

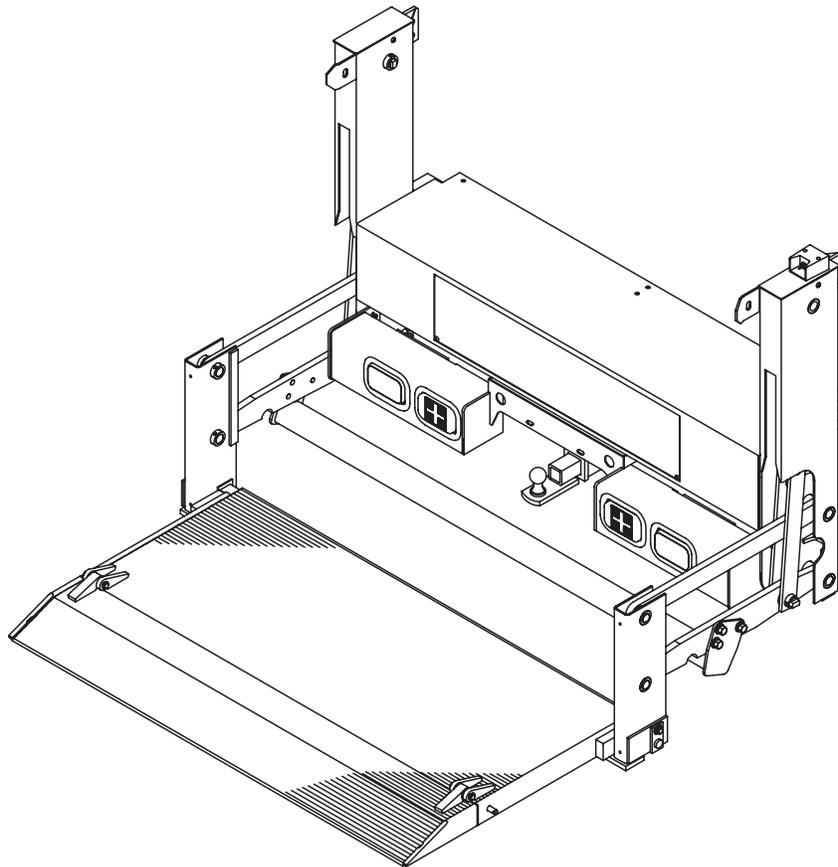
# TOPLIFTER

Tailgates By THIEMAN

## TT-15

# INSTALLATION INSTRUCTIONS

SHOWN WITH OPTIONAL 2 PC. ALUMINUM PLATFORM AND LIGHT KIT



**IMPORTANT! KEEP IN VEHICLE!**

PLEASE READ AND UNDERSTAND THE CONTENTS OF THIS  
MANUAL BEFORE OPERATING THE EQUIPMENT.

**NTEA**  
THE ASSOCIATION FOR THE WORK TRUCK INDUSTRY  
MEMBER

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## **ATTENTION INSTALLERS:**

Changes are made periodically to the installation procedure to comply with engineering changes. To ensure proper liftgate operation, it is **VERY IMPORTANT** to read and understand the installation instructions before attempting an installation. Installers also **MUST** read and understand the liftgate's Owner's Manual before installing the liftgate, so they can operate the liftgate safely as required during different stages of the installation process. **NEVER** perform a modification on the liftgate, which is not specifically covered in this manual or which is unauthorized by Thieman. Modifications may result in failure of the liftgate and may create hazards for liftgate installers, operators, or maintainers. Serious damage, equipment failure, or operator injury could result from improper installation. This equipment **MUST** have all decals applied properly. **FAILURE** to apply all decals properly will **VOID** all warranties! Any installer with questions or doubts should contact Thieman before proceeding.

The TT15 series liftgate is designed for use on pickup trucks, service bodies, and flatbeds. The TT15 has a bed height range of 30 to 45 inches and comes standard with a split style bumper. The split style bumper allows clearance for a receiver type hitch to be attached to the truck frame.

- All maximum mounting dimensions are shown with the vehicle empty; All minimum mounting dimensions are shown with vehicle loaded.
- Check bed height when parked on level surface.

## **TRUCK OR TRAILER PREPARATION**

Remove lights, safety bumper, dock bumpers, etc. that may interfere with installation.

## **INSTALLATION INSTRUCTIONS**

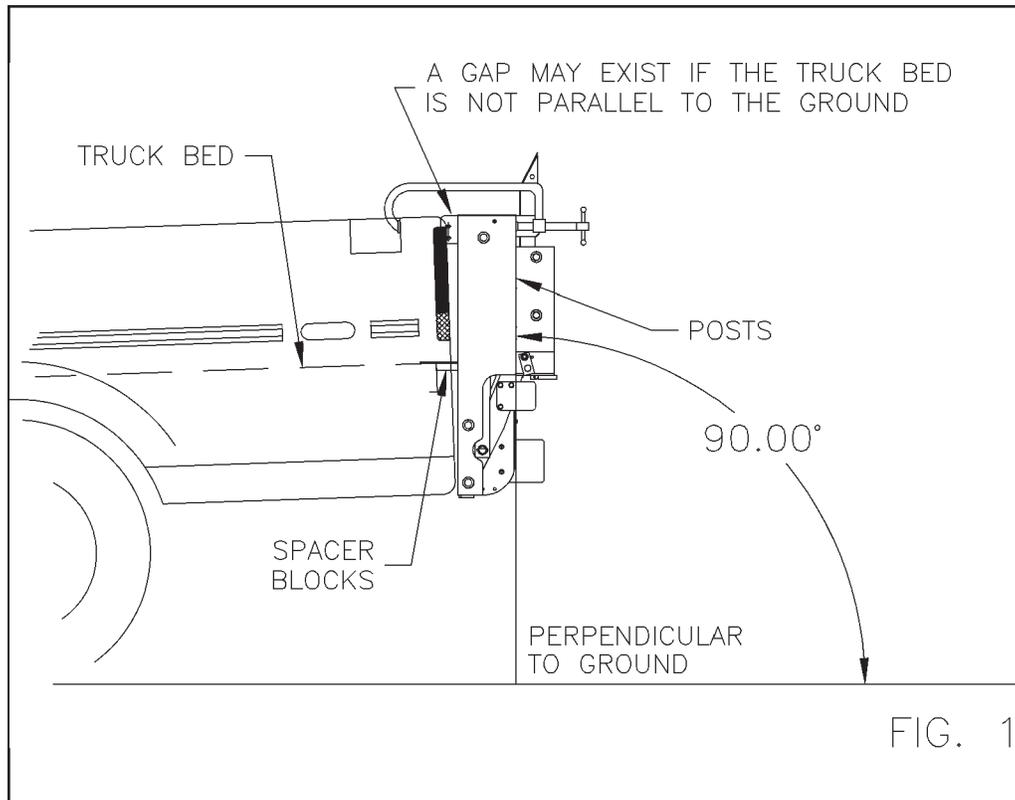
**Step 1** Uncoil the battery cable found under the threshold.

### **Step 2 FORD ALUMINUM PICKUP BEDS**

See Ford SVE Bulletin Q-222 for adding accessories to aluminum beds. It covers how to protect against galvanic corrosion (corrosion between dissimilar metals).

**Step 3** Locate the liftgate in the bed of the vehicle by sliding the deck sheet on to the bed as far as possible. Center the liftgate between the cargo area. Be sure that idler arms and lift arms can be removed once the liftgate is installed. Be sure that the platform is locked into the stowed position during the entire installation.

**Step 4** With the liftgate centered, locate and clamp the posts in their vertical positions - perpendicular to the ground to insure the platform will level ride parallel to the ground. DO NOT square the posts with the truck bed because the truck bed may not be parallel to the ground. Make sure the spacer blocks behind the threshold are tight against the rear of the truck bed while squaring the posts to the ground. See figure 1.



**Step 5** Bolt the threshold to the truck floor using 3 holes provided. See figure 2. Use grade 5, 3/8 hardware (hardware not included).

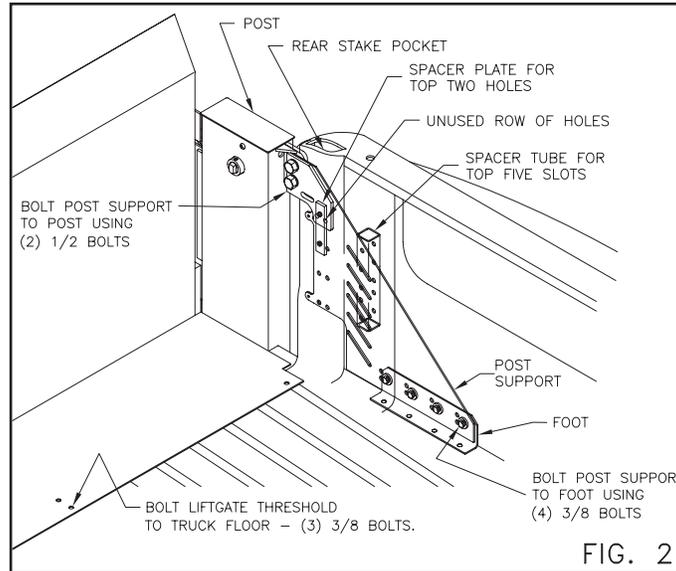
**Step 6** Bolt the foot to the post supports using the 3/8 hardware that is provided. Only finger tighten at this point. There are three locations for the foot because of different bed designs. Which set of holes that are used are dependent upon the location of where the foot bolts to the bed relative to the threshold.

1. Top holes: If the foot is higher than the threshold.
2. Middle holes: If the foot is on the same level as the threshold.
3. Bottom holes: If the foot is lower than the threshold.

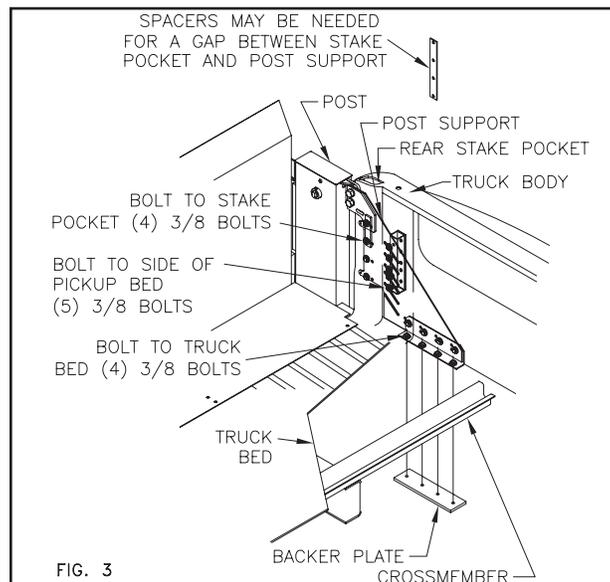
Note: 49 & 53 wide service body installs have a one piece post support that bolts to the back of the post and to the floor of the service body.

## NEXT STEPS (7 & 8) FOR 2007 TO PRESENT GM TRUCK BEDS

**Step 7** Bolt the post supports to the back of the posts on the side away from the stake pockets using the 1/2 inch hardware provided. Finger tighten at this point. Rotate the post support so that the foot is flat on the bed floor and parallel to the stake pocket. A spacer plate is provided to fill the gap between the post support and the stepped stake pocket on the top two holes plus there are additional shims if there is still a gap. A spacer tube and shims are provided to fill the gap between the post support and the side of the truck bed on the top five slots. See figure 2.

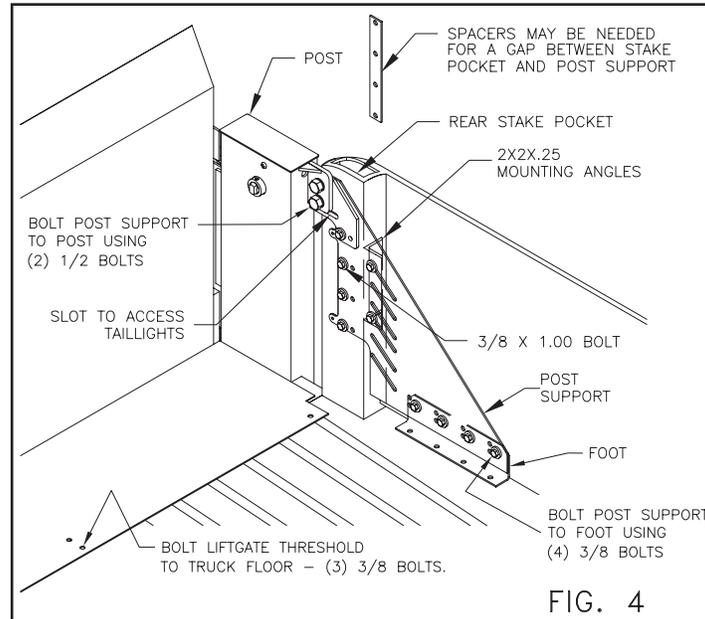


**Step 8** With the foot of the post supports flat on the truck floor, pull tight toward cab and bolt the foot of the post supports through the truck floor and finally through the backer plates. Backer plates may be trimmed where bolts intersect crossmembers, but should be used with all other bolts which only intersect the truck bed. Bolt each post support to the rear stake pockets using the four holes shown. The two top holes will have a spacer plate between the post support and the rear stake pocket plus full length shims if necessary. Use the top 5 slots to bolt the post support to the side of the truck bed with the spacer tube plus shims if necessary sandwiched between. Use grade 5, 3/8 hardware throughout (hardware not included). See Figure 3.

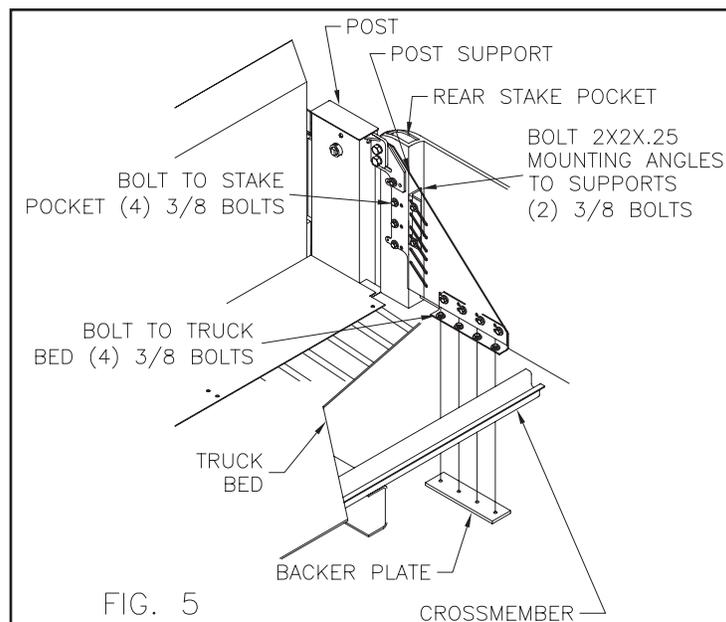


## STEPS 9 & 10 ARE FOR ALL TRUCK BEDS OTHER THAN GM 2007 TO PRESENT

**Step 9** Bolt the post supports to the back of the posts on the side toward the stake pockets using the 1/2 inch hardware provided. Finger tighten at this point. Rotate the post support so that the foot is flat on the bed floor and parallel to the stake pocket. Spacer shims are provided to fill the gap between the stake pocket and the post support. Mounting angles are provided to bolt to the post supports slots as high as possible. See figure 4.

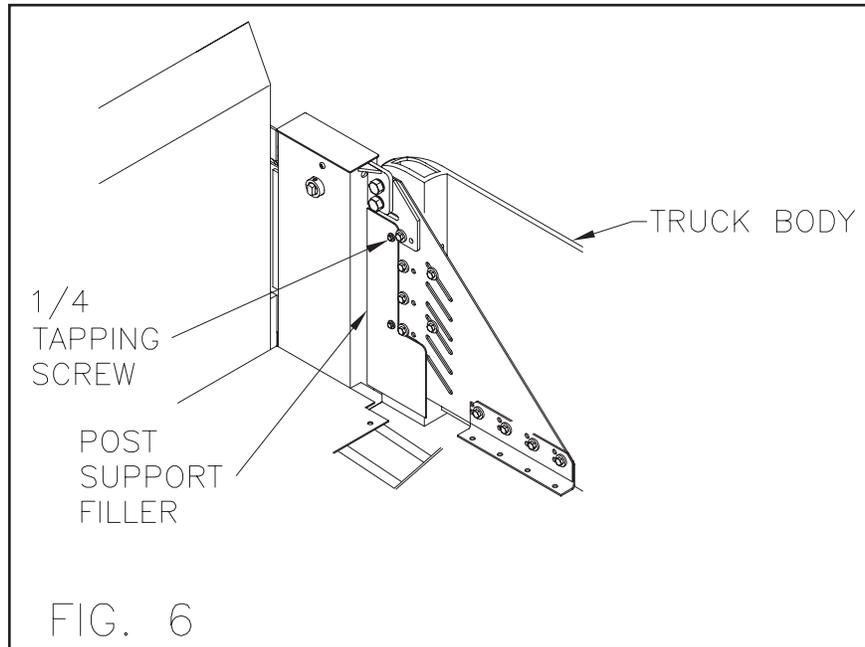


**Step 10** With the foot of the post supports flat on the truck floor, pull tight toward the cab and bolt the foot of the post supports through the truck floor and finally through the backer plates. Backer plates may be trimmed where bolts intersect crossmembers, but should be used with all other bolts which only intersect the truck bed. Bolt each post support to the rear stake pockets using the four holes shown. Shims are provided if necessary to fill a gap between the post support and stake pocket. Bolt the mounting angles through the post support slots as high as possible using the supplied 3/8 hardware. See figure 5.

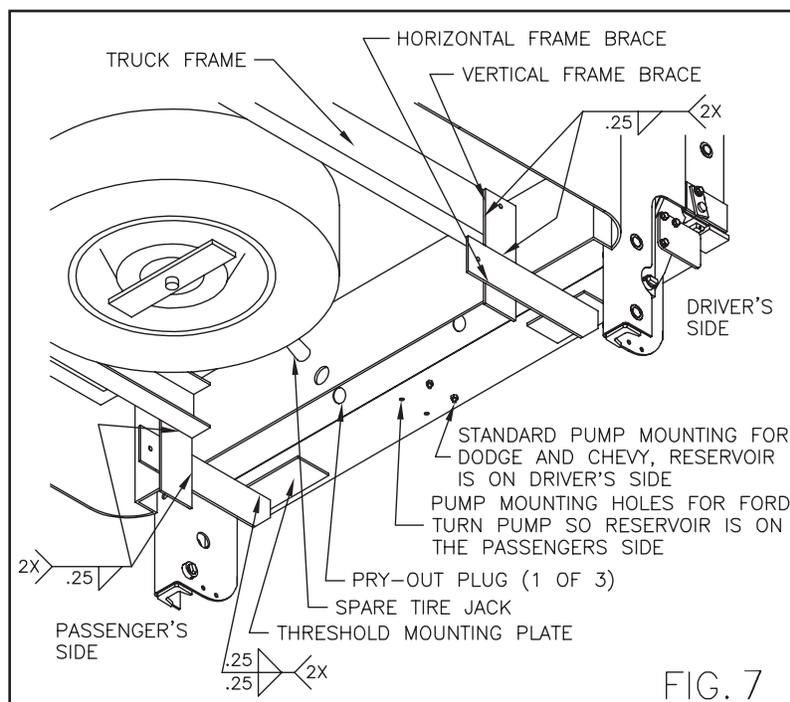


**Step 11** Tighten the 1/2 bolts between the post support and post and the 3/8 bolts that attach the foot to the post support.

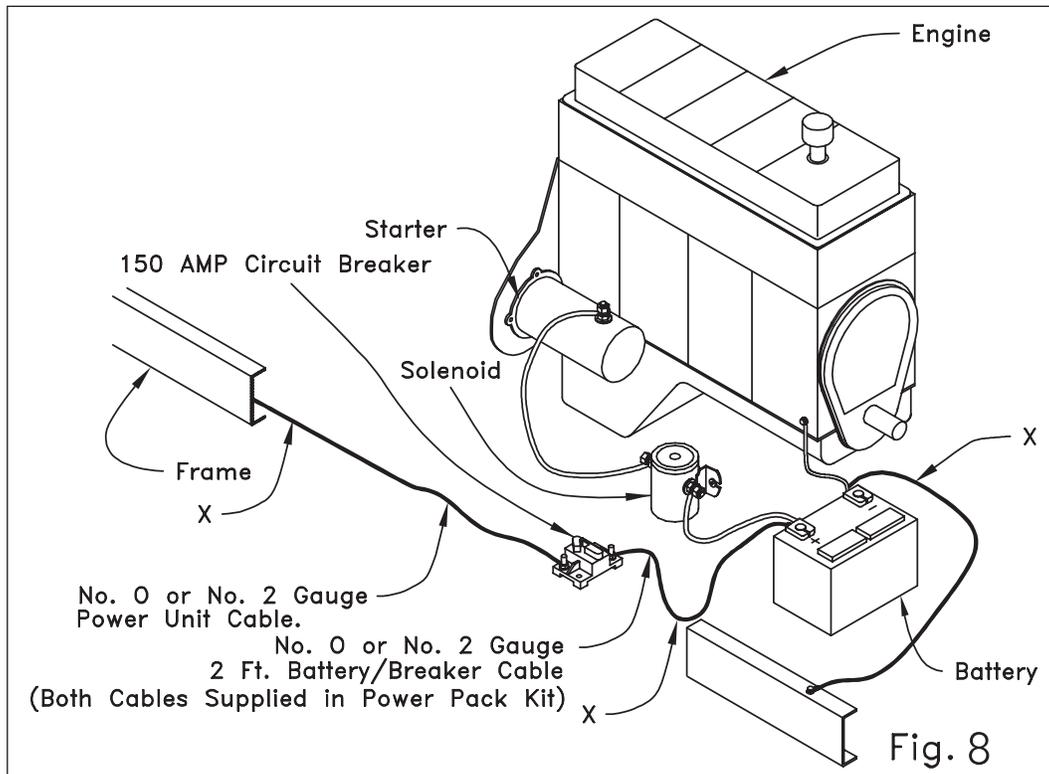
**Step 12** A filler plate is provided to close the opening between the post on the liftgate and the stake pocket of the pickup bed (not used on service bodies). It attaches to the two ears on the post support brace with 1/4 self tappers. Because of the contours on GM pickup bodies some trimming is needed to fit properly. See figure 6.



**Step 13** Weld the vertical frame braces to the truck frame. If welding to the truck frame is prohibited by the manufacturer, the vertical frame brace may be bolted to the frame. On a split style bumper or less bumper, weld the horizontal frame braces to the vertical frame braces and to the mounting plates on the bottom of the liftgate threshold. See figure 7.



**Step 14** Fasten the 150 AMP circuit breaker provided within 2 ft. of the truck battery. Route the battery cable from the liftgate toward the 150 AMP circuit breaker. (Note: secure an extra 2 ft. of battery cable near the liftgate. This slack will allow the power unit to be removed from the gate easily in the future if servicing or replacement is required.) AVOID SHARP CORNERS AND HIGH HEAT AREAS. Use cable clips provided to secure the cable to the truck frame every 2 feet. Cut the cable to the desired length and strip .88" of insulation from the end. Slide the pre-cut heat shrink over the end of the cable. Secure the cable lug in a vise and apply heat to the connector and insert the cable as the solder melts. Allow connector to cool and install the heat shrink. Attach this end to one terminal on the 150 amp circuit breaker. Install heavy ground cable from negative battery terminal to the frame. Wire the breaker to the truck battery using the 2 ft. cable provided. See figure 8.



**Step 15** Many late model trucks have battery connections as shown in Figure 8. The ground cable from the battery is connected directly to the engine block with only a light braided ground strap from the block to the chassis (either the body or the frame). Where this is the case, the factory-installed wiring usually does not provide an adequate ground circuit for battery-operated accessories, such as electric-hydraulic tailgates.

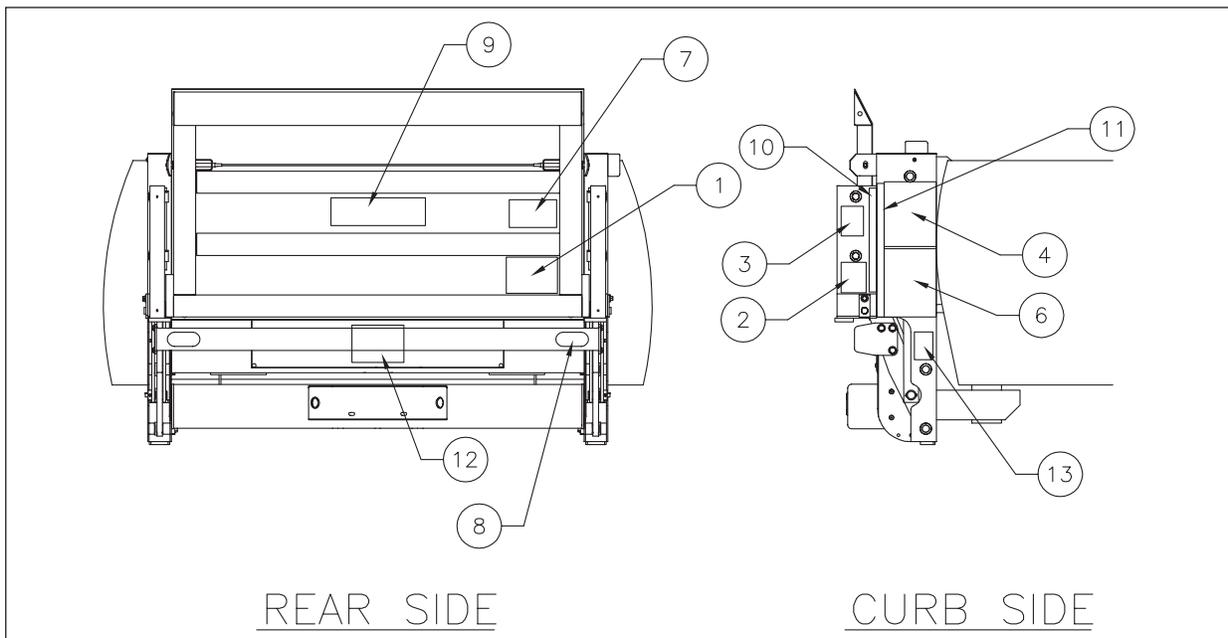
We recommend that the cables shown with an "X" in Figure 9 be not less than No. 2 gauge wire, as supplied in the Power Pack Kit on all electric/hydraulic installations. Because of the high current draw (approximately 200 A) by hydraulic tailgates, we recommend that the alternator be a heavy duty type and the battery must have a 150 AMP minimum reserve capacity.

**Step 16** Once the power is connected, release the safety latches, unfold the platform and lower it to the ground. The pump is located under the threshold and can be accessed by removing the cover plate. With the platform on the ground, make sure that the fluid in the pump reservoir is 1/2" from the top. Remove the plug from the reservoir and replace with the breather cap provided.

**Step 17** The TT15 has three pry out plugs located on the rear of the threshold behind the pump cover plate. These plugs can easily be removed by hand and are designed to allow access to the spare tire jack once the cover plate has been removed. The hydraulic pump is mounted by the factory to allow access to two of the three holes which are designed for Chevy and Dodge pickup trucks. If the liftgate is being mounted on a Ford pickup, the installer must flip the pump 180° and use the other two mounting holes in the threshold so that the reservoir is toward the passenger side. This will allow access to the spare tire on a Ford pickup. These holes are only designed to line up with the latest full size models from Ford, Dodge and Chevy. Access to the spare tire on other model pickups must be provided by the installer. Replace the cover plate when finished. See figure 7.

**Step 18** When painting, carefully grease or mask fittings and any exposed portion of the cylinder rods. On decals already applied remove premask after painting. Apply remaining decals in the appropriate locations as shown. These decals **MUST** be applied or all warranties are **VOID!**

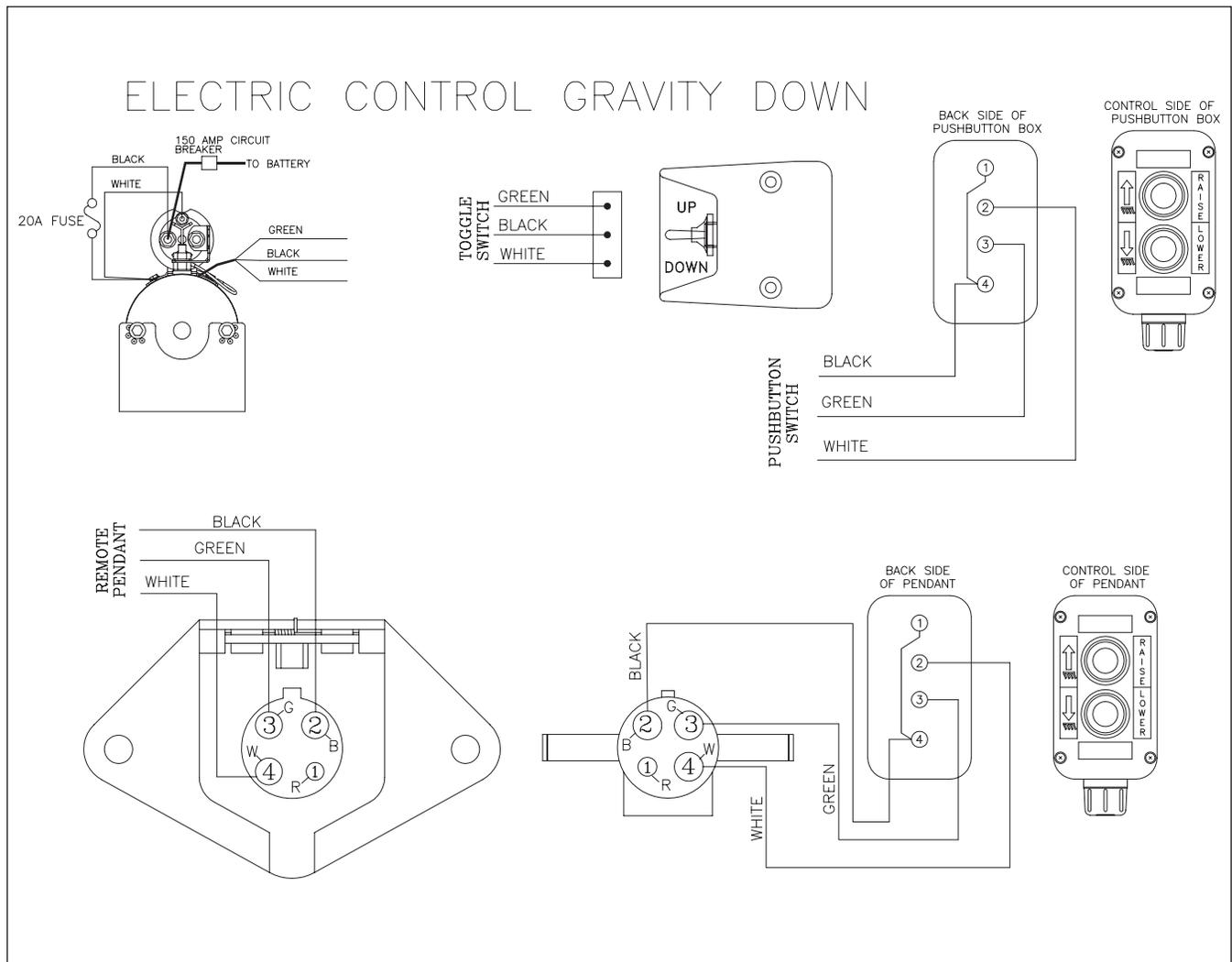
Item	Part Name	Part Number
1	Warning Decal-off center	4671050
2	PTO Decal	4650140
2	Fast Idle Decal	4650150
3	Danger Decal-no riding	4609
4	Operating Decal	4650870
5	Capacity Decal-1000#	4650050
5	Capacity Decal-1250#	4650060
5	Capacity Decal-1500#	4650070
6	Warning Decal	4650530
7	Caution Decal-working area	4650770
8	Reflector(2)	5705
9	Thieman Nameplate	4650801
10	Hazard Marking Tape - Pivot	5760-002
11	Hazard Marking Tape - Frame	5760-003
12	Wiring Decal	4612
13	Warning Decal-High Pressure	4620



**Step 19** Thieman recommends that the installer perform a weight test of the liftgate to check the welds or mounting bolts and the structural integrity of the body or frame of the truck or trailer. The load used should be the maximum weight rating of the particular liftgate with the weight centrally located on the platform. A minimum of 20 cycles should be made to insure the integrity of the mounting.

**Step 20** Any lights that were removed or obstructed must be replaced or relocated in such a manner that the completed vehicle must be in compliance with FMVSS 108 (49CFR 571.108). If the optional bumper lights were ordered it is up to the installer to wire the lights to the truck. No light wiring harness is provided.

### WIRING PICTORIAL



**Step 21** It may be necessary to add Rear End Protection on this installation. Check your local and state laws for requirements for FMCSR 49 CFR 393.86.





