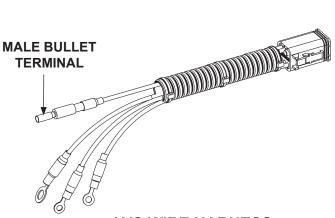
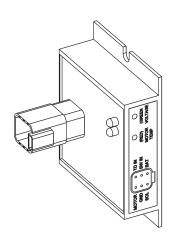
# INSTRUCTION, HALDEX PUMP LVS KIT P/N 267923-01



LVS WIRE HARNESS P/N 267924-01 QTY. 1



LOW VOLTAGE SWITCH (LVS MODULE) P/N 906530-01 QTY. 1



SHRINK TUBING, 1/4" x 2" LG P/N 250673-01 QTY. 1



### **LOW VOLTAGE SWITCH (LVS) INSTRUCTIONS**

The LVS system protection device is attached to the pump motor starter which on this liftgate. This LVS is designed to remove power from liftgate when battery voltage is too low for reliable vehicle and liftgate operation. If liftgate will not operate, look at the LVS VOLTAGE LIGHT and follow the instructions shown on this decal.

### VOLTAGE LIGHT (GREEN)

ON-Liftgate functions are normal

BLINKING RAPIDLY-Liftgate will shut down shortly. BLINKING SLOWLY-Liftgate has shut down. **OFF-**No power or the LVS is malfunctioning.



MANUAL OVERRIDE
To override the LVS shut down mode, rapidly toggle liftgate control
switch 5 times between UP and center position. Override will let liftgate
operate for one more cycle.

BATTERY VOLTAGE RESET
LVS resets when battery charging voltage is above 13 volts. Start vehicle engine to recharge battery.

LVS INSTRUCTION DECAL P/N 265923-02 QTY. 1



SCREW, PAN HEAD, 1/4"-20 X 3/4" LG P/N 900002-1 QTY. 2

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

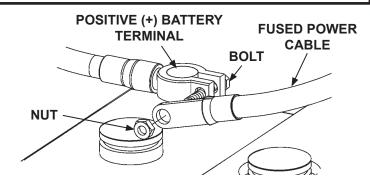
FLAT WASHER, 1/4" P/N 902013-09 QTY. 2



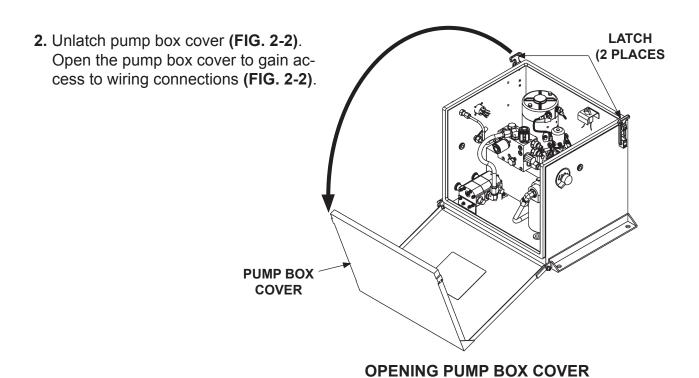
# **WARNING**

To prevent personal injury and equipment damage, make sure power is disconnected at the battery while installing electrical parts.

1. Remove nut from positive (+) battery terminal connector. Disconnect the fused power cable (FIG. 2-1). Reinstall nut.

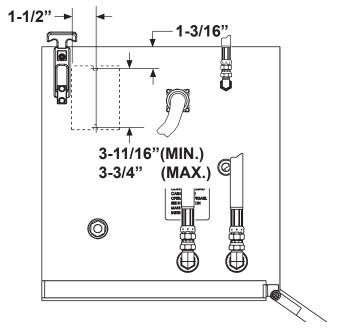


**DISCONNECTING FUSED POWER CABLE** FIG. 2-1

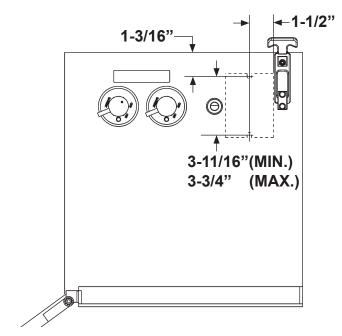


(SINGLE PUMP SHOWN) FIG. 2-2

3. Mark 2 holes on the outside of the pump box for each LVS module. (See FIG. 3-1 for single pump and FIG. 3-2 for dual pump.) Use a 17/64" bit to drill the 2 holes.

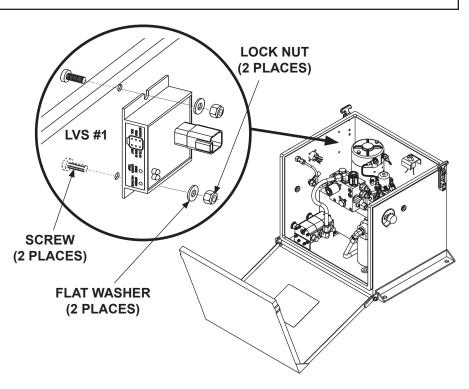


MARKING THE MOUNTING HOLES FOR LVS #1 (SINGLE & DUAL PUMP, LH SIDE SHOWN) FIG. 3-1

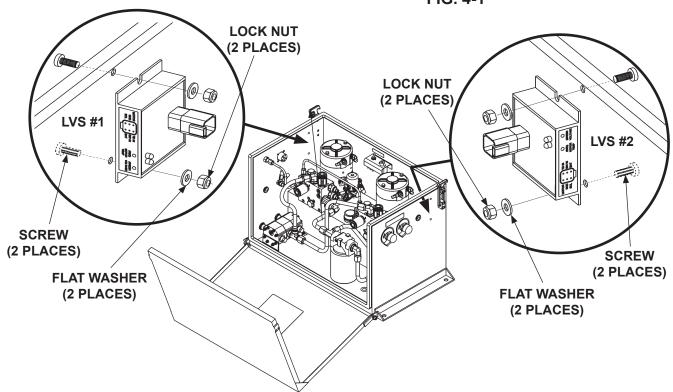


MARKING THE MOUNTING HOLES FOR LVS #2 (DUAL PUMP ONLY, RH SIDE SHOWN) FIG. 3-2

4. Attach LVS module (Kit item) to the inside wall of pump box. (See FIG. 4-1 for single pump and FIG. 4-2 for dual pump.)



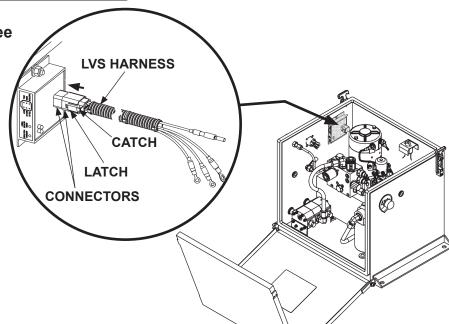
ATTACHING LVS #1 TO WALL OF PUMP BOX (SINGLE PUMP SHOWN) FIG. 4-1



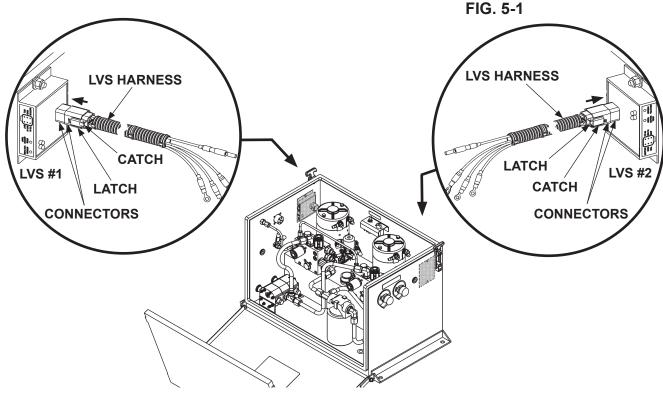
ATTACHING LVS #1 & LVS #2 TO WALLS OF PUMP BOX (DUAL PUMP SHOWN) FIG. 4-2

**NOTE:** MAXON recommends using dielectric grease on all electrical connections.

5. Connect LVS wiring harness (Kit item) to LVS module. (See FIG. 5-1 for single pump and FIG. 5-2 for dual pump.)



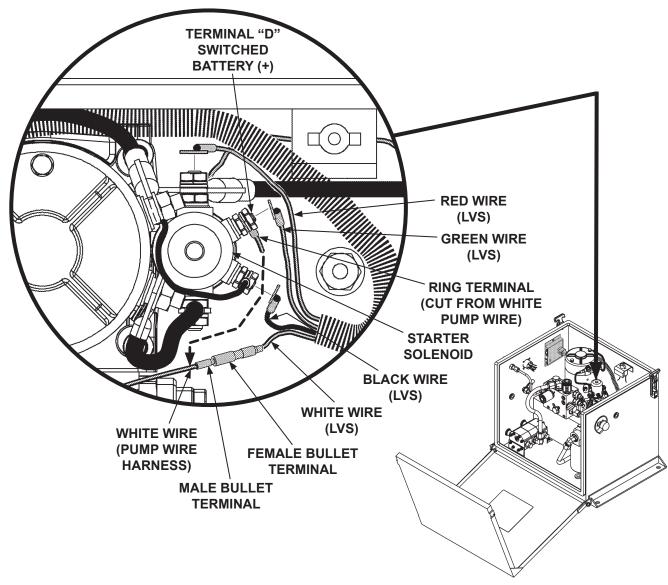
# **CONNECTING LVS HARNESS TO LVS #1** (SINGLE PUMP SHOWN)



**CONNECTING LVS HARNESSES TO** LVS #1 & LVS #2 (DUAL PUMP SHOWN) FIG. 5-2

Route electrical wires clear of the pump box cover and any sharp edges. Avoid making sharp bends in wiring. Connect wiring only as shown in the instructions that follow.

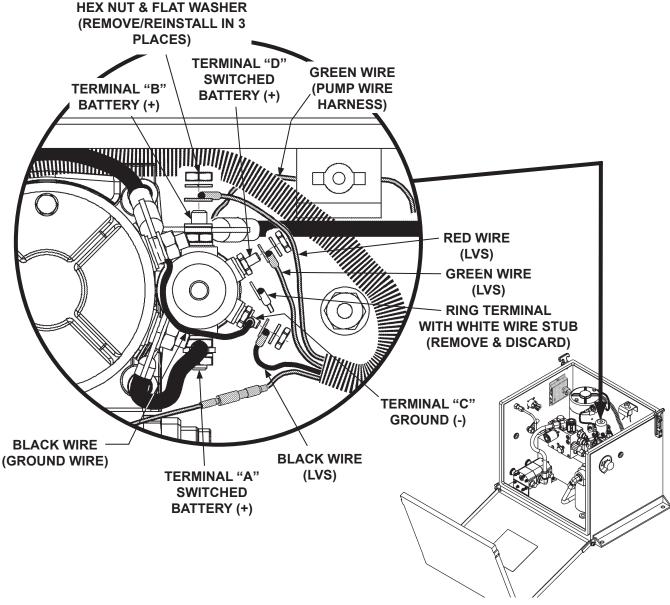
6. Cut the WHITE wire from the ring terminal connected to terminal "D" on the solenoid switch (FIG. 6-1). Next, strip 1/4" insulation from the white wire. Crimp the white wire to the male bullet terminal connected to the white wire on the LVS wire harness (FIG. 6-1).



**CONNECTING WHITE WIRE ON THE** PUMP HARNESS TO WHITE WIRE ON LVS HARNESS (SINGLE PUMP SHOWN) FIG. 6-1

To prevent damage to metal case starter solenoid, hold bottom terminal nut securely when loosening and tightening top terminal nut. Do not over-tighten the terminal nuts. For the 5/16" load terminals, torque nuts 35-40 lbs.-in. Torque the nuts on #10-32 control terminals 15-20 lbs.-in.

7. Connect LVS wire harness to starter solenoid as shown in FIG. 7-1.



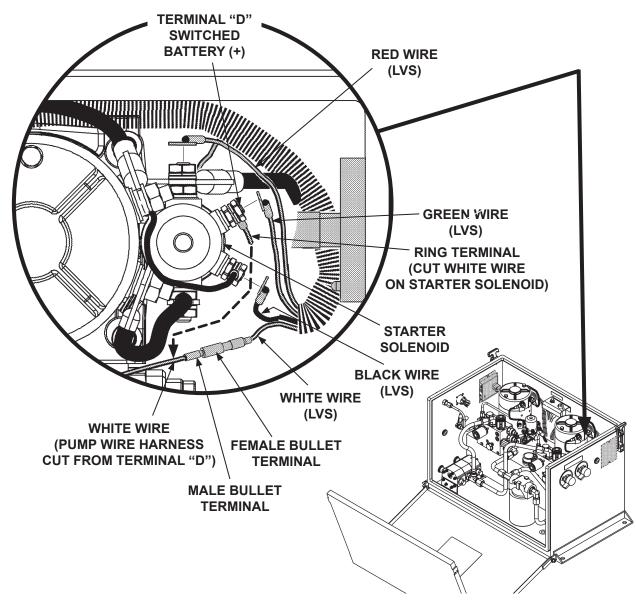
**CONNECTING LVS RED, GREEN & BLACK WIRES TO STARTER SOLENOID** (SINGLE PUMP SHOWN)

FIG. 7-1

# **MAXON**<sup>®</sup>

**NOTE:** To install LVS #2 in a dual pump system, do steps 8 and 9. For a single pump system skip these steps and continue with step 10.

8. Cut the WHITE wire from the ring terminal connected to terminal "D" on the PUMP #2 starter solenoid (FIG. 8-1). Next, strip 1/4" insulation from the white wire. Crimp the white wire to the male bullet terminal connected to the white wire on the LVS wire harness (FIG. 8-1).

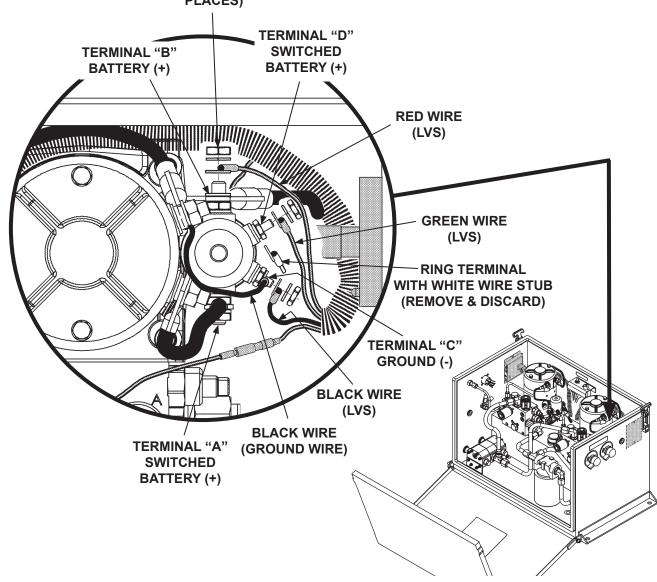


CONNECTING WHITE WIRE ON THE PUMP HARNESS TO WHITE WIRE ON LVS HARNESS (DUAL PUMP SHOWN) FIG. 8-1

To prevent damage to metal case starter solenoid, hold bottom terminal nut securely when loosening and tightening top terminal nut. Do not over-tighten the terminal nuts. For the 5/16" load terminals, torque nuts 35-40 lbs.-in. Torque the nuts on #10-32 control terminals 15-20 lbs.-in.

9. Connect LVS wire harness to starter solenoid as shown in FIG. 9-1.

> **HEX NUT & FLAT WASHER** (REMOVE/REINSTALL IN 3 PLACES)



CONNECTING LVS RED, GREEN & BLACK **WIRES TO STARTER SOLENOID** (DUAL PUMP SHOWN) FIG. 9-1

For cover gasket to seal correctly, each LVS decal must be attached clear of the gasket sealing surface.

NOTE: LVS instruction decals must be attached to the inside of the pump box cover & must be readable with cover open.

10. Attach each LVS instruction decal (FIG. 10-1) to the inside of the pump box cover (See FIG. 10-2 for single pump and FIG. 10-3 for dual pump).

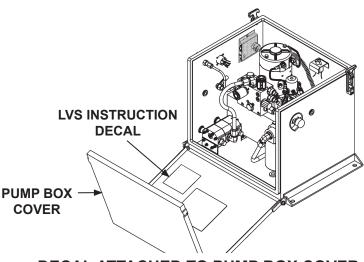


FIG. 10-2

# INSTRUCTIONS

The LVS system protection device is attached to the pump motor starter switch on this liftgate. This LVS is designed to remove power from liftgate when battery voltage is too low for reliable vehicle and liftgate operation. If liftgate will not operate, look at the LVS VOLTAGE LIGHT and follow the

### **VOLTAGE LIGHT (GREEN)**

ON-Liftgate functions are normal.

BLINKING RAPIDLY-Liftgate will shut down shortly.

BLINKING SLOWLY-Liftgate has shut down. **OFF-**No power or the LVS is malfunctioning.



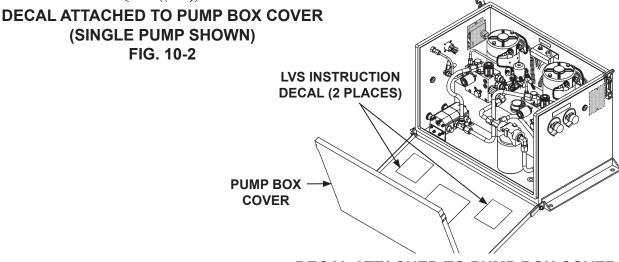
MANUAL OVERRIDE
To override the LVS shut down mode, rapidly toggle liftgate control switch 5 times between UP and center position. Override will let liftgate operate for one more cycle.

### **BATTERY VOLTAGE RESET**

LVS resets when battery charging voltage is above 13 volts. Start vehicle engine to recharge battery.

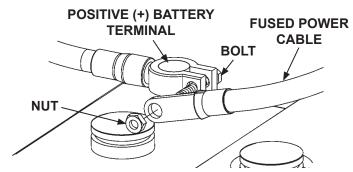
P/N 265923-02

LVS INSTRUCTION DECAL FIG. 10-1



DECAL ATTACHED TO PUMP BOX COVER (DUAL PUMP SHOWN) FIG. 10-3

11. Remove nut from positive (+) battery terminal connector. Reconnect the fused power cable to positive (+) battery terminal connector (FIG. 11-1). Reinstall and tighten nut.



RECONNECTING FUSED POWER CABLE FIG. 11-1

12. Use the LVS instruction decal (FIG. 11-2) to ensure LVS &

# Liftgate function correctly.

### **LOW VOLTAGE SWITCH (LVS) INSTRUCTIONS**

The LVS system protection device is attached to the pump motor starter switch on this liftgate. This **LVS** is designed to remove power from liftgate when battery voltage is too low for reliable vehicle and liftgate operation. If liftgate will not operate, look at the LVS VOLTAGE LIGHT and follow the instructions shown on this decal.

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To override the LVS shut down mode, rapidly toggle liftgate control switch 5 times between UP and center position. Override will let liftgate operate for one more cycle

### **BATTERY VOLTAGE RESET**

LVS resets when battery charging voltage is above 13 volts. Start vehicle engine to recharge battery.

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LVS INSTRUCTION DECAL FIG. 11-2

13. Close pump box cover when installation and LVS check are completed.