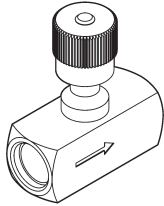


## INSTRUCTION, GPT HAND PUMP KIT INSTALLATION

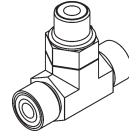
### GPT KIT P/N 282475-01



**NEEDLE VALVE, ADJUSTABLE**  
P/N 906739-01  
QTY. 1



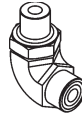
**CONNECTOR, #6 FACE SEAL, #4 O-RING**  
P/N 906759-01  
QTY. 2



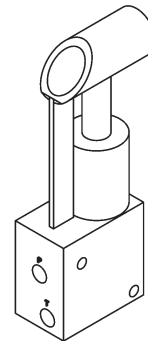
**TEE, #6 FACE SEAL O-RING**  
P/N 906745-01  
QTY. 1



**FITTING, STRAIGHT O-RING, SAE#6**  
P/N 906751-01  
QTY. 1



**ELBOW, SAE#6**  
P/N 906707-01  
QTY. 1



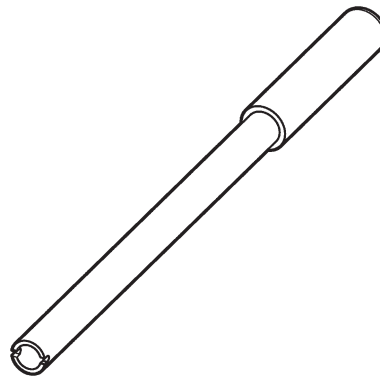
**HAND PUMP, SAE#4 PORTS**  
P/N 266588-01  
QTY. 1



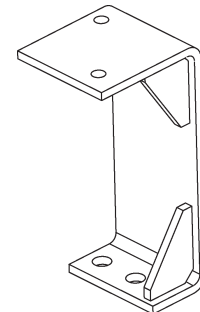
**POP RIVET, 3/16 X .565 LG.**  
P/N 904002-2  
QTY. 2



**SPRING CLIP HOLDER**  
P/N 227681  
QTY. 2



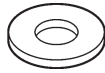
**HANDLE, HAND PUMP**  
P/N 251407-02  
QTY. 1



**BRACKET, HAND PUMP (GPTB)**  
P/N 288930-01G  
QTY. 1



FLAT WASHER, 3/8"  
P/N 902013-11  
QTY. 2



FLAT WASHER, 1/4"  
P/N 902000-2  
QTY. 2



LOCK NUT, 1/4"-20  
P/N 901000  
QTY. 2



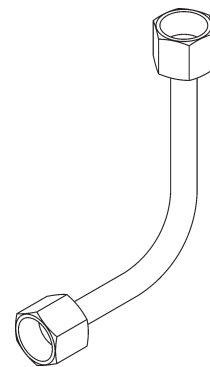
LOCK NUT, 3/8"-16  
P/N 901002  
QTY. 2



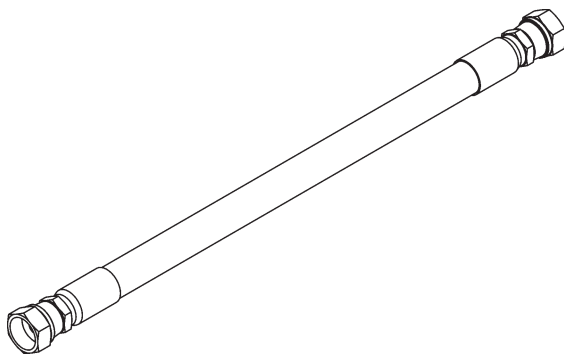
SOCKET SCREW,  
1/4"-20 X 2" LG, GR8  
P/N 900025-8  
QTY. 2



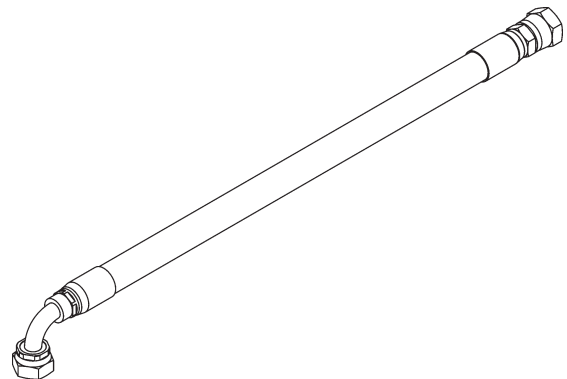
HEX CAP SCREW,  
3/8"-16 X 1" LG, GR8  
P/N 900014-4  
QTY. 2



TUBE ASSY,  
(90 DEG, 3/8" O.D., #8 FACE SEAL)  
P/N 282469-01  
QTY. 1



HOSE ASSEMBLY, STRAIGHT 3/8" I.D. X 18" LG.  
P/N 282467-01  
QTY. 1



HOSE ASSY (WITH 90° FITTING), 3/8" I.D. X 20" LG.  
P/N 282468-01  
QTY. 1

**GPTWR KIT P/N 282475-02**

**NOTE:** This kit contains all parts shown for Kit P/N 282475-01 and the poppet valve shown below.

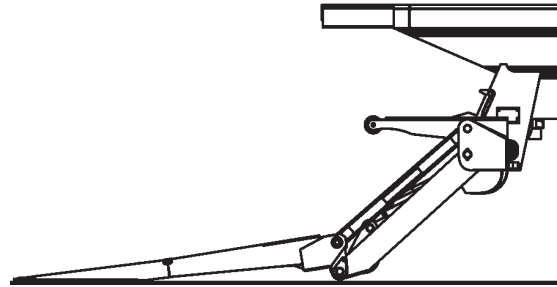


**POPPET (CARTRIDGE) VALVE**  
**P/N 906768-01**  
**QTY. 1**

**⚠ WARNING**

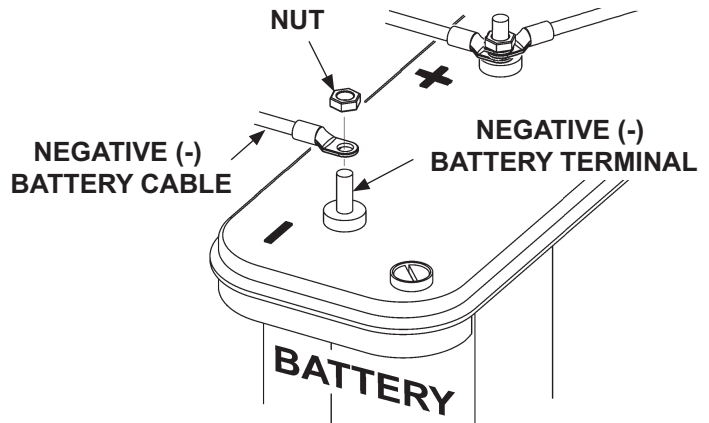
To prevent personal injury and equipment damage, make sure power is disconnected from Liftgate while installing electrical parts.

1. **LOWER** the platform until the knuckles and tip of the flipover rest on the ground (**FIG. 4-1**).



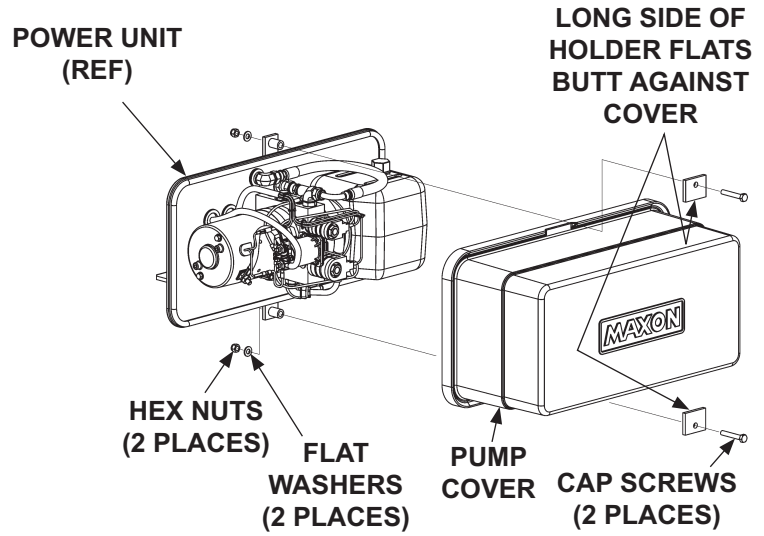
**PLATFORM LOWERED TO GROUND**  
**FIG. 4-1**

2. Disconnect power from Liftgate by disconnecting negative (-) battery cable from negative (-) battery terminal (**FIG. 4-2**).



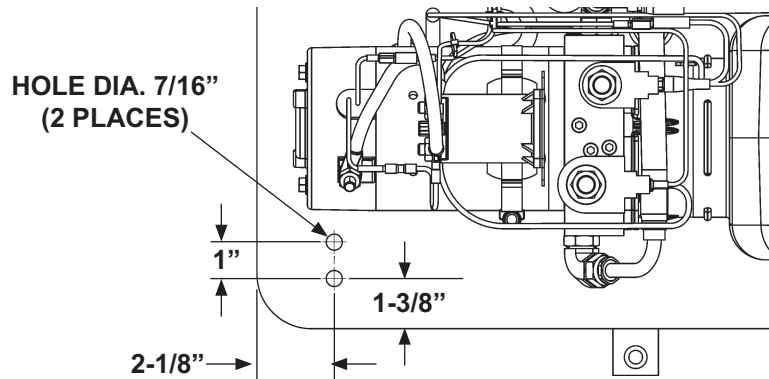
**DISCONNECTING POWER**  
**FIG. 4-2**

3. Remove pump cover (FIG. 5-1).



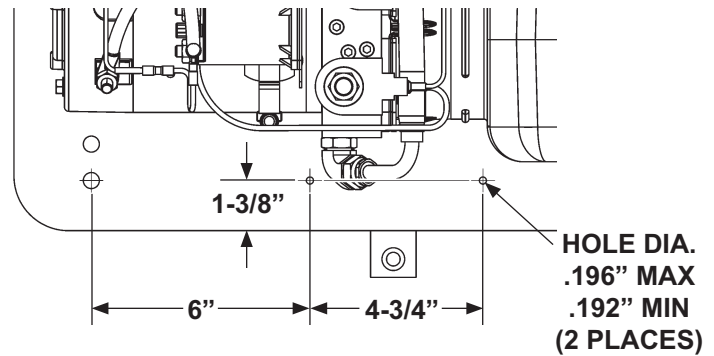
REMOVING PUMP COVER  
FIG. 5-1

4. Measure, mark, and drill holes in mounting plate for the mounting bracket (**FIG. 6-1**).



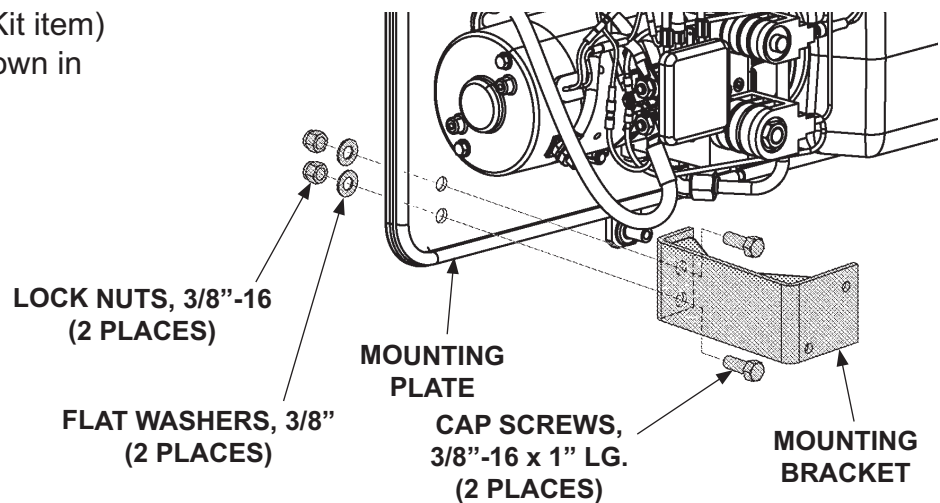
**HOLE PATTERNS FOR MOUNTING BRACKET**  
**FIG. 6-1**

5. Measure, mark, and drill 2 holes for spring clips (**FIG. 6-2**).



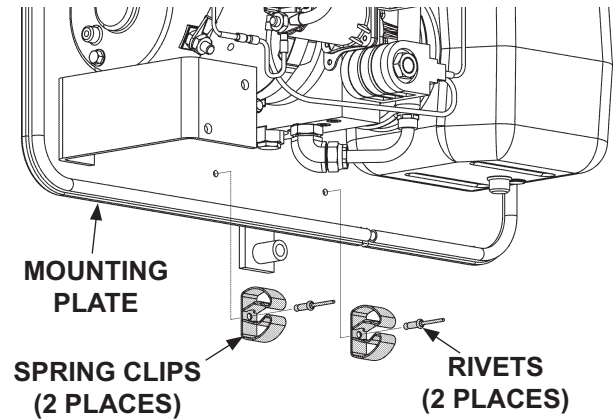
**HOLE PATTERNS FOR SPRING CLIPS**  
**FIG. 6-2**

6. Bolt mounting bracket (Kit item) to mounting plate as shown in **FIG. 6-3**.



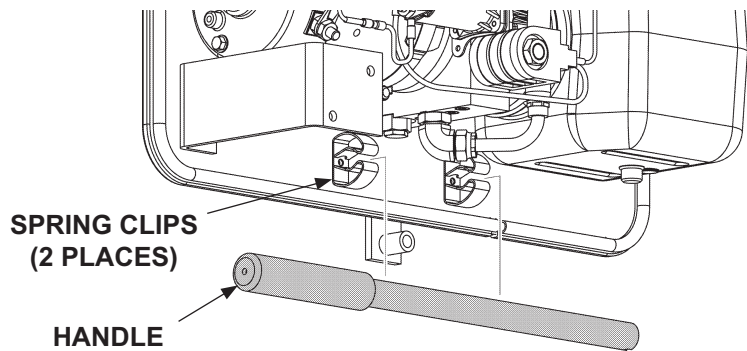
**BOLTING ON MOUNTING BRACKET**  
**FIG. 6-3**

7. Rivet the 2 spring clips (Kit items) to mounting plate (FIG. 7-1).



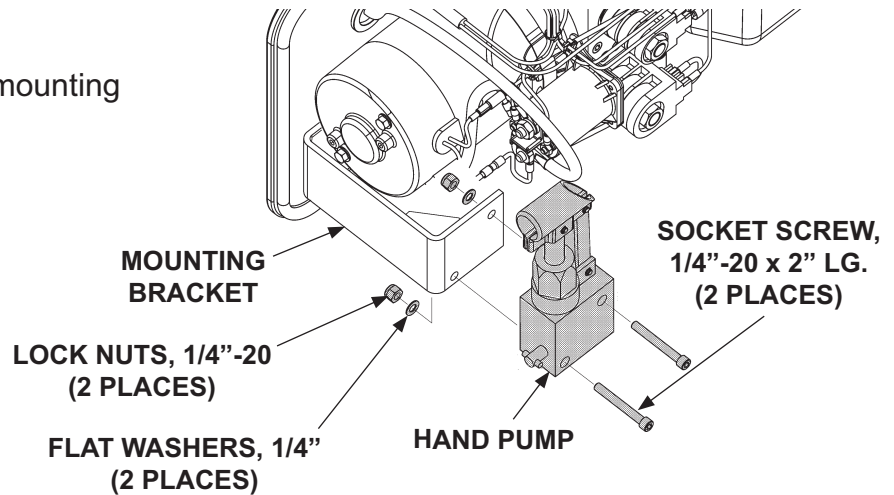
**RIVETING SPRING CLIP HOLDERS  
FIG. 7-1**

8. Place handle (Kit item) in the spring clips as shown in FIG. 7-2.



**STOWING HANDLE IN SPRING CLIPS  
FIG. 7-2**

9. Bolt hand pump (Kit item) to mounting bracket (FIG. 7-3).

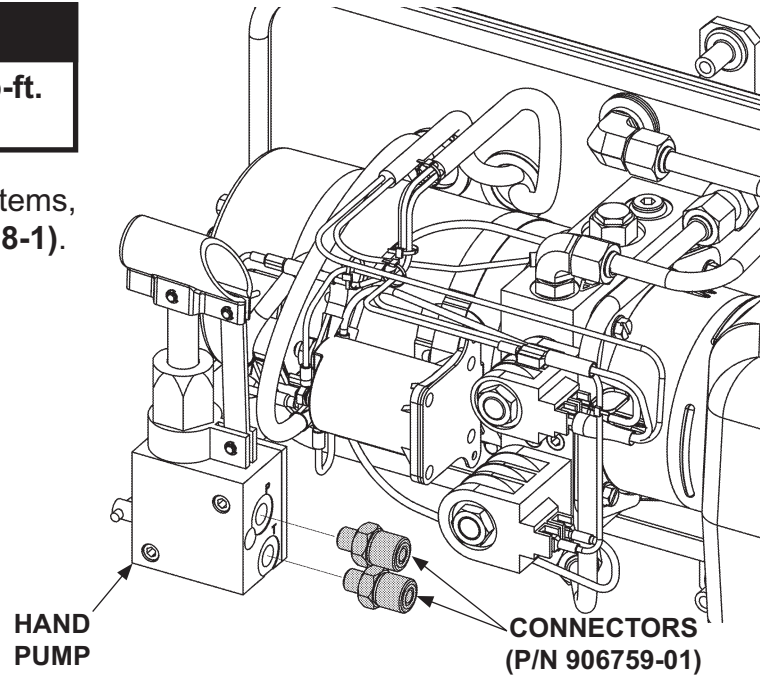


**BOLTING ON HAND PUMP  
FIG. 7-3**

## CAUTION

Torque the connectors to 13-15 lb-ft.  
Do not overtighten.

10. Connect 2 face seal connectors (Kit items, P/N 906759-01) to hand pump (**FIG. 8-1**).

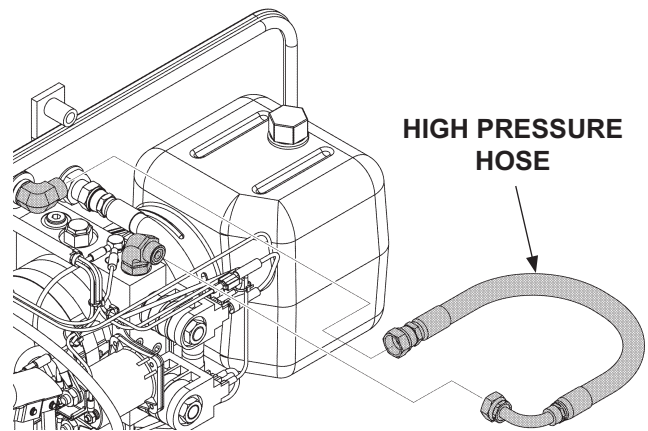


**FASTENING FACE SEAL CONNECTORS**  
**FIG. 8-1**

## CAUTION

Keep dirt, water and other contaminants from entering the hydraulic system. Before opening the hydraulic fluid reservoir filler cap, drain plug and hydraulic lines, clean up contaminants that can get in the openings. Also, protect the openings from accidental contamination.

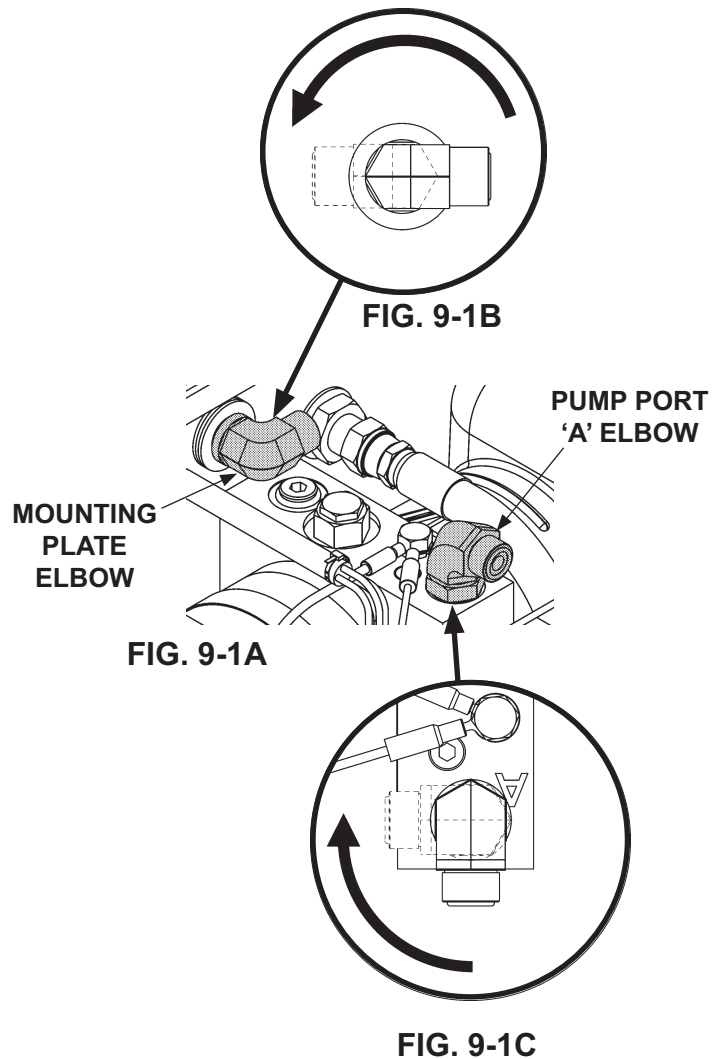
11. Remove and discard high pressure hose from pump assembly (**FIG. 8-2**).



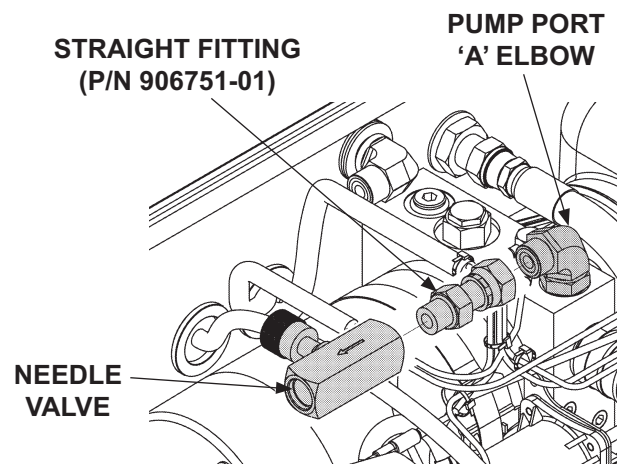
**REMOVING HIGH PRESSURE HOSE**  
**FIG. 8-2**



12. Loosen the elbows on pump port 'A' and mounting plate (**FIG. 9-1A**). Next, rotate elbow 90° on pump port 'A' (**FIG 9-1C**). Then, rotate mounting plate elbow 180° as shown in **FIG. 9-1B**.

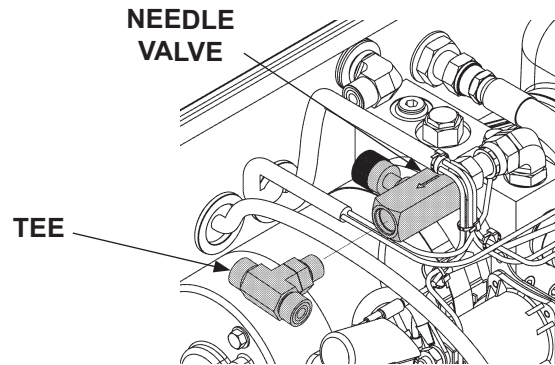


13. Connect straight fitting (Kit item) to elbow on pump port 'A' (**FIG. 9-2**). Then, connect needle valve to straight fitting as shown in **FIG. 9-2**.



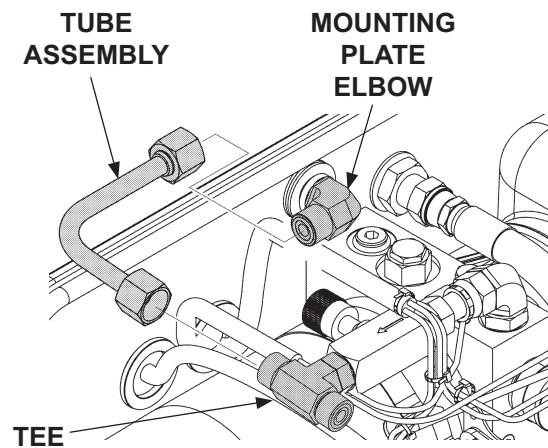
**CONNECTING ELBOW & STRAIGHT FITTING  
FIG. 9-2**

14. Connect tee (Kit item) to needle valve (FIG. 10-1).



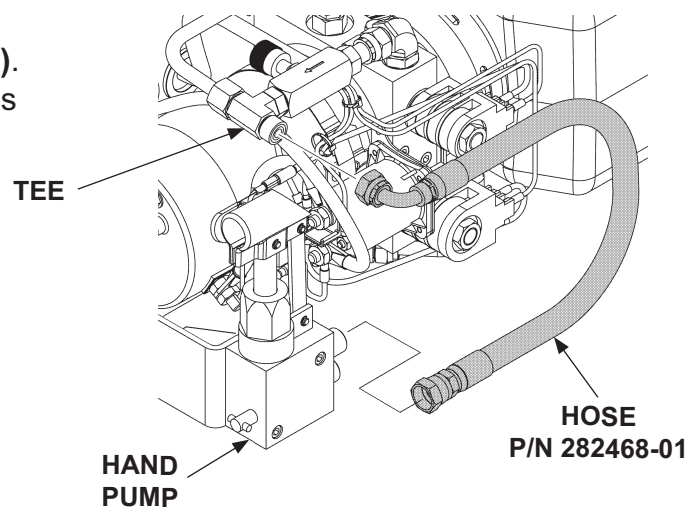
**CONNECTING TEE**  
**FIG. 10-1**

15. Connect tube assembly (Kit item) to tee and elbow on mounting plate (FIG. 10-2). Do not tighten connectors until later in this procedure.



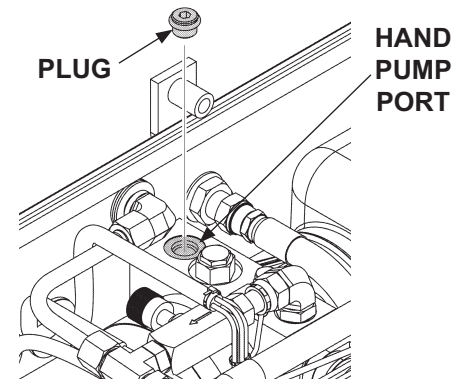
**CONNECTING TUBE ASSEMBLY**  
**FIG. 10-2**

16. Connect hose (Kit item, P/N 282468-01) to tee and fitting on hand pump (FIG. 10-3). Do not tighten connectors until later in this procedure.

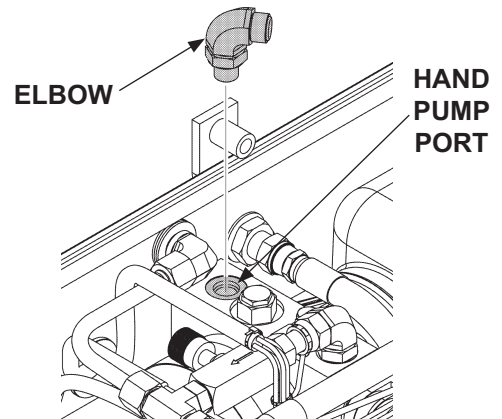


**CONNECTING HOSE**  
**FIG. 10-3**

17. Remove plug from hand pump port on pump block (FIG. 11-1). Connect elbow (Kit item) to hand pump port (FIG. 11-2). Position elbow as shown.



**REMOVING PLUG FROM  
HAND PUMP PORT  
FIG. 11-1**



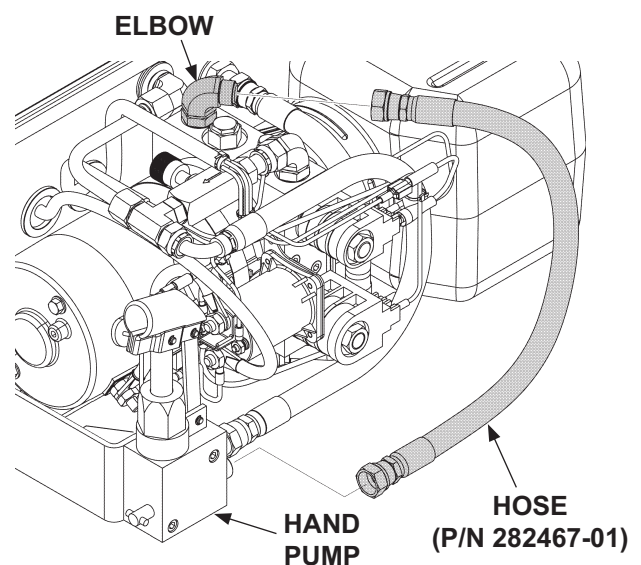
**CONNECTING ELBOW  
FIG. 11-2**

18. Connect straight hose (Kit item, P/N 282467-01) to elbow on pump block and connector on hand pump (FIG. 11-3).

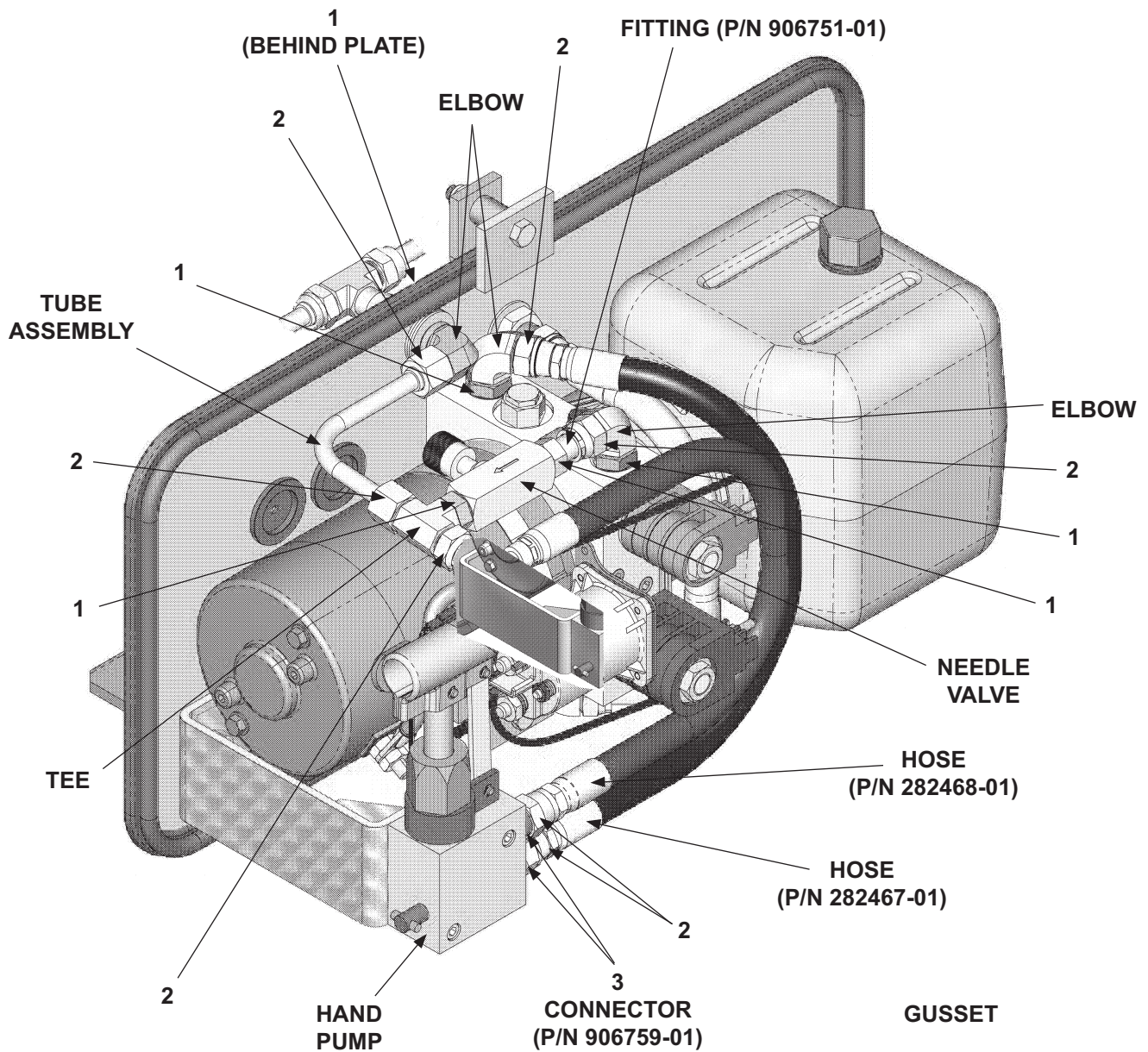
**CAUTION**

Hydraulic lines and fittings must be torqued as shown in FIG. 12-1 & TABLE 12-1.

19. Reposition elbows, hoses, and tube assembly as required (FIG. 12-1). Then, torque the fittings as shown in FIG. 12-1 and TABLE 12-1.



**CONNECTING STRAIGHT HOSE  
FIG. 11-3**



**TIGHTENING FITTINGS**  
**FIG. 12-1**

ITEM	DESCRIPTION	TORQUE VALUE
1	SAE#6 O-RING (MALE)	22-24 lb-ft.
2	SAE#6 FACE SEAL (FEMALE)	25-27.5 lb-ft.
3	SAE#4 O-RING (MALE)	13-15 lb-ft.

**TORQUE VALUES**  
**TABLE 12-1**

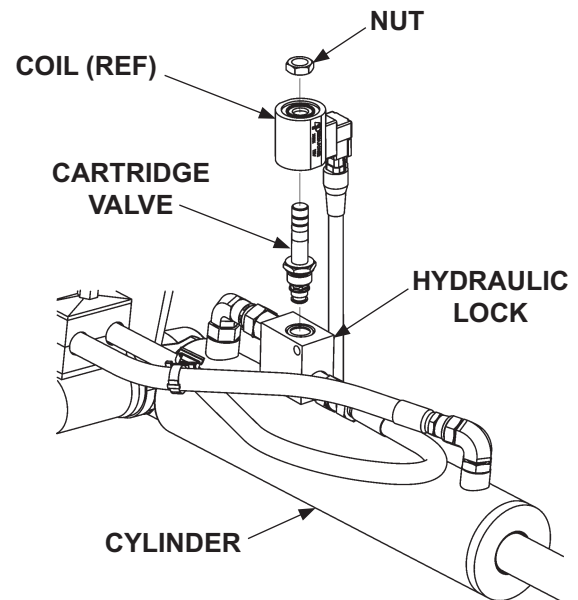
## REPLACE CARTRIDGE VALVE (GPTWR KIT ONLY)

**NOTE:** For GPTWR kits, the cartridge valve in the hydraulic lock needs to be replaced with the poppet valve (Kit item) after installing the hand pump. For GPT kits, skip steps 20-25.

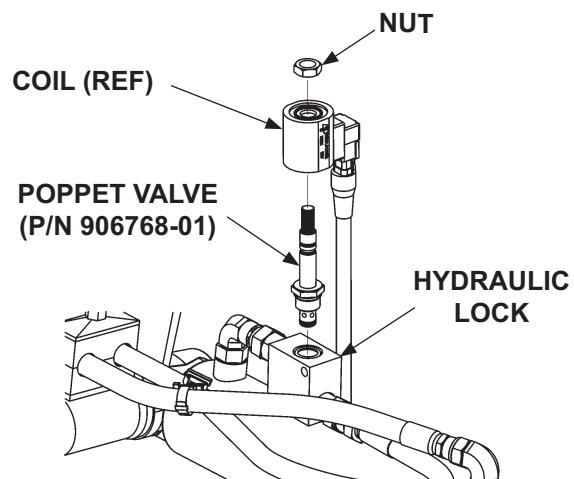
### CAUTION

Small amount of torque is required for tightening the hex nut on poppet valve. Torque the poppet valve hex nut to 30 lbs.-in. Overtightening hex nut may damage poppet valve.

20. Remove the cartridge valve from the hydraulic lock (FIG. 13-1). Install the poppet valve (Kit item, P/N 906768-01) in the hydraulic lock (FIG. 13-2).



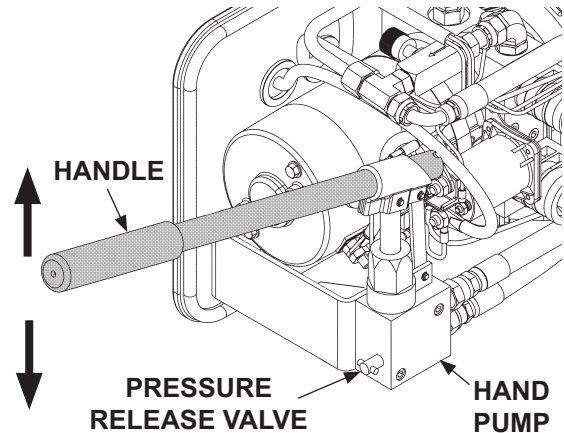
REMOVING CARTRIDGE VALVE  
FIG. 13-1



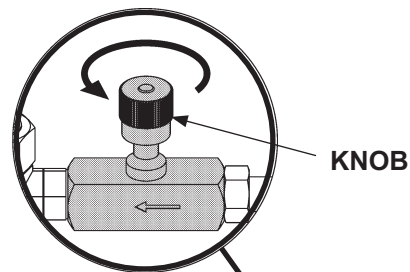
INSTALLING POPPET VALVE  
FIG. 13-2

**NOTE:** Ensure pressure release valve is closed (turn clockwise) before attempting to raise platform.

21. Use hand pump (FIG. 14-1) to raise platform 6" above the ground.

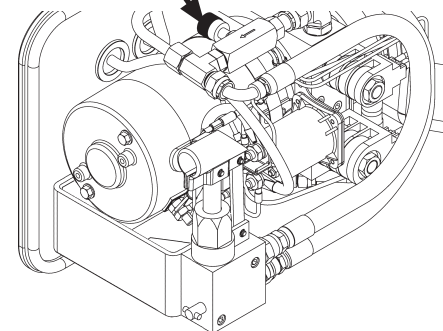


**RAISING PLATFORM WITH HANDLE**  
**FIG. 14-1**

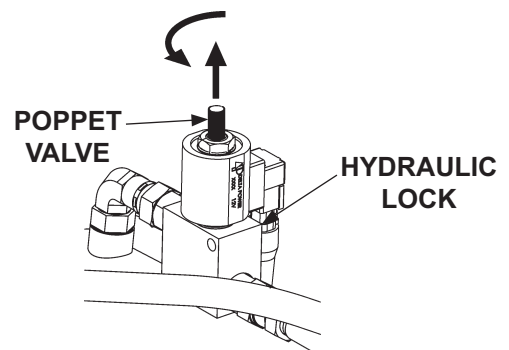


**FIG. 14-2B**

22. Open the needle valve by turning knob counterclockwise (FIG. 14-2A & 14-2B). Then, open the hydraulic lock by pulling and rotating shaft 1/4 turn (FIG. 14-3).

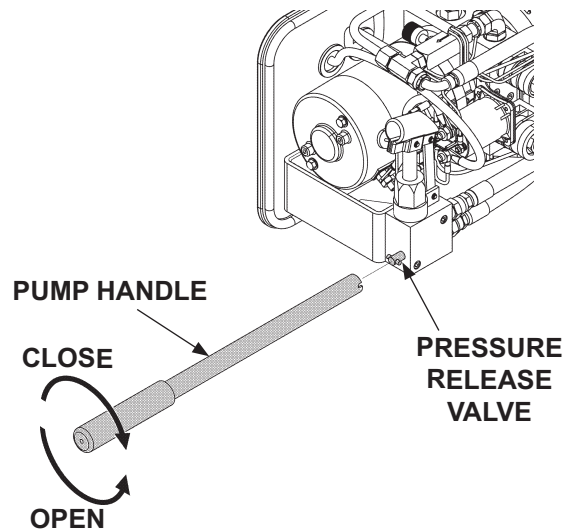


**FIG. 14-2A**



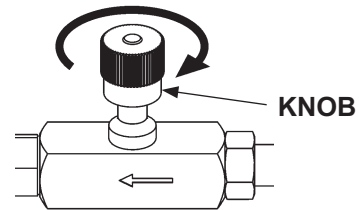
**OPENING HYDRAULIC LOCK**  
**FIG. 14-3**

23. Lower the platform to the ground by opening the pressure release valve 1/2 turn clockwise (**FIG. 15-1**). Close the pressure release valve by turning clockwise (**FIG. 15-1**) when the knuckles and tip of flipover are resting on the ground.

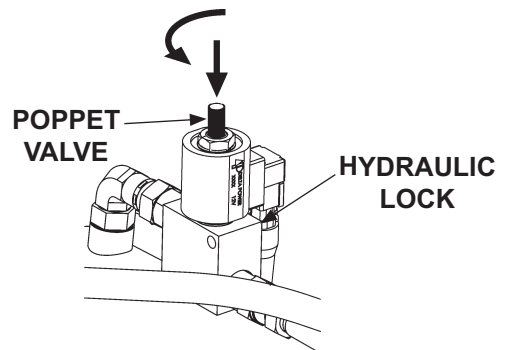


**OPENING & CLOSING RELEASE VALVE**  
**FIG. 15-1**

24. Close the needle valve by turning knob clockwise (**FIG. 15-2**). Then, close hydraulic lock by turning knob until it drops in the top of the poppet valve as shown in **FIG. 15-3**.

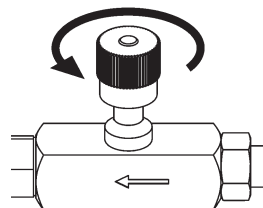


**CLOSING NEEDLE VALVE**  
**FIG. 15-2**

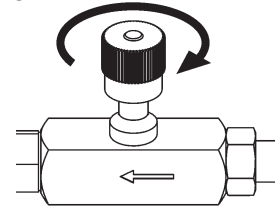


**CLOSING HYDRAULIC LOCK**  
**FIG. 15-3**

25. For normal Liftgate operation, open the needle valve (**FIG. 15-4**). To use hand pump for backup operation, close the needle valve (**FIG. 15-5**).

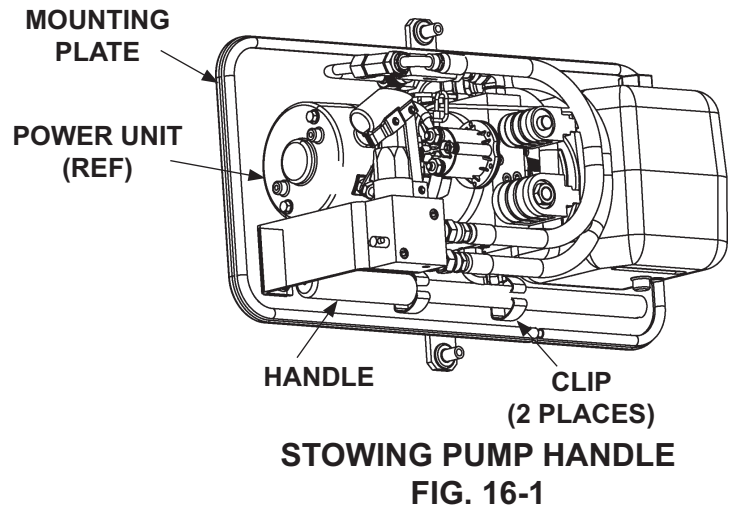


**OPEN FOR**  
**NORMAL OPERATION**  
**FIG. 15-4**

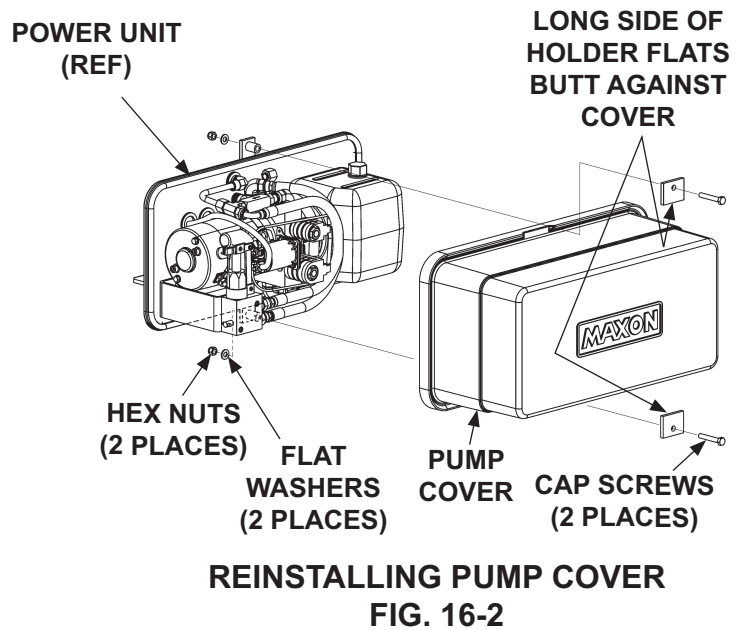


**CLOSE FOR**  
**BACKUP OPERATION**  
**FIG. 15-5**

26. Stow hand pump handle in the spring clips on pump mounting plate (FIG. 16-1).



27. Reinstall pump cover (FIG. 16-2). Torque the 5/16"-18 cover bolts from 10 to 14 lb-ft.



28. Reconnect the negative (-) battery cable to the negative (-) battery terminal (FIG. 16-3). Tighten nut.

