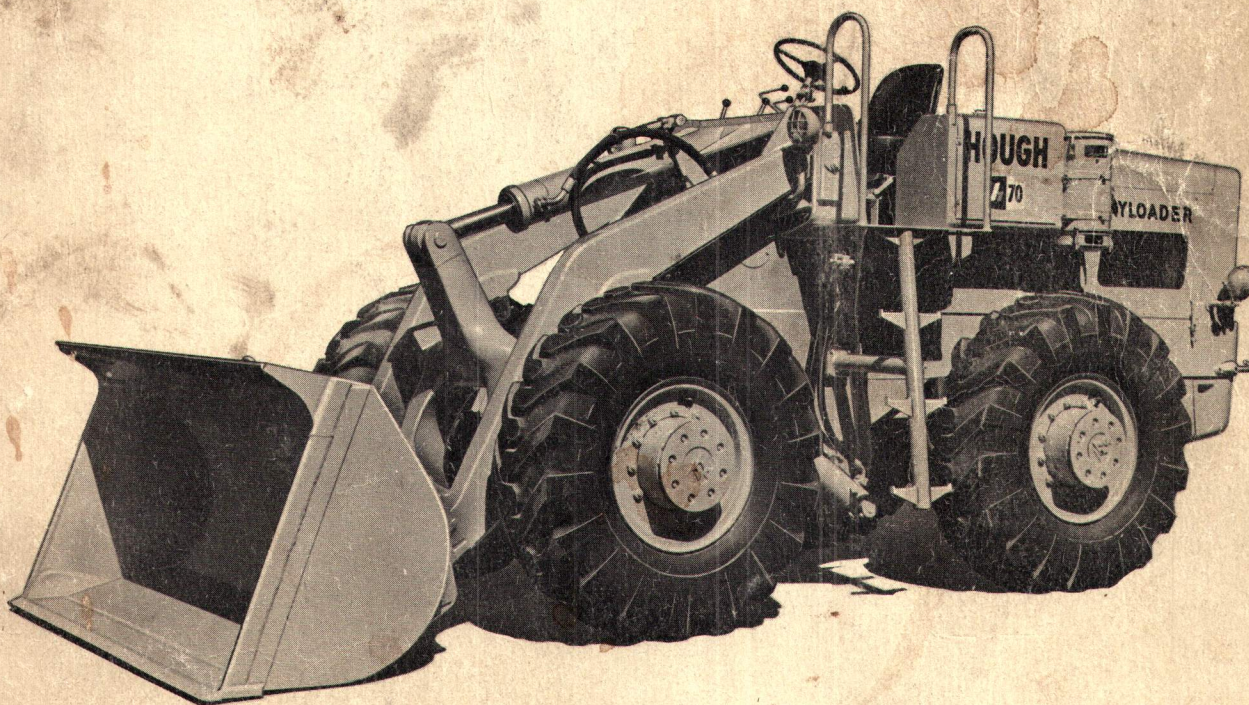


PARTS MANUAL

PAYLOADER[®] **TRACTOR-SHOVEL**

model
H-70C
4-wheel-drive

BEGINNING WITH SERIAL NUMBER
21 CC 1901 & UP DIESEL



PRICE \$1.00

FORM

PM-H-70C

REVISED

JUNE 1964

PRINTED IN U. S. A.

HOUGH[®]



THE FRANK G. HOUGH CO.
LIBERTYVILLE, ILLINOIS
SUBSIDIARY - INTERNATIONAL HARVESTER COMPANY



IN CANADA - HOUGHCO PRODUCTS LTD.,
CANDIAC, QUE.

IT IS THE POLICY OF OUR COMPANY TO IMPROVE ITS PRODUCTS WHEN EVER POSSIBLE AND PRACTICAL TO DO SO. WE RESERVE THE RIGHT TO MAKE CHANGES OR ADD IMPROVEMENTS AT ANY TIME WITHOUT INCURRING ANY OBLIGATION TO MAKE SUCH CHANGES ON MODELS PREVIOUSLY SOLD.

If you should need information not given in this manual, or required the services of a trained mechanic, we urge you to use the extensive facilities offered by our dealers. Dealers are kept informed on the best methods of servicing and are equipped to provide service in the field or in an up-to-date service shop.

Dealers carry ample stock of essential parts.

Listed below you will find the name of dealers with whom your parts orders should be placed and who should be called upon for any required information concerning proper operating and maintenance procedure.

OUR DEALER IS: _____

When ordering parts, always give the dealer both the name and part number of the part required, and also the SERIAL NUMBER OF THE TRACTOR.

SO THAT YOU MAY HAVE IT BEFORE YOU, WRITE THE TRACTOR, POWER UNIT, TRANSMISSION, HYDRAULIC PUMP AND HYDRAULIC VALVE SERIAL NUMBERS HERE:

TRACTOR SERIAL NO: _____

ENGINE UNIT SERIAL NO: _____

REAR AXLE SERIAL NO: _____

FRONT AXLE SERIAL NO: _____

HYDRAULIC PUMP SERIAL NO: _____

HYDRAULIC VALVE SERIAL NO: _____

POWER TAKE-OFF SERIAL NO: _____

TORQUE CONVERTER SERIAL NO: _____

TRANSMISSION SERIAL NO: _____

DIRECTORY
TO
MODEL H-70 "PAYLOADER" PARTS MANUAL

This manual is used specifically for the following Series of H-70 "PAYLOADER".

This serial number of a "PAYLOADER" consists of four parts which identify it:

	<u>MODEL NO.</u>	<u>SERIES</u>	<u>POWER</u>	<u>UNIT NO.</u>
CUMMINS DIESEL	21	C	C	1901
DETROIT DIESEL	21	C	G	2010

IMPORTANT

Each part pictured in this manual is given an identification number which corresponds to the item number in the parts lists of the group. These item numbers are given to identify the part and names of the items wanted. Parts listed herein apply to machines beginning with serial number shown on the outside cover, unless otherwise specified in the serial number column or at the top of the page. Figures in the "Qty" column indicate the number of that part used in the group -- not the total for the machine.

The bucket is always considered as the front end of the machine and right (R. H.) or left hand (L. H.) sides are determined by the operator's position when sitting in the seat and facing the bucket.

Always give the following information on all repair parts orders.

1. The Part Number, Name and Quantity of Items needed.
2. The Serial Number and Model Letters of the machine.
3. When ordering parts for the Transmission, Drive Axle, Pump, Valve, or Engine, be sure to give the Serial Number and Model Number of such units also.
4. Give the Destination and Method of Shipment desired along with any special invoicing instructions.

COMMERCIAL HARDWARE

Special code numbers are listed in the part number column by the contractor. Listed below is the coded index to be used to identify the capscrews, nuts, flatwashers and lockwashers. Such information shall be sufficiently complete to enable the customers to make the replacement from commercial sources, if necessary. All special hardware will have the regular six digit number.

CAPSCREWS - The letter "S" followed by the part number indicates the diameter in 16ths and the length in 8ths. S-1 is fine pitch, S-2 is coarse pitch.

EXAMPLE: S-1820 is fine pitch, 8/16" in diameter by 20/8" long or 1/2" NF x 2-1/2" SAE - Grade #5 steel.

NUTS - The letter "H" followed by an even number digit denotes coarse pitch and type of nut. An odd number digit denotes fine pitch and type of nut. Remainder of part number indicates size in 16ths.

EXAMPLE: H-18 denotes fine pitch, hexagon nut, 8/16" diameter or 1/2 - 20 thread. Types of nuts are digits 1 & 2 - Hex Nut, 3 & 4 - Jam Nut, 5 & 6 - Hexagon Slotted & 7 & 8 - Hex. Slotted Thick.

WASHER, FLAT - The letters "WF" followed by the 1st digit denotes type, (digit #1 is Wrought, digit #3 is SAE) 2nd and 3rd digit denotes bolt size of flatwasher in 16ths.

EXAMPLE: WF-18 denotes Wrought type washer 8/16" bolt size or 1/2" bolt size.

LOCKWASHER - The letters "WL" followed by 1st digit denotes thickness, (WL-1 is medium, WL-2 is light and WL-4 is heavy) 2nd and 3rd digit denotes bolt size of lockwasher in 16ths.

EXAMPLE: WL-18 denotes medium thickness, 8/16" bolt size or 1/2" bolt size of washer.

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SECTION 1

CHASSIS

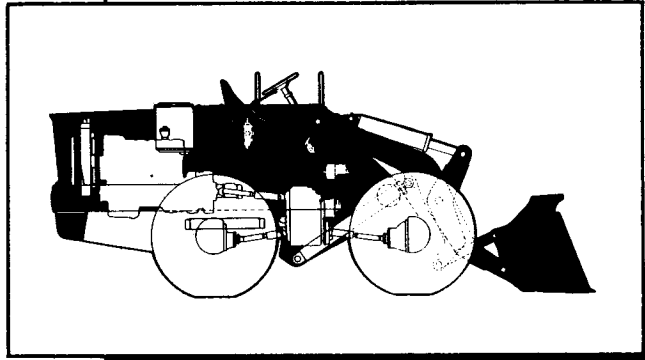


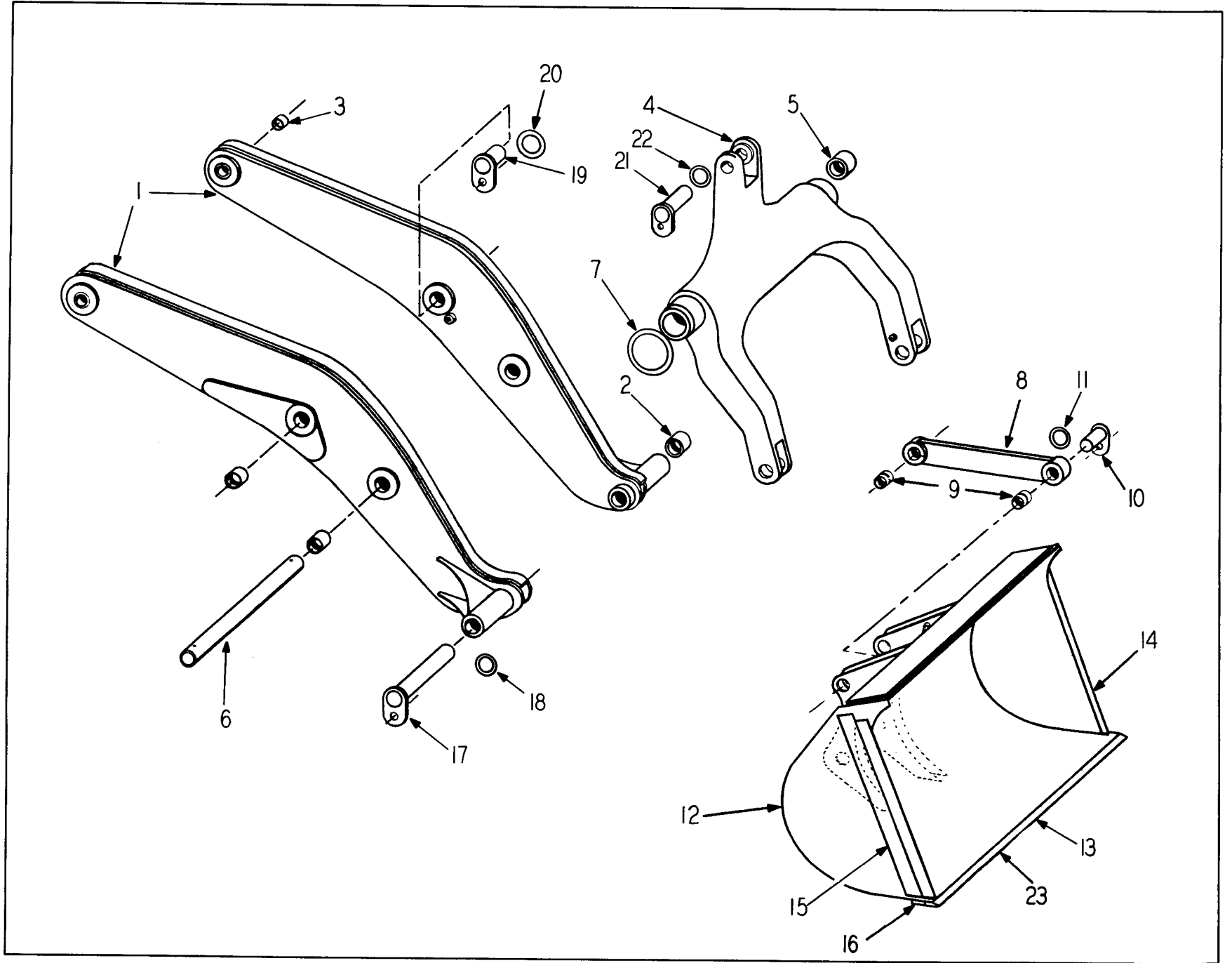
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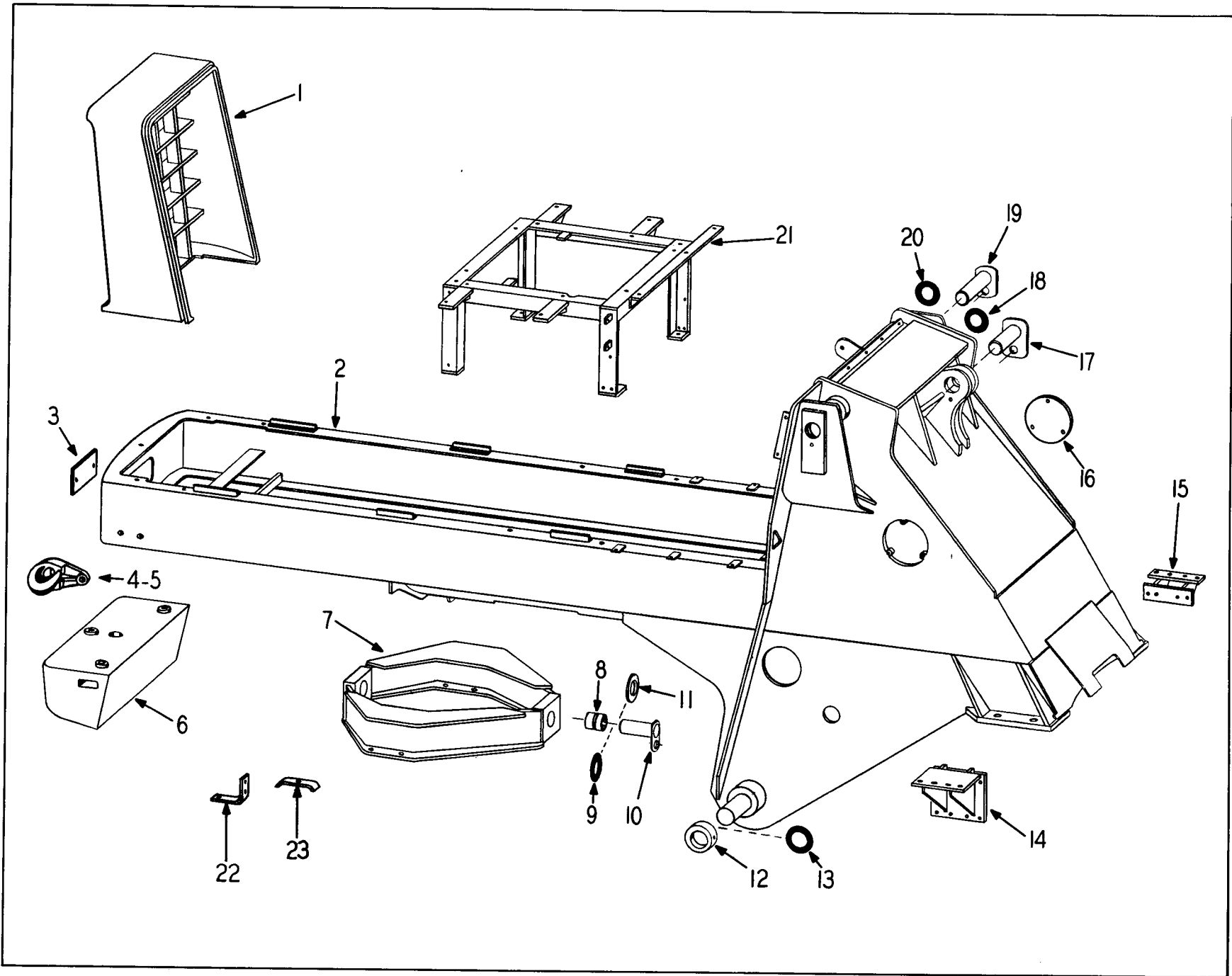
BOOM AND BUCKET



BOOM & BUCKET

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	172178H2	BOOM, R. H.) Includes 2 of	1		
1	172179H2	BOOM, L. H.) Items 2 & 3	1		
2	172190H1	BUSHING	4		
3	172195H1	BUSHING	4		
4	172061H1	BELLCRANK, Includes Item 5	1		
	118491H1	FITTING, Grease	2		
5	172081H1	BUSHING	2		
6	172090H1	SHAFT, Pivot.....	1		
	S-1846	SCREW, Cap)	2		
	E - 18	NUT, Lock) Pivot Shaft	2		
7	181614H1	RING, Cord	2		
8	172095H2	LINK, Bucket (Incl. Item 9) (Order 2 - 202947H1)	2	21CC-1901	21CC-2649
8	202947H1	LINK, Bucket (Incl. Item 9)	2	21CC-2650	Up
9	171890H1	BUSHING	4		
10	179519H1	PINLOCK, Bucket link	4		
	S-187	SCREW, Cap	4		
	WF-18	WASHER, Flat	4		
	WL-18	WASHER, Lock	4		
11	181613H1	RING, Cord	8		
	118491H1	FITTING, Grease	4		
12	180286H1	BUCKET, Includes Items 13, 14, 15, 16 & 23	1		
13	171839H1	CUTTING EDGE, Includes Items 16 & 23	1		
14	162251H1	CUTTING EDGE, Side	2		
15	171842H1	PLATE, Backing	2		
16	171840H1	PLATE, Backing	1		
17	179515H2	PINLOCK, Bucket pivot	2		
	WF-18	WASHER, Flat	2		
	WL-18	WASHER, Lock	2		
	S-187	SCREW, Cap	2		
18	172143H1	RING, Cord.....	8		
19	179517H1	PINLOCK, Cylinder pivot	2		
	WF-18	WASHER, Flat	2		
	WL-18	WASHER, Lock	2		
	S-187	SCREW, Cap	2		
20	181613H1	RING, Cord	4		
	118491H1	FITTING, Grease	4		
21	179585H1	PINLOCK, Bracket cylinder pivot	1		
	S-1108	SCREW, Cap	1		
	WF-110	WASHER, Flat	1		
	WL-110	WASHER, Lock	1		
22	181614H1	RING, Cord	2		
23	171841H1	TIP, Cutting edge	1		

MAIN FRAME



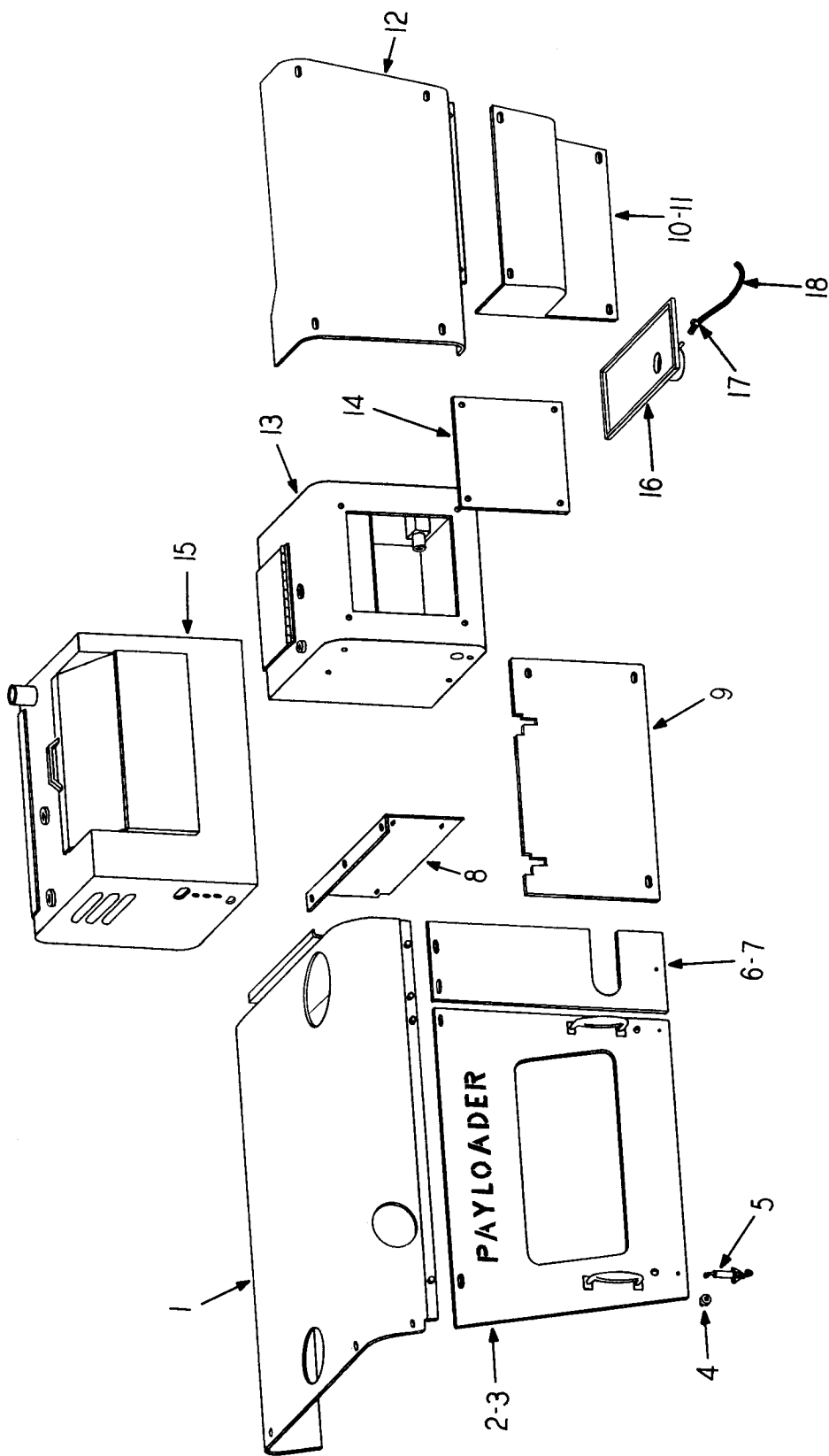
MAIN FRAME

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	172043H1	Grille	1		
	S-11026	Screw, Cap	1		
	S-11030	Screw, Cap	2		
	WF-310	Washer, Flat	3		
	WL-110	Washer, Lock	3		
	H-110	Nut	3		
2	169820H2	Frame, Main	1	21CC-1901 thru 21CC-2110	
2	181770H1	Frame, Main	1	21CC-2111 thru 21CC-2236	
2	181770H2	Frame, Main	1	21CC-2237 & Up	
3	195715H1	Cover, Access Hole	1		
	S-1610	Screw, Cap	2		
	WF-16	Washer, Flat	2		
	WL-16	Washer, Lock	2		
4	154813H2	Hook, Towing R.H. ....(See Items 24 & 25 for.....	1	21CC-1901 thru 21CC-2516	
5	154814H2	Hook, Towing L.H. S/N 21CC-2517 & Up).....	1	21CC-1901 thru 21CC-2516	
	S-11224	Screw, Cap	2		
	WL-112	Washer, Lock	2		
	H-112	Nut	2		
	S-11016	Screw, Cap	2		
	WL-110	Washer, Lock	2		
	H-110	Nut	2		
6	171626H1	Counterweight	1	21CC-1901 thru 21CC-2110	
6	171626H2	Counterweight	1	21CC-2111 thru 21CC-2236	
6	183648H2	Counterweight	1	21CC-2237 & Up	
	S-11230	Screw, Cap	3		
	WF-112	Washer, Flat	3		
	WL-112	Washer, Lock	3		
	H-112	Nut	3		
7	172136H1	Bolster, Includes Item 8	1		
8	158773H1	Bushing	2		
9	172143H1	Ring, Cord	4		
10	179521H1	Pin & Lockplate	2		
11	172142H1	Spacer	AR		
	S-187	Screw, Cap	2		
	WF-18	Washer, Flat	2		
	WL-18	Washer, Lock	2		
	118492H1	Fitting, Grease	2		
	187504H1	Spacer	2		
	125319H1	Screw, Cap	8		
	E-112	Nut	8		
12	171900H1	Collar	2		
	S-1842	Screw, Cap	2		
	WL-18	Washer, Lock	2		
	H-18	Nut	2		
13	181615H1	Ring, Cord	4		
14	171651H1	Bracket, Transmission, R.H.	1		
15	171652H1	Bracket, Transmission, L.H.	1		
	S-2812	Screw, Cap	7		
	WL-18	Washer, Lock	7		
	S-1816	Screw, Cap	4		
	E-18	Nut	4		
	S-1816	Screw, Cap	8		
	E-18	Nut	8		
	WF-18	Washer, Flat	8		
	176146H1	Bolt	8		
	E-116	Nut	8		
16	172547H1	Cover, Access Hole	2		
	S-255	Screw, Cap	6		
	WL-15	Washer, Lock	6		
17	179583H1	Pinlock, Bucket Cylinder Pivot	1		
	S-1108	Screw, Cap	1		
	WF-110	Washer, Flat	1		
	WL-110	Washer, Lock	1		
18	181614H1	Ring, Cord	2		

(Continued on following page)

MAIN FRAME (Continued)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
19	179513H1	Pinlock, Boom Pivot	2		
	S-1108	Screw, Cap	2		
	WF-110	Washer, Flat	2		
	WL-110	Washer, Lock	2		
20	181614H1	Ring, Cord	4		
21	171593H1	Support, Reservoir, Battery Box & Deck - Order #179091 & 1 Panel #179148	1		
21	196036H1	Support, Reservoir, Battery Box & Deck	1		
	S-1816	Screw, Cap	4		
	WF-18	Washer, Flat	4		
	E-18	Nut	4		
22	180268H1	Angle, Cross Pipe Support	1		
23	180269H1	Clip, Cross Pipe Support	1		
	S-1620	Screw, Cap, Cross Pipe to Angle	1		
	S-1610	Screw, Cap, Angle to Angle	2		
	H-16	Nut	3		
	WL-16	Washer, Lock	3		
24	196501H1	Pin, Drawbar	1		
25	CP-816	Pin, Cotter	1		



SHEET COWLING

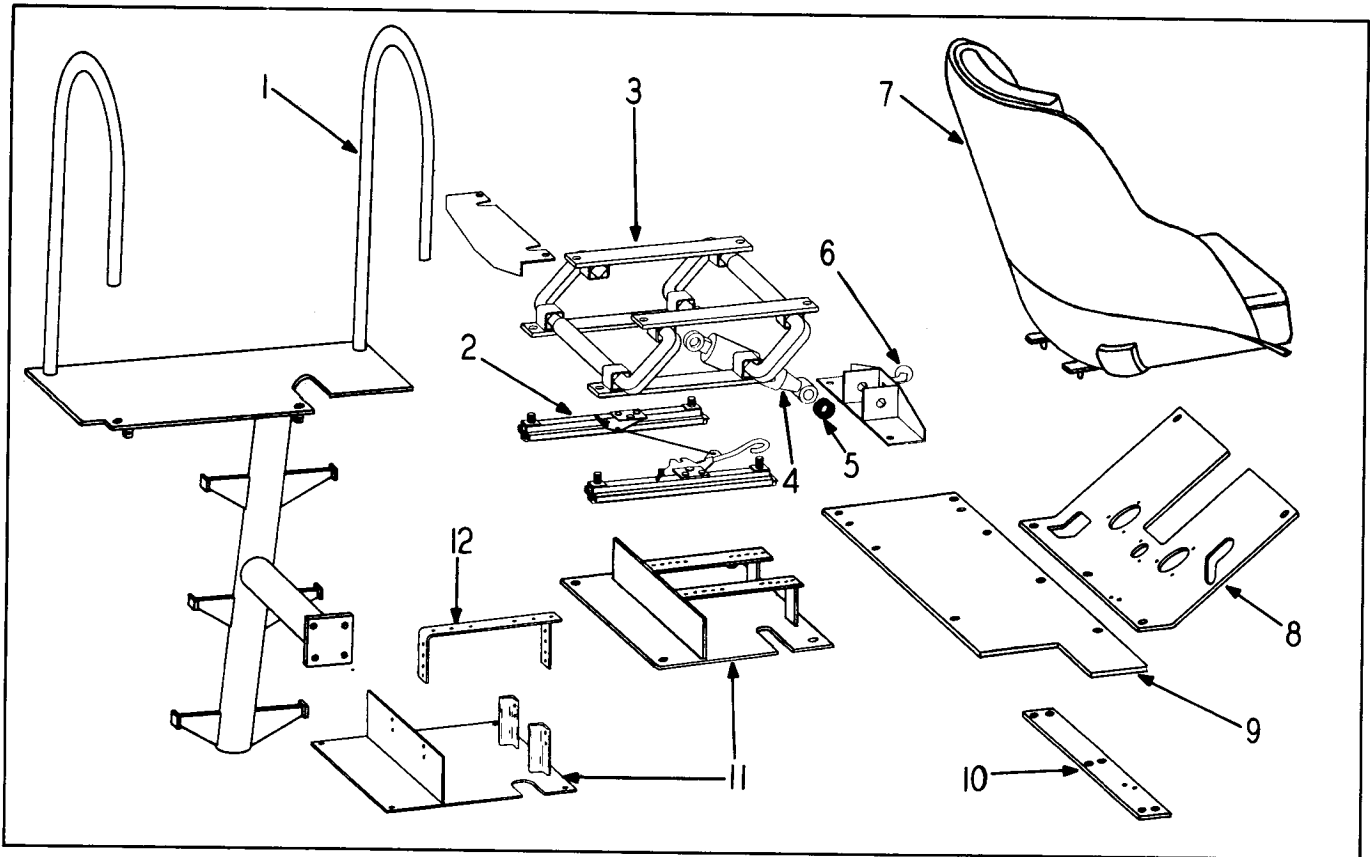
SHEET COWLING

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	172532H2	Hood, Rear (For models with Cummins Diesel Engines)	1		
1	181664H1	Hood, Rear (For models with Detroit Diesel Engines)	1		
	S-167	Screw, Cap, hood front mounting	3		
	S-1611	Screw, Cap, hood rear mounting	4		
	WL-16	Washer, Lock	7		
	WF-36	Washer, Flat	4		
	H - 16	Nut	4		
2	172533H1	Panel Assembly, Rear R.H. side	1		
3	172534H1	Panel Assembly, Rear L.H. side	1		
4	153619H1	Bumper	4		
	153640H1	Screw	4		
	104467H1	Nut	4		
	104469H1	Washer, Lock	4		
5	153618H1	Latch	4		
	168753H1	Screw, Latch to frame	12		
6	172535H1	Panel, R.H. rear side, small	1		
7	176200H1	Panel, L.H. rear side, small	1		
	S-167	Screw, Cap	2		
	WF-36	Washer, Flat	2		
	WL-16	Washer, Lock	2		
8	172537H1	Panel, Oper. compt. rear (Order 179148)	1		
8	179148H1	Panel, Oper. compt. rear (Common to Cum. & G.M.)	1		
8A	182574H1	Plate, Oper. compt. rear	1		
	S-167	Screw, Cap	10		
	WF-36	Washer, Flat	6		
	WL-16	Washer, Lock	10		
9	172539H2	Panel, Center, L.H. side	1		
9	178295H1	Panel, Center, R.H. side	1		
	S-168	Screw, Cap	8		
	WF-36	Washer, Flat	8		
	WL-16	Washer, Lock	8		
10	175324H2	Panel, Forward, lower side, R.H.	1		
11	175325H1	Panel, Forward, lower side, L.H.	1		
	S-167	Screw, Cap	8		
	WF-36	Washer, Flat	8		
	WL-16	Washer, Lock	8		
12	175323H1	Panel, Forward upper side	1		
	S-167	Screw, Cap	4		
	WF-36	Washer, Flat	4		
	WL-16	Washer, Lock	4		
13	172548H2	Enclosure, Hydraulic manifold	1	21CC-1901	21CC-2515
13	193917H1	Enclosure, Hydraulic manifold	1	21CC-2516	Up
	S-1811	Screw, Cap	4		
	WL-18	Washer, Lock	4		
	H - 18	Nut	4		
14	173806H1	Cover, Hydraulic manifold enclosure	1		
	S-145	Screw, Cap	4		
	WL-14	Washer, Lock	4		
15	171825H2	Box, Battery	1		
	S-1812	Screw, Cap	4		
	WL-18	Washer, Lock	4		
	H - 18	Nut	4		
	172565H1	Washer	1		
	171826H1	False Bottom, Battery box	1		
	171828H1	Cover, Battery box	1		
	173352H1	Bolt (XF-25)	1		
	189590H1	Bolt (Exide 4-D)	1	21CC-1901	21CC-2361
	CP-36	Pin, Cotter	1	21CC-2362	Up

(Continued on following page)

SHEET COWLING (Continued)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	E-14	Nut	1		
	171827 H1	Retainer, Battery	1		
	174898 H1	Panel, Instrument) See Note * ...	1		
	188810 H1	Panel, Instrument)	1		
	127514 H1	Grommet	4		
	168751 H1	Screw	4		
	E-34	Nut	4		
16	178296 H1	Shield, Oil (replaced by 204036H1 - See Note)	1	21CC-1901	21CC-2535
17	168816 H1	Clamp	1		
	S-167	Screw, Cap	1		
	WF-16	Washer, Flat	1		
	WL-16	Washer, Lock	1		
	H - 14	Nut	1		
18	176090 H1	Hose, Oil drain	1		
	168417 H1	Clamp, Hose to support weldment	2		
		* #174898 Instrument Panel (for models with Key Type Ignition Switch) #188810 Instrument Panel (for models with Lever Type Ignition Switch)			
		NOTE: On machines of S/N 21CC-2536 & Up, Item 16, #178296, Shield, Oil - is replaced by a formed plate #204036H1 the following hardware is also used. (1) S-167 Screw, Cap (1) WF-16 Washer, Flat (1) WL-16 Washer, Lock			
		Delete remainder of items on page I-9 when using new formed plate #204036H1 and related hardware.			



OPERATOR'S COMPARTMENT

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers		
				FROM	THRU	
1	173936H1	Ladder (See Note).....	1			
	S-1811	Screw, Cap	4			
	H-18	Nut	4			
	WL-18	Washer, Lock	4			
	189248H1	Screw, Cap	2			
	WF-36	Washer, Flat	2			
	WL-16	Washer, Lock	2			
	H-16	Nut	2			
	176445H1	Base, Shock Free-Includes Items 2 thru 6	1			
	177299H1	Kit, Shock Absorber-Includes Items 4, 5, & 6	1			
	177303H1	Slides, Adjustable	1			
	177298H1	Suspension, Shock Free	1			
	177301H1	Shock Absorber	1			
	177302H1	Bushing, Rubber	4			
177300H1	Handle	1				
7	160253H1	Seat	1			
	S-1510	Screw, Cap	4			
	WF-15	Washer, Flat	4			
	WL-15	Washer, Lock	4			
	H-15	Nut	4			
	WF-15	Washer, Flat	4			
	H-15	Nut	4			
			Seat to Base			
8	171618H1	Floorboard, Front	1	21CC-1901	21CC-2330	
	187568H1	Floorboard, Front	1	21CC-2331	Up	
8	S-1613	Screw, Cap	2			
	S-168	Screw, Cap	5			
	H-16	Nut	2			
	WF-36	Washer, Flat	5			
	WF-16	Washer, Lock	5			
	9	175326H1	Floorboard, Rear	1		
		180107H1	Screw, Cap	2		
S-168		Screw, Cap	5			

OPERATOR'S COMPARTMENT (cont)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	WF-36	Washer, Flat	7		
	WL-16	Washer, Lock	7		
10	171616H1	Runner, Floorboard	1		
11	179145H1	Deck, Seat (replaced #171611) order next 5 Items	1		
11	185998H1	Deck, Seat	1	21CG-2166	& UP
12	185993H1	Support, Seat	2	21CG-2166	& UP
	S-159	Screw, Cap	8		
	WL-15	Washer, Lock	8		
	H-15	Nut	8		
	S-168	Screw, Cap	4		
	WF-36	Washer, Flat	4		
	WL-16	Washer, Lock	4		

NOTE: A bolt-on type of ladder construction replaces the 173936 ladder weldment. On order for the 173936 ladder weldment, the following parts will be supplied:

- (1) 201670H1 Ladder
- (1) 203378H1 Rail (Long)
- (1) 200690H1 Rail (Short)
- (2) S-11010 Bolt
- (2) WL-110 Lockwasher

SECTION 2

ENGINE

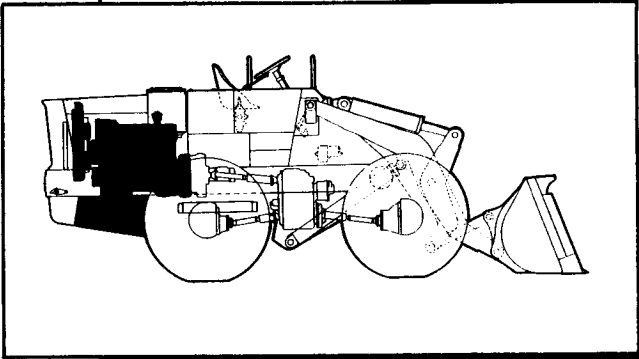
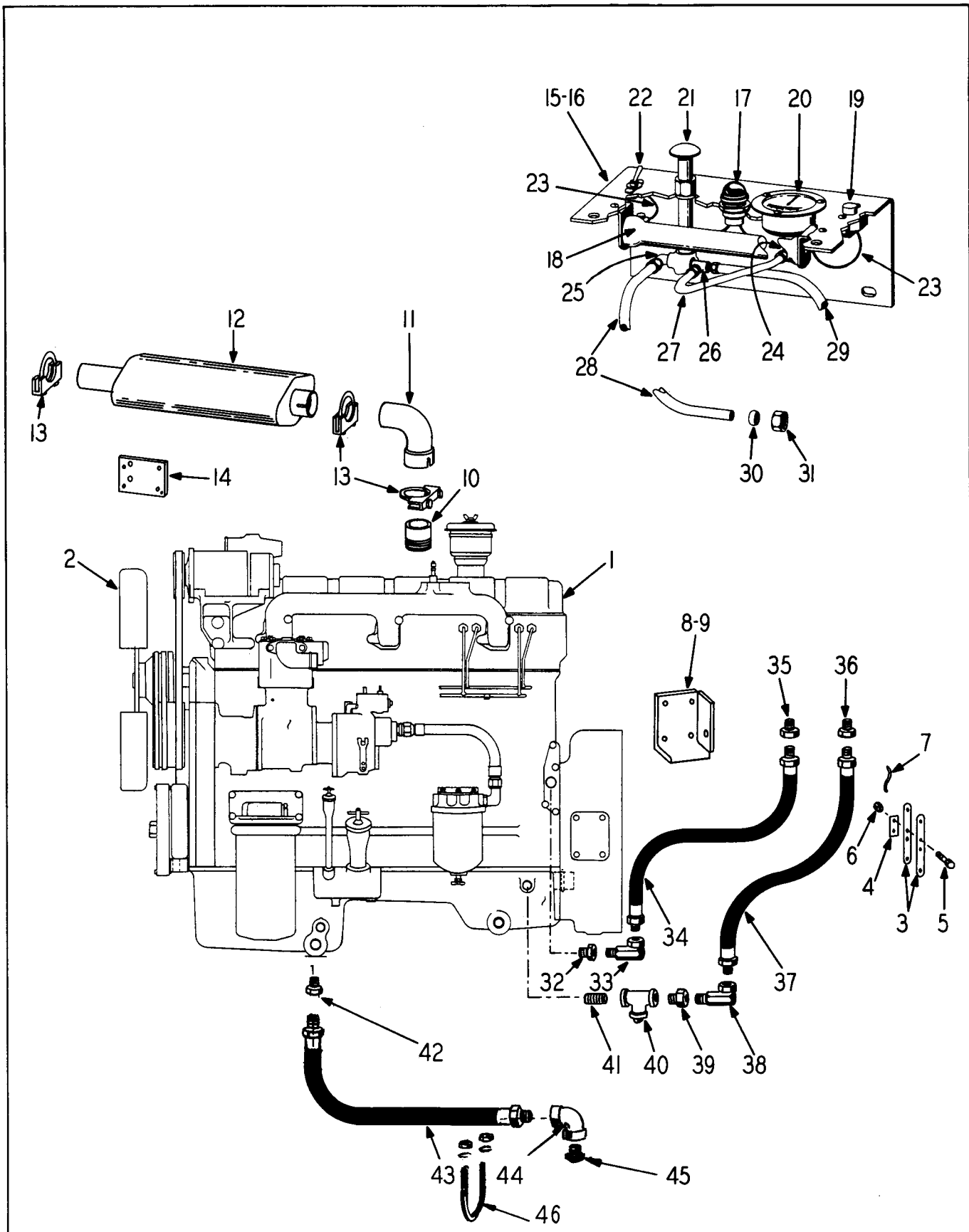


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ENGINE & MOUNTING

**ENGINE MOUNTING
FOR MACHINES OF S/N 21CC-1901 THRU 21CC-2212**

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
ENGINE & MOUNTING (CUMMINS ENGINE)					
1	171727H1	ENGINE, C-160 (See Cummins Engine Manual)	1		
2	176486H1	FAN	1		
	113068H1	SPACER, Engine Mount	2		
	S-11036	SCREW, Cap	2		
	E-110	NUT	2		
3	143277H1	STRAP, Converter	8		
4	129988H1	SPACER	4		
5	143275H1	SCREW, Cap	8		
6	130823H1	NUT	8		
7	LW-165	WIRE, Lock	4		
8	171728H1	BRACKET, Engine Mount, R.H.	1		
9	171729H1	BRACKET, Engine Mount, L.H.	1		
	S-1812	SCREW, Cap	8		
	WL-18	WASHER, Lock	8		
	S-11620	SCREW, Cap	2		
	E-116	NUT	2		
10	172147H1	STACK, Exhaust	1		
11	176218H1	ELBOW	1		
12	177217H2	MUFFLER	1		
13	127487H1	CLAMP	3		
14	179305H1	BRACKET, Voltage Regulator	1		
	S-1410	SCREW, Cap	4		
	WL-14	WASHER, Lock	4		
	H-14	NUT	4		
	S-266	SCREW, Cap	2		
	WL-16	WASHER, Lock	2		
	139017H1	STRAP, Hose & Wire	2		

ENGINE START AND STOP GROUP

15		STARTING AID ASSEMBLY (See Cummins Engine Manual)	1		
16	175381H1	BRACKET, Starting Aid	1		
	S-166	SCREW, Cap	4		
	H-16	NUT	4		
	WL-16	WASHER, Lock	4		
	WF-16	WASHER, Flat	4		
17		LIGHT, Indicator (See Cummins Engine Manual)	1		
18		RESISTOR, Preheater (See Cummins Engine Manual) ..	1		
	168456H1	SCREW	2		
	WL-14	WASHER, Lock	2		
	H-24	NUT	2		
19		CIRCUIT, Breaker (See Cummins Engine Manual)	1		
20	140746H1	SCREW, Circuit Breaker Mtg.	2		
		GAUGE, Fuel Oil Pressure (See Cummins Engine Manual)	1		
	156438H1	SCREW	3		
	104469H1	WASHER, Lock	3		
	104467H1	NUT	3		
21		PRIMER, Hand (See Cummins Engine Manual)	1		
22		SWITCH, On-Off Toggle (See Cummins Engine Manual)	1		
23	134319H1	WIRE	1		
24	137486H1	ELBOW	1		
25	HA-791	ELBOW	1		
26	137487H1	TEE	1		
27	137488H1	TUBING, Primer to Press. Gauge	1		
28	132963H1	TUBING, Primer to Nozzle on Eng.	1		
29	132963H1	TUBING, Filter Line to Primer	1		
30	128215H1	SLEEVE	2		
31	128214H1	NUT, Tube	2		
	161043H1	CLIP	2		
	129668H1	CLIP	1		

(Continued on following page)

ENGINE AND MOUNTING (CUMMINS ENGINE) (Continued)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
ENGINE START & STOP GROUP (Continued)					
24	182866H1	ELBOW, At Gage	1		
25	175775H1	ELBOW, At Primer	1		
26	182594H1	TEE	1		
27	182656H1	TUBING, Primer to Press. Gage	1		
28	179938H1	TUBING, Primer to Nozzle on Eng.	1		
29	175934H1	TUBING, Filter Fuel Line to Primer	1		
30	180080H1	SLEEVE	2		
31	175775H1	ELBOW, At Engine	2		
	179983H1	CLIP	1		

LINE - ENGINE TO LUBER FINER

32	132231H1	BUSHING, Reducer	1		
33	109181H1	ELBOW, 90°	1		
34	171733H1	HOSE	1		
35	127537H1	BUSHING, Reducer	1		
	150339H1	LUBER, Finer (See Page 2-8)	1		

LINE - LUBER FINER TO ENGINE

36	127537H1	BUSHING, Reducer	1		
37	171732H1	HOSE	1		
38	103496H1	ELBOW, 90°	1		
39	127537H1	BUSHING, Reducer	1		
40	107863H1	ADAPTER	1		

LINE - OIL PAN DRAIN

42	179803H1	PLUG, Drain	1		
43	104408H1	HOSE	1		
44	103470H1	ELBOW	1		
45	P-18	PLUG, Pipe	1		
46	153676H1	"U" BOLT	1		
	H-26	NUT	2		
	WL-16	WASHER, Lock	2		
	169912H1	INSERT	2		
	169913H1	HOSE	1		
	168815H1	CLAMP	2		
	P-116	PLUG	1		
	103472H1	ELBOW	1		
	179898H1	HOSE	1		
	176159H1	"U" BOLT	1		
	H-26	NUT	2		
	WL-16	WASHER, Lock	2		
	184605H1	OIL DRAIN WELDMENT	1		
	S-168	SCREW, Cap	2		
	WL-16	WASHER, Lock	2		
	H-16	NUT	2		
	127547H1	BUSHING, Reducer	1		
	174007H1	CONNECTOR	1		
	184917H1	HOSE	1		
	172818H1	CLAMP	2		
	210-8	PLUG	1		
	OR2-8	"O" RING	1		
	127547H1	BUSHING, Reducer	1		
	172695H1	INSERT, 90° Hose	1		
	177928H1	HOSE	1		
	172818H1	CLAMP	2		
	210-8	PLUG	1		
	OR2-8	"O" RING	1		

Used on Machines of S/N 21CC-2219 & Up

Used on machines of S/N 21CC-1901 thru 1961 less 1934

Used on machines of S/N 21CC-1962 thru 2073 less 2071

Used on machines of S/N 21CC-2071 thru 2199 less 2072 & 2073

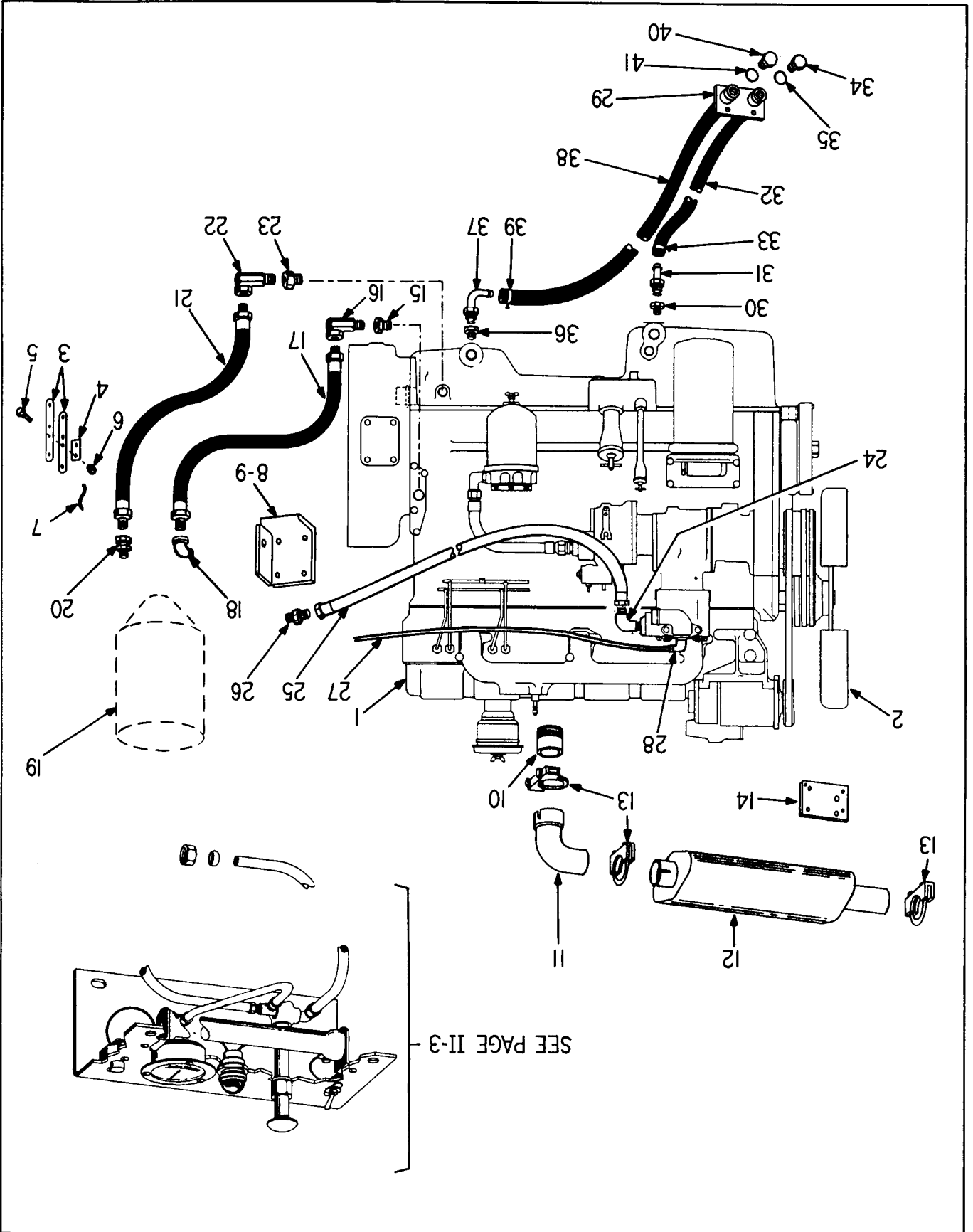
Oil Drain Line Rear Sump

Oil Drain Line, Front Sump

Used on Machines of S/N 21CC-2200 & Up

NOTES

ENGINE AND MOUNTING (CUMMINS ENGINE)



**ENGINE AND MOUNTING (CUMMINS ENGINE)
FOR MACHINES OF S/N 21CC-2213 and UP**

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
ENGINE AND MOUNTING (Cummins Engine)					
1	183141H1	ENGINE, C-160 (See Cummins Engine Manual)	1		
2	176486H1	FAN	1		
	113068H1	SPACER	2		
	S-11036	SCREW, Cap	2		
	E-110	NUT	2		
3	143277H1	STRAP, Flywheel	8		
4	129988H1	SPACER	4		
5	143275H1	SCREW, Cap, Strap to Flywheel	8		
6	130823H1	NUT, Strap to Converter	8		
7	LW-165	WIRE, Lock	4		
8	171728H1	BRACKET, Engine Mount, R.H.	1		
9	171729H1	BRACKET, Engine Mount, L.H.	1		
	S-2812	SCREW, Cap	5		
	S-2814	SCREW, Cap	3		
	WL-18	WASHER, Lock	8		
	S-11620	SCREW, Cap	2		
	E-116	NUT	2		
10	172147H1	STACK, Exhaust	1		
11	176218H1	ELBOW	1		
12	176217H1	MUFFLER	1		
13	127487H1	CLAMP	3		
14	179305H1	BRACKET, Voltage Regulator	1		
	S-1410	SCREW, Cap	4		
	WL-14	WASHER, Lock	4		
	H-14	NUT	4		
	S-266	SCREW, Cap	2		
	WL-16	WASHER, Lock	2		
		} Brackets to Engine			
		} Brackets to Frame			
		} Regulator to Bracket			
		} Regulator Bracket to Engine			

**ENGINE START AND STOP GROUP
(See Page II-3)**

LINE - ENGINE TO LUBE OIL BY-PASS FILTER					
15	127539H1	BUSHING, Reducer	1		
16	122763H1	ELBOW, 90°	1		
17	183638H1	HOSE, Engine to Lube Filter	1		
18	103488H1	ELBOW, 90° St.	1		
19		FILTER, Lube Oil by-pass (See Cummins Engine Manual)	1		
	S-255	SCREW, Cap	8		
	WL-15	WASHER, Lock	8		
	139017H1	STRAP	2		
		} Filter to Rear Hood			

LINE - BY-PASS FILTER TO ENGINE

20	122761H1	ADAPTER, Union	1		
21	183638H1	HOSE	1		
22	103488H1	ELBOW, St. 90°	1		
23	127538H1	BUSHING, Reducer	1		

LINE - COMPRESSOR OUTLET

24	160997H1	ELBOW	1		
25	179017H1	TUBING, Fitting to Connector	1		
26	157919H1	CONNECTOR	1		

LINE - GOVERNOR TO COMPRESSOR

27	175769H1	TUBING	1		
28	175775H1	ELBOW	1		
(Continued on following page)					

ENGINE AND MOUNTING (CUMMINS ENGINE) (Continued)
FOR MACHINES OF S/N 21CC-2213 and UP

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
ENGINE OIL PAN DRAIN					
29	184605H1	DRAIN, Oil	1		
	S-168	SCREW, Cap	2		
	WL-16	WASHER, Lock	2		
	H-16	NUT	2		
		] Oil Drain Attaching			

OIL DRAIN LINE - REAR SUMP

30	127547H1	BUSHING, Reducer	1		
31	167971H1	INSERT	1		
32	184917H1	HOSE	1		
33	172818H1	CLAMP	2		
34	210-8	PLUG	1		
35	OR2-8	"O" RING	1		

OIL DRAIN LINE - FRONT SUMP

36	127547H1	BUSHING, Reducer	1		
37	172695H1	INSERT, Hose, 90°	1		
38	177928H1	HOSE	1		
39	172818H1	CLAMP	2		
40	210-8	PLUG	1		
41	OR2-8	"O" RING	1		

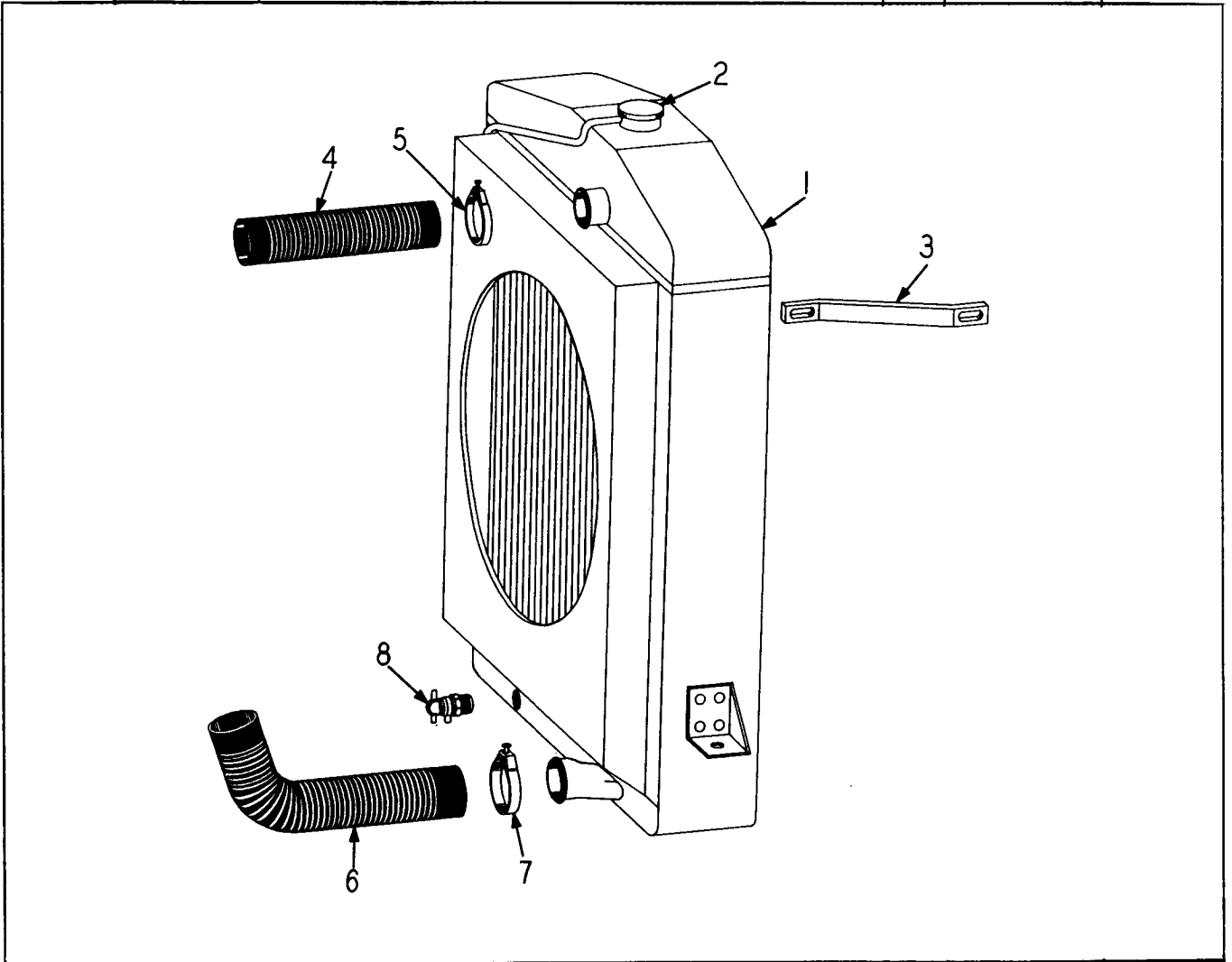
RADIATOR

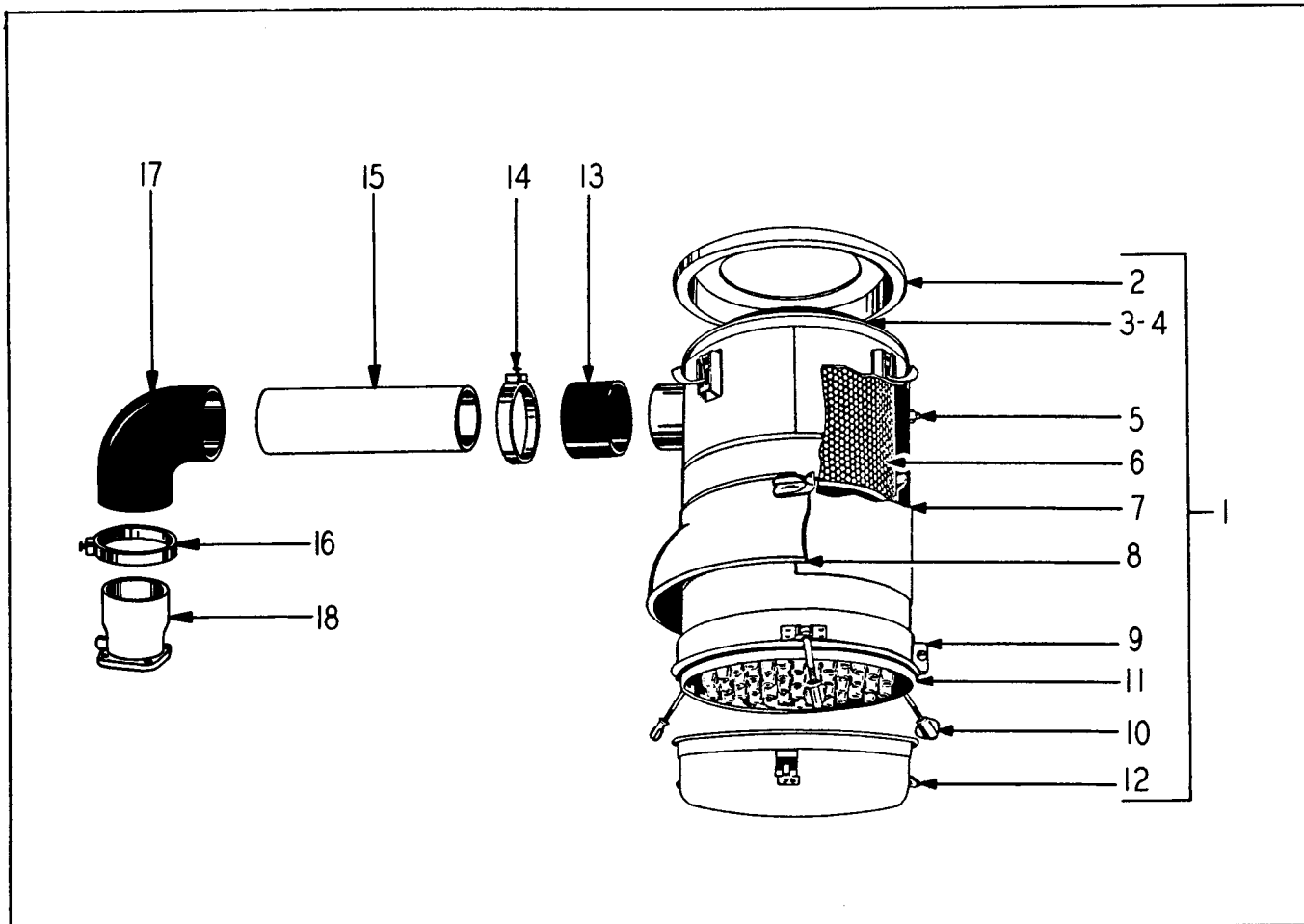
ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	175581H3	RADIATOR	1		
	165338H1	NUT, Lower mounting	1		
2	HA-1274	CAP, Radiator	1		
	180634H1	CAP, Radiator	1		
3	204710H1	ARM, Support	2		
	S-168	SCREW, Cap	4		
	WF-16	WASHER, Flat	4		
	E - 16	NUT	2		
4	167725H1	HOSE, Radiator inlet	1		
5	C - 40	CLAMP, Hose	2		
6	175726H1	HOSE, Radiator outlet	1		
7	C - 46	CLAMP, Hose	2		
8	111493H1	VALVE, Drain	1		
	S-1814	SCREW, Cap	2		
	E - 18	NUT	2		

) Refer to Note

) Radiator to Frame

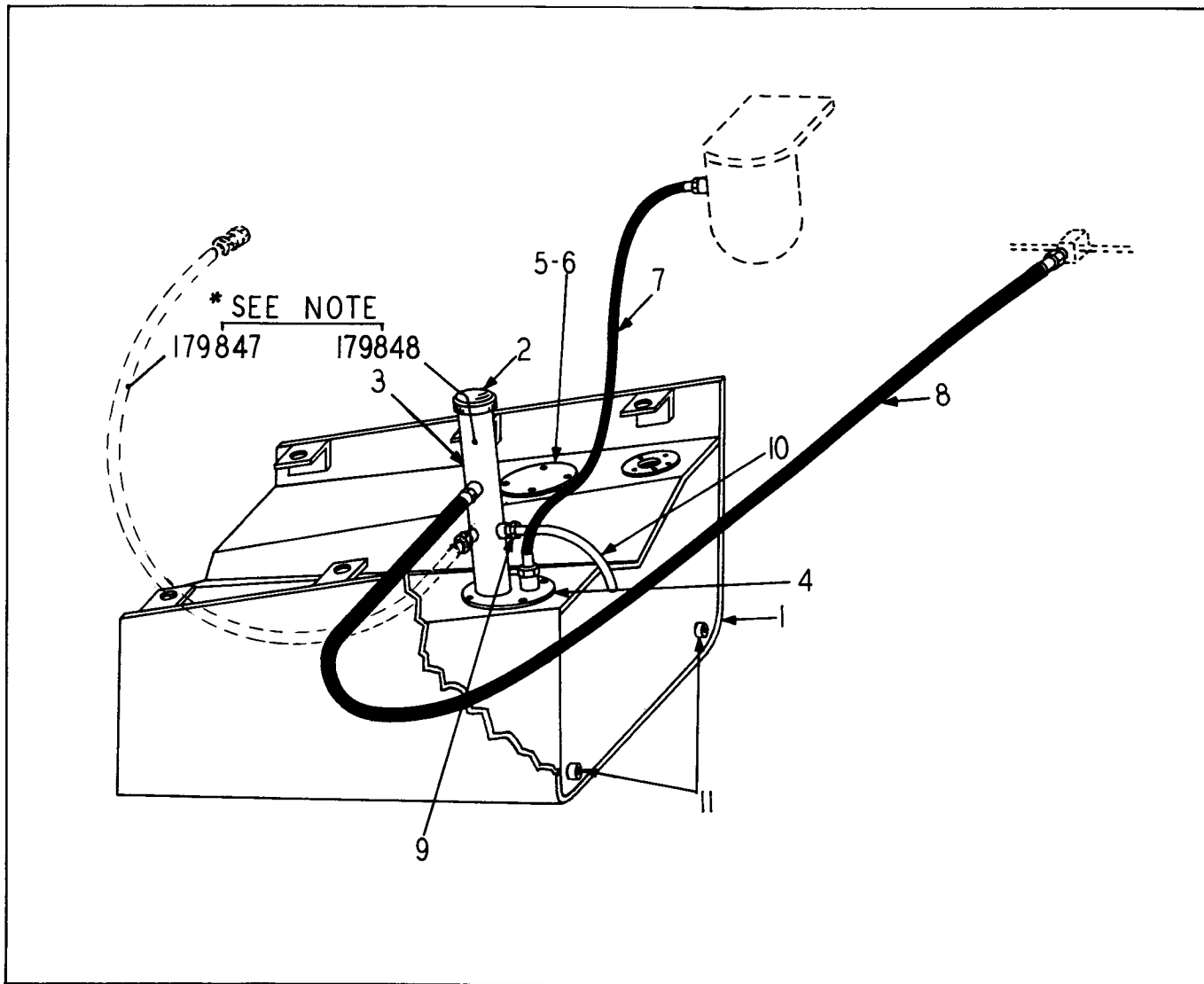
NOTE: Round cap is used on Perfex, Yates, A. C. radiators. The cap with flanges is used on I. H. C. radiators.





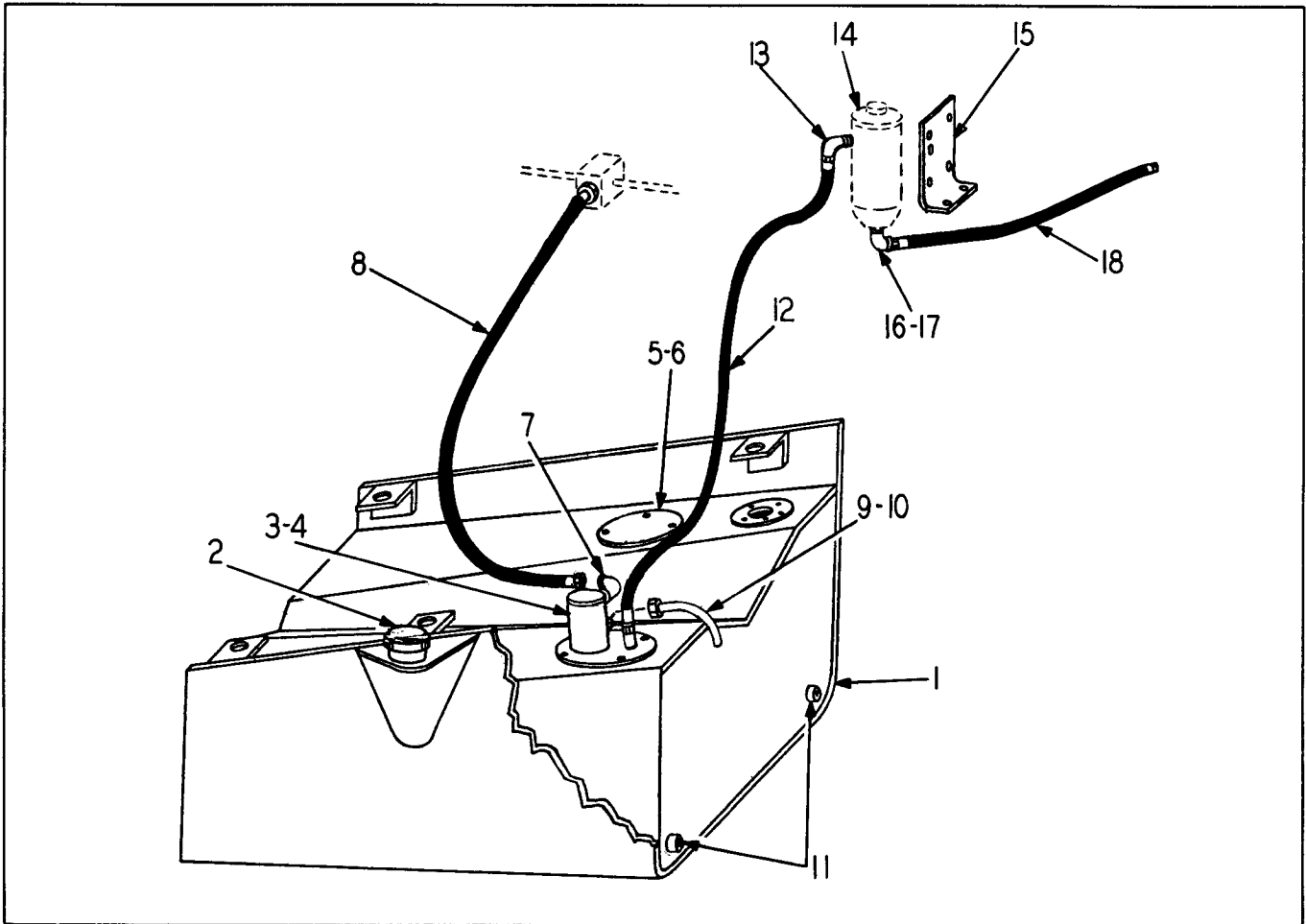
AIR CLEANER

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	152776H1	CLEANER, Air Incl. Items 2 thru 12	1		
2	155206H1	COVER ASSEMBLY.....	1		
3	155207H1	GASKET.....	1		
4	155208H1	BOLT & GASKET ASSEMBLY	1		
5	P-12	PLUG, Pipe.....	1		
6	155209H2	ELEMENT.....	1		
7	155210H1	BODY ASSEMBLY.....	1		
8	155211H1	SHROUD & SHIELD ASSEMBLY	1		
9	155212H1	BAND ASSEMBLY	3		
10	155214H1	BOLT ASSEMBLY.....	1		
11	155215H1	GASKET	1		
12	155213H1	CUP ASSEMBLY	1		
	145720H1	BAND	2		
	S-1610	SCREW, Cap	4		
	H-16	NUT.....	4		
	WL-16	WASHER, Lock.....	4		
13	176034H1	HOSE, Hump Air Cleaner to tube	1		
14	152730H1	CLAMP, Hose to Tube.....	2		
15	171736H1	TUBE, Cleaner to Elbow	1		
16	152730H1	CLAMP, Elbow to Tubes	2		
17	150751H1	ELBOW, Flex	1		
18	176033H1	ADAPTER, Engine	1		
	181338H1	BAR, Spacer	4		
	S-2610	SCREW, Cap	4		
	WL-16	WASHER, Lock	4		



FUEL TANK & LINES

ITEM NO.	PART NO.	For Machines of S/N 21CC-1901 thru 21CC-2199 PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	171739H1	TANK	1		
	S-11016	SCREW, Cap.....	6		
	WL-110	WASHER, Lock.....	6		
2	HA1279	CAP.....	1		
3	*171740H1	TUBE, Filler.....	1		
4	155932H1	GASKET	1		
	S-168	SCREW, Cap	4		
	WL-16	WASHER, Lock	4		
5	125751H1	COVER	1		
6	155932H1	GASKET	1		
	S-168	SCREW, Cap.....	4		
	WL-16	WASHER, Lock	4		
7	179204H1	HOSE, Tank to Fuel Filter.....	1		
8	17145H1	HOSE, Injector Return	1		
9	HS-972	CONNECTOR	1		
10	145325H1	TUBE, Tank Vent & Over Flow.....	1		
11	P-18	PLUG, Pipe, Drain Ports	2		
	116983H1	CLAMP	1		
	102818H1	CLAMP.....	1		
	*NOTE	First Units Used 179848 Tube And 179847 Hose			

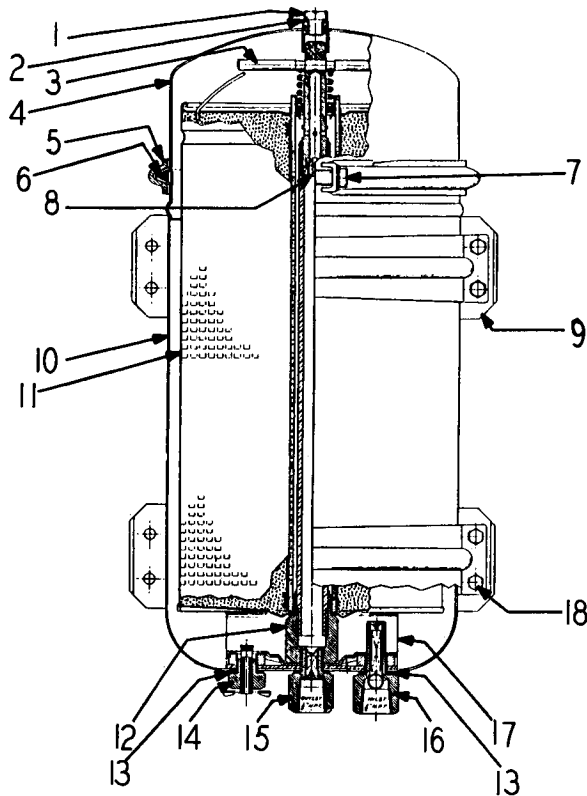


FUEL TANK & LINES

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
FOR MACHINES OF S/N 21CC-2200 & UP					
1	183635H1	TANK, Fuel	1		
	S-11016	SCREW, Cap	6		
	WL-110	WASHER, Lock	6		
	H-110	NUT	6		
2	HA-1279	CAP, Fuel Tank	1		
3	183636H1	TUBE, Outlet	1		
4	155932H1	GASKET	1		
	S-168	SCREW, Cap	4		
	WL-16	WASHER, Lock	4		
5	125751H1	COVER	1		
6	155932H1	GASKET	1		
	S-168	SCREW, Cap	4		
	WL-16	WASHER, Lock	4		
LINES - FUEL DRAIN					
7	129700H1	NIPPLE, Pipe	1		
7	103401H1	ELBOW, 90°	1		
8	171745H1	HOSE, Injector return	1		
9	145325H1	TUBE, Tank vent & overflow	1		
10	HS-972	CONNECTOR	1		
11	P-18	PLUG, Pipe, drain ports	2		
	116983H1	CLAMP	1		
	102818H1	CLAMP	1		
(Continued on following page)					

FUEL TANK & LINES (Continued)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
LINE-TANK TO FILTER					
12	183165H1	HOSE	1		
13	183164H1	ELBOW	1		
14		FILTER, Fuel (See Cummins Engine Manual)	1		
15	183129H1	BRACKET, Filter Mtg.	1		
	S-156	SCREW, Cap	4		
	WL-15	WASHER, Lock	4		
	H-15	NUT	4		
LINE-FILTER TO FUEL PUMP					
16	103489H1	ELBOW, St.	1		
17	126559H1	NIPPLE, Close	1		
18	183165H1	HOSE	1		



Used on Machines of S/N 21CC-1901 thru 21CC-2212.
 (For Machines with later Lube Oil Filter, See Cummins Engine Manual.)

LUBER-FINER

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	150339H1	LUBER, Finer Assembly (Incl. 1 thru 17).....	1		
	151520H1	SCREW, Cap (Vent Plug)	1		
2	151521H1	WASHER, Aluminum	1		
3	151528H1	PACK HOLD DOWN ASSEMBLY	1		
4	151518H1	COVER	1		
5	177710H1	CLAMPING RING ASSEMBLY, (Incl. next Item & Item 7) 1	1		
	177712H1	NUT.....	1		
6	151519H1	GASKET, Cover.....	1		
7	177711H1	SCREW.....	1		
8	151529H1	ORIFICE PLUG (Standard).....	1		
	151530H1	ORIFICE PLUG (Optional)	1		
9	151532H1	MOUNTING BRACKET ASSEMBLY.....	2		
10	151517H1	HOUSING	1		
11	151531H1	CARTRIDGE (Without by-pass valve)	1		
12	151526H1	TUBE & NUT ASSEMBLY, Outlet	1		
13	151525H1	WASHER, Aluminum.....	3		
14	151522H1	DRAIN COCK.....	1		
15	151523H1	CHECK VALVE, Outlet	1		
16	151524H1	CHECK VALVE, Inlet	1		
17	151527H1	PACK SUPPORT.....	1		
18	S-255	SCREW, Cap	8		
	WL-15	WASHER, Lock	8		
		} Lube-Finer Mtg.			

ACCESSORY DRIVE TORQUE CONVERTER

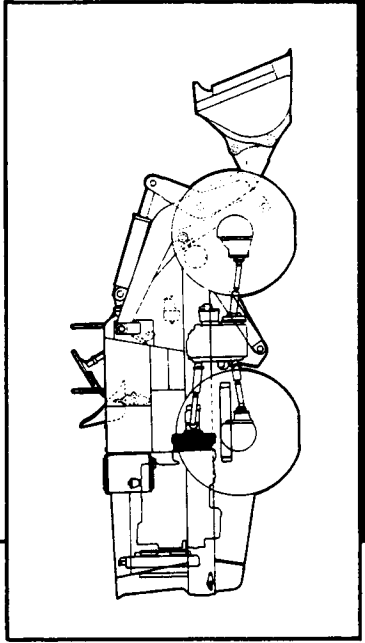
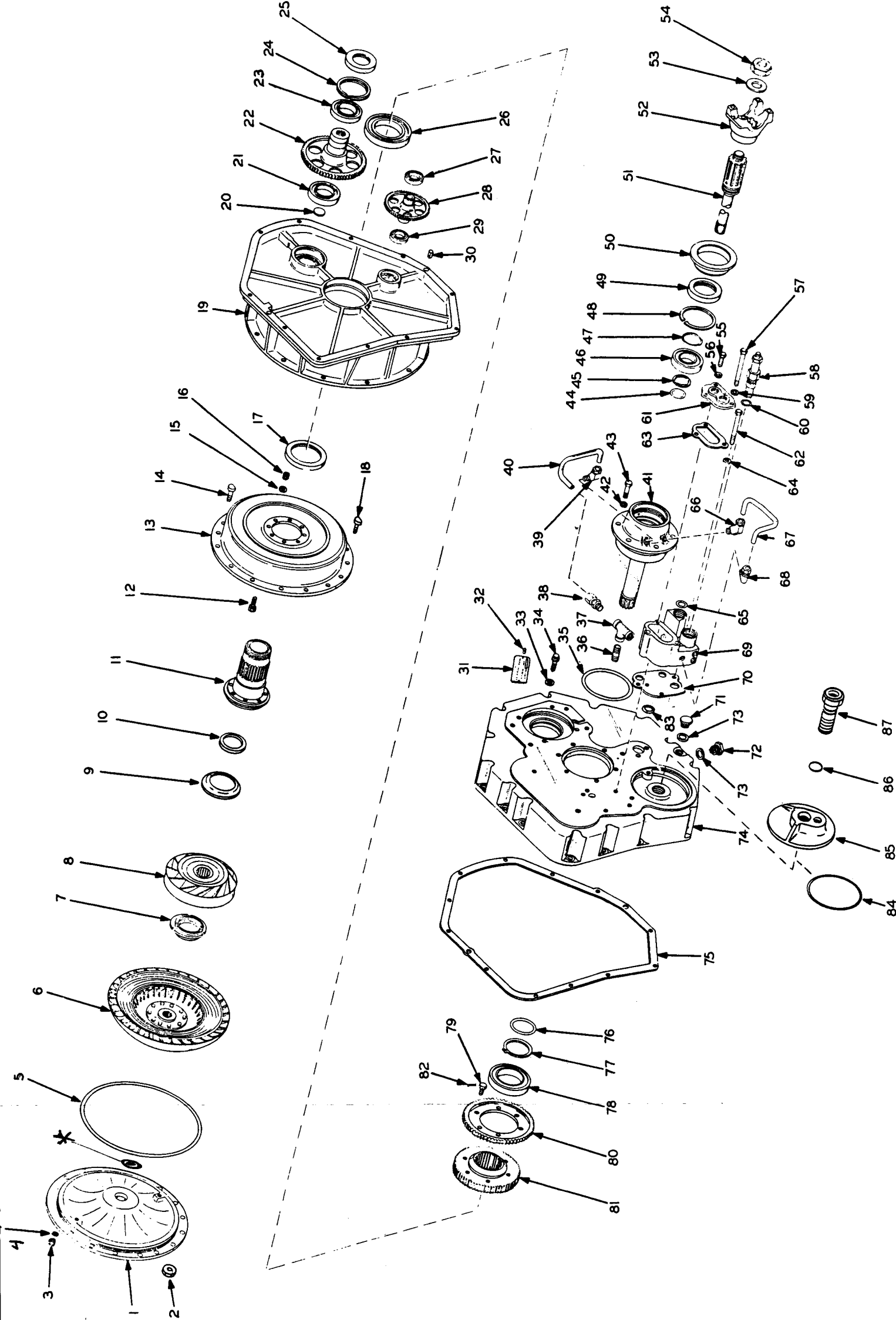


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TORQUE CONVERTER	3 - 3



TORQUE CONVERTER & ACCESSORY DRIVE

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	173530H1	TORQUE CONVERTER & ACCESSORY DRIVE ASSY. (Prior to Torque Converter S/N A70-7-2872).....	1		
	173530H2	TORQUE CONVERTER & ACCESSORY DRIVE ASSY. (Torque Converter S/N A70-7-2872 & Up).....	1		
1	*148460H1	PLATE, Cover (See Footnote) (# See NOTE).....	1		
2	143274H1	NUT, Spacer (drive straps).....	8		
3	H - 15	NUT	10		
4	WL-15	WASHER, Lock	10		
5	148459H1	GASKET	1		
6	148454H2	TURBINE ASSEMBLY (# See NOTE)	1		
7	173536H1	WASHER, Thrust	1		
8	173531H2	STATOR ASSEMBLY (# See NOTE)	1		
9	151506H1	SPACER.....	AR		
	151507H1	SPACER..... Use As Required	AR		
	151508H1	SPACER.....	AR		
10	OR3-6	"O" RING	1		
11	147945H1	HUB, Impeller	1		
12	143276H1	SCREW, Cap	8		
13	148440H1	IMPELLER (# See NOTE).....	1		
14	148461H1	BOLT, Cover	10		
15	OR4-5	"O" RING	8		
16	143294H1	NUT, Lock	8		
17	130005H1	SEAL	1		
18	143273H1	BOLT, Cover	8		
19	129301H1	HOUSING, Converter	1		
	207713H1	GEAR ASSEMBLY (Includes Items 20 & 22).....	1		
20	131197H1	PLUG, Expansion	1		
21	118524H1	BEARING, Ball	1		
22		GEAR (76T).....	1		
23	118524H1	BEARING, Ball	1		
24	130009H1	RING, Retaining.....	1		
25	146458H1	SEAL	1		
26	130006H1	BEARING, Ball	1		
27	118515H1	BEARING, Ball	1		
28	130010H1	GEAR (54T).....	1		
29	118515H1	BEARING, Ball.....	1		
30	116641H1	PIN	2		
31	123246H1	PLATE, Identification	1		
32	123250H1	SCREW, Drive	2		
33	WL-16	WASHER, Lock	12		
34	141095H1	SCREW	12		
35	OR3-26	"O" RING	1		
36	109820H1	NIPPLE, Pipe	1		
37	103507H1	TEE, Pipe..... Effective on Machines Prior to S/N 21CC-2621.	1		
38	143149H1	CONNECTOR	1		
39	152983H1	ELBOW ASSEMBLY... S/N 21CC-2621 & Up	1		
40	152981H1	TUBE	1		
41	163872H1	SHAFT & CAP ASSEMBLY (Incl. #130019 Dowel) ...	1		
42	WL-16	WASHER, Lock	6		
43	S-268	SCREW, Cap	6		
44	130031H1	RING, Seal	1		
45	130030H1	RING, Retaining	1		
46	130029H1	BEARING, Ball	1		
47	142562H1	GASKET.....	1		
48	135310H1	RING, Retaining	1		
49	129370H1	SEAL	1		
50	131193H1	RETAINER, Packing.....	1		
51	143280H2	SHAFT, Converter (# See NOTE)	1		
52	151797H1	YOKE, Universal joint	1		
53	130033H1	WASHER, Flat	1		
54	123298H1	NUT	1		
55	141095H1	SCREW, Cap	1		
56	WL-16	WASHER, Lock	1		
57	188791H1	SCREW, Cap.....	2		
58	148510H1	VALVE, Pressure regulating	1		

* Item 1 includes servicable thrust washer #186783.

(Continued on following page)

TORQUE CONVERTER & ACCESSORY DRIVE (Continued)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
59	WL-16	WASHER, Lock	2		
60	OR4-14	"O" RING	1		
61	130052H2	COVER	1		
62	S-2622	SCREW, Cap	1		
63	130051H1	GASKET	1		
64	WL-16	WASHER, Lock	1		
65	OR4-11	"O" RING	3		
66	152983H1	ELBOW ASSEMBLY	1		
67	152982H1	TUBE	1		
68	129554H1	ELBOW ASSEMBLY	1		
69	153009H1	BODY, Pressure regulating valve	1		
70	149348H1	GASKET	1		
71	116716H1	PLUG	1		
72	121508H1	PLUG, Pipe	1		
73	114851H1	WASHER, Flat	2		
74	155448H2	HOUSING, Front	1		
75	130021H1	GASKET	1		
76	130018H1	RING, Seal	1		
77	129557H1	RING, Retaining	1		
78	130016H1	BEARING, Ball	1		
	133514H1	GEAR ASSEMBLY, (Incl. Items 79 thru 82)	1		
79	130015H1	SCREW, Cap	6		
80	130014H1	GEAR (82T)	1		
81	130013H1	GEAR (75T)	1		
82	LW-1620	WIRE, Lock	1		
83	OR4-14	"O" RING	1		
84	OR3-33	"O" RING	1		
85	173925H1	CAP, Oil filter supply	1		
86	OR4-20	"O" RING	1		
87	173924H1	SHAFT, Oil return	1		
	142896H1	GASKET KIT, (Includes the following)	1		
	130021H1	GASKET, Front housing to converter housing	1		
	132259H1	GASKET, Oil pump to front housing	1		
	130051H1	GASKET, Relief valve cover to body	1		
	142562H1	GASKET, Between fitting yoke and bearing	1		
	149348H1	GASKET, Relief valve to front housing	1		
	142898H1	"O" RING KIT (Includes the following)	1		
	OR3-26	"O" RING, Stator shaft & cap assembly	1		
	OR4-14	"O" RING, Oil pump to front housing	1		
	OR4-14	"O" RING, Relief valve to front housing	1		
	OR3-33	"O" RING, Cap to front housing	3		
	OR4-11	"O" RING, Relief valve to front housing	1		
	OR4-20	"O" RING, Shaft to cap assembly	1		
	142901H2	OIL SEAL KIT, (Includes next 3 items)	1		
	130005H1	SEAL, Converter housing to shaft	1		
	129370H1	SEAL, Adapter to output yoke	1		
	146458H1	SEAL, Pump drive gear	1		
	S-269	SCREW, Cap	12		
	WL-16	WASHER, Lock	12		
	103495H1	ELBOW, St., 45°	1		
	152127H1	BREATHER	1		

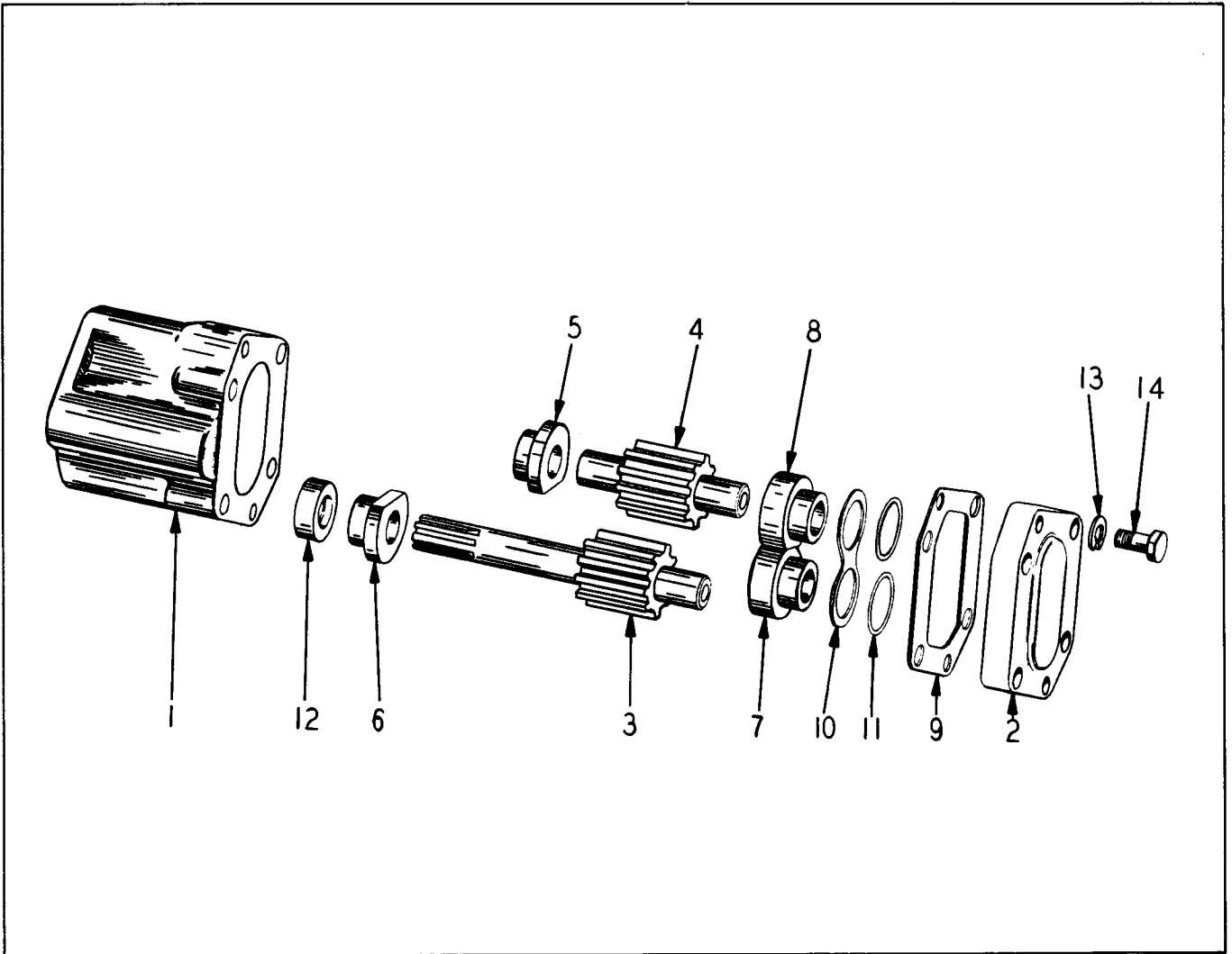
NOTE: Clearance increase between converter elements.

Each of the new parts listed below are directly interchangeable with the comparable old parts, but to receive the full benefit of the increased clearance, all the new parts (*) must be incorporated at the same time.

NEW	OLD	NEW	OLD
143280H3	replace 143280H2	Turbine Shaft	% 148460H2
148440H2	replace 148440	Impeller	replace 173531H3
148454H3	replace 148454H2	Turbine	replace 173531H2
			Converter Cover
			Stator Assembly

- (1) 124161 Retaining Ring
- (1) 197938 Spacer
- (2) 197941 Shim .020 thick
- (2) 197942 Shim .030 thick
- (2) 197943 Shim .060 thick

% Order cover only if damaged or leaking.



PUMP - ACCESSORY DRIVE

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	132258H1	PUMP COMPLETE	1		
2	134830H1	BODY	1		
3	134831H1	COVER	1		
4		GEAR, Drive	1		
5		GEAR, Driven.....	1		
6		BEARING, Body.....	1		
7		BEARING, Body.....	1		
8		BEARING, Cover.....	1		
9		BEARING, Cover.....	1		
10		GASKET	1		
11		SPRING	1		
12		"O" RING	2		
13		SEAL, Shaft	1		
14		WASHER	4		
		SCREW, Cap.....	4		
	151835H1	MAJOR REPAIR KIT (Incl. items 5, 6, 7, 8, 10, 13, 14 & 151834 Minor Repair Kit).....			
	151834H1	MINOR REPAIR KIT (Incl. Items 9, 11 & 12).....			
	151836H1	GEAR KIT (Incl. Items 3 & 4).....			
	132259H1	GASKET, (Pump to Torque Converter).....	1		
	S-2428	SCREW, Cap.....	2		
	WL-14	WASHER, Lock.....	2		
		} Pump Mtg.			

TRANSMISSION

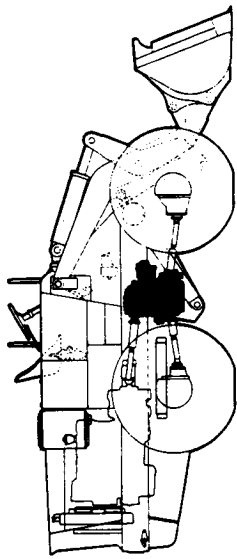
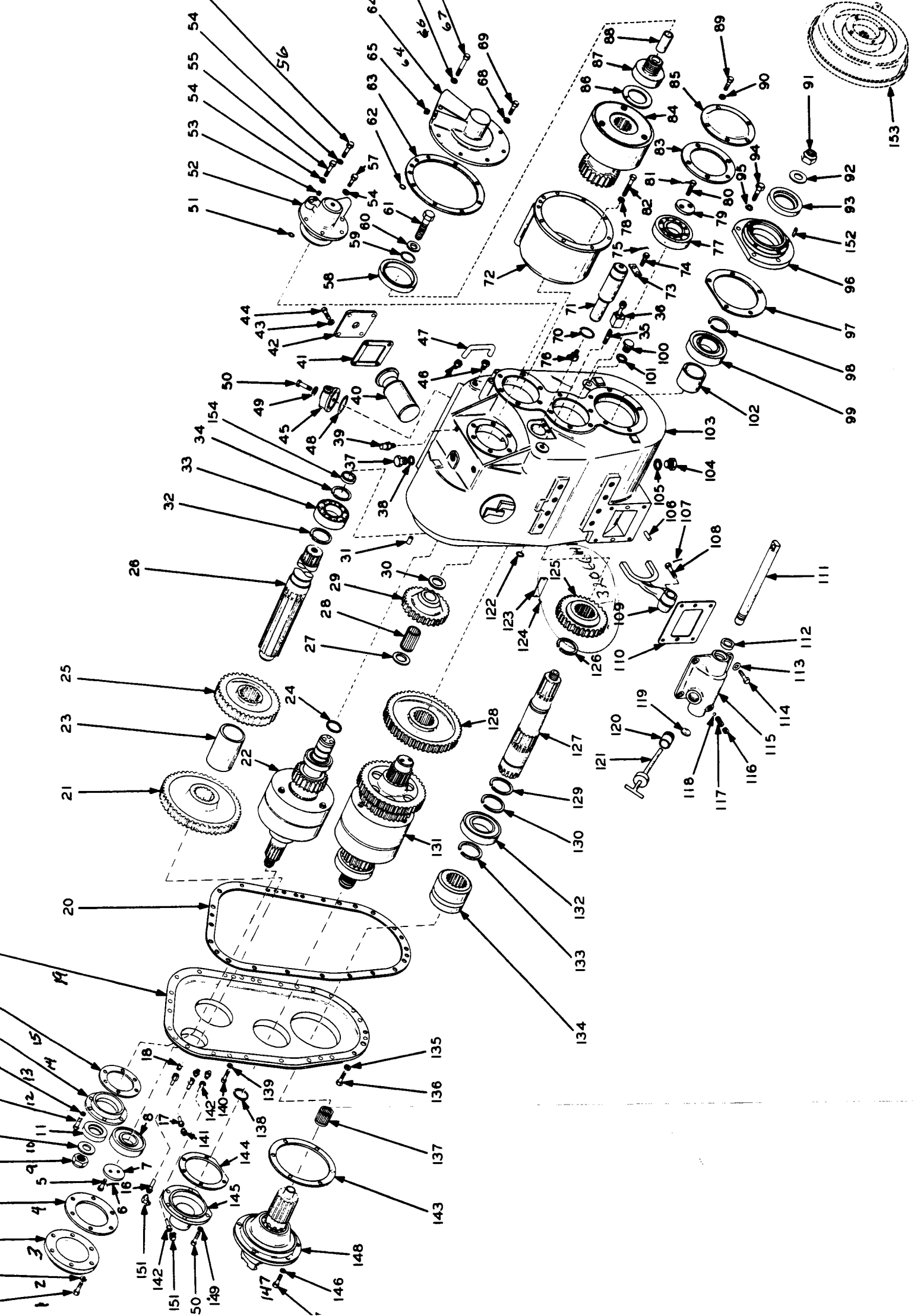


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TRANSMISSION

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	173800H2	TRANSMISSION ASSEMBLY	1		
	142895H1	GASKET SET, Service	AR		
	187452H1	"O" RING SET, Service	AR		
	142899H1	SEAL KIT, Service	AR		
1	S-268	SCREW, Cap.....	6		
2	WL-16	WASHER, Lock	6		
3	116610H1	CAP, Countershaft	1		
4	116611H1	GASKET, Cap.....	1		
5	S-266-D	SCREW, Cap.....	2		
6	LW-187	WIRE	1		
7	116623H1	WASHER, Retaining.....	1		
8	116598H1	BEARING, Ball	1		
9	123298H1	NUT	1		
10	WF-316	WASHER, Flat	1		
11	104705H1	SEAL	1		
12	S-268	SCREW, Cap	6		
13	WL-16	WASHER, Lock	6		
14	199156H1	CAP ASSEMBLY (Includes Item 11).....	1		
15	116609H1	GASKET, Cap.....	1		
16	152125H1	BENT TUBE, 3rd gear.....	1		
17	143052H1	BENT TUBE, 2nd gear.....	1		
18	129553H1	ADAPTER, Straight	3		
19	143053H1	COVER, Transmission	1		
20	125524H1	GASKET.....	1		
21	125563H1	GEAR, Spur, 55 teeth	1		
22	163403H2	CLUTCH ASSEMBLY, Forward and reverse (Includes all items shown on Page 4-6)	1		
23	125564H1	SPACER, Sleeve.....	1		
24	129509H1	RING, Seal	3		
25	159658H1	GEAR, Spur, 37 teeth.....	1		
*	156972H1	COUNTERSHAFT ASSEMBLY (Includes items 26 and 32 thru 34) (Use 190994 - See SD-645)	1		
26 *	157196H2	COUNTERSHAFT, Upper (Use 190919 - See SD-645)...	1		
27	150429H1	WASHER, Flat	1		
28	125522H1	BEARING, Roller.....	1		
29	159653H1	IDLER GEAR, 30 teeth.....	1		
30	150429H1	WASHER, Flat	1		
31	116641H1	PIN	2		
32	125566H1	RING, Retaining	1		
33	118046H1	BEARING, Ball	1		
34	125567H1	RING, Retaining	1		
35	180871H1	NIPPLE, Pipe	1		
36	153005H1	VALVE ASSEMBLY, Relief (Incl. the following 4 items).	1		
	155522H1	CARTRIDGE ASSEMBLY	1		
	OR4-16	"O" RING	1		
	OR4-11	"O" RING	1		
		BODY	1		
37	116716H1	PLUG	1		
38	114851H1	WASHER	3		
39	152127H1	BREATHER	1		
40	129569H1	STRAINER ELEMENT, Sediment.....	1		
41	129570H1	GASKET, Cover	1		
42	129568H1	COVER, Strainer	1		
43	WL-16	WASHER, Lock	4		
44	S-268	SCREW, Cap.....	4		
45	140734H1	MANIFOLD AND RELIEF VALVE ASSEMBLY	1		
46	127302H1	ADAPTER, Straight, pipe to tube	2		
47	137572H1	BENT TUBE	1		
48	OR3-6	"O" RING	1		
49	125003H1	WASHER.....	1		
50	S-2618	SCREW, Cap.....	1		
51	OR4-9	"O" RING	3		
52	125560H1	CAP	1		
53	139509H1	PLUG PIPE	6		
	WL-16	WASHER, Lock	6		

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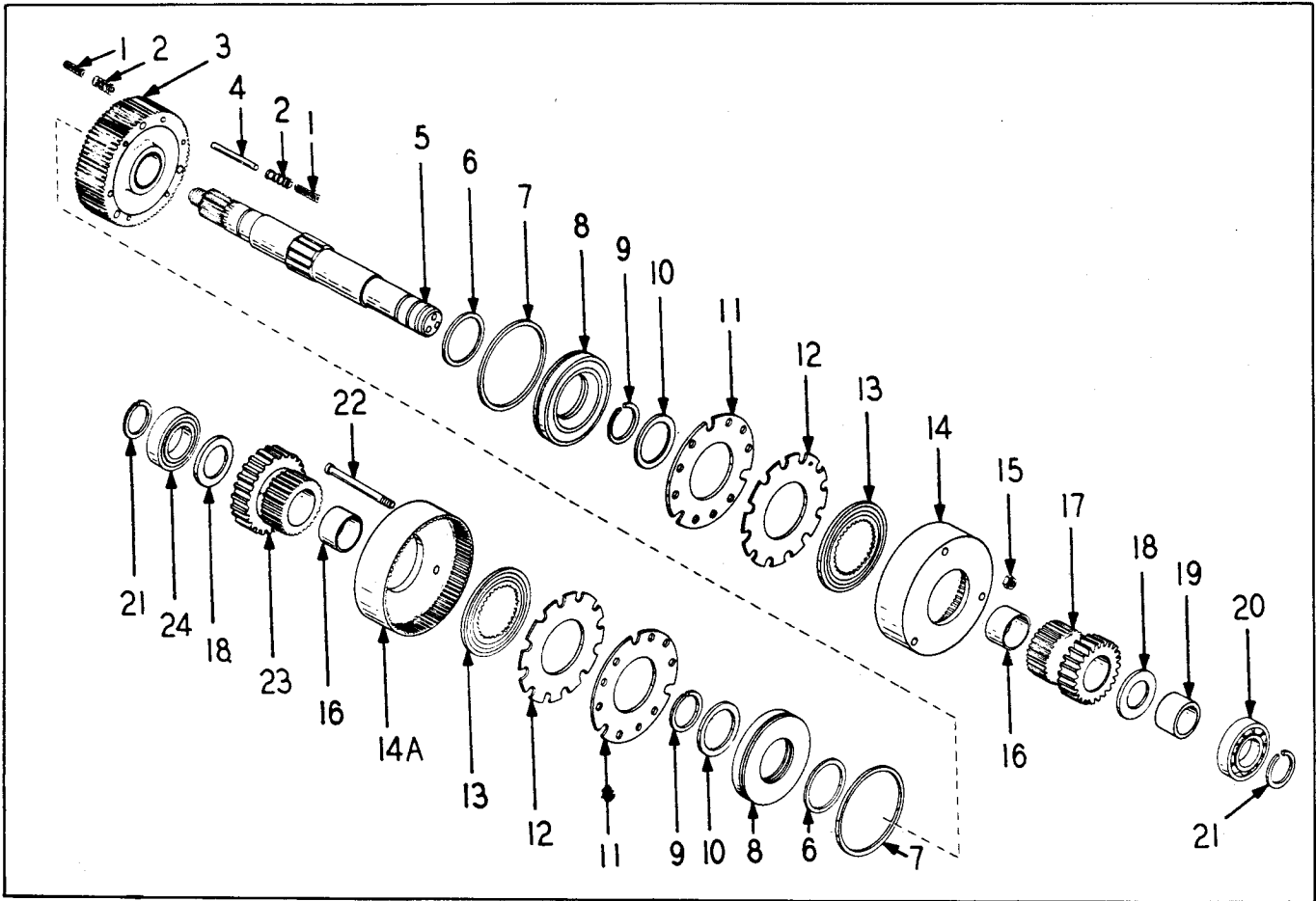
TRANSMISSION (Continued)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	125003H1	WASHER.....	6		
55	S-2618	SCREW, Cap.....	1		
56	S-2614	SCREW, Cap.....	1		
57	S-268	SCREW, Cap.....	4		
58	157197H1	BEARING, Roller	1		
59	129509H1	RING, Seal.....	2		
60	189926H1	WASHER, Lock	1		
61	129508H2	SCREW, Cap.....	1		
62	OR4-9	"O" RING.....	4		
63	129513H1	GASKET.....	1		
64	156949H1	COVER, Gear, 1st gear	1		
65	139509H1	PLUG, Pipe.....	2		
66	WL-16	WASHER, Lock	1		
67	S-2618	SCREW, Cap.....	1		
68	WL-16	WASHER, Lock	7		
69	S-2610	SCREW, Cap.....	7		
70	OR4-27	"O" RING.....	1		
71	157209H1	SHAFT, Idler gear.....	1		
72	129510H1	HOUSING, Clutch.....	1		
73	125523H1	PLATE, Lock.....	1		
74	S-266-D	SCREW, Cap.....	2		
75	LW-187	WIRE.....	1		
76	113081H1	ELBOW	1		
77	120261H1	BEARING, Roller	1		
78	WL-16	WASHER, Lock	6		
79	116623H1	WASHER, Retaining	1		
80	S-266-D	SCREW, Cap.....	2		
81	LW-187	WIRE	1		
82	S-2616	SCREW, Cap.....	1		
83	129548H1	GASKET.....	1		
84		CLUTCH ASSEMBLY, 1st gear (Includes all items shown on Page 4-7)	1		
85	129549H1	CAP.....	1		
86 *	156971H2	GASKET, Clutch	1		
* 87	156939H3	HUB ASSEMBLY, (Includes items 87 and 88).....	1		
88	NSS	HUB	1		
89	NSS	SLEEVE	1		
89	S-268	SCREW, Cap	5		
90	125003H1	WASHER	5		
91	123298H1	NUT	1		
92	137974H1	WASHER, Flat	1		
93	130534H1	SEAL.....	1		
94	S-2812	SCREW, Cap.....	5		
95	126563H1	WASHER	5		
96	199157H1	CAP ASSEMBLY (Includes item 93).....	1		
97	129560H1	GASKET, Adapter	1		
98	118060H1	RING, Retaining	1		
99	120260H1	BEARING, Ball	1		
100	169320H1	PLUG	1		
101	114851H1	WASHER, Flat	1		
102	129559H1	SPACER.....	1		
103	160000H1	HOUSING AND TUBE ASSEMBLY, (Incl. next 12 items).....	1		
	NSS	HOUSING, Main	1		
	125511H1	TUBE, Forward clutch	1		
	125512H1	TUBE, Reverse clutch	1		
	125513H1	TUBE, First gear clutch	1		
	125514H1	TUBE, First gear lube	1		
	125515H1	TUBE, Forward and reverse lube	1		
	125516H1	TUBE, Second and third gear lube	1		
	125517H1	TUBE, Second gear clutch.....	1		
	125518H1	TUBE, Third gear clutch	1		
	199158H1	BUSHING ASSEMBLY (Includes next 2 items)	1		
	OR4-7	"O" RING	16		
	125509H1	BUSHING, Sleeve.....	16		
	146898H1	WASHER	16		
104	121508H1	PLUG, Magnetic	1		

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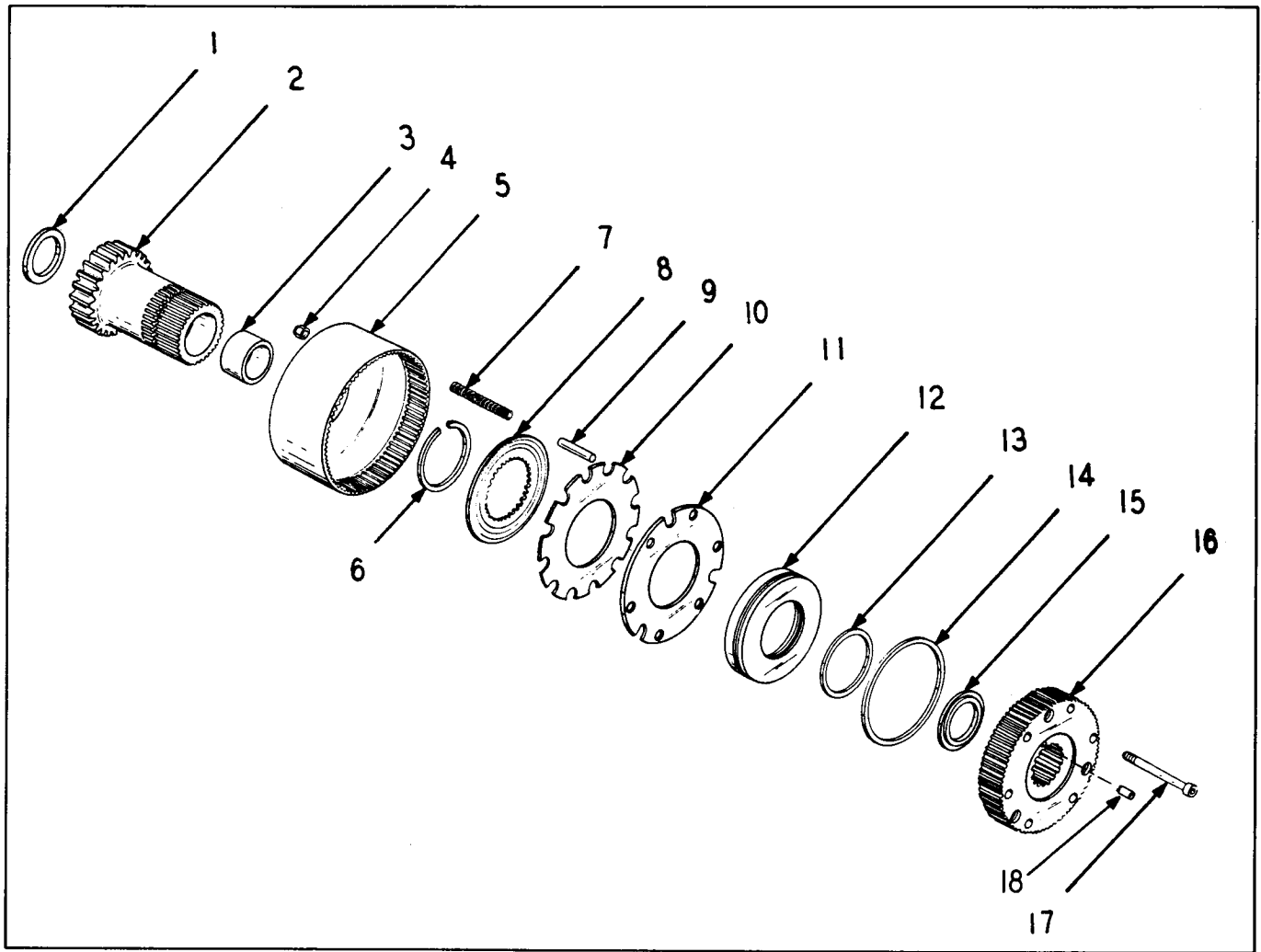
TRANSMISSION (Continued)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
105	114851H1	WASHER, Flat	1		
106	116594H1	PIN	2		
107	LW-187	WIRE	1		
108	116148H1	SCREW, Lock	1		
109	120268H1	FORK, Shifting	1		
110	120275H1	GASKET	1		
111	120267H1	RAIL, Shifting	1		
112	116596H1	SEAL	1		
113	WL-16	WASHER, Lock	4		
114	S-267	SCREW, Cap	4		
115	159210H1	HOUSING, Shifter	1		
116	116593H1	SETSCREW	1		
117	116640H1	SPRING	1		
118	115451H1	BALL, Bearing	1		
119	116595H1	PLUG, Expansion	1		
120	171649H1	PIPE, Dipstick	1		
121	171650H1	CAP AND DIPSTICK	1		
122	OR4-11	"O" RING	3		
123	151947H1	PLATE, Identification	1		
124	123250H1	SCREW, Drive	2		
125	132066H1	GEAR, 32 teeth	1		
126	130537H1	RING, Retaining	1		
127	156960H1	SHAFT, Output	1		
128	129547H1	GEAR, Spur, 53 teeth	1		
129	125566H1	RING, Retaining	1		
130	129557H1	RING, Retaining	1		
131	163404H2	CLUTCH ASSEMBLY, 2nd and 3rd gear (Includes all items shown on Page 4-8)	1		
132	129556H1	BEARING, Ball	1		
133	129557H1	RING, Retaining	1		
134	156968H1	CLUTCH, Sliding Sleeve	1		
135	WL-16	WASHER, Lock	1		
136	S-2610	SCREW, Cap	19		
137	156963H1	BEARING, Roller	19		
138	129509H1	RING, Seal	1		
139	WL-16	WASHER, Lock	3		
140	143049H1	SCREW, Cap	2		
141	129553H1	ADAPTER, Straight, Pipe to Tube	1		
142	143051H1	BENT TUBE, Steel	1		
143	120248H1	GASKET	1		
144	120243H1	GASKET	1		
145	129551H1	CAP	1		
	139509H1	PLUG, Pipe	1		
146	WL-16	WASHER, Lock	2		
147	S-268	SCREW, Cap	6		
148	NSS	SHAFT ASSEMBLY, Rear Output (See Page 4-9)	1		
149	WL-16	WASHER, Lock	6		
150	S-268	SCREW, Cap	6		
151	129554H1	ELBOW, Pipe to Tube	2		
152	137660H1	PIN	1		
153		BRAKE, Parking (See Page 4-10)	1		
154 *	178828H1	SPACER (Use as required).. Use as required	1		
154 *	188645H1	RING, Retainer	1		
	189329H1	Cylinder & Sleeve Assy. replaces the following parts: (1) 157185H2 First Gear Cylinder (See Page 4-7) (1) 176417H1 Dowel (See Page 4-7) (1) 156939H3 Hub & Sleeve Assembly (1) 156971H2 Gasket (4) 189929H1 Capscrew			



CLUTCH ASSEMBLY - FORWARD & REVERSE GEAR

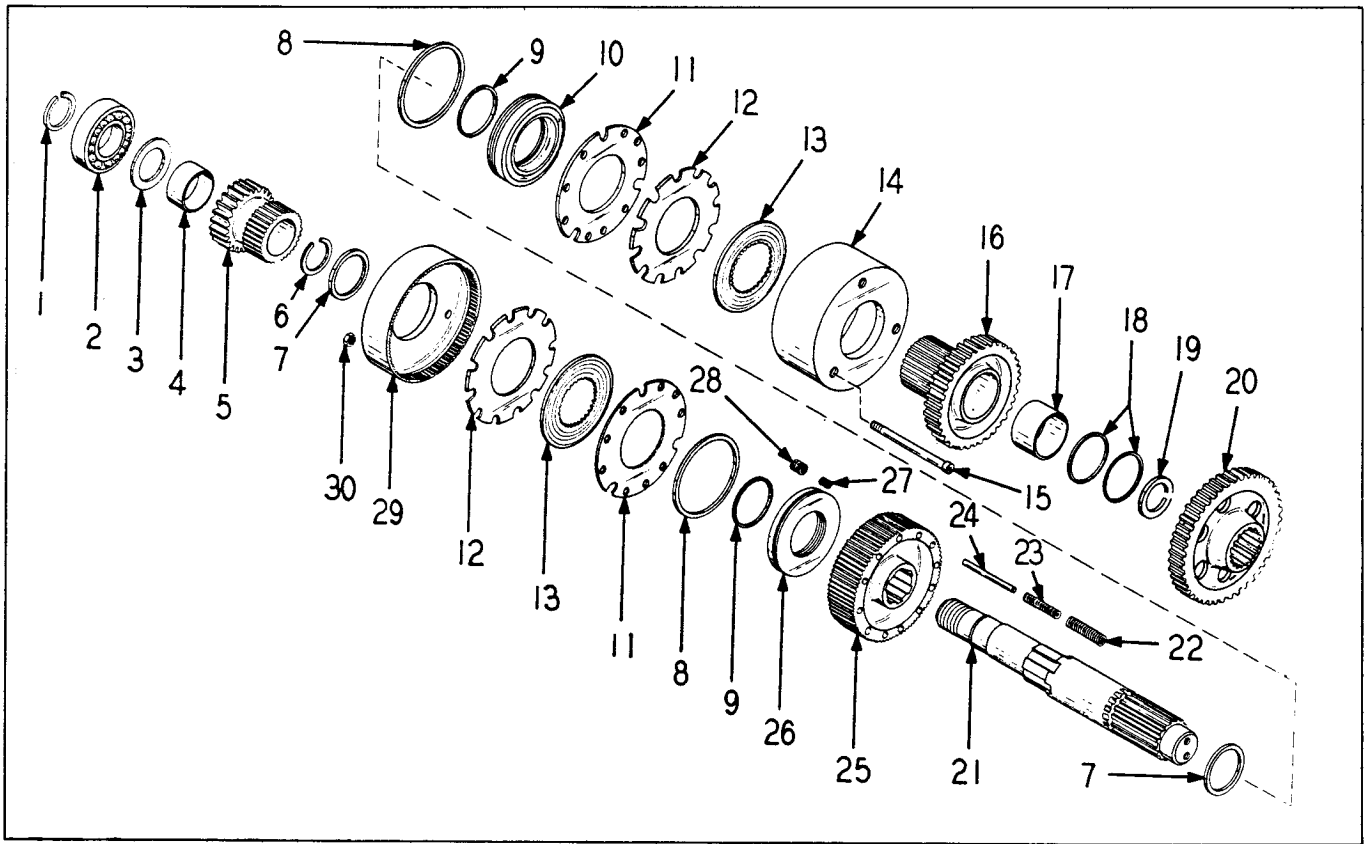
ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	163403H2	CLUTCH ASSEMBLY - Forward & Reverse <i>885176 C94</i>	1		
2	125549H1	SPRING	12		
3	125548H1	SPRING	12		
4	157180H1	CYLINDER	1		
5	125545H1	PIN	6		
6	157178H1	SHAFT ASSEMBLY	1		
7	133601H1	RING, Seal	2		
8	133600H1	RING, Seal	2		
9	125541H2	PISTON	2		
10	156970H1	RING, Retaining	2		
11	175217H1	WASHER	2		
12	129529H1	PLATE, Spring retaining	2		
13	125505H1	PLATE, Clutch	12		
14	125504H1	PLATE, Clutch	14		
14A	125551H1	PLATE, Backing	1		
15	125551H1	PLATE, Backing	1		
16	125553H1	NUT	3		
17	159655H3	GEAR ASSEMBLY, Includes Item 17 & (2) of Item 16	1		
18		BEARING, Sleeve	4		
19		GEAR, Spur	1		
20	150433H1	WASHER	2		
21	150430H1	SPACER, Sleeve	1		
22	104706H1	BEARING, Ball	1		
23	114362H1	RING, Retaining	3		
24	125552H1	SCREW, Cap	3		
	125536H3	GEAR ASSEMBLY, Includes Item 23 & (2) of Item 16	1		
		GEAR, Spur	1		
	116599H1	BEARING, Ball	1		



CLUTCH ASSEMBLY - 1st GEAR

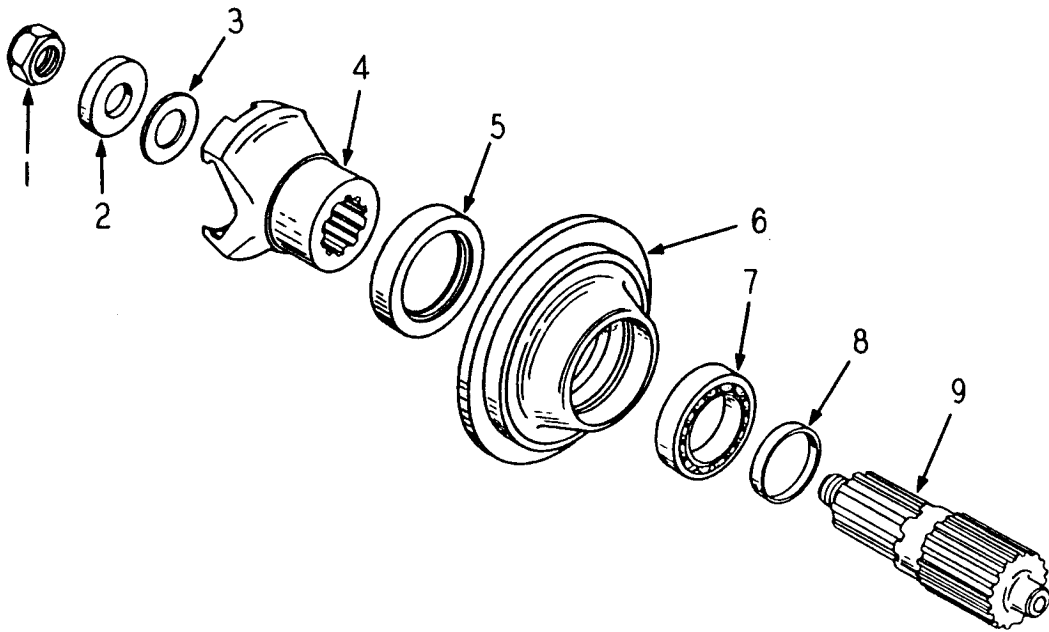
ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
*	163402H3	CLUTCH ASSEMBLY - 1st gear (Use 163402H3)	1		
1	150432H1	WASHER	1		
	125570H3	GEAR ASSEMBLY, Includes items 2 & 3	1		
2		GEAR	1		
3		BUSHING	2		
4	125553H1	NUT	3		
5	129505H1	PLATE, Backing	1		
6	125573H1	RING, Retaining	1		
7	129504H1	SPRING	6		
	125506H1	SPRING, Retaining plate	1		
8	125504H1	PLATE, Clutch	13		
9	129503H1	GUIDE, Spring	6		
10	125505H1	PLATE, Clutch	12		
11	125506H1	PLATE, Spring retaining	1		
12	129502H2	PISTON	1		
13	133601H1	RING, Seal	1		
14	133600H1	RING, Seal	1		
15	150427H1	WASHER	1		
16 *	157185H2	CYLINDER	1		
17	129506H1	SCREW, Cap	3		
18 *	176417H1	PIN, Dowel	1		

* Reference SD-645



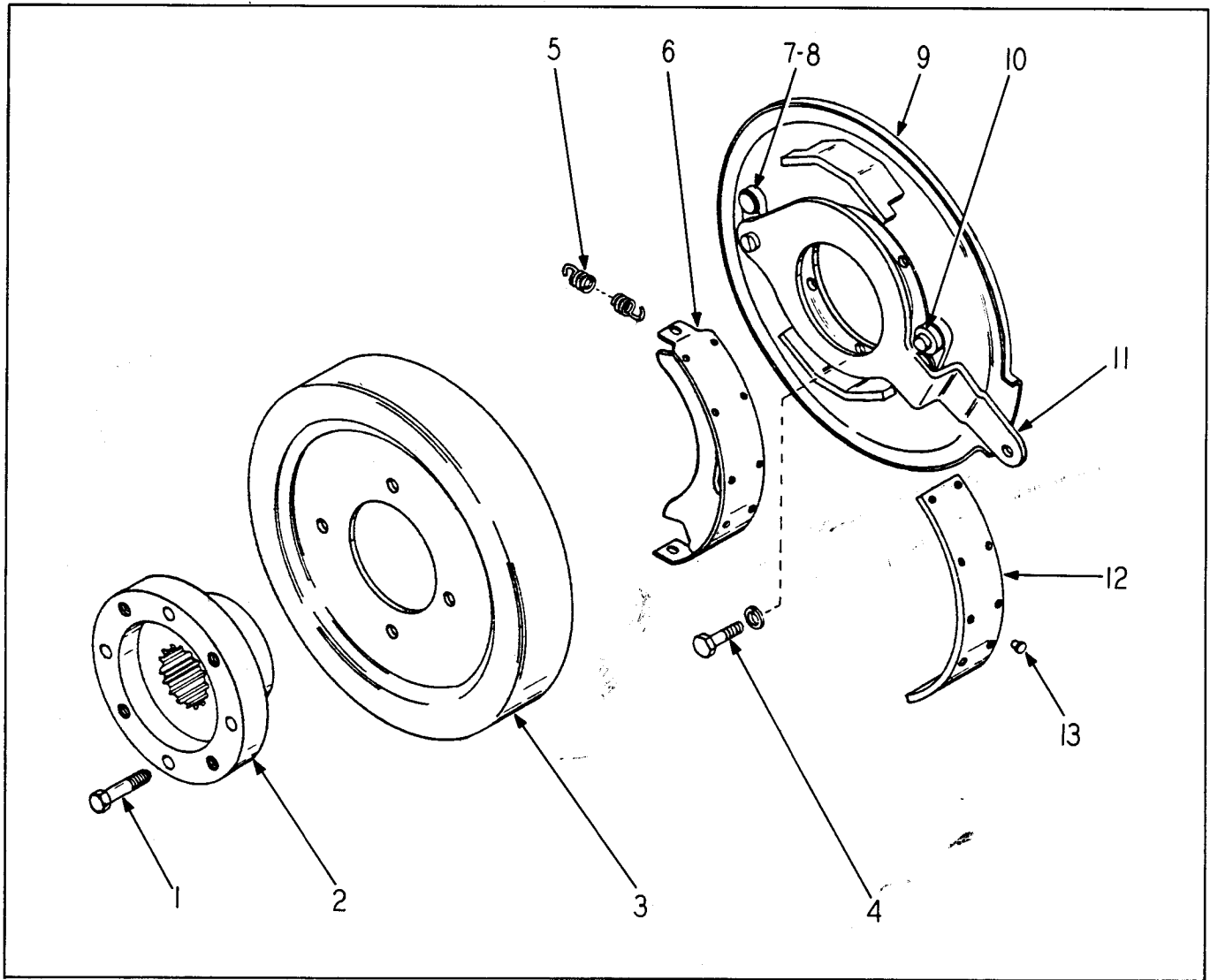
CLUTCH ASSEMBLY - 2nd & 3rd GEAR

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	163404H2	CLUTCH ASSEMBLY, 2nd. & 3rd. Gear.....	1		
1	116719H1	RING, Retaining.....	1		
2	116598H1	BEARING, Ball.....	1		
3	150431H1	WASHER.....	1		
	129523H3	GEAR ASSEMBLY, Includes Items 4 & 5.....	1		
4		BUSHING.....	2		
5		GEAR.....	1		
6	156970H1	RING, Retaining.....	1		
7	175217H1	WASHER.....	2		
8	133600H1	RING, Seal.....	2		
9	133601H1	RING, Seal.....	2		
10	129535H1	PISTON.....	1		
11	129529H1	PLATE, Spring Retainer.....	2		
12	125505H1	PLATE, Clutch.....	14		
13	125504H1	PLATE, Clutch.....	16		
14	129538H1	PLATE, Backing.....	1		
15	129539H1	SCREW, Cap.....	3		
	159659H3	GEAR ASSEMBLY, Incl. Items 16 & 17.....	1		
16		GEAR.....	1		
17	129543H2	BUSHING.....	2		
18	150434H1	WASHER.....	2		
19	134466H1	RING, Retaining.....	1		
20	132064H1	GEAR, Spur.....	1		
21	157187H1	SHAFT ASSEMBLY.....	1		
22	129536H1	SPRING.....	9		
23	129537H1	SPRING.....	9		
24	129530H1	PIN.....	9		
25	156938H1	CYLINDER.....	1		
26	129528H2	PISTON.....	1		
27	129532H1	SPRING.....	9		
28	129531H1	SPRING.....	9		
29	129533H1	PLATE, Backing.....	1		
30	125553H1	NUT.....	3		



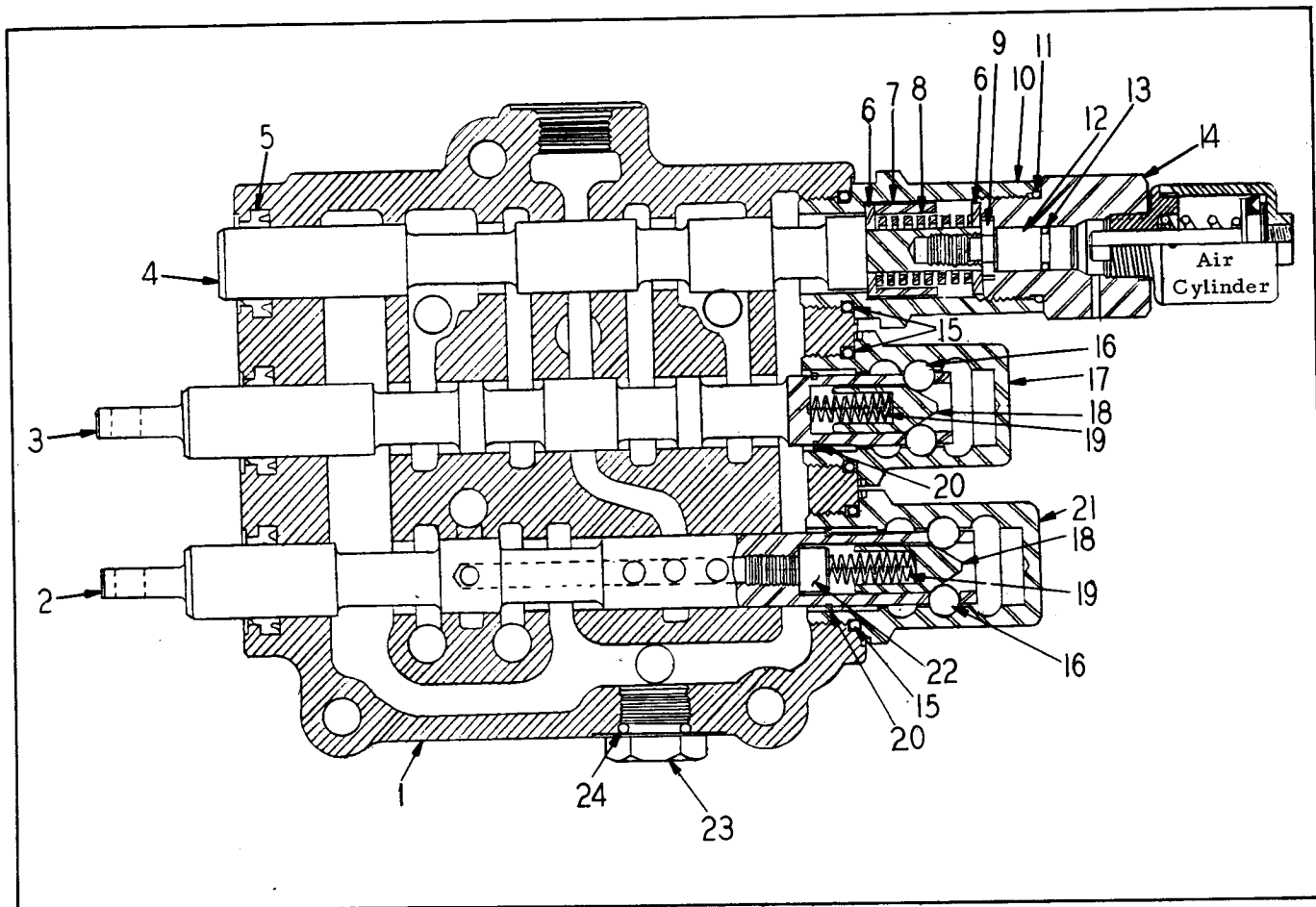
SHAFT ASSEMBLY - REAR OUTPUT

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	123298H1	NUT	1		
2	WF -116	WASHER	1		
3	202965H1	WASHER	1		
4	151802H1	YOKE	1		
5	118086H1	OIL SEAL.....	1		
6	157201H1	CAP.....	1		
7	147173H1	BEARING	1		
8	156969H1	SPACER.....	1		
9	156964H1	SHAFT, Output.....	1		



PARKING BRAKE

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	141183H1	BRAKE, Shoe Type (Incl. Items 5 thru 13).....	1		
	S-1614	SCREW, Cap	4		
	WL-16	WASHER, Lock.....	4		
	H-16	NUT	4		
2	151804H1	FLANGE	1		
3	130539H1	DRUM	1		
4	S-267	SCREW, Cap.....	4		
	WL-16	WASHER, Lock.....			
5	139038H1	SPRING.....	2		
	139037H1	BRAKE SHOE SET (Incls. items 6, 12 & 13)			
6	NSS	SHOE	2		
7	139342H1	PAWL	2		
8	139343H1	RIVET	2		
9	139035H1	PLATE ASSEMBLY (Incls. items 7 & 8)	1		
10	139040H1	ROLLER	1		
11	139039H1	LEVER.....	1		
12	161643H1	KIT, Lining (Incl. Items 12 & 13).....	1		
	NSS	LINING.....			
13	NSS	RIVET.....	20		



TRANSMISSION VALVE

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	174960H1	VALVE, Transmission Includes Items 1 thru 24	1		
1		HOUSING, Valve.....	1		
2		PLUNGER, Speed Change	1		
3		PLUNGER, Forward & Reverse	1		
4		PLUNGER, Special	1		
5	124516H1	SEAL, Wiper.....	3		
6	176418H1	WASHER.....	2		
7	176144H1	SPACER.....	1		
8	180940H1	SPRING.....	1		
9	124519H2	SCREW.....	1		
10	176142H1	PLUG.....	1		
11	OR2-12	"O" RING.....	1		
12	176145H1	PIN.....	1		
13	OR4-6	"O" RING.....	1		
14	176143H1	PLUG, Adapter.....	1		
15	OR4-19	"O" RING.....	3		
16	129646H1	BALL.....	8		
17	144633H1	PLUG, Detent.....	1		
18	144635H1	CAM, Detent.....	2		
19	119183H1	SPRING.....	2		
20	136366H1	RING, Snap.....	2		
21	144634H1	PLUG, Detent.....	1		
22	136363H1	SCREW, Cap, Socket Hd.....	1		
23	210-8	PLUG.....	1		
24	OR2-8	"O" RING.....	1		
	OR4-9	"O" RING.....	6		
	S-2622	SCREW, Cap.....	3		
	WL-16	WASHER, Lock.....	3		
	186242H1	CYLINDER, Air, (See brake line - Page 13-4)	1		

DRIVE SHAFT

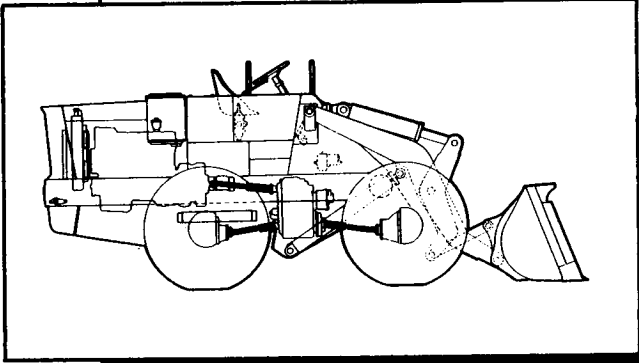
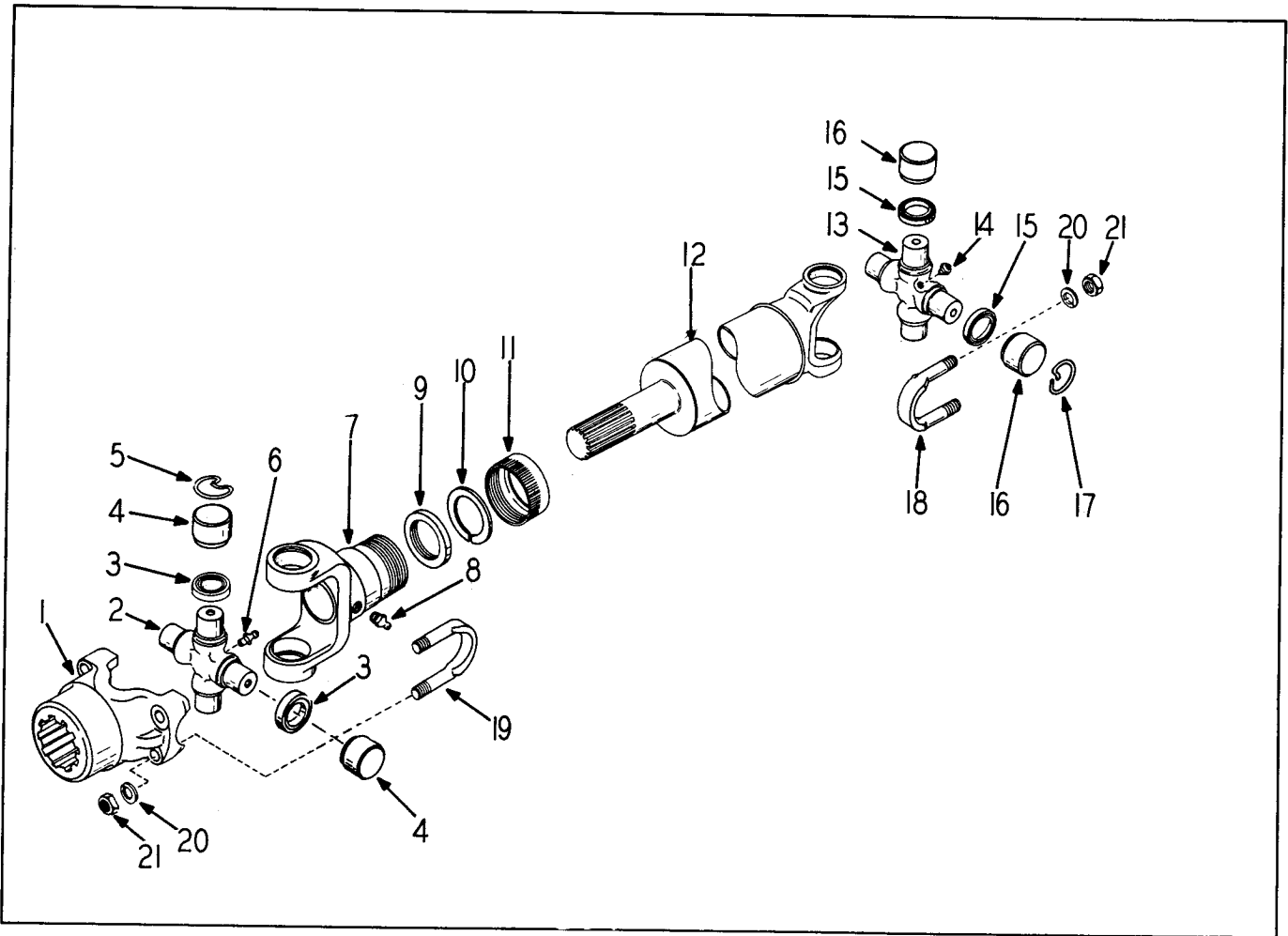


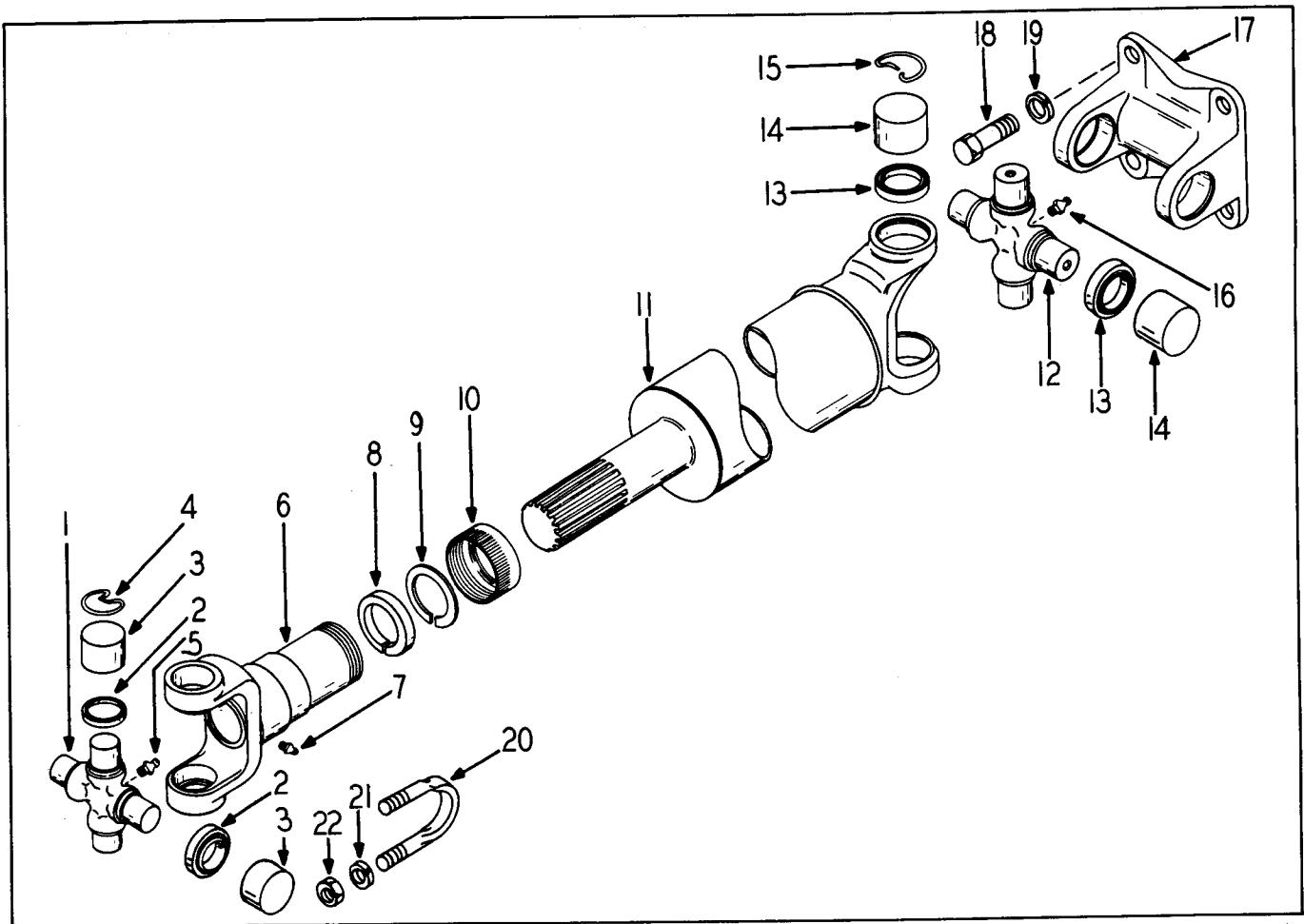
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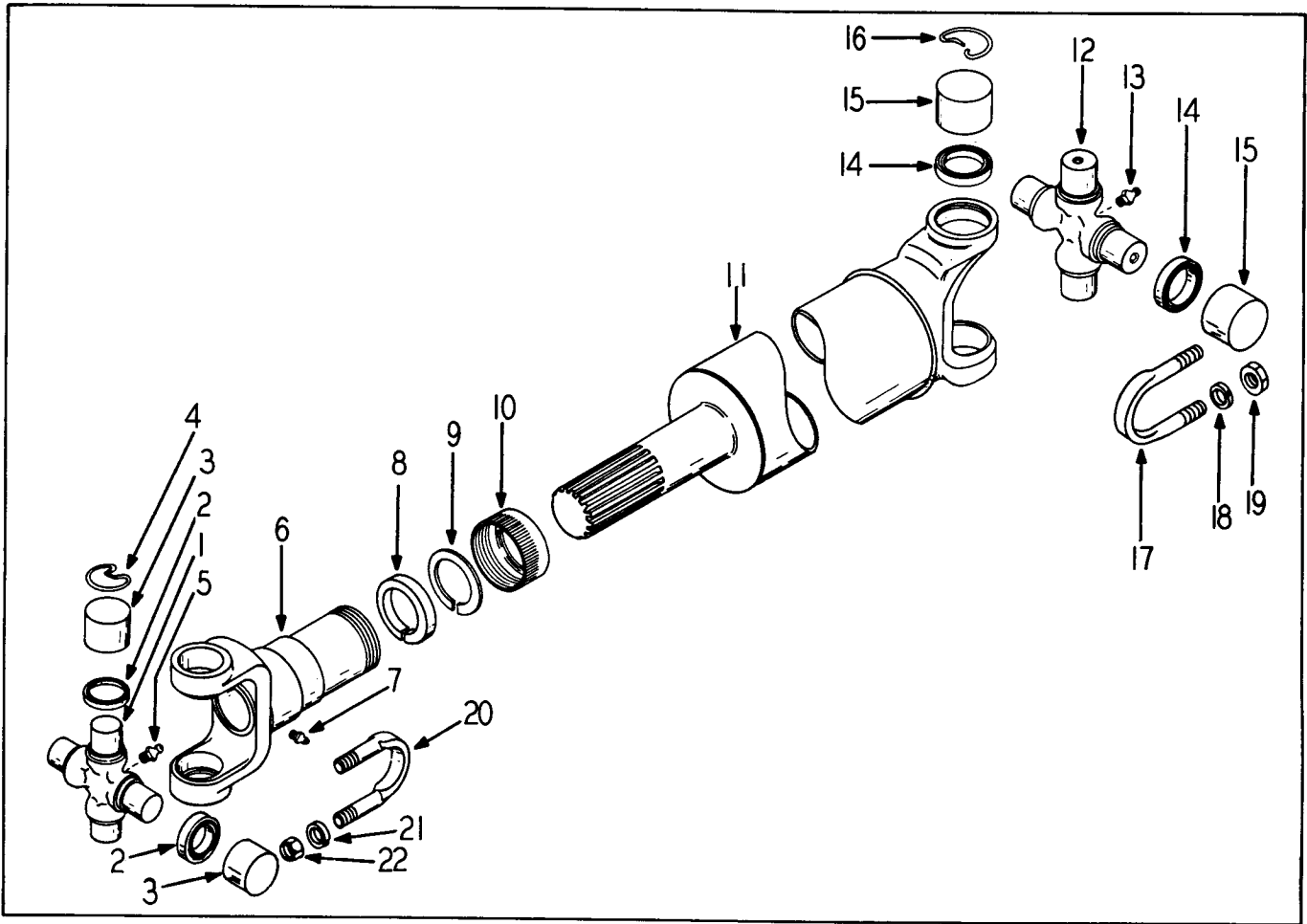
DRIVE SHAFT (Upper Rear)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	154080H1 154081H1	YOKE	1		
		JOURNAL & BEARING ASSEMBLY (Includes Items 2 thru 6)	1		
2		JOURNAL CROSS ASSEMBLY	1		
3	154083H1	GASKET	4		
4		BEARING ASSEMBLY	4		
5	154082H1	RING, Retainer	4		
6	118493H1 176039H1	FITTING, Grease	1		
		SLEEVE YOKE & SHAFT ASSEMBLY (Includes Items 7 thru 12)	1		
7		SLEEVE YOKE ASSEMBLY	1		
8	118491H1	FITTING, Grease	1		
9	154086H1	WASHER, Cork	1		
10	154085H1	WASHER, Steel	1		
11	154084H1	CAP, Dust	1		
12		SHAFT ASSEMBLY	1		
	154081H1	JOURNAL & BEARING ASSEMBLY (Incl. Items 13 thru 17)	1		
13		JOURNAL CROSS ASSEMBLY	1		
14	118493H1	FITTING, Grease	1		
15	154083H1	GASKET	4		
16		BEARING ASSEMBLY	4		
17	154082H1	RING, Retainer	4		
18	151799H1	BOLT, "U"	4		
19	151799H1	BOLT, "U"	2		
20	WL-16	WASHER, Lock	2		
21	H-16	NUT	8		



DRIVE SHAFT (Lower Front)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	154073H1	JOURNAL & BEARING ASSEMBLY (Includes Items 1 thru 5).....	1		
2	154075H1	JOURNAL CROSS ASSEMBLY.....	1		
3	154075H1	GASKET.....	4		
4	154074H1	BEARING ASSEMBLY.....	4		
5	154074H1	RING, Retaining.....	4		
	118493H1	FITTING, Grease.....	1		
6	176038H1	SLEEVE YOKE & SHAFT ASSEMBLY (Includes Items 6 thru 11).....	1		
7	118491H1	SLEEVE, Yoke Assembly.....	1		
8	176036H1	FITTING, Grease.....	1		
9	176036H1	WASHER, Cork.....	1		
10	154077H1	WASHER, Steel.....	1		
11	161784H1	CAP, Dust.....	1		
	154073H1	SHAFT ASSEMBLY.....	1		
12	154073H1	JOURNAL & BEARING ASSEMBLY (Includes Items 12 thru 16).....	1		
13	154075H1	JOURNAL CROSS ASSEMBLY.....	1		
14	154075H1	GASKET.....	4		
15	154074H1	BEARING ASSEMBLY.....	4		
16	154074H1	RING, Retaining.....	4		
17	118493H1	FITTING, Grease.....	1		
18	158031H1	YOKE, Flange.....	1		
19	S-1811	SCREW, Cap.....	4		
20	WL-18	WASHER, Lock.....	4		
21	151803H1	BOLT, "U".....	2		
22	WL-17	WASHER, Lock.....	4		
	H-17	NUT.....	4		



DRIVE SHAFT (Lower Rear)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	154073H1	JOURNAL & BEARING ASSEMBLY (Includes Items 1 thru 5).....	1		
1		JOURNAL CROSS ASSEMBLY	1		
2	154075H1	GASKET	4		
3		BEARING ASSEMBLY	4		
4	154074H1	RING, Retaining	4		
5	118493H1	FITTING, Grease.....	1		
	176035H1	SLEEVE YOKE & SHAFT ASSEMBLY (Includes Items 6 thru 11).....	1		
6		SLEEVE YOKE ASSEMBLY	1		
7	118491H1	FITTING, Grease	1		
8	154078H1	WASHER, Cork.....	1		
9	154077H1	WASHER, Steel	1		
10	161784H1	CAP, Dust	1		
11		SHAFT ASSEMBLY	1		
	154073H1	JOURNAL & BEARING ASSEMBLY (Includes Items 12 thru 16).....	1		
12		JOURNAL CROSS ASSEMBLY	1		
13	118493H1	FITTING, Grease	1		
14	154075H1	GASKET	4		
15		BEARING ASSEMBLY	4		
16	154074H1	RING, Retaining	4		
17	151803H1	BOLT, "U".....	2		
18	WL-17	WASHER, Lock.....	4		
19	H-17	NUT	4		
20	151803H1	BOLT, "U"	2		
21	WL-17	WASHER, Lock	4		
22	H-17	NUT.....	4		

SECTION 6

SOLID AXLE

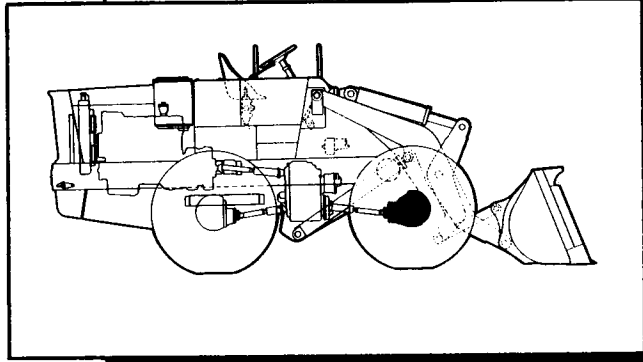
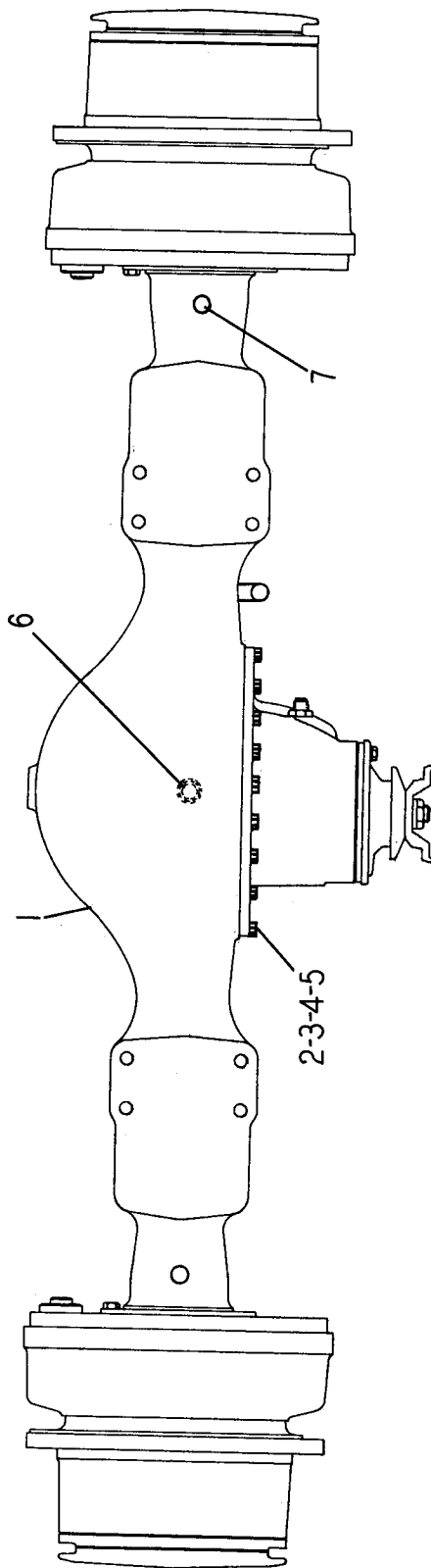


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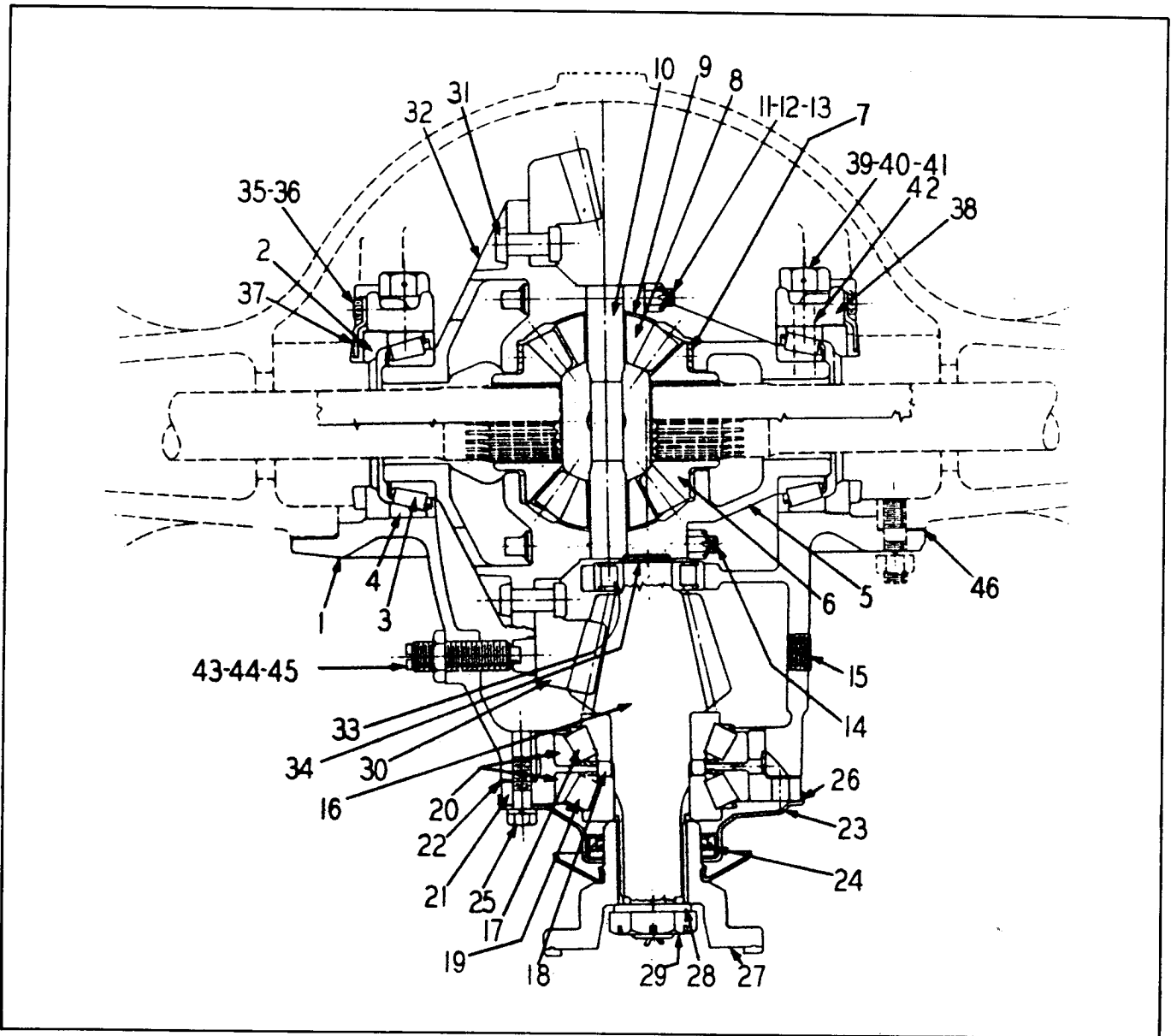
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SOLID AXLE - HOUSING

SOLID AXLE - HOUSING

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	172133H1	FRONT DRIVE AXLE (PR-204-Hx7).....	1		
	175502H1	HOUSING, Includes Item 6	1		
2	132783H1	STUD, Carrier to Housing - Short	10		
3	135993H1	STUD, Carrier to Housing - Long	4		
4	WL-110	WASHER, Lock	14		
5	H-110	NUT	14		
6	P-220	PLUG, Oil Drain	1		
7	116584H1	OIL BREATHER, Axle Housing	3		



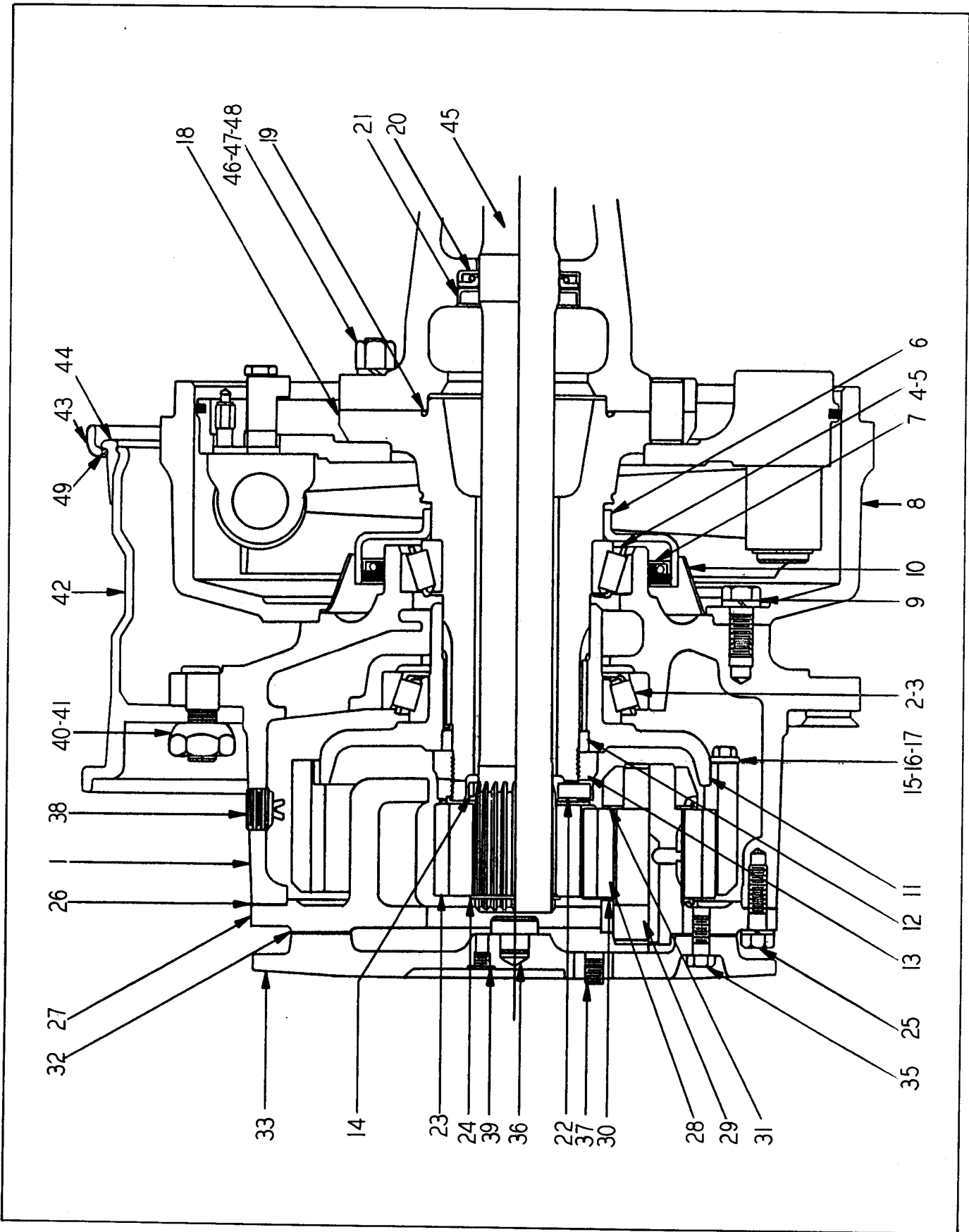
SOLID AXLE - DIFFERENTIAL

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	175486H1	DIFFERENTIAL CARRIER ASSEMBLY	1		
	136296H1	DIFFERENTIAL CASE ASSEMBLY, Includes Items 5 and 32	1		
	136294H1	DIFFERENTIAL & CONE ASSEMBLY, Includes 136296 and Items 3 & 6 thru 14	1		
	137000H1	GEAR, Pinion and Bearing Assembly, Includes Items 16, & 30	1		
	132913H1	DIFFERENTIAL CARRIER & CAP ASSEMBLY, Includes Items 38, 40, 41 and 42	1		
	132912H1	RING, Differential Bearing Adjusting	2		
	132863H1	CONE, Differential Bearing	2		
4	132862H1	CUP, Differential Bearing	2		
5		CASE, Differential (Plain Half) Order 136296	1		
6	132911H1	GEAR, Differential Side	2		
7	132892H1	WASHER, Thrust Differential Side Gear	2		

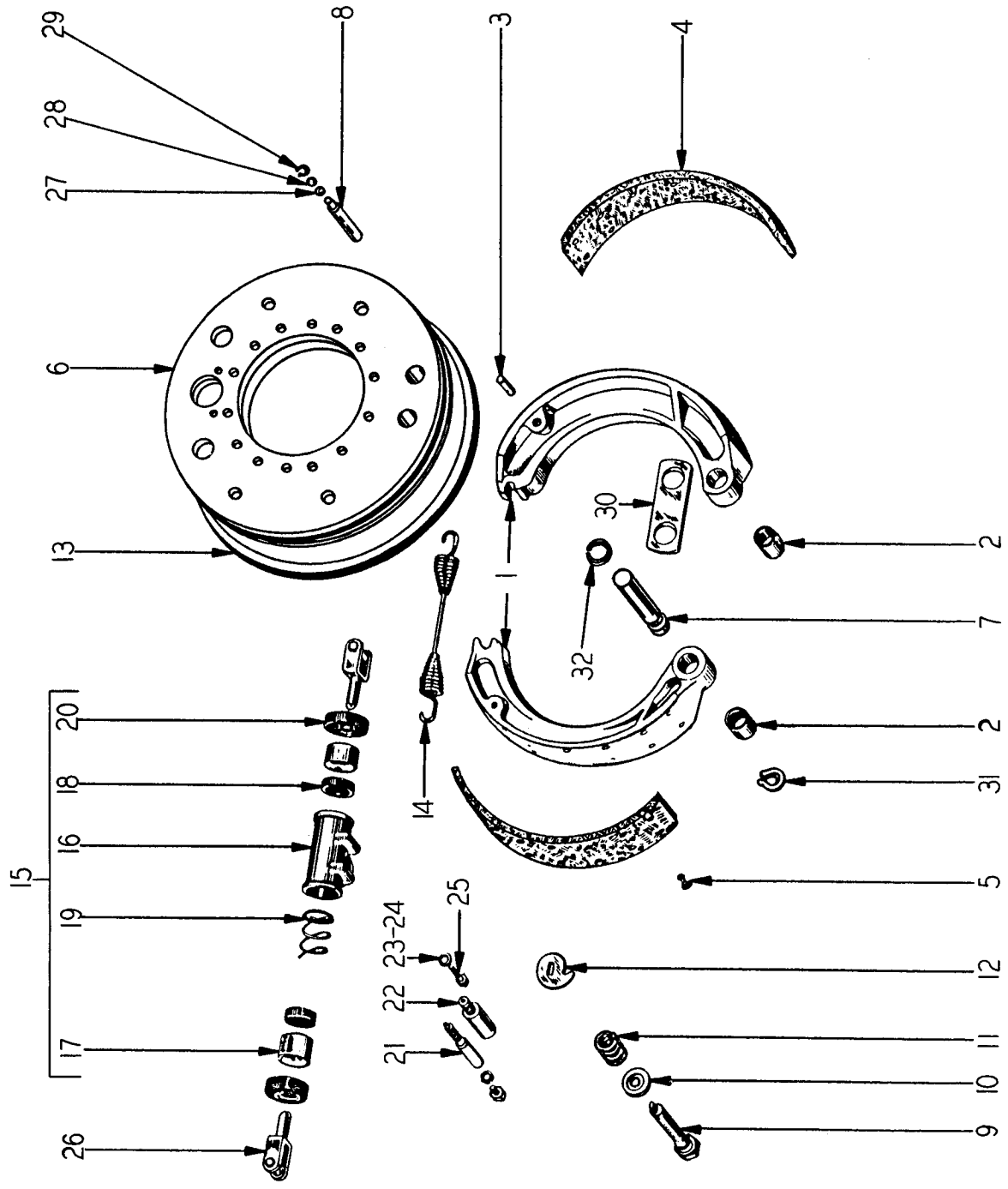
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SOLID AXLE - DIFFERENTIAL (Continued)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
8	132910H1	PINION, Differential	4		
9	132893H1	WASHER, Thrust Differential Pinion	4		
10	132929H1	SPIDER, Differential	1		
11	136276H1	BOLT, Case Differential - Short	4		
12	H-78	NUT, Case Bolt	12		
13	LW-1612	LOCKWIRE	4		
14	136275H1	BOLT, Case Differential - Long	8		
15	P-212	PLUG, Filler and Oil Level Hole	1		
16		DRIVE PINION, Order Gear & Pinion Assembly 137000	1		
	136292H1	PINION FORWARD BEARING CAGE, Bearing & Spacer Assembly - Includes Item 17, 18, 19 21 & 26	1		
17	136299H1	CONE, Inner	1		
18	136278H1	SPACER - .220	AR		
	136279H1	SPACER - .221	AR		
	136280H1	SPACER - .222	AR		
	136281H1	SPACER - .223	AR		
	136282H1	SPACER - .224	AR		
	136283H1	SPACER - .225	AR		
	136284H1	SPACER - .231	AR		
	136285H1	SPACER - .237	AR		
	136286H1	SPACER - .243	AR		
	136287H1	SPACER - .249	AR		
	136288H1	SPACER - .255	AR		
19	132864H1	CONE, Outer	1		
20	132866H1	CUP	2		
21	136291H1	PINION FWD. Brg. Cage & Cup Assy - Incl. Item 20	1		
22	132902H1	SHIM - .005	1		
	132903H1	SHIM - .010	3		
	132901H1	SHIM - .003	1		
23	136297H1	COVER & OIL SEAL ASSEMBLY, Incl. Item 24	1		
24	136277H1	OIL SEAL ASSEMBLY	1		
25	S-2813-8	CAPSCREW, Forward Bearing Cage	8		
26	137058H1	GASKET, Pinion Bearing Cage & Cover	1		
27	175501H1	YOKE, Companion	1		
28	132894H1	WASHER	1		
29	132885H1	NUT	1		
	CP-418	COTTER	1		
30		DRIVE GEAR, Order Gear & Pinion Assy. 137000...	1		
31	132871H1	RIVET, Drive Gear to Case Differential Flange Half	12		
32		CASE DIFFERENTIAL FLANGE HALF, Order 136296	1		
33	137001H1	BEARING, Drive Pinion Rear	1		
34	136999H1	LOCK RING, Bearing Drive Pinion Rear	1		
35	132780H1	CAPSCREW, Ring Lock	4		
36	LW-166	LOCKWIRE, Bearing Adj. { Use #179094 Cotter Pin	2		
37	132900H1	LOCK, Bearing Adj. Ring .. { Bearing Adjusting Ring	2		
38		CAP, Bearing- Order Item 1	2		
39	LW-1615	LOCKWIRE, Bearing Cap Capscrew	2		
40	132876H1	CAPSCREW, Bearing Cap	4		
41	161368H1	WASHER	4		
42	132793H1	DOWEL, Bearing Cap	4		
43	132804H1	BLOCK, Thrust	1		
44	132787H1	NUT, Thrust Block Adj. Screw	1		
45	132786H1	SCREW, Thrust Block Adj.	1		
46	132908H1	GASKET, Carrier to Housing	1		



SOLID AXLE - SHAFT AND HUB



SOLID AXLE - BRAKE

SOLID AXLE - BRAKE

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	152871H1	BRAKE SHOE & LINING ASSEMBLY, Includes Items 2, 3, 4 & 5	4		
2	149994H1	BUSHING	4		
3	149995H1	PIN, Stop	4		
4	153322H1	LINING	4		
5	121083H1	RIVET, Lining.....	64		
6	175510H1	SPIDER BRAKE SEAL, Pins & Adj. Cam Assembly Incls. Items 7 thru 13 & Item 32	2		
7	157457H1	PIN, Brake Anchor	4		
8	150177H1	PIN, Brake Shoe Guide	8		
9	150093H1	PIN, Brake Shoe Adj. Cam, Includes Item 10	4		
10	121725H1	WASHER, Brake Shoe Adj. Cam	4		
11	150179H1	SPRING, Brake Shoe Adj. Cam	4		
12	116278H1	CAM, Brake Shoe Adj.	4		
13	150180H1	SEAL, Brake Drum	2		
14	150102H1	SPRING, Brake Shoe Return	2		
15	105750H1	WHEEL CYLINDER ASSEMBLY, Includes Items 16 thru 20	2		
16		CASTING, Cylinder (Order Item 15).....	2		
17	109538H1	PISTON	4		
18	109539H1	CUP	4		
19	109540H1	SPRING	2		
20	109541H1	BOOT	4		
21	118418H1	BLEEDERSCREW, Wheel Cylinder.....	2		
22	132830H1	INLET CONNECTION	2		
23	HA-884	GASKET, Inlet Connection	2		
24	HA-883	GASKET, Inlet Connection	2		
25	107589H1	BOLT, Inlet Connection	2		
26	107591H1	LINK, Connecting	4		
27	150099H1	WASHER	16		
28	150100H1	WASHER, Spring	8		
29	150101H1	"C" WASHER	8		
30	175511H1	LINK, Anchor Pin	2		
31	124242H1	"C" WASHER, Anchor Pin.....	4		
32	157451H1	SNAP RING, Anchor Pin	4		
	S-269-8	CAPSCREW	4		
	WL-16	LOCKWASHER	4		
	107587H1	REPAIR KIT, Wheel Cylinder (Includes 2 of item 18 & 20)	Ref		

SECTION 7

STEERING AXLE

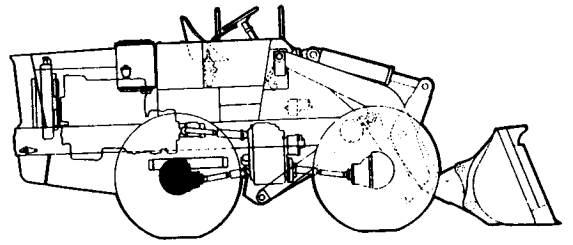
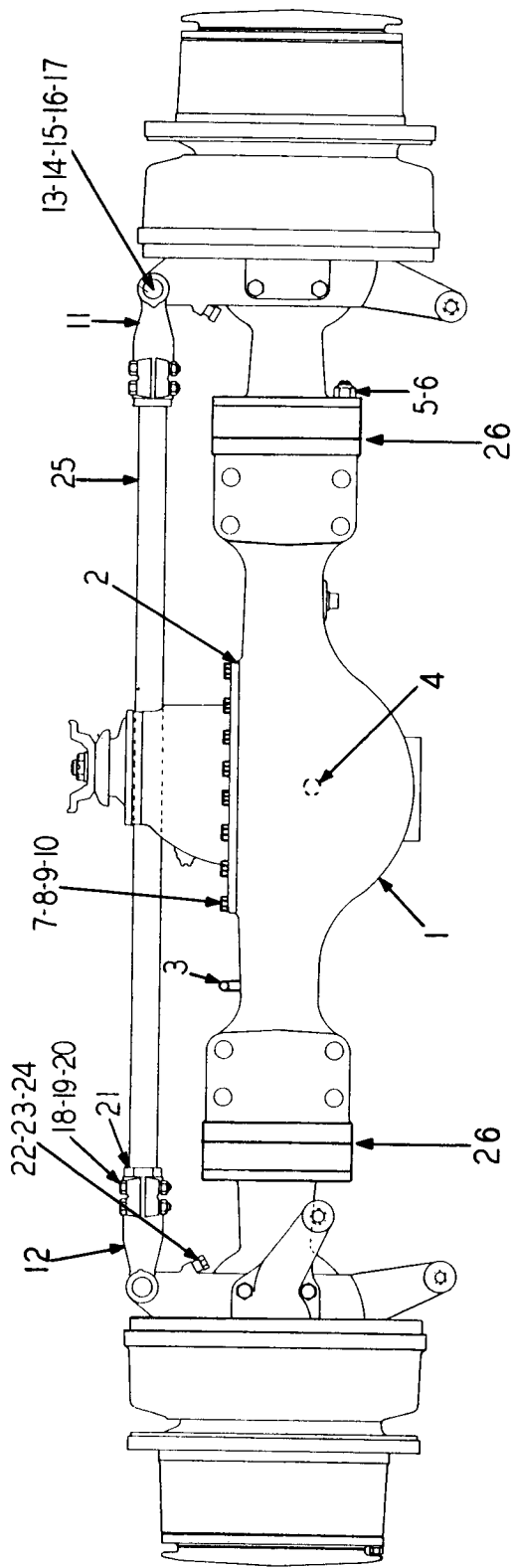


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STEERING AXLE - HOUSING

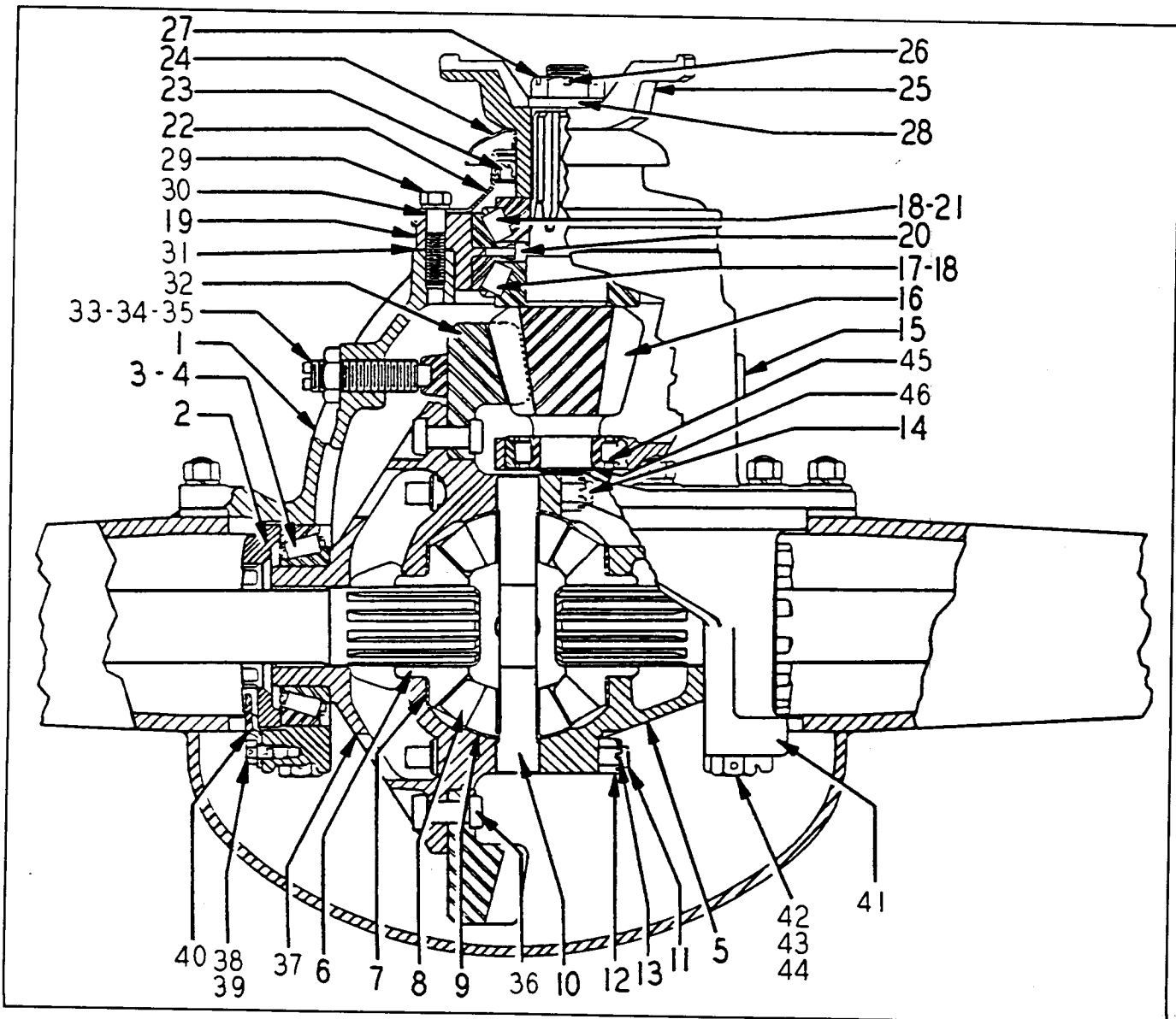
STEERING AXLE - HOUSING

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	* 172135H1	STEERING AXLE COMPLETE (PS-150-HX5)	1		
	* 172135H2	STEERING AXLE COMPLETE (PS-150-HX7)	1		
	* 191209H1	STEERING AXLE COMPLETE (PS-150-HX9)	1		
	175528H1	HOUSING	1		
1	137317H1	GASKET, Carrier to housing	1		
2	116584H1	BREATHER, Oil axle housing	1		
3	P - 220	PLUG, Oil drain	1		
4	175514H1	STUD, Trunion socket to housing	20		
5	141407H1	NUT, Socket to housing stud	20		
6	136727H1	STUD, Carrier to housing - long	4		
7	136726H1	STUD, Carrier to housing - short	10		
8	H-18-8	NUT, Housing stud	14		
9	WL-18	WASHER, Lock	14		
10	109495H1	YOKE, Tie rod (12 Thd.) R.H.	1		
11	109494H1	YOKE, Tie rod (16 Thd.) L.H.	1		
12	109386H1	BUSHING	2		
13	109354H1	BOLT, Tie rod yoke	2		
14	109384H1	NUT	2		
15	CP-412	PIN, Cotter	2		
16	109377H1	PIN, Lock	2		
17	S-1822-8	BOLT, Clamp	4		
18	H - 18	NUT	4		
19	WL - 18	WASHER, Lock	4		
20	109385H1	NUT, Lock tie rod	1		
21	109355H1	SCREW	2		
22	115917H1	SPACER	2		
23	109471H1	SHIM	12		
24	175534H1	ROD, Tie	1		
25	191941H1	SPACER, Socket to housing	2		
26					

* NOTE: 172135H2 Axle replaced 172135H1 on machines of S/N 21CG-2273, 2296, 2298, 2299, 2300, 2301, & 2304 thru 2375.

191209H1 Axle replaced 172135H2 on machines of S/N 21CC-2376 and Up.

On orders for Axle Assemblies 172135H1 or H2 Supply Axle 191209H1 plus (2) 191382H1 Clevis (2) 191381H1 Braced Clevis, (4) 191281H1 Pin, (4) E-312 Nut, (4) 119694H1 Lube Fitting, (4) 191282H1 Tab-lock, (4) S-165 Capscrew, (4) WL-16 Lockwasher, (2) 138926H1 Clamp, (4) WF-312 Flatwasher, (1) 191317H1 Mounting Bracket, Adjust clevis end on old steering cylinders to dimension shown on reference drawing 191284H1.



STEERING AXLE - DIFFERENTIAL

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	155144H1	DIFFERENTIAL CARRIER ASSEMBLY, Used with 172135 Steering Axle	1		
	184204H1	DIFFERENTIAL CARRIER ASSEMBLY, Used with 172125H2 Steering Axle	1		
	127047H1	DIFFERENTIAL CASE ASSEMBLY, Includes Items 5, 11, 12, 14 & 37	1		
	137216H1	DIFFERENTIAL ASSEMBLY, Includes 127047 & Items 6 thru 10 & 13	1		
	138995H1	GEAR & PINION SET, Used with 172135 Steering Axle, Includes Items 16 & 32	1		
	184207H1	GEAR & PINIONSET, Used with 172135H2 Steering Axle, Includes Items 16 & 32	1		
1	137215H1	DIFFERENTIAL CARRIER & CAP ASSEMBLY, Includes Items 41, 43 & 44	1		
2	136783H1	RING, Bearing Adjusting	1		
3	117548H1	CONE, Differential Bearing	2		
(Continued on following page)					

STEERING AXLE - DIFFERENTIAL (Continued)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
4	127262H1	CUP, Differential Bearing	2		
5		CASE, Plain half (Part of 127047, see assy.)	1		
6	136780H1	GEAR, Side	2		
7	127056H1	WASHER, Thrust	2		
8	136778H1	PINION	4		
9	136779H1	WASHER, Thrust	4		
10	127057H1	SPIDER, Differential	1		
11	127049H1	BOLT, Long, Differential Case	8		
12	H-78-1	NUT, Diff. Case	12		
13	LW-1626	LOCKWIRE, Differential Case Bolt	2		
14	127050H1	BOLT, Short, Differential Case	4		
15	P-212	PLUG, Filter & Oil Level Hole	1		
16		DRIVE PINION (Sold only in sets-see assy.)	1		
17	127027H1	CONE, Inner	1		
18	127028H1	CUP, Bearing, Pinion	2		
19	137501H1	PINION BEARING CAGE & CUP ASSEMBLY Includes Item 18	1		
20		SPACER, .219			
	127067H1	SPACER, .220			
	127068H1	SPACER, .221			
	127069H1	SPACER, .222			
	127070H1	SPACER, .223			
	127071H1	SPACER, .224			
	127072H1	SPACER, .230			
	127073H1	SPACER, .236			
	127074H1	SPACER, .242			
	127075H1	SPACER, .248			
	127076H1	SPACER, .254			
	127077H1	CONE, Outer	1		
21	127026H1	COVER & OIL SEAL ASSEMBLY, Includes Item 23 ...	1		
22	127064H1	OIL SEAL ASSEMBLY	1		
23	127063H1	SLINGER, Order Item 25	1		
24		YOKE & SLINGER ASSEMBLY	1		
25	156773H1	PIN, Cotter	1		
26	CP-414	NUT, Drive Pinion	1		
27	104078H1	WASHER	1		
28	127079H1	SCREW, Cap, Pinion Bearing Cage	8		
29	S-2714-8	GASKET, Cover	1		
30	127078H1	SHIM, Pinion Bearing Cage .005			
31	127251H1	SHIM, Pinion Bearing Cage .010			
	136784H1	SHIM, Pinion Bearing Cage .003			
	127250H1	DRIVE, Gear (Sold only in sets, see above)	1		
32	132804H1	BLOCK, Thrust	1		
33	136786H1	NUT	1		
34	136785H1	SCREW, Thrust Block	1		
35	* 127406H1	RIVET, Diff. & Drive Gear	12		
36		CASE, Flange Half (Part of 127047)	1		
37	132780H1	SCREW, Cap	4		
38	LW-166	WIRE, Lock	2		
39	132900H1	LOCK	2		
40	179094H1	PIN, Cotter, used with 172135H2 axle	1		
41		CAP, Differential Brg. (order Item 1)	1		
42	LW-1612	WIRE, Lock	2		
43	136770H1	SCREW, Cap, Diff. Brg. Cap	4		
	184210H1	WASHER	4		
44	132793H1	DOWEL, Diff. Brg. Cap	4		
45	127113H1	BEARING, Drive Pinion (used with 172135 axle)	1		
45	184211H1	BEARING, Drive Pinion (used with 172135H2 axle)	1		
46	127080H1	RING, Snap, Brg. (used with 172135 axle)	1		
46	136999H1	RING, Snap, Brg. (used with 172135H2 axle)	1		

* For service use 143062H1 Bolt,
H-78-1 nut and LW-1610 lockwire.

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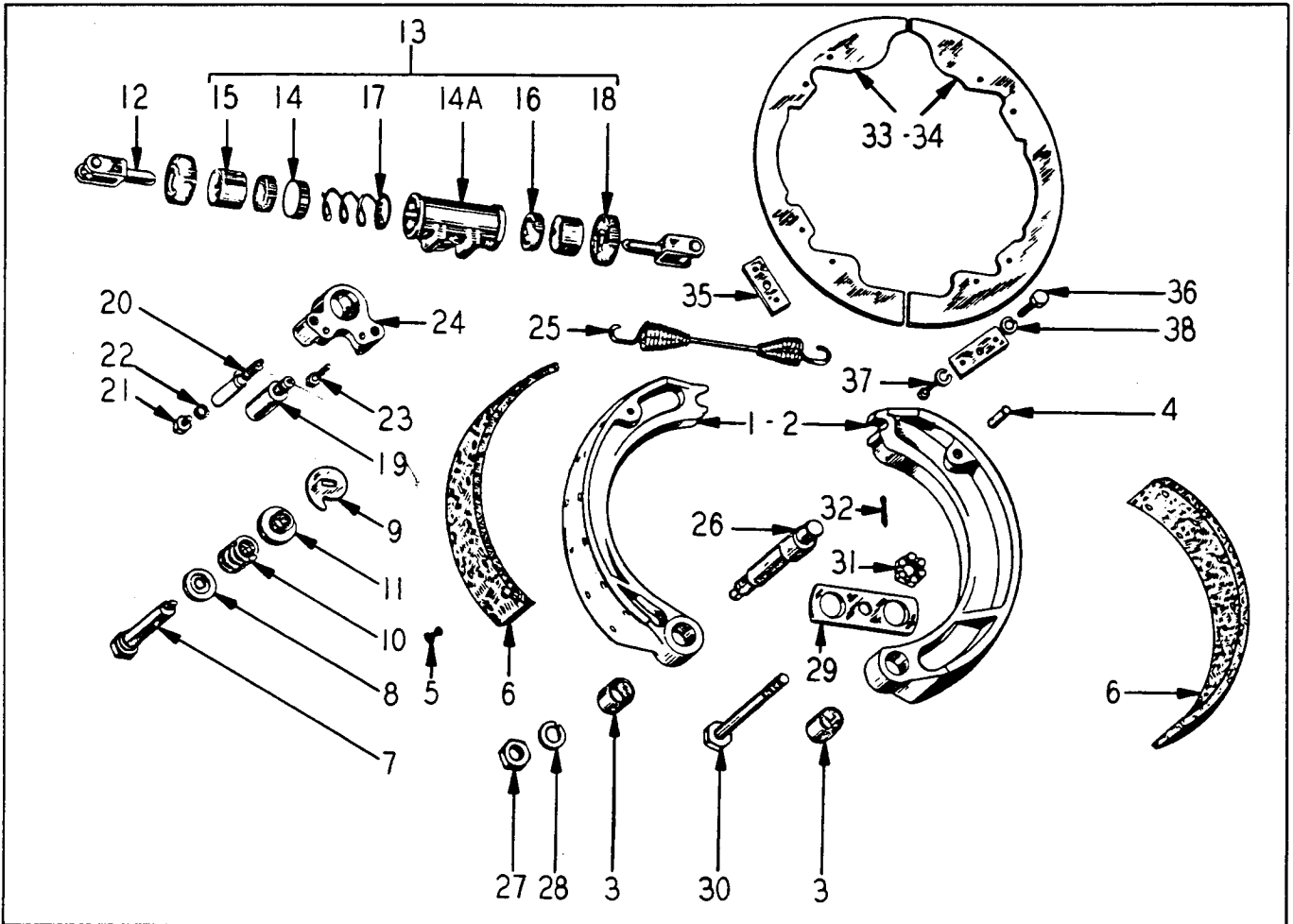
STEERING AXLE - SHAFT & HUB

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
		<i>part C/N 422 m195</i>			
1	175531H1	HUB & CUP ASSEMBLY, Includes Items 2 & 4	2		
2	136032H1	CUP, Hub Bearing (outer)	2		
3	136031H1	CONE, Hub Bearing (outer)	2		
4	136030H1	CUP, Hub Bearing (inner)	2		
5	148525H1	CONE, Hub Bearing (inner)	2		
6	148522H2	RETAINER, Hub Oil Seal, includes item 8	2		
7	137234H1	SEAL, Oil	2		
8	136233H2	SEAL, Oil, Hub Bearing	2		
9	136251H1	SLINGER, Oil	2		
10	141538H2	DRUM, Brake	2		
11	152163H1	SCREW, Cap	20		
	LW-1650	WIRE, Lock	2		
12	136026H1	HUB, Ring Gear, includes item 18	2		
13	136023H1	GEAR, Planetary Ring 52T	2		
14	S-266-D8	SCREW, Cap, Ring Gear	16		
	LW-166	WIRE, Lock	8		
15	136003H1	LOCK, Ring Gear	8		
16	148521H1	HUB, Spindle, includes item 17	2		
17	136237H1	BUSHING	2		
18		SLEEVE, Not serviceable order item 12	2		
19	136004H1	NUT, Hub Bearing	2		
20	136013H1	LOCK, Hub Bearing Nut	4		
21	146995H1	CAGE ASSEMBLY, Universal Joint, includes items 22 thru 26	2		
22	150967H1	RACE, Universal Joint (Outer)	2		
23	127227H1	CAGE	2		
24	127226H1	BALL	12		
25	132451H1	RACE, Inner	2		
26	132452H1	RING, Snap, Axle Shaft Retainer	2		
27	136239H1	RING, Snap, Drive Joint Retainer	2		
28	136024H1	GEAR, Planetary Sun (20T)	2		
29	136005H1	WASHER, Sun Gear	2		
30	175536H1	SHAFT, Axle Drive	2		
	187016H1	GUIDE, Axle Drive Shaft	2		
31	136735H1	SEAL, Oil, Drive Shaft	2		
32	175535H1	SOCKET & PIN ASSEMBLY, Trunnion	2		
33	104559H1	CONE, Steering Bearing	4		
34	109310H1	CUP, Steering Bearing	4		
35	109379H1	RETAINER, Grease	2		
36	175532H1	STEERING KNUCKLE FLANGE & STUD ASSEMBLY R.H., includes 12 of item 39, items 49 & 50, 20 of items 79, 80 & 81, items 13, 22, 23, 24 in Housing Group & items 7 thru 11 in Brake Group	1		
37	175533H1	STEERING KNUCKLE FLANGE & STUD ASSEMBLY, L.H., includes 12 of item 39, items 49 & 50, 2 of items 79, 80 & 81, items 13, 22, 23, 24 in Housing Group & items 7 thru 11 in Brake Group	1		
38	141933H1	NUT	24		
39	152138H1	STUD	24		
40	148528H1	WASHER, Lock	24		
41	109485H1	CAP, Steering Bearing, Upper	1		
42	S-21012-8	SCREW, Cap	4		
	WL-110	WASHER, Lock	4		
43	109470H1	SHIM, Steering Brg. Cap, Thick	4		
44	109469H1	SHIM, Steering Brg. Cap, Thin	20		
45	109486H1	CAP, Steering Brg., Lower	2		
46	S-21012-8	SCREW, Cap	8		
	WL-110	WASHER, Lock	8		
47	147761H1	ARM, Steering	1		
48	109376H1	DOWEL, Steering Arm Stud	2		
49	136229H1	STUD, Steering Arm, Inner	2		
50	109350H1	STUD, Steering Arm, Outer	2		
51	H-110	NUT, Steering Arm Stud, Inner	2		
52	WL-110	WASHER, Lock	4		

(Continued on following page)

STEERING AXLE - SHAFT & HUB (Continued)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
53	149446H1	RING, Snap, Trunnion Socket	2		
54	178795H1	RETAINER	2		
55	149444H1	SEAL	2		
56	183214H1	"O" RING, Spider to Hub	2		
57	132776H1	SCREW, Cap	28		
58	WL-18	WASHER, Lock Spider to Hub	28		
59	175506H1	SPIDER	2		
60	136022H1	SHAFT, Planetary Pinion	6		
61	136006H1	WASHER, Pinion Thrust, Outer	6		
62	198031H1	WASHER, Pinion Thrust, Inner - replaced 136007	6		
63	136025H1	PINION, Planetary (16T)	6		
64	136016H1	GASKET, Spider Cover	2		
65	144024H1	COVER, Spider, Includes Item 67	2		
66	S-279-8	SCREW, Cap w/lockwasher, cover	16		
67	136012H1	BUTTON, Thrust	2		
68	P - 24	PLUG, Planetary Drive Oil Filler	2		
69	136009H1	PLUG, Planetary Drive Oil Drain	2		
70	102430H1	NUT, Wheel	24		
71	135996H1	STUD, Wheel	24		
72	150415H1	WHEEL	2		
73	138546H1	FLANGE	2		
74	138547H1	RING, Lock	2		
75	138548H1	"O" RING	2		
76	OR3-8	"O" RING	2		
77	OR3-47	"O" RING	2		
78	WL-18	WASHER, Lock	16		
*79	109323H1	NUT	4		Steering Knuckle
*80	116374H1	SCREW, Cap	4		Flange Halves
*81	S-2810-8	SCREW, Cap	12		Attaching
	P - 32	PLUG	2		
		VALVE, Rim #TR-623			Buy from
		TIRE, 16:00 x 24-12 Ply			Local Dealer
		Grader Tubeless			
		S/N 21CC - 2376 and up			
		*Note: On Axle 191209H1 the Steering Knuckles changed. Listed are the new number and parts included.			
	192346H1	STEERING KNUCKLE ASSEMBLY (Opposite Steering Arm Side)			
	109355H1	SCREW	1		
	109471H1	SHIM	6		
	115917H1	SPACER	1		
	152138H1	STUD	12		
	197378H1	STEERING KNUCKLE ASSEMBLY	1		
	109386H1	BUSHING	1		
	116287H1	BOLT ASSEMBLY	2		
	116289H1	RETAINER	2		
	116290H1	SPRING	2		
	121726H1	CAM	2		
	191211H1	BUSHING	2		
	197379H1	FLANGE ASSEMBLY	1		
	109323H1	NUT	2		
	116374H1	BOLT	2		
	S-2810-8	CAPSCREW	2		
	192347H1	STEERING KNUCKLE ASSEMBLY (Steering Arm Side) includes same items as listed above plus the following:			
	109350H1	STUD	2		
	136229H1	STUD	2		



STEERING AXLE - BRAKE

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	150916H2	SHOE & LINING ASSEMBLY, L.H. Fwd. R.H. Rev. ...	2		
2	150917H2	SHOE & LINING ASSEMBLY, R.H. Fwd. L.H. Rev. ...	2		
		Items 1 & 2 include the following 4 items			
3	120679H1	BUSHING	4		
4	112277H2	PIN	4		
5	121083H1	RIVET	64		
6	161087H1	LINING KIT, Includes 4 linings & 72 Rivets	AR		
7	116287H1	BOLT, Brake Adjusting Cam	4		
8	121725H1	WASHER, Adjusting Cam	4		
9	121726H2	CAM, Brake Shoe Adjusting	4		
10	116290H1	SPRING, Adjusting Cam	4		
11	116289H1	RETAINER, Adjusting Cam Spring	4		
12	107591H1	LINK, Connecting	4		
13	121728H1	WHEEL CYLINDER ASS'Y., includes items 14 thru 18	2		
		(Continued on following page)			

STEERING AXLE - BRAKE (Continued)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
14	151453H1	RETAINER, Spring	4		
14A		CASTING, Cylinder, Order Item 13	2		
15	109538H1	PISTON	2		
16	109539H1	CUP	4		
17	122008H1	SPRING	2		
18	109541H1	BOOT	4		
18A	121729H1	FITTING, Inlet, Wheel Cylinder	2		
19	121730H1	EXTENSION, Inlet Fitting	2		
20	121731H1	SCREW, Bleeder	2		
21	S-144	SCREW, Cap, Bleeder Screw	2		
22	WL-14	WASHER, Lock	2		
23	174957H1	SCREW, Cap, Wheel Cylinder	4		
24	174956H1	ADAPTER, Wheel Cylinder	2		
	S-2816-8	SCREW, Cap	4		
	WL-18	WASHER, Lock	4		
		} Adapter to Flange			
25	120689H1	SPRING, Brake Shoe Return	2		
26	120683H1	PIN, Brake Shoe	4		
27	120675H1	NUT, Brake Shoe Pin	4		
28	WL-116	WASHER, Lock	4		
29	120680H1	LINK, Brake Shoe	2		
30	151135H1	BOLT, Brake Shoe Link	2		
31	H-78	NUT, Link Bolt	2		
32	CP-38	COTTER, Link Bolt	2		
33	138785H1	SHIELD, Dust	2		
34	138786H1	SHIELD, Dust	2		
		} Service in sets			
35	120684H1	PLATE, Dust Shield Mounting	4		
36	S-267	SCREW, Cap, Shield Plate to Flange	4		
37	S-264H1	SCREW, Cap, Dust Shield	12		
38	WL-16	WASHER, Lock	16		
	HA-884	GASKET	4		
	107587H1	KIT, Repair, Wheel Cylinder, includes items 16 & 18 .	AR		

STEERING GEAR

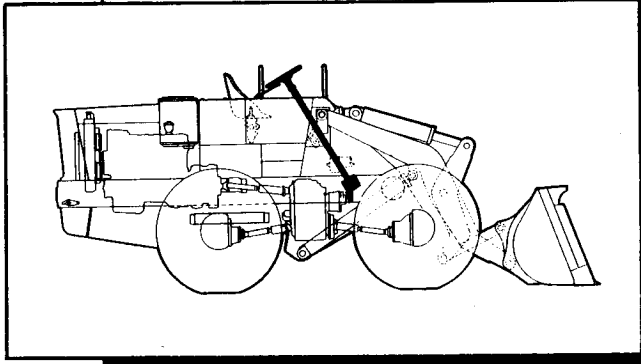
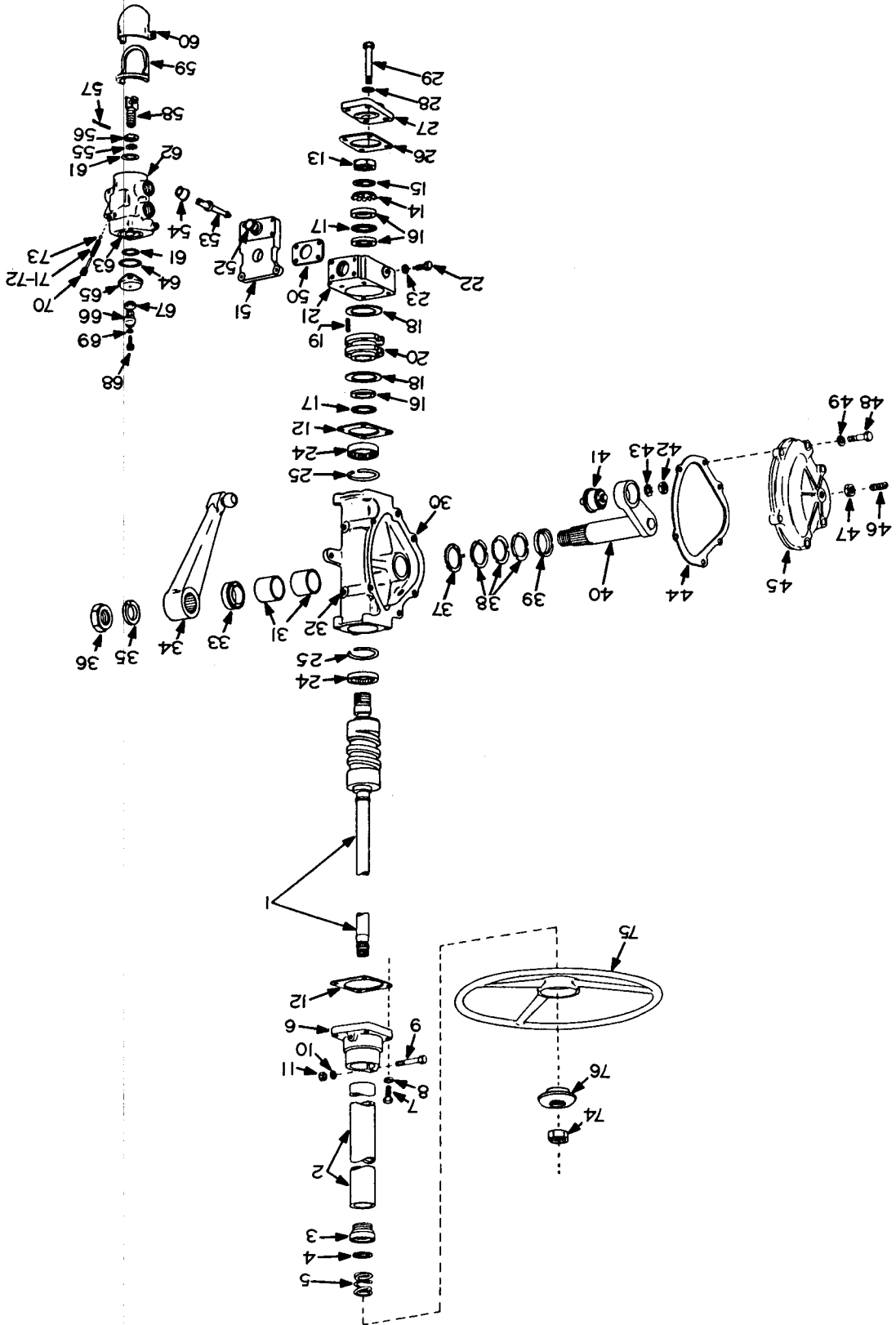


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VALVE, STEERING	8 - 4

ROSS STEERING GEAR



ROSS STEERING GEAR

USED ON MACHINES OF S/N 21CC-1905 thru 21CC-2181 & 2183, 2185 & 2186

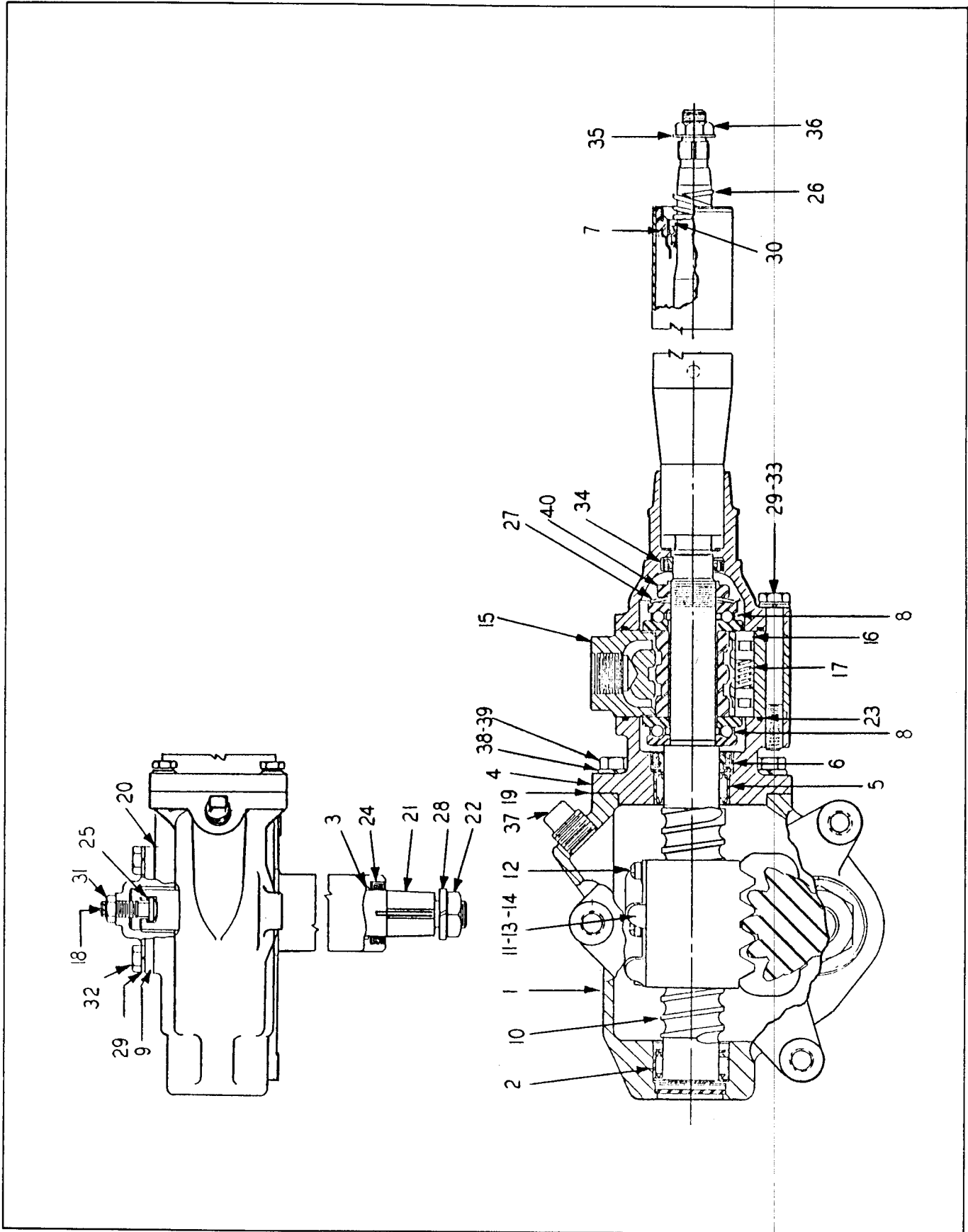
ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	171659H2	STEERING GEAR, Ross (includes items 1 thru 74 less item 34	1		
1	195500H1	CAMSHAFT & TUBE ASSEMBLY	1		
	181029H1	JACKET TUBE ASSEMBLY, Includes #176400 Bearing	1		
2		JACKET, Tube (Order #181029)	1		
3	176400H1	BEARING, Jacket Tube	1		
6	146371H1	COVER, Upper	1		
7	S-266	SCREW, Cap	4		
8	160033H1	WASHER, Lock	4		
	P - 12	PLUG, Pipe	1		
9	142521H1	SCREW, Cap	1		
10	WL-16	WASHER, Lock	1		
11	H - 16	NUT	1		
12	150773H1	GASKET	2		
13	150799H1	NUT, Lock	1		
14	150766H1	WASHER, Lock	1		
15	150765H1	WASHER, Tongued	1		
16	150767H1	WASHER, Thrust	3		
17	150778H1	BEARING, Thrust	2		
18	158513H1	WASHER, Centering	2		
19	150782H1	SPRING	4		
20	150791H1	ACTUATOR	1		
21	158511H1	HOUSING, Actuator	1		
22	146380H1	SCREW	1		
23	160457H1	WASHER, Lock	1		
24	138461H1	BEARING, Cam	2		
25	138460H1	RING, Bearing Retainer	2		
26	146372H1	GASKET, Cover	1		
27	155485H1	COVER, End	1		
28	160033H1	WASHER, Lock	4		
29	S-2622	SCREW, Cap	4		
	176119H1	HOUSING ASSEMBLY, Includes items 24, 25, 30 31 & 33	1		
30		HOUSING, Order #176119	1		
31	138445H1	BUSHING	2		
32	P - 16	PLUG, Pipe	AR		
33	127555H1	SEAL, Oil	1		
34	173763H1	ARM ASSEMBLY (Used on Machines Prior to Serial Number 21CC-2111)	1		
34	155484H1	ARM ASSEMBLY (Used on Machines of S/N 21CC-2111 & Up)	1		
35	WL-118	WASHER, Lock	1		
36	127564H1	NUT	1		
	181027H1	LEVER SHAFT ASS'Y., Includes items 35, 36 & 41 thru 43	1		
40		LEVER SHAFT, Order #181027	1		
41	172665H1	BEARING ASSEMBLY, Includes items 42 & 43	1		
42	HS-858	NUT	1		
43	HS-859	WASHER, Prongued	1		
44	181030H1	GASKET, Side Cover	1		
45	176120H1	COVER ASSEMBLY, Side, includes items 46 & 47	1		
46	120065H1	SCREW, Adjusting	1		
47	120069H1	NUT, Lock	1		
48	S-2610	SCREW, Cap	6		
49	160033H1	WASHER, Lock	6		
50	150771H1	GASKET	1		
51	158514H1	BRACKET ASS'Y., Valve Mtg.	1		
52	NSS	BUSHING	1		
	150801H1	SCREW, 1/4" 20 x 5/8"	2		
	150756H1	SCREW, 1/4" 20 x 1"	2		
	166570H1	SCREW, 1/4" 20 x 1 1/4" ...] Valve to Mtg. Plate	2		

(Continued on following page)

ROSS STEERING GEAR (Continued)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	140538H1	WASHER, Lock	6		
53	158512H1	LEVER, Actuating	1		
54	150769H1	SEAL, Lever	1		
55	127139H1	WASHER, Lock	1		
56	155487H1	NUT	1		
57	CP-28	PIN, Cotter	1		
58	150762H1	CLEVIS	1		
59	150788H1	SEAL, Lever Cover	1		
60	150787H1	COVER, Lever	1		
61	OR4-19	"O" RING	2		
	150758H1	VALVE ASSEMBLY, Includes items 55 thru 58 & 61 thru 73	1		
62		BODY, Valve	1		
63		SPOOL, Valve } Order 150758H1	1		
	150796H1	COVER, Valve, Spool & Seal Assembly includes items 64 thru 67	1		
64	OR2-24	"O" RING, Seal	1		
65		COVER, Order #150796	1		
66	150790H1	RETAINER, Seal	1		
67	150789H1	SEAL, Rubber	1		
68	150801H1	SCREW	2		
69	140538H1	WASHER, Lock } Retainer to Valve Body	2		
70	150774H1	PLUG	1		
71	130128H1	SPRING	1		
72	164916H1	SPRING	1		
73	130127H1	BALL, Steel	1		
74	127568H1	NUT, Wheel	1		
75	HS-865	WHEEL, Steering	1		
76	160480H1	COVER, Wheel	1		
	153492H1	BRACKET	1		
	S-169	SCREW, Cap	2		
	WF-16	WASHER, Flat	2		
	WL-16	WASHER, Lock	2		
	H - 16	NUT	2		
	144079H1	"U" BOLT	1		
	144068H1	BLOCK	1		
	WL-26	WASHER, Lock	2		
	H - 26	NUT	2		
	S-1822	SCREW, Cap	1		
	H - 18	NUT	1		
	WF-18	WASHER, Flat	1		
	WL-18	WASHER, Lock	1		
	S-21016	SCREW, Cap	2		
	WL-110	WASHER, Lock	2		
	176164H1	ANGLE, Steering Gear	1		
	S-11216	SCREW, Cap	4		
	WL-112	WASHER, Lock	4		
	H-112	NUT	4		

NOTES



SAGINAW STEERING GEAR

SAGINAW STEERING GEAR

NOTE: The following parts should also be changed when using the Saginaw Steering Gear. Refer to Steering Lines Group, Page 2. Delete (1) of Item 11 & add (1) #156436H1 Hose & (1) 291-10 Elbow. Delete (1) of Item 15 & add (1) #131147H1 Hose & (1) 291-8 Elbow.

ITEM NO.	PART NO.	PART NAME	Qty.
*	184687H2	STEERING GEAR CHECK (Includes Items 1 - 40) . (#197191H1)	1
1	186474H1	HOUSING ASSEMBLY (Includes Items 2 & 3) (SAME)).....	1
2	158296H1	BEARING (SAME)).....	1
3	186475H1	BUSHING (SAME)).....	2
4	186468H1	ADAPTER ASSEMBLY (Includes Items 5 & 6)..... (SAME)).....	1
5	158296H1	BEARING (SAME)).....	1
6	186469H1	SEAL (SAME)).....	1
7	193155H1	BEARING ASSEMBLY, Upper (SAME)).....	1
8	158297H1	BEARING, Thrust (SAME)).....	2
9	186470H1	COVER ASSEMBLY (SAME)).....	1
10	186513H1	SHAFT ASSEMBLY (Includes Items 11 - 14) (195667H1)).....	1
11	HS-911	BALL (SAME)).....	106
12	107940H1	BOLT & WASHER (SAME)).....	3
13	107941H1	CLAMP, Guide (SAME)).....	1
14	107942H1	GUIDE (SAME)).....	4
	107943H1	NUT, Ball (SAME)).....	1
15	158302H1	VALVE ASSEMBLY (Includes Items 16 & 17) (SAME)).....	1
16	158303H1	PLUNGER (SAME)).....	8
17	158304H1	SPRING (SAME)).....	4
18	HS-914	ADJUSTER, Lash (SAME)).....	1
19	186480H1	GASKET (SAME)).....	1
20	186481H1	GASKET (SAME)).....	1
21	186482H1	GEAR (SAME)).....	1
22	161810H1	NUT (SAME)).....	1
23	186483H1	SEAL (SAME)).....	2
24	186484H1	SEAL (SAME)).....	1
25	122511H1	KIT, Shim (Includes next four Items) (SAME)).....	1
	HA-1440	SHIM, (.063)..... (SAME)).....	1
	HA-1441	SHIM, (.065)..... (SAME)).....	1
	HA-1445	SHIM, (.067)..... (SAME)).....	1
	HA-1446	SHIM, (.069)..... (SAME)).....	1
26	Not Used	SPRING..... (HA-1233)).....	1
27	172352H1	SPRING..... (SAME)).....	1
28	WL-214	WASHER, Lock (SAME)).....	1
29	WL-16	WASHER, Lock (SAME)).....	6
30	Not Used	WASHER (186485H1)).....	1
31	H - 37	NUT (SAME)).....	1
32	S-266	SCREW, Cap (SAME)).....	3
33	S-2626	SCREW, Cap (SAME)).....	3
34	190829H1	SEAL, Valve cover (195666H1)).....	1
35	HA-1492	WASHER (SAME)).....	1
36	HA-1232	NUT (SAME)).....	1
37	P - 18	PLUG, Filler (SAME)).....	1
38	WL-17	WASHER, Lock (SAME)).....	4
39	HS-931	BOLT (SAME)).....	4
40	158336H1	NUT (SAME)).....	1
	HA-1231	WHEEL, Steering (SAME)).....	1
	150717H1	COVER, Wheel..... (SAME)).....	1
	185952H1	ARM, Pitman (SAME)).....	1
	153492H1	BRACKET (SAME)).....	1
	S-169	SCREW, Cap..... (SAME)).....	2
	WF-16	WASHER, Flat (SAME)).....	2
	WL-16	WASHER, Lock (SAME)).....	2
	H - 16	NUT (SAME)).....	2
	144079H1	"U" BOLT (SAME)).....	1
	144068H1	BLOCK (SAME)).....	1
	WL-16	WASHER, Lock (SAME)).....	2
	E - 26	NUT (SAME)).....	2
	S-2812	SCREW, Cap (SAME)).....	3
	WL-18	WASHER, Lock (SAME)).....	3
	194352H1	COVER ASSEMBLY, Jacket, Bearing, and Seal Includes Item 7 & 34 (198526H1)).....	1
		*Used on machines of S/N 21CC - 2182, 2184, 2187 & 2189 & UP. # Used on machines of S/N 21CC - 2479 and UP.	

(Continued on following page.)

SAGINAW STEERING GEAR (Continued)

ITEM NO.	PART NO.	PART NAME	Qty.
	S-11216 WL-112 H-112	SCREW, Cap..... } WASHER, Lock } Support to Frame NUT }	4 4 4

SECTION 9

LINKAGE

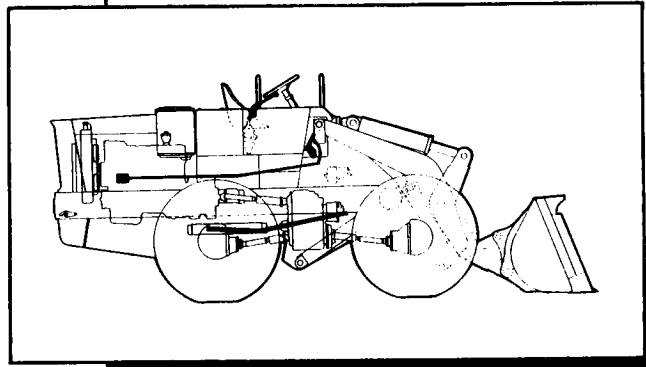
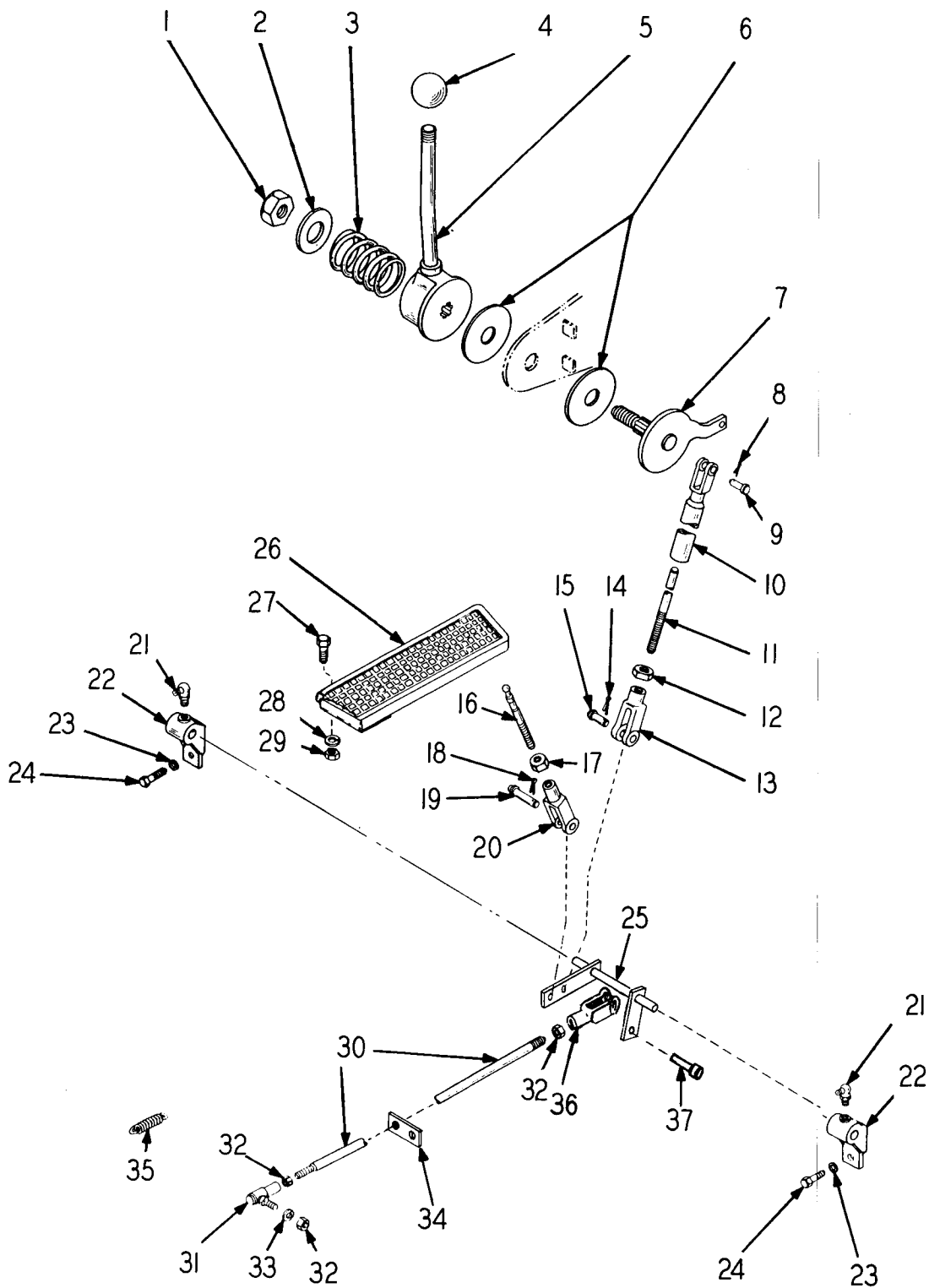


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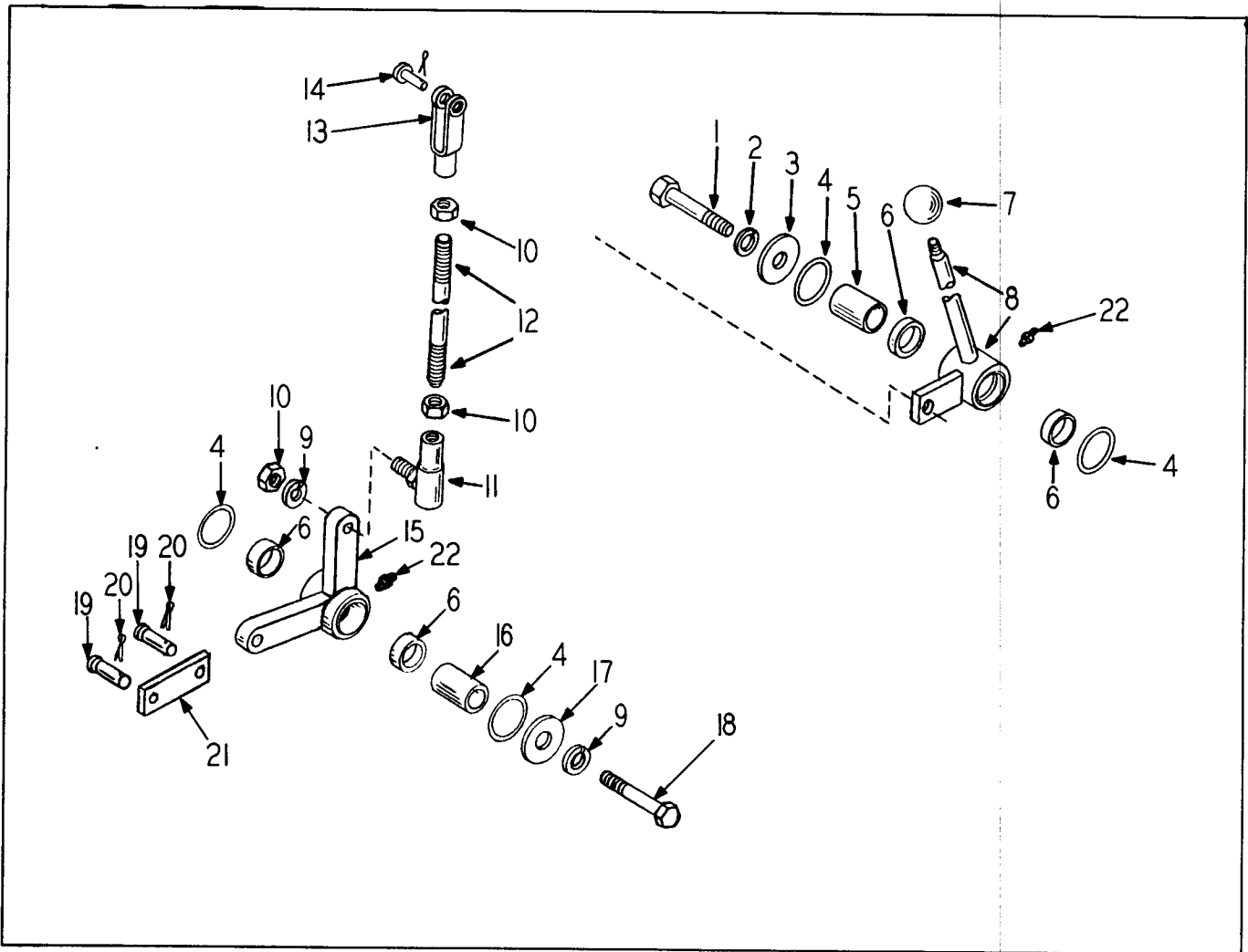
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ACCELERATOR LINKAGE

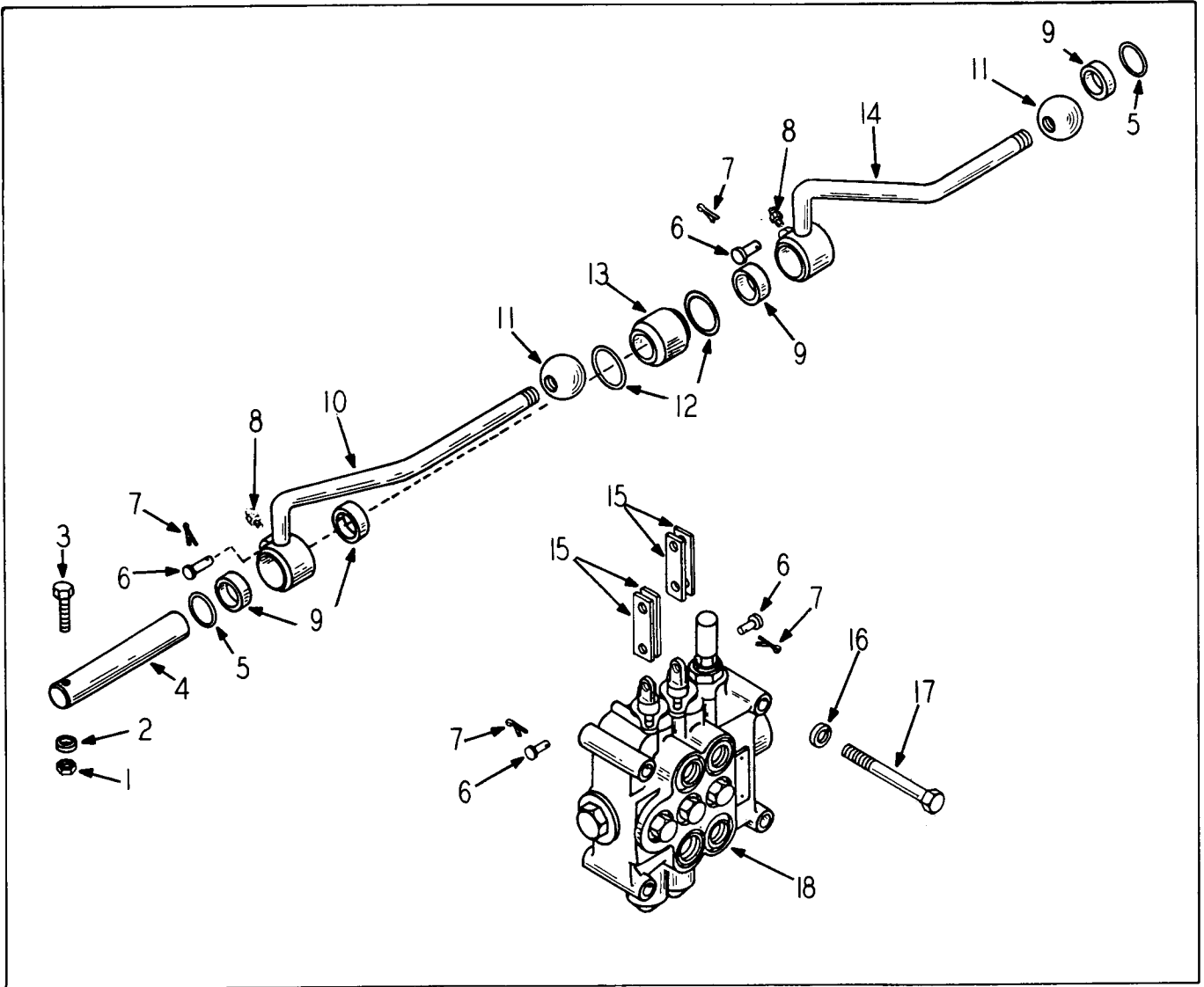
ACCELERATOR LINKAGE

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	H-18	NUT	1		
2	113694H1	WASHER, Flat	1		
3	108650H1	SPRING	1		
4	HL-3343	KNOB	1		
5	140960H1	LEVER	1		
6	108651H1	DISC	2		
7	125098H1	SHAFT, Throttle	1		
8		PIN, Cotter	1		
9	HA-845	PIN, Assembly	1		
10	109046H1	TUBE ASSEMBLY	1		
11	206088H1	ROD	1		
12	H-15	NUT	1		
13	HL-1263	CLEVIS	1		
14		PIN, Cotter	1		
15	HL-1264	PIN ASSEMBLY	1		
16	114689H1	PIN, Pedal	1		
17	H-15	NUT	1		
18		PIN, Cotter	1		
19	HL-1264	PIN ASSEMBLY	1		
20	HL-1263	CLEVIS, Rod end	1		
21	118494H1	FITTING, Grease	2		
22	HA800	BEARING	2		
23	WL-14	WASHER, Lock	4		
	H-14	NUT	4		
24	S-148	SCREW, Cap	4		
25	172215H1	SHAFT, Cross	1		
26	155596H1	Pedal, Accelerator	1		
27	S-148	SCREW, Cap	2		
28	WL-14	WASHER, Lock	2		
29	H-14	NUT	2		
30	172218H1	ROD, Accelerator	1		
31	158396H1	BALL JOINT	1		
32	H-15	NUT	3		
33	WL-15	WASHER, Lock	2		
34	103763H1	SUPPORT, Accelerator rod	1		
	S-168	SCREW, Cap	1		
	WL-16	WASHER, Lock	1		
	H-16	NUT	1		
35	117256H1	SPRING	1		
36	HL-1263	CLEVIS	1		
37	HL-1264	PIN ASSEMBLY	1		



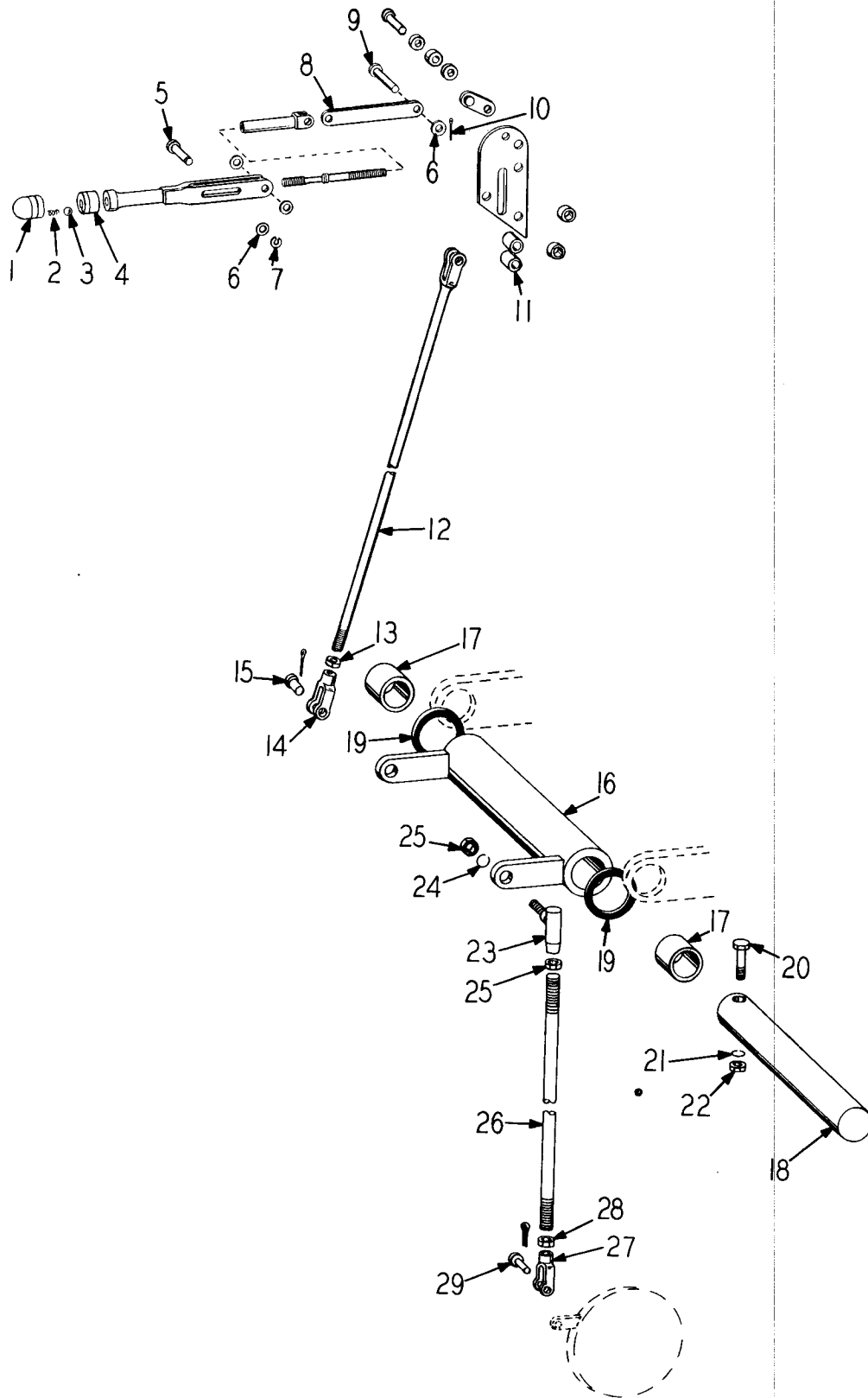
AXLE THROWOUT LINKAGE

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	S-21020	SCREW, Cap	1		
2	WL-110	WASHER, Lock	1		
3	WF-110	WASHER, Flat	1		
4	OR4-28	"O" RING	4		
5	144301H1	TUBE, Lever Pivot	1		
6	144244H1	BUSHING	4		
7	HL-3343	KNOB	1		
8	176952H1	LEVER, Includes 2 of item 6	1		
9	WL-18	WASHER, Lock	2		
10	H-18	NUT	3		
11	149723H1	JOINT, Ball	1		
12	179419H1	ROD	1		
13	GH-211	CLEVIS	1		
14	GH-212	PIN, Clevis	1		
15	176953H1	BELLCRANK, Includes 2 of item 6	1		
16	176947H1	SLEEVE	1		
17	176948H1	WASHER, Flat	2		
18	S-2826	SCREW, Cap	1		
19	GH-212	PIN	2		
20	CP-47	PIN, Cotter	2		
21	176949H1	LINK	2		
22	118491H1	FITTING, Grease	2		



VALVE CONTROL LINKAGE

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	H-15	NUT.....	1		
2	WL-15	WASHER, Lock.....	1		
3	S-1520	SCREW, Cap.....	1		
4	171917H1	PIN, Control Mounting	1		
5	OR4-29	"O" RING.....	2		
6	GH-212	PIN ASSEMBLY (Includes Item 7)	4		
7		PIN, Cotter	4		
8	118493H1	FITTING, Grease	2		
9	144243H1	BUSHING.....	4		
10	176100H1	BOOM LEVER, (Includes 2 of Item 9).....	1		
11	HL-3343	KNOB	2		
12	OR4-29	"O" RING.....	2		
13	173786H1	SPACER.....	1		
14	176101H1	BUCKET LEVER (Includes 2 of Item 9).....	1		
15	171918H1	LINK.....	4		
16	WL-110	WASHER, Lock	4		
17	S-21042	SCREW, Cap	4		
18	171915H1	VALVE (See Page X1-11).....	1		
	OR3-2	"O" RING, Return Port	1		



PARKING BRAKE LINKAGE

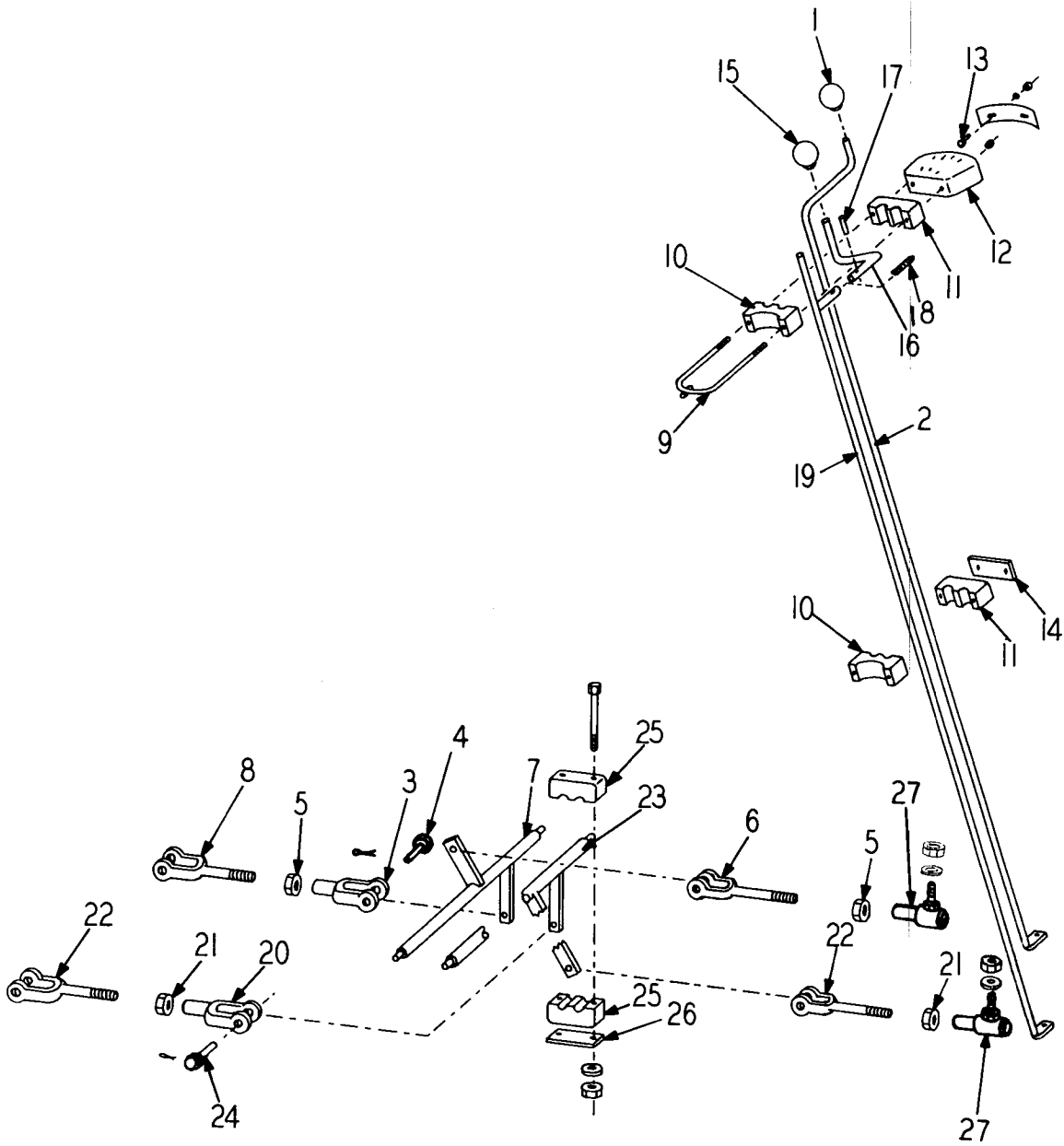
PARKING BRAKE LINKAGE

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	115086H1	LEVER, Parking Brake Assembly, includes Items			
1	160925H1	1 thru 11 CAP, Adjusting Knob	1		
2	160932H1	..... SPRING	1		
3	131525H1	..... BALL, Chrome	1		
4	160926H1	..... BASE, Adjusting Knob	1		
5	150742H1	..... PIN, Foot	1		
6	WF-35	..... WASHER, Flat	2		
7	150744H1	..... RING, Retaining	1		
8	173775H1	..... LINK	1		
9	141455H1	..... PIN	1		
10	CP-36	..... PIN, Cotter	1		
11	134704H1	..... SPACER	2		
	S-1620	..... SCREW, Cap	2		
	H - 16	..... NUT	2		
	WL-16	..... WASHER, Lock	2		
12	171661H1	..... ROD & CLEVIS	1		
13	H - 16	..... NUT	1		
14	HL-3485	..... CLEVIS	1		
15	HL-3486	..... PIN & COTTER	1		
16	171663H1	..... BELLCRANK, Includes Item 17	1		
17	144243H1	..... BUSHING	2		
18	171666H1	..... SHAFT, Pivot	1		
19	OR4-28	..... "O" RING	2		
20	S-1518	..... SCREW, Cap	1		
21	WL-15	..... WASHER, Lock	1		
22	H - 15	..... NUT	1		
23	158397H1	..... JOINT, Ball	1		
24	WL-16	..... WASHER, Lock	1		
25	H - 16	..... NUT	2		
26	171667H1	..... ROD	1		
27	HL-3485	..... CLEVIS	1		
28	H - 16	..... NUT	1		
29	HL-3486	..... PIN & COTTER	1		
		CABLE CONTROLLED BRAKE LINKAGE			
	(1)	HL-1263 CLEVIS			
	(1)	H-15NUT			
	(1)	187562H1 ANCHOR, Lever			
	(1)	186503H1 CABLE			
	(1)	190303H1 ANCHOR, Brake			
	(2)	137344H1 SPACER			
	(2)	S-2614 SCREW, Cap			

Lever Mtg.

Used on machines of
S/N 21CC-1901 thru
S/N 21CC-2330

Used on machines of
serial no. 21CC-2331
& Up.

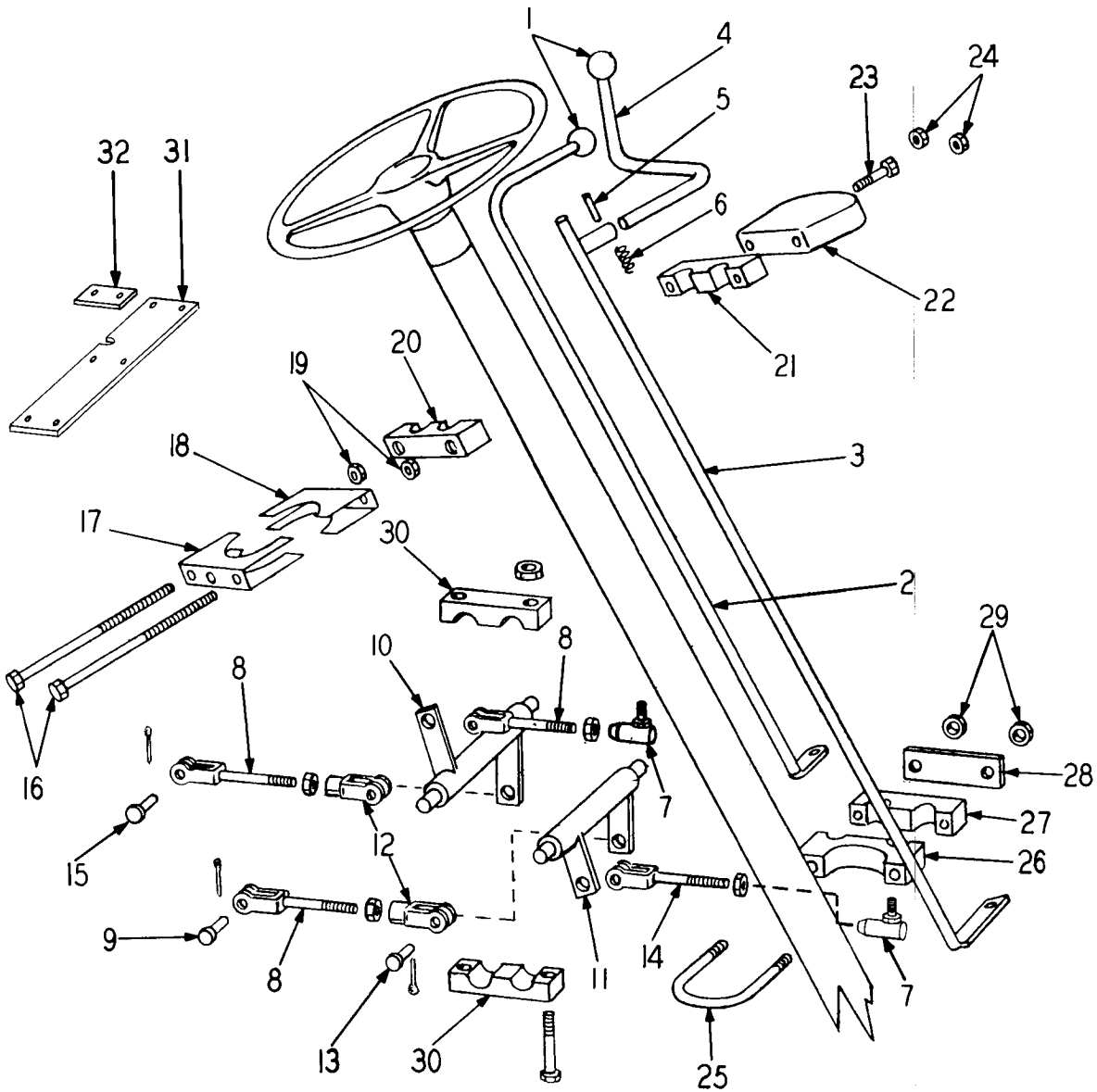


GEAR SHIFT LINKAGE

GEAR SHIFT LINKAGE

FOR MACHINES OF S/N 21CC-1901 thru 21CC-2192

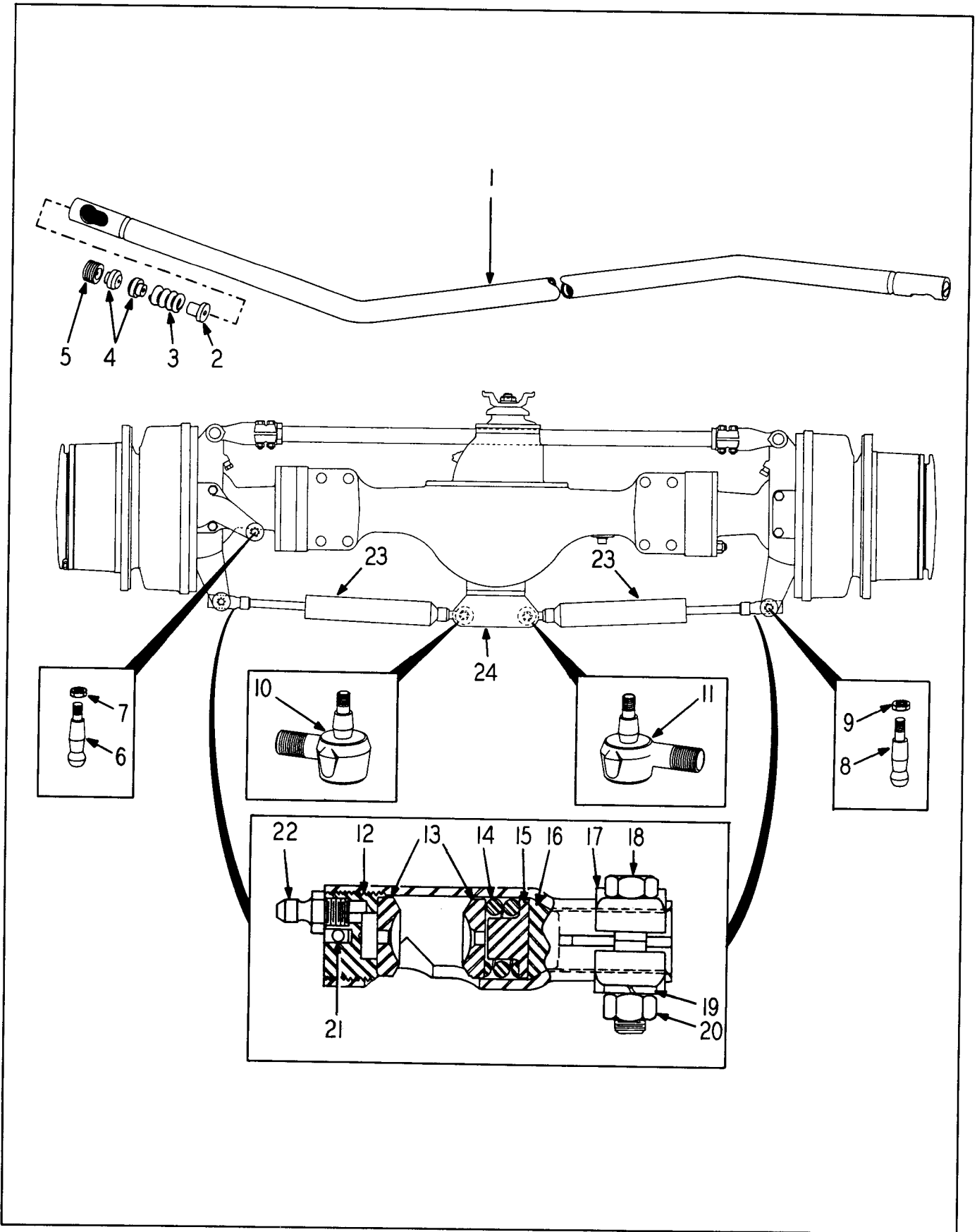
ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	HL-3343	KNOB	1		
2	171671H1	LEVER, Forward & Reverse.....	1		
3	HL-1263	YOKE, Clevis	1		
4	HL-1264	PIN & COTTER.....	2		
5	H-15	NUT.....	2		
6	134245H1	YOKE END.....	1		
7	171675H1	BELLCRANK, Forward & Reverse	1		
8	157315H1	YOKE END	1		
9	144405H1	"U" BOLT	3		
10	144069H1	BLOCK, Bearing	3		
11	144070H1	BLOCK, Bearing	3		
12	171670H1	QUADRANT	1		
13	153965H1	SCREW, Cap.....	2		
	WF-35	WASHER, Flat	2		
	H-25	NUT.....	2		
	E-25	NUT, "U" Bolt	6		
14	146989H1	PLATE.....	1		
15	HL-3343	KNOB	1		
16	153963H1	LEVER	1		
17	153964H1	PIN, Roll.....	1		
18	125548H1	SPRING.....	1		
19	171668H1	LEVER, Range.....	1		
20	HL-1263	YOKE, Clevis	1		
21	H-25	NUT.....	2		
22	134245H1	YOKE, End	2		
23	169914H1	BELLCRANK, Range.....	1		
24	HL-1264	PIN & COTTER.....	2		
25	144070H1	BLOCK, Bearing	4		
26	146989H1	PLATE.....	2		
	S-1518	SCREW, Cap.....	4		
	WF-15	WASHER, Lock	4		
	E-15	NUT.....	4		
27	158396H1	BALL JOINT	2		
	H-15	NUT.....	2		
	WL-15	WASHER	2		



GEAR SHIFT LINKAGE

**GEARSHIFT LINKAGE
FOR MACHINES OF S/N 21CC-2193 & Up**

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	HL-3343	KNOB	2		
2	171671H1	LEVER, Fwd. & Rev.	1		
3	171668H1	LEVER, Range	1		
4	153963H1	LEVER	1		
5	153964H1	PIN, Roll	1		
6	125548H1	SPRING	1		
7	158396H1	JOINT, Ball	2		
	H - 15	NUT	4		
	WL-15	WASHER, Lock	2		
8	134245H1	YOKE, End	3		
9	HL-1264	PIN & COTTER	3		
10	186572H1	BELLCRANK, Fwd. & Rev.	1		
11	186570H1	BELLCRANK, Range	1		
12	HL-1263	YOKE, Clevis	2		
13	HL-1264	PIN & COTTER	2		
	H - 15	NUT	2		
	WL-15	WASHER, Lock	2		
14	157315H1	YOKE, End	1		
15	HL-1264	PIN & COTTER	1		
16	207253H1	SCREW, Cap	2		
17	181836H1	CLAMP, Saddle	1		
18	181835H1	CLAMP, Saddle	1		
19	H - 35	NUT, Jam	2		
20	181837H1	BLOCK, Bearing	1		
21	144070H1	BLOCK, Bearing	1		
22	171670H1	QUADRANT	1		
23	153965H1	SCREW, Cap, Range Stop	1		
	WF-35	WASHER, Flat	1		
	H - 25	NUT	1		
24	E - 15	NUT	2		
25	144405H1	"U" BOLT	2		
26	144069H1	BLOCK, Bearing	2		
27	144070H1	BLOCK, Bearing	2		
28	146989H1	PLATE	2		
29	E - 25	NUT, "U" Bolt	4		
30	144070H1	BLOCK, Bearing	4		
	S-1520	SCREW, Cap	4		
	S-1510	SCREW, Cap	2		
	WF-15	WASHER, Flat	6		
	E - 15	NUT	6		
31	186568H1	BAR, Bearing Support	1		
32	186573H1	SPACER (Not used on later units).....	1		
	S-1510	SCREW, Cap	2		



STEERING LINKAGE

STEERING LINKAGE

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	171660H1	DRAG LINK, (Includes items 2 thru 5)	1		
2	127676H1	GUIDE, Spring	2		
3	127675H1	SPRING	2		
4	127673H1	BEARING	4		
5	174487H1	PLUG, Adjusting	2		
	153494H1	SEAL, Grease drag link	2		
	118491H1	FITTING, Grease drag link	2		
6	177259H1	STUD, Ball	1		
7	E-112	NUT	1		
8	157085H1	STUD, Ball	2		
9	178200H1	NUT, Lock	2		
	178199H1	WASHER	2		
10	* 157612H1	BALL SOCKET, L. H. cylinder inbd	1		
	118492H1	FITTING, Grease	1		
	128493H1	WASHER	1		
	144288H1	SEAL, Grease	1		
	178200H1	NUT.....	1		
	178199H1	WASHER	1		
11	* 144274H1	BALL SOCKET, R. H. Cylinder inbd.	1		
	118492H1	FITTING, Grease	1		
	128493H1	WASHER	1		
	144288H1	SEAL, Grease	1		
	178200H1	NUT	1		
	178199H1	WASHER	1		
	144287H1	SEAL, Grease drag link end	2		
	144275H2	DRAG LINK END, (includes item 12 thru 20)	2		
12	145862H1	PLUG	2		
13	110580H1	BEARING	4		
14	120654H1	SPRING	2		
15	120655H1	GUIDE, Spring	2		
16	145863H1	SEAT	2		
	145883H1	CLAMP ASSEMBLY (Includes items 17 thru 20).....	2		
17		CLAMP Order #145883H1	2		
18	S-1716	SCREW, Cap.....	2		
19	WL-17	WASHER, Lock	2		
20	H-17	NUT	2		
21	CP-414	PIN, Cotter	2		
22	118492H1	FITTING, Grease	2		
23		CYLINDER, Steering (see Page 11-5).....	2		
24	* 172144H2	BRACKET, Strg. cylinder mounting	1		
	S-21212	SCREW, Cap	4		
	WL-112	WASHER, Lock	4		
<p>* Items 10 & 11 used with Steering Cylinder #158090H2</p> <p>SERVICE NOTE: For improved type Steering Cylinder #189070H1 & its related parts, (see page XI-5)</p> <p># 191317H1 Bracket replaced 472144H2 191211H1 Bushing included in 191317H1</p>					

SECTION 10

HYDRAULIC SYSTEM

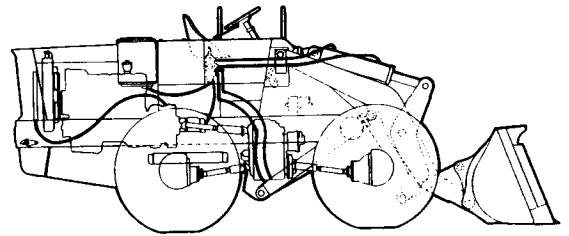
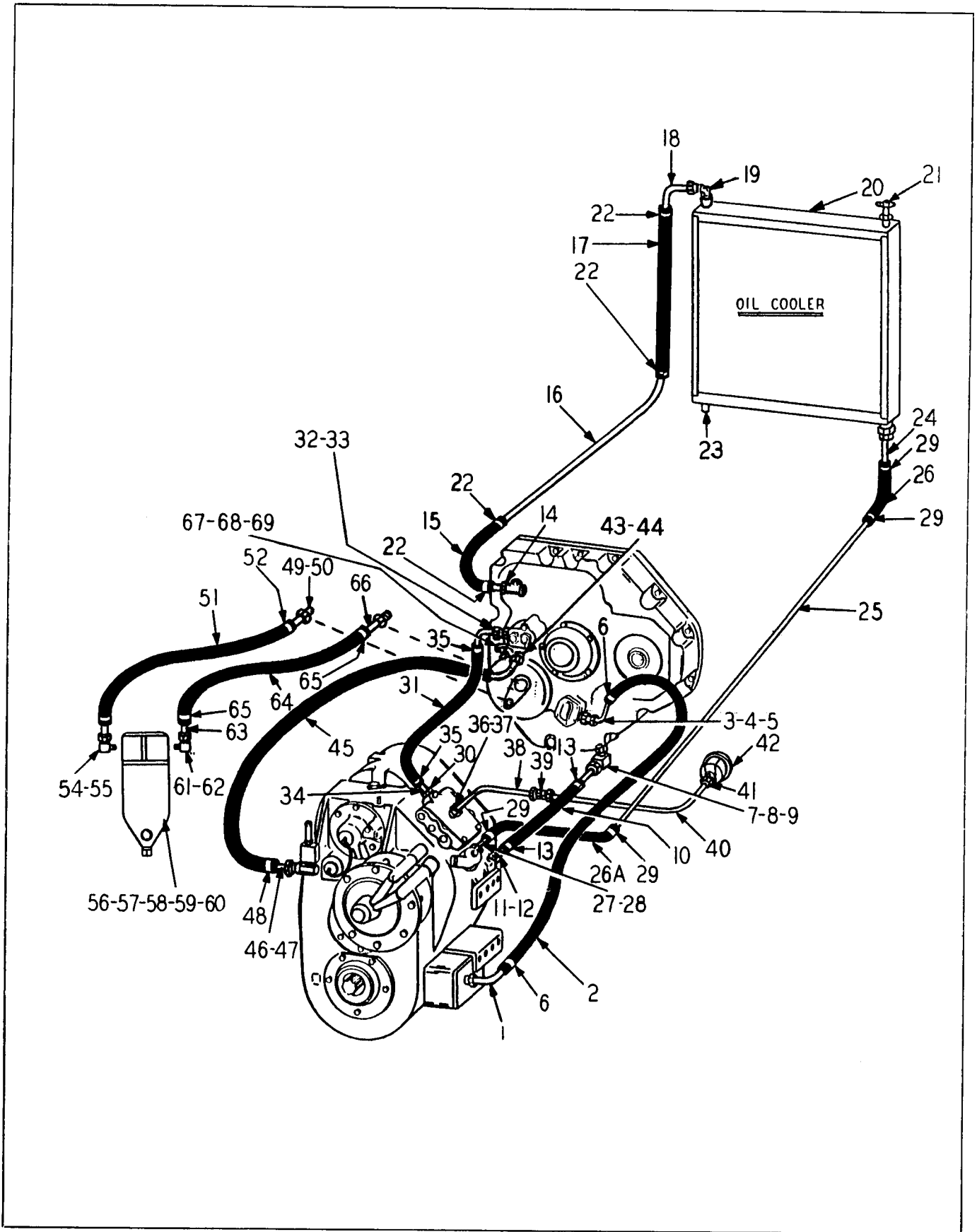


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TORQUE CONVERTER LINES

TORQUE CONVERTER LINES

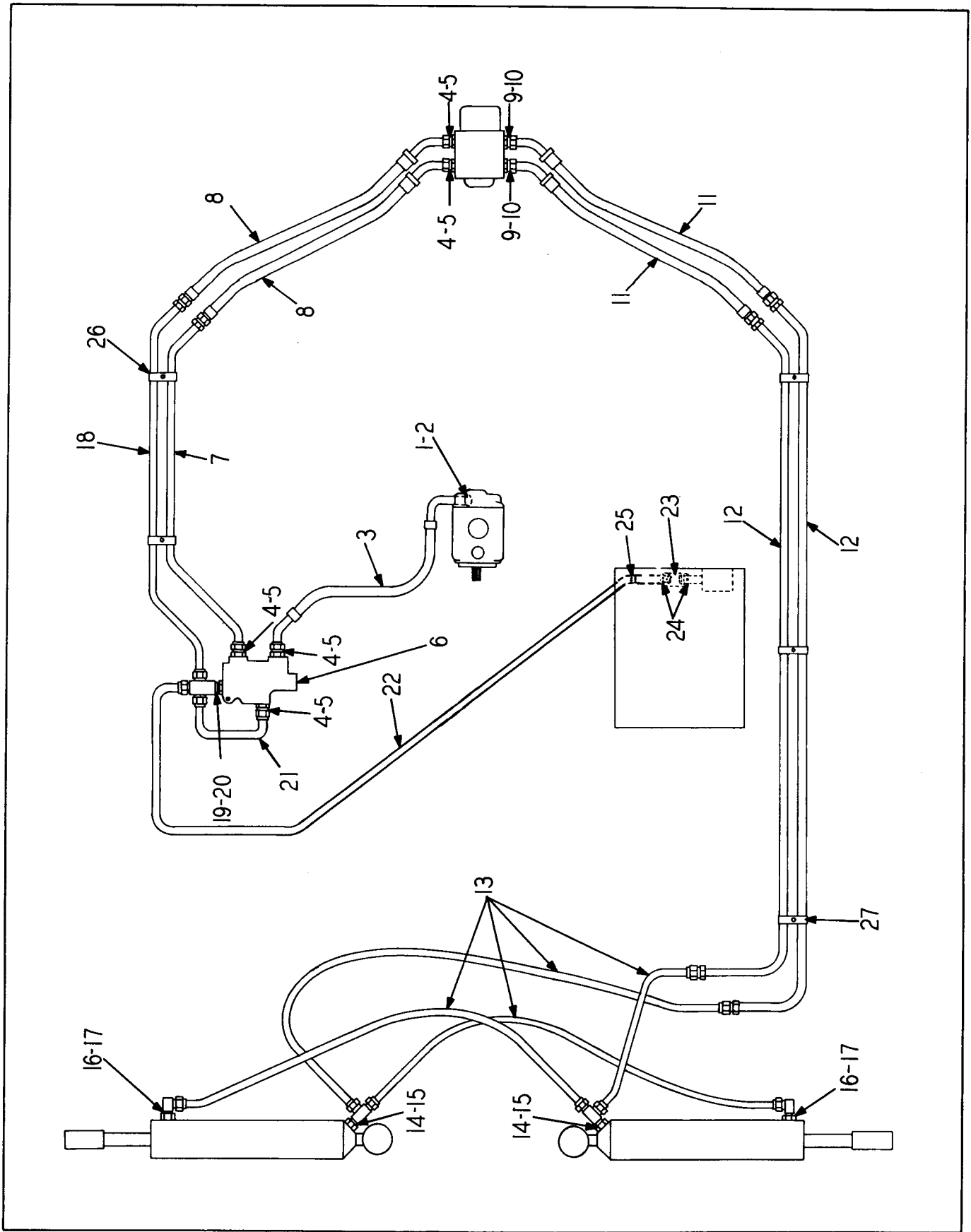
ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
LINE - TRANSMISSION STRAINER TO PUMP					
1	172695H1	INSERT	1		
2	172692H1	HOSE	1		
3	172849H1	INSERT	1		
4	205-12	ADAPTER	1		
5	OR2-12	"O" RING	1		
6	172818H1	CLAMP	2		
LINE - ACCESSORY DRIVE OVERFLOW TO TRANSMISSION					
7	291-12	ADAPTER	1		
8	OR2-12	"O" RING	1		
9	177294H1	INSERT	1		
10	173014H1	HOSE	1		
11	173015H1	INSERT	1		
12	OR2-12	"O" RING	1		
13	172818H1	CLAMP	2		
OIL LINE - ACCESSORY DRIVE TO OIL COOLER					
14	179561H1	INSERT (Replaced by 1999733 Insert 90°)	1	21CC-2621	UP
15	174933H1	HOSE	1		
16	179560H1	TUBE	1		
17	173014H1	HOSE	1		
18	172849H1	INSERT	1		
20	147942H1	COOLER, Oil	1		
	175708H1	STRAP (Not needed with #175581H3 radiator)	2		
	S-1611	SCREW, Cap, Cooler to Strap	4		
	WL-16	WASHER, Lock	8		
	S-169	SCREW, Cap, Strap to Radiator	4		
	WF-16	WASHER, Flat	4		
21	112002H1	PETCOCK	1		
22	172818H1	CLAMP	4		
23	P-14	PLUG	1		
	120418H1	CLAMP	2		
	S-148	SCREW, Cap	2		
	WL-14	WASHER, Lock	2		
	H-14	NUT	2		
OIL LINE - COOLER TO TRANSMISSION MANIFOLD					
24	167971H1	INSERT	1		
25	179562H1	TUBE	1		
26	174933H1	HOSE	2		
27	179563H1	INSERT	1		
28	OR2-10	"O" RING	1		
29	172818H1	CLAMP	4		
	120418H1	CLAMP	5		
	S-148	SCREW, Cap	2		
	H-14	NUT	2		
	WL-14	WASHER, Lock	2		
LINE - ACCESSORY DRIVE TO TRANSMISSION CONTROL VALVE					
30	179077H1	INSERT	1		
31	173021H1	HOSE	1		
32	173019H1	INSERT	1		
33	208-7	ADAPTER	1		
34	OR2-8	"O" RING	1		
35	168814H1	CLAMP	2		
LINE - ACCESSORY DRIVE TO CLUTCH PRESSURE GAUGE					
36	165369H1	CONNECTOR	1		
		(Continued on following page)			

TORQUE CONVERTER LINES (Continued)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
LINE-ACC. DRIVE TO CLUTCH PRESSURE GAGE (Con't.)					
37	132667H1	BUSHING, Reducer	1		
38	172833H1	TUBE	1		
39	172825H1	UNION	1		
40	180227H1	TUBE	1		
41	181084H1	ELBOW	1		
42	188328H1	GAGE	1		
LINE-CONVERTER TO TRANSMISSION					
43	OR2-12	"O" RING	1		
44	173015H1	INSERT	1		
45	173022H1	HOSE	1		
46	172849H1	INSERT	1		
47	173023H1	ADAPTER	1		
48	172818H1	CLAMP	2		
LINES-CONVERTER OIL FILTER					
49	* 173015H1	INSERT	1		
50	OR2-12	"O" RING	1		
51	* 174008H1	HOSE	1		
52	* 172818H1	CLAMP	2		
53	* 177294H1	INSERT	1		
54	291-12	ADAPTER	1		
55	OR2-12	"O" RING	1		
56	173940H1	FILTER, Includes Items 57 thru 60	1		
57	165714H1	PLUG	1		
58	131571H1	GASKET, Base	1		
59	131574H1	GASKET, Shell	1		
60	131570H1	ELEMENT	1		
	S-1612	SCREW, Cap	4		
	H - 16	NUT	4		
	WL-16	WASHER, Lock	4		
61	291-12	ADAPTER	1		
62	OR2-12	"O" RING	2		
63	* 177294H1	INSERT	1		
64	* 174008H1	HOSE	1		
65	* 172818H1	CLAMP	2		
66	* 173015H1	INSERT	1		
	OR2-12	"O" RING	1		
67	135081H1	BUSHING, Face	1		
68	103487H1	ELBOW	1		
69	P - 14	PLUG	1		

* SERVICE IMPROVEMENT - Parts marked (*) are replaced with (2) 205-12 straight adapters and item 51 & 64 are replaced with (2) hoses 447962H1.

NOTES



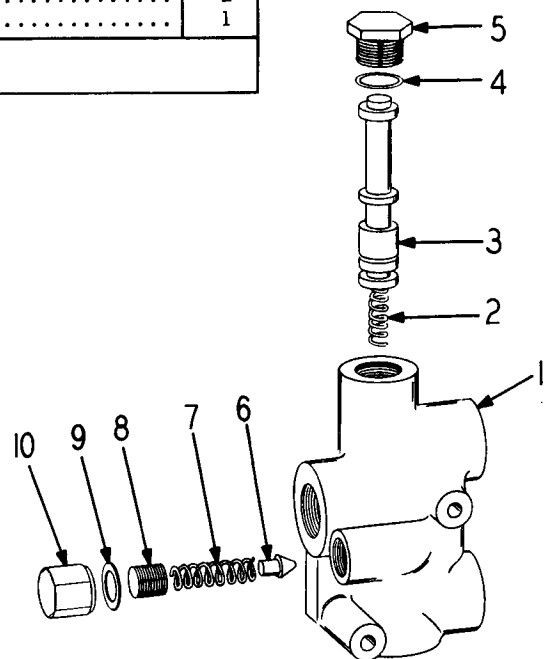
STEERING LINES

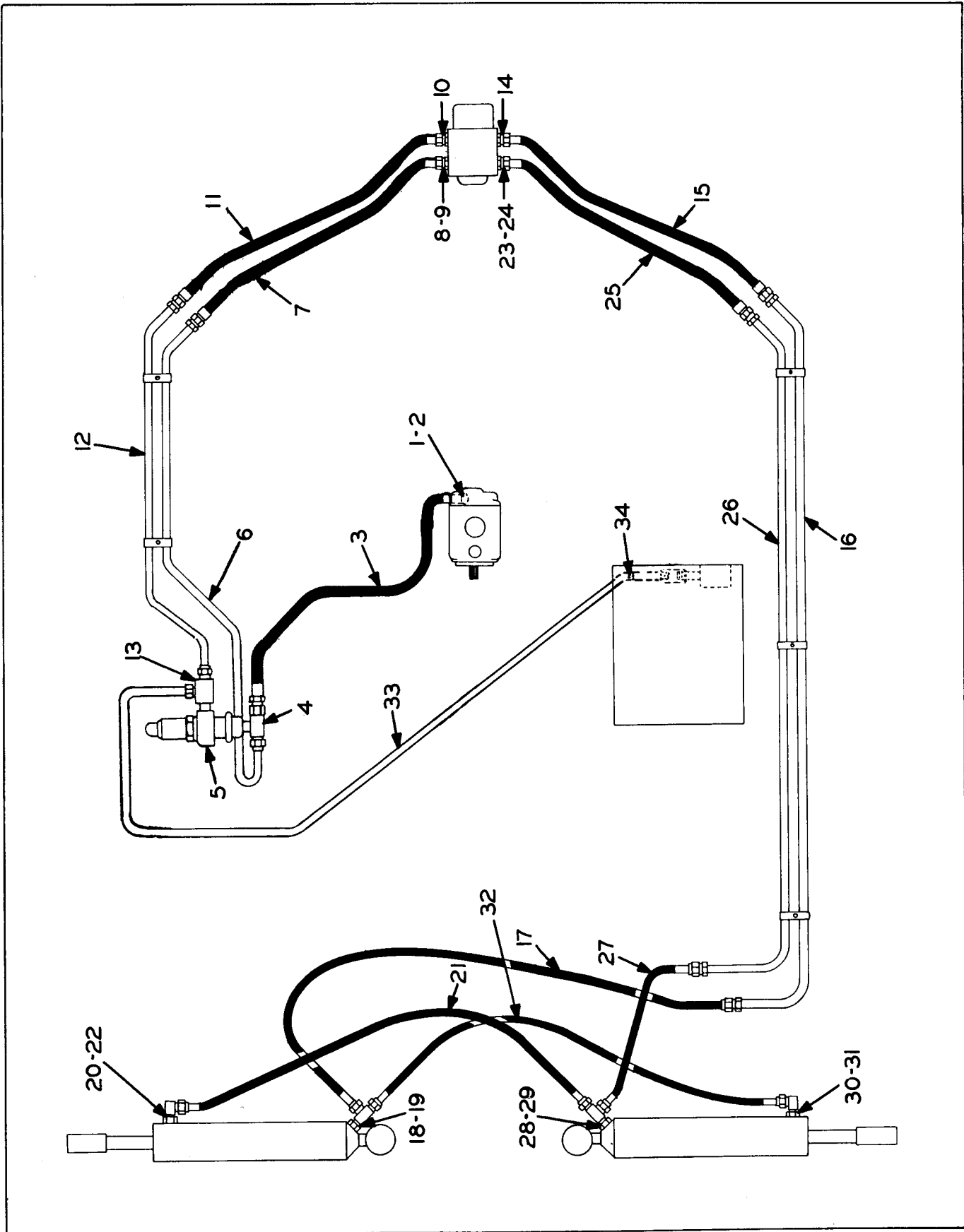
STEERING LINES
FOR MACHINES OF S/N 21CC-1901 THRU 21CC-2110

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	OR4-19	"O" RING	1		
2	115701H1	FLANGE, Split Half	2		
	S-269	SCREW, Cap	1		
	WL-16	WASHER, Lock	1		
3	172806H2	HOSE	1		
4	205-10	ADAPTER	5		
5	OR2-10	"O" RING	5		
6		FLOW DIVIDER (See List Below)	1		
7	172808H1	TUBE ASSEMBLY	1		
8	154028H1	HOSE	2		
9	OR2-8	"O" RING	2		
10	205-8	ADAPTER	2		
11	154031H1	HOSE	2		
12	172810H1	TUBE ASSEMBLY	1		
13	163380H1	HOSE	4		
14	OR2-6	"O" RING	2		
15	216-6	TEE	2		
16	OR2-6	"O" RING	2		
17	178267H1	ADAPTER	2		
18	172809H1	TUBE ASSEMBLY	1		
19	OR2-6	"O" RING	1		
20	172814H1	CROSS	1		
21	172813H1	TUBE ASSEMBLY	1		
22	173607H2	TUBE ASSEMBLY	1		
23	176829H1	HOSE	1		
24	172818H1	CLAMP, Hose	2		
25	120418H1	CLAMP, Tube to Angle	1		
	S-167	SCREW, Cap	1		
	WL-16	WASHER, Lock	1		
	H - 16	NUT	1		
26	154036H1	CLAMP, Tube to L.H. Channel	2		
	S-2412	SCREW, Cap	2		
	WL-14	WASHER, Lock	2		
	H - 24	NUT	2		
27	136198H1	CLAMP, Tube to R.H. Channel	3		
	S-2412	SCREW, Cap	3		
	WL-14	WASHER, Lock	3		
	H - 24	NUT	3		
	P - 12	PLUG, Pipe	2		
	136139H1	CLIP, Sleeve to Flow Divider	1		

FLOW DIVIDER

	180742H1	FLOW DIVIDER, Includes items 1 thru 10	1
1		BODY	1
2	175757H1	SPRING	1
3	180870H1	PISTON	1
4	OR4-12	"O" RING	1
5	146730H1	PLUG	1
6	175759H1	VALVE	1
7	146734H1	SPRING	1
8	146736H1	SCREW	1
9	175761H1	GASKET	1
10	146735H1	CAP, Valve	1
	S-1416	SCREW, Cap	2
	WL-14	WASHER, Lock	2
	H - 14	NUT	2





STEERING LINES

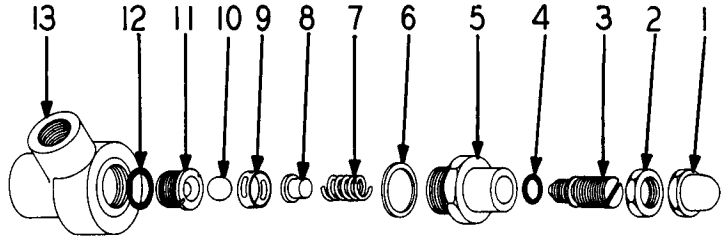
STEERING LINES
FOR MACHINES OF S/N 21CC-2111 & Up
 * For machines of S/N 21CC-2516 & up (see note).

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
LINE - PUMP TO RELIEF VALVE					
1	OR4-19	"O" RING	1		
2	115701H1	FLANGE, Split Half	2		
	S-269	SCREW, Cap	4		
	WL-16	WASHER, Lock	4		
3	175085H1	HOSE	1		
4	181340H1	TEE	1		
5	130167H1	VALVE, Relief (See End of list for Service Parts)	1		
	177020H1	"U" BOLT	1		
	E-24	NUT	2		
LINE - RELIEF VALVE TO STEERING VALVE					
6	181773H1	TUBE ASSEMBLY	1		
7	156436H1	HOSE	1		
8	291-10	ELBOW	1		
9	OR2-10	"O" RING	1		
LINE - STEERING VALVE TO RELIEF VALVE					
10	OR2-10	"O" RING	1		
* 11	181823H1	HOSE	1		
* 12	181774H1	TUBE ASSEMBLY	1		
* 13	181775H1	TEE, Fitting	1		
LINE - STEERING VALVE TO CYLINDER R. H. TURN					
14	OR2-8	"O" RING	1		
15	181884H1	HOSE	1		
16	181776H1	TUBE ASSEMBLY	1		
17	189212H1	HOSE	1		
18	216-6	TEE	1		
19	OR2-6	"O" RING	1		
20	178267H1	ADAPTER, 90°	1		
21	189212H1	HOSE	1		
22	OR2-6	"O" RING	1		
	P-12	PLUG	1		
LINE - STEERING VALVE TO CYLINDER L. H. TURN					
23	OR2-8	"O" RING	1		
24	291-8	ELBOW	1		
25	131147H1	HOSE	1		
26	181776H1	TUBE ASSEMBLY	1		
27	189212H1	HOSE	1		
28	216-6	TEE	1		
29	OR2-6	"O" RING	1		
30	OR2-6	"O" RING	1		
31	178267H1	ADAPTER, 90°	1		
32	189212H1	HOSE	1		
	P-12	PLUG	1		
LINE - RELIEF VALVE TO RESERVOIR					
* 33	181777H1	TUBE ASSEMBLY	1		
34	120418H1	CLAMP	1		
	S-167	SCREW, Cap	1		
	WL-16	WASHER, Lock	1		
	H-16	NUT	1		
* 174937H1		HOSE	1		
* 172818H1		CLAMP	2		

(Continued on following page)

STEERING LINES (Continued)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	130167H1	VALVE, Relief (Incl. Items 1 thru 13) (1)			
2	132643H1	NUT, Acorn (1)			
3	H-310-P	NUT (1)			
4	132641H1	SCREW, Adjust (1)			
5	OR4-9	"O" RING (1)			
6	132639H1	BODY (1)			
7	132638H1	GASKET (1)			
8	132637H1	SPRING (1)			
9	134461H1	SPACER, Spring (1)			
10	164711H1	COLLAR, Jam (1)			
11	162112H1	BALL (1)			
12	166230H1	SEAT (1)			
13	OR2-8	"O" RING (1)			
	NSS	HOUSING (Order 130167) (1)			



CLAMPS AND FASTENERS

*	154036H1	CLAMP, Tubes to L. H. Channel	2		
	S-148	SCREW, Cap	2		
	WL-14	WASHER, Lock	2		
	H-14	NUT	2		
	136198H1	CLAMP, Tubes to R. H. Channel	3		
	S-148	SCREW, Cap	3		
	WL-14	WASHER, Lock	3		
	H-14	NUT	3		

* NOTE: All items marked with an asterisk (*) are replaced by the following items from serial numbers 21CC-2516 & Up.

LINE-STEERING VALVE TO RELIEF VALVE

11	194434H1	HOSE	1		
Add	206-16	ADAPTER	1		
12	194433H1	TUBE ASSEMBLY	1		
13	194436H1	TEE, Fitting	1		

LINE-RELIEF VALVE TO RESERVOIR

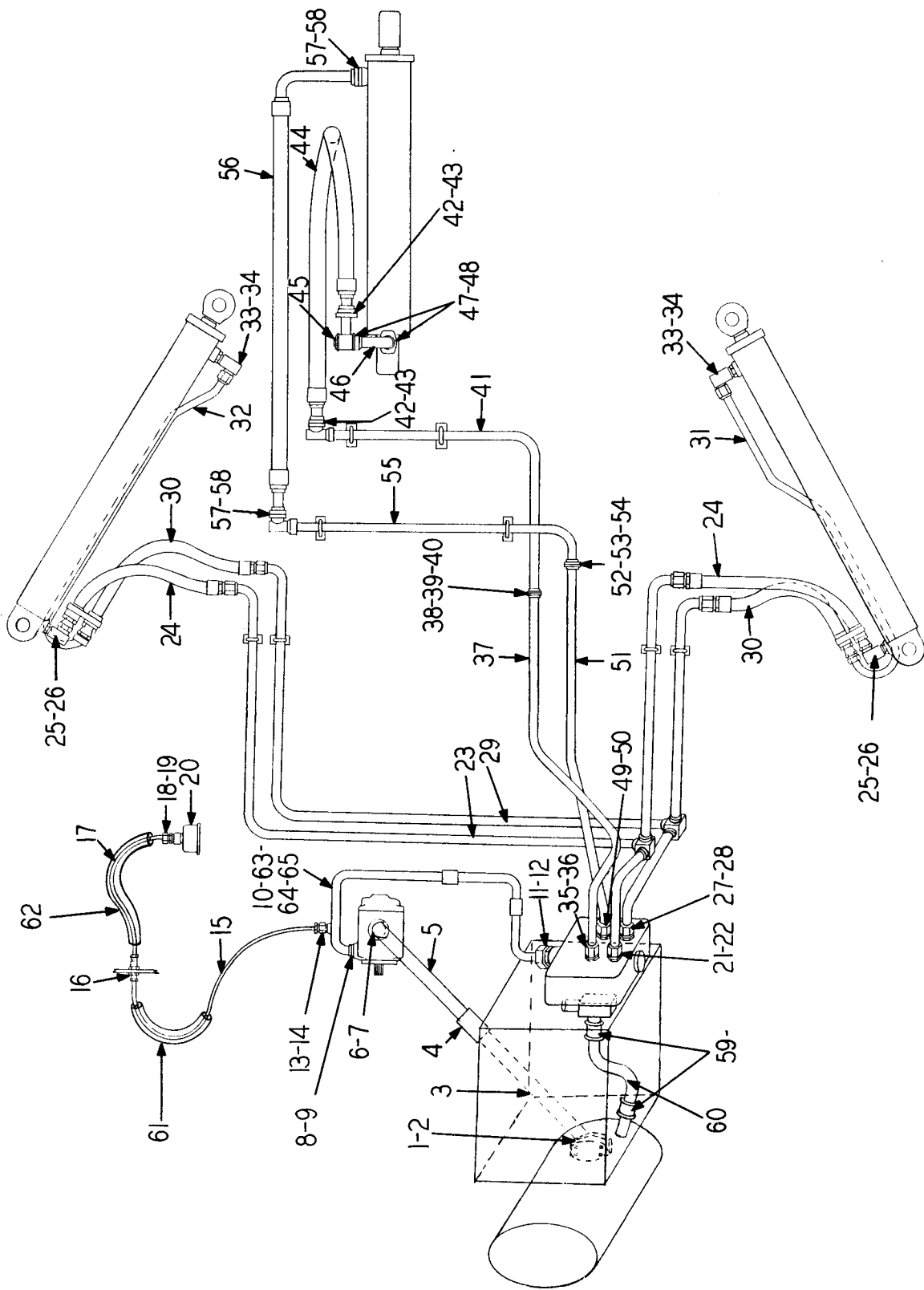
33	194435H1	TUBE ASSEMBLY	1		
	194437H1	HOSE	1		
	161178H1	CLAMP	1		

CLAMPS AND FASTENERS

Add	120622H1	CLAMP, Tube to L. H. Channel	1		
	102818H1	CLAMP, Tube to L. H. Channel	2		

Page 1-8 172548H2 ENCLOSURE, Hydraulic Manifold is replaced by a 193917 ENCLOSURE.

NOTES



BOOM AND BUCKET LINES
S/N 21CC 1901 To 21CC 2535

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
SUCTION LINE - RESERVOIR TO PUMP					
1	OR3-10	"O" RING	1		
2	135006H1	FLANGE, Split	2		
	S-2812	SCREW, Cap	4		
	WL-18	WASHER, Lock	4		
3	176409H1	TUBE ASSEMBLY	1		
4	176104H1	COUPLING *.....	1		
5	176410H1	TUBE ASSEMBLY	1		* Includes the following
6	OR3-15	"O" RING	1		1 COUPLING 180704H1
7	161586H1	FLANGE, Split	2		2 SEAL 180705H1
	S-21014	SCREW, Cap	4		1 SLEEVE 180706H1
	WL-110	WASHER, Lock	4		
HIGH PRESSURE LINE - PUMP TO VALVE					
8	OR4-27	"O" RING	1		
9	128542H1	FLANGE, Split	2		
	S-2711	SCREW, Cap	4		
	WL-17	WASHER, Lock	4		
10	172514H2	TUBE ASSEMBLY (Incl. Items 63 thru 65) See Note #..	1		
11	205-20	ADAPTER	1		
12	OR2-20	"O" RING	1		
GAUGE LINE - MAIN PRESSURE					
13	132667H1	BUSHING, Reducer	1		
14	172832H1	ELBOW	1		
15	180050H1	TUBE, Bulkhead To Tube Assembly	1		
16	172825H1	UNION, Bulkhead	1		
17	186227H1	TUBE, Bulkhead to Gauge	1		
18	172832H1	ELBOW	1		
19	176950H1	BUSHING, Reducer	1		
20	205495H1	GAUGE, replaces 161609H1.....	1		
	136139H1	CLIP, Sleeve to Flow Divider	1		
	175767H1	TUBE, Sleeve for Gage Line	1		
	180118H1	TUBE, Sleeve for Gage Lines in Batt. Box	1		
LINE - VALVE TO BOOM CYLINDER (RAISE)					
21	OR2-20	"O" RING	1		
22	205-20	ADAPTER	1		
23	172515H1	TUBE ASSEMBLY	1		
24	134577H1	HOSE, Tube Assembly To Cylinder Tubes	2		
25	291-12	ELBOW	2		
26	OR2-12	"O" RING	2		
LINE - VALVE TO BOOM CYLINDER (LOWER)					
27	OR2-20	"O" RING	1		
28	205-20	ADAPTER	1		
29	172516H1	TUBE ASSEMBLY	1		
30	134577H1	HOSE, Tube Assembly To Cylinder Tubes	2		
31	172517H1	TUBE ASSEMBLY, Boom Cylinder R.H.	1		
32	172518H1	TUBE ASSEMBLY, Boom Cylinder L.H.	1		
33	291-12	ELBOW	2		
34	OR2-12	"O" RING	2		
LINE - VALVE TO BUCKET CYLINDER (CLOSE)					
35	OR2-20	"O" RING	1		
36	205-20	ADAPTER	1		
37	172519H1	TUBE ASSEMBLY	1		
38	153680H1	PLATE, Connector	1		

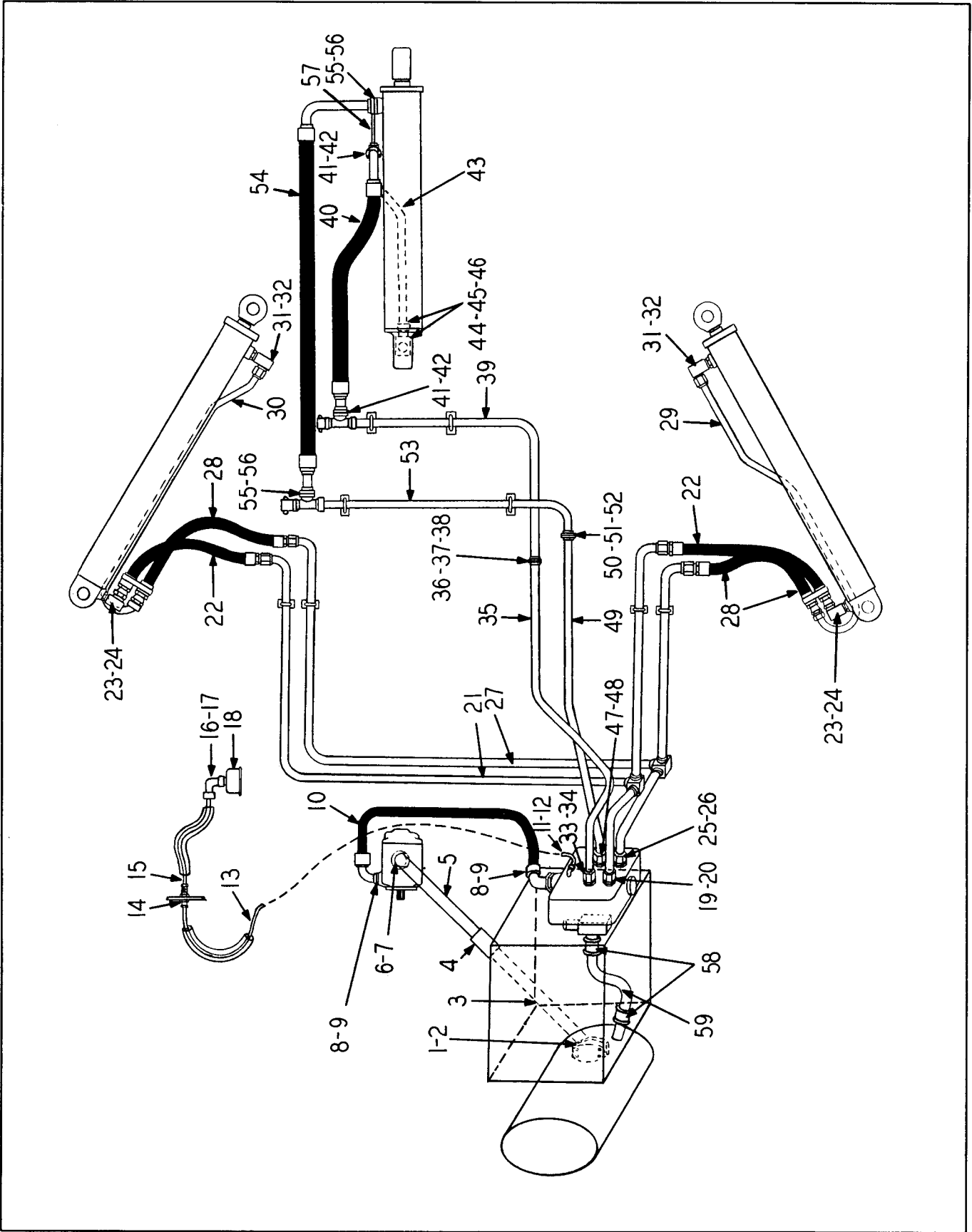
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BOOM AND BUCKET LINES (Continued)
S/N 21CC 1901 To 21CC 2535

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
LINE - VALVE TO BUCKET CYLINDER (CLOSE)					
39	OR4-24	"O" RING	2		
40	115706H1	FLANGE, Split	4		
	S-1614	SCREW, Cap	4		
	WL-16	WASHER, Lock	4		
	H - 16	NUT	4		
41	172520H1	TUBE ASSEMBLY, Cylinder End	1		
42	OR2-24	"O" RING	2		
43	115706H1	FLANGE, Split	4		
	S-269	SCREW, Cap	8		
	WL-16	WASHER, Lock	8		
44	172521H1	HOSE	1		
45	*172522H1	SWIVEL, Hose (See Service Parts at end of List)	1		
46	175544H1	TUBE, Elbow	1		
47	OR4-24	"O" RING	2		
48	115706H1	FLANGE, Split	4		
	S-269	SCREW, Cap	8		
	WL-16	WASHER, Lock	8		
LINE - VALVE TO BUCKET CYLINDER (DUMP)					
49	OR2-20	"O" RING	1		
50	205-20	ADAPTER	1		
51	172523H1	TUBE ASSEMBLY	1		
52	153680H1	CONNECTOR	1		
53	OR4-24	"O" RING	2		
54	115706H1	FLANGE, Split	4		
	S-1614	SCREW, Cap	4		
	WL-16	WASHER, Lock	4		
	H - 16	NUT	4		
55	172524H1	TUBE ASSEMBLY	1		
56	172525H1	HOSE	1		
57	OR4-24	"O" RING	2		
58	115706H1	FLANGE	4		
	S-269	SCREW, Cap	8		
	WL-16	WASHER, Lock	8		
LINE - VALVE TO RESERVOIR					
59	168815H1	CLAMP	4		
60	180117H1	HOSE	1		
TUBE ASSEMBLY CLAMP - BOOM CYLINDER					
	172526H1	"U" BOLT	4		
	172527H1	SPACER	12		
	E - 25	NUT	8		
CROSS PIPE CLAMPS - BUCKET CYLINDER					
	153676H1	"U" BOLT	4		
	153675H1	SPACER	8		
	H - 26	NUT	8		
	WL-16	WASHER, Lock	8		
CLAMPS - BOOM CYLINDER TUBES TO HOSE					
	172577H1	CLAMP	4		
	S-2612	SCREW, Cap	2		
	E - 16	NUT	2		
	WF-16	WASHER, Flat, Spacers between Clamps	10		
(Continued on following page)					

BOOM AND BUCKET LINES (Continued)
S/N 21CC 1901 To 21CC 2535

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
61	175767H1	SLEEVE	1		
62	180118H1	SLEEVE	1		
63	OR4-23	"O" RING	1		
64	181272H1	RING, Back-Up	1		
65	172920H1	SCREW, Set	2		
	*S-244	SCREW, Cap	1		
	*OR4-27	"O" RING	2		
	*184808H1	WASHER, Back-up (leather)	2		
	*OR4-24	"O" RING, Packing	2		
		#NOTE: #186545H2 Hose Assembly now replaced Tube Assembly #172514H2 Item 10. Service parts can still be obtained for the Tube Assembly as shown.			



BOOM & BUCKET LINES

BOOM & BUCKET LINES
(For Machines of S/N 21CC-2536 & Up)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
SUCTION LINE-RESERVOIR TO PUMP					
1	OR3-10	"O" RING	1		
2	135006 H1	FLANGE, Split	2		
	S-2812	SCREW, Cap	4		
	WL-18	WASHER, Lock	4		
3	176409H1	TUBE ASSEMBLY	1		
4	176104H1	COUPLING ASSEMBLY (Includes the next 3 items) ...	1		
	180704H1	COUPLING	2		
	180705H1	SEAL ASSEMBLY	2		
	180706H1	SLEEVE	1		
5	176410H1	TUBE ASSEMBLY	1		
6	OR3-15	"O" RING	1		
7	161586H1	FLANGE, Split	2		
	S-21014	SCREW, Cap	4		
	WL-110	WASHER, Lock	4		
HIGH PRESSURE LINE-PUMP TO VALVE					
8	OR4-27	"O" RING	2		
9	128542H1	FLANGE, Split	4		
	S-2711	SCREW, Cap	8		
	WL-17	WASHER, Lock	8		
10	194055H1	HOSE ASSEMBLY	1		
GAUGE LINE-MAIN PRESSURE					
11	132667H1	BUSHING, Reducer	1		
12	165369H1	CONNECTOR	1		
13	189302H1	TUBE	1		
14	172825H1	UNION, Bulkhead	1		
15	186227H1	TUBE	1		
16	172832H1	ELBOW	1		
17	203425H1	COUPLING	1		
18	205495H1	GAUGE, replaces 161609H1	1		
	138459H1	CLIP, Seat Deck to Tube	2		
	S-148	SCREW, Cap	2		
	WL-14	WASHER, Lock	2		
	H - 14	NUT	2		
	136139H1	CLIP, Sleeve to Flow Divider	1		
	175767H1	TUBE, Sleeve for Gauge Line	1		
	180118H1	TUBE, Sleeve for Gauge Line in Battery Box	1		
LINE-VALVE TO BOOM CYLINDER (RAISE)					
19	OR4-24	"O" RING	1		
20	115706H1	FLANGE, Split	2		
	S-2610	SCREW, Cap	4		
	WL-16	WASHER, Lock	4		
21	194271H1	TUBE ASSEMBLY	1		
22	134577H1	HOSE	2		
23	291-12	ELBOW	2		
24	OR2-12	"O" RING	2		
LINE-VALVE TO BOOM CYLINDER (LOWER)					
25	OR4-24	"O" RING	1		
26	115706H1	FLANGE, Split	2		
	S-2610	SCREW, Cap	4		
	WL-16	WASHER, Lock	4		
27	194272H1	TUBE ASSEMBLY	1		
28	134577H1	HOSE	2		

(Continued on following page)

BOOM & BUCKET LINES (Continued)
(For Machines of S/N 21CC-2536 & Up)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
LINE - VALVE TO BOOM CYLINDER (LOWER) (Continued)					
29	172517H1	TUBE ASSEMBLY, R. H.	1		
30	172518H1	TUBE ASSEMBLY, L. H.	1		
31	291-12	ELBOW	2		
32	OR2-12	"O" RING	2		
LINE - VALVE TO BUCKET CYLINDER (CLOSE)					
33	OR4-24	"O" RING	1		
34	115706H1	FLANGE, Split	2		
	S-2610	SCREW, Cap	4		
	WL-16	WASHER, Lock	4		
	193519H1	TUBE ASSEMBLY	1		
35	153680H1	PLATE, Connector	1		
36	OR4-24	"O" RING	2		
37	115706H1	FLANGE, Split	4		
38	S-1614	SCREW, Cap	4		
	WL-16	WASHER, Lock	4		
	H - 16	NUT	4		
	193521H1	TUBE ASSEMBLY	1		
39	172525H1	HOSE ASSEMBLY	1		
40	OR4-24	"O" RING	2		
41	115706H1	FLANGE, Split	4		
42	S-269	SCREW, Cap	8		
	S-2611	WASHER, Lock	8		
	WL-16	TUBE ASSEMBLY	1		
43	193523H1	"O" RING	1		
44	S-147	SCREW, Cap	4		
45	WL-14	WASHER, Lock	4		
46	H - 14		4		
LINE - VALVE TO BUCKET CYLINDER (DUMP)					
47	OR4-24	"O" RING	1		
48	115706H1	FLANGE, Split	2		
	S-2610	SCREW, Cap	4		
	WL-16	WASHER, Lock	4		
	193519H1	TUBE ASSEMBLY	1		
49	153680H1	PLATE, Connector	1		
50	OR4-24	"O" RING	2		
51	115706H1	FLANGE, Split	4		
52	S-1614	SCREW, Cap	4		
	WL-16	WASHER	4		
	H - 16	NUT	4		
	193521H1	TUBE ASSEMBLY	1		
53	172525H1	HOSE	1		
54	OR4-24	"O" RING	3		
55	115706H1	FLANGE, Split	4		
	S-269	SCREW, Cap (Tube End)	4		
	S-2611	SCREW, Cap (Cylinder End)	4		
	WL-16	WASHER, Lock	8		
56	193523H1	PLATE, Mounting	1		
	S-147	SCREW, Cap	2		
	WL-14	WASHER, Lock	2		
	H - 14	NUT	2		
LINE - VALVE TO RESERVOIR					
58	158094H1	CLAMP	4		
59	194647H1	HOSE	1		

(Continued on following page)

BOOM & BUCKET LINES (Continued)
 (For Machines of S/N 21CC-2536 & Up)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
TUBE ASSEMBLY CLAMPS - BOOM CYLINDER					
	172526H1	"U" BOLT	4		
	172527H1	SPACER	12		
	E - 25	NUT	8		
CROSSPIPE CLAMPS-BUCKET CYLINDER					
	199276H1	"U" BOLT	4		
	199277H1	LUG, Spacer	AR		
	E - 15	NUT	8		
BOOM CYLINDER TUBE TO HOSES -MTG.					
	172577H2	CLAMP	4		
	S-1612	SCREW, Cap	2		
	E - 16	NUT	2		

SECTION 11

HYDRAULIC COMPONENTS

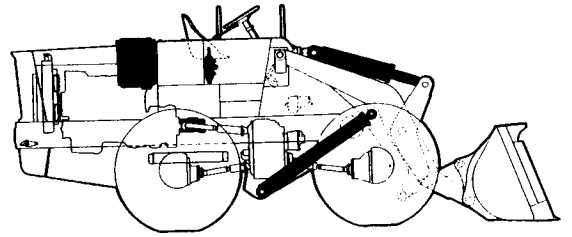
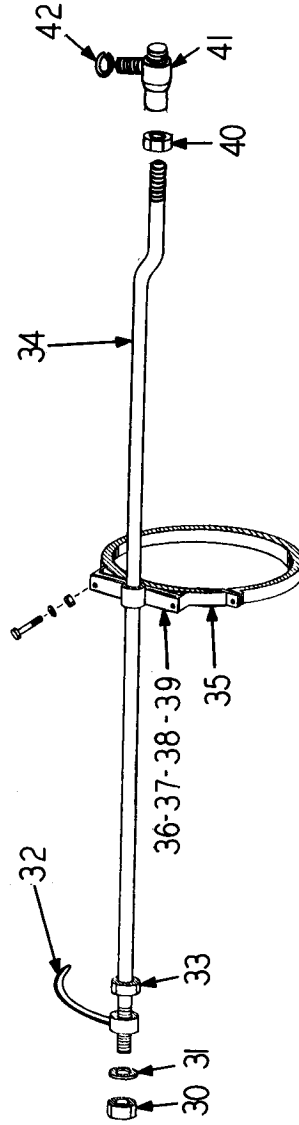
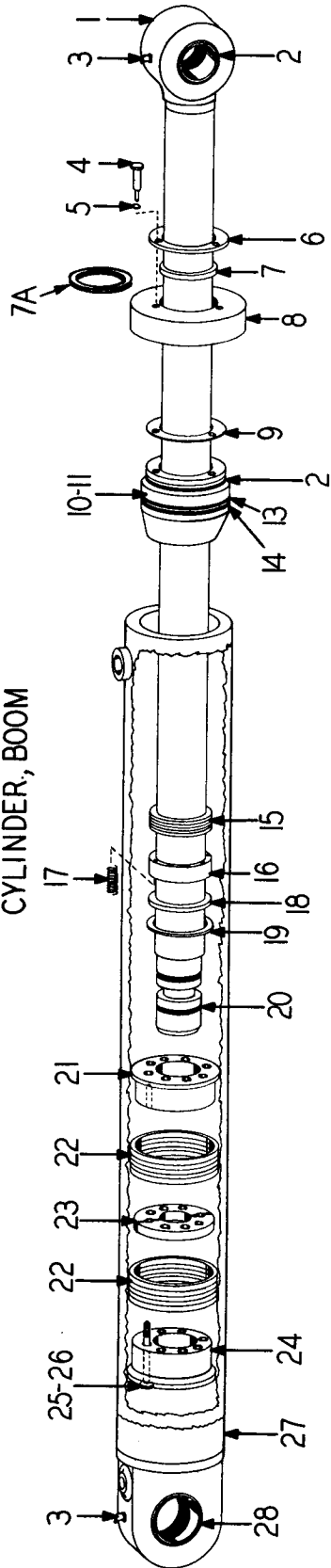


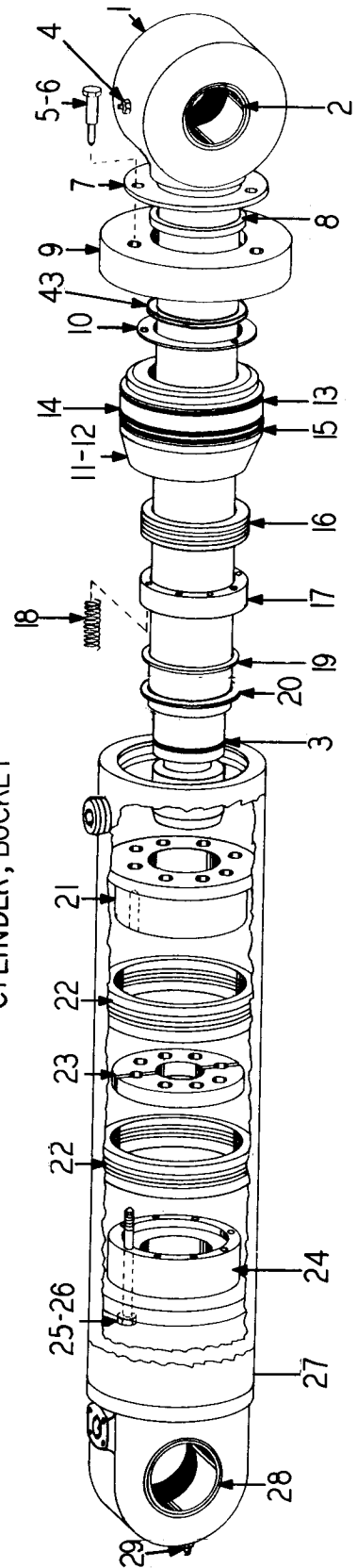
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CYLINDER, BOOM



CYLINDER, BUCKET



BOOM AND BUCKET CYLINDER

BOOM AND BUCKET CYLINDER

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	171866H1	CYLINDER, Boom assembly includes items 1 thru 28..	2		
1	171887H1	ROD, Piston assembly includes item 2	2		
2	171890H1	BUSHING	2		
3	118491H1	FITTING, Grease	4		
4	S-269	SCREW, Cap.....	6		
5	145703H1	WASHER, Lock	6		
6	171899H1	RETAINER, Wiper	2		
7	174686H1	WIPER, Seal	2		
7A	181276H1	GASKET.....	2		
8	171897H1	CAP	2		
9	174693H1	GASKET, Cylinder cap assembly	2		
10	171892H1	CAP, Cylinder includes item 11	2		
11	171895H1	BUSHING	2		
12	155989H1	RING, Lock (composed of 3 segments)	6		
13	155990H1	WASHER, Back up	2		
14	OR4-88	"O" RING	2		
15	155991H1	PACKING	2		
16	155993H1	RING, Gland adj.....	2		
17	147912H1	SPRING	16		
18	171896H1	RING, Back up	2		
19	122144H1	RING, Retaining	2		
20	OR4-33	"O" RING	4		
21	171886H1	PISTON, Half	2		
22	176447H1	PACKING, Piston	4		
23	171885H1	RING, Lock	4		
24	171880H1	PISTON, Half	2		
25	S-2622-D	SCREW, Cap	16		
26	LW-1614	LOCKWIRE	2		
27	171867H1	CYLINDER, Includes item 30	2		
28	171871H1	BUSHING	2		
*	171902H1	CYLINDER, Bucket assembly includes items 1 thru 29 & item 43	1		
1	171904H1	ROD, Piston assembly includes item 2	1		
2	169564H1	BUSHING	1		
3	OR-4-37	"O" RING	2		
4	118491H1	FITTING, Grease	1		
5	S-2611	SCREW, Cap	3		
6	145703H1	WASHER, Lock	3		
7	169560H1	RETAINER, Wiper	1		
8	174687H1	SEAL, Wiper	1		
9	169555H1	CAP	1		
10	174694H1	GASKET, Cylinder cap assembly.....	1		
11	169556H1	CAP, Cylinder includes item 12	1		
12	169559H1	BUSHING	1		
13	169566H1	RING, Lock	1		
14	141543H1	WASHER, Back up	1		
15	OR4-60	"O" RING	1		
16	147897H1	PACKING, Rod	1		
17	147863H2	RING, Gland adj.....	1		
18	147912H1	SPRING, Packing gland	8		
19	169567H1	RING, Back up	1		
20	169581H1	RING, Retaining	1		
21	169577H1	PISTON, Half	1		
22	176448H1	PACKING, Piston	2		
23	169580H1	RING, Lock	2		
24	169576H1	PISTON, Half	1		
25	S-2830-D	SCREW, Cap	8		
26	LW-1316	WIRE, Lock	1		
27	171903H1	CYLINDER, Includes item 28	1		
28	169570H1	BUSHING	1		
29	118495H1	FITTING, Grease	1		
		BUCKET POSITION INDICATOR			
30	H-110	NUT	1		
31	WL-110	WASHER, Lock	1		
32	153275H1	INDICATOR, Bucket position	1		

(Continued on following page.)

BOOM AND BUCKET CYLINDER (Continued)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
33	H-310	NUT	1		
	WL-110	WASHER, Lock	1		
34	171913H1	ROD	1		
35	107336H1	CLAMP	1		
		GUIDE ASSEMBLY, Includes items 36 thru 39	1		
36	173860H1	GUIDE	1		
37	171912H1	BUSHING	1		
38	173862H1	WASHER	2		
39	173863H1	RING, Retaining	2		
	S-158	SCREW, Cap	2		
	WL-15	WASHER, Lock	2		
	H-15	NUT	2		
40	H-310	NUT	1		
41	171914H1	BALL JOINT	1		
42	WL-110	WASHER, Lock	1		
43	178905H1	GASKET, Wiper Seal (Added)	1		

* NOTE: S/N 21CC-2536 & Up Bucket Cylinder Assembly 171902H1 and cylinder 171903H1 were replaced with Bucket Cylinder Assembly 177283H1 and cylinder 177284H1.

NOTE: Change in Steering Cylinder Rod Ends. Effective on machine Model H-70 "C" Series S/N 21CC-2376 and Up.

Effective with the above unit, a complete change in steering cylinders and rod end assemblies has been incorporated. These new cylinders are larger in size and the ball stud type of rod ends have been replaced by clevis type ends. (See Item marked (#) under 189070H1 Cylinder.)

As for units built prior to this breakpoint that incorporate the smaller cylinders 158090H2 are concerned, a comparable design clevis arrangement is now available through our Repair Parts Department. This would be for those units that have experienced repeated ball stud failures but that do not require the new large cylinders.

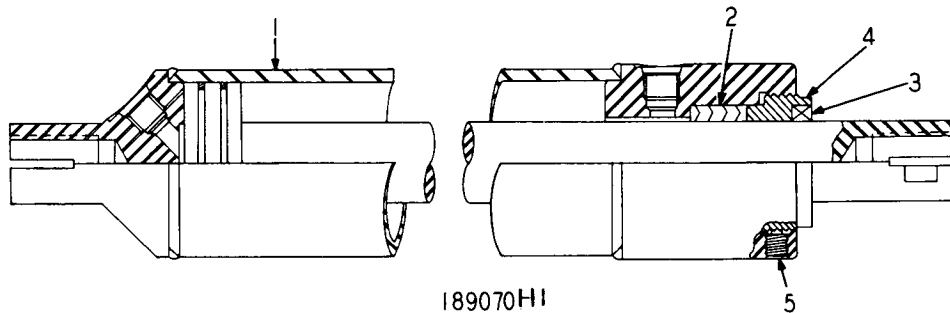
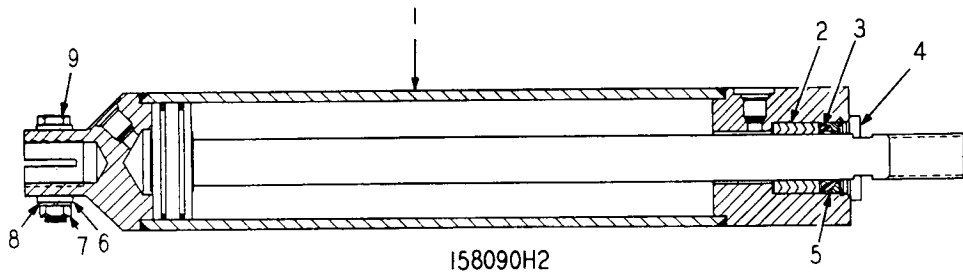
The necessary parts to affect this conversion on these earlier units are listed below for your reference.

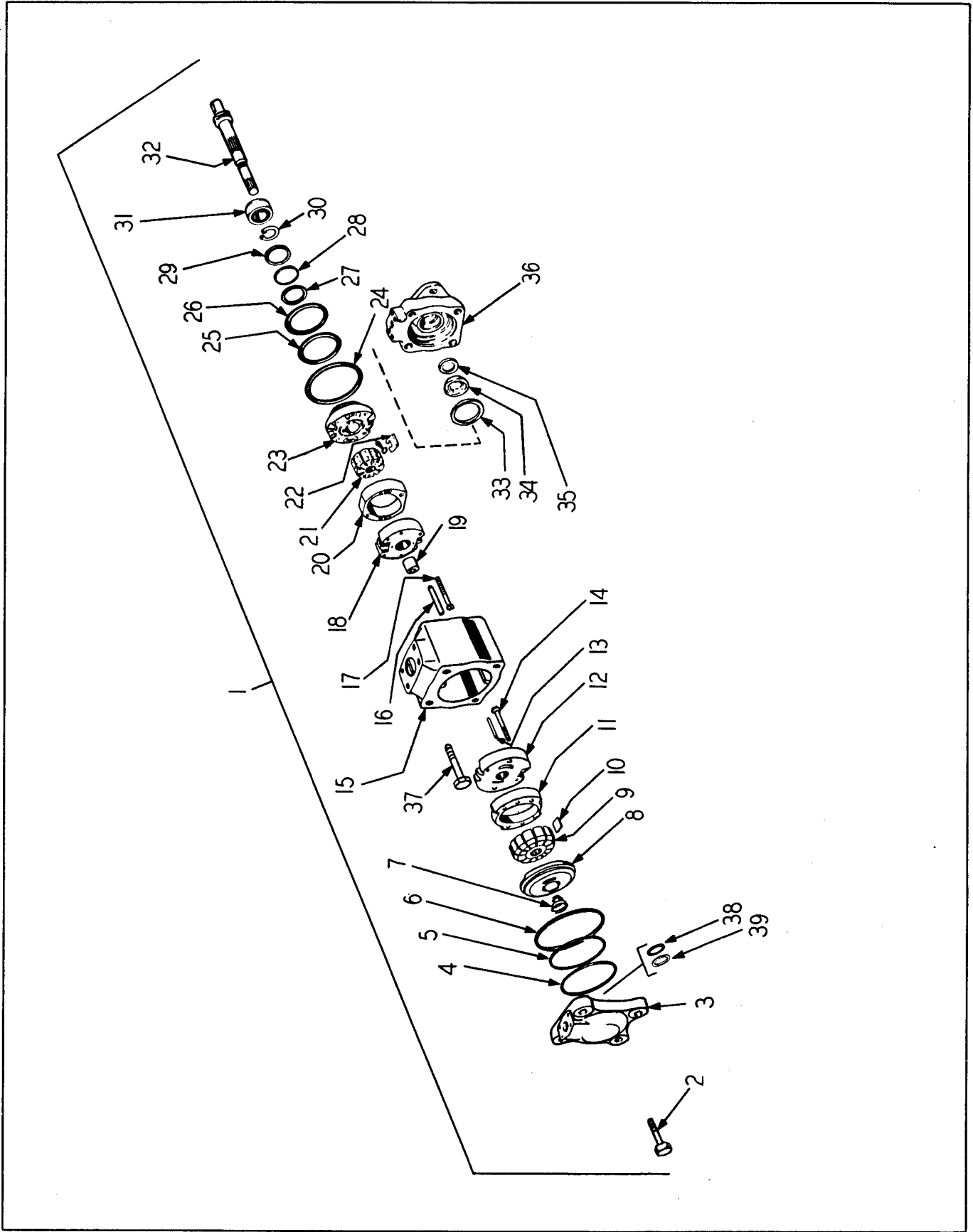
STEERING CYLINDER CLEVIS ENDS KIT 190609H1

- | | | | |
|--------------|----------------|--------------|---------|
| 2 - WL-16 | LOCKWASHER | 2 - 191268H1 | CLEVIS |
| 2 - E-114 | NUT | 4 - 191273H1 | BUSHING |
| 2 - S-165 | CAPSCREW | 4 - 191274H1 | WASHER |
| 2 - E-312 | NUT | 2 - 191964H2 | CLEVIS |
| 2 - WF-312 | FLATWASHER | 1 - 191278H1 | BRACKET |
| 2 - S-11444 | CAPSCREW | 2 - 191281H1 | PIN |
| 2 - 118494H1 | GREASE FITTING | 2 - 191282H1 | TAB |
| 2 - 138926H1 | CLAMP | 1 - 191283H1 | DRAWING |
| 8 - 181213H1 | CORD RING | | |

STEERING CYLINDER

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1 *	158090H2	CYLINDER, Steering (Incl. Items 2 thru 5) See page 11 - 4	2	21CC1901	21CC2375
2	159075H1	PACKING	2		
3	159077H1	SEAL, Wiper	2		
4	162949H1	NUT, Gland	2		
5	159074H1	RETAINER	2		
	138926H1	CLAMP ASSEMBLY, (Includes Items 6 thru 9)	1		
6	138925H1	CLAMP	1		
7	H - 18	NUT	1		
8	WL - 18	WASHER, Lock	1		
9	S-1818	SCREW, Cap	1		
IMPROVED TYPE STEERING CYLINDER AND RELATED PARTS					
1 *	189070H1	CYLINDER, Steering (Includes Items 2 thru 5)	2	21CC2376	UP
2	189072H2	PACKING	2		
3	167055H1	SEAL, Wiper	2		
4	189071H1	NUT, Gland	2		
5	187290H1	SCREW, Set	2		
	138926H1	CLAMP ASSEMBLY (Includes Items 6 thru 9)	4		
6	138925H1	CLAMP	1		
7	H - 18	NUT	1		
8	WL-18	WASHER, Lock	1		
9	S-1818	SCREW, Cap	1		
#	191268H2	CLEVIS (4)			
#	191281H1	PIN (4)			
#	WF-302	WASHER, Lock (4) Items			
#	E - 312	NUT (4) Replac-			
#	119694H1	FITTING, Grease(4) ed			
#	S - 115	SCREW, Cap (4)			
#	WL - 16	WASHER, Lock (4)			
#	191282H2	TAB, Lock (4)			
#	191284H1	DRAWING, Steering Cylinder Adjustment	Ref.		
		188951H1 Socket Assy.	AR		
		P - 42 Plug	AR		
		189074H1 Washer	AR		
		E - 110 Nut	AR		
		189073H1 Seal	AR		
		118492H1 Fitting	AR		

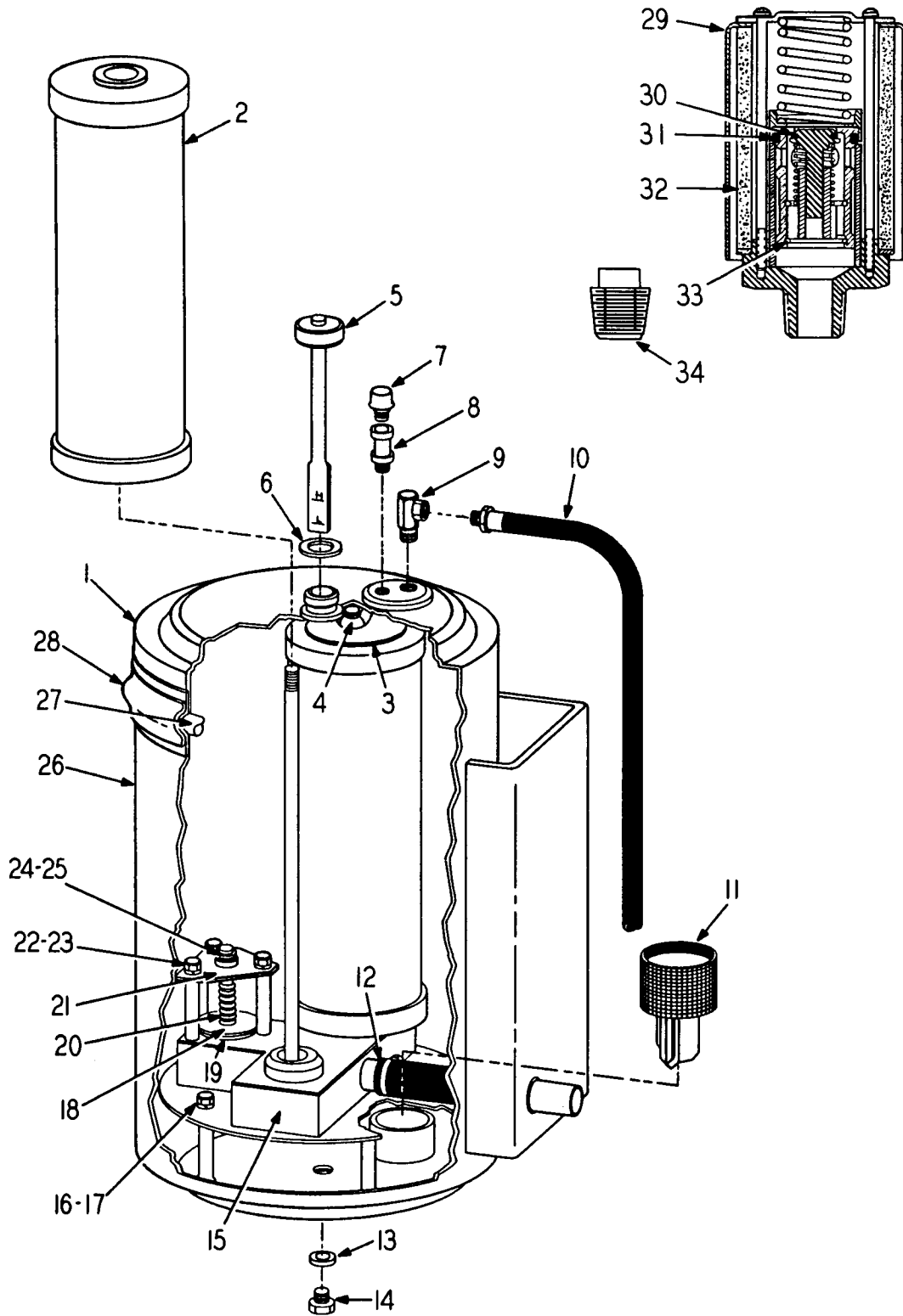




MAIN PUMP

MAIN PUMP

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
* 1	172271H2	PUMP, (Vickers 3521V35-9A-19CC-10L)	1	21CC-1901	21CC-2462 & Up
# 1	194268 H1	PUMP, (Vickers 3520V35-8A-19CC-10L)	1	21CC-2463	
2	177600 H1	SCREW	4		
3	177596 H1	COVER	1		
4		"O" Ring	1		
5		RING, Back-Up	1		
6		"O" RING, Cover	1		
* 7	164363 H1	SPRING	1		
8		PLATE, Pressure	1		
9		ROTOR	1		
10		KIT, Vane	1		
11		RING	1		
12		PLATE, Wear	1		
13		PIN	2		
14		SCREW	2		
15	177595 H1	HOUSING, Inlet	1		
16		PIN, Housing	2		
17		SCREW	2		
18		PLATE, Wear (Includes Bushing)	1		
19		BUSHING	1		
20		RING	1		
21		ROTOR	1		
22		KIT, Vane	1		
23		PLATE, Pressure	1		
24		"O" RING	1		
25		RING, Back-Up	1		
26		"O" RING	1		
27		"O" RING	1		
28		RING, Back-Up	1		
29	165002 H1	RING, Snap	1		
30	148647 H1	RING, Snap	1		
31	177598 H1	BEARING	1		
* 32	177597 H1	SHAFT	1		
# 32	187892 H1	SHAFT	1		
33	165003 H1	WASHER	1		
34		SEAL, Oil	1		
35		WIPER	1		
36	164373 H1	BODY	1		
37	177599 H1	SCREW	4		
# 38		"O" RING	1		
# 39		RING, Back-Up	1		
	161780 H1	PLATE, Adapter	1		
	S-2818	SCREW, Cap	4		
	WL-18	WASHER, Lock	4		
	S-21016	SCREW, Cap	2		
	WL-110	WASHER, Lock	2		
	H-410	NUT	2		
		Adapter Plate to Accessory Drive			
		Pump to Adapter Drive			
* 177592H2		KIT, Gasket (Incls. Items 4, 5, 6, 24, 25, 26, 27, 28, 34 and 35)	1		
# 187894H2		KIT, Gasket (Incls. Items 4, 5, 6, 24, 25, 26, 27, 28, 34, 35, 38 and 39)	1		
* 177591 H1		KIT, Cartridge, Small (Incls. Items 8 thru 14)	1		
# 194643 H1		KIT, Cartridge, Small (Incls. Items 8 thru 14)	1		
# 177590H3		KIT, Cartridge, Large (Incls. Items 16 thru 23)	1		
NOTE: All items not marked * or # are common for both pumps.					



RESERVOIR

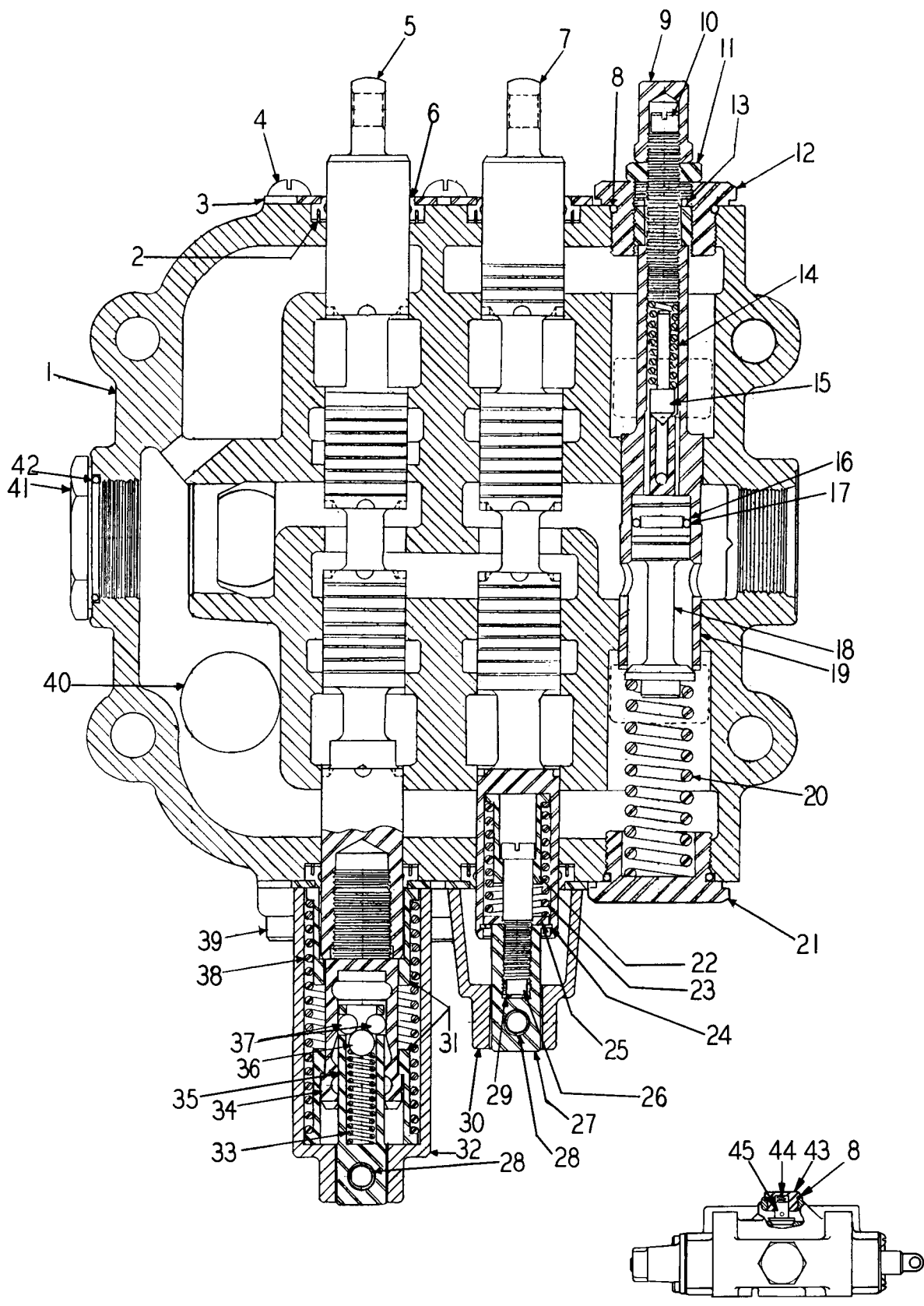
RESERVOIR

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
#	176001H1	RESERVOIR	#	21CC-1901	21CC-2515
*	194430H1	RESERVOIR	*	21CC-2516	& Up
1	176002H1	TOP, Reservoir	1		
#	176028H2	FILTER	2		
*	176028H2	FILTER	3		
#	184842H1	PLATE, Retainer	1		
*	193845H1	PLATE, Retainer	1		
#	E - 18	NUT	2		
*	E - 18	NUT	3		
5	172801H1	CAP & DIPSTICK	1		
6	134045H1	SEAL	2		
7	131154H1	FILTER, Breather	1		
8	150269H1	VACUUM BREAKER	1		
9	134049H1	VALVE, Check	1		
10	176030H1	HOSE, Drain	1		
11	172800H1	SCREEN	1		
#	173747H1	HOSE, Inlet	1		
*	193836H1	HOSE, Inlet	1		
#	168815H1	CLAMP, Hose	2		
*	158094H1	CLAMP, Hose	2		
13	OR2-16	"O" RING	1		
14	210-16	PLUG, Drain	1		
#	176011H1	BAFFLE	1		
*	193829H1	BAFFLE	1		
#	S-166	SCREW, Cap	4		
*	S-168	SCREW, Cap & WF-16 WASHER, Flat	4		
17	WL-16	WASHER, Lock	4		
18	189460H1	PLUNGER	1		
19	176027H1	GROMMET	1		
20	176026H1	SPRING	1		
#	189459H1	PLATE, Check Valve	1		
*	193843H1	VALVE, Check	1		
22	S-166	SCREW, Cap	3		
23	WL-16	WASHER, Lock	3		
*	E - 16	NUT	1		
*	WF-16	WASHER, Flat	1		
#	176004H1	BOTTOM, Reservoir	1		
*	194431H1	BOTTOM, Reservoir	1		
27	172803H1	"O" RING	1		
28	172804H1	COUPLING	1		
29	194400H1	VALVE, Relief (Includes Items 30 thru 33)	1		
30	198464H1	SEAL, Poppet	1		
31	198463H1	SEAL, Sleeve	1		
32	198461H1	FILTER	1		
33	198462H1	RING, Lock	2		
34	P - 14	PLUG	1		
	S-1812	SCREW, Cap	4		
	WL-18	WASHER, Lock	4		
	H - 18	NUT	4		

These items are re-placed by Items 25-34

Reservoir to Enclosure

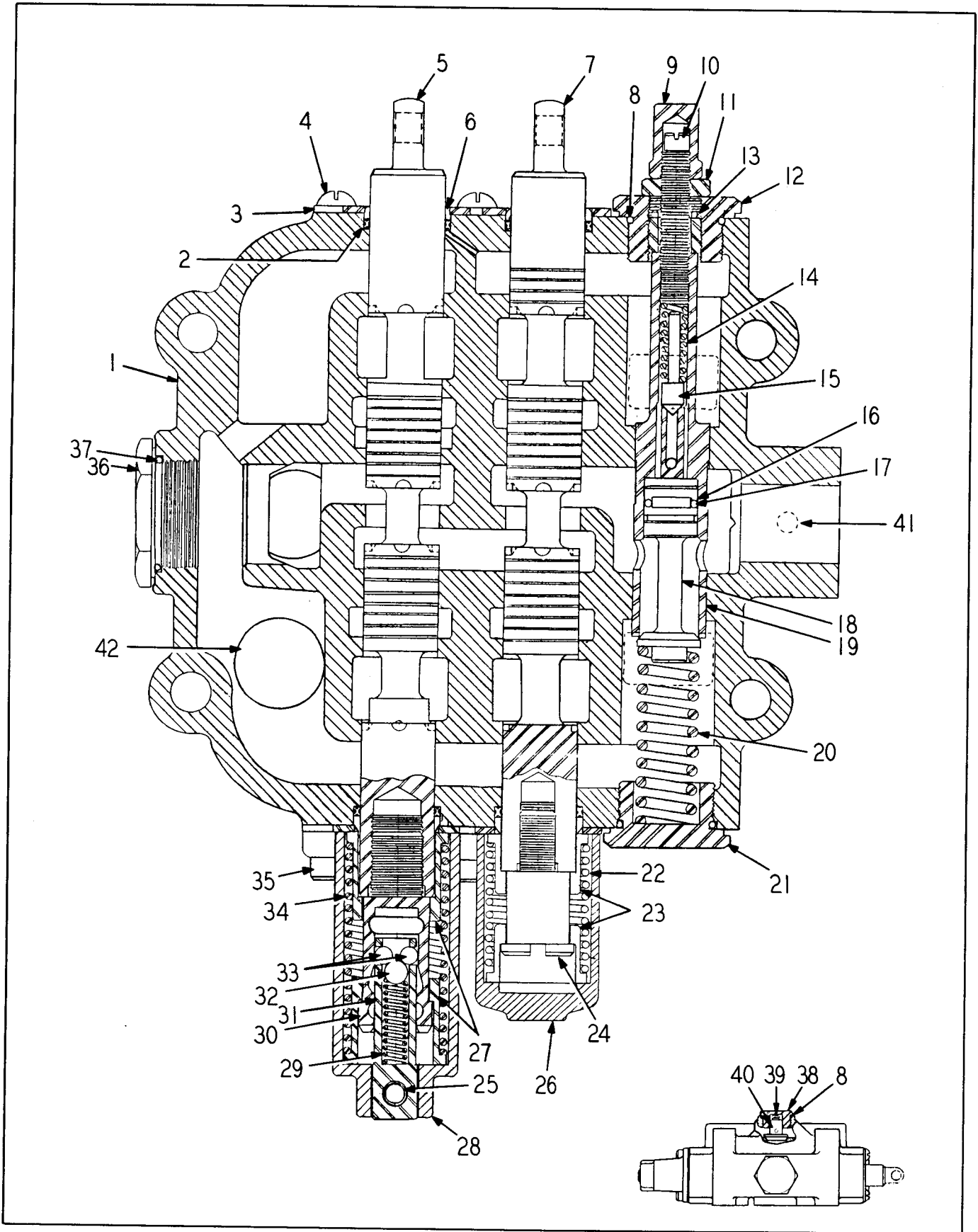
NOTE: All items not marked * or # are common for both reservoirs.



CONTROL VALVE

CONTROL VALVE

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	171915H1	VALVE, Includes Item 1 thru 45.....	1	21CC -1901	21CC -2535
1	*	HOUSING VALVE.....	*		
2	149948H1	RING, Seal.....	4		
3	149946H1	PLATE, Seal.....	4		
4	173652H1	SCREW, Rd. Hd. Mach. 3/8" NC x 1-1/2" lg.....	4		
5	*	PLUNGER, Double Acting Float.....	*		
6	129629H1	WIPER, Seal.....	4		
7	*	PLUNGER, Double Acting.....	*		
8	OR2-20	"O" RING.....	5		
9	111392H1	CASTLE NUT.....	1		
10	144591H1	ADJUST SCREW.....	1		
11	144598H1	NUT.....	1		
12	144588H1	PLUG, Relief Valve Pilot.....	1		
13	144587H1	ADJUST PLUG.....	1		
14	173647H1	SPRING, Relief Valve Pilot.....	1		
15	144606H1	POPPET, Relief Valve Pilot.....	1		
16	149947H1	RING, Back Up.....	1		
17	OR4-13	"O" RING.....	1		
18	144585H1	POPPET, Relief Valve.....	1		
19	144584H1	SLEEVE, Relief Valve.....	1		
20	144586H1	SPRING, Relief Valve.....	1		
21	144589H1	PLUG, Relief Valve.....	1		
22	144595H1	SPRING GUIDE, Plunger.....	1		
23	144590H1	SPRING, Plunger.....	1		
24	144596H1	SNAP RING.....	1		
25	144597H1	WASHER.....	1		
26	144594H1	CAPSCREW, Special.....	1		
27	144593H1	PIN, Plunger.....	1		
28	140800H1	DRIVE PIN.....	2		
29	174677H1	LOCKWASHER, #10 Heavy.....	1		
30	144581H1	CAP, Plunger.....	1		
31	174683H1	SPRING GUIDE, Detent.....	2		
32	174678H1	CAP, Detent Plunger.....	1		
33	174681H1	SPRING, Detent.....	1		
34	174684H1	PLUNGER END, Detent.....	1		
35	174679H1	PIN, Detent Plunger.....	1		
36	131526H1	BALL, 3/8" Dia.....	1		
37	174682H1	BALL, 9/32" Dia.....	3		
38	174680H1	SPRING, Detent Plunger.....	1		
39	157918H1	CAPSCREW.....	4		
40	OR3-2	"O" RING.....	1		
41	144601H1	PLUG.....	1		
42	OR2-24	"O" RING.....	1		
43	144599H1	PLUG, Check Valve.....	3		
44	144604H1	SPRING, Check Valve.....	3		
45	144600H1	POPPET, Check Valve.....	3		
		(See Page 9-5 for Valve Attaching Hardware.)			
		* These parts cannot be serviced separately.			



CONTROL VALVE

CONTROL VALVE

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	193790H2	VALVE, (Includes Items 1 thru 41)	1	21CC-2536	& Up
1	NSS	HOUSING	1		
2	195243H1	RING, Quad	4		
3	149946H1	PLATE, Seal	4		
4	173652H1	SCREW	4		
5	NSS	PLUNGER, Double Acting Float	1		
6	173633H1	WIPER, Seal	4		
7	NSS	PLUNGER, Double Acting	1		
8	OR2-20	"O" RING	5		
9	111392H1	NUT, Castle	1		
10	144591H1	SCREW, Adjusting	1		
11	144598H1	NUT	1		
12	144588H1	PLUG, Relief Valve Pilot	1		
13	144587H1	PLUG, Adjusting	1		
14	173647H1	SPRING	1		
15	144606H1	POPPET	1		
16	149947H1	RING, Back-Up	1		
17	OR4-13	"O" RING	1		
18	144585H1	POPPET	1		
19	144584H1	SLEEVE	1		
20	144586H1	SPRING	1		
21	144589H1	PLUG	1		
22	195240H1	SPRING	1		
23	195242H1	SEAT, Spring	2		
24	195241H1	SCREW, Cap, Special	1		
25	140800H1	PIN, Drive	1		
26	187433H1	CAP, Plunger	1		
27	174683H1	GUIDE, Spring	2		
28	174678H1	CAP	1		
29	174681H1	SPRING	1		
30	174684H1	END, Plunger	1		
31	174679H1	PIN, Detent Plunger	1		
32	131526H1	BALL, 3/8" Diameter	1		
33	174682H1	BALL, 9/32" Diameter	3		
34	174680H1	SPRING	1		
35	157918H1	SCREW, Cap	4		
36	144601H1	PLUG	1		
37	OR2-24	"O" RING	1		
38	144599H1	PLUG, Check Valve	3		
39	144604H1	SPRING, Check Valve	3		
40	144600H1	POPPET, Check Valve	3		
41	P - 44	PLUG	1		
42	OR3-2	"O" RING, Valve Mounting	1		

SECTION 12

**ELECTRICAL
SYSTEM**

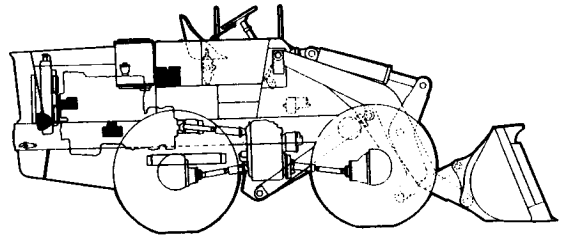
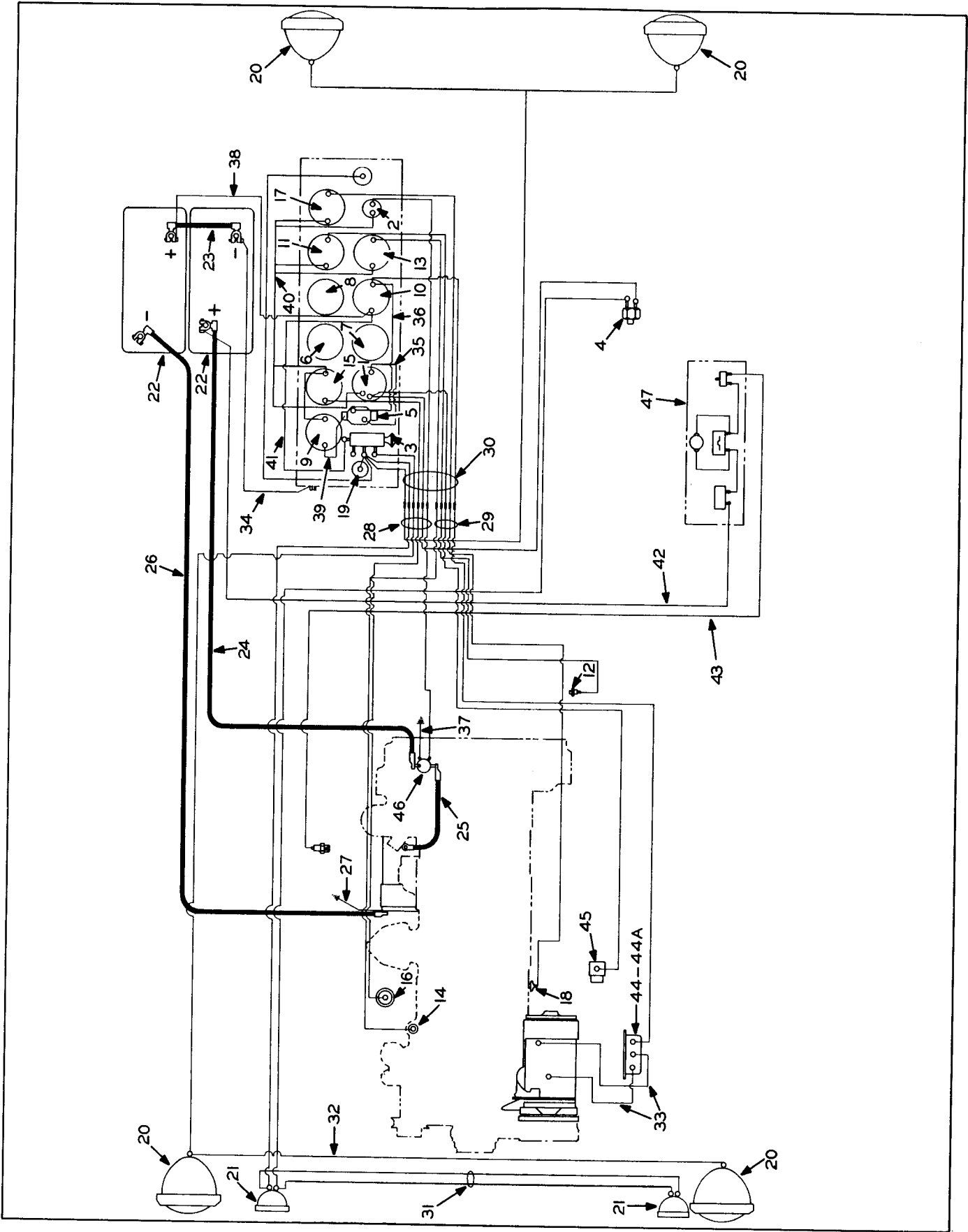


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Group

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WIRING 12 - 3



ELECTRICAL SYSTEM

ELECTRICAL SYSTEM

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	126412H1	SWITCH, Ignition (Push Button)	1		
1	125185H1	SWITCH, Ignition (With Lever)	1		
	125186H1	LEVER, Ignition Switch Order 190345H1 ign. switch..	1		
2	109214H1	SWITCH, Starter	1		
3	107749H1	SWITCH, Light	1		
4	112339H2	SWITCH, Stoplight	1		
5	128359H1	CIRCUIT BREAKER	1		
	168752H1	SCREW, Mach., Rd. Hd.	2		
	104469H1	WASHER, Lock	2		
	104467H1	NUT	2		
6	161609H1	GAGE, Hydraulic Pressure	1		
7	154893H1	GAGE, Air Pressure	1		
8	188328H1	GAGE, Trans. Oil Pressure	1		
9	167564H1	HOURMETER	1		
10	115605H1	AMMETER	1		
11	187314H1	GAGE, Torque Converter Temp.	1		
12	144200H1	SENDER, Torque Converter	1		
13	187313H1	GAGE, Water Temp.	1		
14	144200H1	SENDER, Torque Converter	1		
	104468H1	WASHER, Lock	2		
	104466H1	NUT	2		Sender Mtg.
15	187315H1	GAGE, Fuel	1		
16	171831H1	SENDER, Fuel	1		
	104468H1	WASHER, Lock	1		
	104466H1	NUT	1		
	107755H1	GASKET, Fuel Sender	1		
	160975H1	SCREW, Mach. Rd. Hd.	5		
	108498H1	WASHER, Lock	5		
17	187312H1	GAGE, Engine Oil Pressure	1		
18	123154H1	SENDER, Engine Oil Pressure	1		
19	146568H1	LAMP, Dash (Bulb, Trade #89)	2		
	104469H1	WASHER, Lock	4		
20	176675H1	LAMP, Driving (181355 Sealed Beam Unit 181356 Retainer)	4		
21	115602H3	LAMP, Tail & Stop (Bulb, Trade #67 & #1073)	2		
22	*	BATTERY, Exide XF-25 (See note).....	2		
23	116949H1	CABLE, Battery Jumper	1		
24	* 107558H1	CABLE, Battery to Starter Solenoid	1		
25	148167H1	CABLE, Starter Solenoid to Starter	1		
26	* 107558H1	CABLE, Battery to Ground	1		
27	183039H1	STRAP, Starter Ground	1		
28	174512H2	HARNESS, Wiring	1		
29	174510H3	HARNESS, Wiring	1		
30	175047H2	LOOM, Instrument Panel	1		
31	172227H2	LOOM, Jumper, Stoplights	1		
33	148175H1	WIRE, Generator to Regulator	2		
34	177235H1	WIRE, Ground, Instrument	1		
35	134319H1	WIRE, Ignition Switch to Circuit Breaker	1		
36	109866H1	WIRE, Ammeter to Circuit Breaker	1		
37	117240H1	WIRE, Starter Solenoid to Ground	1		
38	177235H1	WIRE, Battery to Ammeter	1		
39	187396H1	WIRE, Hourmeter Connections	1		
40	175353H1	WIRE, Instrument Jumper	1		
41	109866H1	WIRE, Ammeter to Light Switch	1		
42	180096H1	WIRE, Battery to Cold Weather Start	1		
43	141084H1	WIRE, Cold Weather Start to Glow Plug	1		
44		REGULATOR (Delco-Remy #1119001)	1		
44A		SHOCK MOUNT, Regulator (Delco-Remy #1910966) ..	1		
45		SOLENOID, Fuel Pump (Cummins #107890)	1		
46		SOLENOID, Starter (Cummins #43301)	1		
47		COLD WEATHER STARTING UNIT (See Engine Section)	1		
	129668H1	CLIP, Attach to Engine	1		
	S-286	SCREW, Cap	1		

(Continued on following page)

ELECTRICAL SYSTEM (Continued)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	WL-18	WASHER, Lock	1		
	139016H1	STRAP, Outside Battery Box	1		
	179095H1	BRACKET, Stoplight Mtg. R.H.	1		
	179096H1	BRACKET, Stoplight Mtg. L.H.	1		
	H-14	NUT	4		
	WL-14	WASHER, Lock	4		
	154049H1	GROMMET, Battery Cables	1		
	148147H1	BRACKET, Solenoid Mtg.	4		
	S-145	SCREW, Cap	4		
	WL-14	WASHER, Lock	4		
	H-14	NUT	4		
	S-268	SCREW, Cap	2		
	WF-16	WASHER, Flat	2		
	WL-16	WASHER, Lock	2		
	176734H1	WASHER	2		
	S-1612	SCREW, Cap	1		
	WL-16	WASHER, Lock	1		
	H-16	NUT	1		
	173433H1	SUPPORT, Front Lights	2		
	177360H1	SUPPORT, Rear Lights	2		
	145703H1	WASHER, Lock	2		
	176750H1	CLAMP, Driving Lamp	4		
	176752H1	PLUG, Rubber	8		
	E-18	NUT	4		
	176749H1	WASHER	4		
	H-320	NUT	2		
	WL-120	WASHER, Lock	2		
	173443H1	SETSCREW	4		
	132226H1	SCREW	1		
	104468H1	WASHER, Lock	1		
	104466H1	NUT	1		
	138459H1	CLAMP, Harness to Eng. Block R.H. Side	1		
	161043H1	CLAMP, Harness to Solenoid Bracket	1		
	138459H1	CLAMP, Tail Back Up Light Wires to L.H. Channel	1		
	161043H1	CLAMP, Water Temp. Wire to Eng. Valve Cover	1		
	129668H1	CLAMP, Driving Light Wire to Windshield Strip	4		
	S-168	SCREW, Cap	6		
	H-16	NUT	6		
	WL-16	WASHER, Lock	6		
	161043H1	CLAMP, Harness to Parking Brake	1		
	138459H1	CLAMP, Driving Light Wire to Gearshift Lever Clamp	1		
	138459H1	CLAMP, Wire to Cold Start Bracket	1		
	129668H1	CLAMP, Loom	3		
	139016H1	STRAP, Battery Cables	2		
	136140H1	CLAMP, Wire	3		
	193848H1	WIRE, Instrument panel loom to ignition switch	1		
		* NOTE: (S/N 21CC-2362 & Up) Item 22 exide battery XF-25 was replaced by exide 4D battery, 12 volts, 150 amp. Item 24 189603H1 cable replaced 107558H1 Item 25 189604H1 cable replaced 107558H1			

SECTION 13

AIR - HYDRAULIC SYSTEM

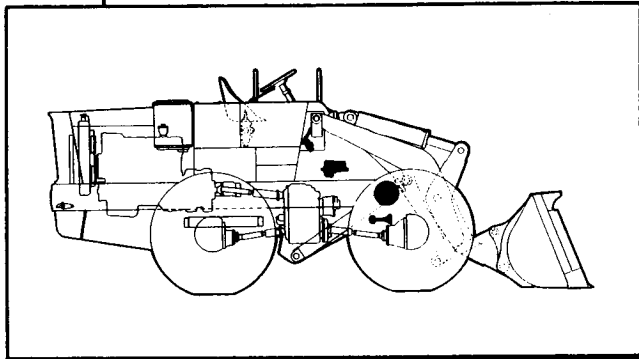
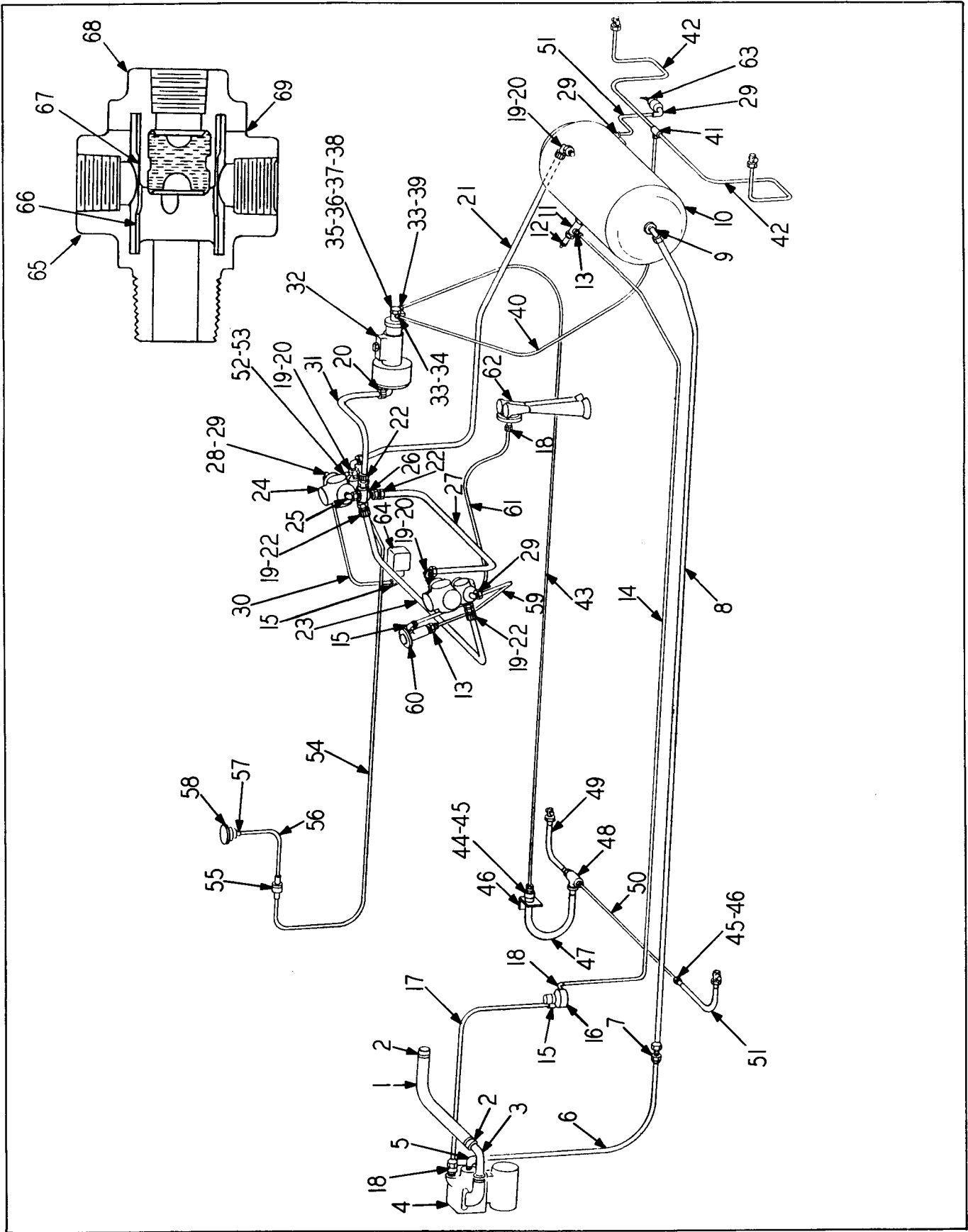


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HYDRAULIC CONNECTIONS - AIR BRAKE

HYDRAULIC CONNECTIONS - AIR BRAKE

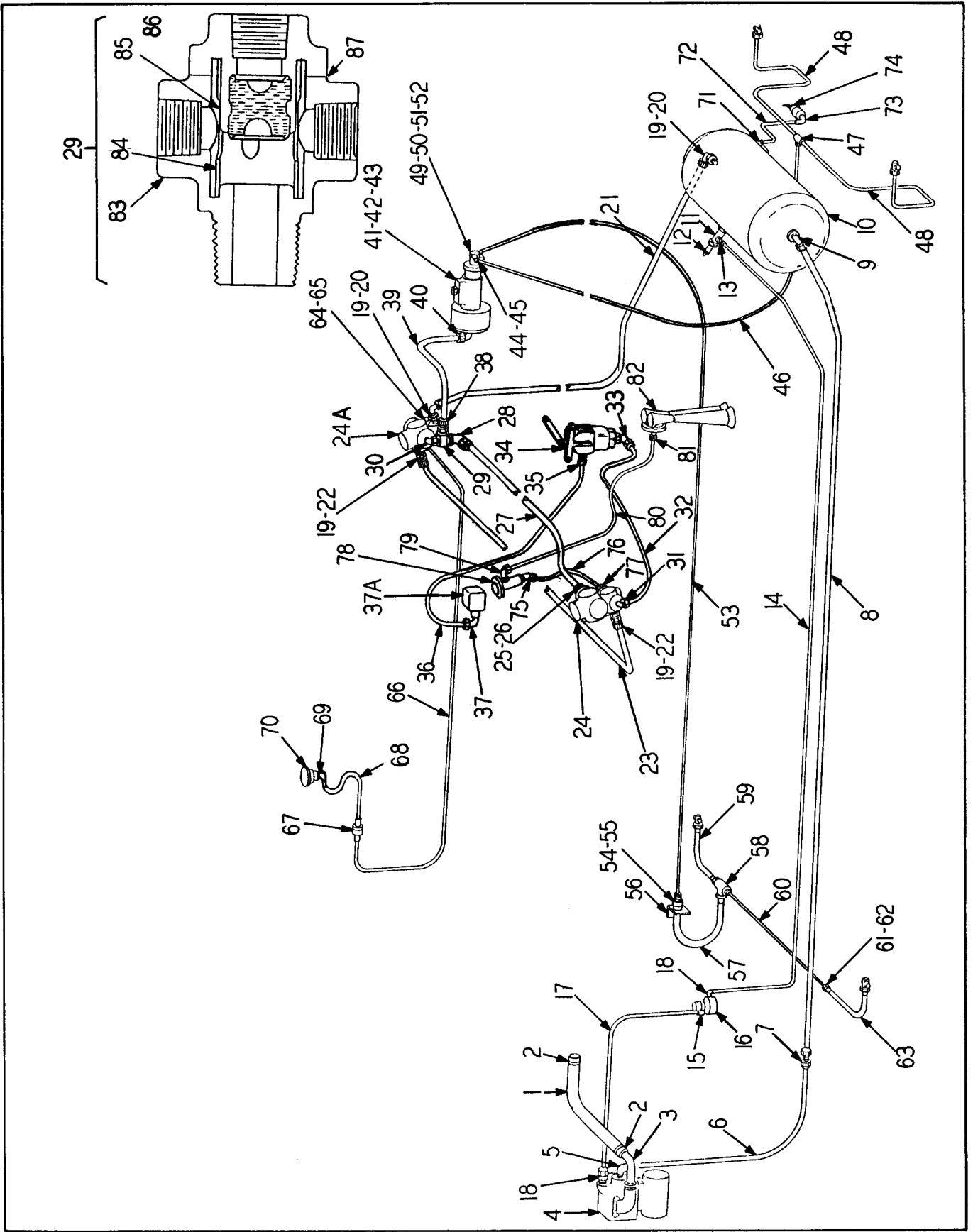
Used on Models of S/N 21CG-2010 thru 21CG-2231 &
21CC-1901 thru 21CC-2235 & 38, 42, 46, 48, 49 53, 54,
55, 58, 59, 62, 63 & 64.

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	176031H1	HOSE	1		
2	161178H1	CLAMP	2		
3	176032H1	TUBE, Air Intake to Compressor	1		
4		COMPRESSOR (See Cummins Engine Manual)	1		
5	160997H1	ELBOW	1		
6	179017H1	TUBING	1		
7	157919H1	CONNECTOR	1		
8	179092H1	TUBING	1		
	132159H1	CLAMP, Tubing to Main Frame	1		
9	153526H1	ELBOW	1		
10	153524H1	RESERVOIR	1		
	153525H1	"U" BOLT	2		
	E - 16	NUT	4		
11	175779H1	TEE	1		
12	139434H1	VALVE, Safety (See Page 13-5)	1		
13	175774H1	CONNECTOR, Male	2		
14	175934H1	TUBE	1		
15	175775H1	ELBOW	3		
16	160446H2	GOVERNOR (See Page 13-12)	1		
	S-1524	SCREW, Cap	2		
	WL-15	WASHER, Lock	2		
	H - 15	NUT	2		
17	175769H1	TUBE, Governor to Compressor	1		
18	175775H1	CONNECTOR	3		
19	175778H1	BUSHING	4		
20	175777H1	ELBOW	4		
21	175768H1	TUBE, Reservoir to L.H. Brake Valve	1		
22	175772H1	CONNECTOR, Male	2		
23	175767H1	TUBE, L. H. Brake Valve to R. H. Brake Valve	1		
24	162410H1	VALVE, Brake (See Page 13-11)	2		
	P - 14	PLUG, R.H. Valve	2		
	P - 18	PLUG, 3 on L.H. & 4 on R.H. Valve	7		
	S-158	SCREW, Cap	6		
	H - 15	NUT	6		
	WL-15	WASHER, Lock	6		
25	175081H1	ELBOW	1		
26	174923H2	VALVE, Double Check (Includes items 65 thru 69)	1		
	P - 16	PLUG	1		
27	175766H1	TUBE	1		
28	151982H1	BUSHING, Reducer	1		
29	164839H1	ELBOW	4		
30	175763H1	TUBE	1		
31	175766H1	TUBE	1		
32	164057H1	HYDRAIR POWER CLUSTER (See Page 13-9)	1		
	S-178	SCREW, Cap	3		
	WL-17	WASHER, Lock	3		
33	HL-3753	GASKET	2		
34	HL-3553	CONNECTOR	1		
35	HA-884	GASKET	1		
36	107689H1	CONNECTOR	1		
37	HA-883	GASKET	1		
38	HA-882	BOLT	1		
39	HL-3552	PLUG	1		
40	120613H1	TUBE & NUT ASSEMBLY	1		
41	146966H1	TEE	1		
	172848H1	CLIP, Tee Mtg.	1		
	S-147	SCREW, Cap	1		
	H - 14	NUT	1		
	WL-14	WASHER, Lock	1		
42	121104H1	TUBE & NUT ASSEMBLY	2		
	139016H1	STRAP, Brake Lines to Axle Bolts	2		
43	142852H1	TUBE & NUT ASSEMBLY	1		

(Continued on following page)

HYDRAULIC CONNECTIONS - AIR BRAKE (Continued)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
44	169677H1	REDUCER	1		
45	H-310	NUT, Jam	2		
46	174919H1	BRACKET	2		
	S-158	SCREW, Cap	1		
	WL-15	WASHER, Lock	1		
	H - 15	NUT	1		
	S-1510	SCREW, Cap	1		
	WL-15	WASHER, Lock	1		
	H - 15	NUT	1		
		Bracket to Frame L. H. Side			
		Bracket to Frame R. H. Side			
47	175287H1	HOSE, Frame to Tee	1		
48	174920H1	TEE	1		
	S-1616	SCREW, Cap	1		
	H - 16	NUT	1		
	WL-16	WASHER, Lock	1		
49	174928H1	HOSE, Tee to L. H. Brake Cylinder	1		
50	110621H1	TUBE & NUT ASSEMBLY, Tee to Coupling R. H.	1		
51	174927H1	HOSE, Tube to R. H. Brake Cylinder	1		
	156608H1	CLAMP	2		
52	132667H1	BUSHING, Reducer	1		
53	172832H1	ELBOW, L. H. Brake Valve	1		
54	172833H1	TUBE, Elbow to Bulkhead Union	1		
55	172825H1	UNION, Bulkhead	1		
56	180227H1	TUBE, Bulkhead Union to Connector	1		
57	181084H1	CONNECTOR	1		
58	154893H1	GAGE, Air Pressure	1		
59	182838H1	TUBE	1		
60	157140H1	VALVE, Horn (See Page 13-7)	1		
	S-146	SCREW, Cap	2		
	H - 14	NUT	2		
	WL-14	WASHER, Lock	2		
61	175764H1	TUBE	1		
62	145775H1	HORN (See Page 13-7)	1		
63	139439H1	VALVE, Drain	1		
64	# 186242H1	CYLINDER, Air replaced #159751	1		
	164839H1	ELBOW (Use with Air Cyl. #186242)	1		
65	179053H2	BODY	1		
66	179067H1	GUIDE, Shuttle	1		
67	179068H1	SHUTTLE	1		
68	* 179070H1	CAP replaced by 179070H2	1		
69	* 179069H1	GASKET replaced by "O" RING	1		
	179071H2	SCREW, W/Lockwasher	2		
	WF-14	WASHER, Flat	1		
	HA-1332	GASKET, Used with items 49 & 51	2		
		* NOTE: On orders for 179070H1 or 179069H1 supply 179070H2 cap and 177625H1 "O" Ring.			
		# NOTE: Effective on transmission Serial No. (T-70-3-2197 and Up)			



HYDRAULIC CONNECTIONS - AIR BRAKE

HYDRAULIC CONNECTIONS - AIR BRAKE

Used on Models of S/N 21CG-2232 & up - 21CC-2236, 37,
39, 40, 41, 43, 44, 45, 47, 50, 51, 52, 56, 57, 60, 61,
65, 66 & up.

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
LINE - AIR INTAKE MANIFOLD TO COMPRESSOR					
1	176031H1	HOSE	1		
2	161178H1	CLAMP	2		
3	176032H1	TUBE, Air Intake to Compressor	1		
4		COMPRESSOR (See Cummins Engine Manual)	1		
LINE - COMPRESSOR OUTLET					
5	160997H1	ELBOW	1		
6	179017H1	TUBING	1		
7	157919H1	CONNECTOR	1		
LINE - COMPRESSOR OUTLET LINE TO RESERVOIR					
8	179092H1	TUBING	1		
	132159H1	CLAMP, Tubing to Main Frame	1		
9	153526H1	ELBOW	1		
10	153524H1	RESERVOIR	1		
	153525H1	"U" BOLT	2		
	E - 16	NUT	4		
11	175779H1	TEE	1		
12	139434H1	VALVE, Safety (See Page 13-5)	1		
LINE - RESERVOIR TEE TO GOVERNOR					
13	175774H1	CONNECTOR, Male	2		
14	175934H1	TUBE	1		
15	175773H1	ELBOW	1		
	144279H1	CLAMP	3		
	S-148	SCREW, Cap	1		
	H - 14	NUT	1		
	WL-14	WASHER, Lock	1		
16	160446H2	GOVERNOR (See Page 13-12)	1		
	S-1526	SCREW, Cap	2		
	WL-15	WASHER, Lock	2		
	H - 15	NUT	2		
LINE - GOVERNOR TO COMPRESSOR					
17	175769H1	TUBE, Governor to Compressor	1		
18	175773H1	CONNECTOR, Elbow	1		
LINE - RESERVOIR TO BRAKE VALVES					
19	175778H1	BUSHING	4		
20	175777H1	ELBOW	4		
21	175768H1	TUBE, Reservoir to L.H. Brake Valve	1		
22	175772H1	CONNECTOR, Male	2		
23	175767H1	TUBE, L.H. Brake Valve to R.H. Brake Valve	1		
24	162410H1	VALVE, Brake R.H. (See Page 13-11)	1		
24A	187715H1	VALVE, Brake, L.H. (See Page 13-11)	1		
	P - 14	PLUG, L.H. Valve	1		
	P - 18	PLUG, (3) on L.H. & (4) on R.H. Valve	1		
	S-158	SCREW, Cap	6		
	H - 15	NUT	6		
	WL-15	WASHER, Lock	6		
	186631H1	ROD ASSEMBLY, Equalizer	1		
	186632H1	END, Rod with eye	1		
	147604H1	END, Rod, plain (Optional)	1		
	158395H1	BALL JOINT	2		
	H - 14	NUT	4		
	WL-14	WASHER, Lock	2		
	E - 34	NUT, Ball Joints	2		

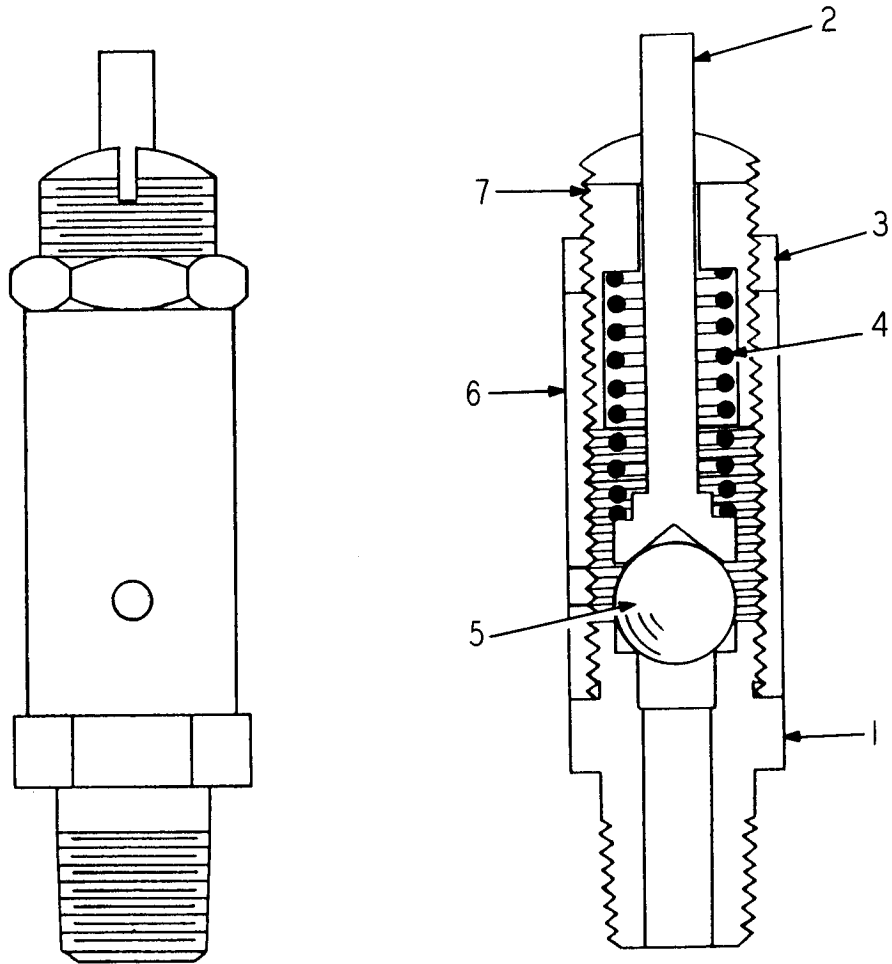
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HYDRAULIC CONNECTIONS - AIR BRAKE (Continued)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
LINE - BRAKE VALVE TO DOUBLE CHECK VALVE					
25	175778H1	BUSHING, Reducer	1		
26	175772H1	CONNECTOR, Male	1		
27	175766H1	TUBING	1		
28	175777H1	ELBOW, 90° R.H. Valve	1		
29	174923H2	VALVE, Double Check, L.H. includes items 83 thru 87	1		
30	175081H1	ELBOW, 90°	1		
LINE - R. H. BRAKE VALVE TO TRANSMISSION DISCONNECT VALVE					
31	164839H1	ELBOW	1		
32	188459H1	TUBE, Brake Valve to Air Control Valve	1		
33	164839H1	ELBOW	1		
34	186634H1	VALVE, Air Control (See Page 13-14)	1		
	186731H1	BRACKET, Air Control Valve	1		
	S-148	SCREW, Cap	4		
	WL-14	WASHER, Lock	4		
	H - 14	NUT	4		
35	175774H1	CONNECTOR	1		
36	175764H1	TUBE, Air Cont. Valve to Trans. Disconnect Valve .	1		
37	164839H1	ELBOW	1		
37A	186242H1	CYLINDER, Air	1		
LINE - DOUBLE CHECK VALVE TO HYDRAIR UNIT					
38	175772H1	CONNECTOR, Male	1		
39	180118H1	TUBE	1		
40	175777H1	ELBOW, 90°	1		
41	164057H1	HYDRAIR POWER CLUSTER ASSEMBLY, (See Page 13-9)	1		
	S-178	SCREW, Cap	3		
	WL-17	WASHER, Lock	3		
42	HL-3552	PLUG	1		
43	HL-3753	GASKET, Plug	1		
LINE - HYDRAIR UNIT TO FRONT WHEELS					
44	HL-3553	CONNECTOR, Hydrair Unit	1		
45	HL-3753	GASKET	1		
46	120613H1	TUBE & NUT ASSEMBLY	1		
47	146966H1	TEE, Front Axle	1		
	172848H1	CLIP, Tee	1		
	S-147	SCREW, Cap	1		
	H - 14	NUT	1		
	WL-14	WASHER, Lock	1		
48	121104H1	TUBE & NUT ASSEMBLY, To Front Wheel Cylinders .	2		
	139016H1	STRAP, Tube to Axle Bolt	2		
LINE - HYDRAIR UNIT TO REAR WHEELS					
49	HA-884	GASKET	1		
50	107689H1	CONNECTOR	1		
51	HA-883	GASKET	1		
52	HA-882	BOLT	1		
53	142852H1	TUBE & NUT ASSEMBLY	1		
	156609H1	CLAMP (On Transmission Mounting Bolt)	1		
54	169677H1	REDUCER	1		
55	H-310	NUT, Jam	1		
56	174919H1	BRACKET, Hose	1		
	S-158	SCREW, Cap	1		
	H - 15	NUT	1		
	WL-15	WASHER, Lock	1		
(Continued on following page)					

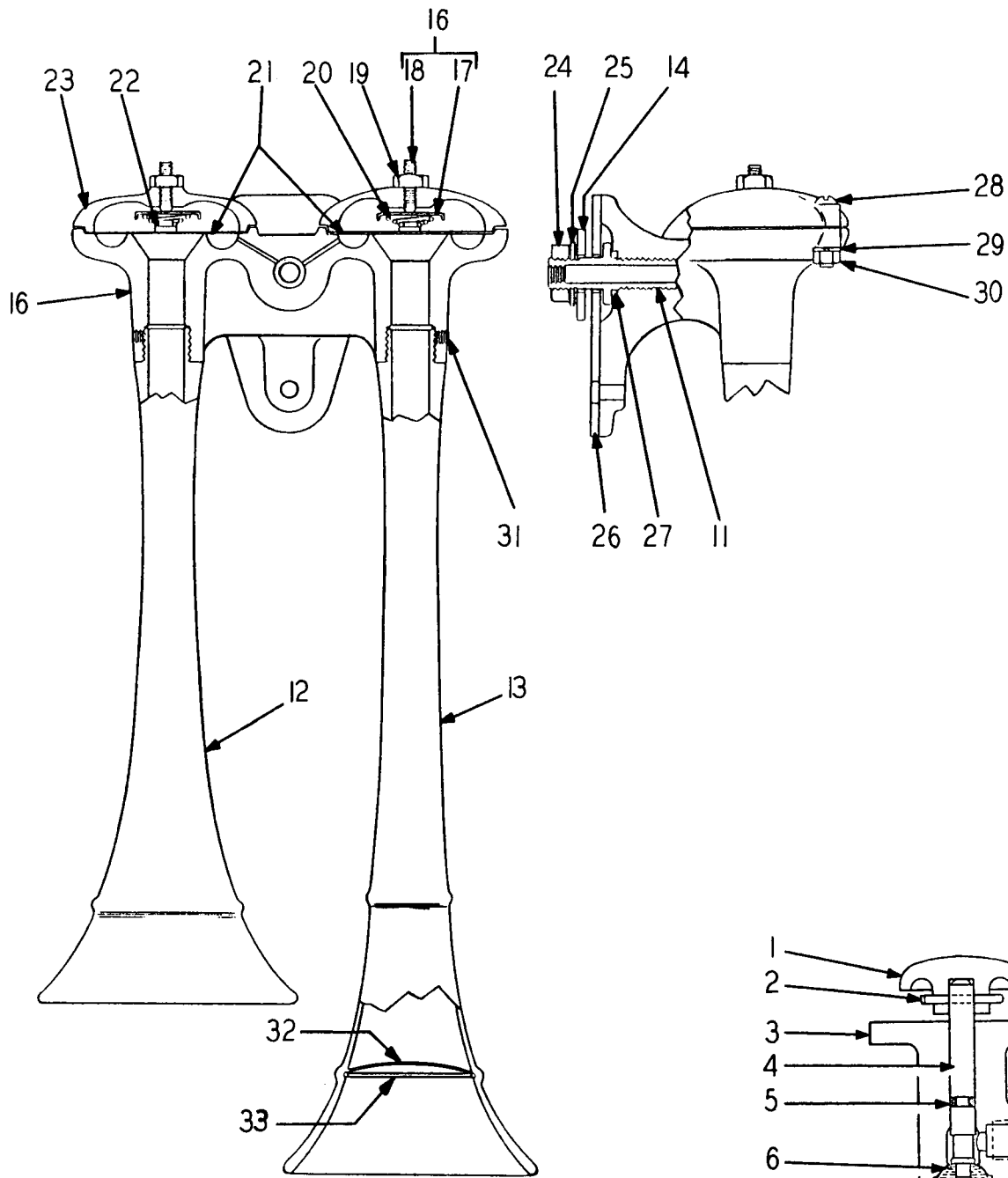
HYDRAULIC CONNECTIONS - AIR BRAKE (Continued)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
57	175287H1	HOSE, Frame to Tee	1		
58	174920H1	TEE	1		
	S-1616	SCREW, Cap	1		
	H - 16	NUT	1		
	WL-16	WASHER, Lock	1		
	HA-1332	GASKET	1		
59	174928H1	HOSE, Tee to L.H. Brake Cyl.	1		
60	110621H1	TUBE & NUT ASSEMBLY, Tee to R.H. Coupling ...	1		
	156608H1	CLAMP, Tube & Nut Assy.,	2		
	S-1510	SCREW, Cap	2		
	H - 15	NUT	2		
	WL-15	WASHER, Lock	2		
61	174919H1	BRACKET, Hose	1		
	S-1510	SCREW, Cap	1		
	H - 15	NUT	1		
	WL-15	WASHER, Lock	1		
62	H-310	NUT, Jam	1		
63	174927H1	HOSE, Tube to R.H. Brake Cylinder	1		
	HA-1332	GASKET	1		
LINE - L.H. BRAKE VALVE TO GAUGE					
64	132667H1	BUSHING, Reducer	1		
65	172832H1	ELBOW, L.H. Brake Valve	1		
66	172833H1	TUBING, Elbow to Bulkhead Union	1		
67	172825H1	UNION, Bulkhead	1		
68	180227H1	TUBE, Union to Connector	1		
69	181084H1	ELBOW	1		
70	154893H1	GAUGE, Air Pressure	1		
LINE - RESERVOIR DRAIN					
71	164839H1	ELBOW	1		
72	182838H1	TUBING	1		
73	164839H1	ELBOW	1		
74	139439H1	COCK, Drain	1		
LINE - BRAKE VALVE TO HORN VALVE					
75	164839H1	ELBOW	1		
76	175765H1	TUBING	1		
77	175774H1	CONNECTOR	1		
78	157140H1	VALVE, Horn (See Page 13-7)	1		
	S-148	SCREW, Cap	2		
	H - 14	NUT	2		
	WL-14	WASHER, Lock	2		
LINE - HORN VALVE TO HORN					
79	175775H1	ELBOW, 90°	1		
80	175764H1	TUBING	1		
81	175773H1	CONNECTOR, Male	1		
82	145775H1	HORN (See Page 13-7)	1		
	S-1510	SCREW, Cap	1		
	H - 15	NUT	1		
	WL-15	WASHER, Lock	1		
83	179053H2	BODY	1		
84	179067H1	GUIDE, Shuttle	1		
85	179068H1	SHUTTLE	1		
86 *	179070H1	CAP	1		
87 *	179069H1	GASKET	1		
	179071H1	SCREW W/Washer	1		
	WF-14	WASHER, Flat	1		
				Service Parts for Item 29	
				* On orders for items 86 or 87 supply 179070H2 Cap, 177625H1 "O" Ring	



SAFETY VALVE

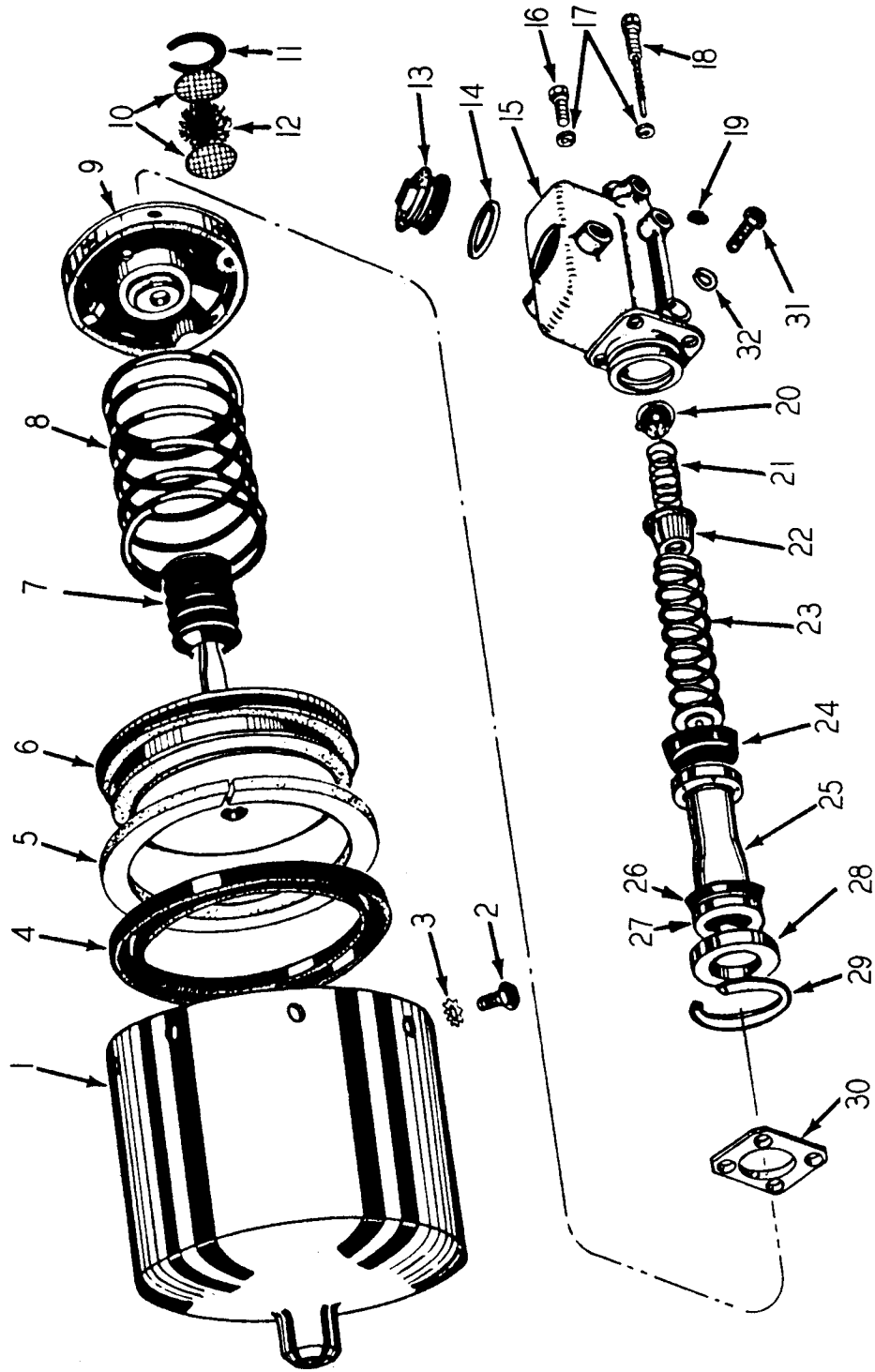
ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	139434H1	VALVE, Safety.....	1		
1	141244H1	BODY	1		
2	167871H1	PIN, Release	1		
3	140280H1	NUT, Lock	1		
4	140278H1	SPRING	1		
5	140275H1	BALL	1		
6	141245H1	CAGE, Spring.....	1		
7	140279H1	NUT, Adjusting	1		



AIR HORN

AIR HORN

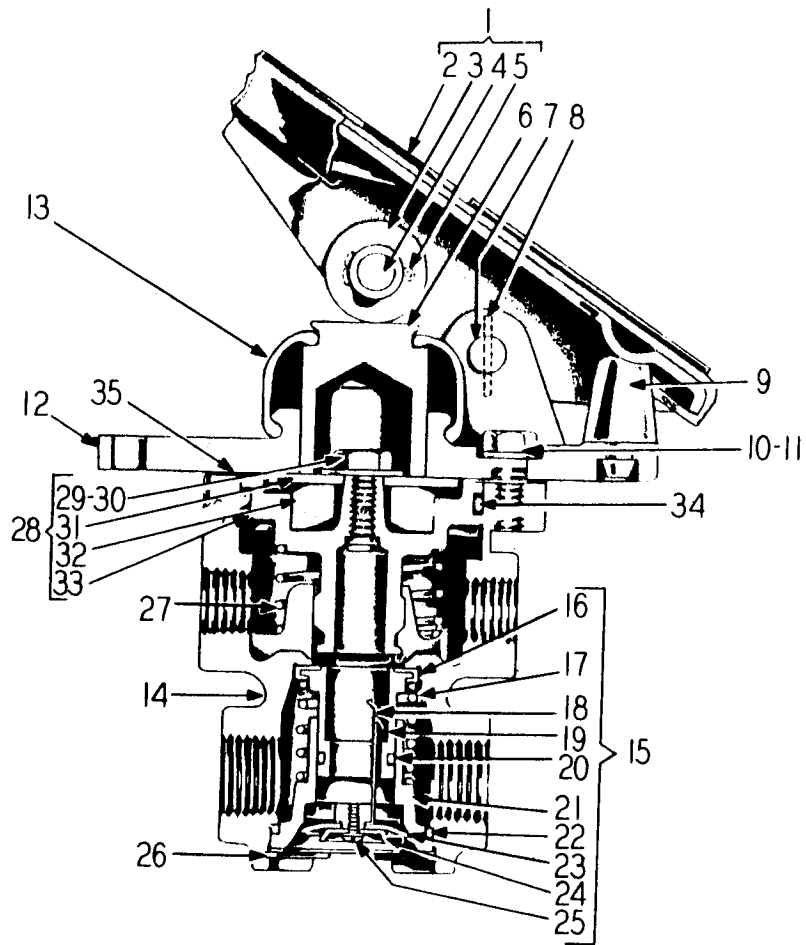
ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	157140H1	BUTTON ASSEMBLY - Horn.....	1		
1	158016H1	BUTTON	1		
2	CP-36	PIN, Cotter, 3/32" x 3/4" Plated.....	1		
3		BODY - NSS.....	1		
4	158012H1	STEM	1		
5	OR4-1	GROMMET, Stem.....	1		
6	158013H1	VALVE, Inlet	1		
7	158014H1	SEAT, Spring	1		
8	158015H1	SPRING.....	1		
9	145986H1	PLATE, Strainer	1		
10		CAP, NSS.....	1		
	S-146	SCREW, Cap.....	2		
	H-14	NUT.....	2		
	WL-14	WASHER, Lock.....	2		
	145775H1	HORN ASSEMBLY.....	1		
11	145988H1	COUPLING, Mounting.....	1		
12	145989H1	BELL, Short.....	1		
13	145990H1	BELL, Long	1		
14	145991H1	WASHER, Special	1		
15	145992H1	BODY	1		
16	145993H1	SEAT ASSEMBLY, Spring.....	1		
17	145994H1	SEAT, Spring	2		
18		SCREW, Set	2		
19	H-45	NUT, Lock	2		
20	145995H1	SPRING	2		
21	145996H1	DIAPHRAM	2		
22	145997H1	CONTACT, Spring	2		
23	145998H1	COVER.....	2		
24	H-310-P	NUT, Thin.....	1		
25		WASHER, Lock 5/8" Internal Shakeproof.....	1		
26	145999H1	GASKET	1		
27	OR4-11	GROMMET	1		
28		SCREW, 1/4" Hex. 1" Cad. Plated Mach. Screw	8		
29	WL-14	WASHER, Lock.....	8		
30	H-24-P	NUT.....	8		
31		SCREW, Set #10-24 x 1/4 Cad. Plated Socket Cup Point	2		
32	146001H1	SCREEN	2		
33	146002H1	RETAINER, Screen.....	2		
	S-1510	SCREW, Cap.....	1		
	H-15	NUT	1		
	WL-15	WASHER, Lock	1		



POWER CLUSTER

POWER CLUSTER

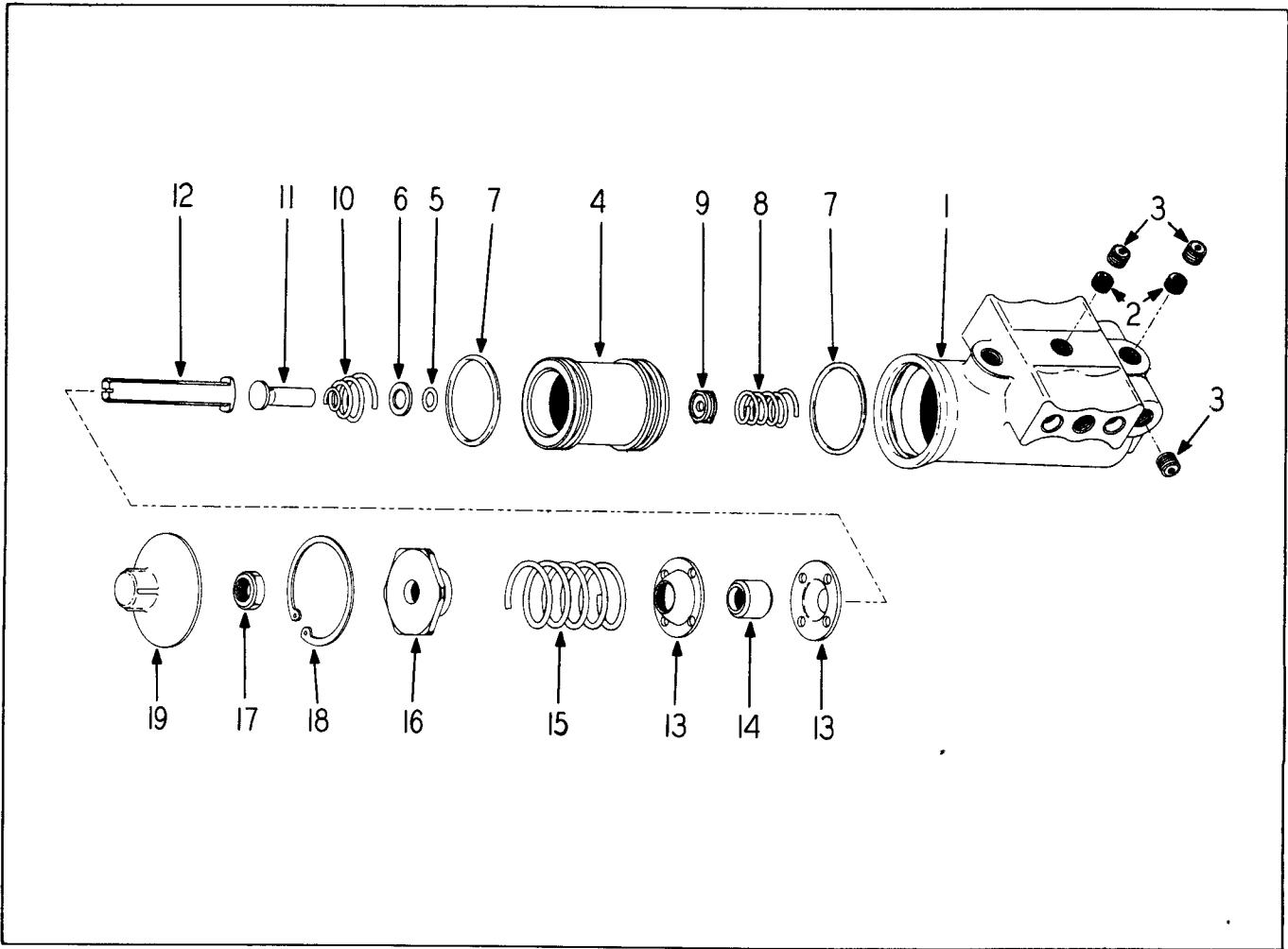
ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	164057H1	POWER CLUSTER ASSEMBLY (Includes Items 1 thru 30)			
	165785H1	CYLINDER ASSEMBLY, Air (Includes 1 thru 12).....	1		
1	165715H1	SHELL, Air Cylinder.....	1		
2	S-255	SCREW, Cap	8		
3	138628H1	WASHER, Lock	8		
4	165716H1	CUP, Piston Air Cylinder.....	1		
5	165718H1	WIPER, Air Cylinder	1		
6	165717H1	PISTON & ROD, Air Cylinder.....	1		
7	165719H1	BOOT, Piston Rod, Air Cylinder.....	1		
8	165720H1	SPRING, Piston Return, Air Cylinder.....	1		
9	165721H1	HEAD, Air Cylinder.....	1		
10	165722H1	SCREEN, Head Filter, Air Cylinder.....	2		
11	165724H1	RING, Head Filter, Air Cylinder.....	1		
12	165723H1	HAIR, Head Filter, Air Cylinder.....	1		
	165727H1	CYLINDER ASSEMBLY, Hydraulic (Incl. Items 13 thru 29).....	1		
13	165734H1	PLUG, Tank Filler.....	1		
14	107639H1	GASKET, Tank Filler	1		
15	165733H1	CASTING, Cyl. & Tank.....	1		
16	S-2612	SCREW, Cap Hydraulic Cylinder Mtg.	3		
17	WL-16	WASHER, Lock Hydraulic Cylinder Mtg.	4		
18	165726H1	INDICATOR, Piston Stroke Power Cluster	1		
19	P-12	PLUG, Drain	1		
20	165732H1	VALVE & SEAT, Check	1		
21	165788H1	SPRING, Check Valve Retainer.....	1		
22	165787H1	RETAINER, Check Valve.....	1		
23	153856H1	SPRING, Piston Return	1		
24	145943H1	CUP, Piston Primary	1		
25	165786H1	PISTON ASSEMBLY	1		
26	165731H1	CUP, Piston Secondary	1		
27	169034H1	BOOT	1		
28	165729H1	PLATE, Piston Stop	1		
29	145946H1	WIRE, Stop Plate Lock.....	1		
30	165725H1	SPACER, Mtg. Power Cluster	1		
31	S-178	SCREW, Cap.....	3		
32	WL-17	WASHER, Lock	3		
	165735H1	KIT, Power Cluster Repair (Includes Items 4, 5, 7, 12, 20, 24 & 25)	1		



BRAKE TREADLE VALVE

BRAKE TREADLE VALVE

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	162410H1	BRAKE VALVE ASSEMBLY (Includes items 1 thru 35)	1		
2	155378H1	TREADLE ASSEMBLY (Includes items 2 thru 5).....	1		
3	155379H1	TREADLE	1		
4	145973H1	ROLLER	1		
5	155380H1	PIN, Roller	1		
6	CP-35	PIN, Cotter	1		
7	155381H1	PLUNGER	1		
8	178171H1	PIN, Fulcrum	1		
9	178172H1	PIN, Roll	1		
10	155382H1	BUTTON, Stop	1		
11	S-256-P	SCREW, Cap	3		
12	WL-15	WASHER, Lock	3		
13	155376H1	PLATE, Mounting	1		
14	155377H1	BOOT	1		
15	172304H1	BODY	1		
16	172305H1	INLET & EXHAUST VALVE ASSEMBLY (Includes items 16 thru 25)	1		
17	179025H1	RETAINER, Valve	1		
18	172315H1	SPRING, Valve	1		
19	172307H1	SPRING, Inlet Valve Preload	1		
20	172312H1	VALVE, Inlet & Exhaust	1		
21	172314H1	GROMMET, Valve	1		
22	172306H1	SEAT, Exhaust Check Valve	1		
23	172311H1	GROMMET, Exhaust Check Valve	1		
24	172308H1	DIAPHRAGM	1		
25	172309H1	WASHER, Diaphragm	1		
26	172310H1	SCREW & LOCKWASHER	1		
27	172317H1	RING, Retaining	1		
28	145958H1	SPRING, Piston Return	1		
29	172319H1	PISTON ASSEMBLY (Includes items 29 thru 33)	1		
30	172324H1	SCREW, Cap	1		
31	172323H1	WASHER	1		
32	172322H1	SEAT, Spring	1		
33	172321H2	SPRING, Rubber	1		
34	172320H1	PISTON	1		
35	OR3-5	GROMMET, Piston	1		
	172326H1	RETAINER	1		
		* 178170H1 Treadle Service Kit Includes Item 1 thru 5 and Item 7 & 8.			



GOVERNOR

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	160446H2	GOVERNOR ASSY. (Incl. The Following).....	1		
	177601H1	BODY ASSY. (Incl. Items 1 & 2).....	1		
1	177618H1	BODY.....	1		21CC1990 & Up
2	177619H1	FILTER.....	2		Including
3	151425H1	PLUG, Pipe.....	4		21CC1981-82-83
	177620H1	PISTON ASSY. (Incl. Items 4, 5 & 6).....	1		
4	177621H1	PISTON.....	1		
5	OR4-4	"O" RING.....	1		
6	177622H1	WASHER.....	1		
7	177625H1	GROMMET, Piston.....	2		
8	177624H1	SPRING, Valve.....	1		
9	177623H1	VALVE (W/Insert).....	1		
10	177626H1	SPRING, Exhaust Stem.....	1		
11	177627H1	STEM, Exhaust.....	1		
	177628H1	ADJUSTING SCREW & SPRING ASSEMBLY (Incl. Items 12 thru 17).....	1		
12	177629H1	SCREW, Adjusting.....	1		
13	177630H1	SEAT, Spring, (Lower).....	2		
14	177631H1	GUIDE, Spring.....	1		
15	177632H1	SPRING.....	1		
16	177633H1	SEAT, Spring (Upper).....	1		
17	H-24	NUT.....	1		
18	177634H2	RING, Retaining.....	1		
19	177635H1	COVER.....	1		

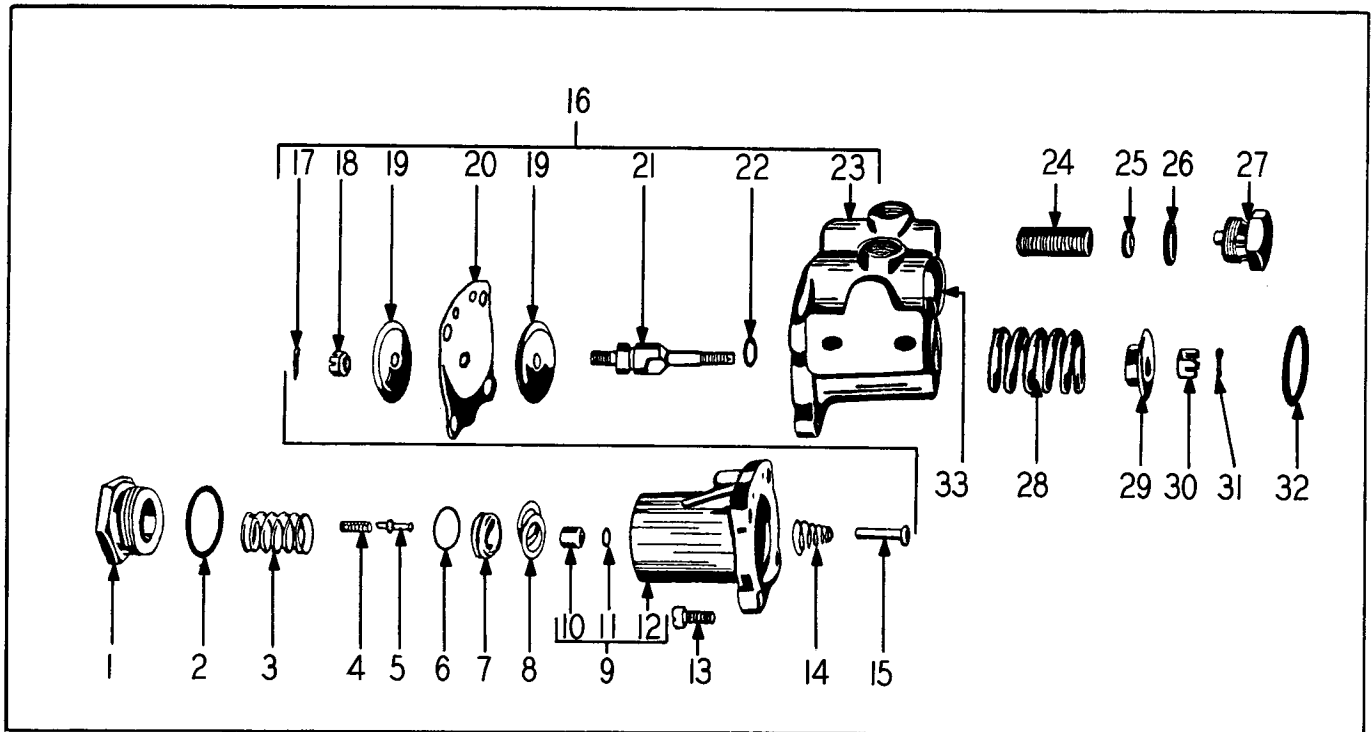
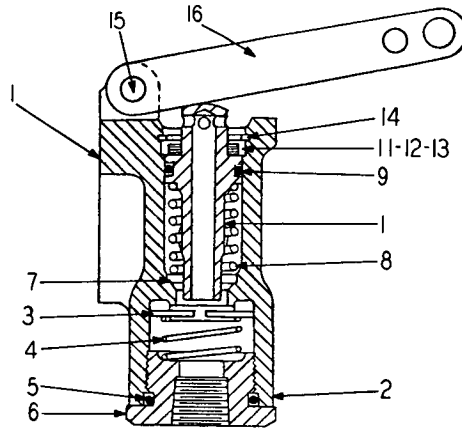


Fig. 40
GOVERNOR

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	160446H1	GOVERNOR, Type "D"	1	21CC1901	21CC1989
1	140257H1	CAP, Valve Body Screw	1		Except
2	140256H1	RING, Sealing - 1.234" O.D.	1	21CC1981-82-83	
3	140255H1	SPRING, Seat Retaining	1		
4	140254H1	SPRING, Inlet Valve	1		
5	140253H1	VALVE, Inlet - Exhaust	1		
6	140251H1	GROMMET, 3/4" O.D.	1		
7	140252H1	SEAT, Inlet Valve	1		
8	140249H1	SHIM, .010"	AR		
8	140250H1	SHIM, .003"	AR		
9	140245H1	VALVE BODY ASSEMBLY	1		
10	140248H1	BUSHING, Guide	1		
11	OR4-3	GROMMET, .316" O.D.	1		
12	140246H1	BODY, Valve	1		
13	140270H1	CAPSCREW	4		
14	140258H1	SPRING, Exhaust Stem	1		
15	140259H2	STEM, Exhaust	1		
16	140261H1	DIAPHRAGM & STEM ASSEMBLY	1		
17		PIN, Cotter, 1/16" x 3/8" lg.	1		
18	H-54-P	NUT	1		
19	140263H1	FOLLOWER	2		
20	140264H1	DIAPHRAGM	1		
21	140262H1	STEM, Diaphragm	1		
22	OR4-7	GROMMET, 1/2" O.D.	1		
23	163734H1	CAGE, Spring	1		
24	140272H1	FILTER	2		
25	140271H1	WASHER	2		
26	140273H1	RING, Sealing 3/4" O.D.	2		
27	140274H1	SCREW, Strainer Cap	2		
28	140266H1	SPRING, Pressure Setting	1		
29	140267H1	SEAT, Spring	1		
30	140268H1	NUT, Adjusting	1		
31	140269H1	PIN, Cotter	1		
32	140256H1	RING, Sealing 1.234" O.D.	1		
33	140257H1	CAP SPRING CAGE	1		



VALVE - EMERGENCY CONTROL
(Optional)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	186634H1	VALVE, Emergency Control, Includes items 1 thru 16	1		
	188562H1	VALVE, Emergency Control, Includes items 2 thru 15	1		
2	188563H1	BODY	1		
3	188564H1	VALVE	1		
4	188565H1	SPRING, Valve	1		
5	188567H1	RING, Sealing	1		
6	188568H1	NUT, Cap	1		
7	188569H1	WASHER, Plunger Guide	1		
8	188570H1	SPRING, Plunger Return	1		
9	OR4-11	GROMMET, Plunger	1		
10	188571H1	PLUNGER	1		
11	188572H1	SEAL, Plunger, Includes Items 12 & 13	1		
12	188573H1	BODY, Plunger Seal	1		
13	188574H1	WASHER, Felt	1		
14	188575H1	RING, Retaining	1		
15	188576H1	PIN	1		
16	188577H1	LEVER	1		

**ACCESSORIES
&
ATTACHMENTS**

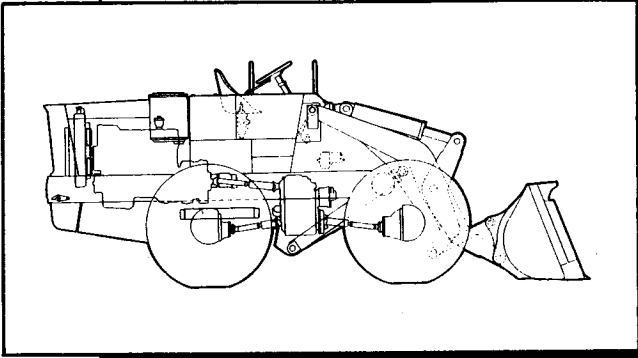


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DECAL GROUP

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	127607H2	PLATE, Serial Number	1		
	105898H1	SCREWS, (Self Tapping)	4		
	127515H4	DECAL, (Patent No.)	1		
	200612H1	DECAL, (Hough)	2		
	152671H2	DECAL, (Model Symbol)	2		
	112364H2	DECAL, (Water)	1		
	153222H1	PLATE, (Valve Instruction)	1		
	153223H1	PLATE, (Valve Adjusting Instructions)	1		
	171559H2	DECAL, (Payloader)	1		
	155569H2	DECAL, (Payloader)	2		
	120948H2	DECAL, (Diesel Fuel)	1		
	131850H2	DECAL, (Safety Instruction)	1		
	145270H2	DECAL, (Air Reservoir)	1		
	177855H1	DECAL, Converter Oil Temperature	1		
	154157H2	DECAL, (Four Wheel Drive)	1		
	165573H1	DECAL, I. H. C. Hough (For Export Machines Only) ...	2		
	161177H2	DECAL, Warning	1		
	188039H1	DECAL, Oil Drain	1		
	188587H1	DECAL, Clutch Operating Pressure	1		
	180936H1	DECAL, Hydraulic Reservoir	1		
	180937H1	DECAL, Trans. Fluid Type "A"	1		
	172177H1	DECAL, Starting Aids	1		
	193115H1	PLATE, Lube instr. Cummins	1		
TOOL GROUP					
	143950H1	GREASE GUN	1		
	143951H1	FLEXIBLE NOZZLE ASSEMBLY	1		
	143952H1	CLAMP, Grease Gun	1		
	138554H1	WRENCH, Wheel Bearing Nut	1		
	154260H1	WRENCH, Valve Adjusting	1		

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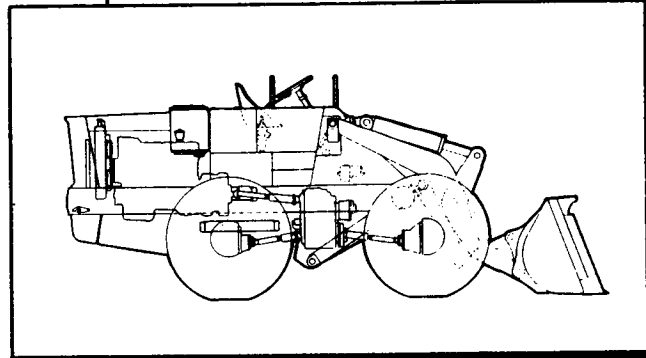
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179092H1	13-4B	181613H1	1-3	186481H1	8-7	189590H1	1-8
179094H1	7-5	181614H1	1-3	186482H1	8-7	189926H1	4-4
179095H1	12-4		1-5	186483H1	8-7	190829H1	8-7
179096H1	12-4		1-6	186484H1	8-7	191209H1	7-3
179145H1	1-11	181615H1	1-5	186513H1	8-7	191211H1	7-8
179148H1	1-8	181664H1	1-8	186568H1	9-9B	191268H2	11-5
179204H1	2-7	181770H1	1-5	186570H1	9-9B	191281H1	11-5
179305H1	2-3	181770H2	1-5	186572H1	9-9B	191282H2	11-5
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179419H1	9-4	181774H1	10-7B	186631H1	13-4B	191941H1	7-3
179513H1	1-6	181775H1	10-7B	186632H1	13-4B	192346H1	7-8
179515H2	1-3	181776H1	10-7B	186634H1	13-4C	192347H1	7-8
179517H1	1-3	181777H1	10-7B		13-14	193115H1	14-2
179519H1	1-3	181823H1	10-7B	186731H1	13-4C	193155H1	8-7
179521H1	1-5	181835H1	9-9B	187016H1	7-7	193519H1	10-14
179560H1	10-3	181836H1	9-9B	187290H1	11-5	193521H1	10-14
179561H1	10-3	181837H1	9-9B	187312H1	12-3	193523H1	10-14
179562H1	10-3	181884H1	10-7B	187313H1	12-3	193790H2	11-13
179563H1	10-3	182574H1	1-8	187314H1	12-3	193829H1	11-9
179583H1	1-5	182594H1	2-4	187315H1	12-3	193836H1	11-9
179585H1	1-3	182656H1	2-4	187396H1	12-3	193843H1	11-9
179803H1	2-4	182838H1	13-4	187433H1	11-13	193845H1	11-9
179898H1	2-4		13-4D	187452H1	4-3	193848H1	12-4
179938H1	2-4	182866H1	2-4	187504H1	1-5	193917H1	1-8
179983H1	2-4	183039H1	12-3	187568H1	1-10	194055H1	10-13
180050H1	10-9	183129H1	2-7B	187715H1	13-4B	194268H1	11-7
180080H1	2-4	183141H1	2-4B	187892H1	11-7	194271H1	10-13
180096H1	12-3	183164H1	2-7B	187894H2	11-7	194272H1	10-13
180107H1	1-10	183165H1	2-7B	188039H1	14-2	194352H1	8-7
180117H1	10-10	183214H1	6-7	188328H1	10-4	194400H1	11-9
180118H1	10-9	183214H1	7-8	188328H1	12-3	194430H1	11-9
	10-11	183635H1	2-7A	188459H1	13-4C	194431H1	11-9
	10-13	183636H1	2-7A	188562H1	13-14	194433H1	10-7C
	13-4C	183638H1	2-4B	188563H1	13-14	194434H1	10-7C
180227H1	10-4	183648H2	1-5	188564H1	13-14	194435H1	10-7C
	13-4	184204H1	7-4	188565H1	13-14	194436H1	10-7C
	13-4D	184207H1	7-4	188567H1	13-14	194437H1	10-7C
180268H1	1-6	184210H1	7-5	188568H1	13-14	194643H1	11-7
180269H1	1-6	184211H1	7-5	188569H1	13-14	194647H1	10-14
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195243H1	11-13						
195500H1	8-3						
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196036H1	1-6						
196501H1	1-6						
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198462H1	11-9						
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200612H1	14-2						
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GM-471 ENGINE MODIFICATION



FOR

THE MODEL H-70 C "PAYLOADER"

SERIAL NUMBER

21CG-2010 and Up

This modification has been prepared specifically for the Model H-70 C "PAYLOADER" units equipped with the Model GM #4055-C-471 Diesel Engine. Section XVI GM-471 Engine modification should be added to the basic PM-H-70 C Parts Manual. To clearly identify the parts on these units, use this section with the basic sections within the Parts Manual and the Detroit Diesel Series 71 Engine Parts Manual.

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ADD & DELETE MODIFICATION

MANUAL
PM-H-70-C
PAGE NO.

DESCRIPTION

SHEET COWLING

1-8 Item 1 - Use #181664 Rear Hood.
 Item 8 - Use #179148 Panel.

STEERING LINES

10-5 Add (1) 290-10 Elbow - Used on line from Pump to
 Flow Divider.

BOOM & BUCKET LINES

10-7 Delete Item 5 and replace with #179809 Tube Assembly.

AIR HYDRAULIC CONNECTIONS

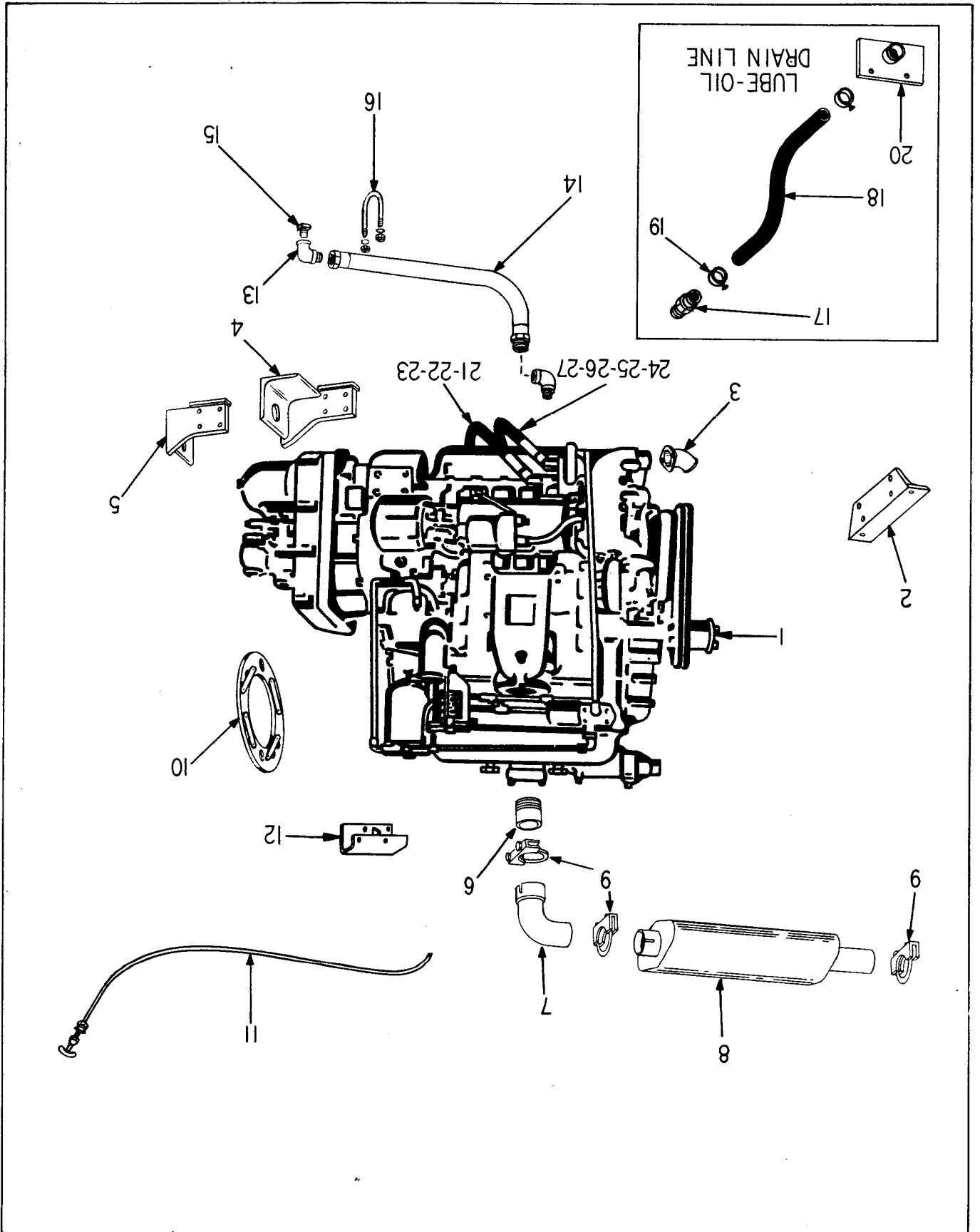
13-3 Delete Item 1 and replace with #136307 Hose.
 Delete Item 2 and replace with #C-22 Clamp.
 Delete Item 3 and replace with (1) #153609 Suction Fitting
 and (1) #153610 Gasket.

 Delete Item 5 and replace with #180127 Elbow.
 Delete Item 6 and replace with #182407 Tubing.
 Delete Item 8 and replace with #182837 Tubing.
 Delete Item 17 and replace with #182838 Tube.
 Delete Item 18 and replace with #164839 Elbow.

DECALS

14-2 Delete - 193115H1 Plate, Lube Inst.
 Add - 193116H1 Plate, Lube Inst.

ENGINE AND MOUNTING



ENGINE AND MOUNTING

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	180403H1	ENGINE, GM-4055-C (See GM Engine Manual)	1		
2	180031H1	ANGLE, Engine Mounting	1		
	131264H1	BOSS, Eng. Mtg. Angle to Frame	2		
	180032H1	SPACER, Mtg. Angle to Frame	2		
	S-1814	SCREW, Cap	2		
	E-18	NUT	2		
	S-1818	SCREW, Cap	2		
	WF-38	WASHER, Flat	2		
	E-18	NUT	2		
	S-11024	SCREW, Cap	2		
	E-110	NUT	2		
3	180519H1	ELBOW, Water Inlet (197508H1 gasket elbow).....	1		
4	179495H1	BRACKET, Eng. Mount R.H.	1		
5	179496H1	BRACKET, Eng. Mount L.H.	1		
	S-2812	SCREW, Cap	8		
	W1-18	WASHER, Lock	8		
	S-11620	SCREW, Cap, R.H. Bracket to Frame	1		
	S-11634	SCREW, Cap, L.H. Bracket to Frame	1		
	182103H1	SPACER, L.H. Bracket to Frame	1		
	E-116	NUT	2		
6	178963H1	STACK, Exhaust, 3"-8 N.P.T.	1		
6	182890H2	STACK, Exhaust, 3 1/2"-8 N.P.T. used on models of S/N 21CG-2166, 2175, 2180, 2182, 2192, 2181, 2159, 2164 & 2169	1		
7	178937H1	ELBOW	1		
8	176217H1	MUFFLER	1		
9	127487H1	CLAMP	3		
10	150388H1	DRIVE RING & STRAP ASSY. (Serviced complete)	1		
	S-266	SCREW, Cap	8		
	WL-16	WASHER, Lock	8		
	130823H1	NUT, Converter to Drive Ring	8		
11	161915H1	CABLE, Flexible	2		
	S-146	SCREW, Cap	1		
	H-14	NUT	1		
	WL-14	WASHER, Lock	1		
	WF-14	WASHER, Flat	1		
	182868H1	BRACKET, Clamp to Exhaust Manifold	1		
	163501H1	CLAMP	2		
	117384H1	CLAMP	1		
	187598H1	FITTING, Connector	1		
	192868H1	BUSHING	1		
12	154071H1	PLATE, Mounting, Oil Filter	1		
	S-1610	SCREW	4		
	WL-16	WASHER, Lock	4		
	H-16	NUT	4		
	S-276	SCREW, Cap	2		
	WL-17	WASHER, Lock	2		
	152113H1	PLATE, Mtg., Voltage Regulator	1		
	181285H1	REGULATOR, Voltage	1		

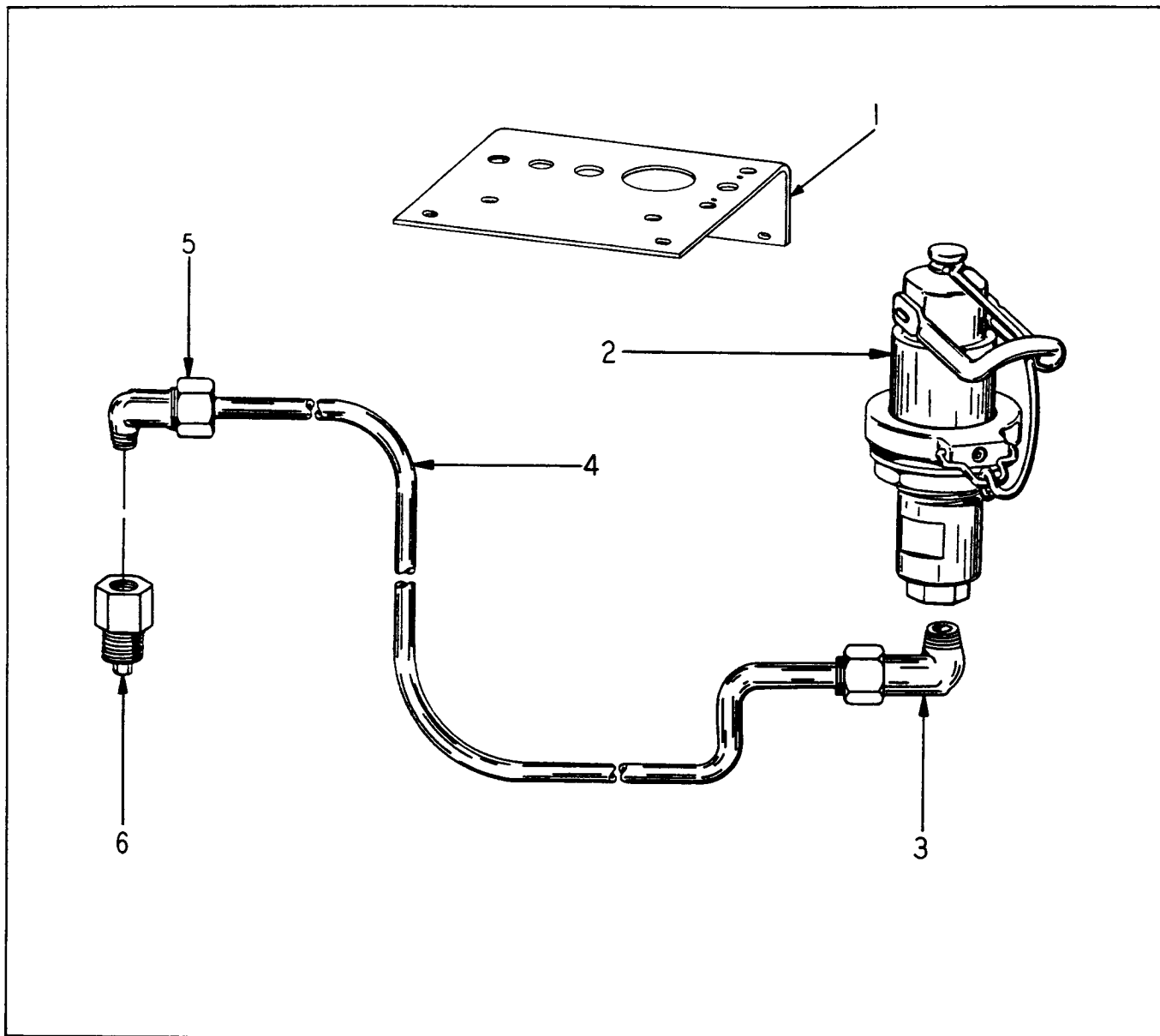
LINE - LUBE OIL DRAIN

13	103490H1	ELBOW, St.	2		
14	165365H1	HOSE	1		
15	P-112	PLUG	1		
16	153676H1	"U" BOLT	1		
	H-16	NUT	2		
	WL-16	WASHER, Lock	2		
	WF-16	WASHER, Flat	1		

(Continued on following page)

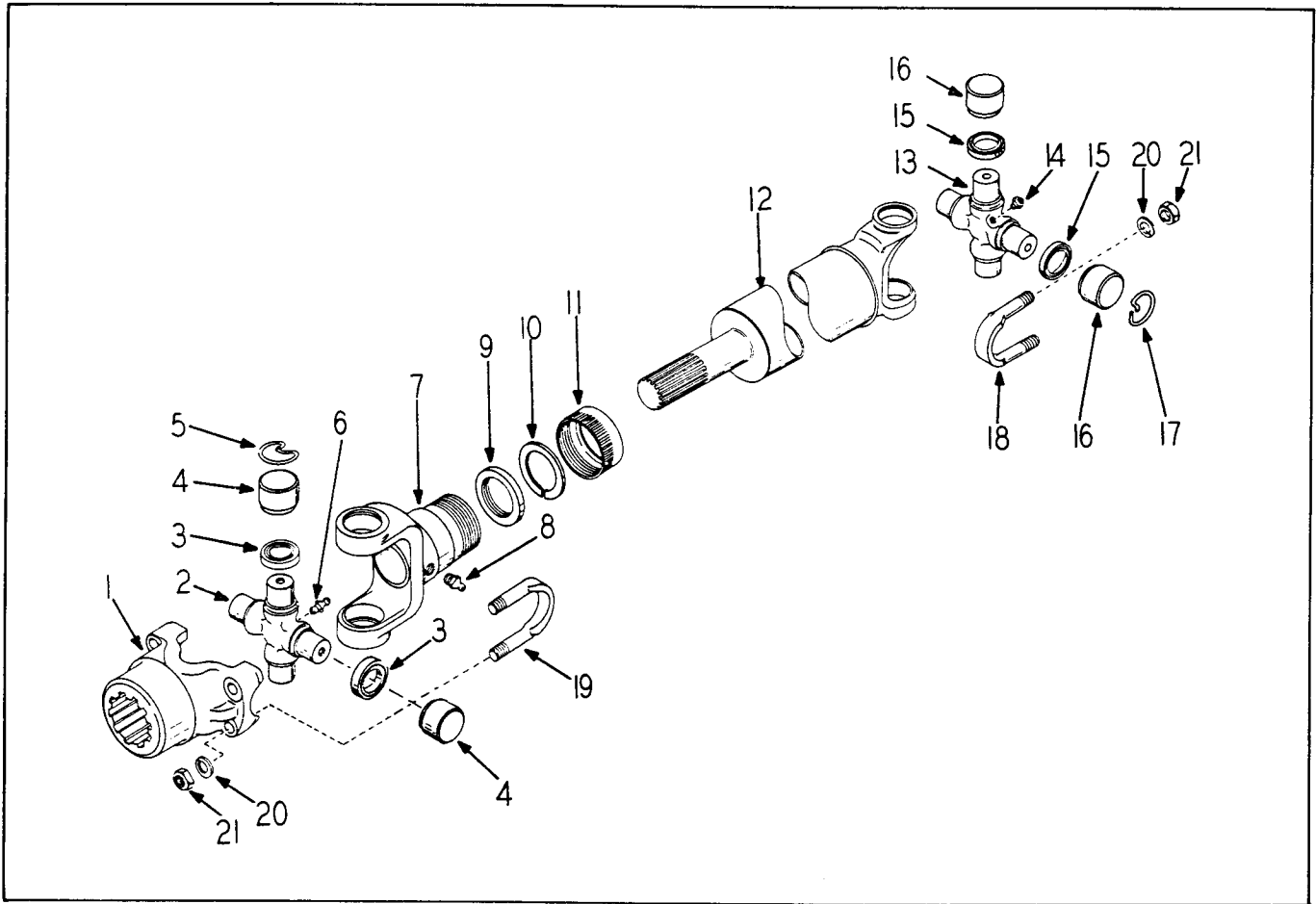
ENGINE AND MOUNTING (Continued)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
LINE - LUBE OIL DRAIN (Continued)					
17	167971H1	HOSE INSERT	1		
18	177928H1	HOSE	1		
19	172818H1	CLAMP, Hose	2		
20	184698H1	DRAIN, Oil	1		
	S-168	SCREW, Cap	2		
	WL-16	WASHER, Lock	2		
	H-16	NUT	2		
	210-8	PLUG	1		
	OR2-8	"O" RING	1		
		Used on machines of S/N 21CG-2203 & Up			
LINE - ENGINE TO OIL FILTER					
21	HA-790	ADAPTER	1		
22	HA-991	HOSE	1		
23	103490H1	ELBOW, 90°	1		
LINE - OIL FILTER TO ENGINE					
24	103490H1	ELBOW, 90°	1		
25	103499H1	ELBOW, St. 45°	1		
26	104349H1	HOSE	1		
27	HA-790	ADAPTER, Straight	1		



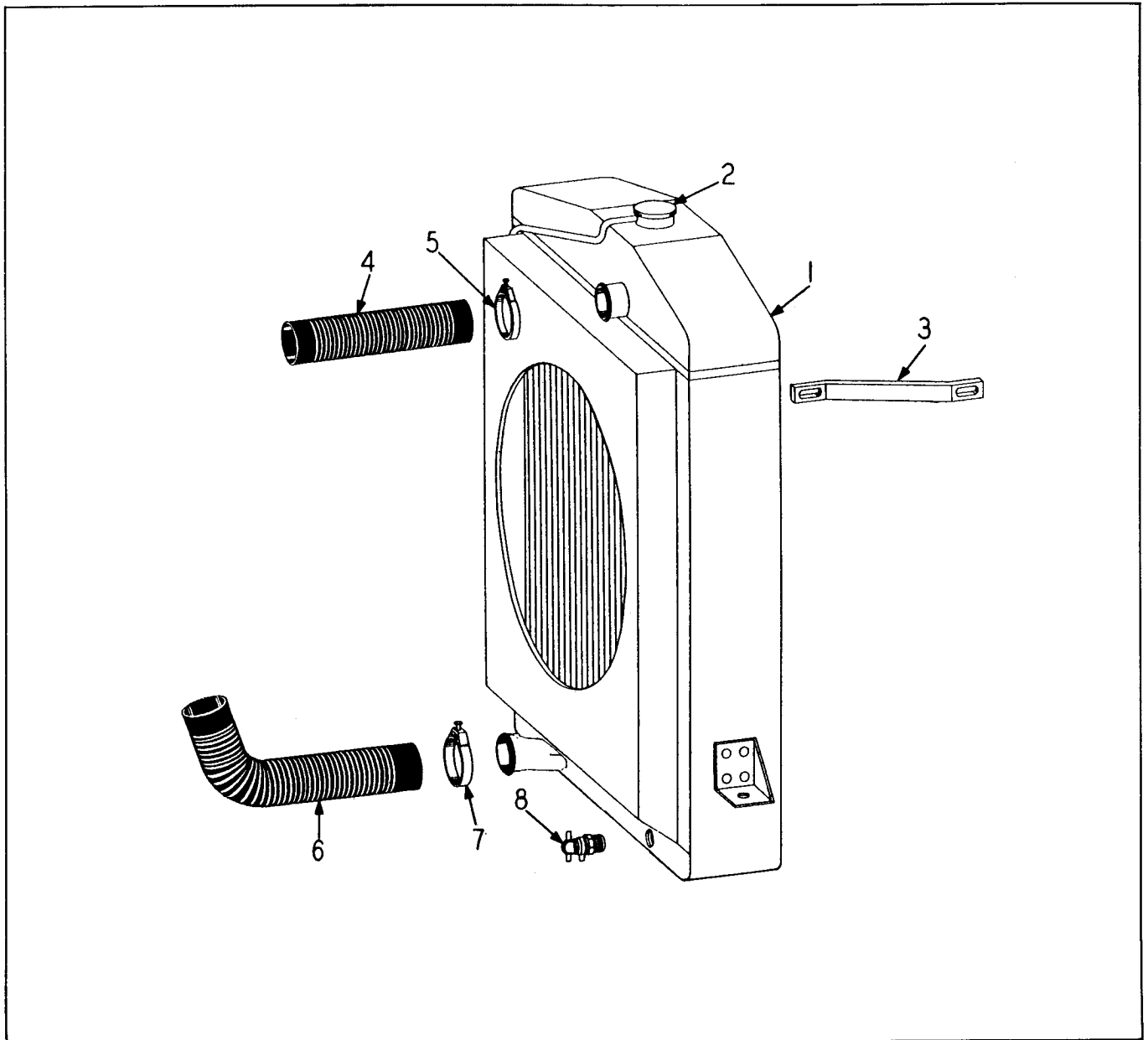
ETHER STARTING

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	175381H1	BRACKET, Starting Aid.....	1		
	S-166	SCREW, Cap.....	4		
	H-16	NUT.....	4		
	WL-16	WASHER, Lock.....	4		
	WF-16	WASHER, Flat.....	4		
2	121816H1	PRIMER, Pressure - Discharger.....	1		
	WF-118	WASHER, Flat Primer Mtg.	2		
3	175775H1	ELBOW.....	1		
4	179938H1	TUBING.....	1		
5	175775H1	ELBOW.....	1		
6	122811H1	NOZZLE, Manifold.....	1		
	135117H1	CLAMP.....	1		
	163501H1	CLAMP.....	1		
	160980H1	CLAMP.....	1		



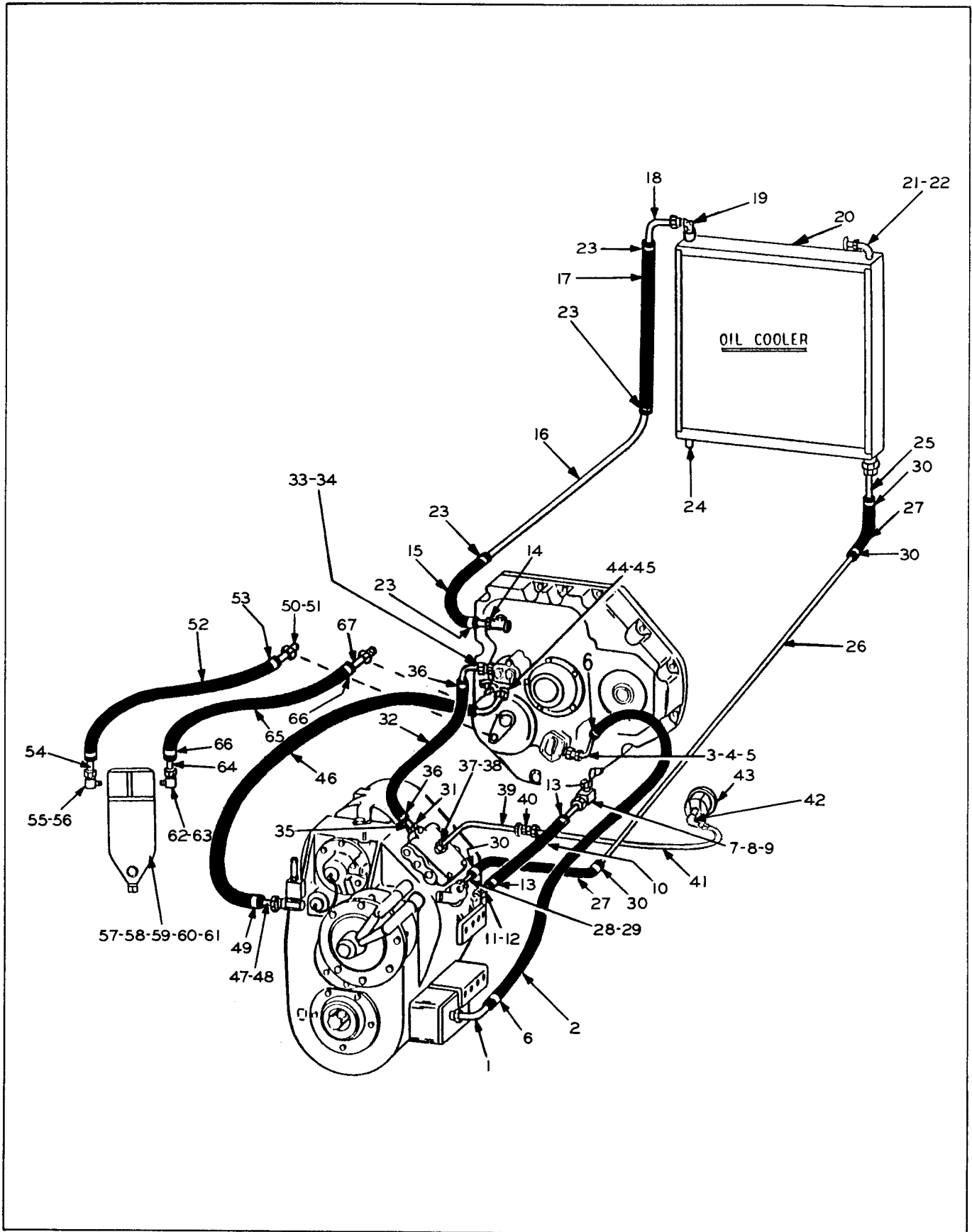
DRIVE SHAFT (UPPER REAR)

ITEM NO.	PART NO.	PART NAME	QTY.	First Used On Serial Numbers	
				FROM	THRU
1	154080H1	YOKE	1		
	154081H1	JOURNAL & BEARING ASSEMBLY (Includes Items 2 thru 6).....	1		
2		JOURNAL CROSS ASSEMBLY	1		
3	154083H1	GASKET	4		
4		BEARING ASSEMBLY	4		
5	154082H1	RING, Retainer	4		
6	118493H1	FITTING, Grease	1		
	182075H1	SLEEVE YOKE & SHAFT ASSEMBLY, (Includes Items 7 thru 12)	1		
7		SLEEVE, Yoke Assembly	1		
8	118491H1	FITTING, Grease	1		
9	154086H1	WASHER, Cork	1		
10	154085H1	WASHER, Steel.....	1		
11	154084H1	CAP, Dust	1		
12		SHAFT ASSEMBLY	1		
	154081H1	JOURNAL & BEARING ASSEMBLY (Includes Items 13 thru 17)	1		
13		JOURNAL CROSS ASSEMBLY	1		
14	118493H1	FITTING, GREASE	1		
15	154083H1	GASKET	4		
16		BEARING ASSEMBLY	4		
17	154082H1	RING, Retainer	4		
18	151799H1	BOLT, "U"	2		
19	151799H1	BOLT, "U"	2		
20	WL-16	WASHER, Lock	8		
21	H-16	NUT.....	8		



RADIATOR

ITEM NO.	PART NO.	PART NAME	QTY.	First Used On Serial Numbers	
				FROM	THRU
1	176367H2	RADIATOR.....	1		
	165338H1	NUT, Weld	2		
2	HA-1274	CAP, Radiator	1		
3	171735H1	ARM, Support.....	2		
	S-168	SCREW, Cap.....	4		
	WF-16	WASHER, Flat	4		
	E-16	NUT	2		
4	160629H1	HOSE, Radiator Inlet	1		
5	C-40	CLAMP, Hose	2		
6	160629H1	HOSE, Radiator Outlet	1		
7	C-40	CLAMP, Hose	2		
8	111493H1	VALVE, Drain	1		
	S-1814	SCREW, Cap	2		
	W-18	NUT	2		
		} Radiator to Frame			



TORQUE CONVERTER LINES

TORQUE CONVERTER LINES

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU

TRANSMISSION STRAINER TO PUMP

1	172695H1	INSERT.....	1		
2	179020H1	HOSE.....	1		
3	172849H1	INSERT.....	1		
4	205-12	ADAPTER.....	1		
5	OR2-12	"O" RING.....	1		
6	172818H1	CLAMP.....	2		

ACCESSORY DRIVE OVERFLOW TO TRANSMISSION

7	291-12	ADAPTER.....	1		
8	OR2-12	"O" RING.....	1		
9	177294H1	INSERT.....	1		
10	177353H1	HOSE.....	1		
11	173015H1	INSERT.....	1		
12	OR2-12	"O" RING.....	1		
13	172818H1	CLAMP.....	2		

OIL LINE - ACCESSORY DRIVE TO OIL COOLER

14	179561H1	INSERT.....	1		
15	179561H1	HOSE.....	1		
16	174933H1	TUBE.....	1		
17	179560H1	HOSE.....	1		
18	173014H1	INSERT.....	1		
19	172849H1	ADAPTER.....	1		
20	298-10	COOLER, Oil.....	1		
	147942H1	SCREW, Cap.....	4		
	S-1611	WASHER, Lock.....	8		
	WL-16	WASHER, Flat.....	4		
21	WF-16	PET COCK.....	1		
22	112002H1	ELBOW, Street.....	1		
23	103487H1	CLAMP.....	4		
24	172818H1	PLUG.....	1		
	P-14	CLAMP.....	2		
	120418H1	SCREW, Cap.....	2		
	S-148	WASHER, Lock.....	2		
	WL-14	NUT.....	2		
	H-14	CLAMP, Lower R.H. Cooler Support.....	1		
	138793H1	WASHER, Flat.....	1		

OIL LINE - COOLER TO TRANSMISSION MANIFOLD

25	167971H1	INSERT.....	1		
26	179562H1	TUBE.....	1		
27	174933H1	HOSE.....	2		
28	179563H1	INSERT.....	1		
29	OR2-10	"O" RING.....	1		
30	172818H1	CLAMP.....	4		
	120418H1	CLAMP.....	5		
	S-148	SCREW, Cap.....	2		
	H-14	NUT.....	2		
	WL-14	WASHER, Lock.....	2		

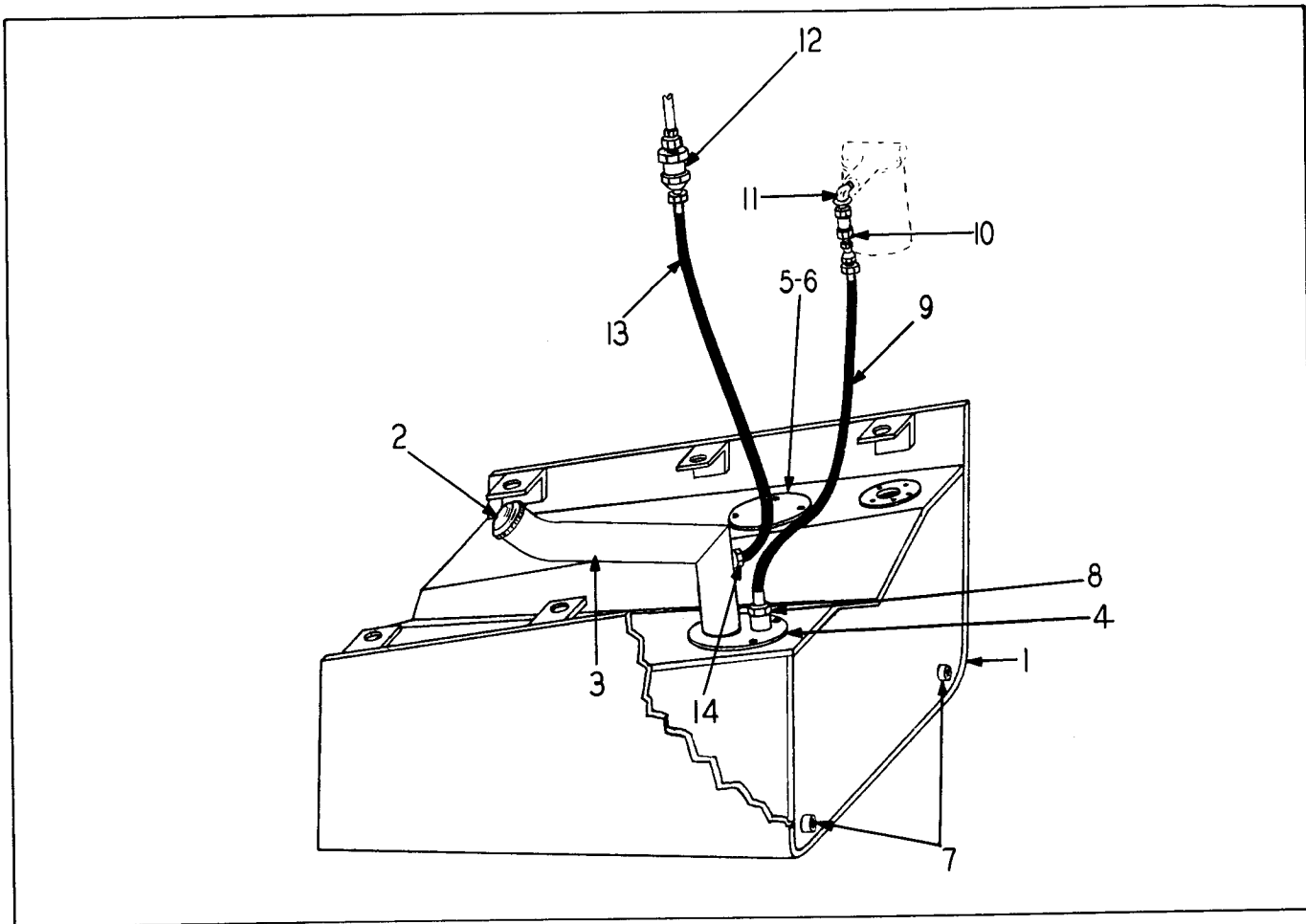
ACCESSORY DRIVE TO TRANSMISSION CONTROL VALVE

31	179077H1	INSERT.....	1		
32	179021H1	HOSE.....	1		
33	173019H1	INSERT.....	1		
34	208-7	ADAPTER.....	1		
35	OR2-8	"O" RING.....	1		
36	168814H1	CLAMP.....	2		

(Continued on next page)

TORQUE CONVERTER LINES (Continued)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
ACCESSORY DRIVE TO CLUTCH PRESSURE GAUGE					
37	165369H1	CONNECTOR	1		
38	132667H1	BUSHING, Reducer	1		
39	172833H1	TUBE	1		
40	172825H1	UNION	1		
41	180227H1	TUBE	1		
42	181084H1	ELBOW	1		
43	188328H1	GAUGE	1		
CONVERTER TO TRANSMISSION					
44	OR2-12	"O" RING	1		
45	173015H1	INSERT	1		
46	173022H1	HOSE	1		
47	172849H1	INSERT	1		
48	173023H1	ADAPTER	1		
49	172818H1	CLAMP	2		
CONVERTER OIL FILTER LINES					
50	173015H1	INSERT	1		
51	OR2-12	"O" RING	1		
52	189780H1	HOSE	1		
53	172818H1	CLAMP	1		
54	177294H1	INSERT	2		
55	291-12	ADAPTER	1		
56	OR2-12	"O" RING	1		
57	173940H1	FILTER (Incl. 58 thru 61).....	1		
58	165714H1	PLUG	1		
59	131571H1	GASKET, Base	1		
60	131574H1	GASKET, Shell	1		
61	131570H1	ELEMENT	1		
	S-1612	SCREW, Cap	4		
	H-16	NUT.....	4		
	WL-16	WASHER, Lock	4		
62	291-12	ADAPTER	1		
63	OR2-12	"O" RING	2		
64	177294H1	INSERT	1		
65	135057H1	HOSE	1		
66	172818H1	CLAMP	1		
67	173015H1	INSERT	1		
	OR2-12	"O" RING	1		
	135081H1	BUSHING, Face	1		
	139017H1	STRAP, Suction Line to Drain Line	1		
	139017H1	STRAP, Filter Hoses to Cont. Valve & Access. Hoses.	2		



FUEL TANK & LINES

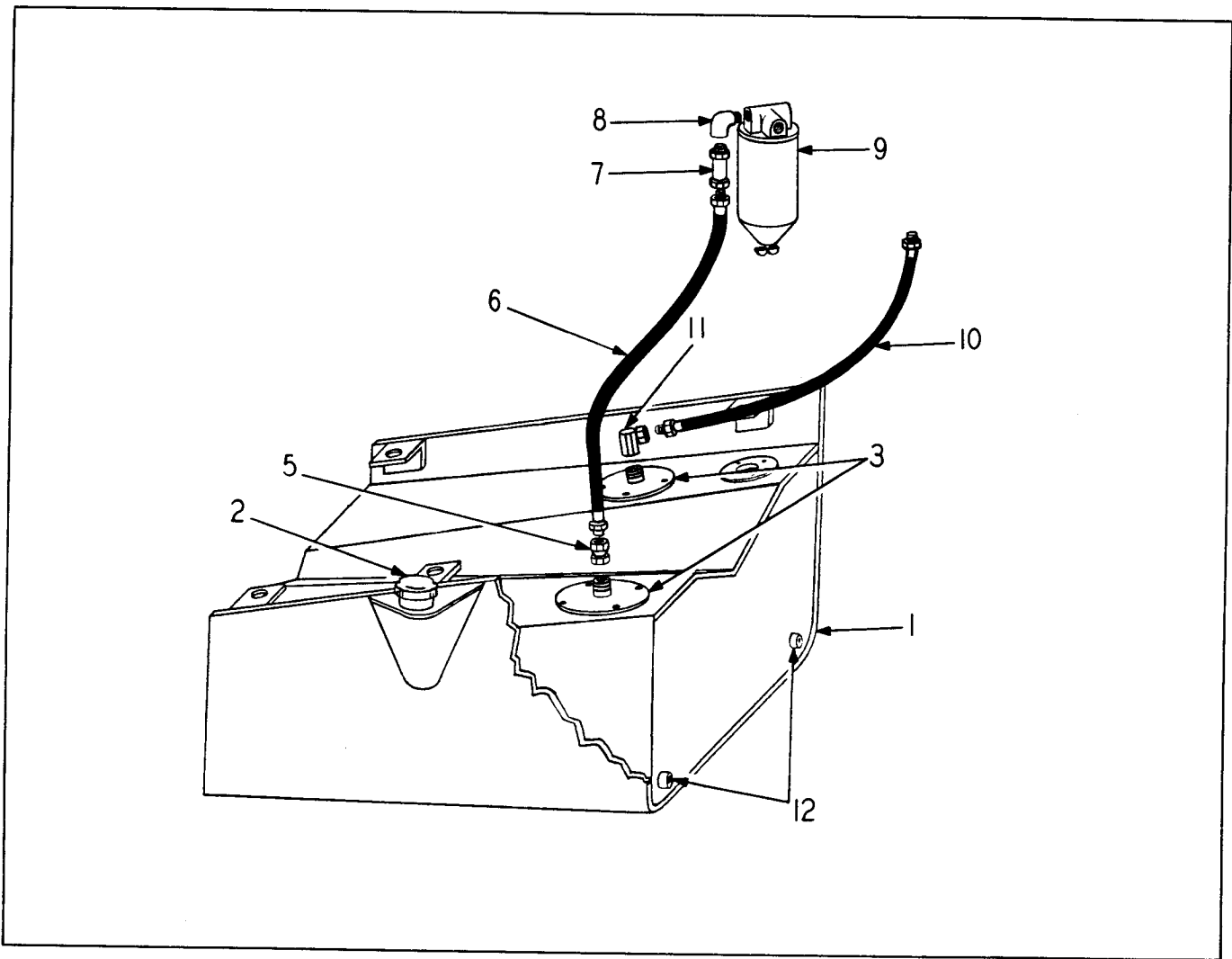
ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
For Machines of S/N 21CG-2010 Thru 21CG-2202.					
1	171739H1	TANK	1		
	S-11016	SCREW, Cap	6		
	WL-110	WASHER, Lock	6		
2	HA-1279	CAP	1		
3	182443H1	TUBE, Filler	1		
4	155932H1	GASKET	1		
	S-165	SCREW, Cap	4		
	WL-16	WASHER, Lock	4		
5	125751H1	COVER	1		
6	155932H1	GASKET	1		
	S-165	SCREW, Cap	4		
	WL-16	WASHER, Lock	4		
7	P-18	PLUG, Pipe, Drain Ports	2		

FUEL LINE - TANK TO PRIMARY FILTER

8	143882H1	COUPLING, Reducer	1		
9	179912H1	HOSE	1		
10	107861H1	ADAPTER, Straight	1		
11	103487H1	ELBOW, Street	1		

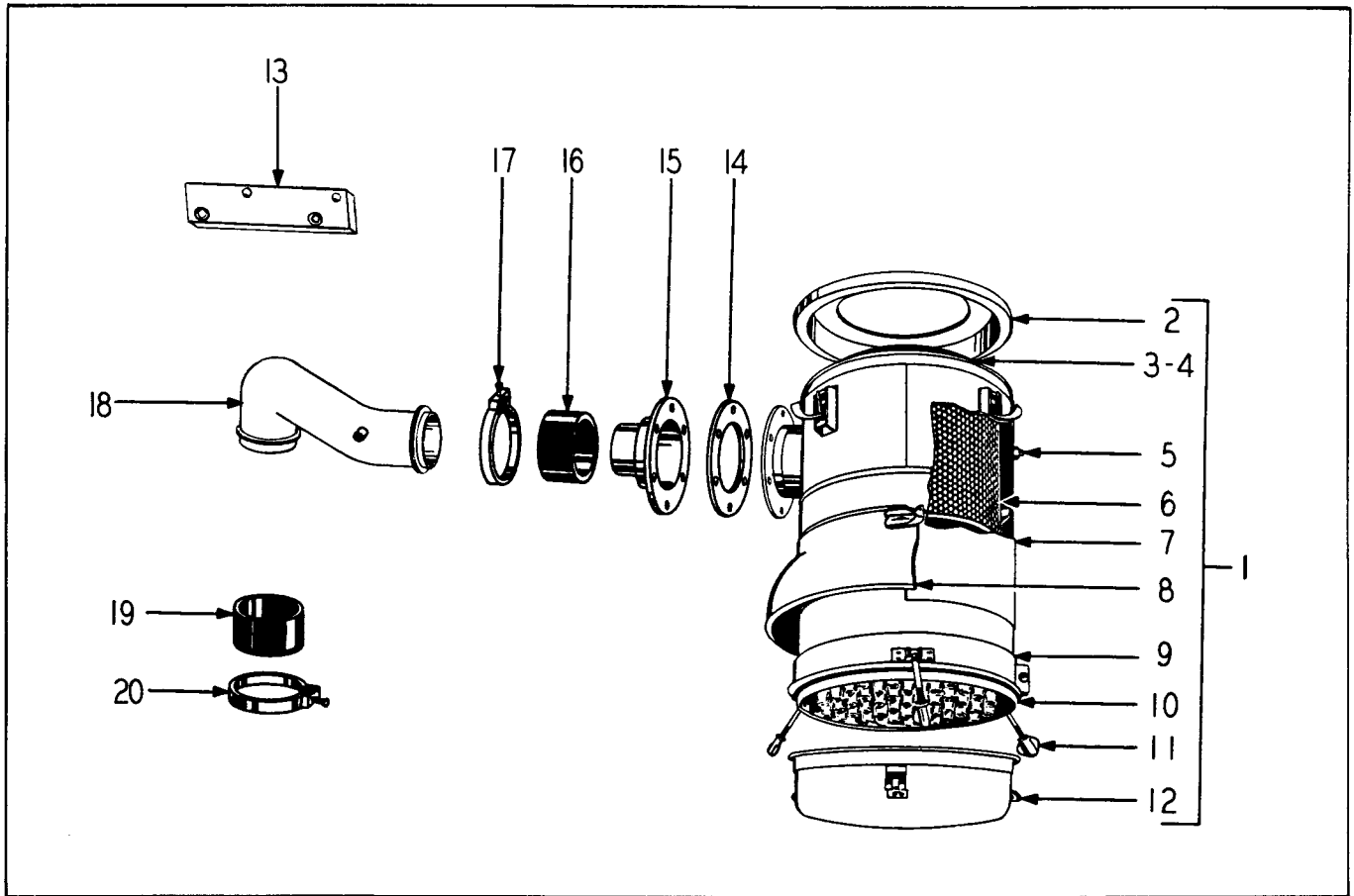
FUEL LINE - INJECTOR RETURN TO TANK

12	150269H1	VALVE CHECK	1		
13	179913H1	HOSE	1		
14	103497H1	ELBOW, Street 45°	1		



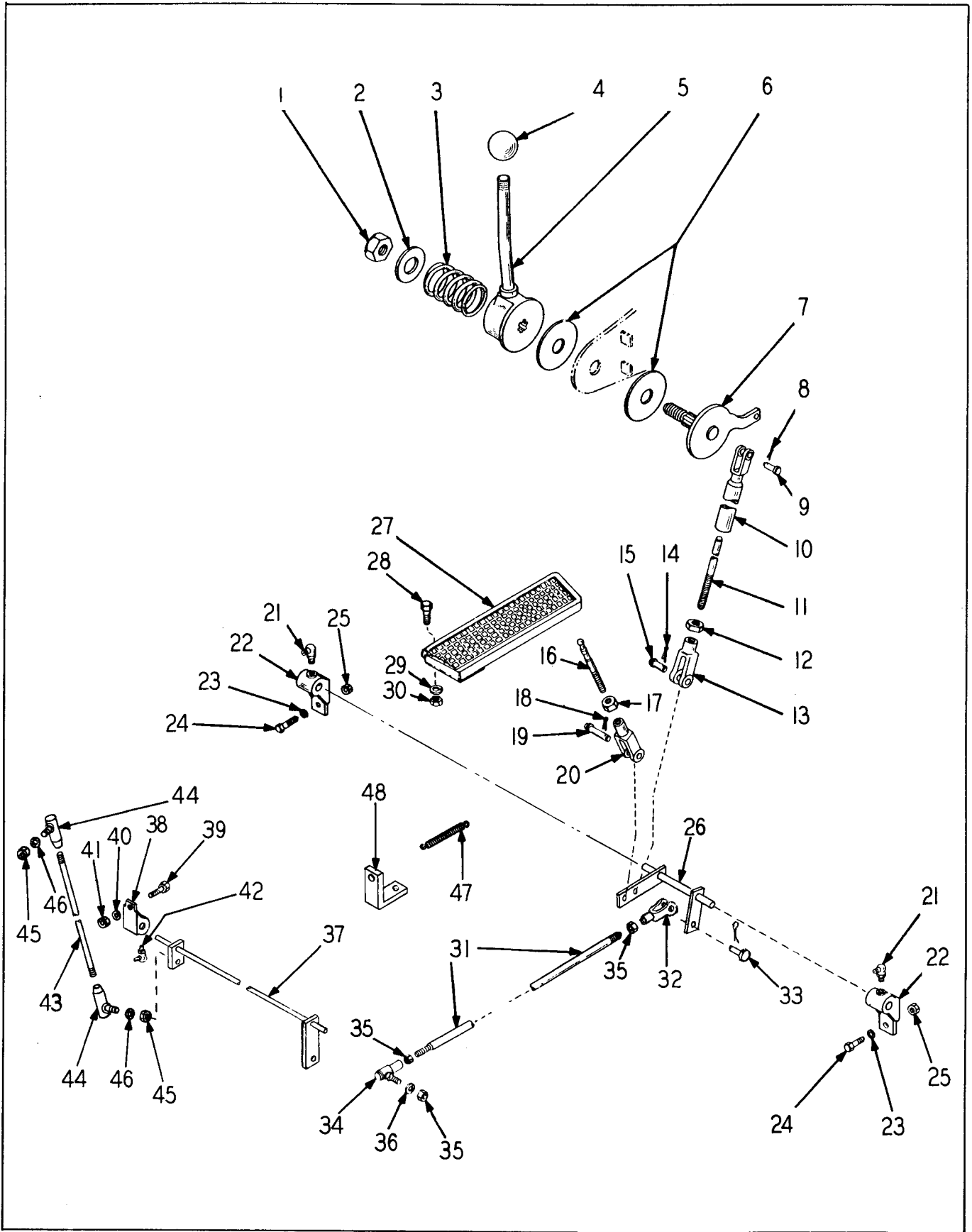
FUEL TANK AND LINES
For Machines of S/N 21CG-2203 & Up

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	183635H1	TANK, Fuel	1		
2	HA-1279	CAP, Fuel Tank	1		
	S-11016	SCREW, Cap	6		
	WL-110	WASHER, Lock	6		
	H-110	NUT	6		
3	189602H1	TUBE, Outlet & Inlet	2		
	S-168	SCREW, Cap	8		
	WL-16	WASHER, Lock	8		
4	155932H1	GASKET	2		
5	107861H1	UNION, Adapter	1		
6	138257H1	HOSE ASSEMBLY	1		
7		VALVE, Check (See GM-471 Eng. Manual)	1		
8		ELBOW	1		
9	117383H1	STRAINER, Fuel (See GM-471 Eng. Manual)	1		
RETURN LINE - ENGINE TO FUEL TANK					
10	184831H1	HOSE ASSEMBLY	1		
11	115700H1	UNION, Adapter 90°	1		
12	P-18	PLUG, Pipe	2		



AIR CLEANER

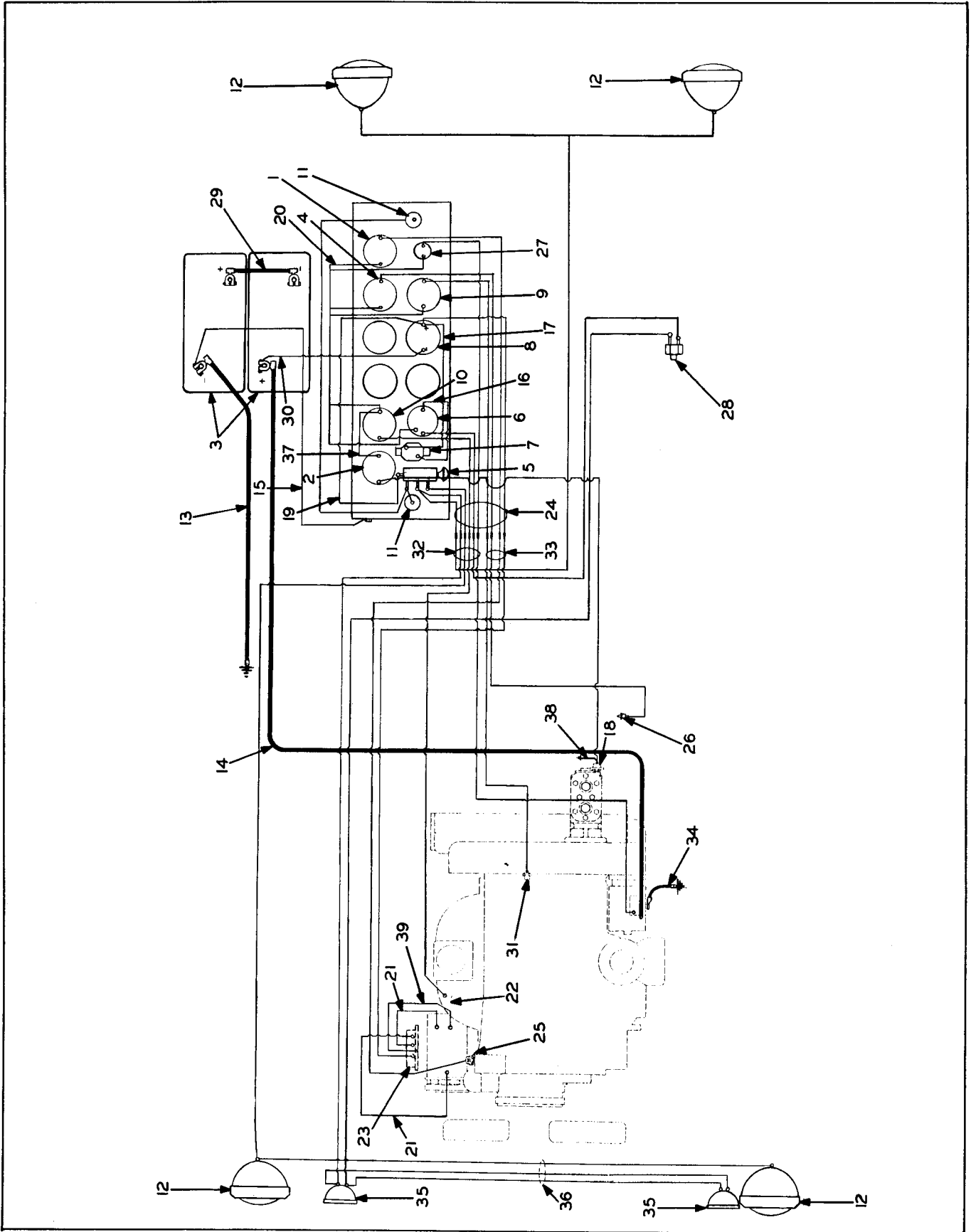
ITEM NO.	PART NO.	PART NAME	QTY.	First Used On Serial Numbers	
				FROM	THRU
1	152540H1	CLEANER, Air (Incl. Items 2 thru 12)	1		
	152539H1	BAND, Mounting	2		
	S-166	SCREW, Cap, Mounting Band to Bracket	4		
2	155262H1	COVER ASSEMBLY, (Includes Item 3)	1		
3	155263H1	GASKET	1		
4	155208H1	BOLT & GASKET ASSEMBLY	1		
5	P-12	PLUG, Pipe.....	1		
6	155264H1	ELEMENT	1		
7	155265H1	BODY ASSEMBLY	1		
8	155266H1	SHROUD & SHIELD ASSEMBLY	1		
9	155267H1	BAND ASSEMBLY	1		
10	155270H1	GASKET	1		
11	155214H1	BOLT & NUT.....	3		
12	155268H1	CUP ASSEMBLY.....	1		
13	178918H1	BRACKET, Air Cleaner	2		
	165338H1	NUT, Weld, Mtg. Bracket.....	8		
	S-169	SCREW, Cap	4		
	WF-16	WASHER, Flat	8		
14	152945H1	GASKET	1		
15	152944H1	ADAPTER	1		
	S-166	SCREW, Cap	6		
	WL-16	WASHER, Lock	6		
	H-16	NUT	6		
16	150320H1	HOSE	1		
17	152730H1	CLAMP.....	2		
18	178920H1	TUBE	1		
19	150320H1	HOSE	1		
20	152730H1	CLAMP.....	2		



ACCELERATOR LINKAGE

ACCELERATOR LINKAGE

ITEM NO.	PART NO.	PART NAME	QTY.	First Used On Serial Numbers	
				FROM	THRU
1	H-18	NUT	1		
2	WF-18	WASHER, Flat	1		
3	108650H1	SPRING.....	1		
4	HL-3343	KNOB	1		
5	140960H1	LEVER.....	1		
6	108651H1	DISC	2		
7	125098H1	SHAFT, Throttle	1		
8		PIN, Cotter.....	1		
9	HA-845	PIN, Assembly.....	1		
10	109046H1	TUBE ASSEMBLY	1		
11	157419H1	ROD.....	1		
12	H-15	NUT.....	1		
13	HL-1263	CLEVIS	1		
14		PIN, Cotter.....	1		
15	HL-1264	PIN, Assembly.....	1		
16	172213H1	PIN, Pedal	1		
17	H-15	NUT	1		
18		PIN, Cotter.....	1		
19	HL-1264	PIN ASSEMBLY.....	1		
20	HL-1263	CLEVIS, Rod End	1		
21	118494H1	FITTING, Grease.....	2		
22	HA-800	BEARING	2		
23	WL-14	WASHER, Lock	4		
24	S-148	SCREW, Cap.....	4		
25	H-14	NUT	4		
26	172215H1	SHAFT, Cross	1		
27	143669H1	PEDAL, Accelerator	1		
28	S-148	SCREW, Cap.....	2		
29	WL-14	WASHER, Lock.....	2		
30	H-14	NUT	2		
31	179606H1	ROD, Pedal End, Accelerator	1		
32	HL-1263	CLEVIS	1		
33	HL-1264	PIN ASSEMBLY	1		
		PIN, Cotter.....	1		
34	158396H1	BALLJOINT.....	1		
35	H-15	NUT	3		
36	WL-15	WASHER, Lock	1		
37	179601	SHAFT, Cross	1		
38	HA-800	BEARING	2		
39	S-148	SCREW, Cap.....	4		
40	WL-14	WASHER, Lock	4		
41	H-14	NUT	4		
42	118494H1	FITTING, Grease	2		
43	179605H1	ROD, Engine End, Accelerator	1		
44	158396H1	BALLJOINT	2		
45	H-15	NUT.....	4		
46	WL-15	WASHER, Lock	2		
47	157756H1	SPRING, Accelerator Return	1		
48	165151H2	CLIP, Accelerator Return	1		



WIRING

WIRING

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	187312H1	GAUGE, Engine Oil Pressure	1		
2	167564H1	HOURMETER	1		
3		BATTERY (Exide XF-25)	2		
4	187314H1	GAUGE, Torque Converter Temperature	1		
5	107749H1	SWITCH, Light	1		
6	125185H1	SWITCH, Ignition 193848H1 Wire switch.....	1		
	125186H1	LEVER ASSEMBLY, Ignition Switch	1		
7	128359H1	CIRCUIT BREAKER	1		
	168752H1	SCREW, Rd. Hd. Mach.	2		
	104467H1	NUT	2		
	104469H1	WASHER, Lock	2		
8	155671H1	AMMETER	1		
9	187313H1	GAUGE, Water Temperature	1		
10	187315H1	GAUGE, Fuel	1		
11	146568H1	LAMP, Dash Assembly	2		
		BULB, Trade #89			
	104469H1	WASHER, Lock	4		
12	176751H1	LAMP DRIVING (Incl. 181355 Sealed Beam and 181356 Retainer)	4		
13	107558H1	CABLE, Battery to Ground	1		
14	182692H1	CABLE, Battery to Starter Solenoid	1		
15	177235H1	WIRE, Instrument Panel Ground	1		
16	134319H1	WIRE, Ignition Switch to Circuit Breaker	1		
17	109866H1	WIRE, Ammeter to Circuit Breaker	1		
18	126287H1	SWITCH, Pressure	1		
19	109866H1	WIRE, Ammeter to Light Switch	1		
20	175353H1	WIRE, Instrument Jumper	1		
21	182963H1	WIRE, Generator to Regulator	2		
22	171831H1	SENDER, Fuel	1		
	104468H1	WASHER, Lock	1		
	107755H1	GASKET	1		
	104466H1	NUT	1		
	160975H1	SCREW	5		
	108498H1	WASHER, Lock	5		
23	181285H1	REGULATOR (Delco-Remy #1119156)	1		
24	175047H2	LOOM, Instrument	1		
25	123154H1	SENDER, Oil Pressure	1		
26	144200H1	SENDER, Torque Converter	1		
27	109214H1	SWITCH, Starter Push	1		
28	112339H2	SWITCH, Stop Light	1		
29	116949H1	CABLE, Battery Jumper	1		
30	177235H1	WIRE, Battery to Ammeter	1		
31	144200H1	SENDER, Engine Temperature	1		
32	174512H2	HARNESS, Wiring	1		
33	174510H2	HARNESS, Wiring	1		
34	148167H1	CABLE, Starter to Ground	1		
35	115602H3	LAMP, Tail & Stop Assembly	2		
		BULB, Trade #67	2		
		BULB, Trade #1073	2		
36	172227H2	LOOM, Jumper, Stop Lights	1		
37	187396H1	WIRE, Hourmeter to Ground	1		
38	143863H1	WIRE, Pressure Switch to Ground	1		
39	182963H1	WIRE, Generator to Regulator	1		
	129668H1	CLIP, Attach to Engine	1		
	S-286	SCREW, Cap	1		
	WL-18	WASHER, Lock	1		
	168344H1	SCREW, Wires to Tail Light	4		
	104469H1	WASHER, Lock, Wires to Tail Light	2		
	152113H1	PLATE	1		
	S-1410	SCREW, Cap	4		
	WL-14	WASHER, Lock	4		
	H-14	NUT	4		
	WL-16	WASHER, Lock	2		
	179095H1	BRACKET, Stop Light Mtg. R.H.	1		

(Continued on following page)

WIRING (Continued)

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	179096H1	BRACKET, Stop Light Mtg. L.H.	1		
	H-14	NUT	4		
	WL-14	WASHER, Lock	4		
	154049H1	GROMMET, Battery Cables	1		
	S-1810	SCREW, Cap	1		
	163839H1	WASHER, Star	2		
	H-18	NUT	1		
	177362H1	SUPPORT, Front Lights	2		
	177360H1	SUPPORT, Rear Lights	2		
	176750H1	CLAMP, Driving Lamp	4		
	176752H1	PLUG, Rubber (6) 186928H1 Plug (2)	AR		
	E-18	NUT	4		
	176749H1	WASHER	4		
	H-320	NUT	2		
	WL-120	WASHER, Lock	2		
	180964H1	WASHER	2		
	173443H1	SETSCREW	4		
	132226H1	SCREW	1		
	104468H1	WASHER, Lock	1		
	104466H1	NUT	1		
	S-1610	SCREW, Cap	1		
	H-16	NUT	1		
	145703H1	WASHER	2		
	116983H1	CLAMP, Battery Cable to Flywheel & Blower	2		
	138459H1	CLAMP, Harness to Eng. Block R.H. Side	1		
	161043H1	CLAMP, Harness to Solenoid Bracket	1		
	138459H1	CLAMP, Tail Back Up Light Wires to L.H. Channel ..	1		
	161043H1	CLAMP, Water Temp. Wire to Eng. Valve Cover	1		
	129668H1	CLAMP, Driving Light Wire to Windshield Strip	4		
	S-168	SCREW, Cap	6		
	H-16	NUT	6		
	WL-16	WASHER, Lock	6		
	161043H1	CLAMP, Harness to Parking Brake	1		
	138459H1	CLAMP, Driving Light Wire to Gearshift Lever Clamp	1		
	129668H1	CLAMP, Loom to Flywheel Hsg. Loom to Oper. Compartment, Loom to Right Front Battery Box Support	3		
	139016H1	STRAP, Battery Cables	3		
	136140H1	CLAMP, Regulator to Ammeter Wire, Loom to Flow Control Valve, and Head Light Wires to Floorboard Support	4		
	103495H1	ELBOW, St. 45° Eng. Oil Pressure Sw. to Block ...	1		
	171186H1	BOTTOM, False	1		
	189590H1	BOLT	1		
	CP-36	PIN, Cotter	1		
	174169H1	NUT, Wing.....	1		
	171827H1	RETAINER (175367H1 Bolt).....	1		
	171828H1	COVER, Battery	1		
	188810H1	PANEL, Instrument	1		
	127514H1	GROMMET	4		
	168751H1	SCREW	4		
	E-34	NUT	4		
	132226H1	SCREW	1		
	104468H1	WASHER, Lock	1		
	104466H1	NUT	1		
	154049H1	GROMMET	1		