

PARTS AND INSTRUCTION BOOK

for

**GarWood**  
**LOAD-PACKER**

MODELS LP-210 LP-213 LP-216



**GAR WOOD INDUSTRIES, INC.**

WAYNE DIVISION  
WAYNE, MICHIGAN



## INDEX

OPERATING INSTRUCTIONS. . . . .	2-4
SERVICE ADJUSTMENTS . . . . .	5-8

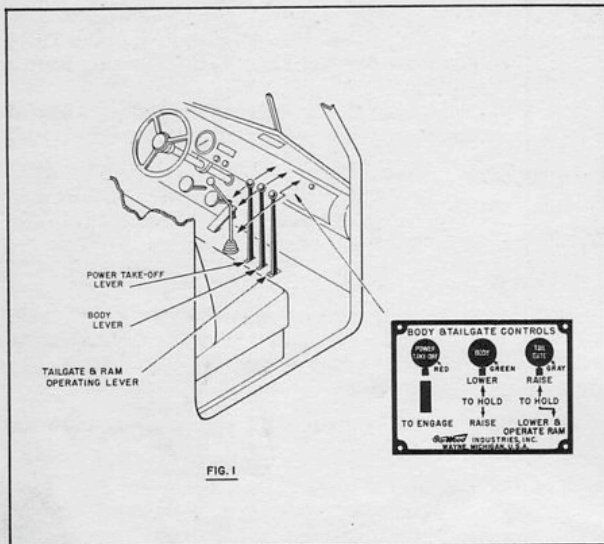
### PARTS LIST SECTION

TAIL GATE ASS'Y. . . . .	10-13
WIRING DIAGRAM . . . . .	14
WIRING SYSTEM . . . . .	15-17
BODY LIFTING CYLINDER ASS'Y. . . . .	18-19
RAM CYLINDER ASS'Y. . . . .	20
TAIL GATE RETAINER PANEL VALVE ASS'Y. . . . .	21
RAM ASS'Y. . . . .	22
42.5 G.P.M. PUMP . . . . .	23
BODY CONTROL VALVE ASS'Y. . . . .	24
RETAINER PANEL CYLINDER ASS'Y. . . . .	25
TAIL GATE JACK CYLINDER ASS'Y. . . . .	26
RAM CONTROL VALVE ASS'Y. . . . .	27
BODY ASS'Y. . . . .	28-29
BODY AND TAIL GATE HYDRAULICS. . . . .	30-32
POWER TAKE-OFF DRIVE . . . . .	33-34
LUBRICATION CHART . . . . .	35-37
HOIST AND SUB-FRAME ASS'Y. . . . .	38-40
HYD. SCHEMATIC PARTS & CONNECTIONS. . . . .	41-43



# LOAD-PACKER

## OPERATING INSTRUCTIONS



### CAB OPERATING CONTROLS (Fig. 1)

The driver should familiarize himself with the location and function of each control lever before operating the Load-Packer. A metal Instruction Plate fastened in a conspicuous spot in the cab, and stamped with the location of the three levers shown in Fig. 1, serves as an operating guide.

### TO ENGAGE POWER TAKE-OFF

P.T.O. lever (Fig. 1) engages drive to pump; always use clutch when engaging or disengaging P.T.O. Engaged position is required in all load-packer operations. However, Do Not Drive Truck With P.T.O. Engaged.

### TO OPERATE TAILGATE

The tailgate lever (Fig. 1) moved forward or to the rear as indicated on the Instruction

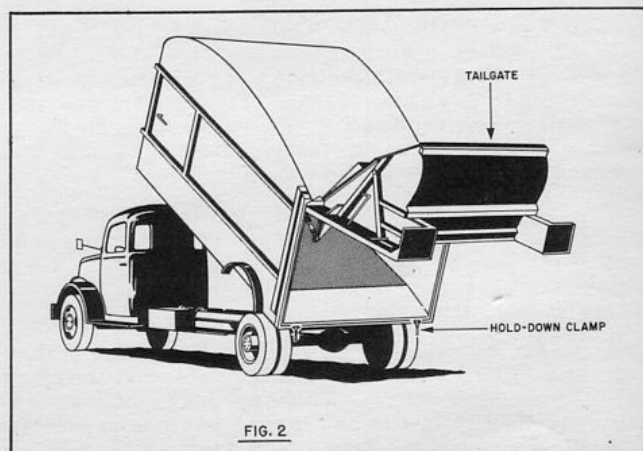
Plate, shifts a spool in the Body Valve and raises or lowers the Tailgate. Before raising, Release Rear Hold-Down Clamps (Fig. II). Tailgate must be raised before raising body. Slightly increased acceleration is required in raising gate, but not in lowering. Releasing the lever at any time will return it to neutral automatically, thus the tailgate can be halted at any desired height. The tailgate should be lowered after the dumping operation and not allowed to remain elevated while the truck is traveling.

### TO RAISE AND LOWER BODY (as in Fig. II)

The body lever (Fig. 1) moved forward or to the rear as indicated on the Instruction Plate, shifts a spool in the Body Valve and raises or lowers the body in dumping operations. Releasing the lever at any time will automatically return it to neutral allowing the body to remain at desired height. Slightly increased acceleration is required in raising body, but not in lowering.

### TO OPERATE RAM

The Tailgate Lever (Fig. 1) also controls Ram Operation. In the position shown on the Cab Instruction Plate as "Lower and Operate Ram", the lever is locked by moving it to the right. In this position oil pressure is diverted through the ram operating section of the valve. The lever remains in this position during loading operations.



ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.



# LOAD PACKER OPERATION

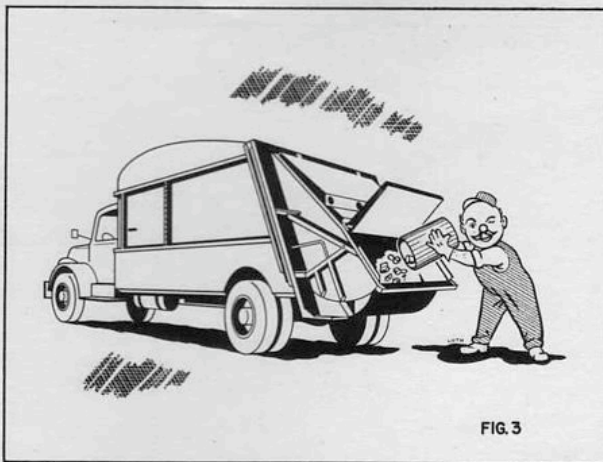


FIG. 3

Ram Control Lever to "Packer Out". This disengages the link Lock and allows the Ram to raise to open position without completing the automatic packing cycle.

Note: Step #2 allows the operators to carry equipment in the hopper, with ram closed, between widely spaced stops if desired.

To operate Ram from fully open (loading) Position, proceed as follows:

1. Move Ram Control Lever (Fig. 4) quickly from "Neutral" to "Close" position.
2. Hold lever in this closed position until ram is closed and latches lock in place at which point the ram clears the hopper sill.
3. Shift Ram Control Lever to "Packer In" position and allow Ram to complete the packing cycle and return to fully open position.

The ram lowers by gravity and may be stopped at any point by releasing the lever and allowing it to return to neutral.

Do not attempt to close ram by power, or "Packer In" position, as this will be opposed automatically by the safety cam and stop block (Fig. 4A) which will shift the control lever to neutral, preventing descent of ram.

In all packing operations an electric Solenoid (Fig. 7) provides proper acceleration automatically, through the Solenoid Switch (Fig. 13, Item 16, P. 15). Do not accelerate engine above solenoid-controlled speed when packing, as this will increase hydraulic pressure above relief valve setting and could result in damage to parts.

It is important to note that we do not recommend operating packing mechanism and moving truck simultaneously, as the pump would then be operating at speeds higher than solenoid setting, causing excessive pressure above relief valve setting and resulting in damage to parts.

A cut-out switch (Fig. 12 and Fig. 13) located in the cab is provided to cut out the electric solenoid when the truck is traveling on the highway. With the truck in motion the ram may drift slightly inward and cause the engine to accelerate automatically unless the switch is shut off.

## RAM OPERATION (Fig. 3, 4)

Before operating Ram, be sure Tailgate Clamps (Fig. 2) are securely fastened.

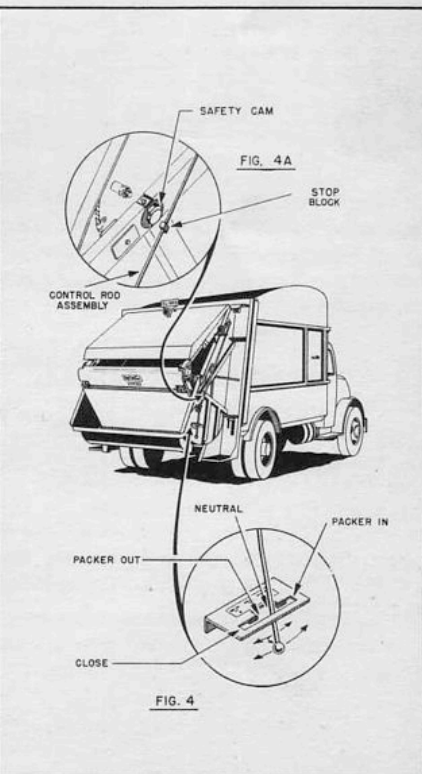
With power take-off engaged, place Tailgate Lever in Cab (Fig. 1) in "Operate Ram" position.

To operate Ram from closed position (at hopper sill) two methods may be employed:

1. Shift Ram Control Lever (Fig. 4) to "Packer In" position to allow Ram to complete automatic packing cycle and back to open position.

- or -

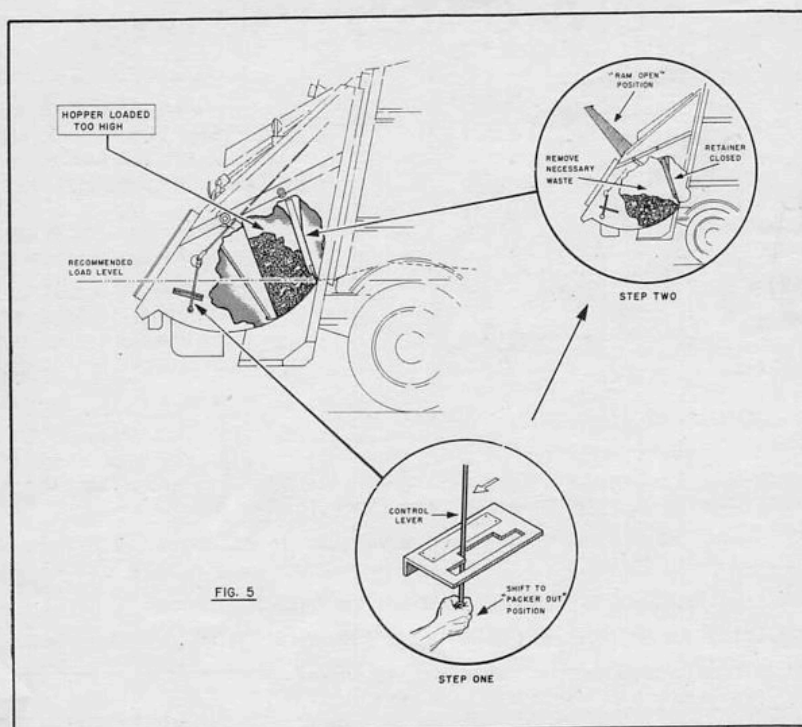
2. Pull link Release Lever (Item 117, Fig. 11) back and hold while shifting



ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.



# LOAD PACKER OPERATION



## HOPPER OVER-LOADING (Fig. 5)

The load of refuse in the hopper should not be piled above the lower edge of the Retainer Panel as shown in the upper left hand drawing of Fig. 5. When the hopper is over-loaded, material may lodge between Ram and Retainer Panel. If packing is attempted under this condition, the panel will automatically stop the operation and return the control lever to "Neutral".

Do not force ram to complete the packing operation by placing the lever in "Packer In" position.

To clear the obstruction, move control lever to "Packer Out" and allow ram to open. After excess material is levelled or removed, repeat closing and packing operations.

## OPERATOR TO DRIVER SIGNALS

A buzzer button mounted on each side of the tailgate is connected to the buzzer in truck cab, and is used to signal the driver to start, stop, engage power take-off, etc.

## LOADED BODY PROCEDURE

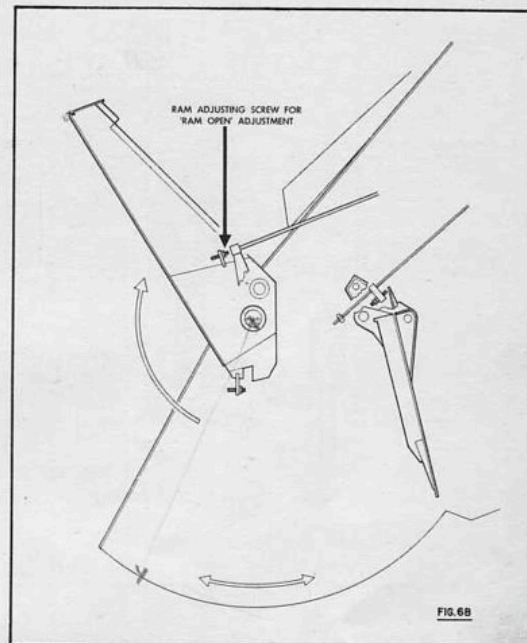
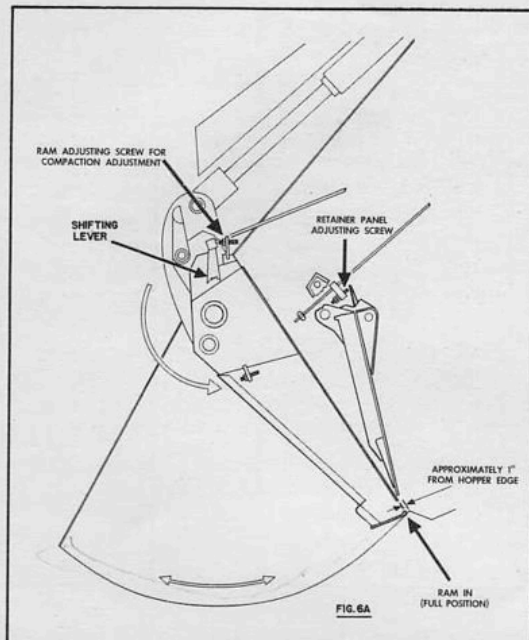
When body is fully loaded, Ram will stop automatically, as the ram pressure then exceeds the relief valve setting. Do not accelerate engine above solenoid speed to increase load capacity.

With body loaded, place control lever in "Packer Out" position and allow ram to move back to hopper sill, then release and allow lever to return to "Neutral".

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.

# LOAD-PACKER

## SERVICE ADJUSTMENTS



RAM AND RETAINER PANEL ADJUSTMENTS (Figure 6A and 6B)

Referring to "Packer In" cycle, Figure 6A. The ram adjusting screw should be set and locked to contact shift lever so that control will reverse when ram is within 1" of reaching hopper edge. The set screw striking the shifter lever reverses the controls and automatically returns ram to open position. Do not allow ram to travel beyond front edge of hopper.

Referring to Figure 6B, when ram reaches full open position the rear ("ram open adjustment") set screw should be set and locked to strike Shifter Lever and Reverse Controls Before ram pistons bottom in cylinders. This allows controls to automatically return to neutral.

### ADJUSTING RETAINER PANEL

With ram at the end of the Packing Cycle, the retainer panel adjusting screw should be set and locked at approximately 1/16" from the stop on the retainer panel (see Figure 6A). This adjustment is very important as it automatically stops the packing operation and shifts controls to neutral, in the event material becomes lodged between ram and retainer panel.

In the ram operations note that the retainer panel releases and moves backward only when control lever is shifted to "Packer In" position.

### RAM CYCLE ADJUSTMENT

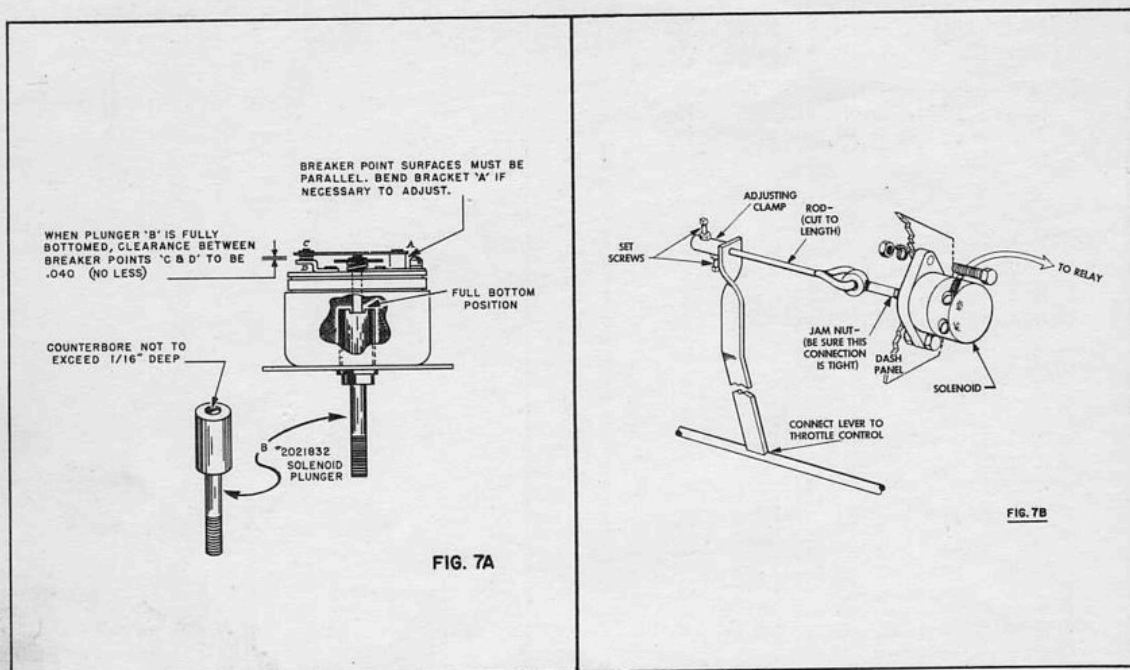
The normal packing cycle (from sill to forward edge of hopper and return to sill) should be approximately 15 to 20 seconds. This packing cycle time will vary as it is dependent on transmission and power take-off speeds and solenoid speed setting. This packing cycle time may be varied by moving the adjusting clamp on the solenoid rod which will increase or decrease engine speed (see Figure 7B). Care should be taken to be sure the solenoid plunger bottoms completely when adjusting the rod.

A solenoid switch is mounted on an adjustable bracket located adjacent to the left hand ram cylinder which actuates the solenoid.

Adjust the bracket so that switch operates the unit at solenoid speed throughout the packing cycle.



# LOAD PACKER SERVICE ADJUSTMENTS



## SOLENOID SERVICE AND ADJUSTMENT (Fig. 7A and 7B)

When installing a Solenoid it should be checked before mounting as follows:

1. Remove cover.
2. Push plunger (B) to full bottomed position.
3. Check Breaker Points (C & D) with feeler gage. Points must open to at least .040".
4. If breaker point gap is less than .040", remove plunger and measure counter-bore; depth of bore as shown should not exceed 1/16". End of plunger may be dressed down with file or grinding wheel to proper depth.
5. Check breaker point surfaces to determine if they are parallel; if not, bend Bracket (A) as shown. This adjustment is necessary to prevent arcing.

The solenoid contains a pulling, or actuating, coil and a holding coil. If the plunger does not bottom fully the points will not break, causing pulling coil to remain active, and solenoid will over-heat and burn out.

When solenoid is installed it is important that the control Rod and clamp be properly adjusted to allow full bottoming of the solenoid plunger.

See Figure 7B for typical installation.

Note that solenoid is connected to the ignition switch and not to any other "hot" circuit.

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.

# LOAD PACKER SERVICE ADJUSTMENTS

## OIL PRESSURE SETTING AND ADJUSTMENT (Figure 8 and 9)

Hydraulic pressure is set at the relief valves in the Body and Tailgate Valve (Figure 19, Page 24) and the Ram Valve (Figure 22, Page 27).

Pressure is adjusted by turning the adjusting screw as shown in Figure 9. The protective nut must be removed and the locknut loosened; turn the adjusting screw counterclockwise (out) to increase pressure and clockwise (in) to decrease pressure.

When checking or setting pressure, always start at the Body Valve (Fig. 19) and proceed as follows:

1. With P.T.O. disengaged, remove 1/4" pipe plug from adapter union fitting on pump, (Figure 8), and install pressure gage and hose as shown.
2. Raise tailgate completely as described on Page 2 and hold cab control lever in "Raise" position.
3. With engine speed held at range required to raise tailgate, set adjusting screw in relief valve (Figure 9) to point at which the pressure gage reads 900 p.s.i. This pressure is adequate for all load packer operations and should not be increased.

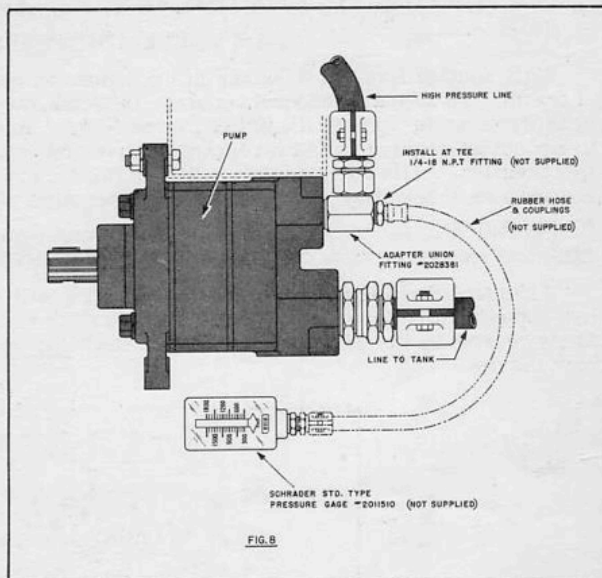


FIG. 8

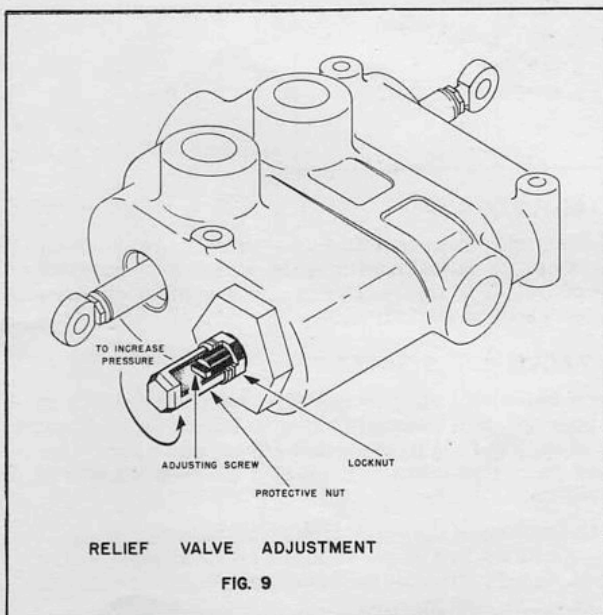


FIG. 9

## TO CHECK RAM PRESSURE

1. Referring to Page 10, Figure 11, remove Tie Bar (Item 69) between Bell Crank (Item 62) and shifter Lever (Item 59).
2. Remove 1/4" pipe plug from Ram Valve and install pressure gage.
3. Place cab lever in locked "Operate Ram" position.
4. Engage P.T.O.
5. Place ram control lever in "Packer Out" position and hold until pistons are completely bottomed in ram cylinders.
6. With engine running at solenoid controlled speed, which must be controlled manually at the switch, set Relief Valve in Ram Valve to point at which pressure gage reads between 850 and 900 p.s.i.

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.



# LOAD PACKER SERVICE ADJUSTMENTS

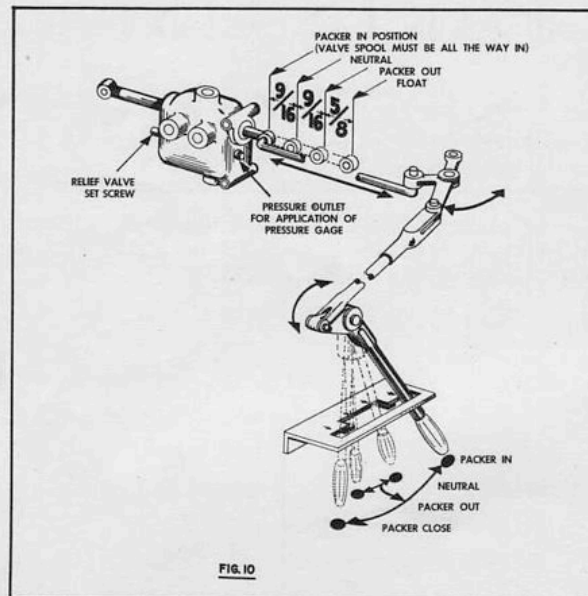
DO NOT OPERATE UNIT WHEN MAKING FOLLOWING ADJUSTMENTS

## RAM VALVE ADJUSTMENT (Figure 10)

With control lever in "Packer In" position the ram valve spool must be at extreme left end of travel. To adjust, disconnect control link from valve spool eye. Push valve spool all the way in to "Packer In" position. Holding control lever in "packer in" position, turn valve spool eye in or out as required and re-connect control link without moving valve spool from its "Packer In" position. The other positions are automatically pre-set by the slotted control lever plate, and may be checked by referring to the dimensions shown in Figure 10.

Periodically all control rod clevis pins and bearings should be checked for proper adjustment and excessive wear to assure efficient operation.

If Control Rod (Item 73, Figure 11, Page 10) will shift in one direction but not completely in the opposite direction, adjust the clevis at each end of the rod, turning in opposite directions, to move rod in the direction in which it would not shift. Test operation after each half turn of both clevises.



## BODY VALVE ADJUSTMENT

Full hydraulic pressure to ram is dependent upon proper adjustment of spool in the Body Valve. With the cab control lever locked in "Operate Ram" position, the valve spool must be all the way out to provide for full passage of the oil to the ram valve. The control clevises should be adjusted to this position and thereafter checked periodically.

## RETAINER PANEL VALVE ADJUSTMENT

Place control lever in "Packer In" position which will shift Ram Valve Spool all the way to the left. Disconnect rod (Item 56, Figure 24, Page 30) and manually move Retainer Valve Spool to the left as far as possible; then move spool back to the right 1/16" and adjust valve spool eye to permit replacement of connecting rod. Care should be taken in replacing the connecting rod to hold retainer valve spool in the adjusted position.

Operate unit thru complete packing cycle to determine if retainer panel is holding. If panel drifts back, adjust retainer valve spool eye, one turn at a time, to move spool slightly to the right. Do not adjust spool eye more than three (3) full turns as the spool will then restrict the passage of oil when valve is in open position (extreme left position).

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.

ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.

---

# PARTS LIST SECTION

---



## TAIL GATE ASS'Y

ITEM	PART NO.	NOMENCLATURE	QUANTITY	
			LP210&213	LP216
	2025189	Tailgate Assembly Models LP210 & LP213 (Complete) . . .	1	
	2025338	Tailgate Assembly Model LP216 (Complete) . . . . .		1
	2025096	Tailgate Weld Ass'y. (Less Controls, Loading Door & Ram)	1	
	2025191	Tailgate Weld Ass'y. (Less Controls, Loading Door & Ram)		1
1	2025100	Cover Ass'y. - Ram Cylinder . . . . .	1	
1	2025363	Cover Ass'y. - Ram Cylinder . . . . .		1
2	105054	Drilled Pin 1/2 x 2 . . . . .	2	2
3	103033	Cotter Pin 1/8 x 7/8 . . . . .	8	8
4	2025099	Wood Block . . . . .	2	
4	2025362	Wood Block . . . . .		2
5	102557	Cap Screw 1/4 - 28 x 2 1/2 . . . . .	4	4
6	102757	Lockwasher 1/4 . . . . .	4	4
6A	103676	Lockwasher 5/16 Ext. Tooth . . . . .	4	4
7	102968	Washer - Flat 1/4 . . . . .	4	4
8	103608	Nut - Hex 1/4 - 28 . . . . .	4	4
8A	2025131	Cover Assembly - Link . . . . .	1	
8A	2025340	Cover Assembly - Link . . . . .		1
9	2028261	Cover Ass'y. - Trough . . . . .	1	
9	2028255	Cover Ass'y. - Trough . . . . .		1
10	2028256	Latch Ass'y. L.H. - Trough . . . . .	1	1
10A	2028257	Latch Ass'y. R.H. - Trough . . . . .	1	1
11	2025273	Strip - Wiper Reinf. . . . .	1	
11	2025274	Strip - Wiper Reinf. . . . .		1
12	2025275	Strip - Wiper. . . . .	1	
12	2025276	Strip - Wiper. . . . .		1
13	103208	Cap Screw 1/4 - 28 x 3/4 . . . . .	14	18
6	102757	Lockwasher 1/4 . . . . .	14	18
14	104496	Nut - Light Jam 1/4 - 28 . . . . .	14	18
15	2013054	Link - Ram . . . . .	2	2
16	2024568	Latch - Weld Ass'y. Ram R.H. . . . .	1	1
17	2024621	Link Weld Ass'y. Stop L.H. . . . .	1	1
18	2024622	Link Weld Ass'y. Stop R.H. . . . .	1	1
19	2029554	Plate - Ram Pin Retainer . . . . .	2	2
20	2029553	Pin - Lower Ram Hoist . . . . .	2	2
21	2013059	Pin - Ram . . . . .	2	2
22	2013056	Pin Ass'y. - Ram Link . . . . .	1	1
23	2028455	Spring. . . . .	1	1
24	2140-E	Spring. . . . .	1	1
25	2016517	Pin - Spring Anchor. . . . .	1	1
26	2024732	Bolt - Spring Eye. . . . .	1	1
27	103181	Cap Screw 3/8 - 24 x 1 1/8 . . . . .	2	2
28	102759	Lockwasher 3/8 . . . . .	2	2
29	105529	Drilled Pin 3/8 x 2 3/8 . . . . .	2	2
30	103027	Cotter Pin 3/32 x 3/4 . . . . .	8	8
31	105851	Grease Fitting 1/8 x 45° . . . . .	2	2
32	105528	Drilled Pin 3/8 x 3 1/8 . . . . .	2	2
33	105397	Grease Fitting 1/8 Straight . . . . .	5	5
34	105162	Set Screw - Hex. Socket 1/2 - 13 x 2 3/4 . . . . .	1	1
35	102720	Hex. Nut - Light 1/2 - 13 . . . . .	1	1
36	103048	Cotter Pin 3/16 x 1 3/4 . . . . .	2	2
37	104464	Nut - Hex. Heavy 1/2 - 13 . . . . .	2	2
38	2028321	Pin Ass'y. Ram Link . . . . .	1	1

## TAIL GATE ASS'Y

ITEM	PART NO.	NOMENCLATURE	QUANTITY	
			LP210&213	LP216
39	2028324	Tube Ass'y. Torque . . . . .	1	
40	2028325	Tube Ass'y. Torque . . . . .		1
41	2013086	Shaft Ass'y. - Ram L.H. . . . .	1	1
42	2013128	Shaft Ass'y. - Ram R.H. . . . .	1	1
43	105521	Pin Drilled 1/2 x 1 1/2 . . . . .	2	2
44	2016400	Spring . . . . .	2	2
33	105397	Alemite . . . . .	2	2
45	103845	Cap Screw 5/16 - 18 x 3/8. . . . .	4	4
31	105851	Alemite 1/8 x 45° . . . . .	2	2
46	105035	Washer - Flat 2" Medium . . . . .	2	2
47	105541	Pin - Drilled 5/8 x 3 7/8 . . . . .	2	2
48	103041	Pin - Cotter 5/32 x 1 . . . . .	4	4
49	100009	Pipe Plug 2" . . . . .	1	1
50	2027175	Lever - Ram Cover Support . . . . .	2	2
51	105834	Cap Screw 3/8 - 16 x 1 5/8 . . . . .	2	2
52	102970	Washer - Flat 3/8 . . . . .	6	6
53	102718	Nut - Hex. 3/8 - 16 . . . . .	4	4
54	2013124	Shaft - Retainer . . . . .	1	
54	2025304	Shaft - Retainer . . . . .		1
55	2016349	Pin - Retainer Shaft . . . . .	1	1
56	2028151	Rod Ass'y. - Shifter . . . . .	1	1
57	2023007	Rod Ass'y. - Safety Control . . . . .	1	1
58	105162	Set Screw - Oval Pt. 1/2 - 13 . . . . .	1	1
35	102720	Nut - Light 1/2 - 13 . . . . .	1	1
59	2023010	Shifter Lever . . . . .	1	1
60	2016198	Bracket - Solenoid Switch . . . . .	1	1
44	2016400	Spring . . . . .	2	2
61	2023104	Spring - Valve Operating . . . . .	1	1
62	2025231	Bell Crank Ass'y. . . . .	1	1
63	2023009	Follower Cam . . . . .	1	1
64	2016413	Bushing. . . . .	1	1
65	102760	Lockwasher 7/16 . . . . .	1	1
66	103611	Nut 7/16 - 20. . . . .	1	1
67	2025229	Bell Crank Ass'y. . . . .	1	1
64	2016413	Bushing. . . . .	1	1
68	2028637	Guide - Valve Shifter. . . . .	1	1
69	2023008	Bar - Tie. . . . .	1	1
70	2025244	Lever Ass'y. - Valve Control . . . . .	1	1
64	2016413	Bushing - Control . . . . .	1	1
71	2016406	Pin Control Lever . . . . .	1	1
72	105438	Retaining Ring. . . . .	2	2
73	2025279	Rod Ass'y. Side Control . . . . .	1	1
74	2025283	Eye-Rod End . . . . .	1	1
75	2025285	Sleeve - Side Control Rod. . . . .	1	1
76	103455	Cotter Pin 5/32 x 1 1/2 . . . . .	1	1
77	2028318	Block-Adjusting . . . . .	1	1
78	102677	Sq. Hd. Set Screw 1/4 - 20 x 5/8 . . . . .	1	1
79	103886	Clevis - Rod End . . . . .	2	2
80	103614	Nut - 5/8 - 18 Light. . . . .	2	2
81	2025260	Rod Weldment - Valve . . . . .	1	
81	2025262	Rod Weldment - Valve . . . . .		1
82	2025290	Handle Ass'y. - Control . . . . .	1	1



## TAIL GATE ASS'Y

ITEM	PART NO.	NOMENCLATURE	QUANTITY	
			LP210&213	LP216
83	2026557	Grip - Control Handle . . . . .	1	1
84	2023016	Bell Crank Pin Ass'y. . . . .	1	1
85	2022977	Retainer Panel Ass'y. . . . .	1	
85	2022962	Retainer Panel Ass'y. . . . .		1
85	2022978	Retainer Panel Weld Ass'y. (Optional). . . . .	1	
85	2022976	Retainer Panel Weld Ass'y. (Optional). . . . .		1
86	102590	Cap Screw 3/8 - 24 x 1 3/4 . . . . .	1	1
87	104509	Jam Nut 3/8 - 24. . . . .	4	4
88	104360	Machine Screw 1/4 - 20 x 1 1/2 . . . . .	1	1
89	102716	Nut 1/4 - 20 Light . . . . .	1	1
90	2028152	Pin . . . . .	1	1
91	106145	Set Screw - Hex. Socket 8 - 32 x 1/4 . . . . .	1	1
92	103631	Nut - Slotted 5/8 - 18 . . . . .	1	1
93	103036	Cotter Pin 1/8 x 1 1/2 . . . . .	1	1
94	104281	Clevis Pin . . . . .	1	1
3	103033	Cotter Pin - 1/8 x 7/8 . . . . .	3	3
95	103647	Washer - Flat 7/8 . . . . .	3	3
96	105297	Retaining Ring . . . . .	3	3
31	105851	Grease Fitting 1/8 - 27 (45°) . . . . .	1	1
97	104316	Clevis Pin 5/8 . . . . .	2	2
98	103034	Cotter Pin 1/8 x 1 . . . . .	5	5
33	105397	Grease Fitting . . . . .	2	2
99	102973	Washer 5/8 . . . . .	2	2
100	2025501	Angle - Spring Ret. Ass'y. . . . .	1	1
101	102972	Washer 1/2 Light . . . . .	2	2
102	105849	Grease Fitting . . . . .	6	6
28	102759	Lockwasher 3/8 . . . . .	1	1
103	2013151	Tailgate Hinge Pin . . . . .	2	2
104	102978	Flat Washer 1 1/2. . . . .	4	4
105	103059	Cotter Pin 1/4 x 2 . . . . .	4	4
106	2029555	Pin-Jack Upper. . . . .	2	2
107	103232	Cap Screw 3/8 - 24 x 7/8. . . . .	2	2
28	102759	Lockwasher 3/8 Med. . . . .	2	2
31	105851	Alemite 1/8 - 27 NPTF 45°. . . . .	3	3
108	2013154	Pin - Retainer Cylinder - Lower . . . . .	1	1
109	103047	Cotter Pin 3/16 x 1 1/2. . . . .	3	3
110	2013153	Pin - Retainer Cylinder - Upper . . . . .	1	1
111	2027110	Tank Ass'y. - Sump Optional Equipment . . . . .	1	1
27	103181	Cap Screw 3/8 - 24 x 1 1/8. . Optional Equipment . . . . .	6	6
28	102759	Lockwasher 3/8 . . . . .	6	6
112	103610	Nut . . . . .	6	6
113	100007	Plug - Pipe 1 1/4 . . . . .	2	2
114	2027114-1	Seal Sump Tank . . . . .	2	2
115	2027114-2	Seal Sump Tank . . . . .	2	2
116	2024912	Bearing Weld Ass'y. . . . .	2	2
117	2025288	Control Handle . . . . .	1	1
83	2026557	Grip - Control Handle . . . . .	1	1
118	2026451	Plate - Ram Control Indicator . . . . .	1	1
119	2026431	Plate - Caution. . . . .	1	1
120	103147	Drive Screw #6 x 1/4 . . . . .	6	6

## WIRING DIAGRAM

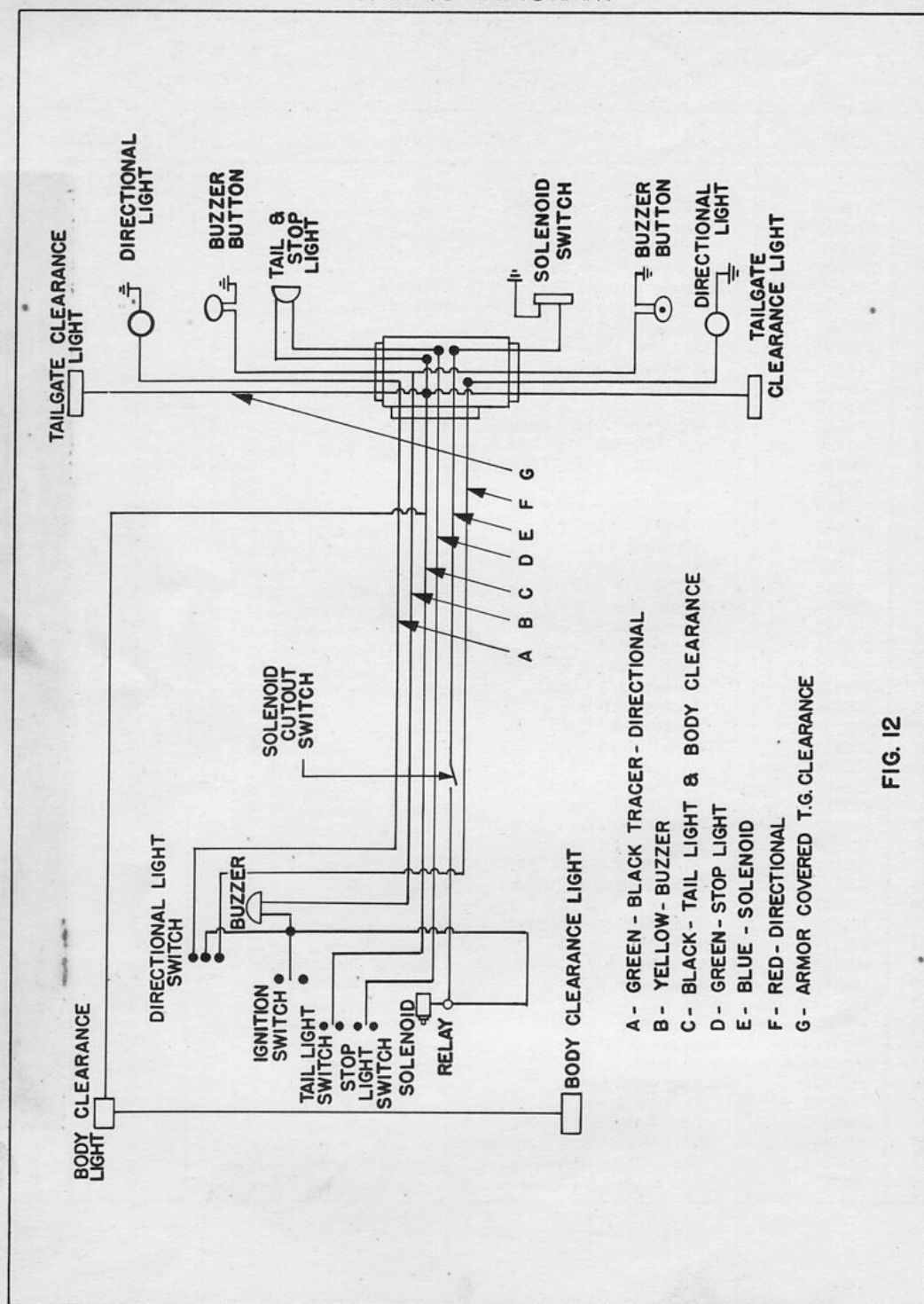


FIG. 12

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.



# WIRING SYSTEM

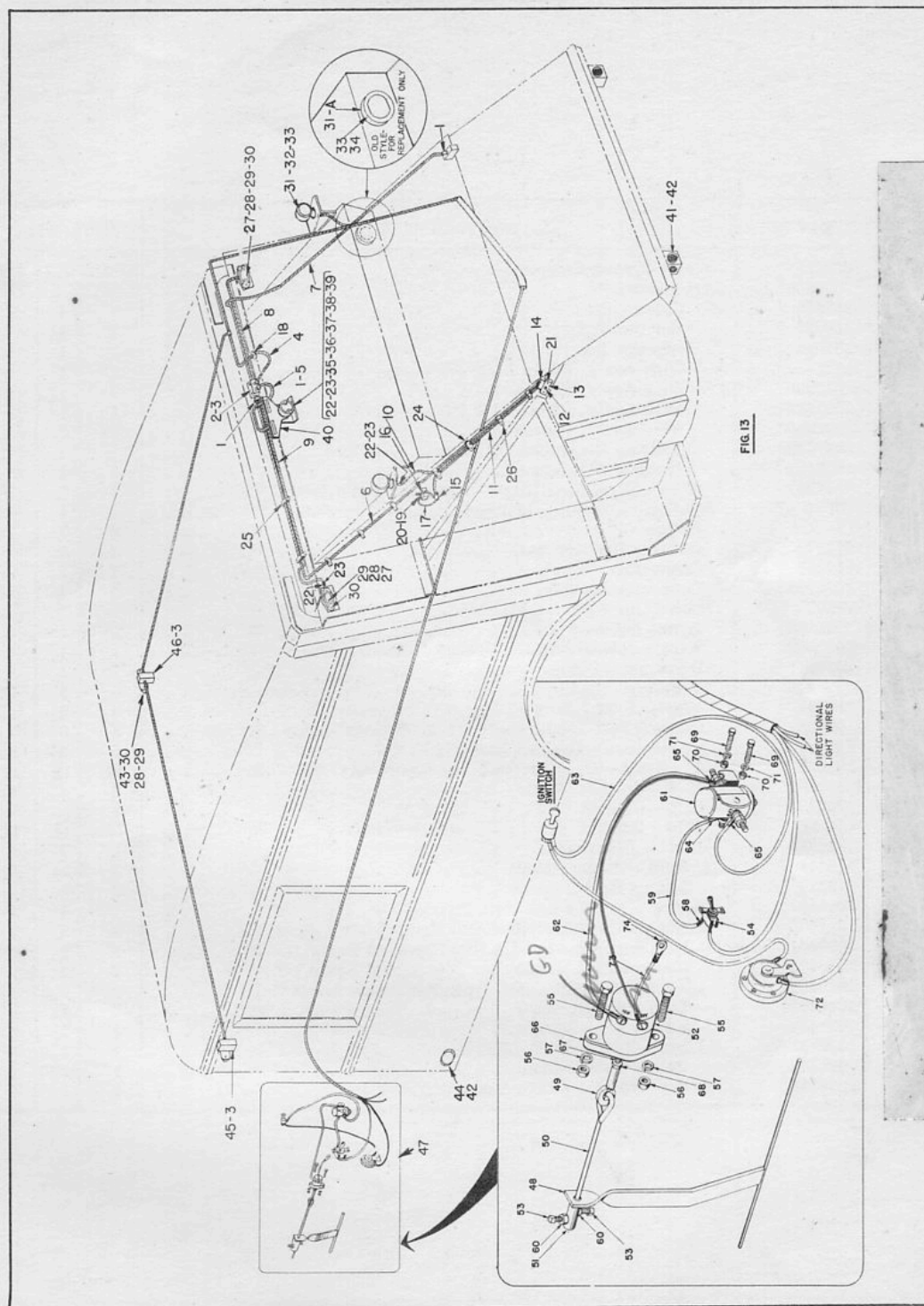


FIG. 13

CORRECTION:

Attach relay wire to terminal "SW" - attach ground wire to terminal "IGN".

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.

## WIRING SYSTEM

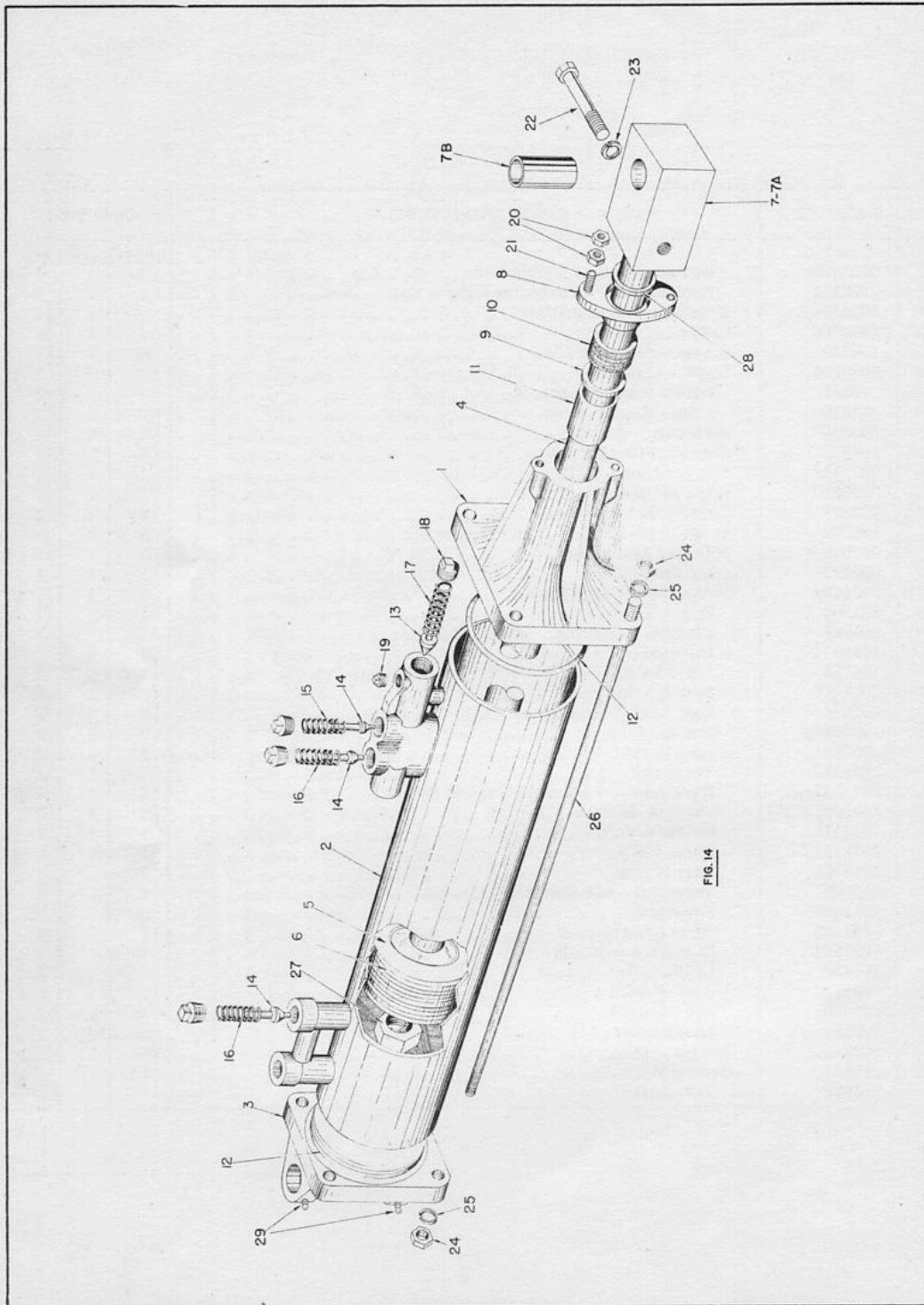
ITEM	PART NO.	NOMENCLATURE	QUANTITY		
			LP210	213	216
	2025481	Wiring System Complete . . . . .			
	2025438	Harness . . . . .			
1	212445	Connector . . . . .	4	4	4
2	210020	Junction Box . . . . .	1	1	1
3	203023	Junction Box Cover . . . . .	1	1	1
4	2025439	Wire Ass'y. (Main Line) . . . . .	1	1	1
5	2027990	Wire Ass'y. (Stop & Tail) . . . . .	1	1	1
6	2027962	Wire Ass'y. (Solenoid & Buzzer) . . . . .	1	1	1
7	2027960	Wire Ass'y. (Buzzer) . . . . .	1	1	1
8	2025463	Tailgate Clearance Lt. Wire . . . . .	1	1	1
9	2025464	Tailgate Clearance Lt. Wire . . . . .	1	1	1
10	2027987	Wire - Directional Light (Optional Equip.) . . . . .	2	2	2
11	2025478	Conduit - Pennflex (Solenoid Switch) . . . . .	1	1	1
12	LP-219	Button - Buzzer . . . . .	2	2	2
13	213370	Cover - Junction Box . . . . .	2	2	2
1	212445	Connector . . . . .	2	2	2
14	2002263	Connector (Double) . . . . .	1	1	1
15	203030	Connector 90° . . . . .	1	1	1
16	2025923	Switch Solenoid . . . . .	1	1	1
17	2025480	Wire - Solenoid Switch Ground . . . . .	1	1	1
18	2025583	Grommet - Rubber . . . . .	1	1	1
19	2024740	Terminal (Optional Equip. Qty. 2) . . . . .	3	3	3
20	213371	Vinyl - 5/32 I.D. x 1" Lg. . . . .	2	2	2
21	105933	Screw - Self Tapping - #6 x 1/2 (Optional Equip. Qty. 2) . . . . .	5	5	5
22	213457	Connector - Douglas Electric . . . . .	6	6	6
23	203028	Terminal - Douglas (Optional Equip. Qty. 2) . . . . .	12	12	12
24	2012592	Clip - Conduit 3/8 . . . . .	4	4	4
25	203029	Clip - Conduit 1/2 . . . . .	9	9	9
26	LP-375	Clip - Conduit 3/8 . . . . .	14	14	14
27	2028987	Light - Clearance . . . . .	2	2	2
28	213314	Bulb - Replacement . . . . .	2	2	2
29	213316	Lens - Replacement . . . . .	2	2	2
30	105942	Screw - #8-32 x 3/8 Self Tapping . . . . .	4	4	4
31	2027895	Light - Directional (Optional Equip.) . . . . .	2	2	2
32	2027984	Replacement - Lens & Rim (Optional Equip.) . . . . .	2	2	2
33	2025483	Replacement - Bulb . . . . . (Optional Equip.) . . . . .	2	2	2
31A	2025482	Directional Light - Old Type (For Replacement Only) . . . . .	2	2	2
33	2025483	Bulb - Replacement . . . . .	2	2	2
34	2025484	Lens - Replacement . . . . .	2	2	2
35	2026387	Light - Tail & Stop . . . . .	1	1	1
36	2026388	Bulb - Replacement . . . . .	1	1	1
37	2026389	Replacement - Door Lens . . . . .	1	1	1



## WIRING SYSTEM

ITEM	PART NO.	NOMENCLATURE	QUANTITY		
			LP210	213	216
38	2026390	Replacement - License Lens . . . . .	1	1	1
39	2026391	Replacement - Connector Plug & Cap . . . . .	1	1	1
40	2026394	Bracket - License Plate . . . . .	1	1	1
41	2000709	Reflector - Red . . . . .	4	4	4
42	104372	Screw - #10-12 x 3/8 . . . . .	8	8	8
43	2028988	Light - Clearance . . . . .	2	2	2
28	213314	Bulb - Replacement . . . . .	2	2	2
29	213315	Lens - Replacement . . . . .	2	2	2
44	2000708	Reflector - Amber . . . . .	4	4	4
42	104372	Screw - #10-12 x 3/8 . . . . .	8	8	8
45	2025548	Box Junction - L.H. . . . .	1	1	1
46	2025549	Box Junction - R.H. . . . .	1	1	1
3	203023	Cover - Junction Box . . . . .	2	2	2
30	105942	Screw - #8-32 x 3/8 (Self-Tapping) . . . . .	8	8	8
47	201079	Solenoid Assembly . . . . .	1	1	1
48	201122	Lever . . . . .	1	1	1
49	2021839	Assembly Connection . . . . .	1	1	1
50	201065	Rod . . . . .	1	1	1
51	201066	Clamp - Adjusting . . . . .	1	1	1
52	2021834	Solenoid . . . . .	1	1	1
53	104759	1/4-20 x 5/8 Sq. Hd. Set Screw Self Lkg. Cup Pt. . . . .	2	2	2
54	2011118	Switch - Solenoid Cut Out . . . . .	1	1	1
55	102571	Bolt 5/16-24 x 1 Hex. Hd. . . . .	2	2	2
56	103609	Nut 5/16-24 . . . . .	2	2	2
57	102758	Lockwasher 5/16 . . . . .	2	2	2
58	2011117	Terminal . . . . .	1	1	1
59	2011141	Wire Ass'y. - Solenoid Cut Out Switch . . . . .	1	1	1
60	103591	Nut 1/4-20 Jam Hex. Hd. . . . .	2	2	2
61	2012119	Relay 6 Volt . . . . .	1	1	1
62	2012122	Wire Ass'y. . . . .	1	1	1
63	2012124	Wire Ass'y. . . . .	1	1	1
64	210006	Terminal #12 Sherman . . . . .	1	1	1
65	2112129	Terminal . . . . .	2	2	2
66	2021833	Spacer - Solenoid . . . . .	1	1	1
67	2021832	Plunger - Solenoid . . . . .	1	1	1
68	104496	Lt. Jam Nut 1/4-28 . . . . .	1	1	1
69	102551	Bolt 1/4-28 x 1 . . . . .	2	2	2
70	103608	Nut 1/4-28 . . . . .	2	2	2
71	102757	Lockwasher 1/4 . . . . .	2	2	2
72	202910	Buzzer Ass'y. . . . .	1	1	1
73	213537	Ground Wire Ass'y. . . . .	1	1	1
74	213538	Terminal . . . . .			

# BODY LIFTING CYLINDER ASS'Y



ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.



## BODY LIFTING CYLINDER ASS'Y

ITEM	PART NO.	NOMENCLATURE	QUANTITY	
	2025123	Cylinder Ass'y. (7" Dia.) LP-210, 213 . . . . .	LP210&213	
	2025124	Cylinder Ass'y. (8" Dia.) LP-216 . . . . .		LP216
1	2023120	Cylinder Head. . . . .	1	
1	2023114	Cylinder Head. . . . .		1
2	2023149	Cylinder Weld Ass'y. . . . .	1	
2	2023128	Cylinder Weld Ass'y. . . . .		1
3	2023148	Base Plate Ass'y. . . . .	1	
3	2023127	Base Plate Ass'y. . . . .		1
4	2023143	Piston Rod . . . . .	1	
4	2023125	Piston Rod . . . . .		1
5	2023146	Piston . . . . .	1	
5	2023129	Piston . . . . .		1
6	2015233-2	Piston Ring. . . . .	4	
6	2015233-1	Piston Ring. . . . .		4
7	2026466	Clevis Block Ass'y. . . . .	1	
7A	2023145	Clevis Block . . . . .	1	
7B	2016930	Bushing. . . . .	1	
7	2026467	Clevis Block Ass'y. . . . .		1
7A	2023124	Clevis Block . . . . .		1
7B	2016854	Bushing. . . . .		1
8	2020348	Packing Gland. . . . .	1	
8	2012845	Packing Gland. . . . .		1
9	2012766	Packing Washer. . . . .	1	
9	2012855	Packing Washer. . . . .		1
10	105653	Packing. . . . .	1	
10	105654	Packing. . . . .		1
11	2016105	Bearing Rod . . . . .	1	
11	2012842	Bearing Rod . . . . .		1
12	105046	'O' Ring 1/8 x 6 1/2 x 6 3/4. . . . .	2	
12	106015	'O' Ring 1/8 x 7 1/2 x 7 3/4. . . . .		2
13	2016641	Plunger - By Pass . . . . .	1	1
14	2016642	Plunger - By Pass . . . . .	3	3
15	2016643	Spring - By Pass . . . . .	1	1
16	2016644	Spring - By Pass . . . . .	2	2
17	2016645	Spring - By Pass . . . . .	1	1
18	2016646	Plug - Guide . . . . .	4	4
19	100003	Plug . . . . .	1	1
20	104312	Nut - Jam 5/8-18 . . . . .	4	4
21	104455	Stud . . . . .	2	2
22	103416	Cap Screw 1-14x4. . . . .	1	1
23	102780	Lockwasher 1" . . . . .	1	1
24	103925	Nut 3/4-16. . . . .	8	8
25	102998	Lockwasher 3/4" . . . . .	8	8
26	2023122	Stay Bolt . . . . .	4	4
27	103624	Nut 1 1/2-12. . . . .	1	1
28	2012993-2	Wiper Strip. . . . .	1	
28	2012993-3	Wiper Strip. . . . .		1
29	105397	Lube Fitting . . . . .	2	2

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.

FIG. 15

FIG. 15

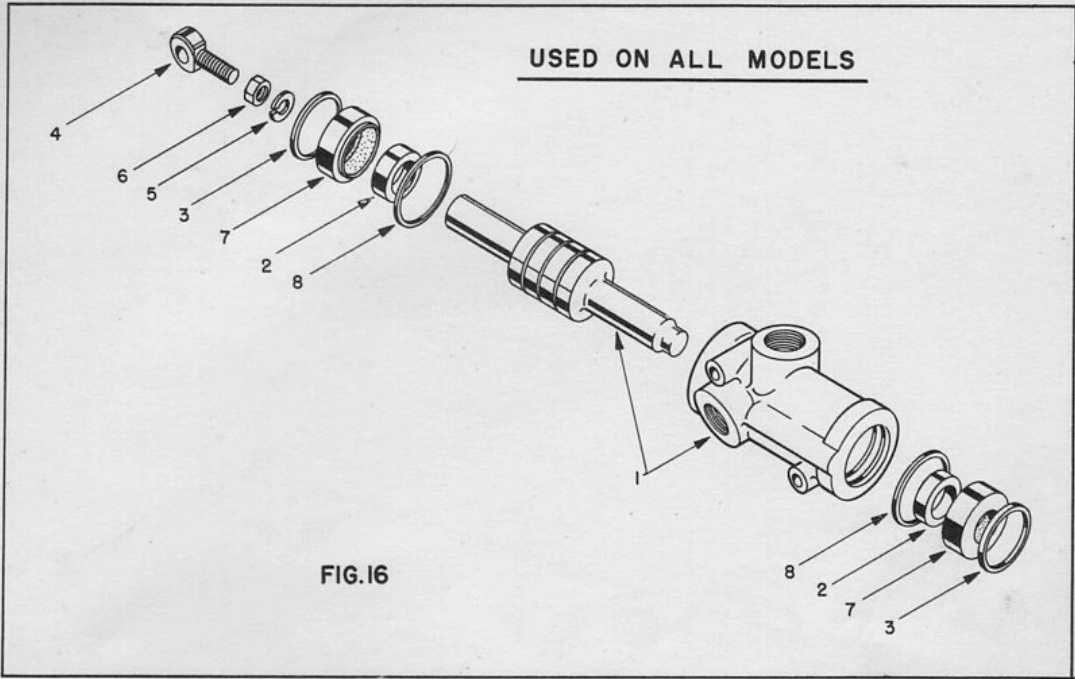
			LP210&213	LP216
ITEM	PART NO.	NOMENCLATURE	QUANTITY	
	2024463	Cylinder Unit Ass'y. 6" (LP-210, LP-213).	1	
	2024478	Cylinder Unit Ass'y. 7" (LP-216)		1
1	2024464	Cylinder Weld Ass'y. 6"	1	
1	2024479	Cylinder Weld Ass'y. 7"		1
2	2028794	Piston Rod Ass'y.	1	
2	2028748	Piston Rod Ass'y.		1
3	2012942	Packing Gland	1	1
4	2012993-2	Wiper Strip	1	1
5	2024476	Cylinder Head	1	
5	2024487	Cylinder Head		1
6	2012766	Packing Washer	1	1
7	2013009	Bearing - Cyl. Head	1	1
8	2015214	Stud	2	2
9	105653	"V" Packing	1	1
10	103617	Hex Nut 1 - 14	1	
10	103619	Hex Nut 1 1/4 - 12		1
11	103802	Jam Nut 1/2 - 20	4	4
12	102589	Cap Screw 3/8 - 24 x 1 1/2.	10	
13	102759	Lockwasher 3/8	11	
13	102761	Lockwasher 1/2		12
14	2027607	Piston	1	
14	2028781	Piston		1
15	21-3253	Piston Ring	6	
15	21-3255	Piston Ring		6
16	106147	Cap Screw 3/8 - 24 x 1 5/8	1	
16	106148	Cap Screw 1/2 - 20 x 1 5/8.		1
17	103297	Cap Screw 1/2 - 20 x 2 3/4.		2
12	103292	Cap Screw 1/2 - 20 x 1 1/2.		9
18	2028314	Clip Spring	1	
18	2028315	Clip Spring		1

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.



TAIL GATE RET. PANEL VALVE ASS'Y

USED ON ALL MODELS



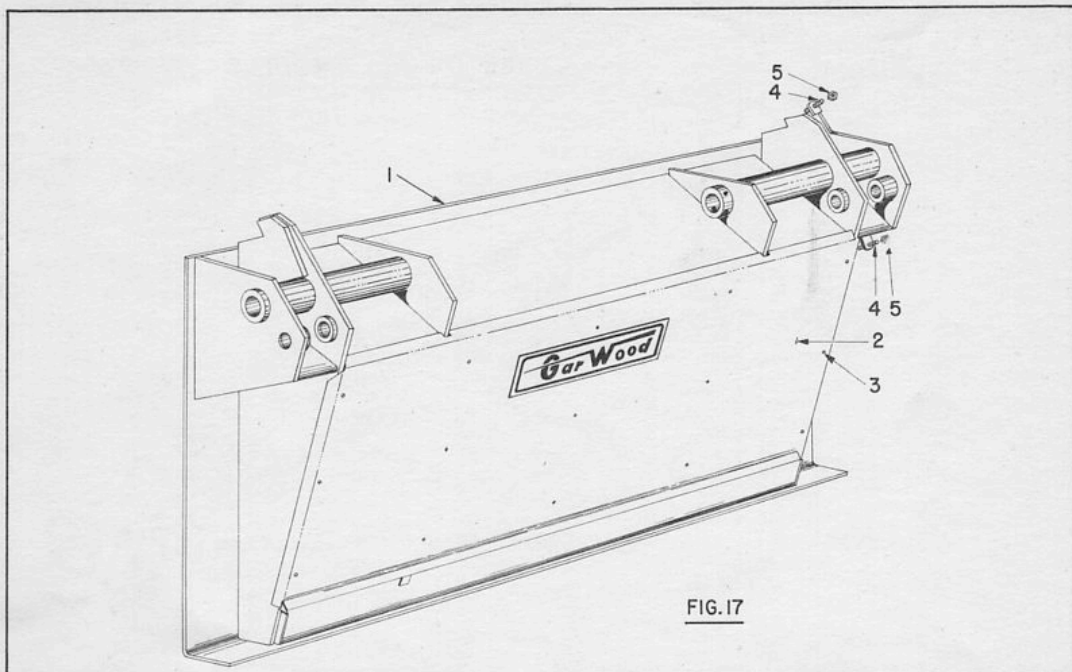
ITEM	PART NO.	NOMENCLATURE	QUANTITY
1	2024403	Valve Ass'y. - Tailgate Retainer Panel Control. . . . .	1
2	20R3211	Valve & Spool Assembly. . . . .	1
3	<del>305307</del>	Oil Seal - Retainer Panel Control Valve. . . . .	2
4	105775	Snap Ring . . . . .	2
5	7Y1229	Shift Rod Eye . . . . .	1
6	104299	Lockwasher 3/8. . . . .	1
7	104509	Nut 3/8 - 24 . . . . .	1
8	2027713	Retainer - Oil Seal. . . . .	2
	105229	'O' Ring 2" I.D. x 2 1/4 O.D. . . . .	2

300/408

(Note: Item #1 Valve & Spool Ass'y. Furnished only as Matched Set.)

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.

## RAM ASS'Y

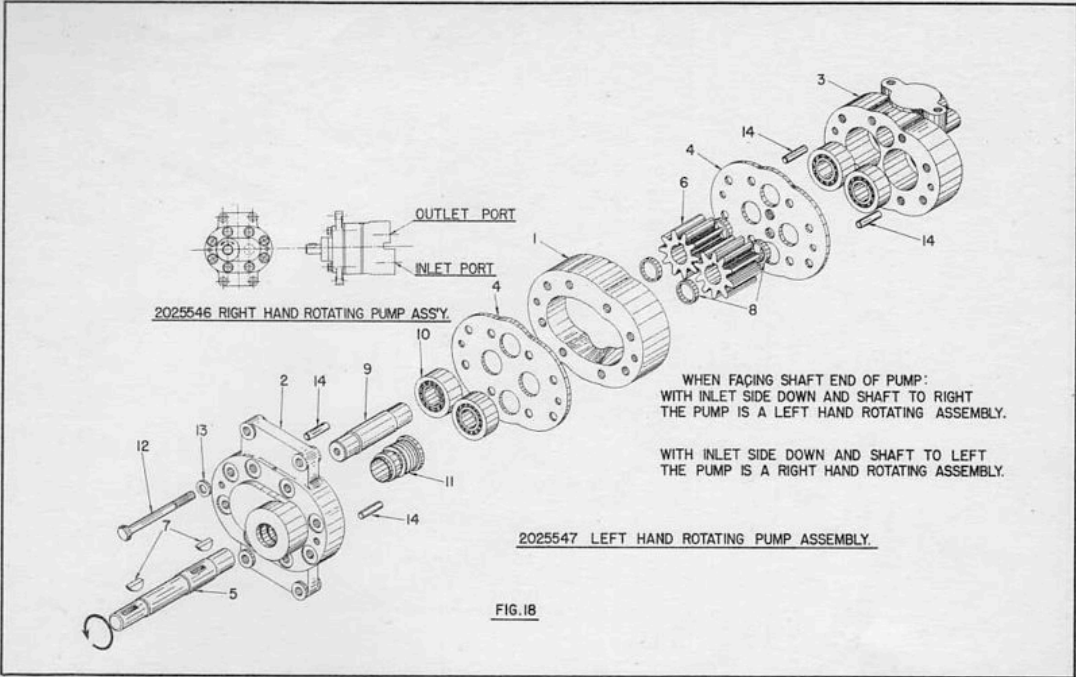


ITEM	PART NO.	NOMENCLATURE	QUANTITY	
			LP210&213	LP216
	2025189	Tailgate Ass'y. . . . .		
	2025338	Tailgate Ass'y. . . . .		
	2025138	Ram Assembly (LP210 & LP213). . . . .	1	
	2025328	Ram Assembly (LP216). . . . .		1
1	2025139	Ram Weld Ass'y. . . . .	1	
1	2025329	Ram Weld Ass'y. . . . .		1
2	2025091	Plate - Ram Cover . . . . .	1	
2	2025330	Cover - Ram. . . . .		1
3	104493	Screw - Self-Tapping #10 x 3/8 . . . . .	15	21
4	105914	Set Screw - Sock. Hd. 1/2 - 13 x 2 1/4 . . . . .	2	2
5	102720	Nut 1/2 - 20. . . . .	2	2

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.



42.5 G. P. M. PUMP

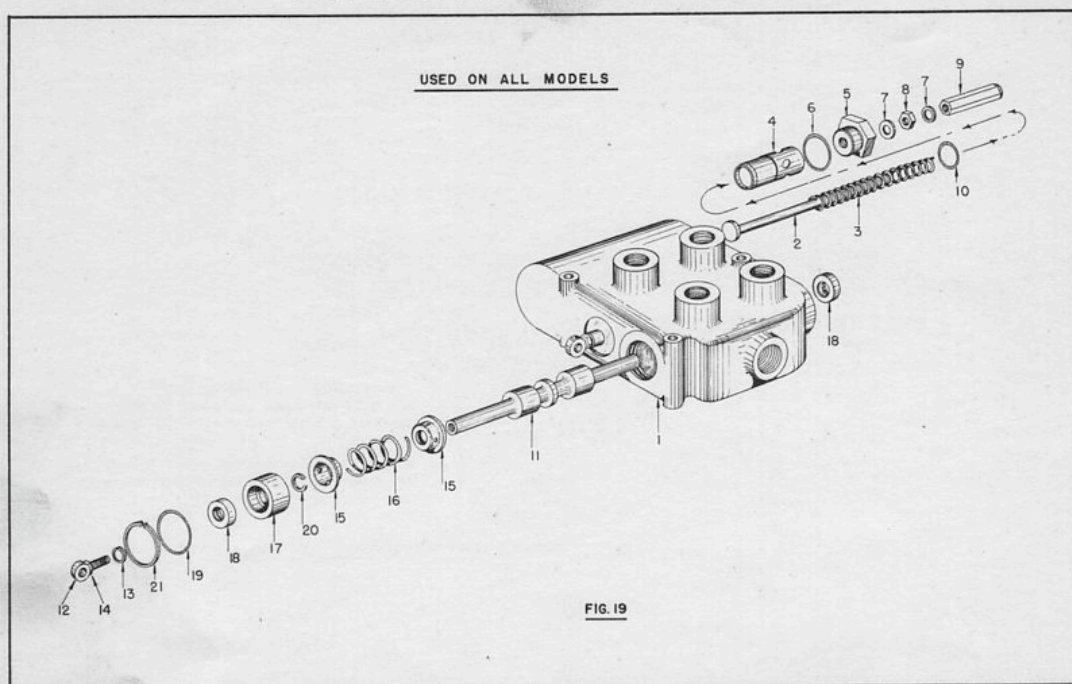


ITEM	PART NO.	NOMENCLATURE	QUANTITY
	2025546	Pump Ass'y. - Right Hand . . . . .	1
	2025547	Pump Ass'y. - Left Hand (Shown). . . . .	1
1	2012831	Pump Body . . . . .	1
2	2016258	Front Cover. . . . .	1
3	2025545	Rear Cover. . . . .	1
4	2012835	Wear Plate . . . . .	2
	2019752	Drive Shaft Ass'y. . . . .	1
5	2016141	Drive Shaft . . . . .	1
6	2012834	10 Tooth Involute Gear . . . . .	1
7	104305	Woodruff Key 5/16 x 1 1/8. . . . .	1
8	2016511	Spacer . . . . .	2
	2019754	Idler Shaft Ass'y. . . . .	1
9	2016332	Idler Shaft . . . . .	1
6	2012834	10 Tooth Involute Gear . . . . .	1
8	2016511	Spacer . . . . .	2
10	2016263	Bearing. . . . .	4
11	<del>2016024</del>	Oil Seal. . . . .	1
12	103321	Cap Screw 5/8 - 11 x 5 . . . . .	8
13	102973	Washer 5/8 . . . . .	8
14	105033	Dowel Pin .5003/.5001 x 1 1/2. . . . .	4
7	104305	Woodruff Key 5/16 x 1 1/8. . . . .	1

2016264

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.

## BODY CONTROL VALVE ASS'Y



ITEM	PART NO.	NOMENCLATURE	QUANTITY
1	2016850	Valve Control Ass'y. . . . .	1
2	2016835	Guide - Relief Valve Spring. . . . .	1
3	2016836	Spring - Relief Valve. . . . .	1
4	2016844	Spool - Relief Valve. . . . .	1
5	2016316	Retainer Relief Valve . . . . .	1
6	105228	"O" Ring 1 5/8 I.D. x 1 7/8 O.D. . . . .	1
7	2016839	Washer Guide. . . . .	2
8	103802	Nut - Hex. Jam 1/2 - 20 . . . . .	1
9	2023193	Cap - Relief Valve 1/2 - 20 . . . . .	1
10	105379	"O" Ring 1 5/16 I.D. x 1 9/16 O.D. . . . .	1
11	2016840	Spool - Control Valve . . . . .	2
12	7Y1229	Shift Rod Eye . . . . .	2
13	102759	Washer - 3/8 Lock . . . . .	2
14	104509	Nut - Hex. Jam 3/8 - 24 . . . . .	2
15	2016841	Guide - Control Spring. . . . .	4
16	2016842	Spring Control - Valve. . . . .	2
17	2016843	Retainer - Oil Seal . . . . .	2
18	<del>2016843</del>	Oil Seal . . . . .	4
19	105229	"O" Ring - 2" I.D. x 2 1/4 O.D. . . . .	2
20	105774	Snap Ring - External 3/4 . . . . .	2
21	105775	Snap Ring - Internal 2" . . . . .	2

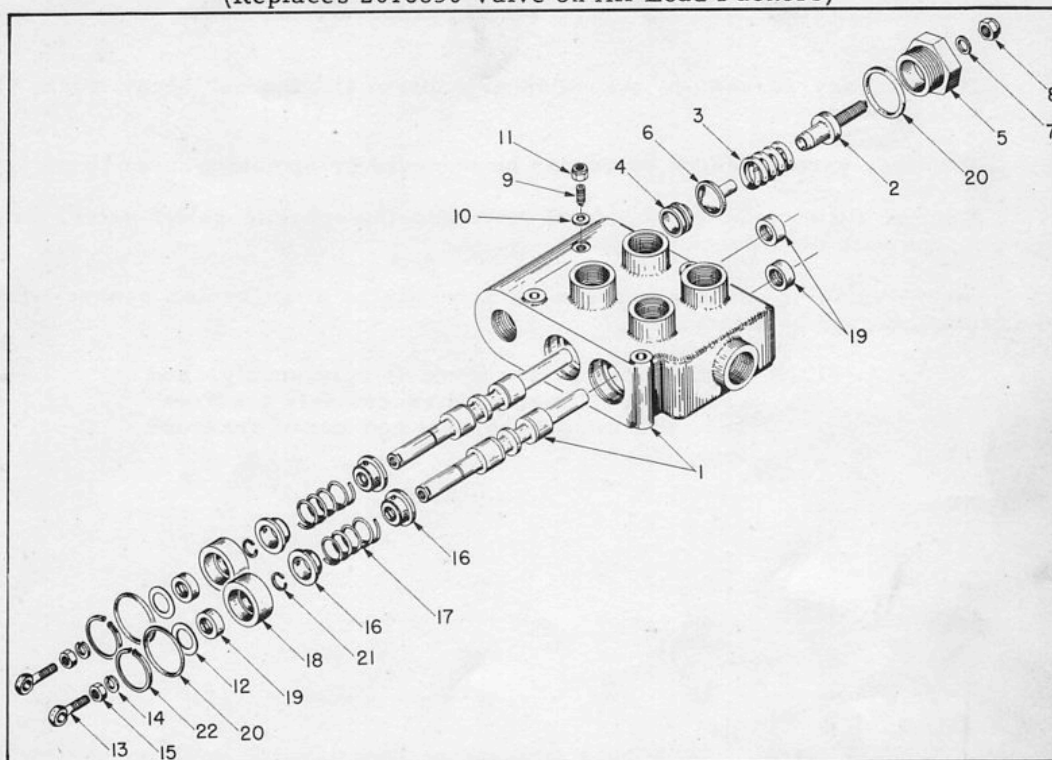
2030897

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.



# **UNDER BODY VALVE** **2035953**

(Replaces 2016850 Valve on All Load Packers)



Item	Part No.	Description	Qty.
	2035953	Control Valve Ass'y (Body Lifting) . . . . .	1
1	20R3861	Valve Body & Spool Ass'y (Sold as Ass'y Only) . . . . .	1
2	2036646	Guide - Relief Valve Spring. . . . .	1
3	2035887	Spring - Relief Valve . . . . .	1
4	2035892	Seat - Relief Valve . . . . .	1
5	2035899	Cover - Relief Valve . . . . .	1
6	2035893	Poppet . . . . .	1
7	2029551	Washer - Guide . . . . .	1
8	106526	Nut 1/2 - 20 Self Lock . . . . .	1
9	103526	Set Screw 5/16 - 18 x 1 1/2 Hex. Soc. 72 Dog. . . . .	1
10	102969	Washer 5/16 . . . . .	1
11	106562	Nut 5/16 - 18 Self Lock. Light . . . . .	1
12	2029487	Washer - Oil Seal Retaining . . . . .	2
13	2032525	Eye - Shift Rod . . . . .	2
14	102759	Lockwasher 3/8 . . . . .	2
15	104509	Nut - Hex. Jam 3/8 - 24 . . . . .	2
16	2016841	Guide - Control Spring . . . . .	4
17	2016842	Spring - Control Valve . . . . .	2
18	2016843	Retainer - Oil Seal . . . . .	2
19	2030897	Oil Seal . . . . .	4
20	105229	"O" Ring 2" I.D. x 2 1/4" O.D. . . . .	3
21	105774	Snap Ring - External 3/4" . . . . .	2
22	105775	Snap Ring - Internal 2" . . . . .	2

(See Reverse Side)

**GAR WOOD INDUSTRIES, INC.**

WAYNE,

MICHIGAN

SE-153

## REPLACING VALVE SEAT

If necessary to remove the valve seat (item 4), the set screw (item 9) must be removed.

All other parts of check valve may be removed by removing cover (item 5).

Remove fitting from front side of valve housing opposite relief valve, then tap seat out with drift punch.

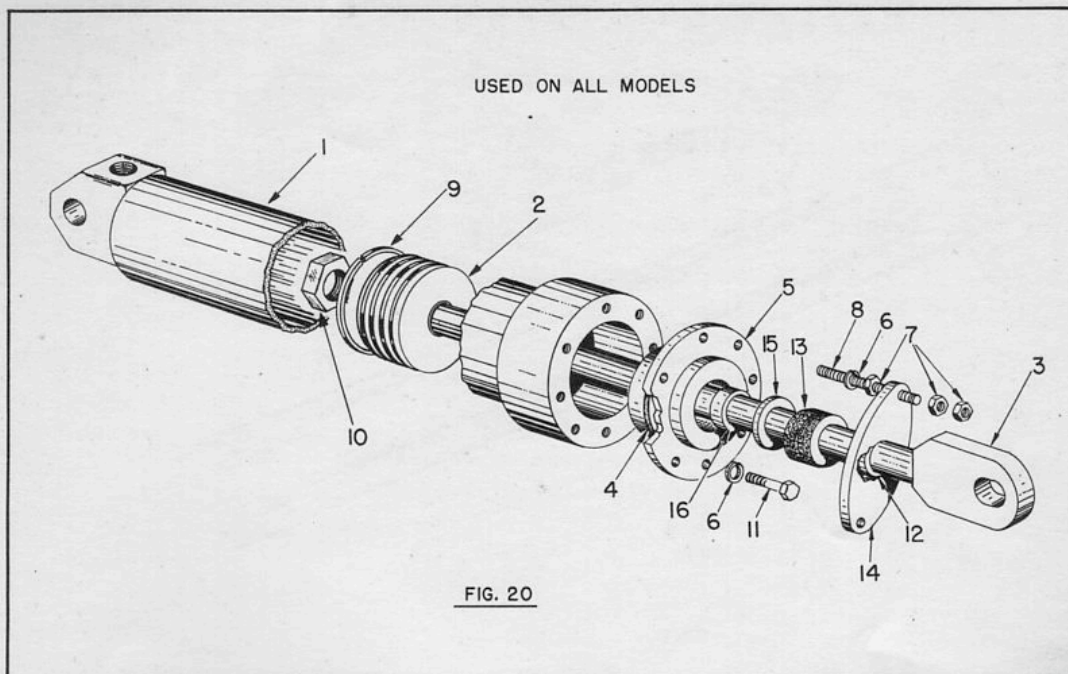
When replacing new seat, press in carefully to align center groove with drilled and tapped hole in housing.

**CAUTION:** Tighten set screw (item 9) only snugly, and carefully. If tightened excessively the pressure will distort the seat and cause pressure loss.



## RET. PANEL CYLINDER ASS'Y

USED ON ALL MODELS



ITEM	PART NO.	NOMENCLATURE	QUANTITY
	2022902	Retainer Panel - Cylinder Ass'y.. . . . .	1
1	2022904	Cylinder Base Weld Ass'y.. . . . .	1
2	2027660	Piston . . . . .	1
3	2022905	Piston Rod Eye (Weldment). . . . .	1
4	105542	'O' Ring . . . . .	1
5	2016525	Head - Retainer Panel Cylinder. . . . .	1
6	102759	Lockwasher - 3/8 Med. . . . .	8
7	104509	Light Jam Nut - 3/8 - 24. . . . .	6
8	2016531	Stud - Retainer Panel Cyl. . . . .	2
9	2027661	Piston Ring. . . . .	4
10	103615	Nut - 3/4 - 16. . . . .	1
11	102587	Cap Screw - 3/8 - 24 x 1. . . . .	6
12	2012993-5	Wiper Strip. . . . .	1
13	105651	"V" Packing . . . . .	1
14	2016524	Gland . . . . .	1
15	2012808	Washer. . . . .	1
16	2022992	Bushing . . . . .	1

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.

## TAILGATE JACK CYLINDER ASS'Y

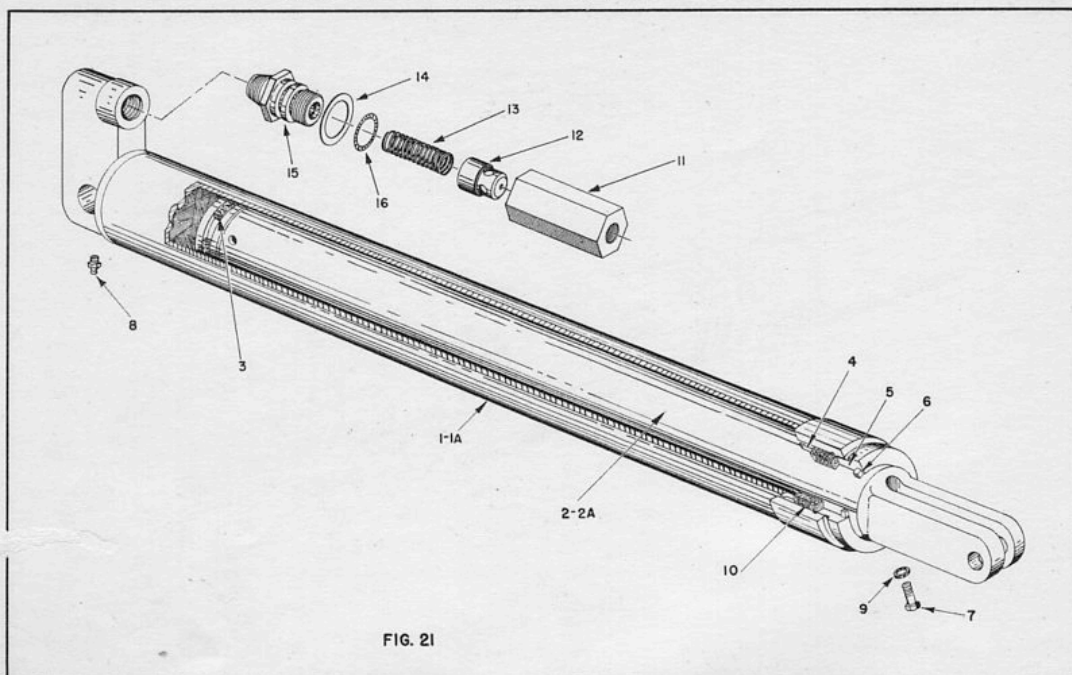


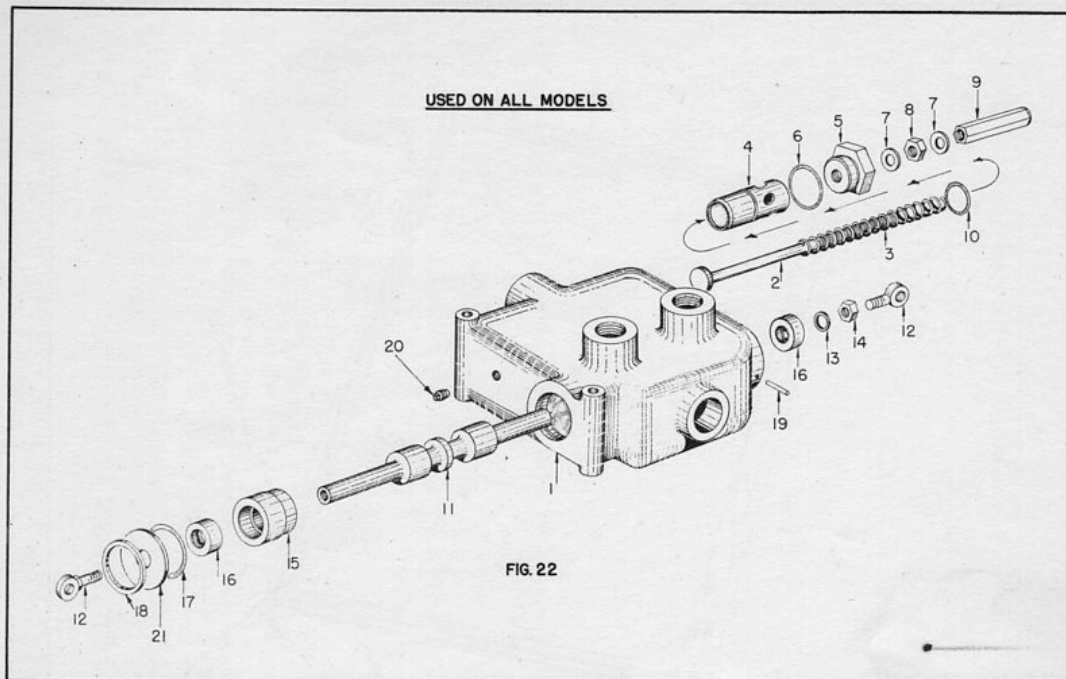
FIG. 21

ITEM	PART NO.	NOMENCLATURE	QUANTITY
	2022927	Tailgate Jack - Cylinder Assem. . . . .	(Old Style)
	2028848	Tailgate Jack - Cylinder Assem. . . . .	(New Style)
1	2022928	Cylinder Weld Assem. (Old) . . . . .	1
1A	2028849	Cylinder Weld Assem. (New) . . . . .	1
2	2022929	Piston Weld Assem. (Old) . . . . .	1
2A	2028850	Piston Weld Assem. (New) . . . . .	1
3	2022936	Ring - Piston . . . . .	2
4	2024327	Stop Ring . . . . .	1
5	2024325	Packing Nut . . . . .	1
6	2012993-6	Wiper . . . . .	1
7	34-1652	Bleeder . . . . .	1
8	105397	Alemite . . . . .	1
9	104495	Washer - Flat . . . . .	1
10	105857	"V" Packing . . . . .	1
	2022878	Valve Assem. - Tailgate Cylinder Snubber. . . . .	
11	2022879	Body - Snubber Valve . . . . .	1
12	2022880	Plunger - Snubber Valve . . . . .	1
13	2022883	Spring - Snubber Valve . . . . .	1
14	2022882	Washer - Snubber Valve Locking . . . . .	1
15	2022881	Retainer - Snubber Valve . . . . .	1
16	105304	"O" Ring 1/8 x 1 5/8 O.D. x 1 3/8 I.D. . . . .	1
	NOTE:	Effective up to & including cylinders, serial #360937, for Cylinder Ass'y. #2022927 (Old Style) 41 7/8 Retracted Length, Center to center between attaching pins, order item #1 (2022928 Cyl. Weld Assem.) & Item #2 (2022929 Piston Weld Assem.).	
		Effective on cylinders, serial #360938 & up, for Cylinder Assem. #2028848 (New Style) 44 1/4 Retracted Length, center to center between attaching pins. Order Item #1A (2028849 Cylinder Weld Assem.) & Item #2A (2028850 Piston Weld Assem.).	
		All Parts Except Cylinder Weld & Piston Weld are same in both cylinder assemblies.	

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.



## RAM CONTROL VALVE ASS'Y



ITEM	PART NO.	NOMENCLATURE	QUANTITY
	2023085	Ass'y. Control Valve (Relief & Double Acting)	
1	2016834	Body Control Valve . . . . .	1
2	2016835	Guide - Relief Valve Spring . . . . .	1
3	2016836	Spring - Relief Valve . . . . .	1
4	2016844	Spool - Relief Valve. . . . .	1
5	2016316	Retainer - Relief Valve . . . . .	1
6	105228	"O" Ring 1 5/8 I.D. x 1 7/8 O.D. (.1) . . . . .	1
7	2016839	Washer - Guide. . . . .	2
8	103802	Nut - Hex. Jam 1/2 - 20 Light . . . . .	1
9	2023193	Cap Relief Valve 1/2 - 20. . . . .	1
10	105379	"O" Ring 1 5/16 I.D. x 1 9/16 O.D.. . . . .	1
11	2023086	Spool - Control Valve . . . . .	1
12	7Y1229	Shift Rod Eye. . . . .	2
13	102759	Washer - 3/8 Lock - Medium . . . . .	2
14	104509	Nut - Hex. Jam 3/8 - 24 Light . . . . .	2
15	2023087	Retainer - Oil Seal . . . . .	1
16	<del>201309</del> 203089	Oil Seal . . . . .	2
17	105229	"O" Ring 2" I.D. x 2 1/4 O.D. . . . .	1
18	105775	Snap Ring - Internal 2" . . . . .	1
19	105020	Pin - Groove 3/16 Dia. x 1" . . . . .	1
20	100002	Pipe Plug 1/4 . . . . .	1
21	2029487	Washer - Oil Seal Retaining . . . . .	1

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.

# BODY ASS'Y

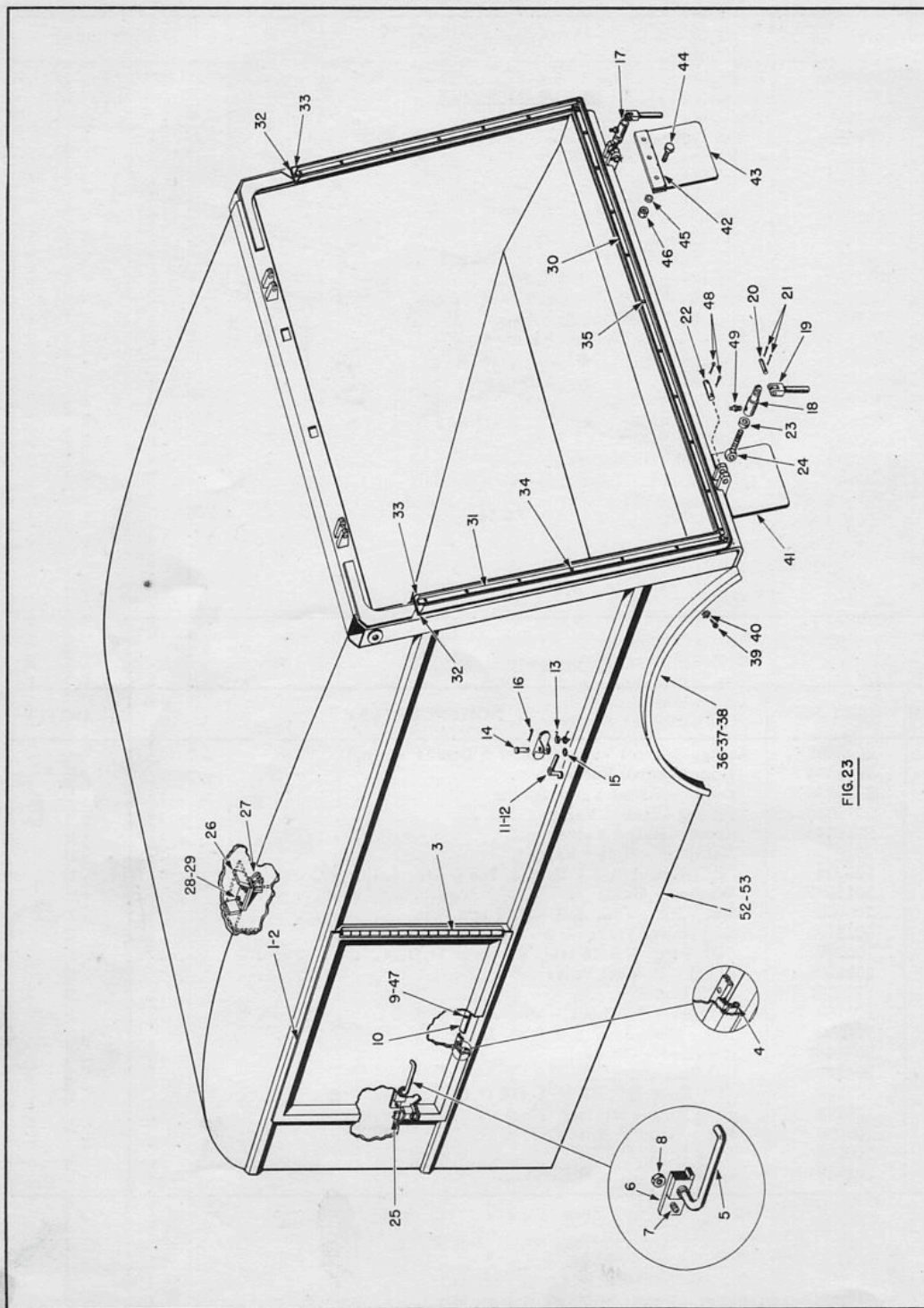


FIG. 23

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.



## BODY ASS'Y

ITEM	PART NO.	NOMENCLATURE	QUANTITY		
	2024609	Body Ass'y. Model LP-210 . . . . .	LP210		
	2024610	Body Ass'y. Model LP-213 . . . . .		LP213	
	2024611	Body Ass'y. Model LP-216 . . . . .			LP216
1	2029256	Side Door Ass'y. L.H. (Shown) . . . . .	1	1	1
2	2029257	Side Door Ass'y. R.H. (Not Shown) . . . . .	1	1	1
3	2013026	Hinge . . . . .	2	2	2
4	2029252	Rubber Seal . . . . .	2	2	2
5	2022937	Handle Weld Ass'y. . . . .	2	2	2
6	2019512	Bar Lock . . . . .	2	2	2
7	105242	Set Screw 1/2 - 13 N.C. 1 1/4" . . . . .	2	2	2
8	102720	Hex Nut 1/2 - 13 N.C. . . . .	2	2	2
9	103018	Set Screw #10 - 24 x 1/2 . . . . .	20	20	20
10	2013080	Bumper - Side Loading Door. . . . .	2	2	2
11	2024614	Latch Ass'y. - Side Loading Door . . . . .	2	2	2
12	2024617	Latch Hook . . . . .	2	2	2
13	BP-302-C.N.	Spring. . . . .	2	2	2
14	BP-302-D.N.	Flat Head Pin . . . . .	2	2	2
15	102969	Washer Flat 5/16 . . . . .	2	2	2
16	103025	Cotter Pin 3/32 x 1/2 . . . . .	2	2	2
17	2028153	Nut & Handle Ass'y. . . . .	2	2	2
18	2028142	Nut Ass'y. - Tailgate Latch Weld . . . . .	2	2	2
19	2028145	Handle Weld Ass'y. - Tailgate Latch . . . . .	2	2	2
20	105054	Drill Pin 1/2 x 2 . . . . .	2	2	2
21	103033	Cotter Pin 1/8 x 7/8 . . . . .	4	4	4
22	2019663	Pin - Tailgate Latch . . . . .	2	2	2
23	2019664	Washer - Tailgate Latch . . . . .	2	2	2
24	2019667	Eye Bolt - Tailgate Latch . . . . .	2	2	2
25	2019883	Pad - Side Door Locking . . . . .	2	2	2
26	2025739	Jack Bracket Ass'y. - (Weld) . . . . .	2	2	2
27	2025740	Cylinder Bracket Weld Ass'y. . . . .	2	2	2
28	103327	Cap Screw 5/8 - 18 x 1 3/4 . . . . .	8	8	8
29	102763	Lockwasher - 5/8 . . . . .	8	8	8
30	2024735	Strip - Rubber Retainer. . . . .	1	1	1
31	2024736	Strip - Rubber Retainer. . . . .	2	2	2
32	2024737	Rubber Seal Filler (Wood). . . . .	2	2	2
33	2024738	Rubber Seal . . . . .	1	1	1
34	106045	Screw - Self Tapping #10 x 1 1/2 . . . . .	14	14	14
35	106094	Screw - Self Tapping #10 - 24 x 1 . . . . .	12	12	12
36	2024742	Fender Ass'y. L.H. (Model LP210 & LP213) (Shown). . . . .	1	1	
37	2024750	Fender L.H. (Model LP210 & LP213) . . . . .	1	1	
38	2024748	Angle - Fender L.H. (Model LP210 & LP213) . . . . .	1	1	
	2024743	Fender Ass'y. R.H. (Model LP210 & LP213) (Not Shown). . . . .	1	1	
	2024751	Fender R.H. (Model LP210 & LP213) (Not Shown). . . . .	1	1	
	2024749	Angle - Fender (Model LP210 & LP213) (Not Shown). . . . .	1	1	
	2024753	Fender Ass'y. (Model LP216) (Not Shown). . . . .			2
	2024741	Fender (Model LP216). . . . .			2
	2024744	Angle - Fender (Model LP216) . . . . .			2
39	102960	Screw - Self Tapping #10 - 24 x 3/8 . . . . .	9	9	11
40	103003	Washer - External Tooth #10 . . . . .	9	9	11
41	2028007	Shield Ass'y. - Splash . . . . .	2	2	2
42	2028009	Channel - Rubber Retainer. . . . .	2	2	2
43	2028008	Shield - Rubber Splash . . . . .	2	2	2
44	102587	Cap Screw 3/8 - 24 x 1 . . . . .	6	6	6
45	102759	Lockwasher 3/8 . . . . .	6	6	6
46	103610	Nut 3/8 - 24 . . . . .	6	6	6
47	102967	Washer #10 . . . . .	20	20	20
48	103028	Cotter Pin 3/32 x 1 . . . . .	4	4	4
49	105397	Fitting - Lubrication 1/8 P.T. . . . .	2	2	2
50	103136	Serial Plate (on Right side) (Not Shown) . . . . .	1	1	1
51	103147	Drive Screws #6 x 1/4 . . . . .	4	4	4
52	2024720	Panel - Lower Side (L.H. Shown). . . . .	1		
53	2024721	Panel - Lower Side (R.H.) . . . . .	1		
52	2024639	Panel - Lower Side (L.H.) . . . . .		1	
53	2024640	Panel - Lower Side (R.H.) . . . . .		1	
52	2024684	Panel - Lower Side (L.H.) . . . . .			1
53	2024685	Panel - Lower Side (R.H.) . . . . .			1

# BODY AND TAILGATE HYDRAULICS

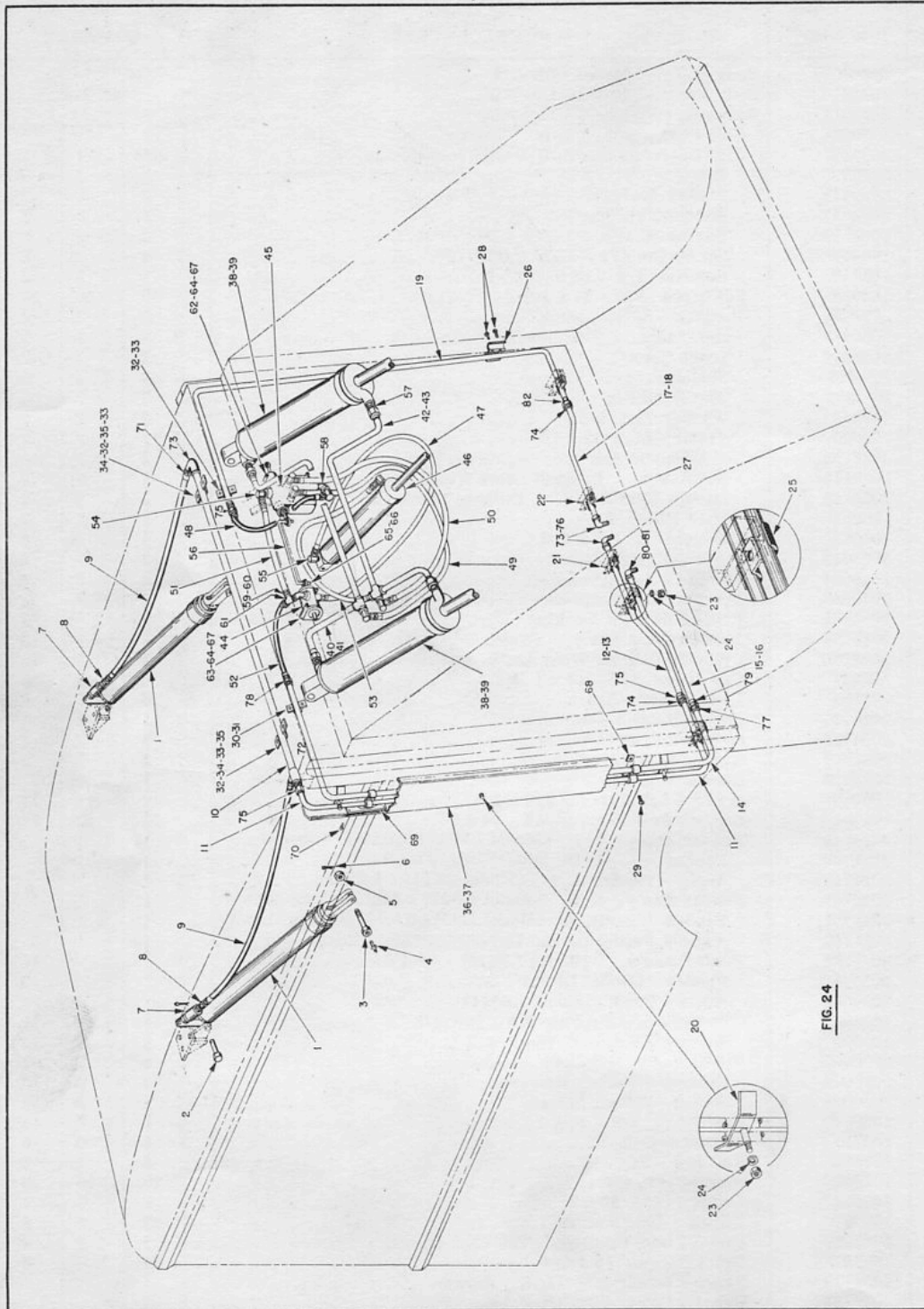


FIG. 24

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.



# BODY AND TAILGATE HYDRAULICS

ITEM	PART NO.	NOMENCLATURE	QUANTITY		
			LP210	LP213	LP216
	2024767	Body Hydraulics for Models LP210, LP213 & LP216 . . .			
1	2028848	Cylinder Assem. (Tailgate) . . . . .	2	2	2
2	2016354	Pin - Tailgate Cylinder (Front) . . . . .	2	2	2
3	2016355	Pin - Tailgate Cylinder (Rear) . . . . .	2	2	2
4	105397	Lubrication Fitting 1/4 N.P.T. . . . .	2	2	2
5	104325	Nut - Slotted 1 - 14 . . . . .	2	2	2
6	103054	Cotter Pin 7/32 x 2 . . . . .	4	4	4
7	2022878	Valve Ass'y. - Tailgate Cyl. (See Fig. 21) . . . . .	2	2	2
8	106163	Adaptor Union - St. 3/4. . . . .	2	2	2
9	2025052-1	Hose Ass'y. . . . .	2	2	2
10	2025025	Tube Ass'y. Tailgate Top . . . . .	1	1	1
71	105391	Adapter . . . . .	1	1	1
72	2025035	Tee 3/4. . . . .	1	1	1
73	203043	Elbow 3/4 x 90° . . . . .	1	1	1
11	2025041	Tube Ass'y. - Tailgate Side. . . . .	1	1	1
75	105217	Nut & Sleeve . . . . .	1	1	1
74	2025023	Fitting - Tube . . . . .	1	1	1
12	2027291	Tube Ass'y. - Tailgate Lower. . . . .	1	1	
75	105217	Nut & Sleeve . . . . .	1	1	
76	2027284	Fitting - Tube . . . . .	1	1	
13	2025036	Tube Ass'y. - Tailgate Lower. . . . .			1
75	105217	Nut & Sleeve . . . . .			1
73	203043	Fitting - Tube . . . . .			1
14	2025045	Tube Ass'y. - Side (Return) . . . . .	1	1	1
77	2025024	Fitting - Tube . . . . .	1	1	1
78	2025369	Fitting - Tube . . . . .	1	1	1
15	2027295	Tube Ass'y. - Lower (Return) . . . . .	1	1	
79	105218	Nut & Sleeve . . . . .	1	1	
80	2027283	Fitting . . . . .	1	1	
16	2025043	Tube Ass'y. - Lower (Return) . . . . .			1
79	105218	Nut & Sleeve . . . . .			1
81	2027178	Fitting - Tube . . . . .			1
17	2027293	Tube Ass'y. - Ram Lower. . . . .	1	1	
76	2027284	Fitting - Tube . . . . .	1	1	
74	2025023	Fitting - Tube . . . . .	1	1	
18	2025039	Tube Ass'y. - Ram Lower. . . . .			1
73	203043	Fitting - Tube . . . . .			1
74	2025023	Fitting - Tube . . . . .			1
19	2025047	Tube Ass'y. - Ram Side . . . . .	1	1	1
82	2025368	Fitting - Tube . . . . .	1	1	1
75	105217	Nut & Sleeve . . . . .	1	1	1
20	2025032	Bracket Ass'y. - Tube Cover . . . . .	6	6	6
21	2029270	Bracket Ass'y. - Tube . . . . .	2	2	2
22	2029271	Bracket Ass'y. - Tube . . . . .	3	3	3
23	102717	Nut - Hex 5/16 - 18 . . . . .	11	11	11
24	102758	Lockwasher 5/16. . . . .	15	15	15
25	2025031	Clamp - Tube . . . . .	4	4	4
26	2025027	Clamp - Tube . . . . .	2	2	2

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.

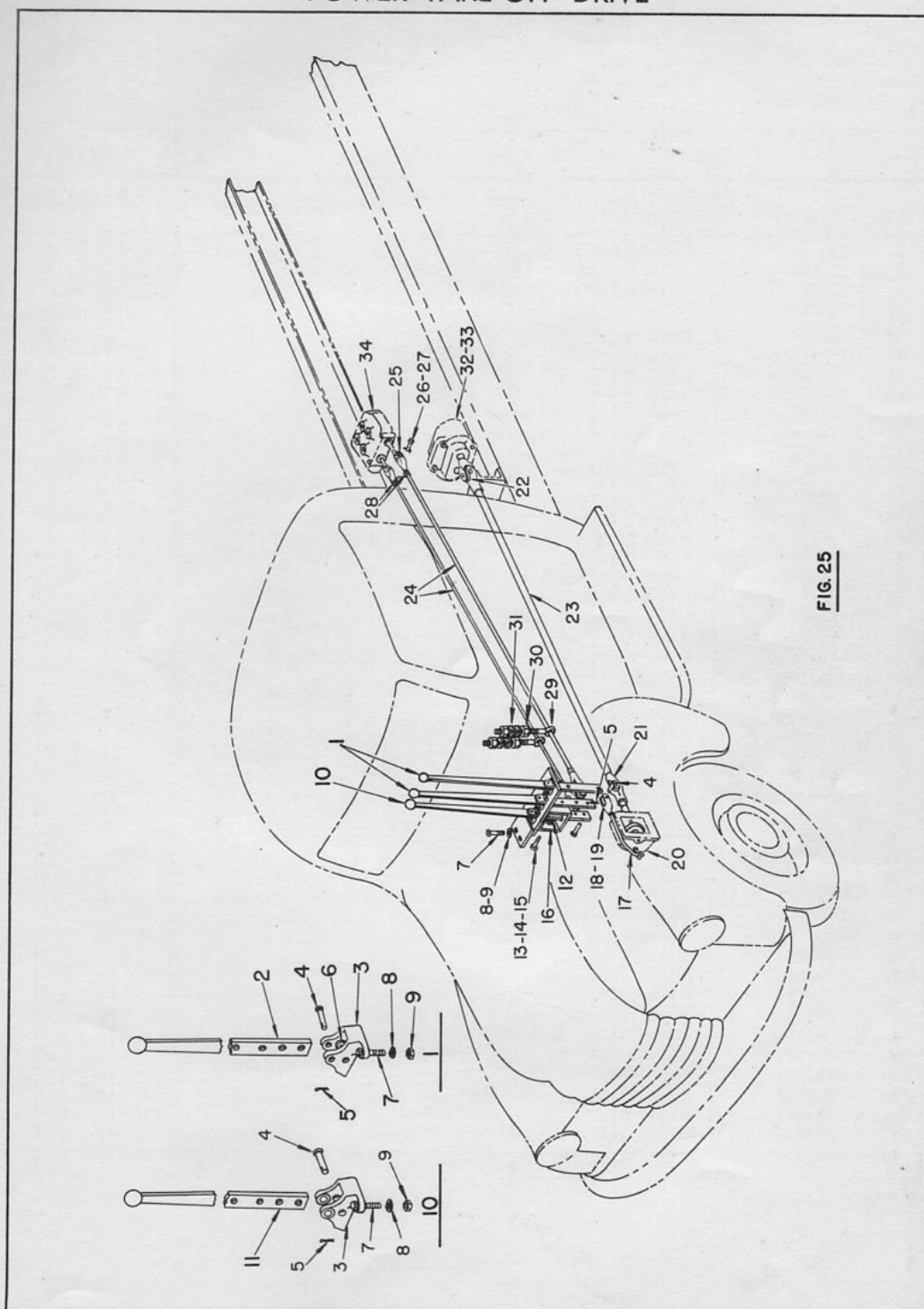
# BODY AND TAILGATE HYDRAULICS

ITEM	PART NO.	NOMENCLATURE	QUANTITY		
			LP210	LP213	LP216
27	2029274	Clamp - Tube . . . . .	3	3	3
28	103096	Machine Screw 5/16 - 18 x 3/4 . . . . .	2	2	2
29	104361	Machine Screw 5/16 - 18 x 1 . . . . .	2	2	2
30	2025075	Clamp - Tube . . . . .	1	1	1
31	2025073	Pad - Tube . . . . .	1	1	1
32	2025021	Clamp - Tube . . . . .	2	3	1
33	2025074	Pad - Tube . . . . .	3	3	1
34	2025022	Clamp - Tube . . . . .			2
35	2025049	Pad - Tube . . . . .			2
36	2026750	Cover Ass'y. - Tube L.H. (Shown) . . . . .	1	1	
	2026751	Cover Ass'y. - Tube R.H. (Not Shown). . . . .	1	1	
37	2025324	Cover Ass'y. - Tube L.H. (Shown) . . . . .			1
	2025325	Cover Ass'y. - Tube R.H. (Not Shown). . . . .			1
	2025194	Tailgate Hydraulics LP210 & LP213. . . . .			
	2025323	Tailgate Hydraulics LP216. . . . .			
38	2024463	Ram Cylinder Ass'y. LP210 & 213 (See Fig. 15, Page 20)	2	2	
39	2024478	Ram Cylinder Ass'y. LP216 (See Fig. 15, Page 20) . . .			2
40	2025378	Upper Manifold Ass'y. LP210 & LP 213 . . . . .	1	1	
41	2025380	Upper Manifold Ass'y. LP216. . . . .			1
42	2025377	Lower Manifold Ass'y. LP210 & LP213 . . . . .	1	1	
43	2025379	Lower Manifold Ass'y. LP216. . . . .			1
44	2024403	Valve Ass'y. . . . .	1	1	1
45	2023085	Valve Ass'y. . . . .	1	1	1
46	2022902	Cylinder Ass'y. - Retainer Panel . . . . .	1	1	1
47	2025052-2	Hose Ass'y. . . . .	1	1	1
48	2029752-1	Hose Ass'y. . . . .	1	1	1
49	2025367-1	Hose Ass'y. . . . .	1	1	1
50	2025367-2	Hose Ass'y. . . . .	1	1	1
51	2026093-1	Hose Ass'y. . . . .	1	1	1
52	2029751-1	Hose Ass'y. . . . .	1	1	1
53	2026095-1	Hose Ass'y. . . . .	1	1	1
54	106170	Adapter Union - 90° x 1 . . . . .	6	6	6
55	106169	Adapter Union - 90° (3/4) . . . . .	2	2	2
56	2023109	Rod Connecting . . . . .	1	1	1
57	105386	Adapter (Flared Tube to Pipe 1 1/4 x 1) . . . . .	4	4	4
58	100113	Elbow - Street - x 90° 3000# . . . . .	1	1	1
59	100122	Elbow - 3/4 x 90° 3000#. . . . .	1	1	1
60	100346	Nipple - 3/4 x 1 3/8 "X" Heavy. . . . .	1	1	1
61	105925	Tee 1 x 3/4 x 1 300# Malleable . . . . .	1	1	1
62	103236	Capscrew 3/8 - 24 x 4 . . . . .	3	3	3
63	103233	Capscrew 3/8 - 24 x 3 1/4. . . . .	2	2	2
64	103610	Nut 3/8 - 24 (Light). . . . .	5	5	5
65	102972	Washer 1/2 (Light). . . . .	2	2	2
66	103033	Cotter Pin 1/8 Dia. x 7/8 Lg. . . . .	2	2	2
67	102759	Lockwasher 3/8 Medium. . . . .	5	5	5
68	2025030	Pad - Tube . . . . .	6	6	6
69	2028148	Filler - Cover. . . . .	4	4	4
70	102960	Screw - Self Tapping #10 - 24 x 3/8. . . . .	8	8	8

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.



## POWER TAKE-OFF DRIVE



ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.

33

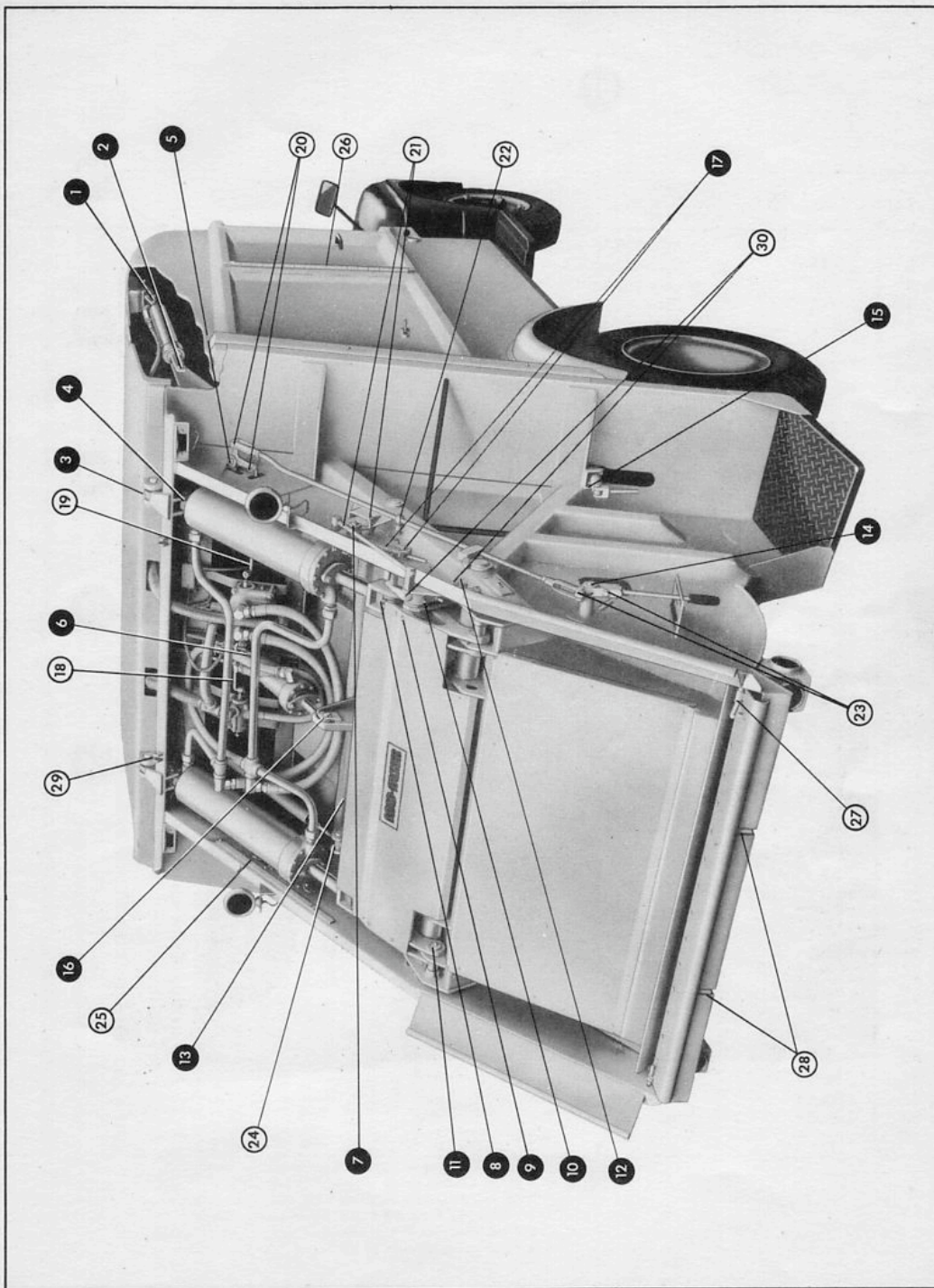
## POWER TAKE-OFF DRIVE

ITEM	PART NO.	NOMENCLATURE	QUANTITY
1	A21-3290	Control Ass'y. . . . .	2
2	21-3305	Cab Control Lever. . . . .	2
3	T-581	Control Lever Bracket. . . . .	2
4	103935	Clevis Pin . . . . .	2
5	103027	Cotter Pin 3/32 x 3/4 Lg. . . . .	2
6	102971	Washer - Flat 7/16 Light. . . . .	4
7	102588	Cap Screw - Hex. Hd. 3/8 - 24 x 1 1/4 . . . . .	4
8	102759	Lockwasher 3/8 Med. . . . .	4
9	103610	Nut - Hex Light 3/8 - 24. . . . .	4
10	2025584	Cab Control Lever Ass'y. . . . .	1
11	2025595	Control Lever. . . . .	1
3	T581	Control Lever Br'kt. . . . .	1
4	103935	Clevis Pin . . . . .	1
5	103027	Cotter Pin 3/32 x 3/4 . . . . .	1
7	102588	Cap Screw 3/8 - 24 x 1 1/4 . . . . .	2
8	102759	Lockwasher 3/8 Med. . . . .	2
9	103610	Nut - Hex Light 3/8 - 24. . . . .	2
12	2025586	Control Spring . . . . .	1
13	103296	Cap Screw 1/2 - 20 x 2 1/2 . . . . .	1
14	102972	Flatwasher 1/2. . . . .	1
15	103802	Jam Nut 1/2 - 20. . . . .	1
16	2027144	Control Br'kt. Ass'y. . . . .	1
7	102588	Cap Screw 3/8 - 24 x 1 1/4 . . . . .	2
8	102759	Lockwasher 3/8 Med. . . . .	2
9	103610	Nut - Hex Light 3/8 - 24. . . . .	2
17	2009027	P. T. O. Control Rod . . . . .	1
18	103936	Clevis 7/16 . . . . .	1
4	103935	Clevis Pin 7/16 . . . . .	1
19	103611	Nut - Hex. 7/16 - 20 . . . . .	1
5	103027	Cotter Pin 3/32 x 3/4 Lg. . . . .	1
20	92Y6000RS.	Power Take Off Ass'y. . . . .	1
21	A13-411R	Universal Joint Ass'y. . . . .	1
22	3000777	Universal Joint Ass'y. (Slip) . . . . .	1
23	6Y1265Z	Drive Shaft. . . . .	1
24	2006152	Control Rod. . . . .	2
25	104292	Clevis 1/2. . . . .	4
26	104281	Clevis Pin . . . . .	4
27	103034	Cotter Pin . . . . .	4
28	103612	Nut - Hex 1/2 - 20. . . . .	4
29	T-1620B	Guide Ass'y. - Control Rod 5" Lg. . . . .	2
30	S43-03	Nut - Hex 3/8 - 24. . . . .	2
31	S46-04	Lockwasher. . . . .	2
32	2025546	Pump Ass'y. L.H. (See Fig. 18, Page 23) . . . . .	1
33	2025547	Pump Ass'y. R.H. (See Fig. 18, Page 23) . . . . .	1
34	2016850	Valve Ass'y. (See Fig. 19, Page 24) . . . . .	1

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.



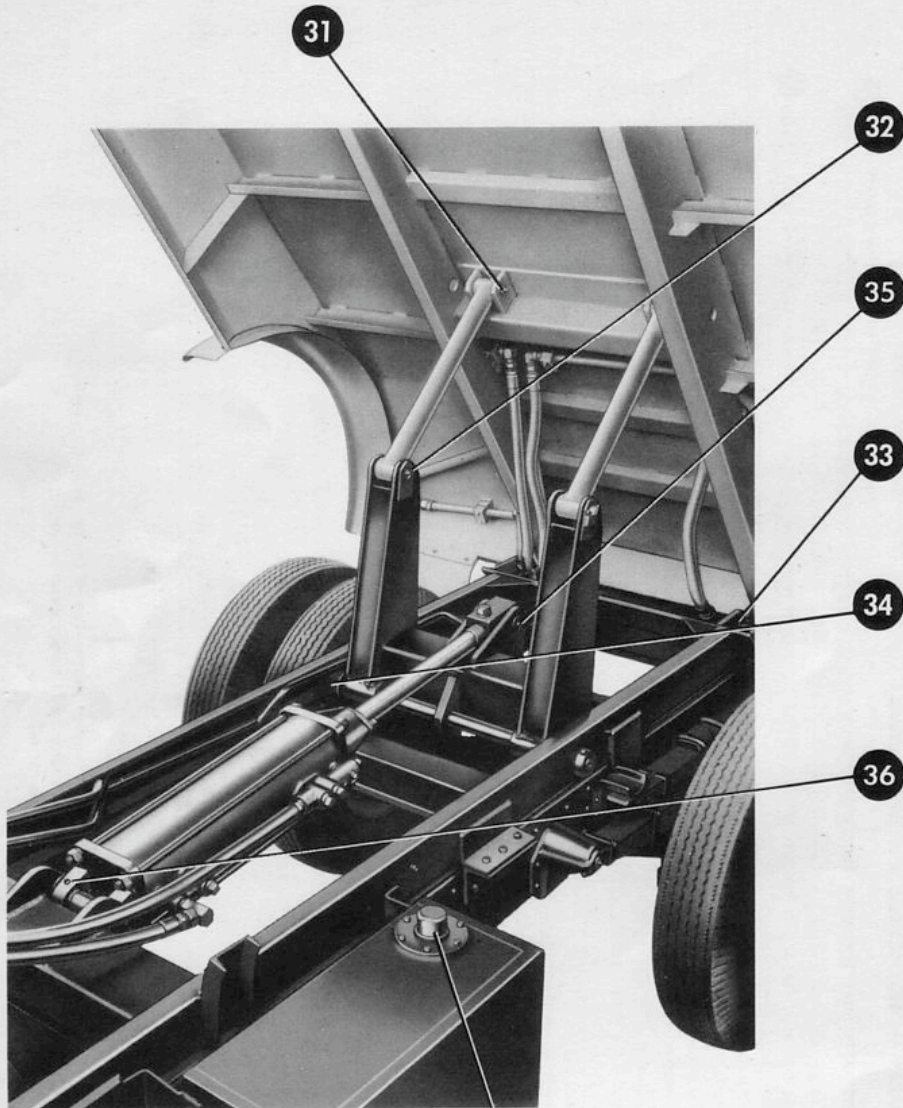
# BODY LUBRICATION POINTS (See Lubrication Chart Page 37)



ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.

## HOIST LUBRICATION POINTS

(See Lubrication Chart Page 37)



Use a good grade of motor oil. Keep to full mark on bayonet gauge. Above 90°F use S.A.E. No. 30. Above 32°F use S.A.E. No. 20; Below 32°F use S.A.E. No. 10; Below 0°F use S.A.E. No. 5. Capacity of oil tank is 23 gallons to full mark on gauge.

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.



## LUBRICATION CHART

Lubricate after every 40 operating hours. If Load-Packer is steam cleaned, lubricate after each cleaning.

### No. 1 Pressure Gun Grease (Body Drawing)

- 1 Tailgate cylinder trunnion pin (both sides)
- 2 Tailgate cylinder clevis pin (both sides)
- 3 Tailgate hinge (both sides)
- 4 Ram cylinder trunnion pin (both sides)
- 5 Ram control bell crank
- 6 Retainer panel cylinder trunnion pin
- 7 Spring loaded toggle bell crank
- 8 Ram cylinder link (both sides)
- 9 Ram stop link (both sides)
- 10 Ram latch
- 11 Ram link pin
- 12 Ram shaft pivot (both sides)
- 13 Retainer panel pivot shaft (6 alemites)
- 14 Ram control lever
- 15 Tailgate screw clamp (both sides)
- 16 Retainer panel cylinder clevis pin (grease manually)
- 17 Ram control toggle bell crank and clevises (grease manually)

### Squirt Can Application of SAE No. 20 Motor Oil

- 18 Panel valve and ram valve control rod (both sides)
- 19 Ram valve rod
- 20 Ram control upper bell crank and clevises
- 21 Bell crank roller and rod
- 22 Control rod guide
- 23 Ram control lever and clevis
- 24 Retainer panel spring pin
- 25 Solenoid switch bracket pivot
- 26 Side door hinge, lock and latch
- 27 Loading sill latch (both sides)
- 28 Ram cover hinge (both sides)
- 29 Ram cylinder cover hinge (both sides)
- 30 Shift lever and rod

### No. 1 Pressure Gun Grease (Hoist Drawing)

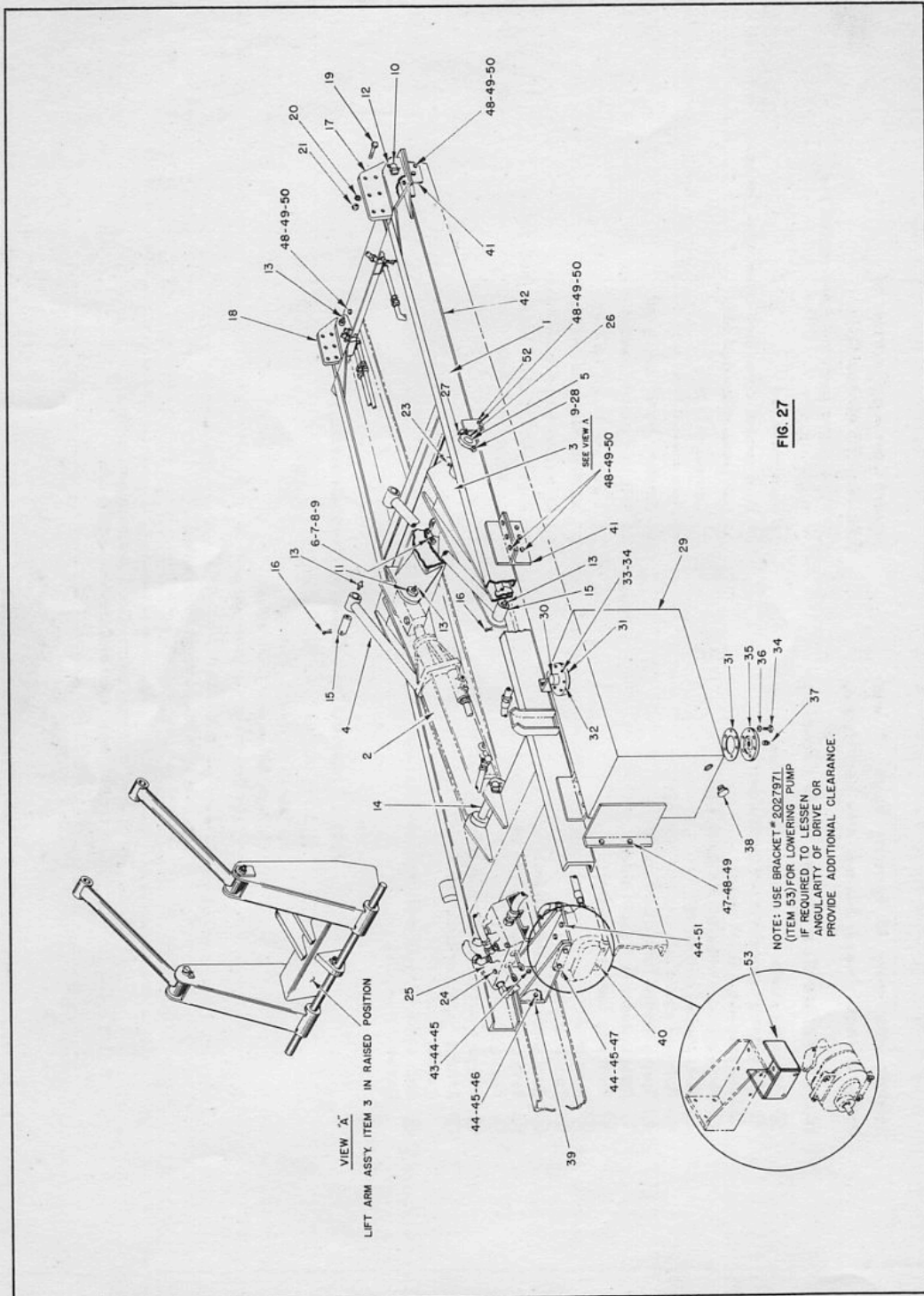
- 31 Body trunnion pins (both sides)
- 32 Hoist link pins (both sides)
- 33 Body hinge pins (both sides)
- 34 Lift arm pivot pin (both sides)
- 35 Hoist cylinder clevis pin
- 36 Hoist cylinder trunnion (both sides)

#### Not Shown

Drive shaft universal joints—No. 1 pressure gun grease  
Cab control lever, rods and clevises—squirt can—  
No. 20 motor oil

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.

## HOIST AND SUB-FRAME ASS'Y



ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.



# HOIST AND SUB-FRAME ASS'Y

ITEM	PART NO.	NOMENCLATURE	QUANTITY		
			LP210	LP213	LP216
	2025301	Hoist & Subframe Ass'y. . . . .	1		
	2025302	Hoist & Subframe Ass'y. . . . .		1	
	2025322	Hoist & Subframe Ass'y. . . . .			1
1	2025299	Subframe Ass'y. (Weldment) . . . . .	1		
1	2025300	Subframe Ass'y. (Weldment) . . . . .		1	
1	2023110	Subframe Ass'y. (Weldment) . . . . .			1
2	2025123	Cylinder Ass'y. . . . .	1	1	
2	2025124	Cylinder Ass'y. . . . .			1
3	2025056	Arm Ass'y. - Lift . . . . .	1	1	
3	2025079	Arm Ass'y. - Lift . . . . .			1
4	2023133	Link Ass'y. (Weldment). . . . .	2	2	
4	2023042	Link Ass'y. . . . .			2
5	2023132	Main Shaft. . . . .	1	1	
5	2023046	Main Shaft. . . . .			1
6	2023049	Plate . . . . .	2	2	2
7	102592	Cap Screw 3/8 - 24 x 2 1/4 . . . . .	2	2	2
8	102759	Lockwasher 3/8 . . . . .	8	8	9
9	103610	Nut 3/8 - 24. . . . .	10	10	11
10	2023044	Hinge Pin (Rear). . . . .	2	2	2
11	2023177	Pin - Pivot . . . . .	1	1	
11	2023047	Pin - Pivot . . . . .			1
12	103070	Cotter Pin 5/16 Dia. x 2 1/2 . . . . .	2	2	2
13	105397	Lubrication Fitting 1/8 St. . . . .	7	7	7
14	2023152	Trunnion Shaft . . . . .	1	1	
14	2023130	Trunnion Shaft . . . . .			1
15	2023154	Link Pin . . . . .	4	4	
15	2023044	Link Pin. . . . .			4
16	103058	Cotter Pin 1/4 Dia. x 1 1/4 . . . . .	4	4	
16	103069	Cotter Pin 5/16 Dia. x 2 1/4 . . . . .			4
17	2023117	Hinge L.H. . . . .	1	1	
17	2025069	Hinge L.H. . . . .			1
18	2023118	Hinge R.H. . . . .	1	1	
18	2025070	Hinge R.H. . . . .			1
19	103362	Cap Screw 3/4 - 16 x 2 3/4 . . . . .	12	12	
19	103364	Cap Screw 3/4 - 16 x 3 1/4 . . . . .			12
20	102764	Lockwasher 3/4 . . . . .	12	12	12
21	103615	Nut - Hex . . . . .	12	12	12
22	103069	Cotter Pin 5/16 Dia. x 2 1/4 . . . . .	2	2	2

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.

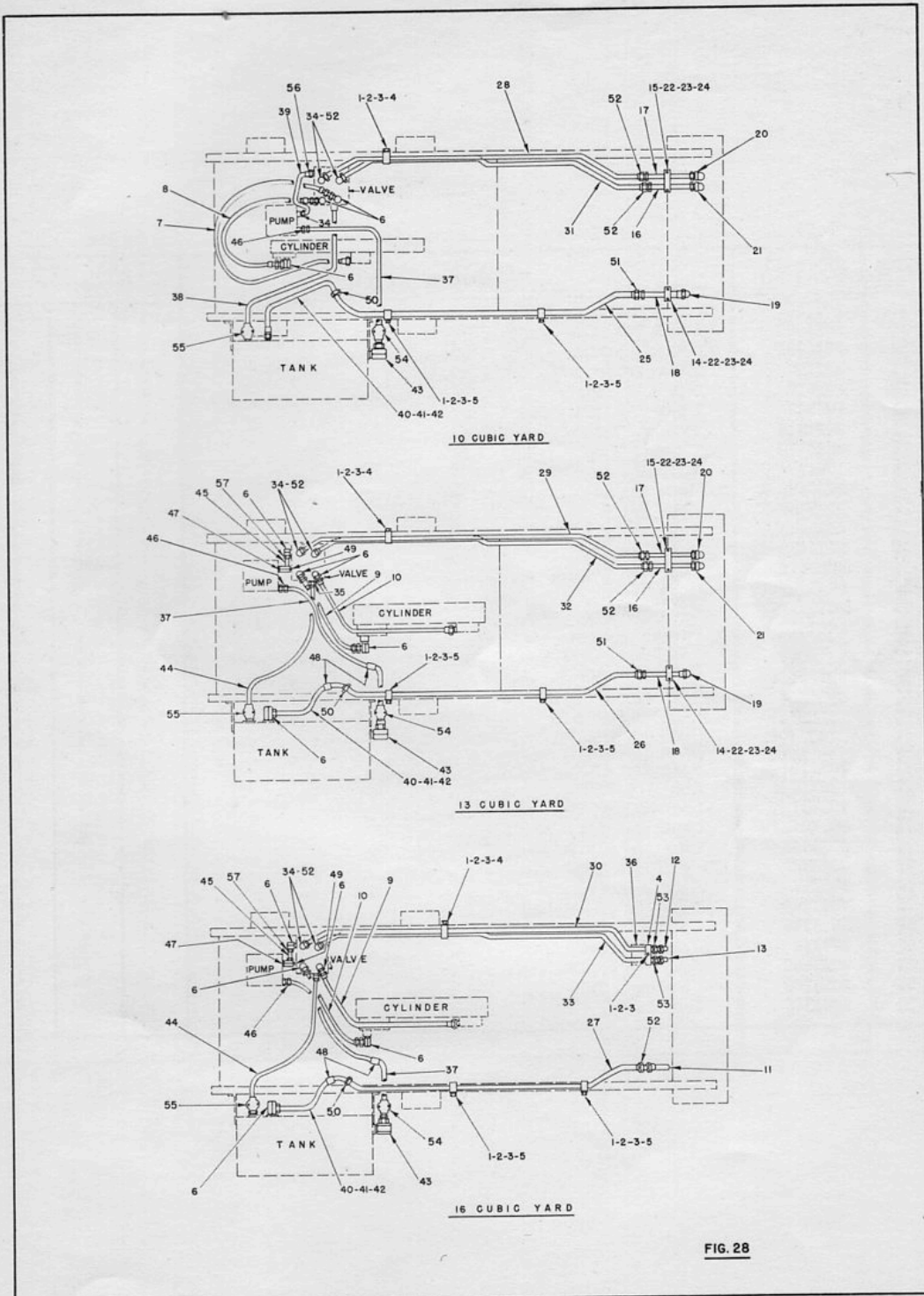
## HOIST AND SUB-FRAME ASS'Y

ITEM	PART NO.	NOMENCLATURE	QUANTITY		
			LP210	LP213	LP216
23	105851	Lubrication Fitting 1/8 x 45° . . . . .	2	2	2
24	103182	Cap Screw 3/8 - 24 x 4 1/4 . . . . .	3	3	3
25	2016850	Valve Ass'y. (Control) . . . . .	1	1	1
26	2027109	Collar. . . . .	2	2	
26	21-1400	Collar. . . . .			2
27	103032	Cotter Pin 1/8 x 3/4 . . . . .	2	2	2
28	106054	Cap Screw Drilled 3/8 - 24 x 3 1/2 . . . . .	2	2	
28	106055	Cap Screw Drilled 3/8 - 24 x 3 3/4 . . . . .			2
29	2023180	Tank Ass'y. . . . .	1	1	1
30	A21-3125	Oil Level Gauge Ass'y. . . . .	1	1	1
31	3A-1783	Gasket. . . . .	2	2	2
32	2023181	Cover Ass'y. . . . .	1	1	1
33	102767	Washer . . . . .	6	6	6
34	102569	Cap Screw 5/16 - 24 x 1 . . . . .	12	12	12
35	2002893	Cover . . . . .	1	1	1
36	1287A	Washer 5/16. . . . .	6	6	6
37	100159	Pipe Plug - Magnetic 3/4 . . . . .	1	1	1
38	100008	Pipe Plug 1 1/2 . . . . .	1	1	1
39	2025535	Pump Mounting Bracket. . . . .	1	1	1
40	2025547	Pump Ass'y. L.H. . . . .	1	1	1
40	2025546	Pump Ass'y. R.H. . . . .	1	1	1
41	2023155	Attaching Clip . . . . .	4	4	
41	2016955	Attaching Clip . . . . .			6
42	2025646	Spacer. . . . .	2		
42	2025647	Spacer. . . . .		2	
42	2025648	Spacer Frame . . . . .			2
43	103327	Cap Screw 5/8 - 18 x 1 3/4 . . . . .	3	3	3
44	102763	Lockwasher 5/8 . . . . .	8	8	8
45	103614	Nut - Hex. 5/8 - 18 . . . . .	6	6	6
46	103329	Cap Screw 5/8 - 18 x 2 1/4 . . . . .	3	3	3
47	103292	Cap Screw 1/2 - 20 x 1 1/2 . . . . .	4	4	4
48	102761	Lockwasher 1/2 . . . . .	38	38	38
49	103612	Nut - Hex. 1/2 - 20 . . . . .	38	38	38
50	103293	Cap Screw 1/2 - 20 x 1 3/4 . . . . .	34	34	34
51	103309	Cap Screw 5/8 - 11 x 1 1/2 . . . . .	2	2	2
52	2027900	Plate . . . . .	2	2	2
53	2027971	Adapter Pump . . . . .	1	1	1

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.



## HYDRAULIC SCHEMATIC



ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.

## HYD. PARTS AND CONNECTIONS

ITEM	PART NO.	NOMENCLATURE	QUANTITY		
			LP210	LP213	LP216
Ref.	2025301	Hoist & Subframe Ass'y. . . . .			
Ref.	2025302	Hoist & Subframe Ass'y. . . . .			
Ref.	2025322	Hoist & Subframe Ass'y. . . . .			
1	102759	Lockwasher 3/8 . . . . .	3	3	4
2	103610	Nut 3/8 - 24 . . . . .	3	3	4
3	102587	Capscrew 3/8 - 24 x 1 . . . . .	3	3	4
4	2025512	Clamp - Tube . . . . .	1	1	2
5	2026779	Clamp - Tube . . . . .	2	2	2
6	106170	Adapter Union 90° x 1" N.P.T. . . . .	3	5	5
7	2025489-4	Hose Ass'y. . . . .	1		
8	2025489-2	Hose Ass'y. . . . .	1		
9	2025489-1	Hose Ass'y. . . . .		1	1
10	2025489-3	Hose Ass'y. . . . .		1	1
11	2025491-1	Hose Ass'y. . . . .			1
12	2025492-1	Hose Ass'y. . . . .			1
13	2025492-2	Hose Ass'y. . . . .			1
14	2027279	Clamp. . . . .	1	1	
15	2027281	Clamp. . . . .	1	1	
16	2027285	Connector Ass'y. . . . .	1	1	
17	2027287	Connector Ass'y. . . . .	1	1	
18	2027289	Connector Ass'y. . . . .	1	1	
19	2027303-1	Hose Ass'y. . . . .	1	1	
20	2027304-1	Hose Ass'y. . . . .	1	1	
21	2027304-2	Hose Ass'y. . . . .	1	1	
22	102716	Nut 1/4 - 20 . . . . .	4	4	
23	102757	Lockwasher 1/4 . . . . .	4	4	
24	103204	Capscrew 1/4 - 20 x 3/4 . . . . .	4	4	
25	2025543	Tube Ass'y. - Return . . . . .	1		
50	2025369	Fitting - Tube . . . . .	1		
51	105218	Nut & Sleeve . . . . .	1		
26	2027297	Tube Ass'y. - Return . . . . .		1	
50	2025369	Fitting - Tube . . . . .		1	
51	105218	Nut & Sleeve . . . . .		1	
27	2025500	Tube Ass'y. - Return . . . . .			1
50	2025369	Fitting - Tube . . . . .			2
28	2025575	Tube Ass'y. - Ram. . . . .	1		

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.



## HYD. PARTS AND CONNECTIONS

ITEM	PART NO.	NOMENCLATURE	QUANTITY		
			LP210	LP213	LP216
52	105217	Nut & Sleeve . . . . .	2		
29	2027301	Tube Ass'y. - Ram. . . . .		1	
52	105217	Nut & Sleeve . . . . .		2	
30	2025510	Tube Ass'y. - Ram. . . . .			1
52	105217	Nut & Sleeve . . . . .			1
53	2025368	Fitting - Tube . . . . .			1
31	2025570	Tube Ass'y. - Tailgate . . . . .	1		
52	105217	Nut & Sleeve . . . . .	2		
32	2027299	Tube Ass'y. - Tailgate . . . . .		1	
52	105217	Nut & Sleeve . . . . .		2	
33	2025508	Tube Ass'y. - Tailgate . . . . .			1
52	105217	Nut & Sleeve . . . . .			1
53	2025368	Fitting - Tube . . . . .			1
34	105225	Elbow Male 1" . . . . .	3	2	2
35	106164	Adapter Union St. 1" . . . . .		1	1
36	2027845	Bracket - Clamp . . . . .			1
37	2025540	Hose Ass'y. (Cut to length @ installation) . . . . .	1	1	1
54	2025540-2	Coupling . . . . .	1	1	1
38	2026326	Hose Ass'y. (Cut to length @ installation) . . . . .	1		
55	405767	Coupling . . . . .	1		
39	2028398	Hose Ass'y. (Cut to length @ installation) . . . . .	1		
56	2029918	Coupling . . . . .	1		
40	2025541	Hose Ass'y. (Cut to length @ installation) . . . . .	1	1	1
42	2029920	Coupling . . . . .	1	1	1
41	2025541-1	Hose Ass'y. (Cut to length @ installation) . . . . .	1	1	1
42	2029920	Coupling . . . . .	1	1	1
43	106171	Adapter Union 90° - 1 1/2" . . . . .	1	1	1
44	2025539	Hose Ass'y. (Cut to length @ installation) . . . . .		1	1
55	405767	Coupling . . . . .		1	1
45	2025538	Hose Ass'y. (Cut to length @ installation) . . . . .		1	1
57	2026088-2	Coupling . . . . .		1	1
46	106166	Adapter Union St. - 1 1/2" . . . . .	1	1	1
47	2028381	Adapter Union 90° - 1" . . . . .		1	1
48	2027694	Bracket - Hose. . . . .		1	1
49	100002	Pipe Plug . . . . .		1	1

ORDER PARTS FROM NEAREST GAR WOOD BRANCH OR DISTRIBUTOR.  
ALWAYS GIVE GAR WOOD SERIAL NUMBER OF UNIT.



SE-63 (7-53)

Litho in U.S.A.