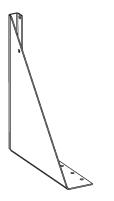
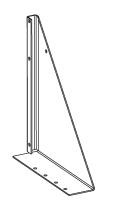
MAXON<sup>®</sup> LIFT CORPORATION Sht. 1 of 19 DSG# M-14-30 Rev. A Date: 11/19/15

## INSTRUCTIONS, DODGE TRUCKS INSTALLATION KIT (C2 LIFTGATES)

DODGE FULLSIZE 1500 PICKUP TRUCKS, 1995 - 2001 DODGE FULLSIZE 2500 & 3500 PICKUP TRUCKS, 1995 - 2002

KIT P/N 289496-01







LH MOUNTING BRACKET P/N 289655-01 QTY. 1 RH MOUNTING BRACKET P/N 289655-02 QTY. 1 MAIN FRAME MOUNTING BRACKET P/N 289637-01 QTY. 2

DODGE BOLT KIT, P/N 289653-01

HEX CAP SCREW 1/2"- 13 X 1-1/4" LG, GR5 P/N 900781-02 QTY. 2



LOCK WASHER, 1/2" P/N 902011-6 QTY. 2



#### BOLT KIT, P/N 289488-01



BUTTONHEAD SCREW 3/8"- 16 X 1" LG. P/N 900064-05 QTY. 8



SELF-TAP SCREW #10-24 X 3/4" LG. P/N 900057-4 QTY. 2



HEX CAP SCREW 3/16"-16 X 1" LG, GR5 P/N 900778-02 QTY. 12



LOCK WASHER, 3/8" P/N 902011-4 QTY. 20

LOCK WASHER, 1/2" P/N 902011-6 QTY. 6



HEX CAP SCREW 1/2"- 13 X 1-1/4" LG, GR5 P/N 900781-02 QTY. 6

FLAT WASHER, 3/8" P/N 902001-2 QTY. 6



FLAT WASHER, 1-3/8" OD, 1/2" P/N 902014 QTY. 4



HEX NUT, 3/8"-16 P/N 903161-05 QTY. 20

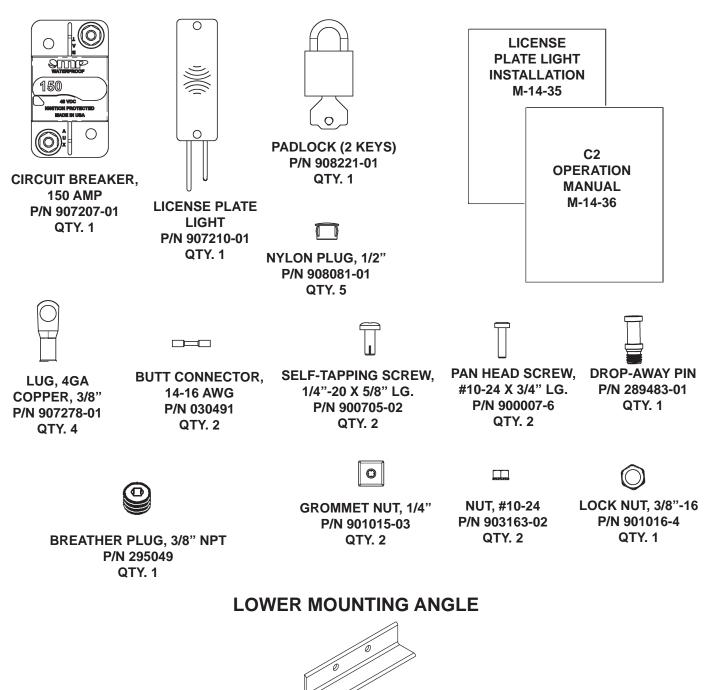


LOCK NUT, 1/2"-13 P/N 040066 QTY, 4

## MAXON<sup>®</sup> LIFT CORPORATION Sht. 3 of 19 DSG# M-14-30 Rev. A Date: 11/19/15

**NOTE:** C2 Liftgates are shipped with the following parts kits for installing the Liftgate. The parts are stored in the main frame housing.

#### C2 LIFTGATE SMALL PARTS & MANUAL KIT P/N 289484-01



SHIPPING LEG P/N 289543-02 QTY. 2

## MAXON<sup>®</sup> LIFT CORPORATION Sht. 4 of 19 DSG# M-14-30 Rev. A Date: 11/19/15

**NOTE:** Installer is responsible for ensuring vehicle meets Federal, State, and Local standards and regulations.

### BODY STRENGTH

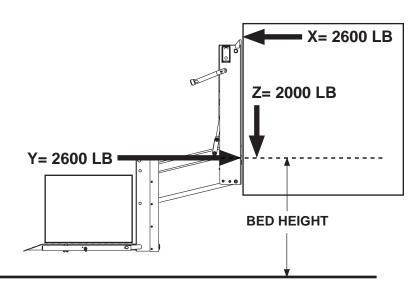
## 

Consult vehicle body manufacturer for vehicle body strength data. Make sure the forces created by the Liftgate are within the limits prescribed by the vehicle body manufacturer.

NOTE: Maximum operating bed height for C2 mounted on pickup body is 42" (Unloaded). Minimum bed height is 28" (Loaded).

The **C2** is a body-mounted liftgate that put forces on the side walls of truck bodies **(FIG. 4-1)**. For correct installation, truck bodies must be strong enough to withstand the tension, compression and shear forces shown in **FIG. 4-1**.

- X= Tension on each sidewall
- Y= Compression on each sidewall
- Z= Shear on each sidewall



C2 LIFTGATE SHOWN ON TRUCK BODY FIG. 4-1

# **MAXON**<sup>®</sup> LIFT CORPORATION Sht. 5 of 19 DSG# M-14-30 Rev. A Date: 11/19/15

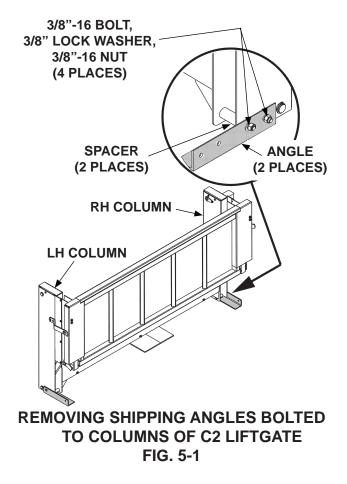
#### PREPARING LIFTGATE

1. Remove mounting kits shipped with liftgate. Refer to **Sheets 1, 2 and 3**. Verify mounting brackets are the correct brackets for this installation.

## **A** CAUTION

Liftgate will not stand upright without the shipping angles. Before removing the angles, make sure Liftgate is supported with forklift or pallet jack. Injury & property damage could result if Liftgate falls over.

 Support Liftgate on shipping pallet with forklift or pallet jack. Then, unbolt shipping angle from each column on the Liftgate (FIG. 5-1). Save shipping angles to use for lower mounting brackets.



## **MAXON**<sup>®</sup> LIFT CORPORATION Sht. 6 of 19 DSG# M-14-30 Rev. A Date: 11/19/15

#### **BOLTING ON MAIN FRAME BRACKETS**

**NOTE:** The extra hole in the main frame mounting brackets is always below the 1/4" X 1" strip.

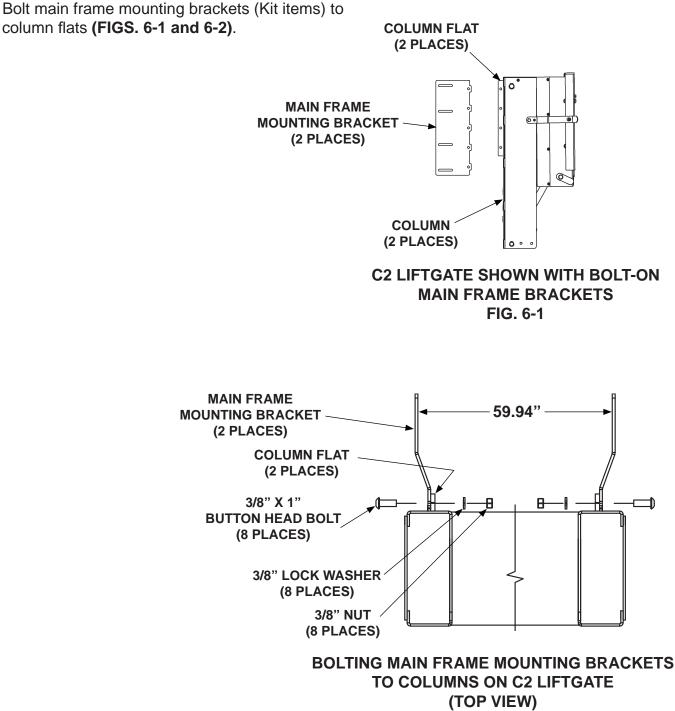
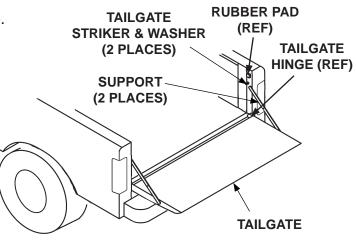


FIG. 6-2

## MAXON<sup>®</sup> LIFT CORPORATION Sht. 7 of 19 DSG# M-14-30 Rev. A Date: 11/19/15

#### **PREPARING PICKUP TRUCK**

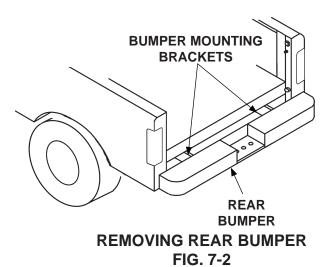
1. Unbolt the tailgate and supports (FIG. 7-1).



2. Support rear bumper (FIG. 7-2) before unbolting the bumper brackets. REMOVING TAILGATE & SUPPORTS FIG. 7-1

**NOTE:** When liftgate is installed on the truck, the tailgate and rear bumper cannot be reinstalled.

3. Unbolt and remove rear bumper, and bumper brackets (FIG. 7-2).



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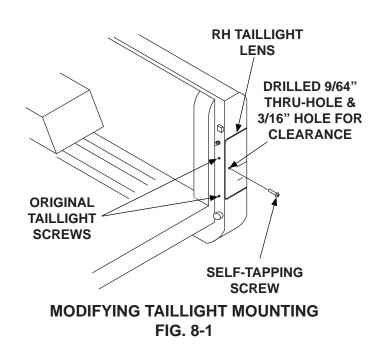
### **CHANGING TAILLIGHT MOUNTING**

**NOTE:** Taillight modification must be completed before Liftgate is installed so that taillight bulbs can be replaced without removing liftgate.

- Remove 2 original taillight screws from RH taillight lens (FIG. 8-1). These screws are not needed after the taillight mounting is changed.
- Drill a 9/64" hole through RH taillight lens and internal sheet metal (FIG. 8-1). Then, carefully drill a 3/16" hole through taillight lens to create clearance for the screw threads (FIG. 8-1).

**NOTE:** If liftgate is C2-15 model (1500 Ib capacity), wait until liftgate is mounted on pickup bed before reinstalling taillights.

- Apply clear automotive silicone sealant (not supplied) to the 3/16" hole in the taillight lens, and on the threaded portion of the self-tapping screw (FIG. 8-1).
- Insert a self-tapping screw (Kit item) into 9/64" hole to secure the taillight lenses in place (FIG 8-1). Do not overtighten screw.
- **5.** Repeat steps 1 through 4 for LH taillight lens.



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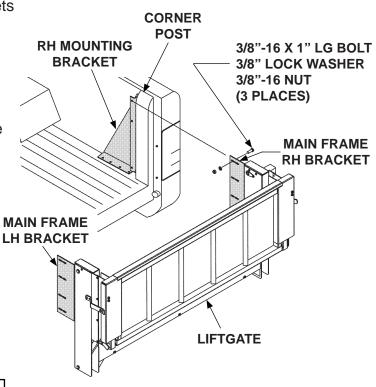
### **INSTALLING LIFTGATE**

**NOTE:** Holes for mounting brackets are marked and drilled only after liftgate is in correct position on the pickup bed.

- 1. Position the LH and RH mounting brackets (Kit items) in the pickup bed just forward of corner posts (FIG. 9-1).
- 2. Position liftgate in the rear opening of the pickup bed (FIG. 9-1).
  - Liftgate centered on rear opening in pickup bed
  - Columns vertical
  - Spare tire access hole aligned with spare tire tube on truck
  - Top of main frame flush with floor of pickup bed

**NOTE:** Ensure nuts and lock washers are on the inboard side of the mounting brackets.

- Bolt the main frame brackets on liftgate, to the RH mounting brackets as shown in FIG. 9-1. Handtighten bolts and nuts. Repeat for LH mounting bracket.
- Let liftgate hang, in the rear opening of pickup bed, with support from corner posts.



BOLTING LIFTGATE TO RH MOUNTING BRACKET FIG. 9-1

# **MAXON**<sup>®</sup> LIFT CORPORATION Sht. 10 of 19 DSG# M-14-30 Rev. A Date: 11/19/15

### **INSTALLING LIFTGATE - Continued**

## CAUTION

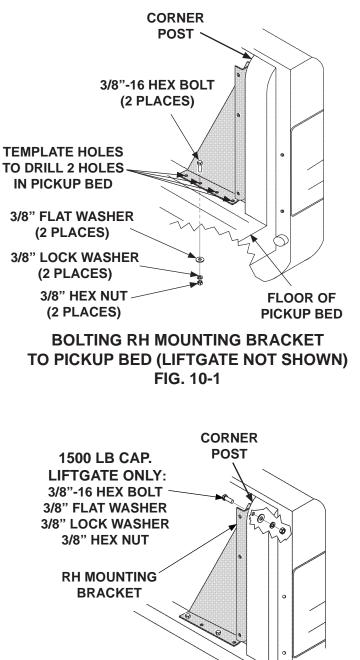
Before drilling holes in the pickup bed, ensure there are no obstructions or items that could be damaged.

- Hold RH mounting bracket against corner post of the pickup bed (FIG. 10-1). Then, use 2 of the 4 bracket holes that are not obstructed, to drill 2 holes for 3/8"-16 bolts in floor of the pickup bed (FIG. 10-1). Repeat for LH mounting bracket.
- Bolt RH mounting bracket to the floor of pickup bed as shown in FIG. 10-1. Repeat for LH mounting bracket.
- Unlatch and unfold platform. Refer to C2 Operation Manual if needed. Then, adjust liftgate position so platform is level from front to back.
- Securely tighten 3 bolts fastening RH mounting bracket to main frame bracket (FIG. 10-1). Ensure the split lock washers are not in the slotted holes on main frame bracket. Repeat for LH mounting bracket.

### CAUTION

1500 lb capacity liftgates require additional support for the mounting brackets. Bolt bracket to pickup bed as shown in the illustration.

- 9. Use upper 3/8" hole in the RH mounting plate as a template to drill hole through RH corner post of pickup bed (FIG. 10-2). Then, bolt RH mounting plate to corner post as shown in FIG. 10-2. Repeat for LH mounting plate.
- 10. If liftgate is C2-15 model (1500 lb capacity), go back and finish the steps for changing the mounting of taillight lenses.





# **MAXON**<sup>®</sup> LIFT CORPORATION Sht. 11 of 19 DSG# M-14-30 Rev. A Date: 11/19/15

### **CHECKING ACCESS TO SPARE TIRE**

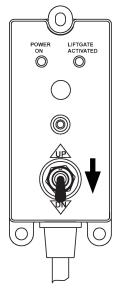
## CAUTION

Do not use a battery charger for connecting power to Liftgate power cables.

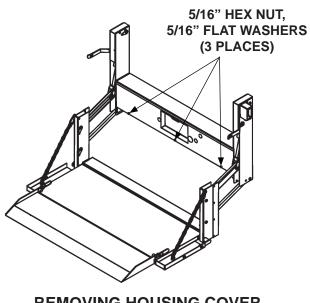
- 1. Connect power from a 12 volt truck battery to the Liftgate power cables extending from the back of main frame housing.
- 2. Refer to operating instructions, in C2 Operation Manual, to unfold platform and activate the Liftgate.

NOTE: With the POWER ON and LIFTGATE ACTIVATED lights on, the Liftgate can be raised or lowered. If the Liftgate is not used for 90 seconds, the control will automatically deactivate.

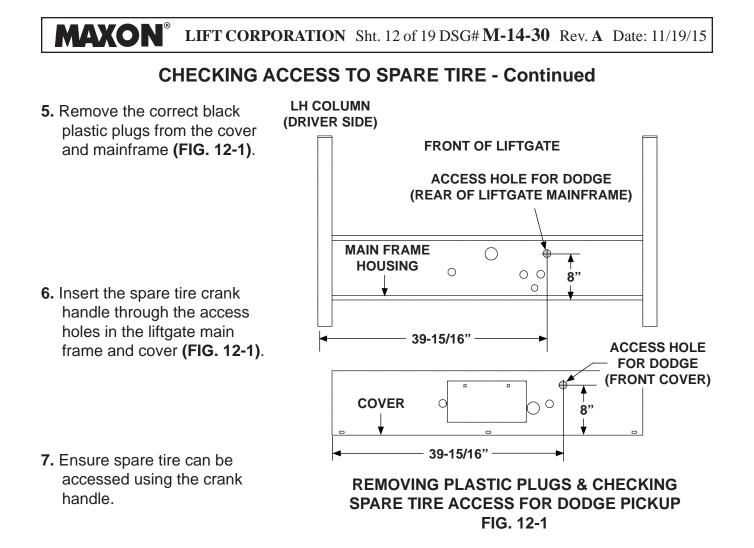
- **3.** Use the control switch to lower **(DN)** the platform to the ground **(FIG. 11-1)**.
- 4. Unbolt and remove main frame housing cover (FIG. 11-2).



USING CONTROL SWITCH TO LOWER LIFTGATE FIG. 11-1



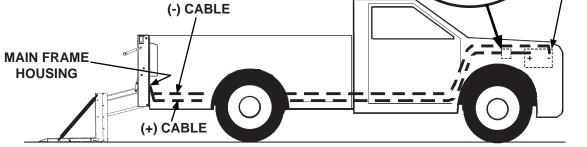
REMOVING HOUSING COVER FROM C2 LIFTGATE FIG. 11-2



# **MAXON**<sup>®</sup> LIFT CORPORATION Sht. 13 of 19 DSG# M-14-30 Rev. A Date: 11/19/15

#### **ROUTING POWER CABLES**

- Remove the small parts and manual kit from the housing. Refer to Sheet 3 for contents of the kits.
- Install circuit breaker (FIG. 13-1) inside the engine compartment near truck battery (+) terminal and away from moving parts. Allow enough room for power cables to be run and for easy access to circuit breaker.



#### **3.** Pull the **(+) and (-)** power cables through the cord grip on back of main frame housing. Leave about 2" of slack, for power cables, inside main frame housing.

- 4. Route power cables along truck frame to truck battery (FIG. 13-1). Pull extra cable beyond the battery terminals. Then, separate positive (+) cable from negative (-) cable.
- Cut positive (+) cable to the length required to reach the AUX terminal of the circuit breaker (FIG. 13-1), without putting strain on the connection. Install copper lug (Kit item) (FIGS. 13-2 and 13-3). Then, connect to AUX terminal on 150A circuit breaker.
- 6. Cut remaining positive (+) cable long enough to reach from the circuit breaker BAT terminal to the positive (+) battery terminal (FIG. 13-1) without putting strain on the connection. Install copper lugs (Kit item) on both ends of cable (FIGS. 13-2 and 13-3). Then, connect cable to BAT terminal on 150A circuit breaker and positive (+) terminal on battery.
- COPPER LUG HEATSHRINK TUBING POWER CABLE (BARE WIRE END) PLACING COPPER LUG & HEATSHRINK TUBING ON POWER CABLE

RUNNING POWER CABLES FROM LIFTGATE TO BATTERY FIG. 13-1

**150A CIRCUIT** 

BREAKER

BATTERY

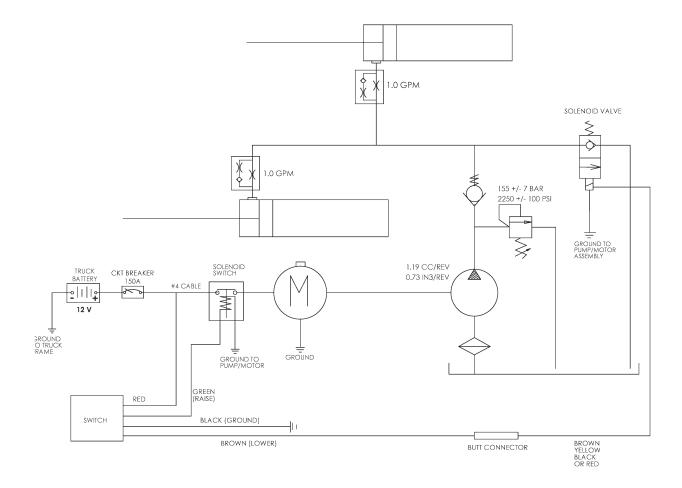
FIG. 13-2



TYPICAL POWER CABLE WITH COPPER LUG INSTALLED FIG. 13-3

Cut negative (-) cable to length required to reach negative (-) battery terminal without putting strain on the connection. Install copper lug (Kit item) (FIGS. 13-2 and 13-3). Then, connect cable to negative (-) terminal on battery.

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#### C2 PICKUP LIFTGATE HYDRAULIC & ELECTRICAL SYSTEMS DIAGRAM FIG. 14-1

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### INSTALL LOWER MOUNTS

### CAUTION

Liftgate can be severely damaged by connecting electric welder to liftgate at the wrong place. To prevent damage, always connect ground lead directly to component being welded & as close as possible to weld.

**NOTE:** Lower mounts are essential for Liftgate to be installed correctly. They attach to the truck frame and support the bottom of Liftgate.

- 1. Unbolt bracket plates from bottom of main frame housing (FIG. 15-1).
- Position 2 bolt-on mounting angles, nearest to truck frame at bottom of Liftgate main frame housing (FIG. 15-2). Then bolt each angle to hole allowing closest fit to truck frame.
- Position 2 bracket plates (Kit items) on truck frame at bottom of Liftgate main frame housing (FIG. 15-2). Bolt to truck frame. If necessary, modify bracket plates for best fit.
- Clamp 2 short angles (no holes) (Kit items) to bracket plates on truck frame (FIG. 15-2). Position the 2 angles to reach the angles bolted on bottom of main frame housing.
- 5. With angles, and bracket plates positioned and clamped together, tack weld the angles and plates in position (FIG. 15-2).
- 6. Unbolt tack-welded lower brackets from truck frame (FIG. 15-2). Then, finish weld the bracket plates and angles.
- 7. Bolt the finish-welded bracket plates and angles back in position on the bottom of the main frame housing and truck frame (FIG. 15-2).

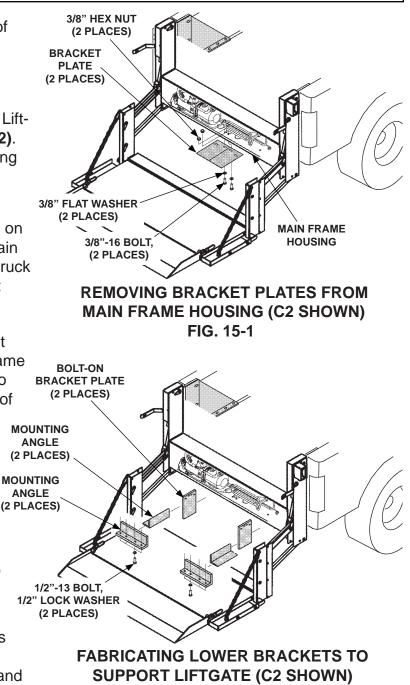


FIG. 15-2

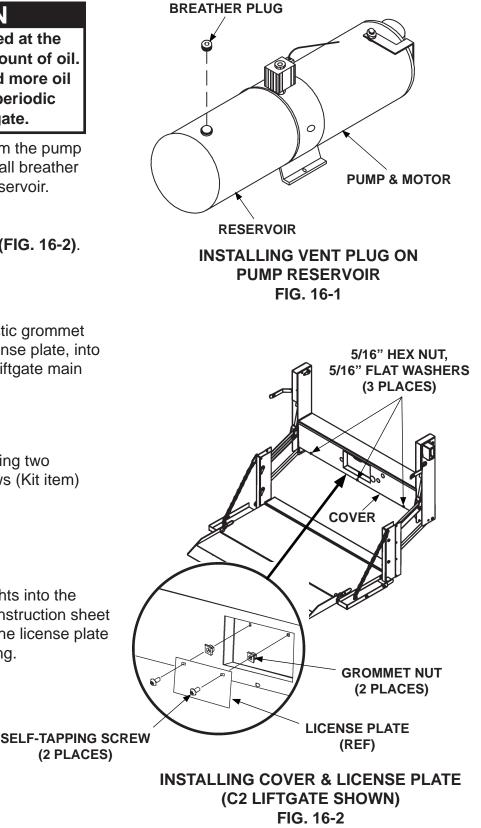
# **MAXON**<sup>®</sup> LIFT CORPORATION Sht. 16 of 19 DSG# M-14-30 Rev. A Date: 11/19/15

### COMPLETE LIFTGATE INSTALLATION

### CAUTION

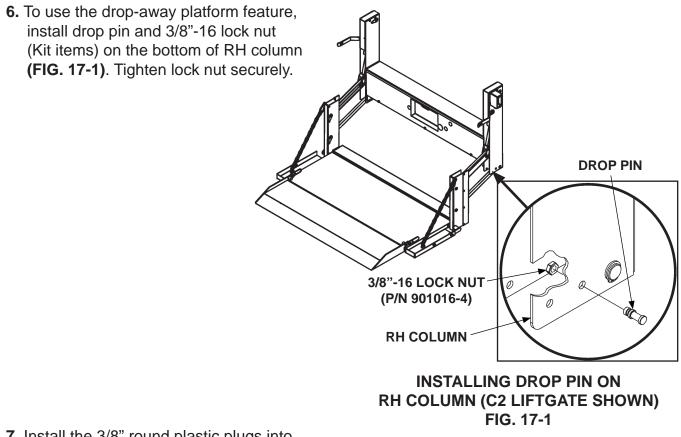
Hydraulic system is filled at the factory with correct amount of oil. It is unnecessary to add more oil except as required for periodic maintenance of the liftgate.

- 1. Remove the solid plug from the pump reservoir (FIG. 16-1). Install breather plug (Kit item) in pump reservoir.
- 2. Bolt on main frame cover (FIG. 16-2).
- **3.** Install the two square plastic grommet nuts (Kit item), for the license plate, into the square holes on the Liftgate main frame cover (**FIG. 16-2**).
- 4. Install the license plate using two 1/4"-20 self-tapping screws (Kit item) (FIG. 16-2).
- Install the license plate lights into the holes provided. Refer to instruction sheet M-14-35. Then, connect the license plate lights to the vehicle's wiring.



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#### **COMPLETE LIFTGATE INSTALLATION - Continued**



- **7.** Install the 3/8" round plastic plugs into the empty holes in the bottom of the columns.
- 8. If previously removed, reinstall spare tire.

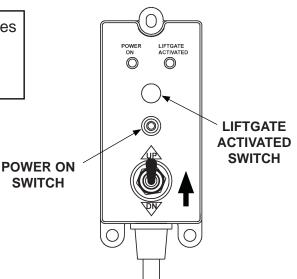
**MAXON**<sup>®</sup> LIFT CORPORATION Sht. 18 of 19 DSG# M-14-30 Rev. A Date: 11/19/15

### TEST OPERATION OF LIFTGATE

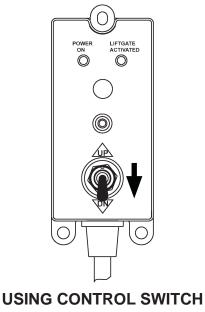
## WARNING

Keep all foreign objects out of the Liftgate mainframe and away from pinch points at all times when operating Liftgate.

- **NOTE:** The **LIFTGATE ACTIVATED** LED illuminates when Liftgate power is on. Control switch should deactivate after 90 seconds of not being used.
- Check operation of control switch for proper operation by pressing POWER ON button once to activate. Next, press POWER ON button again to deactivate Liftgate power. Then, press the POWER ON button twice to reset low voltage (FIG. 18-1).
- 2. Press the LIFTGATE ACTIVATED switch within 1 second to activate the timer (FIG. 18-1).
- Raise (UP) and lower (DN) the unloaded platform (FIGS. 18-1 and 18-2) on a flat surface. Check for proper operating speed and alignment with the ground.
- Load the platform with the rated capacity and measure the time to RAISE the platform (FIG. 18-1). The platform should raise approximately 2" to 3" per second.
- **5.** Examine the platform for any downward creep.
- 6. Measure the time to LOWER the platform still loaded (FIG. 18-2). The load should descend approximately 7" to 9" per second.
- 7. Remove the load from the platform and examine the Liftgate and vehicle for hydraulic oil leaks, loose wiring, and any other problems.
- **8.** Reinstall the main frame housing cover. Then, close and latch platform.



CHECKING OPERATION OF CONTROL SWITCH AND RAISING PLATFORM FIG. 18-1



TO LOWER PLATFORM FIG. 18-2

# **MAXON**<sup>®</sup> LIFT CORPORATION Sht. 19 of 19 DSG# M-14-30 Rev. A Date: 11/19/15

#### **TEST OPERATION OF LIFTGATE - Continued**

**9.** Lock the latch on LH side or RH side through the hole in the latch pin (**FIG. 19-1**).

