

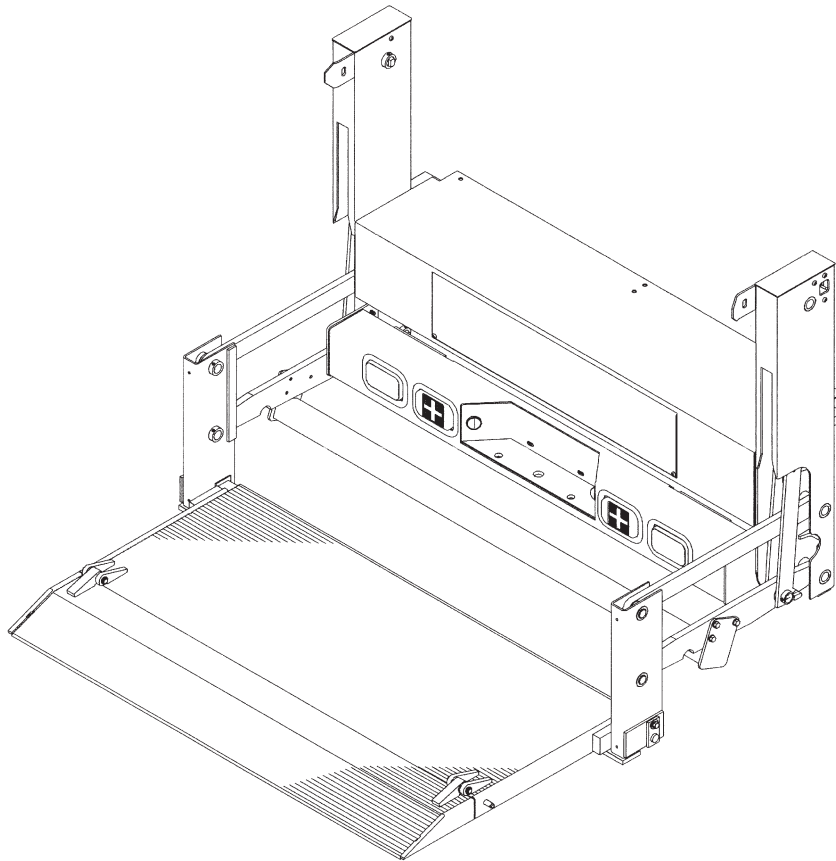
TOPLIFTER

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.



THIEMAN

TAILGATES, INC.

600 East Wayne Street

Celina, Ohio 45822

Phone: 419-586-7727 Fax: 419-586-9724

ATTENTION INSTALLERS:

Changes are made periodically in the installation procedure to comply with engineering product changes. To ensure proper liftgate operation, it is **VERY IMPORTANT** to read and understand the installation instructions before attempting an installation. Serious damage or equipment failure could result from improper installation. This liftgate **MUST** be painted after installation and decals **MUST** be applied. Standard liftgates have a primer coat only and will not withstand harsh environments. **FAILURE** to paint this product and apply all decals will **VOID** all warranties!

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 bumper rated for 5,000 lb. pulling and 500 lb. tongue weight. This rating only applies if the ball of the hitch is mounted in the hole supplied in the bumper or if a trailer tongue is pinned directly through this same hole. **DO NOT** attach any type of receiver hitch to this bumper or all warranties will be **VOID**. If a receiver type hitch is required for a certain application the TT15 may be ordered less bumper.

- 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.

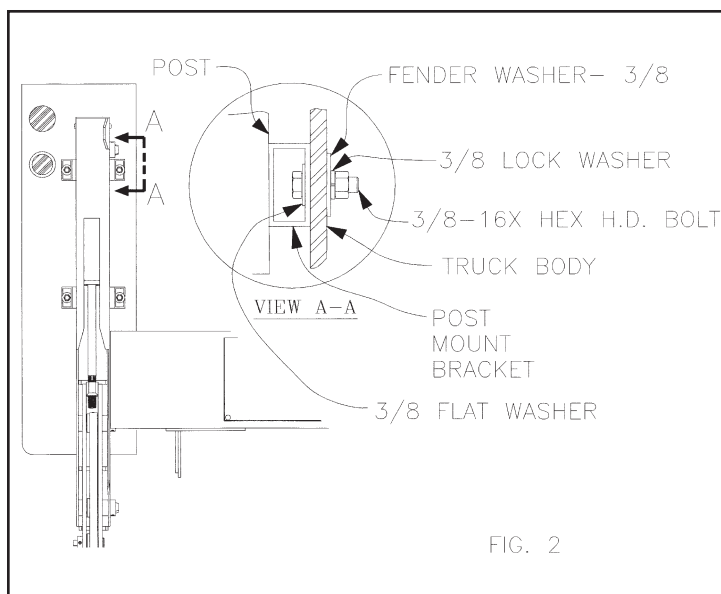
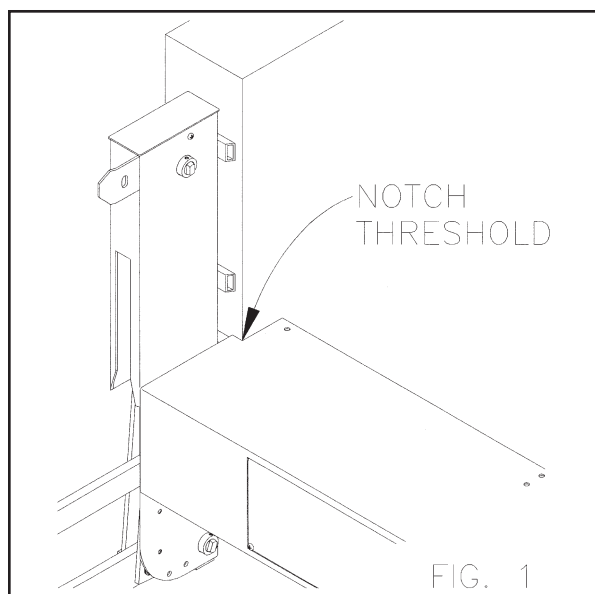
INSTALLATION INSTRUCTIONS

Step 1 Uncoil the battery cable found under the threshold.

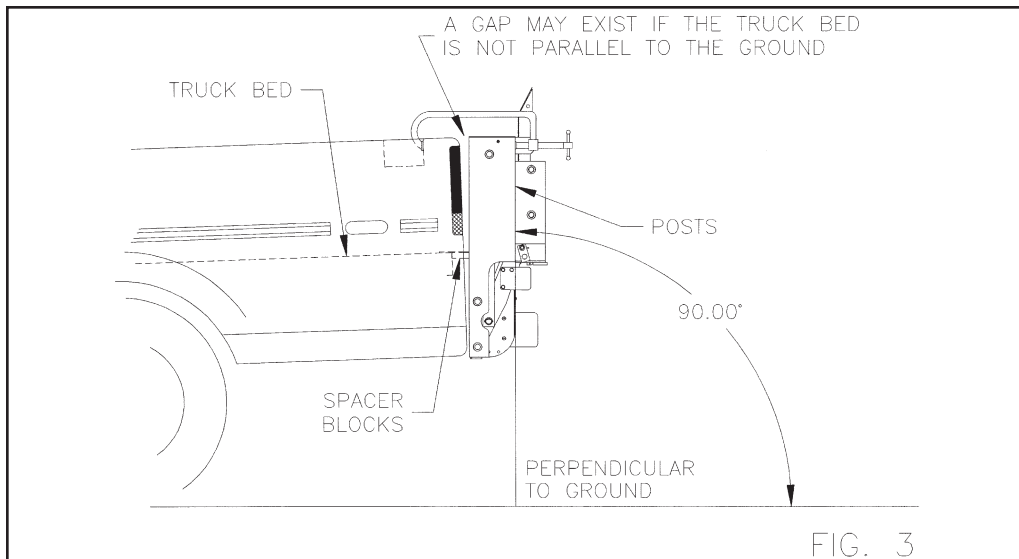
Step 2 Locate the liftgate in the bed of the vehicle by sliding the deck sheet on to the bed as far as possible. Center the liftgate between the cargo area. Be sure that idler arms and lift arms can be removed once the liftgate is installed. Be sure that the platform is locked into the stowed position during the entire installation.

Step 3 SERVICE BODIES ONLY–

On service body applications where the gate posts are positioned outside of the service body opening use the parts bag provided for mounting and notch the threshold if necessary. See figures 1 and 2.

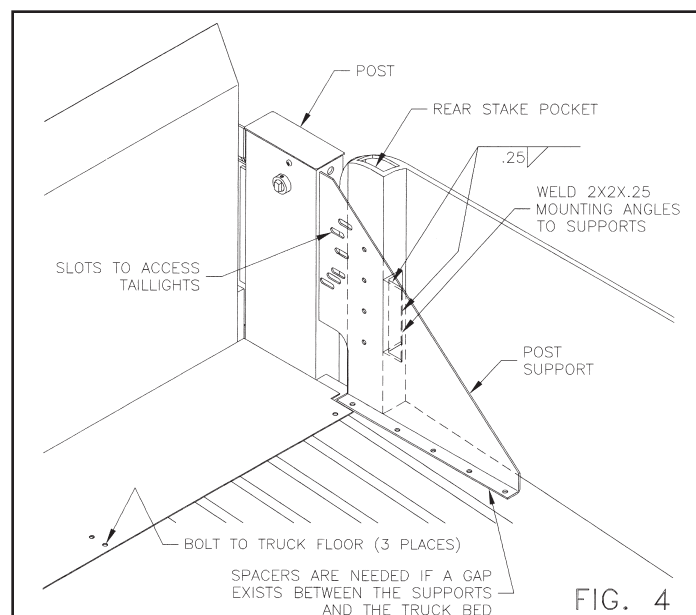


Step 4 With the liftgate centered, locate and clamp the posts in their vertical positions - perpendicular to the ground to insure the platform will level ride parallel to the ground. DO NOT square the posts with the truck bed because the truck bed may not be parallel to the ground. Make sure the spacer blocks behind the threshold are tight against the rear of the truck bed while squaring the posts to the ground. See figure 3.

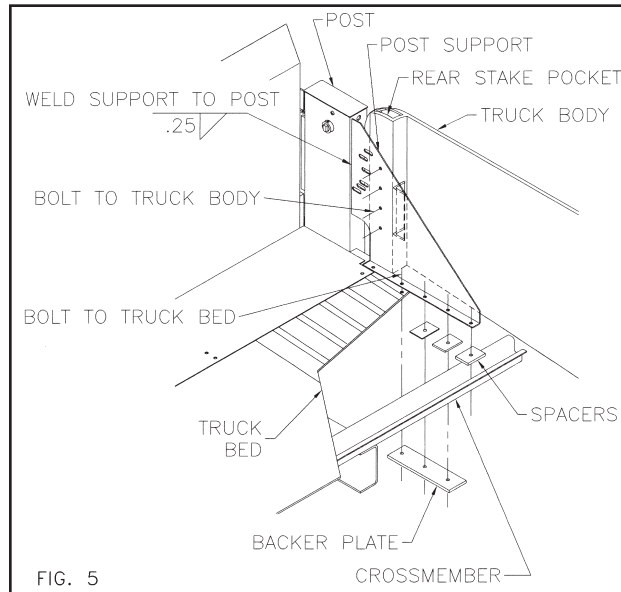


Step 5 Bolt the deckplate sheet to the truck bed. See figure 4.

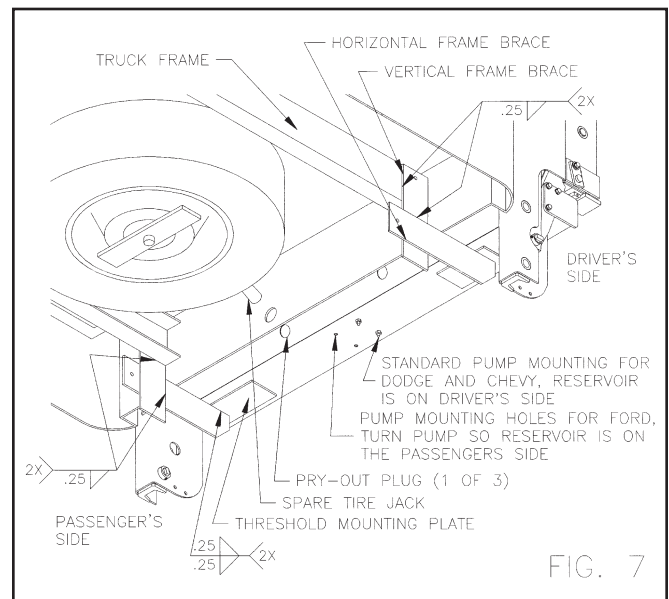
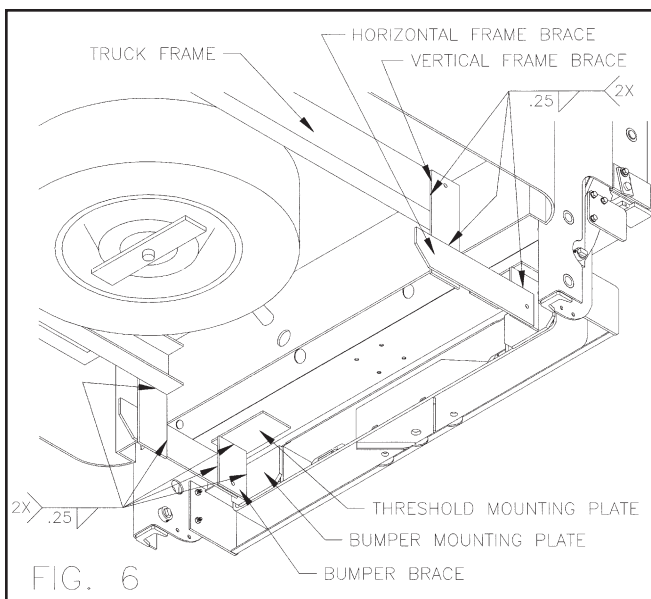
Step 6 Position the unformed edge of the post support tight against the back of the posts and flat against the rear stake pockets so the formed edge of the support is angled toward the center of the truck. Check that in this position, the slots in the post supports will allow removal of the taillight lenses. Also note how much the formed edge of the supports are toed up. Spacers will be needed to fill any gaps between the formed edge of the supports and the truck bed. Mark on each post support where the front edge of the rear stake pocket is. The 2x2x.25 mounting angles need to be welded to the supports at these marks so they can hook snugly around the front of the rear stake pockets. Weld these angles as high as possible to add the most strength to the supports. See figure 4.



Step 7 Weld the unformed edge of the post supports to the posts and bolt through the formed edge of the post supports, through the truck floor and finally through the backer plates. If necessary, spacers must be used between the post supports and the truck bed to keep the post perpendicular to the ground or to fill any gaps between the supports and the truck bed. Backer plates may be trimmed where bolts intersect crossmembers, but should be used with all other bolts which only intersect the truck bed. Bolt the post supports to the rear stake pockets using the four holes provided. See figure 5.



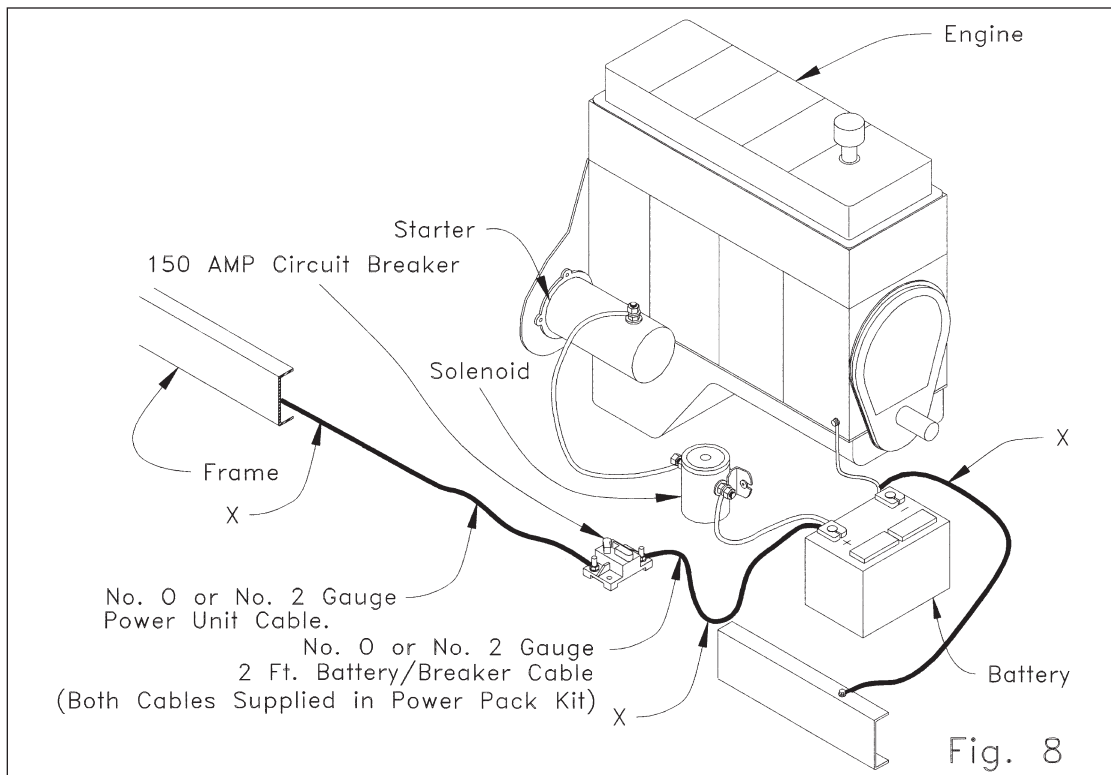
Step 8 Weld the vertical frame braces to the truck frame. If welding to the truck frame is prohibited by the manufacturer, the vertical frame brace may be bolted to the frame. Position the bumper braces directly behind these vertical frame braces and weld these bumper braces between the mounting plates on the bottom of the liftgate threshold and the mounting plates on the back of the bumper. Next position the horizontal frame braces so they are centered vertically on the mounting plates on the back of the bumper and weld these horizontal frame braces between the vertical frame braces and the bumper braces. See figure 6. If the liftgate was ordered less bumper the horizontal braces must be welded to the vertical frame braces and to the mounting plates on the bottom of the liftgate threshold. See figure 7.



Step 9 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 10 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 8 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.

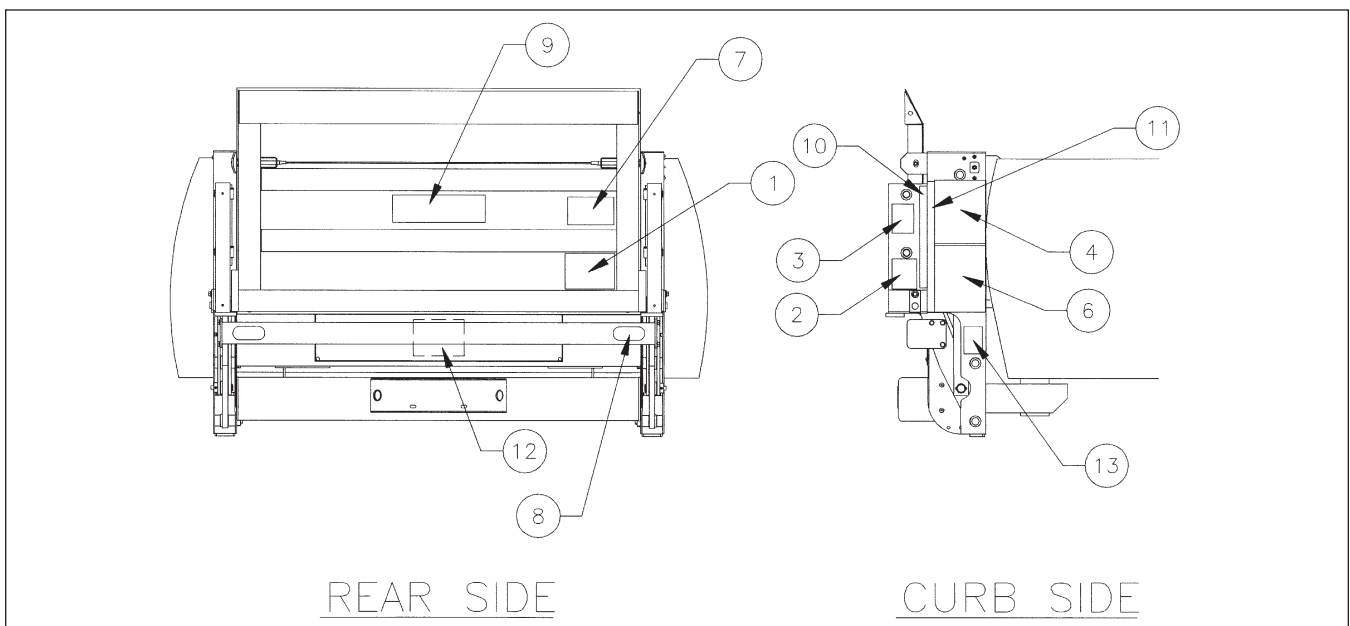


Step 11 Once the power is connected, release the safety latches, unfold the platform and lower it to the ground. The pump is located under the threshold and can be accessed by removing the cover plate. With the platform on the ground, make sure that the fluid in the pump reservoir is 1/2" from the top. Remove the plug from the reservoir and replace with the breather cap provided.

Step 12 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.

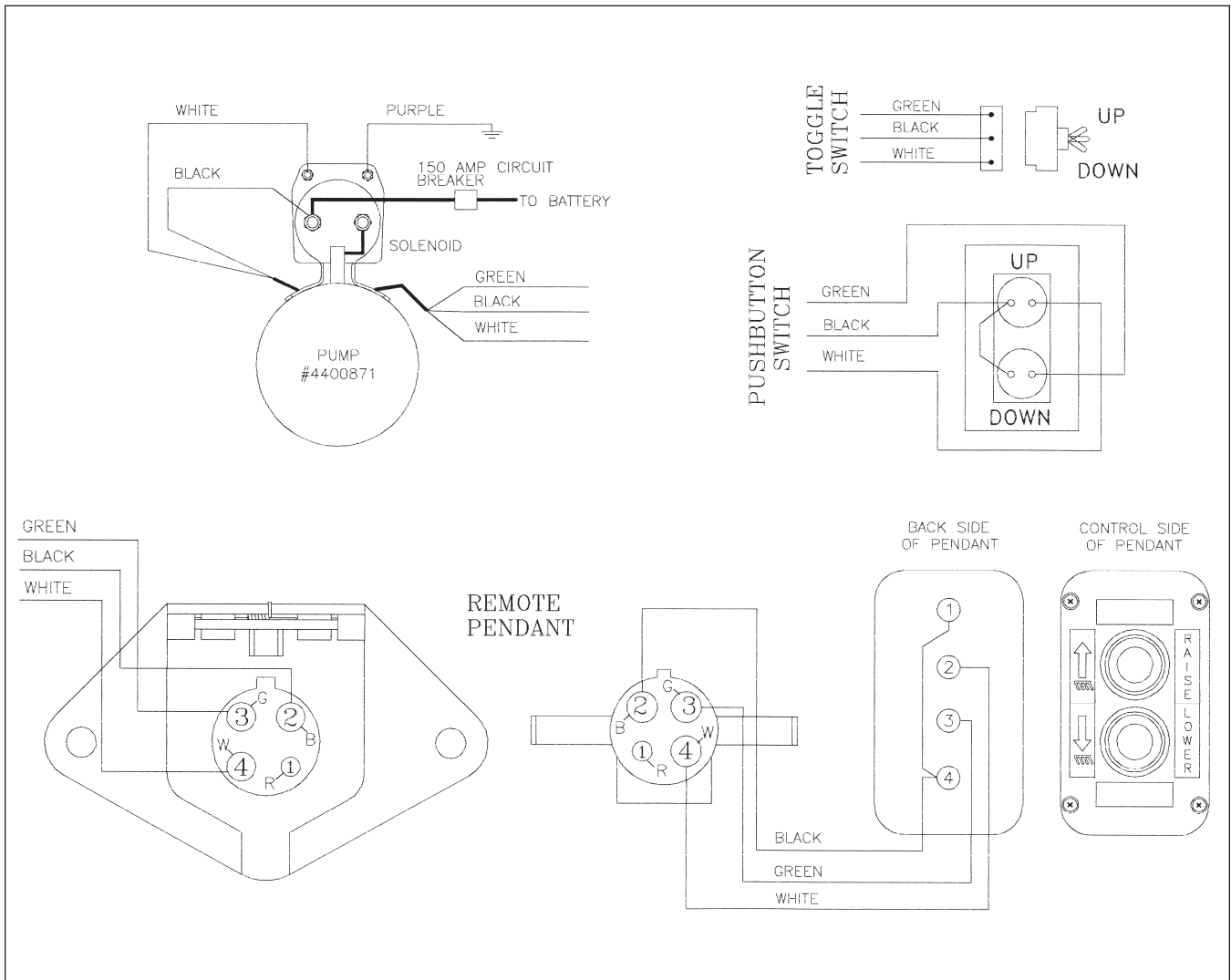
Step 13 After painting is complete, apply decals in the appropriate locations as show below. When painting, carefully grease or mask fittings and any exposed portion of the cylinder rod. If decals are previously applied simply remove premask after painting. These decals **MUST** be applied and this liftgate **MUST** be painted 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	4659
13	Warning Decal-High Pressure	4620



Step 14 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 15 If your TT15 was ordered less bumper, it may be necessary to add Rear-end Protection for bed heights above 39". Check your local and state laws for requirements of FMCSR 49 CFR 393.86.

