

**584D/585D/586D  
Forklift**

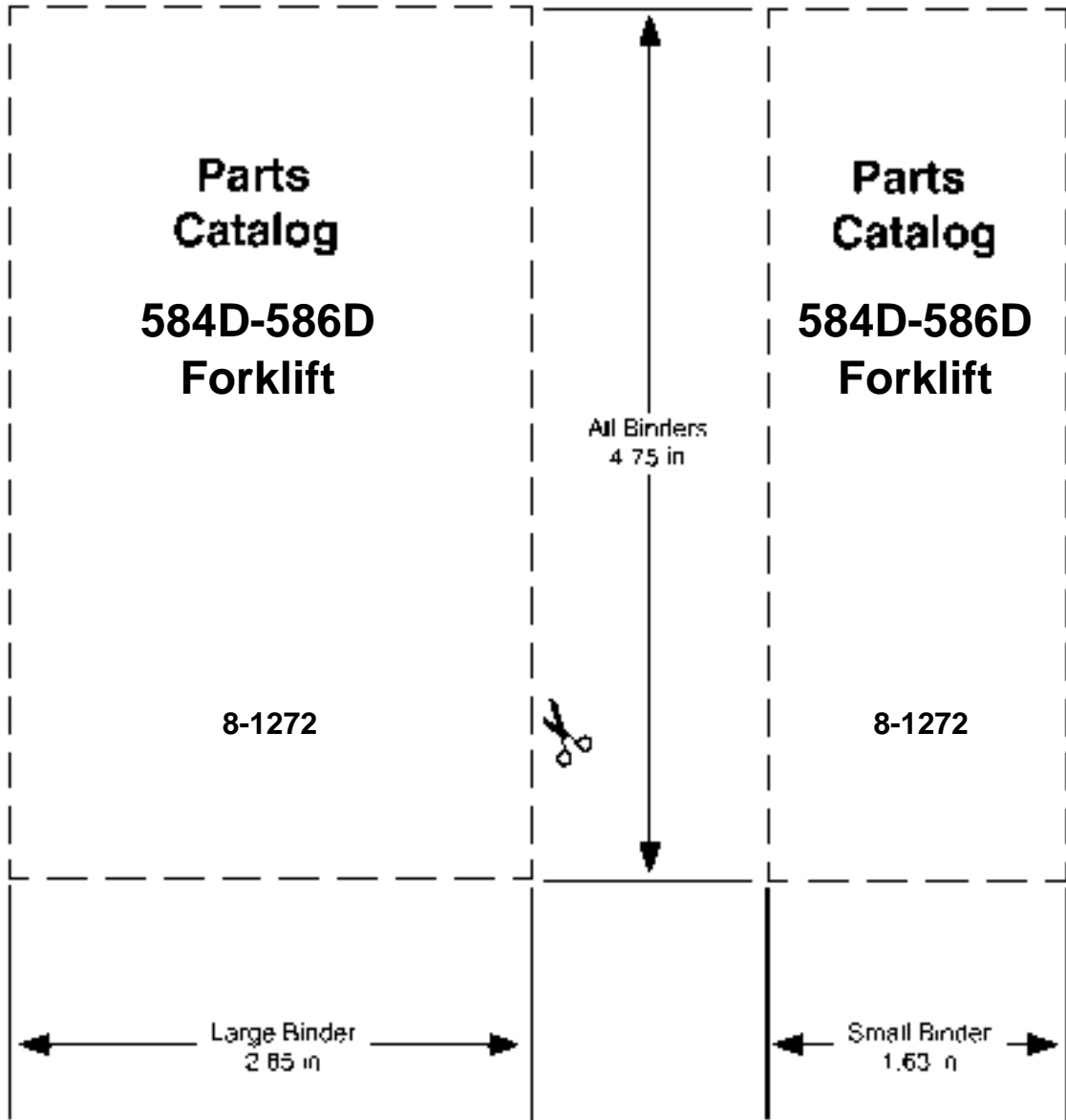
**Parts Catalog**

8-1272

Reprinted

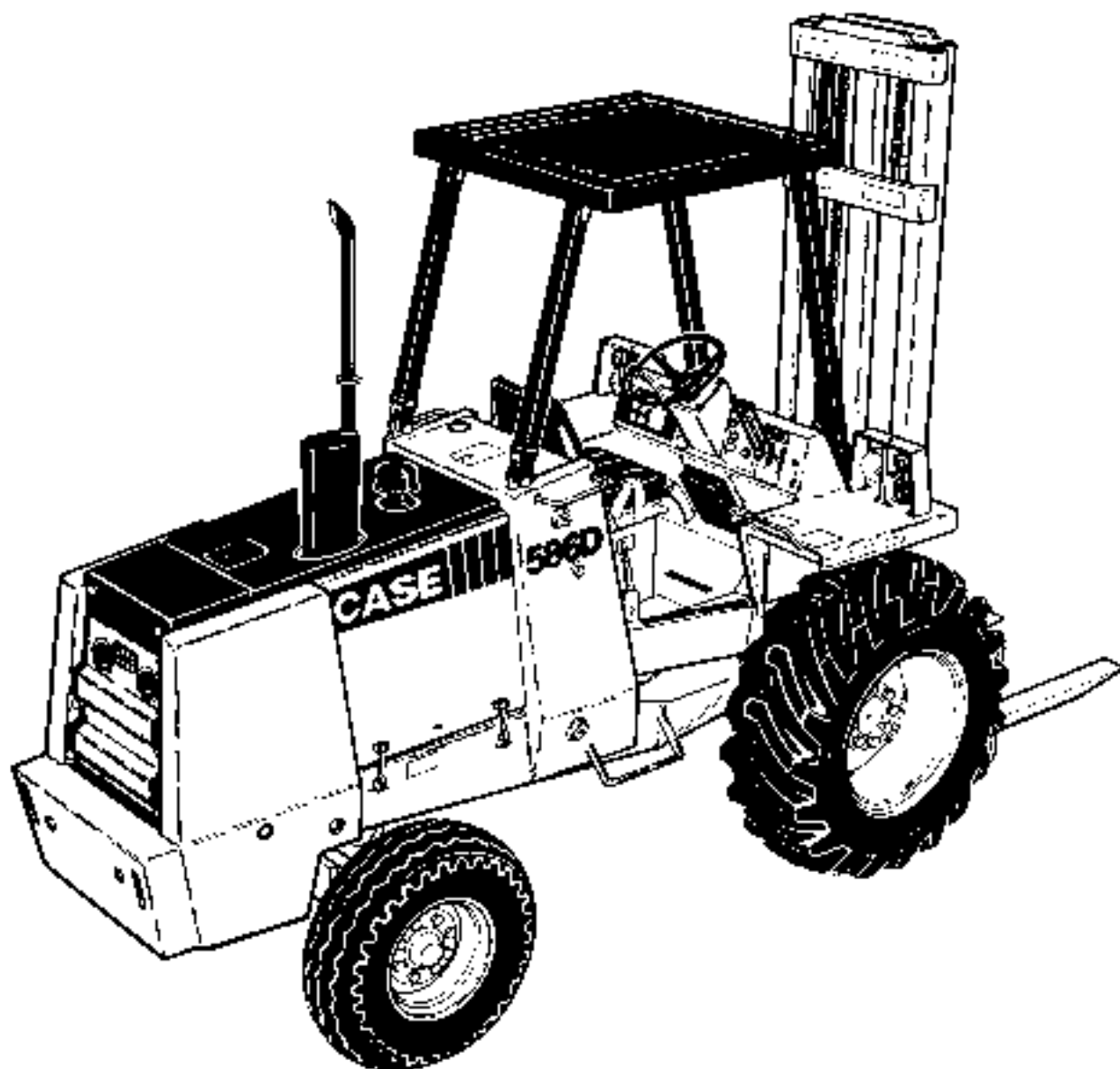
**CASE**





## REVISION RECORD LOG

REVISION NO	DATE INSERTED
1	
2	
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**584D, 585D, AND 586D  
CONSTRUCTION KING  
FORKLIFT****Parts Catalog 8-1272****NOTE:** Discard Parts Catalog 8-1271

811220B

# GENERAL INFORMATION

## Indexes

This parts catalog is arranged for easy identification on parts. The Alphabetical Index at the front of the catalog gives location of major groups and assemblies. The Numerical Index at the rear of the catalog gives part numbers and the page on which they are listed.

## Abbreviations and Terms

PIN - Product Identification Number.  
 SN - Serial Number.  
 NSS - Not sold separately  
 REF - Reference. Used to clarify drawing.  
 RESERVED - No item listed.  
 UAR - Use as required.

## Changes

When changes are made to the machine, revised pages for this catalog will be issued. These pages must be inserted into your catalog as soon as they are received. Failure to keep your catalog up to date will result in confusion and may cause you to order wrong parts.

## Description, Quantity and Machinery Items

All parts are briefly described under DESCRIPTION. The quantity used is listed under REQ'D. Notice in the example below that the description of some items is moved in (indented) from the left-hand margin. An indented item is part of the item under which it is indented. The example shows that one hydraulic oil filter is used on the machine. Each filter contains one head assembly, one element kit, and one housing (indented items with no reference numbers and item 6). The head assembly and kit are further divided to show individual part (items 2, 3, 4 & 5).

Machinery items must be ordered from the Machinery Price List. See item 7 in the example.

REF.	PART NO.	DESCRIPTION	REQ'D
1	D 43567	FILTER ASSEMBLY - hydraulic oil	1
	D 81903	HEAD ASSEMBLY - filter	1
2	NSS	HEAD - filter	1
3	D 58199	VALVE - bypass	1
	D 43800	KIT - filter element	1
4	NSS	ELEMENT - filter	1
5	A 27994	O-RING - filter	1
6	D 42439	HOUSING - filter	1
7	REF	CANOPY - ROPS, machinery item, see page 2 for ordering	2
8	R 42849	HOSE - from upper valve port, 38" (965 mm) long	1
9	13- 728	BOLT - hex head, 7/16" - 14 NC x 1-3/4"	2
10	814- 8030	BOLT - hex head, 8 mm - 1.25 x 30 mm (8.8)	2

## Orders

Orders should specify correct part number, full description, quantity required, machine and engine model, machine and engine serial numbers, method of shipment and shipping address.

## Right-Hand and Left-Hand Sides

The terms right-hand and left-hand (abbreviated to RH and LH) as used in this catalog indicate the right and left sides of the machine as viewed by the operator in the normal operating position for proper operation of the machine or attachment.

## U.S. and Metric Units

Sizes, lengths, and dimensions are given in U.S. units followed by its equivalent in metric units. See item 8 below. Sizes of hardware (bolts, nuts, etc.) are given according to hardware type --- in inches for U.S. hardware; in millimeter for metric hardware. See items 9 and 10.

# PARTS ORDERING INFORMATION FOR FRENCH, GERMAN, ITALIAN AND SWEDISH SPEAKING COUNTRIES

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## COMMANDE DE PIÈCES DE RECHANGE

Ce catalogue Pièces Rechange est conçu pour une identification rapide de toutes les pièces CASE d'origine. Situé au début du catalogue, un répertoire permet de passer rapidement les principaux groupes ou montages. À la fin du catalogue, un index numérique de pièces de rechange précise la page sur laquelle chacune des pièces est décrite.

Les pièces sont mentionnées par ordre de numéro de référence au lieu du numéro de la pièce, de la description et de la quantité nécessaire. Les quantités mentionnées sous la rubrique « Quantité » correspondent à la quantité nécessaire pour former des assemblages ou des sous-ensembles.

Toutes les pièces sont illustrées sur des dessins écrites montrant les pièces individuellement ou liées par rapport aux autres. Les numéros de référence correspondent aux numéros des pièces sur les vues relatives. Ces chiffres se rapportent à ceux de la rubrique « Chiffre de référence » qui sont suivis par le numéro de la pièce et sa description.

Toutes les commandes doivent spécifier exactement le numéro correct de la pièce, sa description, la quantité nécessaire, le type et le NUMÉRO DU MATÉRIEL, le mode d'expédition et l'adresse du destinataire.

Pour être sûr que votre commande de pièces correspond à vos besoins, vérifiez l'illustration et la description dans le catalogue avec la page à commander.

## BESTELLUNG VON ERSATZTEILEN

Diese Ersatzteil-Liste ist so zusammengestellt, dass alle Original-CASE Ersatzteile leicht identifiziert werden können. Vorn ist ein Inhaltsverzeichnis nach Baugruppen und Bauteilen angeordnet, welches das Auffinden der Teile erleichtert. Hingegen am Schluss der Liste befindet sich ein fortlaufendes Verzeichnis der Ersatzteilnummern, in dem der betreffenden Ersatzteilnummer jeweils die Seitennummer gegenübersteht, auf der das Teil verzeichnet ist.

Im Ersatzteilverzeichnis befindet sich vor der Ersatzteilnummer eine laufende Nummer, die auch auf der Abbildung wiederholt wird. Daneben die Ersatzteilnummer, die Bezeichnung des Teils und die davon benötigte Stückzahl für die betreffende Baugruppe.

Alle Teile sind in Zerlegt-Darstellungen so abgebildet, dass sie in ihrem natürlichen Zusammenhang mit den anderen Teilen erkennbar sind, und werden mit der « laufenden Nummer » des Ersatzteilverzeichnisses bezeichnet, um ihre Auffindung zu erleichtern.

Alle Ersatzteil-Aufträge müssen deutlich die richtige Ersatzteilnummer, die genaue Beschreibung, die benötigte Anzahl von Teilen, Modell und NUMMER des Traktors, die gewünschte Versandart und die Versandadresse enthalten.

Das benötigte Teil muss sorgfältig mit der Abbildung und der Beschreibung verglichen werden, damit die im Auftrag gegebenen Teile auch richtig bestellt sind.

## ORDINI DI PEZZI

Questo libro di pezzi è disposto in modo da permettere facilmente una identificazione di tutti gli Autenti Pezzi CASE impiegati. Un indice è fornito sulla facciata del catalogo dei pezzi per individuare i principali gruppi o montaggi. Un indice numerico alla fine del catalogo dei pezzi indica la pagina in cui ciascun pezzo numero e descrizione.

I pezzi sono elencati in ordine di numero di riferimento seguito dal numero del pezzo, descrizione e quantità richiesta. Le quantità indicate nella colonna « Quantitativo richiesto » rappresentano il numero di pezzi richiesti per comporre uno dei procedimenti Montaggi o Sotto-Montaggi.

Tutti i pezzi sono illustrati in « Prospetti Svappati » che mostrano i singoli pezzi e la loro relazione normale tra di loro. I numeri di riferimento sono indicati nella illustrazione. Questi numeri corrispondono a quelli nella colonna « Numero di Riferimento » e sono seguiti dal numero del pezzo e la descrizione.

Tutti gli ordini devono specificare chiaramente il preciso numero del pezzo, completa descrizione, quantità richiesta, modello e NUMERO DELLA SERIE del trattore, metodo di spedizione e indirizzo della spedizione.

Controllare l'illustrazione e la descrizione del pezzo richiesto per assicurarsi che i pezzi ordinati sono quelli.

## BESTÄLLNING AV RESERVDLAR

Denna reservdelarkatalog har getts en speciell uppställningsform för att förnå en identifiering av alla alla CASE reservdelar. För register finns i början av katalogen uppställningarna de olika större grupperna och delarna. En reservdelnummerförteckning i slutet av katalogen anger vid varje sida de olika delarnas föreskrivna nummer.

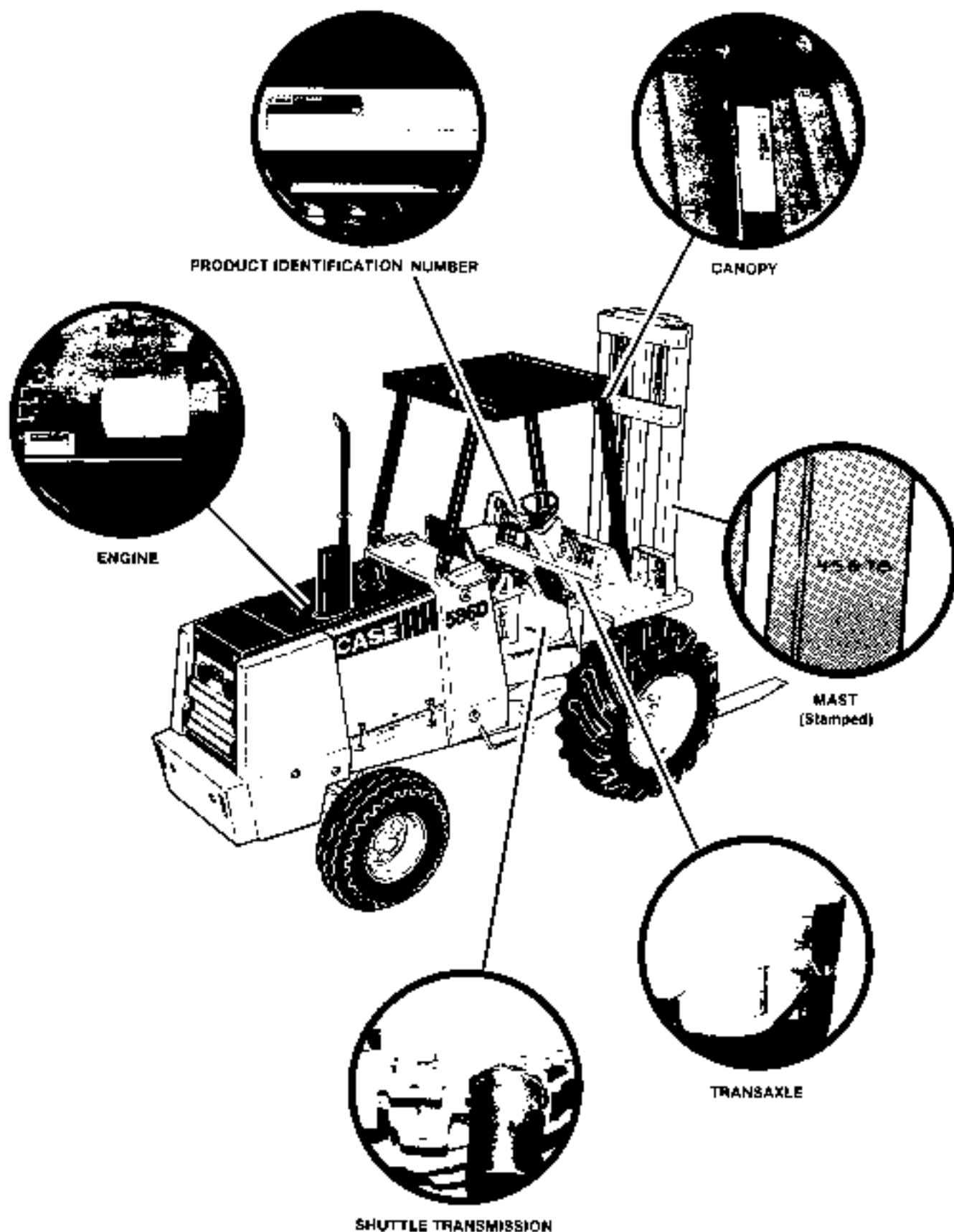
De olika reservdelarna anges i referensnummersordning åtföljda av reservdelens beskrivning och antal. Antalet som anges i kolumnen « Quantity Required », är det antal som ingår i konstruktionen.

Alla reservdelaravordningarna sprängs där i sina inbördes egen Referensnummer anges på språkvalens. De främsta också av kolumnen « Reference Number » där de åtföljas av beskrivning och reservdelnummer.

Reservdelbeställningar skall uppgå korrekt reservdelnummer, beskrivning, beställningsantal, modell och serienummer på maskinen transporterats och montagen adress.

Kontrollera noggrant bild och beskrivning motvarat den ordnade beställningen så att den rättig ordnades.

584D, 585D AND 586D FORKLIFT  
LOCATION OF SERIAL NUMBERS  
AND  
PRODUCT IDENTIFICATION NUMBER



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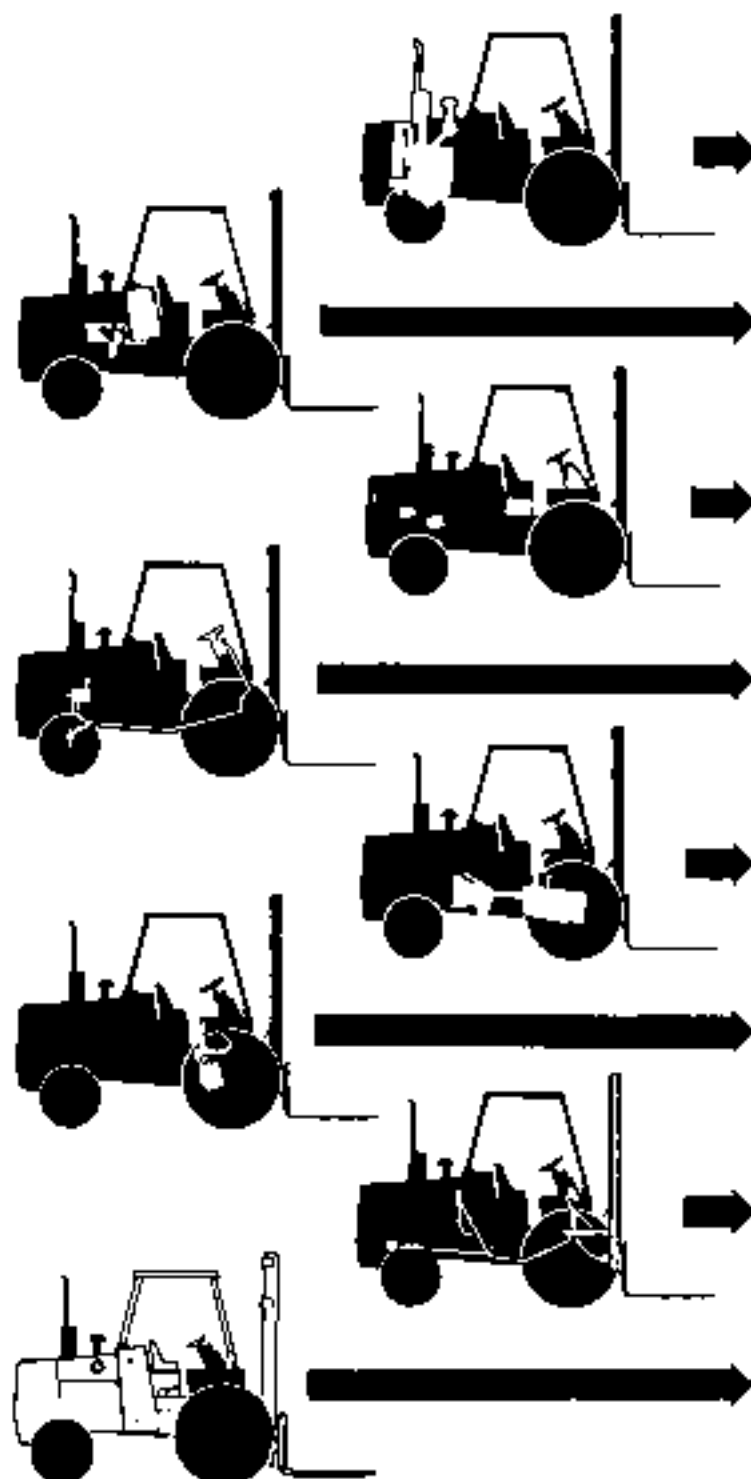
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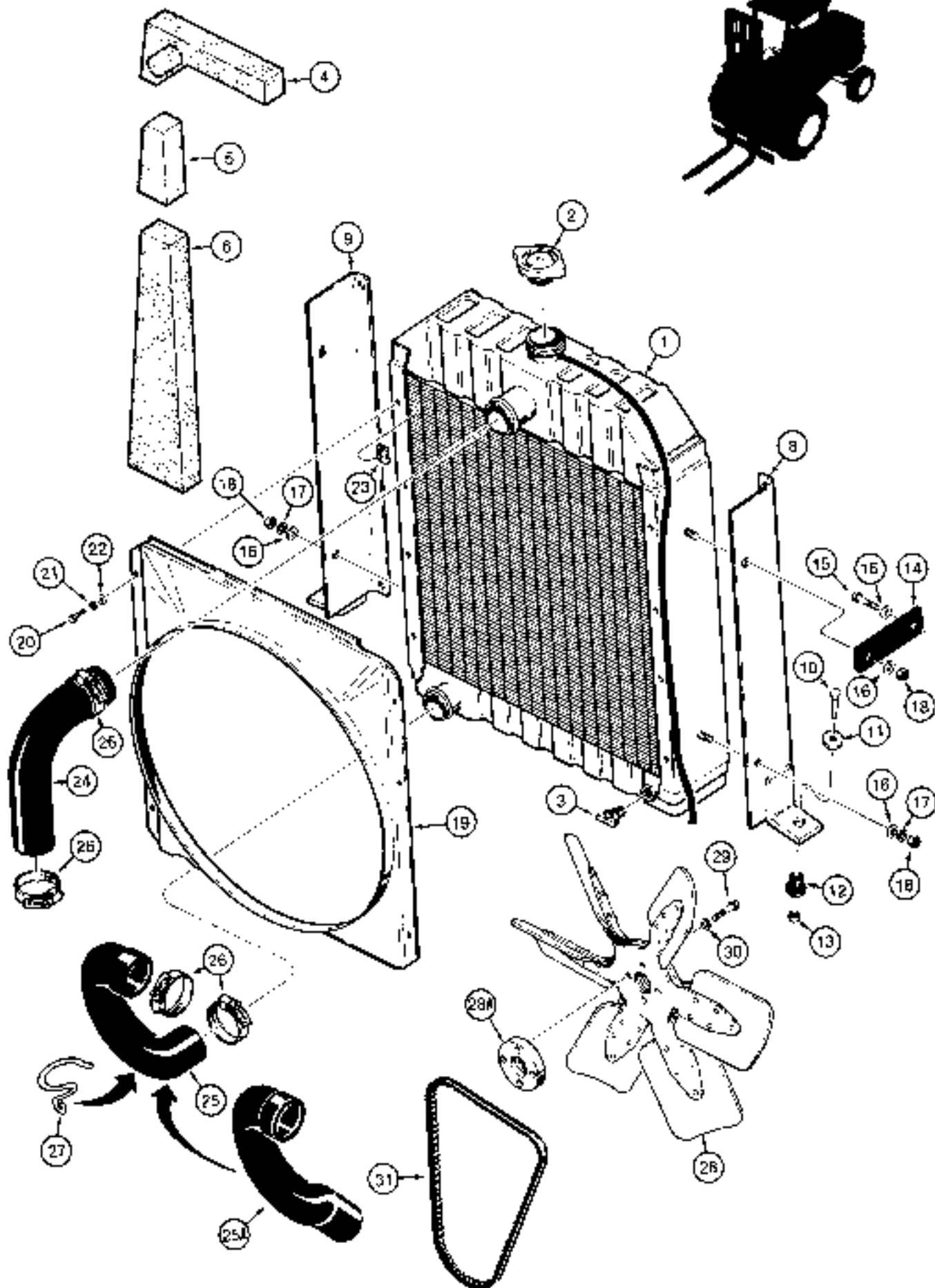
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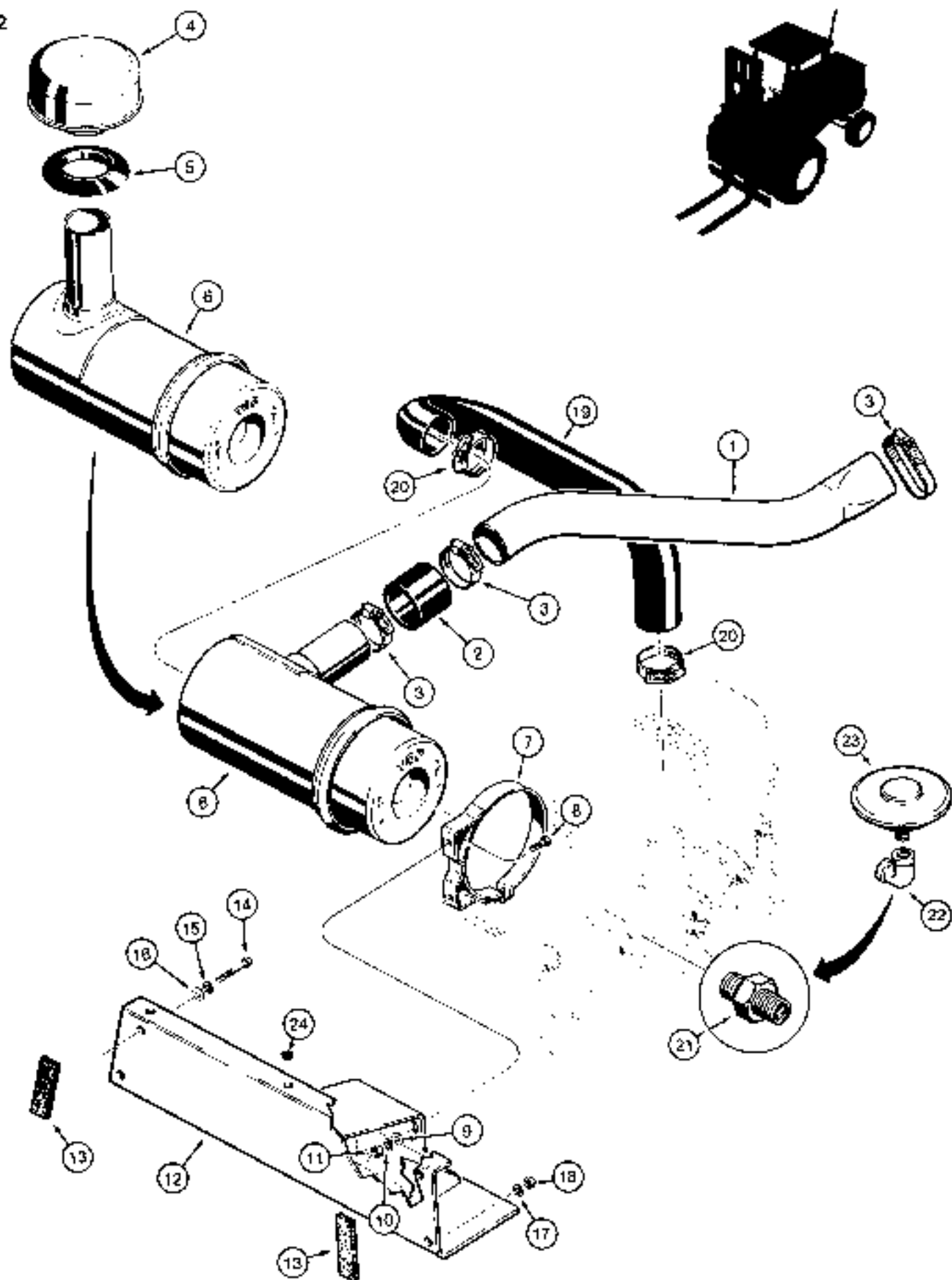


## RADIATOR, FAN, AND MOUNTING PARTS

REF.	PART NO	DESCRIPTION	REQ'D.
1	D 81055	RADIATOR - engine cooling	1
2	F 23120	CAP - radiator	1
3	217- 103	VALVE - drain	1
4	REF	BAFFLE - radiator, top, cut from D92228, base size is 3-15/16" (100 mm) x 9-5/8" (245 mm)	2
5	REF	BAFFLE - radiator, upper, cut from D92228, base size is 2-1/8" (55 mm) x 5-1/8" (130 mm)	2
6	REF	BAFFLE - radiator, lower, cut from D92228, base size is 4-1/8" (105 mm) x 16-3/4" (425 mm)	2
7		RESERVED	
8	D 93807	SUPPORT - radiator, left-hand	1
9	D 93808	SUPPORT - radiator, right-hand	1
10	113- 233	BOLT - hex head, 3/8" - 16 NC x 1-3/4", plated	2
11	D 52275	WASHER - flat, special	2
12	D 52276	INSULATOR - vibration, rubber	2
13	131- 52	NUT - hex, self-locking, 3/8" - 16 NC plated	2
14	D 73500	STRAP - radiator mounting, side	2
15	113- 2201	BOLT - hex head, self-locking, 3/8" - 16 NC x 1-1/2"	2
16	95- 5	WASHER - flat, 3/8"	6
17	192- 21	WASHER - lock, 3/8", plated	2
18	131- 1181	NUT - hex, self-locking, 3/8" - 16 NC plated	4
19	D 81056	SHROUD - radiator, plastic	1
20	113- 3	BOLT - hex head, 1/4" - 20 NC x 3/4", plated	5
21	192- 19	WASHER - lock, 1/4", plated	5
22	195- 102	WASHER - flat, 1/4", plated	6
23	131- 864	NUT - J-type, 1/4" - 20 NC	6
24	D 81057	HOSE - radiator, upper	1
25	D 81058	HOSE - radiator, lower, used with item 27	1
25A	D 122895	HOSE - radiator, lower, does not use item 27	1
26	214- 260	CLAMP - hose	4
27	D 82192	SUPPORT - lower radiator hose, used with item 25 on y	1
28	D 83696	FAN - suction	1
28A	D 83496	SPACER - fan	1
29	**113- 122	BOLT - hex head, 5/16" - 18 NC x 1-1/2", plated	4
29	**113- 104	BOLT - hex head, 5/16" - 18 NC x 1-1/4", plated	4
30	192- 20	WASHER - lock, 5/16", plated	4
31	D 73446	FAN BELT - alternator and fan	1
	*D 92228	BAFFLE - bulk pad, 35-1/2" (900 mm) x 55-1/8" (1400 mm) x 1-1/2" (38 mm), use to cut items 4 thru 6, not shown	1
	345- 44	ADHESIVE - spray can, 23 oz., for attaching foam pads to metal surfaces not shown	1

\*\*NOTE: Use 1-1/2" fan bolts when the fan has a double center plate, and 1-1/4" fan bolts when the fan has a single center plate.

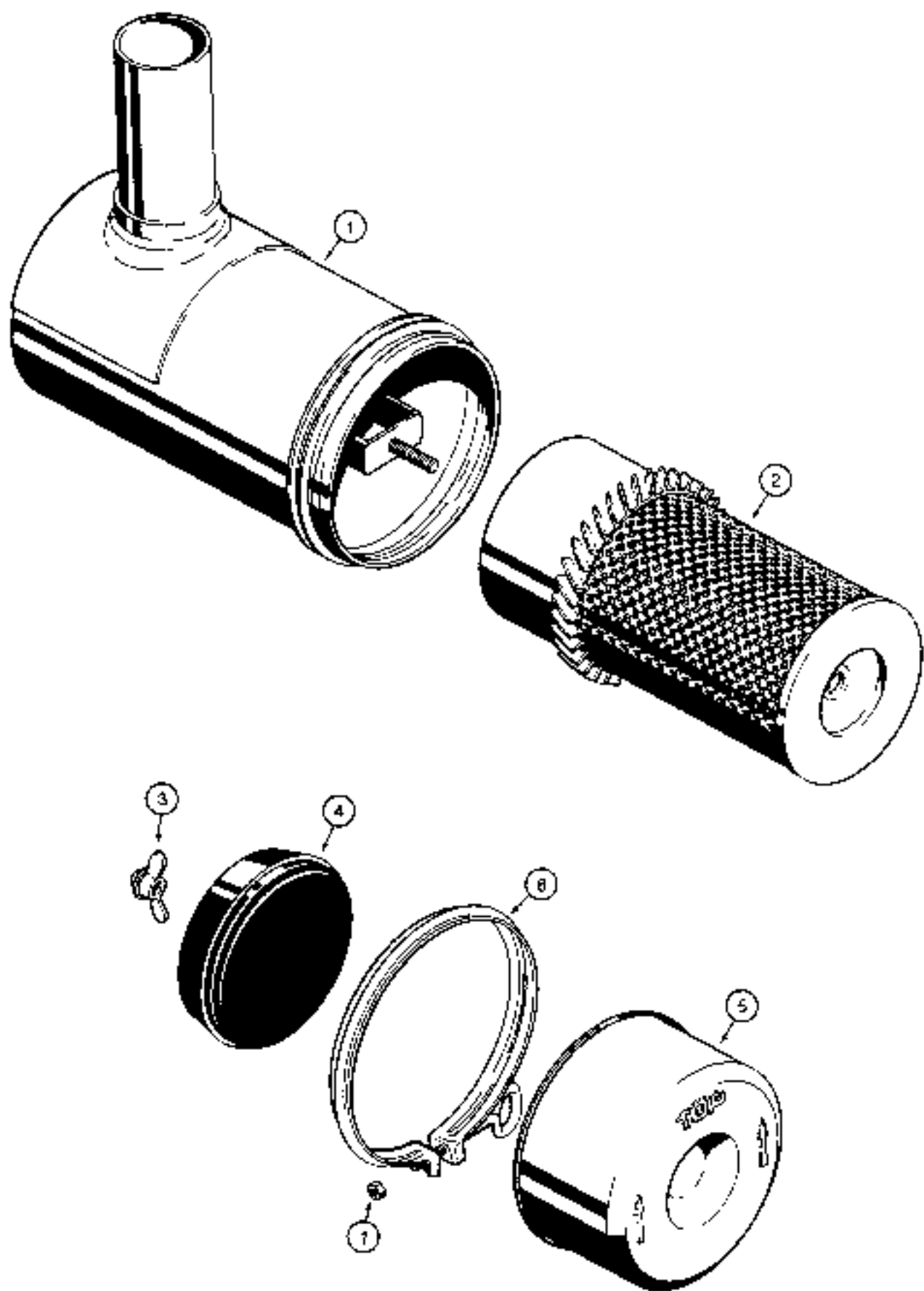
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## AIR CLEANER AND AIR INTAKE PARTS

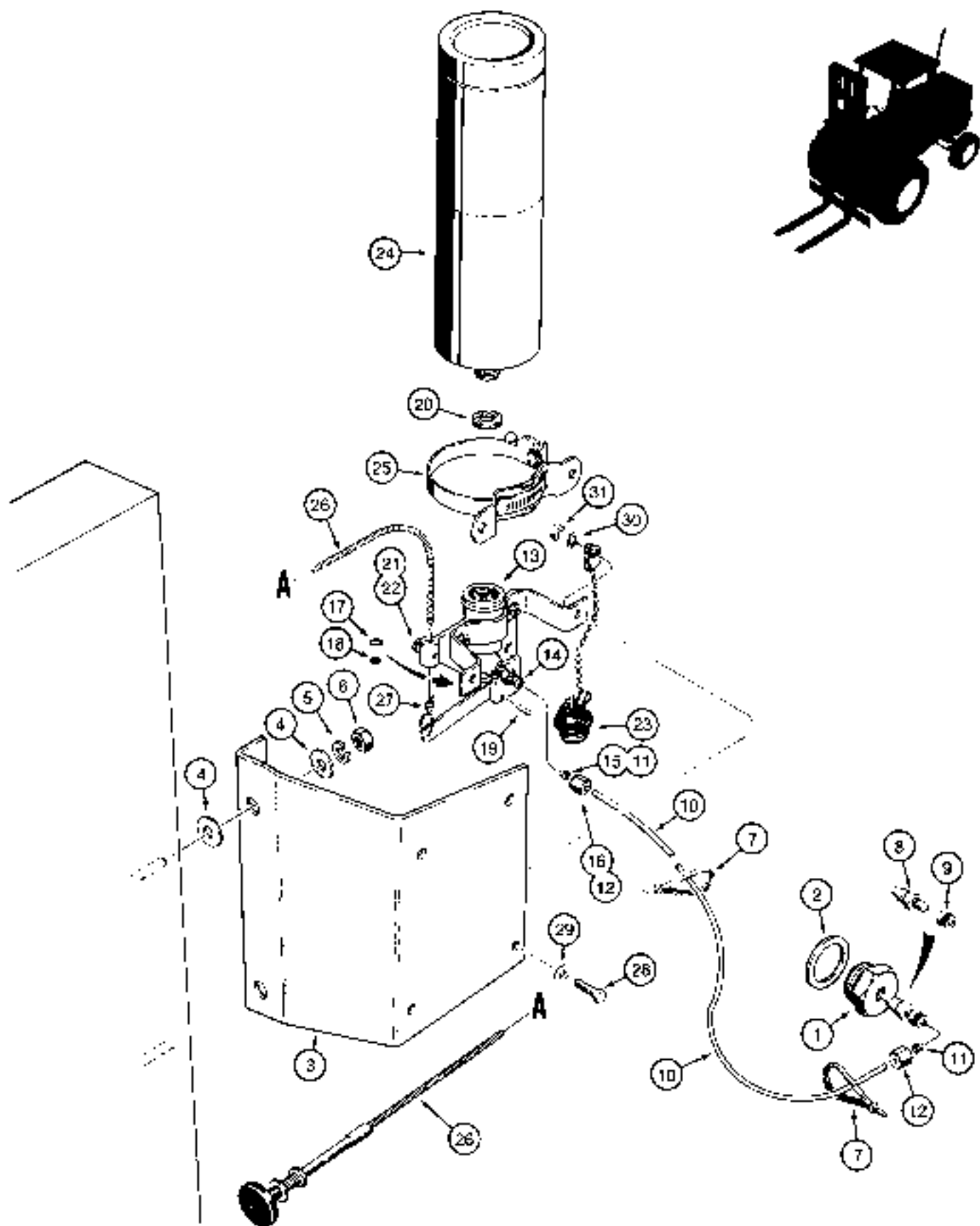
REF.	PART NO.	DESCRIPTION	REQ'D
1	D 91427	TUBE - horizontal, air cleaner intake, increased noise control, if used, see item 4	1
2	73149	HOSE - 2-1/2" (64 mm) ID x 2-1/2" (64 mm) long, horizontal tube to air cleaner, increased noise control, if used	1
3	214- 261	CLAMP - horizontal tube and hose, if used	3
4	A 61276	CAP - vertical air cleaner intake, if used, see item 1	1
5	D 75362	GROMMET - vertical intake air cleaner, if used	1
6	A 139086	AIR CLEANER - engine, parts list page 15	1
7	L 11247	BAND - air cleaner mounting	2
8	113- 206	BOLT - hex head, 3/8" - 16 NC x 3/4", plated	4
9	195- 525	WASHER - flat, 3/8", plated	4
10	192- 21	WASHER - lock, 3/8", plated	4
11	129- 103	NUT - hex, 3/8" - 16 NC, plated	4
12	D 92457	BRACKET - air cleaner mounting	1
13	REF	PAD - foam seal, 2-3/4" (70 mm) long, cut from L35741 bulk roll	2
14	113- 208	BOLT - hex head, 3/8" - 16 NC x 1-1/4", plated	2
15	192- 21	WASHER - lock, 3/8", plated	2
16	195- 525	WASHER - flat, 3/8", plated	2
17	192- 20	WASHER - lock, 5/16", plated	2
18	129- 102	NUT - hex, 5/16" - 18 NC, plated	2
19	D 83487	HOSE - air cleaner to manifold	1
20	214- 261	CLAMP - adjustable hose	2
21	D 36264	FITTING AND FILTER ASSEMBLY - air restriction indicator	1
22	221- 374	ELBOW - 90 degree, 1/8" NPT	1
23	A 154782	SENDER - air filter restriction indicator	1
24	L 60224	BUMPER - rubber, for hood	3
	* L 35741	SEAL - bulk, 1" (25 mm) x 1" (25 mm) x 50 ft. (15.2 m) long	UAR





**A139086 AIR CLEANER**

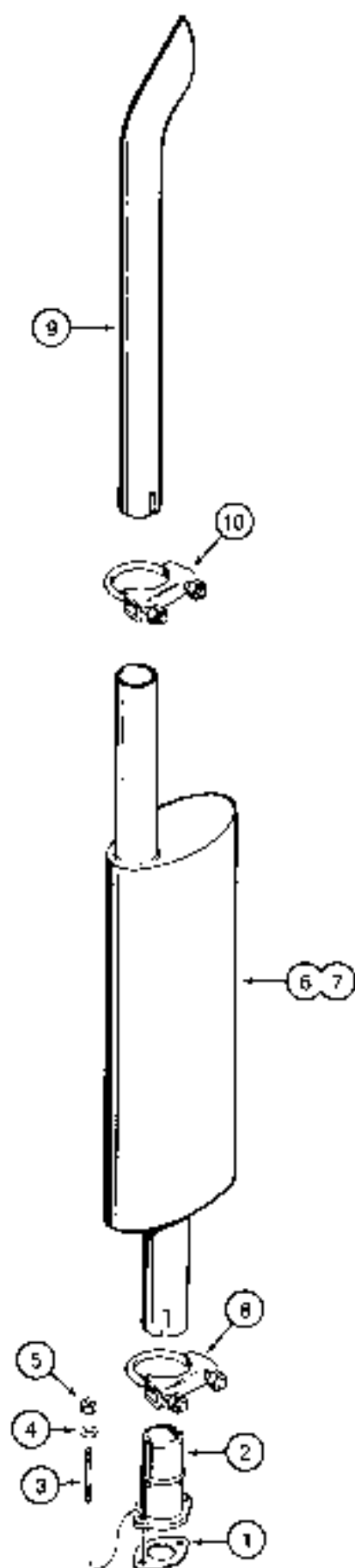
REF	PART NO.	DESCRIPTION	REQ'D.
	A 139086	AIR CLEANER ASSEMBLY - engine .....	1
1	NSS	HOUSING - air cleaner .....	1
2	A 42274	ELEMENT - air cleaner .....	1
3	D 78354	WING NUT - element .....	1
4	F 22312	BAFFLE - rubber .....	1
5	F 91760	DUST CUP - access, air cleaner .....	1
6	F 84999	CLAMP ASSEMBLY - cup .....	1
7	25- 224	NUT - square, 1/4" - 20 NC, can be used to replace caged nut .....	1



## COLD START SYSTEM

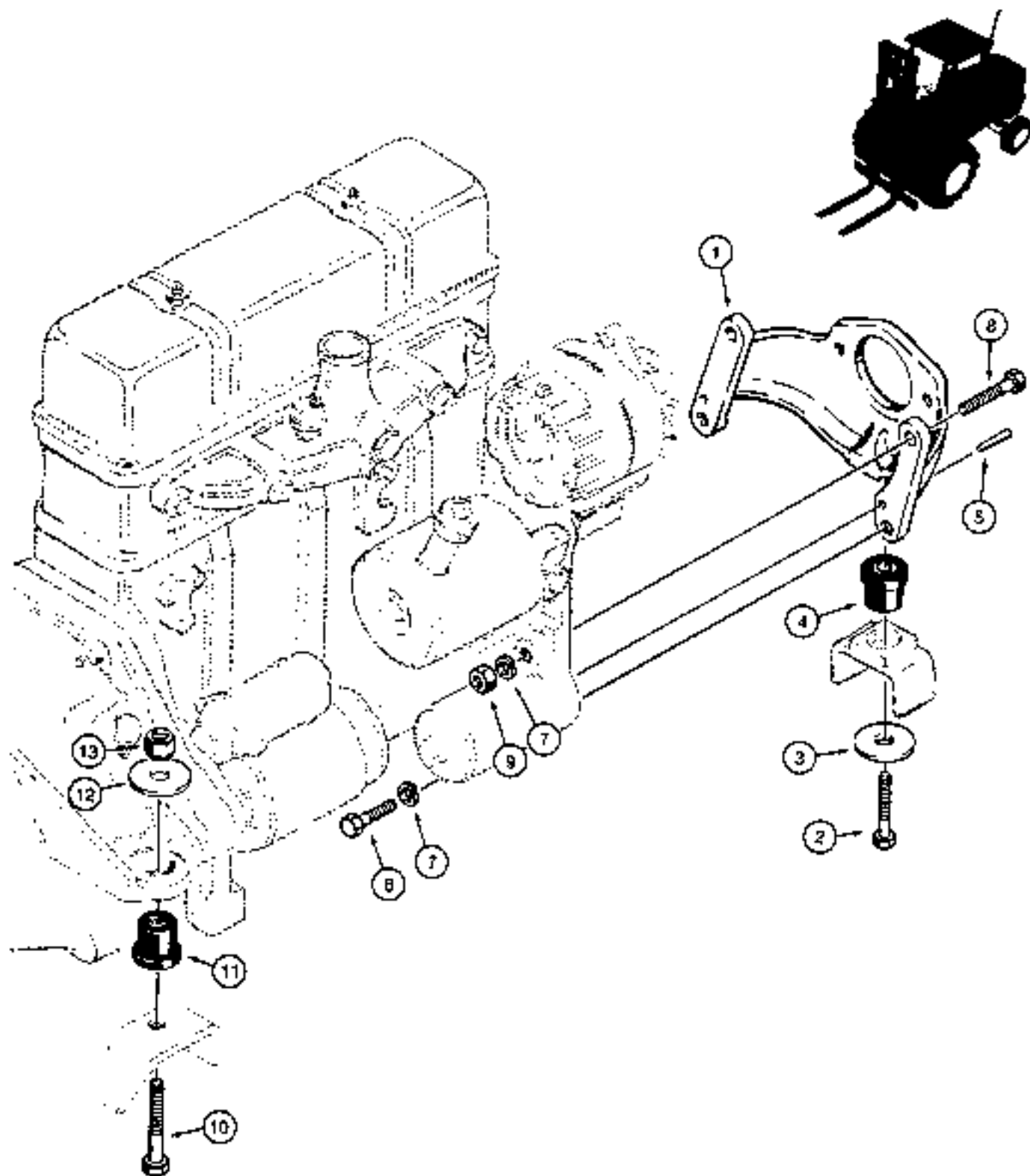
REF.	PART NO.	DESCRIPTION	REQ'D.
1	D 79761	PLUG - manifold	1
2	A 20916	WASHER - special	1
3	D 70731	BRACKET - cold start clamp and valve mounting	1
4	195- 521	WASHER - flat, 5/16", plated	4
5	192- 20	WASHER - lock, 5/16" plated	2
6	129- 102	NUT - hex, 5/16" - 18 NC, plated	2
7	L 18337	TIE STRAP - tube	2
	D 81319	NOZZLE ASSEMBLY - cold start	1
8	NSS	BODY - nozzle	1
9	NSS	NUT AND SLEEVE - one piece, service with 222-660 nut and 222-650 sleeve, see items 14 and 15	1
	D 55947	TUBE ASSEMBLY - valve to nozzle	1
10	NSS	TUBE - valve to nozzle, 60" long (1524 mm) long, cut to 48" (1219 mm)	1
11	222- 650	SLEEVE - compression fitting, tube nut, 1/8", brass	2
12	222- 660	NUT - compression fitting, 1/8", brass	2
	D 88743	VALVE ASSEMBLY - actuator	1
13	NSS	VALVE - actuator	1
14	NSS	ADAPTER - straight	1
15	222- 650	SLEEVE - compression fitting, tube nut, 1/8", brass	1
16	222- 660	NUT - compression fitting, 1/8", brass	1
	O 55951	KIT - service, valve seal	1
17	A 27880	O-RING - internal plunger, large	1
18	A 51274	O-RING - internal plunger, small	1
19	135- 313	GROOVE PIN - 3/32" x 1/2"	1
20	D 74422	SEAL - cork, valve to cylinder	1
21	182- 528	MACHINE SCREW - pan head slotted, No. 10 - 32 NF x 1/2", plated	1
22	192- 18	WASHER - lock, No. 10, plated	1
23	N 8826	PLUG - valve, with chain, if used	1
24	D 55767	STARTING FLUID - 955 cc cylinder	1
25	D 55949	CLAMP - cylinder	1
26	D 55950	CABLE - cold start control, 50" (1270 mm) long	1
27	222- 650	SLEEVE - compression fitting, 1/8", brass, control cable to valve lever	1
28	113- 3	BOLT - hex head, 1/4" - 20 NC x 3/4", plated	4
29	195- 102	WASHER - flat, 1/4", plated	4
30	192- 19	WASHER - lock, 1/4", plated	4
31	129- 101	NUT - hex, 1/4" - 20 NC, plated	4

**NOTE:** Cold Start Kits can be ordered as machinery items from the Machinery Price List, see page 2 for ordering. Items 1-9 are not included in Kits.



## MUFFLER AND EXHAUST SYSTEM

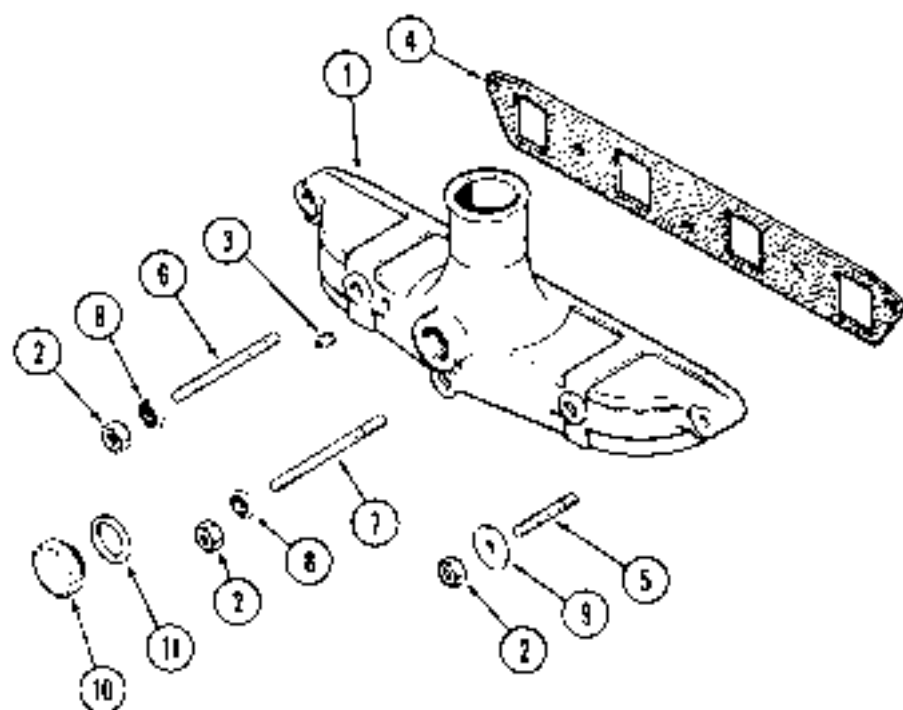
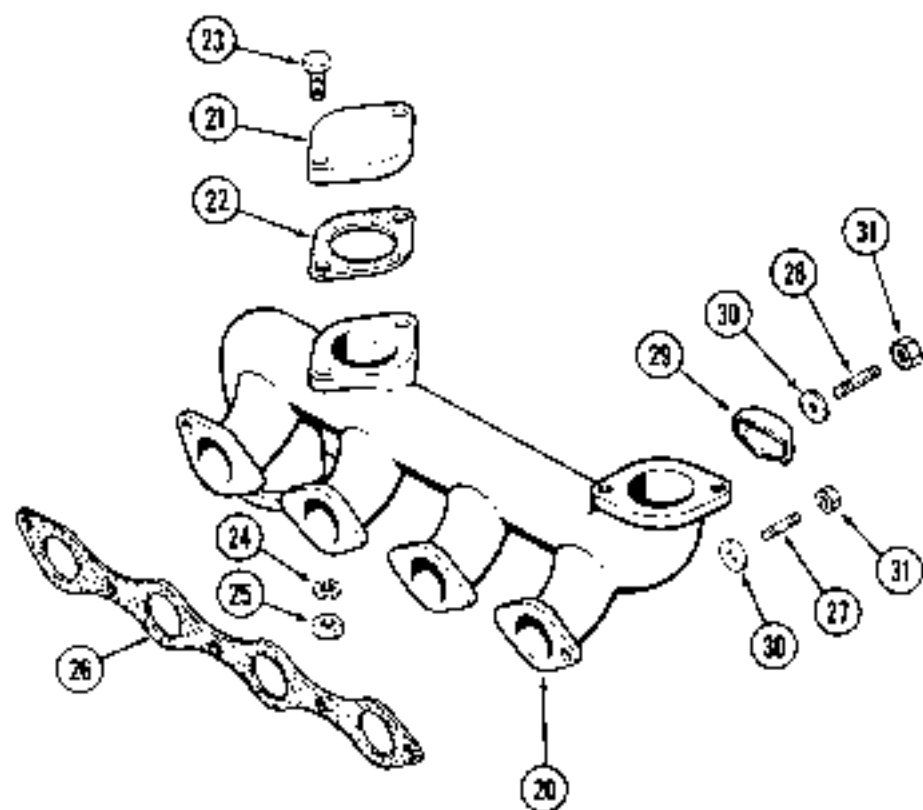
REF.	PART NO.	DESCRIPTION	REQ'D
1	G 46853	GASKET - manifold to exhaust pipe, no longer used, not required	1
2	D 73198	EXHAUST PIPE - muffler	1
3	A 59077	STUD - 3/8" - 16 NC x 1-13/16"	2
4	195- 525	WASHER - flat, 3/8", plated	2
5	131- 666	NUT - hex. self-locking, 3/8" - 16 NC, plated	2
6	A 39561	MUFFLER - engine exhaust, standard, if used	1
7	D 55532	MUFFLER - increased noise control, if used	1
8	A 13240	CLAMP - muffler, includes hardware	1
9	D 70514	EXTENSION - muffler exhaust	1
10	G 45410	CLAMP - muffler extension, includes hardware	1



## ENGINE MOUNTING

REF	PART NO.	DESCRIPTION	REQ'D.
1	D 120867	SUPPORT - engine rear	1
2	113- 621	BOLT - hex head, 5/8" - 11 NC x 2-3/4", plated	1
3	D 35009	WASHER - flat, special, hardened	1
4	A 59516	INSULATOR - engine mount, rubber	1
5	139- 64	PIN - taper, No. 5 x 1-1/2" (38 mm) long	2
6	113- 604	BOLT - hex head, 5/8" - 11 NC x 2", plated	2
7	192- 25	WASHER - lock, 5/8", plated	4
8	113- 621	BOLT - hex head, 5/8" - 11 NC x 2-3/4", plated	2
9	128- 107	NUT - hex, 5/8" - 11 NC, plated	2
10	113- 627	BOLT - hex head, 5/8" - 11 NC x 3-1/4", plated	2
11	A 59516	INSULATOR - engine mount, rubber	2
12	D 35009	WASHER - flat, special, hardened	2
13	129- 107	NUT - hex, 5/8" - 11 NC, plated	2



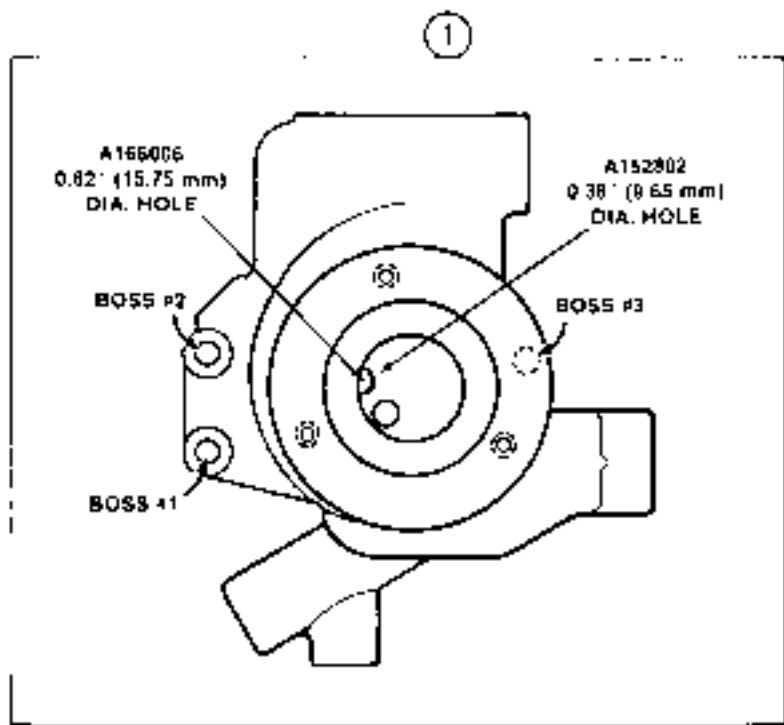
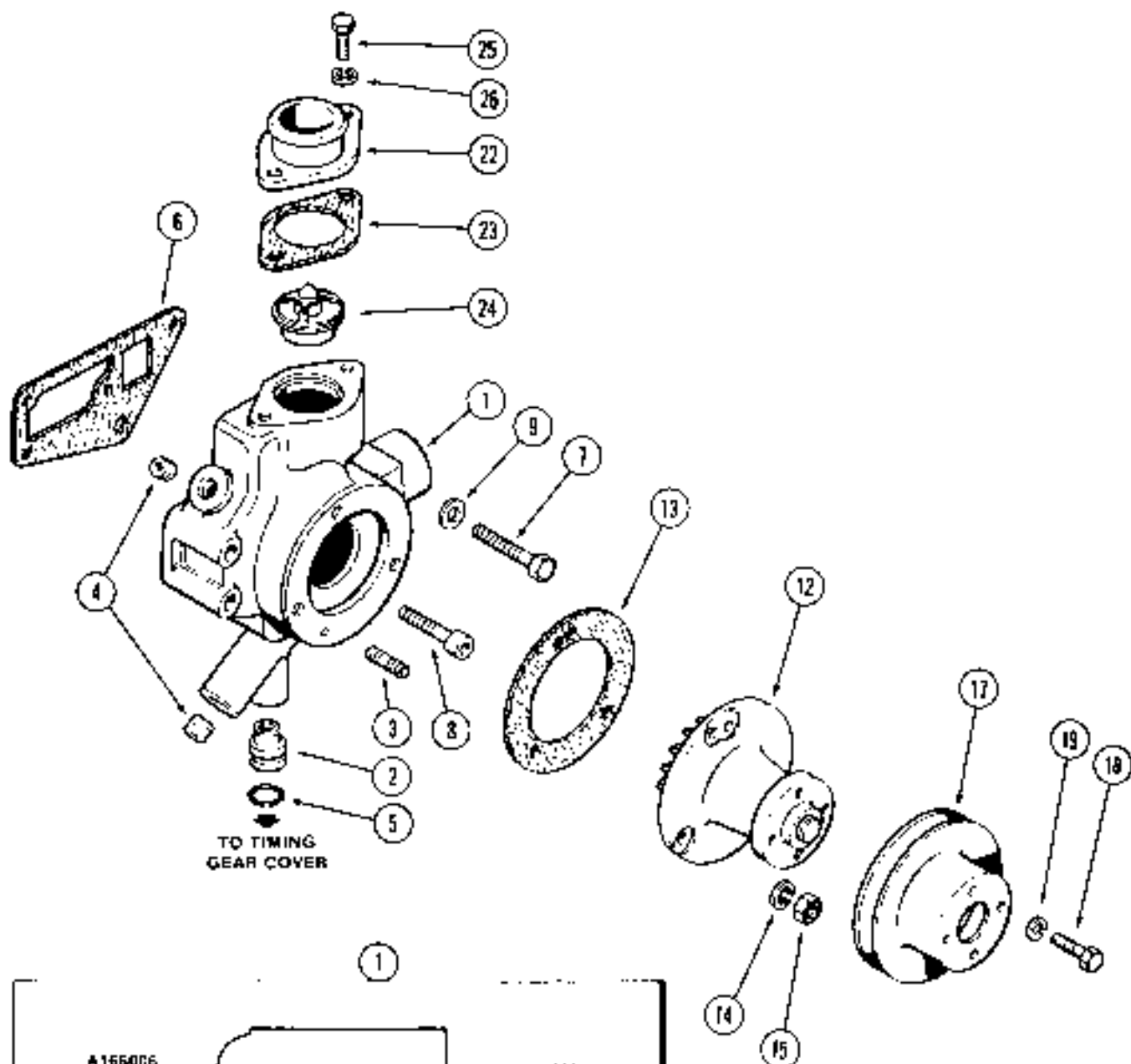


**MANIFOLDS**  
**188 DIESEL ENGINE**  
**INTAKE MANIFOLD**

REF.	PART NO	DESCRIPTION	REQ'D
1	A 152536	MANIFOLD ASSEMBLY - intake .....	1
2	25- 166	NUT - 3/8 inch NC .....	5
3	221- 549	PLUG - square head 1/8 inch PT .....	1
4	G 46871	GASKET - manifold to head .....	1
5	A 140924	STUD - end, 2-7/16 inch .....	2
6	A 153248	STUD - intermediate, 4-13/16 inch .....	2
7	A 51500	STUD - center, 5-5/16 inch .....	1
8	A 50694	WASHER - intermediate stud holes .....	3
9	195- 525	WASHER - flat, 13/32 x 13/16 x 1/16 inch (10 x 21 x 2 mm) .....	2
10	A 20917	PLUG - manifold (heater hole) .....	1
11	A 20916	GASKET - plug .....	1

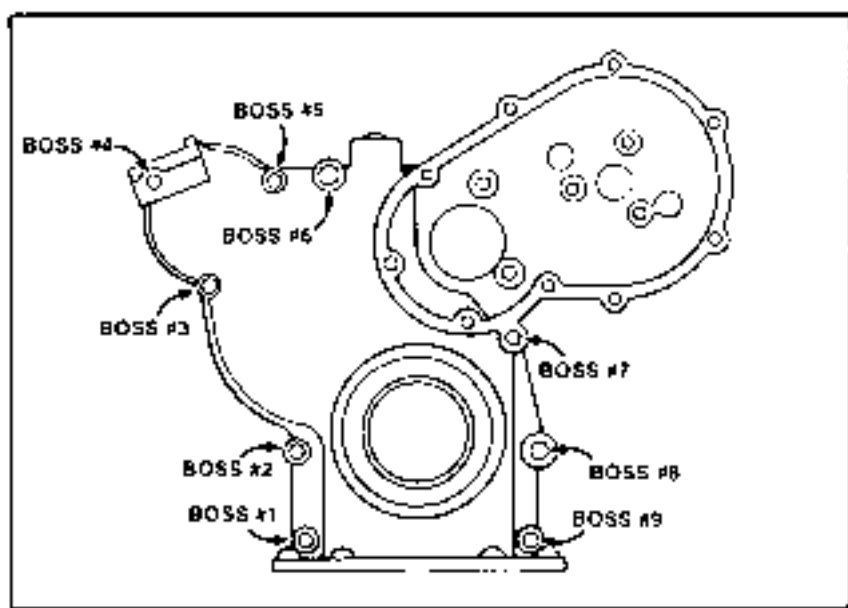
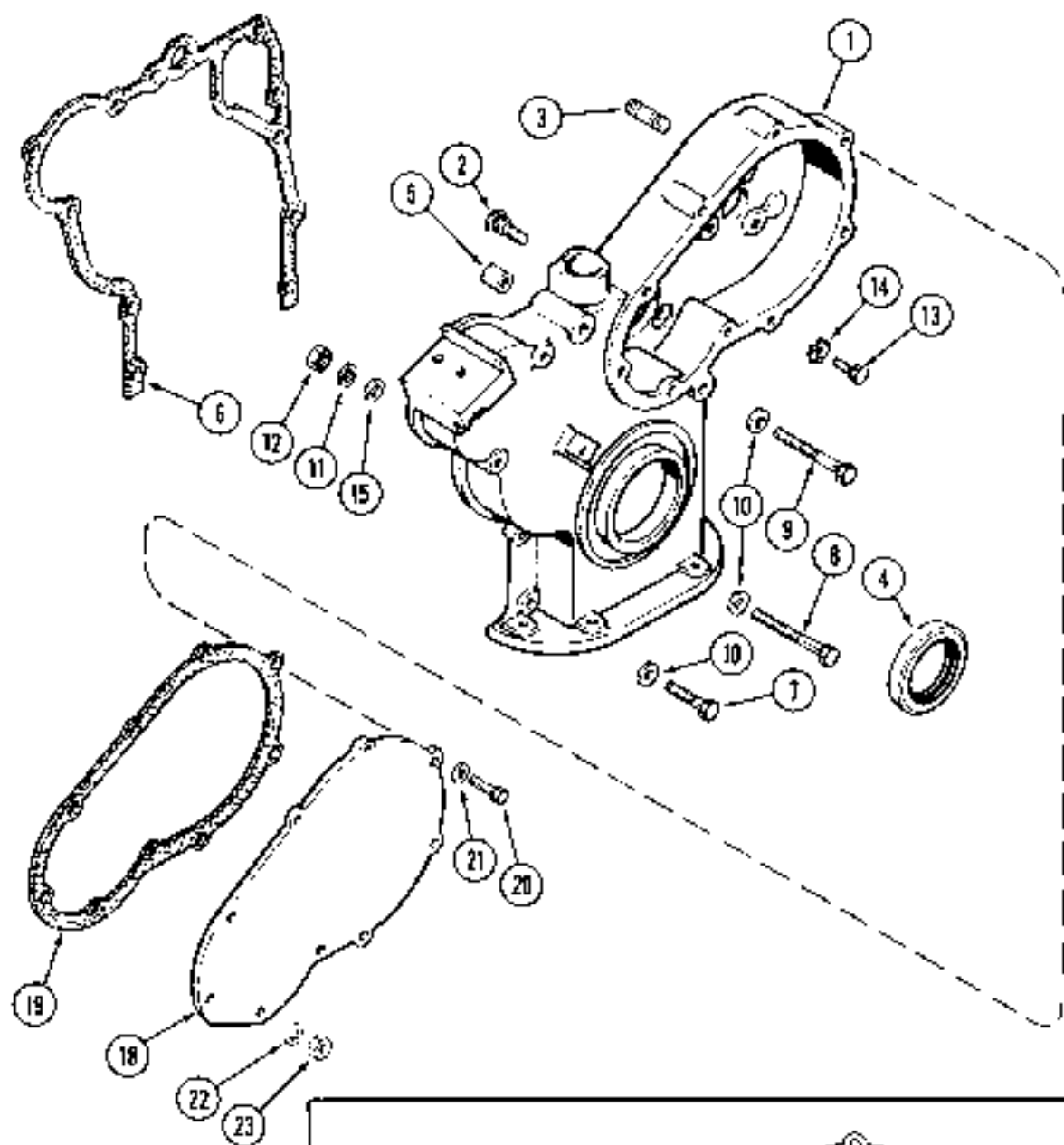
**EXHAUST MANIFOLD**

20	A 39233	MANIFOLD ASSEMBLY exhaust .....	1
21	A 38188	PLATE - cover .....	2
22	G 46853	GASKET - cover plate .....	2
23	113- 209	BOLT - hex. 3/8 NC x 1-1/2 inch .....	2
24	195 521	WASHER - lock, 3/8 inch .....	4
25	131- 903	NUT - Seez-Prof. 3/8 inch NC .....	4
26	G 46672	GASKET - exhaust manifold .....	1
27	A 29431	STUD - ends, 1-3/4 inch .....	2
28	A 140924	STUD - clamps, 2-1/16 inch .....	3
29	A 35028	CLAMP - manifold .....	3
30	195- 25	WASHER - flat, 3/8 x 13/16 x 1/16 inch (10 x 21 x 2 mm) .....	5
31	131- 903	NUT - Seez-Prof. 3/8 inch NC .....	5



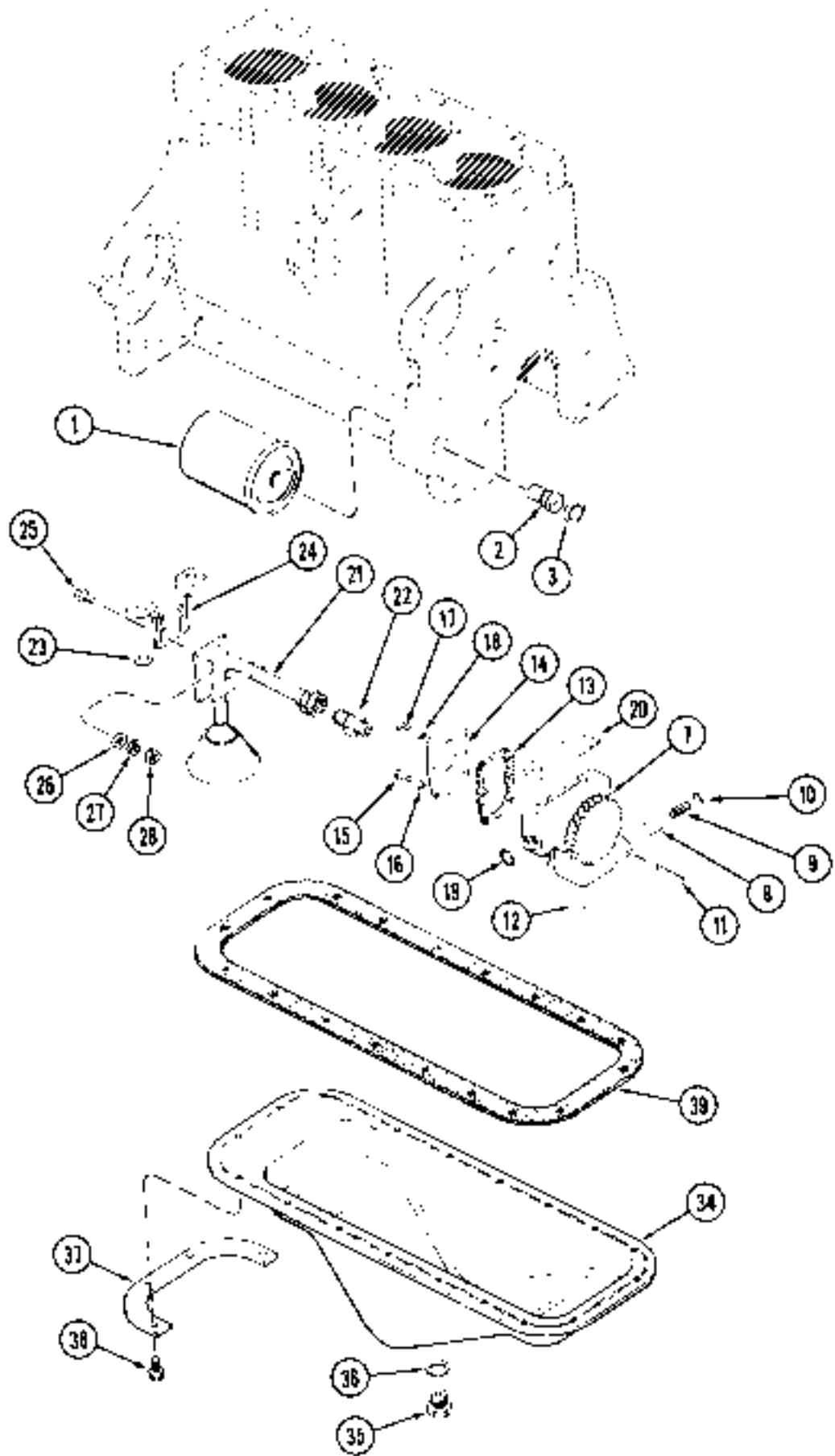
### WATER PUMP AND THERMOSTAT 188 DIESEL ENGINE

REF.	PART NO	DESCRIPTION	REQ ( )
t	A 155005	BODY ASSEMBLY - water pump (Used with A155925) cast numbered cylinder head (See Page 31) . . . . .	1
1	A 152802	BODY ASSEMBLY - water pump (Used with A150384) cast numbered cylinder head. (See Page 31) . . . . .	1
2	A 152715	FITTING - body to timing gear cover . . . . .	1
3	A 29433	STUD - water pump to body, 1 inch . . . . .	3
4	221- 843	PLUG - socket head, 3/8 inch PT . . . . .	2
5	F 62075	O-RING - fitting . . . . .	1
6	A 38084	GASKET - body to cylinder head . . . . .	1
7	113- 208	BOLT - hex (Boss 1) 3/8 NC x 1-1/4 inch . . . . .	1
8	61- 632	BOLT - socket head, 3/8 NC x 2 inch . . . . .	1
9	A 50820	WASHER - mounting bolt . . . . .	3
12	A 146584	PUMP ASSEMBLY - water . . . . .	1
13	A 38083	GASKET - pump to body . . . . .	1
14	92- 6	WASHER - lock 3/8 inch . . . . .	3
15	129- 103	NUT - hex, 3/8 inch NC . . . . .	3
17	G 11339	PULLEY - fan drive . . . . .	1
18	113- 101	BOLT - hex 5/16 x 1/2 inch . . . . .	4
19	192- 20	WASHER - lock 5/16 inch . . . . .	4
22	G 2144	HOUSING - thermostat . . . . .	1
23	G 48907	GASKET - housing to body . . . . .	1
24	A 57641	THERMOSTAT - engine coolant, 180°F (82°C) . . . . .	1
25	113- 207	BOLT - hex 3/8 NC x 1 inch . . . . .	2
26	92- 6	WASHER - 3/8 inch lock . . . . .	2



### TIMING GEAR COVER 188 DIESEL ENGINE

REF	PART NO	DESCRIPTION	REQ'D
1	A 51951	COVER ASSEMBLY - timing gear	1
2	A 51649	STUD - timing gear cover	2
3	G 10212R	STUD - injection pump, 1-7/16 inch	3
4	A 39110	SEAL - oil, crankshaft, front	1
5	A 29442	DOWEL - cover locating	2
6	A 51529	GASKET - cover to block	1
7	113- 208	BOLT - hex, 3/8 NC x 1-1/4 inch (Boss 1,2,9)	3
7	113- 209	BOLT - hex, 3/8 NC x 1-1/2 inch (Boss 8)	1
8	113- 248	BOLT - hex, 3/8 NC x 2-3/4 inch (Boss 7)	1
9	113 241	BOLT - hex, 3/8 NC x 3 inch (Boss 6)	1
9	113- 203	BOLT - hex, 3/8 NC x 3-1/2 inch (Boss 3,4,5)	3
10	195- 525	WASHER - flat, 3/8 x 3/4 x 1/8 inch (10 x 19 x 3 mm)	9
10	95- 6	WASHER - flat, 7/16 x 1 x 1/16 inch (11 x 25 x 2 mm)(Boss 8)	1
10	195- 25	WASHER - flat, 13/32 x 3/4 x 1/16 inch (10 x 19 x 2 mm)(Boss 3,4,5)	3
11	92- 6	WASHER - lock, 3/8 inch	3
12	129- 103	NUT - hex, 3/8 inch NC (Boss 3,4,5)	3
13	113- 221	BOLT - hex, 3/8 NC x 7/8 inch	2
14	195- 53	WASHER - external lock, 3/8 inch	2
15	195- 525	WASHER - flat, 13/32 x 13/16 x 1/16 inch (10 x 20 x 2 mm)	3
18	A 51908	COVER - injection pump gears	1
19	A 39925	GASKET - drive gear cover	1
20	113- 207	BOLT - hex, cover 3/8 NC x 1 inch	7
21	A 50820	WASHER - cover bolt	7
22	92- 6	WASHER - lock, 3/8 inch	2
23	129- 103	NUT - hex, 3/8 inch NC	2



### OIL FILTER 188 DIESEL ENGINE

REF	PART NO	DESCRIPTION	REQ'D
1	A 146696	FILTER - engine oil	1
2	A 153552	ADAPTER - filter to block	1
3	41- 1516	PLUG - cup type, adapter hole 1 inch (25 mm)	1

### OIL PUMP

7	AR 38372	PUMP ASSEMBLY - engine oil (Remanufactured)	1
7	AC 36372	RETURN NUMBER - pump (Use this number when returning pump for credit)	1
7	A 38372	PUMP ASSEMBLY - engine oil (New)	1
8	A 155144	VALVE - relief	1
9	G 48500	SPRING - relief valve, 2-1/8 inch free length (54 mm)	1
10	A 29260	RETAINER - relief valve spring	1
11	138- 62	PIN - roll, 1/8 x 1-1/8 inch	1
12	A 39321	PLUG - cup type, 1/2 inch (13 mm)	1
13	G 46852	GASKET - pump cover	1
14	NSS	COVER - pump body (Reference No. G2039)	1
15	13- 420	BOLT - hex, 1/4 NC x 1-1/4 inch	1
15	13- 412	BOLT - hex, 1/4 NC x 3/4 inch	3
16	92- 4	WASHER - lock, 1/4 inch	4
17	73- 410	SCREW - flat head, 1/4 x 5/8 inch NC	2
18	193 52	WASHER - external lock, 1/4 inch	2
19	A 27365	O-RING - oil port	1
20	G 11337	SHIM - pump to bearing cap 0.002 inch (0.06 mm)	UAR
20	G 11338	SHIM - pump to bearing cap 0.005 inch (0.13 mm)	UAR
21	A 156794	SCREEN ASSEMBLY - oil pump	1
22	218- 1026	CONNECTOR - straight, 3/8 inch P.T.	1
23	G 49404	WASHER - hardened	2
24	A 156845	BRACKET - support	1
25	113- 1	BOLT - hex, 1/4 NC x 1/2 inch	2
26	95- 4	WASHER - flat, 5/16 x 3/4 x 1/16 inch (8 x 19 x 2 mm)	2
27	92- 4	WASHER - lock, 1/4 inch	2
28	25- 104	NUT - hex, 1/4 inch NC	2

### OIL PAN

34	A 36782	PAN ASSEMBLY - oil	1
35	A 140222	PLUG - drain	1
36	A 58608	GASKET - drain plug	1
37	A 151279	STRAP - pan reinforcement	1
38	193- 514	BOLT ASSEMBLY - hex Sems, 5/16 NC x 3/4 inch	18
39	REF	GASKET - oil pan (Order A44758, See Page 43)	1

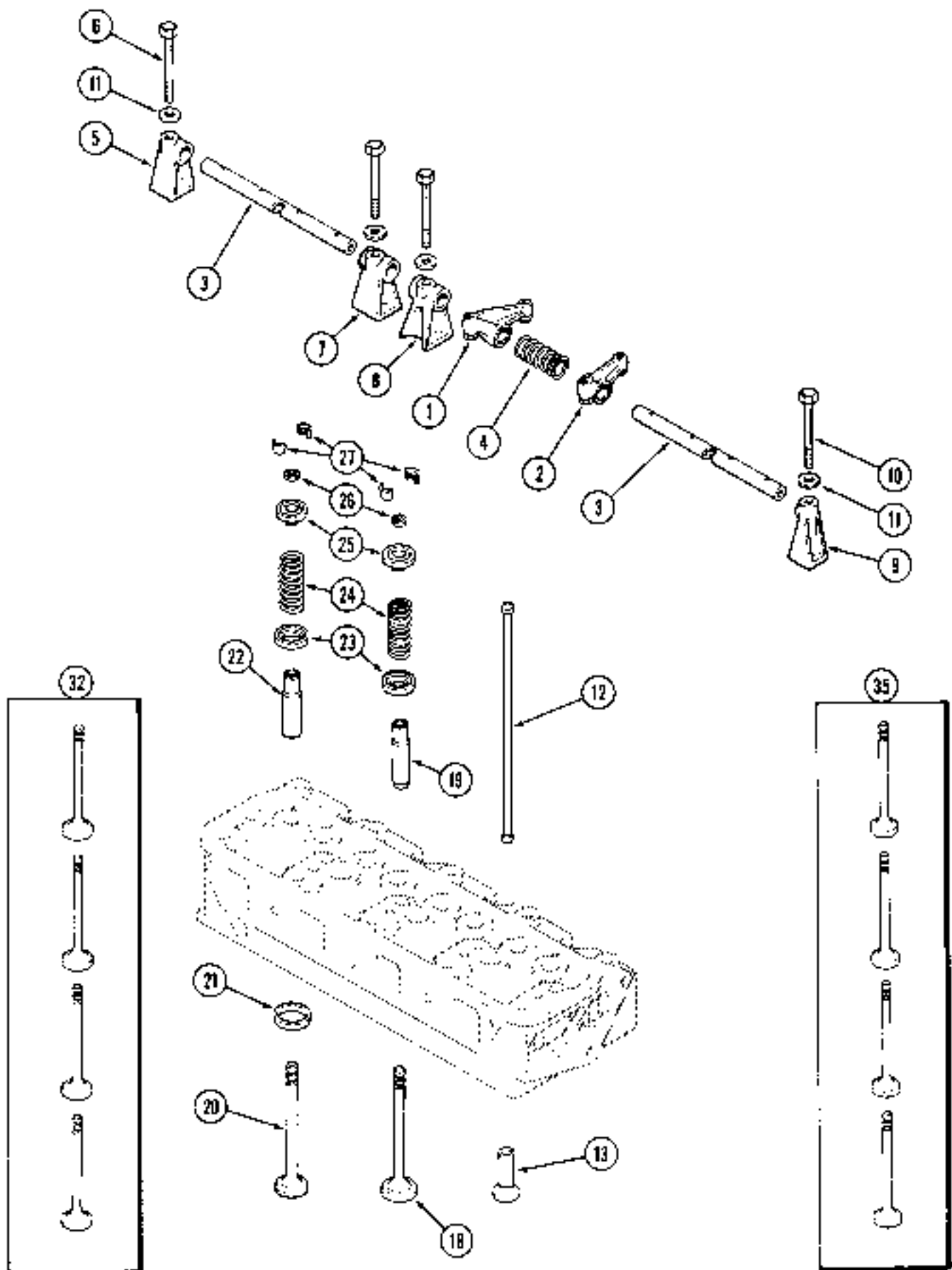
REFERENCE NUMBERS IN DESCRIPTION ARE FOR CARES USE ONLY AND CAN NOT BE ORDERED SEPARATELY





## CYLINDER HEAD AND COVER 188 DIESEL ENGINE

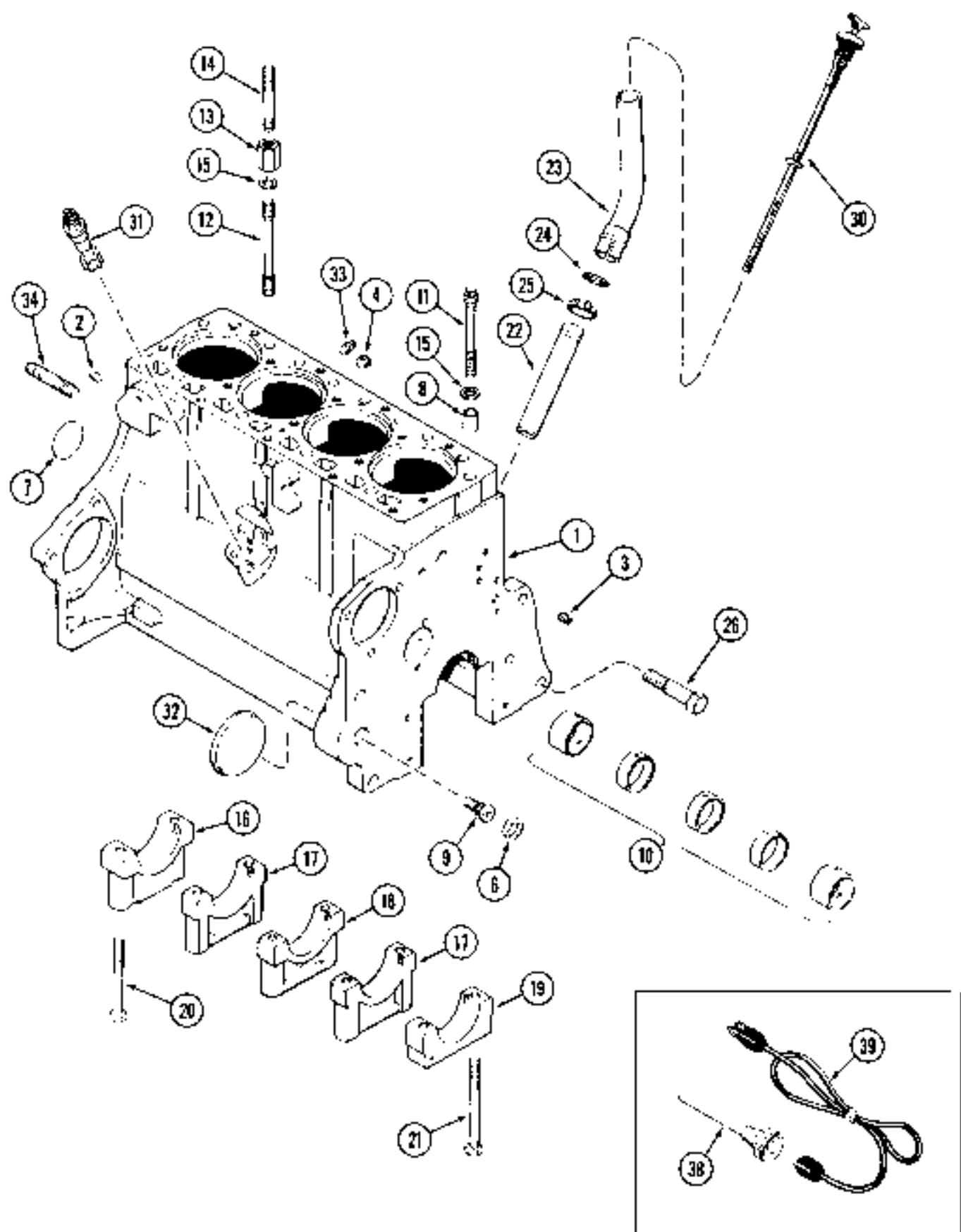
REF	PART NO	DESCRIPTION	REQ'D
1	A 36815	COVER - cylinder head	1
2	A 43030	GASKET - cover to cylinder head	1
3	A 9155	ELBOW - breather	1
4	A 39570	TUBE - breather hose	1
5	214- 253	CLAMP - breather hose, 9/16 to 1-1/16 inch	1
6	AR 153262	HEAD ASSEMBLY - cylinder with valves, springs and retainers (Remanufactured)	1
6	AC 153262	RETURN NUMBER - head, with valves, springs and retainers (Use this number when returning head for credit)	1
6	A 153261	HEAD ASSEMBLY - cylinder (New)(with cast push rod holes) (Casting No. A150384)	1
8	A 166029	HEAD ASSEMBLY - cylinder (New)(with drilled push rod holes) (Casting No. A155925)	1
8	AP 166029	HEAD ASSEMBLY - cylinder, with valves, springs and retainers (Remanufactured)	1
8	AC 166029	RETURN NUMBER - head, with valves, springs and retainers (Use this number when returning head for credit)	1
9	41- 1016	PLUG - cup type, top, 1 inch (25 mm)	3
10	41- 1028	PLUG - cup type, rear, 1-3/4 inch (44 mm)	1
11	G 2089	GUIDE - exhaust valve (Replaces A152489)	4
12	G 2088	GUIDE - intake valve (Replaces A152488)	4
13	G 47078	INSERT - exhaust valve seal (Replaces A39268)	4
15	A 29437	STUD - exhaust manifold, unds. 3/8 inch NC x 1-3/4 inch	2
16	A 140924	STUD - manifold, 2-7/16 inch	6
17	A 153246	STUD - intermediate, 4-13/16 inch	2
18	A 51500	STUD - center, 5-5/16 inch	1
19	A 39047	BOLT - 12 point head, 1/2 NC x 3-1/2 inch	4
19	A 39048	BOLT - 12 point head, 1/2 NC x 3-1/8 inch	11
19	A 39049	BOLT - 12 point head, 1/2 NC x 5-5/8 inch	2
20	A 36902	STUD - lower, 5-5/8 inch	2
21	A 51271	STUD - cover, 3-3/4 inch	2
22	A 51114	NUT - head studs, 1/2 inch and 3/8 inch NC	2
23	A 39046	WASHER - stud nut	19
24	A 142098	GROMMET - cover	2
25	195- 137	WASHER - flat, 13/32 x 1-1/8 x 3/16 inch (10 x 29 x 5 mm)	2
26	129- 103	NUT - hex 3/8 inch NC	2
27	A 148745	GASKET - cylinder head	1
30	321- 5858	DECAL - engine data	1
33	C 65446	UNIT - sending, engine temperature	1
34	193- 1000	NUT - hex, No. 10 NF	1



## VALVE MECHANISM 180 DIESEL ENGINE

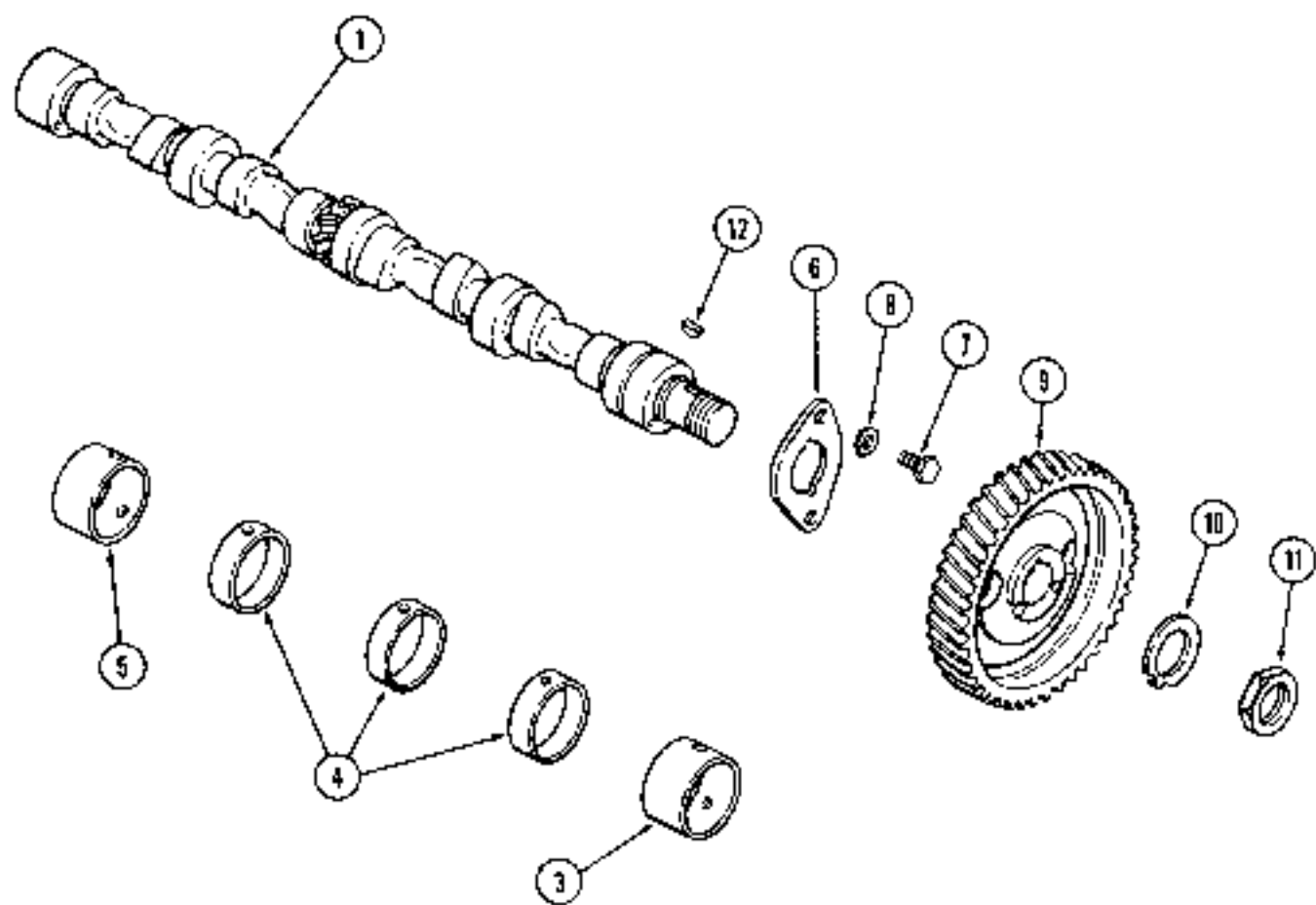
REF	PART NO	DESCRIPTION	REQ'D
1	A 51149	ARM ASSEMBLY - rocker, left hand, with adjusting screw . . . . .	4
2	A 51148	ARM ASSEMBLY - rocker, right hand, with adjusting screw . . . . .	4
3	A 38181	SHAFT - rocker arm . . . . .	2
4	G 48501	SPRING - rocker arm shaft . . . . .	4
5	A 36615	BRACKET - rear, rocker arm shaft . . . . .	1
6	G 49067	BOLT - hex drill ed, rear bracket . . . . .	1
7	G 2101	BRACKET - center . . . . .	1
8	A 51084	BRACKET - intermediate . . . . .	2
9	G 2100	BRACKET - front . . . . .	1
10	13- 656	BOLT - hex, 3/8 NC x 2-1/2 inch . . . . .	4
11	A 30058	WASHER - bracket bolt . . . . .	5
12	G 47079	ROD - push . . . . .	8
13	G 47077	LIFTER - push rod . . . . .	6
18	NSS	VALVE - intake (Order Ref 35)(Reference No. A39422) . . . . .	4
19	G 2069	GUIDE - intake valve, 3-1/4 inch long . . . . .	4
20	NSS	VALVE - exhaust (Order Ref 32)(Reference No. A39423) . . . . .	4
21	A 47078	INSERT - exhaust valve seat (Replaces A39268) . . . . .	4
22	G 2069	GUIDE - exhaust valve, 3-1/8 inch long . . . . .	4
23	G 49065	SEAT - valve spring . . . . .	8
24	A 30025	SPRING - valve . . . . .	8
25	G 11717	RETAINER - valve spring . . . . .	8
26	G 46851	SEAL - valve stem (Rubber) . . . . .	8
27	A 30004	LOCK - retainer . . . . .	16
32	A 41727	VALVE KIT - exhaust (Set of 4) . . . . .	1
35	A 41726	VALVE KIT - intake (Set of 4) . . . . .	1

REFERENCE NUMBERS IN DESCRIPTION ARE FOR CARES USE ONLY AND CAN NOT BE ORDERED SEPARATELY



## CYLINDER BLOCK 188 DIESEL ENGINE

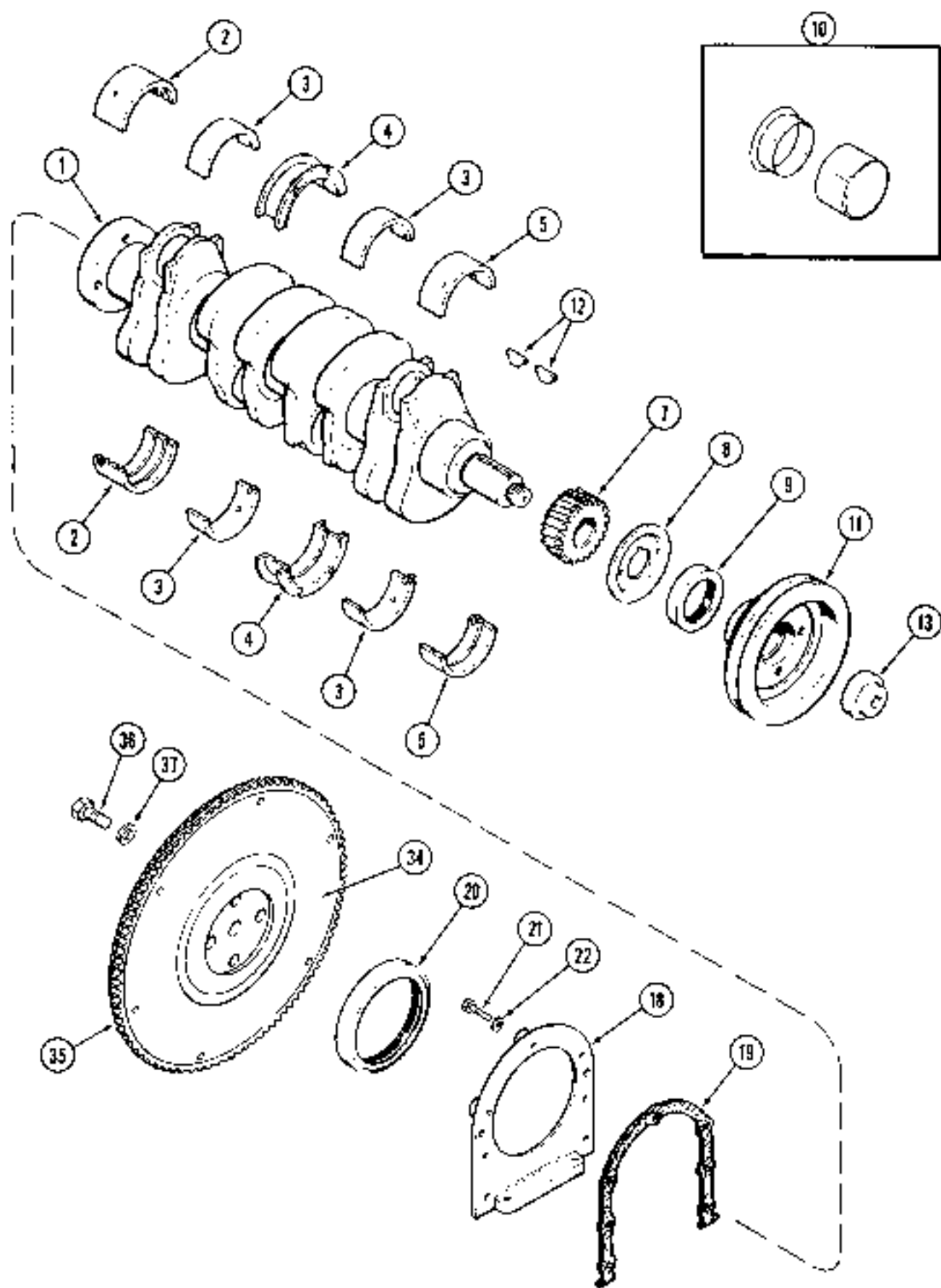
REF	PART NO	DESCRIPTION	REQ'D
	A 46352	BLOCK ASSEMBLY - short (Includes stripped block, crankshaft and bearings, connecting rods and bearings, piston assembly, camshaft, oil pump and timing gears) .....	1
1	AR 46351	BLOCK ASSEMBLY - stripped (Remanufactured) .....	1
1	AC 46351	RETURN NUMBER - blank (Use this number when returning block for credit) .....	1
1	A 46351	BLOCK ASSEMBLY - stripped (New)(Casting No. A152625) .....	1
2	221- 1841	PLUG - socket head .....	3
3	G 49070	PLUG - drilled, front oil gallery .....	1
4	221- 1032	PLUG - socket head, 3/8 inch PT .....	1
6	41- 1016	PLUG - cup type, 1 inch (25 mm) .....	1
7	41- 1030	PLUG - expansion, 1-7/8 inch (47 mm) .....	1
9	G 49608	RING - dowel, head locating .....	2
9	A 153552	ADAPTER - oil filter .....	1
10	REF	BUSHING SET - camshaft (Order components, See Page 37) .....	1
11	A 39047	BOLT - 12 point head, cylinder head, 3-1/2 inch .....	4
11	A 39048	BOLT - 12 point head, cylinder head, 5-1/8 inch .....	11
11	A 39049	BOLT - 12 point head, cylinder head, 5-5/8 inch .....	2
12	A 36002	STUD - cylinder head, lower, 5-5/8 inch .....	2
13	A 51114	NUT - head studs .....	2
14	A 51271	STUD - cylinder head cover, 3-3/4 inch .....	2
15	A 39046	WASHER - head stud .....	19
16	A 39385	CAP - main bearing, rear .....	1
17	G 2128	CAP - main bearing, intermediate .....	2
18	G 2127	CAP - main bearing, center .....	1
19	G 2126	CAP - main bearing, front .....	1
20	26- 872	BOLT - hex, 1/2 NC x 4-1/2 inch .....	8
21	26- 882	BOLT - hex, 1/2 NC x 5-1/8 inch .....	2
22	A 37149	TUBE - oil filter and dipstick .....	1
23	A 37407	EXTENSION - oil filler tube .....	1
24	A 27342	O-RING - tube .....	1
25	214- 256	CLAMP - tube .....	1
26	A 38303	BOLT - hex, front support .....	1
30	A 39936	DIPSTICK - engine oil level .....	1
31	A 137572	DRIVE ASSEMBLY - tachometer .....	1
32	41- 1052	COVER - cup type, auxiliary drive opening, 3-1/2 inch .....	1
33	221- 841	PLUG - hex socket head, 1/4 inch PT .....	1
34	A 51733	STUD - engine to torque tube, 3-3/16 inch .....	2
<b>BLOCK HEATER</b>			
38	A 44815	HEATER ASSEMBLY - cylinder block .....	1
39	A 44814	CORD ASSEMBLY - heater, (12 inch long) .....	1



### CAMSHAFT 188 DIESEL ENGINE

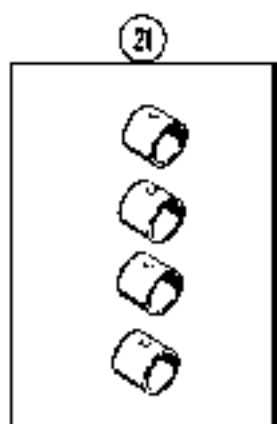
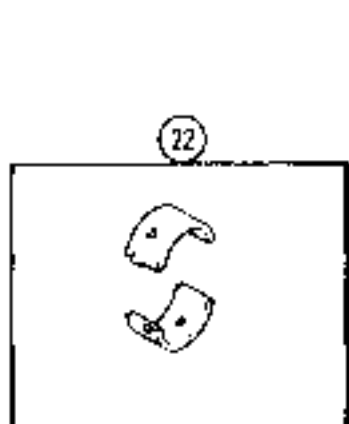
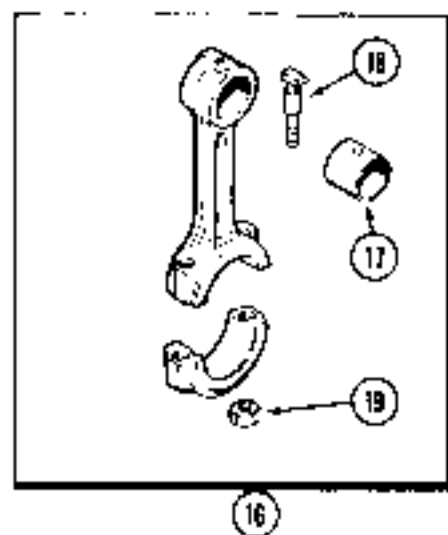
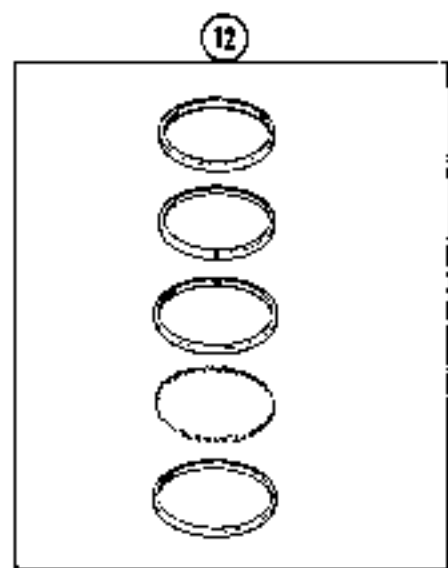
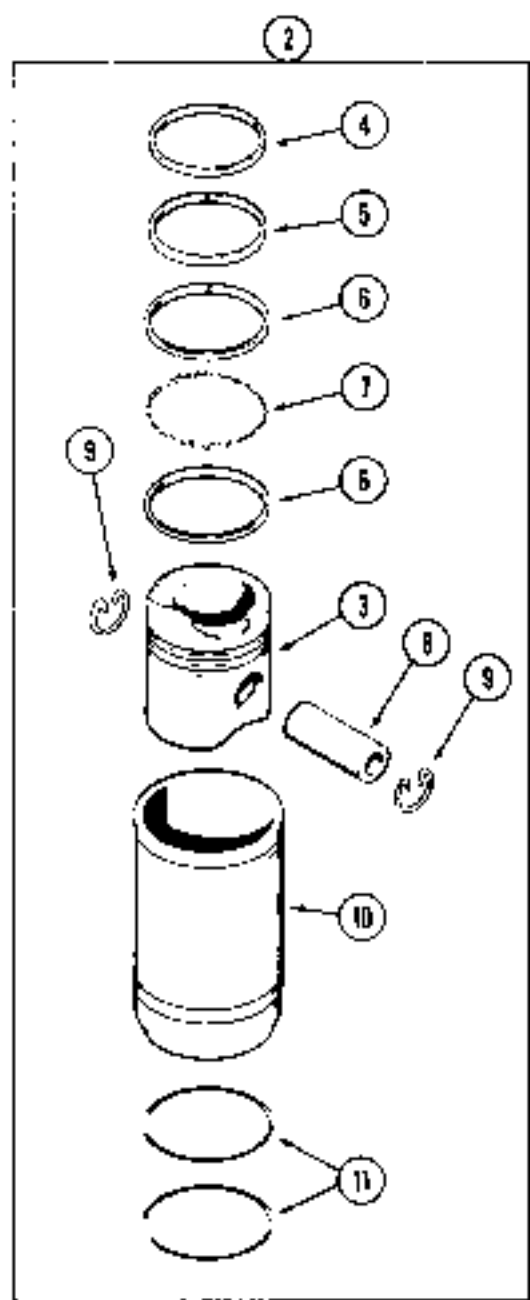
REF.	PART NO	DESCRIPTION	REQ D
1	A 153521	CAMSHAFT - engine (Replaces A34013)	1
3	A 41230	BUSHING - front, 1-7/32 inch wide (31 mm)	1
4	A 41231	BUSHING - intermediate, 1/2 inch wide (13 mm)	3
5	A 151068	BUSHING - rear, 31/32 inch wide (25 mm)	1
6	A 29290	PLATE - thrust, camshaft	1
7	A 30056	BOLT - thrust plate	2
8	193- 9	WASHER - external lock, 5/16 inch	2
9	A 38937	GEAR - camshaft	1
10	A 29438	WASHER - tab, gear nut lock	1
11	A 30063	NUT - gear retaining	1
12	126- 12	KEY - gear to camshaft, No. 6 Woodruff	1





## CRANKSHAFT 189 DIESEL ENGINE

REF.	PART NO	DESCRIPTION	REQ'D
1	A 151015	CRANKSHAFT - engine	1
2	A 36495	INSERT - main bearing, rear, (Standard)(Set of 2)	1
2	A 36496	INSERT - main bearing, rear, 0.002 inch undersize (0.06 mm)(Set of 2)	1
2	A 36497	INSERT - main bearing, rear, 0.010 inch undersize (0.26 mm)(Set of 2)	1
2	A 36498	INSERT - main bearing, rear, 0.020 inch undersize (0.50 mm)(Set of 2)	1
2	A 36499	INSERT - main bearing, rear, 0.030 inch undersize (0.76 mm)(Set of 2)	1
3	A 36485	INSERT - main bearing, intermediate, (Standard)(Set of 2)	2
3	A 36486	INSERT - main bearing, intermediate, 0.002 inch undersize (0.06 mm)(Set of 2)	2
3	A 36487	INSERT - main bearing, intermediate, 0.010 inch undersize (0.26 mm)(Set of 2)	2
3	A 36488	INSERT - main bearing, intermediate, 0.020 inch undersize (0.50 mm)(Set of 2)	2
3	A 36489	INSERT - main bearing, intermediate, 0.030 inch undersize (0.76 mm)(Set of 2)	2
4	A 36490	INSERT - main bearing, center, (Standard)(Set of 2)	1
4	A 36491	INSERT - main bearing, center, 0.002 inch undersize (0.06 mm)(Set of 2)	1
4	A 36492	INSERT - main bearing, center, 0.010 inch undersize (0.26 mm)(Set of 2)	1
4	A 36493	INSERT - main bearing, center, 0.020 inch undersize (0.50 mm)(Set of 2)	1
4	A 36494	INSERT - main bearing, center, 0.030 inch undersize (0.76 mm)(Set of 2)	1
5	A 36480	INSERT - main bearing, front, (Standard)(Set of 2)	1
5	A 36481	INSERT - main bearing, front, 0.002 inch undersize (0.06 mm)(Set of 2)	1
5	A 36482	INSERT - main bearing, front, 0.010 inch undersize (0.26 mm)(Set of 2)	1
5	A 36483	INSERT - main bearing, front, 0.020 inch undersize (0.50 mm)(Set of 2)	1
5	A 36484	INSERT - main bearing, front, 0.030 inch undersize (0.76 mm)(Set of 2)	1
7	A 39288	GEAR - crankshaft	1
8	A 29259	SLINGER - oil	1
9	A 39110	SEAL - oil, front	1
10	A 155893	SLEEVE KIT - wear with tool	1
11	A 156746	PULLEY - fan drive (Replaces A156354)	1
12	A 39132	KEY - pulley and gear	2
13	A 166176	NUT - pulley retaining (Replaces A35673)	1
18	G 2017	RETAINER - rear oil seal (Order A38390)	1
19	A 39188	GASKET - retainer	1
20	A 51339	SEAL - oil, rear	1
21	26- 412	BOLT - hex, 1/4 NC x 3/4 inch	4
21	26- 415	BOLT - hex, 1/4 NC x 1 inch	3
22	92- 4	WASHER - lock, 1/4 inch	7
<b>FLYWHEEL</b>			
34	A 38915	FLYWHEEL ASSEMBLY	1
35	A 182021	GEAR - ring, starter (Replaces G11710)	1
36	21- 300	BOLT - hex, 7/16 NF x 1-1/8 inch	4
37	A 30013	WASHER - flywheel bolt	4



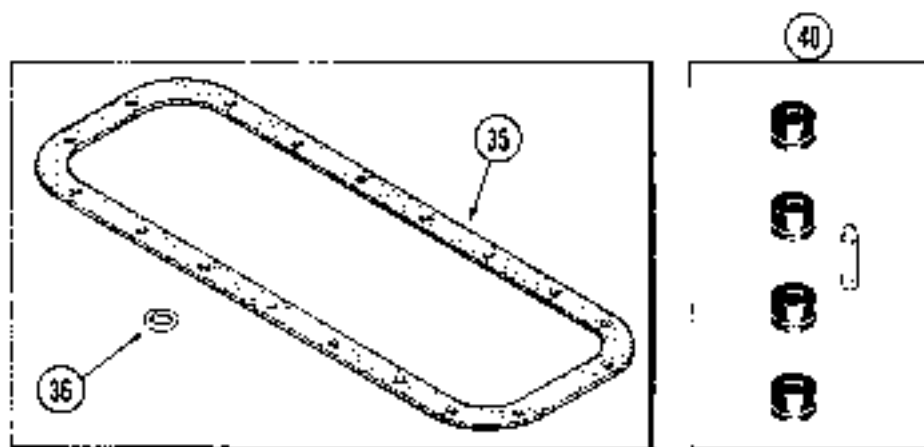
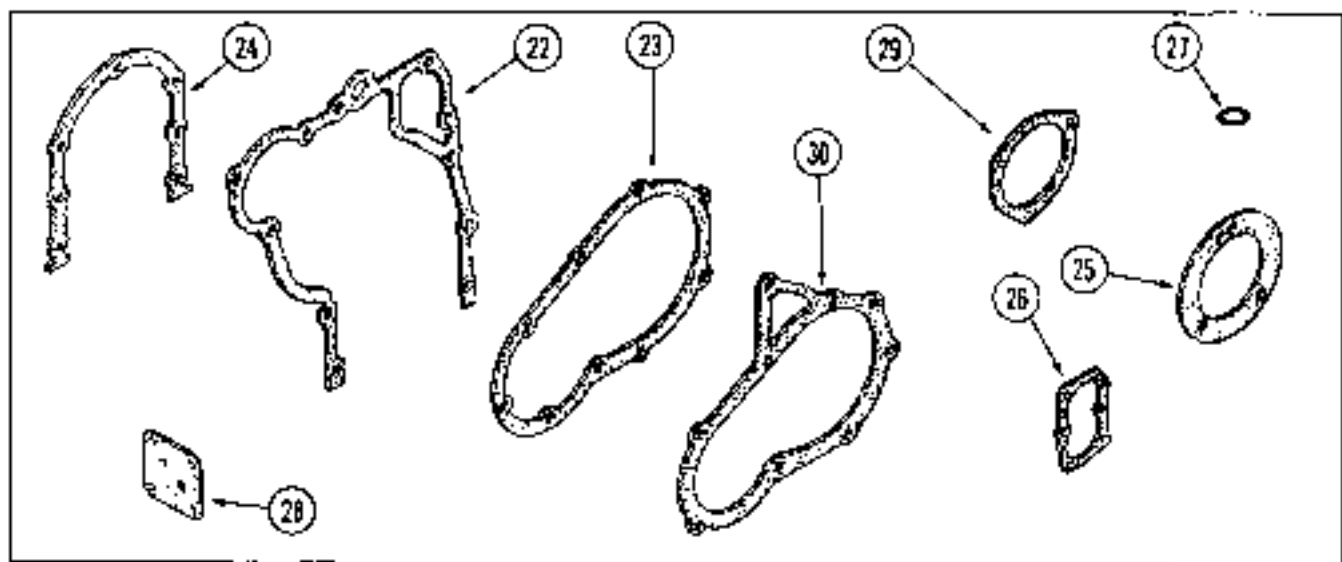
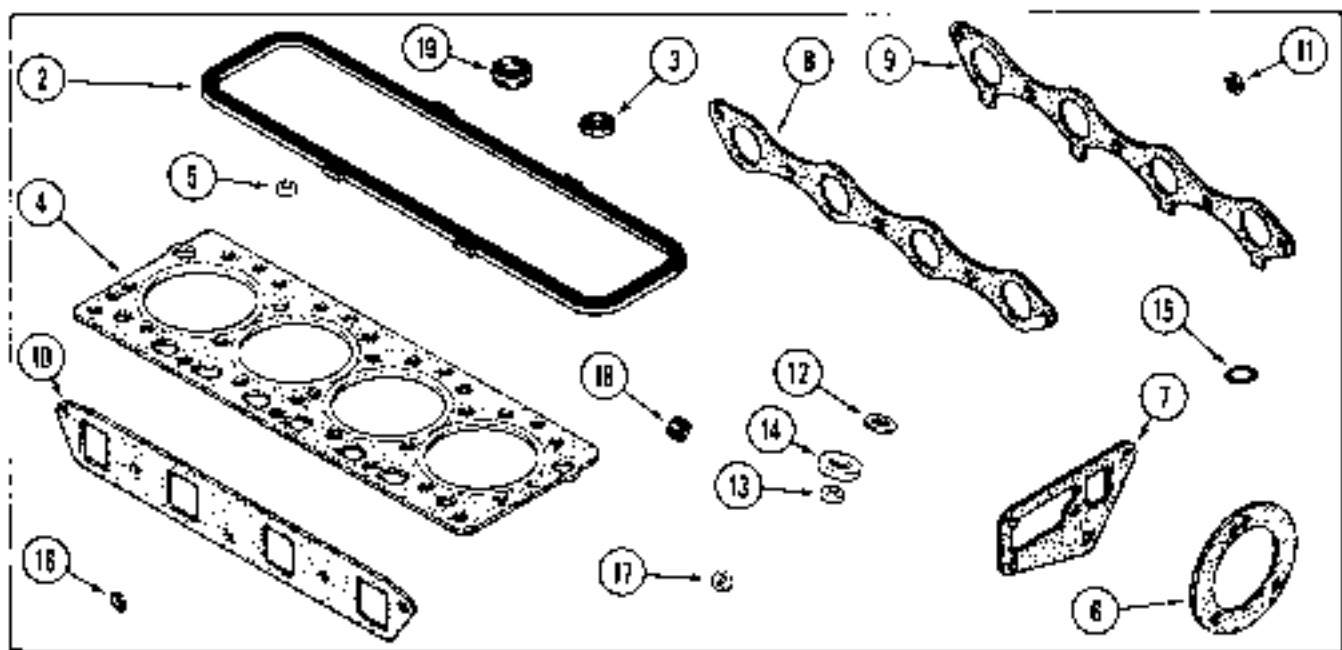
## PISTONS 188 DIESEL ENGINE

REF	PART NO	DESCRIPTION	REQ D
2	A 151895	PISTON KIT - engine (Set of 1) .....	4
3	A 38424	PISTON - engine .....	1
4	A 51189	RING - compression, top groove (See Ref 12) .....	1
5	G 4817	RING - compression, second groove (See Ref 12) .....	1
6	G 47155	RAIL - oil control, third groove (See Ref 12) .....	2
7	G 47174	SPACER - oil control rail (See Ref 12) .....	1
8	A 35770	PIN - piston .....	1
9	G 46702	RING - piston pin retaining .....	2
10	A 39006	SLEEVE - piston .....	1
11	G 46888	O-RING - sleeve packing .....	2
12	A 151857	RING KIT - single piston re-ring (Set of 1)(Includes Ref 4 through 7) ...	4

## CONNECTING RODS

16	A 182011	ROD ASSEMBLY - connecting (Includes Ref 17,18,19)(yellow color code) 1205 to 1229 grams (33 to 43 ounces) .....	UAB
18	A 182012	ROD ASSEMBLY - connecting (Includes Ref 17,18,19)(red color code) 1229 to 1253 grams (43 to 44 ounces) .....	UAB
16	A 182013	ROD ASSEMBLY - connecting (Includes Ref 17,18,19)(blue color code) 1253 to 1277 grams (44 to 45 ounces) .....	UAB
	A 182014	ROD ASSEMBLY KIT - connecting (Set of 4 with no color code) within 1/4 ounce (7.08 grams) of each other .....	1
15	A 136931	ROD ASSEMBLY - connecting .....	4
17	NSS	BUSHING - piston pin (Order Ref 21)(Reference No. A136712) .....	1
18	G 49064	BOLT - connecting rod bearing cap .....	2
19	A 51904	NUT - bearing cap bolt .....	2
21	A 44083	BUSHING SET - piston pin (Set of 4) .....	1
22	A 46050	INSERT KIT - connecting rod bearing, (Standard)(2 in kit) .....	4
22	A 46051	INSERT KIT - connecting rod bearing, 0.002 inch undersize (0.06 mm) (2 in kit) .....	4
22	A 46052	INSERT KIT - connecting rod bearing, 0.010 inch undersize (0.26 mm) (2 in kit) .....	4
22	A 46053	INSERT KIT - connecting rod bearing, 0.020 inch undersize (0.50 mm) (2 in kit) .....	4
22	A 46054	INSERT KIT - connecting rod bearing, 0.030 inch undersize (0.76 mm) (2 in kit) .....	4

REFERENCE NUMBERS IN DESCRIPTION ARE FOR CARES USE  
ONLY AND CAN NOT BE ORDERED SEPARATELY



## ENGINE GASKET KITS

### 188 DIESEL ENGINE

### VALVE GRIND KIT

REF.	PART NO.	DESCRIPTION	REQ'D
	A 155589	GASKET KIT - valve grind (See Note)	1
2	A 43030	GASKET - valve cover	1
3	A 142098	GROMMET - valve cover studs (Rubber)	2
4	A 148745	GASKET - cylinder head	1
5	G 46851	SEAL - valve stem (Rubber)(See Ref 40)	8
6	A 38083	GASKET - water pump to body	1
7	A 28094	GASKET - water pump body to cylinder head	1
8	G 46872	GASKET - exhaust manifold, without turbocharger	1
9	A 155137	GASKET - exhaust manifold, with turbocharger (Not used this application)	1
10	G 46871	GASKET - intake manifold	1
11	A 50694	WASHER - sealing, intake manifold studs (Replaces A148861)	3
12	G 49407	WASHER - fuel injection lines to pump	8
13	A 41402	SEAL - carbon stop, injector nozzles	4
14	A 41403	WASHER - seat injector nozzles	4
15	F 62075	O-RING - water pump body, 1 inch (25 mm) OD	1
16	A 27891	O-RING - manifold studs, 9/16 inch (14 mm) OD	3
17	G 49068	GASKET - injector nozzle seat (Not used this application)	4
18	222- 101	SLEEVE - for 3/16 inch tube (Not used this application)	4
18	222- 103	SLEEVE - for 5/16 inch tube (Not used this application)	4
19	G 46867	GROMMET - cover	2

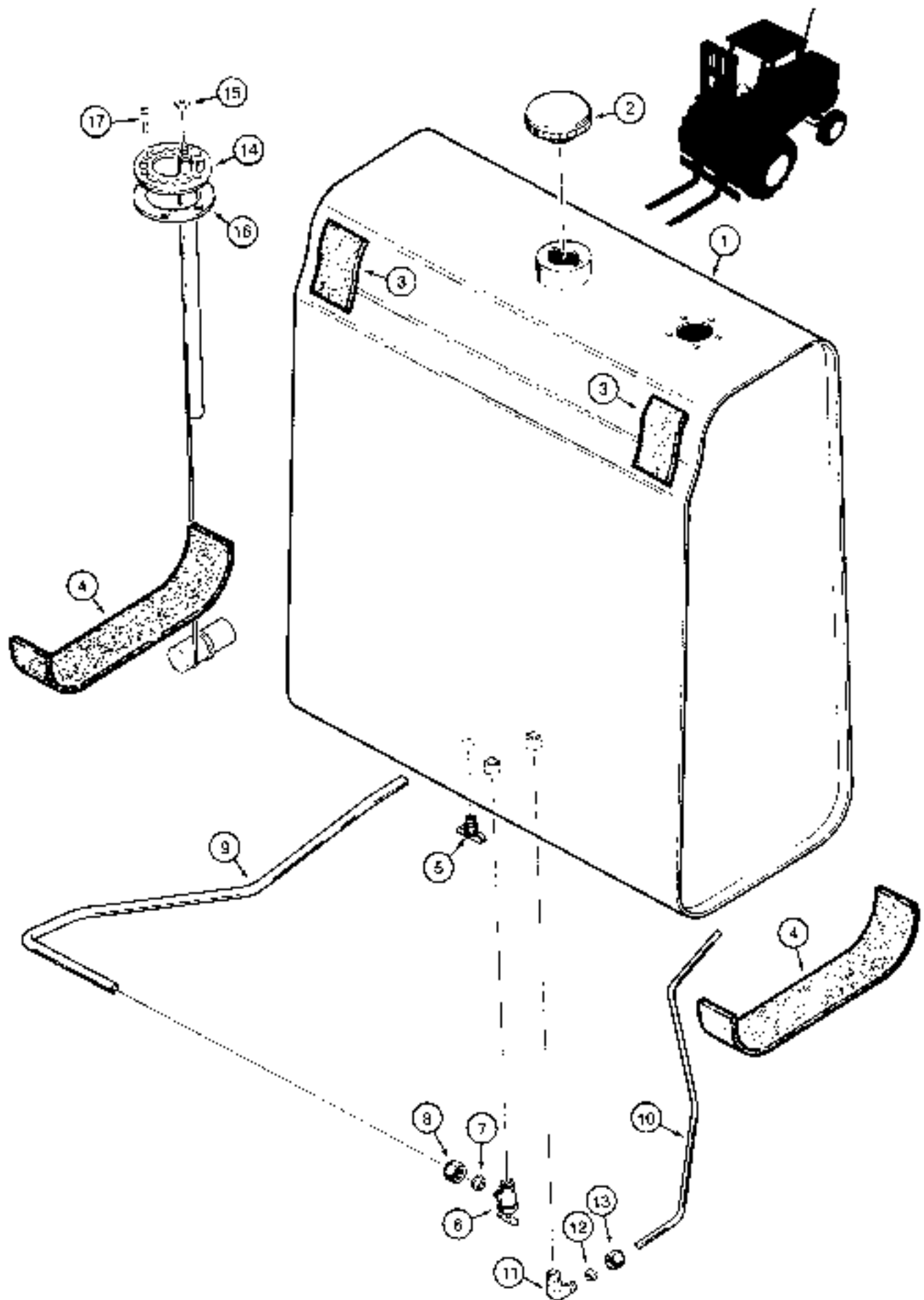
### CYLINDER BLOCK KIT

	A 43198	GASKET KIT - cylinder block (See Note)	1
22	A 51529	GASKET - timing gear cover	1
23	A 39925	GASKET - injection pump drive cover	1
24	A 39188	GASKET - rear oil seal retainer	1
25	A 38083	GASKET - water pump	1
26	G 46852	GASKET - oil pump cover	1
27	F 62075	O-RING - water pump body to cover	1
28	G 46854	GASKET - (Not used this application)	1
29	A 30042	GASKET - (Not used this application)	1
30	G 46859	GASKET - (Not used this application)	1

### OIL PAN KIT

	A 44758	GASKET KIT - oil pan (See Note)	1
35	A 35273	GASKET - oil pan	1
36	A 69608	GASKET - drain plug, Nylon, 3/4 inch (19 mm) ID	1
36	A 34827	GASKET - drain plug, Copper, 7/8 inch (22 mm) ID	1
40	M 20611	SEAL KIT - valve (Includes 4 seals and installation sleeve)	2

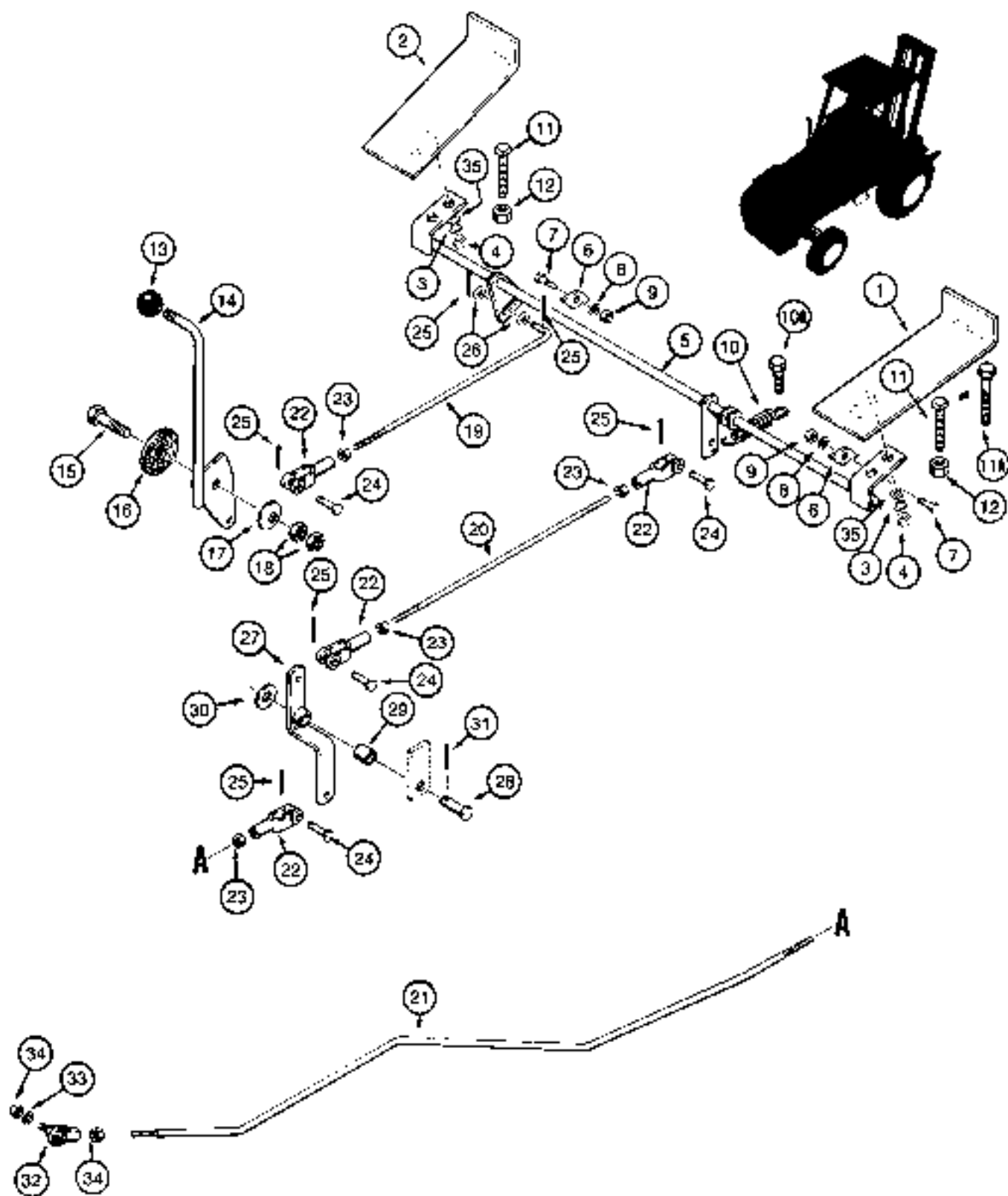
NOTE FOR COMPLETE ENGINE OVERHAUL ORDER 1-A155589, 1-A43198 and 1-A44758



## FUEL TANK AND FUEL LINES

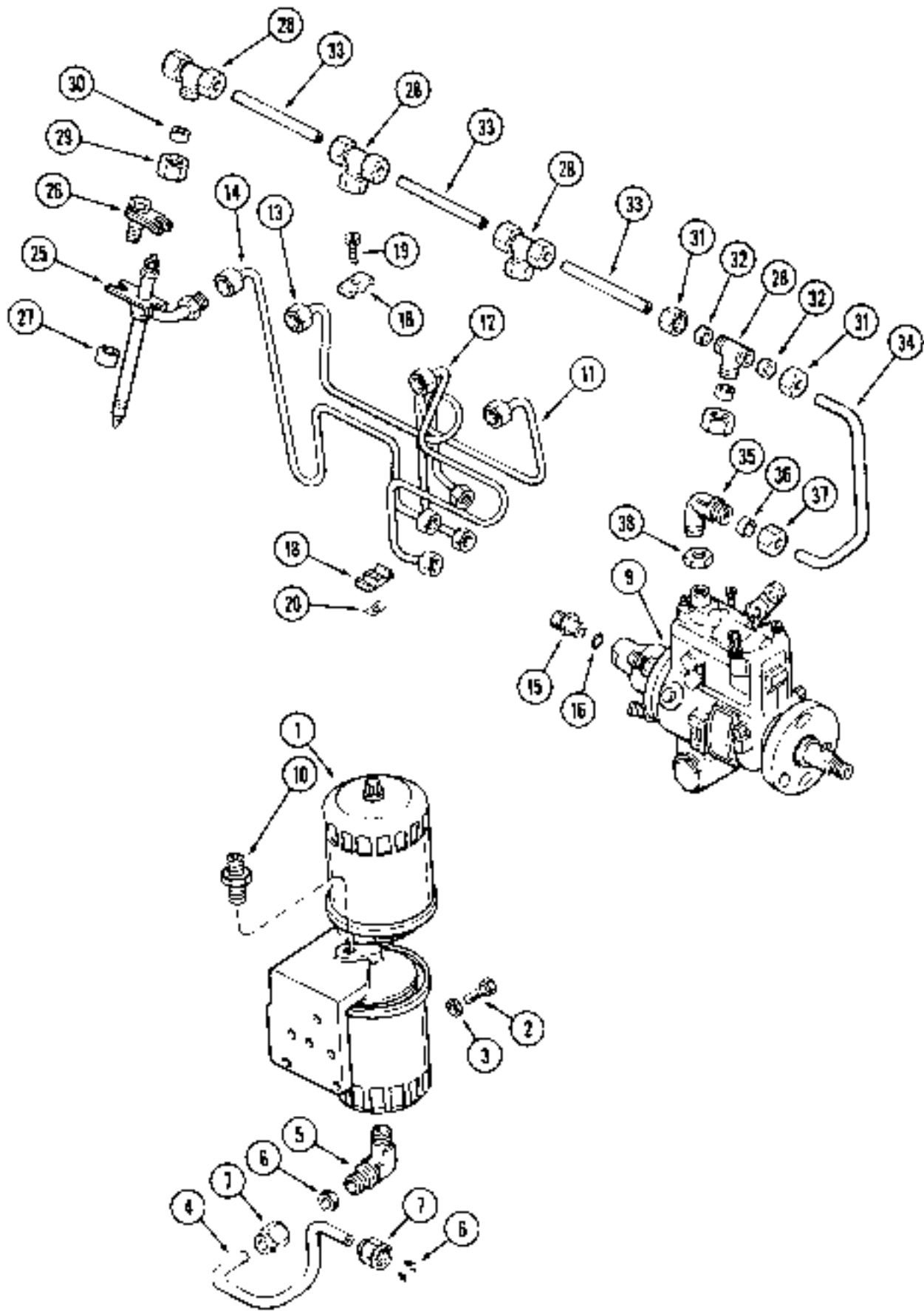
REF.	PART NO.	DESCRIPTION	REQ'D.
1	D 87871	FUEL TANK - diesel fuel	1
2	A 51390	CAP - fuel tank	1
3	D 66072	STRIP - sponge rubber front	2
4	D 93351	STRIP - sponge rubber, bottom	2
5	217- 81	VALVE - fuel tank drain	1
	D 74027	SHUTOFF VALVE ASSEMBLY - fuel tank outlet	1
6	NSS	BODY - shutoff valve	1
7	222- 654	SLEEVE - compression fitting	1
8	222- 664	NUT - compression fitting	1
9	D 121844	TUBE - engine supply, 3/8"	1
10	D 93991	TUBE - engine return, 1/4"	1
	222- 43	ELBOW ASSEMBLY - 90 degree, compression fitting, inlet	1
11	NSS	BODY - elbow	1
12	222- 102	SLEEVE - compression fitting	1
13	222- 112	NUT - compression fitting	1
14	D 83480	SENDER - fuel level gauge	1
15	193- 1000	NUT AND LOCK WASHER - No. 10 - 32 NF, plated	1
16	A 11822	GASKET - fuel sender	1
17	D 75465	SCREW - special sealing	5





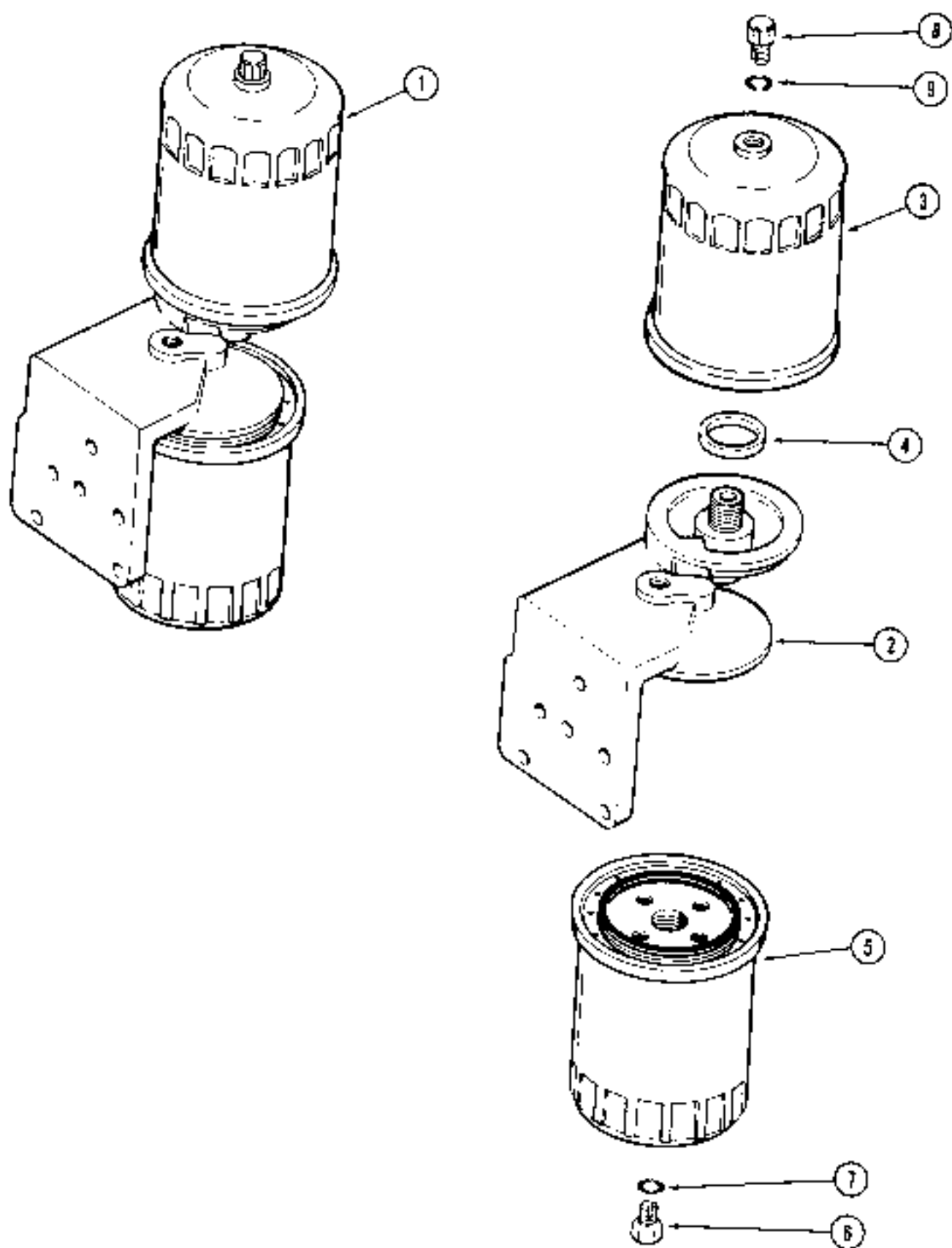
## THROTTLE CONTROL LINKAGE

REF.	PART NO	DESCRIPTION	REQ'D.
1	D 76903	PEDAL - foot throttle, right-hand	1
2	D 76904	PEDAL - foot throttle, left-hand	1
3	192- 21	WASHER - lock, 3/8", plated	4
4	129- 103	NUT - hex, 3/8" - 16 NC, plated	4
5	R 35649	SHAFT - pedal	1
6	D 67902	PLATE - shaft retaining	2
7	113- 103	BOLT - hex head, 5/16" - 18 NC x 1", plated	2
8	192- 20	WASHER - lock, 5/16", plated	2
9	129- 102	NUT - hex, 5/16" - 18 NC, plated	2
10	D 128921	SPRING - throttle return	1
10A	113- 208	BOLT - hex head, 3/8" - 16 NC x 1-1/4", plated, welded to floorplate	1
11	181- 652	SET SCREW - square head, 3/8" - 16 NC x 2-1/4", throttle stop, no longer used. order 1" 3-250 bolt	2
11A	113- 250	BOLT - hex head, 3/8" - 16 NC x 2-1/2", plated	2
12	129- 103	NUT - hex, 3/8" - 16 NC, plated	2
13	D 59912	KNOB - hand throttle	1
14	R 35661	LEVER - hand throttle	1
15	113- 421	BOLT - hex head, 1/2" - 13 NC x 2", plated	1
16	R 15071	FRICTION DISC - throttle lever	1
17	R 14771	BELLEVILLE SPRING - throttle lever	1
18	129- 105	NUT - hex, 1/2" - 13 NC, plated	2
19	R 35667	ROD - hand throttle to pedal shaft	1
20	D 68927	ROD - pedal shaft to pivot	1
21	D 121816	ROD - pivot to injection pump	1
22	H 44198	CLEVIS - throttle rods, 5/16" - 24 NF, metal, plated, replaces fiberglass clevis on some models	4
23	129- 122	NUT - hex, 5/16" - 24 NF, plated	4
24	141- 3	CLEVIS PIN - 5/16" x 15/16"	4
25	132- 320	COTTER PIN - 3/32" x 3/4", plated	6
26	195- 103	WASHER - flat, 5/16", plated	2
27	D 77235	LEVER - throttle rods, pivot	1
28	141- 6	CLEVIS PIN - 1/2" X 1-3/8"	1
29	A 141259	BUSHING - throttle rod pivot	1
30	195- 633	WASHER - flat, 1/2", plated	1
31	132- 334	COTTER PIN - 1/8" x 3/4", plated	1
32	D 63154	BALL JOINT - adjustable, 1/4" - 28 NF threads	1
33	192- 19	WASHER - lock, 1/4", plated	1
34	129- 121	NUT - hex, 1/4" - 28 NF, plated	2
35	195- 525	WASHER - flat, 3/8", plated	4



## FUEL INJECTION AND FILTER SYSTEM 188 DIESEL ENGINE

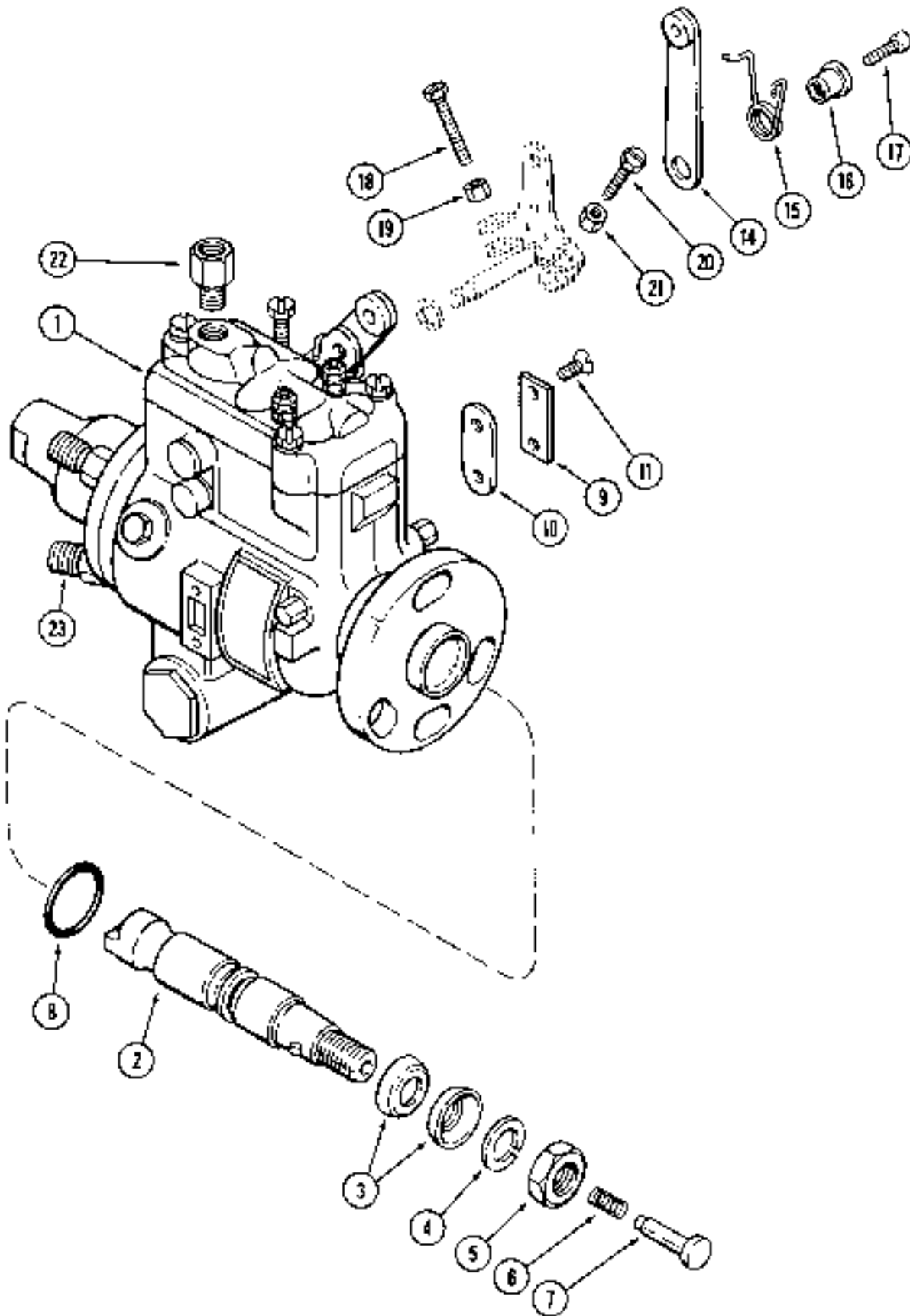
REF.	PART NO.	DESCRIPTION	REQ'D
1	REF.	FILTER ASSEMBLY - fuel (See Page 51)	1
2	113- 113	BOLT - hex. 5/16 NC x 7/8 inch	3
3	192- 20	WASHER - lock, 5/16 inch	3
4	A 154898	TUBE - fuel, filter to pump	1
5	222- 47	ELBOW ASSEMBLY - 90 degree, 3/8 tube 5/8-24 thread x 1/4 inch PT	1
6	222- 103	SLEEVE - for 3/8 inch tube	1
7	222- 113	NUT - for 3/8 inch tube	1
8	REF.	PUMP ASSEMBLY - fuel injection (See Page 53)	1
10	222- 4025	CONNECTOR - straight, 5/16 x 1/4 inch PT	1
11	A 153358	TUBE ASSEMBLY - pump to No. 1 nozzle	1
12	A 153359	TUBE ASSEMBLY - pump to No. 2 nozzle	1
13	A 153360	TUBE ASSEMBLY - pump to No. 3 nozzle	1
14	A 153361	TUBE ASSEMBLY - pump to No. 4 nozzle	1
15	A 51986	FITTING - pump inlet	1
16	218- 5004	O-RING - 27/64 x 5/64 inch (11 x 2 mm)	1
18	A 58709	CLAMP - injection tube	6
19	173- 102	SCREW - round head, No. 10-24 x 1 inch	3
20	131- 612	NUT - speed lock, No. 10-24	3
25	REF.	NOZZLE ASSEMBLY - fuel injector (See Page 57)	4
26	A 37837	CLAMP ASSEMBLY - injector nozzle	4
27	A 37839	SPACER - clamp	4
28	A 58960	TEE - nozzle leak-off lines	4
29	A 58961	NUT - tee to nozzle	4
30	A 58962	GROMMET - tee to nozzle	4
31	222- 112	NUT - for 1/4 inch tube	8
32	222- 102	SLEEVE - for 1/4 inch tube	8
33	A 38644	TUBE - fuel leak-off	3
34	A 142906	TUBE - fuel leak-off (to injection pump)	1
35	222- 42	ELBOW ASSEMBLY - 90 degree, 1/4 tube 1/2-24 thread x 1/8 inch PT	1
36	222- 102	SLEEVE - for 1/4 inch tube	1
37	222- 112	NUT - for 1/4 inch tube	1
38	A 38160	NUT - sealing 1/8 inch PT	1



### FUEL FILTER 188 DIESEL ENGINE

REF.	PART NO	DESCRIPTION	REQ'D
1	A 154934	FILTER ASSEMBLY - fuel .....	1
2	A 154909	HEAD - filter base .....	1
	A 151281	FILTER KIT - fuel .....	1
3	NSS	FILTER ASSEMBLY - secondary (15/16 inch threads)(Order A151281) (Reference No. A39687) .....	1
4	A 42315	GASKET - filter to head, 15/16 x 1-1/4 x 1/4 inch (24 x 32 x 6 mm) .....	1
5	NSS	FILTER ASSEMBLY - primary (13/16 inch threads) (Order A151281)(Reference No. A39668) .....	1
6	G 49080	PLUG - 12 point head, nylon, primary filter drain .....	1
7	218- 5002	O-RING - drain plug, 5/16 x 7/16 x 1/16 inch (8 x 11 x 2 mm) .....	1
8	218- 5152	PLUG ASSEMBLY - hex head, filter drain, 3/8 inch NF .....	1
9	218- 5002	O-RING - drain plug, 5/16 x 7/16 x 1/16 inch (8 x 11 x 2 mm) .....	1

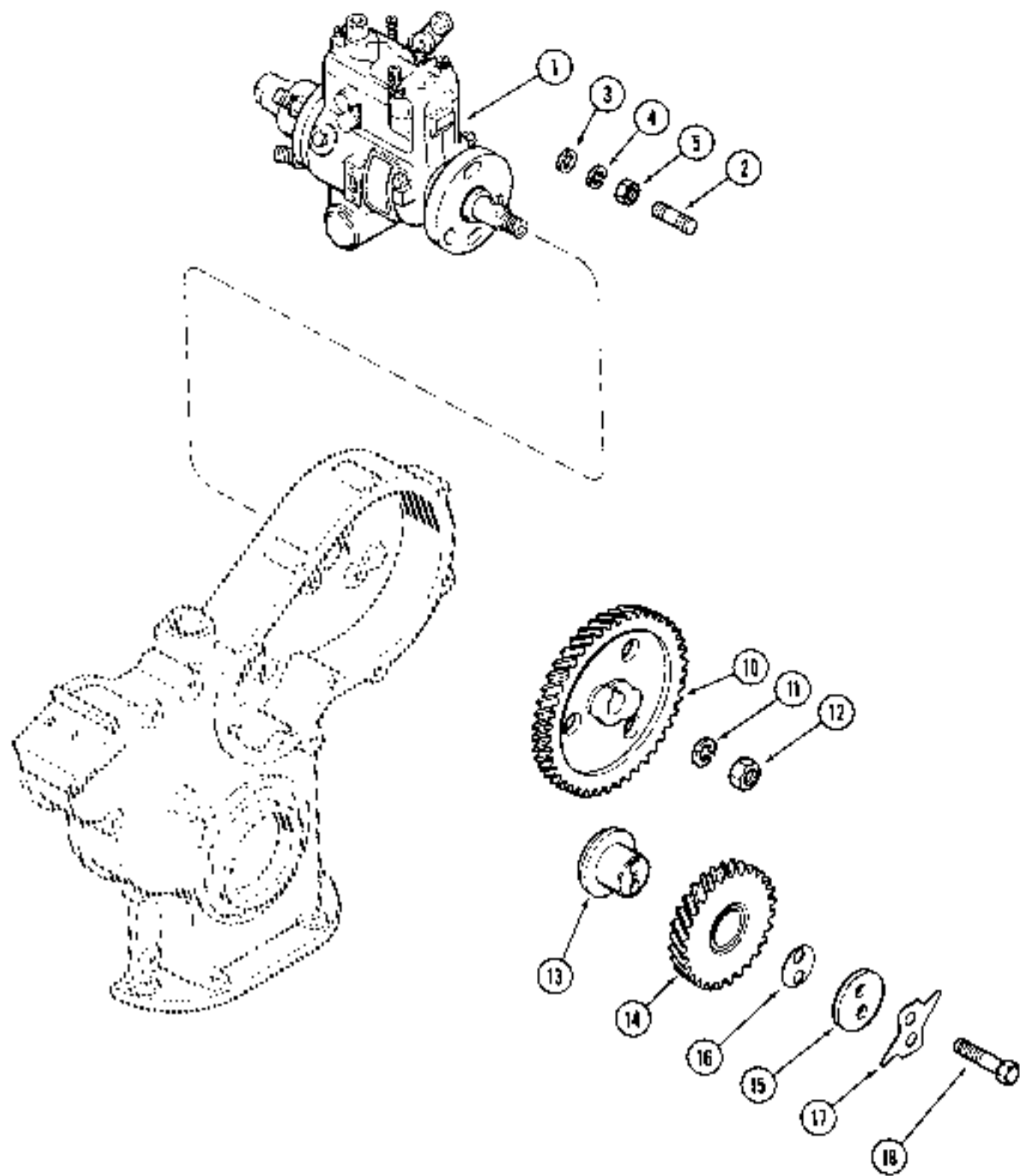
REFERENCE NUMBERS IN DESCRIPTION ARE FOR CARES USE  
ONLY AND CAN NOT BE ORDERED SEPARATELY.



### INJECTION PUMP 188 DIESEL ENGINE

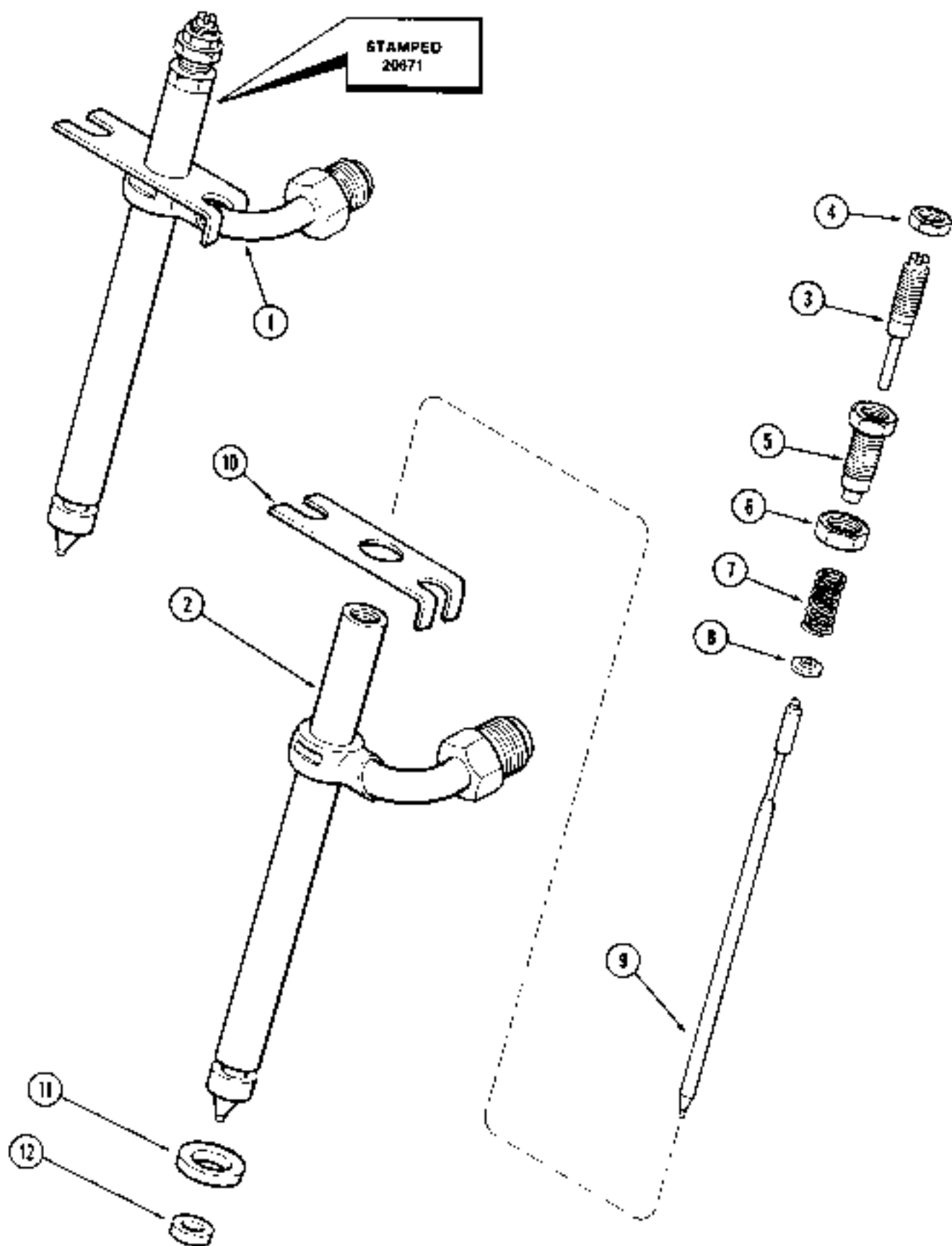
REF.	PART NO.	DESCRIPTION	REQ D
1	A 155747	PUMP ASSEMBLY - fuel injection, 2100 RPM	1
2	A 44710	SHAFT ASSEMBLY - pump drive	1
3	R 14711	SEAL - pump shaft	2
4	192- 24	WASHER - lock, 9/16 inch	1
5	25- 119	NUT - hex, 9/16 inch NF	1
6	G 48502	SPRING - thrust plunger, 1-3/16 inch free length (30 mm)	1
7	A 44653	PLUNGER - thrust, pump drive shaft	1
8	74244	SEAL - pilot tube (o-ring)	1
9	73452	COVER - timing hole	1
10	73453	GASKET - timing hole cover	1
11	A 47591	SCREW - timing hole cover	2
14	G 45338	LEVER - throttle	1
15	G 48505	SPRING - throttle lever	1
16	G 49621	RETAINER - throttle lever spring	1
17	185- 124	SCREW - retainer	1
18	G 49088	SCREW - adjustment high idle	1
19	73651	NUT - hex lock, idle screw	1
20	NSS	SCREW - low idle adjustment	1
21	NSS	NUT - lock, low idle adjustment screw	1
22	A 47592	CONNECTOR - return line	1
23	A 47593	CONNECTOR - fuel lines	4





### INJECTION PUMP DRIVE 188 DIESEL ENGINE

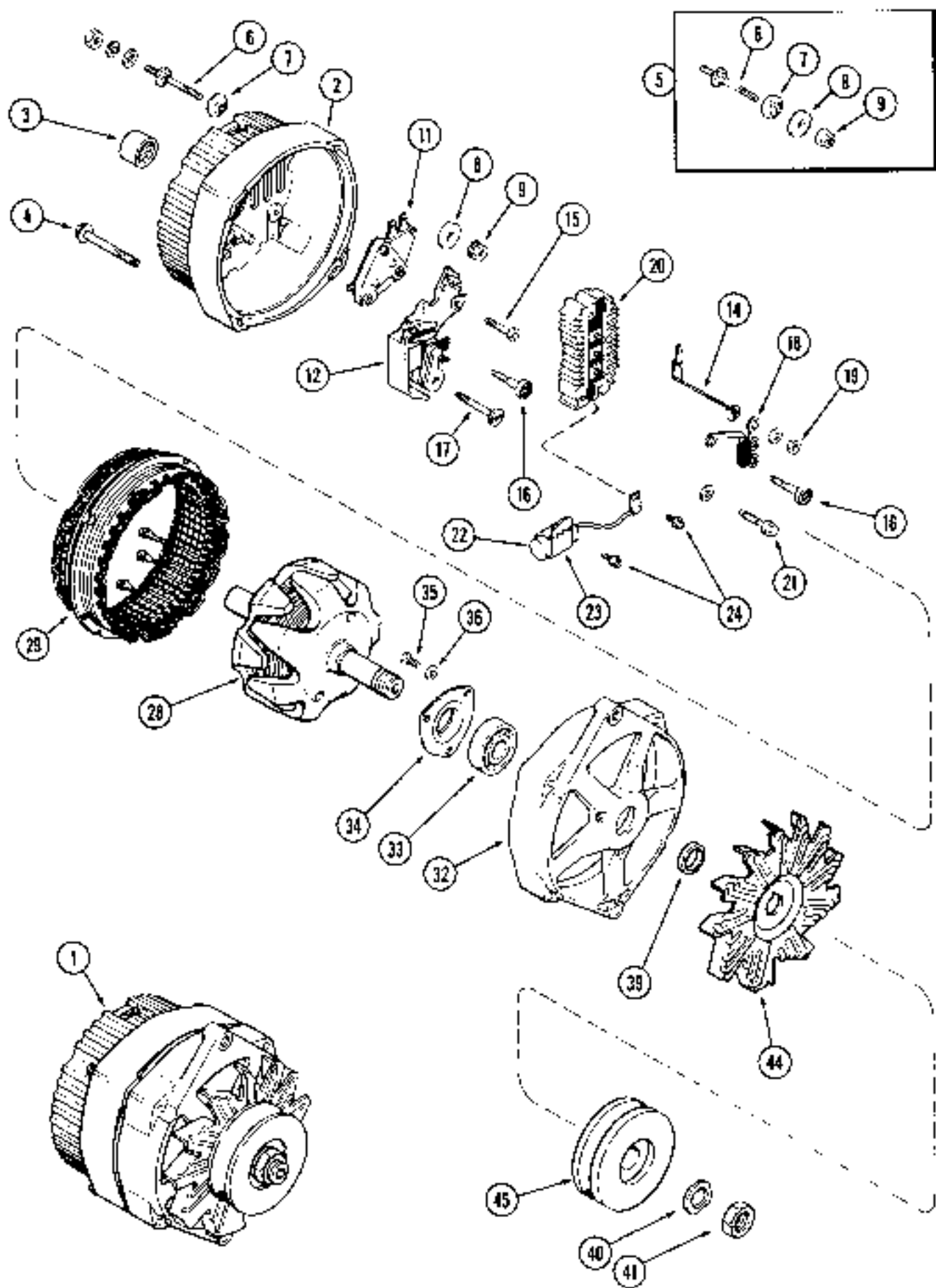
REF	PART NO.	DESCRIPTION	REQ'D
1	REF	PUMP ASSEMBLY - fuel injection (See Page 53)	1
2	G 102128	STUD - pump mounting, 1-7/16 inch	3
3	A 30043	WASHER - mounting studs	3
4	192- 21	WASHER - lock, 3/8 inch	3
5	25- 166	NUT - hex, 3/8 inch NC	3
10	G 2076	GEAR - drive, injection pump	1
11	192- 24	WASHER - lock, 9/16 inch	1
12	129- 166	NUT - hex jam, 9/16 inch NF	1
13	G 11726	HUB - idler gear	1
14	G 11852	GEAR ASSEMBLY - idler, with bushing	1
15	G 11732	PLATE - thrust, idler gear	1
16	G 11728	SHIM - idler gear, 0.005 inch (0.13 mm)	UAF
16	G 11729	SHIM - idler gear, 0.006 inch (0.16 mm)	UAF
16	G 11730	SHIM - idler gear, 0.007 inch (0.18 mm)	UAF
16	G 11731	SHIM - idler gear, 0.009 inch (0.23 mm)	UAF
17	G 11746	PLATE - lock, idler gear	1
18	13- 832	BOLT - hex, 3/8 inch NC x 2 inch	2



## INJECTOR NOZZLE 188 DIESEL ENGINE

REF	PART NO	DESCRIPTION	REQ D
1	AR 140829	NOZZLE ASSEMBLY - injector (Remanufactured) . . . . .	1
1	AC 140829	RETURN NUMBER - injector (Use this number when returning nozzle for credit) . . . . .	1
1	A 140829	NOZZLE ASSEMBLY - injector (New)(See Note) {No. 20671 stamped on body}(Color code white) . . . . .	4
2	NS6	BODY - nozzle . . . . .	1
3	A 43599	SCREW - lift adjusting . . . . .	1
4	A 43602	NUT - lock, lift adjusting screw . . . . .	1
5	A 43600	SCREW - pressure adjusting . . . . .	1
6	A 42424	NUT - lock, pressure adjusting screw . . . . .	1
7	A 43733	SPRING - pressure adjusting 9/16 inch free length (14 mm) . . . . .	1
8	A 44369	SEAT - pressure adjusting spring . . . . .	1
9	NSS	VALVE - nozzle . . . . .	1
10	A 43506	PLATE - nozzle holder . . . . .	1
11	A 41403	WASHER - nozzle body . . . . .	1
12	A 41402	SEAL - carbon stop . . . . .	1

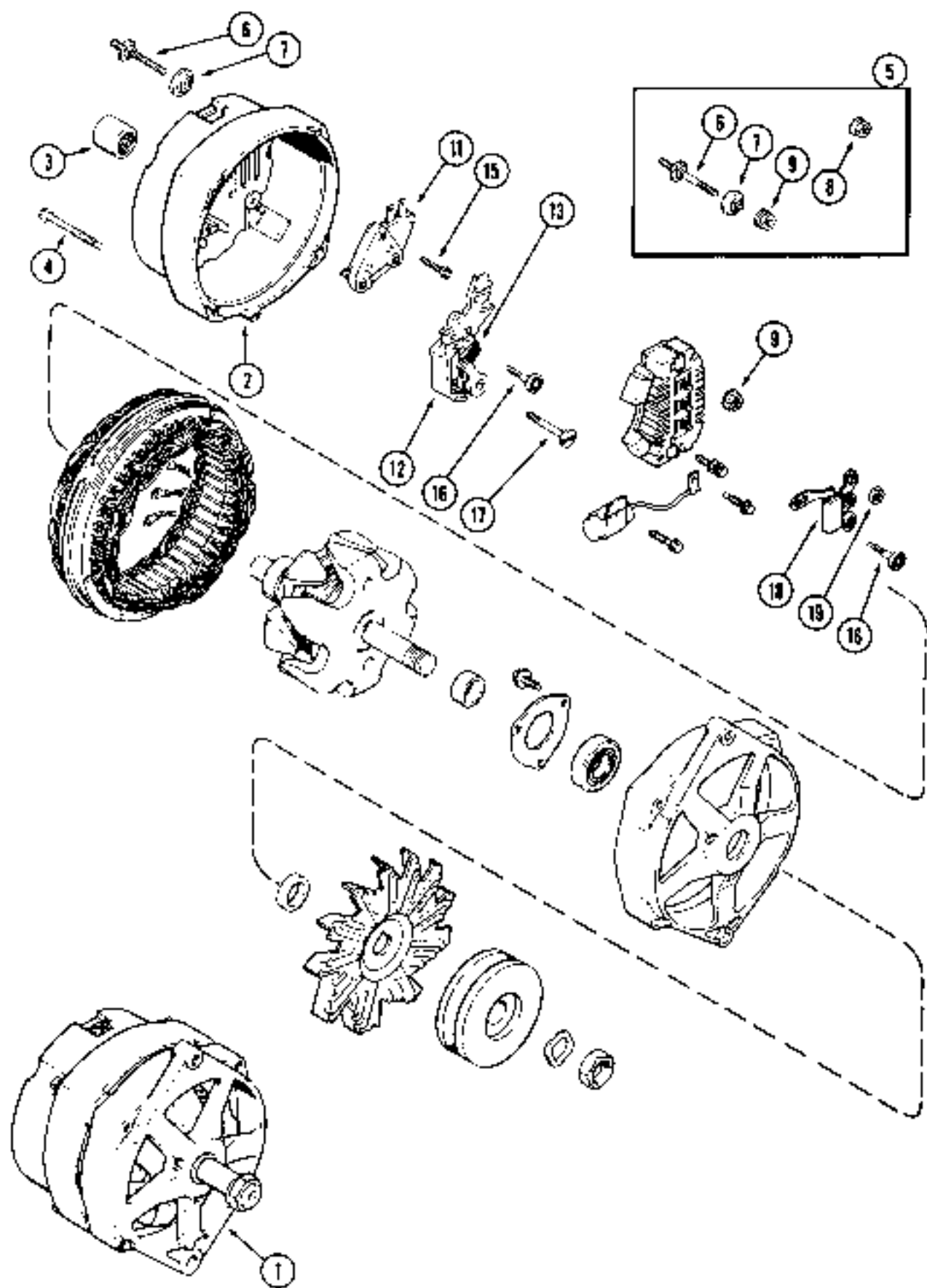
NOTE: WHEN A NOZZLE IS REMOVED FROM THE HEAD, WASHER A41403 AND SEAL A41402 MUST BE REPLACED BEFORE THE NOZZLE IS INSTALLED BACK INTO THE HEAD



## L102693 ALTERNATOR

REF.	PART NO.	DESCRIPTION	REQ'D
1	L 102693	ALTERNATOR ASSEMBLY - 42 ampere Delco-Remy No. 1103125 (J I Case installed)(Order A47623 alternator, A43384 fan and A51561 pulley) . . . . .	1
1	A 47436	ALTERNATOR ASSEMBLY - remanufactured . . . . .	1
1	A 47437	RETURN NUMBER - use this part no. to return alternator core for credit . . .	1
1	A 47623	ALTERNATOR ASSEMBLY - new, Delco Remy No. 1103133 (Used for service only) . . . . .	1
2	A 47595	FRAME ASSEMBLY - slip ring end . . . . .	1
3	A 47578	BEARING - roller . . . . .	1
4	163- 6	BOLT - hex washer head, No. 10-24 x 1-3/4 inch . . . . .	4
5	A 47597	TERMINAL KIT - battery . . . . .	1
6	NSS	STUD - terminal . . . . .	1
7	NSS	INSULATOR . . . . .	1
8	NSS	WASHER - insulating . . . . .	1
9	NSS	NUT ASSEMBLY . . . . .	2
11	A 45213	REGULATOR - voltage . . . . .	1
12	A 47042	HOLDER ASSEMBLY - brush . . . . .	1
	A 47987	BRUSH - (Not shown)(Replaces A47626) . . . . .	2
14	A 47045	TERMINAL - relay . . . . .	1
15	A 47043	SCREW - brush holder grounded . . . . .	1
16	A 45223	SCREW - brush holder, insulated . . . . .	2
17	A 47581	SCREW - brush holder attaching . . . . .	1
18	A 48339	DIODE - trio . . . . .	1
19	129- 16	NUT - hex, trio diode to rectifier bridge . . . . .	3
20	A 45394	RECTIFIER BRIDGE - alternator . . . . .	1
21	A 45221	SCREW - rectifier bridge attaching . . . . .	1
22	A 47734	CAPACITOR - rectifier . . . . .	1
23	A 45227	BRACKET - capacitor mounting . . . . .	1
24	A 45228	SCREW - capacitor bracket and lead . . . . .	2
28	A 47047	ROTOR ASSEMBLY - alternator . . . . .	1
29	A 47048	STATOR ASSEMBLY - alternator . . . . .	1
32	A 47596	FRAME - drive end . . . . .	1
33	A 47579	BEARING - ball, drive end . . . . .	1
34	A 44433	PLATE - bearing retaining . . . . .	1
35	173- 210	SCREW - bearing plate retaining . . . . .	3
36	195- 512	WASHER - flat, 7/32 x 7/16 x 1/16 inch (6 x 11 x 2 mm) . . . . .	3
39	A 47580	COLLAR - rotor shaft . . . . .	1
40	R 18171	WASHER - lock, pulley nut . . . . .	1
41	A 25546	NUT - pulley and fan retaining . . . . .	1
44	A 43384	FAN - ventilating . . . . .	1
45	A 51561	PULLEY - drive . . . . .	1

4

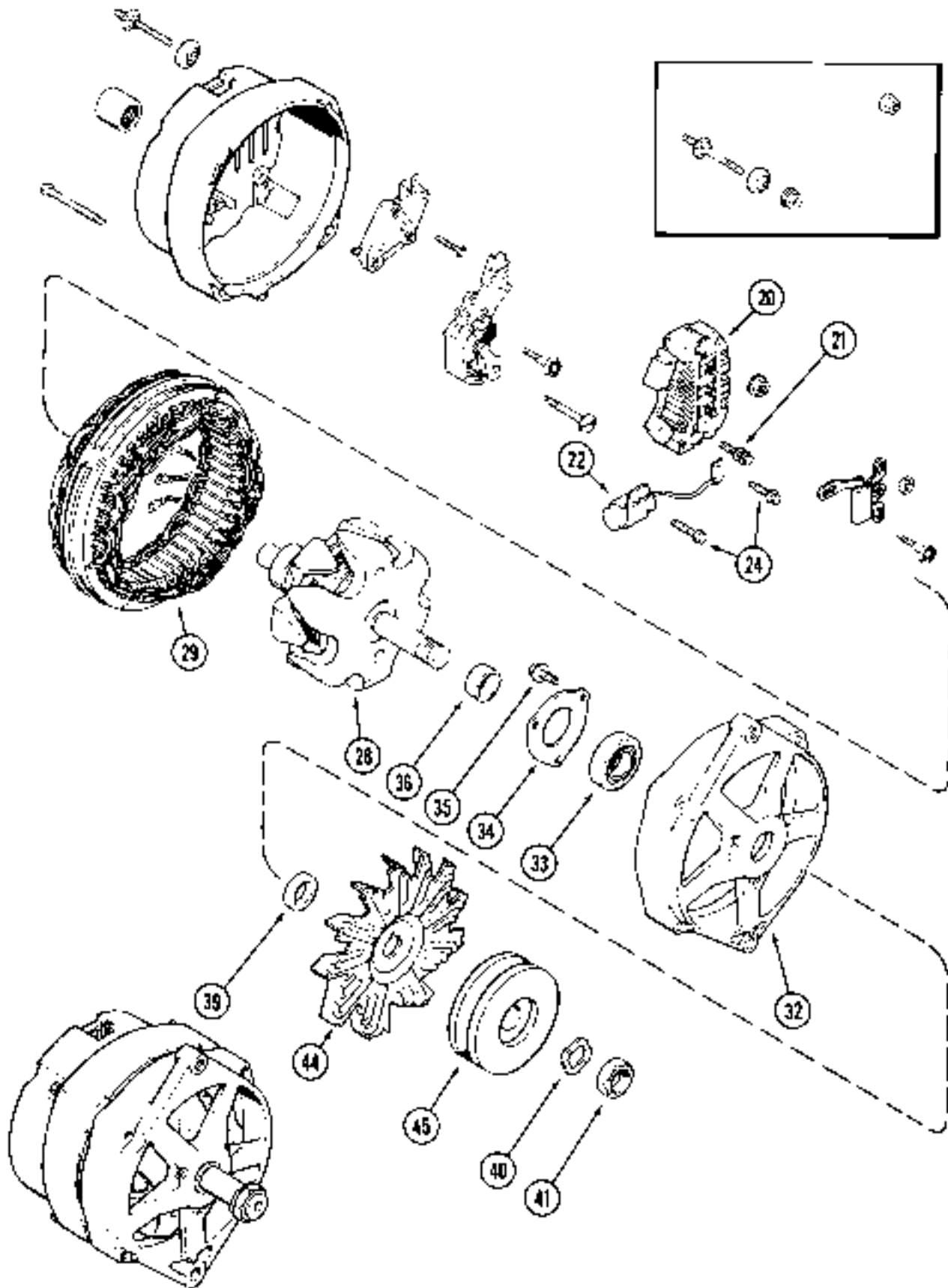


## A167153 ALTERNATOR

REF.	PART NO.	DESCRIPTION	REQ'D
1	A 167153	ALTERNATOR ASSEMBLY - 42 ampere, Delco Remy (J I Case Installed)(Order A46932, A51561 and A43384)	1
1	NSS	ALTERNATOR ASSEMBLY - engine (Order A46932, 63 ampere alternator)	1
2	A 47585	FRAME ASSEMBLY - slip ring end	1
3	A 47578	BEARING - roller	1
4	163- 6	BOLT - hex. No. 10-24 x 1-3/4 inch	4
5	A 47597	TERMINAL KIT - battery	1
6	NSS	STUD - terminal	1
7	NSS	INSULATOR - terminal	1
8	NSS	NUT ASSEMBLY - terminal	1
9	NSS	NUT ASSEMBLY - terminal	1
11	A 45213	REGULATOR - voltage	1
12	A 47042	HOLDER ASSEMBLY - brush	1
13	A 47987	BRUSH - alternator	2
15	A 47043	SCREW - brush holder, grounded	1
16	A 45223	SCREW - brush holder, insulated	1
17	A 47581	SCREW - brush holder, retaining	1
18	A 48339	DIODE - trio	1
19	129- 16	NUT - hex, No. 8-32	3

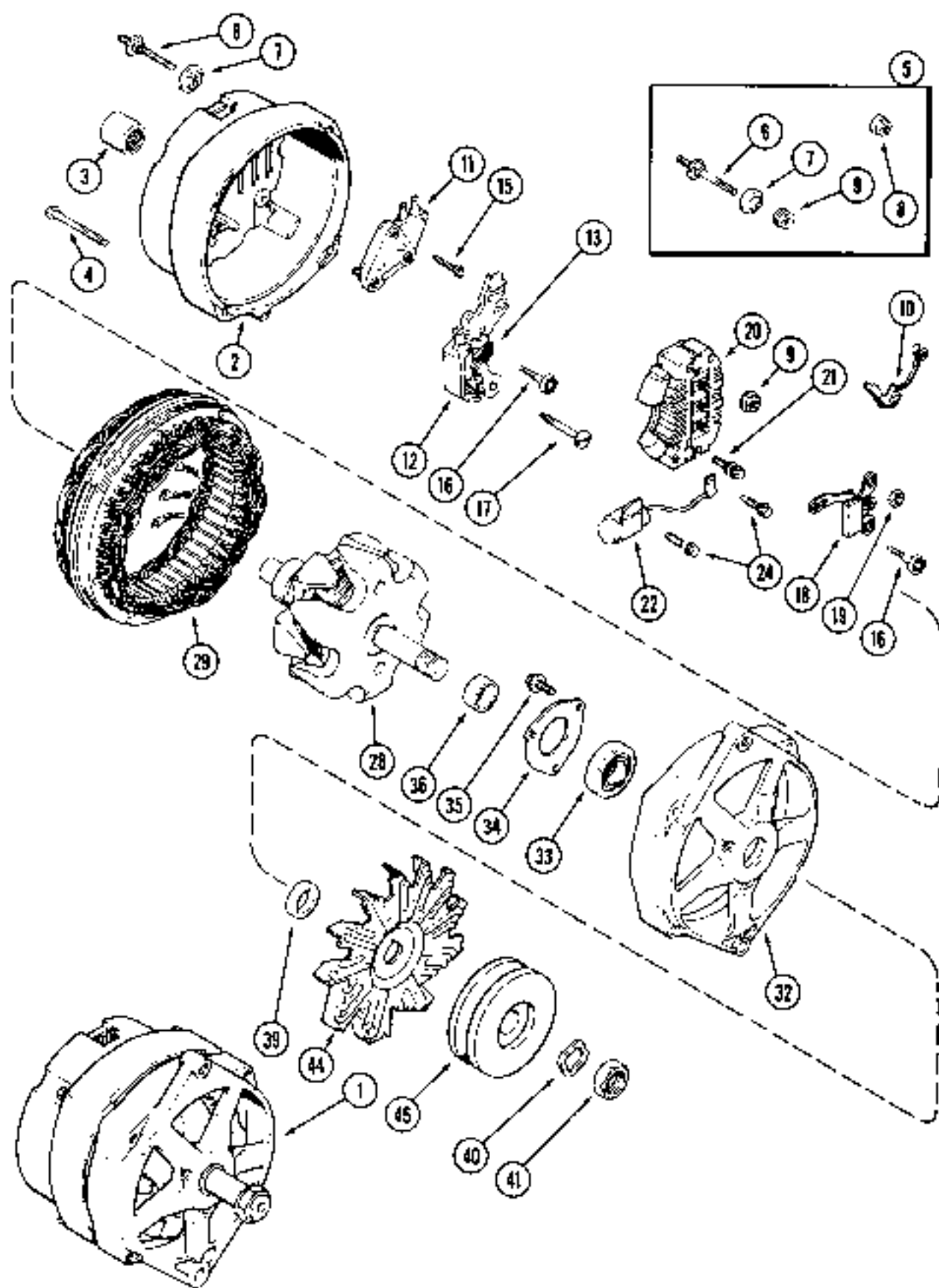
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**A167153 ALTERNATOR**

REF	PART NO	DESCRIPTION	REQ'D
	A 167153	ALTERNATOR - 42 ampere Decca-Remy (Continued from Page 61)	1
20	A 46942	RECTIFIER BRIDGE - alternator	1
21	A 45221	SCREW - rectifier bridge attaching	1
22	A 47734	CAPACITOR - alternator	1
24	A 45228	SCREW - capacitor bracket	2
28	A 49495	ROTOR ASSEMBLY - alternator	1
29	A 49338	STATOR ASSEMBLY - alternator	1
32	A 49174	FRAME - drive end	1
33	A 49389	BEARING - ball, drive end	1
34	A 45616	PLATE - bearing retainer	1
35	A 46941	SCREW - bearing plate retaining	3
36	A 48261	COLLAR - rotor shaft, inner	1
39	A 45613	COLLAR - rotor shaft, outer	1
40	R 16171	WASHER - lock, pulley nut	1
41	A 25546	NUT - pulley and fan retaining	1
44	A 43384	FAN - alternator ventilating	1
45	A 51561	PULLEY - drive	1



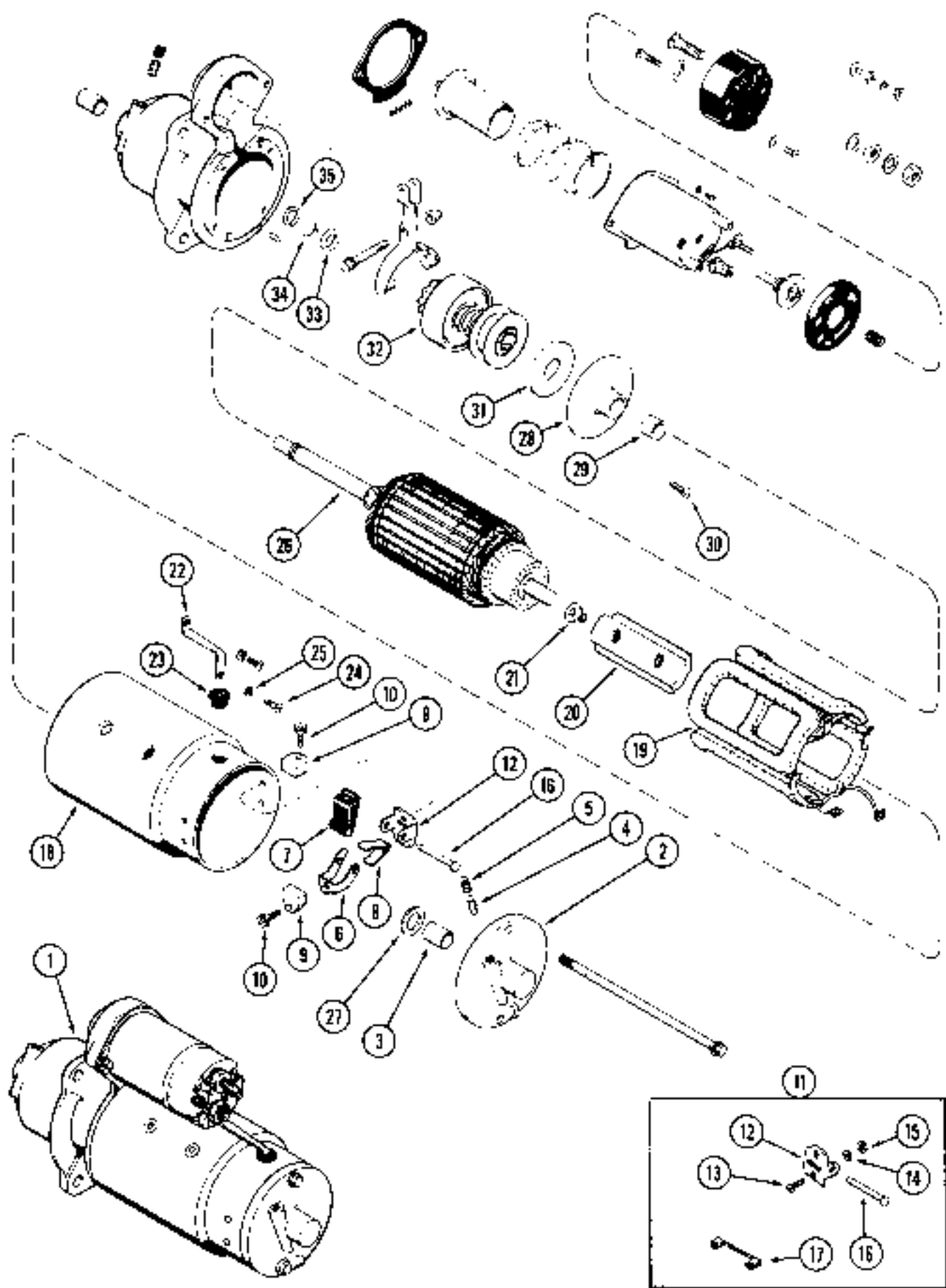
**A46932 ALTERNATOR**

REF.	PART NO	DESCRIPTION	REQ'D
1	A 46932	ALTERNATOR ASSEMBLY - engine, 63 ampere (Service only)	1
2	A 47595	FRAME ASSEMBLY - slip ring end	1
3	A 47578	BEARING - roller	1
4	163- 6	BOLT - hex, No. 10-24 x 1-3/4 inch	4
5	A 47597	TERMINAL KIT - battery	1
6	NSS	STUD - terminal	1
7	NSS	INSULATOR - terminal	1
8	NSS	NUT ASSEMBLY - terminal	1
9	NSS	NUT ASSEMBLY - terminal	1
10	A 46931	TERMINAL - relay	1
11	A 45213	REGULATOR - voltage	1
12	A 47042	HOLDER ASSEMBLY - brush	1
13	A 47987	BRUSH - alternator	2
15	A 47043	SCREW - brush holder, grounded	1
16	A 45223	SCREW - brush holder, insulated	1
17	A 47581	SCREW - brush holder, retaining	1
18	A 48339	DIODE - trio	1
19	129- 16	NUT - hex, No. 8-32	3
20	A 46942	RECTIFIER BRIDGE - alternator	1
21	A 45221	SCREW - rectifier bridge attaching	1
22	A 47734	CAPACITOR - alternator	1
24	A 45228	SCREW - capacitor bracket	2
28	A 46935	ROTOR ASSEMBLY - alternator	1
29	A 46936	STATOR ASSEMBLY - alternator	1
32	A 46933	FRAME - drive end	1
33	A 47579	BEARING - ball, drive end	1
34	R 15101	PLATE - bearing retainer	1
35	A 46941	SCREW - bearing plate retaining	3
36	A 48261	COLLAR - rotor shaft, inner	1
39	A 47580	COLLAR - rotor shaft, outer	1
40	R 16171	WASHER - lock, pulley nut	1
41	A 25548	NUT - pulley and fan retaining	1
44	A 43384	FAN - alternator ventilating	1
45	A 51561	PULLEY - drive	1

**INFORMATION NOT AVAILABLE AT TIME OF PRINTING  
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**BOSCH ALTERNATOR**

**INFORMATION NOT AVAILABLE AT TIME OF PRINTING  
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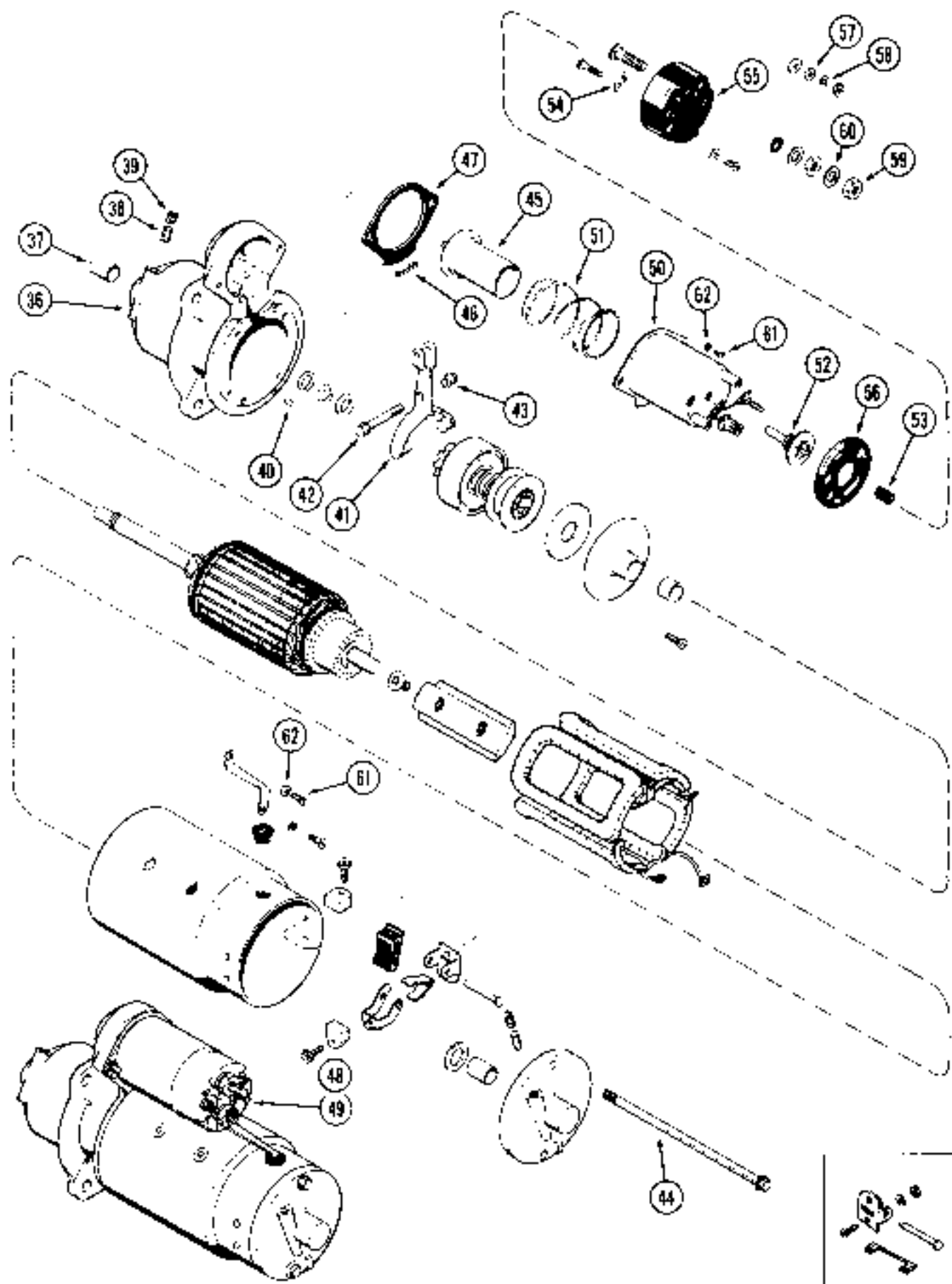


## R29870 STARTER

REF	PART NO.	DESCRIPTION	REQ'D
1	R 29870	STARTER ASSEMBLY - new (Deico-Remy No. 1109149)	1
1	A 47494	STARTER ASSEMBLY - remanufactured	1
1	A 47495	RETURN NUMBER - use this part number to return starter core for credit	1
2	A 25304	FRAME ASSEMBLY - commutator end	1
3	A 45152	BUSHING - frame	1
4	A 41979	WICK - oiler	1
5	221- 1041	PLUG - slotted head, 1/8 inch PF	1
6	A 40217	HOLDER - brush (grounded)	2
7	R 15077	HOLDER - brush (insulated)	2
8	A 25359	SPRING - brush pressure	2
9	A 25356	BRUSH	4
10	D 32481	SCREW - slotted head brush	4
11	A 25379	SUPPORT KIT - brush holder	2
12	NSS	SUPPORT - brush	1
13	173- 212	SCREW - round head No. 10-24 x 1/2 inch	2
14	192- 18	WASHER - lock, No. 10	2
15	129- 17	NUT - hex, No. 10-24	2
16	R 15035	PIN - brush holder	1
17	A 42494	LEAD - brush ground	1
18	NSS	FRAME - starter body	1
19	A 25548	COIL ASSEMBLY - field	1
20	A 25391	SHOE pole	1
21	74- 612	SCREW - flat head, 3/8 NC x 5/8 inch	8
22	A 40225	CONNECTOR - field to solenoid	1
23	A 41980	GROMMET - connector insulating (in frame)	1
24	173- 221	SCHLW - round head, No. 10-32 x 7/16 inch	1
25	192- 16	WASHER - lock, No. 10	1
26	A 25547	ARMATURE - starter	1
27	A 41917	WASHER - thrust, commutator end	1
28	A 40215	PLATE ASSEMBLY - center bearing	1
29	R 15038	BUSHING - center bearing	1
30	A 41959	SCREW - center bearing to drive housing	4
31	R 15043	WASHER - thrust, center bearing	1
32	A 45565	DRIVE ASSEMBLY - starter	1
33	R 15049	COLLAR - drive stop	1
34	R 15048	RING - snap, stop collar retaining	1
35	A 25385	WASHER - thrust, drive end	1

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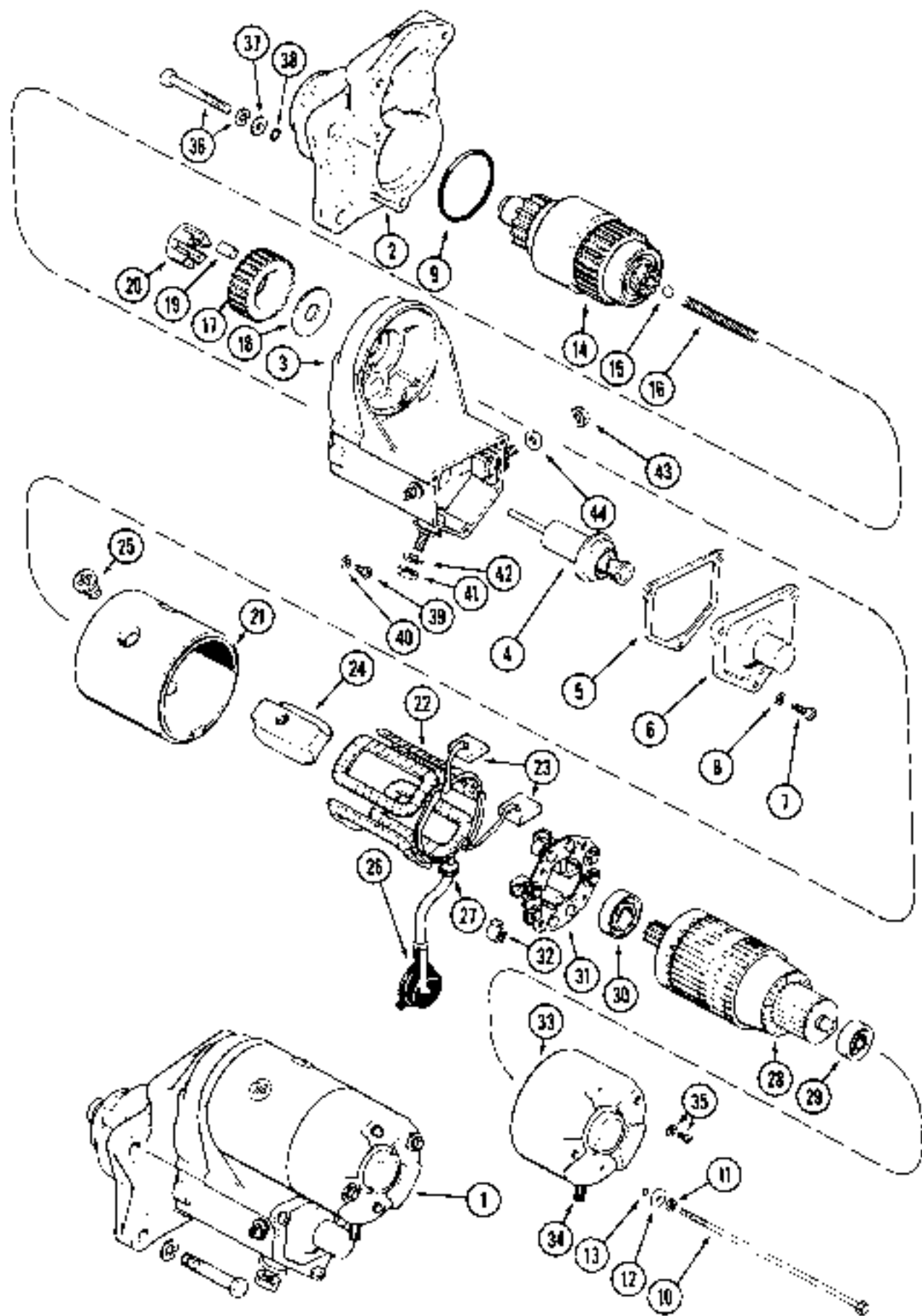


**R29870 STARTER**

REF.	PART NO.	DESCRIPTION	REQ'D
	R 29870	STARTER ASSEMBLY - (Continued from Page 69)	1
36	A 44495	HOUSING ASSEMBLY - drive end	1
37	A 25387	BUSHING - drive housing	1
38	R 15023	WICK - oiler	1
39	221- 1041	PLUG - slotted head, oil wick hole, 1/8 inch PT	1
40	R 15041	PIN - locating, drive housing	1
41	A 40220	LEVER - drive shift	1
42	A 40520	PIVOT - shift levers	1
43	131- 4	NUT - hex, 5/16 inch NC	1
44	A 25552	BOLT - through	2
45	A 40218	PLUNGER - solenoid	1
46	138- 93	PIN - roll, 3/16 x 13/16 inch	1
47	A 40222	BOOT - plunger protection	1
48	A 47539	SOLENOID ASSEMBLY - serviced as complete assembly	1
49	A 47539	SOLENOID ASSEMBLY - (See Note)(For Service order A47539)	1
50	NSS	CASE ASSEMBLY	1
51	A 40221	SPRING - plunger return	1
52	A 42061	CONTACT ASSEMBLY - solenoid	1
53	A 42059	SPRING - contact return	1
54	A 42060	BLADE - contact	1
55	NSS	COVER - solenoid contact and terminals	1
56	NSS	GASKET - cover to solenoid (Reference No. 447125)	1
57	129- 16	NUT - hex, No. 8-32	2
58	192- 16	WASHER - lock, No. 8	2
59	129- 143	NUT - hex, 3/8 inch NC	2
60	132- 21	WASHER - lock, 3/8 inch	1
61	A 42023	SCREW - round head, 1/4 NC x 1/2 inch	3
62	192- 19	WASHER - lock, 1/4 inch	3

NOTE: SEE DELCO-REMY DEALER FOR PARTS ILLUSTRATED BUT NOT LISTED

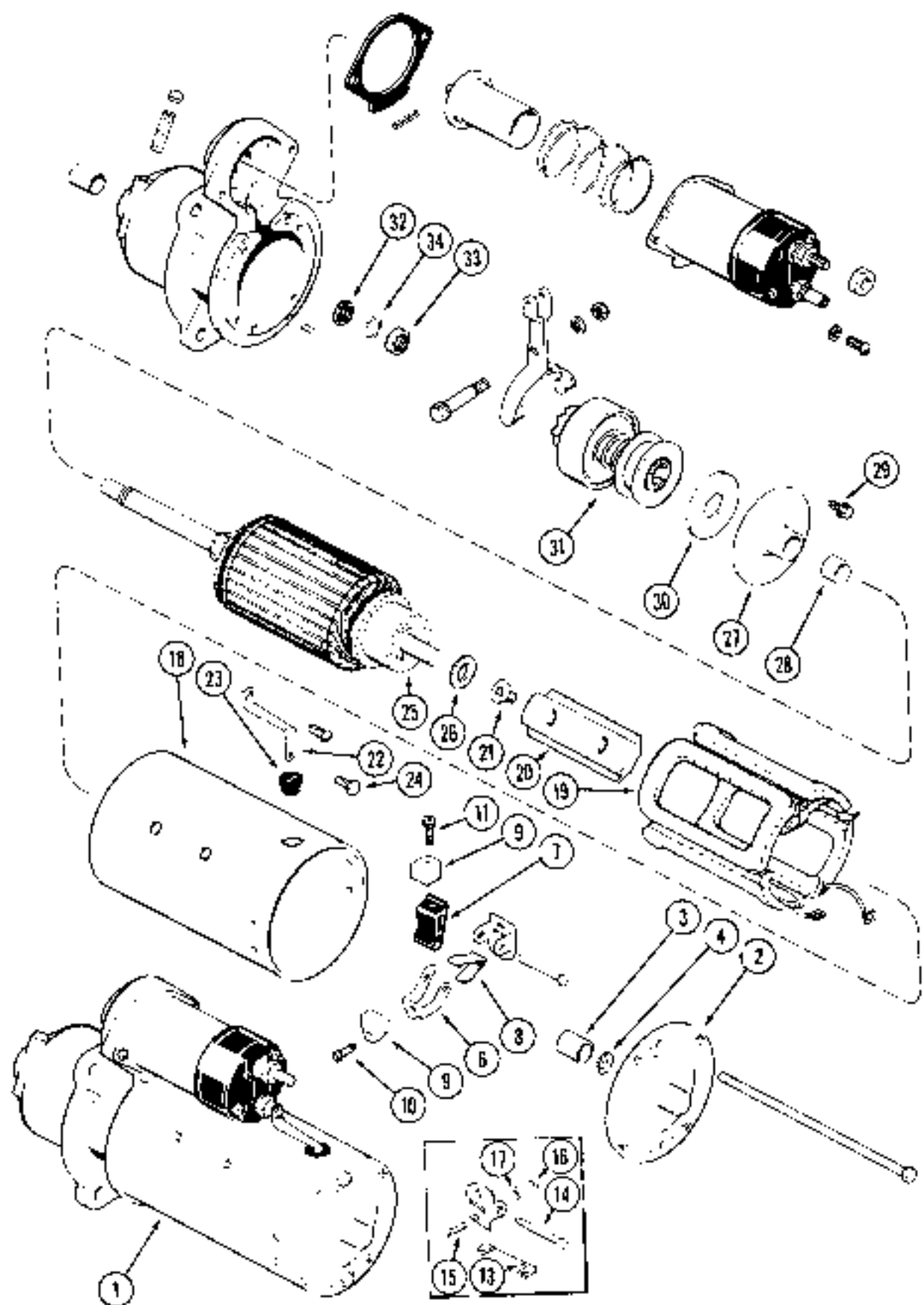
REFERENCE NUMBERS IN DESCRIPTION ARE FOR CASES USE ONLY AND CAN NOT BE ORDERED SEPARATELY



## R39341 STARTER

REF	PAHT NO	DESCRIPTION	REQ'D
1	R 39341	STARTER ASSEMBLY - new (Nippondenso No. 020000-58801)	1
	A 47496	STARTER ASSEMBLY - remanufactured	1
	A 47497	RETURN NUMBER - starter (Use this number to return starter core for credit)	1
2	A 47227	HOUSING - drive end	1
3	A 47228	SWITCH ASSEMBLY - magnetic	1
4	NSS	SOLENOID - starter	1
5	NSS	GASKET - solenoid cover	1
6	NSS	COVER - solenoid	1
7	NSS	SCREW - cover to switch	3
8	NSS	WASHER - cover screw	3
9	A 47229	O-RING - switch to housing	1
	A 47243	BOLT ASSEMBLY - through	2
10	NSS	BOLT - through (Reference No. A47128)	1
11	892- 1106	WASHER - lock 1/4 inch	1
12	195- 516	WASHER - flat, 1/4 x 9/16 x 1/16 inch (6 x 14 x 1 mm)	1
13	A 47127	O-RING - bolt seal	1
14	A 47231	CLUTCH ASSEMBLY - drive	1
15	211- 10	BALL - thrust, steel, 3/8 inch (10 mm) diameter	1
16	A 47232	SPRING - clutch drive, 2-13/16 inch (71 mm) free length	1
17	A 47233	PINION - idler	1
18	A 47234	WASHER - thrust, idler pinion	1
19	A 47235	ROLLER - idler pinion bearing	6
20	A 47236	RETAINER - roller bearings	1
	A 47240	HOUSING ASSEMBLY - with coil and brushes	1
21	NSS	HOUSING - starter	1
22	NSS	COIL - field	1
23	NSS	BRUSHES - starter	2
24	NSS	SHOE - pole	4
25	NSS	SCREW - pole shoes	4
26	NSS	BOOT - magnetic switch terminal	1
27	A 47241	PLATE - lock	1
28	A 47242	ARMATURE ASSEMBLY - starter	1
29	A 47248	BEARING - commutator end	1
30	A 47247	BEARING - drive end	1
31	A 47239	HOLDER ASSEMBLY - brush (Includes 2 brushes)	1
32	A 47249	SPRING - tension, brush	4
33	A 47237	FRAME - commutator end	1
34	A 47238	COVER - end frame	1
35	A 47244	SCREW ASSEMBLY - brush holder to cover	2
	A 47230	BOLT ASSEMBLY - commutator end cover to drive end housing	3
36	NSS	BOLT - with lock washer (Reference No. A47129)	1
37	195- 516	WASHER - flat, 1/4 x 9/16 x 1/16 inch (6 x 14 x 2 mm)	1
38	A 47130	O-RING - bolt seal	1
39	182- 508	SCREW - pan head No. 8-32 x 3/8 inch	1
40	193- 25	WASHER - internal lock, No. 6	1
41	129- 143	NUT - hex, 3/8 inch NC	1
42	192- 21	WASHER - lock, 3/8 inch	1
43	825- 1110	NUT - field coil terminal	1
44	A 10454	WASHER - field coil terminal	1

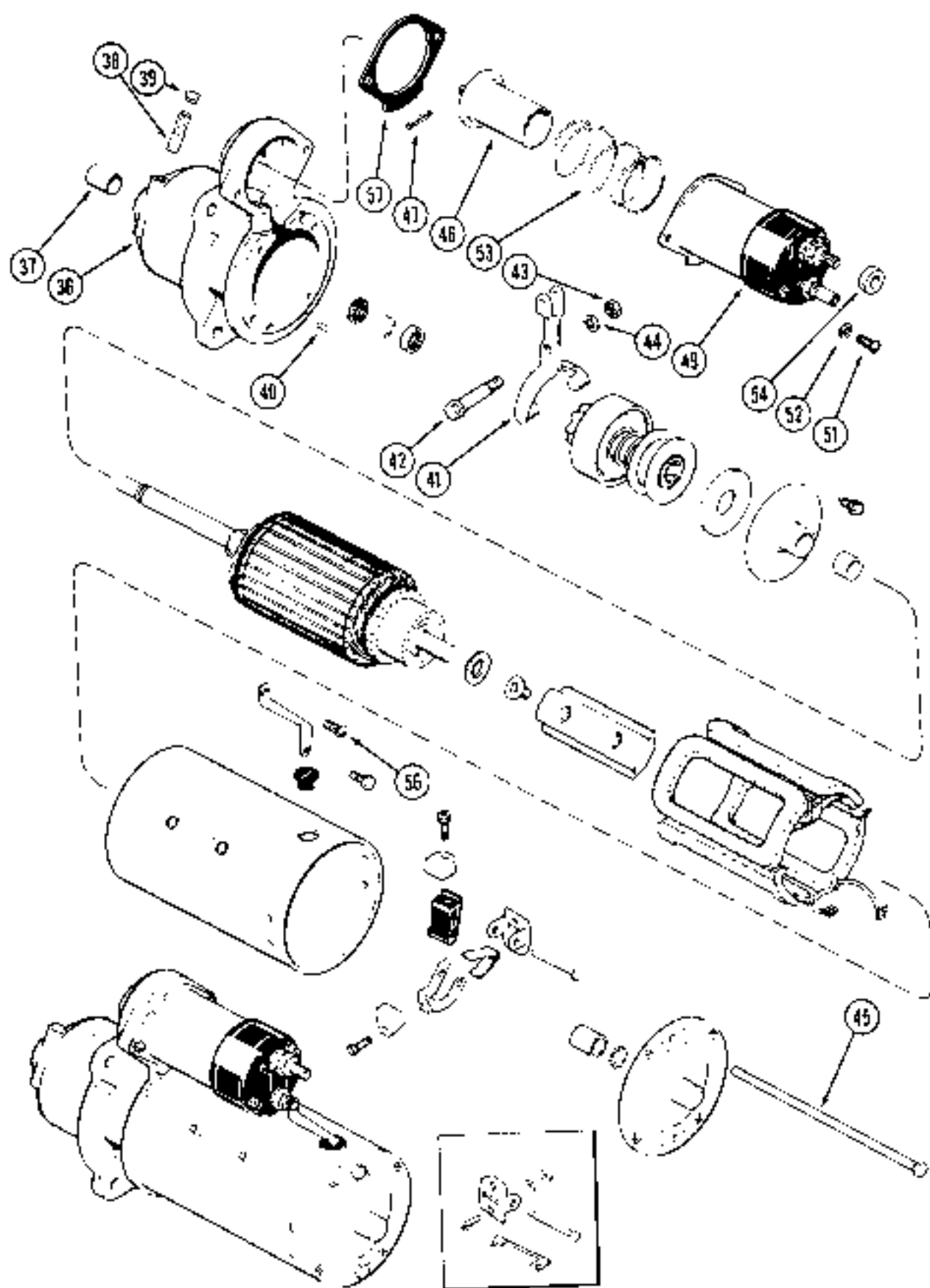
REFERENCE NUMBERS IN DESCRIPTION ARE FOR CARES USE ONLY AND CAN NOT BE ORDERED SEPARATELY



## A169502 STARTER

REF	PART NO	DESCRIPTION	REQ'D
1	A 169502	STARTER ASSEMBLY - new (Delco-Remy No. 1998353) . . . . .	1
2	A 49447	FRAME ASSEMBLY - commutator end . . . . .	1
3	A 45152	BUSHING - frame . . . . .	1
4	A 47133	WICK oiler . . . . .	1
6	A 48714	HOLDER - brush (grounded) . . . . .	2
7	A 49448	HOLDER - brush (insulated) . . . . .	2
8	A 47813	SPRING - brush pressure . . . . .	2
9	A 49479	BRUSH - armature . . . . .	4
10	A 42124	SCREW - brush (grounded) . . . . .	2
11	A 48710	SCREW AND LOCK WASHER brush (insulated) . . . . .	2
	A 46860	SUPPORT KIT brush holder . . . . .	2
13	A 49450	LEAD - brush ground . . . . .	2
14	A 41983	PIN - brush holder . . . . .	2
15	175- 97	SCREW - truss head slotted, No. 10-24 x 1-2 inch . . . . .	4
16	129- 17	NUT - hex. 3/8 inch NC . . . . .	4
17	192- 18	WASHER - lock. 3/16 inch . . . . .	4
18	NSS	FRAME - starter body . . . . .	1
19	A 49481	COIL ASSEMBLY - starter field . . . . .	1
20	A 25391	SHOE - pole . . . . .	4
21	A 42127	SCREW - pole shoe . . . . .	8
22	A 48718	CONNECTOR - field . . . . .	1
23	A 41980	GROMMET - connector insulating . . . . .	1
24	A 42023	BOLT - connector to coil . . . . .	1
25	A 25547	ARMATURE - starter . . . . .	1
26	A 41917	WASHER - commutator brake . . . . .	1
27	A 49446	PLATE ASSEMBLY - center bearing . . . . .	1
28	A 47544	BUSHING - center bearing . . . . .	1
29	A 49476	SCREW AND LOCKWASHER ASSEMBLY - center bearing . . . . .	4
30	A 49451	WASHER - thrust, center bearing . . . . .	1
31	A 47178	DRIVE ASSEMBLY - starter . . . . .	1
32	A 48709	WASHER - thrust, drive end . . . . .	1
33	R 15049	COLLAR - drive stop . . . . .	1
34	R 15048	RING - snap, stop collar retaining . . . . .	1

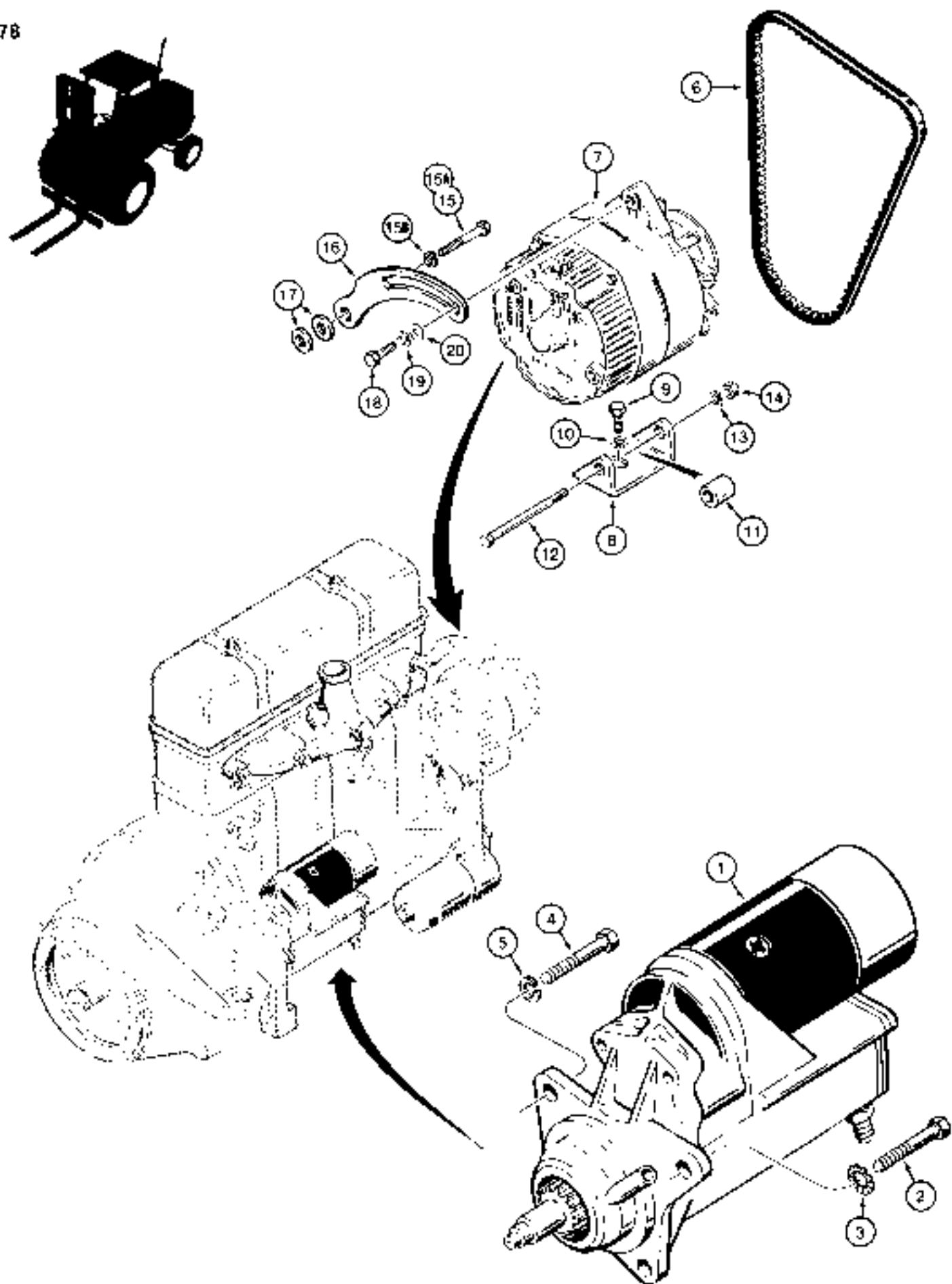
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**A169502 STARTER**

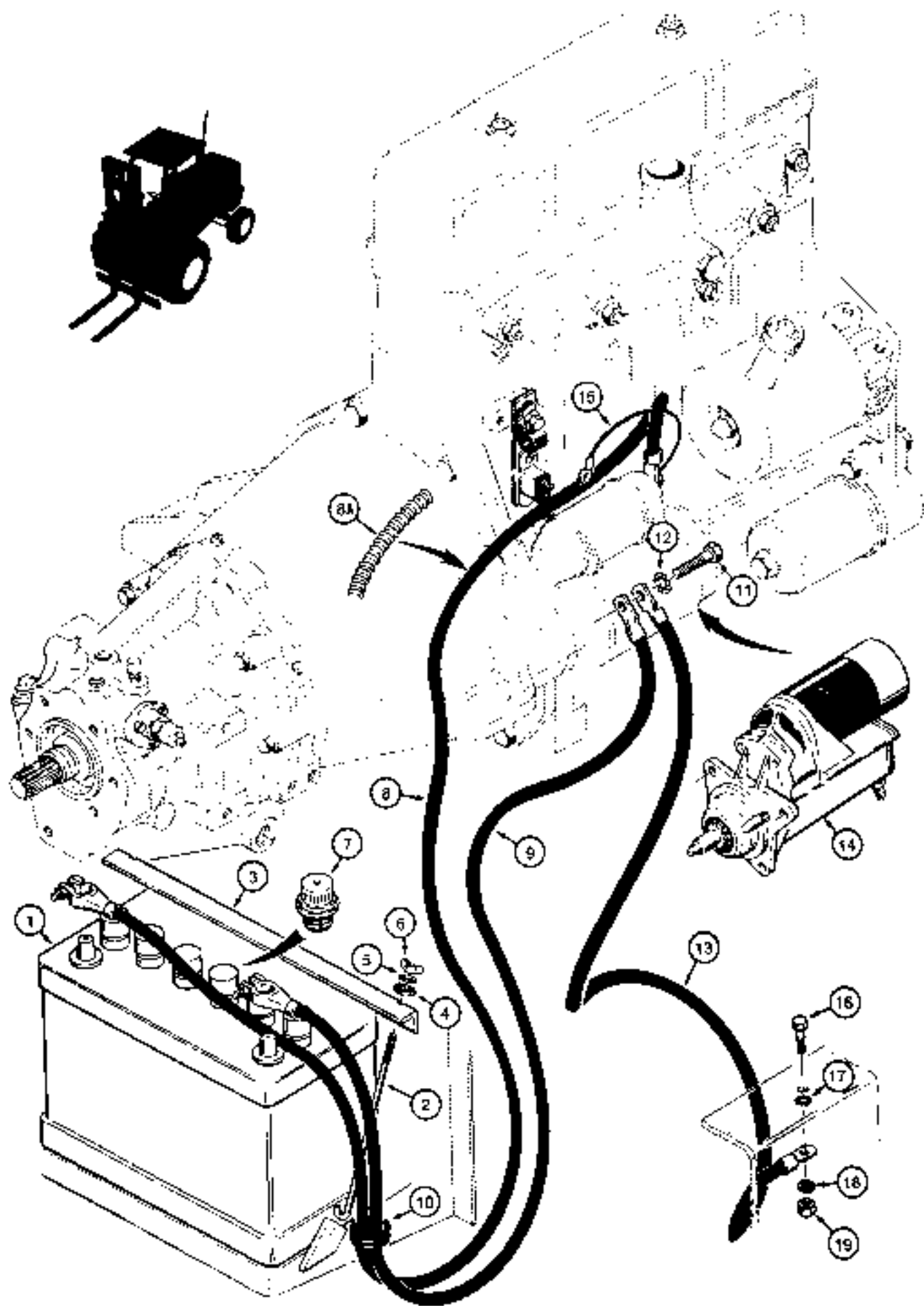
REF	PART NO.	DESCRIPTION	REQ'D
	A 169502	STARTER ASSEMBLY - (Continued from Page 75)	1
36	A 49471	HOUSING ASSEMBLY - drive end	1
37	A 25387	BUSHING - drive housing	1
38	A 48716	WICK - oiler	1
39	A 48712	PLUG - oil wick hole	1
40	A 49452	PIN - locating, drive housing	1
41	A 40220	LEVER - drive shift	1
42	A 40520	PIVOT - shift lever	1
43	129- 142	NUT - hex. 5/16 inch NC	1
44	192- 20	WASHER - lock, 5/16 inch	1
45	A 49474	BOLT - through	2
46	A 49475	PLUNGER - solenoid	1
47	A 49453	PIN - plunger to solenoid	1
49	A 49480	SOLENOID ASSEMBLY - starter	1
51	182- 202	SCREW - round head slotted, 1/4-20 x 1/2 inch	2
52	192- 19	WASHER - lock, 1/4 inch	2
53	A 48717	SPRING - plunger return	1
54	A 49473	NUT - battery cable to solenoid	1
56	182- 202	SCREW - round head, 1/4-20 x 1/2 inch	1
57	A 42126	GASKET - solenoid to drive housing	1





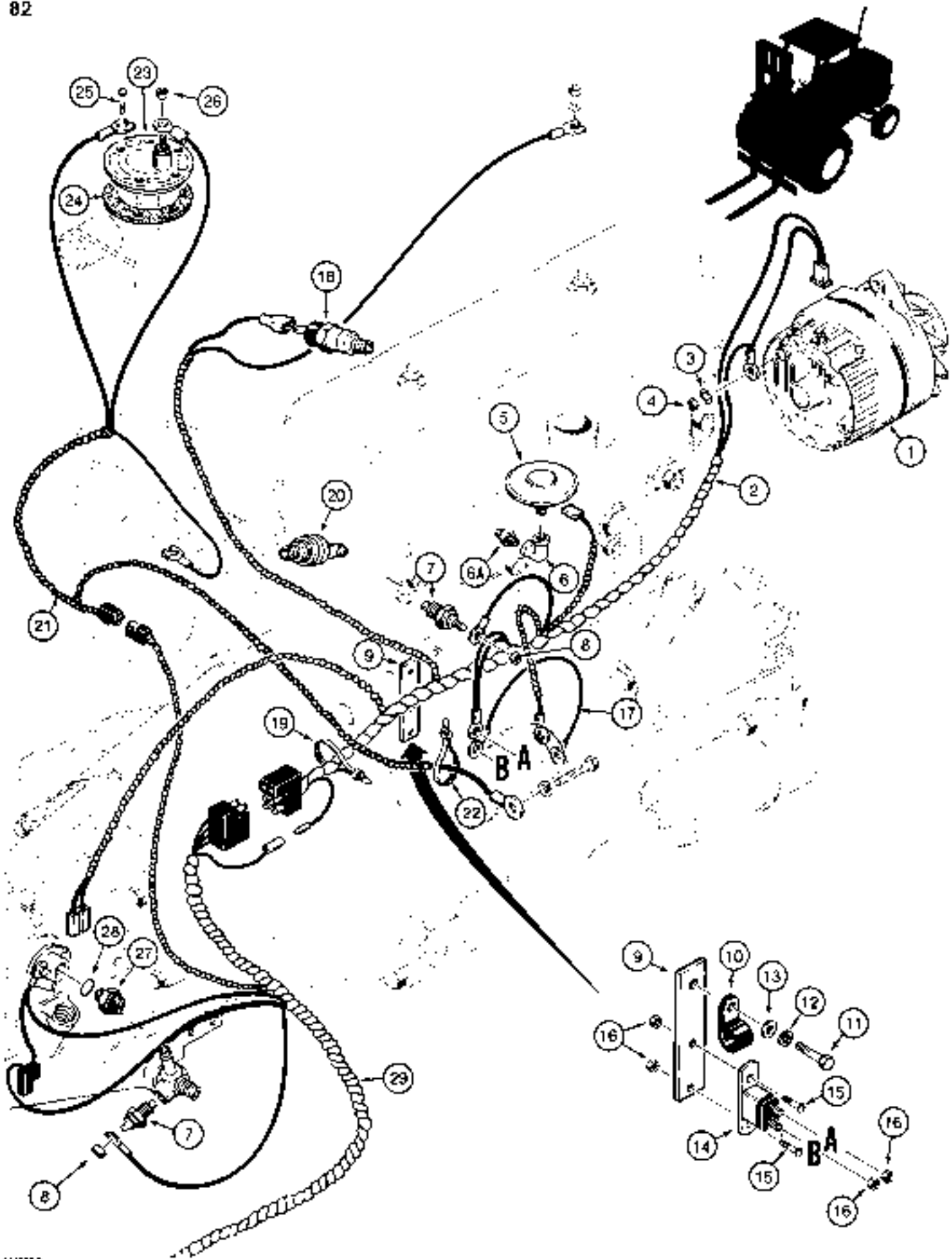
## STARTER AND ALTERNATOR MOUNTING

REF.	PART NO	DESCRIPTION	REQ D
1	REF	STARTER - engine, for correct assembly and components see pages 69-77 . . .	1
2	113- 213	BOLT - hex head, 3/8" - 16 NC x 2-1/4", plated . . . . .	1
3	193- 72	WASHER - internal-external tooth lock, 3/8", plated . . . . .	1
4	113- 219	BOLT - hex head, 3/8" - 16 NC x 2", plated . . . . .	2
5	192- 21	WASHER - lock, 3/8", plated . . . . .	2
6	D 73446	FAN BELT - alternator . . . . .	1
7	REF	ALTERNATOR - electrical, for correct assembly and components see pages 59-67 . . . . .	1
8	A 138246	BRACKET - alternator mounting . . . . .	1
9	113- 206	BOLT - hex head, 3/8" - 16 NC x 3/4", plated . . . . .	2
10	192- 21	WASHER - lock, 3/8", plated . . . . .	2
11	D 88214	SPACER - alternator . . . . .	1
12	113- 267	BOLT - hex head, 3/8" - 16 NC x 4", plated . . . . .	1
13	192- 21	WASHER - lock, 3/8", plated . . . . .	1
14	129- 103	NUT - hex, 3/8" - 16 NC, plated . . . . .	1
15	113- 247	BOLT - hex head, 3/8" - 16 NC x 3-1/4", plated, if used . . . . .	1
15A	113- 203	BOLT - hex head, 3/8" - 16 NC x 3-1/2", plated, if used . . . . .	1
15B	192- 21	WASHER - lock, 3/8", plated, used with 3-1/2" bolt only . . . . .	1
16	A 139258	STRAP - alternator adjusting . . . . .	1
17	195- 104	WASHER - flat, 3/8", plated, alternator strap . . . . .	2
18	814- 8025	BOLT - hex head, 8 mm - 1.25 x 25 mm (8 8), plated . . . . .	1
19	192- 20	WASHER - lock, 5/16", plated . . . . .	1
20	195- 103	WASHER - flat, 5/16", plated . . . . .	1



## ELECTRICAL CIRCUIT BATTERY AND CABLES TO STARTER

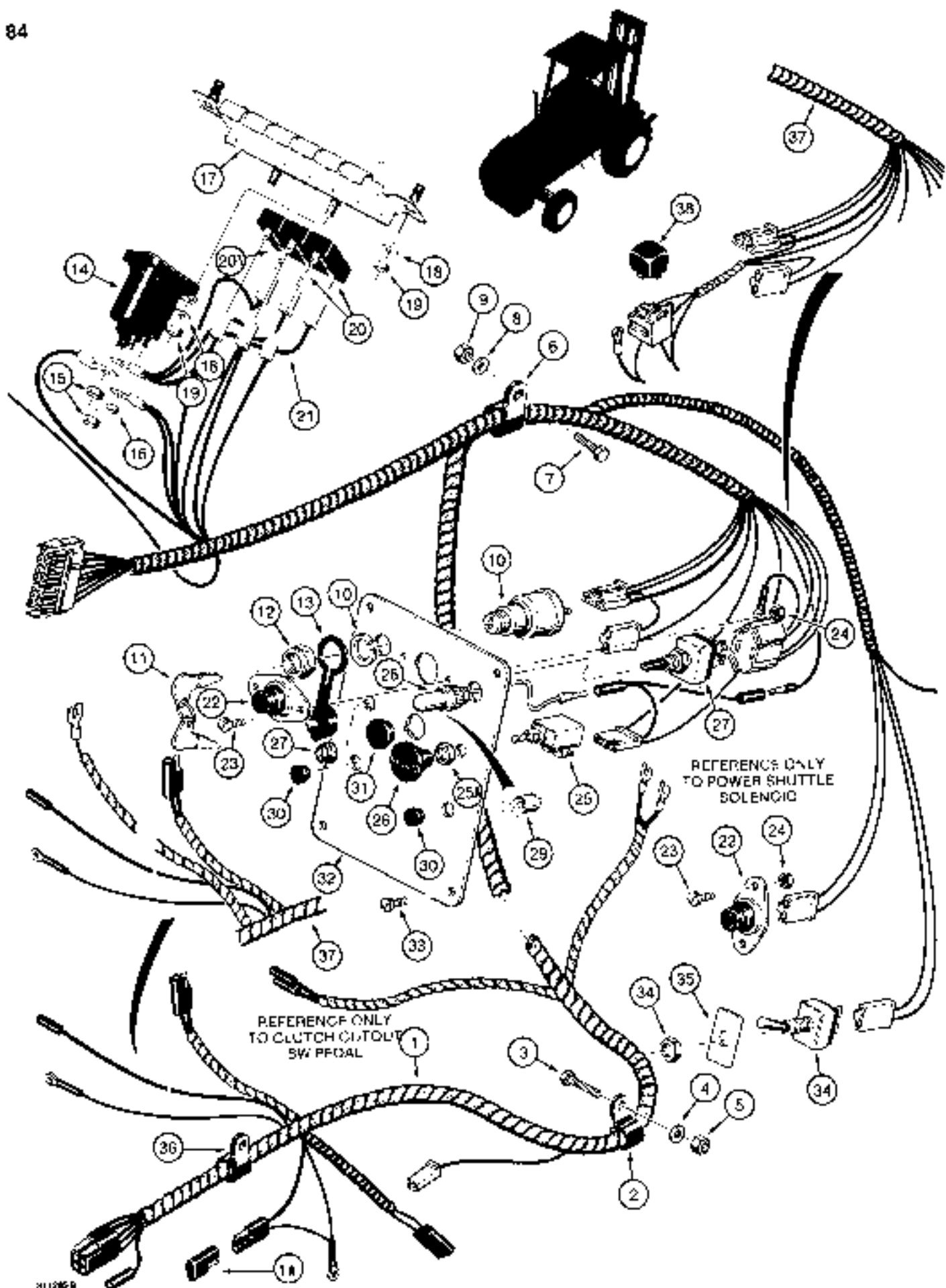
REF	PART NO.	DESCRIPTION	REQ'D.
1	BHC 30	BATTERY - 12 volt. service replacement, maintenance free, replaces battery which used (6) A60553 nonspill caps	1
2	D 49723	BOLT - J-type, battery retaining, 3/8" - 16 NC	2
3	D 49724	BRACKET - battery retaining	1
4	G 46667	GROMMET - battery retaining bolt	2
5	G 49400	WASHER - flat, 3/8", special	2
6	129- 410	WING NUT - 3/8" - 16 NC, plated	2
7	A 60553	CAP - battery, nonspill, if used	6
8	D 71935	CABLE - battery, positive	1
8A	D 121606	SLEEVE - positive cable, 67" long. order D99461 sleeve and cut to required length	1
9	D 71936	CABLE - battery, negative	1
10	49564	GROMMET - battery cables	1
11	113- 213	BOLT - hex head, 3/8" - 16 NC x 2-1/4", plated	1
12	193- 72	WASHER - internal-external tooth lock, 3/8", plated	1
13	F 10142	CABLE - ground	1
14	REF	STARTER - engine. for correct assembly and components see pages 69-77, mounting parts on page 79	1
15	D 79476	WIRE - jumper, circuit breaker to starter solenoid	1
16	113- 103	BOLT - hex head, 5/16" - 18 NC x 1", plated	1
17	193- 71	WASHER - internal-external tooth lock, 5/16", plated	1
18	192- 20	WASHER - lock, 5/16", plated	1
19	129- 102	NUT - hex, 5/16" - 18 NC, plated	1
	D 99461	SLEEVE - bulk, 80" (2032 mm) long	1



## ELECTRICAL CIRCUIT ALTERNATOR, ENGINE HARNESS AND CONNECTIONS

REF.	PART NO.	DESCRIPTION	REQ'D.
1	REF	ALTERNATOR - for correct assembly and components see pages 59-67, mounting parts page 79	1
2	* D 120899	HARNESS - engine	1
3	193- 60	WASHER - internal tooth lock, 1/4", plated	1
4	825- 1106	NUT - hex, 6 mm - 1. plated	1
5	A 154782	SENDER - a.r. filter restriction	1
6	221- 374	ELBOW - 90 degree, 1/8" NPT	1
6A	D 36264	FITTING AND FILTER ASSEMBLY - air restriction indicator	1
7	D 65446	SENDER - engine and shuttle transmission temperature	2
8	193- 1000	NUT AND LOCK WASHER - No. 10 - 32 NF, plated	2
9	D 74343	PLATE - circuit breaker mounting	1
10	49854	CLAMP - engine harness, on circuit breaker mounting plate	1
11	113- 3	BOLT - hex head, 1/4" - 20 NC x 3/4", plated	1
12	192- 19	WASHER - lock, 1/4", plated	1
13	195- 102	WASHER - flat, 1/4", plated	1
14	A 22877	CIRCUIT BREAKER - 40 amperes	1
15	182- 145	MACHINE SCREW - pan head slotted, No. 10 - 32 NF x 1/2"	2
16	193- 1000	NUT AND LOCK WASHER - No. 10 - 32 NF, plated	4
17	D 79476	WIRE - circuit breaker to starter solenoid	1
18	A 182297	SENDER - oil pressure	1
19	L 18337	TIE STRAP - engine harness	1
20	D 87439	SENDER - oil filter restriction, if used	1
21	D 120307	HARNESS - fuel and oil filter senders	1
22	L 18337	TIE STRAP - harness	1
23	D 83480	SENDER - fuel level	1
24	A 11822	GASKET - fuel level sender	1
25	D 75465	SCREW - special sealing	5
26	193- 1000	NUT AND LOCK WASHER - No. 10 - 32 NF, plated	1
27	S 113435	SWITCH - neutral start	1
28	218- 5005	O-RING - switch	1
29	REF	HARNESS - main - see pages 85, 87, and 95	1

\*NOTE: The engine harness grounds to the starter on models without a neutral start switch relay in the main harness; on models with a neutral start switch relay in the main harness, the engine harness starter ground has been moved to the lower circuit breaker mounting bolt to ground the neutral start switch. See pages 85 and 87 for main harness and relay and page 69 for the neutral start switch conversion kit.



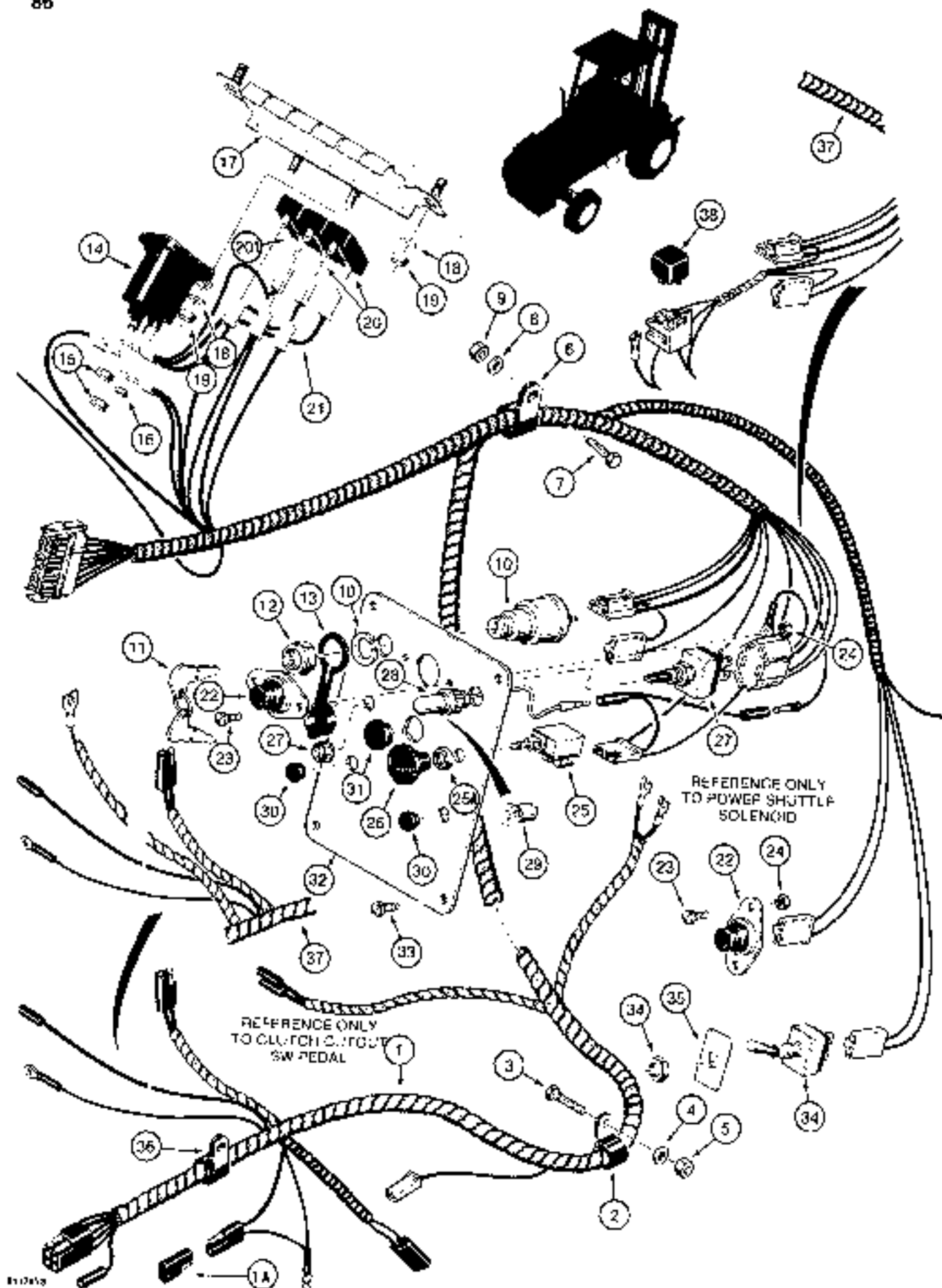
**ELECTRICAL CIRCUIT  
MAIN HARNESS AND INSTRUMENT PANEL  
MODELS WITHOUT FLASHER LAMPS**

REF	PART NO.	DESCRIPTION	REQ'D
1	D 120900	HARNESS - main also see pages 83 and 95. harness without a connector for the neutral start switch relay, no longer available, for service order D102013 kit, items 37-41 on page 87	1
1A	L 71879	DIODE - switch protecting	1
2	49858	CLAMP - harness, under frame	3
3	113- 208	BOLT - hex head, 3/8" - 16 NC x 1-1/4", plated	3
4	195- 525	WASHER - flat, 3/8", plated	3
5	129- 103	NUT - hex, 3/8" - 16 NC, plated	3
6	49858	CLAMP - harness, instrument panel area	2
7	113- 103	BOLT - hex head, 5/16" - 18 NC x 1", plated	2
8	195- 521	WASHER - flat, 5/16", plated	2
9	129- 102	NUT - hex, 5/16" - 18 NC, plated	2
	D 85872	SWITCH ASSEMBLY - key	1
10	NS6	SWITCH - key	1
11	D 36822	KEY - switch, set of two keys	1
12	N 7842	NU1 - key switch	1
13	N 8401	COVER - dirt and moisture protection	1
14	A 77311	SOLENOID - electrical	1
15	193- 1009	NUT AND LOCK WASHER - 5/16" - 18 NC, plated	2
16	193- 1000	NUT AND LOCK WASHER - No. 10 - 32 NF, plated	1
17	D 75355	BRACKET - circuit breakers	1
18	195- 102	WASHER - flat, 1/4", plated	4
19	193- 1006	NUT AND LOCK WASHER - 1/4" - 20 NC, plated	4
20	D 78002	CIRCUIT BREAKER - 15 amperes	2
20A	D 78001	CIRCUIT BREAKER - 10 amperes	1
21	D 75225	WIRE ASSEMBLY - solenoid to circuit breaker	1
22	D 67872	SWITCH - push button starter and horn	2
23	173- 274	MACHINE SCREW - round head slotted, No. 8 - 32 NC x 1/2", plated	4
24	193- 1002	NUT AND LOCK WASHER - No. 8 - 32 NC, plated	4
25	D 74330	SWITCH - lamp	1
25A	N 7557	NUT - special, 3/8" - 24 NF, switch retaining	1
26	D 95781	KNOB - lamp switch	1
27	D 75360	SWITCH - test, air cleaner and hydraulic oil filter	1

Continued on next page

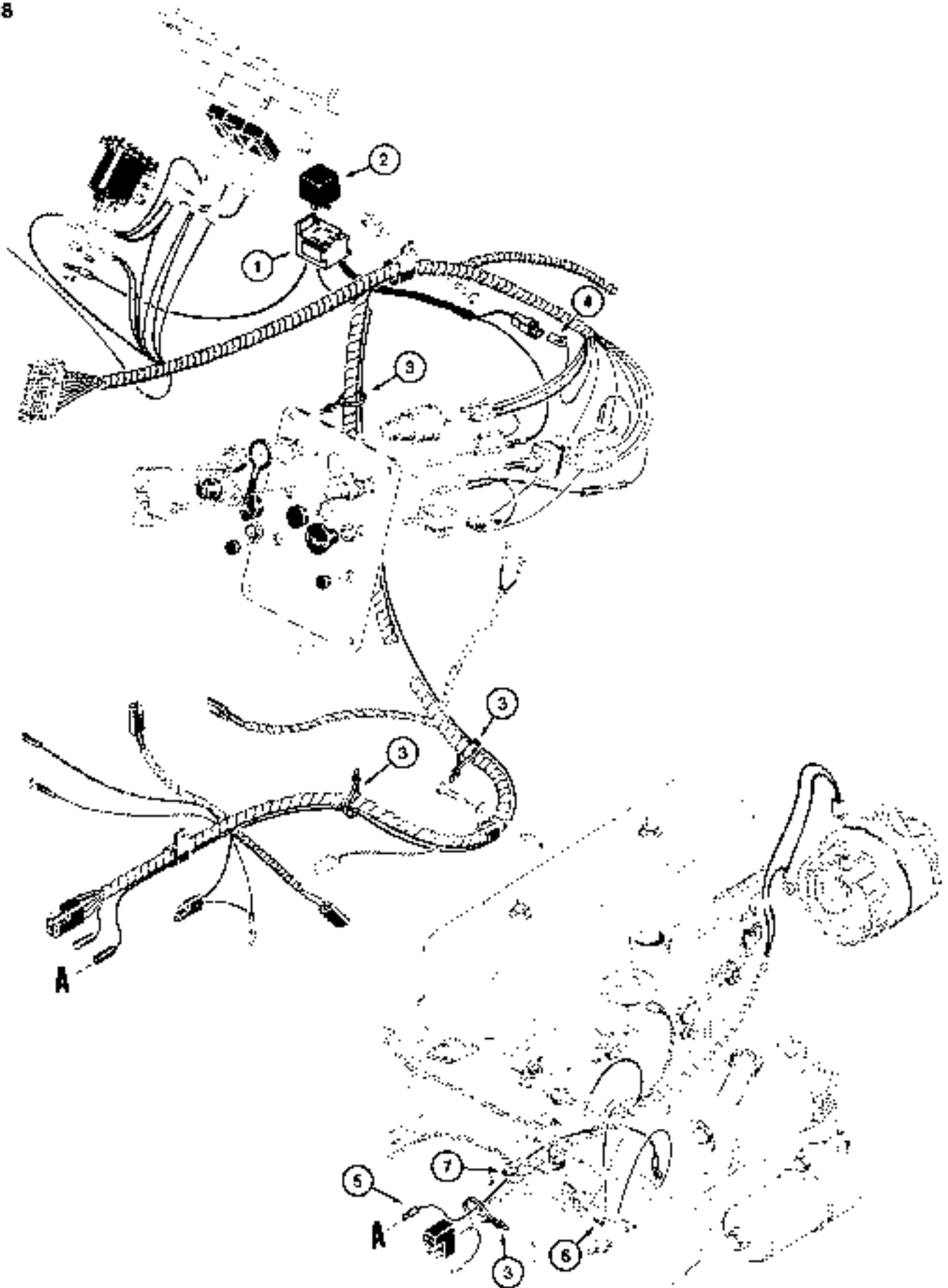
**\*NOTE:** For models prior to tractor PIN 17019351, using D120900 main harness without a connector for a neutral start switch relay, see page 89 for the conversion kit for the redesigned neutral start switch relay circuit. The relay has been added for longer service life of the neutral start switch.





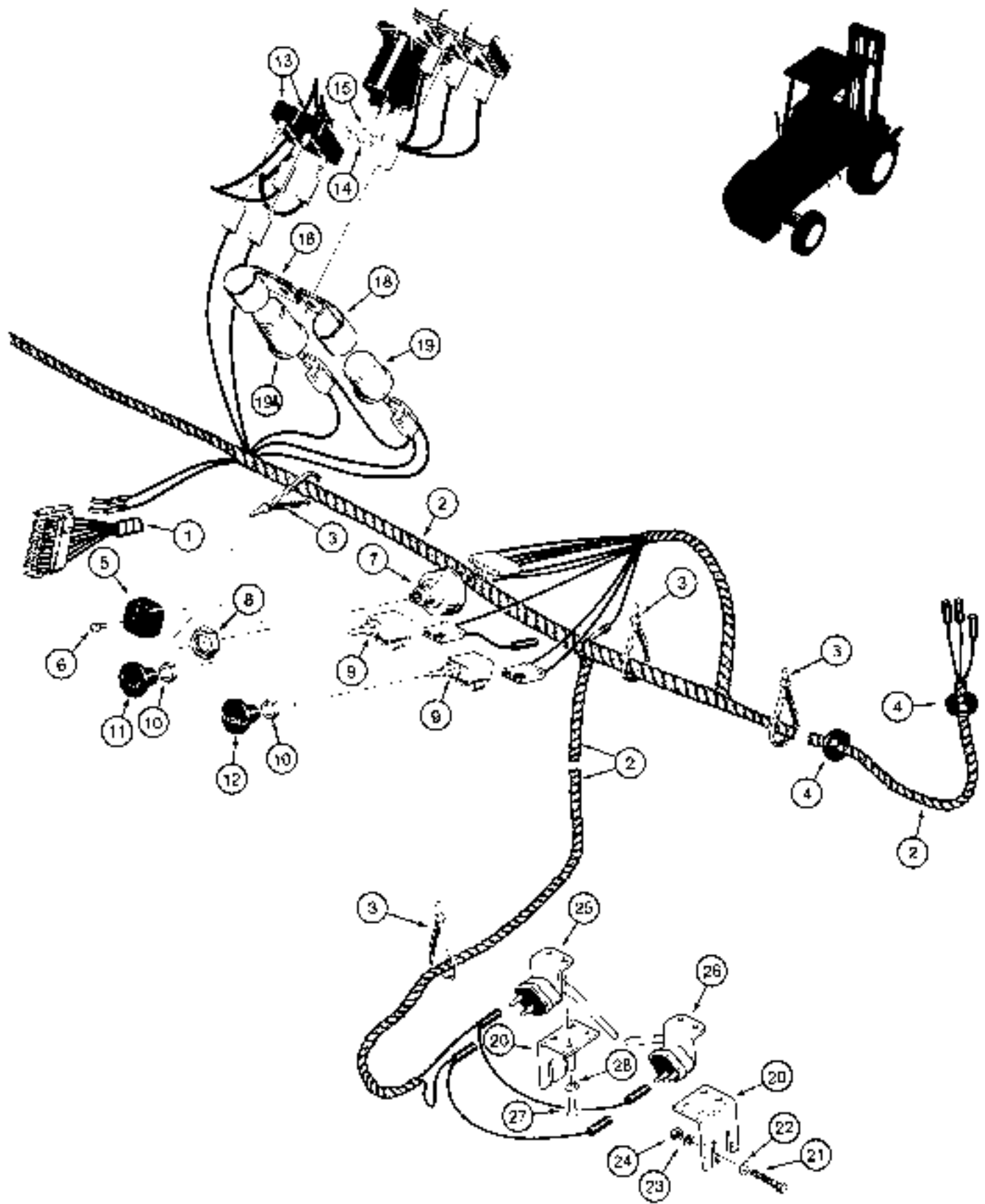
**ELECTRICAL CIRCUIT  
MAIN HARNESS AND INSTRUMENT PANEL  
MODELS WITHOUT FLASHER LAMPS**

REF.	PART NO.	DESCRIPTION	REQ'D
	L 105210	LAMP ASSEMBLY - instrument panel	1
28	NSS	SOCKET ASSEMBLY - lamp	1
29	A 22349	BULB - lamp, No. 9234	1
30	353- 402	PLUG - button, 3/8", if used	2
31	353- 407	PLUG - button, 11/16", if used	1
32	D 73388	PLATE - switch mounting	1
33	182- 516	MACHINE SCREW - pan head slotted, No. 10 - 24 NC x 1/2", plated	4
34	D 87251	SWITCH - clutch cutout, see page 89 for clutch cutout solenoid, connections, and controls	1
35	D 73929	PLATE - clutch cutout switch	1
36	49838	CLAMP - harness, use existing hydraulic tube clamp hardware	2
	D 102013	KIT - service, harness, includes instruction sheet	1
37	D 133057	HARNESS - main, with connector for neutral start switch relay	1
38	D 128310	RELAY - 30 amperes, to protect neutral start switch	1
39	182- 86	MACHINE SCREW - pan head slotted, No. 8 - 32 NC x 1/2", not shown, replaces existing circuit breaker lower mounting hardware	1
40	193- 1002	NUT AND LOCK WASHER - No. 8 - 32 NC, not shown, replaces existing circuit breaker lower mounting hardware	1
41	L 18337	TIE STRAP - wire, not shown	1



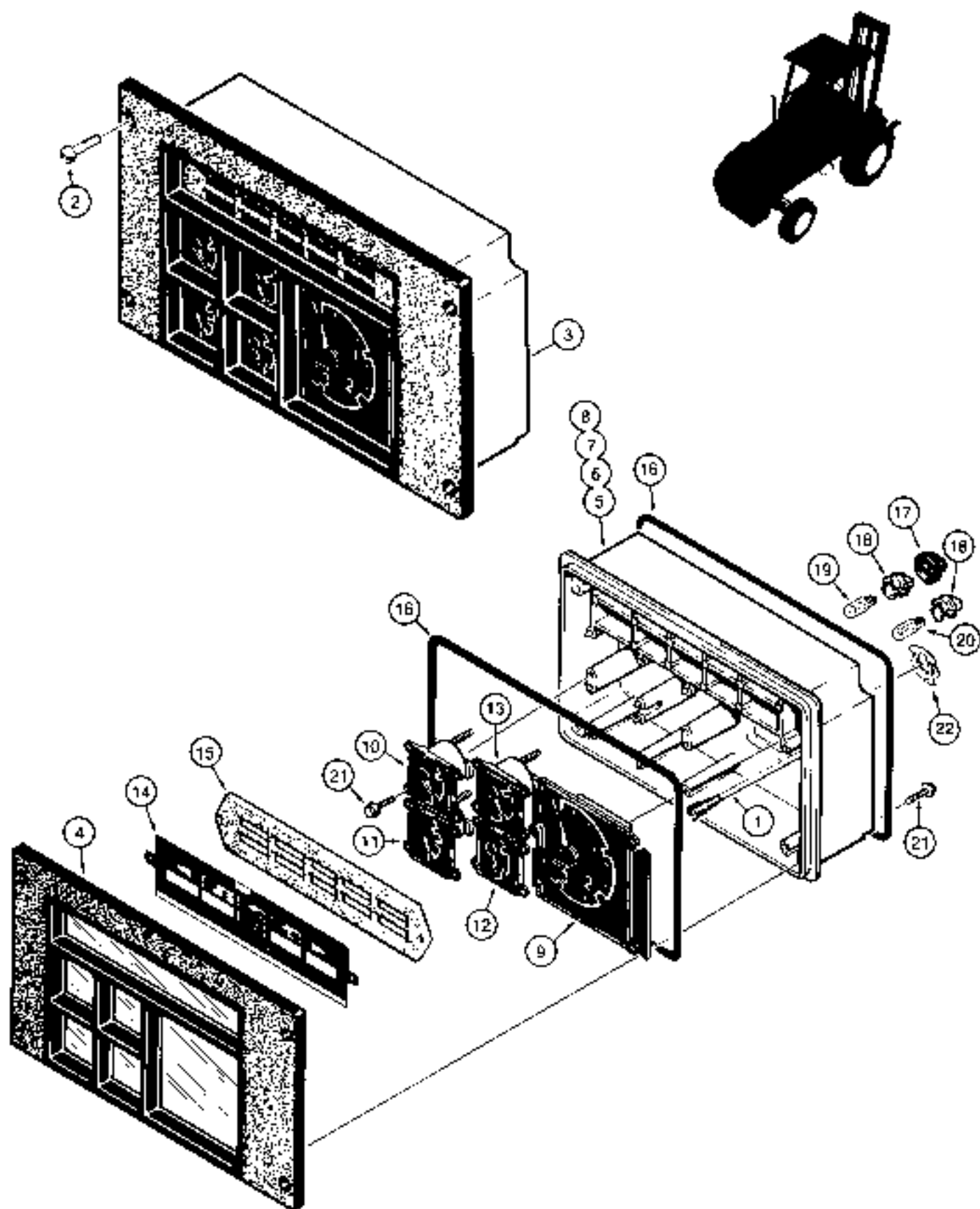
## NEUTRAL START CONVERSION KIT

REF	PART NO.	DESCRIPTION	REQ D.
	O 101559	KIT - neutral start conversion, includes instruction sheet	1
1	O 127340	HARNESSES - relay, attaches to D133562 wire	1
2	D 128310	RELAY - 30 amperes, neutral start	1
3	L 18337	TIE STRAP - wire	6
4	223- 155	CONNECTOR - male	1
5	D 133562	WIRE - starter to relay harness	1
6	182- 86	MACHINE SCREW - pan head slotted, No. 8 - 32 NC x 1/2", replaces existing lower circuit breaker mounting hardware	1
7	193- 1002	NUT AND LOCK WASHER - No. 8 - 32 NC, plated, replaces existing lower circuit breaker mounting hardware	1



## ELECTRICAL CIRCUIT FLASHER HARNESS AND CONTROLS

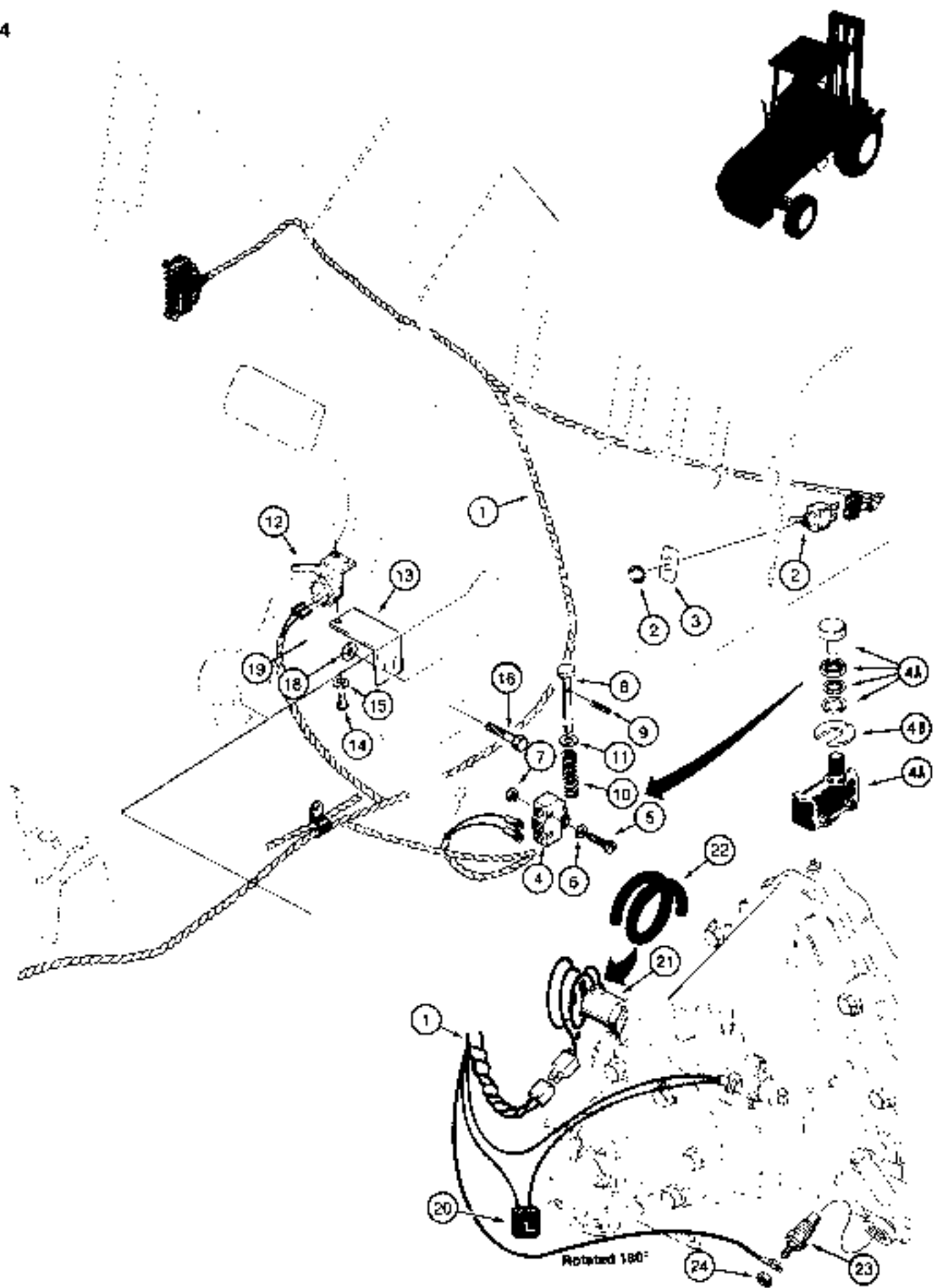
REF	PART NO.	DESCRIPTION	REQ'D
1	REF	HARNESS - main, see pages 85 and 87 for main harness and related parts . . .	1
2	D 76781	HARNESS - front lamps with stop and flasher lamps . . . . .	1
3	L 18337	TIE STRAP - wire harness . . . . .	UAF
4	D 51643	GROMMET - wire harness . . . . .	4
5	A 20465	KNOB - turn signal switch . . . . .	1
6	A 20468	SCREW - knob retaining . . . . .	1
7	D 52008	SWITCH - turn signal . . . . .	1
8	A 20467	NUT - turn signal switch . . . . .	1
9	D 74330	SWITCH - flood lamp and flasher lamp . . . . .	2
10	N 7557	NUT - spec.al, 3/8" - 24 NF, switch retaining . . . . .	1
11	D 95783	KNOB - flood lamp . . . . .	1
12	D 95782	KNOB - flasher lamp . . . . .	1
13	D 78001	CIRCUIT BREAKER - 10 amperes . . . . .	2
14	D 88040	WIRE - jumper, double circuit breaker to solenoid . . . . .	1
15	D 75225	WIRE - jumper, triple, circuit breaker to solenoid . . . . .	1
16		RESERVED	
17		RESERVED	
18	A 34868	BRACKET - flasher mounting . . . . .	2
19	A 65550	FLASHER - 12 volt, turn . . . . .	1
19A	D 133000	FLASHER - 12 volt, hazard . . . . .	1
20	D 77905	BRACKET - brake pedal switch mounting . . . . .	2
21	113- 4	BOLT - hex head, 1/4" - 20 NC x 1", plated . . . . .	4
22	195- 518	WASHER - flat, 1/4", plated . . . . .	4
23	192- 19	WASHER - lock, 1/4", plated . . . . .	4
24	129- 101	NUT - hex, 1/4" - 20 NC, plated . . . . .	4
25	A 33976	SWITCH - stop lamp, left-hand . . . . .	1
26	A 33977	SWITCH - stop lamp, right-hand . . . . .	1
27	182- 143	MACHINE SCREW - pan head slotted, No. 10 - 32 NF x 3/8" . . . . .	4
28	192- 18	WASHER - lock, 3/16", plated . . . . .	4



## INSTRUMENT CLUSTER

REF.	PART NO.	DESCRIPTION	REQ'D.
1	D 133420	CABLE - tachometer drive	1
2	182- 516	MACHINE SCREW - pan head slotted, No. 10 - 24 NC x 1/2", plated	4
3	D 91122	INSTRUMENT CLUSTER ASSEMBLY - tractor	1
4	D 71334	COVER - instrument	1
	D 71335	CASE ASSEMBLY - instrument cluster	1
5	NSS	CASE - instrument cluster	1
6	H 422744	CIRCUIT BOARD - printed	1
7	NSS	CLIP - gauges	12
8	NSS	GASKET - case	1
9	N 6805	GAUGE - tachometer, includes hourmeter	1
10	N 6806	GAUGE - water temperature	1
11	A 47688	GAUGE - fuel level	1
12	N 6807	GAUGE - voltmeter	1
13	N 6808	GAUGE - oil temperature	1
14	N 6809	LENS - identification, warning lamps	1
15	D 71342	GASKET - lens	1
16	D 71343	GASKET - instrument cluster	2
17	D 71344	BOOT - rubber	3
18	A 47125	SOCKET - lamp, green	9
19	W 10473	BULB - illumination, No. 194	3
20	D 71346	BULB - warning, No. 158	6
21	A 45093	SCREW - special	12
22	A 47704	SPRING - locking	1

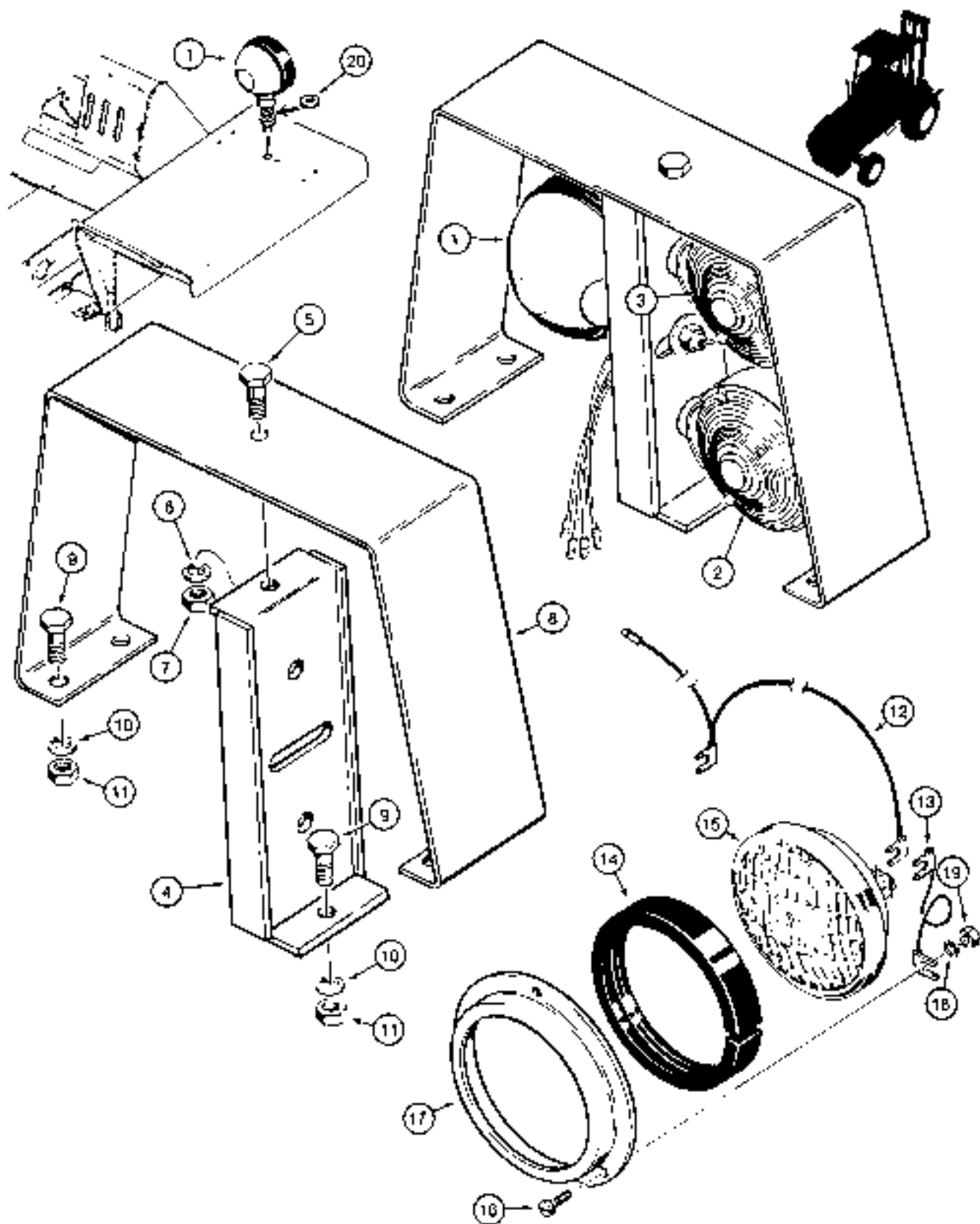




## POWER SHUTTLE ELECTRICAL CIRCUIT

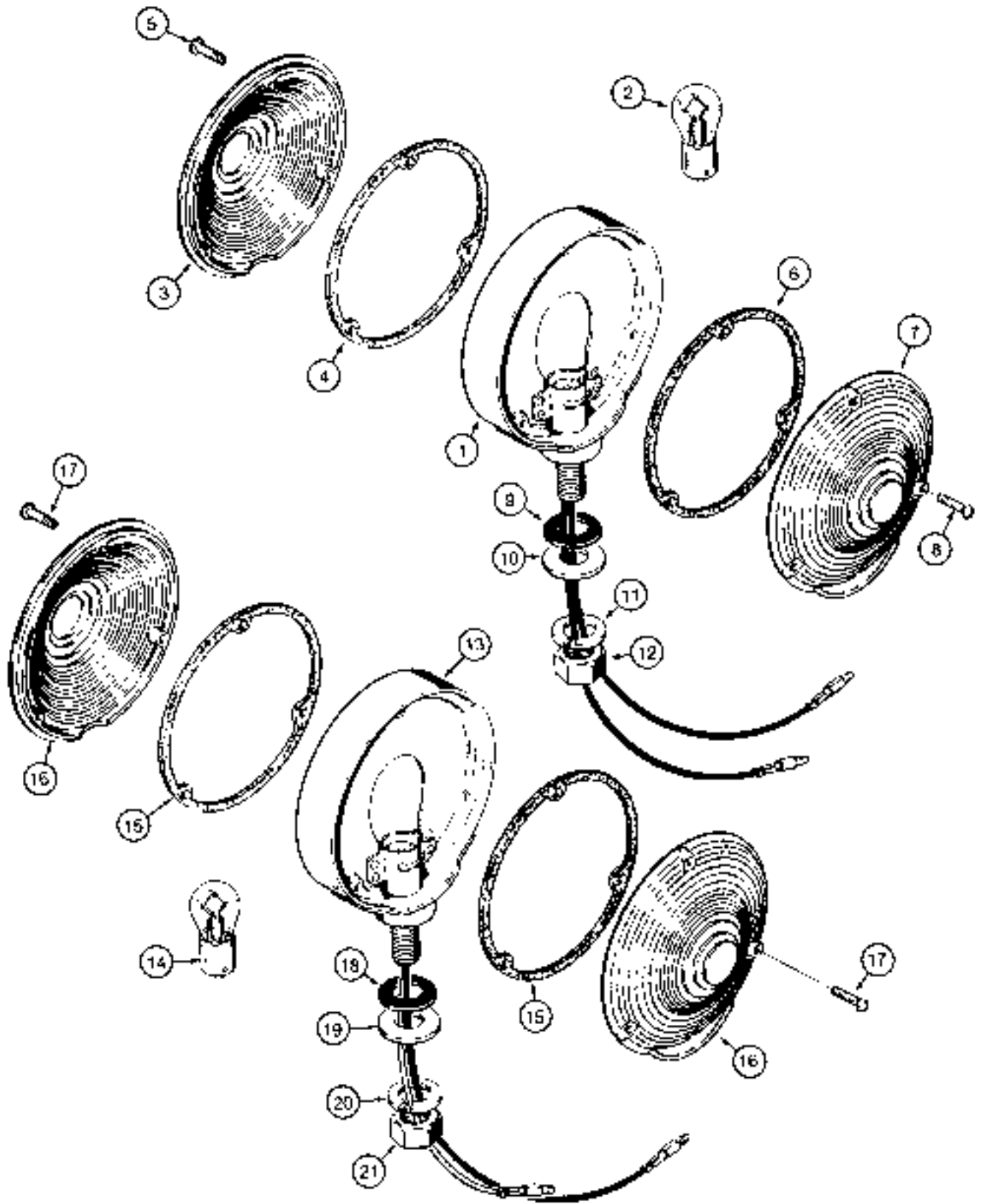
REF.	PART NO.	DESCRIPTION	REQ'D
1	REF	HARNES - main, includes clutch cutout circuit, see pages 85 and 87 for harness	1
2	D 67251	SWITCH - clutch cutout, dash mounted	1
3	D 73929	PLATE - switch	1
4	D 40921	SWITCH - clutch cutout, floor mounted, if used	1
4A	D 124618	SWITCH - clutch cutout, floor mounted, if used	1
4B	D 126116	WASHER - special, used with D124618 switch only	1
5	169- 165	MACHINE SCREW - Fillister head, No. 6 - 32 NC x 1-1/8", plated, if used	2
6	195- 507	WASHER - flat, No. 6, plated, if used	2
7	193- 1003	NUT AND LOCK WASHER - No. 6 - 32 NC, plated, if used	2
8	D 84327	ROD - switch actuating, used with D40921 switch	1
9	138- 61	ROLL PIN - 1/8" x 1", used with D40921 switch	1
10	T 34088	SPRING - rod return, used with D40921 switch	1
11	195- 525	WASHER - flat, 3/8", plated, if used	1
12	A 33977	SWITCH - clutch cutout, brake pedal	1
13	D 77665	BRACKET - brake switch	1
14	182- 143	MACHINE SCREW - pan head slotted, No. 10 - 32 NF x 3/8"	2
15	192- 18	WASHER - lock, 3/16", plated	2
16	113- 4	BOLT - hex head, 1/4" - 20 NC x 1", plated	2
17		RESERVED	
18	195- 518	WASHER - flat, 1/4", plated	2
19	193- 1006	NUT AND LOCK WASHER - 1/4" - 20 NC, plated	2
20	L 71879	DIODE - switch protecting	1
21	D 134742	SOLENOID - clutch cutout, at shuttle	1
22	D 88053	SLEEVE - solenoid wires	1
23	D 65446	SENDER - shuttle transmission temperature	1
24	193- 1000	NUT AND LOCK WASHER - No. 10 - 32 NF, plated	1

**NOTE:** See page 89 for the neutral start conversion kit.



## FRONT AND REAR LAMPS AND CONNECTIONS

REF.	PART NO	DESCRIPTION	REQ'D.
1	D 48664	LAMP ASSEMBLY - front, parts list page 101	2
2	D 49733	LAMP ASSEMBLY - stop and tail, if used, parts list page 99	2
3	D 122121	LAMP ASSEMBLY - signal and flasher, if used, parts list page 99	2
4	D 58713	BRACKET - center, lamp mounting, if used	2
5	113- 206	BOLT - hex head, 3/8" - 16 NC x 3/4", plated	2
6	192- 21	WASHER - lock, 3/8", plated	2
7	129- 103	NUT - hex, 3/8" - 16 NC, plated	2
8	D 58721	BRACKET - outer, lamp mounting, if used	2
9	113- 206	BOLT - hex head, 3/8" - 16 NC x 3/4", plated	10
10	192- 21	WASHER - lock, 3/8", plated	10
11	129- 103	NUT - hex, 3/8" - 16 NC, plated	10
12	D 56401	WIRE - rear lamps	1
13	A 11763	WIRE - rear lamps, ground	2
14	D 93241	RETAINER - rubber, rear lamp	2
15	A 42294	BULB - sealed beam, No. 4406	2
16	182- 516	MACHINE SCREW - pan head, slotted, No. 10 - 24 NC x 1/2", plated	6
17	D 57288	RING - metal, lamp retainer	2
18	192- 18	WASHER - lock, 3/16", plated	6
19	129- 17	NUT - hex, No. 10 - 24 NC, plated	6
20	95- 6	WASHER - flat, 1/2"	2



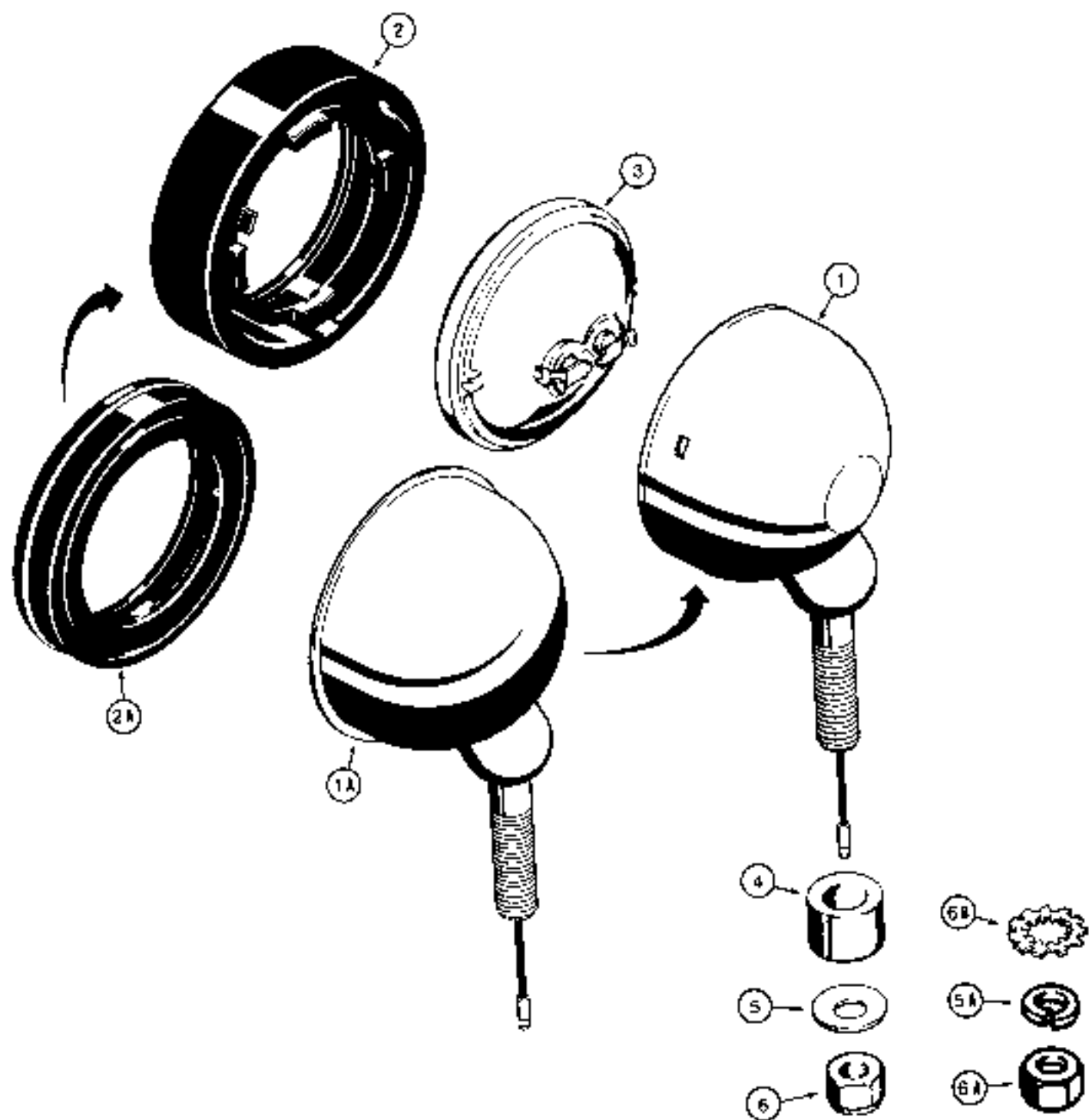
## LAMPS

REF	PART NO	DESCRIPTION	REQ'D
<b>D49733 STOP AND TAIL LAMP</b>			
	D 49733	LAMP ASSEMBLY - stop and tail	2
1	NSS	BODY - lamp, stop and tail	1
2	T 34857	BULB - lamp, No. 1157	1
	L 32213	KIT - lens replacement, red	1
3	NSS	LENS - red	1
4	NSS	GASKET - lens	1
5	173 279	MACHINE SCREW - round head slotted, No. 6 - 32 NC x 5/8", plated	3
	L 32214	KIT - lens replacement, amber	1
6	NSS	GASKET - lens	1
7	NSS	LENS - amber	1
8	173 279	MACHINE SCREW - round head slotted, No. 6 - 32 NC x 5/8", plated	3
9	L 32256	BUSHING - rubber	1
10	195- 105	WASHER - flat, 1/2", plated	12
11	192- 23	WASHER - lock, 1/2", plated	1
12	129- 125	NUT - hex, 1/2" - 20 NF, plated	1

**D122121 SIGNAL AND FLASHER LAMP**

	D 122121	LAMP ASSEMBLY - signal and flasher	2
13	NSS	BODY - lamp, signal and flasher lamp, replaces lamp body without additional ground wire on some models	1
14	A 41264	BULB - lamp, No. 1156	1
	L 32214	KIT - lens replacement	2
15	NSS	GASKET - lens	1
16	NSS	LENS - amber	1
17	173 279	MACHINE SCREW - round head slotted, No. 6 - 32 NC x 5/8", plated	3
18	L 32256	BUSHING - rubber	1
19	195- 105	WASHER - flat, 1/2", plated	12
20	192- 23	WASHER - lock, 1/2", plated	1
21	129- 125	NUT - hex, 1/2" - 20 NF, plated	1

**NOTE:** For front and rear lamp mounting parts see page 97.

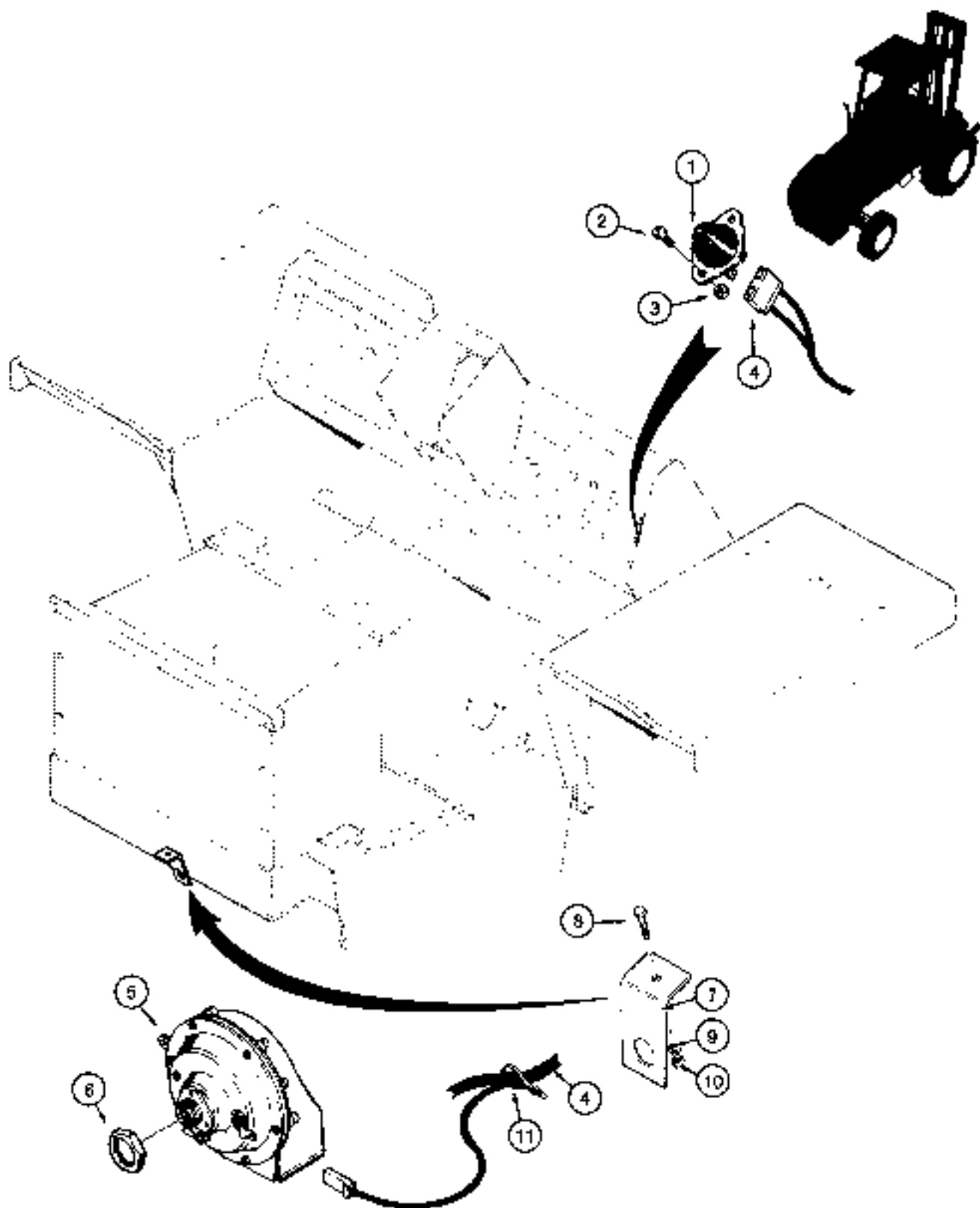


## LAMPS

REF.	PART NO	DESCRIPTION	REQ'D.
<b>D88684 FRONT LAMP</b>			
	D 88684	LAMP ASSEMBLY - front	2
1	NSS	SHELL - lamp, accepts item 2 only	1
1A	NSS	SHELL - lamp, accepts item 2A only	1
2	A 25213	RETAINER - lamp, rubber, locks to shell with three rubber lugs, if used	1
2A	N 6160	RETAINER - lamp, rubber, locks over shell flange, if used	1
3	A 11280	BULB - sealed beam, No. 4411	1
4	D 37048	BUSHING - pivot	1
5	195- 106	WASHER - flat, 1/2", plated	1
5A	192- 23	WASHER - lock, 1/2", plated, if used	1
6	131- 28	NUT - light hex. self-locking, 1/2" - 20 NF, plated, if used	1
6A	129- 155	NUT - hex. jam. 1/2" - 20 NC, plated, if used	1
6B	193- 87	WASHER - internal-external tooth lock, 1/2", plated - can be used to replace item 5A, if used	1

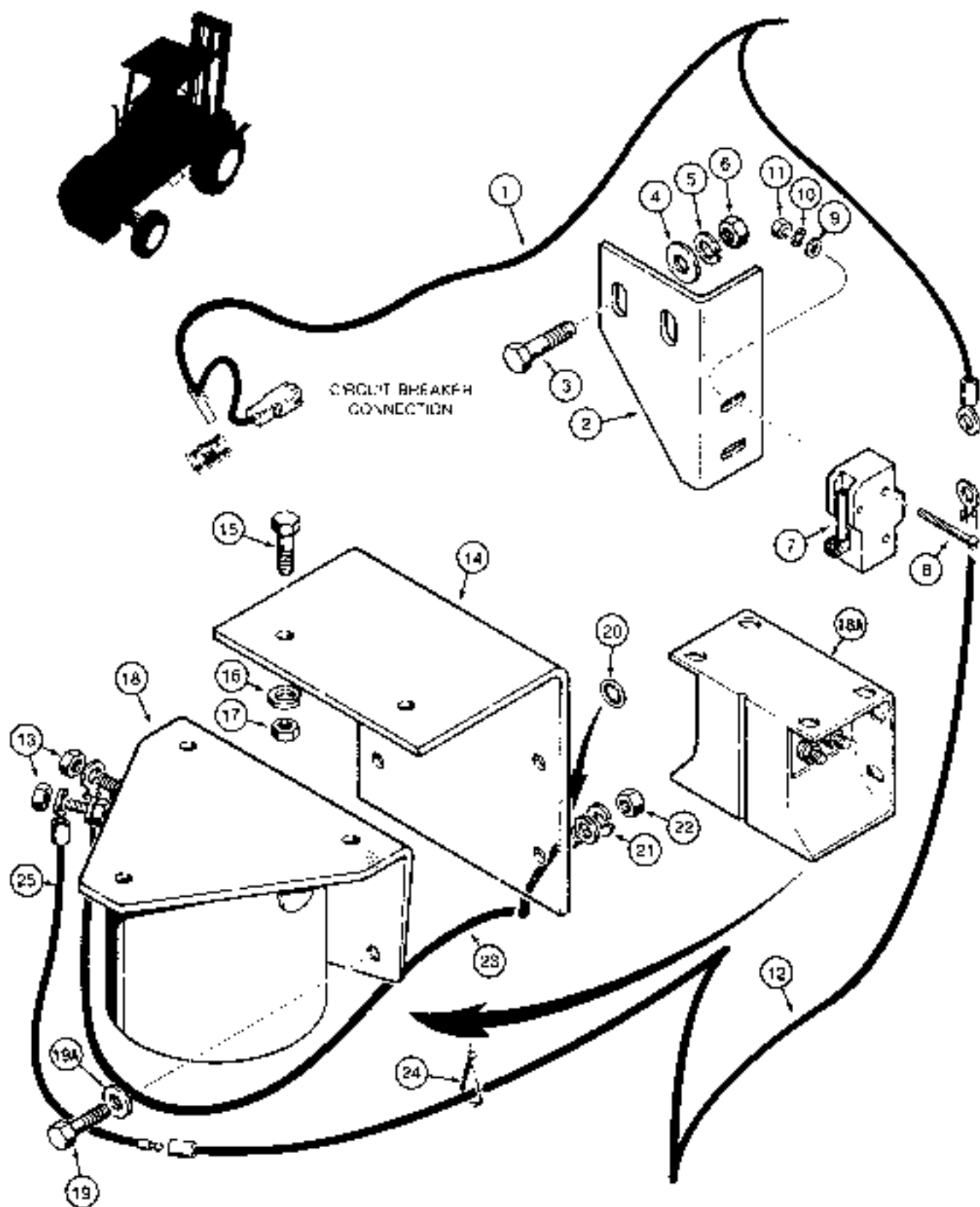
NOTE: For front and rear lamp mounting parts see page 97





## HORN

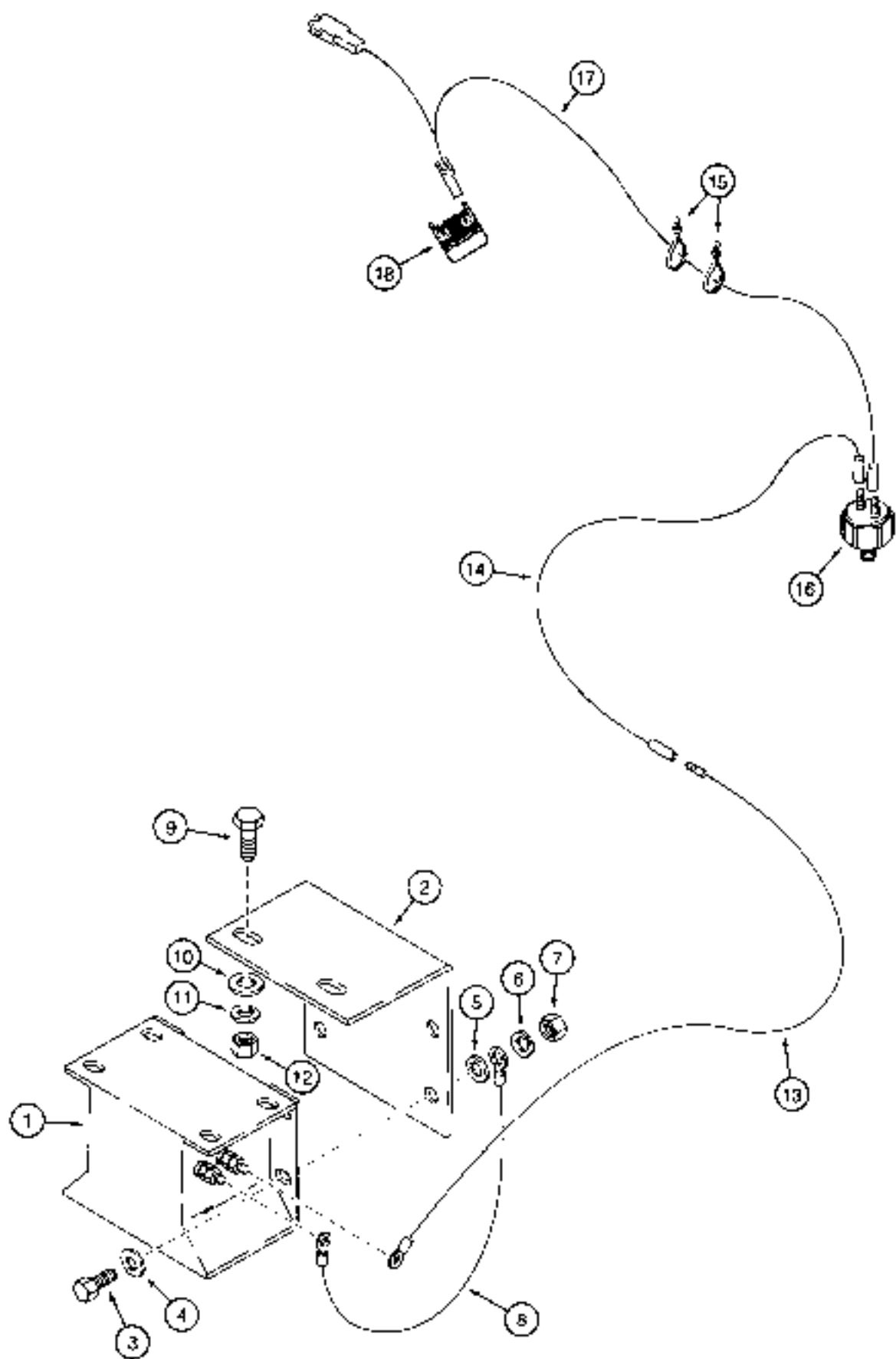
REF.	PART NO.	DESCRIPTION	REQ'D
1	D 67872	SWITCH - horn, push button type	1
2	173- 274	MACHINE SCREW - round head slotted, No. 8 - 32 NC x 1/2", plated	2
3	193- 1002	NUT AND LOCK WASHER - No. 8 - 32 NC, plated	2
4	REF	HARNESSES - main wiring, see pages 83-87 or 95	1
5	D 123205	HORN - 12 volt	1
6	L 30866	NUT - hex, 7/8" - 20, horn mounting	1
7	D 70129	BRACKET - horn mounting	1
8	113 103	BOLT - hex head, 5/16" - 18 NC x 1", plated	1
9	192- 20	WASHER - ack, 5/16", plated	1
10	129- 102	NUT - hex, 5/16" - 18 NC, plated	1
11	L 18337	TIE STRAP - harness	UAB



## BACKUP ALARM \*MECHANICALLY ACTUATED SWITCH

REF.	PART NO.	DESCRIPTION	REQ'D
1	D 78756	WIRE - circuit breaker to switch	1
2	O 75536	BRACKET - switch mounting	1
3	113- 207	BOLT - hex head, 3/8" - 16 NC x 1", plated	2
4	195- 525	WASHER - flat, 3/8", plated	2
5	192- 21	WASHER - lock, 3/8", plated	2
6	129- 103	NUT - hex, 3/8" - 16 NC, plated	2
7	O 40921	SWITCH - backup alarm	1
8	169 144	MACHINE SCREW - Fillister head No. 6 - 32 NC x 1-1/4", plated	2
9	195- 507	WASHER - flat, No. 6, plated	2
10	193- 89	WASHER - internal-external tooth lock, No. 6, plated	2
11	129- 15	NUT - hex, No. 6 - 32 NC, plated	2
12	D 72306	WIRE - switch to backup alarm	1
13	193- 1002	NUT AND LOCK WASHER - No. 8 - 32 NC, plated	2
14	O 75815	BRACKET - backup alarm	1
15	113- 102	BOLT - hex head, 5/16" - 18 NC x 3/4", plated	2
16	192- 20	WASHER - lock, 5/16", plated	2
17	129- 102	NUT - hex, 5/16" - 18 NC, plated	2
18	D 75814	BACKUP ALARM - electric, round type if used	1
18A	D 121972	BACKUP ALARM - electric, rectangular type, if used	1
19	113- 102	BOLT - hex head, 5/16" - 18 NC x 3/4", plated	4
19A	195- 521	WASHER - flat, 5/16", plated	4
20	193- 82	WASHER - internal tooth lock 5/16", plated	1
21	192- 20	WASHER - lock, 5/16", plated	4
22	129- 102	NUT - hex, 5/16" - 18 NC, plated	4
23	D 70125	WIRE - ground	1
24	L 16337	TIE STRAP - wire	UAF
25	O 77263	WIRE - to alarm	1

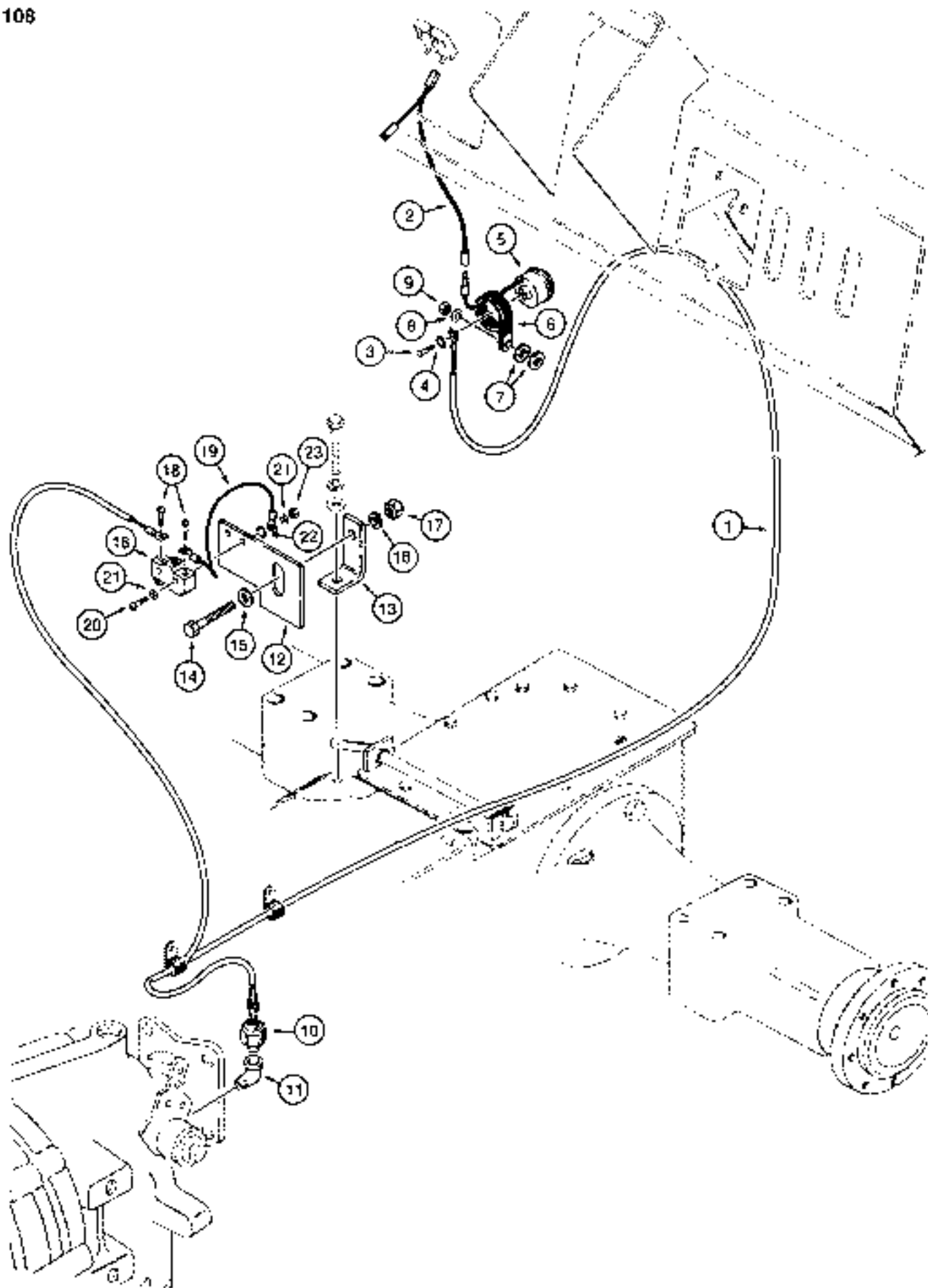
\*NOTE: See page 107 for backup alarm with pressure actuated switch in the power shuttle.



## BACKUP ALARM \*POWER SHUTTLE PRESSURE ACTUATED SWITCH

REF	PART NO.	DESCRIPTION	REQ'D
1	D 121972	BACKUP ALARM - electric, rectangular type	1
2	D 75815	BRACKET - backup alarm	1
3	113- 102	BOLT - hex head, 5/16" - 18 NC x 3/4", plated	4
4	195- 521	WASHER - flat, 5/16", plated	4
5	193- 82	WASHER - internal tooth lock, 5/16", plated	1
6	192- 20	WASHER - lock, 5/16", plated	4
7	129- 102	NUT - hex, 5/16" - 18 NC, plated	4
8	D 70125	WIRE - alarm ground	1
9	113- 102	BOLT - hex head, 5/16" - 18 NC x 3/4", plated	2
10	195- 521	WASHER - flat, 5/16", plated	2
11	192- 20	WASHER - lock, 5/16", plated	2
12	129- 102	NUT - hex, 5/16" - 18 NC, plated	2
13	D 77263	WIRE - switch wire to alarm	1
14	D 134160	WIRE - switch to alarm	1
15	L 18337	TIE STRAP - wire	2
16	D 127319	SWITCH - pressure, mounts in power shuttle	1
17	D 134161	WIRE - pressure switch to circuit breaker	1
18	D 78002	CIRCUIT BREAKER - 15 amperes	1

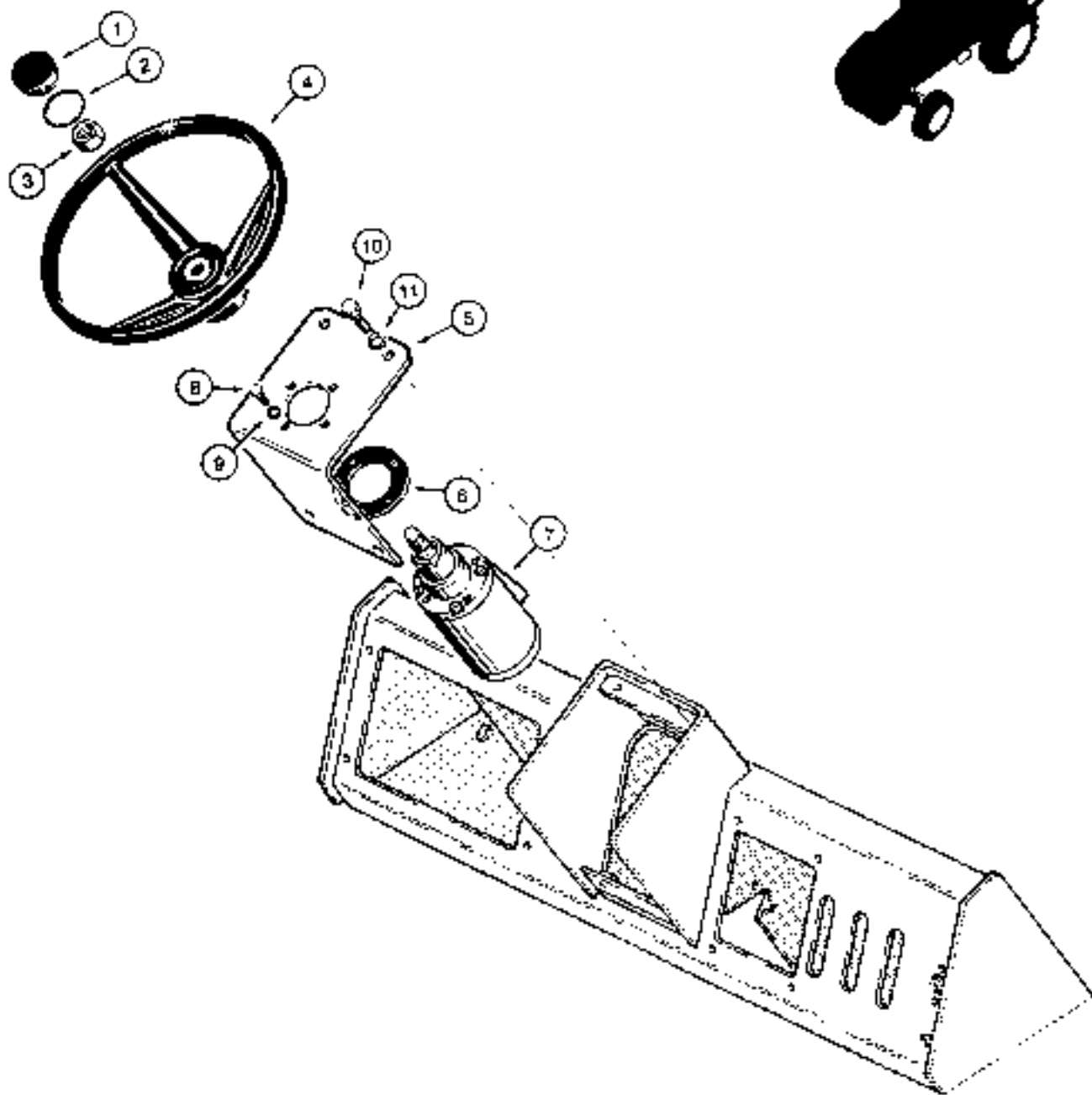
\*NOTE: See page 105 for backup alarm with mechanically actuated switch.



## PARKING BRAKE ALARM

REF.	PART NO.	DESCRIPTION	REQ'D
1	D 128229	HARNES - parking brake alarm	1
2	D 75454	WIRE - circuit breaker to alarm	1
3	182- 81	MACHINE SCREW - pan head slotted, No. 8 - 32 NC x 3/16"	1
4	193- 90	WASHER - external tooth lock, No. 8, plated	1
5	D 126995	ALARM - parking brake	1
6	S 98801	CLAMP - alarm mounting, mounts to existing instrument panel stud	1
7	195- 533	WASHER - flat, 1/2", plated	2
8	195- 2011	WASHER - flat, 1/4", special	1
9	129- 101	NUT - hex, 1/4" - 20 NC, plated	1
10	D 127319	SWITCH - pressure	1
11	221- 411	STREET ELBOW - 90 degree, 1/8" NPT, replaces existing 1/8" pipe plug located on the right-hand side of the power shuttle behind the shift lever	1
12	D 128291	PLATE - micro switch mounting	1
13	D 65647	BRACKET - plate support, uses existing parking brake cable bracket mounting hardware	1
14	113- 233	BOLT - hex head, 3/8" - 16 NC x 1-3/4", plated	1
15	95- 6	WASHER - flat, 3/8"	1
16	192- 21	WASHER - lock, 3/8", plated	1
17	129- 103	NUT - hex, 3/8" - 18 NC, plated	1
18	D 40921	SWITCH - micro	1
19	D 126935	WIRE - ground, micro switch	1
20	182- 530	MACHINE SCREW - pan head slotted, No. 6 - 32 NC x 1-1/4", plated	2
21	195- 507	WASHER - flat, No. 6, plated	4
22	193- 4	WASHER - external tooth lock, No. 6	1
23	193- 1003	NUT AND LOCK WASHER - No. 6 - 32 NC, plated	2

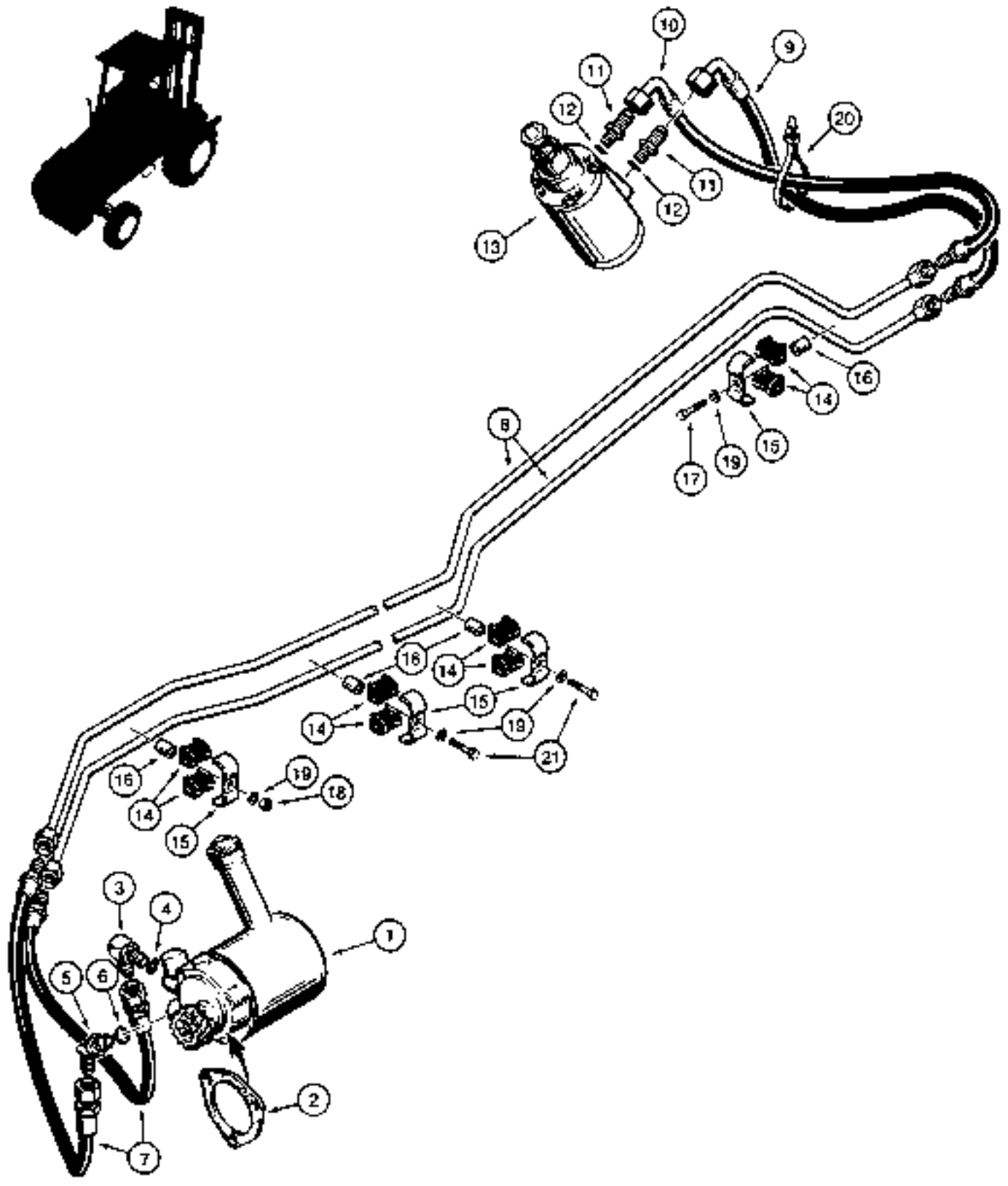




## STEERING WHEEL AND COLUMN

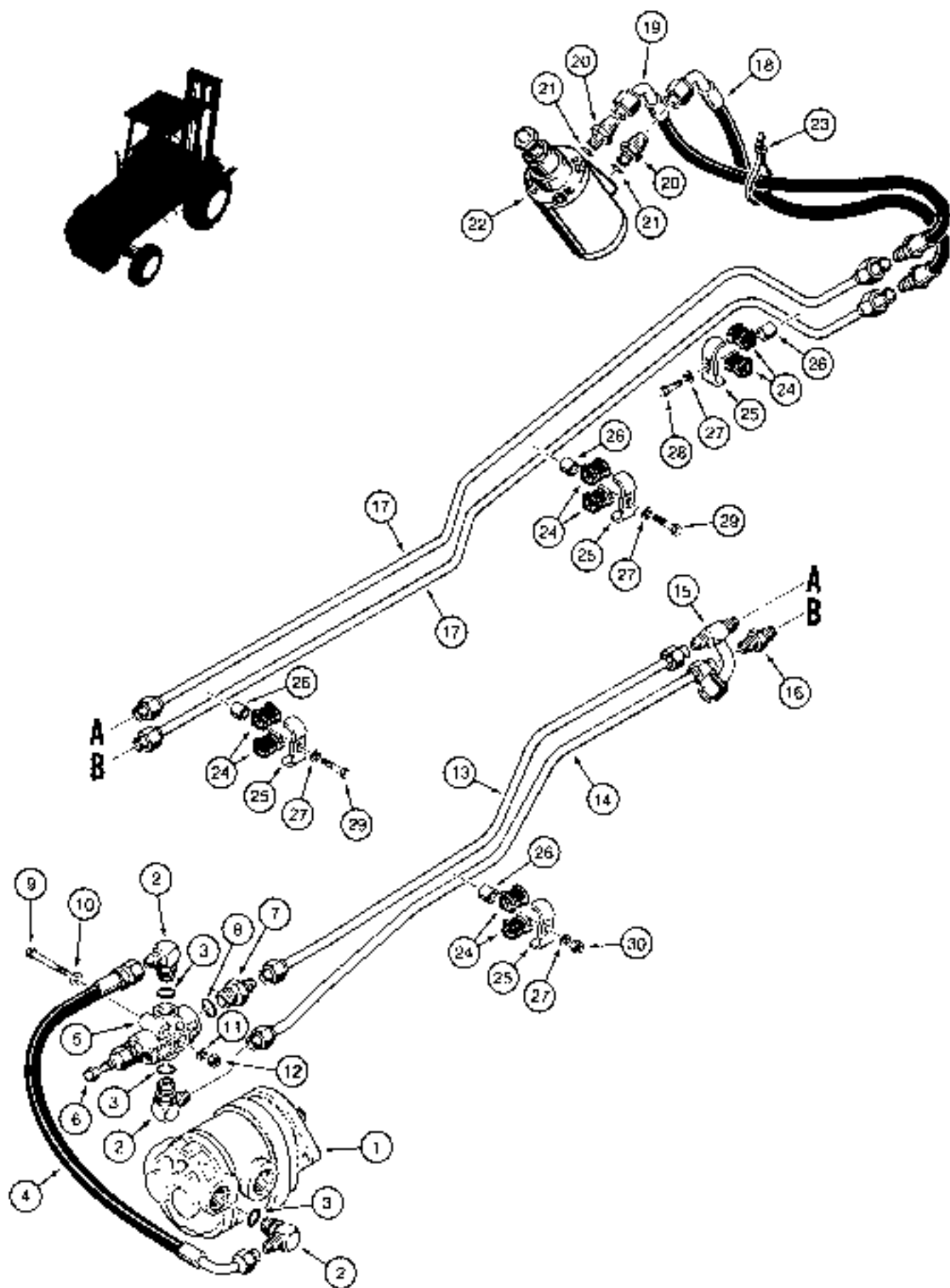
REF.	PART NO	DESCRIPTION	REQ'D.
1	A 62210	CAP - steering wheel nut cover .....	1
2	D 26115	O-RING - cap seal .....	1
3	F 19646	NUT - steering wheel retaining, supplied with steering control valve .....	1
4	A 65544	STEERING WHEEL - tractor .....	1
5	R 35603	PLATE - steering control valve mounting .....	1
6	D 74551	RING - isolation .....	1
7	D 90752	CONTROL VALVE - steering, parts list page 123 .....	1
8	113- 102	BOLT - hex head, 5/16" - 18 NC x 3/4", plated. valve mounting .....	4
9	192- 20	WASHER - lock, 5/16", plated .....	4
10	113- 207	BOLT - hex head, 3/8" - 18 NC x 1", plated. plate mounting .....	4
11	192- 21	WASHER - lock, 3/8", plated .....	4

5



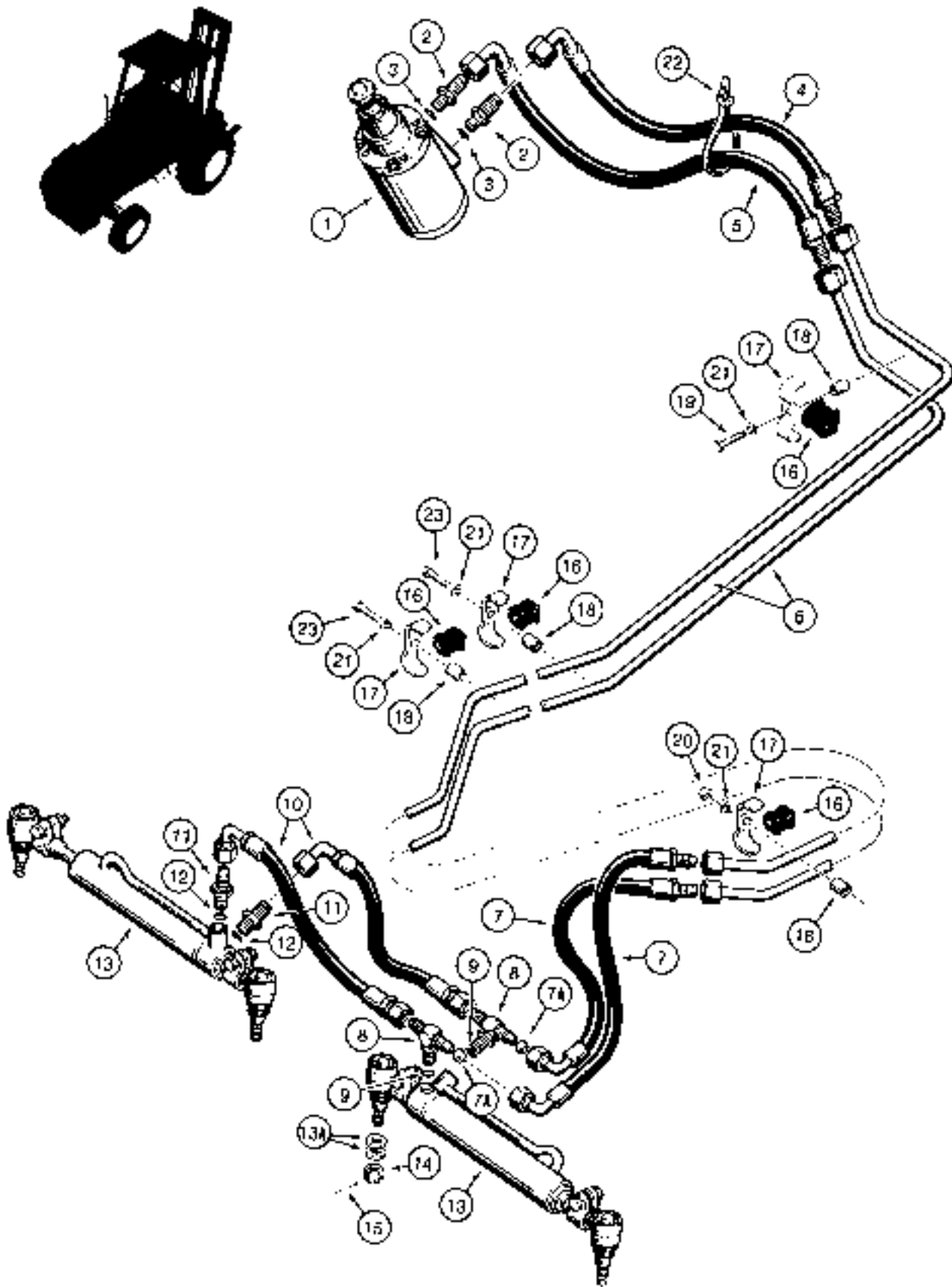
**STEERING HYDRAULIC CIRCUIT  
STEERING PUMP TO STEERING CONTROL VALVE  
TWO WHEEL DRIVE MODELS BEFORE TRACTOR PIN 9879000**

REF.	PART NO.	DESCRIPTION	REQ D
1	D 84178	STEERING PUMP - parts list page 121	1
2	A 30042	GASKET - steering pump	1
3	218- 5106	ELBOW - 90 degree, adjustable	1
4	218- 5006	O-RING - elbow	1
5	218- 5136	ELBOW - 45 degree, adjustable	1
6	218- 5006	O-RING - elbow	1
7	D 63164	HOSE - 12' (305 mm) long, at steering pump	2
8	D 75770	TUBE - steering pump to steering control valve	2
9	D 69142	HOSE - special, lower right-hand control valve port	1
10	D 71785	HOSE - special, upper left-hand control valve port	1
11	218- 5351	ADAPTER - straight, male	2
12	218- 5005	O-RING - adapter	1
13	D 90752	CONTROL VALVE - steering, parts list page 123, mounting parts on page 111	1
14	D 67296	INSULATOR - rubber, tube	8
15	D 68646	CLAMP - tube, double	4
16	D 76195	SPACER - tube clamp	4
17	113- 208	BOLT - hex head, 3/8" - 16 NC x 1-1/4", plated	1
18	129- 103	NUT - hex, 3/8" - 16 NC, plated	1
19	192- 21	WASHER - lock, 3/8", plated	4
20	L 18337	11E STRAP - hoses, at control valve	1
21	113- 209	BOLT - hex head, 3/8" - 16 NC x 1-1/2", plated	2



**STEERING HYDRAULIC CIRCUIT  
STEERING AND EQUIPMENT PUMP TO STEERING CONTROL VALVE  
ALL FOUR WHEEL DRIVE MODELS  
TWO WHEEL DRIVE MODELS TRACTOR PIN 9879000 AND AFTER**

REF.	PART NO.	DESCRIPTION	REQ'D
1	D 126580	STEERING AND EQUIPMENT PUMP - parts list page 283	1
2	218- 5121	ELBOW - 90 degree, adjustable, male	3
3	218- 5007	O-RING - elbow	1
4	D 61500	HOSE - special, steering and equipment pump to relief valve	1
5	REF	RELIEF VALVE - steering, parts list page 293	1
6	218- 752	CAP - hex, 7/16" - 20 NF, steering relief valve	1
7	218- 5070	ADAPTER - straight, male	1
8	218- 5008	O-RING - adapter	1
9	113- 111	BOLT - hex head, 5/16" - 18 NC x 2-1/2", plated	2
10	195- 521	WASHER - flat, 5/16", plated	2
11	192- 20	WASHER - lock, 5/16", plated	2
12	129- 102	NUT - hex, 5/16" - 18 NC, plated	2
13	D 126415	TUBE - relief valve to tube tee	1
14	D 126419	TUBE - connector to relief valve	1
15	D 126425	TUBE - tee	1
16	218- 735	CONNECTOR - straight, tube	1
17	D 126417	TUBE - steering and equipment pump to steering control valve	2
18	D 69142	HOSE - special, lower right-hand control valve port	1
19	D 71785	HOSE - special, upper left-hand control valve port	1
20	218- 5351	ADAPTER - straight, male	2
21	218- 5005	O-RING - adaptor	1
22	D 90752	CONTROL VALVE - steering, parts list page 123, mounting parts on page 111	1
23	L 18337	TIE STRAP - hoses, at control valve	1
24	D 67296	INSULATOR - rubber, tube	8
25	D 68646	CLAMP - tube, double	4
26	D 76195	SPACER - tube clamp	4
27	192- 21	WASHER - lock, 3/8", plated	4
28	113- 208	BOLT - hex head, 3/8" - 16 NC x 1-1/4", plated	1
29	113- 209	BOLT - hex head, 3/8" - 16 NC x 1-1/2", plated	2
30	129- 103	NUT - hex, 3/8" - 16 NC, plated	1

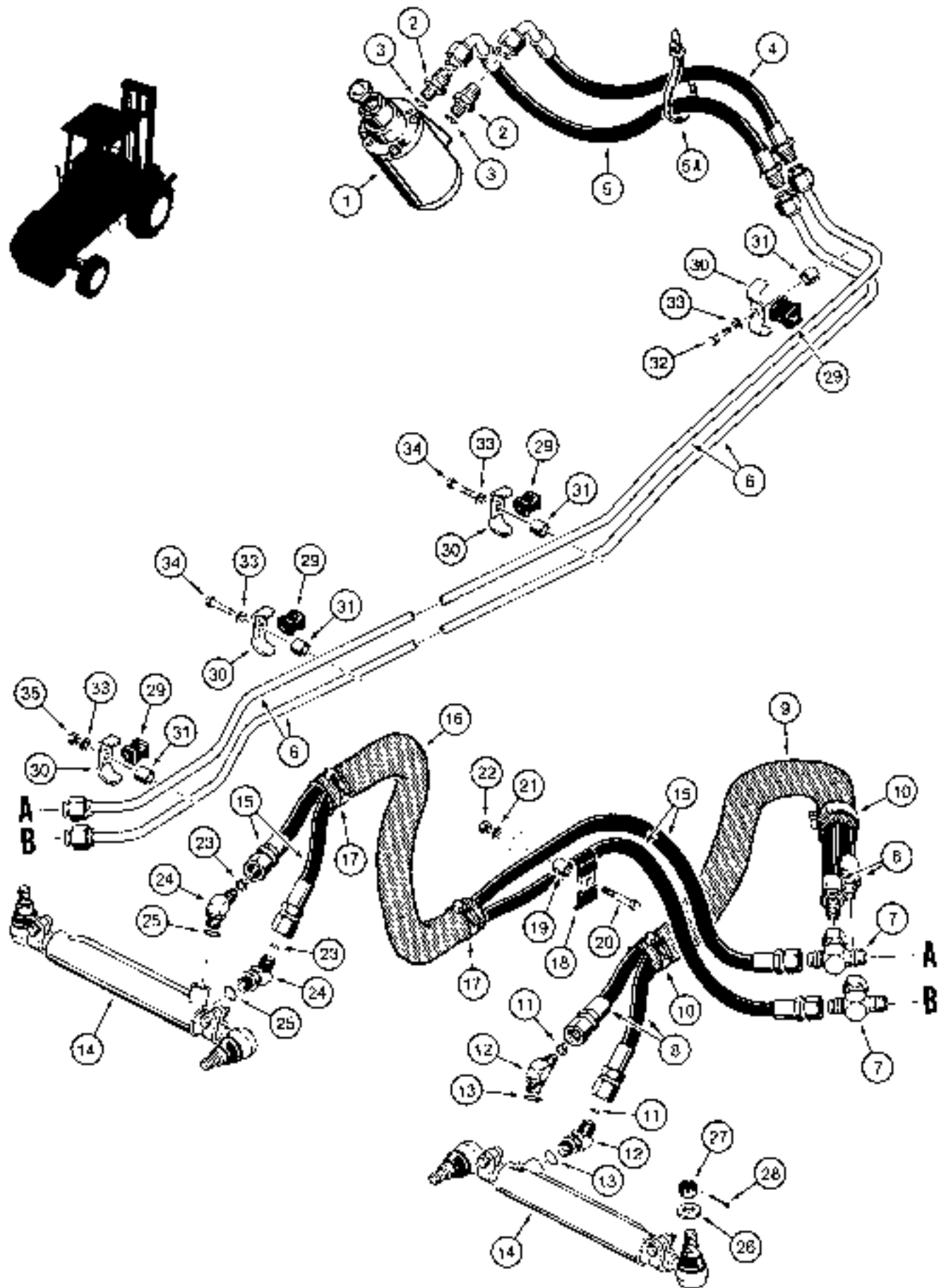


**STEERING HYDRAULIC CIRCUIT  
STEERING CONTROL VALVE TO CYLINDERS  
TWO WHEEL DRIVE MODELS**

REF.	PART NO	DESCRIPTION	REQ'D
1	D 90752	CONTROL VALVE - steering, parts list page 123, mounting parts on page 111	1
2	D 76050	RESTRICTOR - male	2
3	218- 5005	O-RING - restrictor	1
4	D 69142	HOSE - special, lower left-hand control valve port	1
5	D 71785	HOSE - special, upper right-hand control valve port	1
6	D 89043	TUBE - control valve to cylinders	2
7	D 62390	HOSE - special, to steering cylinders	2
7A	D 76229	RESTRICTOR - oil flow	2
8	218- 5182	TEE - adjustable	2
9	218- 5005	O-RING - tee	1
10	D 65620	HOSE - 16" (406 mm) long, between cylinders	2
11	218- 5057	ADAPTER - straight, male	2
12	218- 5005	O-RING - adapter	1
13	O 128454	CYLINDER - steering, parts list page 125	2
13A	95- 10	WASHER - flat, 5/8"	UAF
14	129- 610	NUT - hex, slotted, 5/8" - 18 NF, plated	4
15	132- 335	COTTER PIN - 1/8" x 1-1/4", plated	4
16	D 67296	INSULATOR - rubber, tubes	8
17	D 68646	CLAMP - tube, double	4
18	D 76195	SPACER - tube clamp	4
19	113- 208	BOLT - hex head, 3/8" - 16 NC x 1-1/4", plated	4
20	129- 103	NUT - hex, 3/8" - 16 NC, plated	1
21	192- 21	WASHER - lock, 3/8" plated	4
22	L 18337	TIE STRAP - hoses, at control valve	1
23	113- 209	BOLT - hex head, 3/8" - 16 NC x 1-1/2", plated	2

NOTE: See page 119 for steering hydraulic circuit used on four wheel drive models.

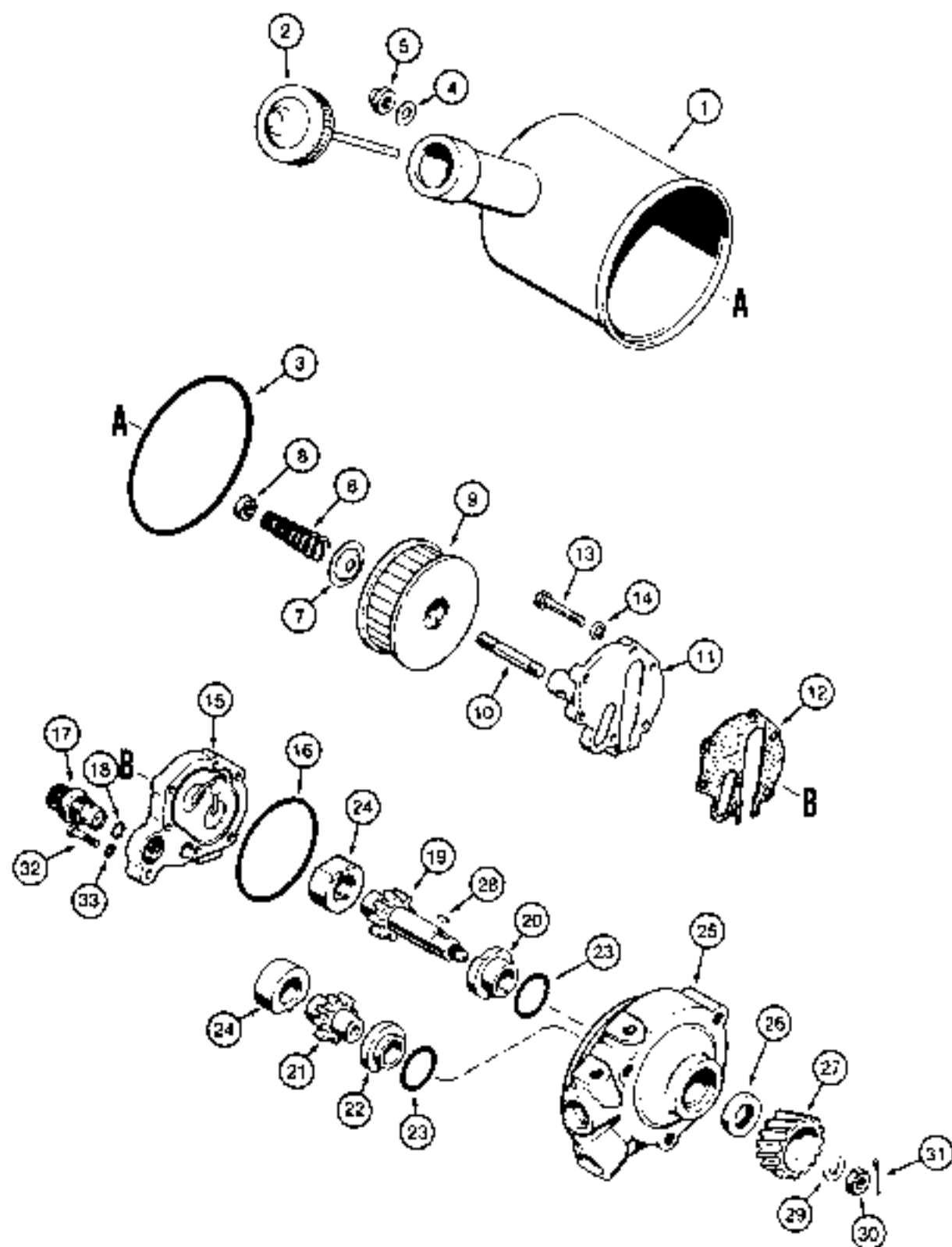




**STEERING HYDRAULIC CIRCUIT  
STEERING CONTROL VALVE TO CYLINDERS  
FOUR WHEEL DRIVE MODELS**

REF.	PART NO	DESCRIPTION	REQ D
1	D 90752	CONTROL VALVE - steer. ng, parts list page 123, mounting parts on page 111	1
2	D 76050	RESTRICTOR - male	2
3	218- 5005	O-RING - restrictor	1
4	D 69142	HOSE - special, lower left-hand control valve port	1
5	D 71785	HOSE - special, upper right-hand control valve port	1
5A	L 18337	TIE STRAP - hoses at control valve	1
6	D 89043	TUBE - control valve to cylinders	2
7	218- 840	TEE - tube to hose	2
8	D 61447	HOSE - 22" (559 mm) long, to right-hand steering cylinder	2
9	D 122671	SLEEVE - hose	1
10	214- 256	CLAMP - hose	2
11	D 76229	RESTRICTOR - oil flow	2
12	218- 5135	ELBOW - 45 degree, adjustable	2
13	218- 5005	O-RING - elbow	1
14	D 128454	CYLINDER - steering, parts list page 125	2
15	D 125415	HOSE - 59" (1500 mm) long, tee to left-hand cylinder	2
16	D 122671	SLEEVE - hose	1
17	214- 256	CLAMP - hose	2
18	D 40236	CLAMP - hose	1
19	D 76209	SPACER - hose clamp	1
20	113- 233	BOLT - hex head, 3/8" - 16 NC x 1-3/4", plated	1
21	192- 21	WASHER - lock, 3/8", plated	1
22	129- 103	NUT - hex, 3/8" - 16 NC, plated	1
23	D 76229	RESTRICTOR - oil flow	2
24	218- 5135	ELBOW - 45 degree, adjustable	2
25	218- 5005	O-RING - elbow	1
26	95- 10	WASHER - flat, 5/8"	UAB
27	129- 610	NUT - hex, slotted, 5/8" - 18 NF, plated	4
28	132- 335	COTTER PIN - 1/8" x 1-1/4", plated	4
29	D 67296	INSULATOR - rubber, tube	8
30	D 68646	CLAMP - tube, double	4
31	D 76195	SPACER - tube clamp	4
32	113- 208	BOLT - hex head, 3/8" - 16 NC x 1-1/4", plated	1
33	192- 21	WASHER - lock, 3/8", plated	4
34	113- 209	BOLT - hex head, 3/8" - 16 NC x 1 1/2", plated	2
35	129- 103	NUT - hex 3/8" - 16 NC, plated	1

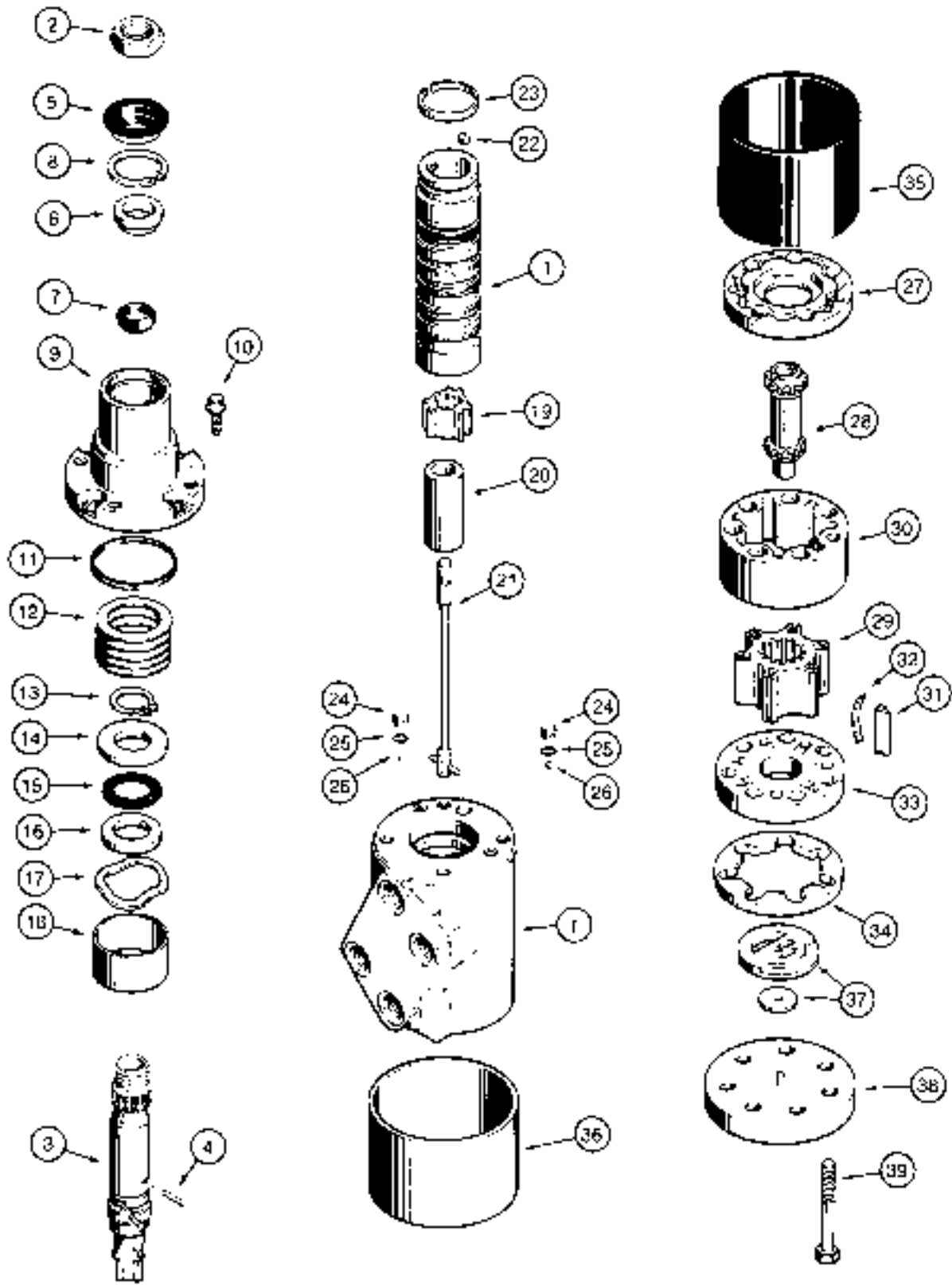
**NOTE:** See page 117 for steering hydraulic circuit used on two wheel drive models



**D84179 POWER STEERING PUMP  
TWO WHEEL DRIVE MODELS  
\*BEFORE TRACTOR SN 9879000**

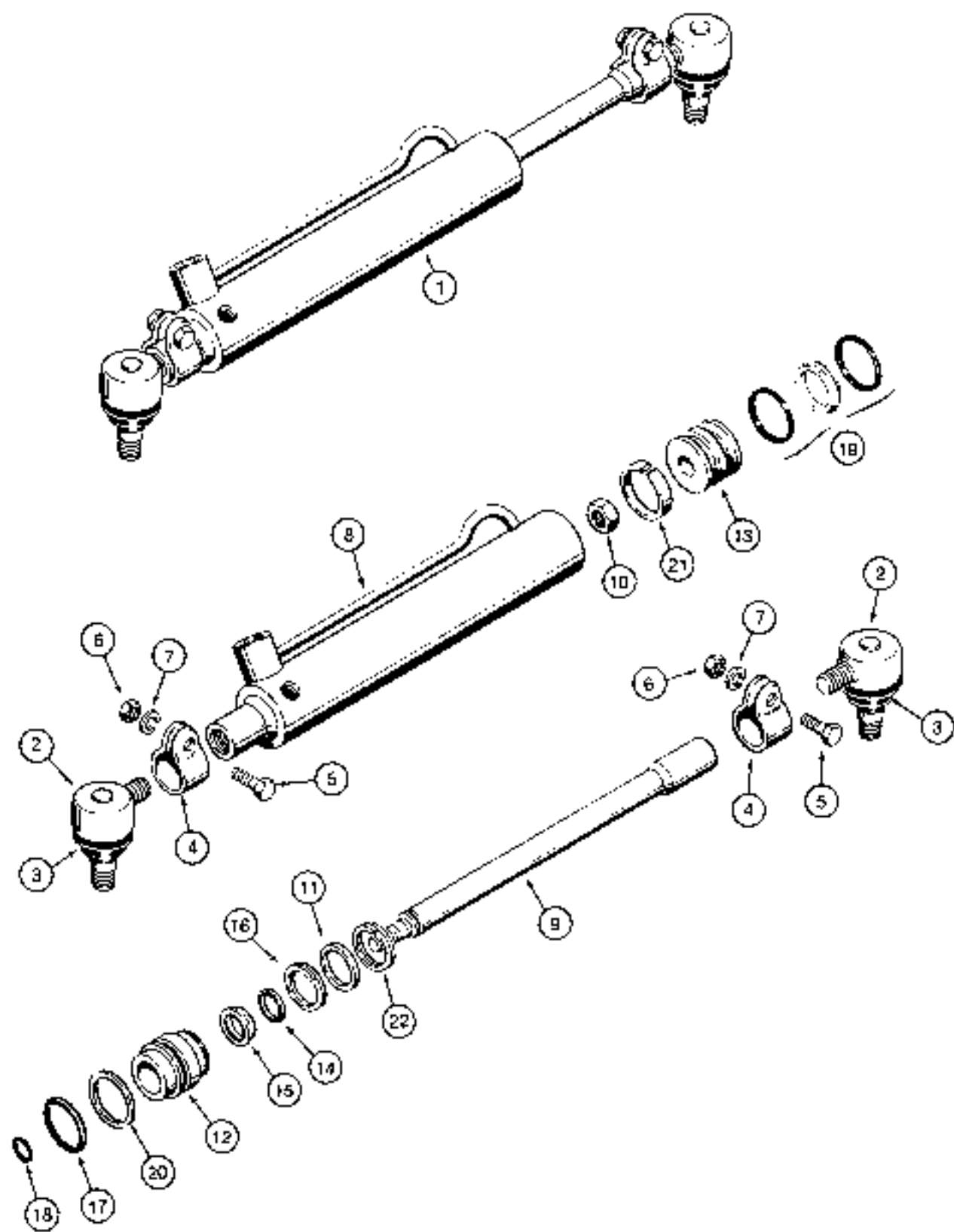
REF.	PART NO	DESCRIPTION	REQ'D.
	D 84179	STEERING PUMP ASSEMBLY - power steering .....	1
1	A 35951	RESERVOIR - oil .....	1
2	A 35967	CAP - reservoir, includes dipstick .....	1
3	A 35965	GASKET - reservoir .....	1
4	A 42164	WASHER - reservoir nut .....	1
5	129- 525	DOME NUT - 3/8" - 16 NC .....	1
6	A 35963	SPRING - element tension .....	1
7	A 35962	SEAT - element spring .....	1
8	25- 146	NUT - hex, am, 3/8" - 16 NC .....	1
9	A 42242	ELEMENT - filter .....	1
10	A 35952	STUD - 3/8" - 16 NC x 2-3/8" .....	1
11	A 35950	COVER - pump, rear .....	1
12	A 35966	GASKET - rear cover .....	1
13	26- 426	BOLT - hex head, 1/4" - 20 NC x 1-5/8", grade 8 .....	6
14	92- 4	WASHER - lock, 1/4" .....	6
15	A 35949	COVER - pump, intermediate .....	1
16	A 35959	O-RING - cover .....	1
17	D 83222	RELIEF VALVE ASSEMBLY - steering pump .....	1
18	A 42187	O-RING - relief valve .....	1
19	A 25583	DRIVEN GEAR - steering pump .....	1
20	A 35957	BEARING - gear, front .....	1
21	A 35954	IDLER GEAR - steering pump .....	1
22	A 35955	BEARING - idler gear, front .....	1
23	D 54277	O-RING - body .....	2
24	A 35956	BEARING - rear .....	2
25	D 71329	BODY - front .....	1
26	A 50421	OIL SEAL - pump body .....	1
27	A 25594	GEAR - pump drive .....	1
28	126- 109	WOODRUFF KEY - No. 3 .....	1
29	195- 25	WASHER - flat, 3/8" .....	1
30	F 18390	NUT - special, 3/8" - 24 NF .....	1
31	132- 5	COTTER PIN - 1/16" x 1/2" .....	1
32	26- 414	BOLT - hex head, 1/4" - 20 NC x 7/8", grade 8 .....	1
33	92- 4	WASHER - lock, 1/4" .....	1

**\*NOTE:** For steering and equipment hydraulic pump used on tractor PIN 9879000 and after, see parts list page 283.



## STEERING CONTROL VALVE

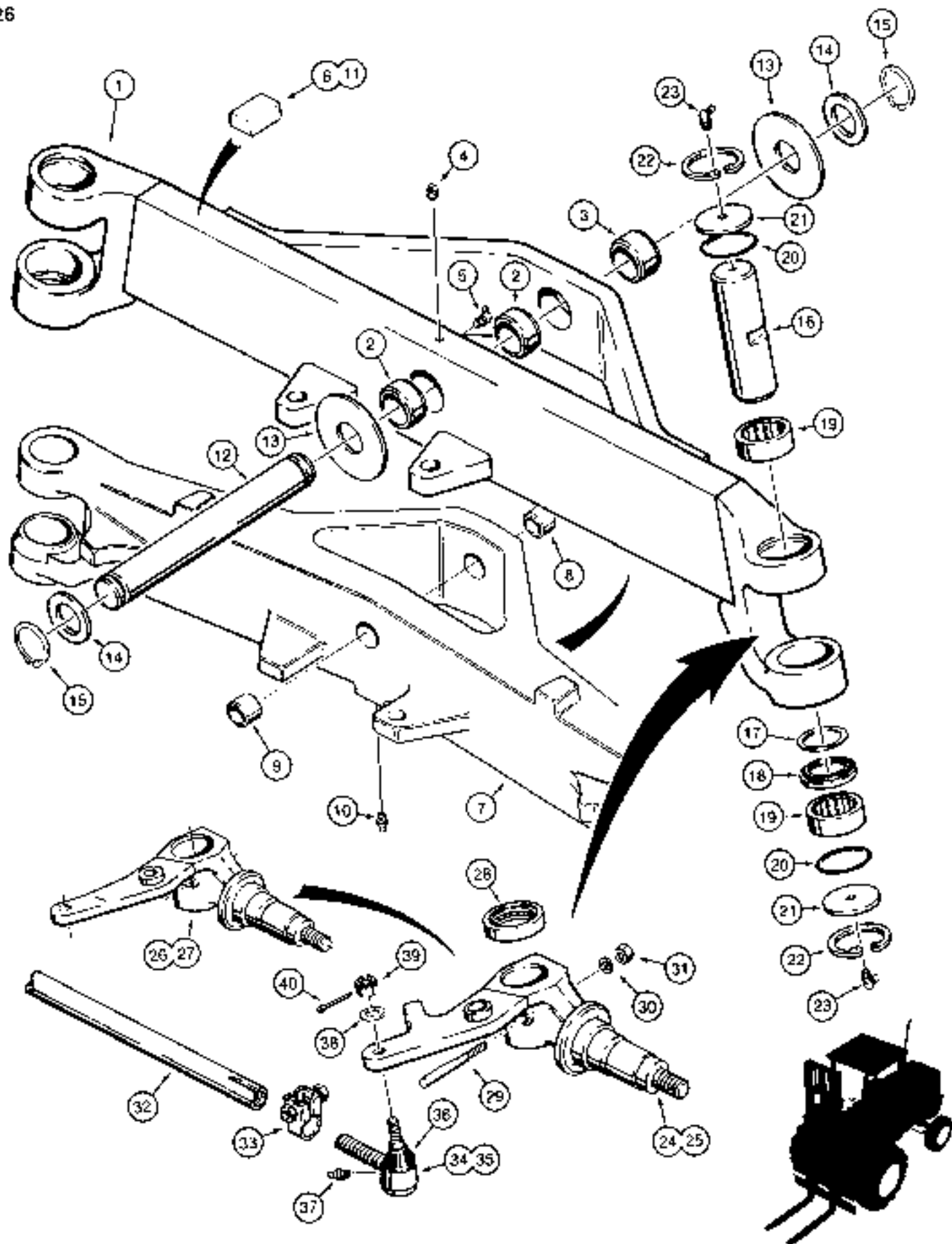
REF	PART NO.	DESCRIPTION	REQ'D.
	D 90752	CONTROL VALVE ASSEMBLY - steering	1
1	NSS	HOUSING AND SPOOL ASSEMBLY - control valve	1
2	F 19646	NUT - steering wheel retaining	1
3	D 73672	SHAFT - steering	1
4	D 53297	PIN - torsion bar retaining	1
	A 47038	KIT - shaft seal	1
5	D 70586	SEAL - dirt	1
6	NSS	SPACER - seal	1
7	NSS	SEAL - dust	1
8	A 21146	SNAP RING - bearing retaining	1
9	D 65139	COVER - upper	1
10	156- 24	BOLT - Ferry head, 5/16" - 18 NC x 3/4", grade 8	4
11	A 43566	SEAL - cover	1
12	A 44435	KIT - sh-m. cover	1
13	A 43720	SNAP RING - retaining shaft	1
14	A 43558	THRUST WASHER - control valve	1
15	F 19633	THRUST BEARING - control valve	1
16	F 19634	THRUST WASHER - control valve	1
17	A 43721	WASHER - wave	1
18	N 6514	SPACER - bearing	1
19	A 43554	RING - drive	1
20	A 43719	SPACER - drive link	1
21	N 6455	TORSION BAR - control valve	1
22	211- 9	BALL - 5/16", grade 200, chrome alloy steel	1
23	N 6458	SPRING - preload	1
	L 36015	PLUG ASSEMBLY - steering control valve	2
24	NSS	PLUG - control valve	1
25	A 43720	O-RING - plug	1
26	211- 7	BALL - 1/4", grade 200, chrome alloy steel, check	1
27	A 43569	SPACER - link	1
28	A 43568	LINK - drive	1
	A 45188	GEROTOR SET - steering control valve	1
29	NSS	ROTOR - steering control valve	1
30	NSS	STATOR - steering control valve	1
31	NSS	VANE - rotor	6
32	A 42219	SPRING - rotor	6
33	A 43573	MANIFOLD - steering control valve	1
34	A 43574	COMMUTATOR - steering control valve	1
35	A 45001	SEAL - rotor	1
36	A 45278	RETAINER - seal	1
37	A 43579	WASHER - wear, rotor	1
38	A 45182	COVER - end	1
39	A 43727	BOLT - special, 5/16" - 18 NC x 2-1/2"	7



## D128454 STEERING CYLINDERS

REF.	PART NO.	DESCRIPTION	REQ'D.
1	D 128454	CYLINDER ASSEMBLY - steering, interchangeable with D84800 steering cylinder	2
2	A 40962	BALL JOINT - male thread	2
3	A 41424	BOOT - dust cover	1
	A 27080	CLAMP ASSEMBLY - end	2
4	NSS	CLAMP - end	1
5	113- 209	BOLT - hex head, 3/8" - 16 NC x 1-1/2", plated	1
6	129- 103	NUT - hex, 3/8" - 16 NC, plated	1
7	192- 21	WASHER - lock, 3/8", plated	1
8	D 83188	TUBE - cylinder	1
9	N 8890	ROD - cylinder	1
10	131- 1145	NUT - hex, self-locking, 9/16" - 18 NF, plated	1
11	A 44641	SPACER - head	1
12	D 83189	GLAND ASSEMBLY - cylinder, includes bushing	1
13	D 83190	PISTON - cylinder	1
	D 83184	KIT - cylinder repair	1
14	A 44651	WIPER - rod	1
15	NSS	SEAL - rod	1
16	A 44652	RING - lock, gland	1
17	S 6582	O-RING - outer gland	1
18	A 64436	O-RING - rod to piston	1
19	NSS	SEAL - piston	1
20	A 45035	RING - backup	1
21	NSS	RING - wear	1
22	A 44654	RING - lock, outer	1





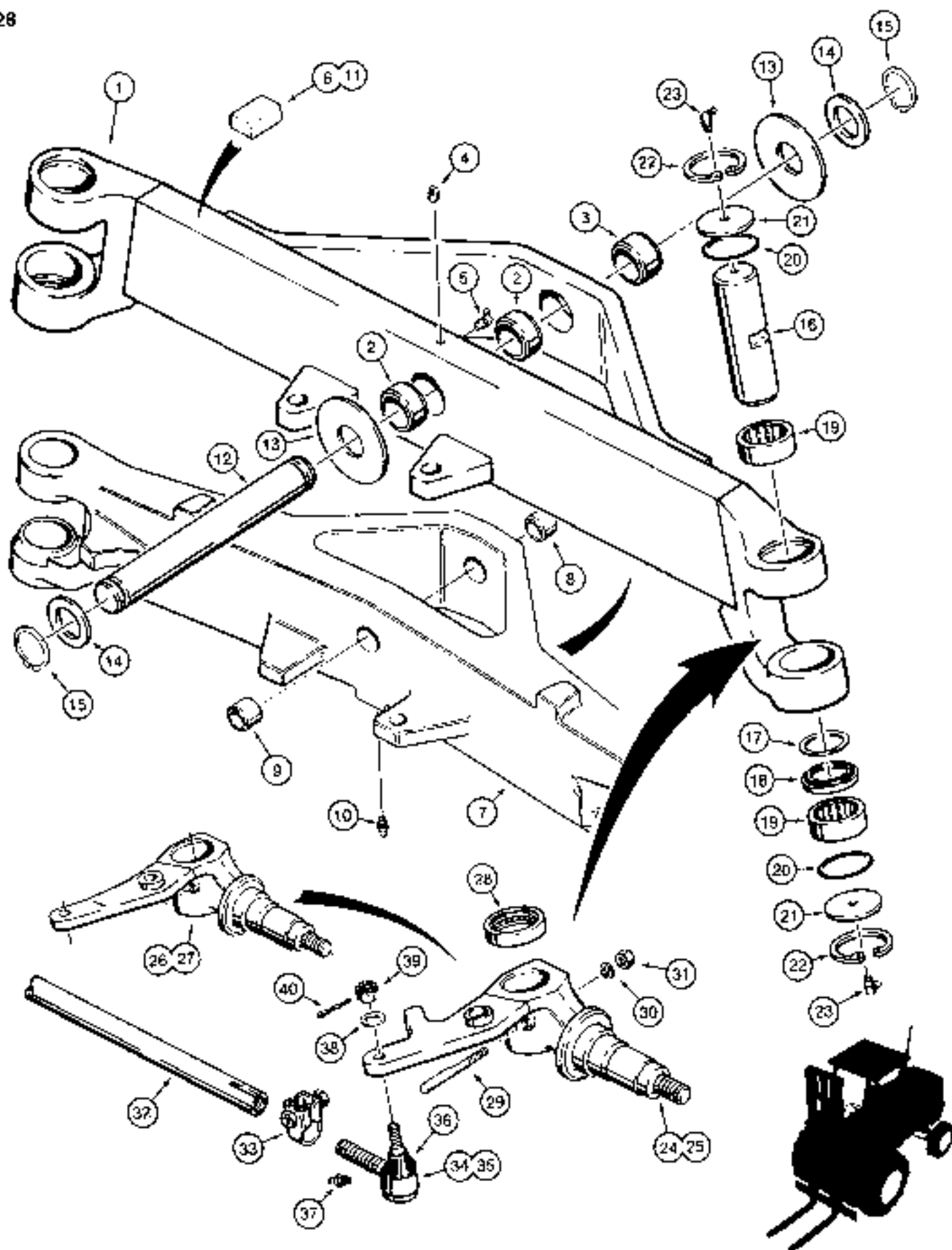
## REAR AXLE AND SPINDLES TWO WHEEL DRIVE MODELS

REF.	PART NO.	DESCRIPTION	REQ'D
1	* D 18450	AXLE ASSEMBLY - rear, welded, no longer used, for ordering information see note below	1
2	D 61241	BUSHING - axle	2
3	D 43940	BUSHING - axle	1
4	221- 11	PLUG - square head, 1/8" NPT	1
5	219- 89	GREASE FITTING - 45 degree, 1/8" pipe, self-tapping	1
6	** D 73261	BLOCK - stop	2
7	D 125824	AXLE ASSEMBLY - rear, cast	1
8	D 50146	BUSHING - axle	1
9	D 126498	BUSHING - axle	1
10	219- 1	GREASE FITTING - straight, 1/8" NPT, used with item 7 only	1
11	** D 126114	BLOCK - stop, used with item 7 only	1
12	D 64171	PIN - axle pivot	1
13	D 61076	WASHER - spacer, large OD	UAF
14	195- 2152	WASHER - flat, 1-3/4", special, spacer, small OD	2
15	D 25280	SNAP RING - axle pivot pin	2
16	D 72337	KING PIN - spindle	2
17	D 72372	THRUST WASHER - bearing	2
18	D 61297	OIL SEAL - bearing	2
19	A 28230	ROLLER BEARING - king pin	4
20	A 23904	O-RING - king pin	4
21	D 72371	SPACER - king pin	4
22	A 27463	SNAP RING - king pin	4
23	219- 89	GREASE FITTING - 45 degree, 1/8" pipe, self-tapping, king pin	4

Continued on next page

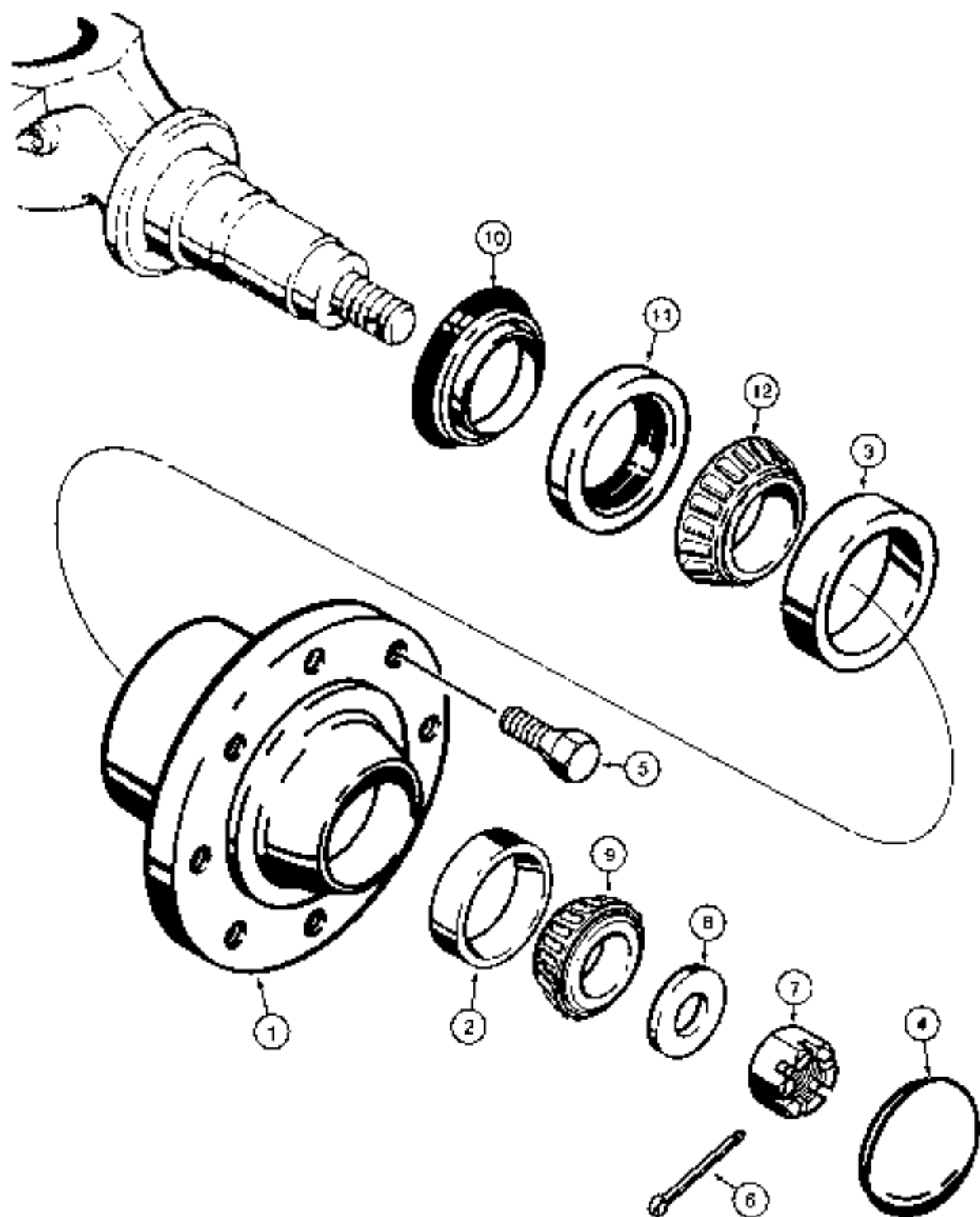
**\*NOTE:** D18450 axle (item 1) is no longer used, for service order D125824 axle (item 7), D125882 spindle (item 26), D125863 spindle (item 27), 219-1 grease fitting (item 10), and D126114 stop block (item 11).

**\*\*NOTE:** Stop blocks must be mounted in vertical position on 584 models with 28 foot mast and in horizontal position on 585 models with 21-1/2 foot mast.



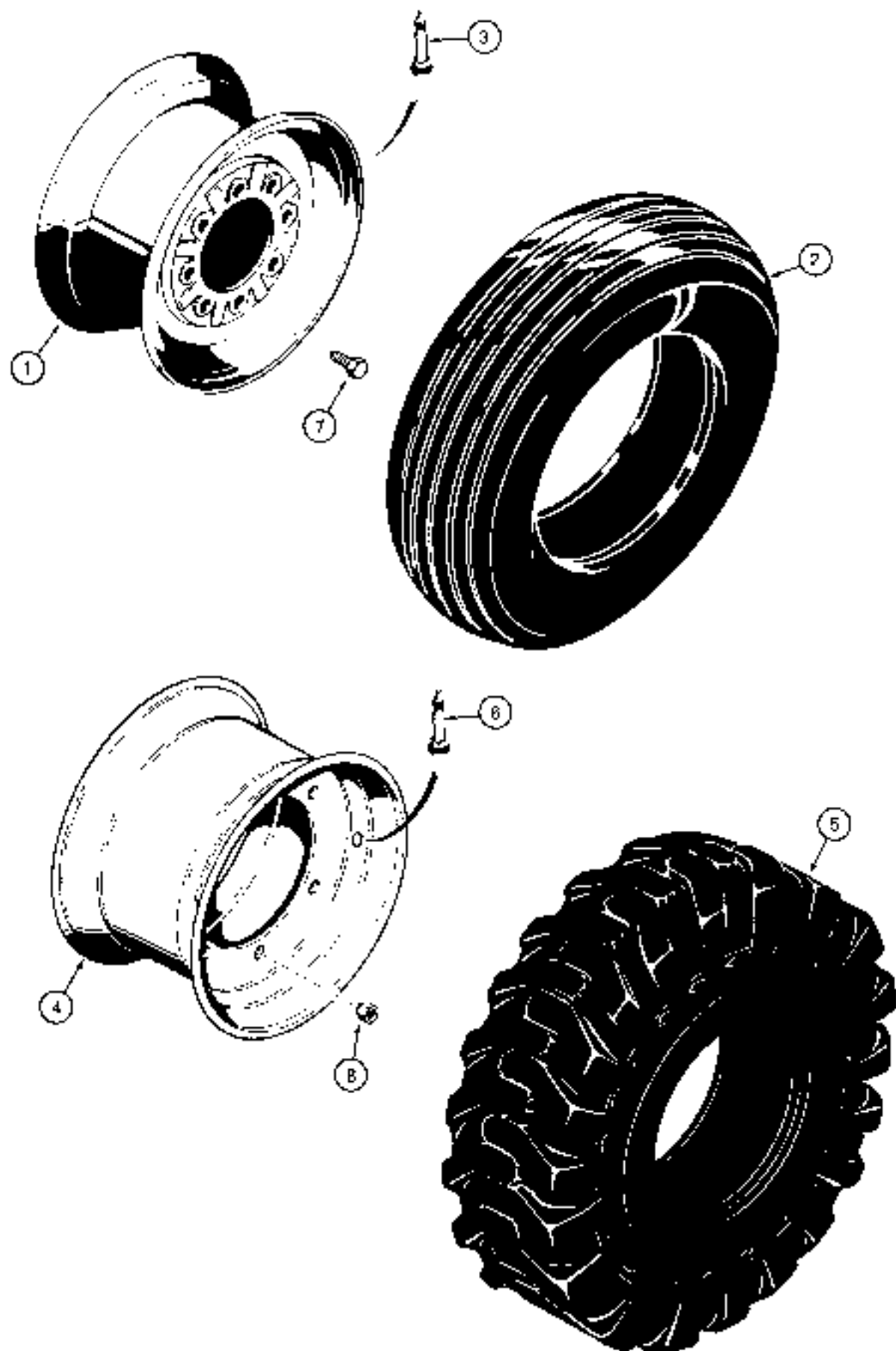
## REAR AXLE AND SPINDLES TWO WHEEL DRIVE MODELS

REF.	PART NO.	DESCRIPTION	REQ'D.
24	D 86343	SPINDLE - left-hand, used with item 1 only	1
25	D 86344	SPINDLE - right-hand, used with item 1 only	1
26	D 125862	SPINDLE - left-hand, used with item 7 only	1
27	D 125863	SPINDLE - right-hand, used with item 7 only	1
28	A 27602	THRUST BEARING - spindle	2
29	D 57486	PIN - threaded, king pin lock	2
30	192- 23	WASHER - lock, 1/2", plated	2
31	129- 125	NUT - hex, 1/2" - 20 NF, plated	2
	D 73396	TIE ROD ASSEMBLY - rear axle	1
32	D 73397	TUBE - tie rod	1
33	D 73799	CLAMP - tie rod, includes hardware	2
34	D 86491	BALL JOINT - tie rod, left-hand	1
35	D 86492	BALL JOINT - tie rod, right-hand	1
36	N 7681	COVER - dust, left-hand and right-hand ball joints	1
37	219- 1	GREASE FITTING - straight 1/8" NPT	1
38	195- 2084	WASHER - flat, 5/8", special	UAR
39	129- 610	NUT - hex, slotted, 5/8" - 18 NF, plated	2
40	132- 335	COTTER PIN - 1/8" x 1-1/4", plated	2



### REAR WHEEL HUB AND BEARINGS USED WITH TWO WHEEL DRIVE REAR AXLE

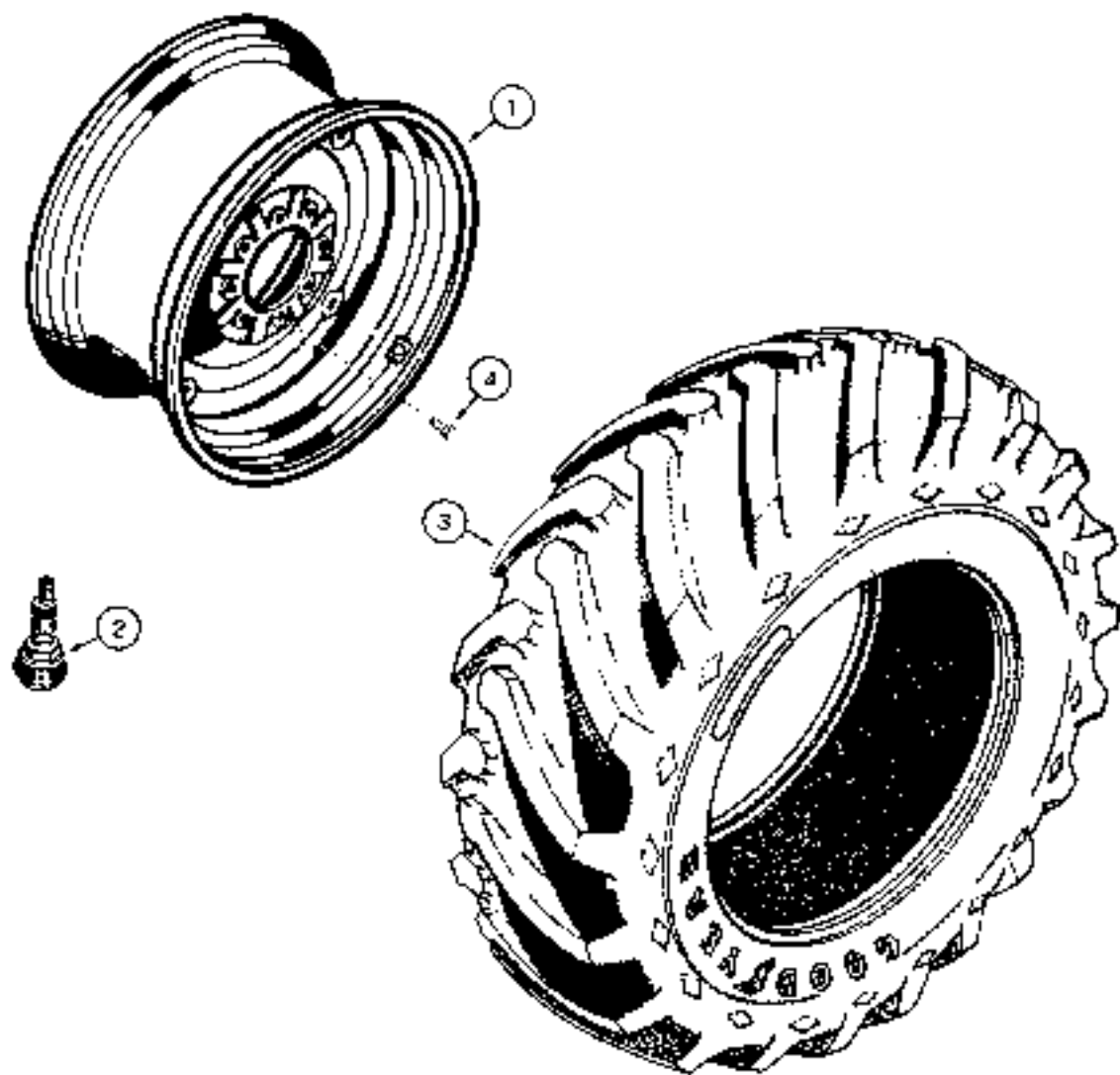
REF.	PART NO	DESCRIPTION	REQ'D
	A 55739	HUB ASSEMBLY - rear wheel . . . . .	2
1	NSS	HUB - rear wheel . . . . .	1
2	G 15214	CUP - outer, tapered roller bearing . . . . .	1
3	A 61446	CUP - inner tapered roller bearing . . . . .	1
4	A 61450	CAP - hub . . . . .	2
5	A 38208	BOLT - wheel retaining . . . . .	16
6	132- 317	COTTER PIN - 3/16" x 2", plated . . . . .	2
7	25- 1918	NUT - hex, slotted, 1-1/8" - 12 NF . . . . .	2
8	D 74949	WASHER - flat 1-1/8" . . . . .	2
9	G 15215	TAPERED ROLLER BEARING - outer . . . . .	2
10	A 61448	SEAL - bearing spindle . . . . .	2
11	A 61448	SEAL - bearing hub . . . . .	2
12	A 61447	TAPERED ROLLER BEARING - inner . . . . .	2



**REAR WHEELS AND TIRES**

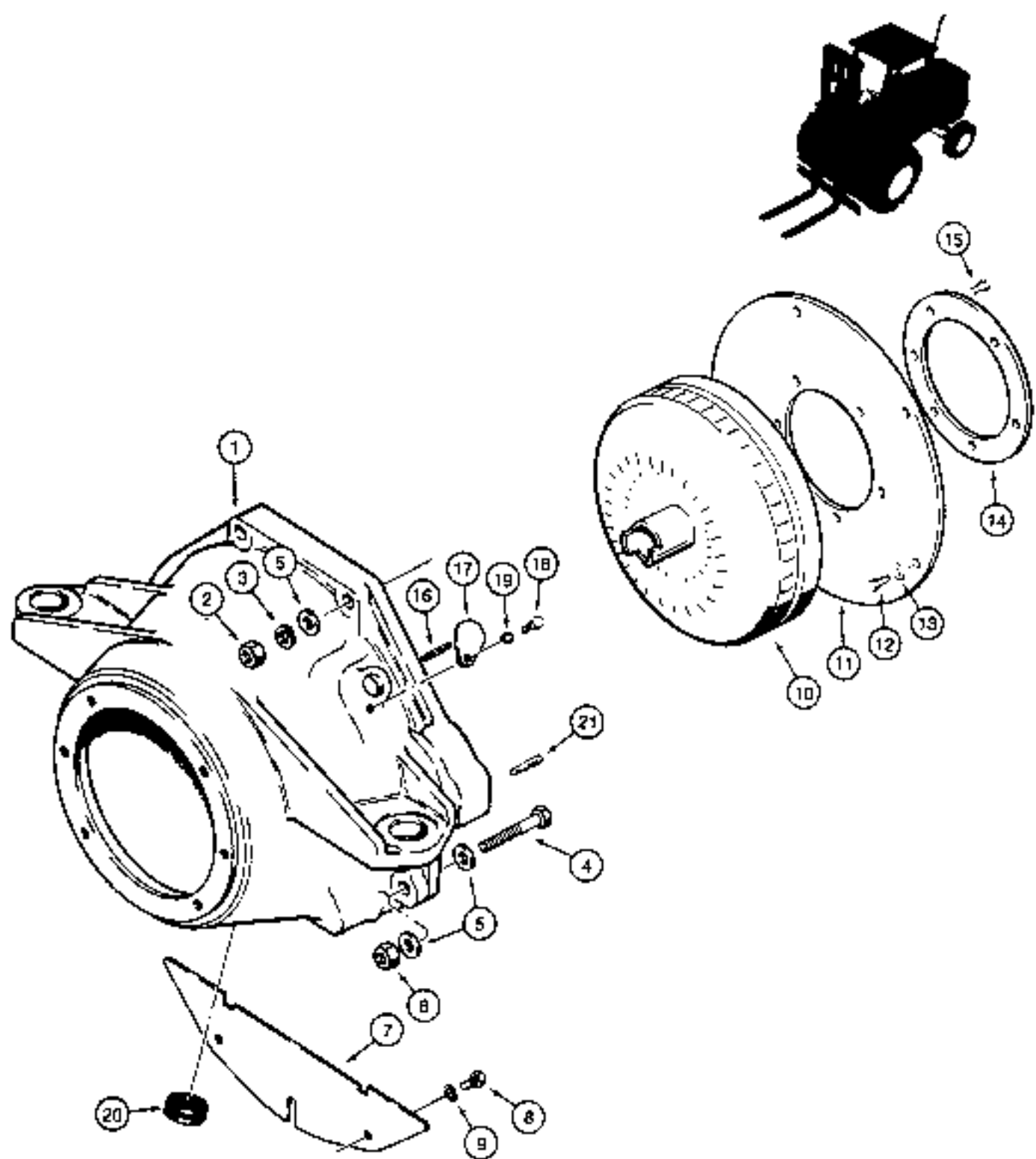
REF	PART NO	DESCRIPTION	REQ'D.
<b>FOR 8.00 x 16 TIRES TWO WHEEL DRIVE MODELS</b>			
1	A 139081	WHEEL - rim .....	2
2	REF	TIRE - rear .....	2
3	A 38261	VALVE STEM - wheel .....	2
<b>FOR 11L x 16 TIRES TWO WHEEL DRIVE MODELS</b>			
1	A 139082	WHEEL - rim .....	2
2	REF	TIRE - rear .....	2
3	A 38261	VALVE STEM - wheel .....	2
<b>FOR 12 x 16.5 TIRES FOUR WHEEL DRIVE MODELS</b>			
4	D 120271	WHEEL - rim .....	2
5	REF	TIRE - rear .....	2
6	A 38261	VALVE STEM - wheel .....	2
<b>WHEEL BOLTS TWO WHEEL DRIVE MODELS</b>			
7	A 38208	BOLT - wheel retaining .....	16
<b>WHEEL NUTS FOUR WHEEL DRIVE MODELS</b>			
8	K 965326	NUT - wheel retaining .....	12





## FRONT WHEELS AND TIRES

REF.	PART NO.	DESCRIPTION	REQ'D
<b>16.9 x 24 AND 17.5L x 24 FIXED DISC WHEEL TWO WHEEL DRIVE MODELS</b>			
1	A 139085	WHEEL - rim .....	2
2	A 20058	VALVE STEM - wheel .....	2
3	REF	TIRE - front .....	2
<b>19.5L x 24 FIXED DISC WHEEL TWO WHEEL OR FOUR WHEEL DRIVE MODELS</b>			
1	D 69792	WHEEL - rim .....	2
2	A 20058	VALVE STEM - wheel .....	2
3	REF	TIRE - front .....	2
<b>WHEEL BOLTS</b>			
4	A 38208	BOLT - wheel retaining .....	16



## TORQUE CONVERTER AND HOUSING

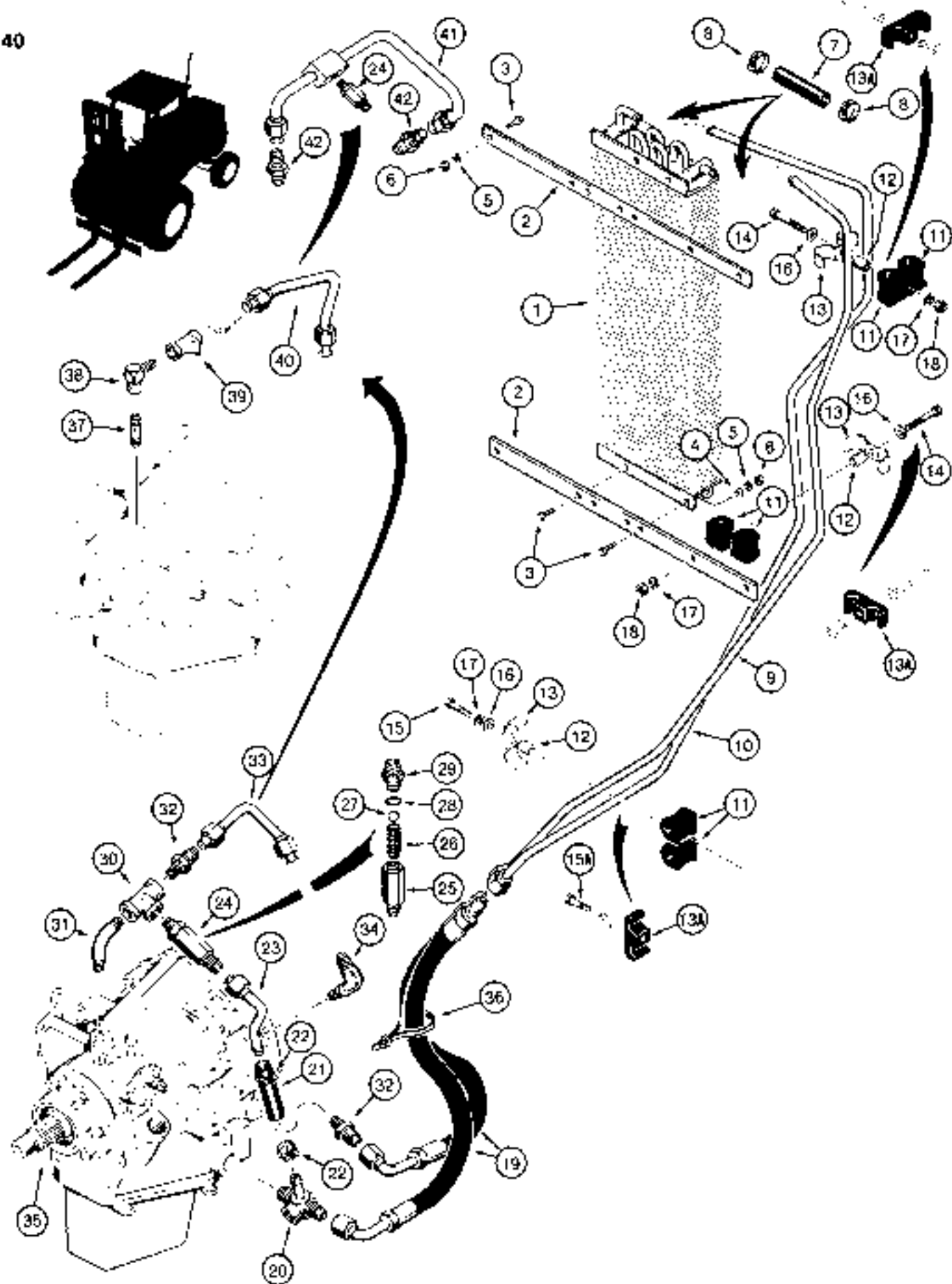
REF.	PART NO.	DESCRIPTION	REQ'D.
1	D 63263	HOUSING - torque converter	1
2	129- 127	NUT - hex. 5/8" - 18 NF, plated	2
3	192- 25	WASHER - lock, 5/8", plated, no longer used, not required	2
4	D 76605	BOLT - hex head, 5/8" - 18 NF x 3-1/2"	2
5	A 35147	WASHER - flat hardened, 5/8"	6
6	129- 127	NUT - hex, 5/8" - 18 NF, plated	2
7	D 68670	COVER - flywheel	1
8	113- 204	BOLT - hex head, 3/8" - 16 NC x 1/2", plated	2
9	192- 21	WASHER - lock, 3/8", plated	2
10	D 81693	TORQUE CONVERTER - transmission	1
11	D 13147	PLATE - torque converter, hardened	1
12	121- 103	BOLT - special, 5/16" - 18 NC x 5/8", grade 8, converter mounting	6
13	A 15672	WASHER - flat	6
14	D 81592	PLATE - converter drive	1
15	121- 203	BOLT - special, 3/8" - 24 NF x 1/2", grade 8, converter drive plate mounting	6
16	138- 65	ROLL PIN - 1/8" x 1-1/2", timing pin	1
17	A 29068	COVER - timing hole	1
18	113- 1	BOLT - hex head, 1/4" - 20 NC x 1/2", plated	1
19	192- 19	WASHER - lock, 1/4", plated	1
20	D 68561	PLUG - converter drain	1
21	139- 62	PIN - taper, No. 5 x 1"	2



## POWER SHUTTLE COOLING SYSTEM

REF.	PART NO	DESCRIPTION	REQ D
1	D 76097	OIL COOLER - power shuttle	1
2	D 93505	BAR - oil cooler mounting	2
3	113- 102	BOLT - hex head, 5/16" - 18 NC x 3/4", plated	8
4	195- 521	WASHER - flat, 5/16", plated	4
5	192- 20	WASHER - lock, 5/16" plated	8
6	129- 102	NUT - hex, 5/16" - 18 NC, plated	8
7	D 55583	HOSE - 1/2" (13 mm) ID x 4" (102 mm) long, at cooler	2
8	214- 253	CLAMP - hose	4
9	O 121817	TUBE - cooler inlet	1
10	O 121819	TUBE - cooler outlet	1
11	D 67296	INSULATOR - tube mounting, if used	6
12	D 76185	SPACER - clamp, if used	3
13	D 68646	CLAMP - tube, metal, if used	3
13A	D 120679	CLAMP - tube, plastic, replaces metal tube clamp on some models	3
14	113- 233	BOLT - hex head, 3/8" - 16 NC x 1-3/4", plated	2
15	113- 209	BOLT - hex head, 3/8" - 16 NC x 1-1/2", plated, if used	1
15A	113- 208	BOLT - hex head, 3/8" - 16 NC x 1-1/4", plated	1
16	195- 525	WASHER - flat, 3/8" plated	3
17	192- 21	WASHER - lock, 3/8", plated	3
18	129- 103	NUT - hex, 3/8" - 16 NC, plated	2
19	O 69051	HOSE - 1/2" (457 mm) long, power shuttle to tubes	2
20	D 68972	FITTING - 4-way	1
21	D 55583	HOSE - 1/2" (13 mm) ID x 4" (102 mm) long, power shuttle	1
22	214- 253	CLAMP - hose	2
23	D 68973	TUBE - at relief valve	1
24	D 48540	RELIEF VALVE ASSEMBLY - power shuttle	1
25	NSS	BODY - relief valve	1
26	S 73472	SPRING - relief valve	1
27	211- 212	BALL - 7/16", grade 25, chrome alloy steel	1
28	D 26265	O-RING - seat	1
29	S 73469	SEAT - spring	1

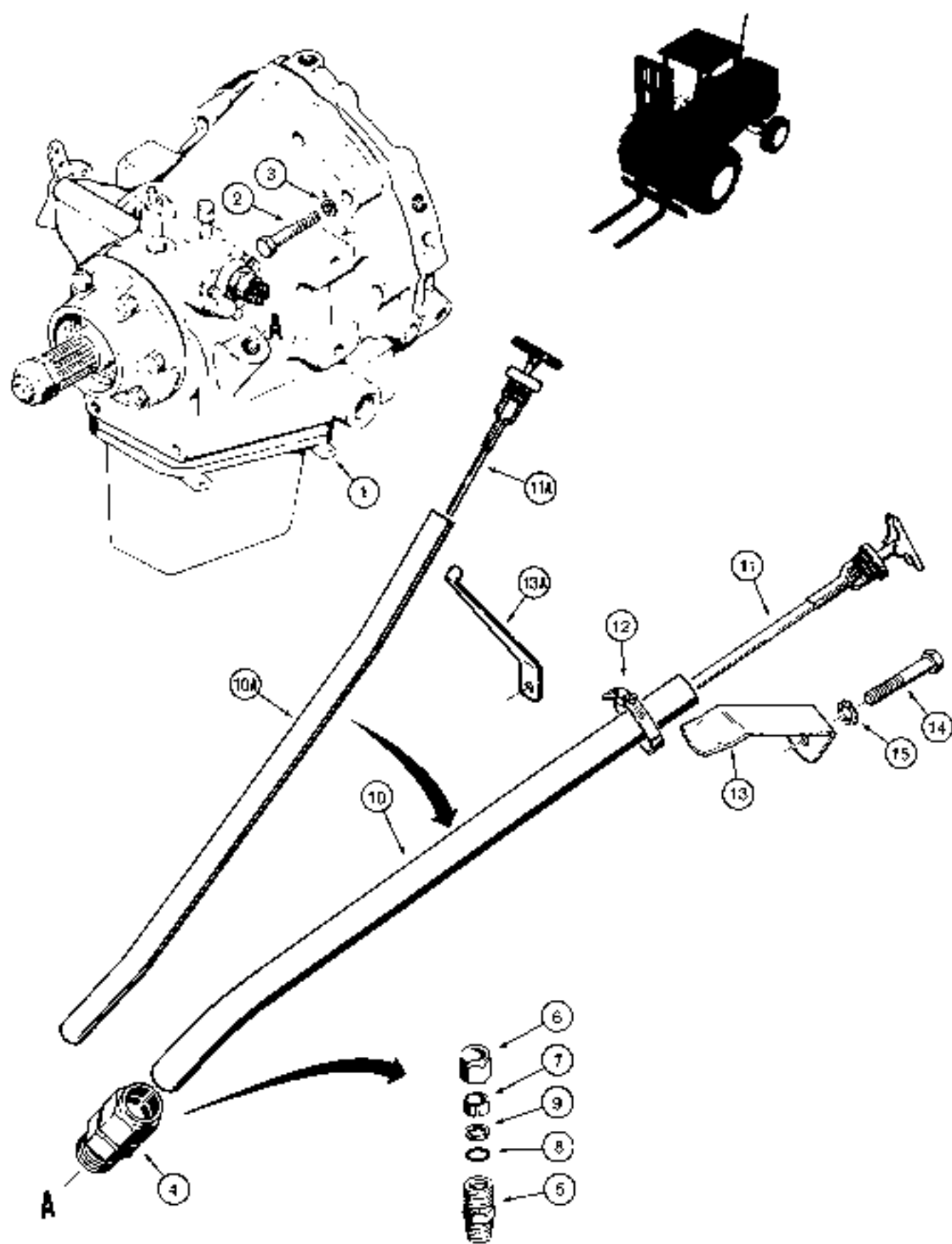
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## POWER SHUTTLE COOLING SYSTEM

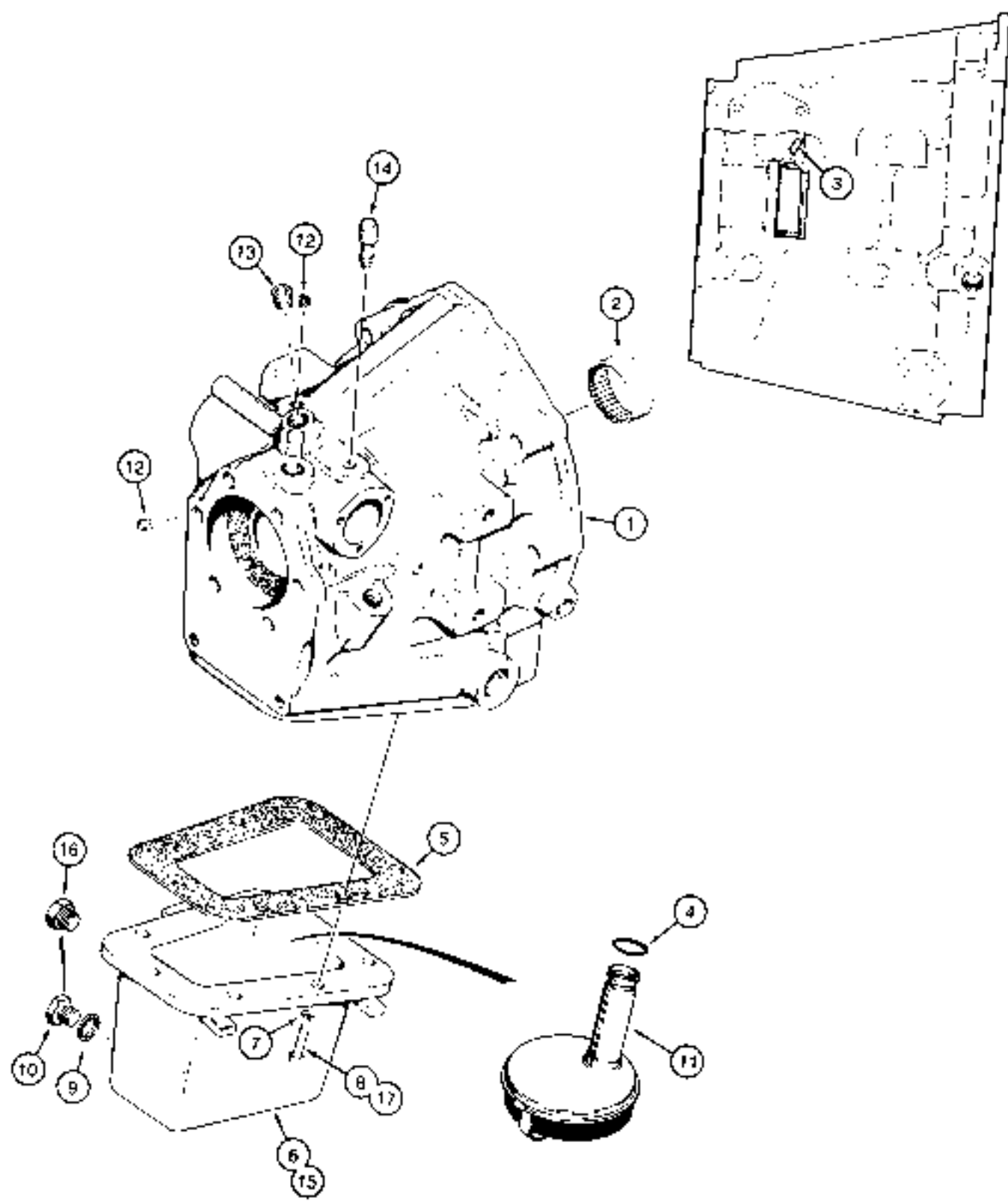
REF	PART NO.	DESCRIPTION	REQ'D
30	221- 423	TEE - 3/8" NPT, pipe, if used	1
31	0 48539	ELBOW - 75 degree special, if used	1
32	218- 444	ADAPTER - straight, male	1-2
33	0 49523	TUBE - power shuttle inlet, if used	1
34	218- 484	ELBOW - 90 degree, male, if used	1
35	REF	POWER SHUTTLE - for correct assembly and components see pages 145-153	1
36	L 18337	TIE STRAP - hoses	1
37	221- 164	NIPPLE - male, 3/8" NPT x 2", if used	1
38	217- 1016	STREET ELBOW - 90 degree, 3/8" NPT, if used	1
39	221- 823	Y-TYPE FITTING - 3/8" NPT, if used	1
40	D 125846	TUBE - power shuttle inlet, if used	1
	D 135703	TUBE - power shuttle, items 24-29, 41, and 42 are included in D135731 power shuttle assembly and may replace items 30-34 and 37-40	1
41	NSS	TUBE - power shuttle	1
42	NSS	CONNECTOR - with sleeve and nut	2





## POWER SHUTTLE MOUNTING AND DIPSTICK

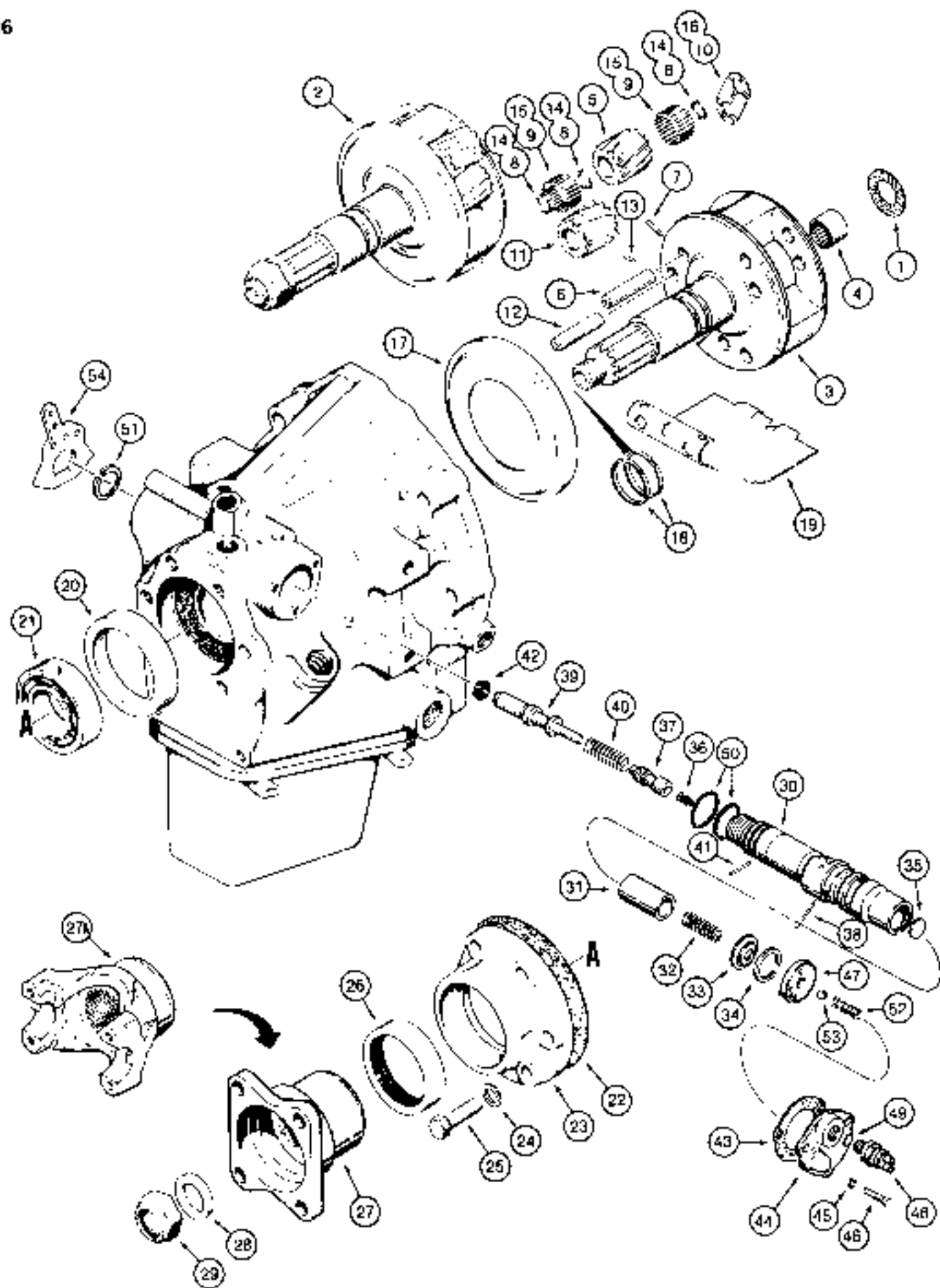
REF.	PART NO	DESCRIPTION	REQ'D
1	REF	POWER SHUTTLE - for correct assembly and components see pages 145-153	1
2	113- 329	BOLT - hex head, 7/16" - 14 NC x 3-1/4", plated	6
3	192- 22	WASHER - lock, 7/16", plated	6
4	222 3006	CONNECTOR ASSEMBLY - straight, power shuttle to dipstick tube	1
5	NSS	BODY - connector	1
6	222- 3111	NUT - connector	1
7	222 3105	SLEEVE - connector	1
8	A 7623	O-RING - connector	1
9	D 54295	BACKUP RING - connector O-ring	1
10	D 70393	TUBE - filler, power shuttle, used with item 11 only	1
10A	D 88410	TUBE - filler, power shuttle, used with item 11A only	1
11	D 78855	DIPSTICK - power shuttle, 23-7/8" long, used with item 10 only	1
11A	D 88856	DIPSTICK - power shuttle, 25-1/2" long, used with item 10A only	1
12	214- 255	CLAMP - tube	1
13	D 80894	SUPPORT - filler tube, used with item 10 only	1
13A	D 88857	SUPPORT - filler tube, used with item 10A only	1
14	113- 213	BOLT - hex head, 3/8" - 16 NC x 2-1/4", plated	1
15	193- 72	WASHER - internal-external tooth lock, 3/8", plated	1



## POWER SHUTTLE HOUSING AND OIL PAN

REF	PART NO	DESCRIPTION	REQ'D
*D	88050	POWER SHUTTLE ASSEMBLY - Warner Gear No. 10-16-000-022, for service order D101784 Kit below and D73776 yoke on page 147, parts list pages 145-153	1
*D	136020	POWER SHUTTLE ASSEMBLY - service replacement for D125633 (Warner Gear No. 10-16-000-026) and D135731 (Warner Gear No. 10-16-000-033) power shuttles used in production on some models, includes instruction sheet, parts list pages 145-153, D135731 power shuttle also includes items 41 and 42 on page 141	1
	D 70650	HOUSING ASSEMBLY - power shuttle	1
1	NSS	HOUSING - power shuttle	1
2	R 21491	NEEDLE BEARING - housing	1
3	41- 1007	PLUG - cup, 7/16"	1
4	R 29797	O-RING - screen lube	1
5	R 29956	GASKET - oil pan, if used	1
5	345- 84	SEALANT - 3 oz (89 ml) of sealant in a tube, not shown, can be used in place of R29956 gasket	1
6	R 29902	OIL PAN - power shuttle, no longer available - order N13577 oil pan, 221-841 drain plug, and (7) 113-221 bolts, see items 15-17	1
7	92- 6	WASHER - lock, 3/8"	7
8	113- 207	BOLT - hex head, 3/8" - 16 NC x 1" - plated, if used	7
	D 73701	PLUG ASSEMBLY - drain - used with R29902 oil pan	1
9	NSS	GASKET - drain plug	1
10	NSS	PLUG - drain	1
11	D 66455	SCREEN - sump, power shuttle	1
12	221- 849	PLUG - hex socket head, 1/8" NPT	2
13	221- 843	PLUG - hex socket head, 3/8" NPT	1
14	D 50062	BREATHER - power shuttle	1
15	N 13577	OIL PAN - power shuttle	1
16	221- 481	PLUG - hex socket head, 1/4" NPT	1
17	113- 221	BOLT - hex head, 3/8" - 16 NC x 7/8", plated	7
D	101784	KIT - power shuttle, includes D125633 power shuttle assembly and installation instructions	1

\*NOTE: Check the part number on the power shuttle serial number plate before ordering

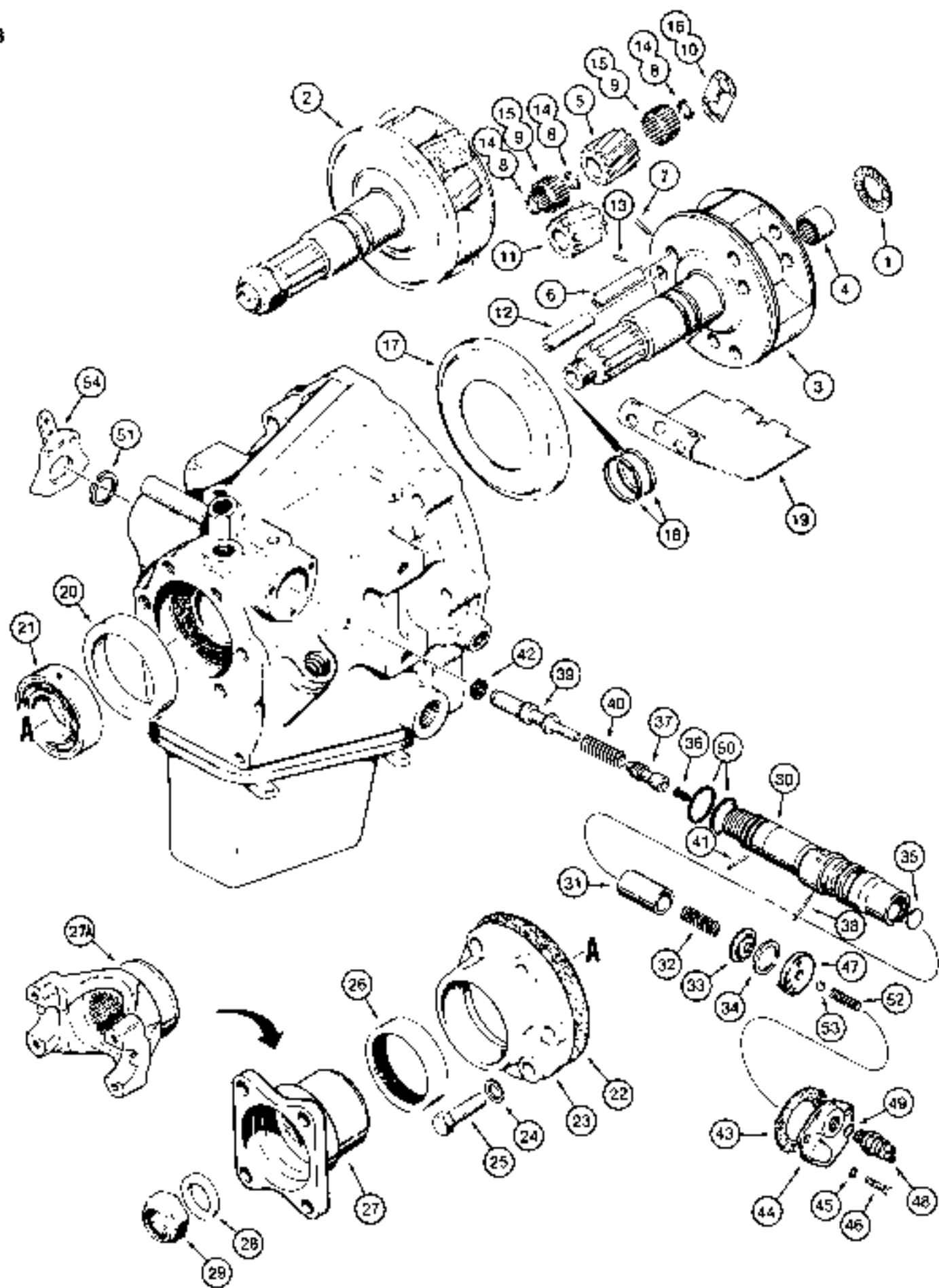


## POWER SHUTTLE PINION CAGE, OUTPUT SHAFT AND CONTROL VALVE

REF.	PART NO.	DESCRIPTION	REQ D
*	REF	POWER SHUTTLE ASSEMBLY - see page 145 <sup>4</sup> for service information, parts list pages 145-153	1
1	D 50055	THRUST WASHER - clutch hub	1
2	D 70685	PINION CAGE AND OUTPUT SHAFT - power shuttle	1
3	NSS	CAGE AND SHAFT - basic	1
4	H 747984	NEEDLE BEARING - output shaft	1
	D 50030	KIT - inner pinion gear and shaft	3
5	NSS	PINION GEAR - inner	1
6	NSS	PINION SHAFT - inner	1
7	NSS	PIN - retaining	1
8	NSS	SPACER - pinion bearing	3
9	NSS	ROLLER - pinion bearing	48
10	NSS	PLATE - thrust	2
	D 50031	KIT - outer pinion gear and shaft	3
11	NSS	PINION GEAR - outer	1
12	NSS	PINION SHAFT - outer	1
13	NSS	PIN - retaining	1
14	NSS	SPACER - pinion bearing	3
15	NSS	ROLLER - pinion bearing	48
16	NSS	PLATE - thrust	2
17	D 50087	RING - collector	1
18	D 50080	RING - sealing	2
19	D 50056	BAFFLE - plate	1
20	D 50057	SPACER - ball bearing	1
21	40011	BALL BEARING - output shaft	1
22	D 50058	GASKET - ball bearing retainer	1
23	D 50059	RETAINER - front ball bearing	1
24	199- 22	WASHER - lock 7/16" plated	6
25	113- 363	BOLT - hex head, 7/16" - 14 NC x 1-1/8", plated	6
26	D 50060	SEAL - oil front	1
27	D 73776	YOKER - output shaft mounting, used with D73777 drive shaft, see page 157	1
27A	D 124144	YOKER - output shaft mounting, used with D125882 drive shaft, see page 157	1
28	D 65247	WASHER - output shaft	1
	345- 84	SEALANT - 3 oz (89 ml) of sealant in a tube, not shown, can be used between D65247 washer and end of shaft	1
29	131- 91	NUT - hex, self-locking 3/4" - 16 NF special	1

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**\*NOTE:** Check the part number on the power shuttle serial number plate before ordering.

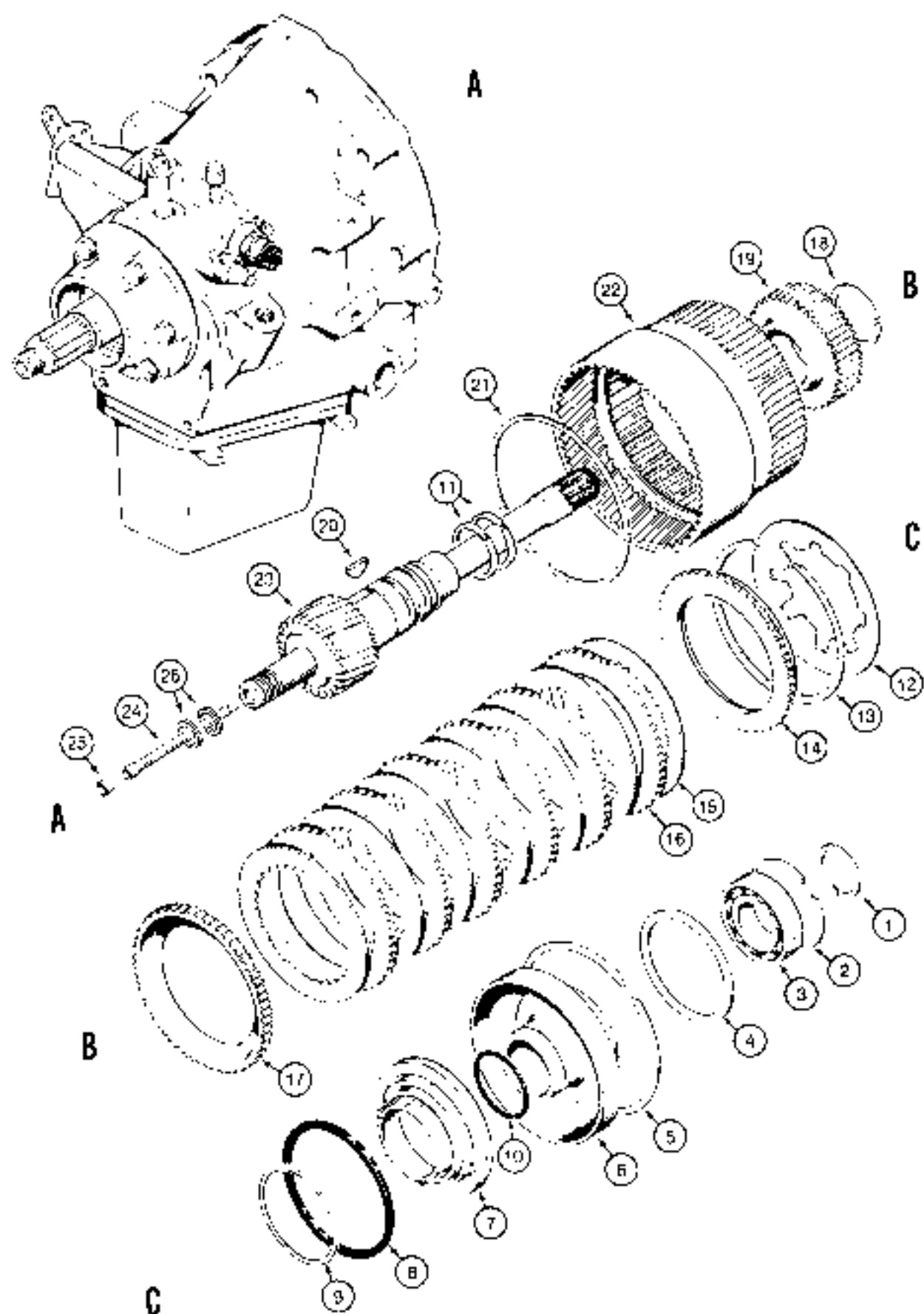


## POWER SHUTTLE PINION CAGE, OUTPUT SHAFT AND CONTROL VALVE

REF.	PART NO.	DESCRIPTION	REQ'D.
	REF	POWER SHUTTLE ASSEMBLY - complete, continued from page 147 . . . . .	1
D	77473	VALVE ASSEMBLY - power shuttle, single groove for one D37156 O-ring (item 50), no longer available, for service order N13639 valve and (2) D37156 O-rings (item 50) . . . . .	1
N	13639	VALVE ASSEMBLY - power shuttle, double groove for two D37156 O-rings (item 50) . . . . .	1
30	NSS	BODY - valve . . . . .	1
31	D 50089	VALVE - pressure regulator . . . . .	1
32	D 50090	SPRING - valve . . . . .	1
33	D 50091	RETAINER - spring . . . . .	1
34	D 50092	RING - spring retaining . . . . .	1
35	41- 12	PLUG - expansion, 3/4" . . . . .	1
36	D 77476	SPRING - clutch cutout . . . . .	1
37	D 77474	SPOOL - valve . . . . .	1
38	135- 198	GROOVE PIN - 5/64" x 1", half length taper . . . . .	1
39	D 75488	PLUNGER - valve . . . . .	1
40	D 77475	SPRING - plunger . . . . .	1
41	138- 59	ROLL PIN - 1/8" x 7/8" . . . . .	1
42	D 75489	SEAL - oil, see item 42A . . . . .	1
42A	D 75492	TOOL - installation, used to install D75489 seal (item 42), not shown . . . . .	1
43	D 50066	GASKET - valve cover . . . . .	1
44	D 86488	COVER - valve . . . . .	1
45	192- 19	WASHER - lock, 1/4", plated . . . . .	3
46	13- 414	BOLT - hex head, 1/4" - 20 NC x 7/8" . . . . .	3
47	D 86489	CAM - neutral start switch . . . . .	1
48	S 113435	SWITCH - neutral start . . . . .	1
49	218- 5005	O-RING - switch . . . . .	1
50	D 37156	O-RING - valve . . . . .	1-2
51	A 75171	RING - retaining . . . . .	1
52	S 47892	SPRING - poppet . . . . .	1
53	211- 9	BALL - 5/16", grade 200, chrome alloy steel . . . . .	1
54	D 77621	LEVER - shift . . . . .	1

**\*NOTE:** Check the part number on the power shuttle serial number plate before ordering.

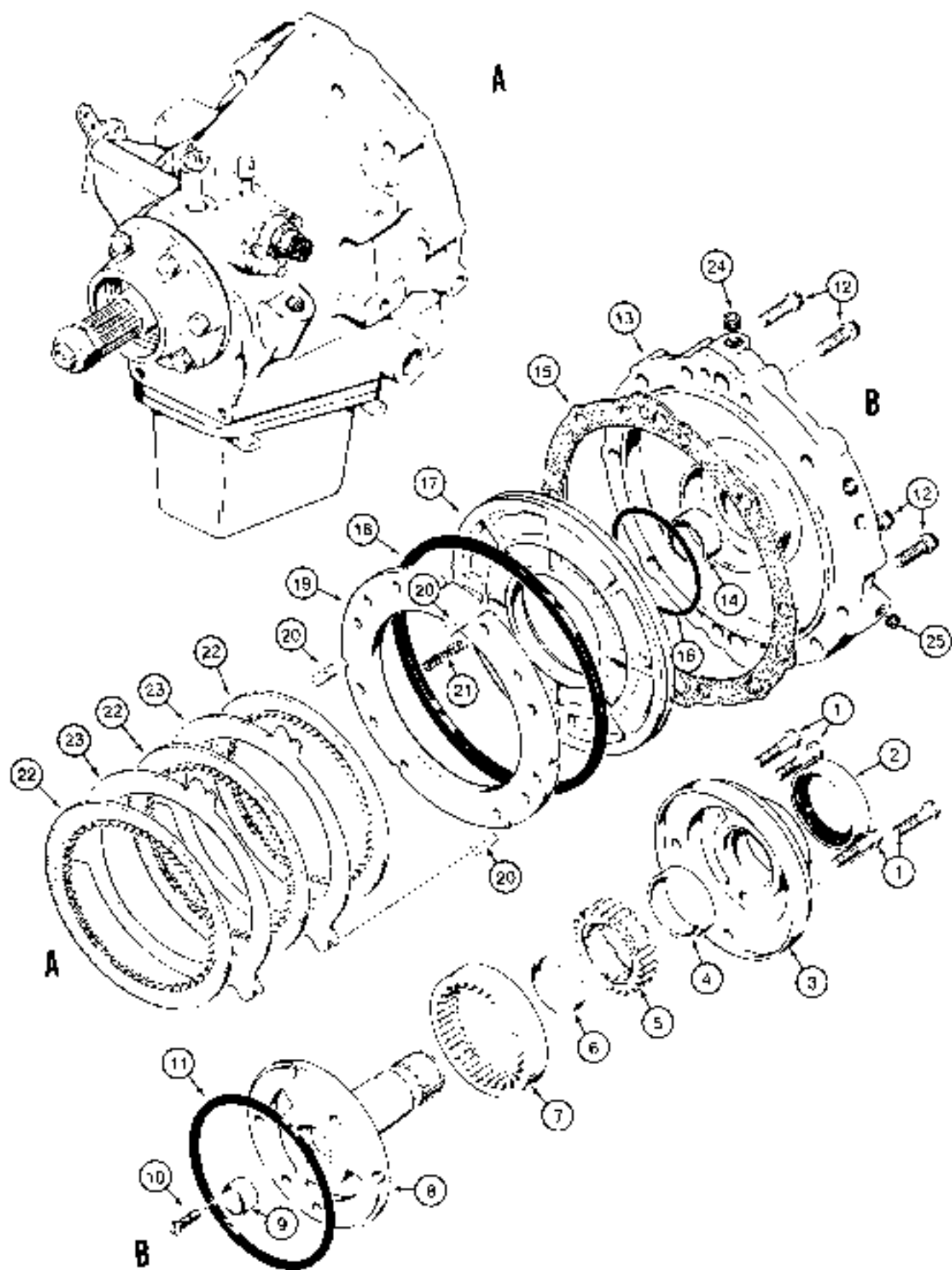




## POWER SHUTTLE INPUT SHAFT AND FORWARD CLUTCH

REF.	PART NO	DESCRIPTION	REQ'D
	REF	POWER SHUTTLE ASSEMBLY - see page 145 for service information, parts list pages 145-153	1
1	D 50042	SNAP RING - bearing retaining, small	1
2	D 50043	SNAP RING - bearing retaining, large	1
3	D 50044	BALL BEARING - clutch cylinder	1
4	D 50045	THRUST WASHER - forward clutch	1
5	D 50046	RING - ring gear retaining	1
6	D 50075	CYLINDER - forward clutch	1
7	D 70670	PISTON - forward clutch	1
8	D 50077	RING - piston	1
9	D 50078	RING - piston	1
10	D 50079	O-RING - cylinder	1
11	D 50080	RING - sealing	2
12	D 50047	SPRING - Belleville	1
13	D 50048	RING - retaining, pressure plate	1
14	D 50081	PLATE - pressure rear	1
15	D 70672	DISC - friction, internal tooth	7
16	D 50083	DISC - friction, external tooth	6
17	D 50084	PLATE - pressure front	1
18	D 50049	RING - clutch hub retaining	1
19	D 75853	HUB - clutch	1
20	126- 124	WOODRUFF KEY - size 15, hardened, input shaft	1
21	D 50051	RING - .050" (1.270 mm) to .054" (1.372 mm) thick	UAR
21	D 78397	RING - .062" (1.575 mm) to .066" (1.676 mm) thick	UAR
21	D 50052	RING - .074" (1.880 mm) to .078" (1.981 mm) thick	UAR
21	D 78396	RING - .084" (2.134 mm) to .088" (2.235 mm) thick	UAR
21	D 50053	RING - .096" (2.438 mm) to .100" (2.540 mm) thick	UAR
22	D 50054	RING GEAR - power shuttle	1
	D 70666	INPUT SHAFT ASSEMBLY - power shuttle	1
23	NSS	INPUT SHAFT - drive	1
24	N 7043	TUBE - forward clutch supply	1
25	D 50085	PLUG - shaft end	1
26	D 70668	RING - sealing	2

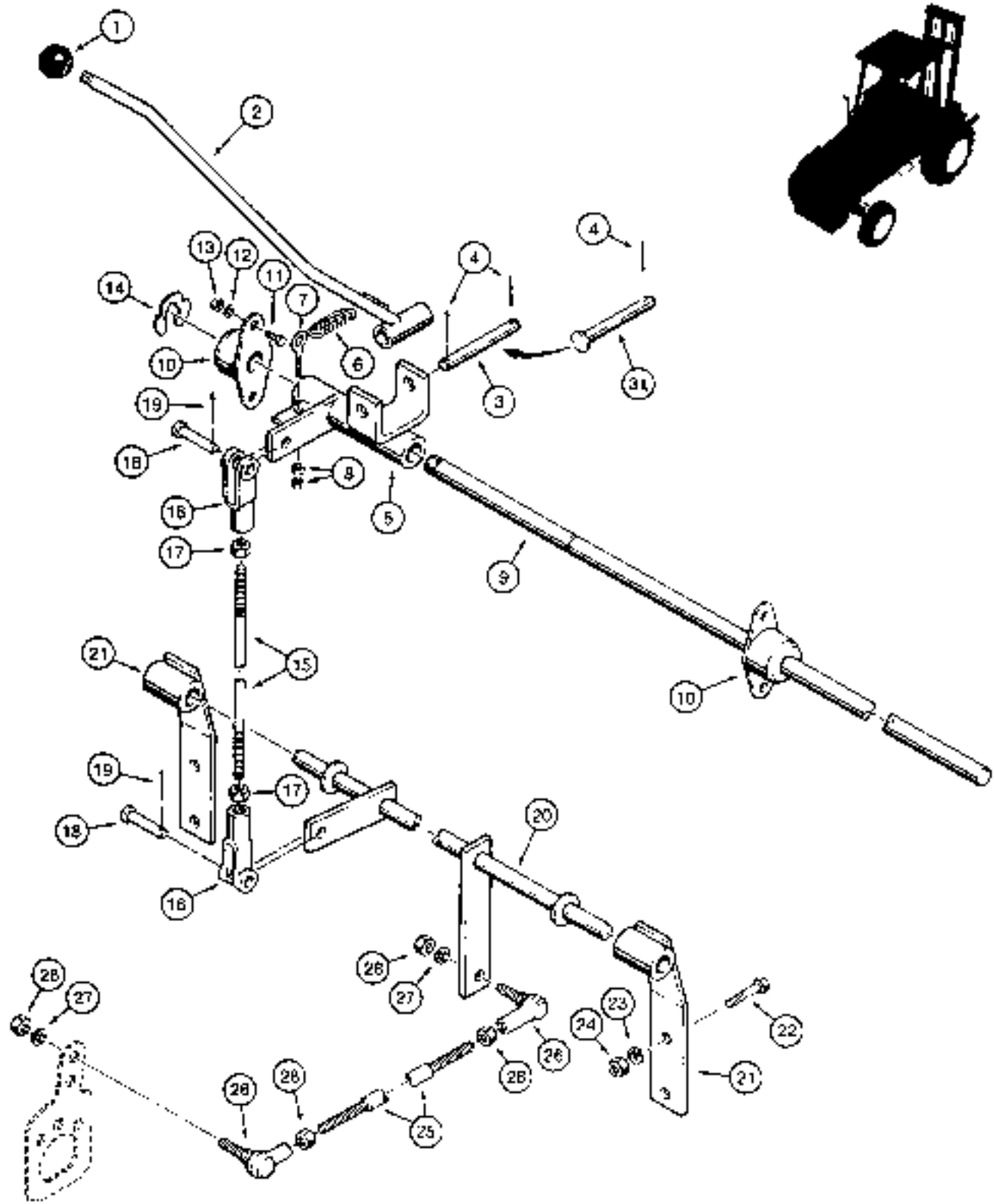
**\*NOTE:** Check the part number on the power shuttle serial number plate before ordering



## POWER SHUTTLE CHARGING PUMP AND REVERSE CLUTCH

REF.	PART NO.	DESCRIPTION	REQ'D
	* REF	POWER SHUTTLE ASSEMBLY - see page 145 for service information, parts list pages 145-153	1
1	113- 120	BOLT - hex head, 5/16" - 18 NC x 1-3/4", plated	4
	R 29995	CHARGING PUMP ASSEMBLY - power shuttle	1
2	N 8071	SEAL - oil	1
3	NSS	BODY - charging pump	1
4	NSS	BUSHING - charging pump	1
5	NSS	DRIVE GEAR - charging pump	1
6	NSS	BUSHING - charging pump gear drive	1
7	NSS	DRIVEN GEAR - charging pump	1
8	NSS	SUPPORT - torque converter	1
9	NSS	BUSHING - torque converter support	1
10	171- 100	MACHINE SCREW - flat head slotted, No. 10 - 24 NC x 3/4"	1
11	L 30487	GASKET - charging pump	1
12	166- 46	BOLT - Ferry head, 3/8" - 16 NC x 1-1/4", grade 8	4
	D 50022	COVER ASSEMBLY - power shuttle	1
13	NSS	COVER - power shuttle	1
14	D 50074	BUSHING - cover	1
15	D 50033	GASKET - cover to housing	1
16	D 50034	O-RING - small	1
17	D 50035	PISTON - reverse clutch	1
18	D 50036	RING - piston seal, square section	1
19	D 50037	PLATE - pressure, reverse clutch	1
20	D 50038	DOWEL PIN - pressure plate	3
21	D 50039	SPRING - pressure plate	11
22	D 50040	DISC - friction, internal tooth	3
23	D 50041	DISC - metal, external flange	2
24	221- 841	PLUG - hex socket head, 1/4" NPT	1
25	221- 849	PLUG - hex socket head, 1/8" NPT	2

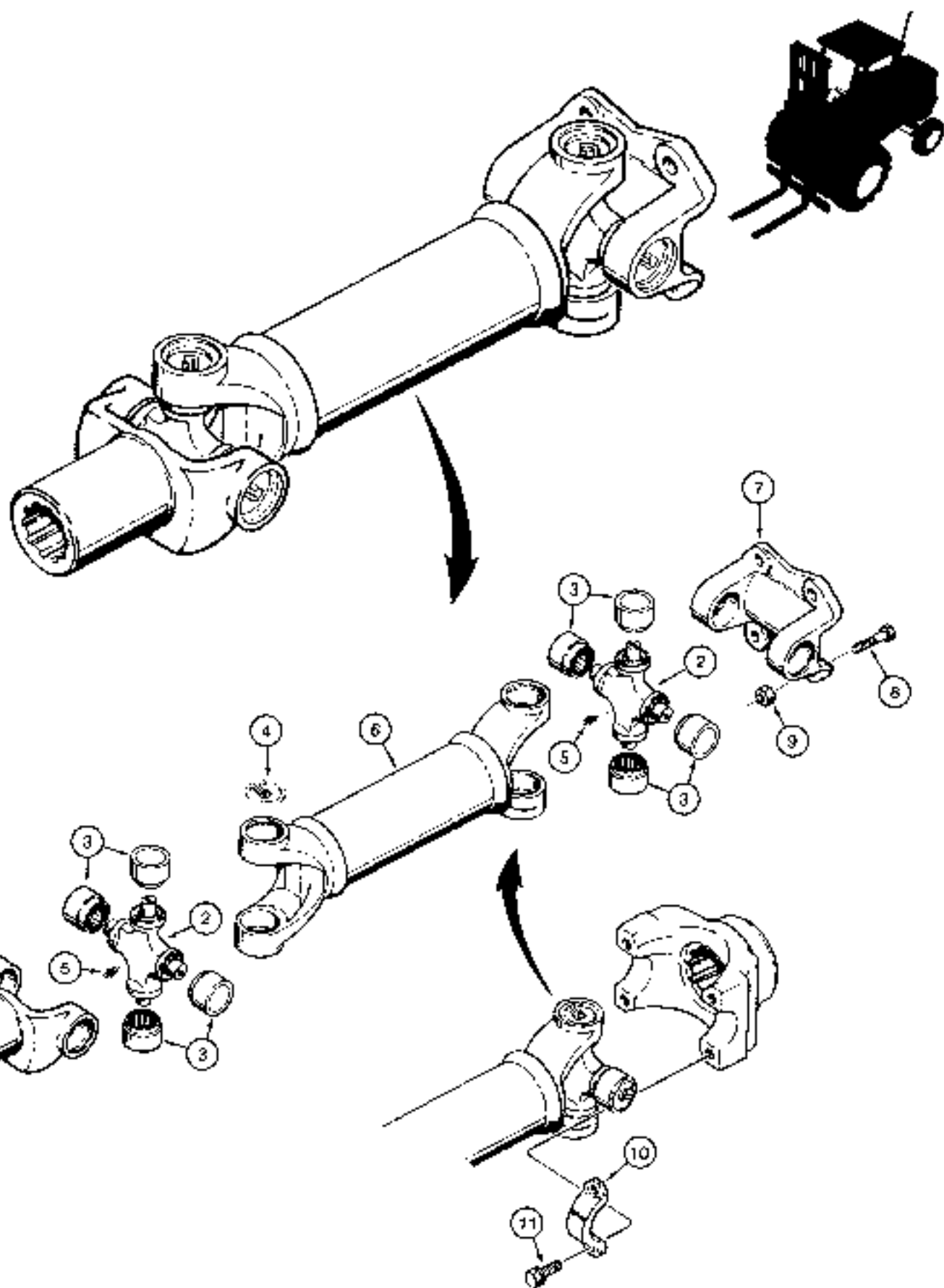
\*NOTE: Check the part number on the power shuttle serial number plate before ordering.



## SHUTTLE CONTROL AND LINKAGE

REF.	PART NO.	DESCRIPTION	REQ'D
1	D 59912	KNOB - shuttle control lever . . . . .	1
2	D 77330	CONTROL LEVER - shuttle control . . . . .	1
3	T 51361	PIN - control lever pivot, if used . . . . .	1
3A	141- 59	CLEVIS PIN - 3/8", control lever pivot, if used . . . . .	1
4	132- 25	COTTER PIN - 3/32" x 5/8" . . . . .	1-2
5	D 77115	BELLCRANK - shuttle control lever . . . . .	1
6	D 91097	SPRING - shuttle control lever . . . . .	1
7	F 13855	EYEBOLT - spring tightening . . . . .	1
8	129- 17	NUT - hex, No. 10 - 24 NC, plated . . . . .	2
9	*D 68519	SHAFT - control levers, upper . . . . .	1
10	L 15401	BEARING - shaft . . . . .	2
11	113- 102	BOLT - hex head, 5/16" - 18 NC x 3/4", plated . . . . .	4
12	192- 20	WASHER - lock, 5/16", plated . . . . .	4
13	129- 102	NUT - hex, 5/16" - 18 NC, plated . . . . .	4
14	D 95096	RETAINER - bearing . . . . .	2
15	R 26943	ROD - shuttle control . . . . .	1
16	H 44198	CLEVIS - rod end, metal, plated replaces fiberglass clevis on some models . . . . .	2
17	129- 122	NUT - hex, 5/16" - 24 NF, plated . . . . .	2
18	141- 3	CLEVIS PIN - 5/16", rod ends . . . . .	2
19	132- 25	COTTER PIN - 3/32" - 5/8" . . . . .	2
20	D 58619	SHAFT - shuttle control, lower . . . . .	1
21	D 77722	BRACKET - shaft mounting . . . . .	2
22	113- 104	BOLT - hex head, 5/16" - 18 NC x 1-1/4", plated . . . . .	4
23	192- 20	WASHER - lock, 5/16", plated . . . . .	4
24	129- 102	NUT - hex, 5/16" - 18 NC, plated . . . . .	4
25	D 78108	ROD - to power shuttle . . . . .	1
26	D 63154	BALL JOINT - shuttle rod . . . . .	2
27	192- 19	WASHER - lock, 1/4", plated . . . . .	2
28	129- 121	NUT - hex, 1/4" - 28 NF, plated . . . . .	4

\*NOTE: For mast control levers and linkage, see page 305.

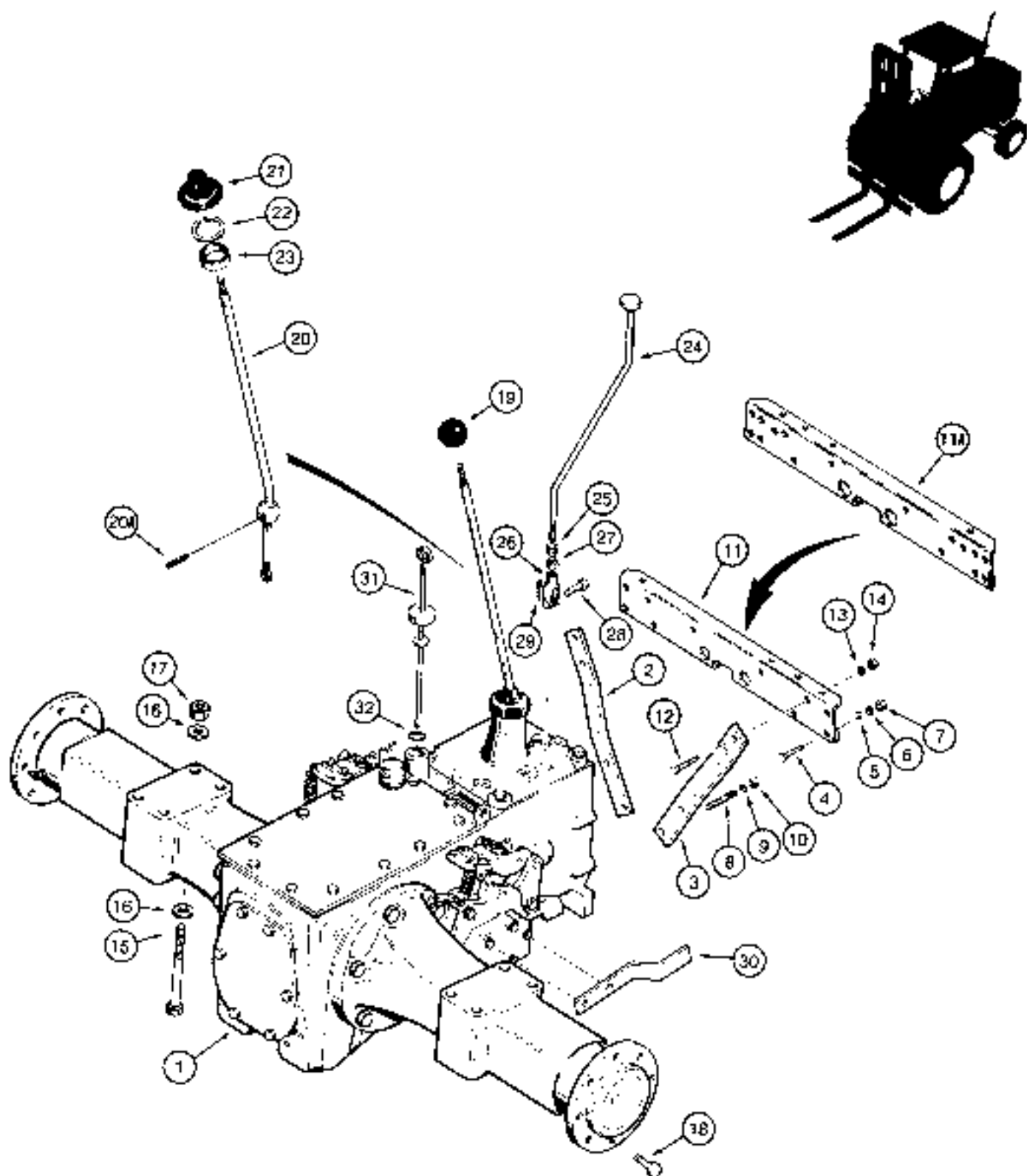


## DRIVE SHAFT POWER SHUTTLE TO TRANSAXLE

REF.	PART NO.	DESCRIPTION	REQ'D.
	D 73777	DRIVE SHAFT ASSEMBLY - to transaxle. mounts to power shuttle with W13668 bracket, item 7 . . . . .	1
	D 125882	DRIVE SHAFT ASSEMBLY - to transaxle. mounts to power shuttle with D124146 strap. item 10, no longer available, order D128559 drive shaft . . . . .	1
	D 128559	DRIVE SHAFT ASSEMBLY - to transaxle. mounts to power shuttle with D124146 strap. item 10 . . . . .	1
1	D 75847	YOKE - end, to transaxle. used with D73777 drive shaft only . . . . .	1
1A	N 6834	YOKE - end, to transaxle. used with D125882 drive shaft only . . . . .	1
1B	N 9515	YOKE - end, to transaxle. used with D128559 drive shaft only . . . . .	1
1C	N 13653	PLUG - grease. N6834 or N9515 yoke, not shown . . . . .	1
	D 70629	KIT - universal joint . . . . .	2
2	NSS	UNIVERSAL JOINT - drive shaft . . . . .	1
3	NSS	BEARING - universal joint . . . . .	4
4	11256	RING - retaining . . . . .	4
5	219- 10	GREASE FITTING - straight, 1/4" - 28 NF taper . . . . .	1
6	NSS	DRIVE SHAFT - forklift . . . . .	1
7	W 13668	BRACKET - to power shuttle, used with D73777 drive shaft only . . . . .	1
8	114- 266	BOLT - hex head, 3/8" - 24 NF x 1", grade 8, special thread length . . . . .	4
9	131- 752	NUT - hex self-locking 3/8" - 24 NF . . . . .	4
10	D 124146	STRAP - bearing, used with D125882 or D128559 drive shaft only . . . . .	2
11	D 124151	BOLT - special, used with D124146 strap (item 10) . . . . .	4

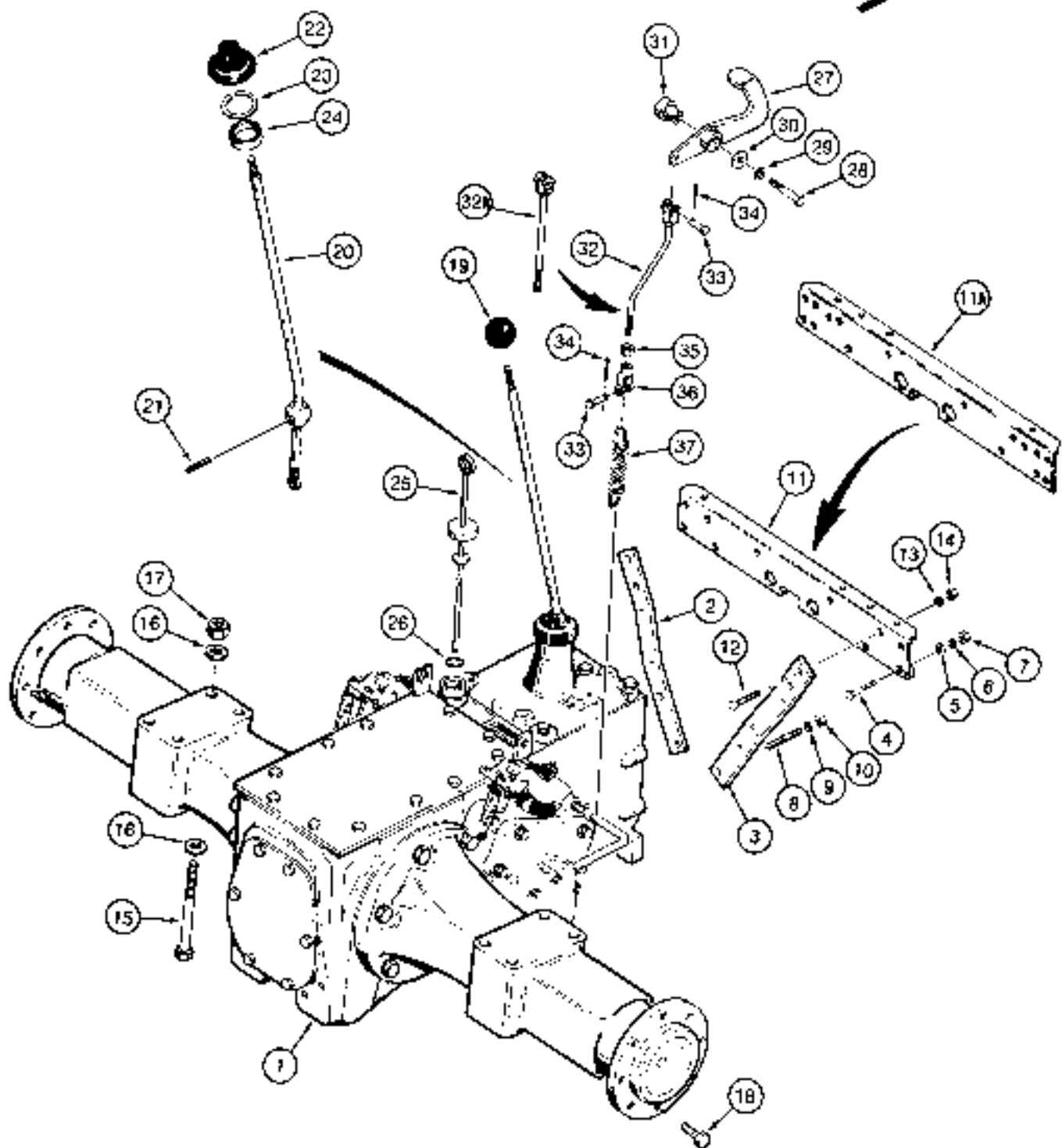
**NOTE:** It is necessary to use a grease gun needle nozzle adapter (Case part number D51765 or Lincoln number 5803) to lubricate drive shafts.





## TRANSAXLE AND DIFFERENTIAL LOCK TWO WHEEL DRIVE MODELS BEFORE TRANSAXLE SN 16249203

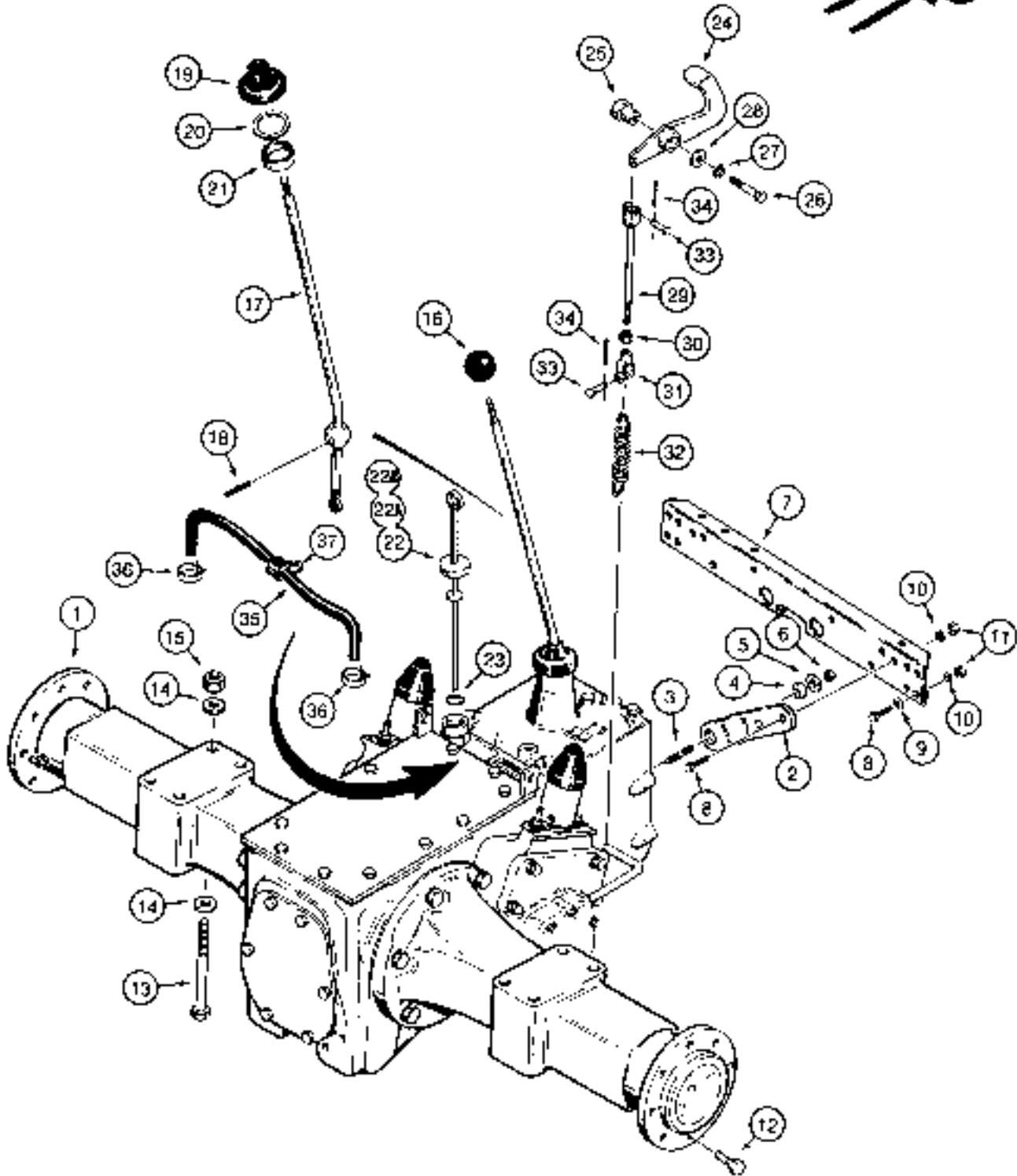
REF	PART NO.	DESCRIPTION	REQ'D
1	A 140534	TRANSAXLE - complete, with differential lock, parts list pages 187-243 . . . . .	1
2	D 90453	SUPPORT - right-hand . . . . .	1
3	D 90452	SUPPORT - left-hand . . . . .	1
4	113- 410	BOLT - hex head, 1/2" - 13 NC x 1-1/2", plated . . . . .	4
5	195- 533	WASHER - flat, 1/2", plated . . . . .	4
6	192- 23	WASHER - lock, 1/2", plated . . . . .	4
7	129- 105	NUT - hex, 1/2" - 13 NC, plated . . . . .	4
8	D 69763	STUD - 1/2" - 20 NF . . . . .	4
9	192- 23	WASHER - lock, 1/2", plated . . . . .	4
10	129- 125	NUT - hex, 1/2" - 20 NF, plated . . . . .	4
11	D 123848	BRACKET - crossmember, no longer used, order D129941 bracket . . . . .	1
11A	D 129941	BRACKET - crossmember . . . . .	1
12	113- 410	BOLT - hex head, 1/2" - 13 NC x 1-1/2", plated . . . . .	4
13	192- 23	WASHER - lock, 1/2", plated . . . . .	4
14	129- 105	NUT - hex, 1/2" - 13 NC, plated . . . . .	4
15	113- 732	BOLT - hex head, 3/4" - 10 NC x 8", plated, axle to frame . . . . .	8
16	D 34666	WASHER - flat, 3/4", hardened . . . . .	16
17	129- 108	NUT - hex, 3/4" - 10 NC, plated . . . . .	8
18	A 38208	BOLT - wheel lug . . . . .	16
19	A 23885	KNOB - shift lever . . . . .	1
20	A 140891	SHIFT LEVER - transaxle . . . . .	1
20A	A 156515	GROOVE PIN - 1/8" x 1-1/4" . . . . .	1
21	A 26356	COVER - rubber, shift lever . . . . .	1
22	A 26836	RETAINING RING - shift lever . . . . .	1
23	A 7923	SEAT - shift lever . . . . .	1
24	D 75768	ROD - differential lock . . . . .	1
25	353- 462	BUSHING - lever to floor plate . . . . .	1
26	213- 4	CLEVIS - 3/8", lever end . . . . .	1
27	129- 123	NUT - hex, 3/8" - 24 NF, plated . . . . .	1
28	141- 4	CLEVIS PIN - 3/8", lever . . . . .	1
29	132- 25	COTTER PIN - 3/32" x 5/8" . . . . .	1
30	D 74240	BAR - lever stop . . . . .	1
31	A 154967	DIPSTICK - transaxle . . . . .	1
32	A 42597	O-RING - dipstick . . . . .	1



## TRANSAXLE AND DIFFERENTIAL LOCK

### TWO WHEEL DRIVE MODELS TRANSAXLE SN 16249203 THRU 16270318

REF.	PART NO.	DESCRIPTION	REQ'D
1	A 168795	TRANSAXLE - complete, with differential lock, parts list pages 187-243 . . . . .	1
2	D 90453	SUPPORT - right-hand . . . . .	1
3	D 90452	SUPPORT - left-hand . . . . .	1
4	113- 410	BOLT - hex head, 1/2" - 13 NC x 1-1/2", plated . . . . .	4
5	195- 533	WASHER - flat, 1/2", plated . . . . .	4
6	192- 23	WASHER - lock, 1/2", plated . . . . .	4
7	129- 105	NUT - hex, 1/2" - 13 NC, plated . . . . .	4
8	D 69763	STUD - 1/2" - 20 NF . . . . .	4
9	192- 23	WASHER - lock, 1/2", plated . . . . .	4
10	129- 125	NUT - hex, 1/2" - 20 NF, plated . . . . .	4
11	D 125848	BRACKET - crossmember, no longer used, order D129941 bracket . . . . .	1
11A	D 129941	BRACKET - crossmember . . . . .	1
12	113- 410	BOLT - hex head, 1/2" - 13 NC x 1-1/2", plated . . . . .	4
13	192- 23	WASHER - lock, 1/2", plated . . . . .	4
14	129- 105	NUT - hex, 1/2" - 13 NC, plated . . . . .	4
15	113- 732	BOLT - hex head, 3/4" - 10 NC x 8", plated, axle to frame . . . . .	8
16	D 34666	WASHER - flat, 3/4", hardened . . . . .	16
17	129- 108	NUT - hex, 3/4" - 10 NC, plated . . . . .	8
18	A 38208	BOLT - wheel lug . . . . .	16
19	A 23885	KNOB - shift lever . . . . .	1
20	A 140891	SHIFT LEVER - transaxle . . . . .	1
21	135- 329	GROOVE PIN - 1/8" x 1-1/4" . . . . .	1
22	A 26956	COVER - rubber, shift lever . . . . .	1
23	A 26836	RETAINING RING - shift lever . . . . .	1
24	A 7923	SEAT - shift lever . . . . .	1
25	A 154967	DIPSTICK - transaxle . . . . .	1
26	A 42597	O-RING - dipstick . . . . .	1
27	D 125318	PEDAL - differential lock . . . . .	1
28	113- 425	BOLT - hex head, 1/2" - 13 NC x 3", plated . . . . .	1
29	192- 23	WASHER - lock, 1/2", plated . . . . .	1
30	D 64050	WASHER - hardened . . . . .	1
31	D 125312	SPACER - pedal pivot . . . . .	1
32	D 125416	ROD - offset, differential lock, no longer used, order D128655 rod . . . . .	1
32A	D 128655	ROD - straight, differential lock . . . . .	1
33	141- 54	CLEVIS PIN - 3/8", plated, rod . . . . .	2
34	132- 320	COTTER PIN - 3/32" x 3/4", plated . . . . .	2
35	129- 123	NUT - hex, 3/8" - 24 NF, plated . . . . .	1
36	213- 41	CLEVIS - 3/8", plated, differential lock rod, replaces fiberglass clevis on some models . . . . .	1
37	A 59470	SPRING - transaxle to differential lock . . . . .	1



## TRANSAXLE AND DIFFERENTIAL LOCK TWO WHEEL DRIVE MODELS TRANSAXLE SN 16270319 AND AFTER

REF.	PART NO.	DESCRIPTION	REQ'D
1	A 179042	TRANSAXLE - complete, with differential lock, parts list; pages 167-243 . . . . .	1
2	D 129815	SUPPORT - transaxle . . . . .	2
3	A 50237	STUD - 5/8" - 11 NC x 2-1/2", hardened . . . . .	2
4	D 122706	BUSHING - support . . . . .	2
5	D 43266	WASHER - flat, 5/8", hardened . . . . .	2
6	129- 563	NUT - hex, 5/8" - 11 NC, grade 8 . . . . .	2
7	D 129841	BRACKET - crossmember . . . . .	1
8	113- 410	BOLT - hex head, 1/2" - 13 NC x 1-1/2", plated . . . . .	8
9	195- 533	WASHER - flat, 1/2", plated . . . . .	4
10	192- 23	WASHER - lock, 1/2", plated . . . . .	8
11	129- 105	NUT - hex, 1/2" - 13 NC, plated . . . . .	8
12	A 38208	BOLT - wheel lug . . . . .	16
13	113- 732	BOLT - hex head, 3/4" - 10 NC x 8", plated . . . . .	8
14	D 34666	WASHER - flat, hardened . . . . .	16
15	129- 108	NUT - hex, 3/4" - 10 NC, plated . . . . .	8
16	A 23885	KNOB - shift lever . . . . .	1
17	A 140891	SHIFT LEVER - transaxle . . . . .	1
18	135- 329	GROOVE PIN - 1/8" x 1-1/4" . . . . .	1
19	A 26956	COVER - rubber, shift lever . . . . .	1
20	A 26836	RETAINING RING - shift lever . . . . .	1
21	A 7923	SEAT - shift lever . . . . .	1
22	A 154967	DIPSTICK - transaxle, 14-1/2" total length, used before tractor PIN 17019708 . . . . .	1
22A	D 135008	DIPSTICK - transaxle, 14-1/2" total length, used on tractor PIN 17019708 and after, no longer used, order D134734 dipstick . . . . .	1
22B	D 134734	DIPSTICK - transaxle, 20-1/2" total length, used on tractor PIN 1701978 and after . . . . .	1
23	A 42597	O-RING - all dipsticks . . . . .	1
24	D 125318	PEDAL - differential lock . . . . .	1
25	D 125312	SPACER - pedal pivot . . . . .	1
26	113- 425	BOLT - hex head, 1/2" - 13 NC x 3", plated . . . . .	1
27	192- 23	WASHER - lock, 1/2", plated . . . . .	1
28	D 64050	WASHER - flat, hardened . . . . .	1
29	D 128655	ROD - differential lock . . . . .	1
30	129- 123	NUT - hex, 3/8" - 24 NF, plated . . . . .	1
31	213- 41	CLEVIS - 3/8", plated, differential lock rod, replaces fiberglass clevis on some models . . . . .	1
32	A 59470	SPRING - transaxle to differential lock . . . . .	1
33	141- 54	CLEVIS PIN - 3/8", plated, differential lock rod . . . . .	2
34	132- 320	COTTER PIN - 3/32" x 3/4", plated . . . . .	2
35	D 134065	HOSE - 1/4" (6 mm) ID x 21-5/8" (550 mm) long, cut from D134170 bulk hose, see below, vent, brake actuator . . . . .	1
36	F 64936	CLAMP - vent hose . . . . .	2
37	49838	CLAMP - P-type, uses existing transaxle cover plate mounting hardware . . . . .	1
	D 134170	HOSE - bulk, 1/4" (6 mm) ID x 62-3/16" (1580 mm) long . . . . .	1

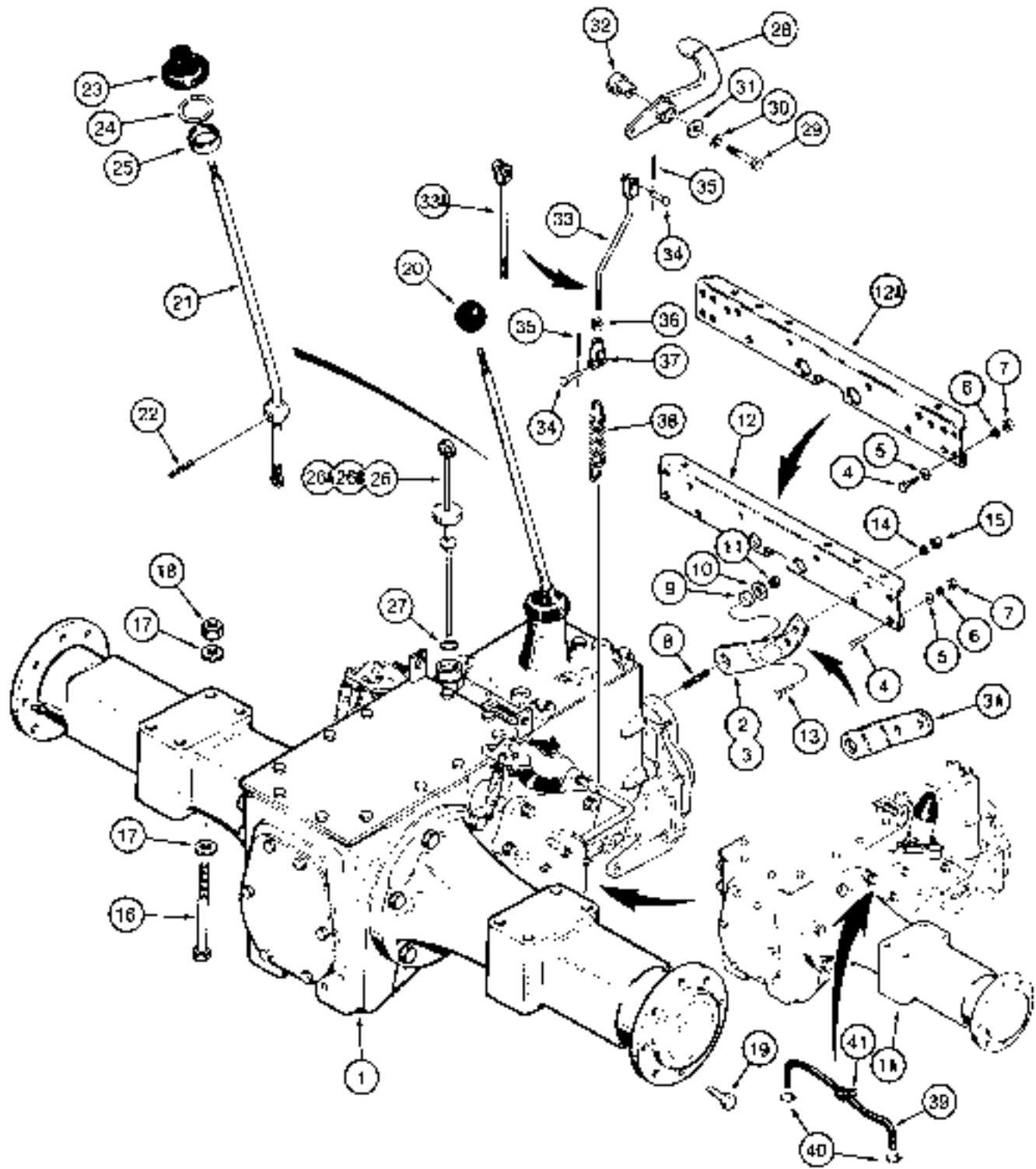


## TRANSAXLE AND DIFFERENTIAL LOCK FOUR WHEEL DRIVE MODELS

REF	PART NO.	DESCRIPTION	REQ'D.
1	A 168796	TRANSAXLE - complete, with differential lock and drop box, transaxle SN 16249203 thru 16270318, parts list pages 187-243	1
1A	A 179043	TRANSAXLE - complete, with differential lock and drop box, transaxle SN 16270319 and after, parts list pages 187-243	1
2	D 122704	SUPPORT - r ght-hand, used with A168796 transaxle, item 1	1
3	D 122705	SUPPORT - left-hand, used with A168796 transaxle, item 1	1
3A	D 129915	SUPPORT - transaxle, used with A179043 transaxle, item 1A only	2
4	113- 410	BOLT - hex head, 1/2" - 13 NC x 1-1/2", plated	4
5	195- 533	WASHER - flat, 1/2", plated	4
6	192- 23	WASHER - lock, 1/2", plated	4
7	129- 105	NUT - hex, 1/2" - 13 NC, plated	4
8	A 50237	STUD - 5/8" - 11 NC x 2-1/2", hardened	2
9	D 122706	BUSHING - support	2
10	T 53567	WASHER - hardened	2
11	129- 183	NUT - hex, 5/8" - 11 NC, grade 8, plated	2
12	D 125848	BRACKET - crossmember, no longer used, order D129941 bracket	1
12A	D 129941	BRACKET - crossmember	1
13	113- 410	BOLT - hex head, 1/2" - 13 NC x 1-1/2", plated	4
14	192- 23	WASHER - lock, 1/2", plated	4
15	129- 105	NUT - hex, 1/2" - 13 NC, plated	4
16	113- 732	BOLT - hex head, 3/4" - 10 NC x 8", plated, axle to frame	8
17	D 34666	WASHER - flat, 3/4", hardened	16
18	129- 108	NUT - hex, 3/4" - 10 NC, plated	8
19	A 38208	BOLT - wheel lug	16
20	A 23885	KNOB - shift lever	1
21	A 140891	SHIFT LEVER - transaxle	1
22	135- 329	GROOVE PIN - 1/8" x 1-1/4"	1
23	A 26956	COVER - rubber, sh.ft lever	1
24	A 26836	RETAINING RING - shift lever	1
25	A 7923	SEAT - shift lever	1
26	A 154967	DIPSTICK - transaxle, 14-1/2" total length, used before tractor PIN 17019708	1
26A	D 135008	DIPSTICK - transaxle, 14-1/2" total length, used on tractor PIN 17019708 and after, no longer used, order D134734 dipstick	1
26B	D 134734	DIPSTICK - transaxle, 20-1/2" total length, used on tractor PIN 17019708 and after	1
27	A 42597	O-RING - all dipsticks	1

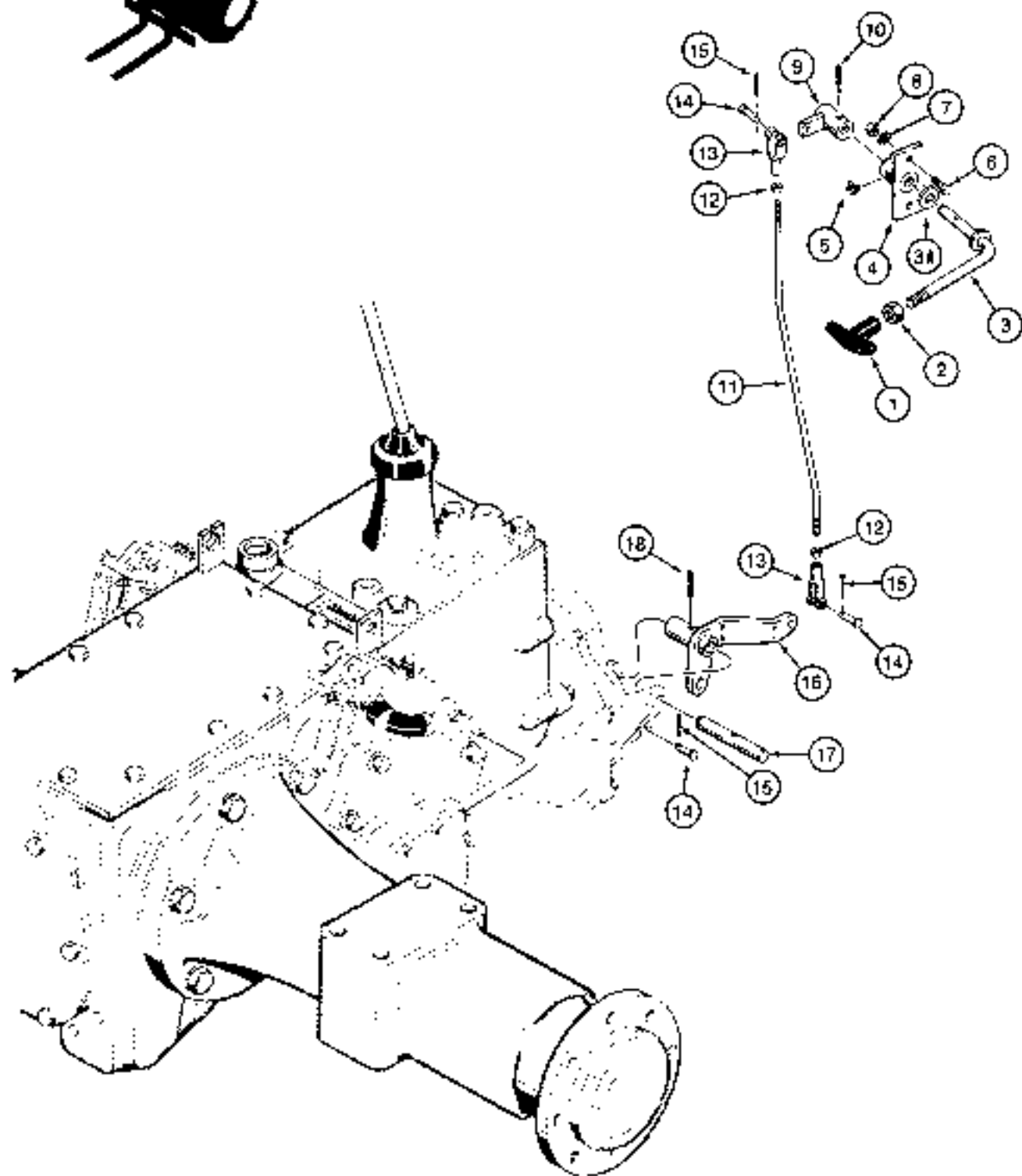
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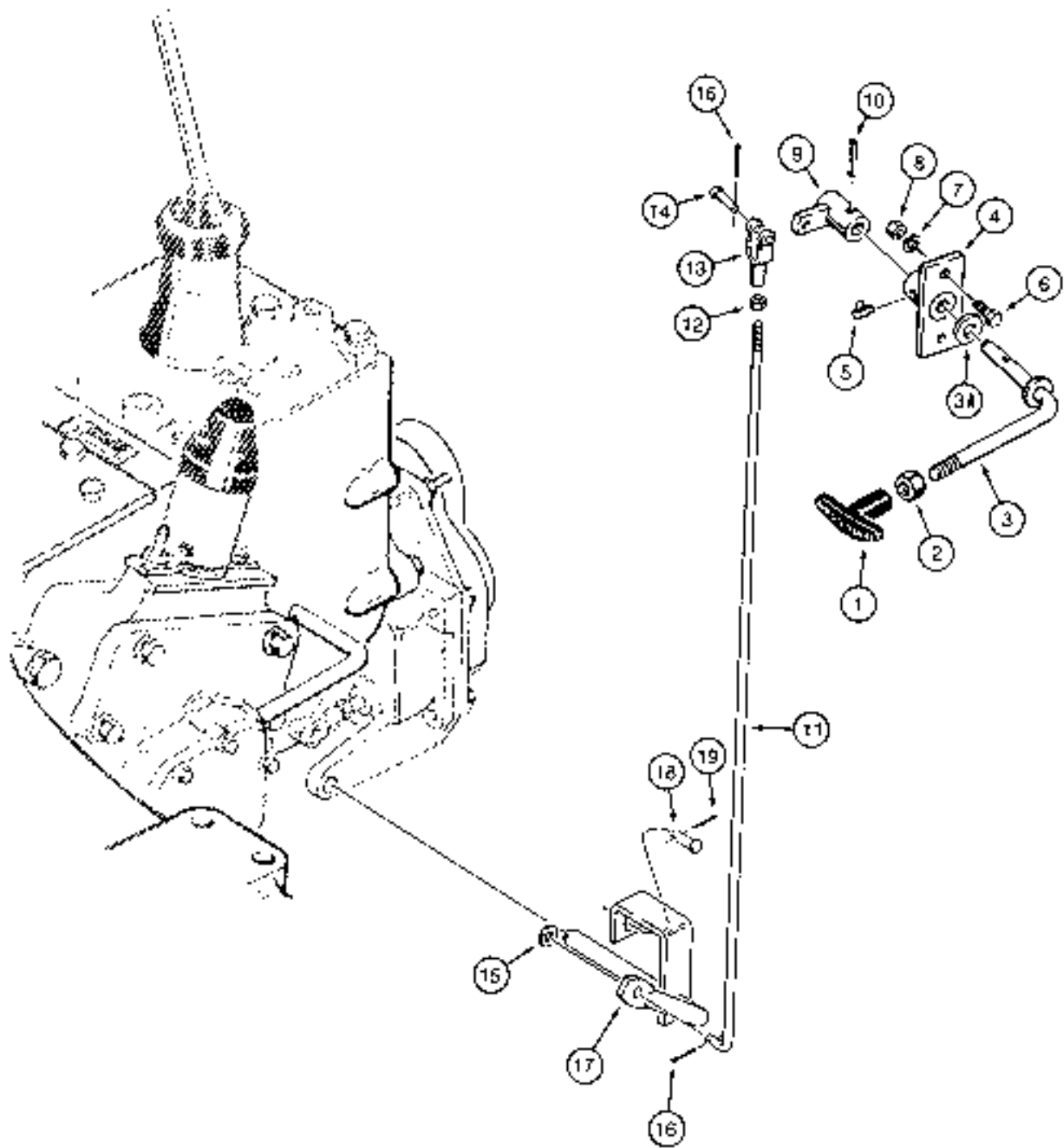
### TRANSAXLE AND DIFFERENTIAL LOCK FOUR WHEEL DRIVE MODELS

REF.	PART NO.	DESCRIPTION	REQ'D
28	D 125318	PEDAL - differential lock	1
29	113- 425	BOLT - hex head, 1/2" - 13 NC x 3", plated	1
30	192- 23	WASHER - lock, 1/2", plated	1
31	D 64050	WASHER - hardened	1
32	D 125312	SPACER - pedal p-rot	1
33	D 125418	ROD - offset, differential lock - no longer used, order D128655 rod	1
33A	D 128655	ROD - straight, differential lock	1
34	141- 54	CLEVIS PIN - 3/8", p-ated, rod	2
35	132- 320	COTTER PIN - 3/32" x 3/4", plated	2
36	129- 123	NUT - hex, 3/8" - 24 NF, plated	1
37	213- 41	CLEVIS - 3/8", plated, differential lock rod, replaces fiberglass clevis on some models	1
38	A 59470	SPRING - transaxle to differential lock	1
39	D 134065	HOSE - 1/4" (6 mm) ID x 21-5/8" (550 mm) long, cut from D134170 bulk hose, see below, vent, brake actuator, used with A179043 transaxle item 1A	1
40	F 64936	CLAMP - vent hose	2
41	49838	CLAMP - P-type, uses existing transaxle cover plate mounting hardware	1
	D 134170	HOSE - bulk, 1/4" (6 mm) ID x 62-3/16" (1580 mm) long	1



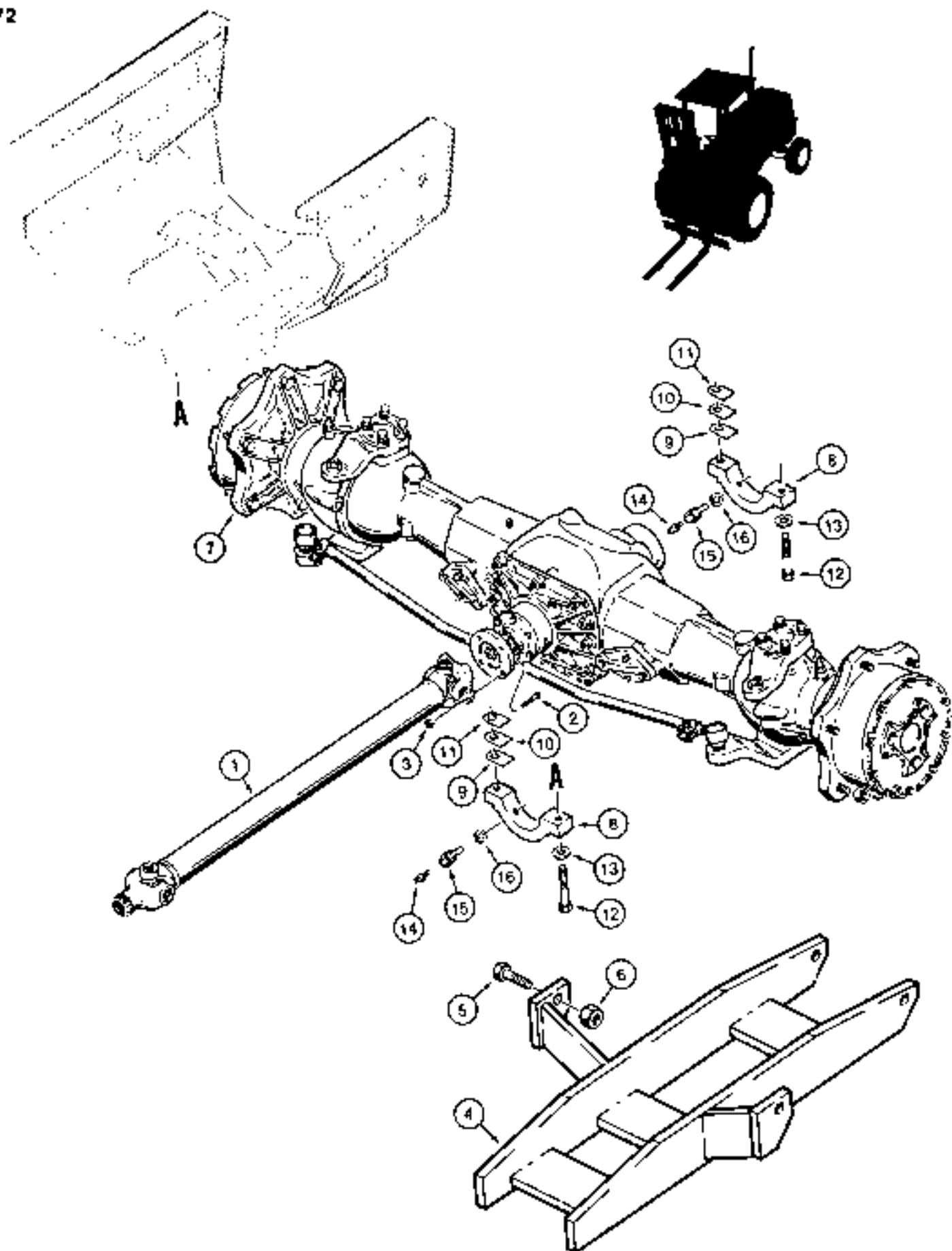
**REAR DRIVE AXLE CONTROL  
FOUR WHEEL DRIVE MODELS BEFORE TRANSAXLE SN 16270319**

REF.	PART NO.	DESCRIPTION	REQ'D.
1	D 120758	HANDLE - T-grip	1
2	128- 145	NUT - hex, jam, 1/2" - 13 NC, plated	1
3	D 125293	LEVER - shift	1
3A	195- 533	WASHER - flat, 1/2", plated	1
4	D 89341	BRACKET - lever bearing	1
5	218- 55	GREASE FITTING - 90 degree, special short, 1/8" NPT	1
6	113- 207	BOLT - hex head, 3/8" - 16 NC x 1", plated	2
7	192- 21	WASHER - lock, 3/8", plated	2
8	129- 103	NUT - hex, 3/8" - 16 NC, plated	2
9	D 125296	LEVER - pivot	1
10	138- 96	ROLL PIN - 3/16" x 1"	1
11	D 125295	ROD - control	1
12	129- 123	NUT - hex, 3/8" - 24 NF, plated	2
13	213- 41	CLEVIS - 3/8", metal, plated, rod end, replaces fiberglass clevis on some models	2
14	141- 54	CLEVIS PIN - 3/8", plated, rod end	3
15	132- 320	COTTER PIN - 3/32" x 3/4", plated	3
16	D 126535	BELLCRANK - shift lever control to transaxle	1
17	D 126534	SHAFT - bellcrank pivot	1
18	138- 96	ROLL PIN - 3/16" x 1"	1



**REAR DRIVE AXLE CONTROL  
FOUR WHEEL DRIVE MODELS TRANSAXLE SN 16270319 AND AFTER**

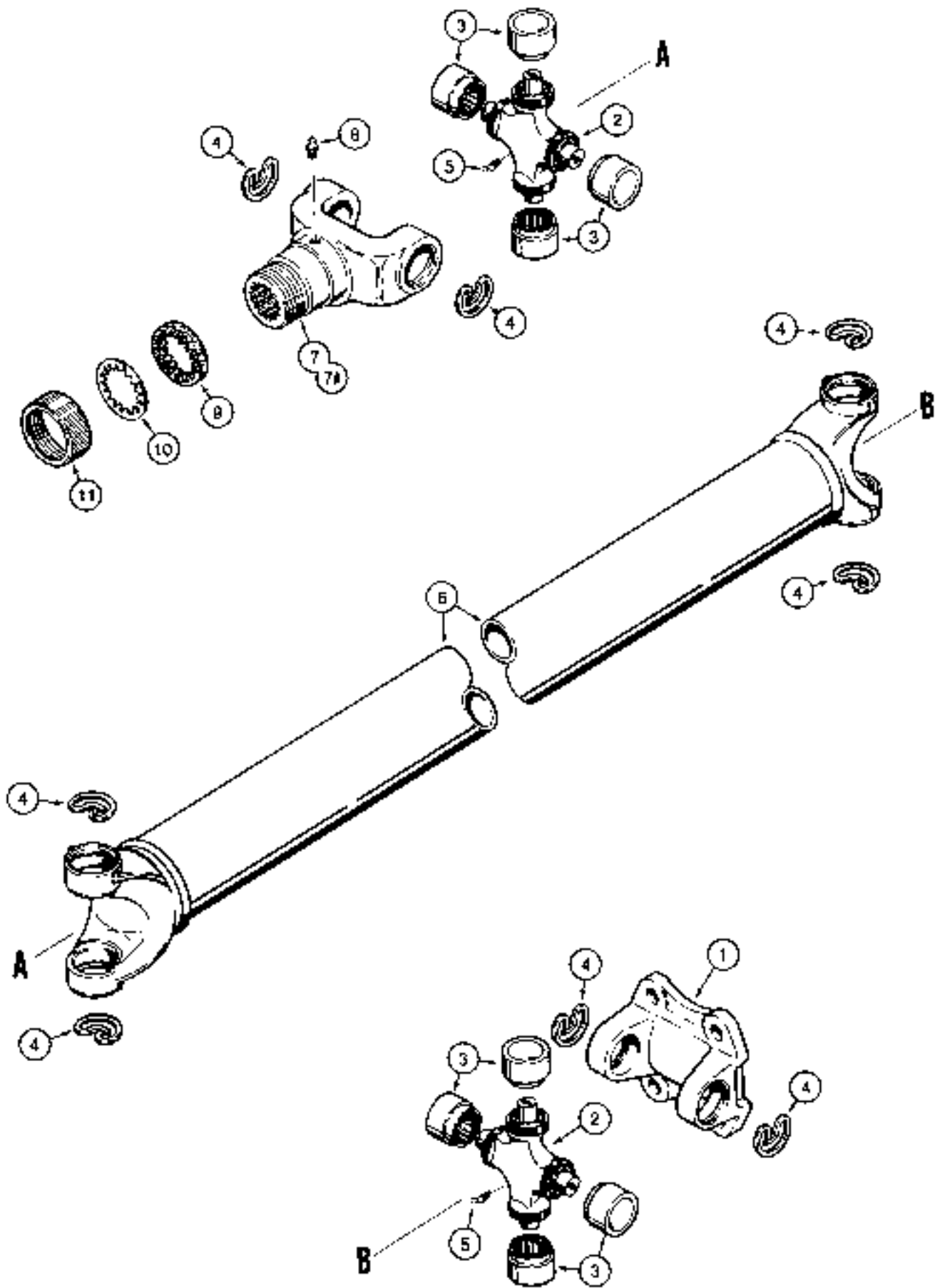
REF.	PART NO.	DESCRIPTION	REQ'D.
1	D 120758	HANDLE - T-grip	1
2	129- 146	NUT - hex. jam. 1/2" - 13 NC, plated	1
3	D 125283	LEVER - shift	1
3A	195- 533	WASHER - flat, 1/2", plated	1
4	D 89341	BRACKET - lever bearing	1
5	219- 55	GREASE FITTING - 90 degree, special short 1/8" NPT	1
6	113- 207	BOLT - hex head, 3/8" - 16 NC x 1", plated	2
7	192- 21	WASHER - lock, 3/8", plated	2
8	129- 109	NUT - hex, 3/8" - 16 NC, plated	2
9	D 125296	LEVER - pivot	1
10	138- 96	ROLL PIN - 3/16" x 1"	1
11	D 128563	ROD - control	1
12	129- 123	NUT - hex, 3/8" - 24 NF, plated	1
13	213- 41	CLEVIS - 3/8", metal, plated, rod to pivot lever, replaces fiberglass clevis on some models	1
14	141- 54	CLEVIS PIN - 3/8", plated, rod end	1
15	195- 525	WASHER - flat, 3/8", plated	1
16	132- 320	COTTER PIN - 3/32" x 3/4", plated	2
17	D 128567	LEVER - control	1
18	141- 54	CLEVIS PIN - 3/8", plated, control rod to transaxle	1
19	132- 320	COTTER PIN - 3/32" x 3/4", plated	1



### REAR DRIVE AXLE MOUNTING AND DRIVE SHAFT FOUR WHEEL DRIVE MODELS

REF	PART NO	DESCRIPTION	REQ'D.
1	REF	DRIVE SHAFT - rear wheel drive, parts list page 175	1
2	28- 724	BOLT - hex head, 7/16" - 20 NF x 1-1/2", grade 8	4
3	131- 753	NUT - hex, self-locking, 7/16" - 20 NF	4
4	D 125602	GUARD - drive shaft	1
5	113- 924	BOLT - hex head, 1" - 8 NC x 2-1/2", plated	4
6	131- 20	NUT - hex, self-locking, 1-1/8" - 7 NC	4
7	D 124605	AXLE ASSEMBLY - rear drive, parts list pages 177-185	1
	D 126549	KIT - bearing cap, replaces production axle caps, must order two kits	1
8	NSS	CAP - axle mounting, rear	1
9	D 126551	SHIM - cap, 0.3 mm thick	VAR
10	D 126552	SHIM - cap, 0.4 mm thick	VAR
11	D 126553	SHIM - cap, 0.5 mm thick	VAR
12	26- 1256	BOLT - hex head, 3/4" - 10 NC x 3-1/2", grade 8	4
13	D 34686	WASHER - 3/4", hardened	4
14	219- 1	GREASE FITTING - straight, 1/8" NPT	2
15	D 93588	ADAPTER - grease fitting	2
16	192- 23	WASHER - lock, 1/2", plated	2

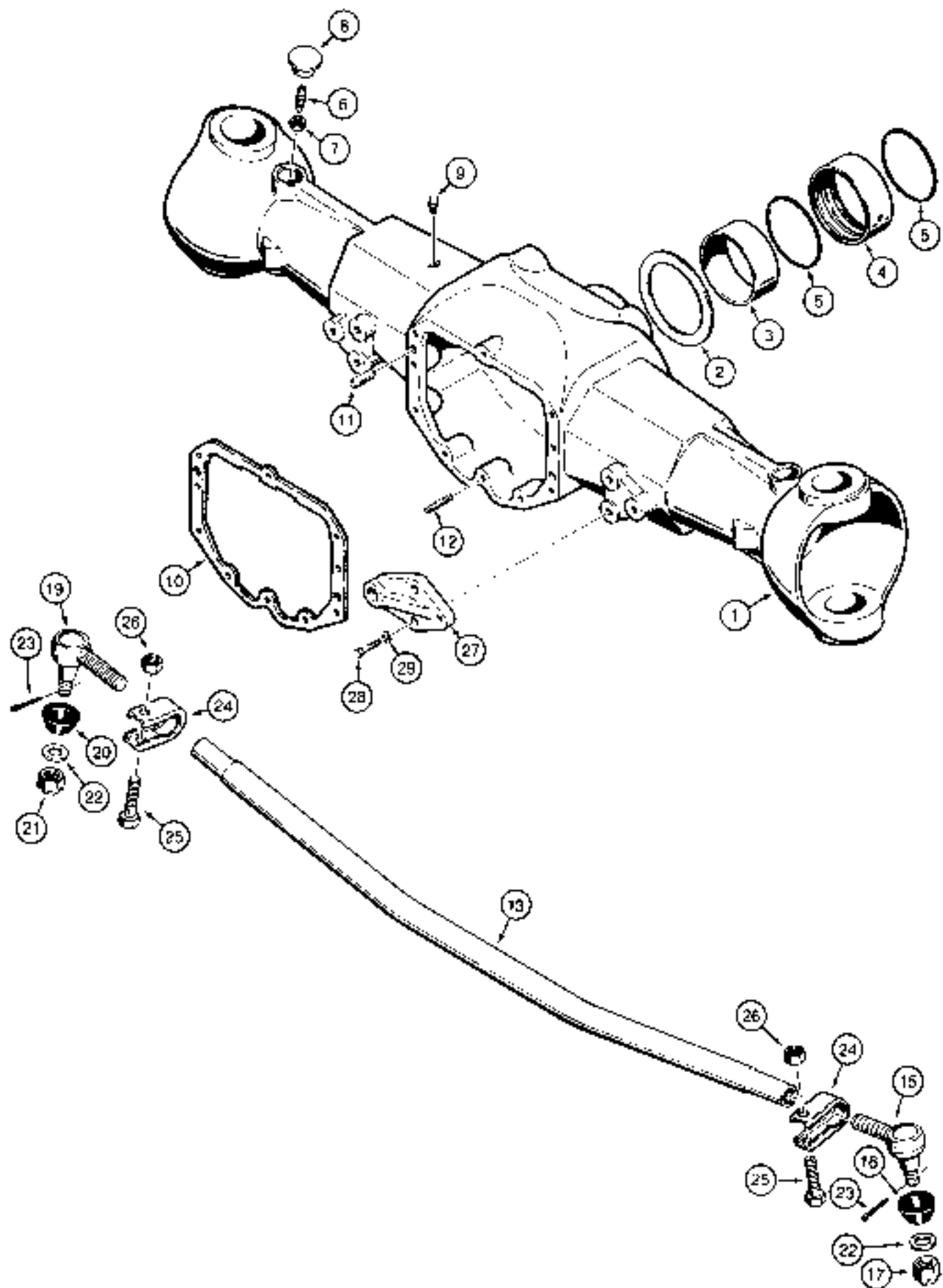




### DRIVE SHAFT FOR REAR DRIVE AXLE FOUR WHEEL DRIVE MODELS

REF.	PART NO.	DESCRIPTION	REQ'D
	D 124853	DRIVE SHAFT - rear drive axle, no longer available, for service order D128560 drive shaft	1
	D 128560	DRIVE SHAFT - rear drive axle	1
1	S 80726	YOKE - flange	1
	R 2713	KIT - universal joint	2
2	NSS	UNIVERSAL JOINT - drive shaft	1
3	NSS	BEARING - universal joint	4
4	NSS	RING - retaining	4
5	219- 37	GREASE FITTING - 45 degree, 1/4" - 28 NF taper	1
6	NSS	DRIVE SHAFT - rear drive axle	1
7	N 7512	YOKE - splined, D124853 drive shaft only	1
7A	N 9926	YOKE - D128560 drive shaft only, not shown	1
8	219- 10	GREASE FITTING - straight, 1/4" - 28 NF taper	1
	N 7513	KIT - dust seal and cap	1
9	NSS	SEAL - dust, cork	1
10	NSS	WASHER - seal, steel	1
11	NSS	CAP - dust seal retaining	1

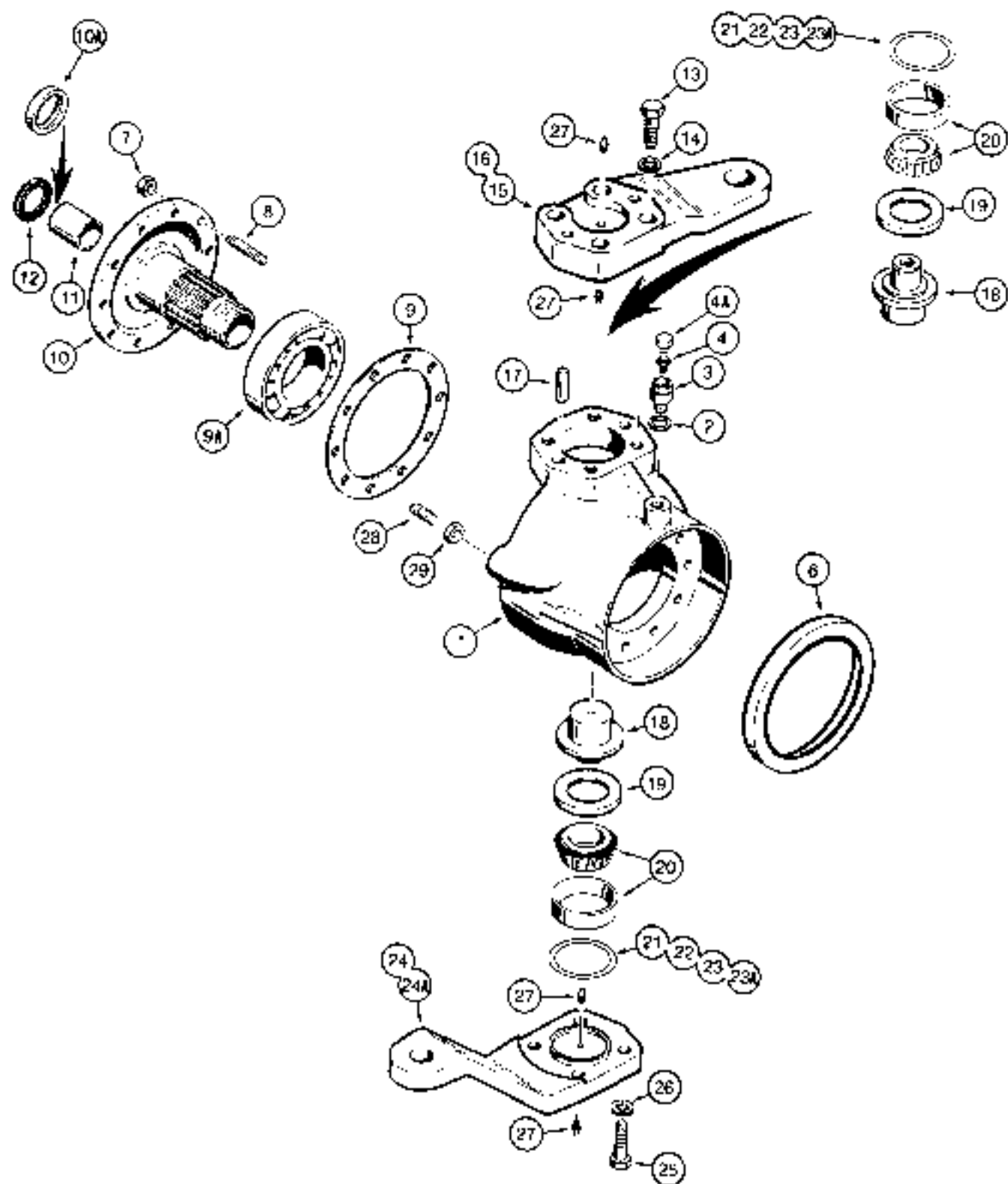
**NOTE:** It is necessary to use a grease gun needle nozzle adapter (Case part number D51765 or Lincoln number 5803) to lubricate drive shafts.



**REAR DRIVE AXLE  
HOUSING AND TIE ROD  
FOUR WHEEL DRIVE MODELS**

REF	PART NO	DESCRIPTION	REQ'D.
	*O 124605	AXLE ASSEMBLY - rear drive .....	1
1	N 7627	HOUSING - axle .....	1
2	K 965264	THRUST WASHER - rear pivot .....	1
3	K 965266	SLEEVE - rear pivot .....	1
4	K 965265	COLLAR - rear pivot .....	1
5	K 965267	O-RING - rear pivot .....	2
6	K 965232	SCREW - lock, bearing retaining .....	4
7	825- 1014	NUT - hex, 14 mm - 2 .....	4
8	K 956997	COVER - dust .....	4
9	K 965231	BREATHER - axle housing .....	1
10	N 7524	GASKET - differential carrier .....	1
11	K 965252	DOWEL PIN - housing to carrier .....	2
12	K 261639	STUD - housing to carrier .....	10
13	D 126279	TIE ROD - steering .....	1
14		RESERVED	
	K 260250	BALL JOINT ASSEMBLY - left-hand .....	1
15	NSS	BALL JOINT - left-hand .....	1
16	K 956939	BOOT - ball joint .....	1
17	K 260251	CASTLE NUT - ball joint .....	1
18		RESERVED	
	K 260254	BALL JOINT ASSEMBLY - right-hand .....	1
19	NSS	BALL JOINT - right-hand .....	1
20	K 956939	BOOT - ball joint .....	1
21	K 260251	CASTLE NUT - ball joint .....	1
22	895- 11016	WASHER - flat, 16 mm. plated .....	2
23	K 260255	COTTER PIN - ball joint .....	2
24	N 8904	CLAMP - tie rod .....	2
25	N 8905	BOLT - special .....	2
26	K 260157	NUT - special .....	2
27	N 7525	SUPPORT - steering cylinder .....	2
28	N 7526	BOLT - hex head 14 mm .....	6
29	K 965246	WASHER - lock, 14 mm .....	6

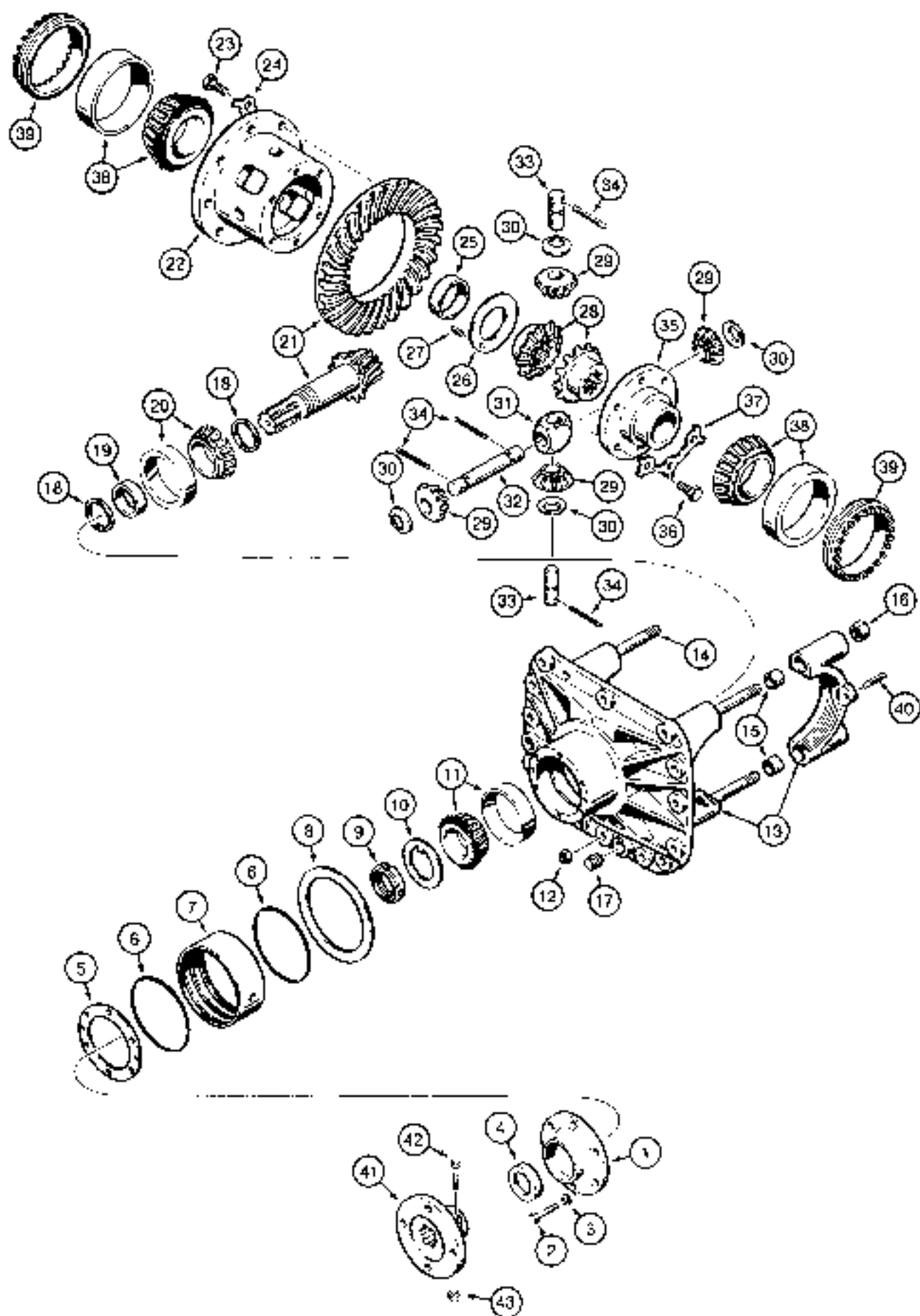
\*NOTE: D124605 Axle Assembly includes all parts on pages 177-185. For axle mounting see page 173.



**REAR DRIVE AXLE  
SWIVEL HOUSINGS  
FOUR WHEEL DRIVE MODELS**

REF.	PART NO.	DESCRIPTION	REQ D
	* D 124605	AXLE ASSEMBLY - rear drive	1
1	N 8891	SWIVEL HOUSING - axle ends	2
2	K 957001	SEAL - breather protector	2
3	K 957000	PROTECTOR - breather	2
4	K 965231	BREATHER - swivel housing	2
4A	K 260136	CAP - breather cover	2
5		RESERVED	
6	N 8898	SEAL - oil, housing, 170 mm OD x 145 mm ID x 18 mm wide, fits outside of K261816 wear ring. Item 10 on page 185 may replace oil seal and felt seal mounted one behind the other used on some models	2
7	K 965250	NUT - hub stud	20
8	K 965249	STUD - hub to swivel housing	20
9	K 965237	GASKET - hub to swivel housing	2
9A	K 965321	BALL BEARING - small	2
10	K 965236	SPINDLE - planetary	2
10A	N 8892	SLEEVE - spindle	2
11	K 965322	BUSHING - spindle	2
12	N 8897	SEAL - spindle	2
13	N 7552	BOLT - steering cover	8
14	K 965248	WASHER - lock, 14 mm	8
15	D 126042	LEVER - steering right-hand	1
16	D 126043	LEVER - steering left-hand	1
17	K 965275	DOWEL PIN - steering lever	8
18	N 7532	PIN - swivel	4
19	N 7533	SEAL - pin	4
20	N 7534	TAPERED ROLLER BEARING - swivel pin	4
21	K 965243	SHIM - 0.1 mm	UAR
22	K 965244	SHIM - 0.3 mm	UAR
23	K 965245	SHIM - 0.5 mm	UAR
23A	NSS	SHIM - 1.0 mm, when replacing this shim, use two K965245 shims (item 23)	UAR
24	D 126277	LEVER - lower, swivel housing to tie rod ball joint, left-hand	1
24A	D 126278	LEVER - lower, swivel housing to tie rod ball joint, right-hand	1
25	N 7552	BOLT - tie rod ball joint lever	8
26	K 965248	WASHER - lock, 14 mm	8
27	K 965246	GREASE FITTING - steering levers and covers	8
28	N 7527	STUD - steering stop	2
29	K 965369	NUT - hex 12 mm	2

\*NOTE: D124605 Axle Assembly includes all parts on pages 177-185.



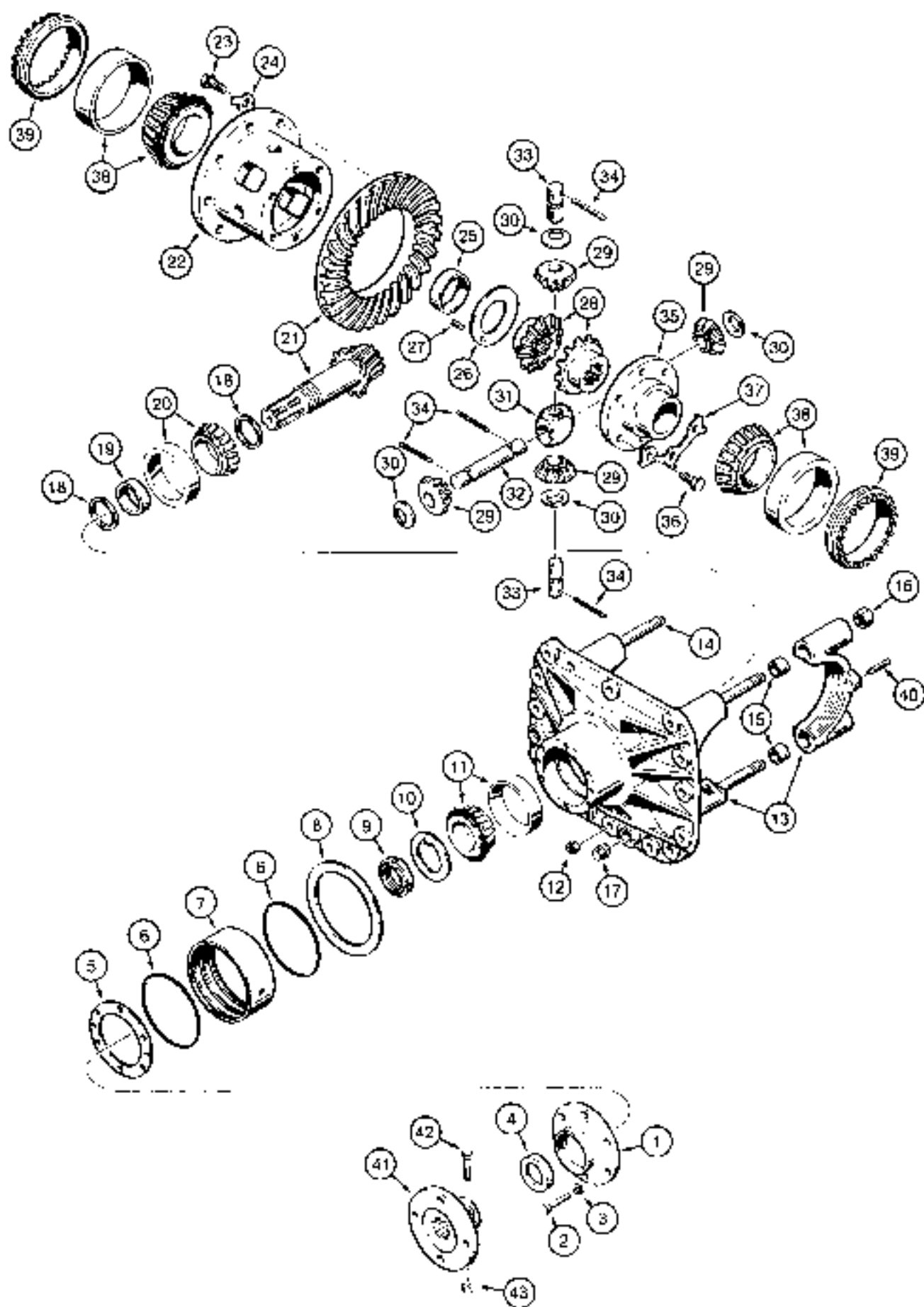
**REAR DRIVE AXLE  
DIFFERENTIAL  
FOUR WHEEL DRIVE MODELS**

REF	PART NO.	DESCRIPTION	REQ'D
	*D 124605	AXLE ASSEMBLY - rear drive	1
1	N 8894	COVER - carrier assembly	1
2	814- 8020	BOLT - hex head, 8 mm - 1.25 x 20 mm (8.8), plated	6
3	892- 1108	WASHER - lock, 8 mm, plated	6
4	N 8895	SEAL - pinion shaft	1
5	K 965364	GASKET - cover	1
6	K 965267	O-RING - bushing	2
7	K 965265	BUSHING - pivot	1
8	K 965264	THRUST WASHER - bearing	1
9	N 7537	NUT - pinion shaft	1
10	K 261065	WASHER - special	1
11	K 965356	TAPERED ROLLER BEARING - outer	1
12	K 965255	NUT - hex, 12 mm - 1.25	10
	N 7528	CARRIER ASSEMBLY - differential	1
13	NSS	CARRIER - differential	1
14	K 965257	STUD - differential carrier	4
15	K 965259	SLEEVE - differential carrier	4
16	K 965250	NUT - differential carrier	4
17	K 965263	PLUG - differential carrier	2
18	K 965280	SHIM - 2.50 mm	UAR
18	K 965281	SHIM - 2.55 mm	UAR
18	K 965282	SHIM - 2.60 mm	UAR
18	K 965283	SHIM - 2.65 mm	UAR
18	K 965284	SHIM - 2.70 mm	UAR
18	K 965285	SHIM - 2.75 mm	UAR
18	K 965286	SHIM - 2.80 mm	UAR
18	K 965287	SHIM - 2.85 mm	UAR
18	K 965288	SHIM - 2.90 mm	UAR
18	K 965289	SHIM - 2.95 mm	UAR
18	K 965290	SHIM - 3.00 mm	UAR
18	K 965291	SHIM - 3.05 mm	UAR
18	K 965292	SHIM - 3.10 mm	UAR
18	K 965293	SHIM - 3.15 mm	UAR
18	K 965294	SHIM - 3.20 mm	UAR
18	K 965295	SHIM - 3.25 mm	UAR
18	K 965296	SHIM - 3.30 mm	UAR
18	K 965297	SHIM - 3.35 mm	UAR
18	K 965298	SHIM - 3.40 mm	UAR
19	895- 11008	WASHER - flat, 8mm, plated, used as a spacer	1

Continued on next page

\*NOTE: D124605 Axle Assembly includes all parts on pages 177-185

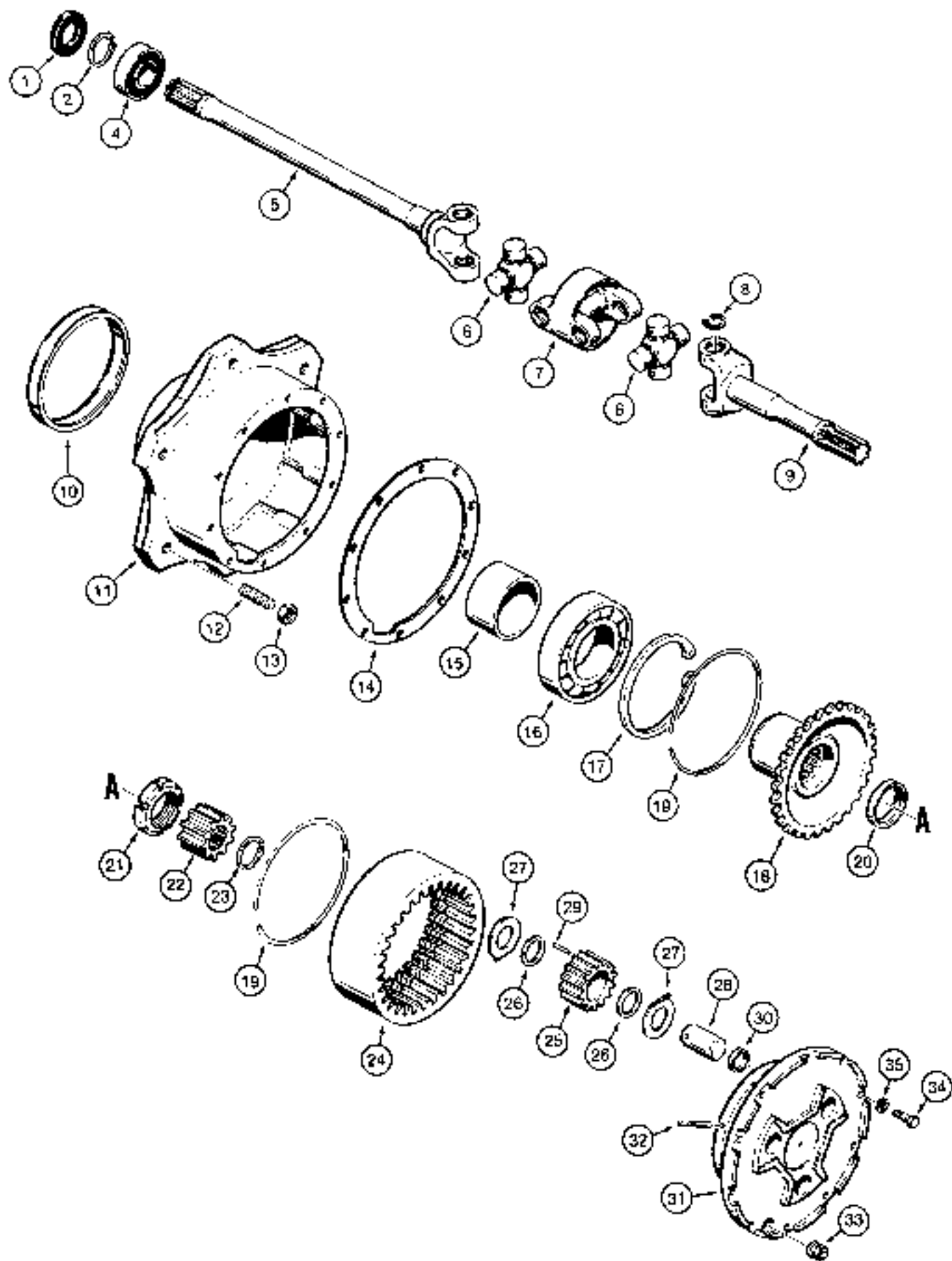




**REAR DRIVE AXLE  
DIFFERENTIAL  
FOUR WHEEL DRIVE MODELS**

REF.	PART NO	DESCRIPTION	REQ D
	* D 124605	AXLE ASSEMBLY - rear drive, continued	1
20	K 965357	TAPERED ROLLER BEARING - inner	1
21	N 8893	GEAR SET - ring and pinion	1
22	N 8896	CAGE - differential	1
23	K 965356	BOLT - hex head, 12 mm, cage to ring gear	8
24	K 965355	LOCK PLATE - cage bolts	4
25	K 965347	BUSHING - cage to side gear	1
26	K 965346	WASHER - cage, inner	1
27	K 965348	DOWEL PIN - washer to cage	1
28	E 43051	SIDE GEAR - differential	2
29	E 43052	PINION GEAR - differential	4
30	K 965350	WASHER - pinion gear	4
31	K 965353	BLOCK - support	1
32	K 965352	SHAFT - long	1
33	K 965354	SHAFT - short	2
34	K 965349	DOWEL PIN - differential shafts	4
35	K 965343	COVER - differential	1
36	K 965341	BOLT - hex head, 10 mm, cover	6
37	K 965342	LOCK PLATE - cover bolts	2
38	K 965339	TAPERED ROLLER BEARING - side gears	2
39	K 965338	RING - bearing adjustment	2
40	K 965340	PIN - adjustment ring lock	2
41	K 958954	FLANGE - drive shaft	1
42	K 965415	BOLT - hex head, 10 mm - 1.25 x 60 mm	2
43	K 965414	NUT - hex, 10 mm - 1.25	2

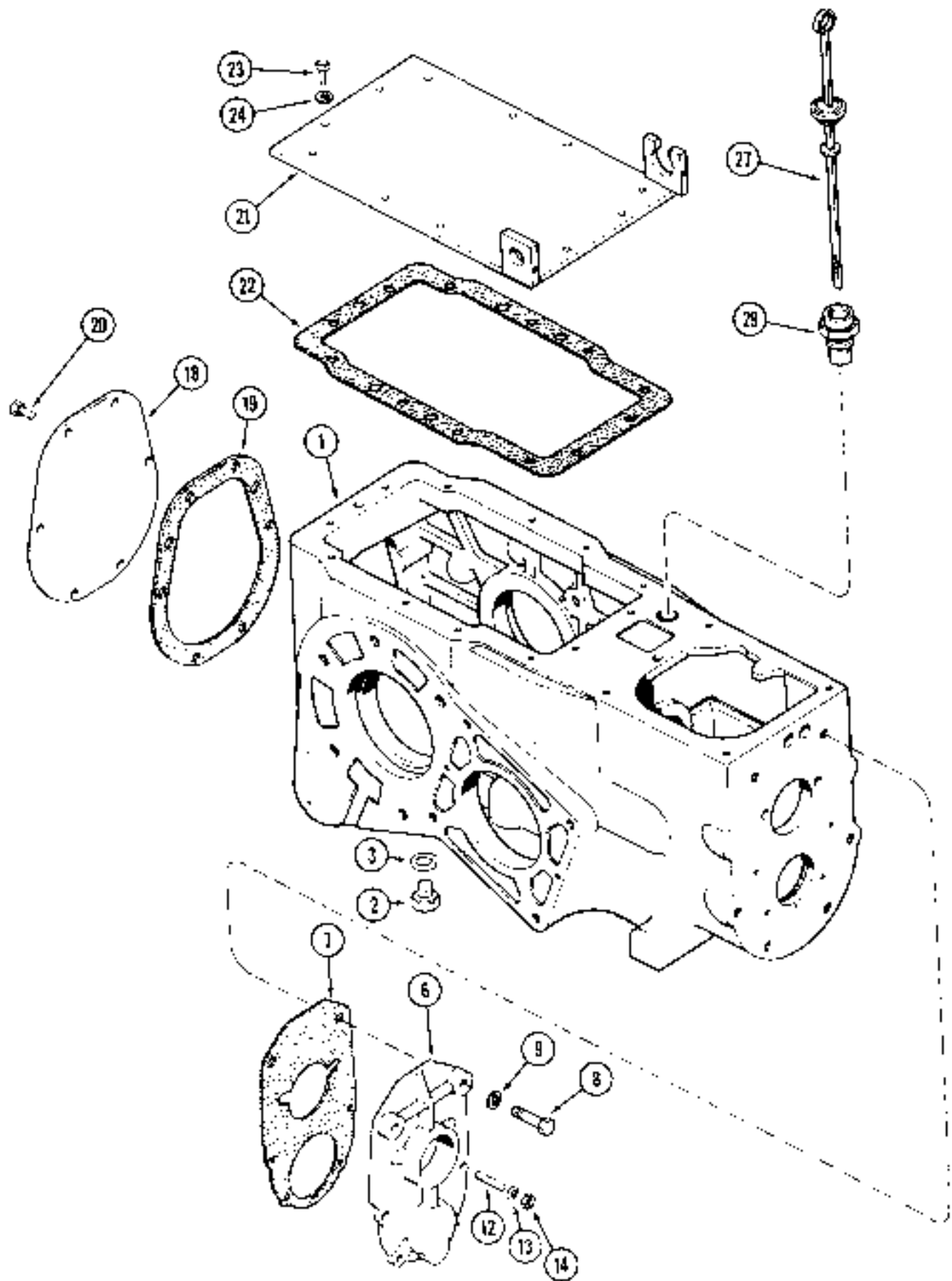
\*NOTE: D124605 Axle Assembly includes all parts on pages 177-185



**REAR DRIVE AXLE  
AXLE SHAFT AND PLANETARY  
FOUR WHEEL DRIVE MODELS**

REF.	PART NO	DESCRIPTION	REQ'D.
	* D 124605	AXLE ASSEMBLY - rear drive	1
1	K 965335	SEAL - axle shaft	2
2	K 965334	SNAP RING - axle shaft	2
3		RESERVED	
4	K 965333	BALL BEARING - axle shaft	2
5	N 7543	SHAFT - long	1
6	K 260189	UNIVERSAL JOINT - axle shaft	2
7	K 260190	FLANGE - connecting	1
8	K 260188	SNAP RING - universal joint	8
9	N 7542	SHAFT - short	1
10	K 261816	WEAR RING - hub, 140 mm ID x 145 mm OD, fits inside of N8898 oil seal - item 6, on page 179, may replace an oil seal and left seal mounted one behind the other used on some models	2
11	K 965278	HUB - wheel attaching	2
12	K 205125	STUD - wheel attaching	12
13	K 965326	NUT - wheel	12
14	K 965304	GASKET - hub to cover	2
15	K 965320	SPACER - bearing	2
16	K 965319	BALL BEARING - large	2
17	K 965318	SNAP RING - bearing retaining	2
18	K 965317	DRIVE GEAR - planetary	2
19	K 965306	RING - lock	4
20	K 965316	BUSHING - centering	2
21	K 965315	NUT - spindle	2
22	K 965312	SUN GEAR - planetary	2
23	K 965313	SNAP RING - axle shaft	2
24	K 965314	RING GEAR - planetary	2
25	K 965308	PINION GEAR - planetary	6
26	K 965311	SPACER - pin on gear	12
27	K 965310	WASHER - tab, pinion gear	12
28	K 965307	PIN - pinion gear	6
29	K 965309	NEEDLE - pinion gear	13B
30	K 965301	PLUG - pinion gear	6
31	N 7548	HOUSING - planetary	2
32	K 965305	PIN - pin on gear pin	6
33	K 965263	PLUG - expansion	2
34	K 965302	BOLT - hex head, 10 mm, housing	20
35	K 965303	WASHER - lock, 10 mm	20

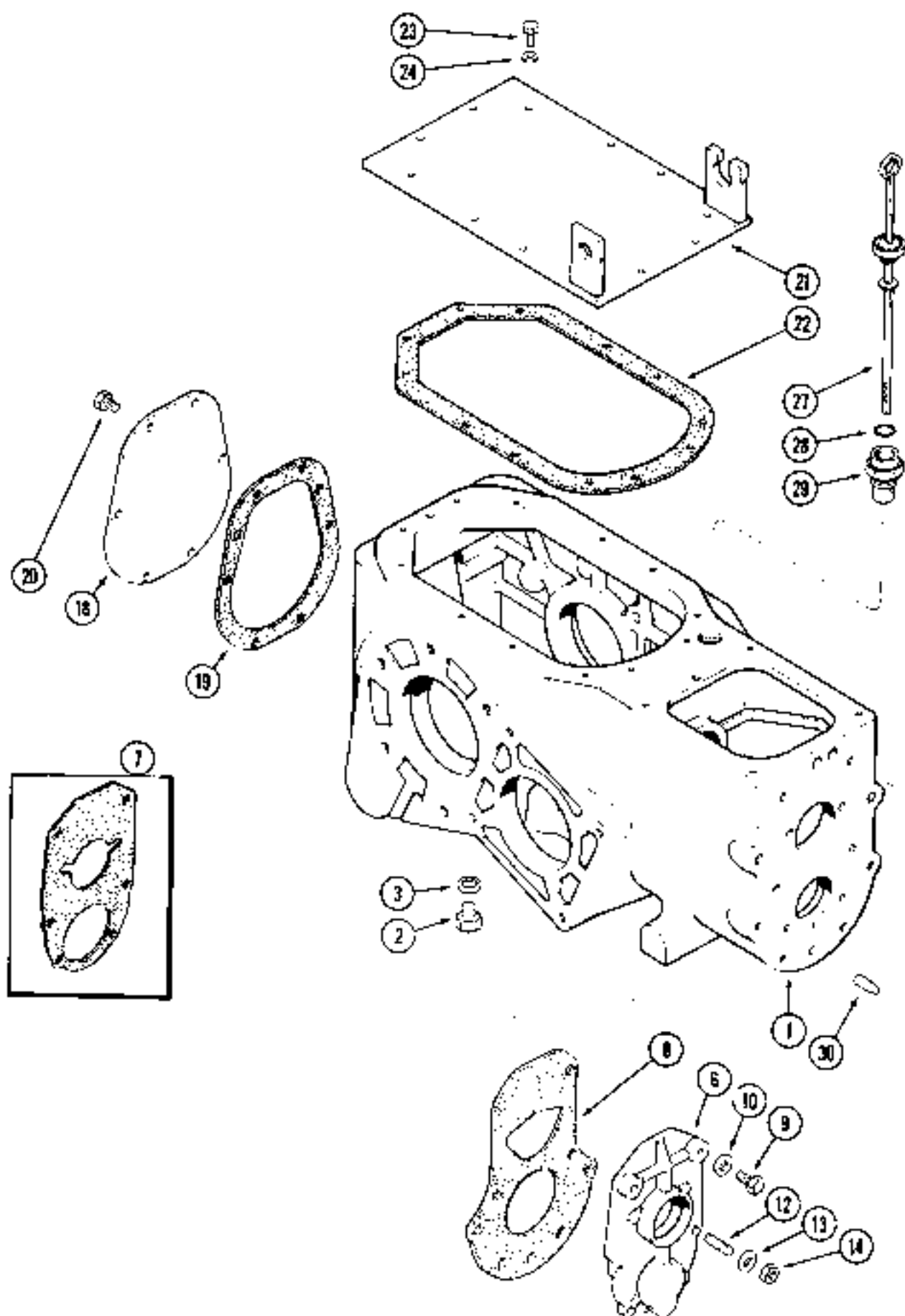
\*NOTE: D124605 Axle Assembly includes all parts on pages 177-185



**TRANSAXLE TRANSMISSION HOUSING  
PRIOR TO TRANSMISSION SERIAL NO. 16249203  
2 WHEEL DRIVE AND 4 WHEEL DRIVE**

REF.	PART NO.	DESCRIPTION	REQ'D
1	A 157561	HOUSING - transmission (Replaces A51952 and A156247)	1
2	A 140222	PLUG - drain, transmission housing	1
3	A 58608	GASKET - drain plug	1
6	A 51953	COVER - transmission housing, rear	1
7	G 46849	GASKET - rear cover to transmission housing	1
8	13- 830	BOLT - hex, 1/2 NC x 1 inch	2
9	92- 8	WASHER - lock, 1/2 inch	2
12	A 29717	STUD - center, 1-1/2 inch	2
12	G 10710	STUD - bottom, 1-3/4 inch	2
13	92- 6	WASHER - lock, 3/8 inch	4
14	129- 123	NUT - hex, 3/8 inch NF	4
18	A 39105	COVER - transmission housing, front	1
19	G 10447	GASKET - front cover to transmission housing (See Note)	1
20	13- 612	BOLT - hex, 3/8 NC x 3/4 inch	6
21	A 155700	COVER - transmission housing, top	1
22	A 152450	GASKET - top cover to transmission housing	1
23	26- 616	BOLT - hex, 3/8 NC x 1 inch	10
24	A 140282	WASHER - hardened, cover bolt	10
27	A 154967	DIPSTICK ASSEMBLY - oil gauge	1
	F 62075	O-RING	1
29	A 154850	TUBE - dipstick and oil filler	1

NOTE PRODUCTION HOUSING MAY NOT HAVE A COVER GASKET IF REAR HOUSING COVER IS REMOVED, INSTALL A GASKET PRIOR TO REASSEMBLY.

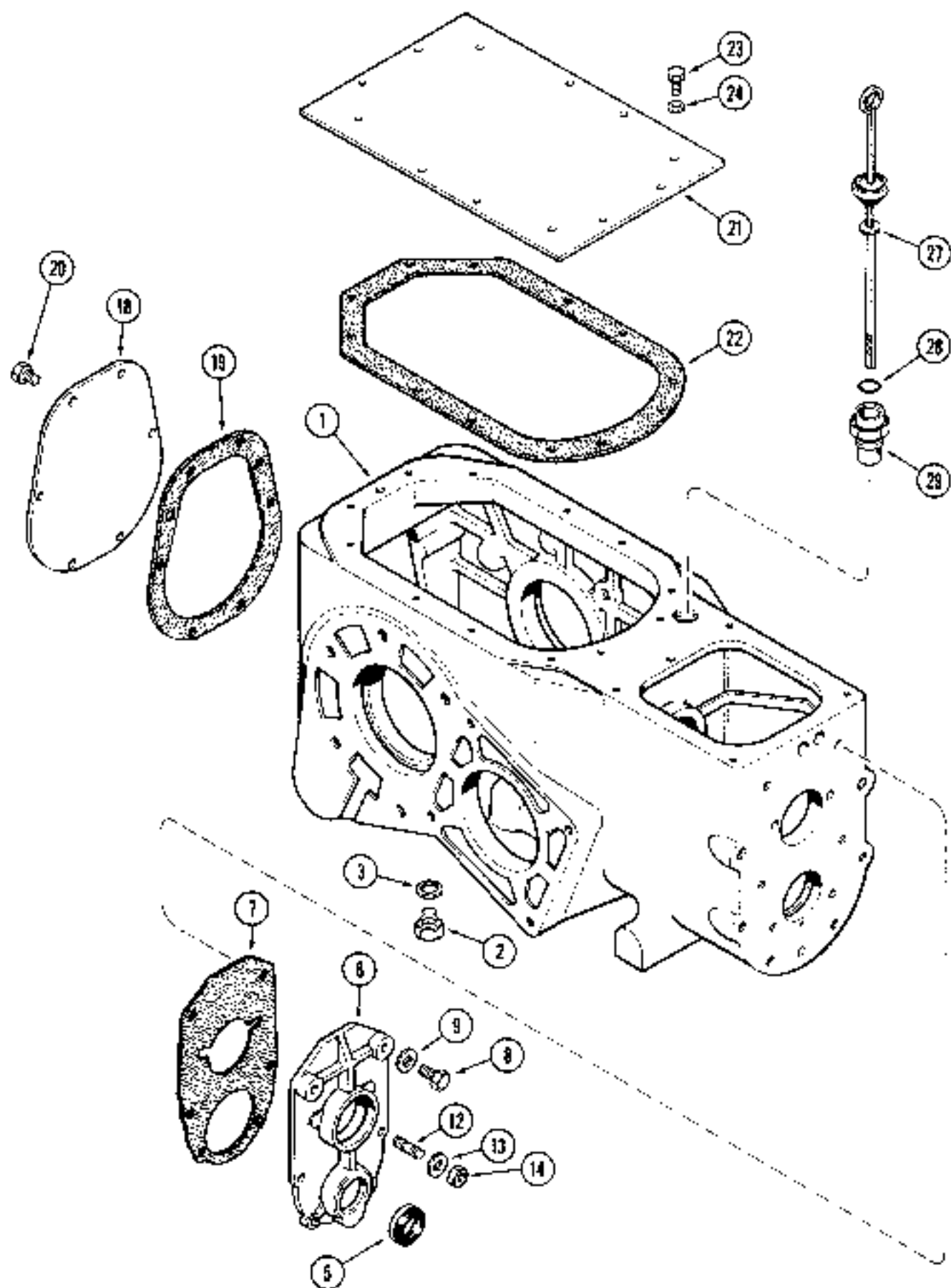


**TRANSAXLE TRANSMISSION HOUSING  
TRANSMISSION SERIAL NO. 16249203 TO SERIAL NO. 16270318  
2 WHEEL DRIVE AND 4 WHEEL DRIVE**

REF.	PART NO	DESCRIPTION	REQ'D.
1	A 157659	HOUSING - transmission	1
2	A 140222	PLUG - drain, transmission housing	1
3	A 58608	GASKET - drain plug	1
6	A 154308	COVER - transmission housing, front	1
7	G 46849	GASKET - front cover to transmission housing (2 wheel drive only)	1
8	A 156248	GASKET - front housing (4 wheel drive only)	1
9	13- 830	BOLT - hex, 1/2 NC x 1 inch (2 used for 2 wheel drive)	4
10	195- 533	WASHER - flat, 17/32 x 1-1/16 x 7/64 inch (14 x 27 x 3 mm) 2 used for 2 wheel drive)	4
12	A 29717	STUD - center, 3/8 NC - NF x 1-1/2 inch (2 wheel drive only)	2
12	G 10710	STUD - bottom, 3/8 NC - NF x 1-3/4 inch	2
13	195- 525	WASHER - flat, 13/32 x 13/16 x 1/16 inch (10 x 21 x 2 mm)	4
14	129- 123	NUT - hex, 3/8 inch NF	4
18	A 39105	COVER - rear, transmission housing	1
19	G 10447	GASKET - rear cover to transmission housing (See Note)	1
20	113- 206	BOLT - hex, 3/8 NC x 3/4 inch	6
21	A 154625	COVER - rear, transmission housing top	1
22	A 153777	GASKET - top cover to transmission housing	1
23	26- 616	BOLT - hex, 3/8 NC x 1 inch (Grade 8)	10
24	A 140282	WASHER - cover bolt, hardened	10
27	A 154967	DIPSTICK ASSEMBLY - oil gauge	1
28	F 62075	O-RING - dipstick	1
29	A 154850	TUBE - dipstick and oil filter	1
30	A 24540	PIN - dowel, transfer housing locating (4 wheel drive only)	2

**NOTE:** IF CASE INSTALLED HOUSING MAY NOT HAVE A COVER GASKET. IF REAR HOUSING COVER IS REMOVED, INSTALL A GASKET PRIOR TO REASSEMBLY

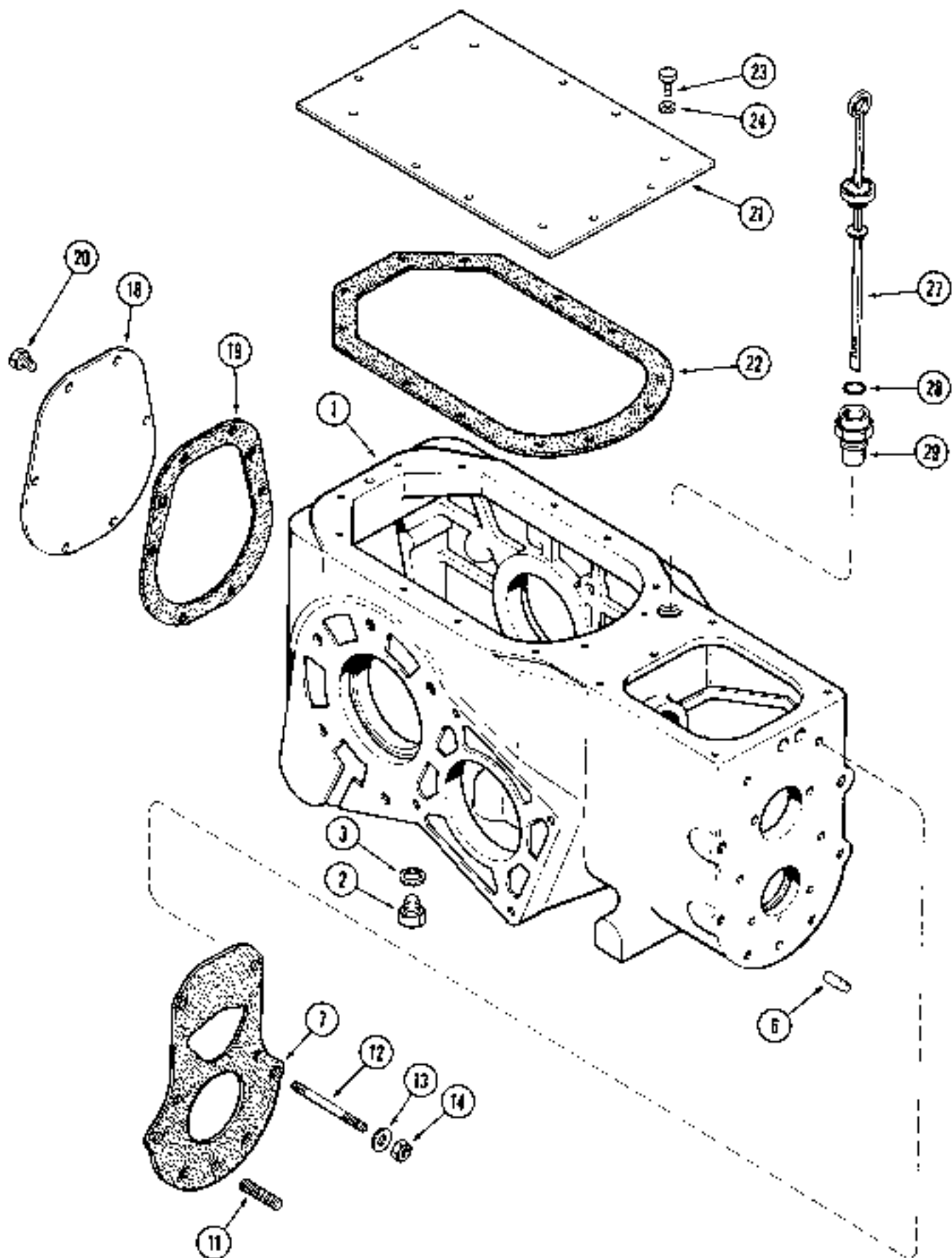




**TRANSAXLE TRANSMISSION HOUSING  
TWO WHEEL DRIVE  
TRANSMISSION SERIAL NO. 16270319 AND AFTER**

REF.	PART NO	DESCRIPTION	REQ'D.
1	A 157659	HOUSING - transmission	1
2	A 140222	PLUG - drain, transmission housing	1
3	A 58608	GASKET - drain plug	1
5	A 179056	SEAL - oil	1
6	A 168851	COVER - transmission housing, front	1
7	G 16849	GASKET - front cover to transmission housing	1
8	13- 830	BOLT - hex, 1/2 NC x 1 inch	2
9	195- 533	WASHER - flat, 17/32 x 1-1/16 x 7/64 inch (14 x 27 x 3 mm)	2
12	A 29717	STUD - cover, center, 1-1/2 inch	2
12	G 10710	STUD - cover, bottom, 1-3/4 inch	2
13	195- 525	WASHER - flat, 13/32 x 13/16 x 1/16 inch (10 x 21 x 2 mm)	4
14	129- 123	NUT - hex 3/8 inch NF	4
18	A 39105	COVER - transmission housing, rear	1
19	G 10447	GASKET - rear cover to transmission housing (See Note)	1
20	13- 612	BOLT - hex, 3/8 NC x 3/4 inch	6
21	A 153744	COVER - transmission housing, top, rear	1
22	A 153777	GASKET - top cover to transmission housing	1
23	26- 616	BOLT - hex, 3/8 NC x 7/8 inch (Grade B)	10
24	A 140282	WASHER - cover bolt, hardened	10
27	A 154967	DIPSTICK - oil gauge	1
28	A 42597	O-RING - dipstick	1
29	A 154850	TUBE - dipstick and oil filler	1

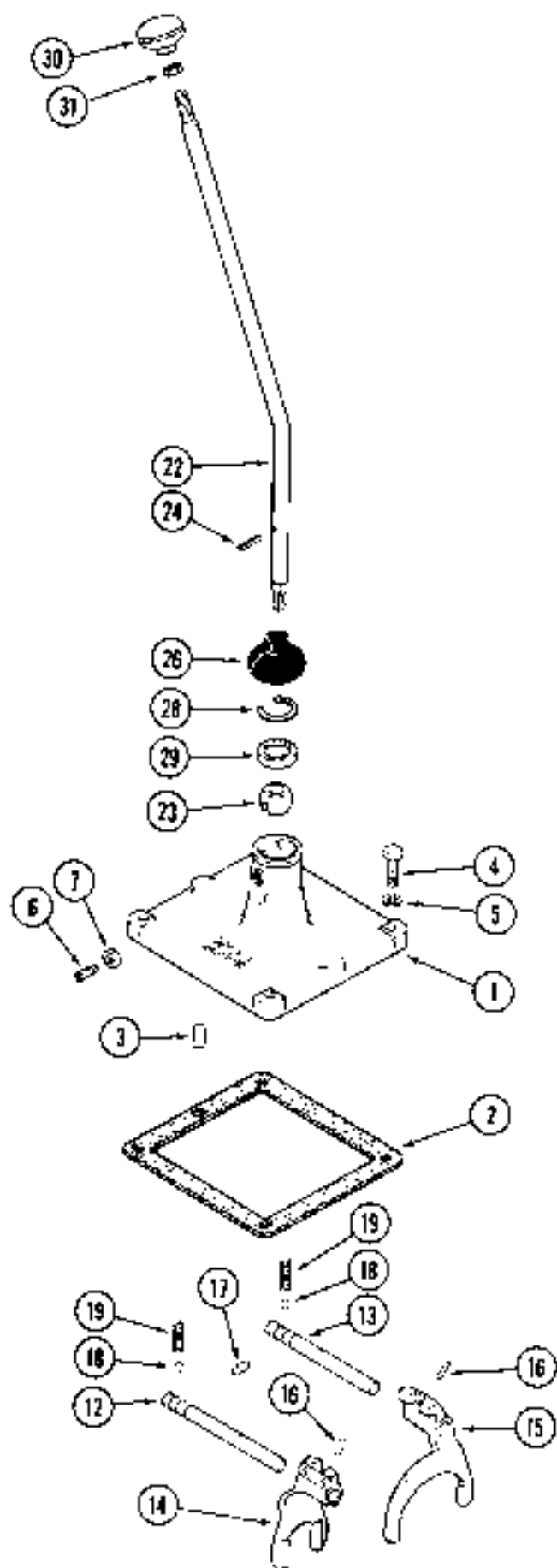
**NOTE:** IN CASE INSTALLED HOUSING MAY NOT HAVE A COVER GASKET. IF REAR HOUSING COVER IS REMOVED, INSTALL A GASKET PRIOR TO REASSEMBLY



**TRANSAXLE TRANSMISSION HOUSING  
FOUR WHEEL DRIVE  
TRANSMISSION SERIAL NO. 16270319 AND AFTER**

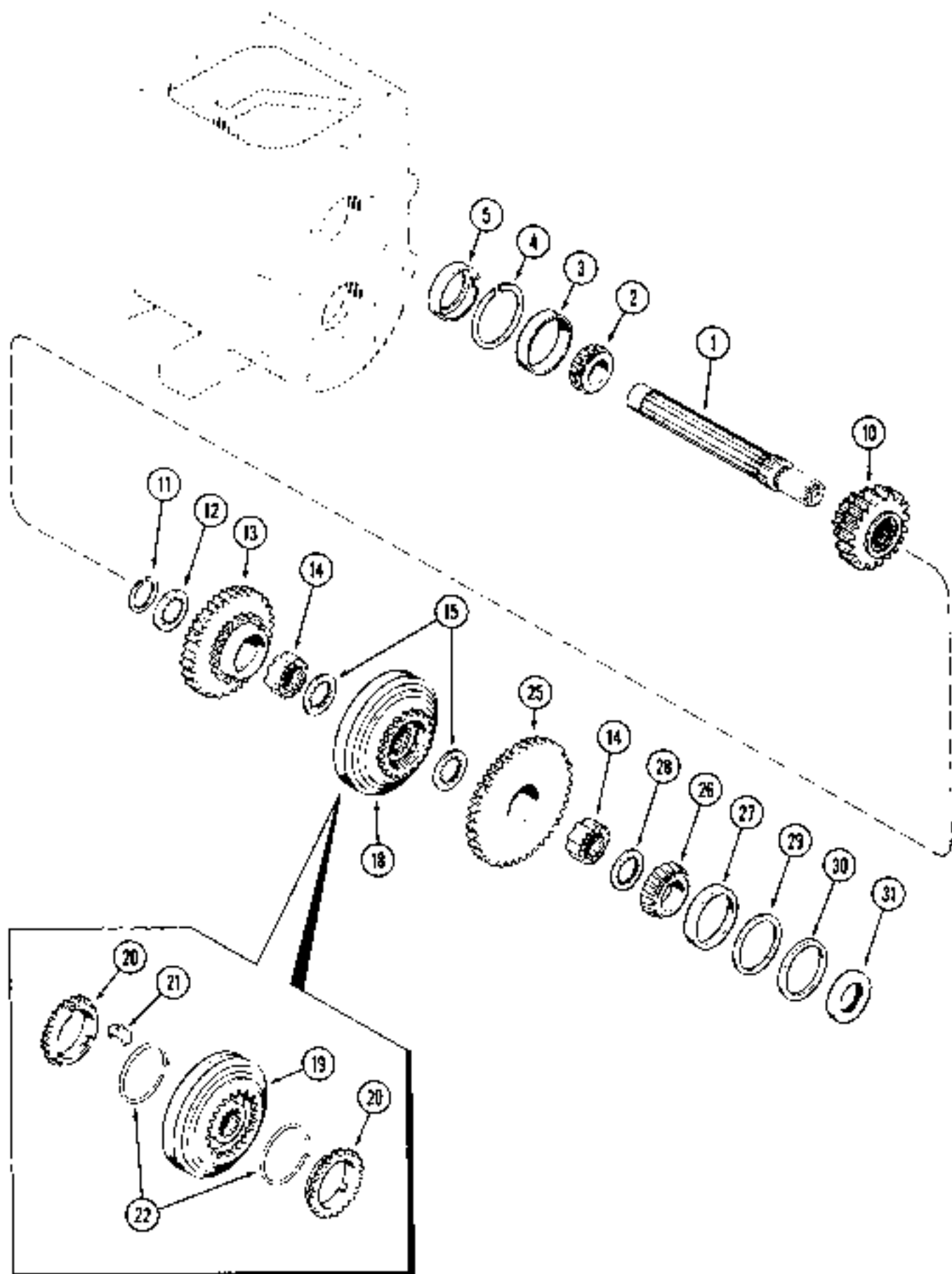
REF.	PART NO	DESCRIPTION	REQ'D.
1	A 157659	HOUSING - transmission	1
2	A 140222	PLUG - drain, transmission housing	1
3	A 58608	GASKET - drain plug	1
6	A 29540	PIN - dowel, locating	1
7	A 156248	GASKET - front cover to transmission housing	1
11	A 157625	STUD - front mount, 2-1/2 inch	2
12	A 153248	STUD - cover, center, 4-13/16 inch	2
13	92- 6	WASHER - lock, 3/8 inch	2
14	25- 106	NUT - hex, 3/8 inch NC	2
18	A 39105	COVER - transmission housing, rear	1
19	G 10447	GASKET - rear cover to transmission housing (See Note)	1
20	13- 612	BOLT - hex, 3/8 NC x 3/4 inch	6
21	A 153744	COVER - transmission housing, top, rear	1
22	A 153777	GASKET - top cover to transmission housing	1
23	26- 616	BOLT - hex, 3/8 NC x 1 inch (Grade 8)	11
24	A 140282	WASHER - cover bolt - hardened	10
27	A 154967	DIPSTICK ASSEMBLY - oil gauge	1
28	A 42597	O-RING - dipstick	1
29	A 154850	TUBE - dipstick and oil filler	1

**NOTE:** IF CASE INSTALLED HOUSING MAY NOT HAVE A COVER GASKET. IF REAR HOUSING COVER IS REMOVED, INSTALL A GASKET PRIOR TO REASSEMBLY



## TRANSAXLE SHIFTER MECHANISM

REF	PART NO	DESCRIPTION	REQ'D
1	A 138312	COVER - shift control .....	1
2	G 10342	GASKET - cover to transmission housing .....	1
3	138- 245	PIN - roll, 1/2 x 7/8 inch [13 x 22 mm] .....	1
4	13- 624	BOLT - hex, 3/8 NC x 1-1/2 inch .....	4
5	92- 6	WASHER - lock, 3/8 inch .....	4
6	G 15468	SCREW - sel, 5/16 inch NC .....	1
7	25- 145	NUT - hex jam lock, 5/16 inch NC .....	1
12	A 138313	RAIL - shifter, first and second gear .....	1
13	A 140578	RAIL - shifter, third and fourth gear .....	1
14	A 51964	FORK ASSEMBLY - shift, first and second gear .....	1
15	A 150726	FORK - shifter, third and fourth gear .....	1
16	138- 2009	PIN - spirol, 3/16 x 1 -inch .....	2
17	A 29060	PLUG - interlock, shifter rails .....	1
18	211- 28	BALL - detent, 13/32 inch diameter (10 mm) .....	2
19	G 47039	SPRING - tension, detent ball .....	2
22	A 154286	LEVER ASSEMBLY - shift, transmission .....	1
23	A 144397	BALL - lever .....	1
24	A 156515	PIN - groove, lever ball .....	1
26	A 26956	CAP - dust .....	1
28	A 26836	RING - snap .....	1
29	A 7923	SEAT - lever, shift .....	1
30	D 69105	KNOB - lever, shift .....	1
31	129- 146	NUT - hex jam, 1/2 inch NC .....	1

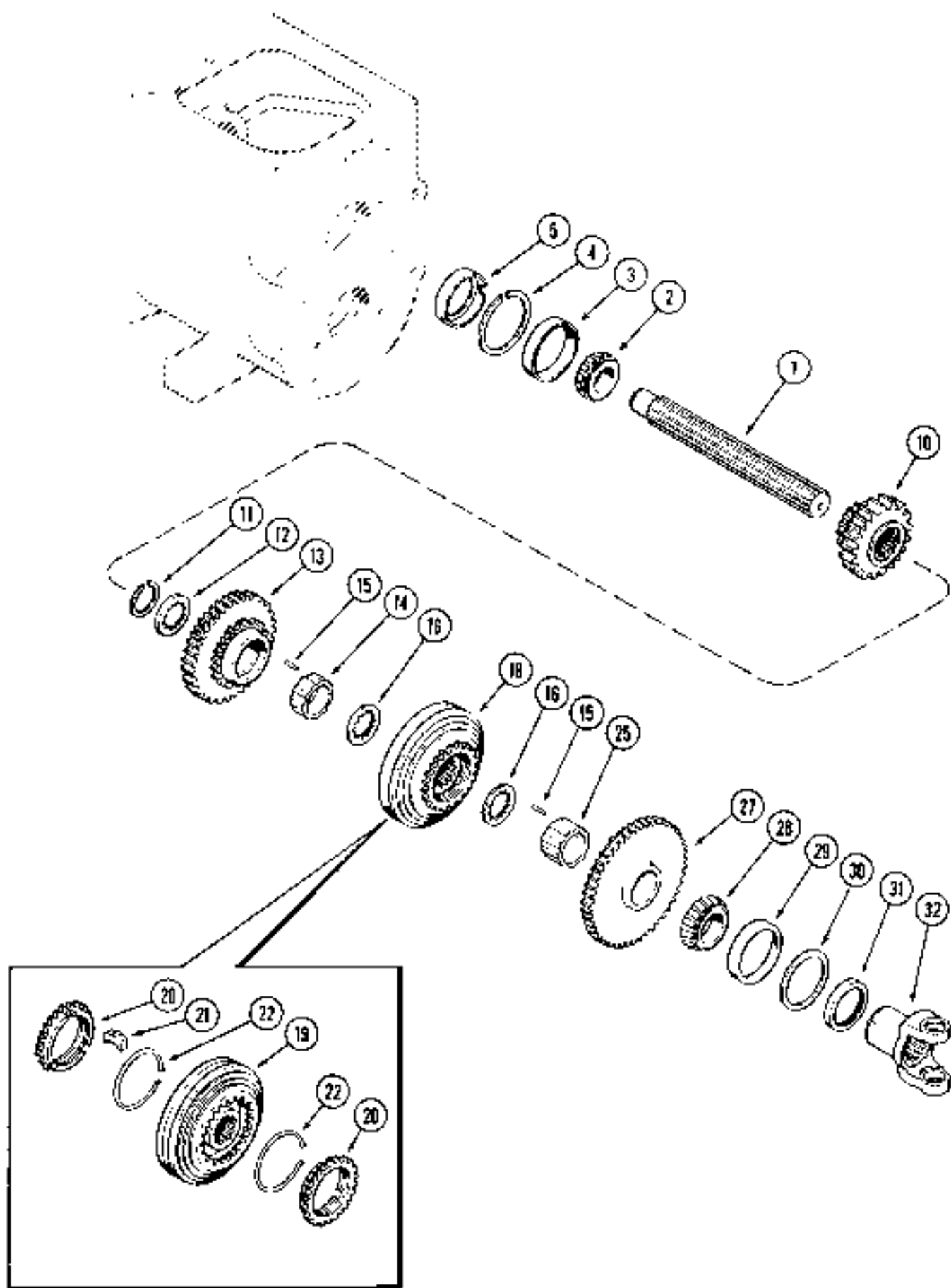


**TRANSAXLE MAINSHAFT  
PRIOR TO TRANSMISSION SERIAL NO. 16249203  
2 AND 4 WHEEL DRIVE**

REF.	PART NO.	DESCRIPTION	REQ'D
1	A 148508	MAINSHAFT - transaxle .....	1
2	T 20939	CONE - bearing, front, 1-1/4 inch ID (32 mm) .....	1
3	A 29977	CUP - bearing, front, 2-3/4 inch OD (70 mm) .....	1
4	A 29971	RING - snap, front bearing retaining .....	1
5	G 10816	CUP - oiling, mainshaft, front .....	1
10	A 168172	GEAR - sliding, first and second (16 and 25 external and internal teeth) (Replaces A51957) .....	1
11	A 26840	RING - snap, thrust washer and gear retaining .....	1
12	A 140239	COLLAR - thrust, third and fourth gears (24 internal teeth) 3/16 and 1/8 inch step dimension (5 and 3 mm) .....	1
13	A 138597	GEAR - sliding, third (27 and 35 external teeth) .....	1
14	A 51956	BUSHING - third and fourth gears (24 internal teeth) .....	2
15	A 138572	WASHER - thrust, third and fourth gears 1/8 inch thickness with 24 internal teeth (3 mm) .....	2
18	A 138656	SYNCHRONIZER ASSEMBLY - mainshaft .....	1
19	NSS	HUB AND SLEEVE ASSEMBLY - (Reference No. A45407) .....	1
20	A 45568	RING - blocking (Replaces A42252) .....	2
21	G 46078	PLATE - shifter .....	3
22	A 40766	SPRING - lock ring .....	2
25	A 148194	GEAR - sliding, fourth (27 and 44 external teeth) .....	1
26	G 10424	CONE - bearing, rear, 1-9/16 inch ID (40 mm) .....	1
27	G 10426	CUP - bearing, rear, 2-7/8 inch OD (73 mm) .....	1
28	A 136386	COLLAR - thrust, rear bearing, 3/16 inch thickness (5 mm) with 24 internal teeth .....	1
29	A 51527	SHIM - rear bearing, 0.035 inch (0.89 mm) .....	UAR
29	G 10341	SHIM - rear bearing, 0.005 inch (0.13 mm) ..	UAR
29	G 10340	SHIM - rear bearing, 0.007 inch (0.18 mm) .....	UAR
30	A 39184	COLLAR - pilot, rear cover .....	1
31	G 10422	SEAL - oil, rear (Order A155950) .....	1

REFERENCE NUMBERS IN DESCRIPTION ARE FOR CARE'S USE  
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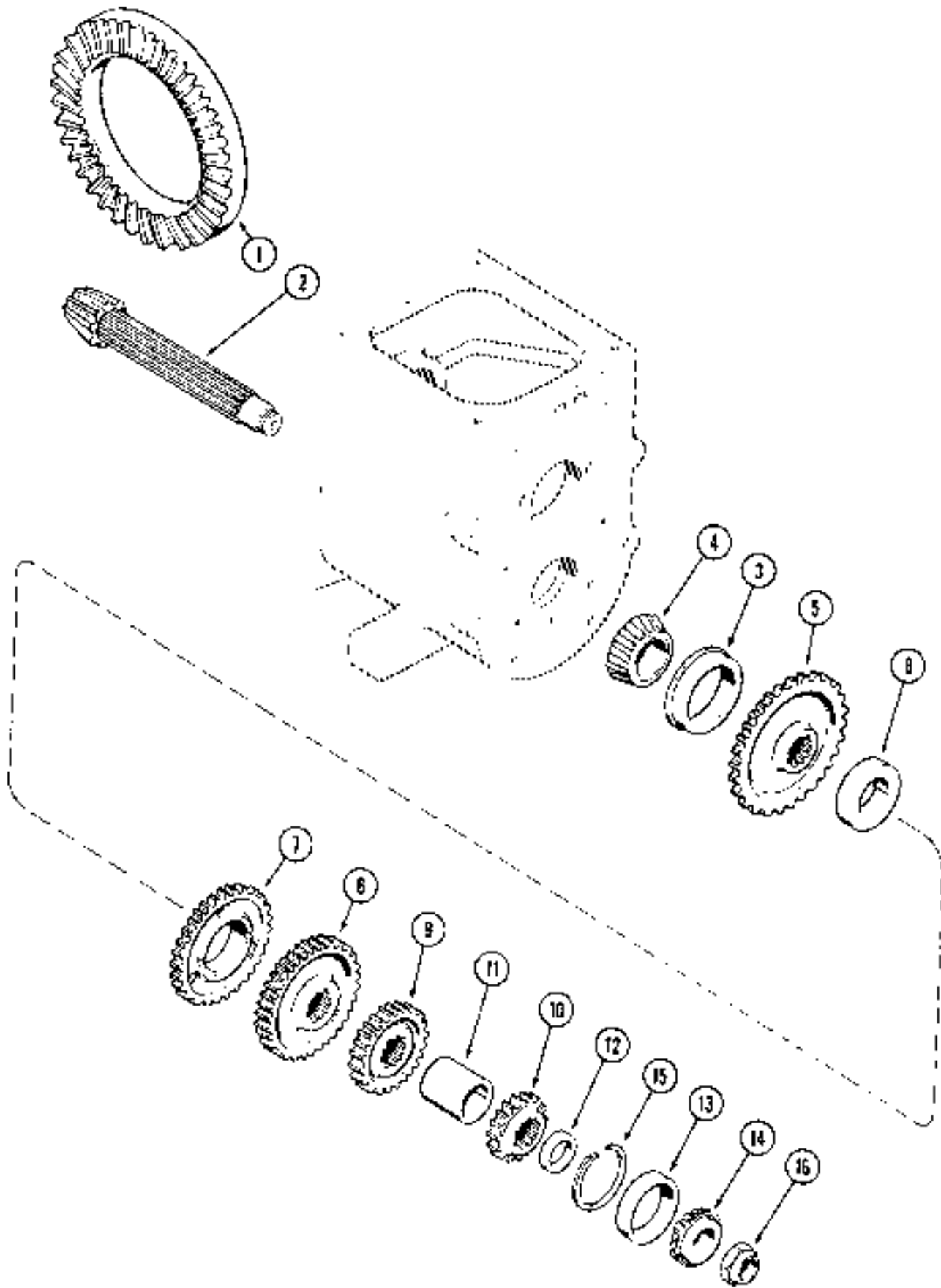




**TRANSAXLE MAINSHAFT  
TRANSMISSION SERIAL NO. 16249203 AND AFTER  
2 AND 4 WHEEL DRIVE**

REF	PART NO	DESCRIPTION	REQ D
1	A 168330	MAINSHAFT - transaxle .....	1
2	T 20939	CONE - bearing, rear, 1-1/4 inch ID (32 mm) .....	1
3	A 29977	CUP - bearing, rear, 2-3/4 inch OD (70 mm) .....	1
4	A 29971	RING - snap, rear bearing retaining .....	1
5	G 10616	CUP - oiling, mainshaft, rear .....	1
10	A 168172	GEAR - sliding, first and second (16 and 25 external and 24 internal teeth) ....	1
11	A 26946	RING - snap, gear retaining .....	1
12	A 140239	COLLAR - thrust, third and fourth gears (24 internal teeth) .....	1
13	A 136597	GEAR - sliding, third (27 and 35 external teeth) .....	1
14	A 150317	BUSHING - third gear (24 internal teeth) .....	1
15	A 168375	PIN - bushing .....	1
16	A 157470	WASHER - thrust, third and fourth gears 1/8 inch (3 mm) thick with 24 internal teeth .....	2
18	A 138655	SYNCHRONIZER ASSEMBLY - mainshaft .....	1
19	NSS	HUB AND SLEEVE ASSEMBLY - (Reference No. G45027) .....	1
20	A 45568	RING - blocking .....	2
21	G 46078	PLATE - shifter .....	3
22	L 33396	SPRING - lock ring .....	2
25	A 150318	BUSHING - fourth gear .....	1
27	A 154650	GEAR - sliding, fourth (27 and 44 external teeth) .....	1
28	H 753566	CONE - bearing, front, 1-9/16 inch ID (40 mm) .....	1
29	H 753574	CUP - bearing, front, 2-7/8 inch OD (73 mm) .....	1
30	A 51527	SHIM - front bearing, 0.035 inch (0.89 mm) .....	UAR
30	G 10341	SHIM - front bearing, 0.005 inch (0.13 mm) .....	UAR
30	G 10340	SHIM - front bearing, 0.007 inch (0.18 mm) .....	UAR
31	A 154253	SEAL - oil, front (2 wheel drive only) .....	1
32	N 6834	YOKE - power input .....	1

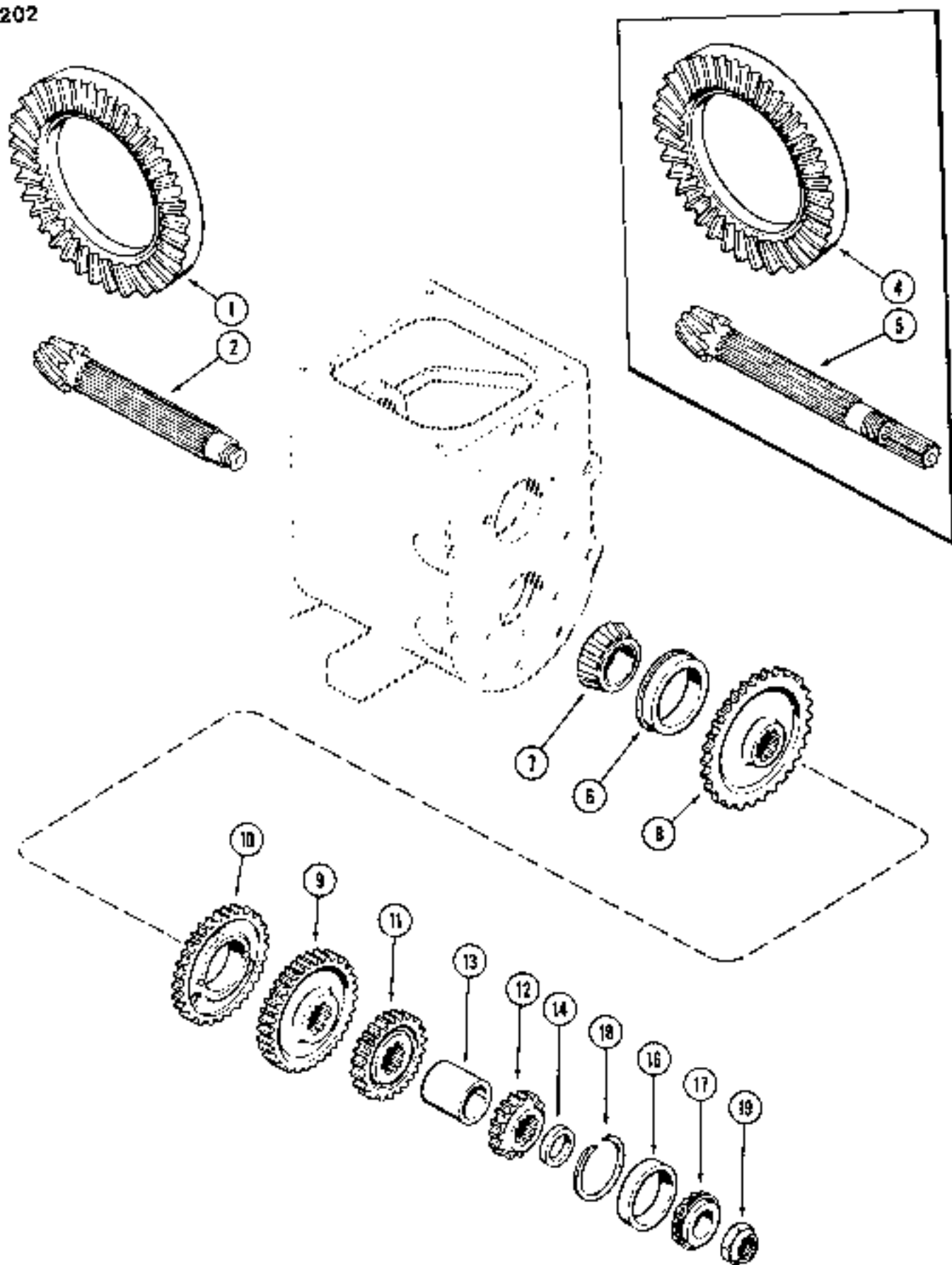
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**TRANSAXLE COUNTERSHAFT  
PRIOR TO TRANSMISSION SERIAL NO. 16249203  
2 AND 4 WHEEL DRIVE**

REF.	PART NO.	DESCRIPTION	REQ'D
	A 50996	PINION AND RING GEAR - transaxle (Matched set) .....	1
1	NSS	GEAR - ring (rivet type) (Reference No. A146155) .....	1
2	NSS	PINION - bevel, 12 inch long (305 mm) (Reference No. A146154) .....	1
3	A 30115	CUP - bearing front, with snap ring, 3-1/2 inch OD (89 mm) .....	1
4	A 30116	CONE - bearing front, 1-5/8 inch ID (41 mm) (Order D44321) .....	1
5	A 38157	GEAR - first (47 external and 10 internal teeth) .....	1
6	A 51961	GEAR - second (38 external and 10 internal teeth) .....	1
7	A 51962	GEAR - oil slinger (38 external teeth) .....	1
8	A 138847	SPACER - first and second gear, 3 inch (76 mm) OD .....	1
9	A 51960	GEAR - third (28 external and 10 internal teeth) .....	1
10	A 150248	GEAR - fourth (19 external and 10 internal teeth) .....	1
11	A 51958	SPACER - third and fourth gears, 2-5/16 inch (59 mm) OD .....	1
12	A 38751	SPACER - thrust, 0.254 inch (6.46 mm) .....	UAR
12	A 38752	SPACER - thrust, 0.244 inch (6.20 mm) .....	UAR
12	A 38753	SPACER - thrust, 0.239 inch (6.08 mm) .....	UAR
12	A 38754	SPACER - thrust, 0.234 inch (5.95 mm) .....	UAR
12	A 38755	SPACER - thrust, 0.229 inch (5.82 mm) .....	UAR
12	A 38756	SPACER - thrust, 0.224 inch (5.70 mm) .....	UAR
12	A 38757	SPACER - thrust, 0.219 inch (5.58 mm) .....	UAR
12	A 38758	SPACER - thrust, 0.214 inch (5.44 mm) .....	UAR
12	A 38760	SPACER - thrust, 0.218 inch (5.55 mm) .....	UAR
12	A 38759	SPACER - thrust, 0.209 inch (5.32 mm) .....	UAR
12	A 38761	SPACER - thrust, 0.204 inch (5.20 mm) .....	UAR
12	A 38762	SPACER - thrust, 0.199 inch (5.06 mm) .....	UAR
12	A 38763	SPACER - thrust, 0.194 inch (4.94 mm) .....	UAR
12	A 38764	SPACER - thrust, 0.189 inch (4.82 mm) .....	UAR
12	A 38765	SPACER - thrust, 0.184 inch (4.68 mm) .....	UAR
12	A 38766	SPACER - thrust, 0.179 inch (4.56 mm) .....	UAR
12	A 38767	SPACER - thrust, 0.174 inch (4.42 mm) .....	UAR
12	A 38768	SPACER - thrust, 0.169 inch (4.30 mm) .....	UAR
12	A 38769	SPACER - thrust, 0.164 inch (4.18 mm) .....	UAR
13	A 29977	CUP - bearing, rear, 2-3/4 inch OD (70 mm) .....	1
14	A 30072	CONE - bearing, rear, 13/16 inch ID (21 mm) .....	1
15	A 29971	RING - snap, rear bearing retaining .....	1
16	G 49010	NUT - adjusting countershaft .....	1

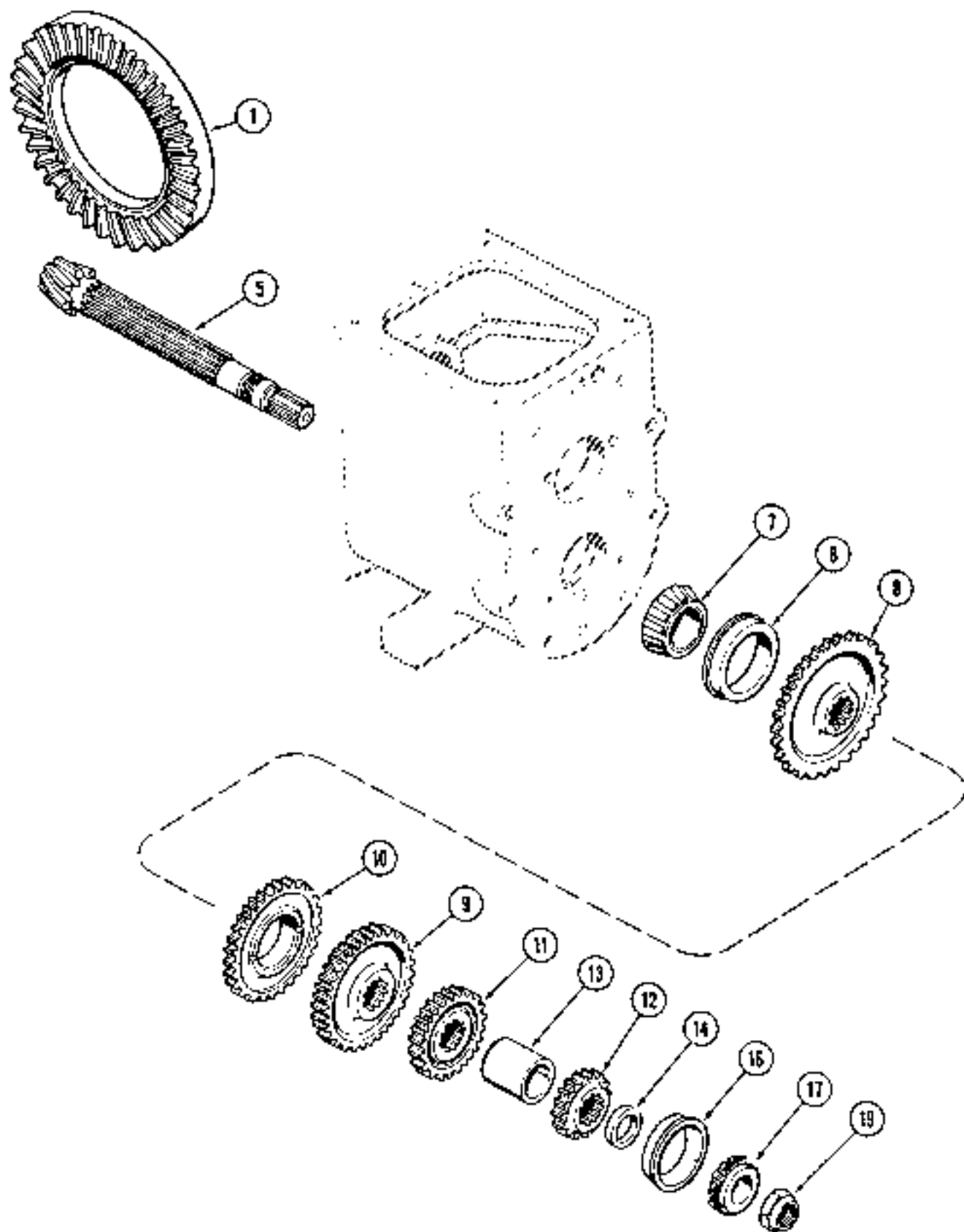
REFERENCE NUMBERS IN DESCRIPTION ARE FOR CARES USE ONLY AND CAN NOT BE ORDERED SEPARATELY



**TRANSAXLE COUNTERSHAFT**  
**TRANSMISSION SERIAL NO. 16249203 TO SERIAL NO. 16270318**  
**2 AND 4 WHEEL DRIVE**

REF	PART NO.	DESCRIPTION	REQ'D
	A 168102	PINION AND RING GEAR - 2 wheel drive (Matched set) . . . . .	1
1	NSS	GEAR - ring (Reference No. A168100) . . . . .	1
2	NSS	PINION - bevel (Reference No. A168101) . . . . .	1
	A 168108	PINION AND RING GEAR - 4 wheel drive (Matched set) . . . . .	1
4	NSS	GEAR - ring (Reference No. A168100) . . . . .	1
5	NSS	PINION - bevel (Reference No. A168101) . . . . .	1
6	A 153753	CUP - bearing, rear, with snap ring, 3-1/2 inch OD (89 mm) . . . . .	1
7	R 10276	CONE - bearing, rear, 1-5/8 inch ID (41 mm) . . . . .	1
8	A 153751	GEAR - first (47 external and 10 internal teeth) . . . . .	1
9	A 51961	GEAR - second (38 external and 10 internal teeth) . . . . .	1
10	A 157304	GEAR - u.l. slinger (38 external teeth) (Replaces A51962) . . . . .	1
11	A 51960	GEAR - third (28 external and 10 internal teeth) . . . . .	1
12	A 154649	GEAR - fourth (29 external and 10 internal teeth) . . . . .	1
13	A 51959	SPACER - third and fourth gears . . . . .	1
14	A 153776	SPACER - thrust, 0.250-0.258 inch (6.35-6.55 mm) (2 wheel drive only) . . . . .	UAB
14	A 153775	SPACER - thrust, 0.244 inch (6.20 mm) (2 wheel drive only) . . . . .	UAB
14	A 153774	SPACER - thrust, 0.239 inch (6.08 mm) (2 wheel drive only) . . . . .	UAB
14	A 153773	SPACER - thrust, 0.234 inch (5.95 mm) (2 wheel drive only) . . . . .	UAB
14	A 153772	SPACER - thrust, 0.229 inch (5.81 mm) (2 wheel drive only) . . . . .	UAB
14	A 153771	SPACER - thrust, 0.224 inch (5.71 mm) (2 wheel drive only) . . . . .	UAB
14	A 153770	SPACER - thrust, 0.219 inch (5.59 mm) (2 wheel drive only) . . . . .	UAB
14	A 153769	SPACER - thrust, 0.214 inch (5.41 mm) (2 wheel drive only) . . . . .	UAB
14	A 153754	SPACER - thrust, 0.210-0.218 inch (5.34-5.56 mm) . . . . .	UAB
14	A 153755	SPACER - thrust, 0.209 inch (5.31 mm) . . . . .	UAB
14	A 153756	SPACER - thrust, 0.204 inch (5.18 mm) . . . . .	UAB
14	A 153757	SPACER - thrust, 0.199 inch (5.08 mm) . . . . .	UAB
14	A 153758	SPACER - thrust, 0.194 inch (4.94 mm) . . . . .	UAB
14	A 153759	SPACER - thrust, 0.189 inch (4.81 mm) . . . . .	UAB
14	A 153760	SPACER - thrust, 0.184 inch (4.68 mm) . . . . .	UAB
14	A 153761	SPACER - thrust, 0.179 inch (4.57 mm) . . . . .	UAB
14	A 153762	SPACER - thrust, 0.174 inch (4.45 mm) . . . . .	UAB
14	A 153763	SPACER - thrust, 0.169 inch (4.30 mm) . . . . .	UAB
14	A 153764	SPACER - thrust, 0.164 inch (4.18 mm) . . . . .	UAB
16	A 179719	CUP - flanged bearing (Replaces A153748 and A153750) . . . . .	1
17	A 153749	CONE - bearing, rear, 1-5/16 inch ID (33 mm) . . . . .	1
19	G 49010	NUT - adjusting, countershaft - 2 wheel drive . . . . .	1

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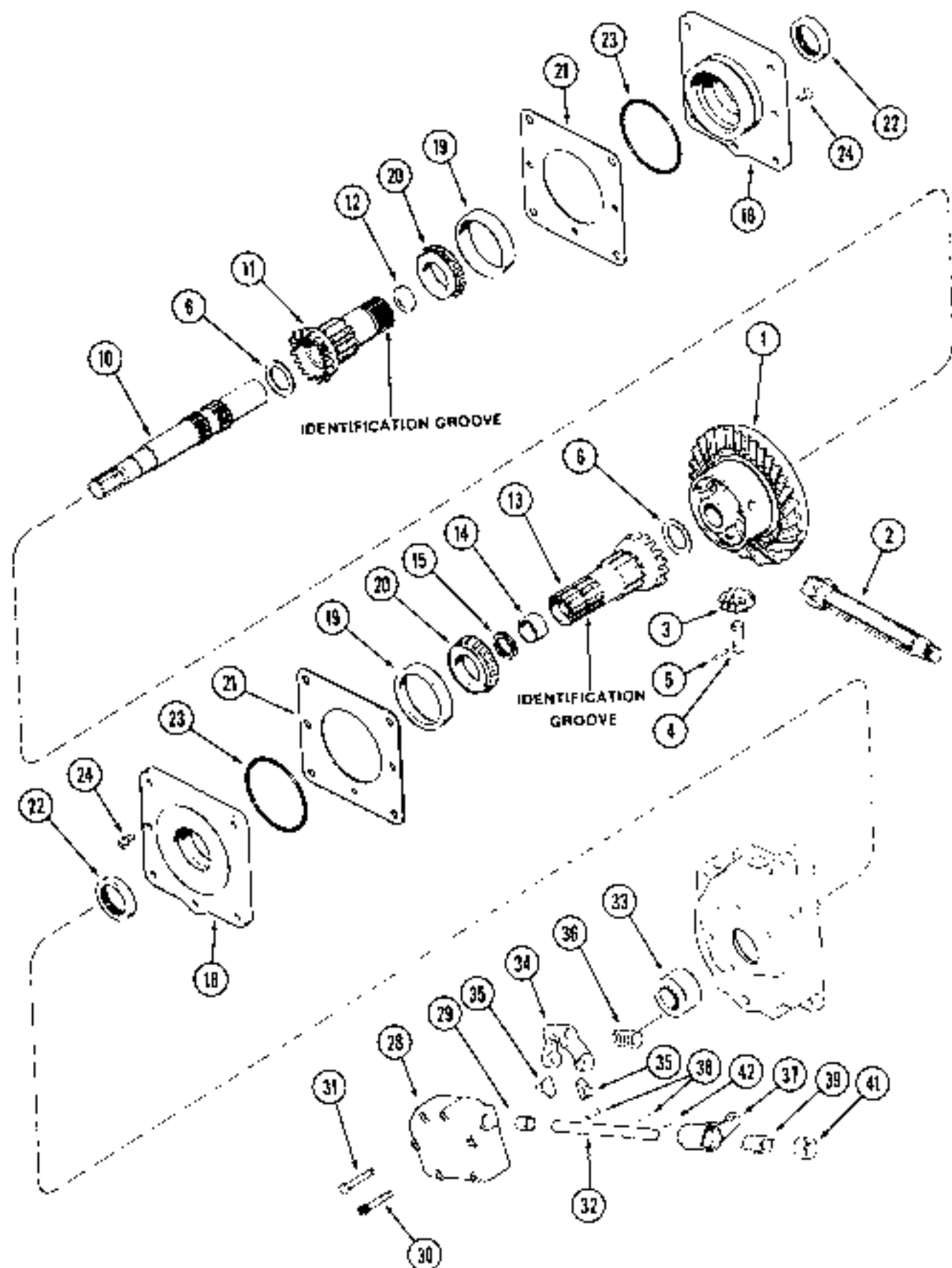


**TRANSAXLE COUNTERSHAFT  
2 AND 4 WHEEL DRIVE  
TRANSMISSION SERIAL NO. 16270319 AND AFTER**

REF	PART NO	DESCRIPTION	REQ'D
	A 168883	PINION AND RING GEAR - transaxle (Matched set) . . . . .	1
1	NSS	GEAR - ring (Reference No. A168100) . . . . .	1
5	NSS	PINION - bevel (Reference No. A168824) . . . . .	1
6	A 153753	CUP - bearing, rear, with snap ring, 3-1/2 inch OD (89 mm) . . . . .	1
7	P 10276	CONE - bearing, rear, 1-5/8 inch ID (41 mm) . . . . .	1
8	A 153751	GEAR - first (47 external and 10 internal teeth) . . . . .	1
9	A 51961	GEAR - second (38 external and 10 internal teeth) . . . . .	1
10	A 157304	GEAR - oil slinger (38 external teeth)(Replaces A51962) . . . . .	1
11	A 51860	GEAR - third (28 external and 10 internal teeth) . . . . .	1
12	A 154649	GEAR - fourth (29 external and 10 internal teeth) . . . . .	1
13	A 51959	SPACER - third and fourth gears . . . . .	1
14	A 179800	SPACER - thrust, 0.248-0.25 inch (6.30-6.35 mm) . . . . .	UAR
14	A 179798	SPACER - thrust, 0.245-0.243 inch (6.22-6.17 mm) . . . . .	UAR
14	A 179798	SPACER - thrust, 0.240-0.238 inch (6.10-6.05 mm) . . . . .	UAR
14	A 179797	SPACER - thrust, 0.235-0.233 inch (5.97-5.92 mm) . . . . .	UAR
14	A 179796	SPACER - thrust, 0.230-0.228 inch (5.84-5.79 mm) . . . . .	UAR
14	A 179795	SPACER - thrust, 0.225-0.223 inch (5.72-5.66 mm) . . . . .	UAR
14	A 179794	SPACER - thrust, 0.220-0.218 inch (5.59-5.54 mm) . . . . .	UAR
14	A 179793	SPACER - thrust, 0.215-0.213 inch (5.46-5.41 mm) . . . . .	UAR
14	A 179792	SPACER - thrust, 0.210-0.208 inch (5.33-5.28 mm) . . . . .	UAR
14	A 179791	SPACER - thrust, 0.205-0.203 inch (5.21-5.16 mm) . . . . .	UAR
14	A 179790	SPACER - thrust, 0.200-0.198 inch (5.08-5.03 mm) . . . . .	UAR
14	A 179789	SPACER - thrust, 0.195-0.193 inch (4.95-4.90 mm) . . . . .	UAR
14	A 179788	SPACER - thrust, 0.190-0.188 inch (4.83-4.78 mm) . . . . .	UAR
14	A 179787	SPACER - thrust, 0.185-0.183 inch (4.70-4.65 mm) . . . . .	UAR
14	A 179786	SPACER - thrust, 0.180-0.178 inch (4.57-4.52 mm) . . . . .	UAR
14	A 179785	SPACER - thrust, 0.175-0.173 inch (4.45-4.39 mm) . . . . .	UAR
14	A 179784	SPACER - thrust, 0.170-0.168 inch (4.32-4.27 mm) . . . . .	UAR
14	A 179783	SPACER - thrust, 0.165-0.163 inch (4.19-4.14 mm) . . . . .	UAR
16	A 179719	CUP - bearing . . . . .	1
17	A 153749	CONE - bearing, rear, 1-5/16 inch ID (33 mm) . . . . .	1
19	A 156260	NUT - adjusting, countershaft . . . . .	1

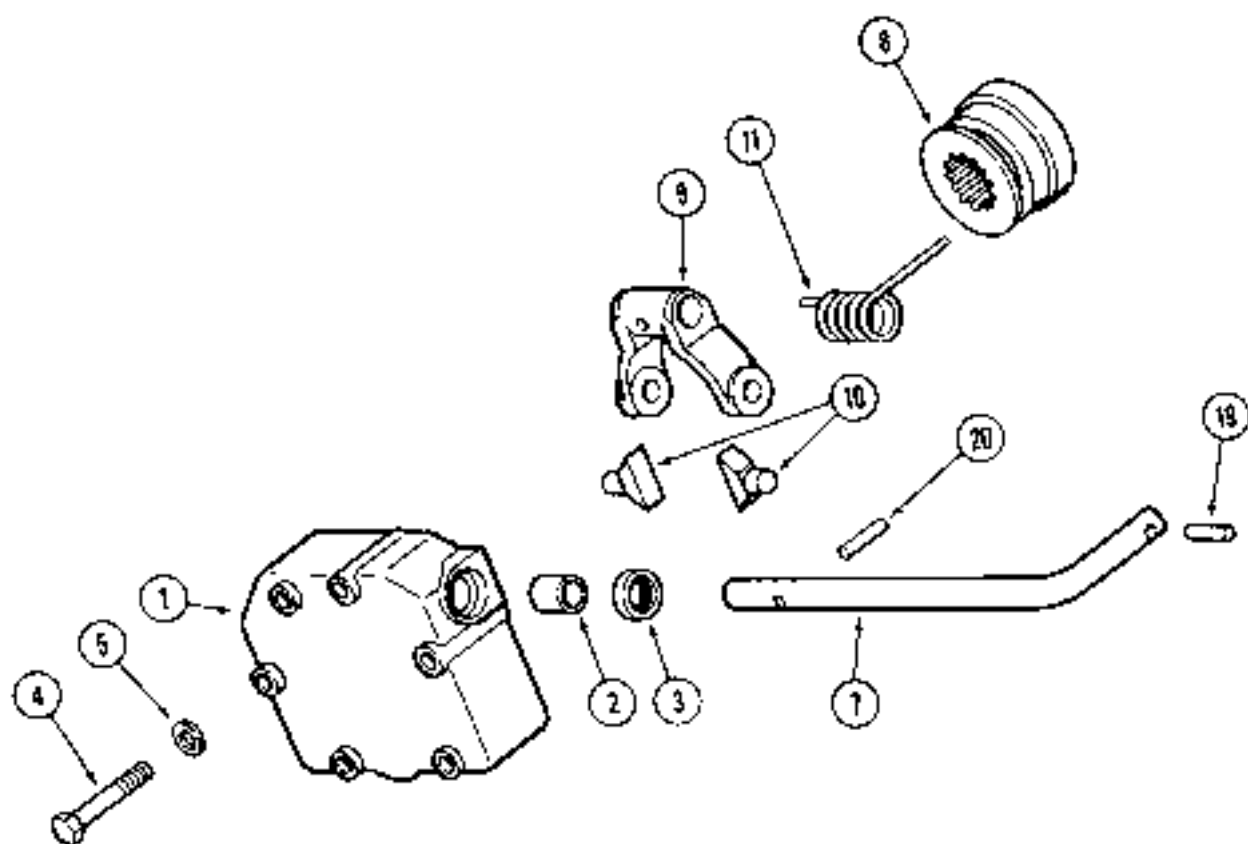
REFERENCE NUMBERS IN DESCRIPTION ARE FOR CARES USE  
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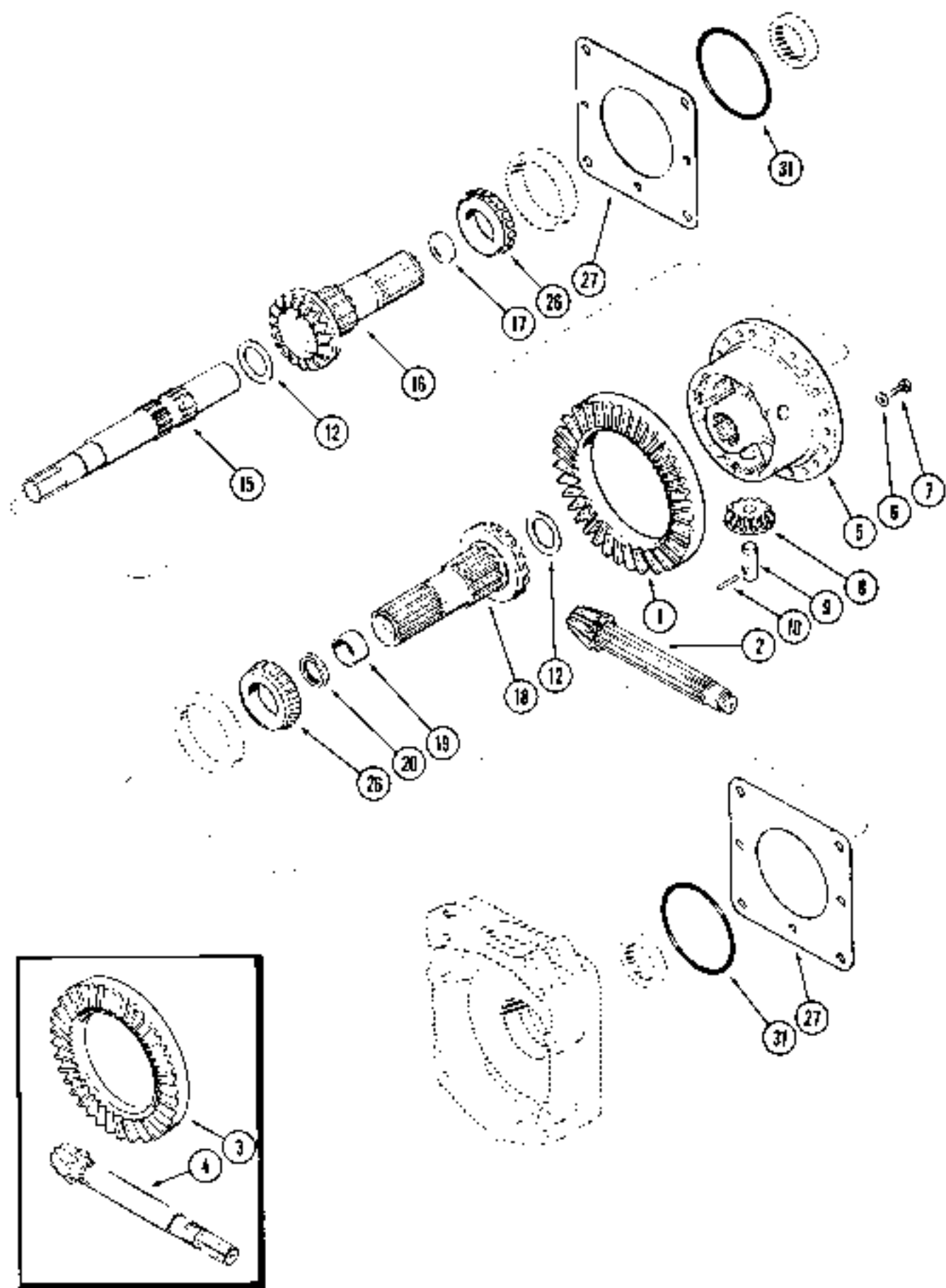
### TRANSAXLE DIFFERENTIAL AND LOCK PRIOR TO TRANSMISSION SERIAL NO. 16249203

REF	PART NO	DESCRIPTION	REQ'D
	A 50996	PINION AND RING GEAR - transaxle (Matched set)	1
1	NSS	GEAR - ring (rivet type)	1
2	NSS	PINION - bevel, 12 inch long (305 mm)	1
3	A 142676	GEAR - pinion	3
4	A 146541	PIN - pinion gear	3
5	A 140705	PIN - groove, 3/16 x 2 inch (5 x 51 mm)	3
6	A 39012	WASHER - thrust, ring gear, 0.089 inch (2.26 mm)	UAR
6	A 39007	WASHER - thrust, ring gear, 0.094 inch (2.40 mm)	UAR
6	A 39008	WASHER - thrust, ring gear, 0.099 inch (2.52 mm)	UAR
6	A 39009	WASHER - thrust, ring gear, 0.104 inch (2.66 mm)	UAR
6	A 39010	WASHER - thrust, ring gear, 0.109 inch (2.78 mm)	UAR
6	A 39011	WASHER - thrust, ring gear, 0.119 inch (3.04 mm)	UAR
10	A 144266	SHAFT - cross	1
11	A 144337	GEAR ASSEMBLY - side, right hand (identification groove on spline gear)	1
12	A 29902	PLUG - RH side gear, 1-5/8 inch expansion (41 mm)	1
13	A 144339	GEAR ASSEMBLY - side, left hand (identification groove on spline gear)	1
14	A 35921	BUSHING - LH side gear, 1-9/16 inch (40 mm) OD	1
15	A 49793	SEAL - oil, LH side gear, 1-5/8 inch (41 mm) OD	1
18	A 140869	CARRIER ASSEMBLY - side gear bearing	2
19	A 26744	CUP - bearing, side gear, 4-11/32 inch OD (110 mm)	1
20	A 30114	CONE - bearing, side gear, 2-1/4 inch ID (57 mm)	2
21	A 39289	SHIM - bearing carrier, 0.007 inch (0.20 mm)	UAR
21	C 10719	SHIM - bearing carrier, 0.005 inch (0.14 mm)	UAR
21	G 10720	SHIM - bearing carrier, 0.010 inch (0.25 mm)	UAR
22	A 33273	SEAL - oil carrier	2
23	G 10347	O-RING - carrier seal	2
24	171- 228	SCREW - flat head slotted, 3/8-10 x 1 inch	2
28	A 155606	COVER ASSEMBLY - lock (on LH brake housing)	1
29	A 35925	BUSHING - cover	1
30	61- 536	SCREW - hex socket head, 5/16 NC x 2-1/4 inch	1
31	113- 111	BOLT - hex, 5/16 NC x 2-1/2 inch	5
32	A 158394	SHAFT - actuating, 11-5/32 inch long (283 mm) (Replaces A148547)	1
33	A 158677	COLLAR - differential lock (Replaces A142029)	1
34	A 38749	LEVER - collar throw-out	1
35	A 65101	FINGERS - lever to collar	2
36	A 156559	SPRING - throwout lever	1
37	A 148426	LEVER - actuating	1
38	138- 96	PIN - roll, 3/16 x 1 inch	2
39	A 36446	SPRING - actuating lever	1
41	A 148134	RETAINER - actuating lever spring (with 2 holes)	1
42	138- 319	PIN - roll, 3/16 x 1-1/4 inch (5 x 32 mm)	1



**TRANSAXLE DIFFERENTIAL LOCK  
TRANSMISSION SERIAL NO. 16249203 AND AFTER  
2 AND 4 WHEEL DRIVE**

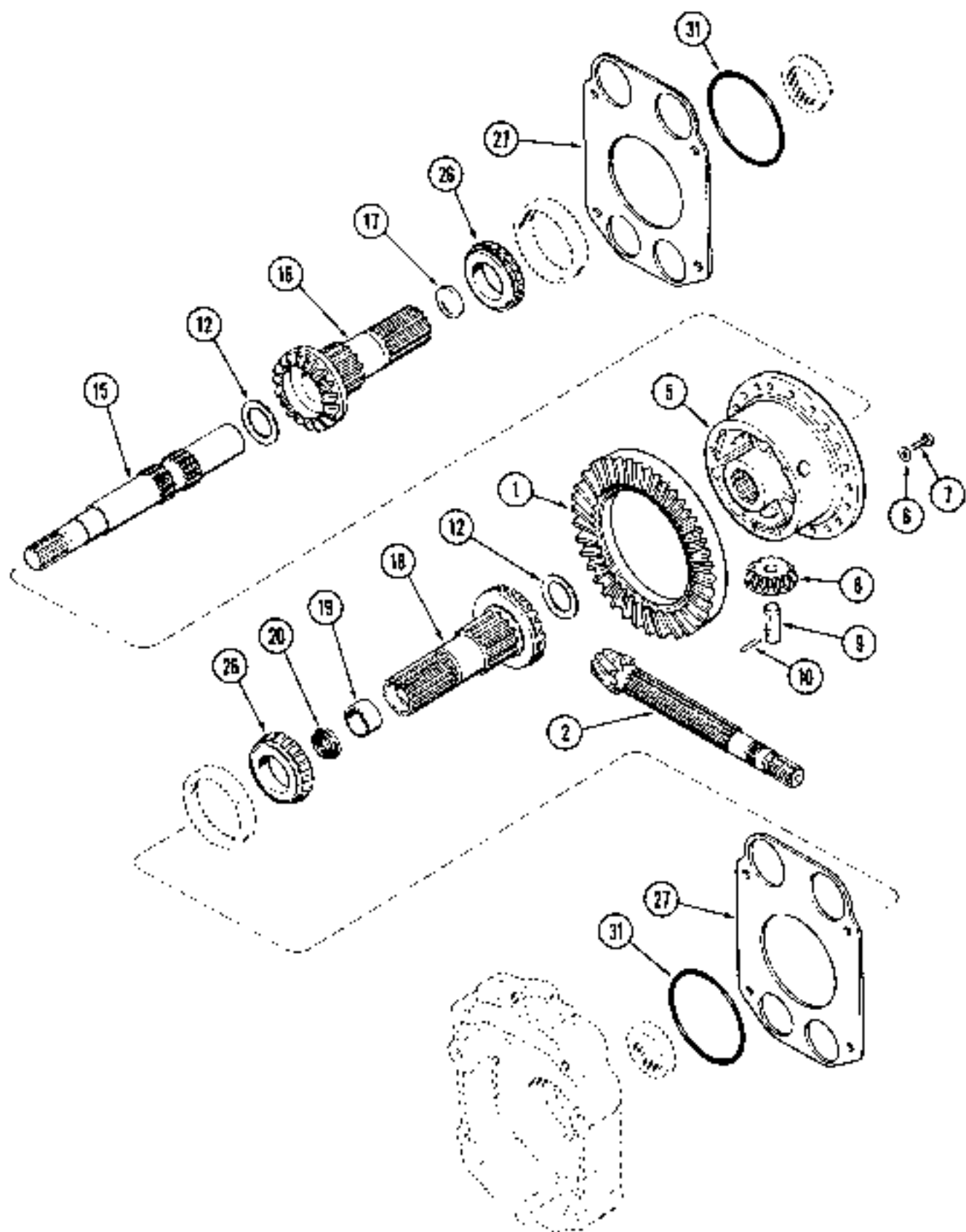
REF	PART NO.	DESCRIPTION	REQ'D
1	A 168525	COVER ASSEMBLY - lock (on RH brake housing) .....	1
2	B 1576R	BUSHING - cover .....	1
3	G 105700	SEAL - oil .....	1
4	113- 111	BOLT - hex, 5/16 NC x 2-1/2 inch .....	6
5	195- 103	WASHER - flat, 3/8 x 7/8 x 5/64 inch (10 x 22 x 2 mm) .....	6
7	A 157734	SHAFT - actuating .....	1
8	A 156373	COLLAR - differential lock .....	1
9	A 168524	LEVER - collar throw-out .....	1
10	A 65101	FINGERS - lever to collar .....	2
11	A 156553	SPRING - throw-out lever .....	1
19	138 319	PIN - roll, 3/16 x 1-1/4 inch .....	1
211	138- 95	PIN - roll, 3/16 x 1 inch .....	2



**TRANSAXLE DIFFERENTIAL**  
**TRANSMISSION SERIAL NO. 16249203 TO SERIAL NO. 16270318**  
**2 AND 4 WHEEL DRIVE**

REF	PART NO	DESCRIPTION	REQ'D.
	A 169102	PINION AND RING GEAR - transaxle, 2 wheel drive (Matched Set) . . . . .	1
1	NSS	GEAR - ring (Reference No. A169101) . . . . .	1
2	NSS	PINION - bevel (Reference No. A169101) . . . . .	1
	A 169108	PINION AND RING GEAR - 4 wheel drive (Matched Set) . . . . .	1
3	NSS	GEAR - ring (Reference No. A169101) . . . . .	1
4	NSS	PINION - bevel (Reference No. A169101) . . . . .	1
5	A 159506	WHEEL - center . . . . .	1
6	A 155847	WASHER - wheel bolt . . . . .	20
7	28- 614	BOLT - hex, 3/8 NF x 7/8 inch . . . . .	20
8	A 157462	GEAR - pinion . . . . .	3
9	A 153711	PIN - pin on gear . . . . .	3
10	A 140705	PIN - groove, 3/16 x 2 inch . . . . .	3
12	A 154141	WASHER - thrust center wheel, 0.079 inch (2.01 mm) . . . . .	UAR
12	A 153717	WASHER - thrust center wheel, 0.084 inch (2.13 mm) . . . . .	UAR
12	A 153712	WASHER - thrust center wheel, 0.089 inch (2.26 mm) . . . . .	UAR
12	A 153713	WASHER - thrust center wheel, 0.094 inch (2.40 mm) . . . . .	UAR
12	A 153714	WASHER - thrust center wheel, 0.099 inch (2.52 mm) . . . . .	UAR
12	A 153715	WASHER - thrust center wheel, 0.104 inch (2.66 mm) . . . . .	UAR
12	A 153716	WASHER - thrust center wheel, 0.109 inch (2.78 mm) . . . . .	UAR
15	A 156376	SHAFT - cross . . . . .	1
16	A 158745	GEAR ASSEMBLY - side, LH . . . . .	1
17	41- 1028	PLUG - expansion, 1-3/4 inch (44 mm) . . . . .	1
18	A 158744	GEAR ASSEMBLY - side, RH . . . . .	1
19	A 153719	BUSHING - gear . . . . .	1
20	A 153709	SEAL - oil, RH side gear . . . . .	1
26	A 7891	CONE - bearing, 2-1/2 inch ID (64 mm) . . . . .	2
27	A 39289	SHIM - bearing carrier, 0.007 inch (0.20 mm) . . . . .	UAR
27	G 10719	SHIM - bearing carrier, 0.005 inch (0.14 mm) . . . . .	UAR
27	G 10720	SHIM - bearing carrier, 0.010 inch (0.26 mm) . . . . .	UAR
31	G 10347	O-RING - housing . . . . .	2

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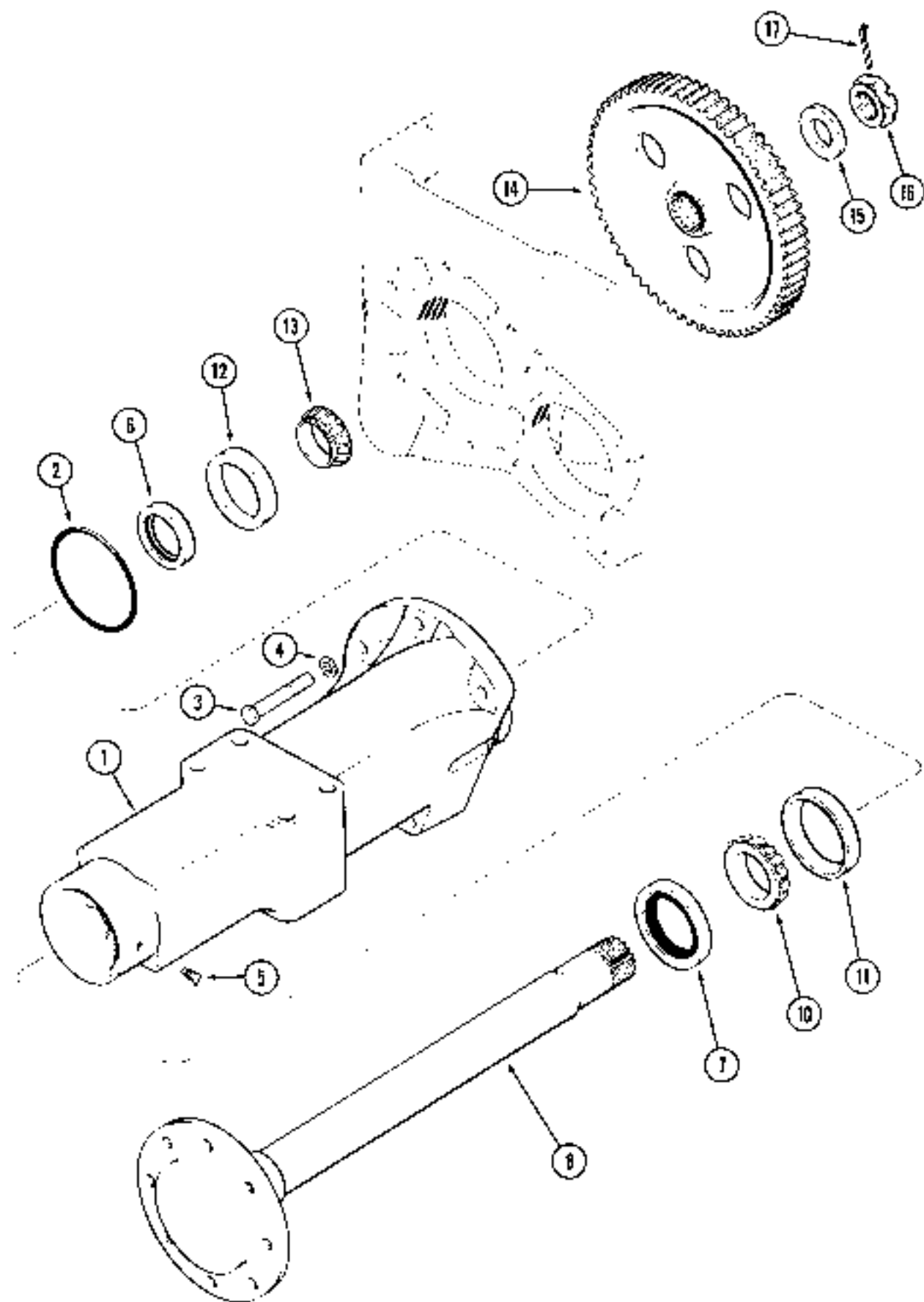


**TRANSAXLE DIFFERENTIAL  
2 AND 4 WHEEL DRIVE  
TRANSMISSION SERIAL NO. 16270319 AND AFTER**

REF	PART NO.	DESCRIPTION	REQ'D
	A 168883	PINION AND RING GEAR - differential (Matched Set) .....	1
1	NSS	GEAR - ring (Reference No. A158110) .....	1
2	NSS	PINION - bevel (Reference No. A158124) .....	1
5	A 179986	WHEEL - center .....	1
6	A 155847	WASHER - wheel bolt .....	20
7	28- 614	BOLT - hex, 3/8 NF x 7/8 inch .....	20
8	A 179762	GEAR - pinion .....	3
9	A 153711	PIN - pinion gear .....	3
10	A 140705	PIN - groove, 3/16 x 2 inch .....	3
12	A 154141	WASHER - thrust, center wheel, 0.079 inch (2.01 mm) .....	UAF
12	A 153717	WASHER - thrust, center wheel, 0.084 inch (2.13 mm) .....	UAF
12	A 153712	WASHER - thrust, center wheel, 0.089 inch (2.26 mm) .....	UAF
12	A 153713	WASHER - thrust, center wheel, 0.094 inch (2.40 mm) .....	UAF
12	A 153714	WASHER - thrust, center wheel, 0.099 inch (2.52 mm) .....	UAF
12	A 153715	WASHER - thrust, center wheel, 0.104 inch (2.65 mm) .....	UAF
12	A 153716	WASHER - thrust, center wheel, 0.109 inch (2.78 mm) .....	UAF
15	A 156376	SHAFT - cross (Replaces A153706) .....	1
16	A 158745	GEAR ASS'Y - side, left hand .....	1
17	41- 1028	PLUG - expansion, 1-3/4 inch (44 mm) .....	1
18	A 158744	GEAR ASSEMBLY - side, right hand .....	1
19	A 153719	BUSHING - gear .....	1
20	A 179053	SEAL - oil, right hand side gear .....	2
26	A 7891	CONE - bearing, 2-1/2 inch ID (64 mm) .....	2
27	A 179076	SHIM - bearing carrier, 0.007 inch (0.20 mm) .....	UAF
27	A 179075	SHIM - bearing carrier, 0.005 inch (0.14 mm) .....	UAF
27	A 179077	SHIM - bearing carrier, 0.010 inch (0.26 mm) .....	UAF
31	G 10347	O-RING - housing .....	2

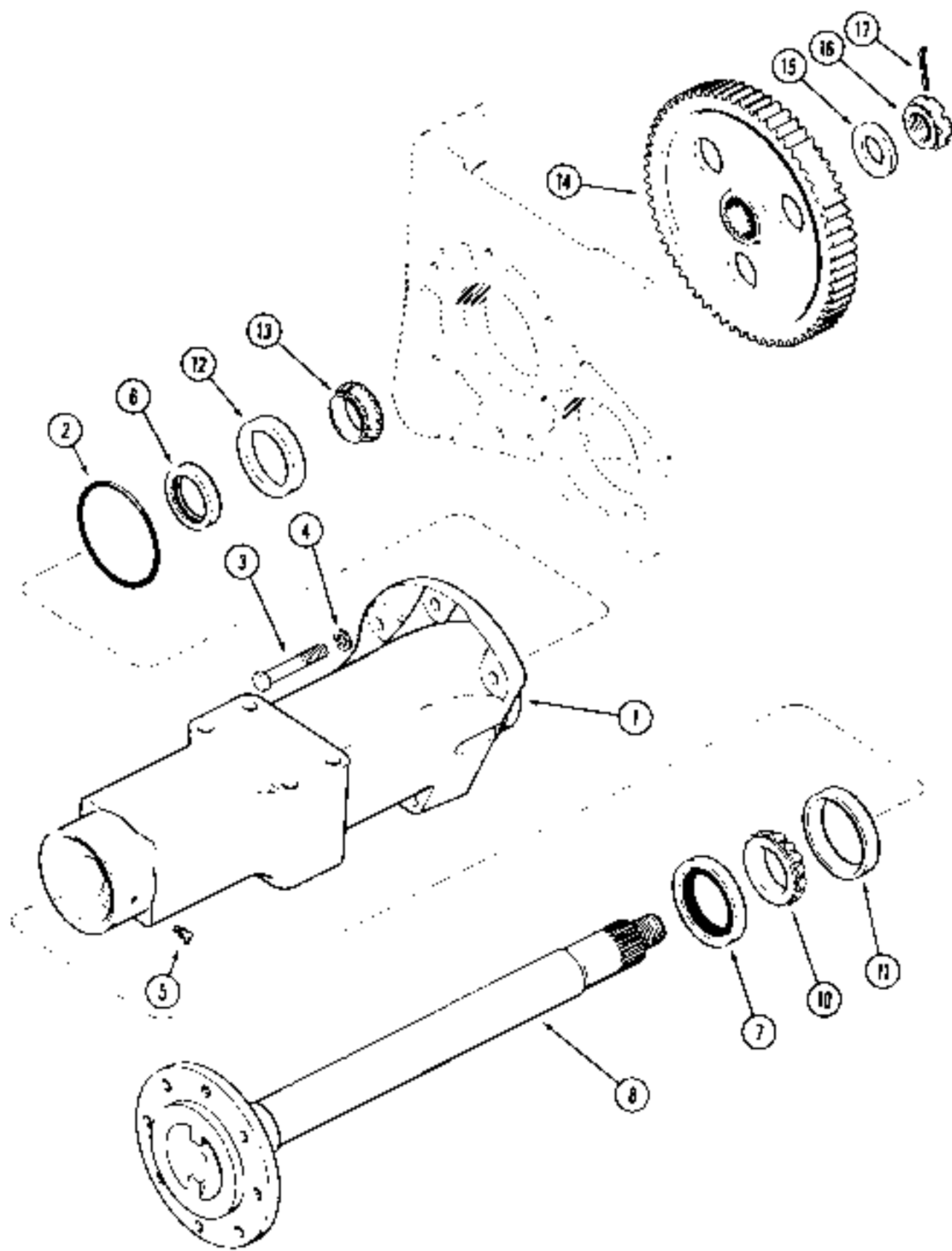
REFERENCE NUMBERS IN DESCRIPTION ARE FOR CARE'S USE ONLY AND CAN NOT BE ORDERED SEPARATELY.





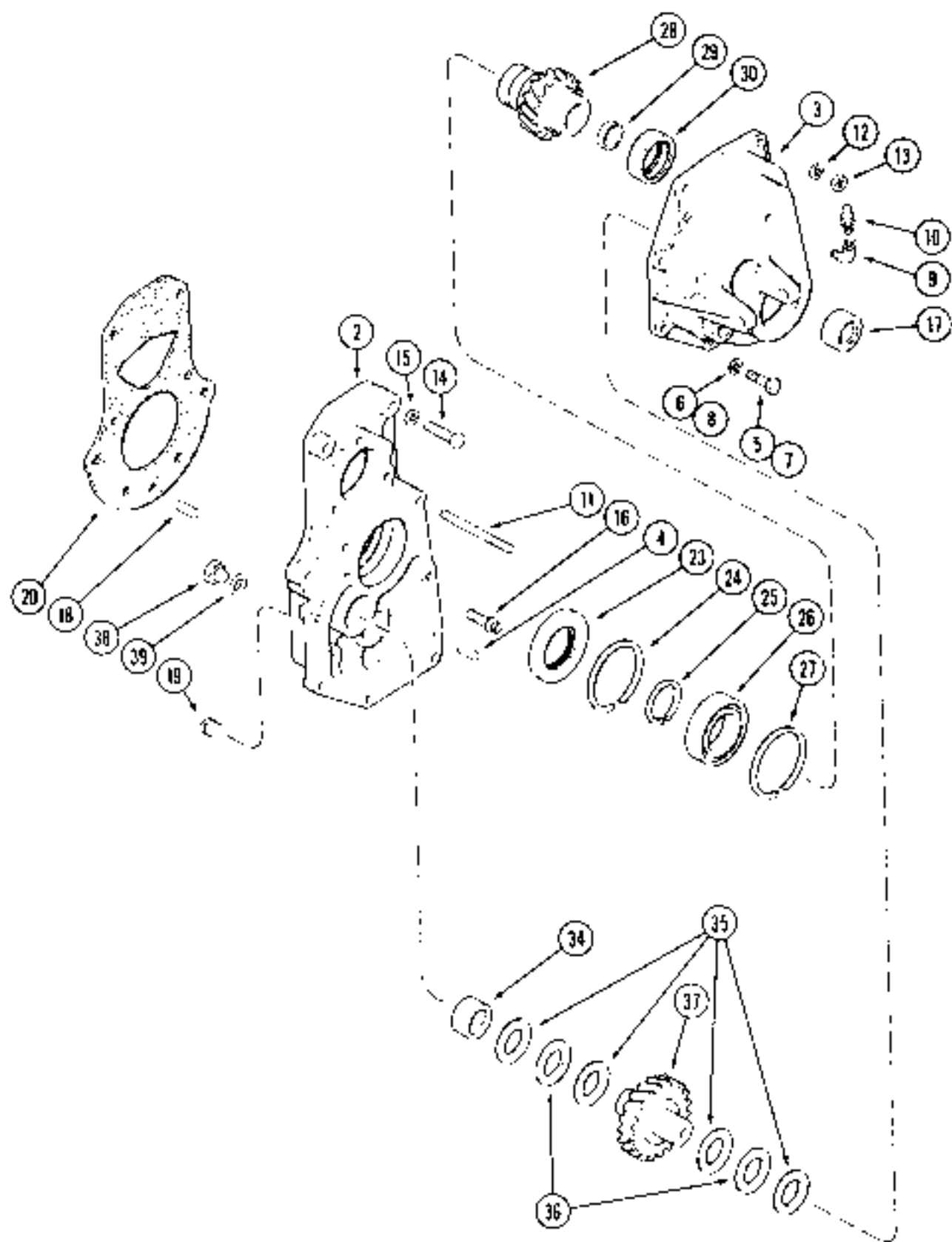
**TRANSAXLE FRONT AXLE  
PRIOR TO TRANSMISSION SERIAL NO. 16249203**

REF	PART NO	DESCRIPTION	REQ'D
1	A 138286	HOUSING - axle, left hand	1
1	A 138287	HOUSING - axle, right hand (Not shown)	1
2	G 10347	O-RING - axle housing to transmission housing	2
3	113- 2619	BOLT - hex, 5/8 NC x 2 inch	2
3	26- 1036	BOLT - hex, 5/8 NC x 2-1/4 inch	8
3	26- 1064	BOLT - hex, 5/8 NC x 4 inch	2
4	192- 25	WASHER - lock, 5/8 inch	10
5	219 36	FITTING - greasu, 1/8 inch PT, 45 degree	2
6	G 13801	SEAL - oil, inner, 3-1/8 inch (79 mm) OD	2
7	G 13822	SEAL - oil, outer, 4-3/8 inch (111 mm) OD	2
8	A 138233	SHAFT - front axle	2
10	G 15207	CONE - bearing, outer, 2-5/8 inch ID (67 mm)	2
11	G 15208	CUP - bearing, outer, 4-11/32 inch OD (110 mm)	2
12	G 10415	CUP - bearing, inner, 3-15/16 inch OD (101 mm)	2
13	! 33289	CONE - bearing, inner, 2-1/4 inch ID (57 mm)	2
14	A 168925	GEAR - final drive (Bull gear)(66 external and 17 internal teeth) (Replaces A37925)	2
15	F 62105	WASHER - take-up	2
16	A 30075	NUT - hex slotted, 1/2 inch NF	2
17	132- 362	PIN - cotter, 1/4 x 2-1/2 inch (6 x 63 mm)	2



**TRANSAXLE FRONT AXLE  
TRANSMISSION SERIAL NO. 16249203 AND AFTER  
2 AND 4 WHEEL DRIVE**

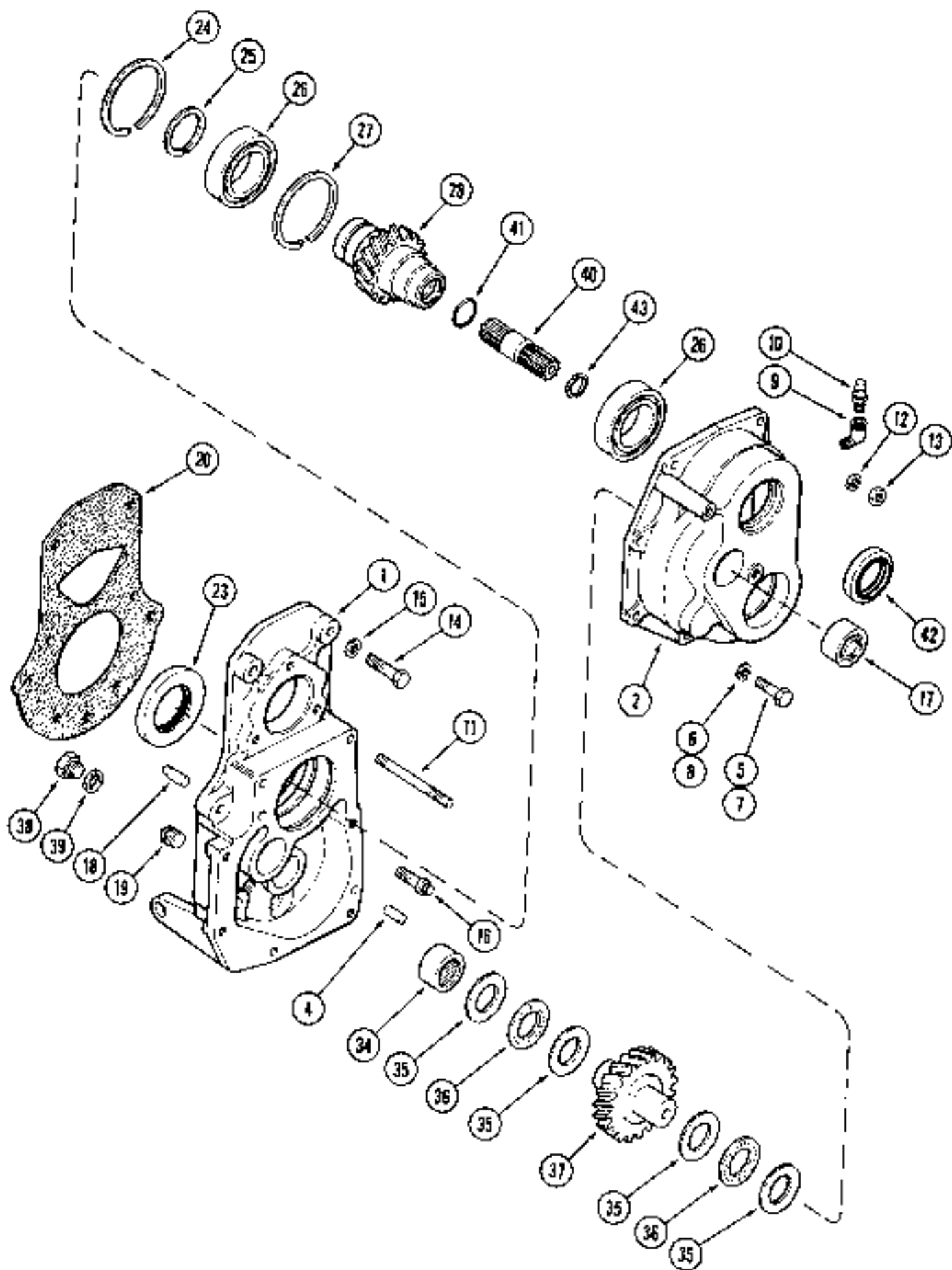
REF.	PART NO.	DESCRIPTION	REQ'D
1	A 153737	HOUSING - axle LH	1
1	A 153738	HOUSING - axle RH (LH shown)	1
2	G 10347	O-RING - axle housing to transmission housing	2
3	26- 1032	BOLT - hex, 5/8 NC x 2 inch (Grade 8)	2
3	26- 1036	BOLT - hex, 5/8 NC x 2-1/4 inch (Grade 8)	6
3	26- 1064	BOLT - hex, 5/8 NC x 4 inch (Grade 8)	2
4	182- 25	WASHER - lock, 5/8 inch	10
5	219- 36	FITTING - grease, 45 degree, 1/8 inch PT	2
6	G 13801	SEAL - oil, inner, 3-1/8 inch (79 mm) OD	2
7	G 13822	SEAL - oil, outer, 4 3/8 inch (111 mm) OD	2
8	A 154936	SHAFT - front axle	2
10	G 15207	CONE - bearing, outer, 2-5/8 inch ID (67 mm)	2
11	G 15208	CUP - bearing, outer, 4-11/32 inch OD (110 mm)	2
12	G 10415	CUP - bearing, inner, 3-15/16 inch OD (101 mm)	2
13	L 33289	CONE - bearing inner, 2-1/4 inch ID (57 mm)	2
14	A 154940	GEAR - final drive (bull gear); (64 external and 17 internal teeth)	2
15	F 62105	WASHER - lock-up	2
16	A 30075	NUT - hex slotted, 1-2 inch NF	1
17	132- 352	PIN - cotter, 1/4 x 2-1/2 inch	2



**TRANSAXLE TRANSFER GEAR BOX  
PRIOR TO TRANSMISSION SERIAL NO. 16249203  
4 WHEEL DRIVE**

REF.	PART NO.	DESCRIPTION	REQ'D
	A 156239	HOUSING ASSEMBLY - transfer gearbox (Matched Set) . . . . .	1
2	NSS	HOUSING - transfer gearbox (Order A156239) (Reference No. A156238) . . . . .	1
3	NSS	COVER - transfer gearbox (Order A156239)(Reference No. A156237) . . . . .	1
4	A 35459	PIN - dowel, cover to housing . . . . .	2
5	26- 624	BOLT - hex, 3/8 x 1-1/2 inch, Grade 8 . . . . .	3
6	92- 6	WASHER - lock, 3/8 inch . . . . .	3
7	26- 624	BOLT - hex, 3/8 NC x 1-1/2 inch, Grade 8 . . . . .	2
8	92- 6	WASHER - lock, 3/8 inch . . . . .	2
9	221- 411	FILLOW - 90 degree, 1/8 inch PT . . . . .	1
10	A 1292R	BREATHER - transfer gearbox . . . . .	1
11	A 15324R	STUD - transfer gearbox mounting, 4-13/16 inch . . . . .	2
12	92- 6	WASHER - lock, 3/8 inch . . . . .	2
13	129- 103	NUT - hex, 3/8 inch NC . . . . .	2
14	13- 830	BOLT - hex, 1/2 NC x 1-7/8 inch . . . . .	4
15	92- 8	WASHER - lock, 1/2 inch . . . . .	4
16	16R- 87	BOLT - 12 point head, 1/2 NC x 1-1/2 inch . . . . .	2
17	A 156286	BEARING - idler gear, rear . . . . .	1
18	A 29540	PIN - dowel, transmission housing . . . . .	1
19	221- 4	PLUG - square head, 1/4 inch PT . . . . .	1
20	A 15624R	GASKET - transmission housing to transfer gearbox . . . . .	1
23	A 15722R	SEAL - input gear oil . . . . .	1
24	A 31234	RING - bearing to gearbox retaining . . . . .	1
25	A 27117	RING - retaining, 0.096 inch (2.44 mm) . . . . .	UAR
25	A 27118	RING - retaining, 0.0975 inch (2.47 mm) . . . . .	UAR
25	A 27119	RING - retaining, 0.099 inch (2.52 mm) . . . . .	UAR
25	A 27115	RING - retaining, 0.109 inch (2.78 mm) . . . . .	UAR
26	A 21266	BEARING - input gear, front . . . . .	1
27	A 31234	RING - bearing to gearbox retaining . . . . .	1
28	A 157190	GEAR - input, 14 teeth . . . . .	1
29	41- 1024	PLUG - cup type, 1-1/2 inch (38 mm) . . . . .	1
30	A 28161	BEARING - input gear, rear . . . . .	1
34	F 7356	BEARING - idler gear, front . . . . .	1
35	A 54031	WASHER - idler gear thrust . . . . .	4
36	T 41022	BEARING - idler gear thrust . . . . .	2
37	A 156266	GEAR - idler, 17 teeth . . . . .	1
38	A 140222	PLUG - transfer gearbox drain . . . . .	1
39	A 58606	GASKET - drain plug . . . . .	1

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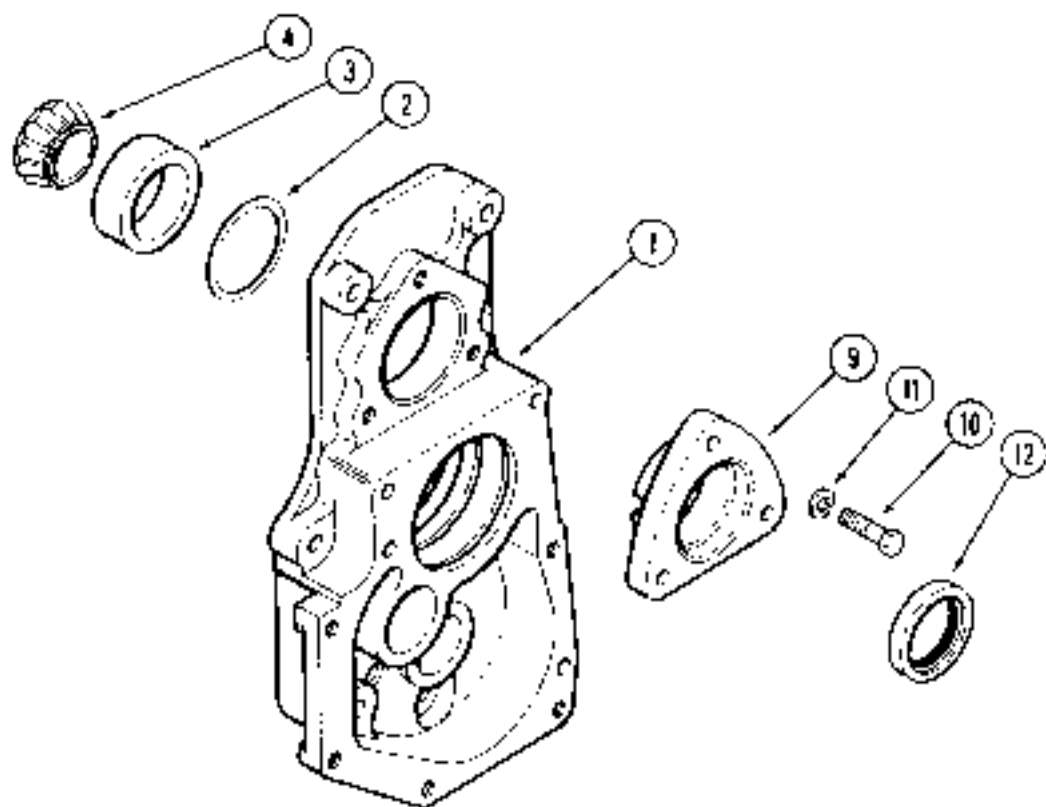


**TRANSAXLE TRANSFER GEAR BOX  
4 WHEEL DRIVE  
TRANSMISSION SERIAL NO. 16249203 AND AFTER**

REF.	PART NO.	DESCRIPTION	REQ'D
	A 168942	HOUSING ASSEMBLY - transfer gearbox (Matched Set) .....	1
1	NSS	HOUSING - transfer gearbox (Order A168942) (Reference No. A168942) .....	1
2	NSS	COVER - transfer gearbox (Order A168942) (Reference No. A168942) .....	1
4	A 55459	PIN - dowel, cover to housing .....	2
5	26- 624	BOLT - hex. 3/8 NC x 1-1/2 inch, Grade 8 .....	3
6	92- 6	WASHER - lock, 3/8 inch .....	3
7	26- 624	BOLT - hex. 3/8 NC x 1-1/2 inch, Grade 8 .....	2
8	92 6	WASHER - lock, 3/8 inch .....	2
9	221- 411	ELBOW - gearbox cover, 90 degree .....	1
10	A 12928	BREATHER - transfer gearbox .....	1
11	A 153248	STUD - transfer gearbox mounting, 4-13/16 inch .....	2
12	92- 6	WASHER - lock, 3/8 inch .....	2
13	129- 103	NUT - hex, 3/8 inch NC .....	2
14	13- 830	BOLT - hex, 1/2 NC x 1-7/8 inch .....	4
15	92- 8	WASHER - lock, 1/2 inch .....	4
16	186- 87	BOLT - 12 point head, 1/2 NC x 1-1/2 inch .....	2
17	A 156286	BEARING - idler gear, front .....	1
18	A 29540	PIN - dowel, transmission housing ..	1
19	221- 4	PLUG - square head, 1/2 inch PT .....	1
20	A 158248	GASKET - transmission housing to transfer gearbox .....	1
23	A 157228	SEAL - input gear oil .....	1
24	A 31234	RING - bearing to gearbox retaining ..	1
25	A 27117	RING - retaining, 0.096 inch (2.44 mm) .....	UAR
25	A 27118	RING - retaining, 0.0975 inch (2.47 mm) .....	UAR
25	A 27119	RING - retaining, 0.099 inch (2.52 mm) .....	UAR
25	A 27116	RING - retaining, 0.109 inch (2.78 mm) .....	UAR
26	A 21266	BEARING - input gear .....	2
27	A 31234	RING - bearing to gearbox retaining ..	1
28	A 179007	GEAR - input, 14 teeth .....	1
34	F 7356	BEARING - idler gear, rear .....	1
35	A 54031	WASHER - idler gear thrust .....	4
36	T 41022	BEARING - idler gear thrust .....	2
37	A 156256	GEAR - idler, 17 teeth .....	1
38	A 140222	PLUG - transfer gearbox drain .....	1
39	A 58808	GASKET - drain plug .....	1
40	A 179006	SPLINE - stub .....	1
41	A 179155	O-RING - sealing .....	1
42	A 179071	SEAL - oil .....	1
43	A 140189	RING - snap .....	1

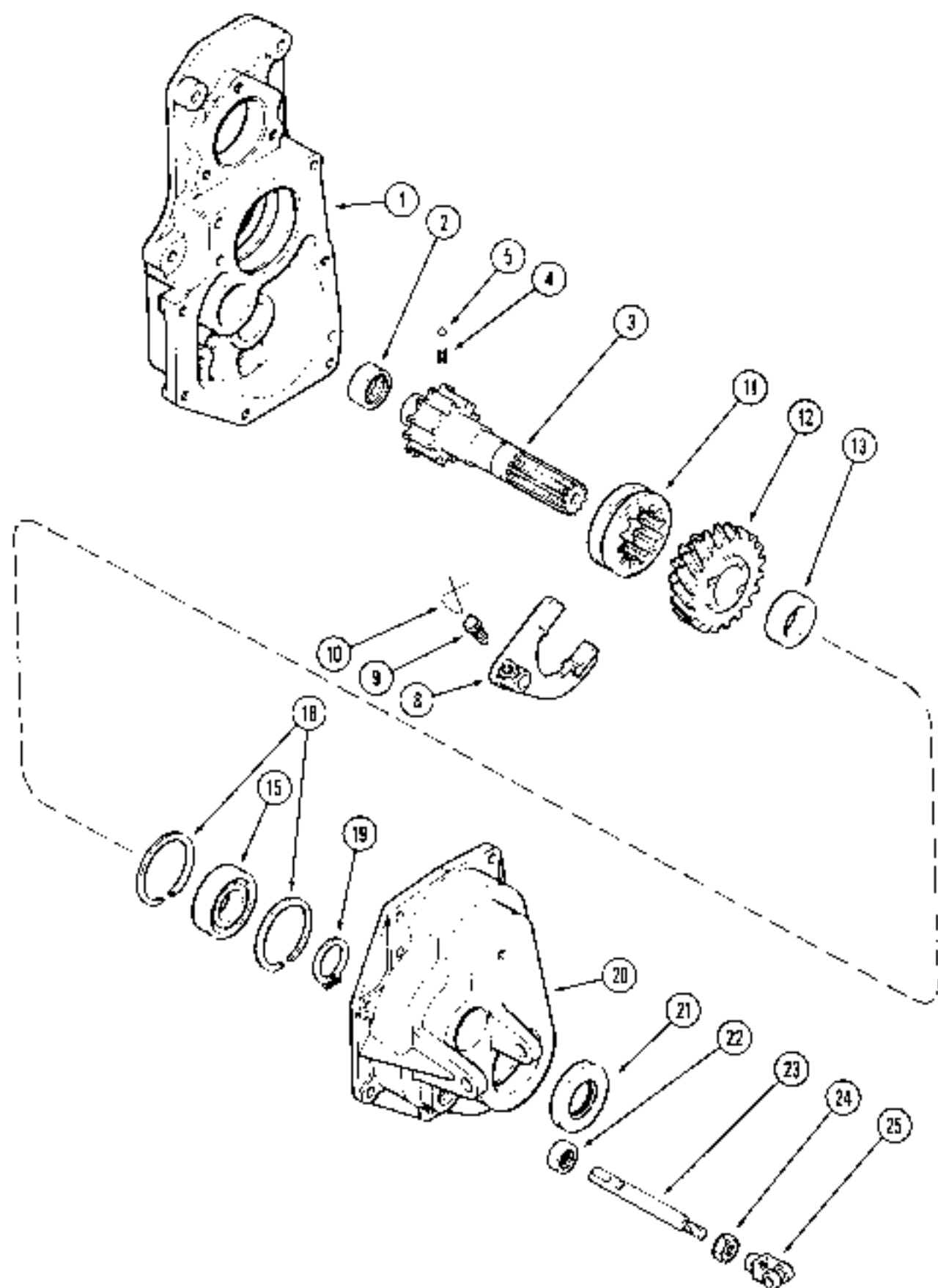
REFERENCE NUMBERS IN DESCRIPTION ARE FOR CARES USE ONLY AND CAN NOT BE ORDERED SEPARATELY





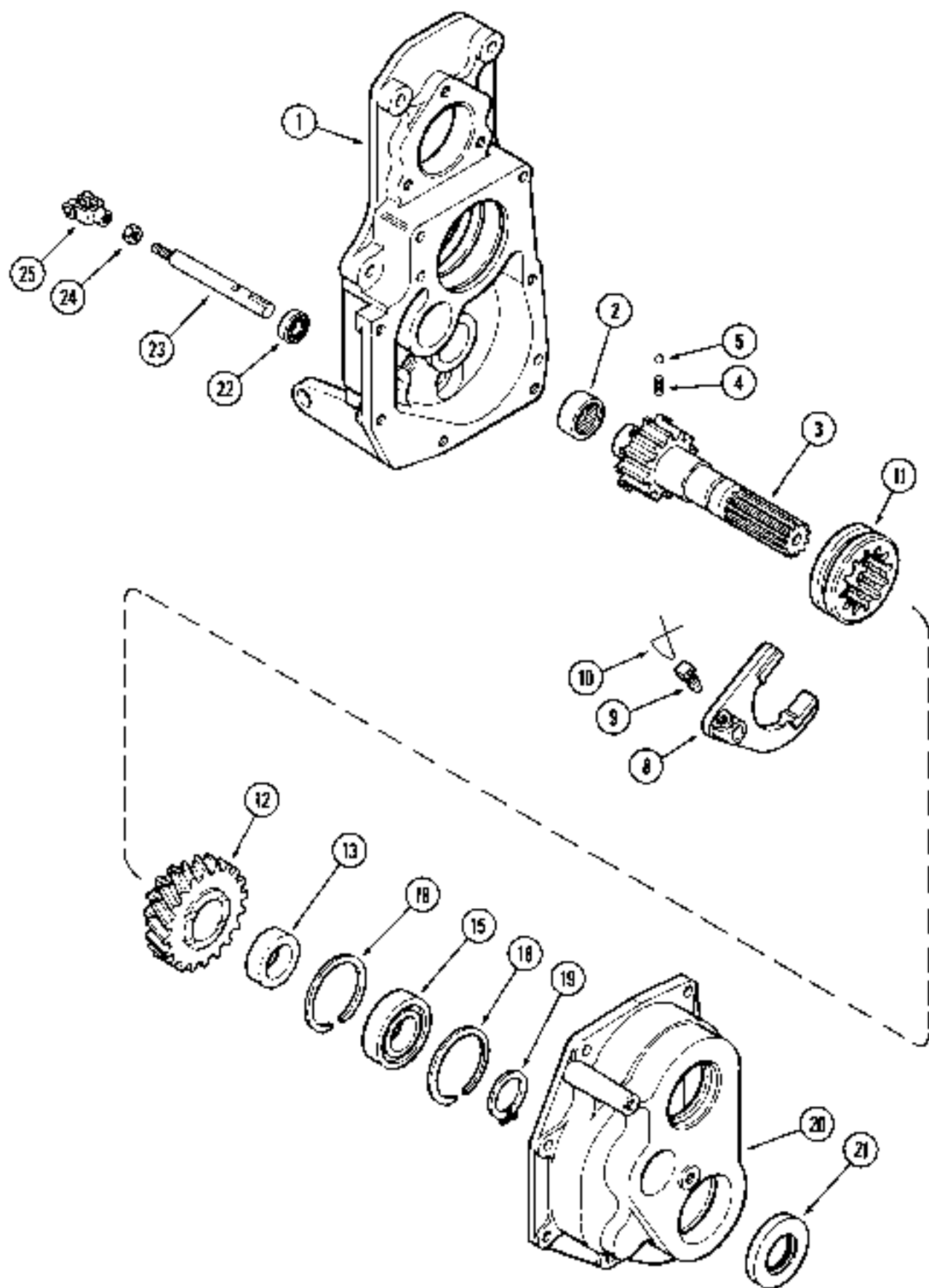
## TRANSAXLE MAINSHAFT ADJUSTING COVER 4 WHEEL DRIVE

REF	PART NO.	DESCRIPTION	REQ D
1	RF	HOUSING - transfer gearbox (See Page 219 and 221) .....	1
2	G 10341	SHIM - mainshaft rear bearing, 0.005 inch (0.13 mm) .....	UAR
2	G 10340	SHIM - mainshaft rear bearing, 0.007 inch (0.18 mm) .....	UAR
2	A 51527	SHIM - mainshaft rear bearing, 0.035 inch (0.89 mm) .....	UAR
3	H 753574	CUP - mainshaft bearing, rear .....	1
4	H 753586	CONE - mainshaft bearing rear .....	1
9	A 156606	COVER - mainshaft bearing adjusting .....	1
10	13- 624	BOLT - hex. 3/8 NC x 1-1/2 inch .....	3
11	92 6	WASHER lock 3/8 inch .....	3
12	A 154253	SEAL - mainshaft .....	1



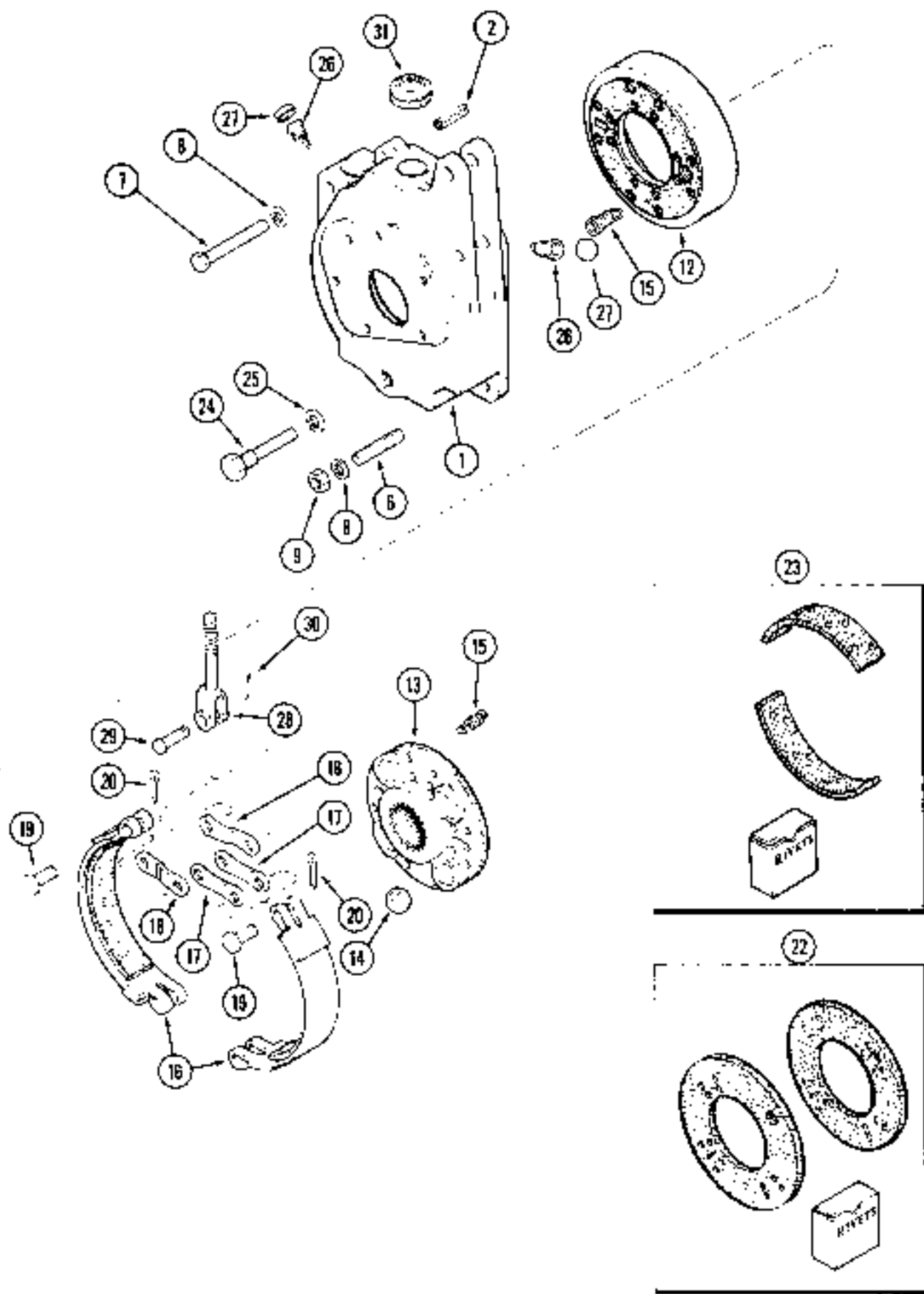
**TRANSAXLE SHIFT MECHANISM AND OUTPUT SHAFT  
PRIOR TO TRANSMISSION SERIAL NO. 16249203  
4 WHEEL DRIVE**

REF	PART NO	DESCRIPTION	REQ'D
1	REF	HOUSING - transfer gearbox (See Page 219)	1
2	A 35767	BEARING - output shaft, front	1
3	A 156220	SHAFT - output	1
4	A 156269	SPRING - detent	3
5	2-1- 7	BALL - detent, 1/4 inch diameter (6 mm)	3
8	A 51951	FORK - shifter	1
9	A 29964	SCREW - shifter fork locking	1
10	A 29966	WIRE - screw to shift fork locking	1
11	A 156258	COLLAR - output shaft	1
12	A 156253	GEAR - output, 19 teeth	1
13	A 156278	SPACER - gear, 0.611 inch (15.52 mm)	UAR
13	A 156277	SPACER - gear, 0.616 inch (15.64 mm)	UAR
13	A 156276	SPACER - gear, 0.621 inch (15.78 mm)	UAR
13	A 156250	SPACER - gear, 0.626 inch (15.90 mm)	UAR
15	B 19215	BEARING - output shaft, front	1
18	A 27579	RING - bearing to cover retaining	2
19	A 144595	RING - output shaft retaining	1
20	REF	COVER - transfer gearbox (See Page 219)	1
21	A 51948	SEAL - output shaft	1
22	G 105700	SEAL - shift fork oil	1
23	A 156259	RAIL - shift fork	1
24	129- 123	NUT - hex, 3/8 inch NF	1
25	I 40057	YOKE - shifter rail	1



**TRANSAXLE SHIFT MECHANISM AND OUTPUT SHAFT  
TRANSMISSION SERIAL NO. 16249203 AND AFTER  
4 WHEEL DRIVE**

REF.	PART NO.	DESCRIPTION	REQ'D
1	REF	HOUSING - transfer gearbox (See Page 221)	1
2	A 35767	BEARING - output shaft, front	1
3	A 156220	SHAFT - output	1
4	A 156209	SPRING - detent	3
5	211- 7	BALL - detent, 1/4 inch diameter (6 mm)	3
8	A 51951	FORK - shifter	1
9	A 29964	SCREW - shifter fork locking	1
10	A 29966	WIRE - screw to shift fork, locking	1
11	A 156258	COLLAR - output shaft	1
12	A 156253	GEAR - output, 19 teeth	1
13	A 156278	SPACER - gear, 0.611 inch (15.52 mm)	UAP
13	A 156277	SPACER - gear, 0.616 inch (15.64 mm)	UAP
13	A 156276	SPACER - gear, 0.621 inch (15.78 mm)	UAP
13	A 156250	SPACER - gear, 0.626 inch (15.90 mm)	UAP
15	B 18215	BEARING - output shaft, front	1
18	A 27579	RING - bearing to cover retaining	2
19	A 144595	RING - output shaft retaining	1
20	REF	COVER - transfer gearbox (See Page 221)	1
21	A 51948	SEAL - output shaft	1
22	G 105700	SEAL - shift fork oil	1
23	A 156259	RAIL - shift fork	1
24	129- 123	NUT - hex, 3/8 inch NF	1
25	F 40057	YOKE - shifter rail	1



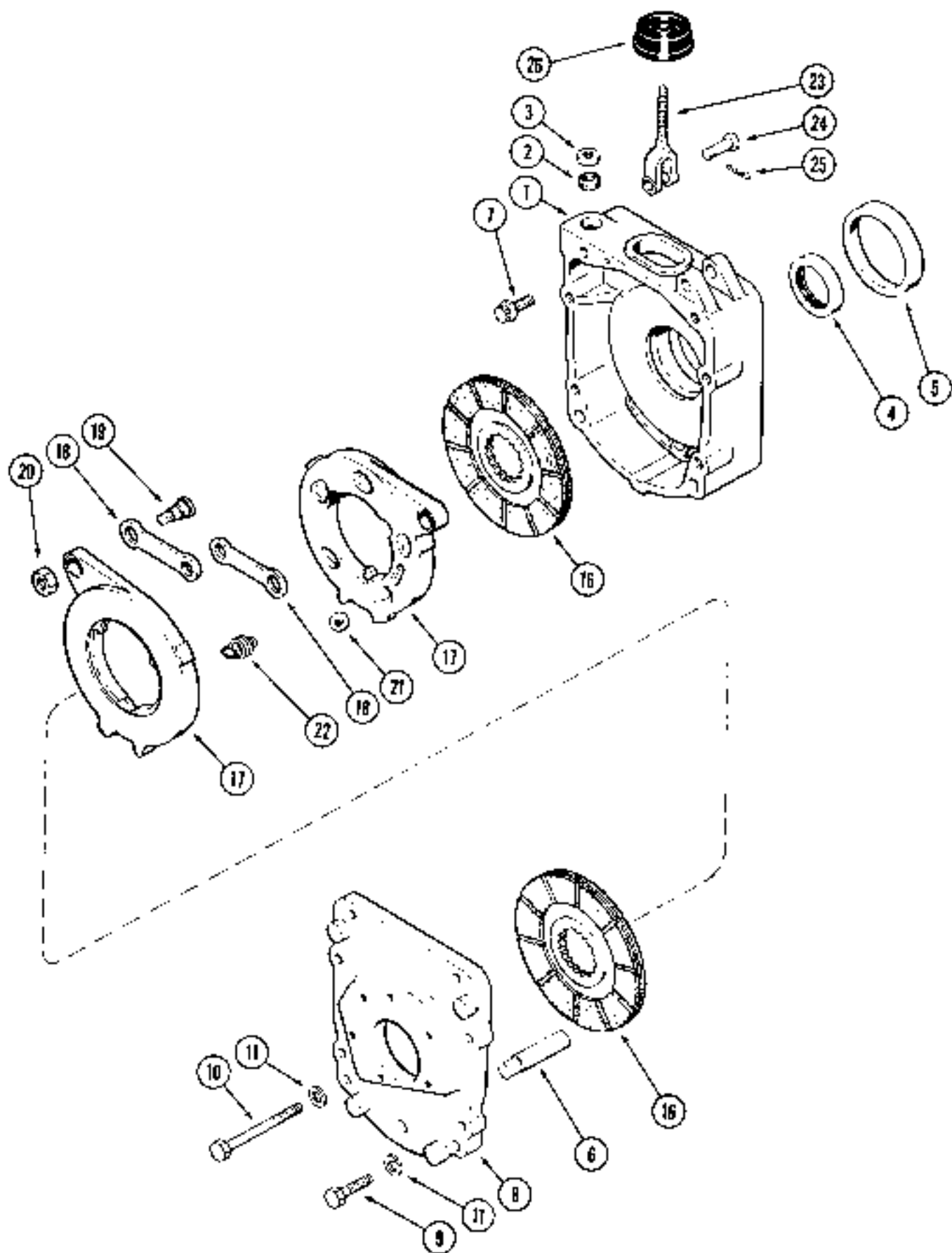
### TRANSAXLE DIFFERENTIAL BRAKE HOUSING AND BRAKE PRIOR TO TRANSMISSION SERIAL NO. 16249203

REF.	PART NO.	DESCRIPTION	REQ'D
1	A 152924	HOUSING - brake, RH, 0.360 diameter anchor pin hole (0.92 mm) . . . . .	1
1	A 152923	HOUSING - brake, LH, 0.360 diameter anchor pin hole (0.92 mm) . . . . .	1
2	138- 2068	PIN - spiro, 3/8 x 2-1/2 inch . . . . .	2
8	A 27637	STUD - brake housing, 2-5/8 inch . . . . .	4
7	13- 860	BOLT - hex, 1/2 NC x 3-3/4 inch . . . . .	2
7	13- 864	BOLT - hex, 1/2 NC x 4 inch . . . . .	2
8	92- 8	WASHER - lock, 1/2 inch . . . . .	8
9	25- 118	NUT - hex, 1/2 inch NC . . . . .	4
	A 157157	BRAKE ASSEMBLY - transaxle (Replaces A156383) . . . . .	2
12	A 47886	DRUM ASSEMBLY - with lining (See Ref 22) . . . . .	1
13	A 47885	DISC ASSEMBLY - with lining (See Ref 22) . . . . .	1
14	211- 21	BALL - 1 inch diameter (25 mm) . . . . .	4
15	A 47524	SPRING - disc return . . . . .	2
16	NSS	BAND ASSEMBLY - inner, with lining (See Ref 23) (Reference No. 44/1348) . . . . .	2
17	G 46345	LINK - actuating, inner band . . . . .	2
18	G 46344	LINK - actuating, outer band . . . . .	2
19	G 49082	PIN - clevis, link to band . . . . .	2
20	132- 320	PIN - cotter, 3/32 x 3/4 inch . . . . .	2
22	A 44720	LINING KIT - drum and disc, with rivets (For 1 side only) . . . . .	2
23	A 48372	LINING KIT - brake bands, with rivets (For 1 side only) . . . . .	2
24	G 15801	ANCHOR - brake bands . . . . .	2
25	92- 10	WASHER - 5/8 inch lock . . . . .	2
26	A 157705	SPRING - brake band return (Replaces G48507) . . . . .	4
27	41- 13	PLUG - expansion, return spring hole, 13/16 inch (21 mm) . . . . .	4
28	A 154737	ROD - brake actuating . . . . .	2
29	141- 64	PIN - clevis rod to brake links . . . . .	2
30	132- 320	PIN - cotter, 3/32 x 3/4 inch . . . . .	2
31	A 135946	SEAL - dust, brake housing . . . . .	2

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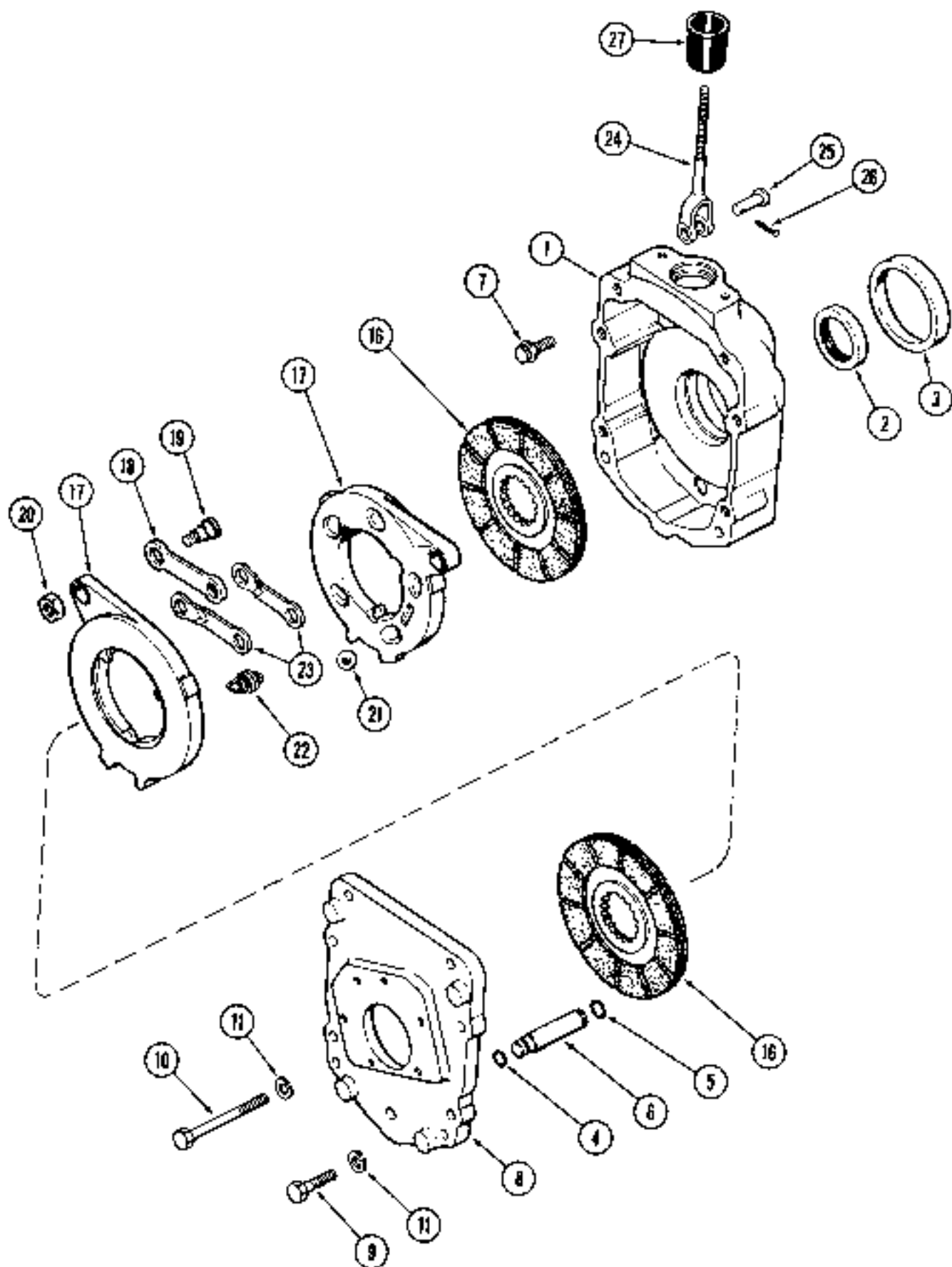
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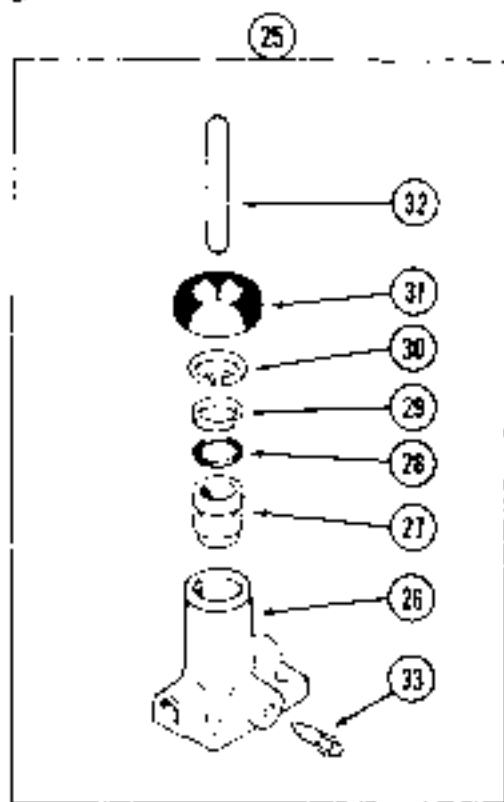
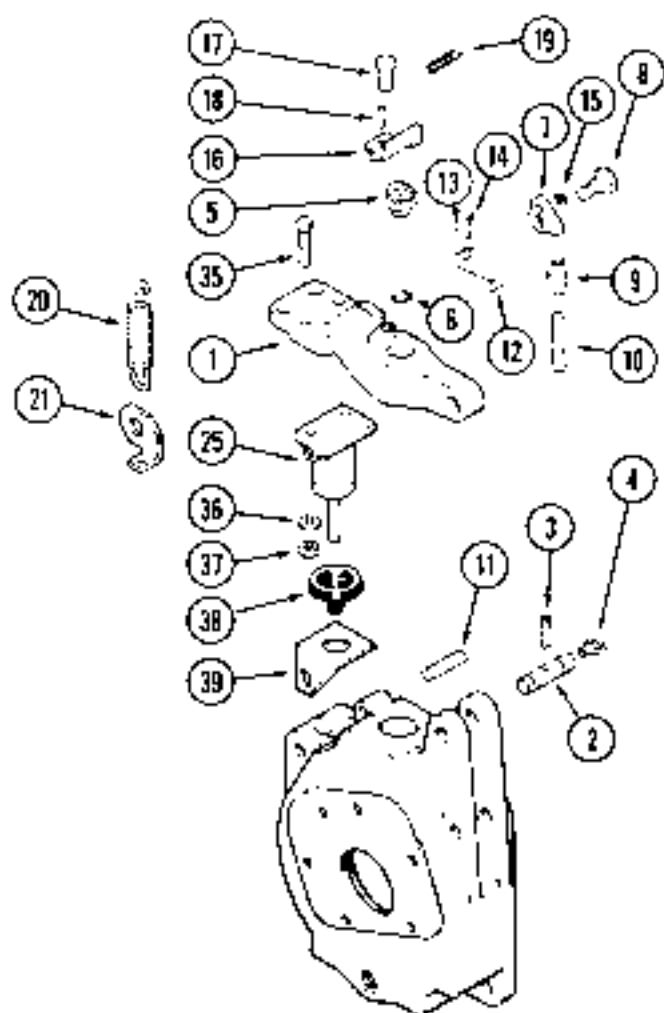
**TRANSAXLE DIFFERENTIAL BRAKE HOUSING AND BRAKE  
TRANSMISSION SERIAL NO. 16249203 TO SERIAL NO. 16270318  
2 AND 4 WHEEL DRIVE**

REF.	PART NO	DESCRIPTION	REQ'D.
1	A 168292	HOUSING - brake, LH (Includes Ref 2,3,4 and 5)	1
1	A 168294	HOUSING - brake, RH (LH shown)	1
2	A 30011	SEAL - lube felt, 13/16 inch (21 mm) OD	1
3	A 155602	SEAL - dirt, 27/32 inch (21 mm) OD	1
4	A 179054	SEAL - oil, 3-1/2 inch (89 mm) OD	1
5	A 7890	CUP - bearing, 4-7/16 inch OD (113 mm)	1
6	A 153728	PIN - spring anchor, 3-13/16 inch long (97 mm)	2
7	A 156878	BOLT - 12 point, 1/2 NC x 1-1/4 inch	4
8	A 168296	COVER - brake housing, LH	1
8	A 168297	COVER - brake housing, RH (LH shown)	1
9	113- 421	BOLT - hex, 1/2 NC x 2 inch	12
10	113- 429	BOLT - hex, 1/2 NC x 5 inch	4
11	92- 8	WASHER - lock, 1/2 inch	16
	A 168628	BRAKE ASSEMBLY - transaxle	2
16	A 153982	DISC ASSEMBLY - brake	2
17	A 41860	DISC - brake actuating	2
18	A 41861	LINK - actuating disc	2
19	A 41865	BOLT - actuating disc	2
20	A 42801	NUT - hex jam, 1/2 inch NF	2
21	211- 223	BALL - actuating, 1 inch diameter (25 mm)	5
22	A 47719	SPRING - disc tension	3
23	A 168382	ROD - brake actuating	2
24	C 13129	PIN - clevis rod to brake links	2
25	132- 310	PIN - cotter 1/8 x 1 inch	2
26	A 146418	SEAL - dust, brake housing	2



**TRANSAXLE DIFFERENTIAL BRAKE HOUSING AND BRAKE  
TRANSMISSION SERIAL NO. 16270319 AND AFTER**

REF.	PART NO	DESCRIPTION	REQ'D.
1	A 179102	HOUSING ASSEMBLY - brake	2
2	A 179054	SEAL - oil	1
3	A 7890	CUP - bearing, 4-7/16 inch OD (113 mm)	1
4	A 179308	O-RING - anchor pin, 5/8 inch (16 mm) ID	2
5	A 179307	O-RING - anchor pin, 3/4 inch (19 mm) ID	2
6	A 179913	PIN - spring anchor	2
7	A 156878	BOLT - 12 point head, housing	4
8	A 168821	COVER - brake housing, right hand	1
8	A 168822	COVER - brake housing, left hand (Right hand shown)	1
9	113- 421	BOLT - hex, 1/2 NC x 2 inch	12
10	113- 429	BOLT - hex, 1/2 NC x 5 inch	4
11	92- 8	WASHER - lock, 1/2 inch	16
	A 168828	BRAKE ASSEMBLY - transaxle	2
15	A 153982	DISC ASSEMBLY - brake	2
17	A 41850	DISC - brake, actuating	2
18	A 41851	LINK - actuating, disc	2
19	A 41855	BOLT - actuating disc	2
20	A 42801	NUT - hex jam, 1/2 inch NF	2
21	211- 223	BALL - actuating, 1 inch diameter (25 mm)	5
22	A 47719	SPRING - disc tension	3
23	A 48952	LINK - actuating, disc	2
24	A 168817	ROD - pull, brake actuating	2
25	L 13129	PIN - clevis rod to brake links	2
26	132- 310	PIN - cotter, 1/8 x 1 inch	2
27	A 179595	SEAL - dust, brake housing	2



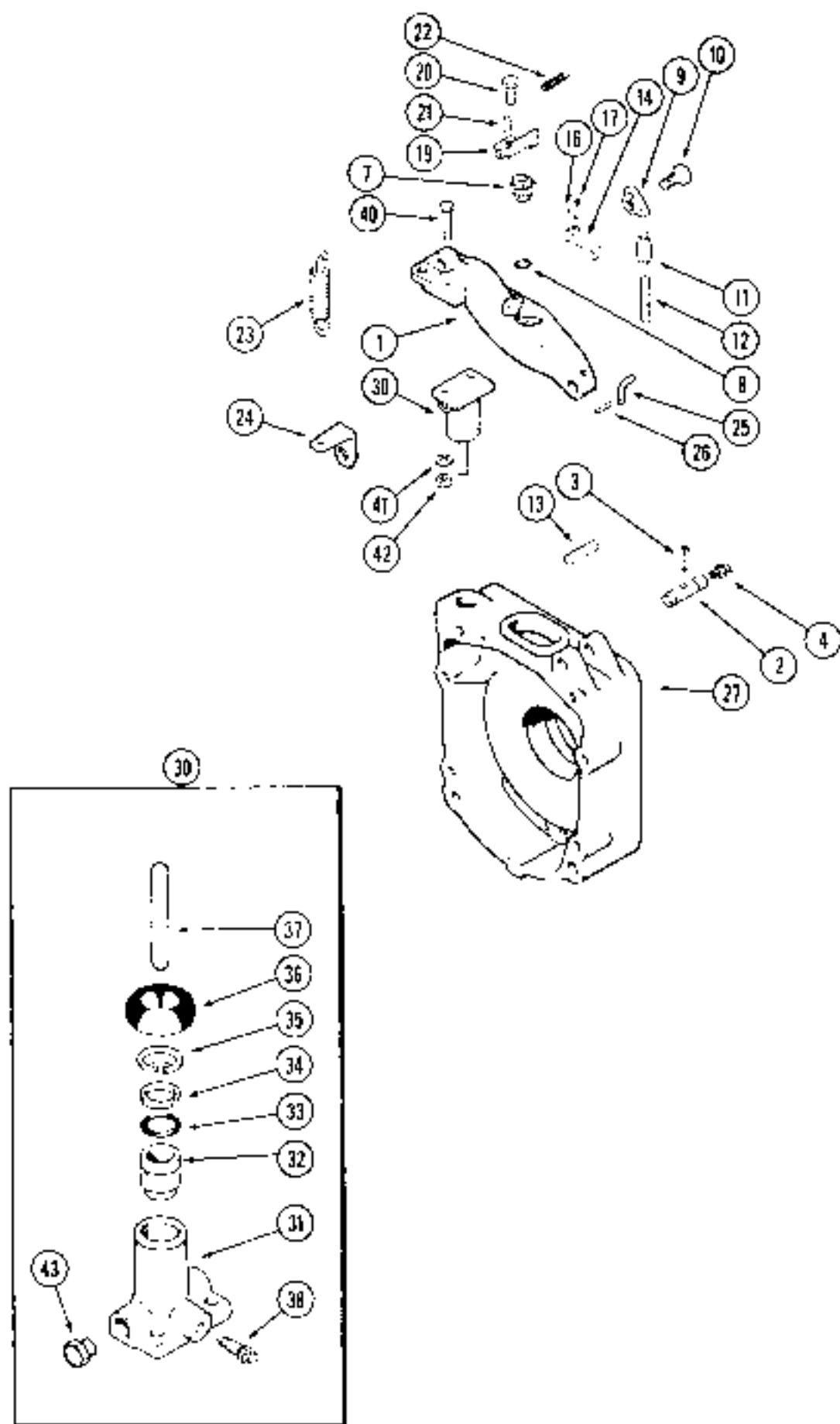
### TRANSAXLE DIFFERENTIAL BRAKE LEVER AND LOCK PRIOR TO TRANSMISSION SERIAL NO. 16249203

REF.	PART NO.	DESCRIPTION	REQ'D
1	A 51969	LEVER - brake	2
2	A 154569	PIN - brake lever pivot	2
3	138- 2028	PIN - roll 3/16 x 1-1/4 inch	2
4	219- 55	FITTING - 1/8 inch PT, 90 degree	2
5	A 148118	NUT - ratchet, brake adjusting	2
6	A 27891	O-RING - adjusting nut	2
7	A 64420	CAM - self adjusting brake	2
8	A 58471	BOLT - cam pivot	2
9	A 60489	SPRING - self adjusting brake cam	2
10	A 51971	PIN - spring limit	2
11	REF	PIN - spring anchor (See Page 231)	2
12	A 51970	ROD - ratchet lock	2
13	138- 20	PIN - roll, 1/16 x 1/2 inch	2
14	132- 5	PIN - collar, 1/16 x 1/2 inch	2
15	S 67607	RING - grip, brake rod to cam	2
16	A 59609	BRACKET - self adjusting brake	2
17	61- 58	BOLT - hex socket head, 3/8 NC x 1/2 inch	2
18	138- 92	PIN - roll, 3/16 x 3/4 inch	2
19	A 60555	SPRING - ratchet rod return	2
20	A 35789	SPRING - brake return, 4 inch free length (102 mm)	2
21	A 51974	BRACKET - anchor, return spring, LH	1
21	A 51975	BRACKET - anchor, return spring, RH	1

### DIFFERENTIAL BRAKE CYLINDER

25	A 148562	CYLINDER ASSEMBLY - brake, 1 inch diameter cylinder (25 mm) with yellow paint color code	2
26	NSS	BODY - cylinder (Reference No. A45026)	1
26	A 45025	PISTON ASSEMBLY - cylinder	1
27	NSS	PISTON - cylinder (Reference No. A45025)	1
28	NSS	O-RING - piston (Order A45027 Kit) (Reference No. A45025)	1
29	S 7172	RING - O-ring backup	1
30	NSS	RING - snap piston retaining (Order A45027 Kit) (Reference No. A46808)	1
31	A 45382	BOOT - cylinder weatherseal	1
32	A 42254	ROD - push	1
33	A 41487	SCREW - cylinder bleeder	1
	A 45027	REPAIR KIT - wheel cylinder (Includes all items with *)	2
35	13- 420	BOLT - hex, 1/4 NC x 1-1/4 inch	4
36	92- 4	WASHER - lock, 1/4 inch	4
37	25- 104	NUT - hex, 1/4 inch NC	4
38	A 41490	COVER - dust, brake cylinder	2
39	A 154558	BRACKET - brake cylinder cover, RH	1
39	A 154557	BRACKET - brake cylinder cover, LH	1

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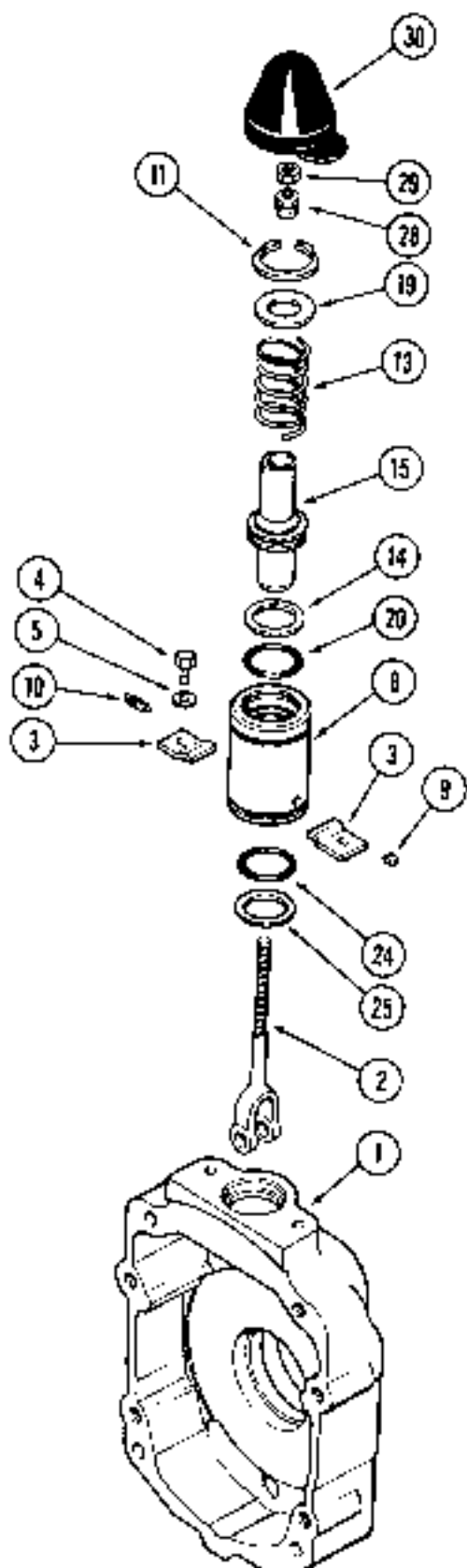
**TRANSAXLE DIFFERENTIAL BRAKE LEVER AND LOCK  
TRANSMISSION SERIAL NO. 16249203 TO SERIAL NO. 16270318  
2 AND 4 WHEEL DRIVE**

REF	PART NO	DESCRIPTION	REQ'D
1	A 151610	LEVER - brake	2
2	A 151569	PIN - pivot	2
3	138- 2028	PIN - spirot, 3/16 x 1-1/4 inch	2
4	219- 55	FITTING - 90 degree, 1/8 inch #1	2
7	A 62230	NUT - ratchet, brake adjusting	2
8	A 27891	O-RING - ratchet nut	2
9	A 01490	CAM - seal adjusting, brake	2
10	A 58471	BOLT - cam pivot	2
11	A 60489	SPRING - adjusting cam	2
12	A 61216	HOI - cam stop	2
13	A 163720	PIN - spring anchor, 3 13/16 inch long (97 mm)	2
14	A 59607	HOI - lock ratchet	2
16	138- 20	PIN - roll, 1/16 x 1/2 inch	2
17	132- 5	PIN - roller, 1/16 x 1/2 inch	2
19	A 59619	BRACKET - self adjusting brake	2
20	113- 205	BOLT - hex, 3/8 NC x 5/8 inch	2
21	138- 92	PIN - roll, 3/16 x 3/4 inch	2
22	A 60555	SPRING - return, ratchet rod	2
23	A 35789	SPRING - brake return	2
24	A 155840	BRACKET - anchor, return spring	2
25	A 59319	STUD - spring retaining	2
26	138- 71	PIN - roll, 5/32 x 5/8 inch	2
27	REF	HOUSING - brake (See Page 231)	2

**DIFFERENTIAL BRAKE CYLINDER**

30	A 168473	CYLINDER ASSEMBLY - brake (Replaces A62483)	2
31	NSS	BODY - cylinder	1
32	A 45383	PISTON ASSEMBLY - cylinder	1
33	*F 62114	O-RING - piston	1
34	*A 42252	RING - backup	1
35	*A 42256	RING - snap, piston retaining	1
36	*A 42255	BOOT - cylinder weatherseal	1
37	*A 42254	ROD - push	1
38	A 41491	SCREW - cylinder bleeder	1
	A 42258	REPAIR KIT - wheel cylinder (Includes all items with *)	2
40	113- 17	BOLT - hex, 1/4 NC x 1-1/4	4
41	92- 4	WASHER - lock, 1/4 inch	4
42	129- 101	NUT - hex, 1/4 inch NC	4
43	222- 1062	PLUG - cylinder, 7/16 inch PT	2

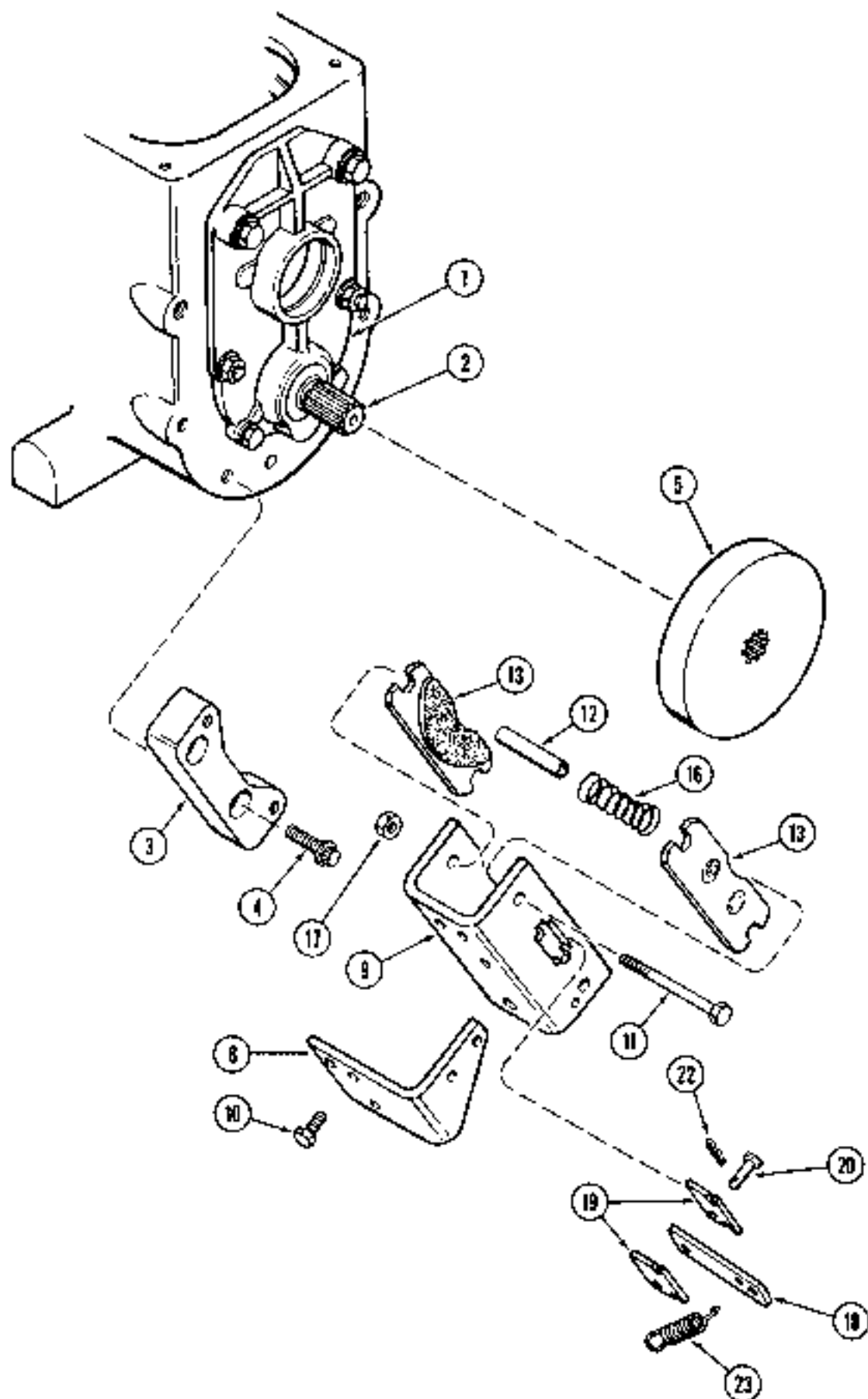




**TRANSAXLE DIFFERENTIAL BRAKE ACTUATOR  
TRANSMISSION SERIAL NO. 16270319 AND AFTER**

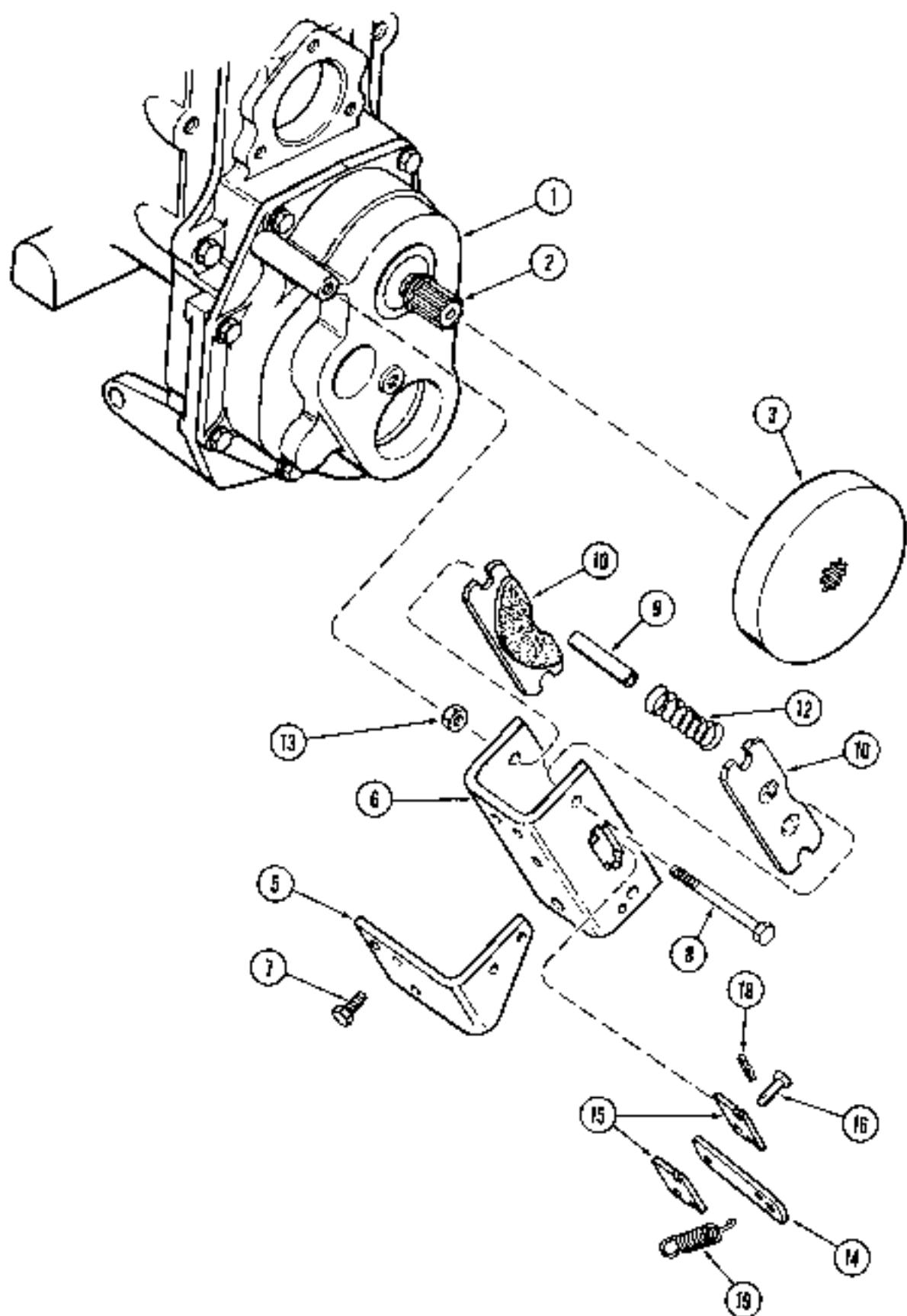
REF	PART NO	DESCRIPTION	REQ'D.
1	REF	HOUSING - brake (See Page 233)	2
2	A 168817	ROD - pull, brake actuating	2
3	A 168909	PLATE - clamp, actuator	4
4	13- 612	BOLT - hex, 3/8 NC x 3/4 inch	4
5	195- 25	WASHER - flat, 13/32 x 13/16 x 1/16 inch (10 x 21 x 2 mm)	4
	A 168974	ACTUATOR ASSEMBLY - brake	2
8	A 52286	HOUSING - piston	1
9	S 114301	INSERT - seal	1
10	S 114300	SCREW - bleed	1
11	A 52276	RING - retainer	1
13	A 52272	SPRING - piston	1
14	A 52271	RING - backup, piston	1
15	A 52267	PISTON - actuator	1
	A 52277	REPAIR KIT - piston	1
19	NSS	WASHER - flat, 2 inch (51 mm) OD (Reference No. A52273)	1
20	NSS	O-RING - piston, 1-1/2 inch (38 mm) ID (Reference No. A52270)	1
24	NSS	O-RING - housing, 1-5/8 inch (41 mm) OD (Reference No. A52269)	1
25	NSS	RING - back up (Reference No. A52268)	1
28	A 157951	NUT - hex, pull rod	2
29	25- 157	NUT - hex jam, 7/16 inch NF	2
30	A 179594	SEAL - dust	2

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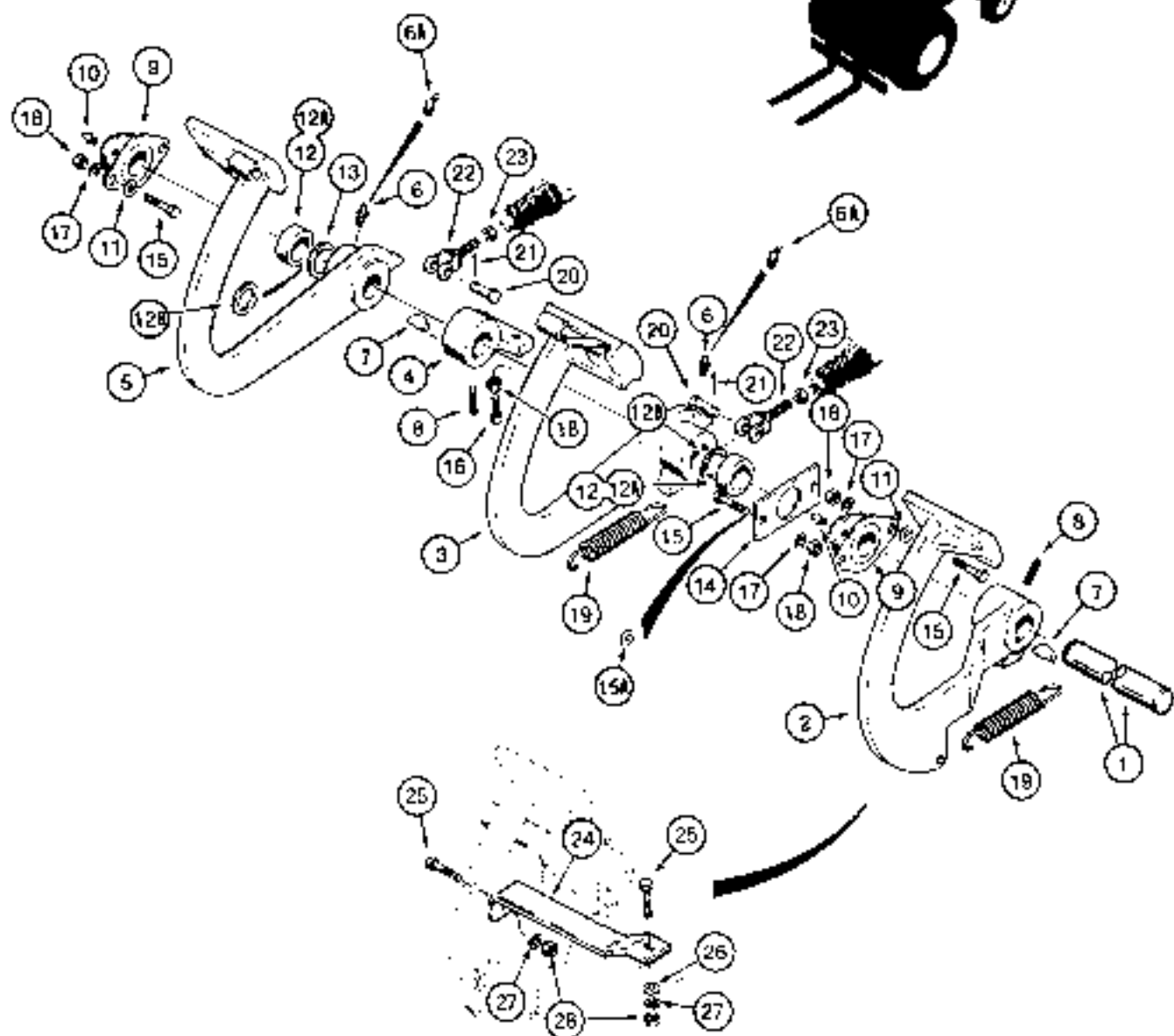
**TRANSAXLE PARK BRAKE  
TWO WHEEL DRIVE  
TRANSMISSION SERIAL NO. 16270319 AND AFTER**

REF.	PART NO.	DESCRIPTION	REQ D
1	REF	COVER - front, transmission (See Page 191) . . . . .	1
2	REF	SHAFT - counter (See Page 205) . . . . .	1
3	A 179065	PLATE - mounting, brake . . . . .	1
4	166- 87	BOLT - 12 point flanged head 1/2 NC x 1-1/2 inch . . . . .	2
5	A 169790	DISK - brake, caliper . . . . .	1
	A 162271	BRAKE ASSEMBLY - caliper . . . . .	1
8	A 52380	BRACKET - mounting, cable . . . . .	1
9	A 52256	HOUSING - brake . . . . .	1
10	113- 335	BOLT - hex. 7/16 NC x 3/4 inch . . . . .	3
11	A 52263	BOLT - retaining, brake . . . . .	2
12	A 52261	SPACER - stator . . . . .	2
13	A 52255	PAD - brake . . . . .	2
16	A 52262	SPRING - compression . . . . .	2
17	129- 144	NUT - hex jam, 7/16 inch NC (Discard) . . . . .	2
18	A 52379	LEVER - actuating . . . . .	1
19	A 52257	PLATE - pivot . . . . .	2
20	A 52259	PIN - clevis, pivot . . . . .	1
22	A 52260	PIN - retainer, pivot pin . . . . .	1
23	A 52264	SPRING - extension . . . . .	1



**TRANSAXLE PARK BRAKE  
FOUR WHEEL DRIVE  
TRANSMISSION SERIAL NO. 16270319 AND AFTER**

REF.	PART NO.	DESCRIPTION	REQ'D.
1	REF	COVER - transfer gear box (See Page 221) . . . . .	1
2	REF	SPLINE - stub (See Page 221) . . . . .	1
3	A 68790	DISK - brake, caliper . . . . .	1
	A 82271	BRAKE ASSEMBLY - park . . . . .	1
5	A 52380	BRACKET - mounting, cable . . . . .	1
6	A 52256	HOUSING - brake . . . . .	1
7	113- 335	BOLT - hex, 7/16 NC x 3/4 inch . . . . .	3
8	A 52263	BOLT - retaining, brake . . . . .	2
9	A 52261	SPACER - stator . . . . .	2
10	A 52255	PAD - brake . . . . .	2
12	A 52262	SPRING - compression . . . . .	2
13	129- 144	NUT - hex jam, 7/16 inch NC (Discard) . . . . .	2
14	A 52379	LEVER - actuating . . . . .	1
15	A 52257	PLATE - pivot . . . . .	2
16	A 52259	PIN - clevis, pivot . . . . .	1
18	A 52260	PIN - retaining, pivot pin . . . . .	1
19	A 52264	SPRING - extension . . . . .	1

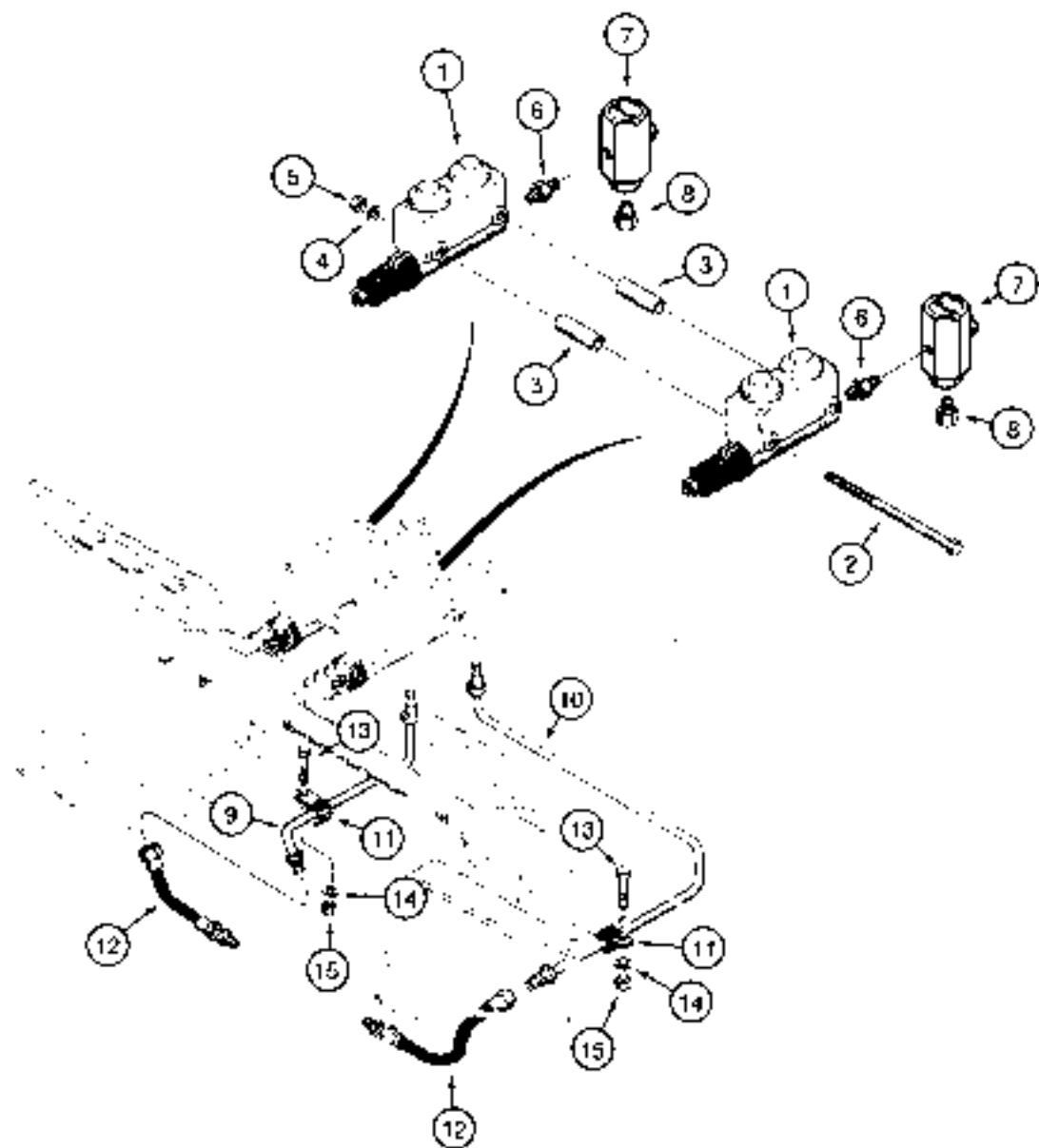


## BRAKE PEDALS AND MOUNTING

REF	PART NO.	DESCRIPTION	REQ'D
1	D 67451	SHAFT - brake pedal	1
2	D 67294	PEDAL - brake, both	1
3	D 67351	PEDAL - brake, left-hand	1
4	D 68123	STOP - brake pedals	1
5	D 67342	PEDAL - brake, right-hand	1
6	219- 1	GREASE FITTING - straight, 1/8" NPT, if used	2
6A	219- 36	GREASE FITTING - 45 degree, special short, 1/8" NPT, if used	2
7	128- 33	WOODRUFF KEY - 5/16" x 1-1/4"	2
8	85- 612	SET SCREW - square head, 3/8" - 16 NC x 3/4", cup point	2
9	D 77731	BEARING - pedal shaft	2
10	219- 1	GREASE FITTING - straight, 1/8" NPT	2
11	A 140282	WASHER - bearing, spacer	4
12	D 89713	SPACER - 5/8" wide, brake pedal, no longer used, order D89845 spacer and 195-2121 washer	2
12A	D 89845	SPACER - 1/2" wide, brake pedal	2
12B	195- 2121	WASHER - flat, 1-1/4" x .051 mm thick	2
13	195- 2125	WASHER - flat, 1-1/4" x .086 mm thick	1
14	D 69458	PLATE - spacer retaining	1
15	113- 207	BOLT - hex head, 3/8" - 16 NC x 1", plated	6
15A	A 140282	WASHER - spacer	VAR
16	178- 260	SET SCREW - hex socket headless, 3/8" - 16 NC x 1-1/4", dog point	2
17	192- 21	WASHER - lock, 3/8", plated	6
18	129- 103	NUT - hex, 3/8" - 16 NC, plated	8
19	R 15380	SPRING - pedal return	2
20	141- 5	CLEVIS PIN - 7/16"	2
21	132- 26	COTTER PIN - 3/32" x 3/4"	2
22	D 38620	CLEVIS - master cylinder	2
23	129- 167	NUT - hex, 7/16" - 20 NF, plated	2
24	D 72028	STOP - pedal	1
25	113- 207	BOLT - hex head, 3/8" - 16 NC x 1", plated	2
26	195- 525	WASHER - flat, 3/8", plated	1
27	192- 21	WASHER - lock, 3/8", plated	2
28	129- 103	NUT - hex, 3/8" - 16 NC, plated	2

**NOTE:** See pages 247-251 for brake master cylinder hydraulic circuit.

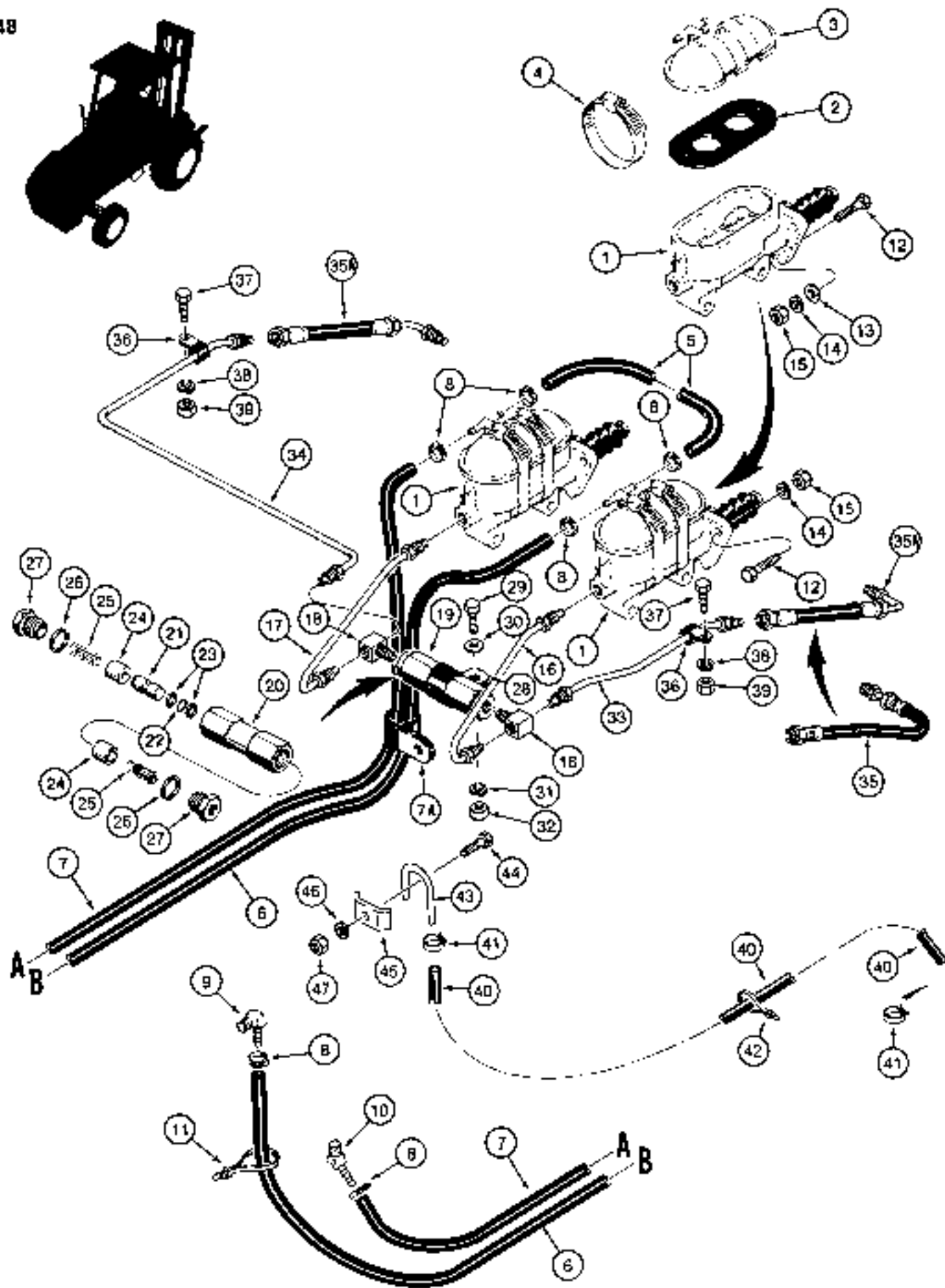




**BRAKE MASTER CYLINDER HYDRAULIC CIRCUIT  
TWO WHEEL DRIVE MODELS BEFORE TRACTOR PIN 9879000**

REF.	PART NO.	DESCRIPTION	REQ'D.
1	D 73465	MASTER CYLINDER - brake, parts list page 253	2
2	113- 251	BOLT - hex head, 3/8" - 16 NC x 7-1/2", plated	2
3	D 95741	SPACER - master cylinders	2
4	192- 21	WASHER - lock, 3/8", plated	2
5	129- 103	NUT - hex, 3/8" - 16 NC, plated	2
6	217- 1079	CONNECTOR - straight, male, 1/8" NPT	2
7	D 120878	REGULATOR - brake pressure	2
8	222- 1013	ADAPTER - straight, regulator to tube	2
9	D 87645	TUBE - brake, right-hand	1
10	D 75772	TUBE - brake, left-hand	1
11	49851	CLAMP - tube	2
12	D 66741	HOSE - 10" (254 mm) long, tube to brake cylinders	2
13	113- 207	BOLT - hex head, 3/8" - 16 NC x 1", plated	2
14	192- 21	WASHER - lock, 3/8", plated	2
15	129- 103	NUT - hex, 3/8" - 16 NC, plated	2

**NOTE:** For brake pedals and mounting parts see page 245. For brake master cylinder hydraulic circuit on tractor PIN 9879000 and after see page 249.



**BRAKE MASTER CYLINDER HYDRAULIC CIRCUIT  
ALL FOUR WHEEL DRIVE MODELS  
TWO WHEEL DRIVE MODELS TRACTOR PIN 9879000 AND AFTER**

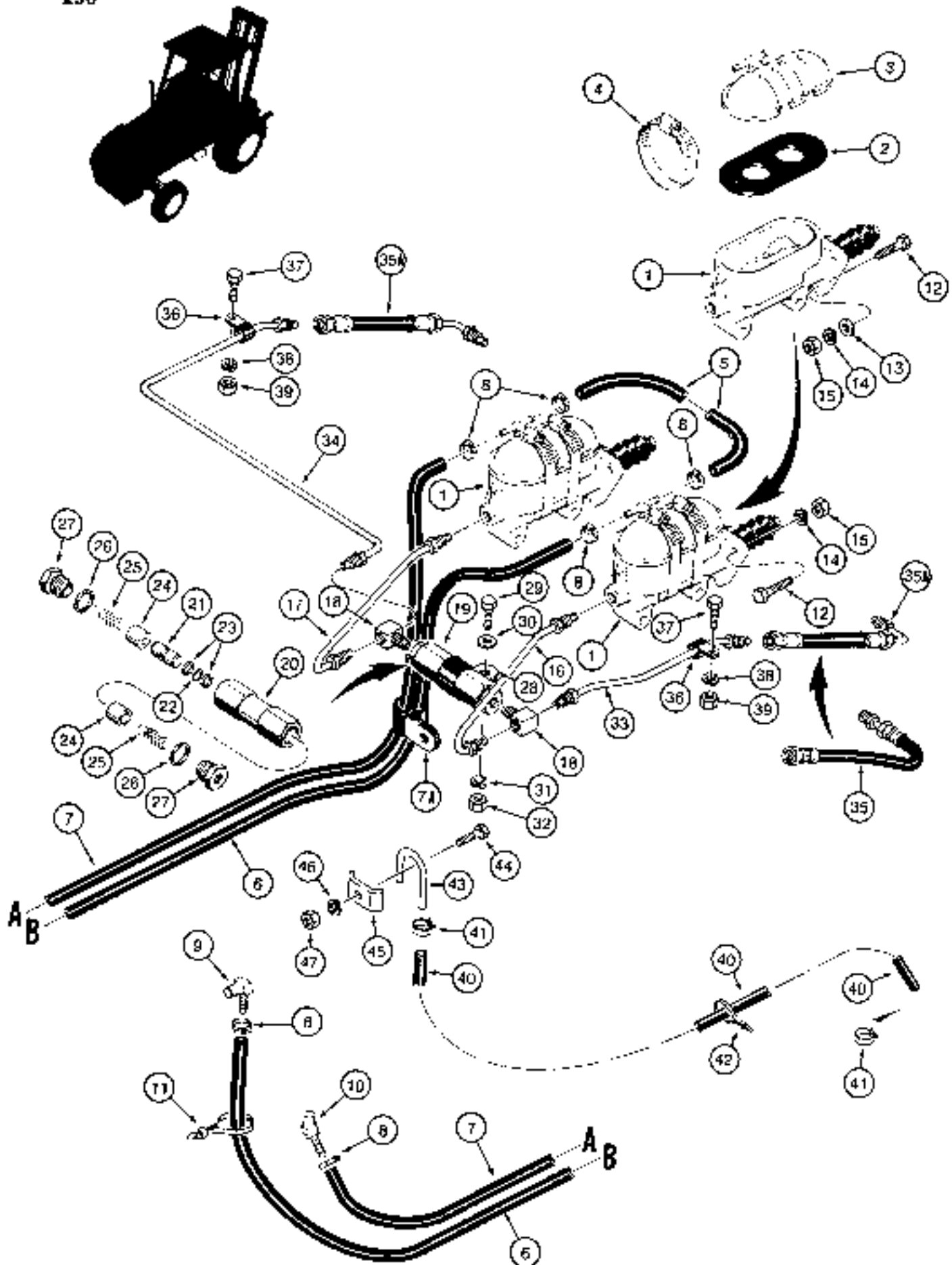
REF	PART NO	DESCRIPTION	REQ'D
1	D 127519	MASTER CYLINDER - brake, parts list page 255	2
2	D 128313	GASKET - master cylinder	2
3	D 127405	COVER - master cylinder	2
4	214- 264	CLAMP - cover to master cylinder, includes screw	4
5	D 59944	HOSE - 7-3/16" (183 mm) long, cylinder connecting	1
6	D 126994	HOSE - 1/4" (6 mm) ID x 75" (1905 mm) long, cut from H4001B4 bulk hose, see below, cylinder connecting hose to hydraulic oil filter	1
7	D 126980	HOSE - 1/4" (6 mm) ID x 58" (1480 mm) long, cut from H4001B4 bulk hose, see below, cylinder connecting hose to hydraulic reservoir return tube	1
7A	A 141013	CLAMP - P-type	1
8	214- 335	CLAMP - hose	6
9	*217- 292	BARB FITTING - 90 degree	1
10	*217- 281	BARB FITTING - 45 degree	1
11	L 18337	TIE STRAP - hoses to tubes	5
12	113- 209	BOLT - hex head, 3/8" - 16 NC x 1-1/2", plated	6
13	D 41740	WASHER - flat, 3/8", hardened	2
14	192- 21	WASHER - lock, 3/8", plated	6
15	129- 103	NUT - hex 3/8" - 16 NC, plated	6
16	D 128367	TUBE - right-hand master cylinder to tee	1
17	D 128365	TUBE - left-hand master cylinder to tee	1
18	222- 1071	TEE - tubes to equalizer valve	2
19	D 126650	VALVE - equalizer	1
20	NSS	BODY - equalizer valve	1
21	NSS	PISTON - equalizer valve	1
22	A 28197	O-RING - piston	1
23	N 9058	BACKUP RING - piston O-ring	2
24	NSS	RETAINER - spring	2
25	NSS	SPRING - piston	2
26	A 18673	GASKET - plug, copper	2
27	NSS	PLUG - equalizer valve end	2
28	A 141013	CLAMP - P-type equalizer valve	1

Continued on next page

H	400*84	HOSE - bulk, 1/4" (6 mm) ID x 75" (1905 mm) long	1
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**NOTE:** For brake pedals and mounting parts see page 245. For brake master cylinder hydraulic circuit before tractor PIN 9879000 see page 247.

\*NOTE: For further hydraulic related parts, see return lines and filter connections on pages 267 and 269.

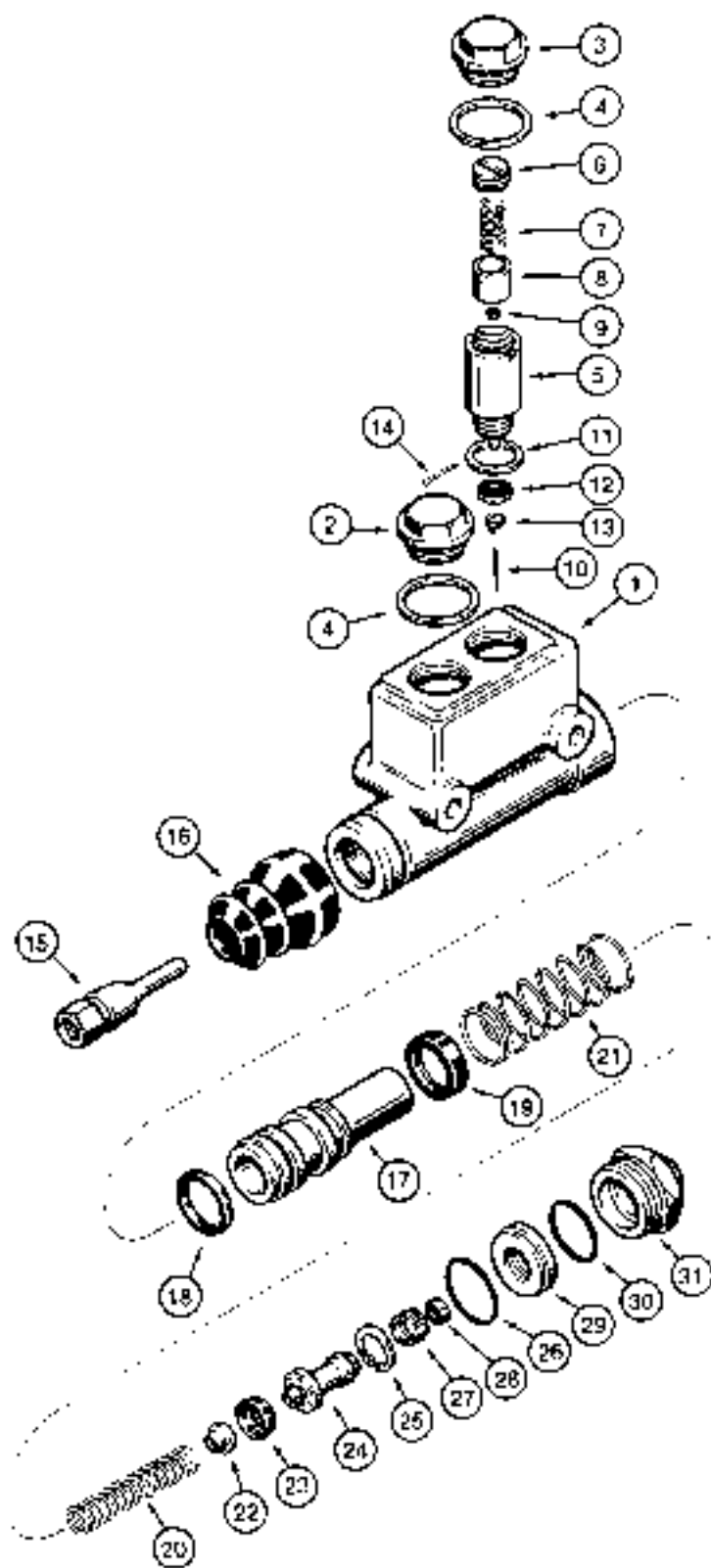


**BRAKE MASTER CYLINDER HYDRAULIC CIRCUIT  
ALL FOUR WHEEL DRIVE MODELS  
TWO WHEEL DRIVE MODELS TRACTOR PIN 9879000 AND AFTER**

REF.	PART NO.	DESCRIPTION	REQ'D
29	113- 207	BOLT - hex head, 3/8" - 16 NC x 1", plated	1
30	195- 525	WASHER - flat, 3/8", plated	1
31	192- 21	WASHER - lock, 3/8", plated	1
32	129- 103	NUT - hex, 3/8" - 16 NC, plated	1
33	D 128371	TUBE - right-hand, master cylinder to brake cylinder hose	1
34	D 128369	TUBE - left-hand, master cylinder to brake cylinder hose	1
35	D 66741	HOSE - 10' (254 mm) long, tube to brake cylinders, used on models with transaxle SN 16270319 and after, transaxle with unit actuator brake, see pages 163 and 165 for transaxle	2
35A	D 126980	HOSE - 8-3/4' (221 mm) long, tube to brake cylinders, used on models with transaxle SN 16249203 thru 16270318, transaxle without unit actuator brake, see pages 161 and 165 for transaxle, replaced hose with straight ends on some models	2
36	49851	CLAMP - P-type	2
37	113- 207	BOLT - hex head, 3/8" - 16 NC x 1", plated	2
38	192- 21	WASHER - lock, 3/8", plated	2
39	129- 103	NUT - hex, 3/8" - 16 NC, plated	2
40	D 134170	HOSE - 1/4" (6 mm) ID x 62-3/16" (1580 mm) long, vent, used on models with transaxle SN 16270319 and after	1
41	F 54936	CLAMP - vent hose	2
42	L 18337	TIE STRAP - hose	1
43	D 133917	TUBE - vent	1
44	113- 207	BOLT - hex head, 3/8" - 16 NC x 1", plated	1
45	L 15301	CLAMP - tube	1
46	192- 21	WASHER - lock, 3/8", plated	1
47	129- 103	NUT - hex, 3/8" - 16 NC, plated	1

**NOTE:** For brake pedals and mounting parts see page 245. For brake master cylinder hydraulic circuit before tractor PIN 9879000 see page 247.

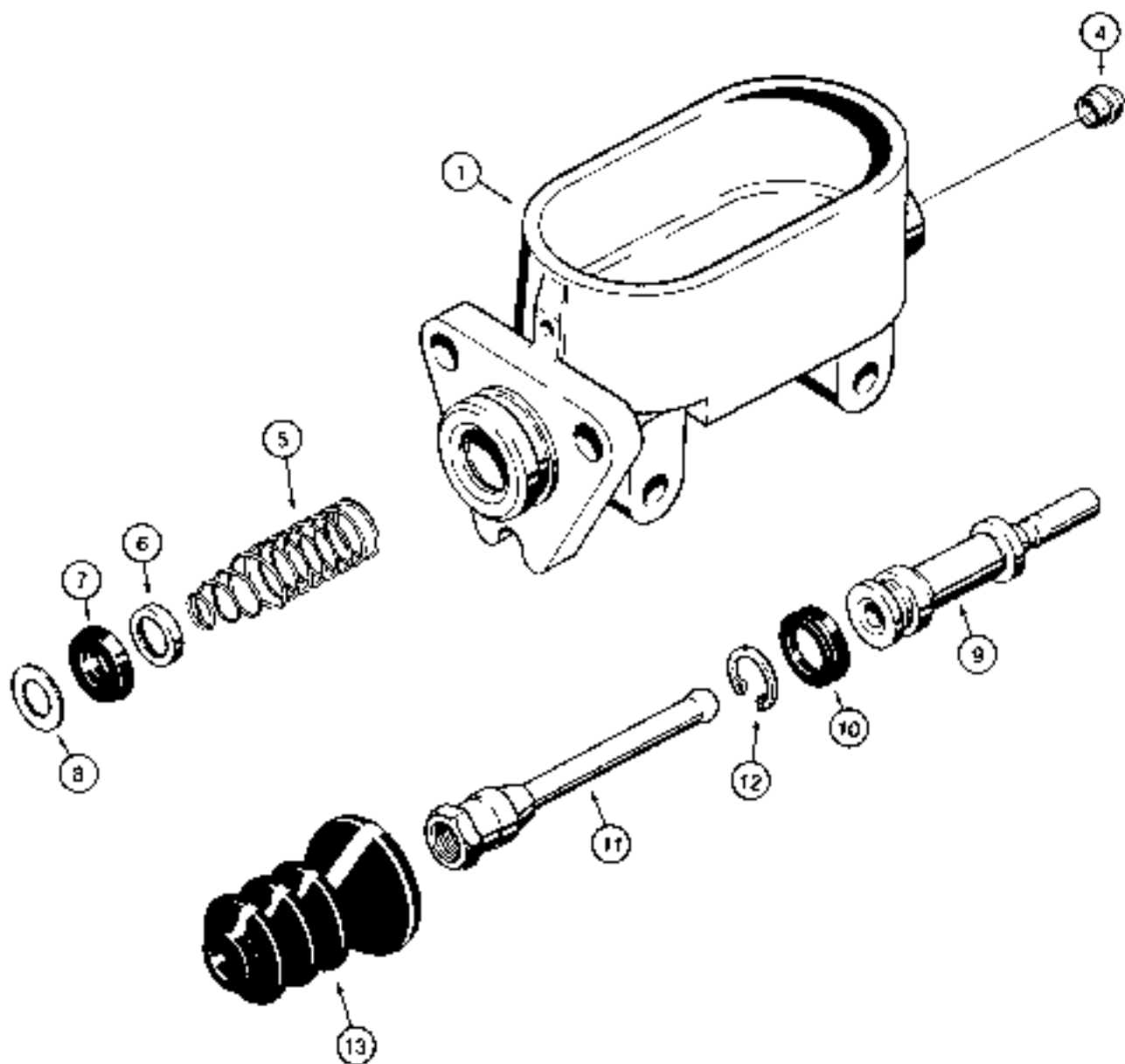
**\*NOTE:** For brake actuator vent hose used on transaxle SN 16270319 and after, see transaxle and differential lock on pages 163 and 167.



## D73465 BRAKE MASTER CYLINDER

REF	PART NO.	DESCRIPTION	REQ'D
	D 73465	MASTER CYLINDER ASSEMBLY - brake	1
1	NSS	HOUSING - master cylinder	1
2	A 12888	FILLER CAP - master cylinder	1
3	A 44664	FILLER CAP - over relief valve	1
4	* NSS	SEAL - filler caps	2
	D 75885	RELIEF VALVE ASSEMBLY - master cylinder	1
5	NSS	BODY - relief valve	1
6	NSS	ADJUSTING SCREW - relief valve	1
7	NSS	SPRING - relief valve, internal	1
8	NSS	PISTON - relief valve	1
9	NSS	SEAT - piston	1
10	NSS	PIN - metering	1
11	* NSS	SEAL - relief valve	1
12	* NSS	DISC - check seal	1
13	* NSS	SPRING - disc	1
14	* NSS	PIN - spring retaining	1
15	D 72412	ROD - push	1
16	D 72413	BOOT - master cylinder	1
17	NSS	PISTON - master cylinder	1
18	* NSS	SEAL - cup, secondary, piston	1
19	* NSS	SEAL - cup, high pressure, piston	1
20	NSS	SPRING - return, inner	1
21	NSS	SPRING - return, outer	1
22	NSS	RETAINER - inner seal cup	1
23	* NSS	SEAL - inner cup	1
24	NSS	PISTON - inner	1
25	* NSS	SNAP RING - internal	1
26	* NSS	O-RING - retainer to housing	1
27	* NSS	RETAINER - inner	1
28	* NSS	SEAL - end	1
29	NSS	RETAINER - outer	1
30	* NSS	O-RING - retainer to end plug	1
31	NSS	PLUG - end	1
	* D 75886	KIT - master cylinder repair, includes all items preceded by an asterisk	1

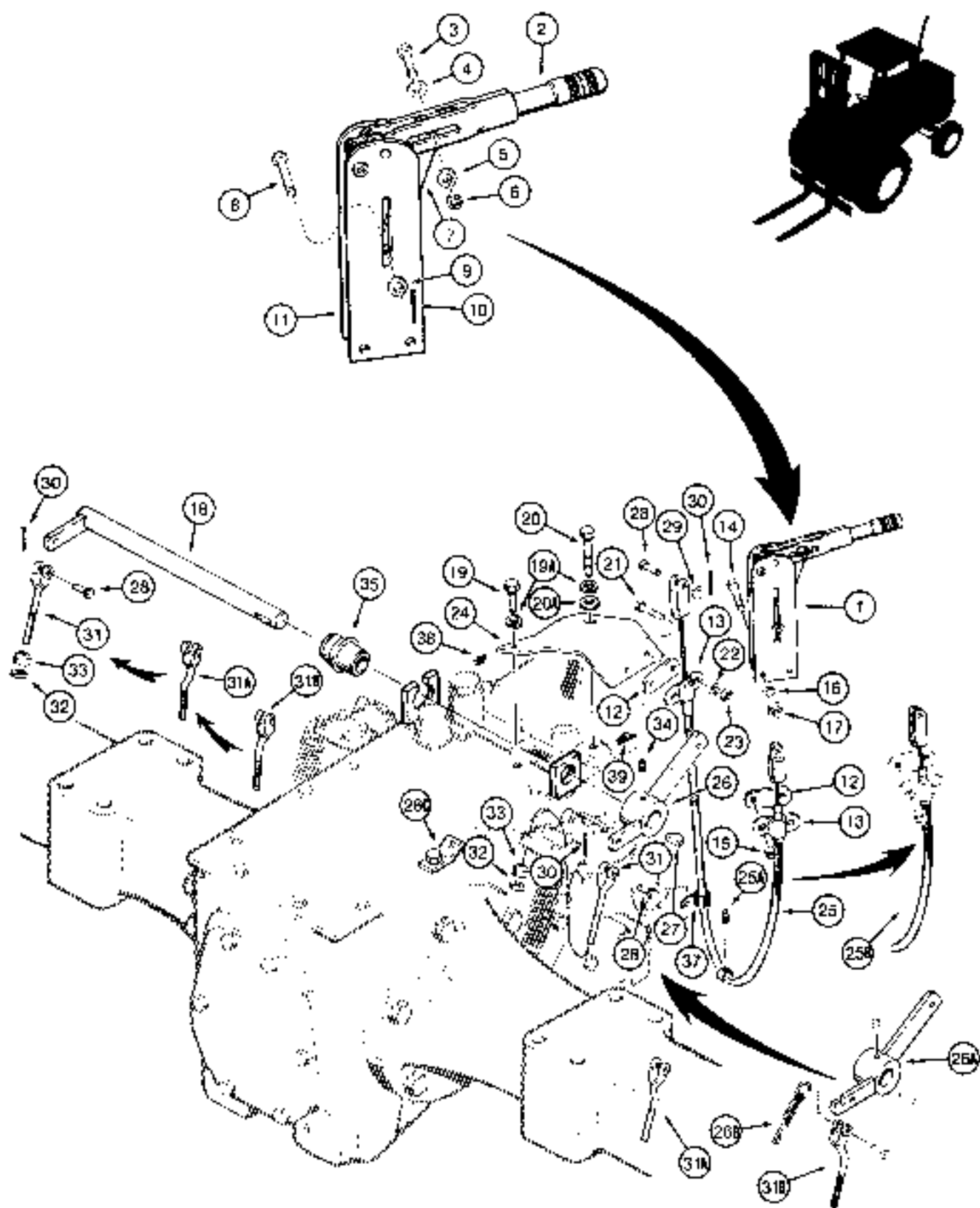




**D127519 BRAKE MASTER CYLINDER**

REF	PART NO	DESCRIPTION	REQ'D
	Q 127519	MASTER CYLINDER - brake .....	2
1	NSS	BODY - master cylinder .....	1
2		RESERVED	
3		RESERVED	
4	N 6825	SEAT - tube .....	1
	N 6823	PISTON ASSEMBLY - master cylinder .....	1
5	NSS	SPRING - return .....	1
6	NSS	RETAINER - cup .....	1
7	N 0830	CUP - pump .....	1
8	N 0828	PROTECTOR - cup .....	1
9	NSS	PISTON - master cylinder .....	1
10	N 6829	SEAL - double lip .....	1
11	- 32137	ROD - push .....	1
12	A 42256	SNAP RING - master cylinder .....	1
13	N 5819	BOOT - push rod .....	1

**NOTE:** See page 249 for brake master cylinder cover, gasket, clamps, and mounting.



## PARKING BRAKE LEVER AND LINKAGE

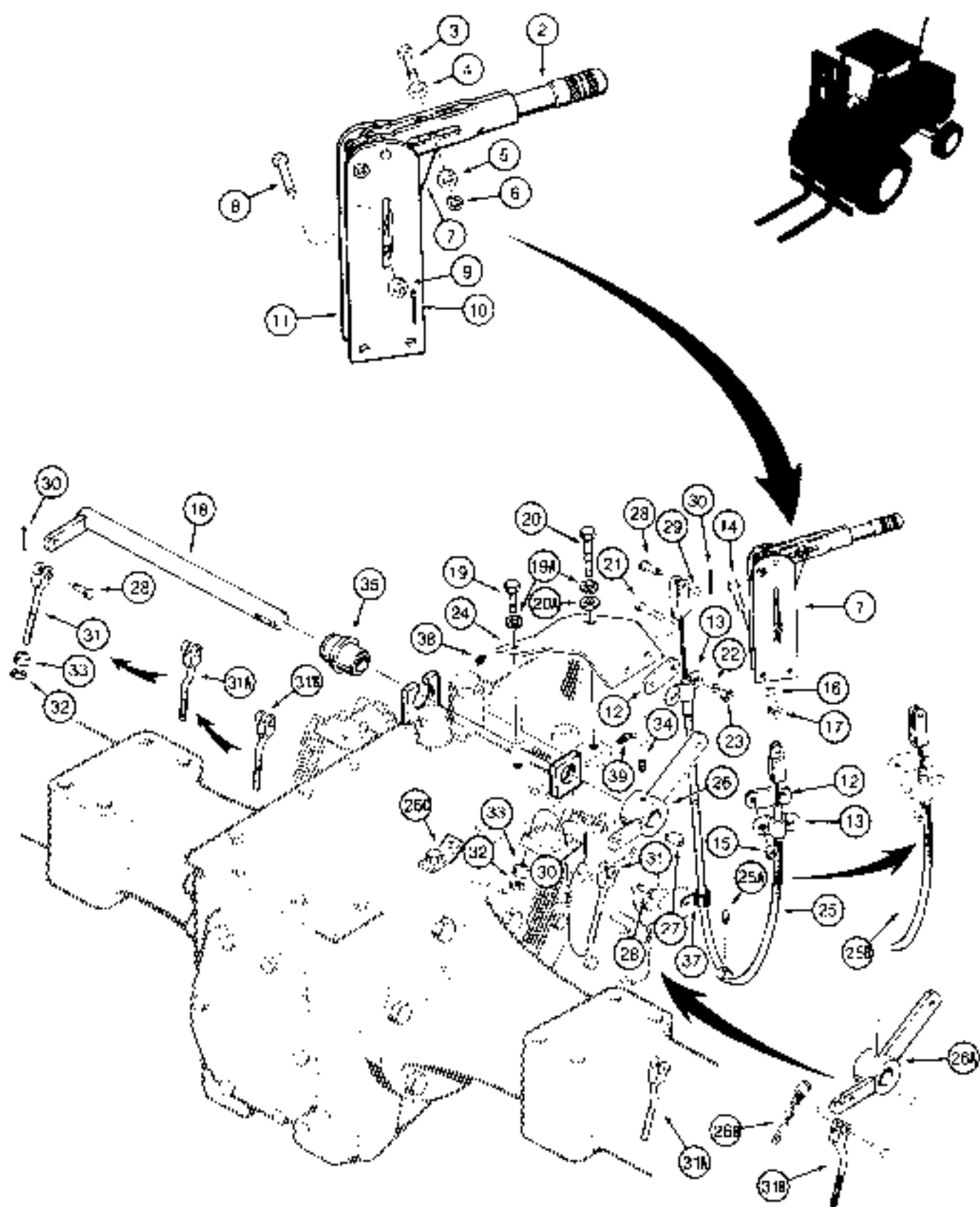
\*USED BEFORE TRANSAXLE SN 16270319

REF.	PART NO.	DESCRIPTION	REQ'D.
1	D 75370	LEVER ASSEMBLY - parking brake	1
2	NSS	LEVER - brake	1
3	A 42204	PIN - lever to link, if used	1
4	A 55834	WASHER - wave, if used	1
5	195- 103	WASHER - flat, 5/16", plated, if used	1
6	F 45340	RING - retaining, if used	1
7	NSS	LINK - brake lever	1
8	L 30975	PIN - lever to brake cable	1
9	195- 103	WASHER - flat, 5/16", plated	1
10	132- 320	COTTER PIN - 3/32" x 3/4", plated	1
11	NSS	BRACKET - brake lever	1
12	D 129747	PLATE - oval, spacer, cable clamp, replaces rectangular plate on some models	2
13	D 121608	CLAMP - parking brake cable	2
14	113- 121	BOLT - hex head, 5/16" - 18 NC x 2", plated	2
15	D 69991	SPACER - clamp	2
16	192- 20	WASHER - lock, 5/16", plated	2
17	129- 102	NUT - hex, 5/16" - 18 NC, plated	2
18	D 69400	SHAFT - parking brake	1
19	113- 209	BOLT - hex head, 3/8" - 16 NC x 1-1/2", plated	1
19A	192- 21	WASHER - lock, 3/8", plated	2
20	113- 219	BOLT - hex head, 3/8" - 16 NC x 2", plated	1
20A	195- 525	WASHER - flat, 3/8", plated	1
21	113- 122	BOLT - hex head, 5/16" - 18 NC x 1-1/2", plated	2
22	192- 20	WASHER - lock, 5/16", plated	2
23	129- 102	NUT - hex, 5/16" - 18 NC, plated	2

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**NOTE:** See page 109 for parking brake alarm.

**\*NOTE:** See page 261 for parking brake used on transaxle SN 16270319 and after



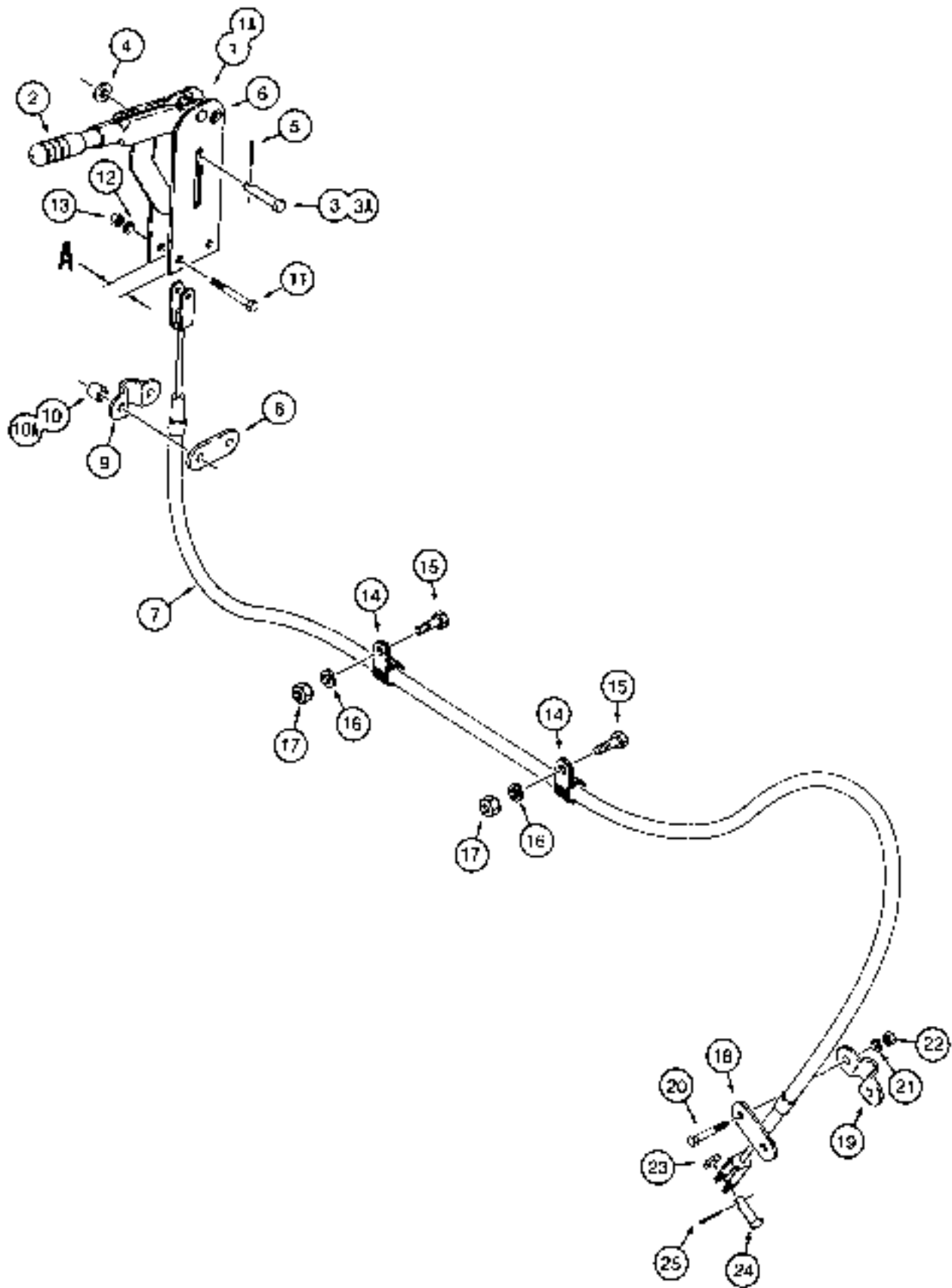
## PARKING BRAKE LEVER AND LINKAGE

\*USED BEFORE TRANSAXLE SN 16270319

REF.	PART NO.	DESCRIPTION	REQ D.
24	D 69997	BRACKET - cable mounting	1
25	D 81871	CABLE - parking brake, no longer used, order D127893 cable	1
25A	219- 8	GREASE FITTING - straight, 1/4" - 28 NF taper, D81871 cable only	1
25B	D 127893	CABLE - parking brake	1
26	D 69995	BELLCRANK - parking brake, if used	1
26A	D 126957	BELLCRANK - used on models with parking brake alarm, if used	1
26B	A 35789	SPRING - clutch pedal return, used with D126957 bellcrank, if used	1
26C	D 127509	BRACKET - return spring	1
27	126- 24	WOODRUFF KEY - size 15	1
28	141- 53	CLEVIS PIN - 5/16", plated	3
29	195- 521	WASHER - flat, 5/16", plated	1
30	132- 330	COTTER PIN - 3/32" x 1/2", plated	3
31	D 69411	ROD - straight, hand brake, if used	2
31A	D 83994	ROD - offset, parking brake, if used	2
31B	D 127530	ROD - clevis, offset, parking brake, if used	2
32	129- 102	NUT - hex. 5/16" - 18 NC, plated	2
33	D 69410	NUT - hand brake, 5/16" - 18 NC, special	2
34	85- 610	SET SCREW - square head, cup point, 3/8" - 16 NC x 5/8"	1
35	D 74218	BUSHING - spacer	1
36		RESERVED	
37	49636	CLAMP - cable, uses existing transaxle support hardware, see items 8, 9 and 10 on pages 159 and 161 and items 8, 9, 10, and 11 on page 165 no longer used, not required	1
38	219 20	GREASE FITTING - straight, 1/4" - 28 NF	1
39	219 30	GREASE FITTING - 45 degree, 1/4" - 28 NF taper	1

**NOTE:** See page 109 for parking brake alarm

**\*NOTE:** See page 261 for parking brake used on transaxle SN 16270319 and after.

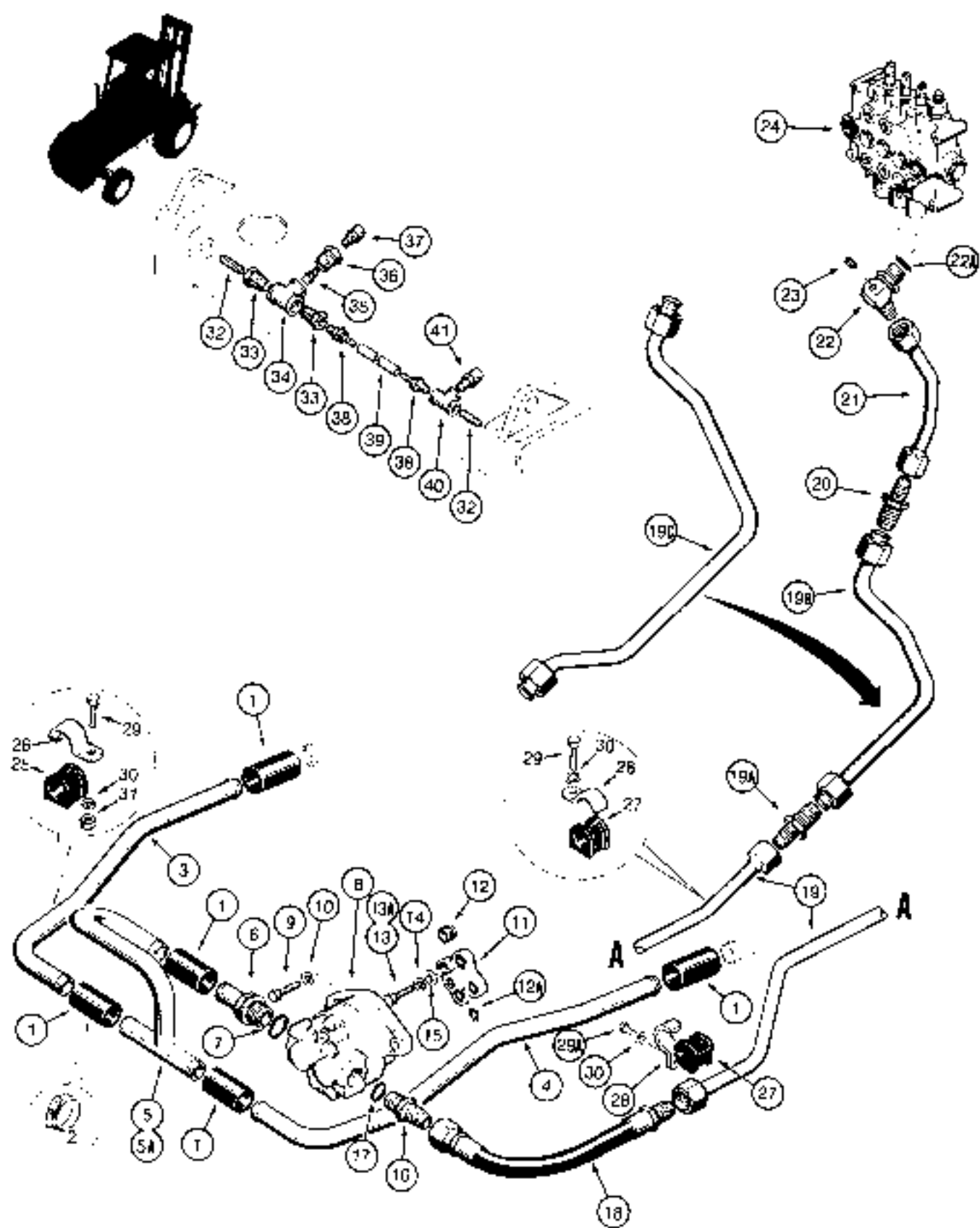


**PARKING BRAKE**  
**\*USED ON TRANSAXLE SN 16270319 AND AFTER**

REF.	PART NO	DESCRIPTION	REQ'D.
1	D 75370	LEVER ASSEMBLY - parking brake, inside dimension A is .97" (24.6 mm) wide, use items 3, 8, and 10	1
1A	D 121555	LEVER ASSEMBLY - parking brake, inside dimension A is .81" (20.6 mm) wide, use items 3A, 8, and 10A, no longer used, order D75370 lever (item 1), (2) D69991 spacer (item 10), and L30875 pin (item 3)	1
2	NSS	LEVER - parking brake	1
3	L 30975	PIN - lever to brake cable, used with item 1 only	1
3A	D 42458	PIN - lever to brake cable, used with item 1A only	1
4	195- 103	WASHER - flat, 5/16", plated	1
5	132- 320	COTTER PIN - 3/32" x 3/4", plated	1
6	NSS	BRACKET - brake lever	1
7	D 127893	CABLE - parking brake	1
8	D 129747	PLATE - oval spacer, plated	1
9	D 121608	CLAMP - parking brake cable to lever	1
10	D 69991	SPACER - clamp, used with item 1 only	2
10A	D 122882	SPACER - split, clamp, used with item 1A only	2
11	113- 121	BOLT - hex head, 5/16" - 18 NC x 2", plated	2
12	192- 20	WASHER - lock, 5/16", plated	2
13	129- 102	NUT - hex 5/16" - 18 NC, plated	2
14	49838	CLAMP - P-type, cable to transaxle	2
15	113- 207	BOLT - hex head, 3/8" - 16 NC x 1", plated	2
16	192- 21	WASHER - lock, 3/8", plated	2
17	129- 103	NUT - hex 3/8" - 16 NC, plated	2
18	D 129747	PLATE - oval spacer, mounts to extension on transaxle countershaft	1
19	D 121608	CLAMP - parking brake cable	1
20	113- 122	BOLT - hex head, 5/16" - 18 NC x 1-1/2", plated	2
21	192- 20	WASHER - lock, 5/16", plated	2
22	129- 102	NUT - hex 5/16" - 18 NC, plated	2
23	195- 521	WASHER - flat, 5/16", plated	1
24	141- 53	CLEVIS PIN - 5/16", plated, lower cable mounting	1
25	132- 330	COTTER PIN - 3/32" x 1/2", plated	1

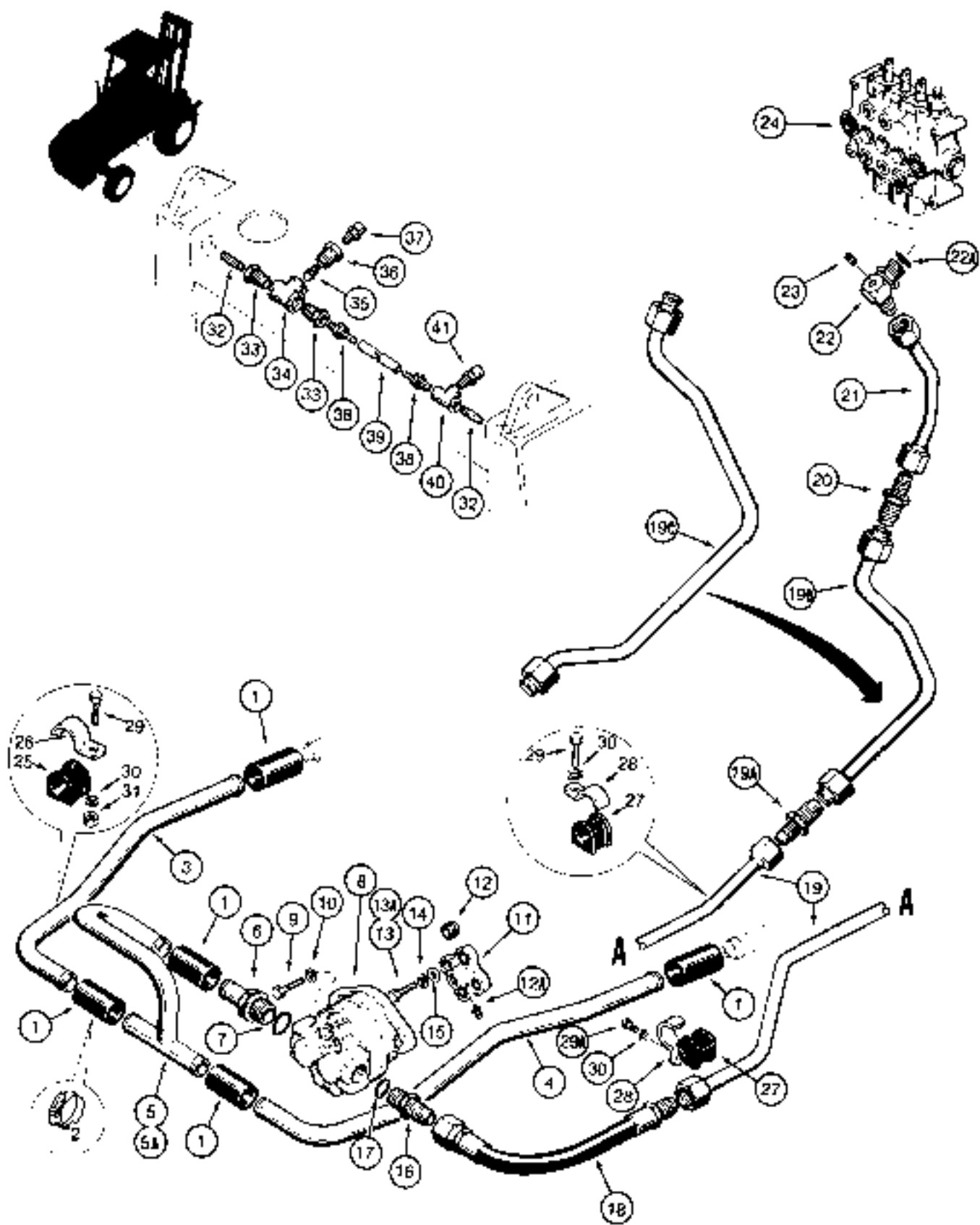
**\*NOTE:** See pages 257 and 259 for parking brake used before transaxle SN 16270319





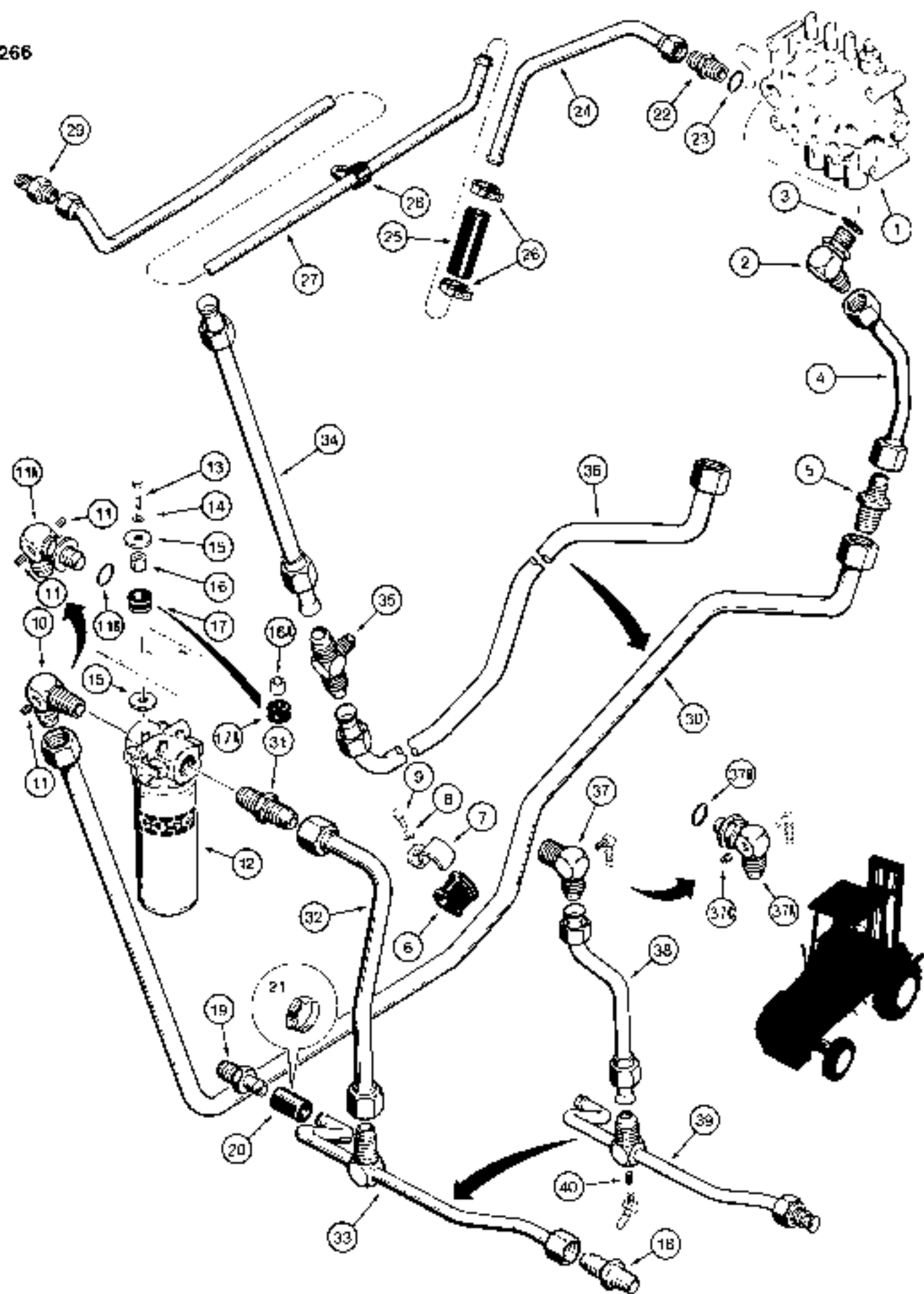
## FORKLIFT HYDRAULIC CIRCUIT RESERVOIR TO CONTROL VALVE

REF.	PART NO	DESCRIPTION	REQ'D.
1	R 13911	HOSE - 1-1/4" (32 mm) ID x 4" (102 mm) long, cut from S118465 bulk hose, see below, suction tubes	5
2	214- 257	CLAMP - hose	10
3	D 65670	TUBE - suction, left-hand	1
4	D 65659	TUBE - suction, right-hand	1
5	D 94147	TUBE - manifold, suction, used before tractor SN 9879000	1
5A	D 128885	TUBE - manifold, suction, used on tractor SN 9879000 and after	1
6	217- 178	STEM FITTING - straight, at hydraulic pump	1
7	218- 5011	O-RING - stem fitting	1
8	REF	HYDRAULIC PUMP - for correct assembly and components see pages 279-283	1
9	113- 410	BOLT - hex head, 1/2" - 13 NC x 1-1/2", plated	2
10	192- 23	WASHER - lock, 1/2", plated	2
11	D 90883	COUPLING - equipment hydraulic pump	1
12	A 45216	BUSHING - pump coupling	4
12A	219- 20	GRF ASE FITTING - straight, 1/4" - 28 NF	1
13	113- 311	BOLT - hex head, 7/16" - 14 NC x 1-1/2", plated, if used	4
13A	113- 323	BOLT - hex head, 7/16" - 14 NC x 1-3/4", plated, if used	4
14	192- 22	WASHER - lock, 7/16", plated	4
15	A 30013	WASHER - flat, special	4
16	218- 5069	ADAPTER - straight, male	1
17	218- 5010	O-RING - adapter	1
18	D 68547	HOSE - 20' (508 mm) long, pressure	1
19	D 77297	TUBE - pressure, long	1
19A	218- 739	CONNECTOR - straight, male	1
19B	D 77295	TUBE - pressure, intermediate, used before tractor SN 9879000	1
19C	D 125816	TUBE - pressure, intermediate, used on tractor SN 9879000 and after	1
20	218- 745	ADAPTER - straight, male	1
21	D 75084	TUBE - pressure, short	1
22	R 30729	ELBOW - 90 degree, adjustable, special	1
22A	218- 5008	O-RING - elbow	1
23	221- 849	PLUG - hex socket head, 1/8" NPT	1
24	REF	CONTROL VALVE - forklift control, for correct assembly and components see pages 285-291	1
25	D 67298	INSULATOR - suction tubes	2
26	D 68845	CLAMP - suction tubes	2
27	D 67297	INSULATOR - pressure tube	2
28	D 68846	CLAMP - pressure tube	2
29	113- 207	BOLT - hex head, 3/8" - 16 NC x 1", plated	3
29A	113- 206	BOLT - hex head, 3/8" - 16 NC x 3/4", plated, rear clamp	1
30	192- 21	WASHER - lock, 3/8", plated	4
31	129- 103	NUT - hex, 3/8" - 16 NC, plated	2
		Continued on next page	
S	118465	HOSE - bulk, 1-1/4" (32 mm) ID x 180' (4572 mm) long	1



### FORKLIFT HYDRAULIC CIRCUIT RESERVOIR TO CONTROL VALVE

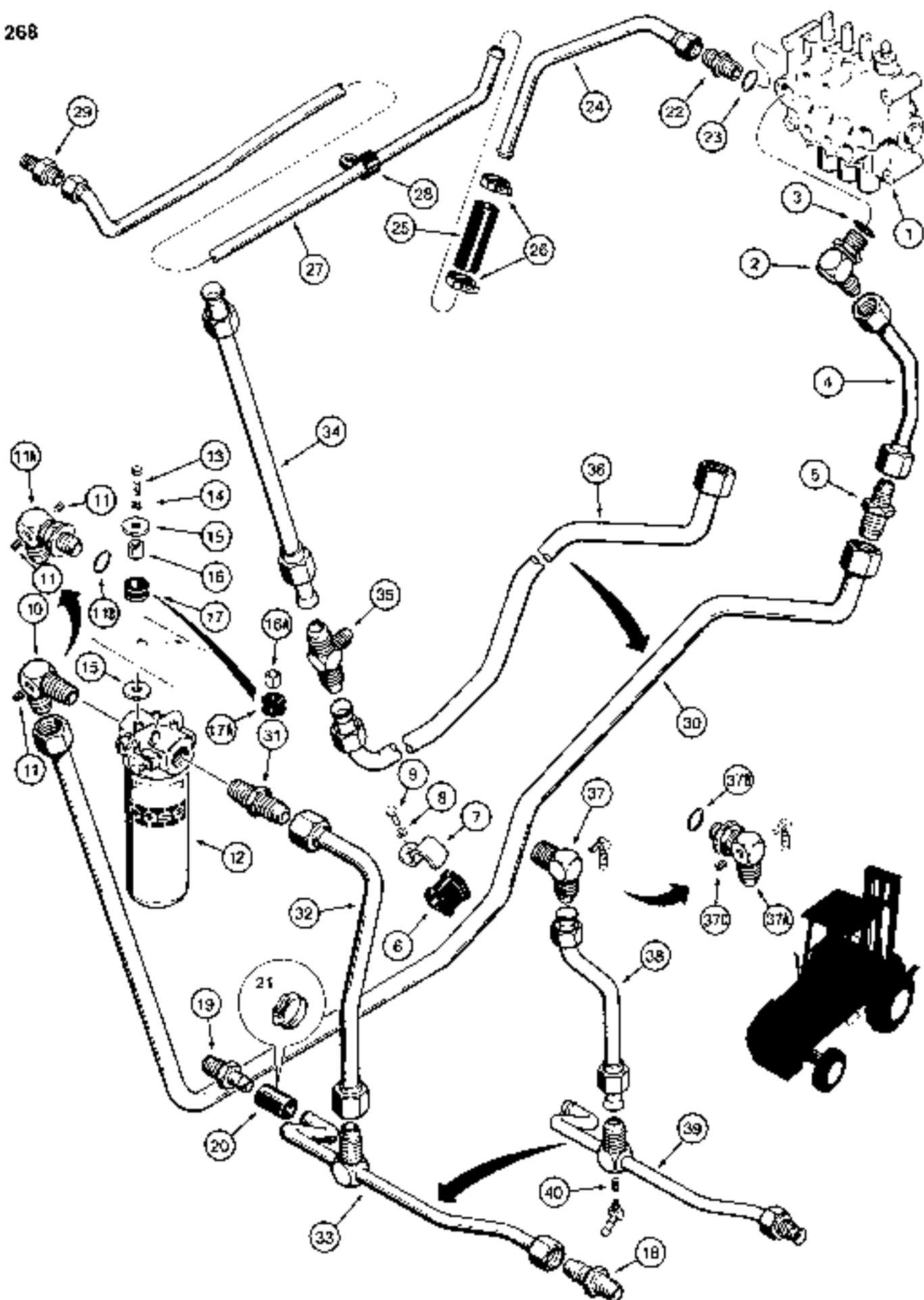
REF.	PART NO.	DESCRIPTION	REQ'D.
32	221- 130	NIPPLE - 1/4" NPT x 7/8" . . . . .	2
33	221- 1088	REDUCER - 1/2" x 1/4" NPT. at tee . . . . .	2
34	221- 441	TEE - left-hand side . . . . .	1
35	D 63543	FILTER - breather . . . . .	1
36	D 63506	ADAPTER - breather . . . . .	1
37	R 15538	BREATHER - air, inlet . . . . .	1
38	220- 502	BARB FITTING - straight, hose coupling . . . . .	2
39	D 72098	HOSE - 1/4" (6.4 mm) ID x 17" (432 mm) long, cut from C18274 bulk hose, see below . . . . .	1
40	221- 430	TEE - relief valve . . . . .	1
41	D 94060	RELIEF VALVE - air outlet . . . . .	1
	C 18274	HOSE - bulk, 1/4" (6.4 mm) ID x 60" (1524 mm) long . . . . .	1



## FORKLIFT HYDRAULIC CIRCUIT RETURN LINES AND FILTER CONNECTIONS

REF.	PART NO.	DESCRIPTION	REQ'D.
1	REF	CONTROL VALVE - forklift for correct assembly and components see pages 285-291	1
2	218- 5108	ELBOW - 90 degree, adjustable	1
3	218- 5008	O RING - fitting	1
4	D 75064	TUBE - return, from valve	1
5	218- 745	ADAPTER - str.a.ght. male	1
6	D 67297	INSULATOR - tube	1
7	D 68846	CLAMP - tube	1
8	192- 21	WASHER - lock, 3/8", plated	1
9	113- 207	BOLT - hex head, 3/8" - 16 NC x 1", plated	1
10	D 65646	ELBOW - 90 degree, male, used with D89908 or D122362 oil filter without O-ring ports	1
11	221- 849	PLUG - hex socket head, 1/8" NPT	1/2
11A	D 132008	ELBOW - 90 degree, adjustable, used with D131293 oil filter with O-ring ports	1
11B	218- 5010	O-RING - D132008 elbow only	1
12	REF	FILTER - hydraulic oil, for correct assembly and components, see parts list page 295	1
13	113- 209	BOLT - hex head, 3/8" - 16 NC x 1-1/2", plated	2
14	192- 21	WASHER - lock, 3/8", plated	2
15	195- 2042	WASHER - flat, 3/8", special	4
16	D 89934	SPACER - filter mounting, 7/8" OD x 7/32" thick, used with item 17 grommet, if used	2
16A	D 76209	SPACER - split, filter mounting bracket, 5/8" OD x 1/8" thick, used with item 17A grommet, if used	2
17	D 67415	GROMMET - filter mounting, 7/8" ID, used with item 16 spacer, if used	2
17A	D 132895	GROMMET - filter mounting bracket, 5/8" ID, used with item 16A spacer, if used	2
18	218- 446	ADAPTER - str.a.ght. male, right-hand reservoir	1
19	217- 155	STEM FITTING - straight, left-hand reservoir	1
20	R 20804	HOSE - 3/4" (19 mm) ID x 3" (76 mm) long, may be cut from bulk hose, see Parts Substitution List for bulk hose options, return tube	1
21	214- 255	CLAMP - hose	2
22	218- 5064	ADAPTER - str.a.ght. male	1
23	218- 5008	O-RING - adapter	1
24	D 93704	TUBE - from valve or d port	1
25	D 24728	HOSE - 3/4" (19 mm) ID x 4-1/2" (114 mm) long, may be cut from bulk hose, see Parts Substitution List for bulk hose options	1
26	214- 255	CLAMP - hose	2
27	D 121639	TUBE - to reservoir	1
28	49858	CLAMP - tube	1
29	218- 446	ADAPTER - str.a.ght. male	1

Continued on next page

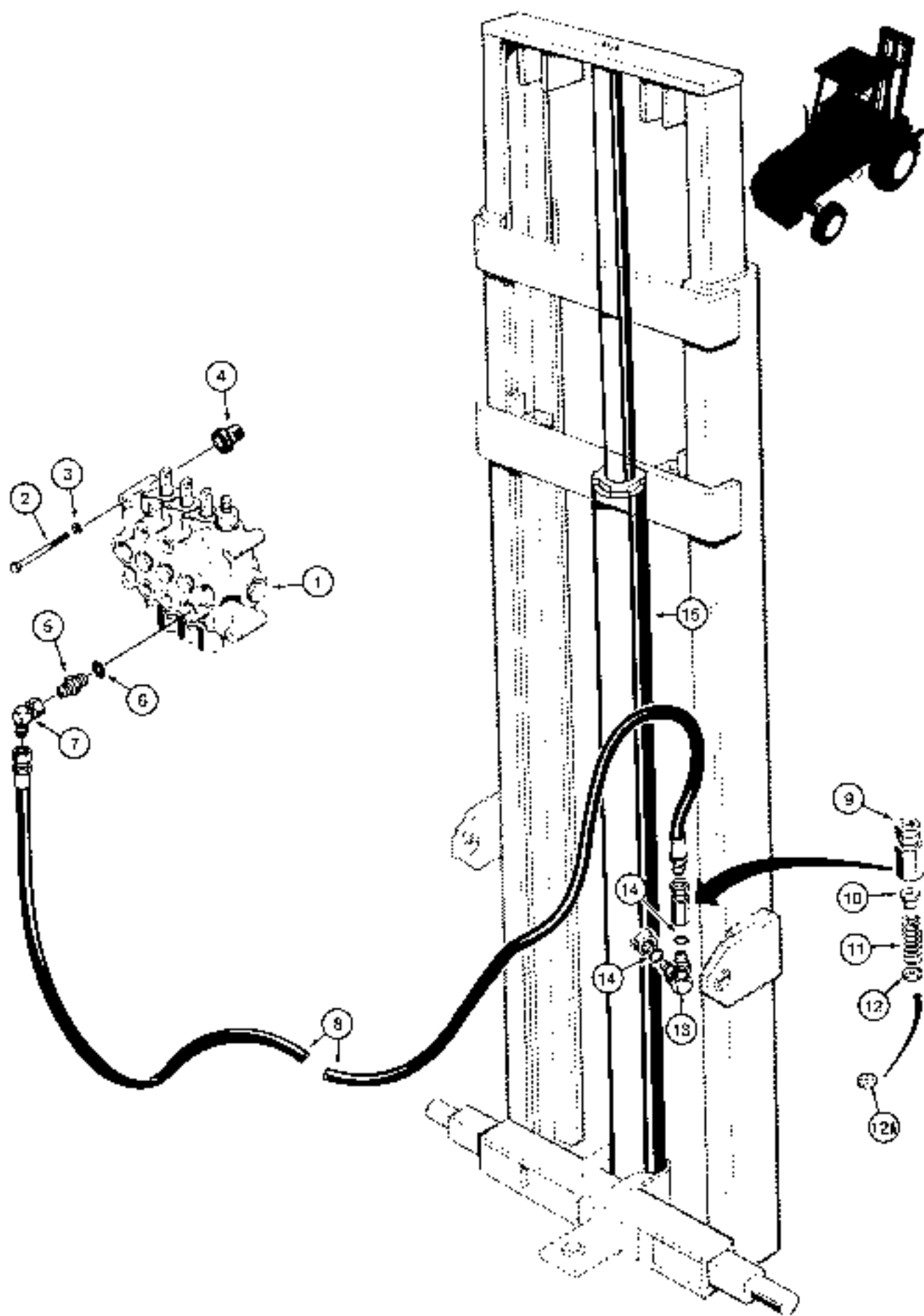


## FORKLIFT HYDRAULIC CIRCUIT RETURN LINES AND FILTER CONNECTIONS

REF.	PART NO.	DESCRIPTION	REQ'D
<b>USED BEFORE TRACTOR PIN 9879000</b>			
30	D 86092	TUBE - return, to filter .....	1
31	218- 448	ADAPTER - straight, male .....	1
32	D 67711	TUBE - return, from filter .....	1
33	D 68536	TUBE - return to tank .....	1
<b>USED ON TRACTOR PIN 9879000 AND AFTER</b>			
34	D 126421	TUBE - return, valve to filter .....	1
35	218- 586	TEE - male, tube to tube .....	1
36	D 126423	TUBE - return, valve to filter .....	1
37	*D 65646	ELBOW - 90 degree, male, used with D89908 or D122362 oil filter without O-ring ports .....	1
37A	*D 132008	ELBOW - 90 degree, adjustable, used with D131293 oil filter with O-ring ports .....	1
37B	218- 5010	O-RING - D132008 elbow only .....	1
37C	221- 849	PLUG - hex socket head, 1/8" NPT, used with D132008 elbow .....	1
38	*D 127000	TUBE - return, from filter .....	1
39	*D 126993	TUBE - return to tank .....	1
40	*221- 11	PLUG - square head, 1/8" NPT, if used, not required when tractor is equipped with brake balance system .....	1

**\*NOTE:** For further hydraulic related parts, see brake master cylinder hydraulic circuit on page 249.

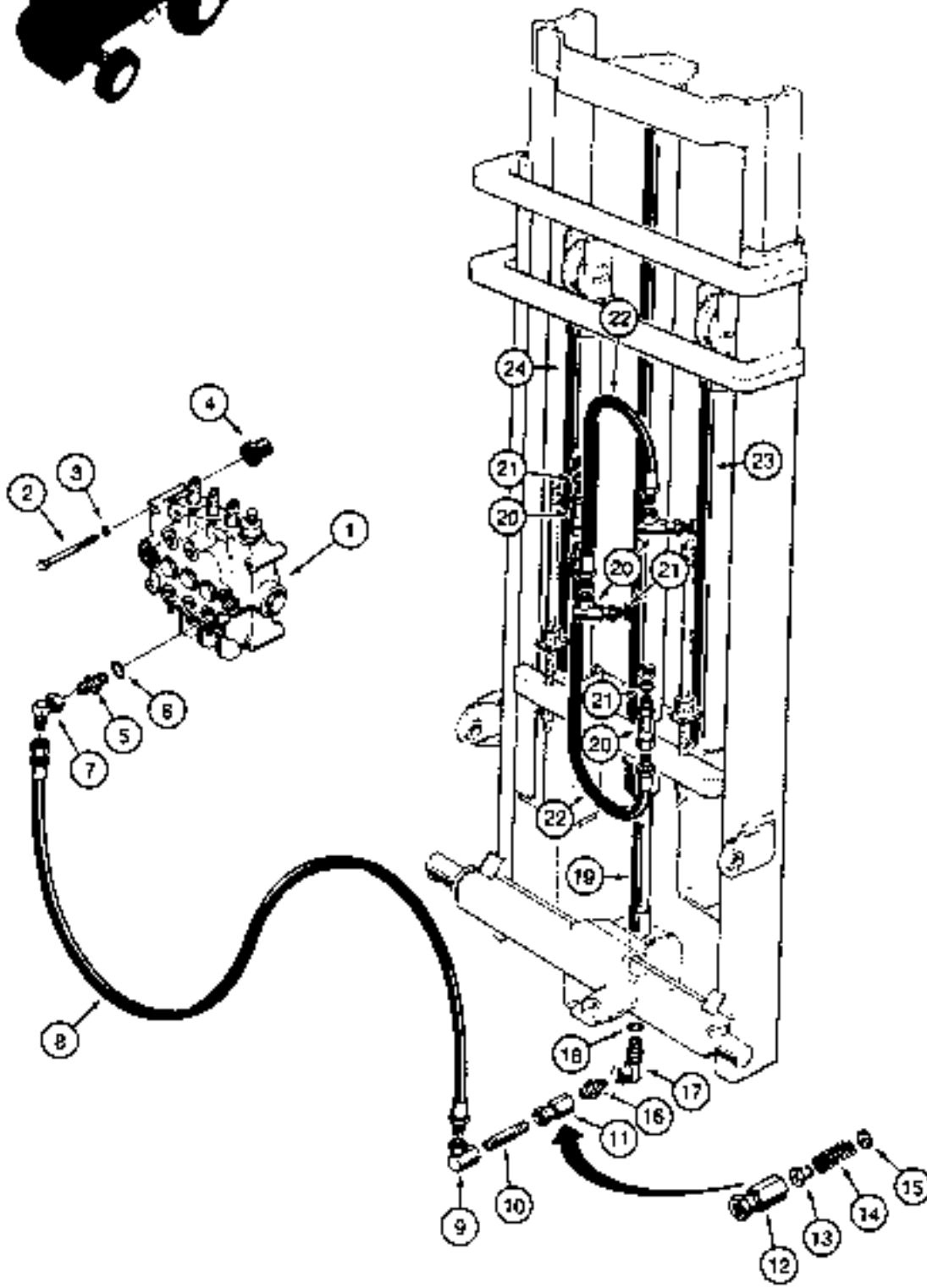




## MAST LIFT CYLINDER HYDRAULIC CIRCUIT

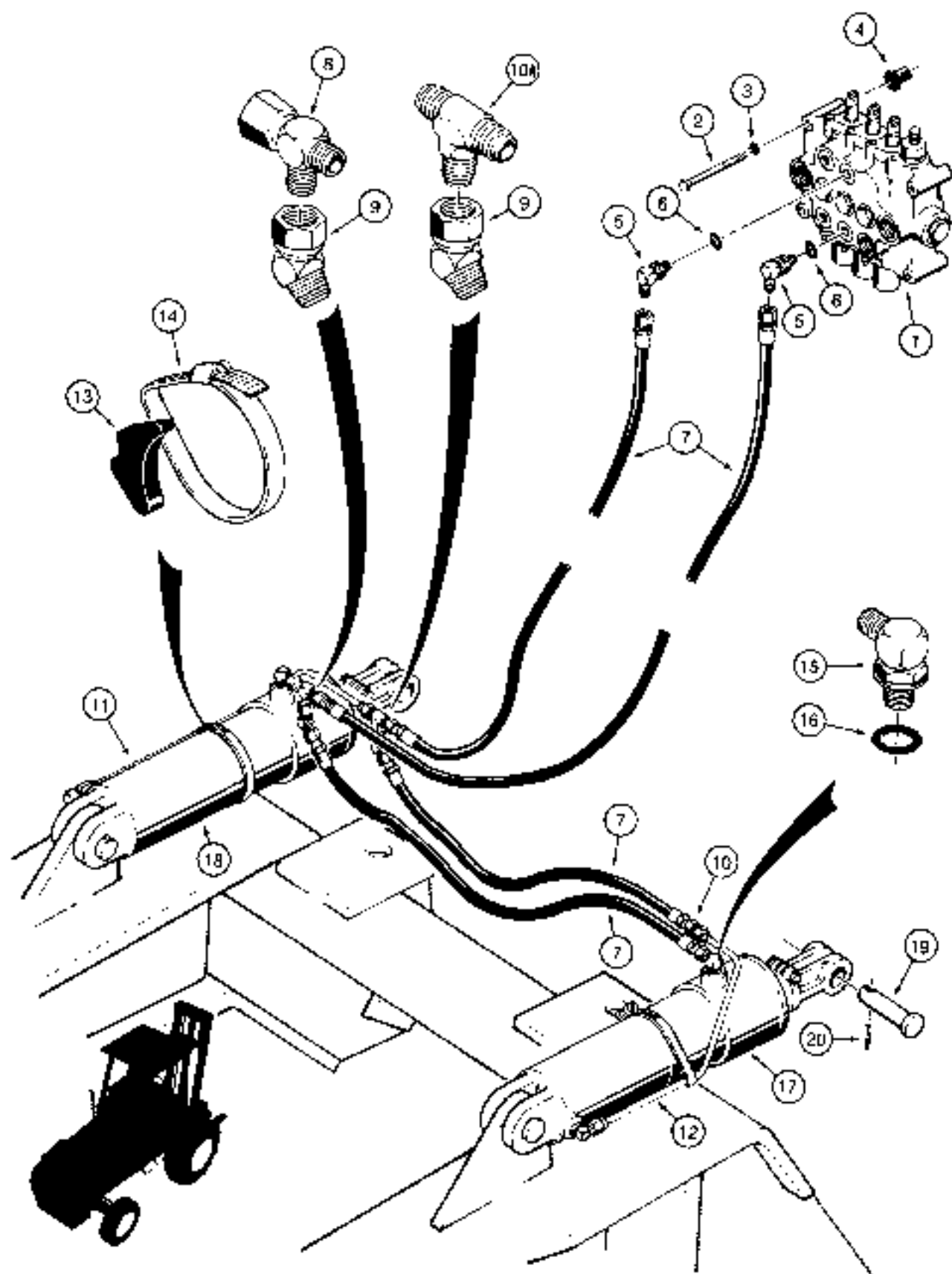
REF	PART NO.	DESCRIPTION	REQ'D
1	REF	CONTROL VALVE - forklift for correct assembly and components see pages 265-291	1
2	113- 203	BOLT - hex head, 3/8" - 16 NC x 3-1/2", plated	3
3	192- 21	WASHER - lock, 3/8", plated	3
4	D 75755	INSULATOR - valve mounting	3
5	218- 5060	ADAPTER - stra ght, male	1
6	218- 5007	O-RING - adapter	1
7	218- 5230	ELBOW - 90 degree, adjustable	1
8	R 17579	HOSE - 40" (1016 mm) long, to lift cylinder	1
	D 48875	RESTRICTOR - lift cylinder hydraulic circuit all masts except 21-1/2 foot (6.5 m) mast for 585D and 586D	1
	D 122897	RESTRICTOR - lift cylinder hydraulic circuit 21-1/2 foot (6.5 m) mast for 585D and 586D	1
9	NSS	BODY - restrictor	1
10	D 48876	SPACER - restrictor	1
11	D 48877	SPRING - restrictor	1
12	D 48878	WASHER - D48875 restrictor only	1
12A	N 8401	WASHER - D122897 restrictor only	1
13	D 48874	ELBOW - 90 degree special, adjustable	1
14	218- 5007	O-RING - elbow	2
15	REF	CYLINDER - lift, for correct assembly and components see page 297	1

**NOTE:** For models with free lift mast, see page 273.



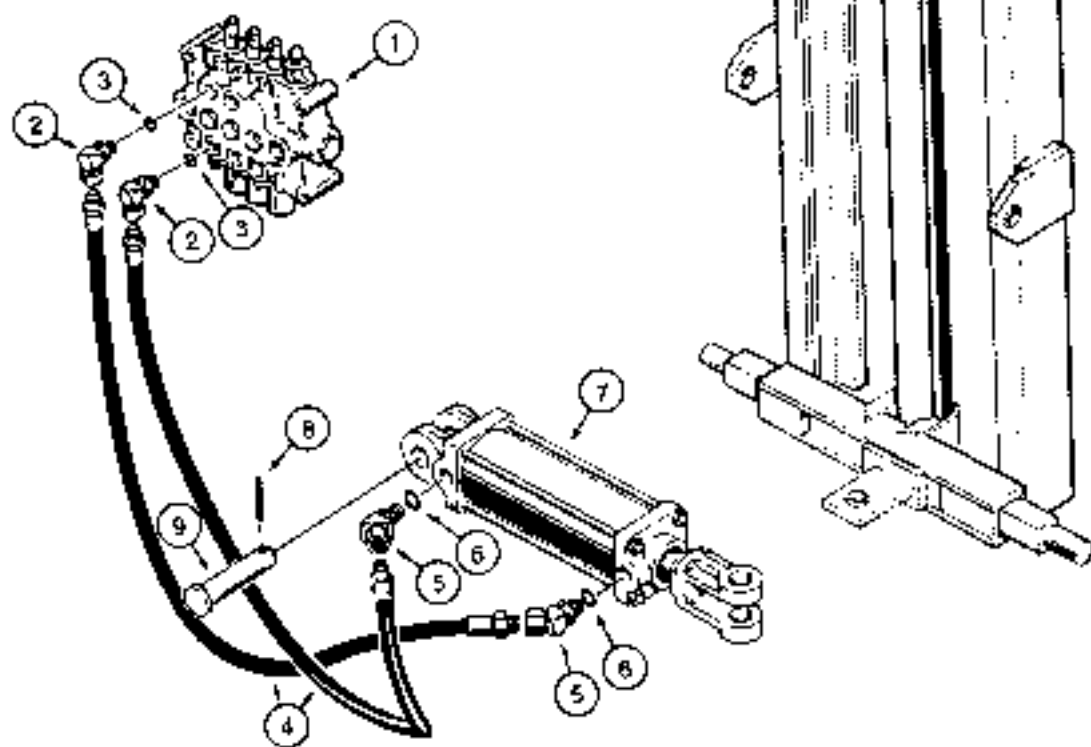
## FREE LIFT MAST LIFT CYLINDER HYDRAULIC CIRCUIT

REF.	PART NO	DESCRIPTION	REQ'D
1	REF	CONTROL VALVE - forklift, for correct assembly and components see pages 285-291	1
2	113- 203	BOLT - hex head, 3/8" - 16 NC x 3-1/2", plated	3
3	192- 21	WASHER - lock, 3/8", plated	3
4	D 75755	CUSHION - valve mounting	3
5	218- 5060	ADAPTER - straight, male	1
6	218- 5007	O-RING - adapter	1
7	218- 5230	ELBOW - 90 degree, adjustable	1
8	R 17579	HOSE - 40" (1016 mm) long, to lift cylinder	1
9	218- 944	ELBOW - 90 degree, adjustable	1
10	D 82880	NIPPLE - special	1
11	D 82879	RESTRICTOR ASSEMBLY - lift cylinder hydraulic circuit	1
12	NSS	BODY - restrictor	1
13	D 48876	SPACER - restrictor	1
14	O 82914	SPRING - restrictor	1
15	D 82915	WASHER - restrictor	1
16	D 82878	ADAPTER - straight	1
17	218- 5390	ELBOW - 90 degree	1
18	218- 5008	O-RING - elbow	1
19	N 7650	CYLINDER - lift, center, 14 foot (4.3 m) mast, parts list page 299	1
20	218- 5201	ELBOW - 90 degree, adjustable	4
21	218- 5007	O-RING - elbow	1
22	D 41821	HOSE - 18" (457 mm) long, between lift cylinders	2
23	N 7648	CYLINDER - lift, right-hand, 14 foot (4.3 m) mast, parts list page 299	1
24	N 7649	CYLINDER - lift, left-hand, 14 foot (4.3 m) mast, parts list page 299	1



## MAST TILT CYLINDER HYDRAULIC CIRCUIT

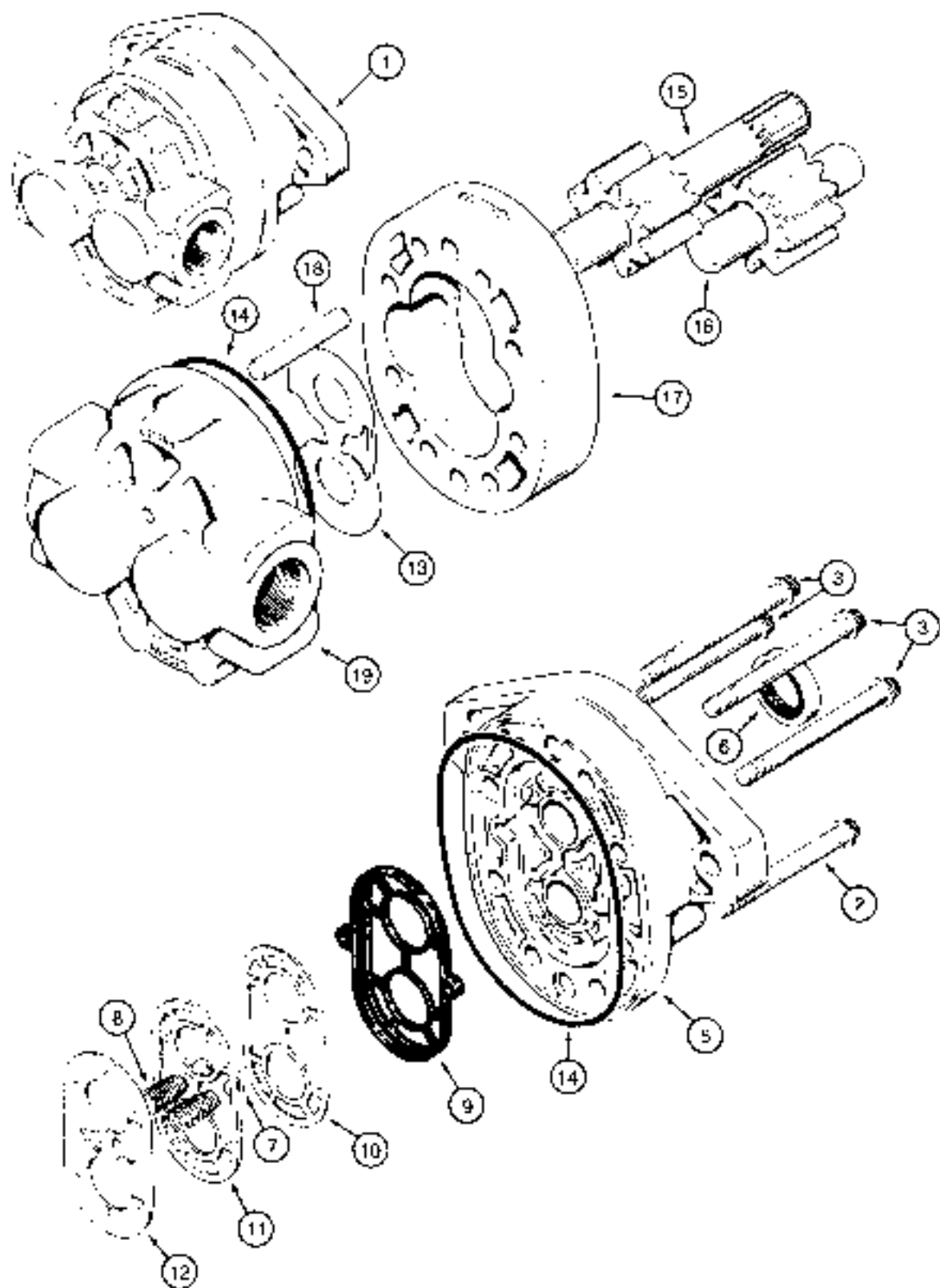
REF.	PART NO.	DESCRIPTION	REQ'D
1	REF	CONTROL VALVE - forklift, for correct assembly and components see pages 285-291	-
2	113- 203	BOLT - hex head, 3/8" - 16 NC x 3-1/2", plated	3
3	192- 21	WASHER - lock, 3/8", plated	3
4	D 75755	CUSHION - valve mounting	3
5	D 69173	ELBOW - 90 degree, adjustable, 125" restriction (3.175 mm), used on all masts except 28 foot (8.5 m) mast	2
6	218- 5005	O-RING - elbow	1
5	D 80997	ELBOW - 90 degree, adjustable, 078" restriction (2 mm), used on 28 foot (8.5 m) mast only	2
6	218- 5005	O-RING - elbow	1
7	D 69101	HOSE - 30" (762 mm) long, tilt cylinder	4
8	218- 5222	TEE - adjustable	1
9	218- 5172	ELBOW - 45 degree, adjustable	2
10	218- 734	CONNECTOR - straight, male	1
10A	218- 593	TEE - if used	1
11	D 69087	TUBE - left-hand tilt cylinder	-
12	D 69089	TUBE - right-hand tilt cylinder	-
13	D 38648	SPACER - tube	2
14	214- 267	CLAMP - tube to cylinder	2
15	218- 5128	ELBOW - 90 degree, adjustable	4
16	218- 5006	O-RING - elbow	1
17	G 34197	CYLINDER - tilt, right-hand, parts list page 301	1
18	G 34196	CYLINDER - tilt, left-hand, parts list page 301	1
19	D 36819	PIN - cylinder mounting	4
20	138- 2039	HOLL PIN - 1/4" x 2"	4



## MAST SIDESHIFT HYDRAULIC CIRCUIT

REF.	PART NO.	DESCRIPTION	REQ'D
1	REF	CONTROL VALVE for lift, for correct assembly and components see pages 285-291	1
2	218- 5204	ELBOW - 90 degree adjustable at valve	2
3	218- 5005	O-RING - elbow	1
4	D 26355	HOSE - 45" (1143 mm) long, valve to cylinder	2
5	D 75823	ELBOW - 45 degree adjustable, restrictor type at cylinder	2
6	218- 5005	O-RING - elbow	1
7	D 41117	CYLINDER - sideshift, parts list page 303	1
8	138- 142	ROLL PIN - 1/4" x 2"	2
9	D 36819	PIN - cylinder mounting	2

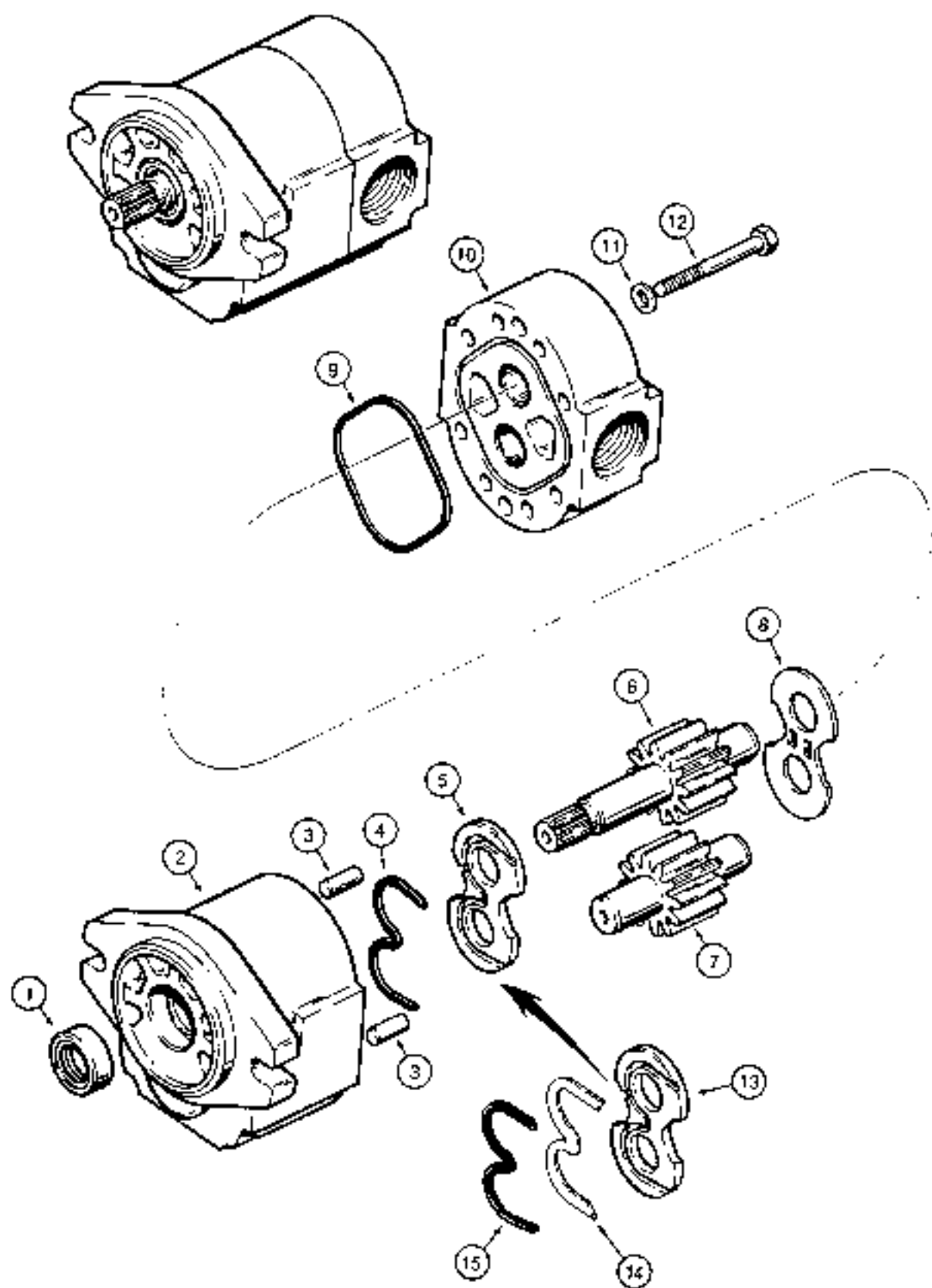




## D41390 HYDRAULIC PUMP

REF	PART NO.	DESCRIPTION	REQ'D
1	DR 41390	PUMP ASSEMBLY - hydraulic, remanufactured - component parts shown on this page do not apply to the remanufactured assembly . . . . .	1
1	DC 41390	RETURN NUMBER - use this part number to return pump core for credit when using a remanufactured assembly . . . . .	1
1	D 41390	PUMP ASSEMBLY - hydraulic, Cessna 24504-LAN, includes items 2-19 . . . . .	1
2	166- 54	BOLT - Terry head 3/8" - 16 NC x 3-1/4" - grade 8 . . . . .	4
3	166- 55	BOLT - Terry head 3/8" - 16 NC x 3-1/2" - grade 8 . . . . .	4
4		RESERVED	
5	D 48879	COVER - drive shaft end . . . . .	1
	N 9005	KIT - pump repair, seal . . . . .	1
6	A 25139	SEAL - drive shaft . . . . .	1
7	211- 312	BALL - 13/32" - grade 100 carbon steel . . . . .	2
8	D 31403	SPRING - ball retaining . . . . .	2
9	D 48888	SEAL - diaphragm . . . . .	1
10	D 39319	GASKET - backup . . . . .	1
11	H 260835	GASKET - protector . . . . .	1
12	H 335331	DIAPHRAGM - pump . . . . .	1
13	A 45358	PLATE - thrust . . . . .	1
14	H 756221	O-RING - cover seal . . . . .	2
	D 52323	GEAR SET - drive and driver . . . . .	1
15	NSS	DRIVE GEAR - includes shaft . . . . .	1
16	NSS	DRIVEN GEAR - includes shaft . . . . .	1
17	D 49371	HOUSING - gear . . . . .	1
18	D 49373	DOWEL - pump housing . . . . .	2
19	D 48883	COVER - port end . . . . .	1

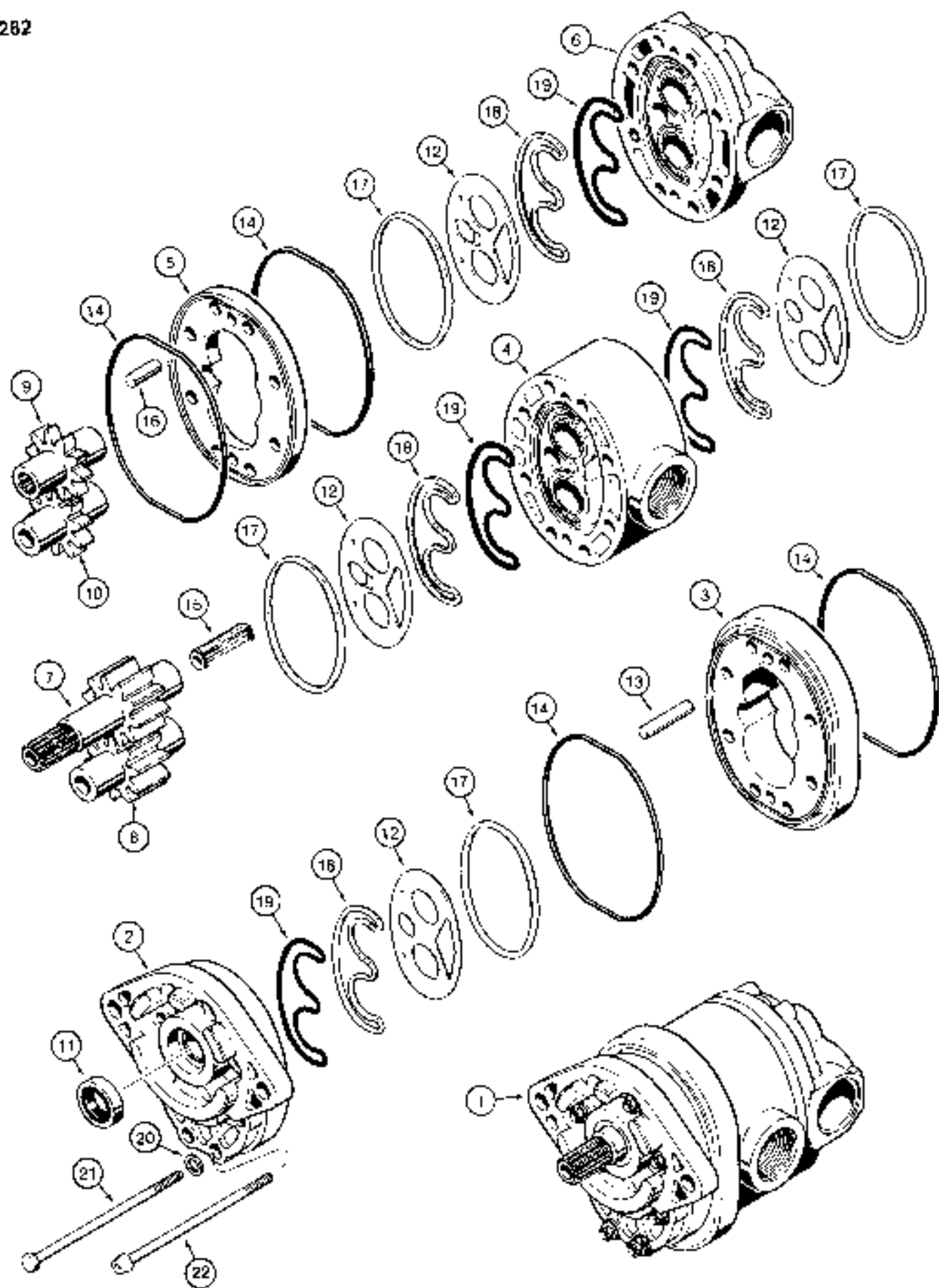
**NOTE:** For identification see name plate on pump - Cessna 24504 LAN. See other pump options on pages 281 and 283. On machines where increased noise control is desired, D73079 pump shown on page 281 can be used. Check make and model number of pump before ordering parts.



## D73079 HYDRAULIC PUMP

REF.	PART NO	DESCRIPTION	REQ'D.
	D 73079	HYDRAULIC PUMP - Warner Motive S30S-24E-J5-3-L	1
1	D 73624	OIL SEAL - shaft	1
2	D 74415	BODY - shaft end	1
3	D 58188	DOWEL PIN - body and cover	2
4	D 73620	OIL SEAL - wear plate, one-piece, used with tin wear plate (item 5) only, if used, no longer available. order items 13-15	1
5	D 73619	WEAR PLATE - gear, tin, used with one-piece oil seal (item 4). no longer available, order items 13-15	1
6	D 74416	DRIVE GEAR - hydraulic pump	1
7	D 74417	DRIVEN GEAR - hydraulic pump	1
8	D 73623	THRUST PLATE - gear	1
9	D 73622	SEAL - square section	1
10	D 73615	COVER - port end	1
11	D 74441	WASHER - special	8
12	13- 852	BOLT - hex head, 3/8" - 16 NC x 3-1/4"	8
13	N 9773	WEAR PLATE - gear, bronze, used with two seals (items 14 and 15)	1
14	N 9772	SEAL - flat, wear plate	1
15	N 9771	SEAL - grooved, wear plate	1

**NOTE:** For identification see name plate on pump - Warner Motive S30S-24E-J5-3-L. See other pump options on pages 279 and 283. Check make and model number of pump before ordering parts.

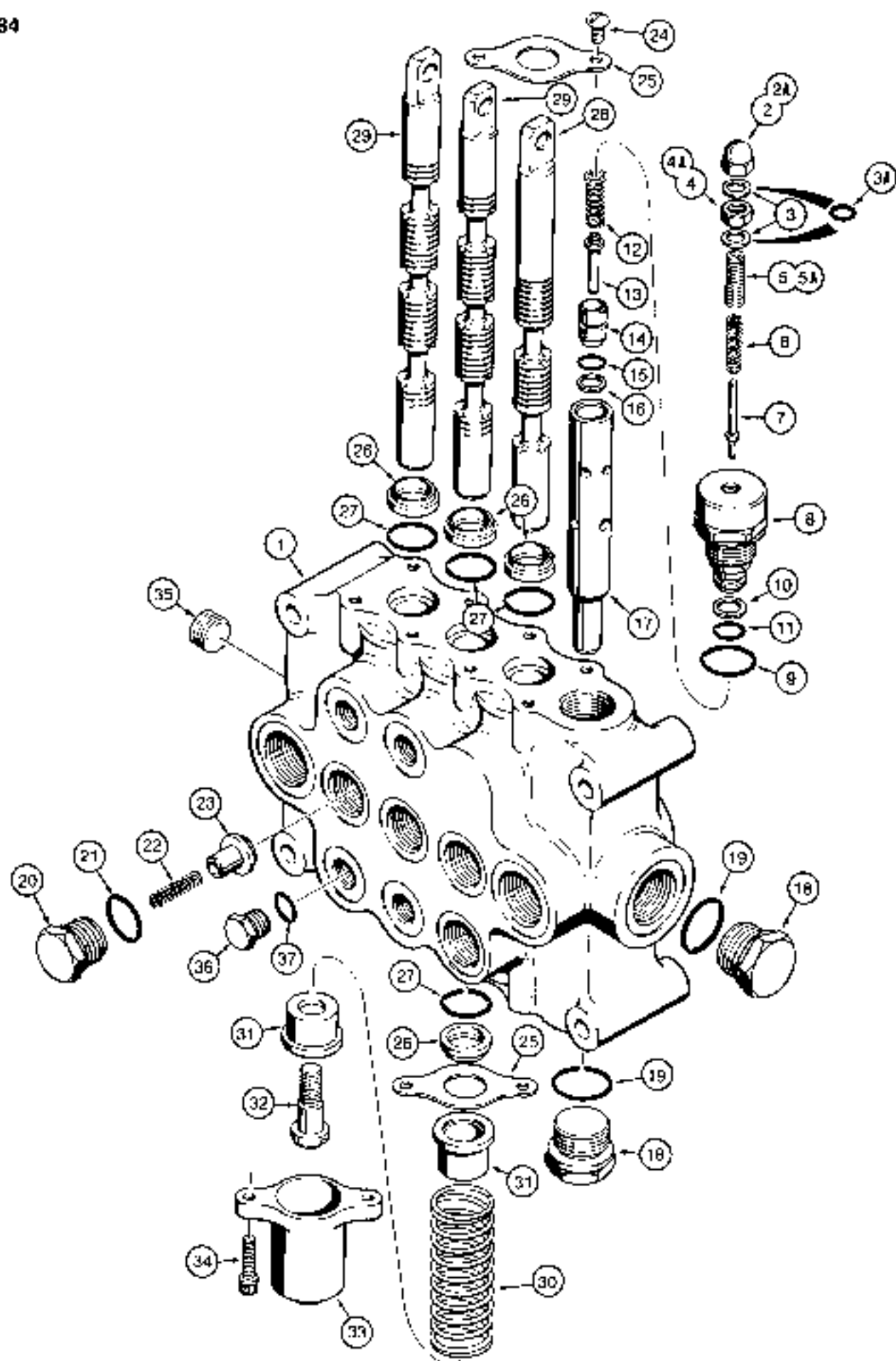


**D126580 STEERING AND EQUIPMENT PUMP  
ALL FOUR WHEEL DRIVE MODELS  
\*TWO WHEEL DRIVE MODELS TRACTOR PIN 9879000 AND AFTER**

REF	PART NO.	DESCRIPTION	REQ'D
1	D 126580	HYDRAULIC PUMP - equipment and steering, Webster No. 152-45207-106	1
2	N 6885	COVER - mounting, drive shaft end	1
3	N 6892	GEAR HOUSING - drive shaft end	1
4	N 6887	CARRIER - bushing	1
5	N 6895	GEAR HOUSING - gear, port end	1
6	N 6886	COVER - port end	1
7	N 6888	DRIVE GEAR - equipment hydraulic circuit	1
8	N 6890	DRIVEN GEAR - equipment hydraulic circuit	1
9	N 6889	DRIVE GEAR - steering circuit	1
10	N 6891	DRIVEN GEAR - steering circuit	1
11	A 23903	SEAL - drive shaft	1
12	A 45048	PLATE - wear	4
13	N 6893	DOWEL PIN - drive shaft end plate	2
14	N 6896	SEAL - ring	4
15	N 6899	COUPLING - drive and driven gear	1
16	N 6894	DOWEL PIN - bearing plate to cover	2
17	D 54169	SEAL - ring	4
18	D 54168	SEAL - backup	4
19	O 54167	SEAL - pre-load	4
20	A 45050	WASHER - special	8
21	26- 692	BOLT - hex head, 3/8" - 16 NC x 5-3/4", grade 8	6
22	61- 692	BOLT - hex socket head, 3/8" - 16 NC x 5-3/4"	2

**NOTE:** For identification see name plate on pump - Webster No. 152-45207-106. See other pump options on pages 279 and 281. Check make and model number of pump before ordering parts.

\*NOTE: For power steering pump used before tractor PIN 9879000, see parts list page 121.

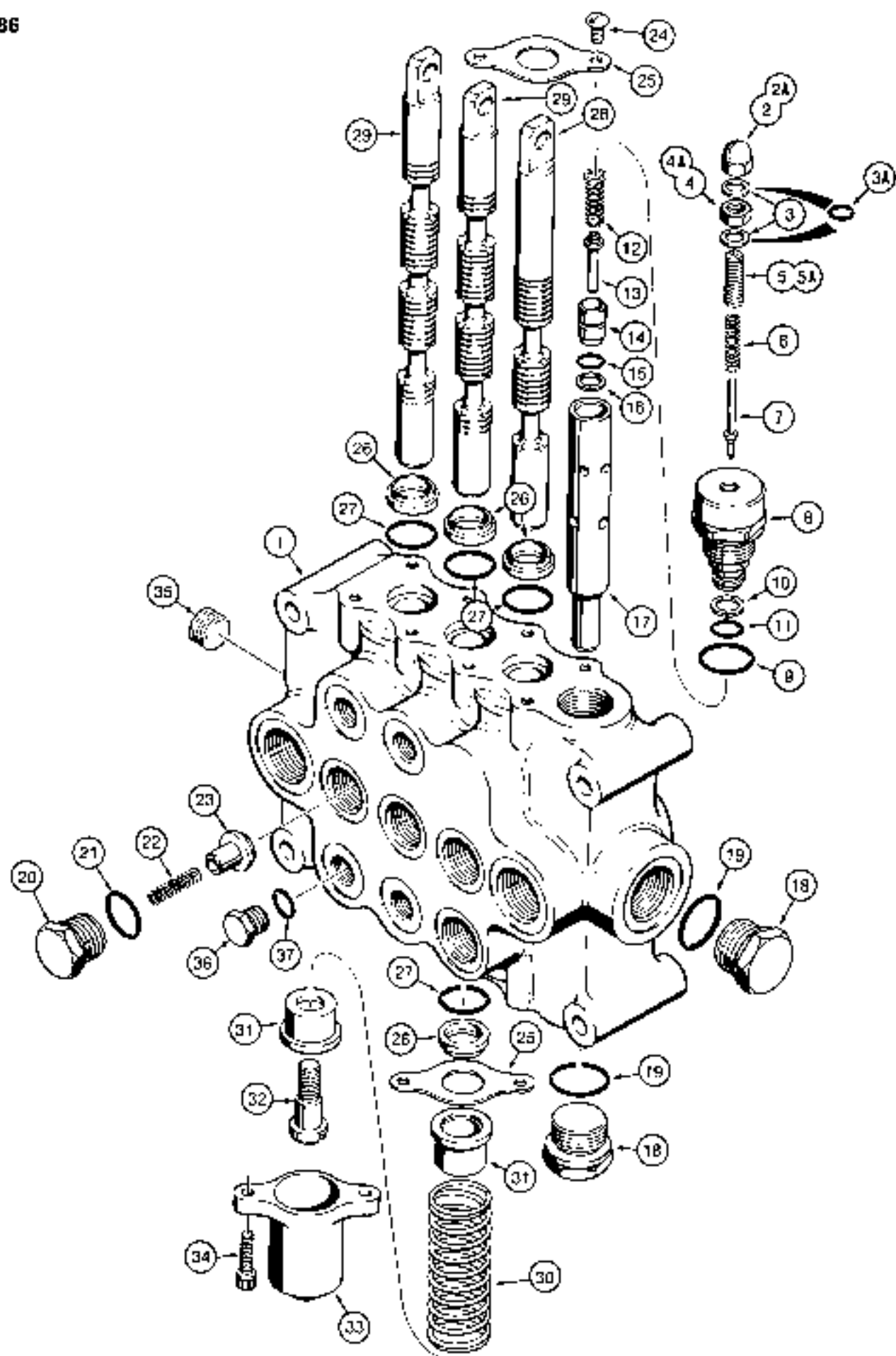


## D120040 FORKLIFT CONTROL VALVE

REF.	PART NO	DESCRIPTION	REQ'D
	D 120040	CONTROL VALVE ASSEMBLY - forklift, Husco No. 3303-110, no longer available. for service order D124427, see page 289	1
1	NSS	BODY - control valve	1
	N 7488	MAIN RELIEF VALVE ASSEMBLY - control valve	1
2	129- 526	DOME NUT - 3/8" - 24 NF, used with item 3	1
2A	S 116073	DOME NUT - 3/8" - 24 NF, has O-ring groove, used with item 3A	1
3	D 32117	WASHER - copper, used with items 2 and 4 only	2
3A	S 116070	O-RING - used with items 2A and 4A only	2
4	25- 156	NUT - hex, jam. 3/8" - 24 NF, used with item 3	1
4A	S 116072	NUT - hex, special, 3/8" - 24 NF, has O-ring groove, used with item 3A	1
5	NSS	ADJUSTING SCREW - main relief valve, used with items 2, 3, and 4 only	1
5A	NSS	ADJUSTING SCREW - main relief valve, used with item 2A, 3A, and 4A only	1
6	NSS	SPRING - plunger	1
7	NSS	PLUNGER - relief valve	1
8	NSS	BODY - relief valve	1
9	218- 5008	O-RING - relief valve body	1
10	D 75841	BACKUP RING - internal	1
11	S 116070	O-RING - internal	1
12	NSS	SPRING - inner	1
13	NSS	TUBE - piston	1
14	NSS	PISTON - relief valve	1
15	N 6417	O-RING - piston	1
16	C 11865	BACKUP RING - piston O-ring	1
17	NSS	SLEEVE - relief valve	1
18	S 62127	PLUG - valve	2
19	218- 5008	O-RING - plug	2
20	S 48057	PLUG - load check valve	3
21	218- 5007	O-RING - plug	3
22	S 48065	SPRING - load check valve	3
23	S 48056	POPPET - load check valve	3

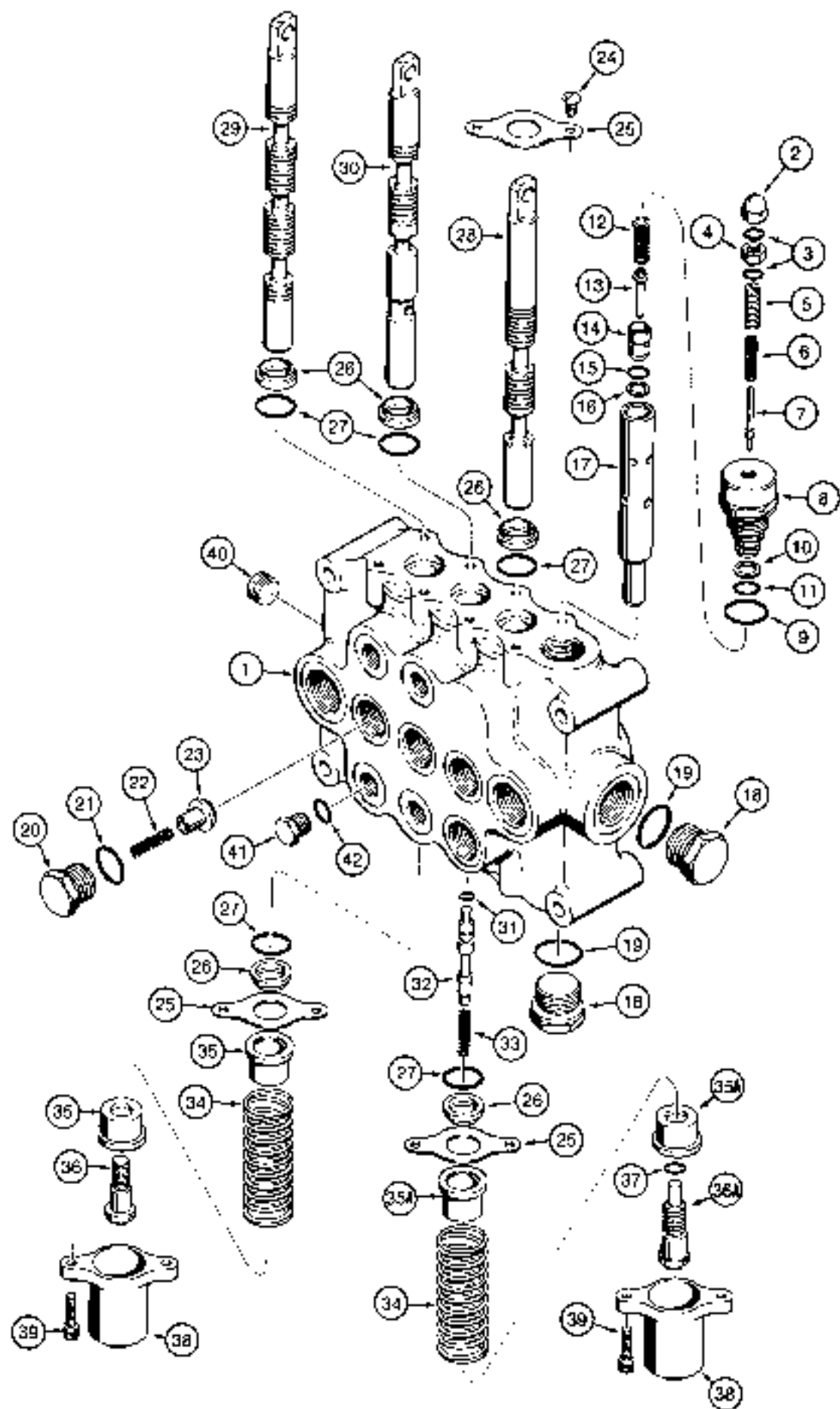
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## D120040 FORKLIFT CONTROL VALVE

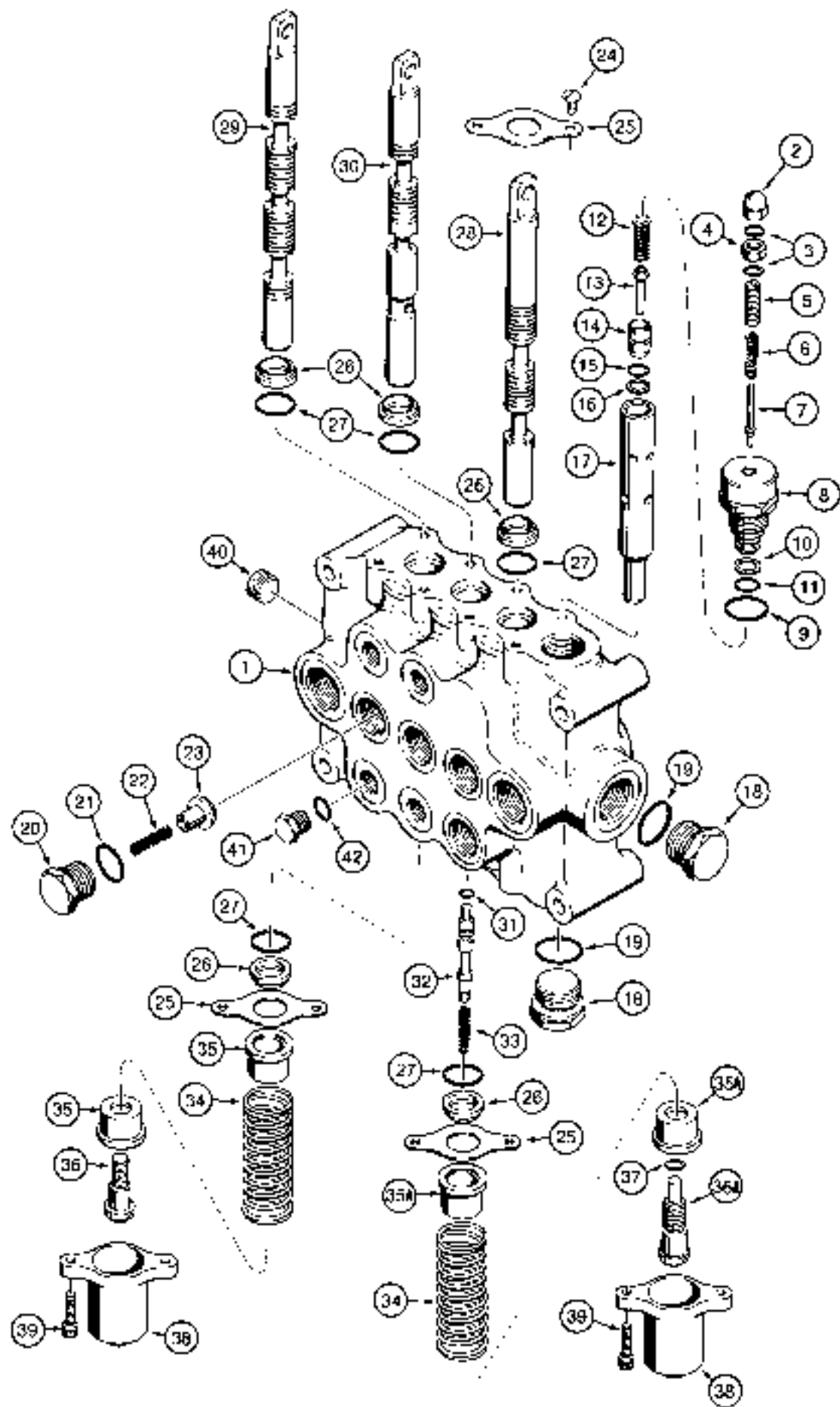
REF.	PART NO	DESCRIPTION	REQ'D
	D 120040	CONTROL VALVE ASSEMBLY - continued forklift, Husco No. 3303-110, no longer available, for service order D124427, see page 289	1
24	182- 540	MACHINE SCREW - pan head slotted, 1/4" - 20 NC x 3/8", plated, plate attaching, spool end	6
25	S 48043	PLATE - spool end	6
26	D 75838	WIPER - spool	6
27	F 62075	O-RING - spool	6
28	NSS	SPOOL - lift circuit	1
29	NSS	SPOOL - t/l and sideshift circuit	2
30	S 48046	SPRING - spool	3
31	S 48044	SEAT - spring	6
32	S 48045	SCREW - spool end	3
33	S 48042	COVER - spool end	3
34	165- 180	BOLT - hex socket head, 1/4" - 20 NC x 7/8", spool cover	6
35	221- 644	PLUG - hex socket head, 1/2" NPT	1
36	218- 5155	PLUG - hex head, upper and lower valve ports, not required when sideshift attachment is used	2
37	218- 5005	O-RING - plug	1



## D124427 FORKLIFT CONTROL VALVE

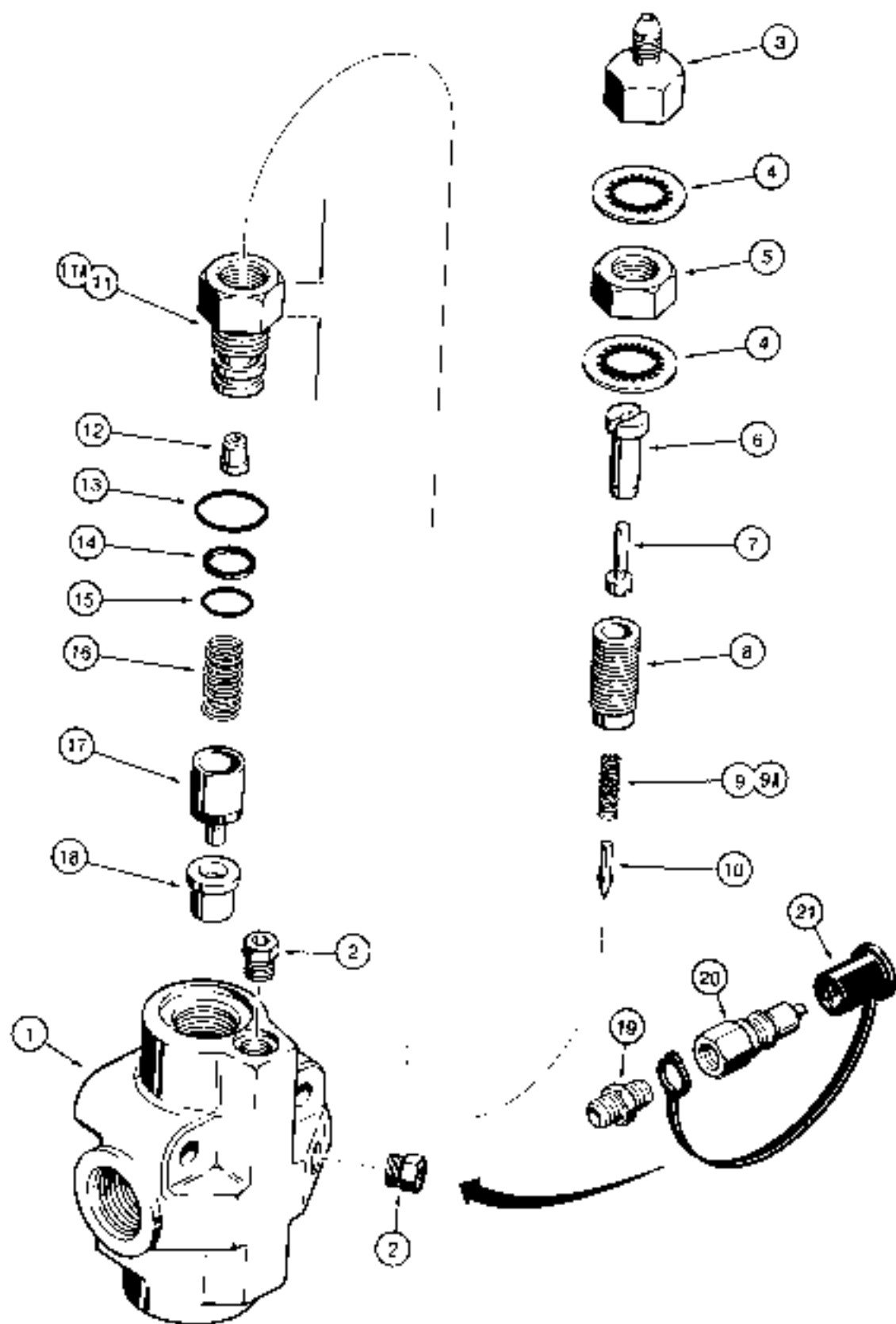
REF.	PART NO.	DESCRIPTION	REQ'D
	D 124427	CONTROL VALVE ASSEMBLY - forklift, Husco No. 3303-120	1
1	NSS	BODY - control valve	1
	N 7488	MAIN RELIEF VALVE ASSEMBLY - control valve	1
2	S 116073	DOME NUT - 3/8" - 24 NF	1
3	S 116070	O-RING - dome nut and jam nut	2
4	S 116072	NUT - hex, jam, 3/8" - 24 NF	1
5	NSS	ADJUSTING SCREW - main relief valve	1
6	NSS	SPRING - plunger	1
7	NSS	PLUNGER - relief valve	1
8	NSS	BODY - relief valve	1
9	218- 5008	O-RING - relief valve body	1
10	D 75841	BACKUP RING - internal	1
11	S 116070	O-RING - internal	1
12	NSS	SPRING - inner	1
13	NSS	TUBE - piston	1
14	NSS	PISTON - relief valve	1
15	N 6417	O-RING - piston	1
16	C 11865	BACKUP RING - piston O-ring	1
17	NSS	SLEEVE - relief valve	1
18	S 62127	PLUG - valve	2
19	218- 5008	O-RING - plug	2
20	S 48057	PLUG - load check valve	3
21	218- 5007	O-RING - plug	3
22	S 48065	SPRING - load check valve	3
23	S 48056	POPPET - load check valve	3
24	182- 540	MACHINE SCREW - pan head slotted, 1/4" - 20 NC x 3/8", plated, plate attaching, spool end	6
25	S 48043	PLATE - spool end	6
26	D 75838	WIPER - spool	6
27	F 62075	O-RING - spool	6

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## D124427 FORKLIFT CONTROL VALVE

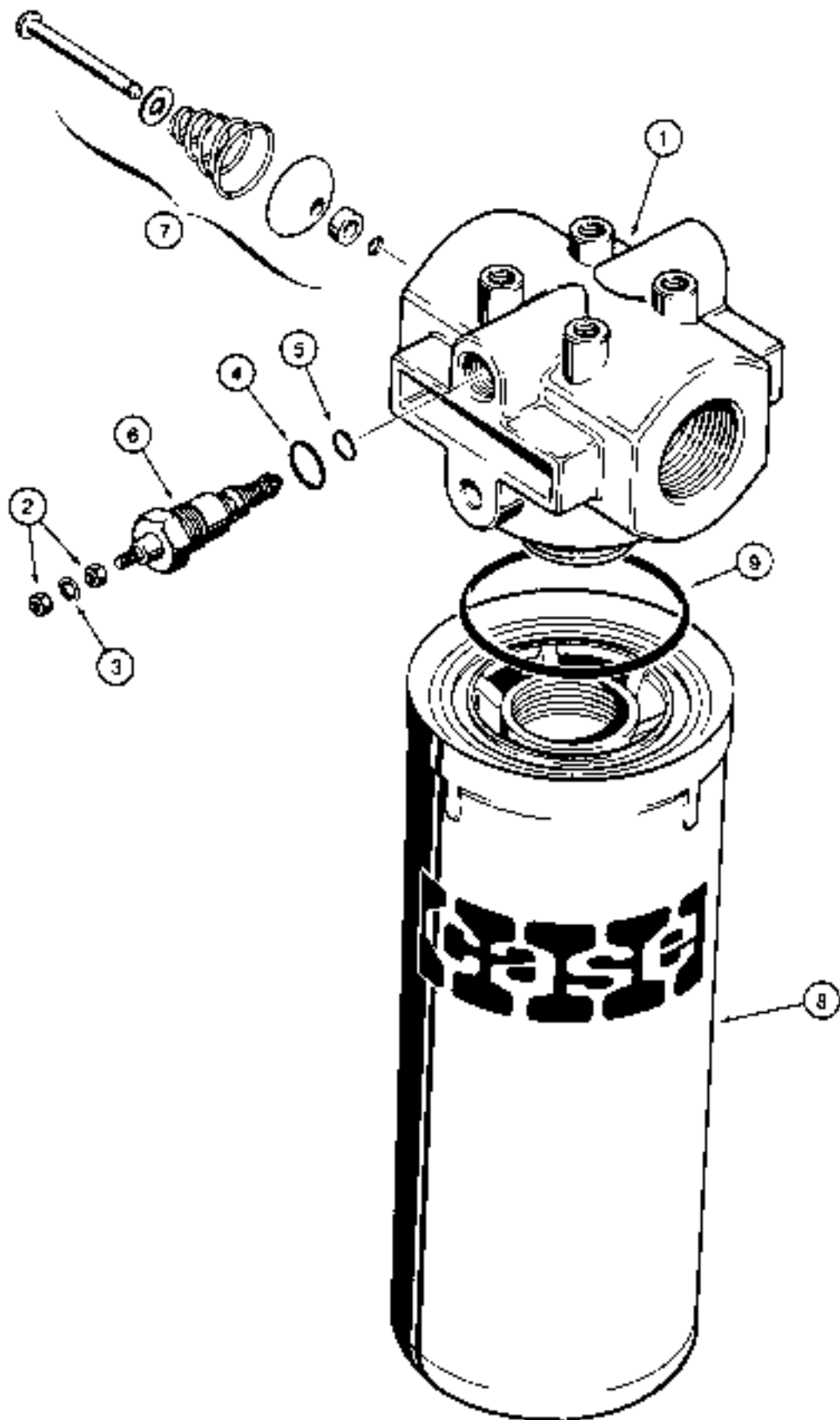
REF.	PART NO.	DESCRIPTION	REQ'D
	D 124427	CONTROL VALVE ASSEMBLY - continued, forklift, Husco No. 3303-120	1
28	NSS	SPOOL - lift circuit, right-hand	1
29	NSS	SPOOL - sideshift circuit, left-hand	1
30	NSS	SPOOL - tilt circuit, center	1
31	T 30271	O-RING - piston, center tilt spool	1
32	NSS	PISTON - center tilt spool	1
33	N 8448	SPRING - piston	1
34	S 48046	SPRING - spool	3
35	S 48044	SEAT - spring, right-hand lift and left-hand sideshift	4
35A	N 8449	SEAT - spring, center tilt spool	2
36	S 48045	SCREW - right-hand lift and left-hand sideshift spool ends	2
36A	N 8447	SCREW - center tilt spool end	1
37	218- 5004	O-RING - used with item 36A screw only	1
38	S 48042	COVER - spool end	3
39	165- 180	BOLT - hex socket head, 1/4" - 20 NC x 7/8"	6
40	221- 844	PLUG - hex socket head, 1/2" NPT	1
41	218- 5155	PLUG - hex head, upper and lower valve parts, not required when sideshift attachment is used	2
42	218- 5005	O-RING - plug	1



## D89498 AND D128430 STEERING RELIEF VALVE

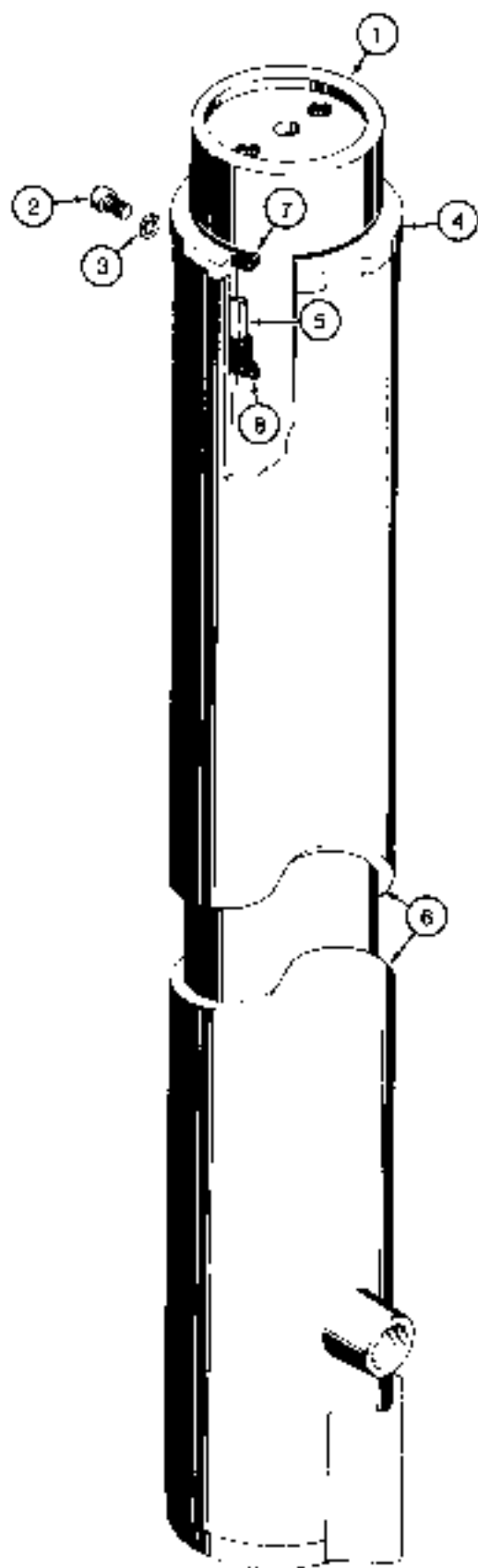
REF.	PART NO.	DESCRIPTION	REQ'D
	D 89498	RELIEF VALVE ASSEMBLY - steering, Parker No. VPRP5X-017 no longer used, order D128430 valve	1
	D 128430	RELIEF VALVE ASSEMBLY - steering, Parker No. VPRP5X-024	1
1	NSS	HOUSING - relief valve	1
2	221- 1849	PLUG - hex socket head, 1/8" NPT	2
	N 9524	RELIEF VALVE ASSEMBLY - steering	1
3	N 6841	FITTING - pilot relief	3
4	D 27259	SEAL - special	2
5	25- 1510	NUT - hex. jam, 5/8" - 18 NF	1
6	N 6803	RETAINER - piston	4
7	N 6802	PISTON - two stage	1
8	N 6840	SCREW - adjusting	1
9	D 26268	SPRING - pilot, N6839 body	1
9A	N 9526	SPRING - pilot, N9009 body	1
10	D 26267	PLUNGER - pilot	1
11	N 6839	BODY - relief, hex head height is 1/2", no longer used, when replacing this body, must order both N9526 spring and N9009 body	1
11A	N 9009	BODY - relief, hex head height is 5/8"	1
12	N 6804	SEAT - pilot plunger	1
13	218- 5006	O-RING - cap	1
14	L 30443	BACKUP RING - small O-ring	1
15	L 30444	O-RING - small	1
16	D 26261	SPRING - relief valve	1
17	L 30667	POPPET - relief valve	1
18	D 26259	SEAT - poppet	1
19	217- 1071	ADAPTER - straight, 1/4" NPT x 1/8" NPT, used for testing system, if used	1
20	S 206607	COUPLING - male, used for testing system, if used	1
21	D 123387	COVER - dust, if used	1





## D122362 AND D131293 HYDRAULIC OIL FILTERS

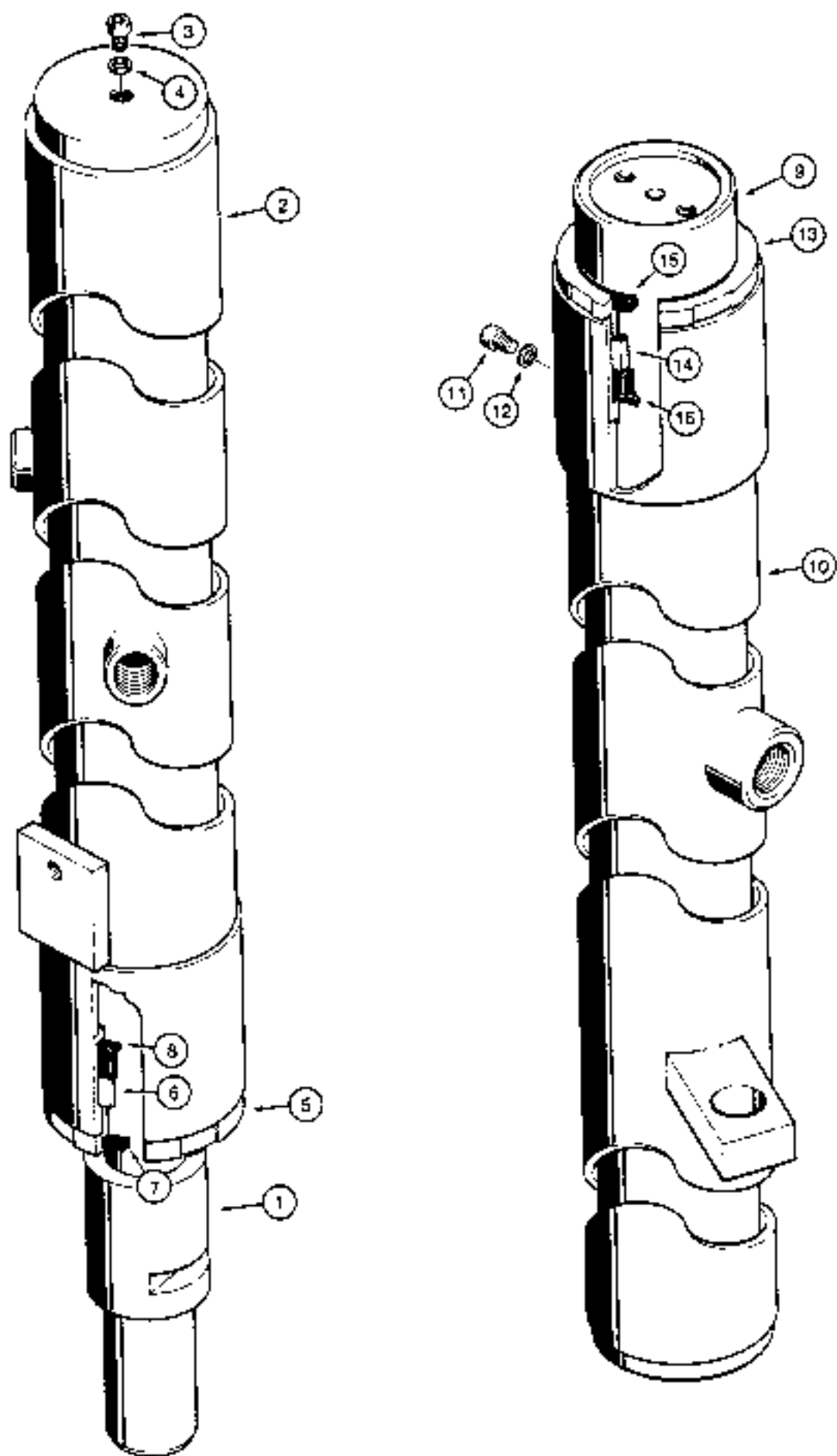
REF.	PART NO.	DESCRIPTION	REQ. Q
	D 122362	FILTER ASSEMBLY - hydraulic oil, interchangeable with D89908 filter, without O-ring parts, if used	1
	D 131293	FILTER ASSEMBLY - hydraulic oil, with O-ring parts, if used	1
1	NSS	HEAD - filter	1
	N 6755	RESTRICTION INDICATOR ASSEMBLY - electric	1
	N 6841	KIT - restriction indicator repair	1
2	129- 067	NUT - No. 10 - 32 NF	2
3	193- 99	WASHER - internal tooth lock, No. 10, plated	1
4	218- 5005	O-RING - outer	1
5	A 28090	O-RING - middle	1
6	NSS	RESTRICTION INDICATOR - electric	1
7	NSS	VALVE - bypass	1
	N 9025	ELEMENT ASSEMBLY - filter, interchangeable with D89908 and D94236 elements	1
8	NSS	ELEMENT - filter	1
9	N 9026	O-RING - filter to head	1



## MAST LIFT CYLINDERS

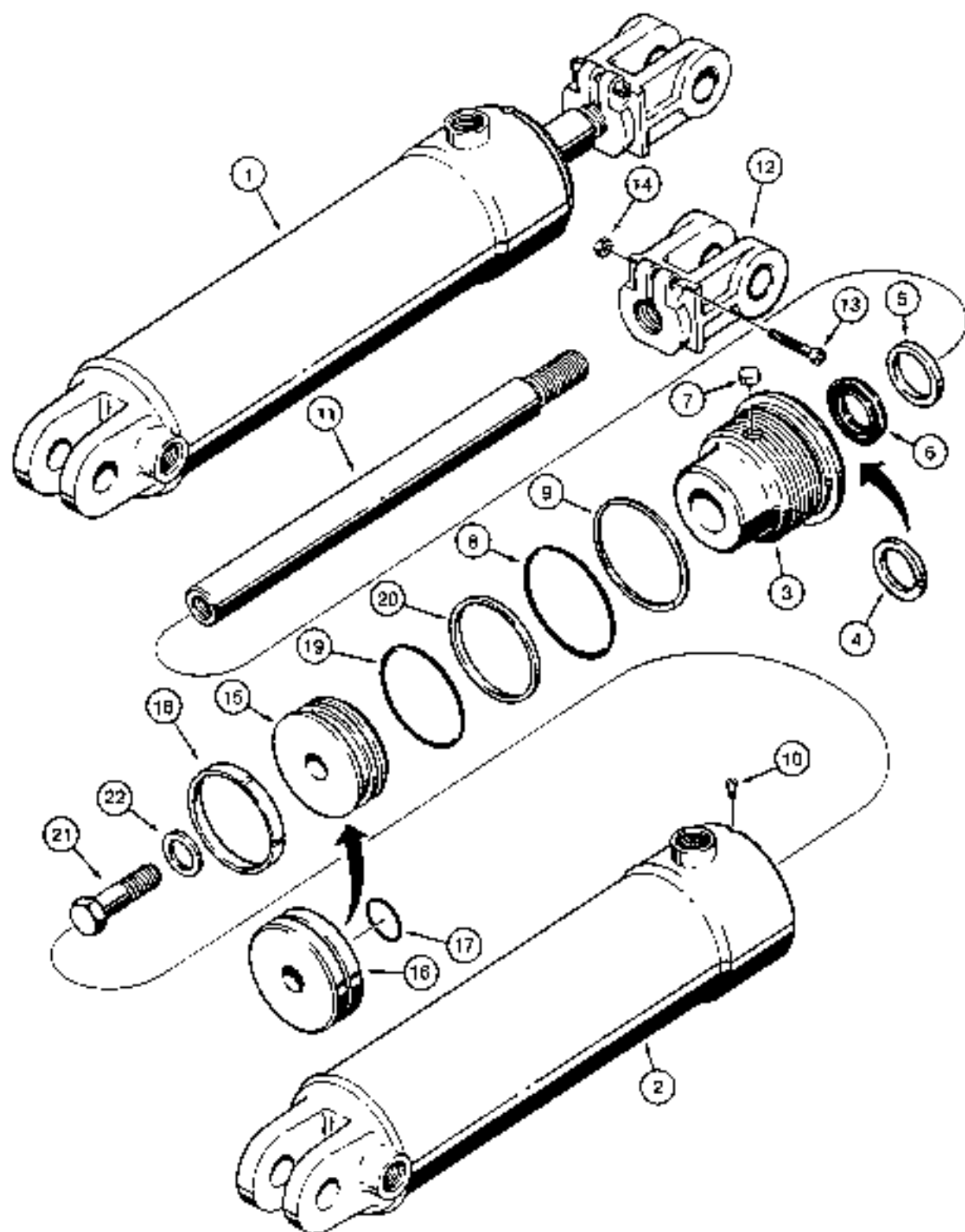
REF.	PART NO.	DESCRIPTION	REQ'D
N	7642	CYLINDER - lift, 4" (102 mm) ID x 71-11/16" (1921 mm) stroke, 12' (3.6 m) masts	1
N	7643	CYLINDER - lift, 4" (102 mm) ID x 85-3/16" (2164 mm) stroke, 14-1/4" (4.3 m) masts and 21-1/2' (6.5 m) masts	1
N	7644	CYLINDER - lift, 4" (102 mm) ID x 111-11/16" (2837 mm) stroke, 28' (8.5 m) masts	1
1	NSS	PISTON - tube assembly	1
2	B1-45	SCREW - hex socket head, 1/4" - 20 NC x 3/8"	1
3	D 24252	WASHER - special	1
4	D 41189	NUT - cylinder packing	1
5	D 41190	SLEEVE - packing, upper	1
6	NSS	TUBE - cylinder	1
	D 82792	KIT - cylinder packing, used on Mast SN 42274 and after	1
7	NSS	WIPER - piston, D82792 kit	1
8	NSS	RING - packing, O82792 kit	1

**NOTE:** For free lift mast lift cylinders see page 299



## FREE LIFT MAST LIFT CYLINDERS

REF.	PART NO	DESCRIPTION	REQ'D
	N 7650	CYLINDER - lift, center . . . . .	1
1	NSS	PISTON - tube assembly . . . . .	1
2	NSS	TUBE - cylinder, outer . . . . .	1
3	61- 46	SCREW - hex socket head, 1/4" - 20 NC x 3/8" . . . . .	1
4	D 24252	WASHER - special . . . . .	1
5	D 87296	NUT - packing . . . . .	1
6	D 87297	RING - packing . . . . .	1
	D 87289	KIT - seal . . . . .	1
7	NSS	WIPER - solid type . . . . .	1
8	NSS	RING - packing . . . . .	1
	N 7648	CYLINDER - III, right-hand . . . . .	1
	N 7649	CYLINDER - III, left-hand . . . . .	1
9	NSS	PISTON - tube assembly . . . . .	1
10	NSS	TUBE - cylinder, outer . . . . .	1
11	61- 46	SCREW - hex socket head, 1/4" - 20 NC x 3/8" . . . . .	1
12	D 24252	WASHER - special . . . . .	1
13	D 87296	NUT - packing . . . . .	1
14	D 87297	RING - packing . . . . .	1
	D 87288	KIT - seal . . . . .	1
15	NSS	WIPER - solid type . . . . .	1
16	NSS	RING - packing . . . . .	1

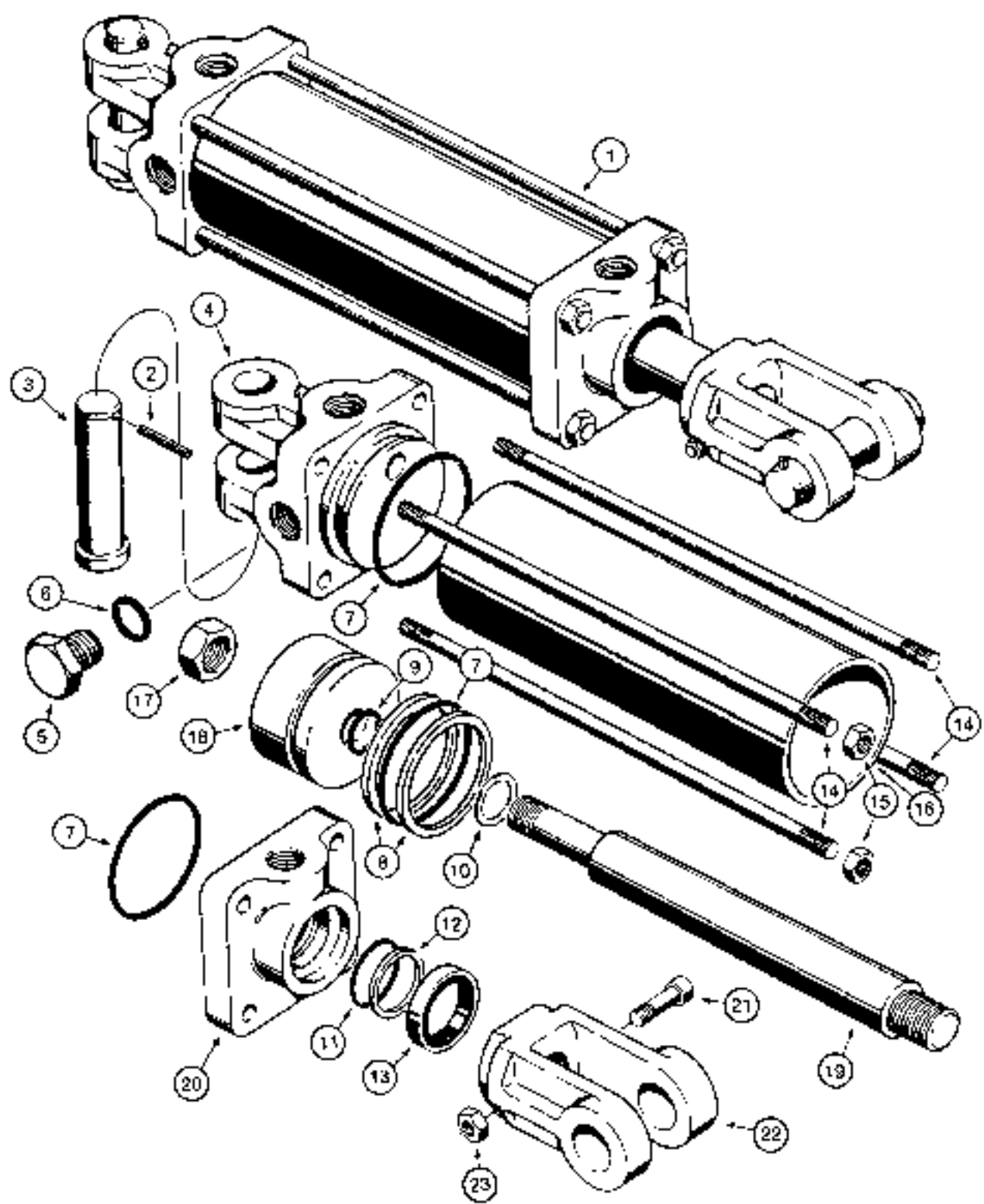


## G34196 AND G34197 TILT CYLINDERS

REF.	PART NO.	DESCRIPTION	REQ'D
1	G 34196	CYLINDER - hydraulic, tilt, left-hand, 3" ID (76 mm) x 10" (254 mm) stroke	1
1	G 34197	CYLINDER - hydraulic, tilt, right-hand, 3" ID (76 mm) x 10" (254 mm) stroke	1
2	G 34196	TUBE - G34196 cylinder, left-hand	1
2	G 34199	TUBE - G34197 cylinder, right-hand	1
	G 104244	GLAND ASSEMBLY - cylinder	1
3	NSS	GLAND - cylinder	1
3A	*G 109092	SEAL - buffer, grooved, piston rod, narrow	1
4	*D 95141	WIPER - piston rod	1
5	*D 36968	U-CUP SEAL - piston rod, wide	1
5	G 100776	U-CUP SEAL - piston rod, service option - severe heat or cold	1
5A	G 102569	PLUG - nylon, thread locking, gland, if used	1
6	*A 30095	O-RING - gland	1
7	*G 32122	BACKUP RING - gland O-ring	1
8	187- 1524	SCREW - hex head, slotted, self-tapping No. 8 - 32 NC x 3/8", plated, if used	1
9	G 34195	ROD - piston, 1-1/4" (32 mm) diameter	1
10	G 34262	CLEVIS - adjustable, piston rod	1
11	61- 628	SCREW - hex socket head 3/8" - 16 NC x 1-3/4"	1
12	25- 106	NUT - hex 3/8" - 16 NC	1
13	G 34202	PISTON - cylinder, double groove, if used	1
13A	G 104106	PISTON - cylinder, single groove, if used	1
13B	A 59066	O-RING - small, used with item 13A only	1
14	*G 100449	RING - wear, piston, used with item 13 only	1
15	*A 26318	O-RING - piston	1
16	*G 32034	SEAL - piston	1
17	28- 1232	BOLT - hex head, 3/4" - 16 NF x 2", grade 8	1
18	G 32317	WASHER - special	1
	*G 109463	KIT - seal, includes all items with an asterisk	1

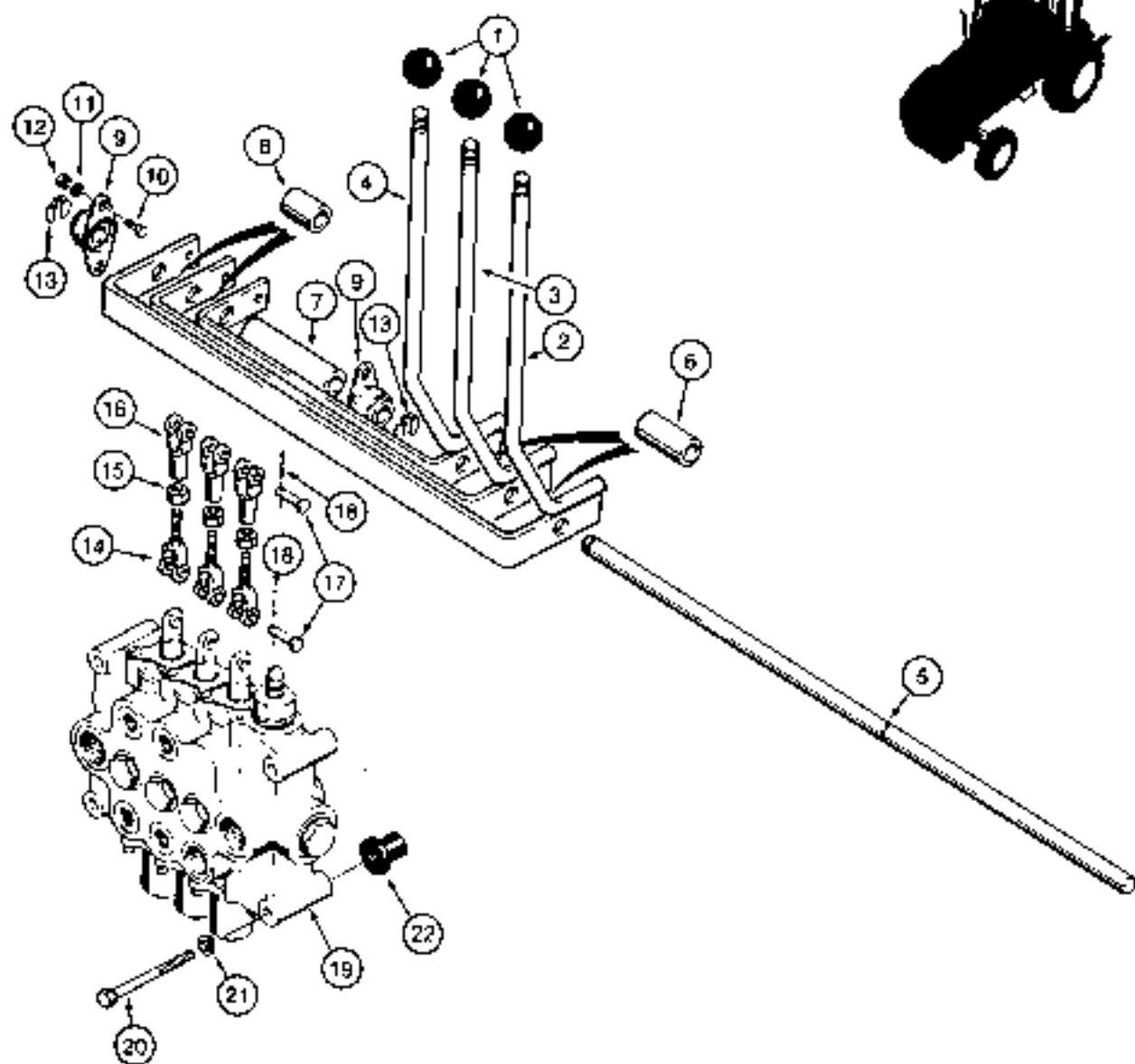
**NOTE:** The cylinder assembly part number is stamped on some cylinder glands or tubes





## D40197 SIDESHIFT CYLINDER

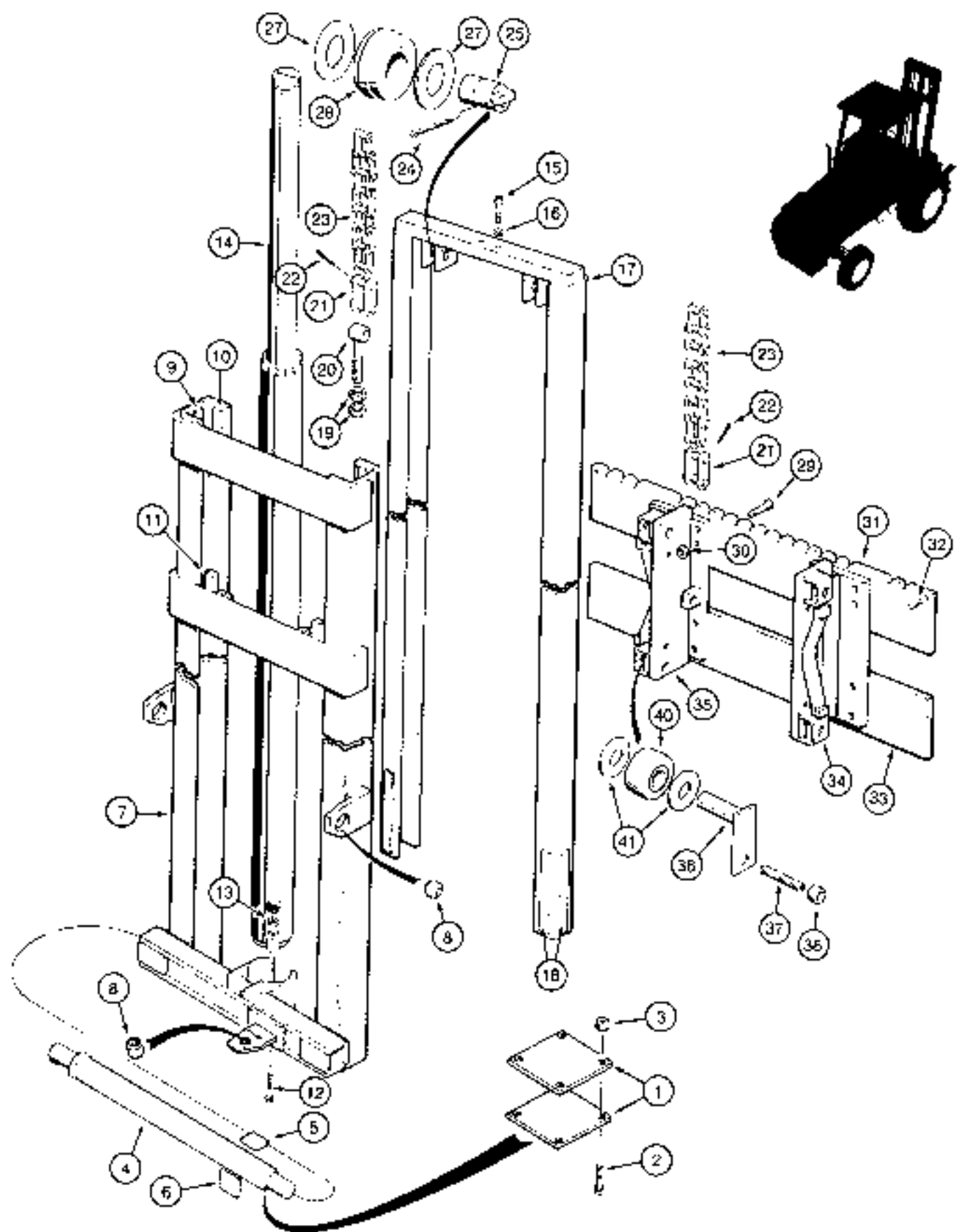
REF	PART NO.	DESCRIPTION	REQ D
1	D 40197	CYLINDER - hydraulic, sideshift, 2-1/2" (64 mm) ID x 6" (152 mm) stroke . . . . .	1
2	138- 142	ROLL PIN - 1/4" x 2" . . . . .	2
3	D 36819	PIN - cylinder mounting . . . . .	2
4	D 40199	CAP - cylinder, closed end . . . . .	1
5	218- 5155	PLUG - cylinder end cap . . . . .	1
6	218- 5005	O-RING - plug . . . . .	1
	D 24118	KIT - cylinder packing . . . . .	1
7	NSS	O-RING - end caps and piston . . . . .	3
8	B 17297	BACKUP RING - piston O-ring . . . . .	2
9	F 62075	O-RING - located pins de piston, if used . . . . .	1
10	D 24091	GASKET - piston to piston rod, if used . . . . .	1
11	NSS	O-RING - piston rod . . . . .	1
12	B 17295	BACKUP RING - piston rod O-ring . . . . .	1
13	B 17290	SEAL - rod wiper . . . . .	1
14	D 28147	TIE ROD - cylinder . . . . .	4
15	25- 106	NUT - hex 3/8" - 16 NC . . . . .	8
16	D 24109	TUBE - cylinder . . . . .	1
17	25- 1512	NUT - hex, jam, 3/4" - 16 NF . . . . .	1
18	B 17273	PISTON - cylinder . . . . .	1
19	D 24106	ROD - piston, 1" - 14 NF threads at yoke, if used, order D78263 clevis and D78264 piston rod . . . . .	1
19	D 78264	ROD - piston, 1-1/16" - 12 NF threads at yoke, if used . . . . .	1
20	D 40198	CAP - cylinder, rod end . . . . .	1
21	61- 628	BOLT - hex socket head, 3/8" - 16 NC x 1-3/4" . . . . .	1
22	D 24097	CLEVIS - piston rod, 1" - 14 NF threads, if used . . . . .	1
22	D 78263	CLEVIS - piston rod, 1-1/16" - 12 NF threads, if used . . . . .	1
23	25- 106	NUT - hex, 3/8" - 16 NC . . . . .	1



## FORKLIFT CONTROL LEVERS AND LINKAGE

REF.	PART NO.	DESCRIPTION	REQ'D.
1	D 59912	KNOB - control levers	3
2	D 72071	CONTROL LEVER - sideshift	1
3	D 72070	CONTROL LEVER - tilt	1
4	D 72069	CONTROL LEVER - lift	1
5	*D 68519	SHAFT - levers	1
6	D 68524	SPACER - control lever handles	2
7	D 68523	SPACER - control lever shaft	1
8	D 46080	SPACER - control lever ends	2
9	L 15401	BEARING - shaft	2
10	113- 102	BOLT - hex head, 5/16" - 18 NC x 3/4", plated	4
11	192- 20	WASHER - lock, 5/16", plated	4
12	129- 102	NUT - hex, 5/16" - 18 NC, plated	4
13	D 95095	RING - bearing retaining	2
14	D 68186	CLEVIS - threaded male	3
15	129- 122	NUT - hex, 5/16" - 24 NF, plated	3
16	H 44198	CLEVIS - metal, plated, replaces fiberglass clevis on some models	3
17	141- 3	CLEVIS PIN - 5/16"	6
18	132- 25	COTTER PIN - 3/32" x 5/8"	6
19	REF	CONTROL VALVE - forklift for correct assembly and components see pages 285-291	1
20	113- 203	BOLT - hex head, 3/8" - 16 NC x 3-1/2", plated	3
21	192- 21	WASHER - lock, 3/8", plated	3
22	D 75755	INSULATOR - valve mounting	3

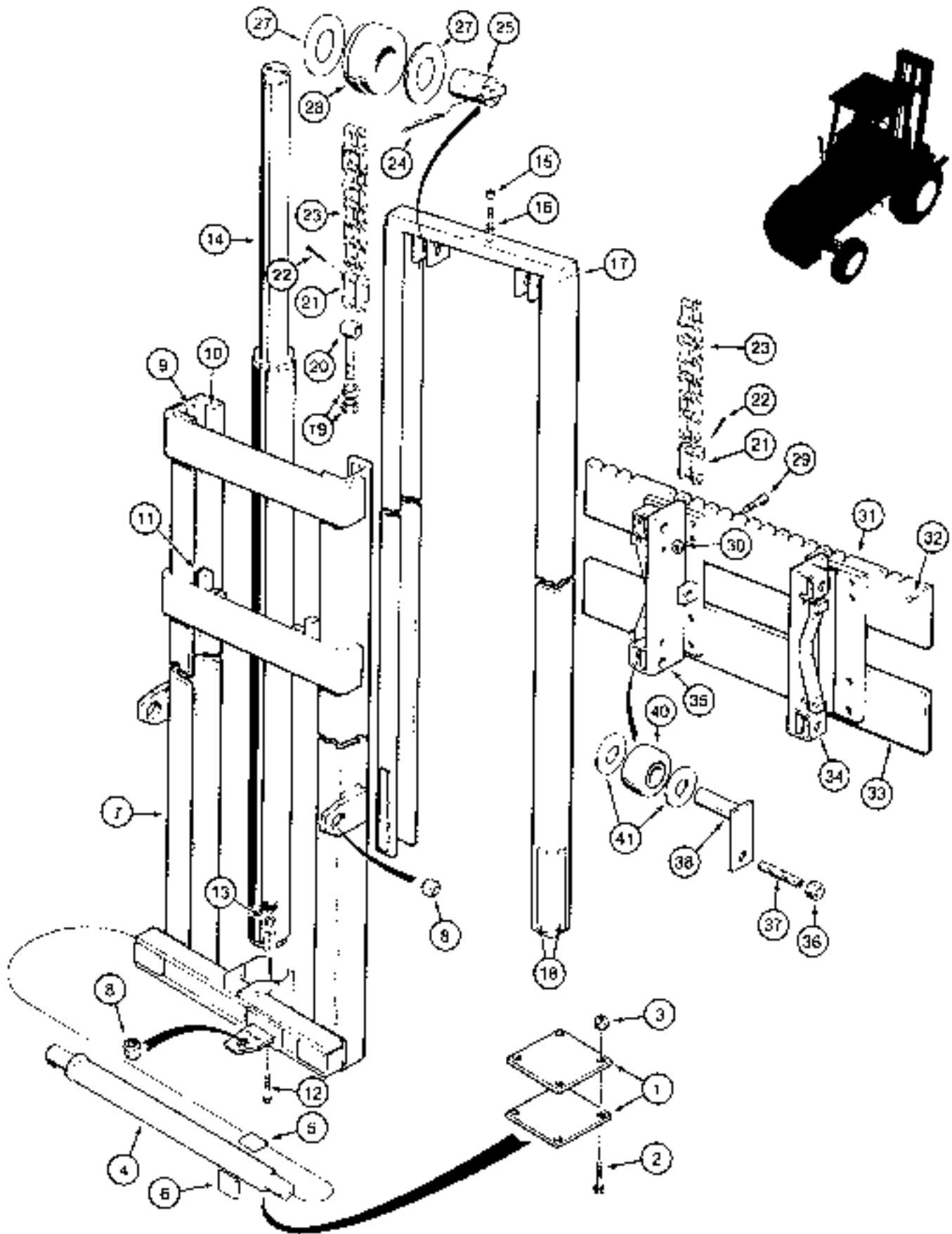
\*NOTE: For shuttle control lever and linkage, see page 155.



## 14-1/4 FOOT (4.3 m) MAST FOR 584D

REF.	PART NO.	DESCRIPTION	REQ'D.
	D 121815	MAST - complete, mach nery item, see page 2 for ordering . . . . .	1
1	D 88745	PLATE - trunnion bar ends . . . . .	4
2	113- 177	BOLT - hex head, 5/16" - 18 NC x 3", plated . . . . .	8
3	131- 4	NUT - hex, self-locking, 5/16" - 18 NC . . . . .	8
4	D 75934	BAR - trunnion . . . . .	1
5	D 40841	WEAR PLATE - horizontal . . . . .	4
6	D 40840	WEAR PLATE - vertical . . . . .	4
7	D 75936	FRAME - outer . . . . .	1
8	D 40843	BEARING - self-aligning . . . . .	3
9	D 32555	WEAR PLATE - 1/8" (3 mm) x 5" (127 mm) . . . . .	2
10	D 27366	WEAR PLATE - 1/8" (3 mm) x 7" (178 mm) . . . . .	4
11	D 47895	WEAR PLATE - 5/16" (8 mm) x 4-1/2" (114 mm) . . . . .	2
12	113- 353	BOLT - hex head, 7/16" - 14 NC x 6", plated . . . . .	1
13	131- 51	NUT - hex, self-locking, 7/16" - 14 NC . . . . .	1
14	N 7643	CYLINDER - lift, parts list page 297 . . . . .	1
15	165- 166	BOLT - hex socket head, self-locking, 1/2" - 20 NF x 2" . . . . .	2
16	192 23	WASHER - lock, 1/2", plated . . . . .	2
17	D 77580	FRAME - inner . . . . .	1
18	60972	WEAR PLATE - 1/8" (3 mm) x 11" (279 mm) . . . . .	6
19	129- 125	NUT - hex, 1/2" - 20 NF, plated . . . . .	4
20	N 6012	EYEBOLT - chain . . . . .	2
21	N 6010	LINK - connecting, lift chain . . . . .	4
22	132- 45	COTTER PIN - 1/8" x 5/8" . . . . .	2
23	D 34446	CHAIN - lift, 113 links . . . . .	2

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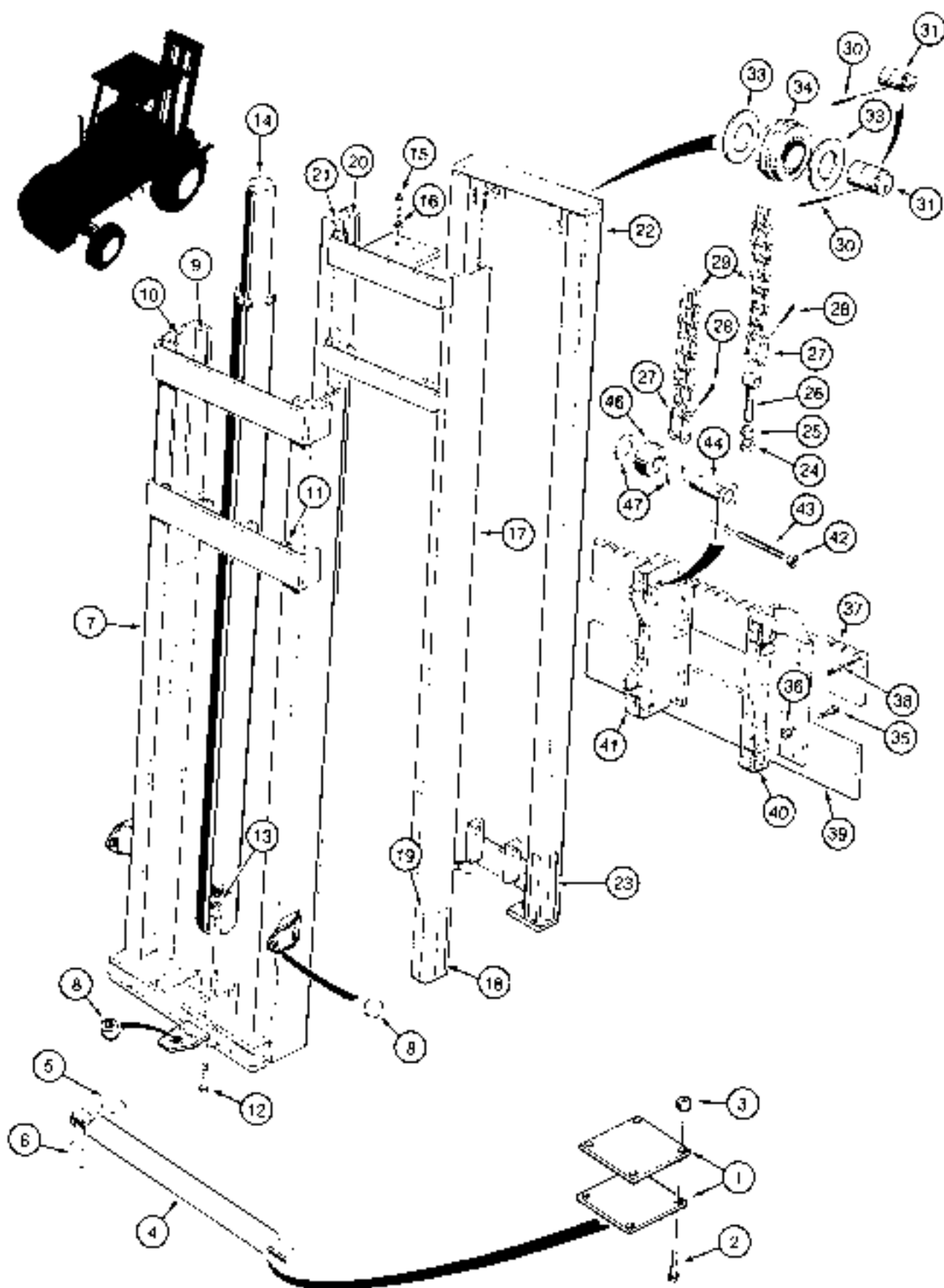


## 14-1/4 FOOT (4.3 m) MAST FOR 584D

REF.	PART NO.	DESCRIPTION	REQ'D.
	REF	MAST - complete, continued from page 307	1
24	132- 99	COTTER PIN - 3/16" x 2"	2
25	D 87070	PIN - wheel, service, includes grease fitting not required	2
26	211- 5	BALL - 3/16", grade 200, chrome alloy steel, if used, not shown	2
27	60944	THRUST WASHER - wheel	4
28	D 87069	WHEEL - chain guide, sealed	2
29	61- 828	BOLT - hex socket head, 1/2" - 13 NC x 1-3/4"	16
30	129- 145	NUT - hex, jam, 1/2" - 13 NC, plated	16
31	D 47875	BACK PLATE - upper	1
32	138- 2050	SPIROL PIN - 7/16" x 2"	2
33	D 47876	BACK PLATE - lower	1
34	*D 47901	CARRIAGE ASSEMBLY - right-hand, includes (2) N7958 wear plates	1
35	*D 47902	CARRIAGE ASSEMBLY - left-hand, includes (2) N7958 wear plates	1
36	129- 145	NUT - hex, jam, 1/2" - 13 NC, plated	4
37	178- 693	SET SCREW - hex socket headless, 1/2" - 13 NC x 3" oval point	4
38	D 86604	PIN - roller, service, includes grease fitting not required	4
39	211- 5	BALL - 3/16", grade 200, chrome alloy steel, if used, not shown	4
40	D 47894	ROLLER - load	4
41	60917	THRUST WASHER - roller	8

\*NOTE: Carriages must be aligned and drilled at time of installation.

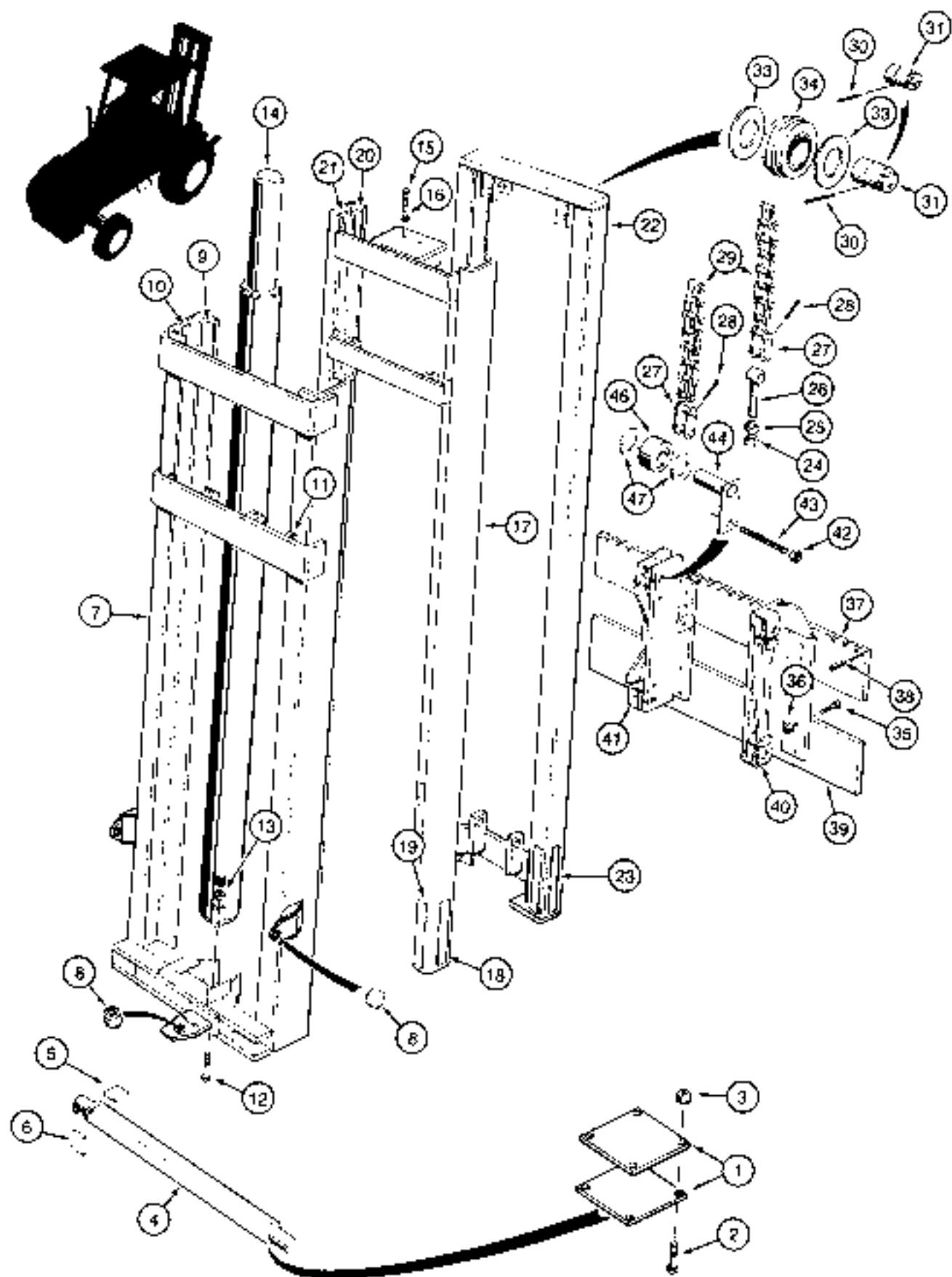




## 21-1/2 FOOT (6.5 m) MAST FOR 584D

REF.	PART NO.	DESCRIPTION	REQ'D
	D 121916	MAST - complete, machinery item, see page 2 for ordering	1
1	D 88745	PLATE - trunnion ear ends	4
2	113- 177	BOLT - hex head, 5/16" - 18 NC x 3", plated	8
3	131 4	NUT - hex, self-locking, 1/2" - 13 NC	8
4	D 75934	BAR - trunnion	1
5	D 40841	WEAR PLATE - horizontal	4
6	D 40840	WEAR PLATE - vertical	4
7	D 73662	FRAME - outer	1
8	D 40843	BEARING - self-aligning	3
9	D 32555	WEAR PLATE - 1/8" (3 mm) x 5" (127 mm)	2
10	D 27363	WEAR PLATE - 3/16" (5 mm) x 6" (152 mm)	4
11	D 47895	WEAR PLATE - 5/16" (8 mm) x 4-1/2" (114 mm)	2
12	113- 436	BOLT - hex head, 1/2" - 13 NC x 5-1/2", plated	1
13	131- 10	NUT - hex, self-locking, 1/2" - 13 NC	1
14	N 7643	CYLINDER - lift, parts list page 297	1
15	185- 166	BOLT - hex socket head, self-locking, 1/2" - 20 NF x 2"	2
16	192- 23	WASHER - lock, 1/2", plated	2
17	D 73664	FRAME - center	1
18	D 27362	WEAR PLATE - 1/8" (3 mm) x 10" (254 mm)	2
19	D 27365	WEAR PLATE - 3/16" (5 mm) x 10" (254 mm)	4
20	D 27364	WEAR PLATE - 1/8" (3 mm) x 6" (152 mm)	4
21	D 32555	WEAR PLATE - 1/8" (3 mm) x 5" (127 mm)	2
22	D 73663	FRAME - inner	1
23	60972	WEAR PLATE - 1/8" (3 mm) x 11" (279 mm)	6
24	25- 1512	NUT - hex, jam, 3/4" - 16 NF, outer chain bolt	2
24	129- 170	NUT - hex, jam, 1" - 14 NF, plated, inner chain bolt	2
25	129- 128	NUT - hex, 3/4" - 16 NF, plated, outer chain bolt	2
25	120- 130	NUT - hex, 1" - 14 NF, plated, inner chain bolt	2
26	N 60" 1	EYEBOLT - outer chain, for service order both N60" 1 eyebolt and N6010 connecting link	2
26	N 6877	EYEBOLT - inner chain	2
27	N 60" 0	LINK - connecting, outer chain	4
27	N 6878	LINK - connecting, inner chain	4
28	132 45	COTTER PIN - 1/8" x 5/8" N6010 and N6878 links	2
29	D 73665	CHAIN - inner, 95 links	2
29	D 34446	CHAIN - outer, 113 links	2
30	132- 99	COTTER PIN - 3/16" x 2", D87070 pin	2
30	132- 102	COTTER PIN - 3/16" x 2-1/2", N7324 pin	2

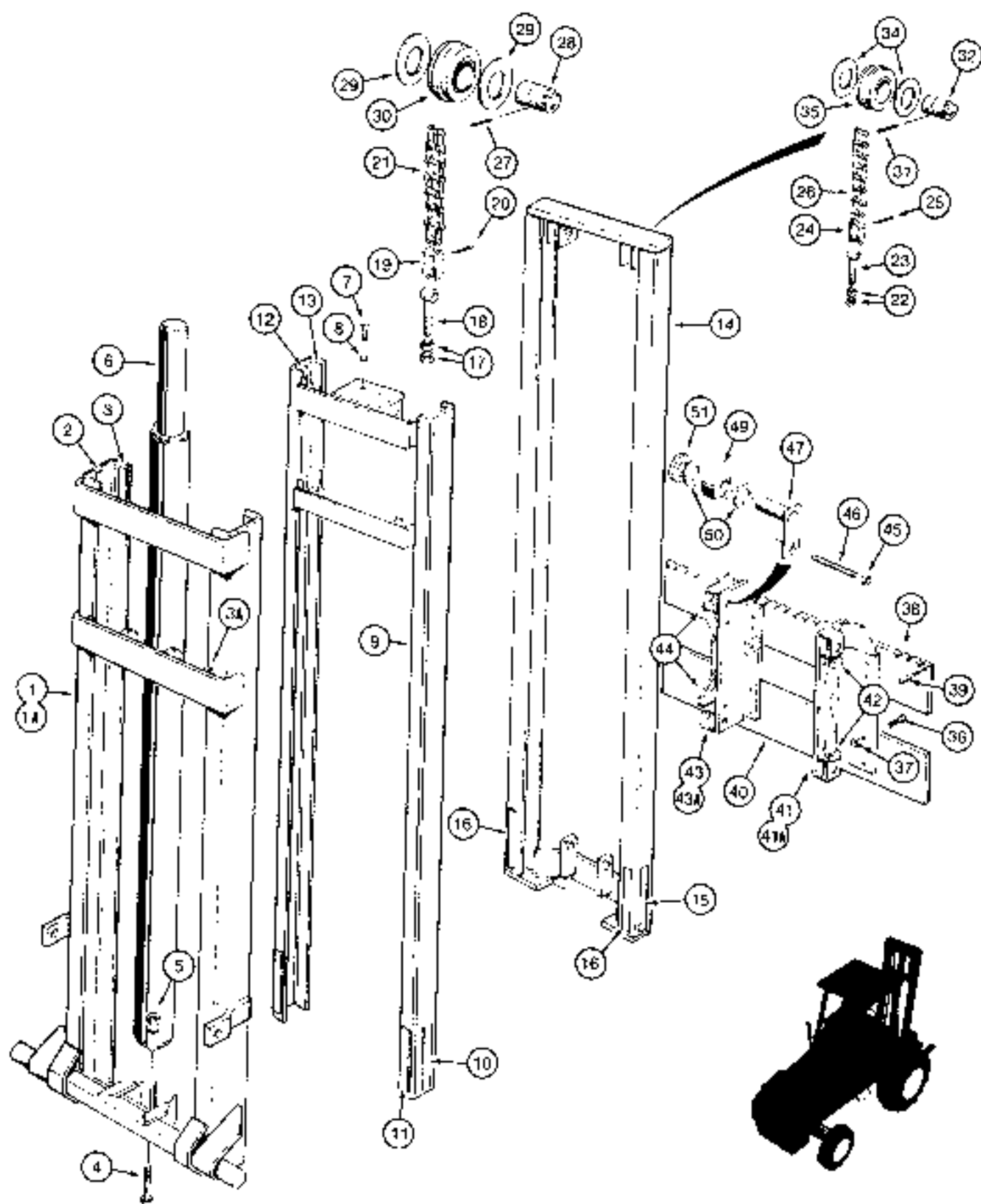
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## 21-1/2 FOOT (6.5 m) MAST FOR 584D

REF.	PART NO.	DESCRIPTION	REQ. D.
	REF	MAST - complete, continued from page 311	1
31	D 87070	PIN - outer service, includes grease fitting not required	2
31	N 7324	PIN - inner guide wheel, service, includes grease fitting not required	2
32	211- 5	BALL - 3/16", grade 200, chrome alloy steel, D87070 and N7324 pins, if used, not shown	1
33	80944	THRUST WASHER - outer guide wheel	4
33	D 36582	THRUST WASHER - inner guide wheel	4
34	D 87069	WHEEL - outer, sealed	2
34	D 39482	WHEEL - guide, inner chain	2
35	61- 832	BOLT - hex socket head, 1/2" - 13 NC x 2"	16
36	129- 145	NUT - hex, jam, 1/2" - 13 NC, plated	16
37	D 47875	BACK PLATE - upper	1
38	138- 2050	SPIRÖL PIN - 7/16" x 2"	2
39	D 47876	BACK PLATE - lower	1
40	*D 47877	CARRIAGE ASSEMBLY - right-hand, includes (2) N7958 wear plates	1
41	*D 47878	CARRIAGE ASSEMBLY - left-hand, includes (2) N7958 wear plates	1
42	129- 145	NUT - hex, jam, 1/2" - 13 NC, plated	4
43	178- 693	SET SCREW - hex socket headless, 1/2" - 13 NC x 3", oval point	4
44	D 86604	PIN - roller, service includes grease fitting not required	4
45	211- 5	BALL - 3/16", grade 200, chrome alloy steel, if used, not shown	1
46	D 47894	ROLLER - load	4
47	80917	THRUST WASHER - roller	8

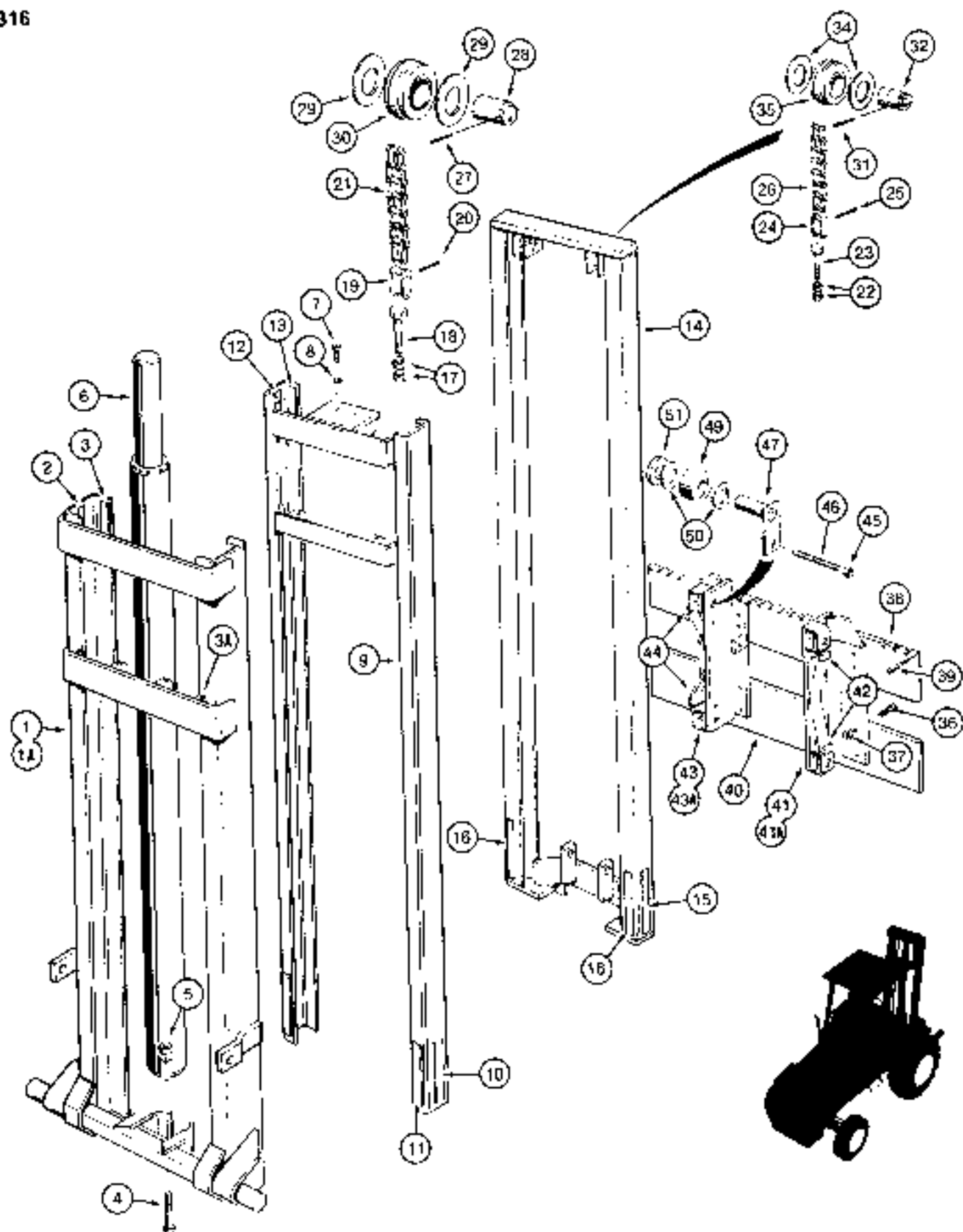
\*NOTE: Carriages must be aligned and drilled at time of installation.



## 28 FOOT (8.5 m) MAST FOR 584D

REF.	PART NO.	DESCRIPTION	REQ'D
	D 12197	MAST - complete, machinery item, see page 2 for ordering	1
1	D 55400	FRAME - outer, used before mast SN 53561	1
1A	N 8802	FRAME - outer, used on mast SN 53561 and after	1
2	D 55411	WEAR PLATE - 1/8" (3 mm) x 6" (152 mm)	2
3	D 55409	WEAR PLATE - 3/16" (5 mm) x 6" (152 mm)	4
3A	D 47895	WEAR PLATE - 5/16" (8 mm) x 4-1/2" (114 mm), D55400 frame only	2
4	113- 353	BOLT - hex head, 7/16" - 14 NC x 6", plated	1
5	131- 51	NUT - hex, self-locking, 7/16" - 14 NC	1
6	N 7544	CYLINDER - lift, parts list page 297	1
7	165- 166	BOLT - hex socket head, self-locking, 1/2" - 20 NI" x 2"	2
8	192- 23	WASHER - lock, 1/2", plated	2
9	D 55401	FRAME - center	1
10	D 55412	WEAR PLATE - 1/8" (3 mm) x 10" (254 mm)	2
11	D 55410	WEAR PLATE - 3/16" (5 mm) x 10" (254 mm)	4
12	D 55411	WEAR PLATE - 1/8" (3 mm) x 6" (152 mm)	2
13	D 55409	WEAR PLATE - 3/16" (5 mm) x 6" (152 mm)	4
14	D 55402	FRAME - inner	1
15	D 27362	WEAR PLATE - 1/8" (3 mm) x 10" (254 mm)	2
16	D 27365	WEAR PLATE - 3/16" (5 mm) x 10" (254 mm)	4
17	129- 130	NUT - hex, 1" - 14 NF, plated	4
18	N 6877	EYEBOLT - chain	2
19	N 6878	LINK - connecting	4
20	132- 45	COTTER PIN - 1/8" x 5/8"	2
21	D 55397	CHAIN - lift, 115 links	2
22	129- 126	NUT - hex, 3/4" - 16 NF, plated	4
23	N 5011	LYLBOLT - chain, for service order both N601: eyebolt and N6010 connecting link	2
24	N 5010	LINK - connecting	4
25	132- 45	COTTER PIN - 1/8" x 5/8"	2
26	D 55398	CHAIN - lift, 137 links	2
27	132- 102	COTTER PIN - 3/16" x 2-1/2"	2
28	N 7324	PIN - guide wheel	2
29	D 36582	THRUST WASHER - roller	4
30	D 39482	WHEEL - guide	2
31	132- 99	COTTER PIN - 3/16" x 2"	2
32	D 87070	PIN - wheel, service, includes grease fitting not required	2
33	211- 5	BALL - 3/16", grade 200, chrome alloy steel, if used, not shown	1
34	60944	THRUST WASHER - roller	4
35	D 87069	WHEEL - guide, sealed	2

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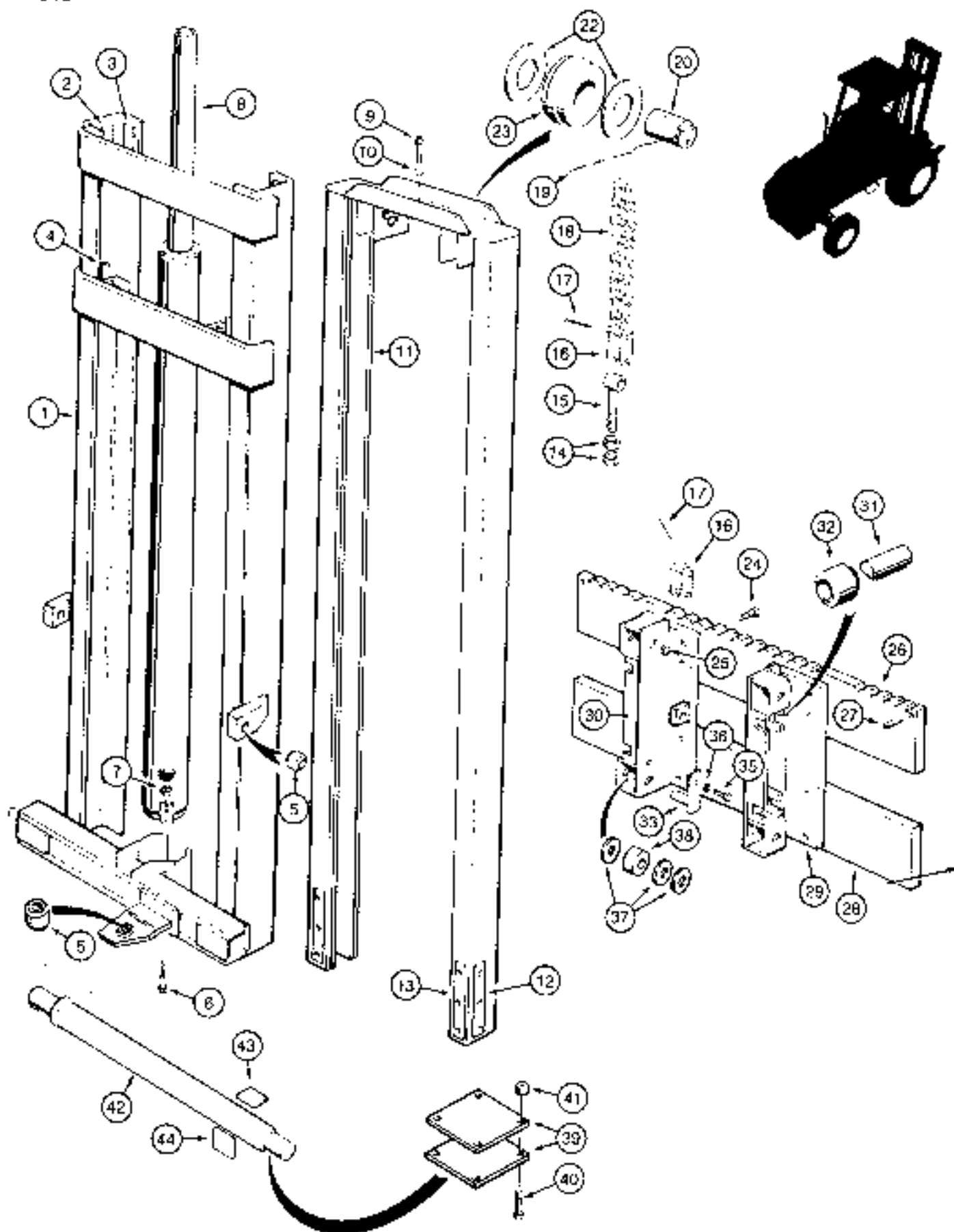


## 28 FOOT (8.5 m) MAST FOR 584D

REF.	PART NO.	DESCRIPTION	REQ D
	REF	MAST - complete, continued from page 315	1
36	81- 828	BOLT - hex socket head, 1/2" - 13 NC x 1-3/4"	16
37	129- 146	NUT - hex, jam, 1/2" - 13 NC, plated	16
38	D 47875	BACK PLATE - upper	1
39	138- 2050	SPIROL PIN - 7/16" diameter x 2"	2
40	D 47876	BACK PLATE - lower	1
41	*O 55405	CARRIAGE - right-hand, used before mast SN 53561	1
41A	*N 8805	CARRIAGE - right-hand, used on mast SN 53561 and after	1
42	D 55407	WEAR PLATE - bronze, D55405 or N8805 carriage	2
43	*D 55406	CARRIAGE - left-hand, used before mast SN 53561	1
43A	*N 8806	CARRIAGE - left-hand, used on mast SN 53561 and after	1
44	D 55407	WEAR PLATE - bronze, D55406 or N8806 carriage	2
45	129- 146	NUT - hex, jam, 1/2" - 13 NC, plated	4
46	178- 692	SET SCREW - hex socket headless, 1/2" - 13 NC x 2-3/4", oval point	4
47	D 86606	PIN - roller, service, includes grease fitting not required	4
48	211- 5	BALL - 3/16", grade 200, chrome alloy steel, if used, not shown	1
49	D 52289	ROLLER - load	4
50	D 52288	THRUST WASHER - roller	8
51	D 55404	THRUST WASHER - roller	4

\*NOTE: Carriages must be aligned and drilled at time of installation



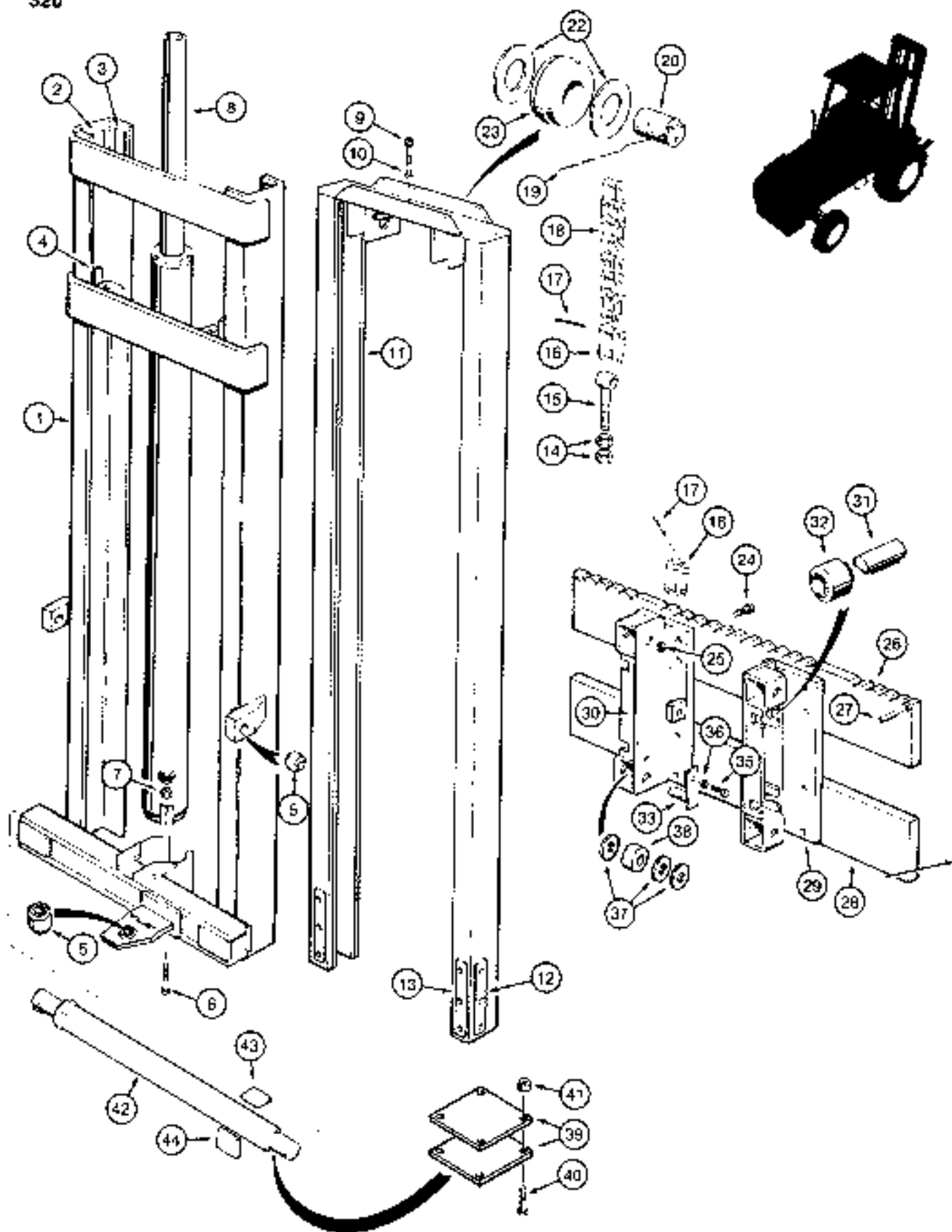


## 12 FOOT (3.6 m) MAST FOR 585D

REF	PART NO.	DESCRIPTION	REQ'D.
	D 121918	MAST - complete, machinery item, see page 2 for ordering	1
1	D 75937	FRAME - outer	1
2	D 32555	WEAR PLATE - 1/8" (3 mm) x 5" (127 mm)	2
3	D 27365	WEAR PLATE - 3/16" (5 mm) x 10" (254 mm)	4
4	D 47895	WEAR PLATE - 3/16" (5 mm) x 4-1/2" (114 mm)	2
5	D 40843	BEARING - self-aligning	3
6	113- 353	BOLT - hex head, 7/16" - 14 NC x 6", plated	1
7	131- 51	NUT - hex, self-locking, 7/16" - 14 NC	1
8	N 7642	CYLINDER - lift, parts list page 297	1
9	165- 166	BOLT - hex socket head, self-locking, 1/2" - 20 NF x 2"	2
10	192- 23	WASHER - lock, 1/2", plated	2
11	D 39480	FRAME - inner	1
12	D 27362	WEAR PLATE - 1/8" (3 mm) x 10" (254 mm)	2
13	D 27366	WEAR PLATE - 3/16" (5 mm) x 10" (254 mm)	4
14	129- 130	NUT - hex, 1" - 14 NF, plated	4
15	N 6877	EYEBOLT - chain	2
16	N 6878	LINK - connecting, lift chain	4
17	132- 45	COTTER PIN - 1/8" x 5/8"	2
18	D 39483	CHAIN - lift 79 links	2
19	132- 102	COTTER PIN - 3/16" x 2-1/2"	2
20	N 7324	PIN - guide wheel, service, includes grease fitting not required	2
21	211- 5	BALL - 3/16", grade 200, chrome alloy steel, if used, not shown	1
22	D 36582	THRUST WASHER - wheel	4
23	D 39482	WHEEL - chain guide	2
24	61- 828	BOLT - hex socket head, 1/2" - 13 NC x 1-3/4"	16
25	129- 145	NUT - hex, jam, 1/2" - 13 NC, plated	16
26	D 36580	BACK PLATE - upper	1
27	138- 2050	SPIRAL PIN - 7/16" x 2"	2
28	D 36581	BACK PLATE - lower	1
29	D 52321	CARRIAGE - right-hand	1
30	D 52322	CARRIAGE - left-hand	1
31	D 36589	PIN - side roller	4
32	D 36590	ROLLER - side	4
33	D 86605	PIN - roller, service, includes grease fitting not required	4
34	211- 5	BALL - 3/16", grade 200, chrome alloy steel, if used, not shown	1
35	113- 424	BOLT - hex head, 1/2" - 13 NC x 1", plated	4
36	192- 23	WASHER - lock, 1/2", plated	4
37	D 52298	THRUST WASHER - roller	12
38	D 52299	ROLLER - load	4

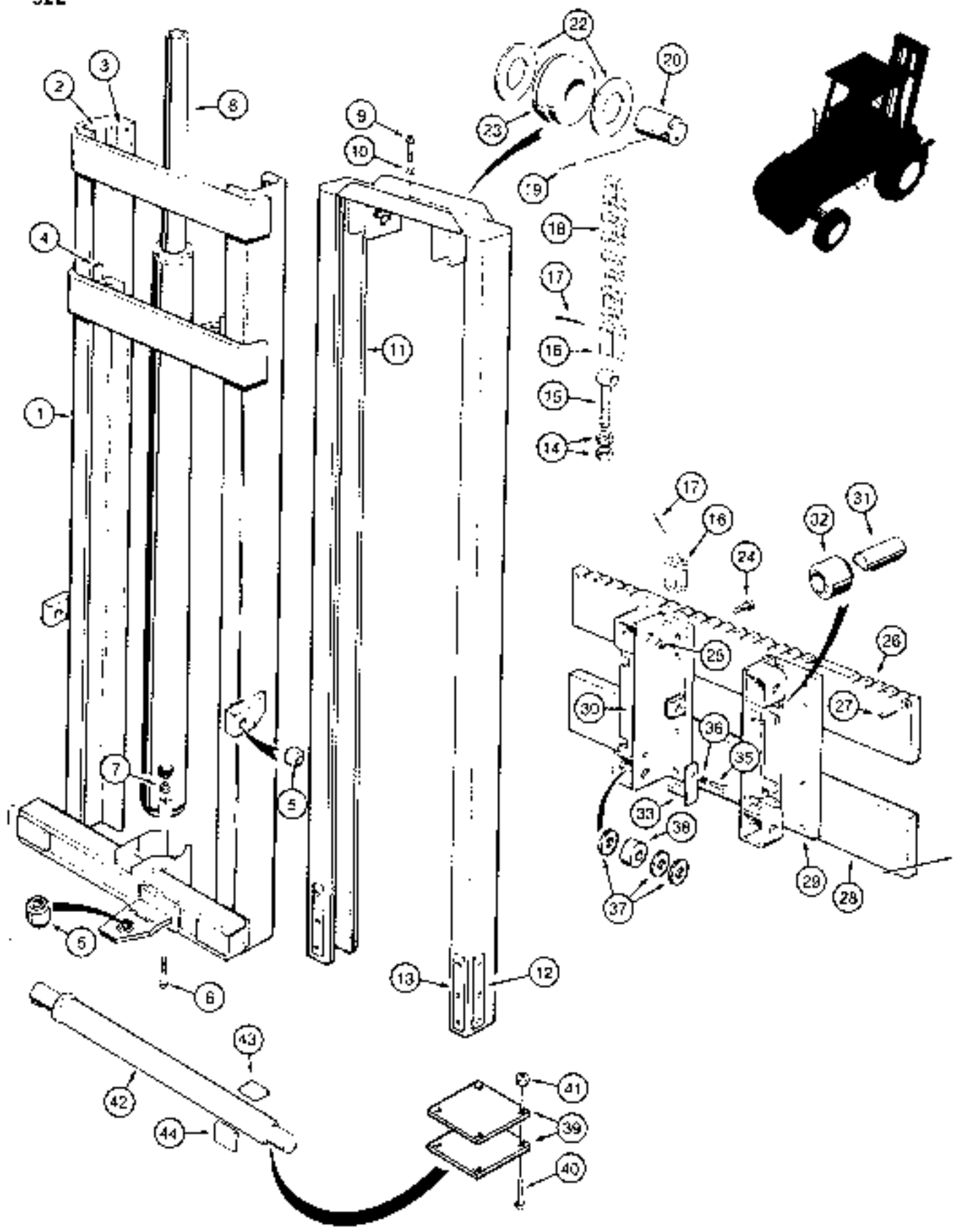
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\*NOTE: Carriages must be aligned and drilled at time of installation.



## 12 FOOT (3.6 m) MAST FOR 585D

REF.	PART NO	DESCRIPTION	REQ'D
	REF	MAST - complete, continued from page 319 .....	1
39	D 88745	PLATE - trunnion bar ends .....	4
40	113- 177	BOLT - hex head, 5/16" - 18 NC x 3", plated .....	8
41	131- 4	NUT - hex. self-locking, 5/16" - 18 NC .....	8
42	D 75934	BAR - trunnion .....	1
43	D 40841	WEAR PLATE - horizontal .....	4
44	D 40840	WEAR PLATE - vertical .....	4

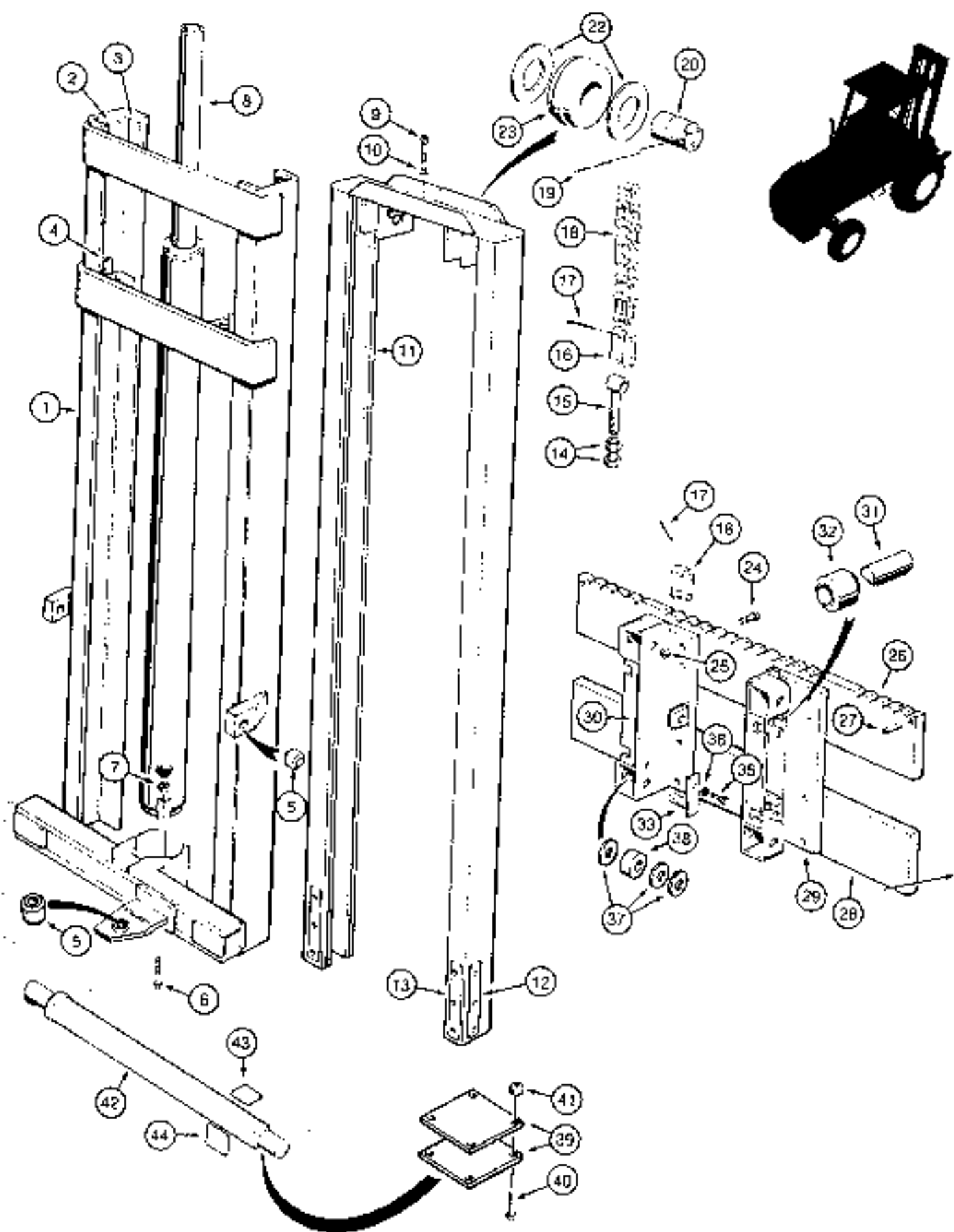


## 14-1/4 FOOT (4.3 m) MAST FOR 585D

REF.	PART NO.	DESCRIPTION	REQ'D.
	D 121919	MAST - complete, machinery item, see page 2 for ordering	1
1	D 75938	FRAME - outer	1
2	D 32555	WEAR PLATE - 1/8" (3 mm) x 5" (127 mm)	2
3	D 27365	WEAR PLATE - 3/16" (5 mm) x 10" (254 mm)	4
4	D 47895	WEAR PLATE - 3/16" (5 mm) x 4-1/2" (114 mm)	2
5	D 40843	BEARING - self-aligning	3
6	113- 353	BOLT - hex head, 7/16" - 14 NC x 6", plated	1
7	131- 51	NUT - hex, self-locking, 7/16" - 14 NC	1
8	N 7543	CYLINDER - lift, parts list page 297	1
9	165- 166	BOLT - hex socket head, self-locking, 1/2" - 20 NF x 2"	2
10	192- 23	WASHER - lock, 1/2", plated	2
11	D 39481	FRAME - inner	1
12	60972	WEAR PLATE - 1/8" (3 mm) x 11" (279 mm)	2
13	D 36586	WEAR PLATE - 3/16" (5 mm) x 11" (279 mm)	4
14	129- 130	NUT - hex, 1" - 14 NF, plated	4
15	N 6877	EYEBOLT - chain	2
16	N 6878	LINK - connecting, lift chain	4
17	132- 45	COTTER PIN - 1/8" x 5/8"	2
18	D 39484	CHAIN - lift, 89 links	2
19	132- 102	COTTER PIN - 3/16" x 2-1/2"	2
20	N 7324	PIN - guide wheel, service, includes grease fitting not required	2
21	211- 5	BALL - 3/16", grade 200, chrome alloy steel, if used, not shown	1
22	O 36582	THRUST WASHER - wheel	4
23	O 39482	WHEEL - chain guide	2
24	61- 828	BOLT - hex socket head, 1/2" - 13 NC x 1-3/4"	16
25	129- 145	NUT - hex, jam, 1/2" - 13 NC, plated	16
26	O 36580	BACK PLATE - upper	1
27	138- 2050	SPIRAL PIN - 7/16" x 2"	2
28	D 36581	BACK PLATE - lower	1
29	*D 52321	CARRIAGE - right-hand	1
30	*D 52322	CARRIAGE - left-hand	1
31	D 36589	PIN - side roller	4
32	D 36590	ROLLER - side	4
33	D 86605	PIN - roller, service, includes grease fitting not required	4
34	211- 5	BALL - 3/16", grade 200, chrome alloy steel, if used, not shown	1
35	113- 424	BOLT - hex head, 1/2" - 13 NC x 1", plated	4
36	192- 23	WASHER - lock, 1/2", plated	4
37	D 52298	THRUST WASHER - roller	12
38	D 52299	ROLLER - load	4

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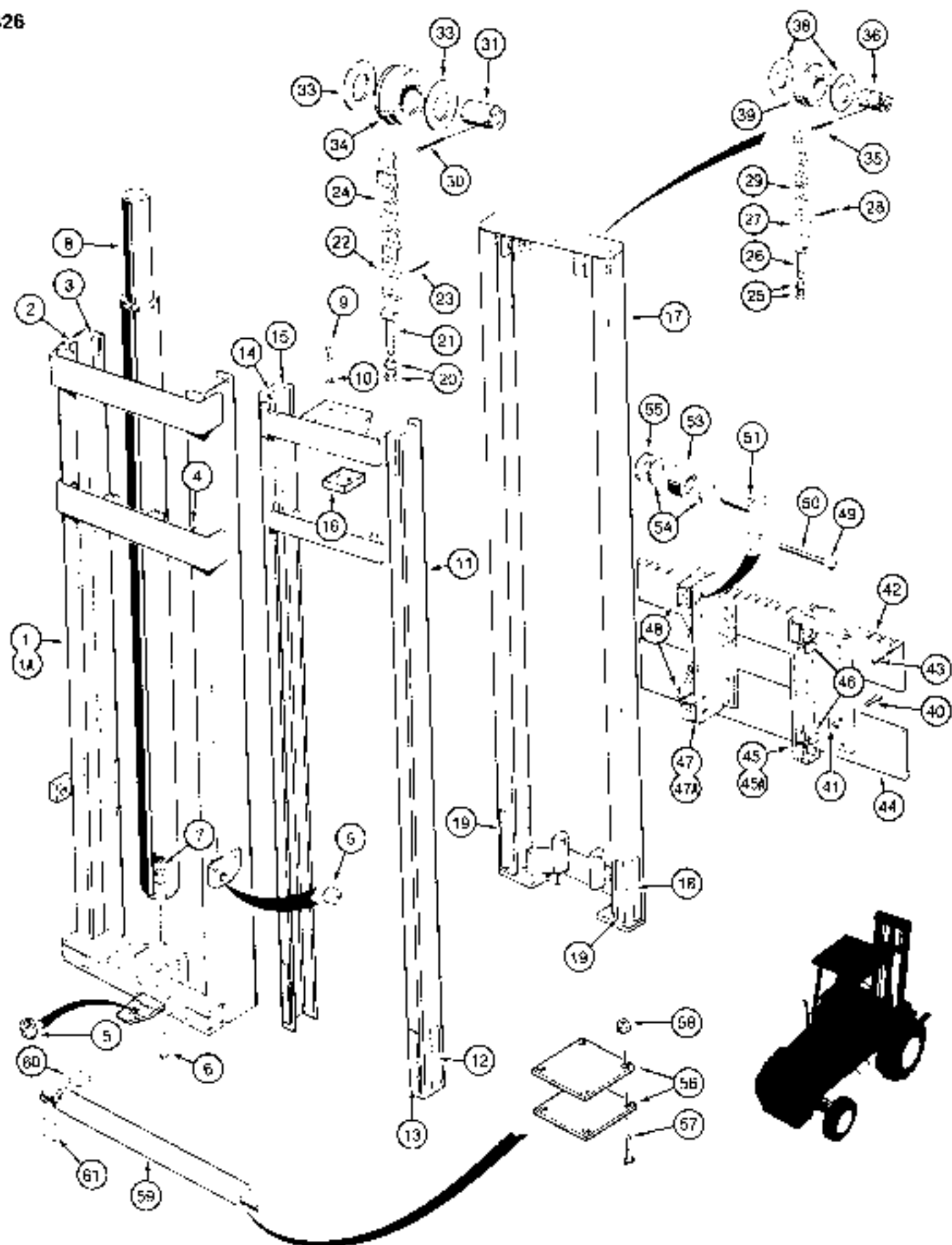
\*NOTE: Carriages must be aligned and drilled at time of installation



## 14-1/4 FOOT (4.3 m) MAST FOR 585D

REF.	PART NO	DESCRIPTION	REQ'D.
	REF	MAST complete continued from page 323	1
39	D 88745	PLATE - trunnion bar ends	4
40	113 177	BOLT - hex head, 5/16" - 18 NC x 3", plated	8
41	131 4	NUT - hex, self-locking, 5/16" - 18 NC	8
42	D 75934	BAR - trunnion	1
43	D 40641	WEAR PLATE - horizontal	4
44	D 40640	WEAR PLATE - vertical	4

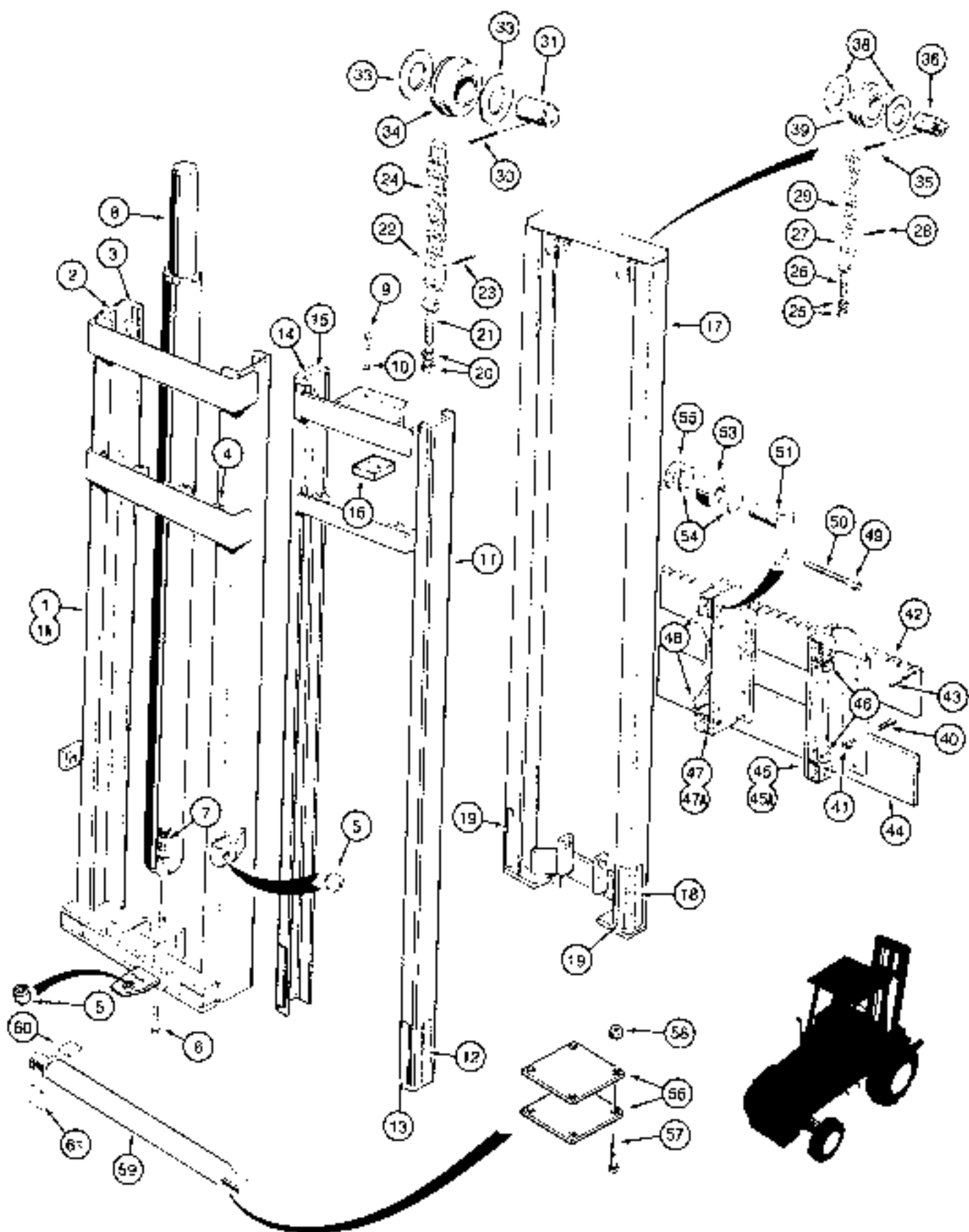




## 21-1/2 FOOT (6.5 m) MAST FOR 585D

REF	PART NO	DESCRIPTION	REQ'D.
	D 121920	MAST complete machinery item, see page 2 for ordering	1
1	D 75939	FRAME - outer, used before mast SN 52668	1
1A	N 6801	FRAME - outer, used on mast SN 52668 and after	1
2	D 55411	WEAR PLATE - 1/8" (3 mm) x 6" (152 mm)	2
3	D 55409	WEAR PLATE - 3/16" (5 mm) x 6" (152 mm)	4
4	D 47895	WEAR PLATE - 5/16" (8 mm) x 4-1/2" (114 mm)	2
5	D 40843	BEARING - self-aligning	3
6	113- 353	BOLT - hex head, 7/16" - 14 NC x 6", plated	1
7	131- 51	NUT - hex, self-locking, 7/16" - 14 NC	1
8	N 7613	CYLINDER - lift, parts list page 207	1
9	165- 166	BOLT - hex socket head, self-locking, 1/2" - 20 NF x 2"	2
10	192- 23	WASHER - lock, 1/2", plated	2
11	D 74410	FRAME - center	1
12	D 55412	WEAR PLATE - 1/8" (3 mm) x 10" (254 mm)	2
13	D 55410	WEAR PLATE - 3/16" (5 mm) x 10" (254 mm)	4
14	D 55411	WEAR PLATE - 1/8" (3 mm) x 6" (152 mm)	2
15	D 55409	WEAR PLATE - 3/16" (5 mm) x 6" (152 mm)	4
16	D 74412	PLATE - spacer	1
17	D 74411	FRAME - inner	1
18	D 27362	WEAR PLATE - 1/8" (3 mm) x 10" (254 mm)	2
19	D 27365	WEAR PLATE - 3/16" (5 mm) x 10" (254 mm)	4
20	129- 130	NUT - hex, 1" - 14 NF, plated	4
21	N 6877	EYEBOLT - inner chain	2
22	N 6878	LINK - connecting, inner chain	4
23	132- 45	COTTER PIN - 1/8" x 5/8"	2
24	D 73665	CHAIN - inner, 95 links	2
25	129- 128	NUT - hex, 3/4" - 16 NF, plated	4
26	N 6011	EYEBOLT - outer chain, for service order both N6011 eyebolt and N6010 connecting link	2
27	N 6010	LINK - connecting, outer chain	4
28	132- 25	COTTER PIN - 3/32" x 5/8"	2
29	D 74408	CHAIN - outer, 117 links	2
30	132- 102	COTTLR PIN - 3/16" x 2-1/2"	2
31	N 7324	PIN - guide wheel inner chain, service includes grease fitting not required	2
32	211- 5	BALL - 3/16", grade 200, chrome alloy steel, if used, not shown	1
33	D 36582	THRUST WASHER - inner wheel	4
34	D 39482	WHEEL - guide inner chain	2
35	132- 99	COTTER PIN - 3/16" x 2"	2
36	D 87070	PIN - wheel, service includes grease fitting not required	2
37	211- 5	BALL - 3/16", grade 200, chrome alloy steel, if used, not shown	1
38	60944	THRUST WASHER - wheel, outer chain guide	4
39	D 87069	WHEEL - guide, sealed, outer chain	2

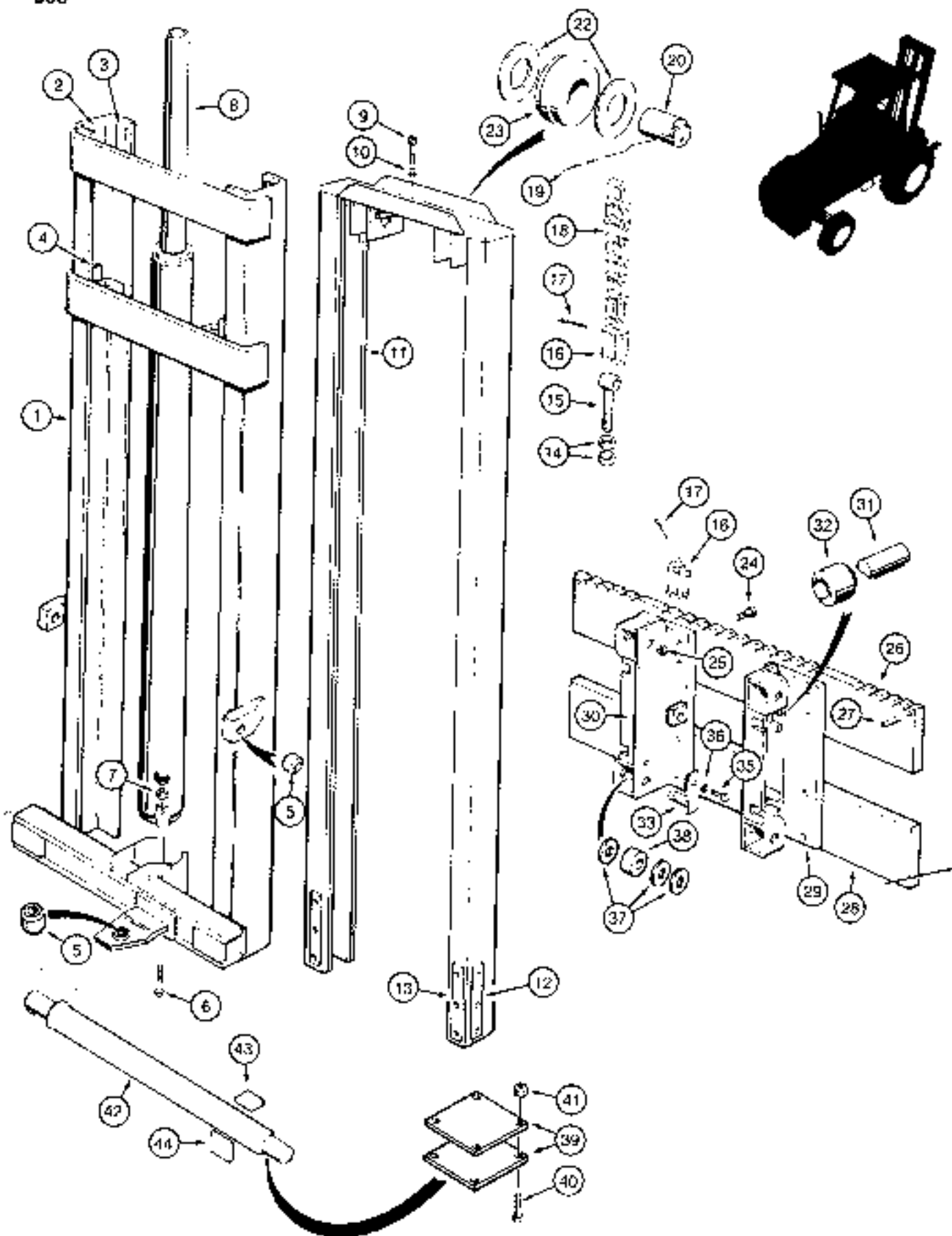
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## 21-1/2 FOOT (6.5 m) MAST FOR 585D

REF.	PART NO.	DESCRIPTION	REQ'D.
	REF	MAST - complete, continued from page 327	1
40	51- 828	BOLT - hex socket head, 1/2" - 13 NC x 1-3/4"	16
41	129- 145	NUT - hex, jam, 1/2" - 13 NC, plated	16
42	D 74406	BACK PLATE - upper	1
43	138- 2050	SPIROL PIN - 7/16" x 2"	2
44	D 74405	BACK PLATE - lower	1
45	*D 55405	CARRIAGE - right-hand, used before mast SN 52668	1
45A	*N 8805	CARRIAGE - right-hand, used on mast SN 52668 and after	1
46	D 55407	WEAR PLATE - bronze, D55405 or N8805 carriage	2
47	*D 55406	CARRIAGE - left-hand, used before mast SN 52668	1
47A	*N 8806	CARRIAGE - left-hand, used on mast SN 52668 and after	1
48	D 55407	WEAR PLATE - bronze, D55406 or N8806 carriage	2
49	129- 145	NUT - hex, jam, 1/2" - 13 NC, plated	4
50	178- 692	SET SCREW - hex socket headless, 1/2" - 13 NC x 2-3/4", oval point	4
51	D 88606	PIN - roller, service includes grease fitting not required	4
52	211- 5	BALL - 3/16", grade 200, chrome alloy steel, if used, not shown	1
53	O 52299	ROLLER - load	4
54	O 52298	THRUST WASHER - roller	8
55	O 55404	THRUST WASHER - roller	4
56	O 88745	PLATE - trunnion bar ends	4
57	113- 177	BOLT - hex head, 5/16" - 18 NC x 3", plated	8
58	131- 4	NUT - hex, self-locking, 5/16" - 18 NC	8
59	D 75934	BAR - trunnion	1
60	D 40841	WEAR PLATE - horizontal	4
61	D 40840	WEAR PLATE - vertical	4

\*NOTE: Carriages must be aligned and drilled at time of installation

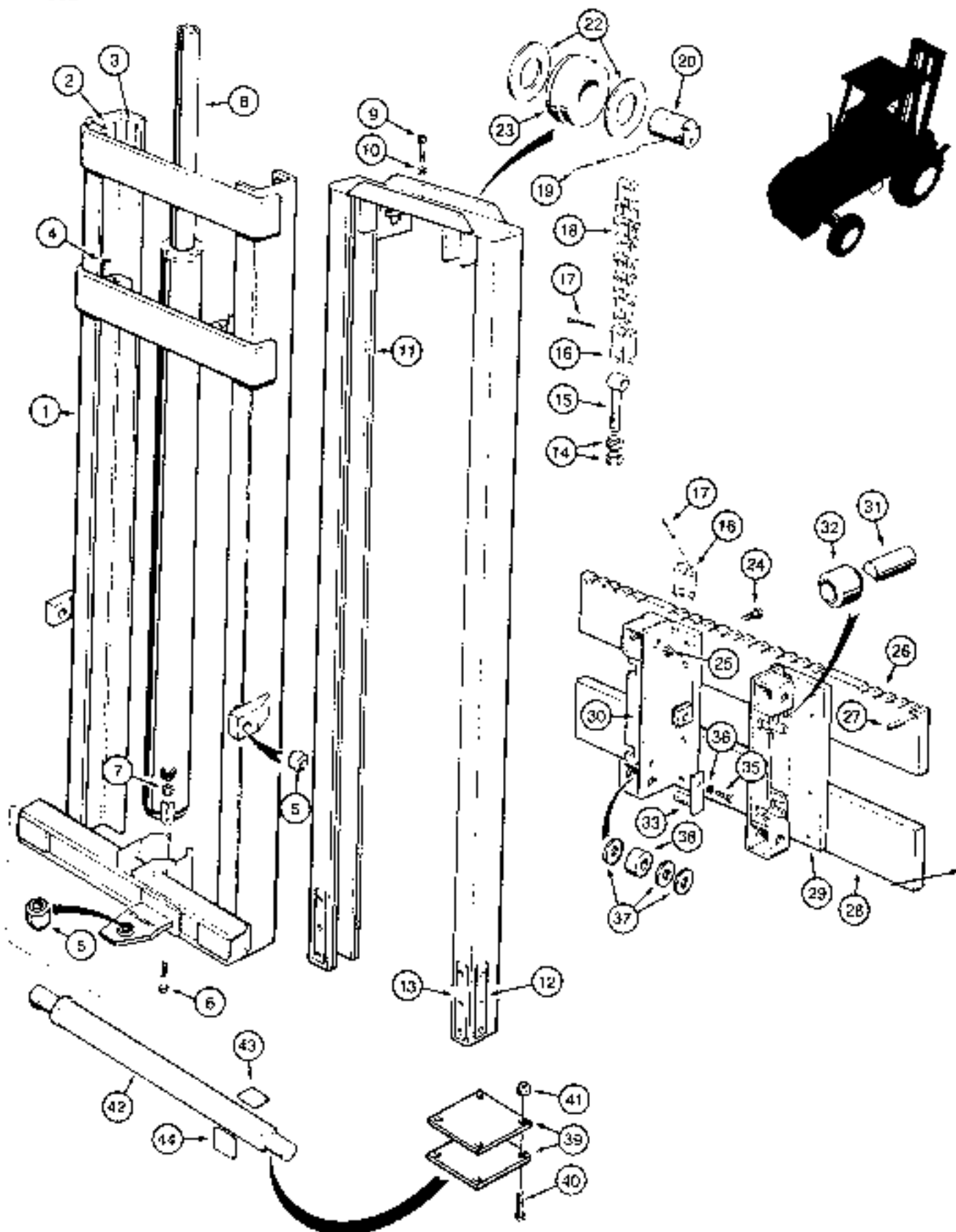


## 12 FOOT (3.6 m) MAST FOR 586D

REF	PART NO	DESCRIPTION	REQ'D.
	D 121921	MAST - complete, machinery item. see page 2 for ordering	1
1	D 75940	FRAME - outer	1
2	D 32555	WEAR PLATE - 1/8" (3 mm) x 5" (127 mm)	2
3	D 27365	WEAR PLATE - 3/16" (5 mm) x 10" (254 mm)	4
4	D 47895	WEAR PLATE - 3/16" (5 mm) x 4-1/2" (114 mm)	2
5	D 40843	BEARING - self-aligning	3
6	113- 353	BOLT - hex head, 7/16" - 14 NC x 6", plated	7
7	131- 51	NUT - hex, self-locking, 7/16" - 14 NC	1
8	N 7642	CYLINDER - lift, parts list page 297	1
9	155- 166	BOLT - hex socket head, self-locking, 1/2" - 20 NF x 2"	2
10	192- 23	WASHER - lock, 1/2", plated	2
11	D 39480	FRAME - inner	1
12	D 27362	WEAR PLATE - 1/8" (3 mm) x 10" (254 mm)	2
13	D 27365	WEAR PLATE - 3/16" (5 mm) x 10" (254 mm)	4
14	129- 130	NUT - hex, 1" - 14 NF, plated	4
15	N 6A77	EYEBOLT - chain	2
16	N 6A78	LINK - connecting, lift chain	4
17	132- 45	COTTER PIN - 1/8" x 5/8"	2
18	D 39483	CHAIN - lift, 79 links	2
19	132- 102	COTTER PIN - 3/16" x 2-1/2"	2
20	N 7324	PIN - guide wheel, service. includes grease fitting not required	2
21	211- 5	BALL - 3/16", grade 200, chrome alloy steel, if used, not shown	1
22	D 36582	THRUST WASHER - wheel	4
23	D 39482	WHEEL - chain guide	2
24	61- 82B	BOLT - hex socket head, 1/2" - 13 NC x 1-3/4"	16
25	129- 145	NUT - hex, jam, 1/2" - 13 NC, plated	16
26	D 55415	BACK PLATE - upper	1
27	138- 2050	SPIROL PIN - 7/16" x 2"	2
28	D 55416	BACK PLATE - lower	1
29	*D 52321	CARRIAGE - right-hand	1
30	*D 52322	CARRIAGE - left-hand	1

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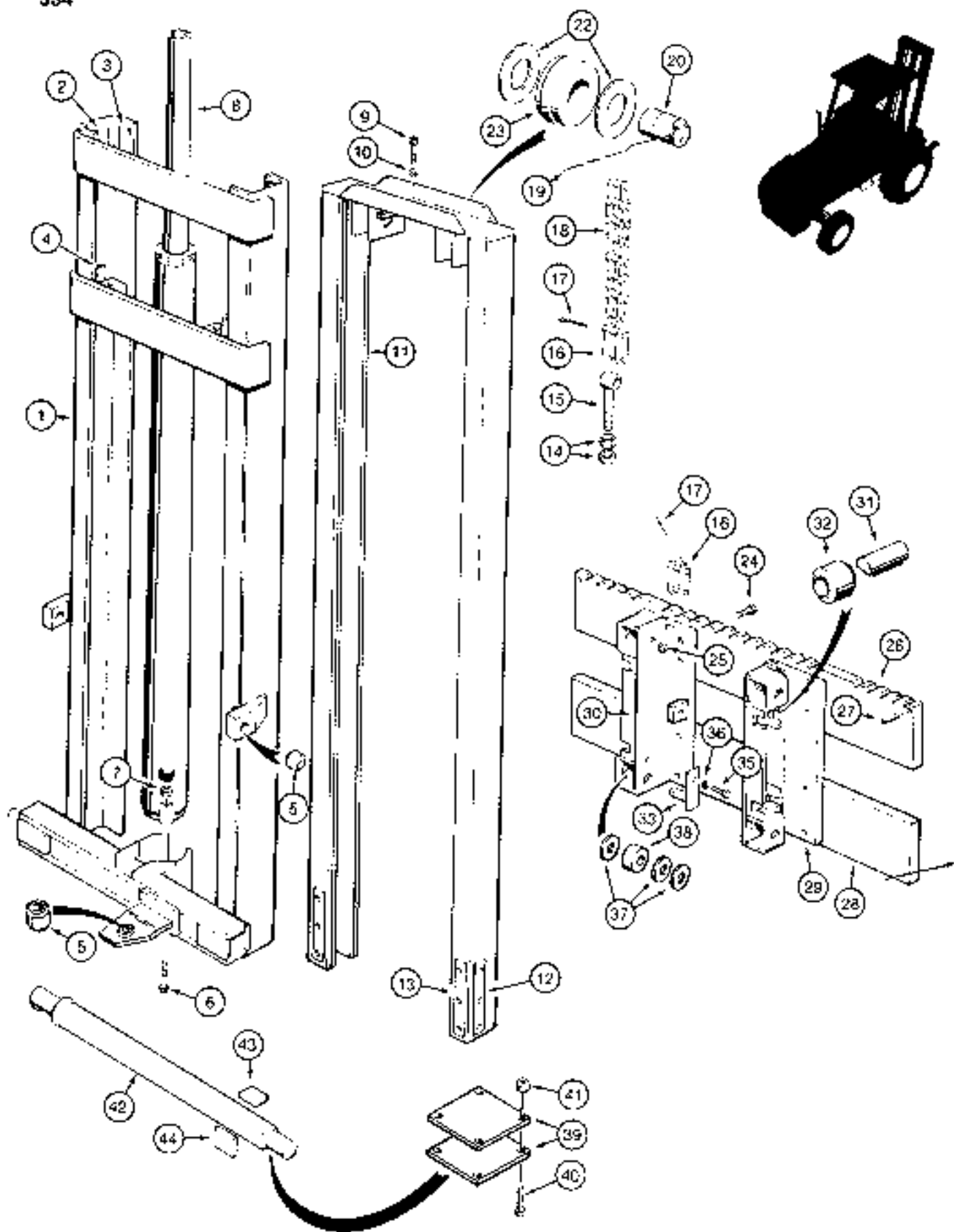
\*NOTE: Carriages must be aligned and drilled at time of installation.



## 12 FOOT (3.6 m) MAST FOR 586D

REF.	PART NO.	DESCRIPTION	REQ'D
	REF	MAST - complete, continued from page 331	1
31	D 36589	PIN - side roller	4
32	D 36590	ROLLER - side	4
33	D 86605	PIN - roller, service, includes grease fitting not required	4
34	211- 5	BALL - 3/16", grade 200, chrome alloy steel, if used, not shown	1
35	113- 424	BOLT - hex head, 1/2" - 13 NC x 1", plated	4
36	192- 23	WASHER - lock, 1/2", plated	4
37	D 52298	THRUST WASHER - roller	12
38	D 52299	ROLLER - load	4
39	D 88745	PLATE - trunnion bar ends	4
40	113- 177	BOLT - hex head, 5/16" - 18 NC x 3", plated	8
41	131- 4	NUT - hex, self-locking, 5/16" - 18 NC	8
42	D 75934	BAR - trunnion	1
43	D 40841	WEAR PLATE - horizontal	4
44	D 40840	WEAR PLATE - vertical	4



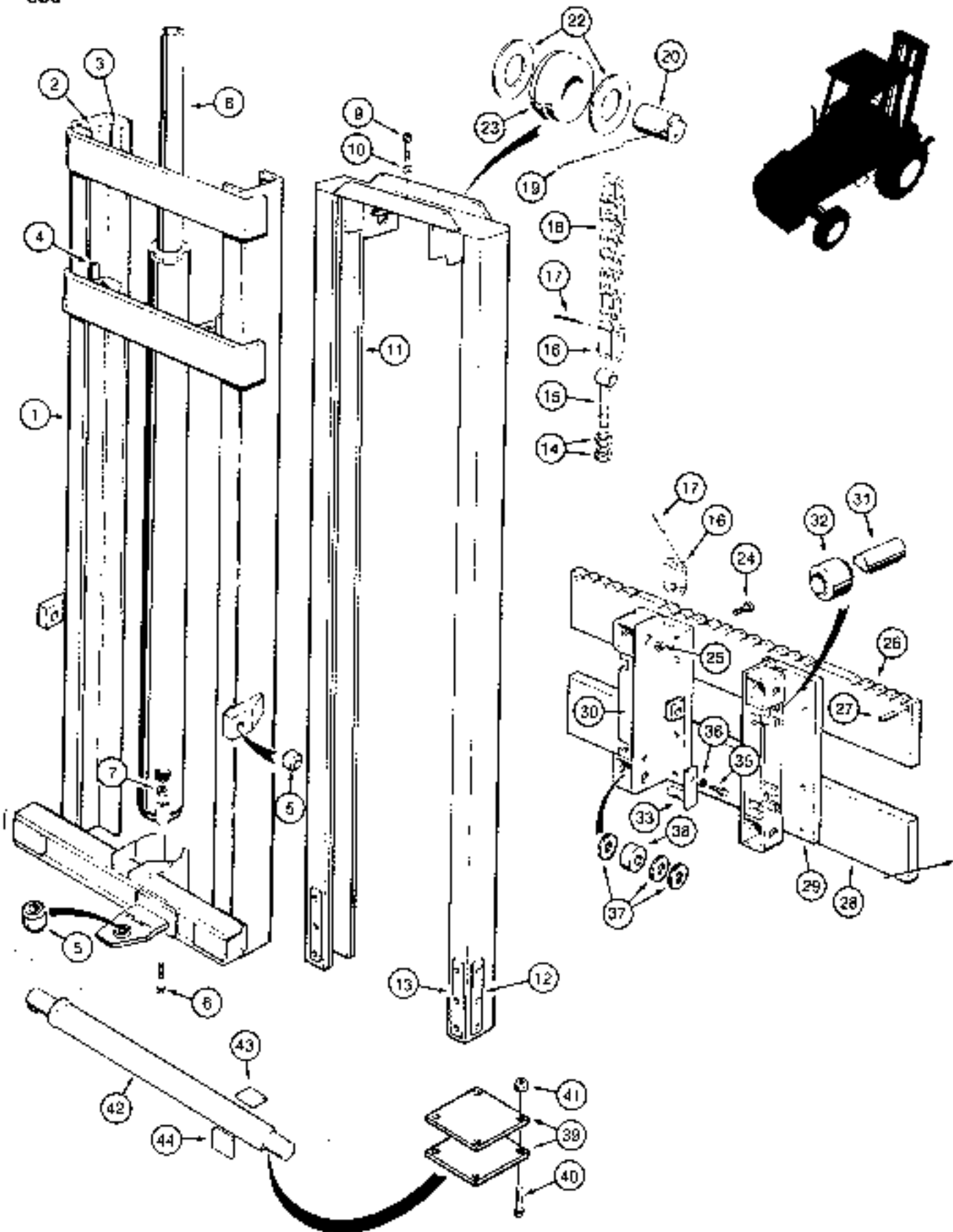


## 14-1/4 FOOT (4.3 m) MAST FOR 586D

REF.	PART NO.	DESCRIPTION	REQ D.
	D 80994	MAST - complete, machinery item, see page 2 for ordering . . . . .	1
1	D 75941	FRAME - outer . . . . .	1
2	D 32555	WEAR PLATE - 1/8" (3 mm) x 5" (127 mm) . . . . .	2
3	D 27365	WEAR PLATE - 3/16" (5 mm) x 10" (254 mm) . . . . .	4
4	D 47895	WEAR PLATE - 3/16" (5 mm) x 4-1/2" (114 mm) . . . . .	2
5	D 40843	BEARING - self-aligning . . . . .	3
6	113- 353	BOLT - hex head, 7/16" - 14 NC x 6", plated . . . . .	1
7	131- 51	NUT - hex, self-locking, 7/16" - 14 NC . . . . .	1
8	N 7543	CYLINDER - lift, parts list page 297 . . . . .	1
9	165- 166	BOLT - hex socket head, self-locking, 1/2" - 20 NF x 2" . . . . .	2
10	192- 23	WASHER - lock, 1/2", plated . . . . .	2
11	D 39481	FRAME - inner . . . . .	1
12	60972	WEAR PLATE - 1/8" (3 mm) x 11" (279 mm) . . . . .	2
13	D 36586	WEAR PLATE - 3/16" (5 mm) x 11" (279 mm) . . . . .	4
14	129- 190	NUT - hex, 1" - 14 NF, plated . . . . .	4
15	N 6877	EYEBOLT - chain . . . . .	2
16	N 6878	LINK - connecting lift chain . . . . .	4
17	132- 45	COTTER PIN - 1/8" x 5/8" . . . . .	2
18	D 39484	CHAIN - lift, 89 links . . . . .	2
19	132- 102	COTTER PIN - 3/16" x 2-1/2" . . . . .	2
20	N 7324	PIN - guide wheel, serv. ce. includes grease fitting not required . . . . .	2
21	211- 5	BALL - 3/16", grade 200, chrome alloy steel, if used, not shown . . . . .	1
22	D 36582	THRUST WASHER - wheel . . . . .	4
23	D 33482	WHEEL - chain guide . . . . .	2
24	61- 828	BOLT - hex socket head, 1/2" - 13 NC x 3-3/4" . . . . .	16
25	129- 145	NUT - hex, jam, 1/2" - 13 NC, plated . . . . .	16
26	D 55415	BACK PLATE - upper . . . . .	1
27	138 2050	SPIROL PIN - 7/16" x 2" . . . . .	2
28	D 55416	BACK PLATE - lower . . . . .	1
29	D 52321	CARRIAGE - right-hand . . . . .	1
30	D 52322	CARRIAGE - left-hand . . . . .	1
31	D 36589	PIN - side roller . . . . .	4
32	D 36590	ROLLER - side . . . . .	4
33	D 86605	PIN - roller, service, includes grease fitting not required . . . . .	4
34	211- 5	BALL - 3/16", grade 200, chrome alloy steel, if used, not shown . . . . .	1
35	113- 424	BOLT - hex head, 1/2" - 13 NC x 1", plated . . . . .	4
36	192- 23	WASHER - lock, 1/2", plated . . . . .	4
37	D 52298	THRUST WASHER - roller . . . . .	12
38	D 52299	ROLLER - load . . . . .	4

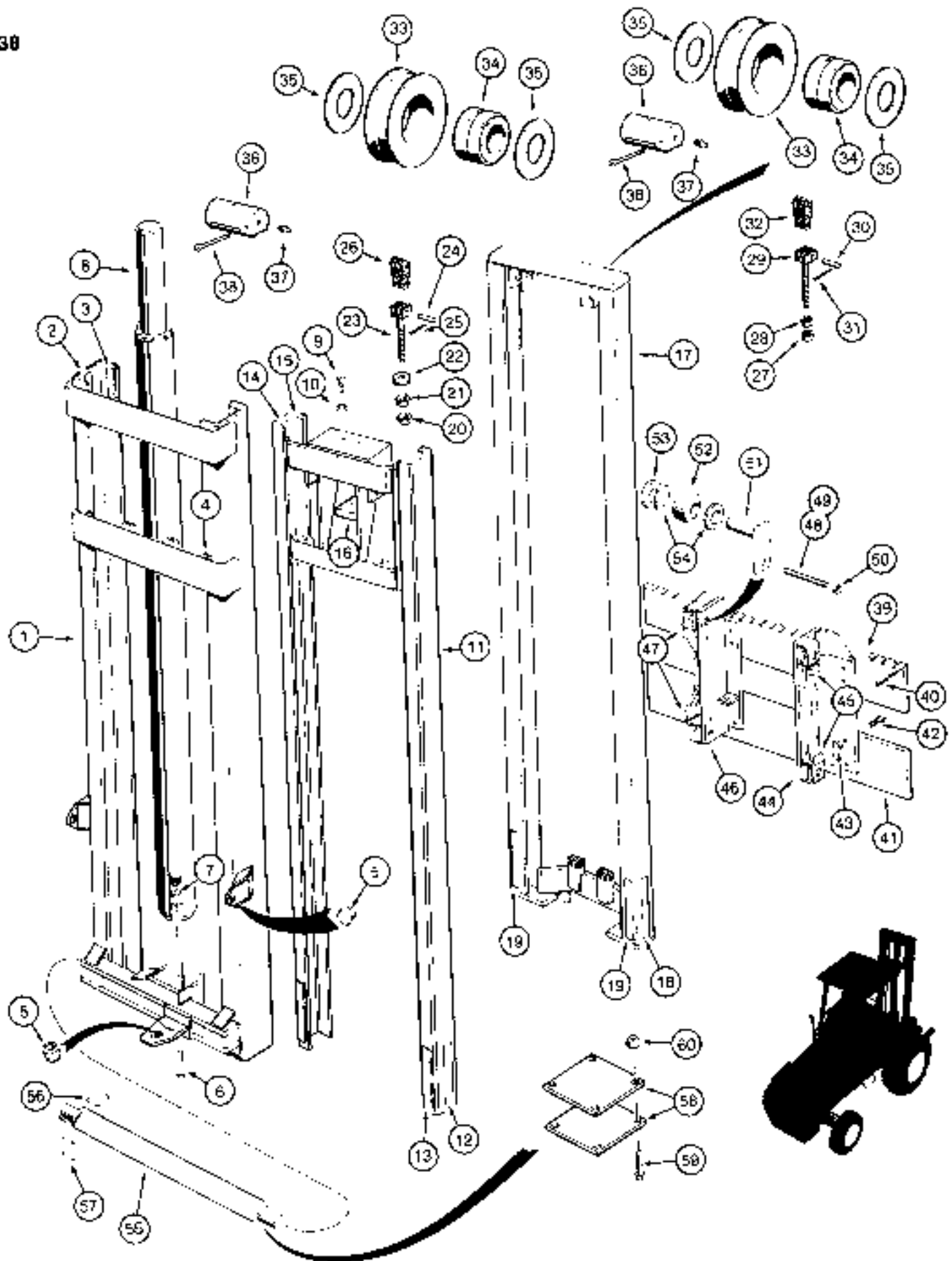
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\*NOTE: Carriages must be aligned and drilled at time of installation.



## 14-1/4 FOOT (4.3 m) MAST FOR 586D

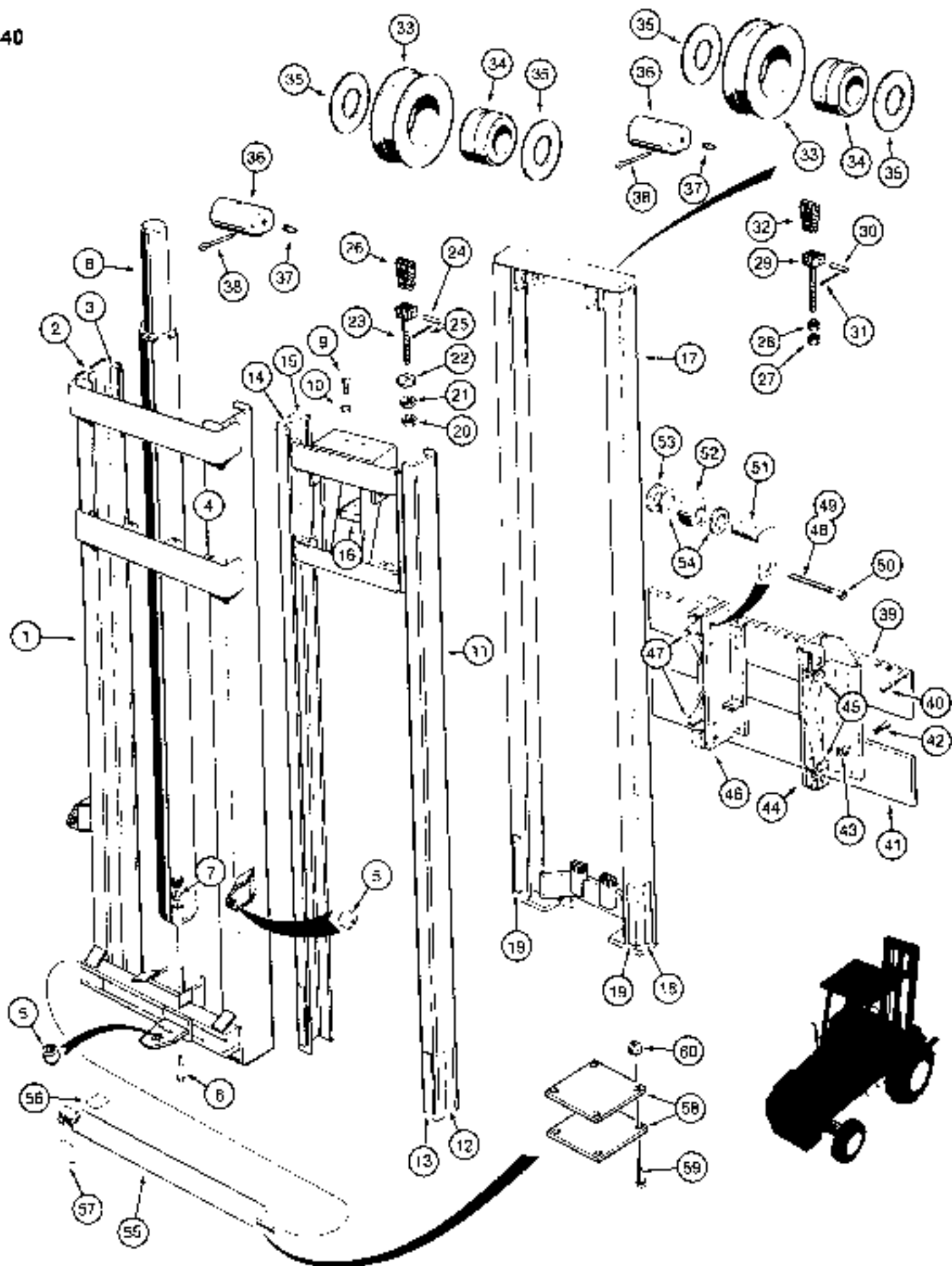
REF	PART NO.	DESCRIPTION	REQ D
	REF	MAST - complete, cont nued from page 335	1
39	D 88745	PLATE - trunnion bar ends	4
40	113- 177	BOLT - hex head, 5/16" - 18 NC x 3", plated	8
41	131- 4	NUT - hex, self-locking, 5/16" - 18 NC	8
42	D 75934	BAR - trunnion	1
43	D 40841	WEAR PLATE - horizontal	4
44	D 40840	WEAR PLATE - vertical	4



## 21-1/2 FOOT (6.5 m) MAST FOR 586D

REF	PART NO	DESCRIPTION	REQ'D.
	D 122196	MAST - complete, machinery item, see page 2 for ordering	1
1	N 7694	FRAME - outer	1
2	D 55411	WEAR PLATE - 1/8" (3 mm) x 6" (152 mm)	2
3	D 55409	WEAR PLATE - 3/16" (5 mm) x 6" (152 mm)	4
4	D 4789E	WEAR PLATE - 5/16" (8 mm) x 4-1/2" (114 mm)	2
5	D 40843	BEARING - self-aligning	3
6	113- 436	BOLT - hex head, 1/2" - 13 NC x 5-1/2", plated	1
7	131- 10	NUT - hex, self-locking, 1/2" - 13 NC	1
8	N 7643	CYLINDER - lift, parts list page 297	1
9	61- 856	BOLT - hex, socket head, 1/2" - 13 NC x 3-1/2"	2
10	193- 12	WASHER - internal tooth lock, 1/2"	2
11	N 7696	FRAME - center	1
12	D 55412	WEAR PLATE - 1/8" (3 mm) x 10" (254 mm)	2
13	D 55410	WEAR PLATE - 3/16" (5 mm) x 10" (254 mm)	4
14	D 55411	WEAR PLATE - 1/8" (3 mm) x 6" (152 mm)	2
15	D 55409	WEAR PLATE - 3/16" (5 mm) x 6" (152 mm)	4
16	N 7697	PLATE - spacer	1
17	N 7695	FRAME - inner	1
18	D 32555	WEAR PLATE - 1/8" (3 mm) x 5" (127 mm)	2
19	D 27365	WEAR PLATE - 5/16" (5 mm) x 10" (254 mm)	4
20	131- 1333	NUT - hex, jam, self-locking, 1" - 14 NF	2
21	131- 1774	NUT - hex, self-locking, 1" - 14 NF, plated	2
22	N 7702	WASHER - special	2
23	N 7701	MOUNT - chain	2
24	N 7700	PIN - chain mount	4
25	132- 46	COTTER PIN - 1/8" x 3/4"	8
26	N 7699	CHAIN - lift, 123 links	2
27	25- 1512	NUT - hex, jam, 3/4" - 16 NF	4
28	D 82886	NUT - hex, 3/4" - 16 NF, special	4
29	D 82894	MOUNT - chain	4
30	D 82895	PIN - chain mount	4
31	132- 46	COTTER PIN - 1/8" x 3/4"	8
32	N 7693	CHAIN - lift, 113 links	2

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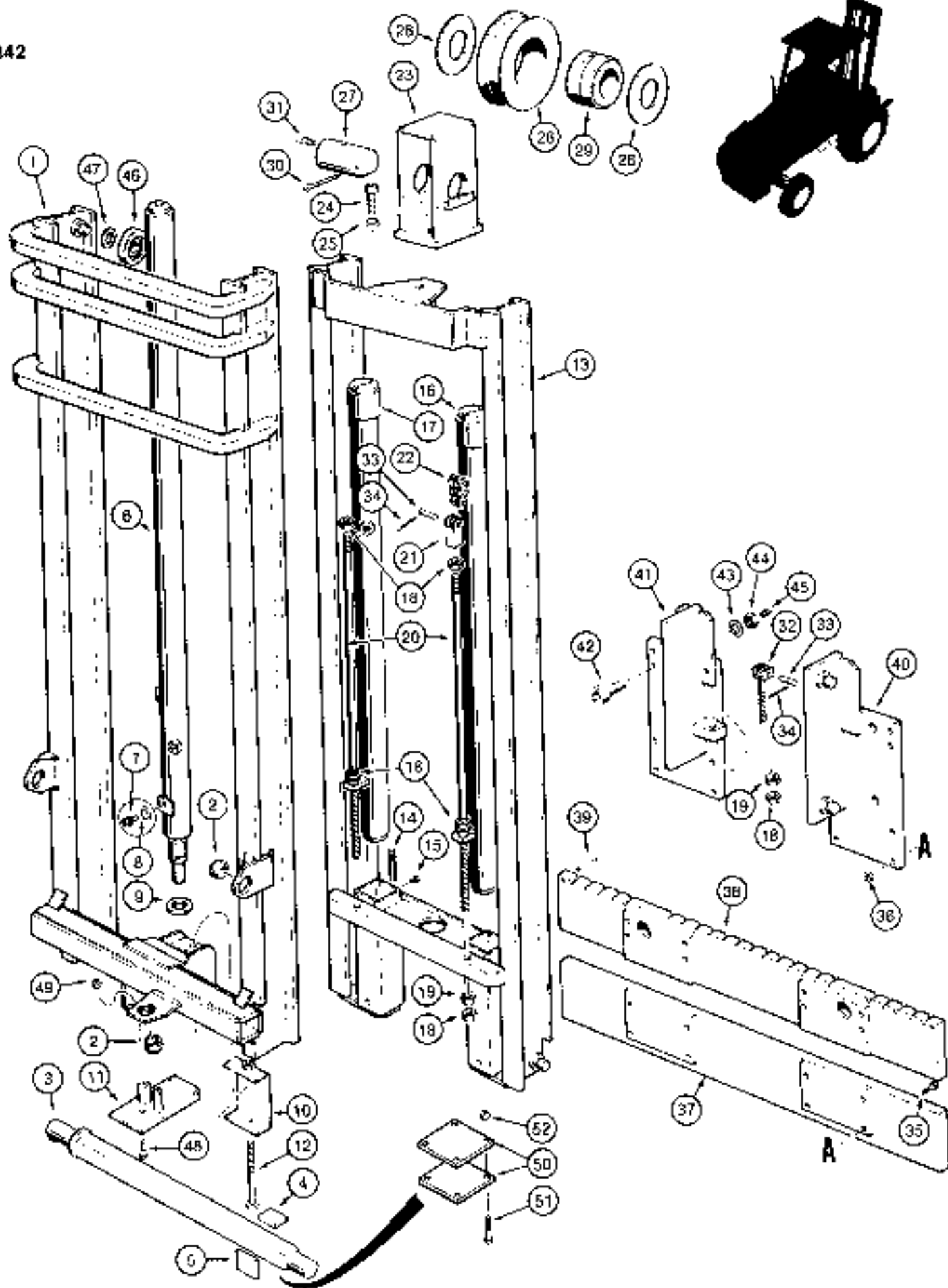


## 21-1/2 FOOT (6.5 m) MAST FOR 586D

REF	PART NO	DESCRIPTION	REQ'D
	REF	MAST - complete, continued from page 339	1
33	D 82891	SHEAVE - chain	4
34	D 82893	BEARING - sheave	4
35	D 36582	THRUST WASHER - bearing	8
36	N 7698	PIN - sheave	4
37	219- 17	GREASE FITTING - straight, 3/16", drive sheave pin	4
38	132- 102	COTTER PIN - 3/16" x 2-1/2"	4
39	N 7692	BACK PLATE - upper	1
40	138- 2050	SPIROL PIN - 7/16" x 2"	2
41	N 7691	BACK PLATE - lower	1
42	81- 836	BOLT - hex socket head, 1/2" - 13 NC x 2-1/4"	16
43	129- 145	NUT - hex, jam, 1/2" - 13 NC, plated	16
44	*N 7703	CARRIAGE - right-hand	1
45	D 55407	WEAR PLATE - carriage	2
46	*N 7704	CARRIAGE - left-hand	1
47	D 55407	WEAR PLATE - carriage	2
48	178- 691	SET SCREW - hex socket headless, 1/2" - 13 NC x 2-1/2", oval point, upper	2
49	178- 693	SET SCREW - hex socket headless, 1/2" - 13 NC x 3", oval point, lower	2
50	129- 145	NUT - hex, jam, 1/2" - 13 NC, plated	1
51	D 86606	PIN - roller, service includes grease fitting not required	4
52	D 52299	ROLLER - load	4
53	D 55404	THRUST WASHER - roller	4
54	D 52298	THRUST WASHER - roller	8
55	D 75934	BAR - trunnion	1
56	D 40841	WEAR PLATE - horizontal	4
57	D 40840	WEAR PLATE - vertical	4
58	D 88745	PLATE - trunnion bar ends	4
59	113- 177	BOLT - hex head, 5/16" - 18 NC x 3", plated	8
60	131- 4	NUT - hex, self-locking 5/16" - 18 NC	8

\*NOTE: Carriages must be aligned and drilled at time of installation

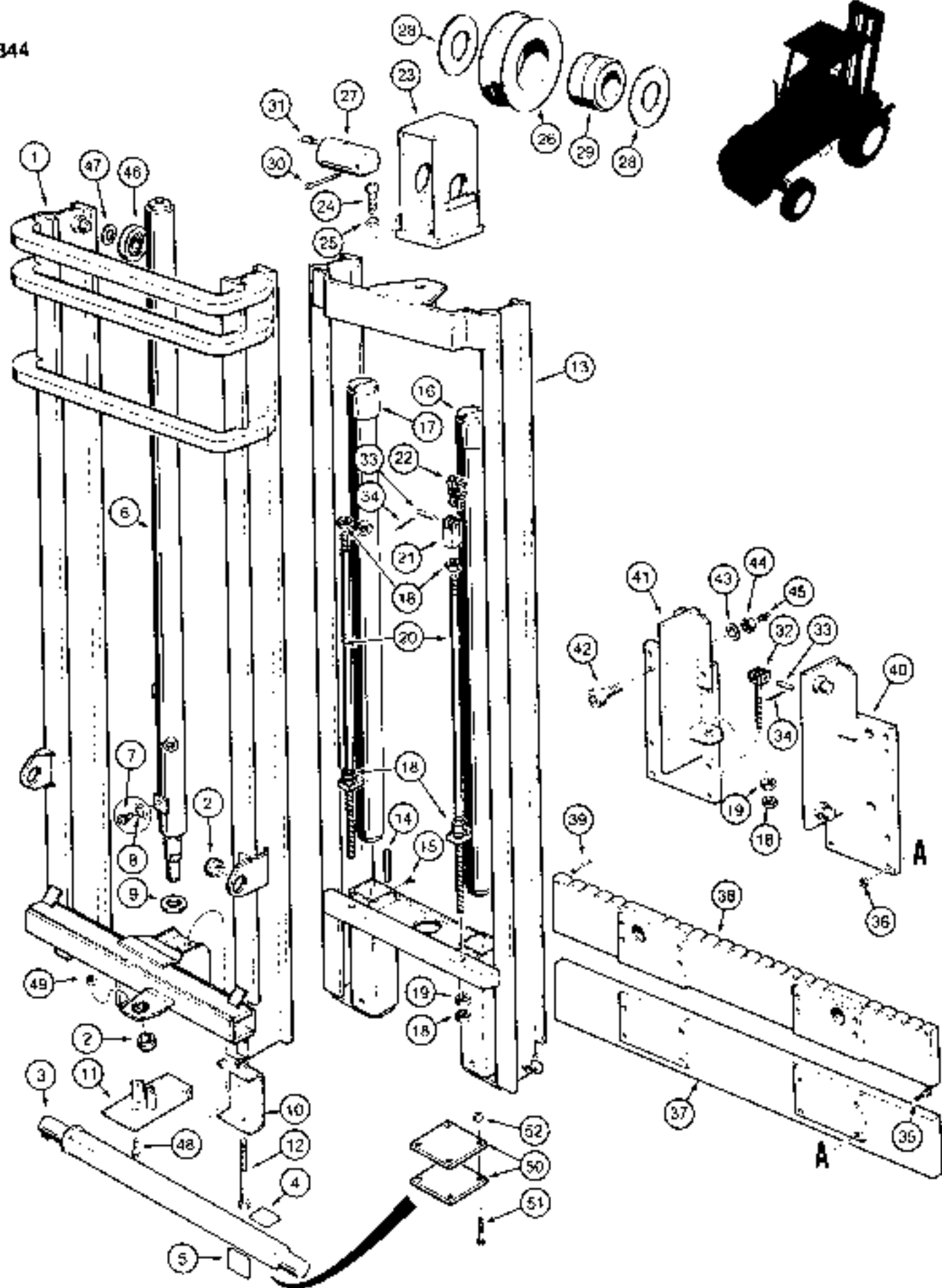




## 14 FOOT (4.3 m) FREE LIFT MAST FOR 586D

REF	PART NO.	DESCRIPTION	REQ'D
	D 121922	MAST - complete, machinery item. see page 2 for ordering. includes items 1 thru 52. also includes items 9 thru 24 on page 273	1
1	D 82903	FRAME - outer	1
2	D 40843	BEARING - self-aligning	3
3	D 75934	BAR - trunnion	1
4	D 40841	WEAR PLATE - horizontal	4
5	D 40840	WEAR PLATE - vertical	4
6	N 7650	CYLINDER - lift, center. see parts list page 299	1
7	51- 66	BOLT - hex socket head, 3/8" - 16 NC x 3/8"	1
8	193- 30	WASHER - internal tooth lock, 3/8"	1
9	D 82877	WASHER - cylinder	1
10	D 82861	GUARD - hydraulic	1
11	D 83063	COVER - bottom	1
12	113- 791	BOLT - hex head, 3/4" - 10 NC x 8-1/2", plated	1
13	D 82905	FRAME - inner	1
14	D 82883	HOSE - rubber, insulator	8
15	187- 1331	SCREW - pan head, slotted, self tapping, No 12 - 14 x 5/8", plated	8
16	N 7648	CYLINDER - lift, right-hand, see parts list page 299	1
17	N 7649	CYLINDER - lift, left-hand, see parts list page 299	1
18	25- 1512	NUT - hex, jam, 3/4" - 16 NF	10
19	D 82886	NUT - special, 3/4" - 16 NF	4
20	D 82808	POD - connecting	2
21	D 82888	MOUNT - chain	2
22	D 82909	CHAIN - lift, 65 links	2
23	D 82890	FRAME - sheave	2
24	51- 624	BOLT - hex socket head, 3/8" - 16 NC x 1-1/2"	4
25	193- 30	WASHER - internal tooth lock, 3/8"	4
26	D 82891	SHEAVE - chain	2
27	D 82892	PIN - sheave	2
28	D 36582	THRUST WASHER - bearing	4
29	D 82893	BEARING - sheave	2
30	132- 102	COTTER PIN - 3/16" x 2-1/2"	2
31	219- 53	GREASE FITTING - 65 degree, 3/16" drive	2
32	D 82894	MOUNT - chain	2
33	D 82895	PIN - chain mount	4
34	132- 46	COTTER PIN - 1/8" x 3/4"	8

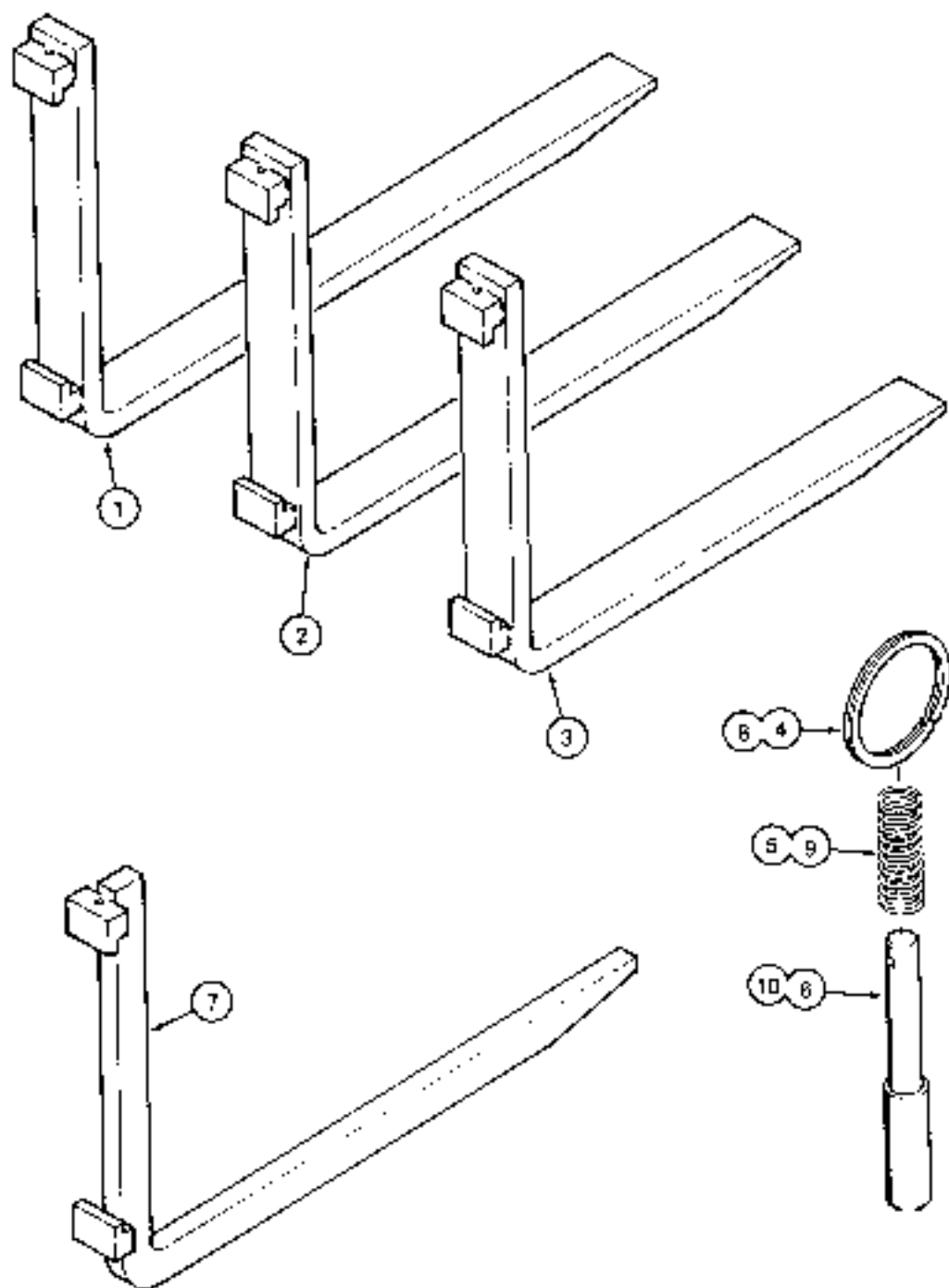
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## 14 FOOT (4.3 m) FREE LIFT MAST FOR 586D

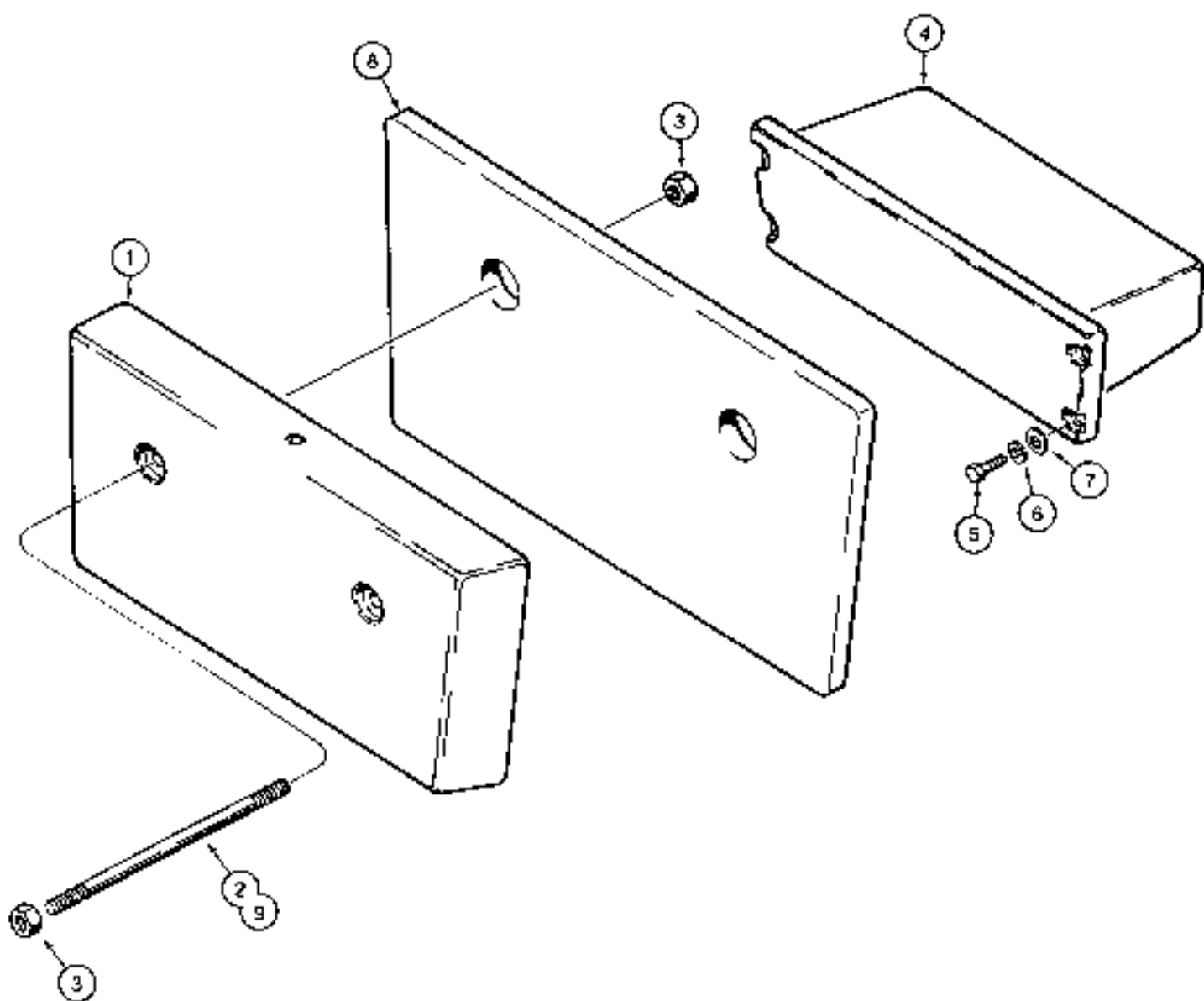
REF.	PART NO.	DESCRIPTION	REQ D
	REF	MAST - complete, continued from page 343	1
35	61- 840	BOLT - hex socket head, 1/2" - 13 NC x 2-1/2"	16
36	129- 145	NUT - hex, jam, 1/2" - 13 NC, plated	12
37	D 82896	BACK PLATE - lower	1
38	D 82897	BACK PLATE - upper	1
39	138- 190	ROLL PIN - 7/16" x 2"	2
40	*D 82898	CARRIAGE - right-hand	1
41	*D 82899	CARRIAGE - left-hand	1
42	D 82900	ROLLER BEARING - carriage	4
43	195- 49	WASHER - flat, 7/8"	4
44	131- 1408	NUT - hex, self-locking, 7/8" - 14 NF	4
45	219- 17	GREASE FITTING - straight, 3/16" drive	4
46	N 7679	ROLLER BEARING - frames	8
47	D 82902	WASHER - shim	8
48	113- 207	BOLT - hex head, 3/8" - 16 NC x 1" plated	1
49	129- 103	NUT - hex, 3/8" - 16 NC, plated	1
50	D 88746	PLATE - trunnion bar ends	4
51	113- 177	BOLT - hex head, 5/16" - 18 NC x 3", plated	8
52	131- 4	NUT - hex, self-locking, 5/16" - 18 NC	8

\*NOTE: Carriages must be aligned and drilled at time of installation



## FORKS

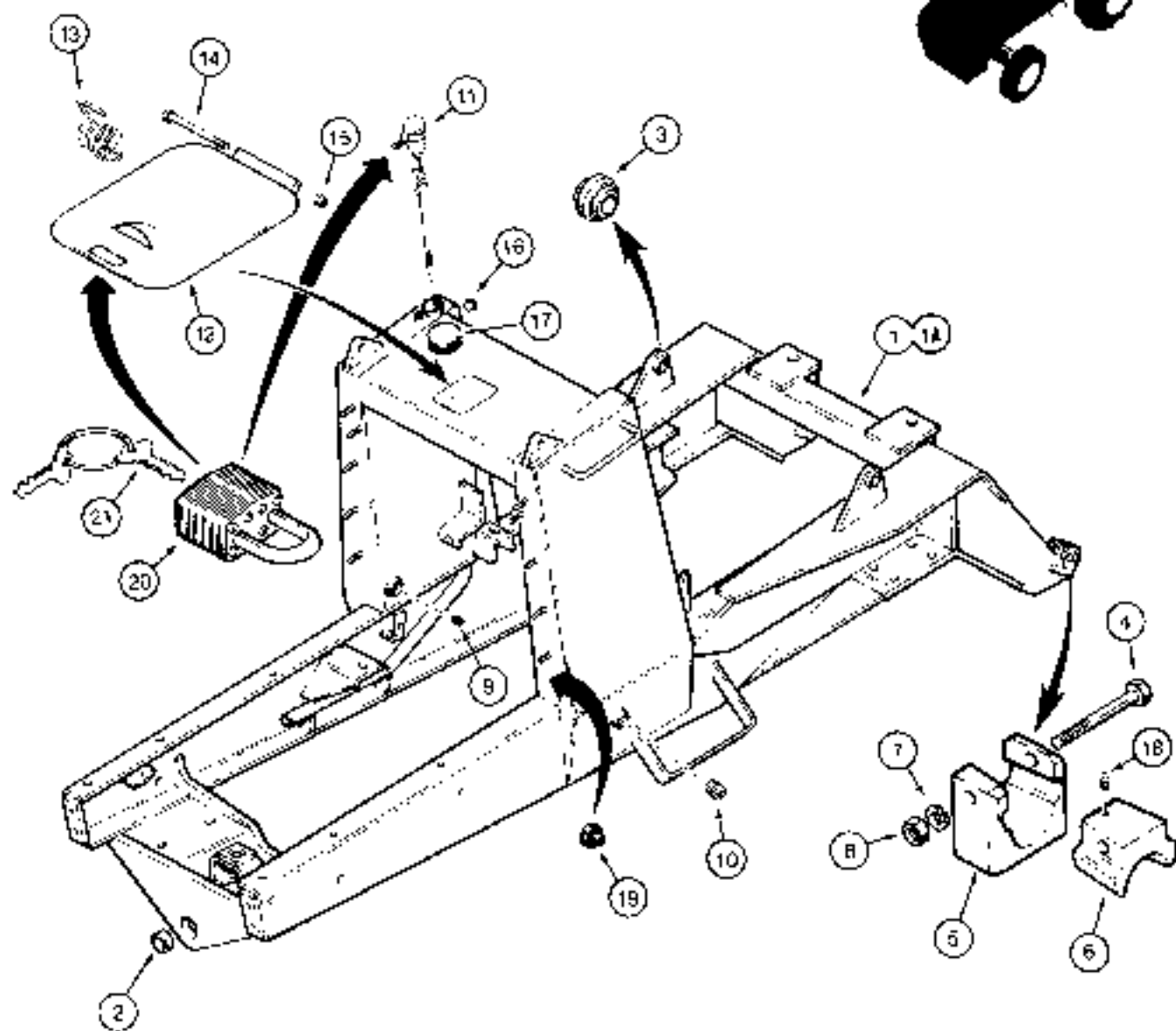
REF	PART NO	DESCRIPTION	REQ'D
<b>PALLET AND LOGGING FORKS</b>			
1	D 10464	FORK - pallet and logging, 48" (1219 mm) length, 584D .....	2
1	D 36809	FORK - pallet and logging, 48" (1219 mm) length, 585D .....	2
1	D 55845	FORK - pallet and logging, 48" (1219 mm) length, 586D .....	2
2	D 10465	FORK - pallet and logging, 42" (1066 mm) length, 584D .....	2
3	D 10466	FORK - pallet and logging, 36" (914 mm) length, 584D .....	2
4	D 41289	RING - pin retaining, all forks .....	1
5	D 52904	SPRING - tension, pin, all forks .....	1
6	D 38358	PIN - lock, fork, all forks .....	1
<b>CONCRETE BLOCK FORKS</b>			
7	D 10653	FORK - concrete block, 42" (1066 mm) length, 584D .....	6
7	D 43690	FORK - concrete block, 48" (1219 mm) length, 584D .....	6
7	D 41220	FORK - concrete block, 42" (1066 mm) length, 585D .....	6
7	D 43691	FORK - concrete block, 48" (1219 mm) length, 585D .....	6
7	D 55846	FORK - concrete block, 42" (1066 mm) length, 586D .....	6
7	D 55847	FORK - concrete block, 48" (1219 mm) length, 586D .....	6
8	D 41289	RING - pin retaining, all forks .....	1
9	D 52904	SPRING - tension, pin, all forks .....	1
10	D 38359	PIN - lock, fork, all forks .....	1



## REAR COUNTERWEIGHTS

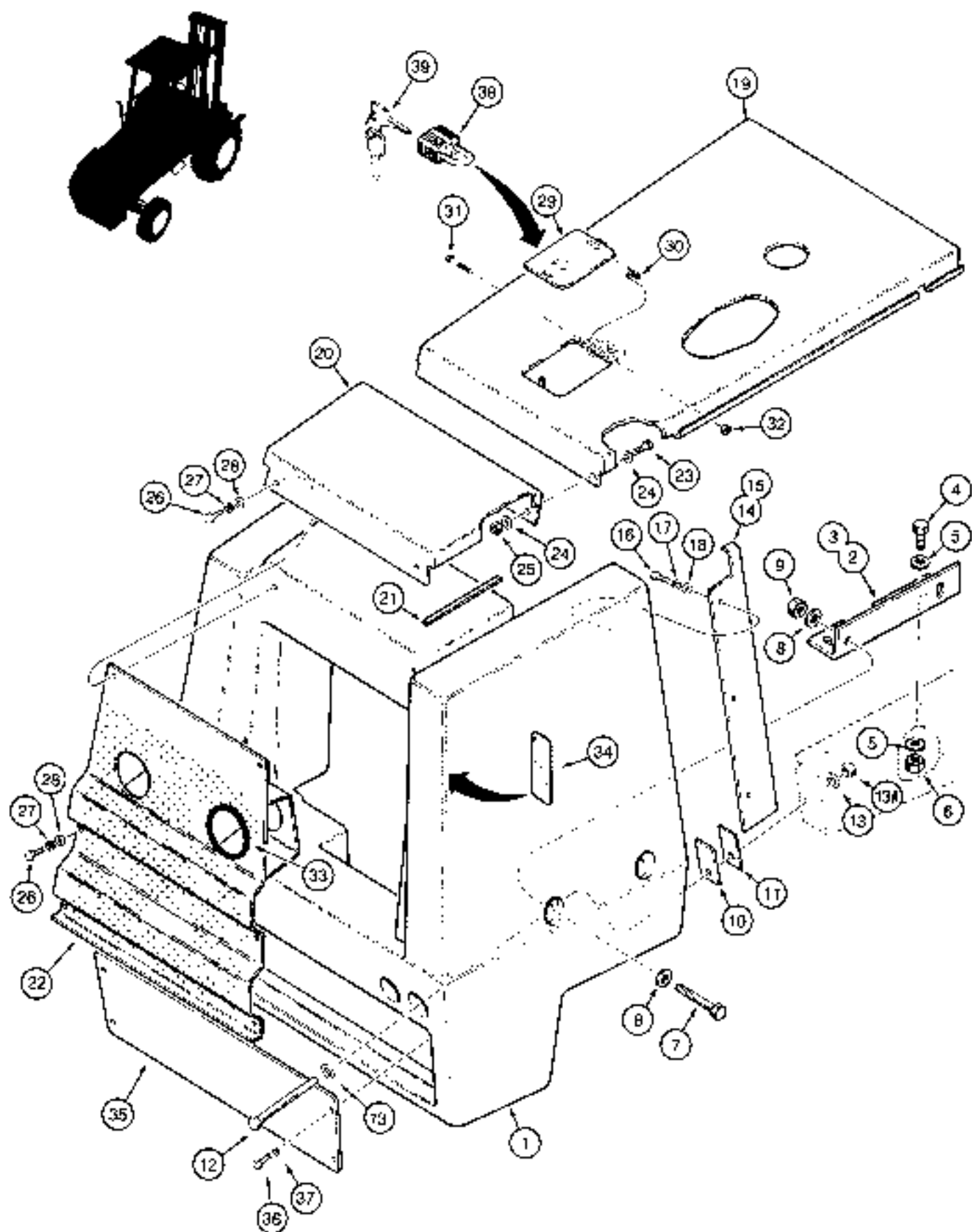
REF.	PART NO.	DESCRIPTION	REQ'D
1	D 70038	COUNTERWEIGHT - outer . . . . .	1
2	D 120291	STUD - 3/4" - 10 NC x 15-3/16", used with item 1 . . . . .	2
3	128- 108	NUT - hex. 3/4" - 10 NC, plated . . . . .	4
4	D 91631	COUNTERWEIGHT - inner . . . . .	1
5	113- 209	BOLT - hex head, 3/8" - 16 NC x 1-1/2", plated . . . . .	4
6	192- 21	WASHER - lock, 3/8" plated . . . . .	4
7	95- 6	WASHER - flat, 3/8" . . . . .	4
8	D 122191	COUNTERWEIGHT - center . . . . .	1
9	D 122192	STUD - 3/4" - 10 NC x 16-1/8", used when both items 1 and 8 are used . . . . .	2





## CHASSIS

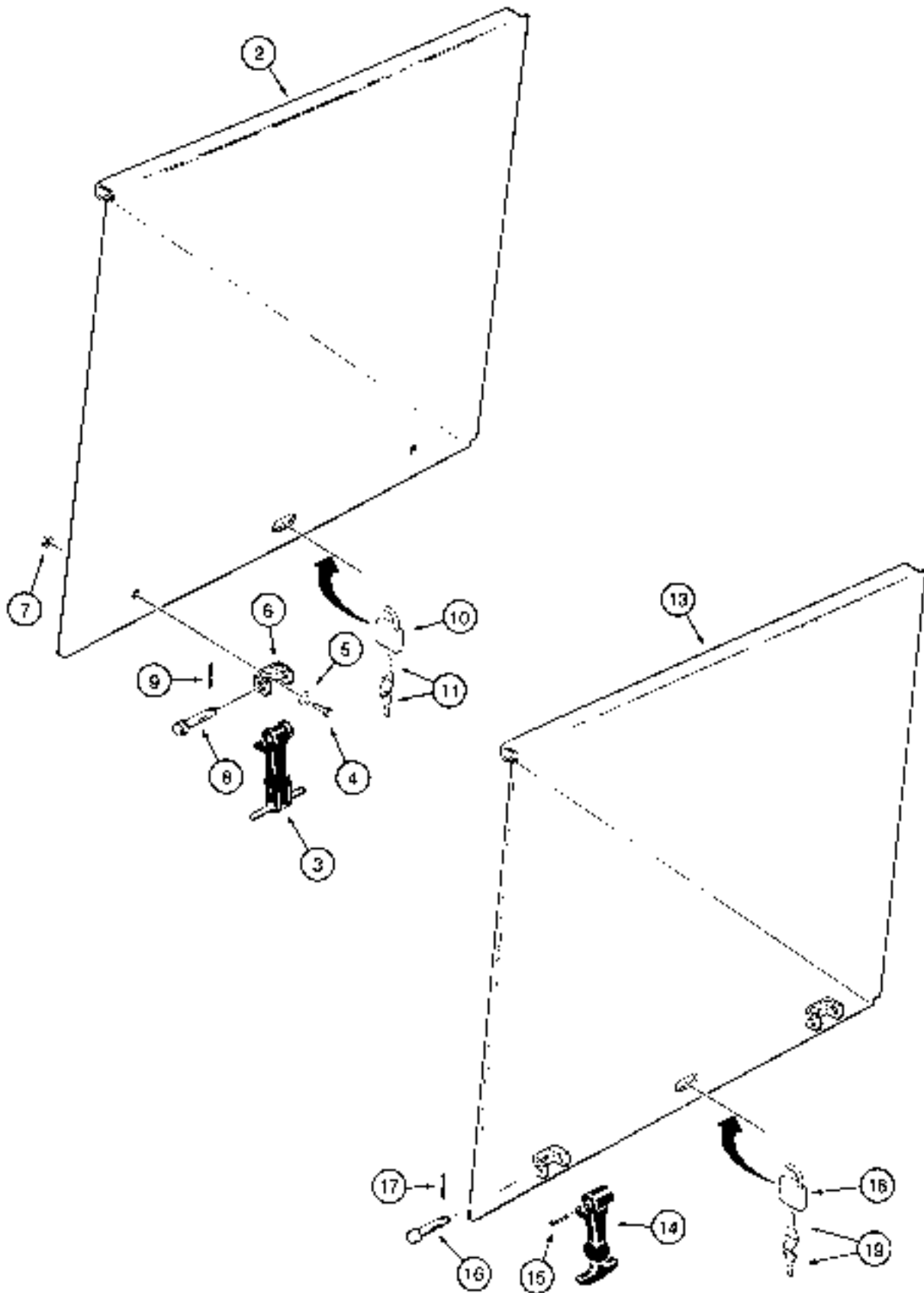
REF.	PART NO	DESCRIPTION	REQ'D.
1	D 12170	CHASSIS - forklift, includes decals, two wheel drive models before tractor PIN 9075490	1
'A	D 130014	CHASSIS - forklift, includes decals, two wheel drive models, tractor PIN 9075490 and after, not shown, interchangeable with D124273 chassis	1
'B	D 130013	CHASSIS - forklift, includes decals, four wheel drive models, also includes items 8, 12, and 13 on page 173, not shown, interchangeable with D125600 chassis	1
2	D 43940	BUSHING - rear axle mounting, two wheel drive models only	2
3	D 40843	BUSHING - self-aligning, mast tilt cylinder and sideshift cylinder mounting	2
	D 66315	BLOCK ASSEMBLY - mast trunnion mounting, right-hand	1
	D 66316	BLOCK ASSEMBLY - mast trunnion mounting, left-hand	1
4	13- 688	BOLT - hex head, 3/8" - 16 NC x 4-1/4"	1
5	NSS	BLOCK - trunnion mounting, right-hand and left-hand	1
6	NSS	WEDGE - trunnion block, right-hand and left-hand	1
7	92- 6	WASHER - lock, 3/8"	1
8	129- 103	NUT - hex, 3/8" - 16 NC plated	1
9	221- 35	PLUG - square socket head, 3/4" NPT	3
10	221- 37	DRAIN PLUG - square socket head, 1-1/4" NPT	2
11	D 93915	DIPSTICK - hydraulic oil	1
12	D 120306	COVER - fuel	1
13	D 121677	SPRING - cover	1
14	113- 53	BOLT - hex head, 1/4" - 20 NC x 3-1/4", plated	1
15	131- 2	NUT - hex self-locking, 1/4" - 20 NC	1
16	353- 402	PLUG - nylon, 3/8"	1
17	205- 72	PLUG - button, 3"	1-2
18	219- 17	GREASE FITTING - straight, 3/16" drive	2
19	L 60224	BUMPER - rubber	2
20	D 93753	PADLOCK - fuel cover and hydraulic oil, includes keys	2
21	R 29555	KEY - for Master padlock only	2
21	D 93751	KEY - for Yale padlock only	2



## HOOD, GRILLE, AND RADIATOR SHROUD

REF.	PART NO	DESCRIPTION	REQ'D.
1	D 92797	SHROUD - radiator casting	1
2	D 121733	SUPPORT - radiator shroud, right-hand	1
3	D 121734	SUPPORT - radiator shroud, left-hand	1
4	113- 708	BOLT - hex head, 3/4" - 10 NC x 2", plated	4
5	195- 545	WASHER - flat, 3/4", plated	8
6	129- 108	NUT - hex, 3/4" - 10 NC, plated	4
7	113- 717	BOLT - hex head, 3/4" - 10 NC x 3-1/2", plated	4
8	195- 545	WASHER - flat, 3/4", plated	8
9	129- 108	NUT - hex, 3/4" - 10 NC, plated	4
10	D 121857	SPACER - radiator shroud to frame, 6 mm	U/A
11	D 121835	SPACER - radiator shroud to frame, 3 mm	U/A
12	15- 12168	BOLT - hex head, 3/4" - 10 NC x 10-1/2"	2
13	195- 545	WASHER - flat, 3/4", plated	4
13A	129- 108	NUT - hex, 3/4" - 10 NC, plated	2
14	D 92940	PLATE - side panel, right-hand	1
15	D 92941	PLATE - side panel, left-hand	1
16	113- 207	BOLT - hex head, 3/8" - 16 NC x 1"	6
17	192- 21	WASHER - lock, 3/8", plated	6
18	195- 525	WASHER - flat, 3/8", plated	6
19	D 93057	HOOD - engine, used on models with vertical air cleaner intake	1
19A	D 94074	HOOD - engine, noise reduction, used on models with horizontal air cleaner intake tube, not shown	1
20	D 92942	COVER - radiator shroud	1
21	D 93480	STRIP - rubber	2
22	D 92400	GRILLE - radiator shroud	1
23	113- 207	BOLT - hex head, 3/8" - 16 NC x 1", plated	2
24	195- 525	WASHER - flat, 3/8", plated	4
25	131- 52	NUT - hex, self-locking, 3/8" - 16 NC	2
26	113- 207	BOLT - hex head, 3/8" - 16 NC x 1", plated	6
27	192- 21	WASHER - lock, 3/8", plated, no longer used	6
28	195- 525	WASHER - flat, 3/8", plated	6
29	D 92446	COVER - radiator access	1
30	D 121677	SPRING - radiator access cover	1
31	113- 53	BOLT - hex head, 1/4" - 20 NC x 3-1/4", plated	1
32	131- 2	NUT - hex, self-locking, 1/4" - 20 NC	1
33	D 121856	TRIM - edge	2
34	D 87870	REFLECTOR - red	2
35	D 71059	COVER - shroud, lower, 1 used, not required when extra counterweights are used	1
36	113- 207	BOLT - hex head, 3/8" - 16 NC x 1", plated	4
37	192- 21	WASHER - lock, 3/8", plated	4
38	D 93753	PADLOCK - hood, includes keys	1
39	H 29553	KEY - for Master padlock only	2
39	D 93751	KEY - for Yale padlock only	2

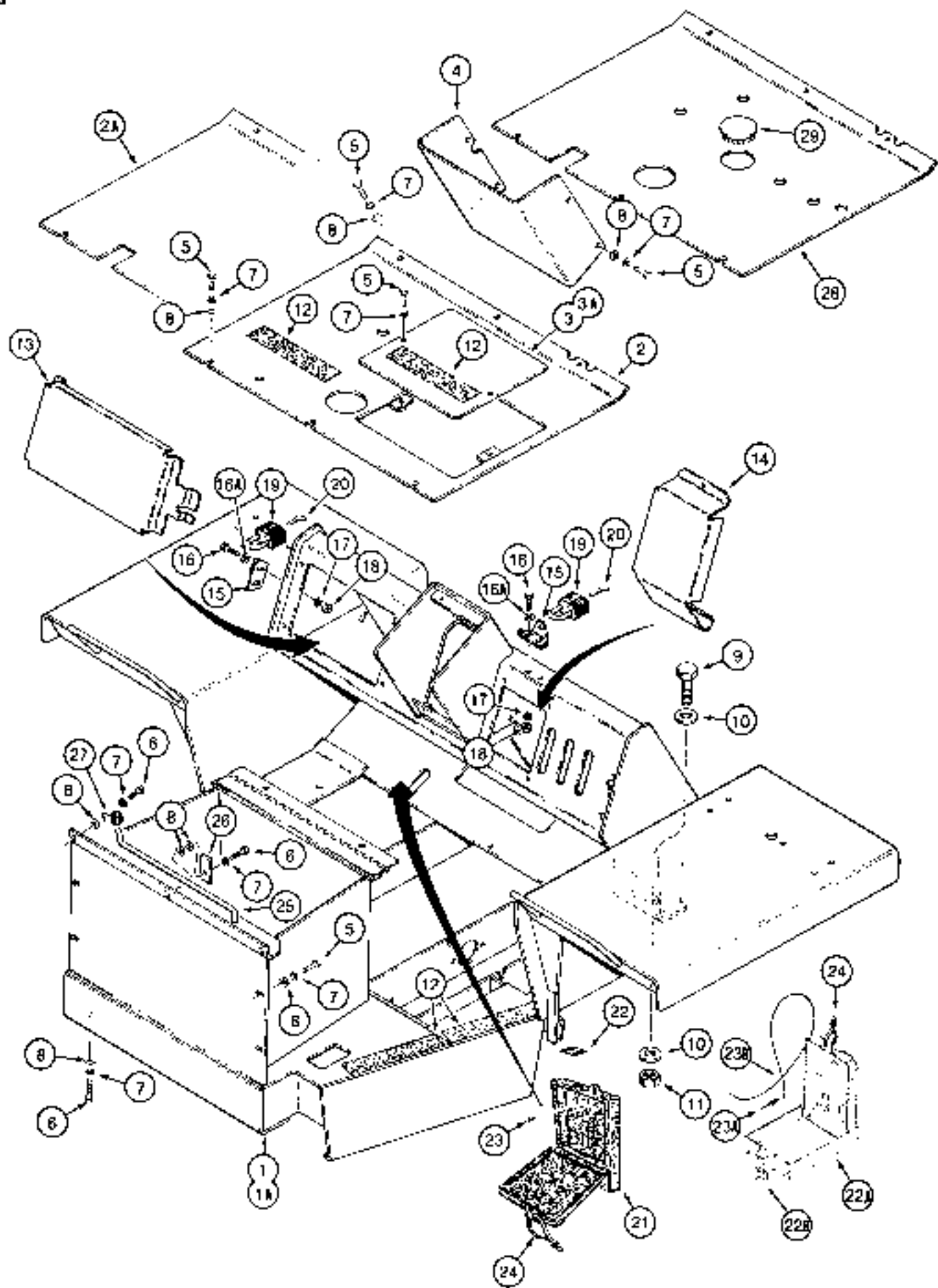
**NOTE:** For noise reduction pads, see page 361.



## ENGINE SIDE PANELS

REF.	PART NO.	DESCRIPTION	REQ'D.
<b>MODELS WITH BOLT-ON BRACKET</b>			
1	D 88932	PANEL - side, engine, right-hand, not shown, no longer used, for service order D122133 panel (item 12), (2) H54890 pins (item 16), (2) 132-328 cotter pins (items 17), and (2) 138-55 roll pins (item 15) . . . . .	1
2	D 88931	PANEL - side, engine, left-hand, no longer used, for service order D122138 panel (item 13), (2) H54890 pins (item 16), (2) 132-328 cotter pins (item 17), and (2) 138-55 roll pins (item 15) . . . . .	1
3	L 47157	HOOK - side panel retaining . . . . .	4
4	113- 118	BOLT - hex head, 5/16" - 18 NC x 5/8", plated . . . . .	4
5	195- 521	WASHER - flat, 5/16" plated . . . . .	4
6	L 47158	BRACKET - anchor, side panel . . . . .	4
7	131- 4	NUT - hex, self-locking, 5/16" - 18 NC . . . . .	4
8	141- 66	CLEVIS PIN - 5/16", special length, plated, hook mounting . . . . .	4
9	132- 320	COTTER PIN - 3/32" x 3/4", plated . . . . .	4
10	D 93753	PADLOCK - engine side panels, if used . . . . .	2
11	R 29555	KEY - for Master padlock only . . . . .	2
11	D 93751	KEY - for Yale padlock only . . . . .	2
<b>MODELS WITH WELDED BRACKET</b>			
12	D 122113	PANEL - side, engine, right-hand, not shown . . . . .	1
13	D 122138	PANEL - side, engine, left-hand . . . . .	1
14	D 121323	HOOK - side panel . . . . .	4
15	138- 55	ROLL PIN - 1/8" x 5/8", hook bushing . . . . .	4
16	H 54890	PIN - hook mounting . . . . .	4
17	132- 328	COTTER PIN - 1/16" x 3/8", plated . . . . .	4
18	D 93753	PADLOCK - engine side panels, if used . . . . .	2
19	R 29555	KEY - for Master padlock only . . . . .	2
19	D 93751	KEY - for Yale padlock only . . . . .	2

**NOTE:** For noise reduction pads, see page 36.

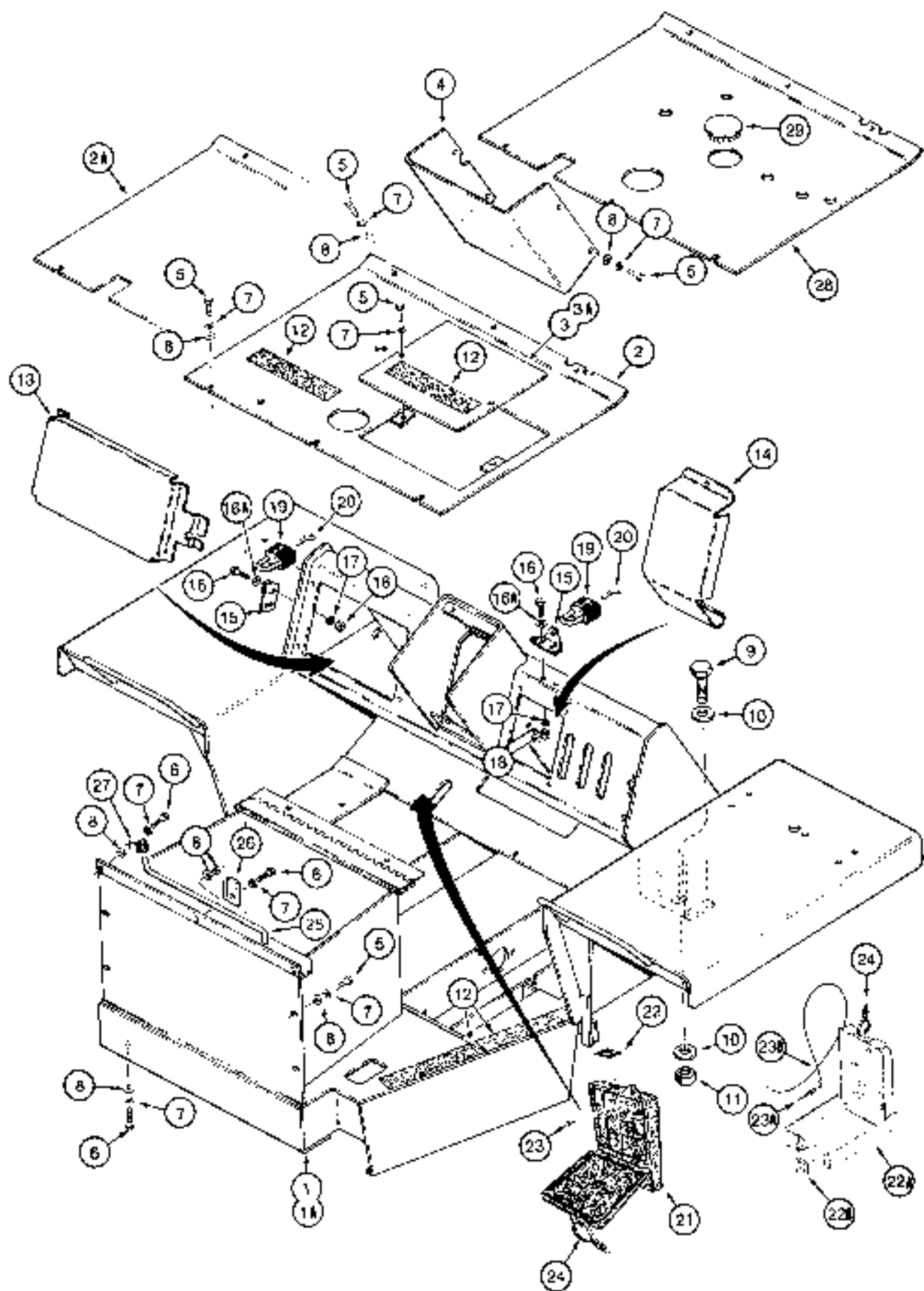


## FENDERS, FLOOR PLATES, AND BATTERY BOX

REF.	PART NO	DESCRIPTION	REQ'D
1	D 121700	FRAME - operators compartment, includes decals, two wheel drive models before tractor PIN 9879000 . . . . .	1
1A	D 125399	FRAME - operators compartment, includes decals, all four wheel drive models, two wheel drive models tractor PIN 9879000 and after . . . . .	1
2	D 86771	PLATE - floor, center, two wheel drive models before tractor PIN 9879000 . . . . .	1
2A	D 125308	PLATE - floor, center, all four wheel drive models, two wheel drive models tractor PIN 9879000 and after, no longer used, order D133084 floor plate and (1) 205-72 plug, items 28 and 29 . . . . .	1
3	D 72120	COVER - access, floor, two wheel drive models before tractor PIN 9879000 . . . . .	1
3A	D 125319	COVER - access, floor, all four wheel drive models, two wheel drive models tractor PIN 9879000 and after, used with item 2A floor plate . . . . .	1
4	D 120041	COVER - access, control valve . . . . .	1
5	113- 207	BOLT - hex head, 3/8" - 16 NC x 1", plated . . . . .	14-16
6	113- 208	BOLT - hex head, 3/8" - 16 NC x 1-1/4", plated . . . . .	5
7	192- 21	WASHER - lock, 3/8", plated . . . . .	19-21
8	195- 525	WASHER - flat, 3/8", plated . . . . .	20
9	113- 924	BOLT - hex head, 1" - 8 NC x 2-1/2", plated . . . . .	2
10	195- 553	WASHER - flat, 1", plated . . . . .	4
11	25- 1816	NUT - hex, 1" x 8 NC . . . . .	2
12	D 55216	STRIP - non-skid . . . . .	6
13	D 77104	COVER - instrument panel, if used . . . . .	1
14	D 77082	COVER - switches, if used . . . . .	1
15	D 76641	BRACKET - covers, if used . . . . .	2
16	113- 103	BOLT - hex head, 5/16" - 18 NC x 1", plated . . . . .	4
16A	195- 521	WASHER - flat, 5/16", plated . . . . .	4
17	192- 20	WASHER - lock, 5/16", plated . . . . .	4
18	129- 102	NUT - hex, 5/16" - 18 NC, plated . . . . .	4
19	D 93753	PADLOCK - instrument panel and switch covers, includes keys . . . . .	2
20	R 29555	KEY - for Master padlock only . . . . .	2
20	D 93751	KEY - for Yale padlock only . . . . .	2

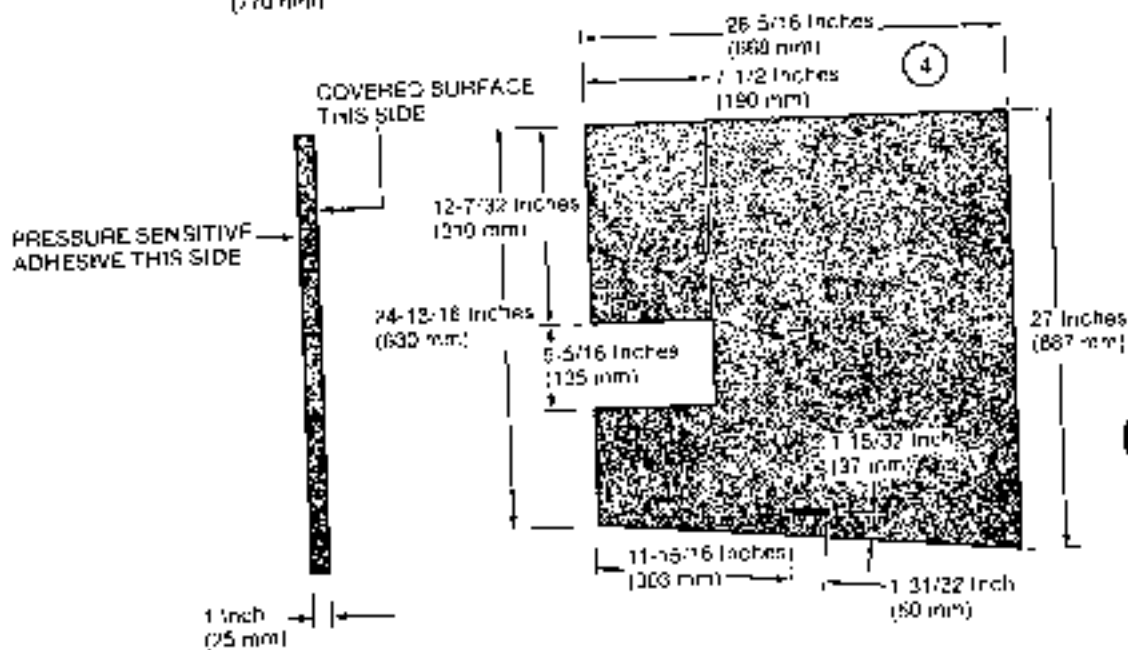
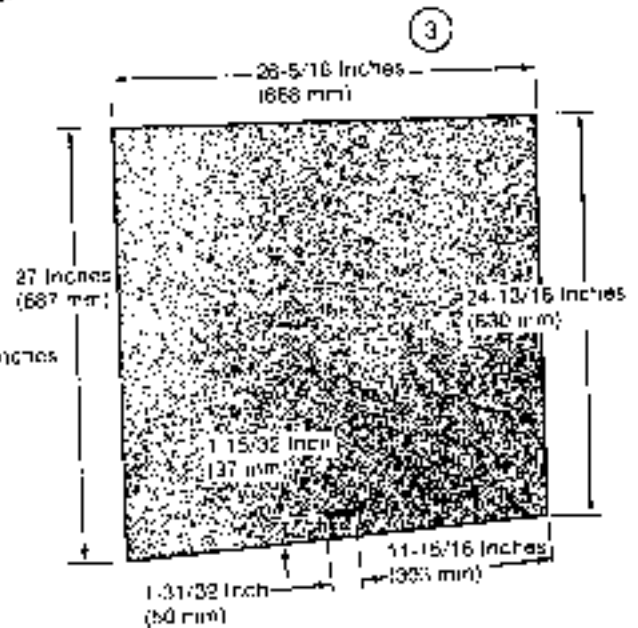
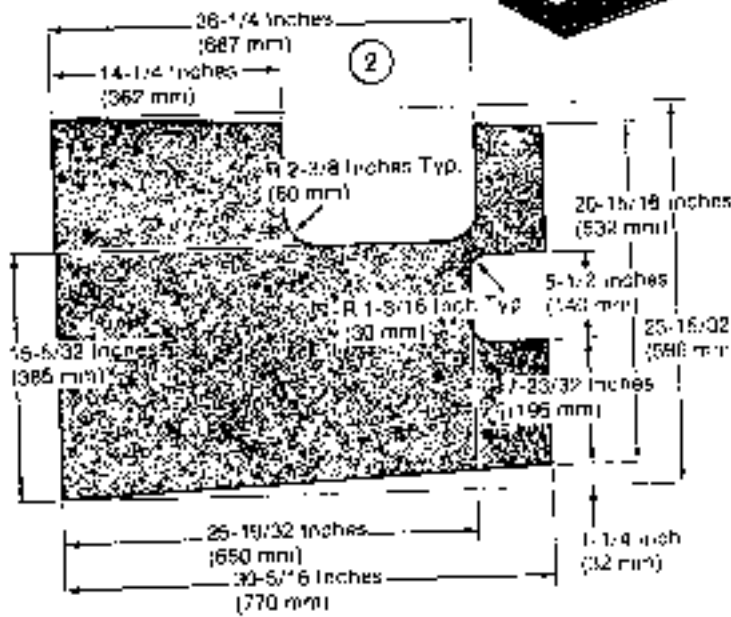
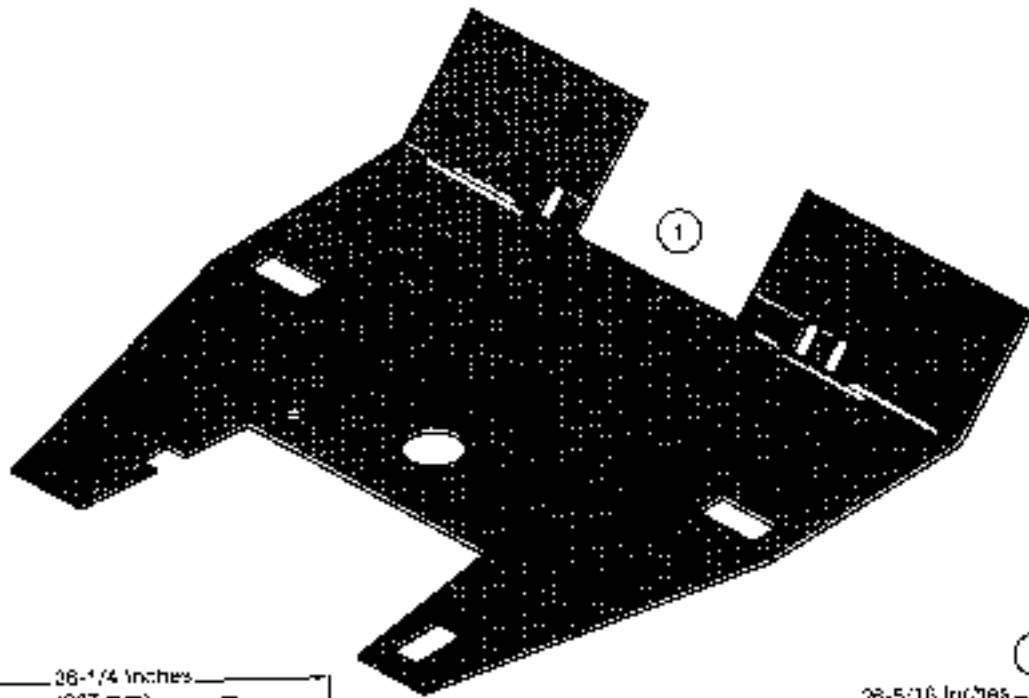
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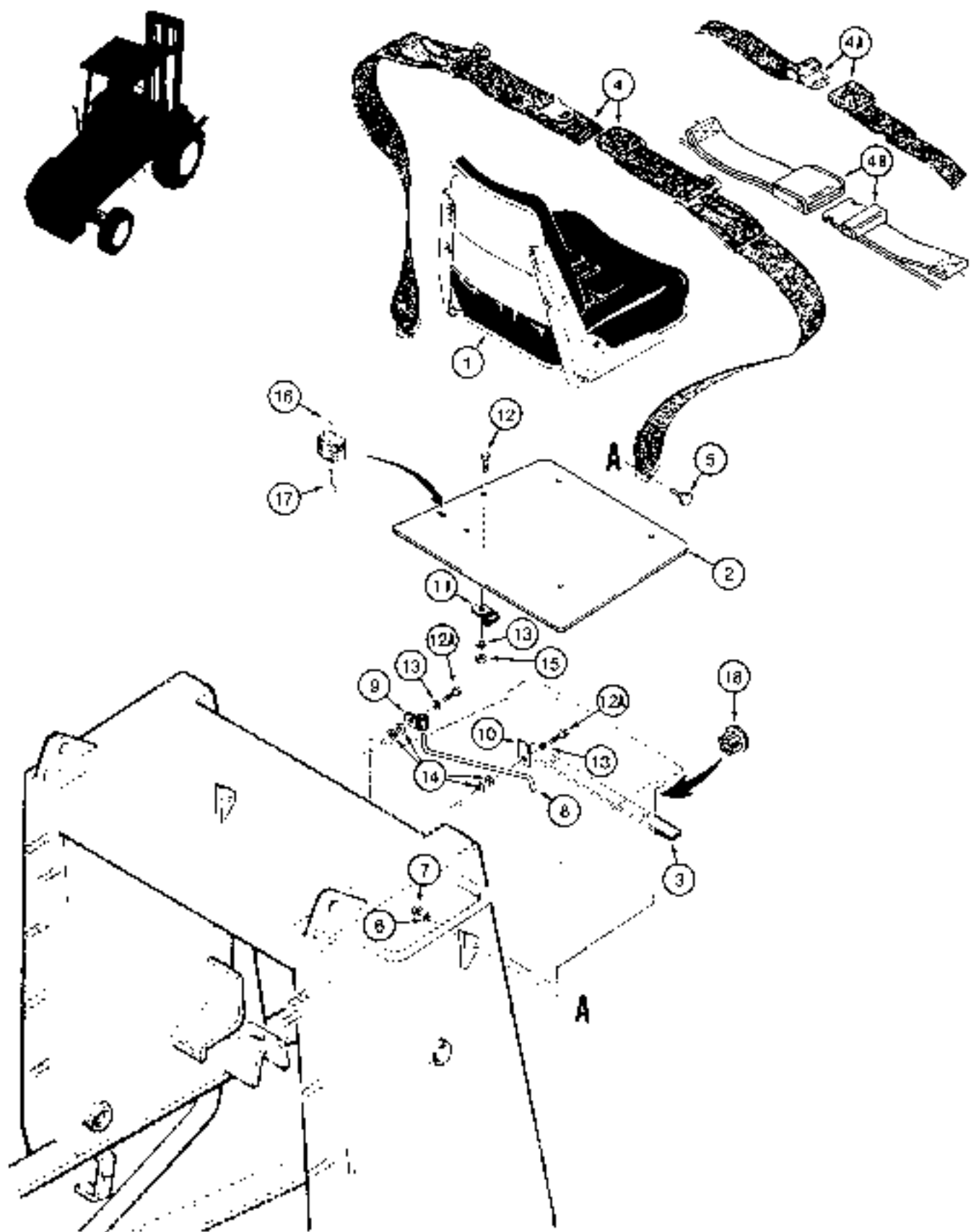
## FENDERS, FLOOR PLATES, AND BATTERY BOX

REF	PART NO	DESCRIPTION	REQ'D
21	R 38893	BOX - operators manual, if used .....	1
22	N 7120	LATCH - R38893 manual box .....	1
22A	R 46464	BOX - operators manual, if used .....	1
22B	NSS	LATCH - R46464 manual box .....	1
23	151- 520	POP RIVET - 3/16" x 7/16", used with R38893 manual box .....	3
23A	151- 522	POP RIVET - 3/16" x 1/2", used with R46464 manual box .....	3
23B	R 46465	CORD - manual retaining .....	1
24	L 18337	TIE STRAP - manual box .....	1
25	D 77709	ROD - seat support .....	1
26	D 49640	BLOCK - seat support rod .....	1
27	49851	CLAMP - seat support rod .....	1
28	D 133084	PLATE - floor, center .....	1
29	205- 72	PLUG - button, 3" .....	1



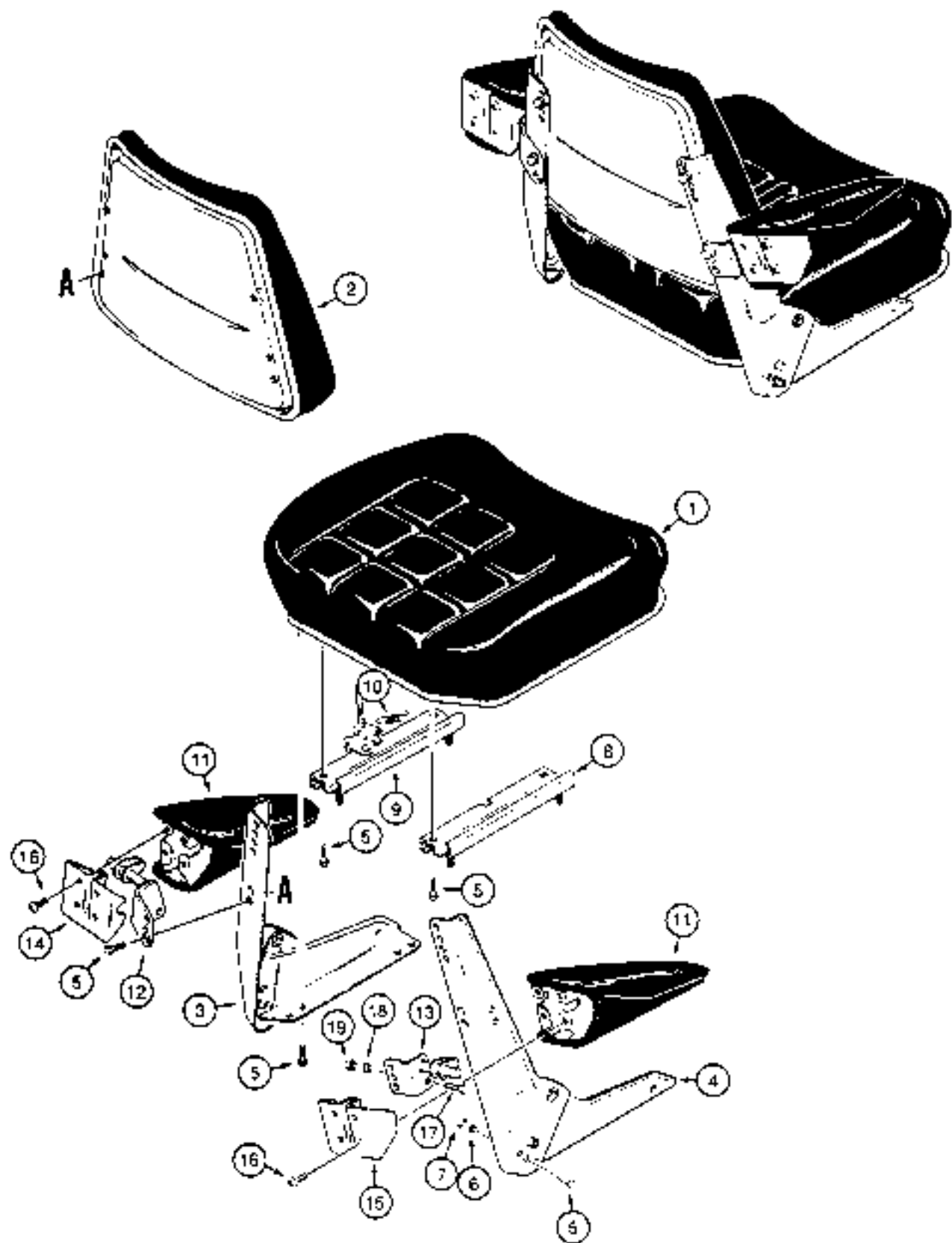
## NOISE REDUCTION PADS

REF.	PART NO.	DESCRIPTION	REQ'D.
1	D 73221	PAD - floormat, black, two wheel drive models before tractor PIN 9879000 . . .	1
1	D 126750	PAD - floormat, brown, all four wheel drive models, two wheel drive models tractor PIN 9879000 and after, not shown . . . . .	1
2	REF	PAD - hood, cut from D89609 . . . . .	1
3	REF	PAD - engine side panel, right-hand, cut from D89609 . . . . .	1
4	REF	PAD - engine side panel, left-hand, cut from D89609 . . . . .	1
	D 89609	PAD - bulk, adhesive, 54" (1372 mm) x 36" (914 mm) x 1" (25 mm) not shown . . . . .	UAF



## SEAT MOUNTING PARTS AND SEAT BELTS

REF	PART NO.	DESCRIPTION	REQ'D.
1	REF	SEAT ASSEMBLY - operators for correct assembly and components see pages 365-369	1
2	D 67376	PLATE - seat mounting	1
3	D 68335	PLATE - hinge reinforcement	1
4	D 85816	BELT - seat, 3" (76 mm) wide, if used	1
4A	D 75997	BELT - seat, 2" (51 mm) wide, no longer used, order D133870 seat belt	1
4B	D 133870	BELT - seat, 2" (51 mm) wide, with anti-creep slides, if used	1
5	F 42236	SHOULDER BOLT - 7/16" - 20 NF x 1-1/4", plated	2
6	192- 22	WASHER - lock, 7/16", plated	2
7	129- 124	NUT - hex, 7/16" - 20 NF, plated	2
8	D 77709	ROD - seat support	1
9	49851	CLAMP - support rod	1
10	D 49640	PLATE - rod retaining	1
11	49859	CLAMP - on seat mounting plate	1
12	113- 207	BOLT - hex head, 3/8" - 16 NC x 1", plated	1
12A	113- 208	BOLT - hex head, 3/8" - 16 NC x 1-1/4", plated	3
13	192- 21	WASHER - lock, 3/8", plated	4
14	195- 525	WASHER - flat, 3/8", plated	4
15	129- 103	NUT - hex 3/8" - 16 NC plated	1
16	D 93753	PADLOCK - seat mounting plate, for battery, if used	1
17	R 29555	KEY - for Master padlock only	2
17	D 93751	KEY - for Yale padlock only	2
18	205- 75	PLUG - action, 1/4" (6.35 mm) diameter, fuel shut-off cable hole	1

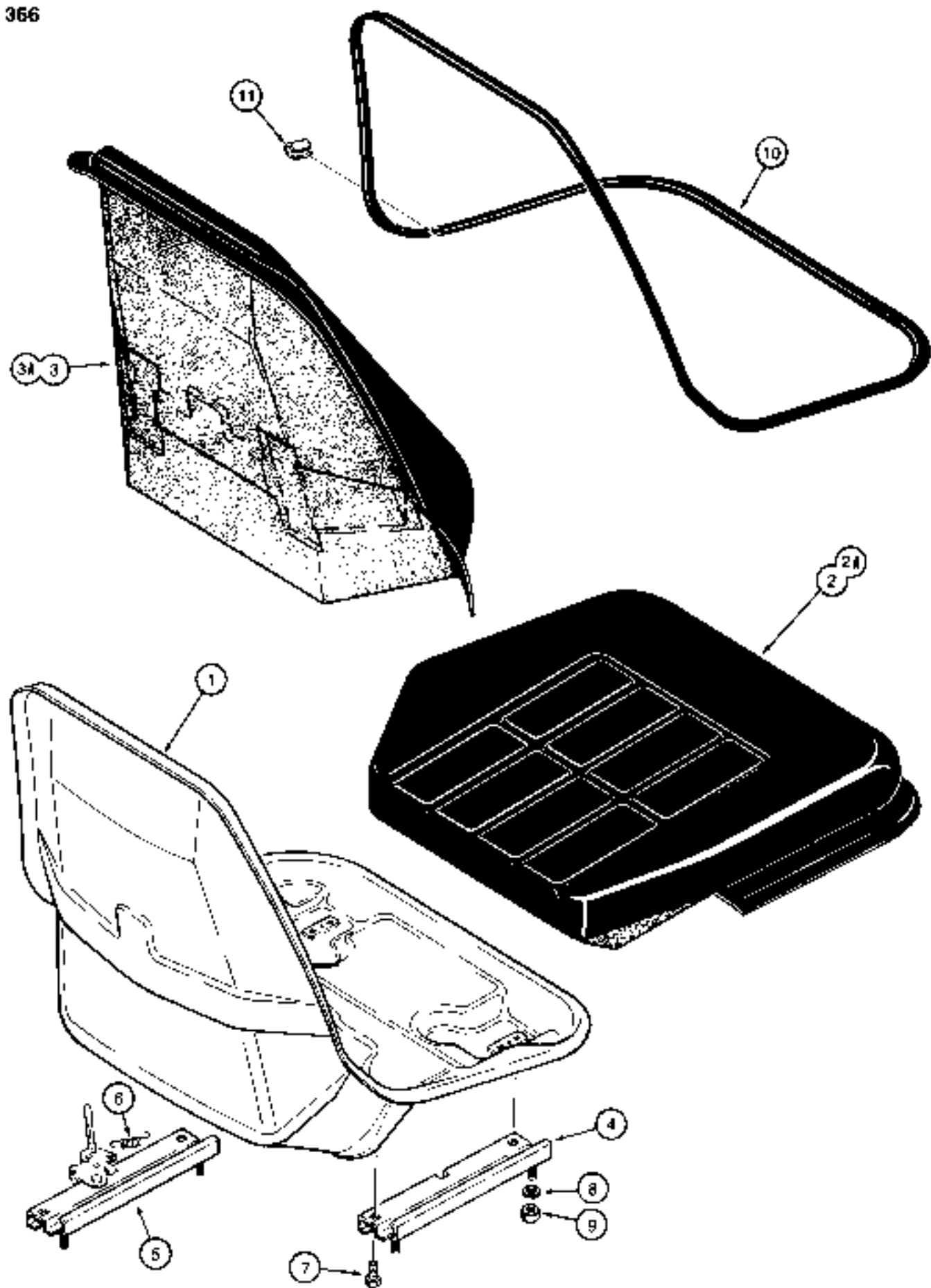


## D76157 SEAT AND ARMRESTS

REF.	PART NO.	DESCRIPTION	REQ'D
	D 76157	SEAT ASSEMBLY - operators, standard back	1
1	D 56883	CUSHION - seat	1
2	D 56884	CUSHION - backrest	1
3	D 56885	SUPPORT - seat, left-hand	1
4	D 56886	SUPPORT - seat, right-hand	1
5	113- 118	BOLT - hex head, 5/16" - 18 NC x 5/8", plated	14
6	192- 20	WASHER - lock, 5/16", plated	2
7	129- 102	NUT - hex, 5/16" - 18 NC, plated	2
8	D 56887	SLIDE - seat, right-hand	1
9	D 56888	SLIDE - seat, left-hand, adjustment side	1
10	L 35503	SPRING - adjustment lever	1
	D 56424	KIT - armrest, used with D76157 seat only	1
11	D 56898	ARMREST - operator	2
12	D 56899	BRACKET - mounting, left-hand	1
13	D 56900	BRACKET - mounting, right-hand	1
14	D 56901	PLATE - mounting, left-hand	1
15	D 56902	PLATE - mounting, right-hand	1
16	187- 1004	SCREW - flat Phillips head, self-tapping, No. 8 - 32 NC x 3/8"	8
17	113- 118	BOLT - hex head, 5/16" - 18 NC x 5/8", plated	2
18	192- 20	WASHER - lock, 5/16", plated	2
19	129- 102	NUT - hex, 5/16" - 18 NC, plated	2

**NOTE:** Other seat options shown on pages 367 and 369.

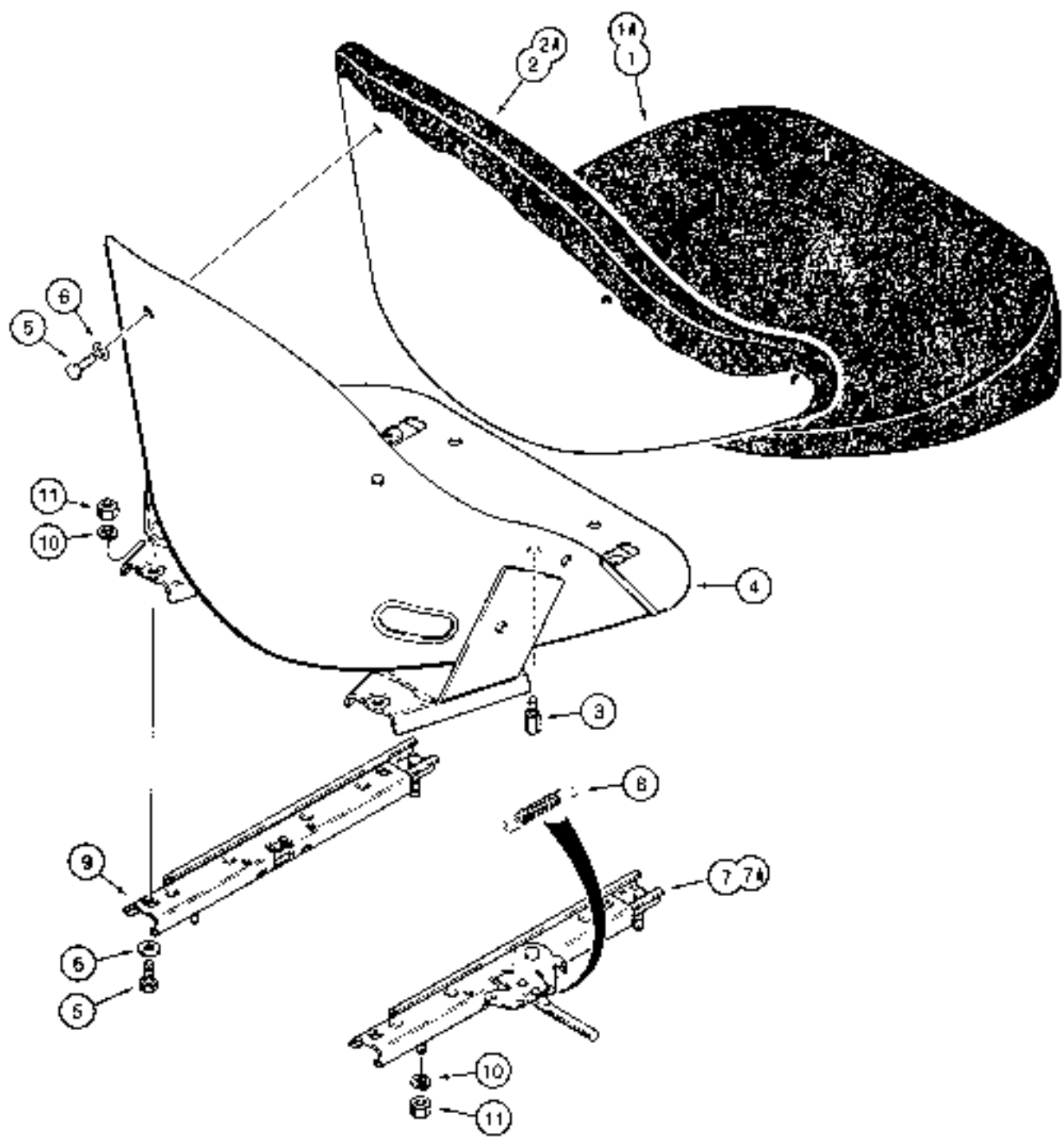




## D122157 AND D124515 SEATS

REF	PART NO	DESCRIPTION	REQ'D
	D 122157	SEAT ASSEMBLY - operators, standard, black, order D76157 seat for service . . . . .	1
	D 124515	SEAT ASSEMBLY - operators, standard, brown . . . . .	1
1	NSS	SHELL - seat . . . . .	1
2	N 7675	CUSHION - seat, black, if used, includes N7802 clip kit, see below . . . . .	1
2A	N 8462	CUSHION - seat, brown, if used, includes N7802 clip kit, see below . . . . .	1
3	N 7674	CUSHION - backrest, black, if used, includes N7802 clip kit, see below . . . . .	1
3A	N 8461	CUSHION - backrest, brown, if used, includes N7802 clip kit, see below . . . . .	1
4	D 56887	SLIDE - seat, right-hand . . . . .	1
5	D 56888	SLIDE - seat, left-hand, adjustment side . . . . .	1
6	L 35503	SPRING - adjustment lever . . . . .	1
7	113- 11B	BOLT - hex head, 5/16" - 1B NC x 5/8", plated . . . . .	4
8	192- 20	WASHER - lock, 5/16", plated . . . . .	4
9	129- 102	NUT - hex, 5/16" - 1B NC, plated . . . . .	4
10	NSS	RETAINER - edging strip - cushion to shell . . . . .	1
11	NSS	CLIP - retainer, order N7802 clip kit, see below . . . . .	1
	345- 44	ADHESIVE - pad retaining, in a can, 23 fl. ounces (680 ml), not shown . . . . .	QAR
	N 7802	KIT - clip, includes item 11 clip above plus 6 additional narrow clips . . . . .	1

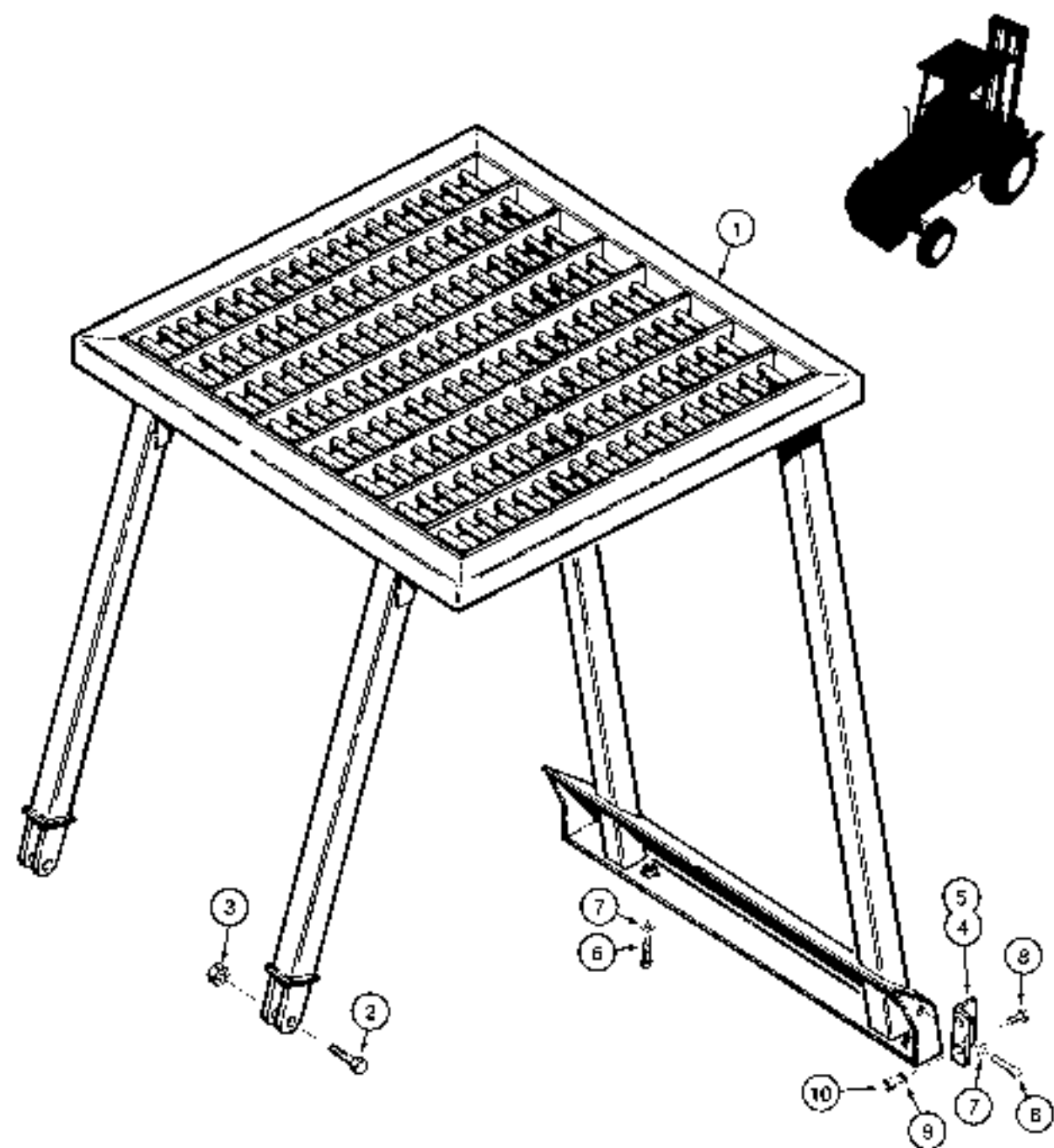
**NOTE:** Other seats shown on pages 365 and 369.



## L77247 AND D124790 SEATS

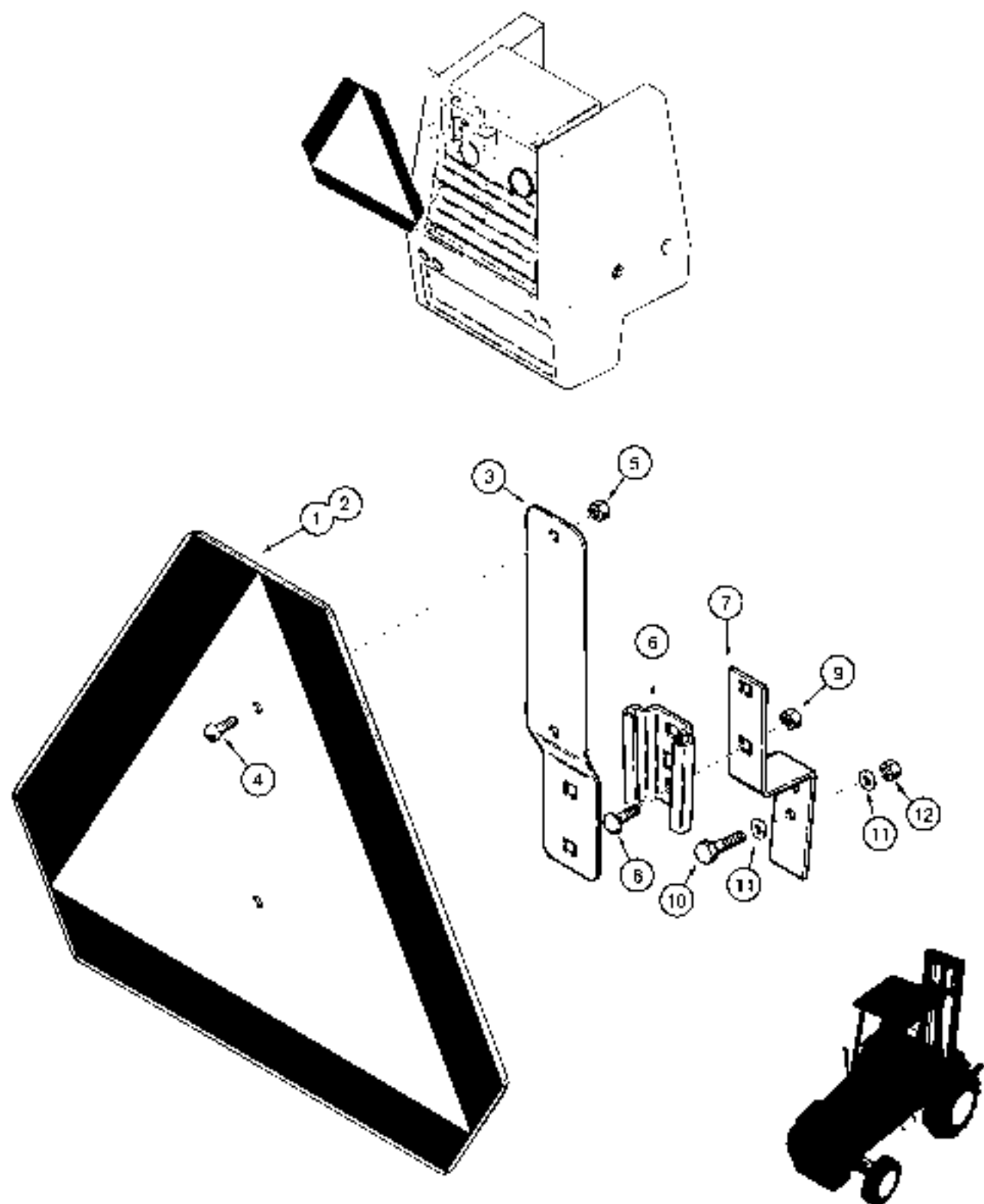
REF.	PART NO.	DESCRIPTION	REQ'D
	L 77247	SEAT ASSEMBLY - operators, deluxe, black, no longer available order	
		D124790 seal for service . . . . .	1
	D 124790	SEAT ASSEMBLY - operators, deluxe, brown . . . . .	1
1	D 52470	CUSHION - seat, black, if used . . . . .	1
1A	N 8761	CUSHION - seat, brown, if used . . . . .	1
2	A 42747	CUSHION - backrest, black, if used . . . . .	1
2A	N 8762	CUSHION - backrest, brown, if used . . . . .	1
3	D 77386	PIN - cushion alignment . . . . .	2
4	NSS	SHELL - seat . . . . .	1
5	113- 102	BOLT - hex head, 5/16" - 18 NC x 3/4", plated . . . . .	9
6	195- 103	WASHER - flat, 5/16" . . . . .	9
7	D 59688	SLIDE - adjuster, right-hand, 9" handle, if used . . . . .	1
7A	D 83178	SLIDE - adjuster, right-hand, 3-1/2" handle, if used . . . . .	1
8	L 35503	SPRING - adjusting lever, D59688 or D83178 slide . . . . .	1
9	L 35272	SLIDE - left-hand . . . . .	1
10	192- 20	WASHER - lock, 5/16", plated . . . . .	8
11	129- 122	NUT - hex, 5/16" - 24 NF, plated . . . . .	8

**NOTE:** Other seats shown on pages 365 and 367



## ROPS CANOPY

REF	PART NO.	DESCRIPTION	REQ'D.
1	REF	ROPS CANOPY - machinery item, see page 2 for ordering	1
2	113- 740	BOLT - hex head, 3/4" - 10 NC x 3-1/4", grade 8, plated	2
3	129- 138	NUT - hex, 3/4" - 10 NC, grade 8, plated	2
4	D 76427	BRACKET - right-hand front	1
5	D 76426	BRACKET - left-hand front	1
6	113- 2619	BOLT - hex head, 5/8" - 11 NC x 2", grade 8, plated	6
7	195- 108	WASHER - flat, 5/8", plated	6
8	113- 2424	BOLT - hex head, 1/2" - 13 NC x 1-1/4", grade 8, plated	4
9	192- 23	WASHER - lock, 1/2", plated	4
10	129- 194	NUT - hex 1/2" - 13 NC, grade 8, plated	4



## SLOW MOVING VEHICLE EMBLEM

REF.	PART NO.	DESCRIPTION	REQ'D.
	A 59450	EMBLEM ASSEMBLY - SMV, riveted construction, replaces bolted construction	1
1	NSS	PLATE - SMV emblem	1
2	321- 4311	DECAL - slow moving vehicle emblem	1
3	NSS	BRACKET - emblem mounting	1
4	182- 518	MACHINE SCREW - pan head slotted, No. 10 - 24 NC x 1/2", plated	2
5	193- 1004	NUT AND LOCK WASHER - No. 10 - 24 NC, plated	2
6	A 59457	SOCKET - emblem mounting	1
7	D 73260	BRACKET - socket to grille	1
8	111- 215	CARRIAGE BOLT - short neck, 5/16" - 18 NC x 3/4", plated	2
9	193- 1009	NUT AND LOCK WASHER - 5/16" - 18 NC, plated	2
10	113- 4	BOLT - hex head, 1/4" - 20 NC x 1", plated	2
11	195- 102	WASHER - flat, 1/4", plated	4
12	193- 1006	NUT AND LOCK WASHER - 1/4" - 20 NC, plated	2



①  
**584D**

⑨  
4,000 LB. CAPACITY  
AT 24' LOAD CENTER



②  
**585D**

⑩  
CAPACITY AT 24' LOAD CENTER  
4,000 LB. TO 15' 2,500 LB. TO 21'

③  
**586D**

⑪  
CAPACITY AT 24' LOAD CENTER  
4,000 LB. TO 15' 2,500 LB. TO 21'  
1,000 LB. TO 28'

④  
**CASE**



⑫  
5,000 LB. CAPACITY  
AT 24' LOAD CENTER



⑤  
**CASE**

⑬  
CAPACITY AT 24' LOAD CENTER  
5,000 LB. TO 12' 4,000 LB. TO 15'  
2,500 LB. TO 27'



⑥  
**CASE**

⑭  
6,000 LB. CAPACITY  
AT 24' LOAD CENTER



⑦  
**construction king**

⑮  
CAPACITY AT 24' LOAD CENTER  
6,000 LB. TO 12' 4,000 LB. TO 15'  
2,500 LB. TO 21'



⑧  
ETHER STARTING AID

⑯  
6,000 LB. CAPACITY AT 24' LOAD CENTER



⑰  
**WARNING** [unreadable text]

㉕  
ACL OFF ON

## DECALS

REF	PART NO.	DESCRIPTION	REQ'D
	N 7690	KIT - includes black decals, if used	1
	D 128098	KIT - includes brown decals, if used	1
1	321- 6260	DECAL - 584D, black, if used	2
1	D 123985	DECAL - 584D, brown, if used	2
2	321- 6261	DECAL - 585D, black, if used	2
2	D 123972	DECAL - 585D, brown, if used	2
3	321- 6262	DECAL - 586D, black, if used	2
3	D 123973	DECAL - 586D, brown, if used	2
4	321- 6246	DECAL - Case, with treads, left-hand, black, if used	1
4	D 123954	DECAL - Case, with treads, left-hand, brown, if used	1
5	321- 6247	DECAL - Case, with treads, right-hand, black, if used	1
5	D 123952	DECAL - Case, with treads, right-hand, brown, if used	1
6	321- 5117	DECAL - Case, with treads, front, black, if used	1
6	D 123884	DECAL - Case, with treads, front, brown, if used	1
7	321- 3308	DECAL - construction king, black, if used	2
7	D 123950	DECAL - construction king, brown, if used	2
8	321- 2435	DECAL - Ether Starting Aid, black, if used	1
8	D 124152	DECAL - Ether Starting Aid, brown, if used	1
9	D 55885	DECAL - capacity, for 584D with 14-1/4' (4.3 m) mast	1
10	D 55888	DECAL - capacity, for 584D with 21-1/2' (6.5 m) mast	1
11	D 55889	DECAL - capacity, for 584D with 26' (8 m) mast	1
12	D 55886	DECAL - capacity, for 585D with 12' (3.6 m) and 14-1/4' (4.3 m) masts	1
13	321- 3358	DECAL - capacity, for 585D with 21-1/2' (6.5 m) mast	1
14	D 55887	DECAL - capacity, for 586D with 12' (3.6 m) and 14-1/4' (4.3 m) masts	1
15	N 7705	DECAL - capacity, for 586D with 21-1/2' (6.5 m) mast	1
16	D 83264	DECAL - capacity, for 586D with 14' (4.3 m) free-lift mast	1
17	D 87486	DECAL - Warning, 586D with free-lift mast - move truck with extreme caution when load is elevated	1
18	D 83465	DECAL - Warning, do not permit riders on forks	1
19	321- 3159	DECAL - Warning, tilt	1
20	321- 3160	DECAL - Warning, load in transit	1
21	321- 3161	DECAL - Warning, elevated load	1
22	321- 3401	DECAL - Start	1
23	321- 3294	DECAL - Horn	1
24	321- 5696	DECAL - Lamp Test	1
25	321- 3402	DECAL - Key switch	1

Continued on next page

26

SPECIFICATIONS	
MODEL	857
NET WEIGHT (kg)	1700
NET WEIGHT (lb)	3700
MAXIMUM SPEED (km/h)	30 (19.0)
MAXIMUM SPEED (mi/h)	20 (12.5)
MAXIMUM FUEL CONSUMPTION (l/h)	40 (10.6)
MAXIMUM FUEL CONSUMPTION (g/kWh)	200

27

**WARNING**  
WEAR SEAT BELT

28

**WARNING**  
BEFORE STARTING ENGINE  
ALWAYS WEAR YOUR SEAT BELT AND HOLD  
ON TO ALL CONTROLS BEFORE STARTING  
CHECK THE WORKING OF ALL CONTROLS  
LEARN & PRACTICE SAFE USE OF  
CONTROLS BEFORE OPERATING  
THE MACHINE

29

DIFFERENTIAL  
LOCK  
↓  
ENGAGED

30

DIFFERENTIAL  
LOCK  
↓  
DISENGAGED

31

FORWARD  
↑  
REVERSE  
↓

32

STOP	REVERSE	FORWARD
↑	↓	↑
↓	↑	↓
↑	↓	↑

33

CLUTCH  
DISCONNECT  
↑  
DRIVE  
↓  
NEUTRAL  
↑

34

HAND THROTTLE

35

ON  
OFF  
PARK BRAKE

36

4 2  
| N |  
3 1

37

HYDRAULIC  
FLUID

38

DIESEL FUEL

39

20-201  
ELECTRICAL  
WIRING  
ALTERNATOR  
BATTERY  
GROUND  
FIELD OR  
OUTPUT  
TERMINALS

40

**WARNING**

1. This system is designed to operate at 12V DC. Do not connect any other electrical components to this system. Do not connect any electrical components to the battery terminals. Do not connect any electrical components to the ground terminals. Do not connect any electrical components to the output terminals. Do not connect any electrical components to the field terminals. Do not connect any electrical components to the alternator terminals. Do not connect any electrical components to the battery terminals. Do not connect any electrical components to the ground terminals. Do not connect any electrical components to the output terminals. Do not connect any electrical components to the field terminals. Do not connect any electrical components to the alternator terminals.

41

**CAUTION**

USE ONLY GRADE 8-16 NUTTING BAR JIBS  
3/8" DIA. &  
1/2" THICK. DO NOT USE OTHER TYPES OF NUTTING BAR JIBS.  
DO NOT USE OTHER TYPES OF NUTTING BAR JIBS.

42

**CAUTION**  
DO NOT OPERATE THE MACHINE ON SLOPES EXCEEDING THE MAXIMUM SLOPE RATING. DO NOT OPERATE THE MACHINE ON SLOPES EXCEEDING THE MAXIMUM SLOPE RATING. DO NOT OPERATE THE MACHINE ON SLOPES EXCEEDING THE MAXIMUM SLOPE RATING. DO NOT OPERATE THE MACHINE ON SLOPES EXCEEDING THE MAXIMUM SLOPE RATING.

43

**WARNING**  
DO NOT OPERATE THE MACHINE ON SLOPES EXCEEDING THE MAXIMUM SLOPE RATING. DO NOT OPERATE THE MACHINE ON SLOPES EXCEEDING THE MAXIMUM SLOPE RATING. DO NOT OPERATE THE MACHINE ON SLOPES EXCEEDING THE MAXIMUM SLOPE RATING. DO NOT OPERATE THE MACHINE ON SLOPES EXCEEDING THE MAXIMUM SLOPE RATING.

43M

**WARNING**  
DO NOT OPERATE THE MACHINE ON SLOPES EXCEEDING THE MAXIMUM SLOPE RATING. DO NOT OPERATE THE MACHINE ON SLOPES EXCEEDING THE MAXIMUM SLOPE RATING. DO NOT OPERATE THE MACHINE ON SLOPES EXCEEDING THE MAXIMUM SLOPE RATING. DO NOT OPERATE THE MACHINE ON SLOPES EXCEEDING THE MAXIMUM SLOPE RATING.

44

**WARNING**  
DO NOT REMOVE ENGINE SIDE PANELS EXCEPT FOR MAINTENANCE. DO NOT REMOVE ENGINE SIDE PANELS EXCEPT FOR MAINTENANCE. DO NOT REMOVE ENGINE SIDE PANELS EXCEPT FOR MAINTENANCE. DO NOT REMOVE ENGINE SIDE PANELS EXCEPT FOR MAINTENANCE.

45

**IMPORTANT**  
DO NOT OPERATE THE MACHINE ON SLOPES EXCEEDING THE MAXIMUM SLOPE RATING. DO NOT OPERATE THE MACHINE ON SLOPES EXCEEDING THE MAXIMUM SLOPE RATING. DO NOT OPERATE THE MACHINE ON SLOPES EXCEEDING THE MAXIMUM SLOPE RATING. DO NOT OPERATE THE MACHINE ON SLOPES EXCEEDING THE MAXIMUM SLOPE RATING.

46

46

47

47

**IMPORTANT**

DO NOT OPERATE THE MACHINE ON SLOPES EXCEEDING THE MAXIMUM SLOPE RATING. DO NOT OPERATE THE MACHINE ON SLOPES EXCEEDING THE MAXIMUM SLOPE RATING. DO NOT OPERATE THE MACHINE ON SLOPES EXCEEDING THE MAXIMUM SLOPE RATING. DO NOT OPERATE THE MACHINE ON SLOPES EXCEEDING THE MAXIMUM SLOPE RATING.

49

49

50

51

**4 wheel drive**

## DECALS

REF.	PART NO.	DESCRIPTION	REQ'D.
	N 7690	KIT - includes black decals, if used, continued . . . . .	1
	D 128098	KIT - includes brown decals, if used, continued . . . . .	1
26	321- 4291	DECAL - engine data . . . . .	1
27	321- 3060	DECAL - Warning, Faster Seat Belt . . . . .	1
28	321- 3703	DECAL - Warning, before starting engine . . . . .	1
29	321- 1646	DECAL - Differential Lock control pattern, if used . . . . .	1
30	321- 5598	DECAL - Differential Lock control pattern, D128098 kit only . . . . .	1
31	321- 2145	DECAL - shuttle lever control pattern . . . . .	1
32	321- 3902	DECAL - lift, tilt, and sideshift control pattern . . . . .	1
33	321- 5441	DECAL - Clutch Disconnect control pattern . . . . .	1
34	321- 3907	DECAL - Hand Throttle control pattern . . . . .	1
35	321- 2066	DECAL - Park Brake control pattern . . . . .	1
36	321- 3904	DECAL - gear shift control pattern . . . . .	1
37	321- 229	DECAL - Hydraulic Fluid . . . . .	1
38	321- 230	DECAL - Diesel Fuel . . . . .	1
39	321- 1061	DECAL - alternator instructions . . . . .	1
40	321- 5974	DECAL - Warning, jump start procedure . . . . .	1
41	321- 6630	DECAL - Caution, brake fluid . . . . .	2
42	321- 3903	DECAL - Caution, safety warnings . . . . .	1
43	321- 5734	DECAL - Warning, hot coolant, no longer used, order 321-6672 decal . . . . .	1
43A	321- 6672	DECAL - Warning, check and service cooling system . . . . .	1
44	321- 5701	DECAL - Warning, rotating parts . . . . .	2
45	321- 3882	DECAL - Important, power shuttle oil level . . . . .	1
46	D 87870	DECAL - reflector red . . . . .	2
47	D 55216	STRIP - anti-skid, steps . . . . .	6
48	321- 2101	DECAL - Important, replace filter . . . . .	1
49	321- 4739	EMBLEM - Case, on grille . . . . .	1
50	131- 431	NUT - push, attaches emblem to grille . . . . .	2
51	O 121390	DECAL - 4 wheel drive, black, if used, order separate from kit . . . . .	2
51	O 123949	DECAL - 4 wheel drive, brown, if used, order separate from kit . . . . .	2
52	321- 4614	TAG - Do Not Operate, not shown . . . . .	1

\*NOTE: 321-6630 decal is only to be used on models without the self-filling brake master cylinders

## HOSE AND FITTING ASSEMBLY CONVERSION PART NUMBERS

To make up a replacement hose line, find the Case original equipment part number in the left hand column. To the right of this number are the component part numbers needed to assemble the replacement hose line.

ORIGINAL EQUIPMENT HOSE NO.	BULK HOSE NO.	CUT HOSE LENGTH	USE FITTING NO.	USE FITTING NO.	ADDITIONAL PARTS REQUIRED
D 26365	A21564	42-5/8"	220-130	220-130	
D 41821		USE ORIGINAL EQUIPMENT HOSE			
D 61447		USE ORIGINAL EQUIPMENT HOSE			
D 61500		USE ORIGINAL EQUIPMENT HOSE			
D 62390		USE ORIGINAL EQUIPMENT HOSE			
D 63194	A21566	9"	220-104	220-144	
D 65620		USE ORIGINAL EQUIPMENT HOSE			
D 66741		USE ORIGINAL EQUIPMENT HOSE			
D 68547	A21574	15-7/8"	220-246	220-211	
D 69051		USE ORIGINAL EQUIPMENT HOSE			
D 69101	A21570	26-7/8"	220-214	220-214	
D 69142		USE ORIGINAL EQUIPMENT HOSE			
D 71785		USE ORIGINAL EQUIPMENT HOSE			
D 125415		USE ORIGINAL EQUIPMENT HOSE			
D 126980		USE ORIGINAL EQUIPMENT HOSE			
R 17579	A21572	36-3/4"	220-203	220-224	

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49564	81	10	A15672	137	13	A26956	165	23
49836	259	37	A16673	249	26	A26956	195	26
49838	87	36	A20058	135	2	A27080	125	
49838	163	37	A20465	91	5	A27116	219	25
49838	167	41	A20467	91	8	A27116	221	25
49838	261	14	A20468	91	6	A27117	219	25
49851	247	11	A20916	17	2	A27117	221	25
49851	251	36	A21145	123	8	A27118	219	25
49851	359	27	A21266	219	26	A27118	221	25
49851	363	9	A21266	221	26	A27119	219	25
49854	83	10	A22349	87	29	A27119	221	25
49856	85	2	A22877	83	14	A27342	35	24
49856	85	6	A23885	159	19	A27365	29	19
49856	267	28	A23885	161	19	A27463	127	22
49859	363	11	A23885	163	16	A27579	225	18
60917	309	41	A23885	165	20	A27579	227	18
60917	313	47	A23903	283	11	A27602	129	28
60944	309	27	A23904	127	20	A27637	229	6
60944	313	33	A24540	189	30	A27880	17	17
60944	315	34	A25139	279	8	A27891	43	16
60944	327	38	A25213	101	2	A27891	235	6
60972	307	18	A25304	69	2	A27891	237	8
60972	311	23	A25356	69	9	A28090	295	5
60972	323	12	A25359	69	8	A28161	219	30
60972	335	12	A25379	69	11	A28230	127	19
73149	13	2	A25385	69	35	A28318	301	15
73452	53	9	A25387	71	37	A29060	195	17
73453	53	10	A25387	77	37	A29068	137	17
73651	53	19	A25391	69	20	A29197	249	22
74244	53	8	A25391	75	20	A29259	39	8
A7623	143	8	A25546	59	41	A29260	29	10
A7690	231	5	A25546	63	41	A29290	37	6
A7690	233	3	A25546	65	41	A29431	31	15
A7691	211	26	A25547	69	26	A29433	25	3
A7691	213	26	A25547	75	25	A29438	37	10
A7923	159	23	A25548	69	19	A29442	27	5
A7923	161	24	A25552	71	44	A29540	193	6
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A11280	101	3	A26836	163	20	A29902	207	12
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## NUMERICAL INDEX

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A29977	197	3	A35963	121	6	A38261	133	6
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A30072	201	14	A36489	39	3	A38758	201	12
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A30114	207	20	A36493	39	4	A38762	201	12
A30115	201	3	A36494	39	4	A38763	201	12
A30116	201	4	A36495	39	2	A38764	201	12
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A34827	43	36	A36902	31	20	A39006	41	10
A34868	91	18	A36902	35	12	A39007	207	6
A35147	137	5	A37149	35	22	A39008	207	6
A35273	43	35	A37407	35	23	A39009	207	6
A35767	225	2	A37837	49	26	A39010	207	6
A35767	227	2	A37839	49	27	A39011	207	6
A35770	41	8	A38083	25	13	A39012	207	6
A35789	235	20	A38083	43	6	A39046	31	23
A35789	237	23	A38083	43	25	A39046	35	15
A35789	259	26B	A38084	25	6	A39047	31	19
A35921	207	14	A38084	43	7	A39047	35	11
A35925	207	29	A38157	201	5	A39048	31	19
A35949	121	15	A38160	49	38	A39048	35	11
A35950	121	11	A38181	33	3	A39049	31	19
A35951	121	1	A38208	131	5	A39049	35	11
A35952	121	10	A38208	133	7	A39105	187	18
A35954	121	21	A38208	135	4	A39105	189	18
A35955	121	22	A38208	159	18	A39105	191	18
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A39925	43	23	A42204	257	3	A44083	41	21
A39936	35	30	A42219	123	32	A44369	57	8
A40215	69	28	A42242	121	9	A44433	59	34
A40217	69	6	A42252	237	34	A44435	123	12
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A40222	71	47	A42256	255	12	A44653	53	7
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A41491	237	38	A42801	231	20	A45152	75	3
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A41865	231	19	A43384	65	44	A45221	59	21
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A45383	237	32	A47237	73	23	A47885	229	13
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A47178	75	31	A47597	61	5	A50237	163	3
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A51114	35	13	A52257	241	9	A59470	163	32
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A51390	45	2	A52262	241	16	A60489	237	11
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A51527	197	29	A52263	241	11	A60555	235	19
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A51561	65	45	A52272	239	13	A61449	131	10
A51649	27	2	A52276	239	11	A61450	131	4
A51793	35	34	A52277	239		A62210	111	1
A51904	41	19	A52379	241	18	A62230	237	7
A51908	27	18	A52379	243	14	A64436	125	18
A51948	225	21	A52380	241	8	A64490	235	7
A51948	227	21	A52380	243	5	A64490	237	9
A51951	225	8	A54031	219	35	A65101	207	35
A51951	227	8	A54031	221	35	A65101	209	10
A51953	187	6	A55439	219	4	A65544	111	4
A51956	197	14	A55439	221	4	A65550	91	19
A51959	201	11	A55934	257	4	A66739	131	
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A51960	201	9	A58471	237	10	A135946	229	31
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A51960	205	11	A58608	43	36	A136597	197	13
A51961	201	6	A58608	187	3	A136597	199	13
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A51969	235	1	A58608	221	39	A138286	215	1
A51970	235	12	A58709	49	18	A138287	215	1
A51971	235	10	A58960	49	28	A138312	195	1
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A138847	201	8	A146584	25	12	A153717	211	12
A139081	133	1	A146696	29	1	A153717	213	12
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A140239	197	12	A151068	37	5	A153753	205	6
A140239	199	12	A151279	29	37	A153754	203	14
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A144339	207	13	A153714	211	12	A154266	195	22
A144397	195	23	A153714	213	12	A154308	189	6
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A154640	237	1	A156259	225	23	A166006	25	1
A154649	203	12	A156259	227	23	A166029	31	8
A154649	205	12	A156260	205	19	A166176	39	13
A154650	199	27	A156269	225	4	A167153	61	1
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A154850	187	29	A156277	225	13	A168108	203	
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A154850	191	29	A156278	225	13	A168172	197	10
A154850	193	29	A156278	227	13	A168172	199	10
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A154909	51	2	A156286	221	17	A168294	23*	1
A154934	51	1	A156373	209	8	A168296	23*	8
A154936	217	8	A156376	211	15	A168297	23*	8
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A155602	231	3	A157157	229		A168817	233	24
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A156248	221	20	A157734	209	7	A179007	221	28
A156250	225	13	A157951	239	28	A179042	163	1
A156250	227	13	A158384	207	32	A179043	165	1A
A156253	225	12	A158744	211	18	A179053	213	20
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A179076	213	27	B17290	303	13	D28147	303	14
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A179102	233	1	B17297	303	6	D32117	285	3
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A179719	205	16	D10464	347	1	D32555	331	2
A179762	213	8	D10465	347	2	D32555	335	2
A179783	205	14	D10466	347	3	D32555	339	18
A179784	205	14	D10653	347	7	D34446	307	23
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A179787	205	14	D24097	303	22	D34666	161	16
A179788	205	14	O24106	303	19	D34666	163	14
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A179790	205	14	O24118	303		D34666	173	13
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A179792	205	14	O24252	299	4	D35009	21	12
A179793	205	14	O24252	299	12	D36264	13	21
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A182014	41		D27362	319	12	D36582	341	35
A182021	39	35	D27362	327	18	D36582	343	28
A182271	241		D27362	331	12	D36586	323	13
A182271	243		D27363	311	10	D36586	335	13
AC38372	29	7	D27364	311	20	D36589	319	31
AC46351	35	1	D27365	311	19	D36589	323	31
AC140829	57	1	D27365	315	16	D36589	333	31
AC153262	31	0	D27365	319	3	D36589	335	31
AC166029	31	8	D27365	319	13	D36590	319	32
AR38372	29	7	D27365	323	3	D36590	323	32
AR46351	35	1	D27365	327	19	D36590	333	32
AR140829	57	1	D27365	331	3	D36590	335	32

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D36819	275	19	D40843	307	8	D48539	141	31
D36819	277	9	D40843	311	8	D48540	133	24
D36819	303	3	D40843	319	5	D48874	271	13
D36822	85	11	D40843	323	5	D48875	271	
D36968	301	5	D40843	327	5	D48876	271	10
D37048	101	4	D40843	331	5	D48876	273	13
D37156	149	50	D40843	335	5	D48877	271	11
D38359	347	6	D40843	339	5	D48878	271	12
D38359	347	10	D40843	343	2	D48879	279	5
D38620	245	22	D40843	351	3	D48883	279	19
D38648	275	13	D40921	95	4	D48888	279	9
D39319	279	10	D40921	105	7	D49371	279	17
D39480	319	11	D40921	109	18	D49373	279	18
D39480	331	11	D41189	297	4	D49640	359	26
D39481	323	11	D41190	297	5	D49640	363	10
D39481	335	11	D41220	347	7	D49723	81	2
D39482	313	34	D41289	347	4	D49724	81	3
D39482	315	30	D41289	347	8	D49733	97	2
D39482	319	23	D41390	279	1	D49733	99	
D39482	323	23	D41740	249	13	D50022	153	
D39482	327	34	D41821	273	22	D50030	147	
D39482	331	23	D42458	261	3A	D50031	147	
D39482	335	23	D43266	163	5	D50033	153	15
D39483	319	18	D43690	347	7	D50034	153	16
D39483	331	18	D43691	347	7	D50035	153	17
D39484	323	18	D43940	127	3	D50036	153	18
D39484	335	18	D43940	351	2	D50037	153	19
D40197	277	7	D46080	305	6	D50038	153	20
D40197	303	1	D47875	309	31	D50039	153	21
D40198	303	20	D47875	313	37	D50040	153	22
D40199	303	4	D47875	317	38	D50041	153	23
D40236	119	18	D47876	309	33	D50042	151	1
D40840	307	6	D47876	313	39	D50043	151	2
D40840	311	6	D47876	317	40	D50044	151	3
D40840	321	44	D47877	313	40	D50045	151	4
D40840	325	44	D47878	313	41	D50046	151	5
D40840	329	61	D47894	309	40	D50047	151	12
D40840	333	44	D47894	313	46	D50048	151	13
D40840	337	44	D47895	307	11	D50049	151	18
D40840	341	57	D47895	311	11	D50051	151	21
D40840	343	5	D47895	315	3A	D50052	151	21
D40841	307	5	D47895	319	4	D50053	151	21
D40841	311	5	D47895	323	4	D50054	151	22
D40841	321	43	D47895	327	4	D50055	147	1
D40841	325	43	D47895	331	4	D50056	147	19
D40841	329	60	D47895	335	4	D50057	147	20
D40841	333	43	D47895	339	4	D50058	147	22
D40841	337	43	D47901	309	34	D50059	147	23
D40841	341	56	D47902	309	35	D50060	147	26

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D50066	149	43	D54168	283	18	D55845	347	1
D50074	153	14	D54169	283	17	D55846	347	7
D50075	151	6	D54277	121	23	D55847	347	7
D50077	151	8	D54295	143	9	D55885	375	9
D50078	151	9	D55216	357	12	D55886	375	12
D50079	151	10	D55216	377	47	D55887	375	14
D50080	147	18	D55397	315	21	D55888	375	10
D50080	151	11	D55398	315	26	D55889	375	11
D50081	151	14	D55400	315	1	D55947	17	
D50083	151	16	D55401	315	9	D55949	17	25
D50084	151	17	D55402	315	14	D55950	17	26
D50086	151	25	D55404	317	51	D55951	17	
D50087	147	17	D55404	329	55	D56401	97	12
D50089	149	31	D55404	341	53	D56424	365	
D50090	149	32	D55405	317	41	D56883	365	1
D50091	149	33	D55405	329	45	D56884	365	2
D50092	149	34	D55406	317	43	D56885	365	3
D50146	127	8	D55406	329	47	D56886	365	4
D51643	91	4	D55407	317	42	D56887	365	8
D52008	91	7	D55407	317	44	D56887	367	4
D52275	11	11	D55407	329	46	D56888	365	9
D52276	11	12	D55407	329	48	D56888	367	5
D52298	317	50	D55407	341	45	D56898	365	11
D52298	319	37	D55407	341	47	D56899	365	12
D52298	323	37	D55409	315	3	D56900	365	13
D52298	329	54	D55409	315	13	D56901	365	14
D52298	333	37	D55409	327	3	D56902	365	15
D52298	335	37	D55409	327	15	D57288	97	17
D52298	341	54	D55409	339	3	D57486	129	29
D52299	317	49	D55409	339	15	D58188	281	3
D52299	319	38	D55410	315	11	D58713	97	4
D52299	323	38	D55410	327	13	D58721	97	8
D52299	329	53	D55410	339	13	D59688	369	7
D52299	333	38	D55411	315	2	D59912	47	13
D52299	335	38	D55411	315	12	D59912	155	1
D52299	341	52	D55411	327	2	D59912	305	1
D52321	319	29	D55411	327	14	D59944	249	5
D52321	323	29	D55411	339	2	D61076	127	13
D52321	331	29	D55411	339	14	D61241	127	2
D52321	335	29	D55412	315	10	D61297	127	18
D52322	319	30	D55412	327	12	D61447	119	8
D52322	323	30	D55412	339	12	D61500	115	4
D52322	331	30	D55415	331	28	D62390	117	7
D52322	335	30	D55415	335	26	D63154	47	32
D52470	360	1	D55416	331	28	D63154	155	26
D52904	347	5	D55416	335	28	D63184	113	7
D52904	347	9	D55532	19	7	D63263	137	1
D52929	279		D55583	139	7	D63506	265	36
D53297	123	4	D55583	139	21	D63543	265	35

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D64050	167	31	D68646	115	25	D71334	93	4
D64171	127	12	D68646	117	17	D71335	93	
D65139	123	9	D68646	119	30	D71342	93	15
D65247	147	28	D68646	139	13	D71343	93	16
D65446	31	33	D68661	137	20	D71344	93	17
D65446	83	7	D68670	137	7	D71346	93	20
D65446	95	23	D68845	263	26	D71785	113	10
D65620	117	10	D68846	263	28	D71785	115	19
D65646	267	10	D68846	267	7	D71785	117	5
D65646	269	37	D68927	47	20	D71785	119	5
D65647	109	13	D68972	139	20	D71935	81	8
D65659	263	4	D68973	139	23	D71936	81	9
D65670	263	3	D69051	139	19	D72028	245	24
D66072	45	3	D69087	275	11	D72069	305	4
D66315	351		D69089	275	12	D72070	305	3
D66316	351		D69101	275	7	D72071	305	2
D66455	145	11	D69105	195	30	D72098	265	39
D66741	247	12	D69142	113	9	D72120	357	3
D66741	251	35	D69142	115	18	D72308	105	12
D67251	87	34	D69142	117	4	D72337	127	16
D67251	95	2	D69142	119	4	D72371	127	21
D67294	245	2	D69179	275	5	D72372	127	17
D67296	113	14	D69400	257	18	D72412	253	15
D67296	115	24	D69410	259	33	D72413	253	16
D67296	117	16	D69411	259	31	D73079	281	
D67296	119	29	D69458	245	14	D73198	19	2
D67296	139	11	D69763	159	8	D73221	361	1
D67297	263	27	D69763	161	8	D73260	373	7
D67297	267	6	D69792	135	1	D73261	127	6
D67298	263	25	D69991	257	15	D73388	87	32
D67342	245	5	D69991	261	10	D73397	129	32
D67351	245	3	D69995	250	26	D73398	129	
D67376	363	2	D69997	250	24	D73446	11	31
D67451	245		D70039	349	1	D73446	79	6
D67711	269	32	D70125	105	23	D73465	247	1
D67872	85	22	D70125	107	8	D73465	253	
D67872	103	1	D70129	103	7	D73500	11	14
D67902	47	6	D70393	143	10	D73615	281	10
D67915	267	17	D70514	19	9	D73619	281	5
D68123	245	4	D70586	123	5	D73620	281	4
D68186	305	14	D70629	157		D73622	281	9
D68335	363	3	D70650	145		D73623	281	8
D68519	155	9	D70665	147	2	D73624	281	1
D68519	305	5	D70666	151		D73662	311	7
D68523	305	7	D70668	151	26	D73663	311	22
D68524	305	6	D70670	151	7	D73664	311	17
D68536	269	33	D70672	151	15	D73665	311	29
D68547	263	18	D70731	17	3	D73665	327	24



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D73701	145		D75815	107	2	D77115	155	6
D73776	147	27	D75823	277	5	D77235	47	27
D73777	157		D75838	287	26	D77263	105	25
D73799	129	33	D75838	289	26	D77265	107	13
D73929	87	35	D75841	285	10	D77295	263	19B
D73929	95	3	D75841	289	10	D77297	263	19
D74027	45		D75847	157	1	D77330	155	2
D74218	259	35	D75853	151	19	D77386	369	3
D74240	159	30	D75885	253		D77473	149	
D74330	85	25	D75888	253		D77474	149	37
D74330	91	9	D75934	307	4	D77475	149	40
D74343	83	9	D75934	311	4	D77476	149	36
D74405	329	44	D75934	321	42	D77580	307	17
D74406	329	42	D75934	325	42	D77621	149	54
D74408	327	29	D75934	329	59	D77685	95	13
D74410	327	11	D75934	333	42	D77709	359	25
D74411	327	17	D75934	337	42	D77709	353	8
D74412	327	16	D75934	341	55	D77722	155	21
D74415	281	2	D75934	343	3	D77731	245	9
D74416	281	6	D75936	307	7	D77905	91	20
D74417	281	7	D75937	319	1	D78001	85	20A
D74422	17	20	D75938	323	1	D78001	91	19
D74441	281	11	D75939	327	1	D78002	85	20
D74551	111	6	D75940	331	1	D78002	107	18
D74949	131	8	D75941	335	1	D78108	155	25
D75064	263	21	D75997	363	4A	D78263	303	22
D75064	267	4	D76050	117	2	D78264	303	19
D75225	85	21	D76050	119	2	D78354	15	3
D75225	91	15	D76097	139	1	D78397	151	21
D75355	85	17	D76157	365		D78398	151	21
D75360	85	27	D76195	113	16	D78855	143	11
D75362	13	5	D76195	115	26	D79476	81	15
D75370	257	1	D76195	117	18	D79476	83	17
D75370	261	1	D76195	119	31	D79761	17	1
D75454	109	2	D76195	139	12	D80894	143	13
D75465	45	17	D76209	119	19	D80897	275	5
D75465	83	25	D76209	267	18A	D81055	11	1
D75488	149	39	D76229	117	7A	D81056	11	19
D75489	149	42	D76229	119	11	D81057	11	24
D75492	149	42A	D76229	119	23	D81058	11	25
D75536	105	2	D76425	371	5	D81319	17	
D75755	271	4	D76427	371	4	D81592	137	14
D75755	273	4	D76605	137	4	D81693	137	10
D75755	275	4	D76641	357	15	D81871	259	25
D75755	305	22	D76755	105	1	D82192	11	27
D75768	159	24	D76761	91	2	D82792	297	
D75770	113	8	D76903	47	1	D82877	343	9
D75772	247	10	D76904	47	2	D82878	273	16
D75814	105	18	D77082	357	14	D82879	273	11

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D82881	343	10	D86604	309	38	D88857	143	13A
D82883	343	14	D86604	313	44	D88931	355	2
D82886	339	28	D86605	319	33	D88932	355	1
D82886	343	19	D86605	323	33	D89043	117	6
D82888	343	21	D86605	333	35	D89043	119	6
D82890	343	23	D86605	335	33	D89341	169	4
D82891	341	33	D86606	317	47	D89341	171	4
D82891	343	26	D86606	329	51	D89498	299	
D82892	343	27	D86606	341	51	D89609	361	
D82893	341	34	D86771	357	2	D89713	245	12
D82893	343	29	D87069	309	28	D89845	245	12A
D82894	339	29	D87069	313	34	D89934	267	16
D82894	343	32	D87069	315	35	D90452	159	3
D82895	339	30	D87069	327	39	D90452	161	3
D82895	343	33	D87070	309	25	D90453	159	2
D82896	345	37	D87070	313	31	D90453	161	2
D82897	345	38	D87070	315	32	D90752	111	7
D82898	345	40	D87070	327	36	D90752	113	13
D82898	345	41	D87288	299		D90752	115	22
D82900	345	42	D87288	299		D90752	117	1
D82902	345	47	D87296	299	5	D90752	119	1
D82903	343	1	D87297	299	6	D90752	123	
D82905	343	13	D87298	299	13	D90883	263	11
D82908	343	20	D87299	299	14	D90994	335	
D82909	343	22	D87439	83	20	D91097	155	6
D82914	273	14	D87486	375	17	D91122	93	3
D82915	273	15	D87645	247	9	D91427	13	1
D83063	343	11	D87870	353	34	D91631	349	4
D83178	369	7A	D87870	377	46	D92228	11	
D83184	125		D87871	45	1	D92400	353	22
D83188	125	8	D88040	91	14	D92416	353	29
D83189	125	12	D88050	145		D92457	13	12
D83190	125	13	D88053	95	22	D92797	353	1
D83222	121	17	D88214	79	11	D92940	353	14
D83264	375	16	D88410	143	10A	D92941	353	15
D83455	375	18	D88491	129	34	D92942	353	20
D83480	45	14	D88492	129	35	D93057	353	19
D83480	83	23	D88684	97	1	D93241	97	14
D83487	13	19	D88684	101		D93351	45	4
D83994	259	31A	D88743	17		D93480	353	21
D84179	113	1	D88745	307	1	D93496	11	28A
D84179	121		D88745	311	1	D93588	173	15
D84327	95	8	D88745	321	39	D93898	11	28
D85816	363	4	D88745	325	39	D93704	267	24
D85872	85		D88745	329	56	D93751	351	21
D86082	269	30	D88745	333	39	D93751	353	39
D86343	129	24	D88745	337	39	D93751	355	11
D86344	129	25	D88745	341	58	D93751	355	19
D86488	149	44	D88745	345	50	D93751	357	20

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D93753	351	20	D121701	351	1	D124151	157	11
D93753	353	38	D121733	353	2	D124152	375	6
D93753	355	10	D121734	353	3	D124427	289	
D93753	355	18	D121816	47	21	D124427	291	
D93753	357	19	D121817	139	9	D124515	367	
D93753	363	16	D121819	139	10	D124605	173	7
D93805	139	2	D121835	353	11	D124605	177	
D93807	1	8	D121844	45	9	D124605	179	
D93808	11	9	D121856	353	33	D124605	181	
D93915	351	11	D121857	353	10	D124605	183	
D93991	45	10	D121915	307		D124605	185	
D94060	265	41	D121916	311		D124618	95	4A
D94074	353	19A	D121917	315		D124790	369	
D94147	263	5	D121918	319		D124853	175	
D95096	155	14	D121919	323		D125293	169	3
D95096	305	13	D121920	327		D125293	171	3
D95141	301	4	D121921	331		D125295	169	11
D95741	247	3	D121922	343		D125296	169	9
D95781	85	26	D121972	105	18A	D125296	171	9
D95782	91	12	D121972	107	1	D125308	357	2A
D95783	91	11	D122113	355	12	D125312	161	31
D99461	81		D122121	97	3	D125312	163	25
D101559	89		D122121	99		D125312	167	32
D101784	145		D122138	355	13	D125318	161	27
D102013	87		D122157	367		D125318	163	24
D120040	285		D122191	349	8	D125318	167	28
D120040	287		D122192	349	9	D125319	357	3A
D120041	357	4	D122196	339		D125415	119	15
D120271	133	4	D122362	295		D125416	161	32
D120291	349	2	D122671	119	9	D125416	167	33
D120307	83	21	D122671	119	16	D125599	357	1A
D120308	351	12	D122704	165	2	D125602	173	4
D120579	139	13A	D122705	165	3	D125816	263	19C
D120758	163	1	D122706	163	4	D125824	127	7
D120758	171	1	D122706	165	9	D125845	141	40
D120867	21	1	D122882	261	10A	D125848	159	11
D120878	247	7	D122895	11	25A	D125848	161	11
D120899	83	2	D122897	271		D125848	165	12
D120900	85	1	D123205	103	5	D125862	129	26
D121323	355	14	D123387	293	21	D125863	129	27
D121390	377	51	D123949	377	51	D125882	157	
D121555	261	1A	D123950	375	7	D126042	179	15
D121606	81	8A	D123952	375	5	D126043	179	16
D121608	257	13	D123954	375	4	D126114	127	11
D121608	261	9	D123972	375	2	D126116	95	4B
D121608	261	19	D123973	375	3	D126277	179	24
D121639	267	27	D123984	375	6	D126278	179	24A
D121677	351	13	D123985	375	1	D126279	177	13
D121677	353	30	D124144	147	27A	D126415	115	13

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