INSTRUCTION, GPT HAND PUMP KIT (BUCHER PUMP) INSTALLATION

KIT P/N 296075-01



NEEDLE VALVE, ADJUSTABLE, SAE #6 P/N 906739-01 QTY. 1



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



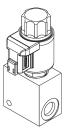
TEE, SAE #6 FACE **SEAL O-RING** P/N 906745-01 QTY. 1



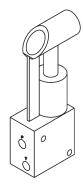
FITTING, STRAIGHT O-RING, SAE#6 P/N 906751-01 QTY. 1



ELBOW, SAE#6, MALE FACE **SEAL, O-RING** P/N 906707-01 QTY. 1



LOCK VALVE ASSEMBLY, WITH OVERRIDE, 12V P/N 282744-03 QTY. 1



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



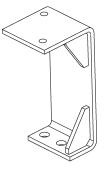
POP RIVET, LARGE FLANGE SPRING CLIP HOLDER 3/16" X .55" DOME P/N 904002-2 QTY. 2



P/N 227681 QTY. 2



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



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

MAXON® LIFT CORPORATION Sht. 2 of 27 DSG# M-15-13 Rev. A Date: 11/04/15



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



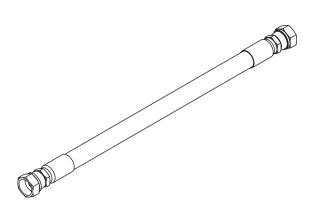
SOCKET SCREW, 1/4"-20 X 2" LG, GR8 P/N 900025-8 QTY. 2



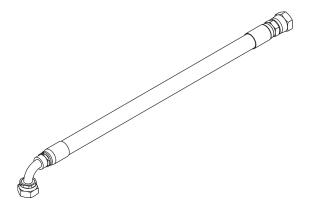
HEX CAP SCREW, 3/8"-16 X 1" LG, GR8 P/N 900014-4 QTY. 2



TUBE ASSY, (3/8" O.D., #8 FACE SEAL) P/N 296069-01 QTY. 1



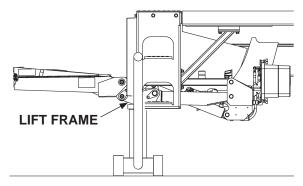
HOSE ASSEMBLY, STRAIGHT 3/8" I.D. X 18" LG. P/N 282467-01 QTY. 1



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

MAXON® LIFT CORPORATION Sht. 3 of 27 DSG# M-15-13 Rev. A Date: 11/04/15

 Lower the platform to a comfortable work height (FIG. 3-1). Then, use jack under the lift frame to support the Liftgate (FIG. 3-1). Refer to GPT Operation Manual for detailed operating instructions.

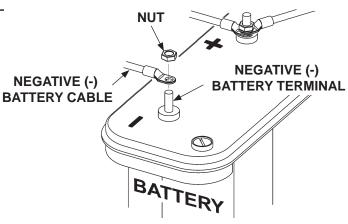


SUPPORTING LIFT FRAME WITH JACK FIG. 3-1

A WARNING

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

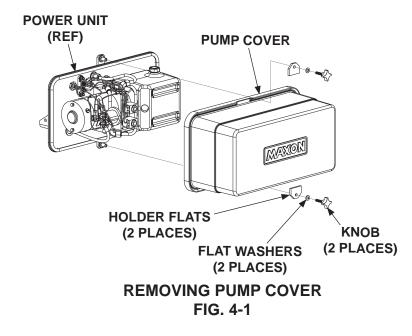
2. Disconnect power from Liftgate by disconnecting negative (-) battery cable from negative (-) battery terminal (FIG. 3-2).



DISCONNECTING POWER FIG. 3-2

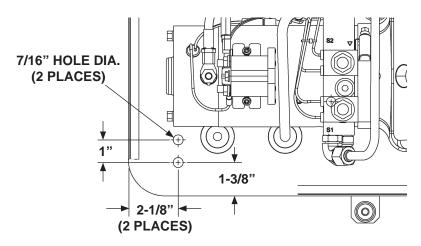
MAXON® LIFT CORPORATION Sht. 4 of 27 DSG# M-15-13 Rev. A Date: 11/04/15

3. Unfasten and remove pump cover (FIG. 4-1).



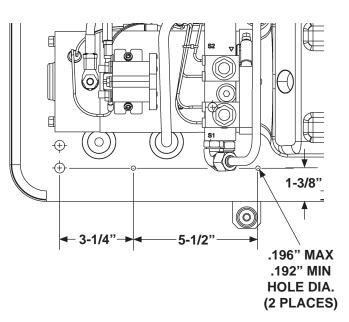
MAXON® LIFT CORPORATION Sht. 5 of 27 DSG# M-15-13 Rev. A Date: 11/04/15

4. Measure, mark, and drill holes in mounting plate for the mounting bracket **(FIG. 5-1)**.



HOLE PATTERNS FOR MOUNTING BRACKET FIG. 5-1

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



HOLE PATTERNS FOR SPRING CLIPS FIG. 5-2

MAXON® LIFT CORPORATION Sht. 6 of 27 DSG# M-15-13 Rev. A Date: 11/04/15

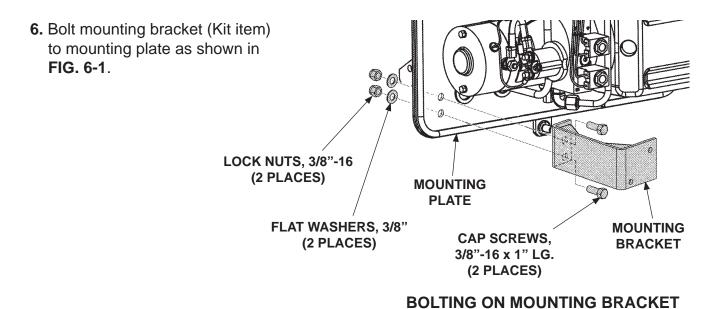
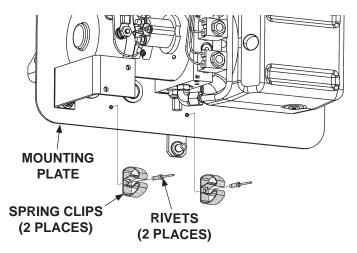


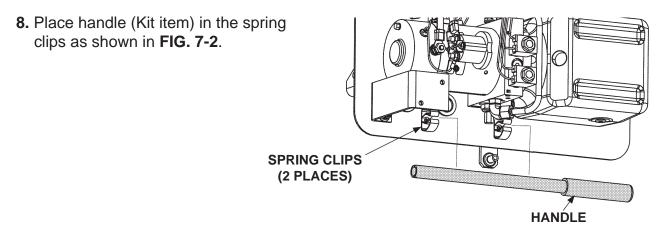
FIG. 6-1

MAXON® LIFT CORPORATION Sht. 7 of 27 DSG# M-15-13 Rev. A Date: 11/04/15

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



RIVETING SPRING CLIPS FIG. 7-1



STOWING HANDLE IN SPRING CLIPS FIG. 7-2

MAXON® LIFT CORPORATION Sht. 8 of 27 DSG# M-15-13 Rev. A Date: 11/04/15

9. Bolt hand pump (Kit item) to mounting bracket (FIG. 8-1).

MOUNTING BRACKET
LOCK NUTS, 1/4"-20
(2 PLACES)

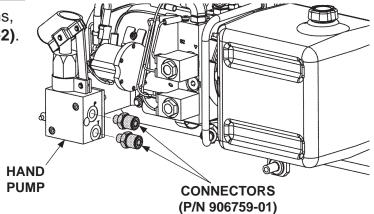
FLAT WASHERS, 1/4"
(2 PLACES)

BOLTING ON HAND PUMP
FIG. 8-1

CAUTION

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

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

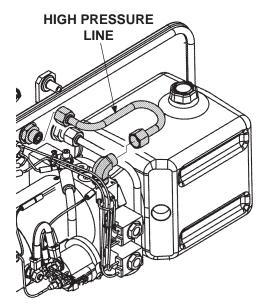


FASTENING FACE SEAL CONNECTORS FIG. 8-2

CAUTION

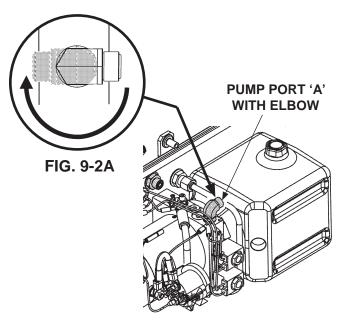
Keep dirt, water and other contaminants from entering the hydraulic system. Before opening the hydraulic fluid reservoir filler cap, drain plug and hydraulic lines, clean up contaminants that can get in the openings. Also, protect the openings from accidental contamination.

11. Remove and discard high pressure line from pump assembly (FIG. 9-1).



REMOVING HIGH PRESSURE LINE FIG. 9-1

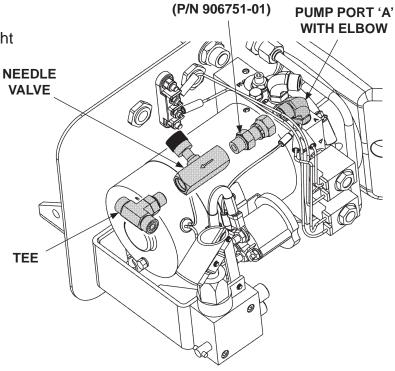
12. Loosen the elbow on pump port 'A' (FIG. 9-2). Next, rotate elbow 180° on pump port 'A' (FIG 9-2A).



ROTATING ELBOW ON PUMP PLATE FIG. 9-2

MAXON® LIFT CORPORATION Sht. 10 of 27 DSG# M-15-13 Rev. A Date: 11/04/15

13. Connect straight fitting (Kit item) to elbow on pump port 'A' **(FIG. 10-1)**. Then, connect needle valve to straight fitting as shown in **FIG. 10-1**.



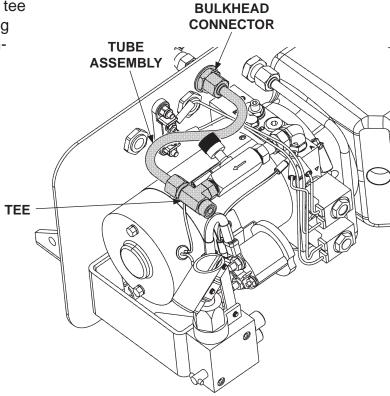
STRAIGHT FITTING

CONNECTING ELBOW, STRAIGHT FITTING & TEE FIG. 10-1

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

MAXON® LIFT CORPORATION Sht. 11 of 27 DSG# M-15-13 Rev. A Date: 11/04/15

15. Connect tube assembly (Kit item) to tee and bulkhead connector on mounting plate **(FIG. 11-1)**. Do not tighten connectors until later in this procedure.



CONNECTING TUBE ASSEMBLY FIG. 11-1

MAXON[®] LIFT CORPORATION Sht. 12 of 27 DSG# M-15-13 Rev. A Date: 11/04/15

16. Connect hose (Kit item, P/N 282468-01) to tee and top connector on hand pump (FIG. 12-1). Do not tighten connectors until later in this procedure.

HAND PUMP PORT HOSE (REMOVE PLUG) (P/N 282467-01) **17.** Remove plug from hand pump port on pump block (FIG. 12-1). TEE HOSE TOP (P/N 282468-01) **CONNECTOR BOTTOM CONNECTOR** HAND PUMP

> **CONNECTING ELBOW AND HOSES** FIG. 12-1

ELBOW

(P/N 906707-01)

18. Connect elbow (Kit item) to hand pump port (FIG. 12-1). Position elbow as shown.

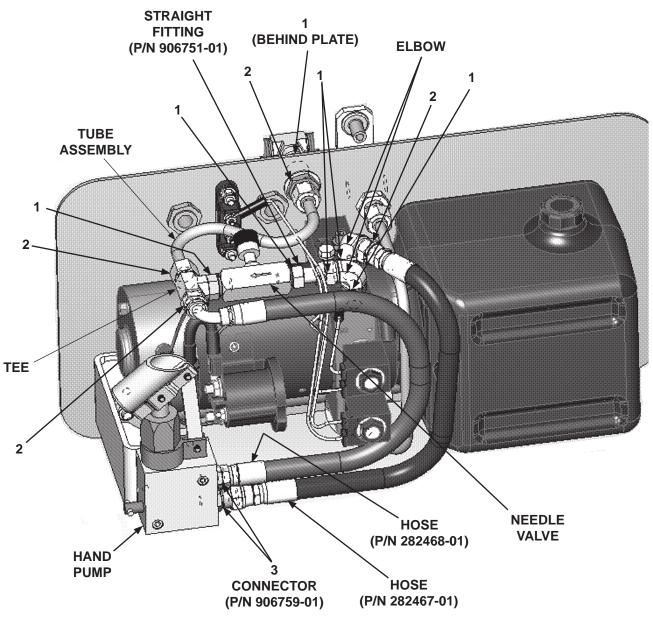
19. Connect hose (Kit item, P/N 282467-01) to elbow on pump block and bottom connector on hand pump (FIG. 12-2).

CAUTION

Hydraulic lines and fittings must be torqued as shown in FIG. 13-1 and TABLE 13-1.

20. Reposition elbows, hoses, and tube assembly as required (FIG. 13-1). Then, torque the fittings as shown in FIG. 13-1 and TABLE 13-1.

MAXON® LIFT CORPORATION Sht. 13 of 27 DSG# M-15-13 Rev. A Date: 11/04/15



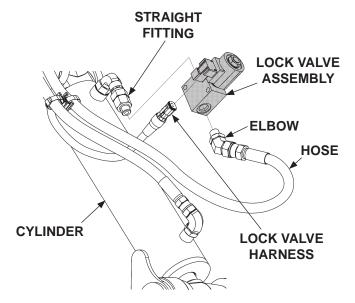
TIGHTENING FITTINGS FIG. 13-1

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.

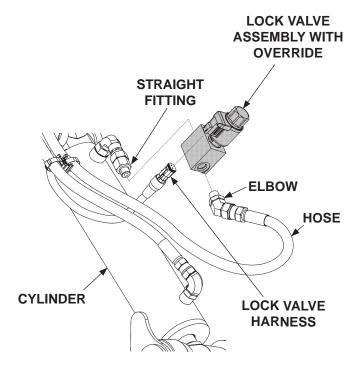
TORQUE VALUES TABLE 13-1

MAXON® LIFT CORPORATION Sht. 14 of 27 DSG# M-15-13 Rev. A Date: 11/04/15

21. Remove the existing lock valve assembly from RH cylinder as shown in FIG. 14-1. Install lock valve assembly with override (Kit item) as shown in FIG. 14-2.



REMOVING LOCK VALVE FIG. 14-1

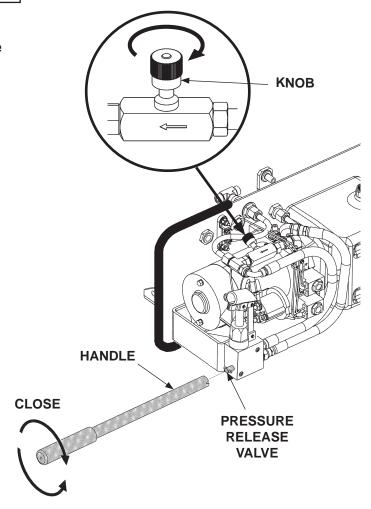


INSTALLING LOCK VALVE FIG. 14-2

MAXON[®] LIFT CORPORATION Sht. 15 of 27 DSG# M-15-13 Rev. A Date: 11/04/15

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

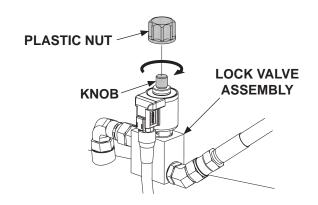
22. Close needle valve by turning knob fully clockwise **(FIG. 15-1)**. Then, close hand pump release valve, by turning valve clockwise with handle.



CLOSING NEEDLE VALVE & HAND PUMP RELEASE VALVE FIG. 15-1

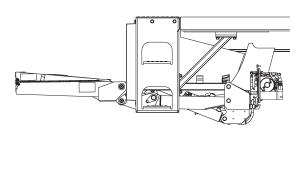
MAXON® LIFT CORPORATION Sht. 16 of 27 DSG# M-15-13 Rev. A Date: 11/04/15

23. Remove plastic nut from lock valve (FIG. 16-1). Then, ensure valve is closed to locked (reset) position by turning lock valve shaft fully clockwise (FIG. 16-1).



ENSURING LOCK VALVE IS CLOSED FIG. 16-1

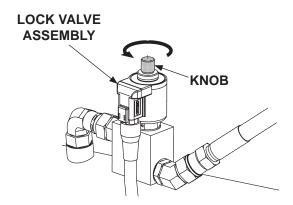
24. Lower and remove floor jack (FIG. 16-2).



JACK REMOVED FIG. 16-2

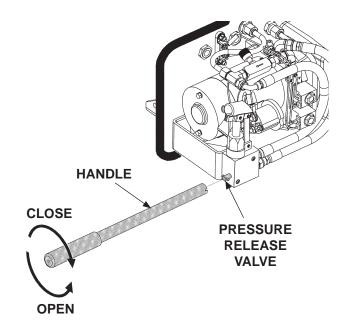
MAXON® LIFT CORPORATION Sht. 17 of 27 DSG# M-15-13 Rev. A Date: 11/04/15

25. Override (open) lock valve by turning shaft fully counterclockwise (**FIG. 17-1**).

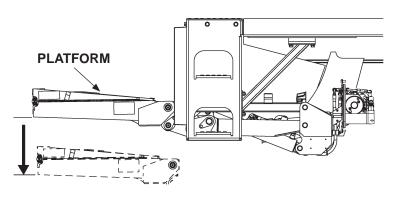


OVERRIDING LOCK VALVE FIG. 17-1

26. Lower platform 1/2 the distance to ground (FIG. 17-3) by turning hand pump release valve counterclockwise with handle (FIG. 17-2). Turn release valve fully clockwise to stop platform from lowering (FIG. 17-2).

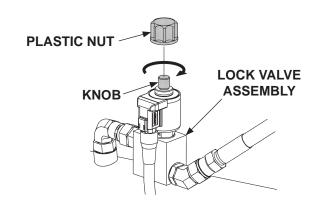


OPENING/CLOSING RELEASE VALVE FIG. 17-2



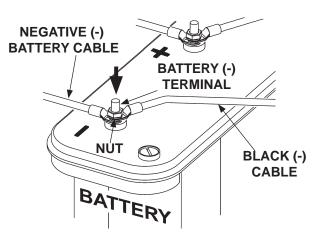
MAXON[®] LIFT CORPORATION Sht. 18 of 27 DSG# M-15-13 Rev. A Date: 11/04/15

27. Reset (close) lock valve by turning shaft fully clockwise, (FIG. 18-1) so that it locks. Reinstall plastic nut on lock valve.



RESETTING LOCK VALVE FIG. 18-1

28. Reconnect the negative (-) battery cable to the negative (-) battery terminal (FIG. 18-2). Tighten nut.

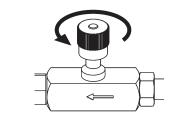


RECONNECTING POWER FIG. 18-2

CAUTION

The hand pump is only intended for stowing the platform if the power unit does not work. Do not use for repeated loading and unloading of vehicle.

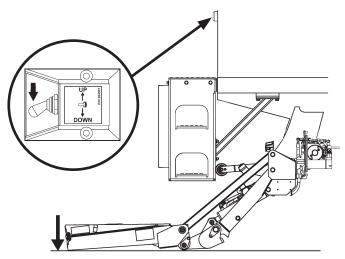
29. Open the needle valve by turning knob fully counterclockwise (**FIG. 18-3**).



OPENING NEEDLE VALVE FIG. 18-3

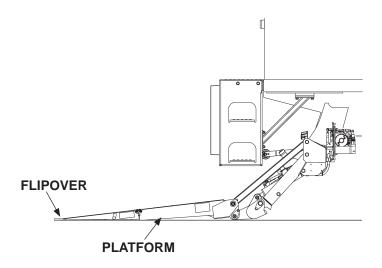
MAXON[®] LIFT CORPORATION Sht. 19 of 27 DSG# M-15-13 Rev. A Date: 11/04/15

30. Use the control switch to **LOWER** platform to the ground **(FIG. 19-1)**.



LOWERING PLATFORM TO GROUND WITH CONTROL SWITCH FIG. 19-1

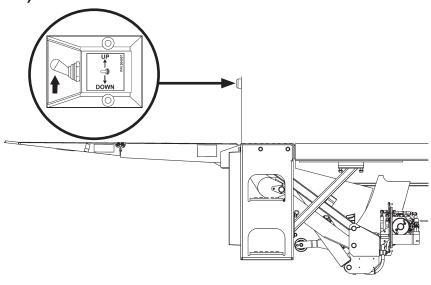
31. Unfold platform and flipover **(FIG. 19-2)**.



UNFOLDING PLATFORM & FLIPOVER FIG. 19-2

MAXON[®] LIFT CORPORATION Sht. 20 of 27 DSG# M-15-13 Rev. A Date: 11/04/15

32. Use the control switch to **RAISE** platform to bed height **(FIG. 20-1)**.

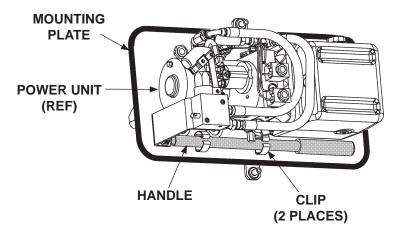


RAISING PLATFORM TO BED HEIGHT WITH CONTROL SWITCH FIG. 21-1

- **33.** Repeat step 30 and step 32 until all air has been bled from the system.
- **34.** Refer to the **GPT Maintenance Manual** for instructions on checking hydraulic fluid.

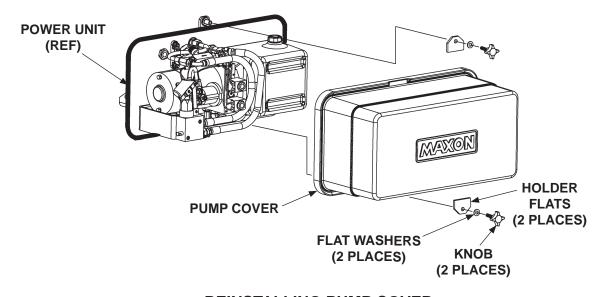
MAXON® LIFT CORPORATION Sht. 21 of 27 DSG# M-15-13 Rev. A Date: 11/04/15

35. Stow hand pump handle in the spring clips on pump mounting plate **(FIG. 21-1)**.



STOWING PUMP HANDLE FIG. 21-1

36. Reinstall and fasten pump cover **(FIG. 21-2)**. Hand-tighten knobs.



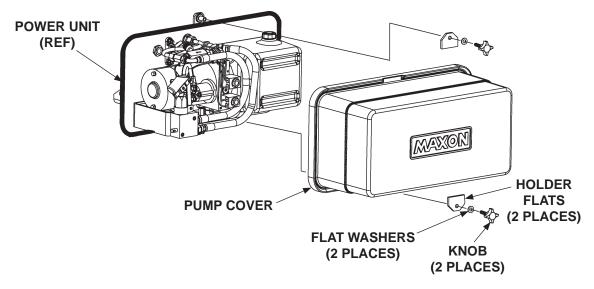
REINSTALLING PUMP COVER FIG. 21-2

GPT HAND PUMP OPERATION INSTRUCTIONS

CAUTION

The hand pump is only intended for stowing the platform if the power unit does not work. Do not use for repeated loading and unloading of vehicle.

1. Unfasten and remove pump cover (FIG. 22-1).

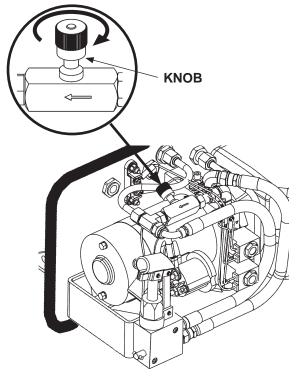


REINSTALLING PUMP COVER FIG. 22-1

CAUTION

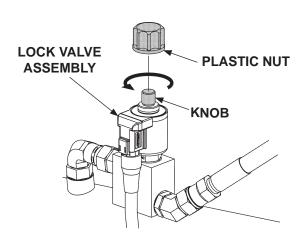
The manual override option is intended for emergency use only. Do not use for continuous operation.

2. To use hand pump for backup operation, close the needle valve by turning knob fully clockwise (FIG. 23-1).



CLOSING NEEDLE VALVE FIG. 23-1

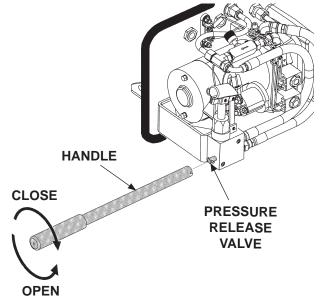
3. Remove plastic nut on lock valve (FIG. 23-2). Override (open) lock valve by turning shaft fully counterclockwise (FIG. 23-2).



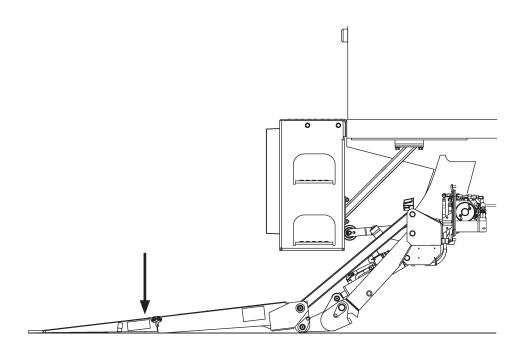
REMOVING NUT & OVERRIDING LOCK VALVE FIG. 23-2

MAXON[®] LIFT CORPORATION Sht. 24 of 27 DSG# M-15-13 Rev. A Date: 11/04/15

4. Lower the platform by opening the hand pump release valve 1/2 turn counterclockwise with the handle (FIGS. 24-1 & 24-2). To stop platform from lowering (FIG. 24-2), close the release valve (FIG. 24-1) by turning clockwise.



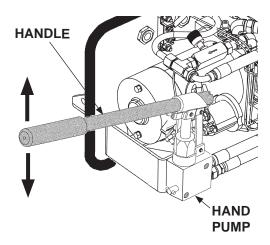
OPENING HAND PUMP RELEASE VALVE TO LOWER PLATFORM FIG. 24-1



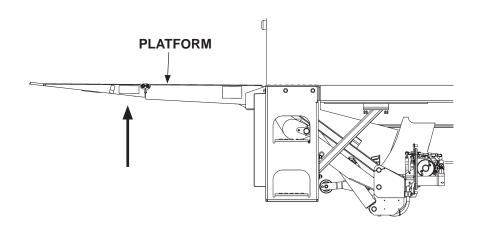
LOWERING PLATFORM FIG. 24-2

MAXON® LIFT CORPORATION Sht. 25 of 27 DSG# M-15-13 Rev. A Date: 11/04/15

5. Use the handle with hand pump to raise the platform (FIGS. 25-1 & 25-2).



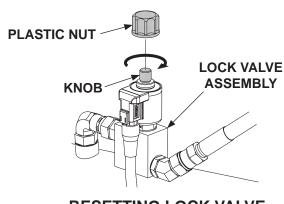
RAISING PLATFORM WITH HAND PUMP FIG. 25-1



RAISING PLATFORM FIG. 25-2

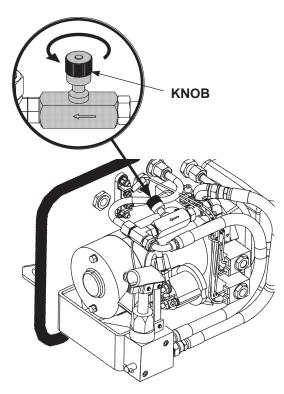
MAXON® LIFT CORPORATION Sht. 26 of 27 DSG# M-15-13 Rev. A Date: 11/04/15

6. Reset (close) lock valve by turning shaft fully clockwise, **(FIG. 26-1)** so that it locks. Reinstall plastic nut.



RESETTING LOCK VALVE FIG. 26-1

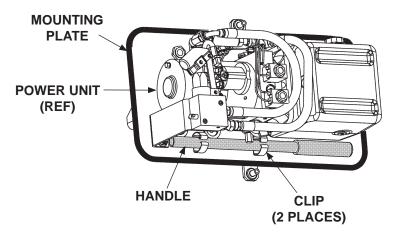
7. For normal Liftgate operation with power unit, open the needle valve by turning knob fully counterclockwise (**FIG. 26-2**).



OPENING NEEDLE VALVE FOR NORMAL OPERATION FIG. 26-2

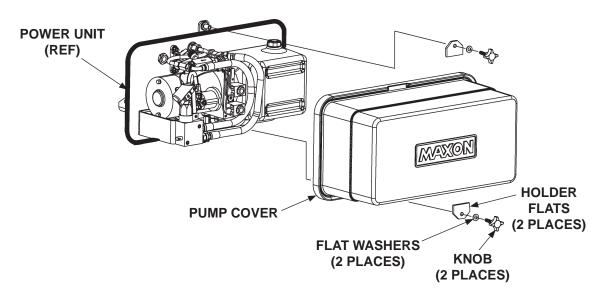
MAXON® LIFT CORPORATION Sht. 27 of 27 DSG# M-15-13 Rev. A Date: 11/04/15

8. Stow hand pump handle in the spring clips on pump mounting plate (FIG. 27-1).



STOWING PUMP HANDLE FIG. 27-1

9. Reinstall and fasten pump cover **(FIG. 27-2)**. Hand-tighten knobs.



REINSTALLING PUMP COVER FIG. 27-2