

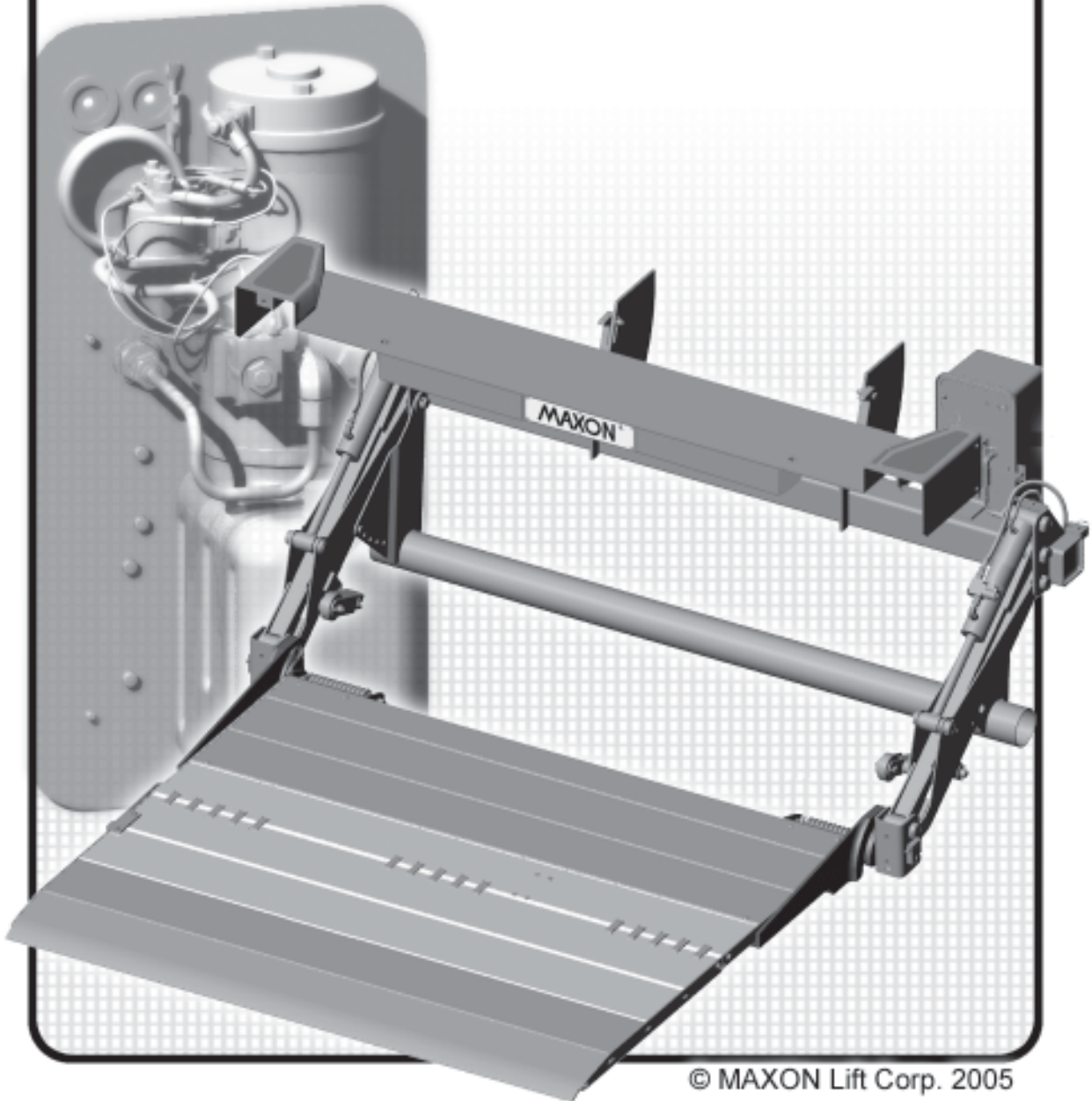
M-04-06
REV. B
MAY 2005

MAXON[®]

INSTALLATION MANUAL

GPTLR-25, GPTLR-33, GPTLR-44, & GPTLR-55

TUK-A-WAY[®]
LIFT GATE SERIES



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Comply with the following **WARNINGS** while installing Liftgates. See Operation Manual M-04-05 for operating safety requirements.

WARNING

- Read and understand the instructions in this **Installation Manual** before installing Liftgate.
- Before operating the Liftgate, read and understand the operating instructions in **Operation Manual M-04-05**.
- Comply with all **WARNING** and instruction decals attached to the Liftgate.
- Keep decals clean and legible. If decals are defaced or missing, replace them. Free replacement decals are available from **Maxon Customer Service**.
- Consider the safety and location of bystanders and location of nearby objects when operating the Liftgate. Stand to one side of the platform while operating the Liftgate
- Do not allow untrained persons to operate the Liftgate.
- Do not stand under, or allow obstructions under the platform when lowering the Liftgate. **Be sure your feet are clear of the Liftgate.**
- **Keep fingers, hands, arms, legs, and feet clear of moving Liftgate parts (and platform edges) when operating the Liftgate.**
- **Correctly stow platform when not in use. Extended platforms could create a hazard for people and vehicles passing by.**
- **Make sure vehicle battery power is disconnected** while installing Liftgate. Connect vehicle battery power to the Liftgate only when installation is complete or as required in the installation instructions.
- Wear appropriate safety equipment such as protective eyeglasses, faceshield and clothing while performing maintenance on the Liftgate and handling the battery. Debris from drilling and contact with battery acid may injure unprotected eyes and skin.
- Be careful working by an automotive type battery. Make sure the work area is well ventilated and there are no flames or sparks near the battery. Never lay objects on the battery that can short the terminals together. If battery acid gets in your eyes, immediately seek first aid. If acid gets on your skin, immediately wash it off with soap and water.
- If an emergency situation arises (vehicle or Liftgate) while operating the Liftgate, release the control Toggle Switch and the Liftgate will stop.
- A correctly installed Liftgate operates smoothly and reasonably quiet. The only noticeable noise during operation comes from the pump unit while the platform is raised and lowered. Listen for scraping, grating and binding noises and correct the problem before continuing to operate Liftgate.
- If it is necessary to stand on the platform while operating the Liftgate, keep your feet and any objects clear of the inboard edge of the platform. Your feet or objects on the platform could be trapped between the platform and the Liftgate extension plate.
- Never perform unauthorized modifications on the Liftgate. Modifications may result in early failure of the Liftgate and may create hazards for Liftgate operators and maintainers.

GPTLR LIFTGATE COMPONENTS

⚠ CAUTION

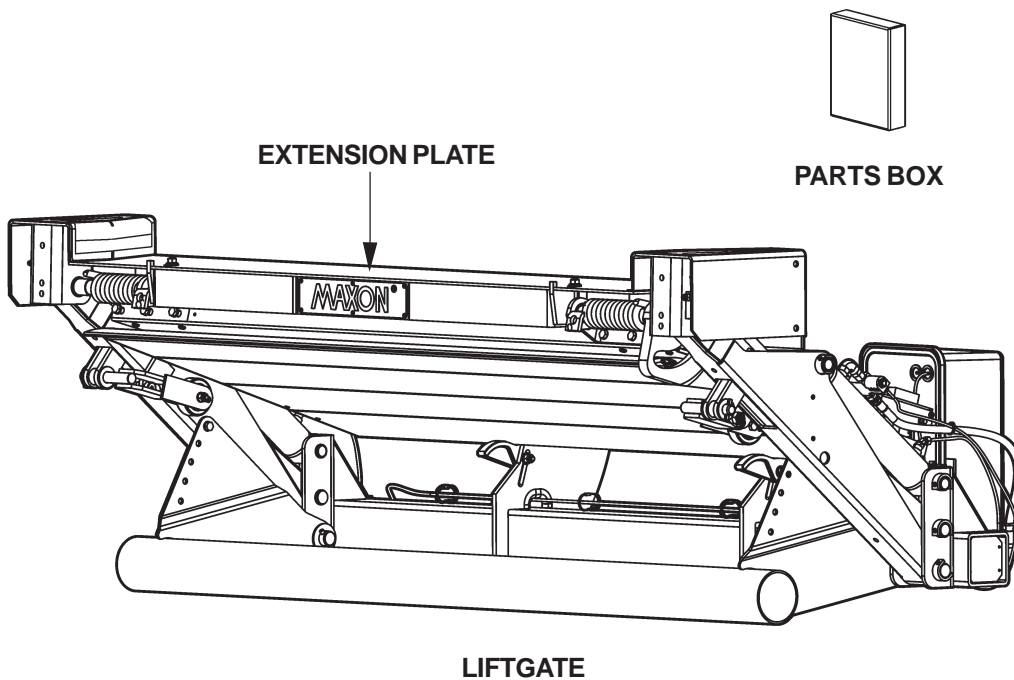
Prevent injuries and equipment damage. Before cutting the shipping straps from the Liftgate, put Liftgate on level ground that will support at least 1500 pounds. Be careful lifting and moving components after shipping straps are removed.

NOTE: Make sure you have all components and parts before you start installing Liftgate. Compare parts in the Part Box and each Kit Box with packing list enclosed in each box. If parts and components are missing or incorrect call:

Maxon Customer Service

Call (800) 227-4116 or

Send e-mail to customersupport@maxonlift.com



**GPTLR COMPONENTS
FIG. 4-1**

GPTLR-SERIES INSTALLATION PARTS BOX

ITEM	DESCCRIPTION	QTY.	PART NO.
1	FRAME CLIP, 1/2" X 1-3/8"	7	050079
2	COPPER LUG (#2 GA)	1	226778
3	SWITCH AND CABLE ASSY	1	264346
4	FUSED POWER CABLE, 200 AMP, 38' LG.	1	264422
5	DECAL & MANUAL KIT	1	-
	A. INSTALLATION MANUAL	1	M-04-06
	B. OPERATION MANUAL	1	M-04-05
	C. MAINTENANCE MANUAL	1	M-04-04
	D. WARRANTY CARD	1	M-78-78
	E. CUSTOMER SURVEY FORM	1	M-94-04
	F. DECALS		REFER TO DECAL PAGES IN THIS MANUAL
6	CLAMP, #10 RUBBER LOOM	2	801681
7	SELF-TAPPING SCREW, #10-24 X 1" LG.	4	900057-5
8	SHIM, PLATFORM ADJUSTMENT 1/16"	2	281166-01
9	SHIM, PLATFORM ADJUSTMENT 1/8"	2	281166-02
10	FLAT (SADDLE SUPPORT)	2	090300-11
11	EARRING, UNDERRIDE	2	281346-01

TABLE 5-1

STEP 1 - PREPARE VEHICLE

NOTE: The maximum operating Vehicle Body bed height for the GPTLR-Series Liftgates (unloaded) is 55". The minimum height is 44" (loaded). Do not install this Liftgate on Vehicle Bodies equipped with swing open doors.

NOTE: Measure the width of the Liftgate and the width of the Vehicle Body before you start doing this procedure. Ensure the Liftgate is the correct width for Vehicle.

1. Check the Vehicle to ensure Liftgate will fit without interference. The Liftgate must fit within the clearance dimensions shown in FIG. 6-1 or FIG. 6-2.

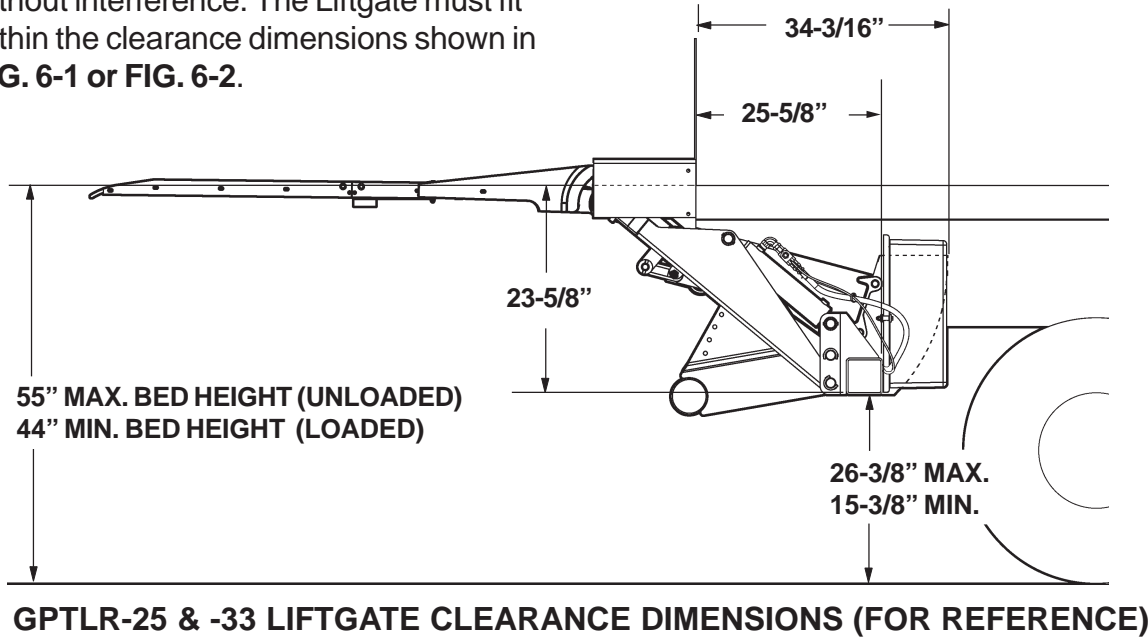


FIG. 6-1

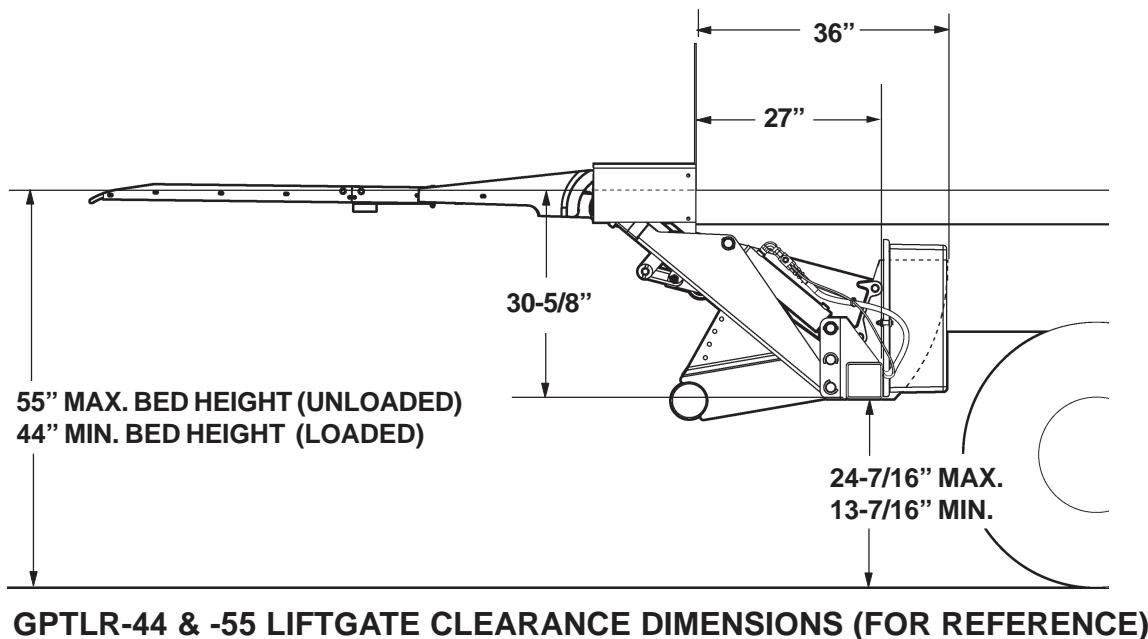
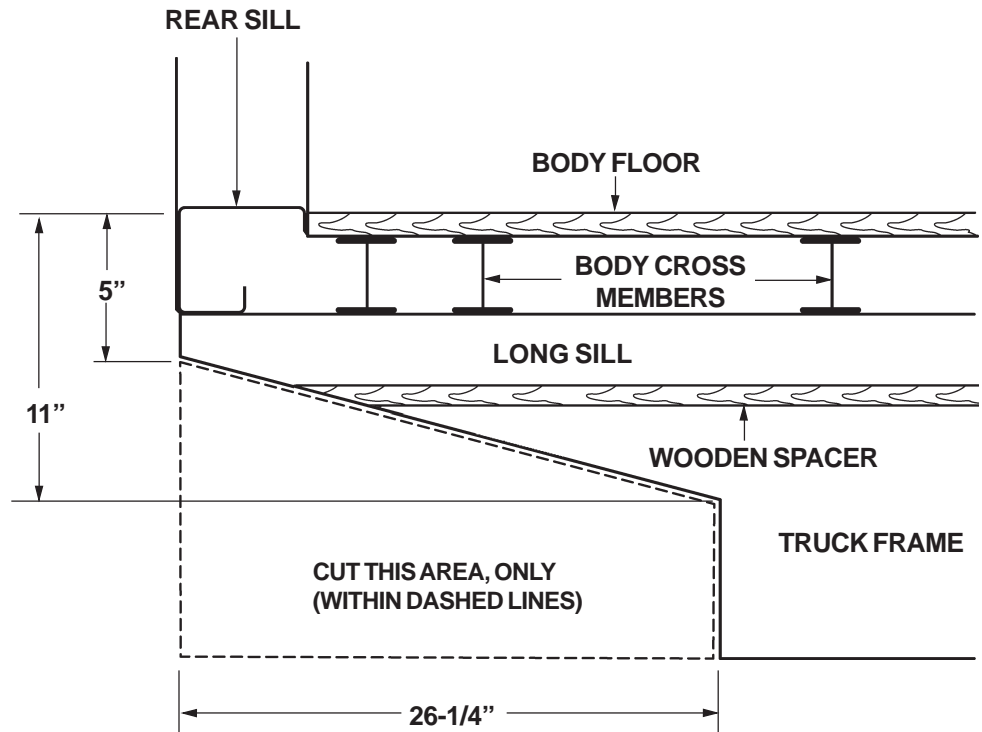


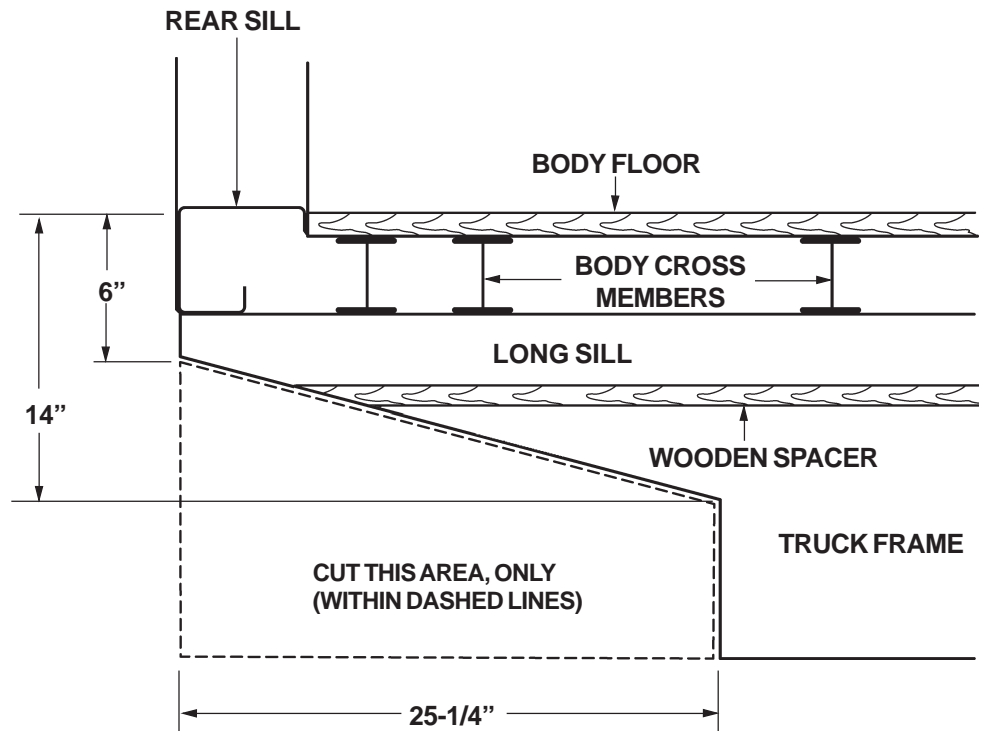
FIG. 6-2

STEP 1 - PREPARE VEHICLE - Continued

2. Fit Liftgate to truck body by cutting frame as shown in FIG. 7-1 or FIG. 7-2.



VEHICLE FRAME CUT FOR GPTLR-25 & GPTLR-33
FIG. 7-1



VEHICLE FRAME CUT FOR GPTLR-44 & GPTLR-55
FIG. 7-2

STEP 2 - WELD LIFTGATE TO VEHICLE

WARNING

Keep Liftgate clamped to forklift until Liftgate is welded (or bolted if required) to vehicle body. Liftgate may be damaged and create a hazard for the installer if it falls off the forklift.

NOTE: To install Liftgate correctly, you must park the Vehicle on level ground and follow the instructions in this manual.

1. Clamp Liftgate to forklift as shown in **FIG. 8-1A**.

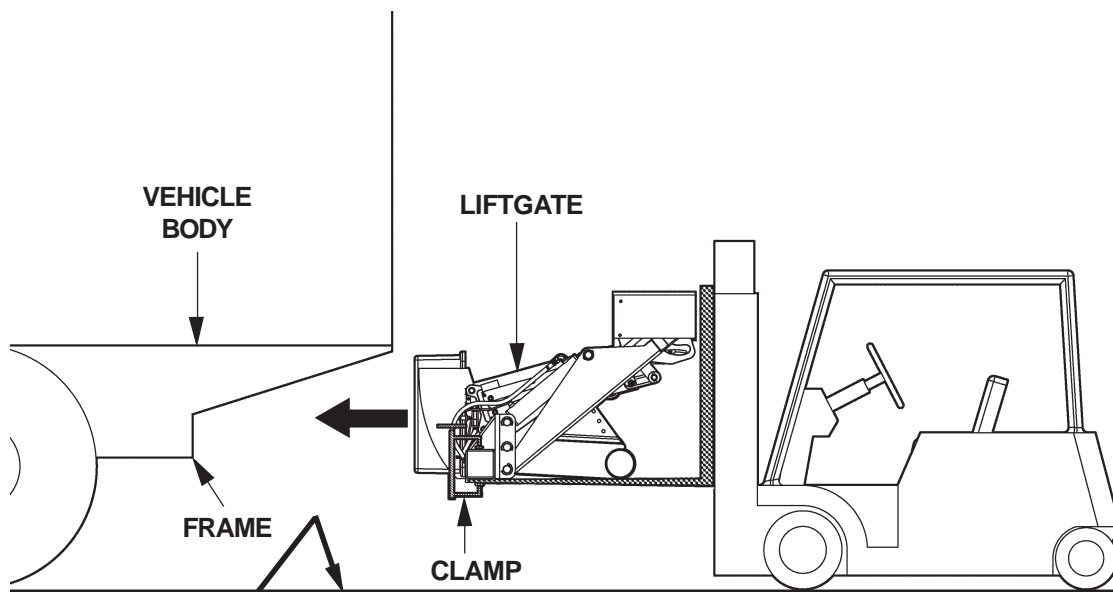
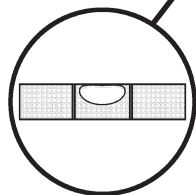


FIG. 8-1A

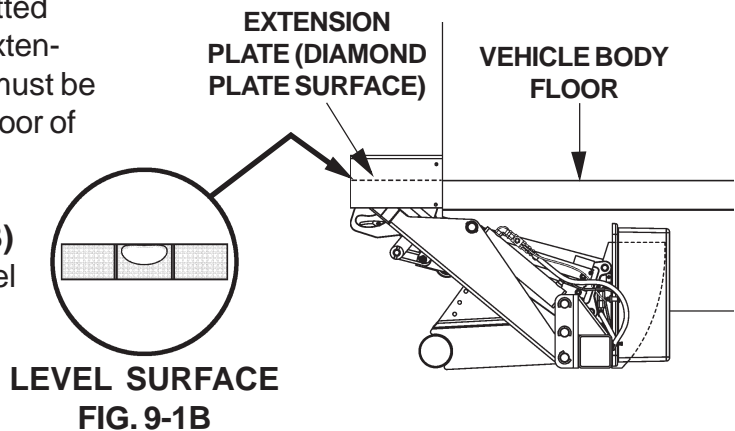


LEVEL SURFACE
FIG. 8-1B

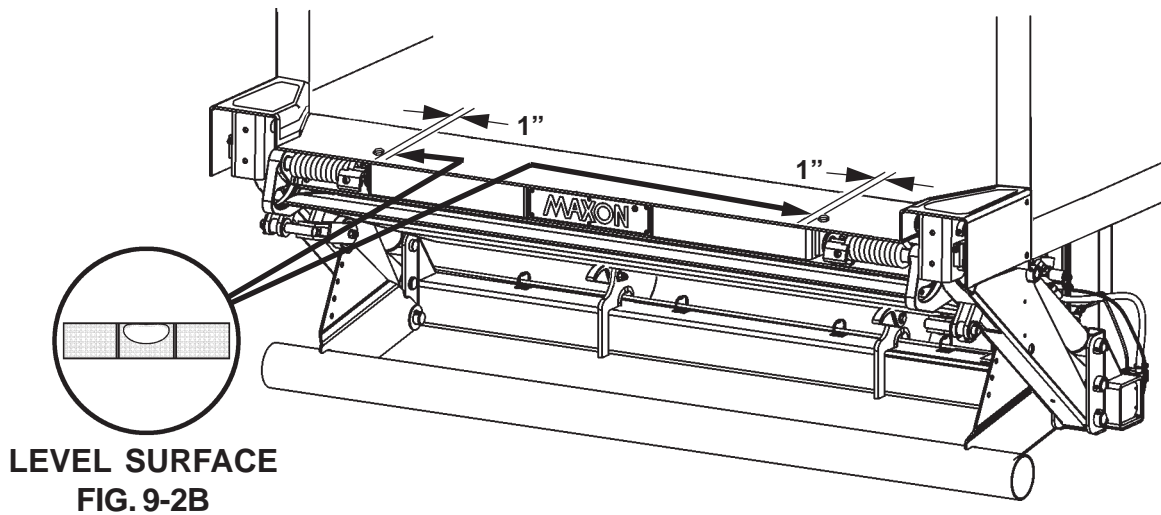
2. Use forklift to center the Liftgate in position on the back of the Vehicle Body and Frame (**FIG. 8-1**). If necessary, have 1 person operate the forklift and 1 other person check alignment of Liftgate and Vehicle.

STEP 2 - WELD LIFTGATE TO VEHICLE - Continued

3. Make sure the Extension Plate is butted against Vehicle Body (**FIG. 9-1A**). Extension Plate (diamond plate surface) must be level with the ground and flush with floor of Vehicle Body (**FIGS. 9-1 & 9-1B**). Position levels in 2 places on Extension Plate (**FIGS. 9-2A & 9-2B**) to show when Extension Plate is level with the ground.



SIDE VIEW OF EXTENSION PLATE AND TRUCK BODY (FORKLIFT NOT SHOWN)
FIG. 9-1A



POSITIONING LEVELS ON EXTENSION PLATE
FIG. 9-2A

STEP 2 - WELD LIFTGATE TO VEHICLE - Continued

⚠ WARNING

Liftgate is shipped from factory with Mounting Plates that are only Tack Welded to Main Frame. Weld as shown in illustrations before operating Liftgate.

CAUTION

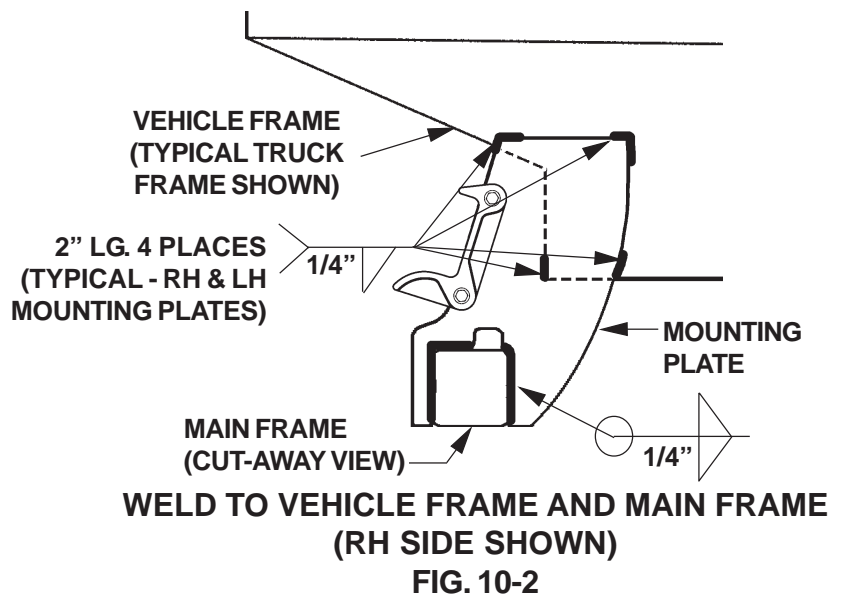
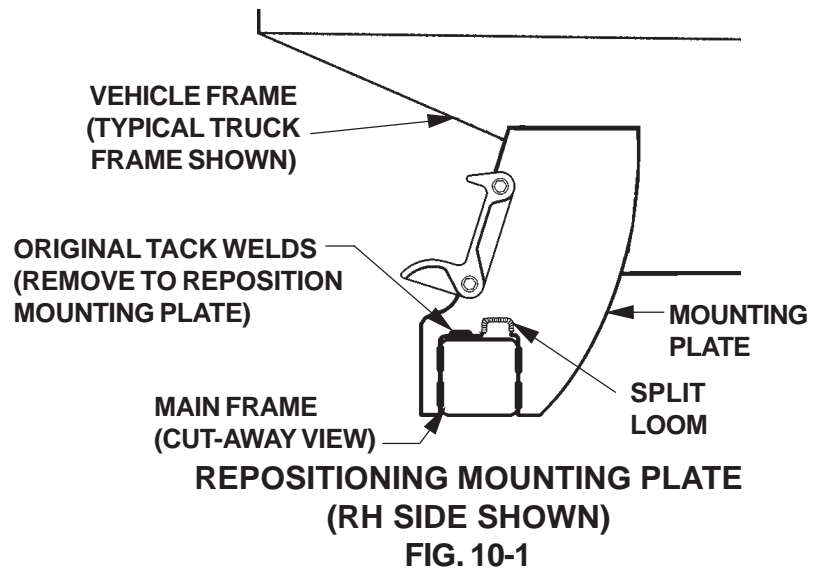
Prevent damaged hydraulic hoses and saddles. Before welding next to hydraulic hoses and saddles, protect the hoses and saddles with a heat-resistant cover.

CAUTION

When using electrical welder to weld on Mounting Plates, make sure the welder ground lead is connected directly to the Mounting Plate, as close as possible to the place being welded. Failure to comply can result in damaged cylinders and electrical parts.

NOTE: Weld both Mounting Plates to vehicle frame before welding Mounting Plates to Main Frame.

4. Check if both Mounting Plates line up with the vehicle frame. If the Mounting Plates do not line up, remove the tack welds from both Mounting Plates (**FIG. 10-1**). Make sure Liftgate stays centered on vehicle body. Reposition Mounting Plates against vehicle frame.
5. Remove the Split Loom from both Mounting Plates (**FIG. 10-1**). Save the Split Loom to reinstall.
6. Clamp both Mounting Plates to vehicle frame. Weld each Mounting Plate to vehicle frame as shown in **FIG. 10-2**. Next, weld both Mounting Plates to Main Frame (**FIG. 10-2**). Remove clamps.



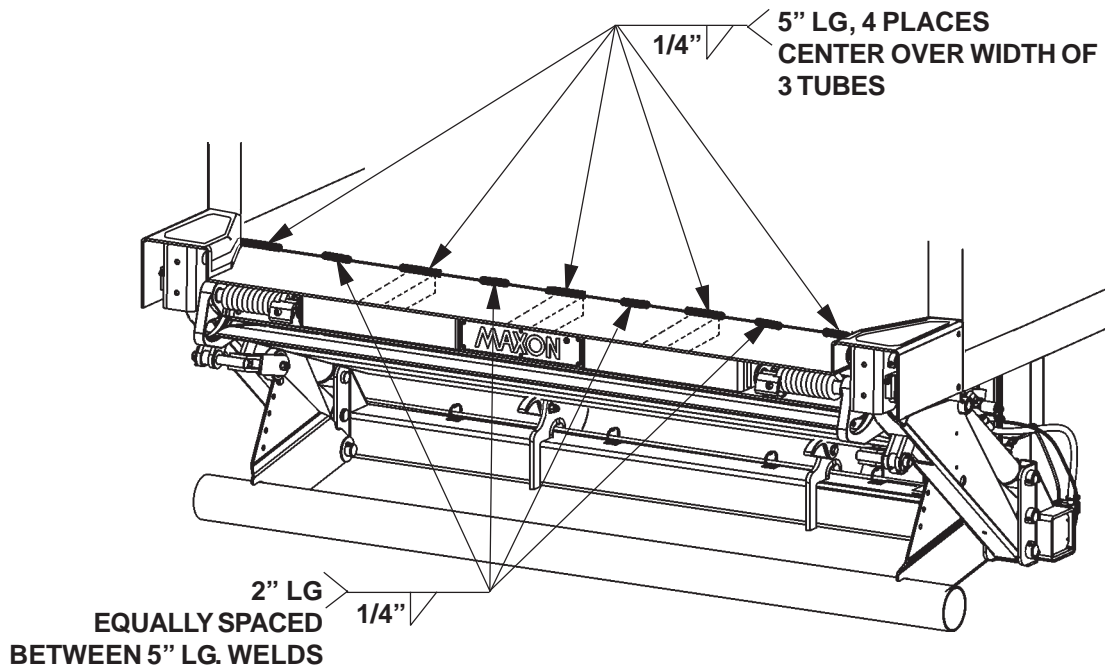
STEP 2 - WELD LIFTGATE TO VEHICLE - Continued

CAUTION

When using electrical welder to weld on Extension Plate, make sure the welder ground lead is connected directly to the Extension Plate, as close as possible to the place being welded. Failure to comply can result in damaged cylinders and electrical parts.

NOTE: While welding Extension Plate to Vehicle Body sill, make sure the diamond plate surface on the Extension Plate stays flush with the sill.

7. Weld the top of Extension Plate to Vehicle Body sill as shown in **FIG. 11-1**.



**EXTENSION PLATE WELDS - VIEWED FROM ABOVE
(FORKLIFT NOT SHOWN)
FIG. 11-1**

STEP 2 - WELD LIFTGATE TO VEHICLE - Continued

9. Remove clamps from forklift and Liftgate. Back out forklift (**FIG. 12-1**).

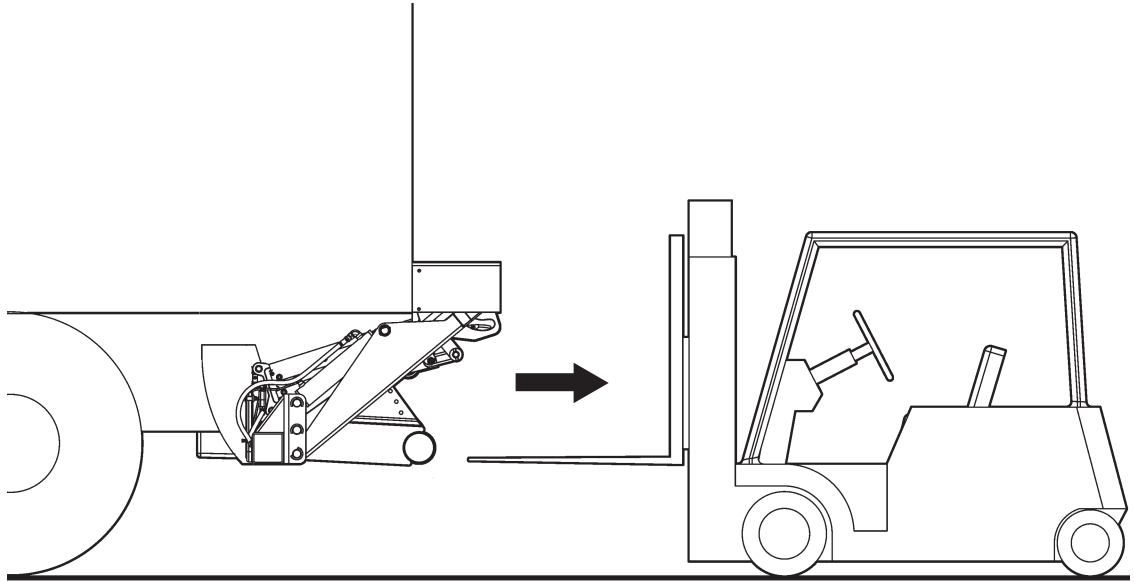


FIG. 12-1

STEP 3 - RUN POWER CABLE

CAUTION

Never route an energized wire. Make sure the vehicle battery is disconnected. Always route electrical wires clear of moving parts, brake lines, sharp edges and exhaust systems. Avoid making sharp bends in wiring. Attach securely. If drilling is necessary, first check behind the drilling surface so you do not damage any fuel lines, vent lines, brake lines or wires.

Clip Fused Power Cable to vehicle chassis, with fuse nearest the vehicle battery, as shown in **FIG. 13-1**. Keep enough cable near the battery to reach the positive terminal without straining cable (after connection). Run cable to Pump Box on Liftgate.

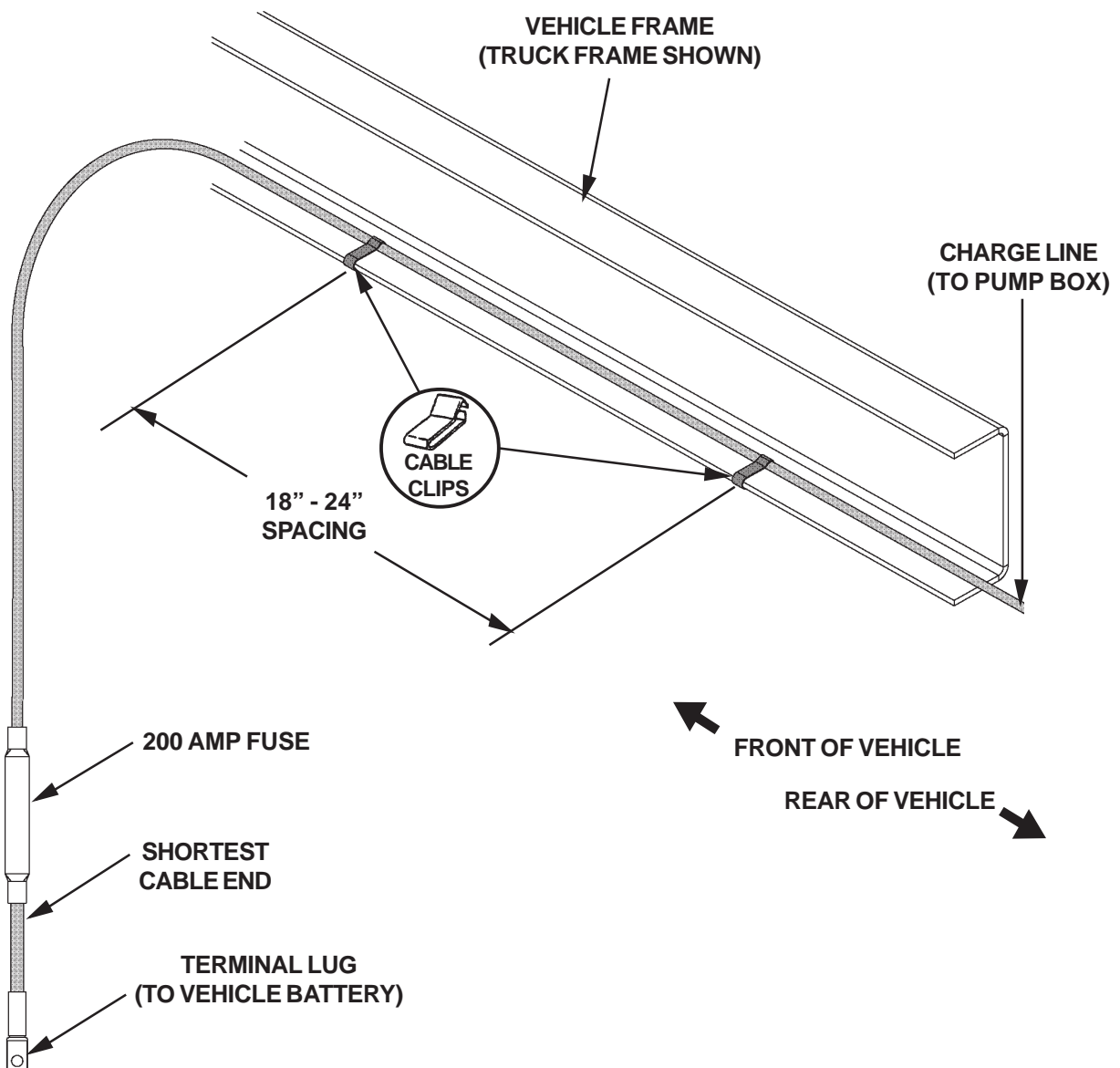


FIG. 13-1

STEP 4 - CONNECT POWER CABLE

1. Unbolt the Pump Cover as shown in FIG. 14-1.

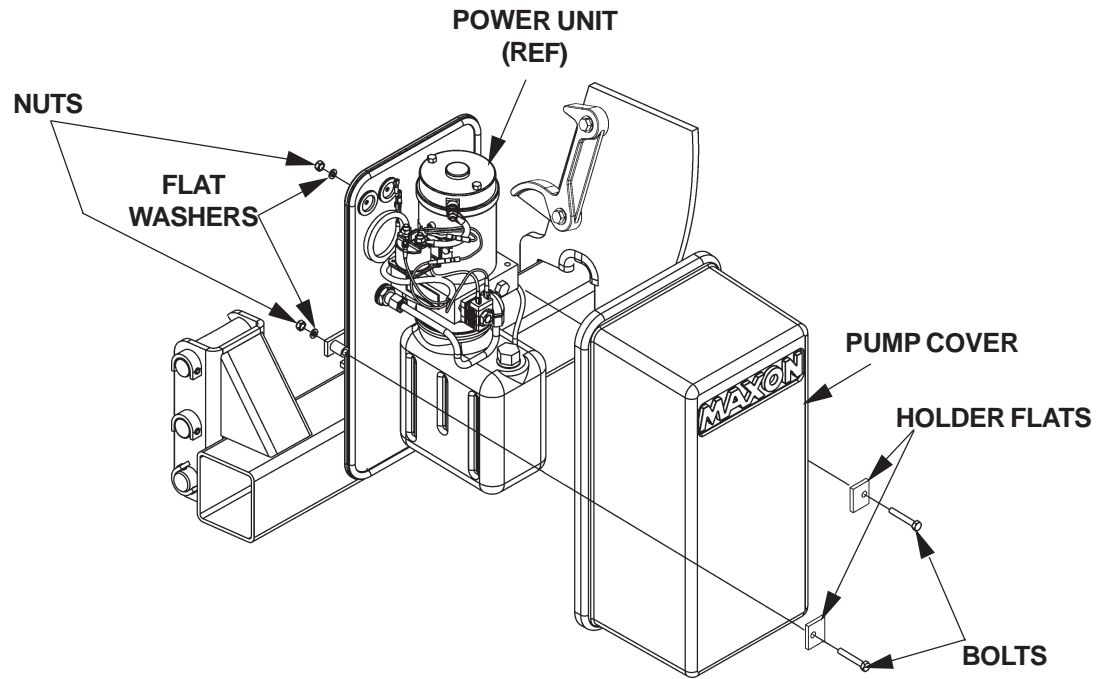


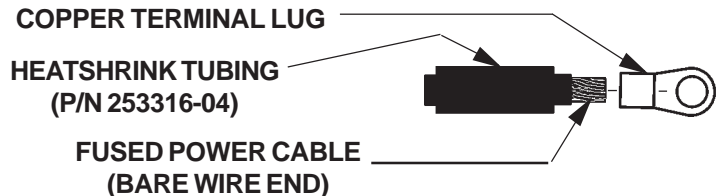
FIG. 14-1

STEP 4 - CONNECT POWER CABLE - Continued

NOTE: Electrical lines must be run into Pump Box through sealing grommets (FIG. 15-3). to keep a good seal on hydraulic & electrical lines, never cut the sealing grommets.

2. Run fused Power Cable through Grommet on Pump Mounting Plate (FIG. 15-3).

3. On the bare wire end of Fused Power Cable, keep enough length to attach copper terminal lug and reach Motor Solenoid without putting tension on cable (after connection) (FIG. 15-1). Measure (if needed) and then cut excess cable from bare wire end of cable. Put heatshrink tubing (Parts Box) (FIG. 15-1) on the end of the cable (leave room for terminal lug). Crimp copper terminal lug (from Parts Box) on the Fused Power Cable and shrink the Heatshrink Tubing (FIG. 15-2).



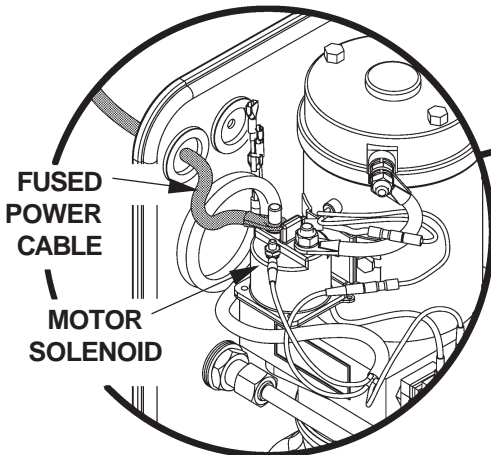
PLACING TERMINAL LUG & HEATSHRINK TUBING ON FUSED POWER CABLE
FIG. 15-1



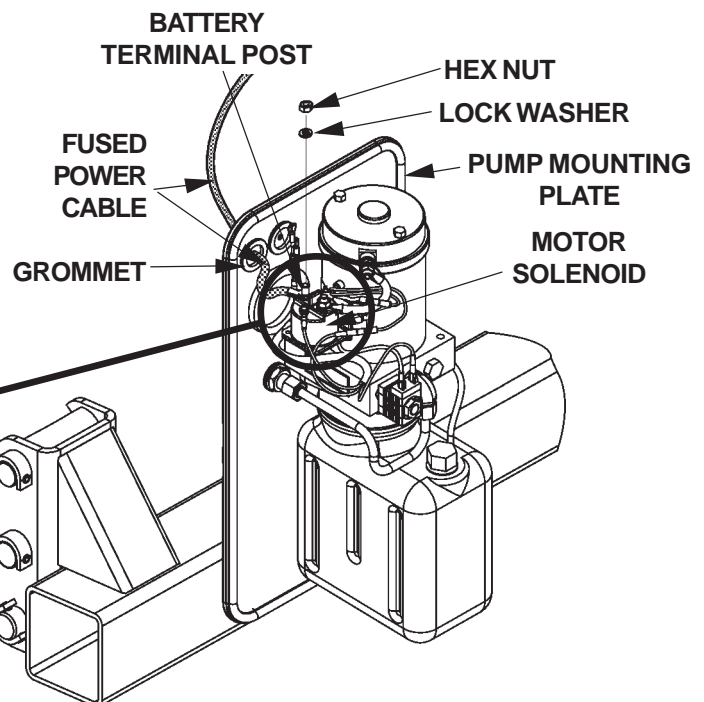
TYPICAL FUSED POWER CABLE WITH TERMINAL LUG INSTALLED
FIG. 15-2

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

4. Remove hex nut and lock washer from Battery terminal post on the Motor Solenoid. Connect the Fused Power Cable to the Motor Solenoid as shown in FIGS. 15-3A & 15-3B. Reinstall and tighten lock washer and hex nut. Torque hex nut to **95 LBS.-IN.**



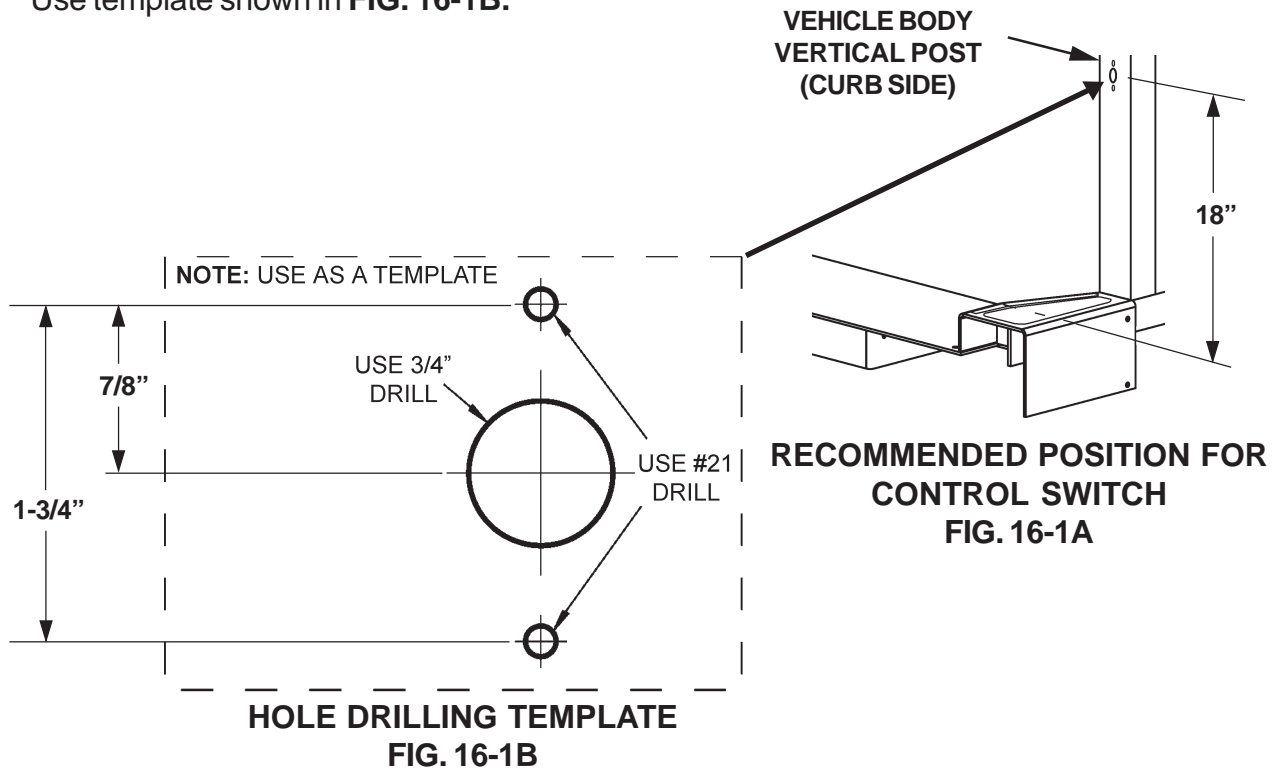
CABLE CONNECTION TO MOTOR SOLENOID
FIG. 15-3B



TYPICAL FUSED POWER CABLE CONNECTION (GRAVITY DOWN PUMP SHOWN)
FIG. 15-3A

STEP 5 - INSTALL CONTROL SWITCH

1. Drill one 3/4" hole and two #21-size holes in the vertical post on curb side of vehicle body as shown in **FIG. 16-1A**. Use template shown in **FIG. 16-1B**.



NOTE: Electrical lines must be run into Pump Box through sealing grommets (**FIG. 16-2**). To keep a good seal on the electrical lines, never cut the sealing grommets.

2. Cut Tie Strap on coiled Wiring Harness (**FIG. 16-2**). Pull the Wiring Harness through grommet on the Pump Mounting Plate (**FIG. 16-2**).

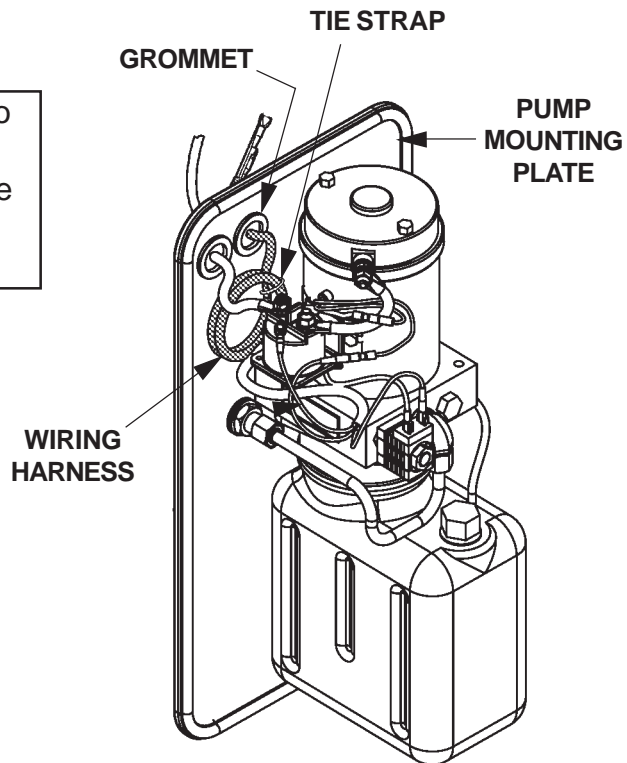
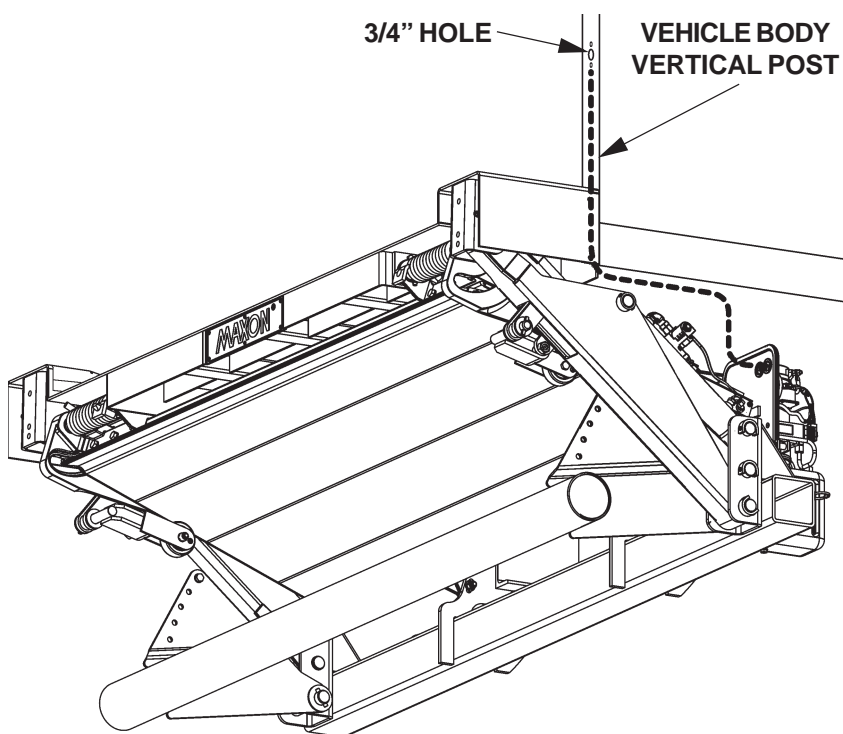


FIG. 16-2

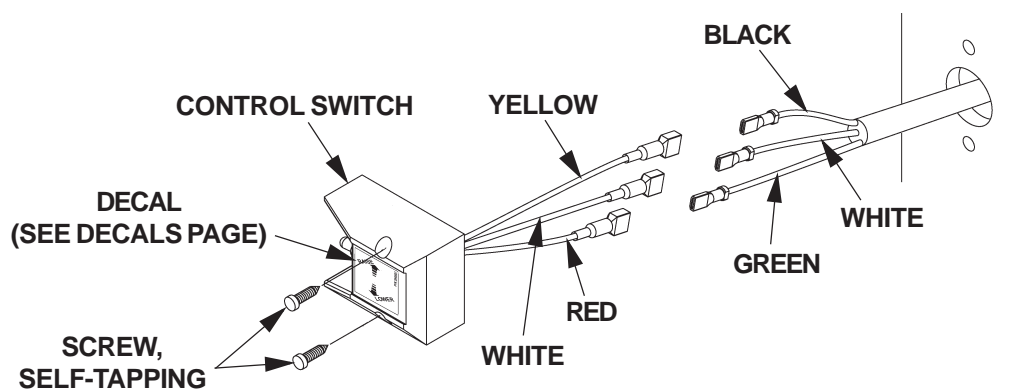
STEP 5 - INSTALLING CONTROL SWITCH - Continued

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

3. Run wiring harness under Vehicle Body (see dashed line - FIG. 17-1) and up through inside of Vertical Post. Then pull Control Switch wiring harness out the 3/4" hole drilled in Vertical Post (FIG. 17-1). Connect the Control Switch wiring to the wiring harness as shown in FIG. 17-2. Push extended wiring back into the 3/4" hole in the Vertical Post until Control Switch touches the post. Attach the Control Switch to Vertical Post with 2 self-tapping screws (FIG. 17-2).



ROUTING CONTROL SWITCH WIRING
FIG. 17-1



CONTROL SWITCH WIRING CONNECTIONS
FIG. 17-2

STEP 6 - CHECKING HYDRAULIC FLUID

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.

NOTE: Use correct grade of hydraulic fluid for your location.

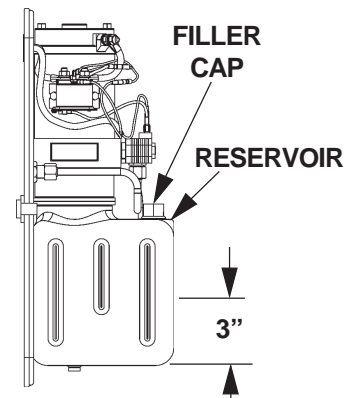
- +70 to +140 Degrees F - Grade ISO 32
- +40 to +105 Degrees F - Grade ISO 15
- Below + 70 Degrees F - Grade ISO 10 or MIL-H-5606

See TABLES 19-1, 19-2 & 19-3 on the next page for recommended brands.

1. Unbolt & remove Pump Cover (FIG. 18-2).

NOTE: If the Hydraulic Fluid in the Reservoir is contaminated, do the **CHANGING HYDRAULIC FLUID** procedure in this section.

2. Check the Hydraulic Fluid level in Reservoir. With Liftgate stowed or Platform at Vehicle bed height, Level should be 3" (FIG. 18-1). If needed, add fluid to the Reservoir as follows.

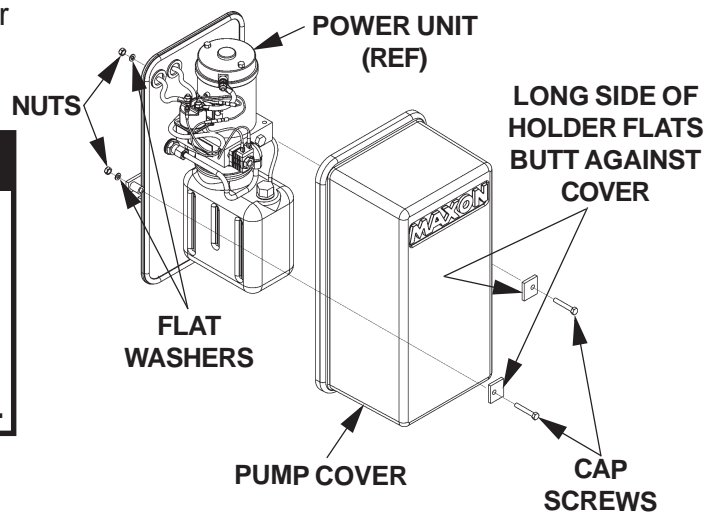


POWER UNIT FLUID LEVEL
FIG. 18-1

3. Pull out (no threads) Filler Cap (FIG. 18-1). Fill the Reservoir with Hydraulic Fluid to level shown in FIG. 18-1. Reinstall Filler Cap (FIG. 18-1)

CAUTION

Pump Cover must be correctly secured to prevent it from becoming a hazard. To secure Pump Cover, the long side of the Holder Flats must butt against Pump Cover as shown in the illustration.



UNBOLTING / BOLTING PUMP COVER
FIG. 18-2

4. Bolt on the Pump Cover as shown in FIG. 18-2. Torque the 5/16"-18 cover bolts to 20 to 29 LBS.-FT.

STEP 6 - ADD HYDRAULIC FLUID TO RESERVOIR - Continued

ISO 32 HYDRAULIC OIL	
RECOMMENDED BRANDS	PART NUMBER
AMSOIL	AWH-05
CHEVRON	HIPERSYN 32
KENDALL	GOLDEN MV
SHELL	TELLUS T-32
EXXON	UNVIS N-32
MOBIL	DTE-13M, DTE-24, HYDRAULIC OIL-13

TABLE 19-1

ISO 15 HYDRAULIC OIL	
RECOMMENDED BRANDS	PART NUMBER
AMSOIL	AWF-05
CHEVRON	FLUID A, AW-MV-15
KENDALL	GLACIAL BLU
SHELL	TELLUS T-15
EXXON	UNVIS HVI-13
MOBIL	DTE-11M

TABLE 19-2

ISO-10 OR MIL-H-5606 HYDRAULIC FLUID	
RECOMMENDED BRANDS	PART NUMBER
AMSOIL	N/A
CHEVRON	FLUID A, FLUID G
KENDALL	GLACIAL BLU
SHELL	AEROSHELL FLUID-41
EXXON	UNVIS HVI-13
MOBIL	AERO HFA

TABLE 19-3

STEP 7 - CONNECT POWER CABLE TO BATTERY

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

Remove nut from positive (+) battery terminal connector. Connect Power Cable to the positive (+) battery terminal connector (**FIG. 20-1**). Reinstall and tighten nut.

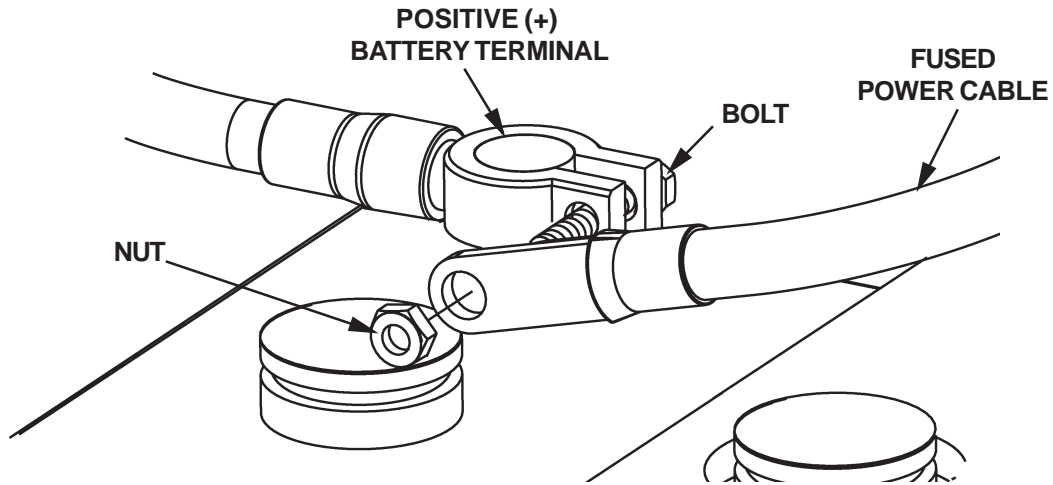


FIG. 20-1

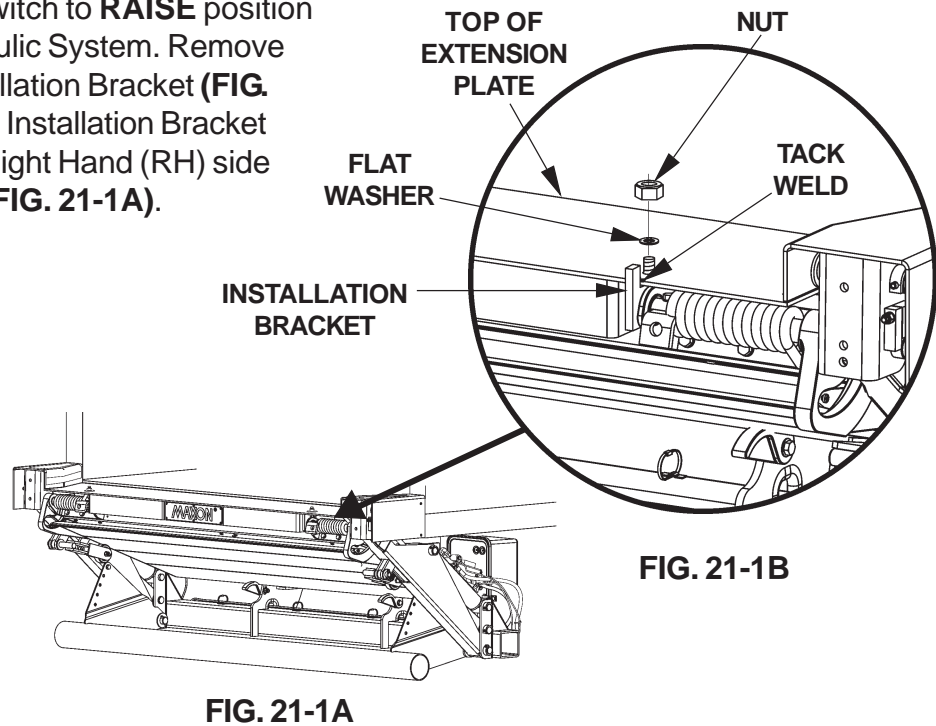
STEP 8 - REMOVE LOCKING BRACKETS

WARNING

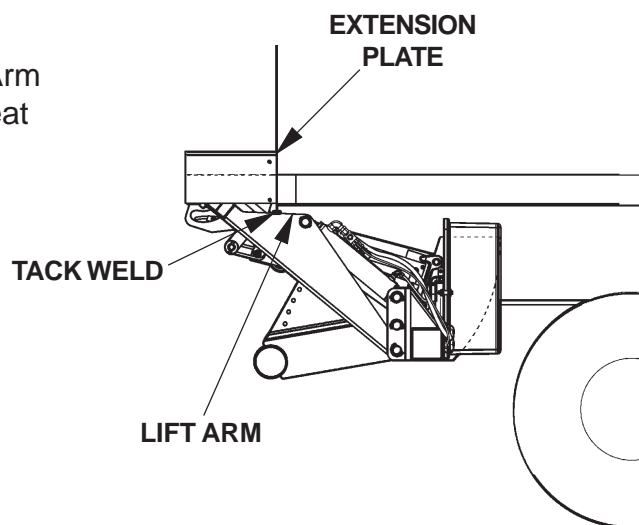
To prevent possible injury, never work in the area under the Platform. Get access to the Locking Angle from the back of the Liftgate.

NOTE: To operate Liftgate, Locking Bracket must be removed.

1. Push the Control Switch to **RAISE** position to pressurize Hydraulic System. Remove tack weld from Installation Bracket (**FIG. 21-1B**). Then unbolt Installation Bracket (**FIG. 21-1B**) from Right Hand (RH) side of Extension Plate (**FIG. 21-1A**). Repeat for LH side.



2. Remove tack weld between each Lift Arm and Extension Plate (**FIG. 21-2**). Repeat for LH Side of Liftgate.



REMOVING TACK WELD
(RH SIDE OF LIFTGATE SHOWN)
FIG. 21-2

STEP 8 - REMOVE LOCKING BRACKETS - Continued

3. Lower the Liftgate to ground level. Remove both Installation Brackets. Keep both Brackets in case Liftgate needs to be repositioned (**FIGS. 22-1A & 22-1B**).

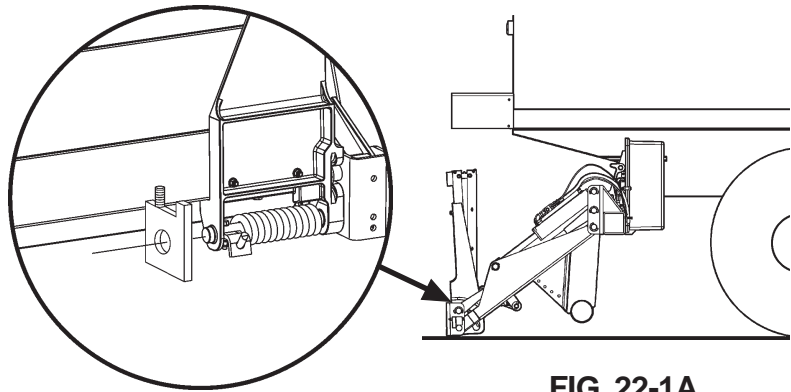


FIG. 22-1B

FIG. 22-1A

4. Unfold Platform and Flipover (**FIG. 22-2**).

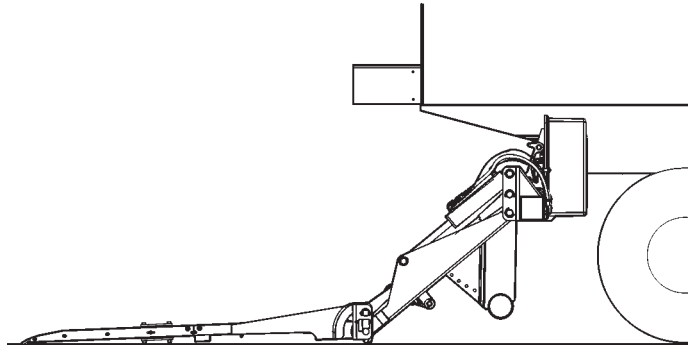


FIG. 22-2

5. Unbolt the Locking Brackets from both Cylinders (**FIG. 22-3**).

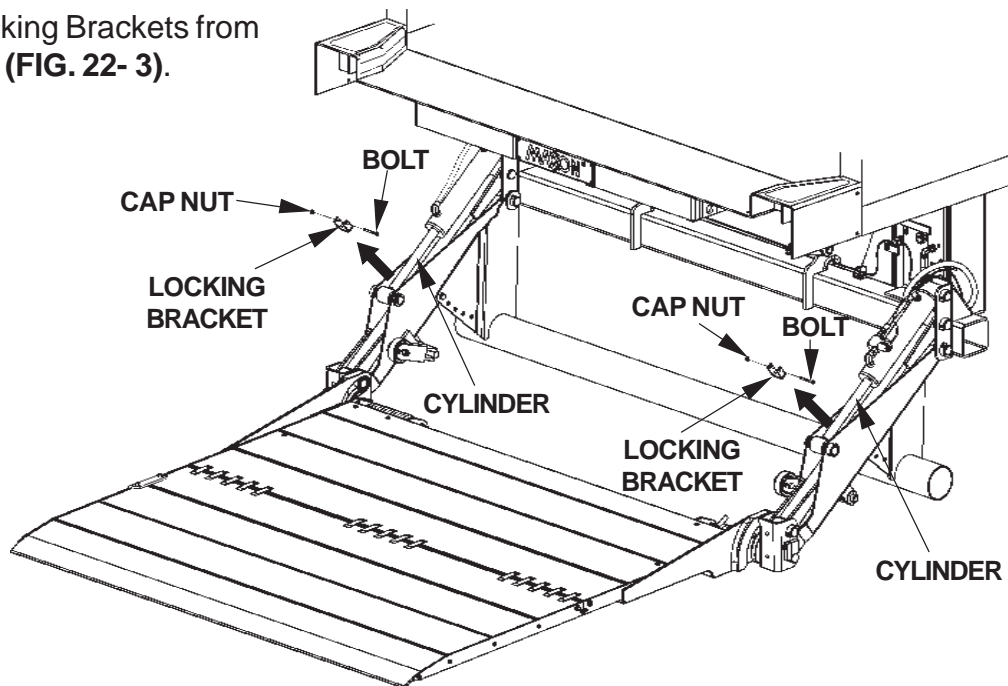


FIG. 22-3

STEP 8 - REMOVE LOCKING BRACKETS - Continued

6. Raise the Liftgate to Vehicle Bed Height. Check if Extension Plate interferes with Lifting Arm (**FIG. 23-1**).

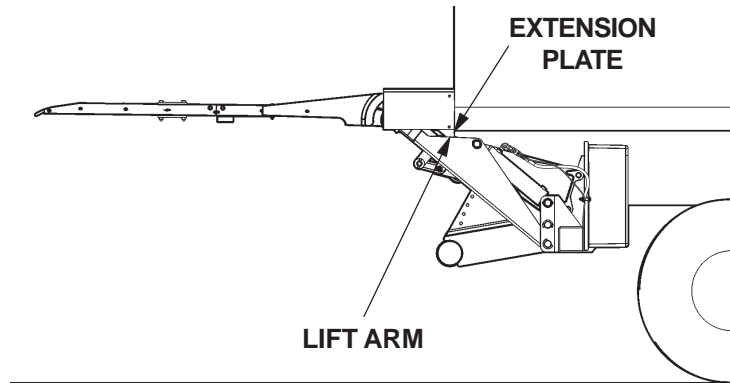
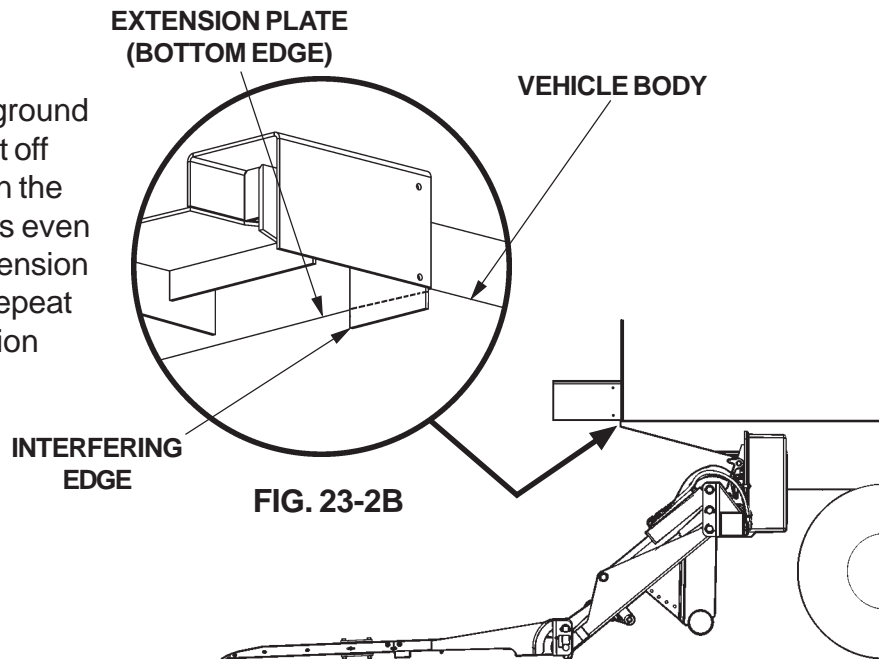


FIG. 23-1

7. Lower the Liftgate to ground level (**FIG. 23-2A**). Cut off the interfering edge on the Extension Plate so it is even with the bottom of Extension Plate (**FIG. 23-2B**). Repeat for LH Side of Extension Plate.



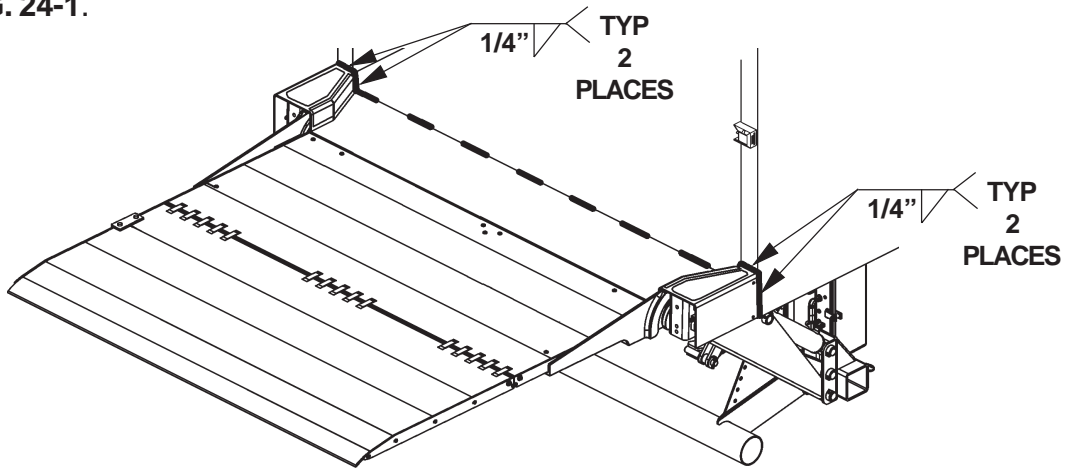
**PLATFORM AT GROUND LEVEL
(RH SIDE SHOWN)
FIG. 23-2A**

STEP 9 - FINISH WELDING EXTENSION PLATE

CAUTION

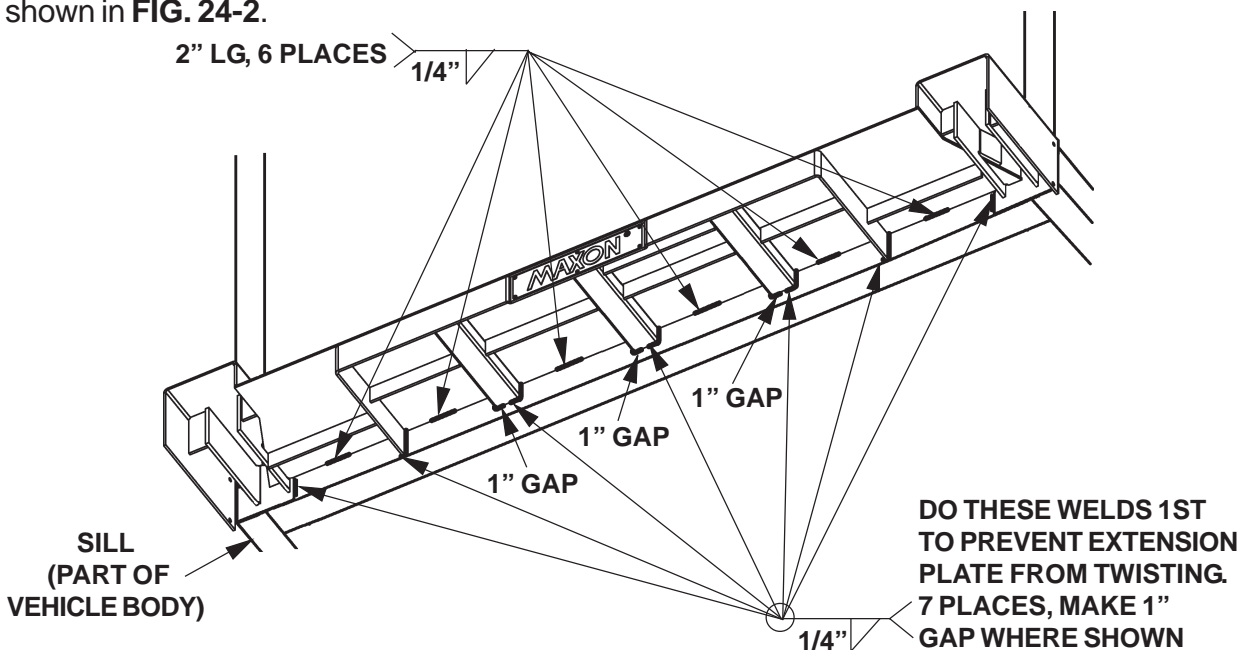
When using electrical welder to weld on Extension Plate, make sure the welder ground lead is connected directly to the Extension Plate, as close as possible to the place being welded. Failure to comply can result in damaged cylinders and electrical parts.

1. RAISE the Platform to bed level under moderate hydraulic pressure (FIG. 24-1). Weld the top of Extension Plate to Vehicle Body sill as shown in FIG. 24-1.



EXTENSION PLATE WELDS - VIEWED FROM ABOVE
(FORKLIFT NOT SHOWN)
FIG. 24-1

2. Weld the bottom of Extension Plate to Vehicle Body sill as shown in FIG. 24-2.



EXTENSION PLATE WELDS - VIEWED FROM UNDERNEATH
(PLATFORM NOT SHOWN)
FIG. 24-2

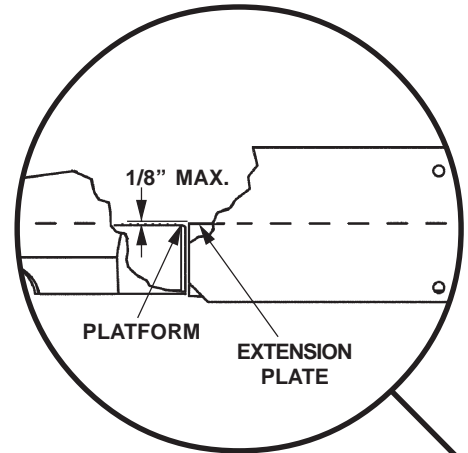
STEP 10 - ADJUST PLATFORM (IF REQUIRED)

NOTE: In most cases, if Liftgate is installed according to the instructions in this manual, Platform will not require adjustment. Use the following instructions to check the Platform. Then adjust the Platform only if required.

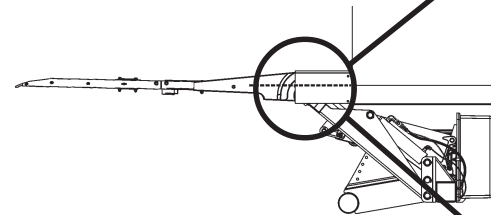
NOTE: Before doing the following procedure, make sure vehicle is still parked on level ground.

- 1. RAISE** Platform to bed height. Check the Platform as follows. Inboard edge on top of Platform must be no more than 1/8" from diamond plate surface on top of Extension Plate (**FIGS. 25-1A & 25-1B**). The maximum allowable horizontal gap between inboard edge of Platform and adjacent edge of Extension Plate is 1/4" (**FIGS. 25-1A & 25-1C**). **LOWER** Platform to ground level. Shackles and tip of Flipover should touch the ground at the same time (**FIG. 25-2**). Tip of Flipover must not be higher than 1/4" above the ground. If all indications are correct (**FIGS. 25-1A, 25-1B, 25-1C, & 25-2**), Liftgate is installed correctly and no adjustment is needed. If the Tip of Flipover is too high above the ground, if Shackles are off the ground, or if there is too much gap between Platform and Extension Plate, continue doing this procedure.

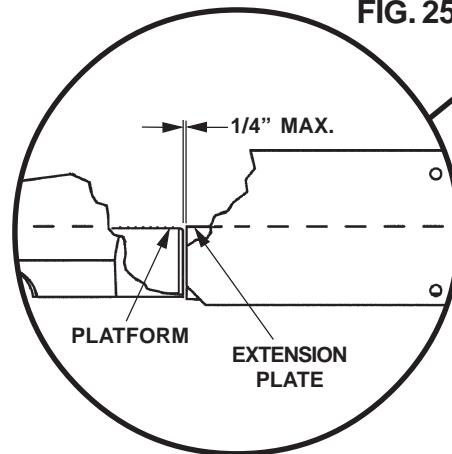
NOTE: If the Shackles do not touch the ground (see **FIG. 26-1**), do instruction **2**. If the Tip of the Flipover is more than 1/4" above the ground (see **FIG. 25-2**), skip instructions **2 - 5** and do **instruction 6**. If there is too much vertical space (**FIG. 25-1B**) or horizontal space (**FIG. 25-1C**) between Platform and Extension Plate, start with **instruction 7** to remove and reinstall Liftgate.



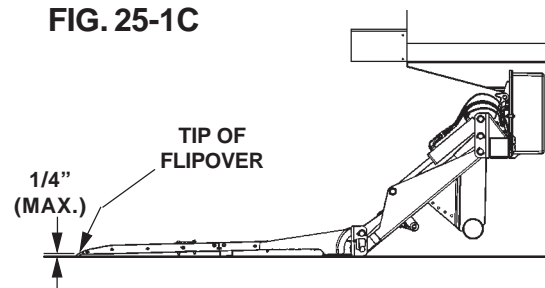
**VERTICAL GAP
FIG. 25-1B**



**PLATFORM AT
BED LEVEL
FIG. 25-1A**



**HORIZONTAL GAP
FIG. 25-1C**



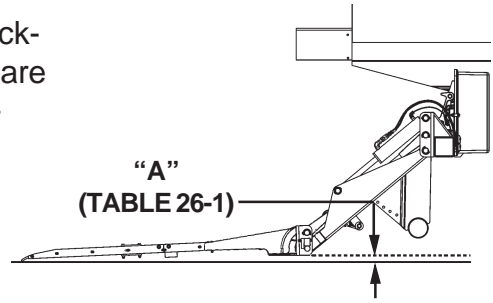
**PLATFORM & SHACKLES
TOUCH GROUND
FIG. 25-2**

STEP 10 - ADJUST PLATFORM (IF REQUIRED) - Continued

2. Make sure Platform is still at ground level. If the Shackles are not touching the ground, measure and compare distance "A" (FIG. 26-1) with TABLE 26-1 to determine the correct shim.

RAISE TIP OF FLIPOVER THIS DISTANCE "A"	REQUIRED SHIM THICKNESS	WELD SIZE "W"
1"	1/16"	1/32"
2"	1/8"	1/16"

TABLE 26-1



SHACKLES DO NOT TOUCH GROUND
FIG. 26-1

3. Fold the Flipover and Platform. Then raise the Platform to position shown in FIG. 26-2A.

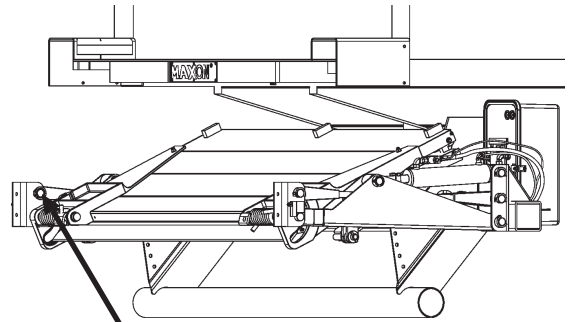


FIG. 26-2A

CAUTION

When using electrical welder to weld on Pin, make sure the welder ground lead is connected directly to the Pin, as close as possible to the place being welded. Failure to comply can result in damaged cylinders and electrical parts.

4. Use TABLE 26-1 to select the correct size shim and refer to TABLE 26-1 for the correct shim to get from the Parts Box. Weld shim to Pin as shown in FIG. 26-2B.

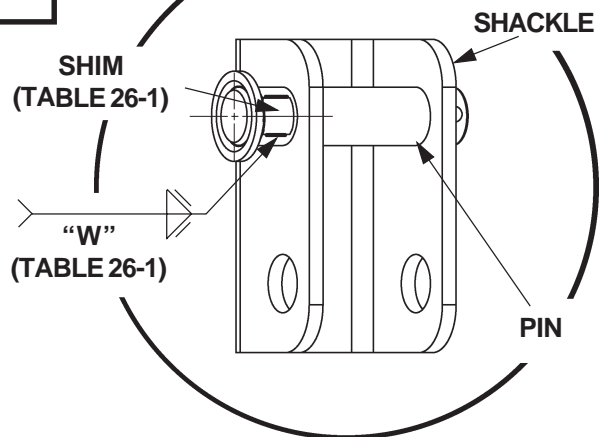
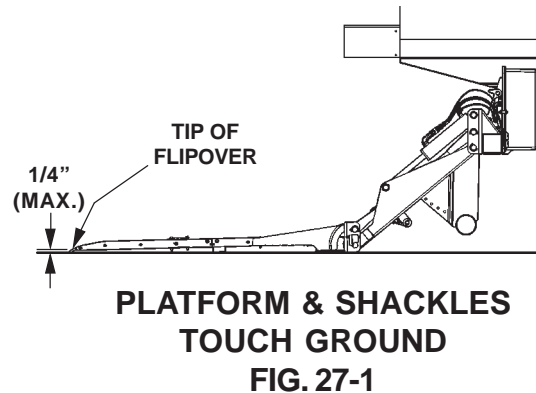


FIG. 26-2B

STEP 10 - ADJUST PLATFORM (IF REQUIRED) - Continued

5. Lower Platform to the ground. Unfold Platform and Flipover. **RAISE** the Platform to bed height, then **LOWER** it to the ground. The tip of Flipover and Shackle should touch the ground as shown in **FIG. 27-1**. Tip of Flipover must not be higher than 1/4" above the ground.



6. If the tip of Flipover is more than 1/4" above the ground (**FIG. 27-2**), note the distance "B" above ground level. Distance "B" will be used for adjusting the Platform later in this procedure.

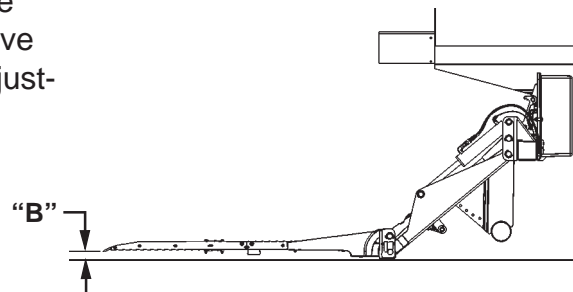
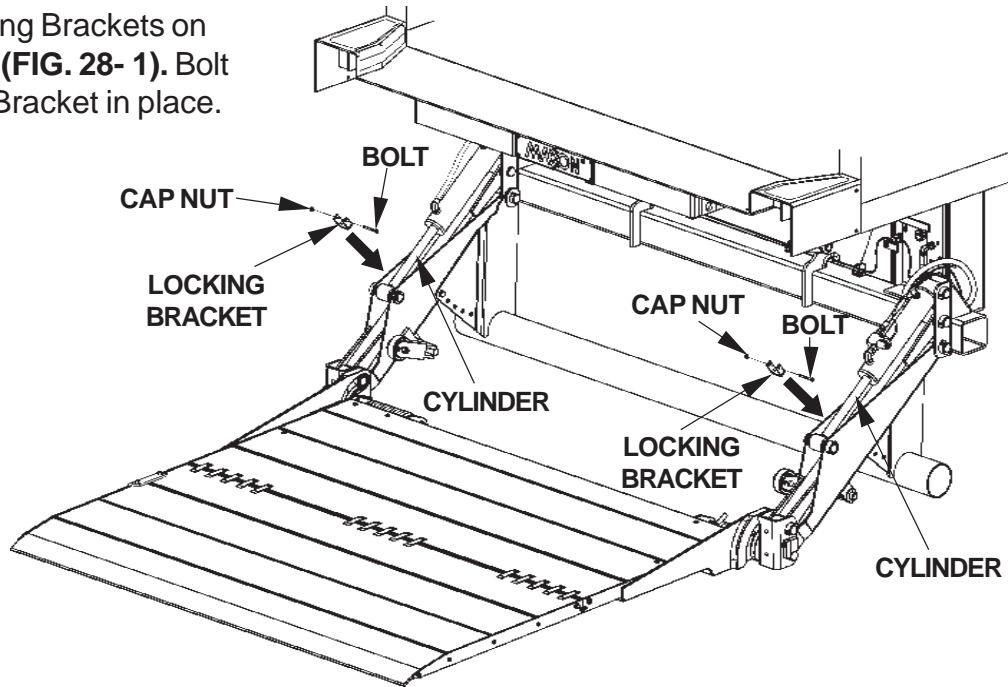


FIG. 27-2

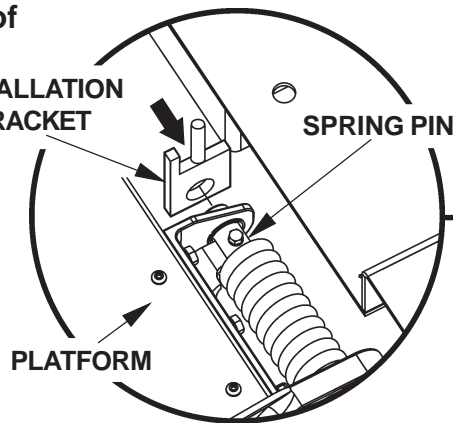
STEP 10 - ADJUST PLATFORM (IF REQUIRED) - Continued

7. Reinstall Locking Brackets on both Cylinders (**FIG. 28-1**). Bolt each Locking Bracket in place.



**REINSTALLING LOCKING BRACKETS
FIG. 28-1**

8. Review the **WARNING** page at the front of this manual before continuing this procedure. **Stay clear of moving Liftgate parts.**



**INSTALLATION BRACKET
(RH SIDE SHOWN)
FIG. 28-2B**

9. **RAISE** Platform to position just below Extension Plate (see **FIG. 28-2A**). Place an Installation Bracket on the Spring Pin on the RH Side of Platform (**FIG. 28-2B**) and on the Spring Pin on the LH Side of Platform.

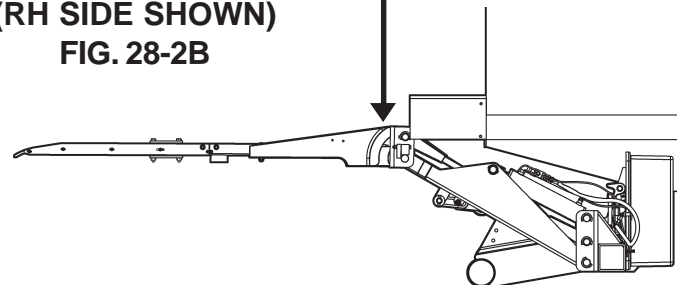
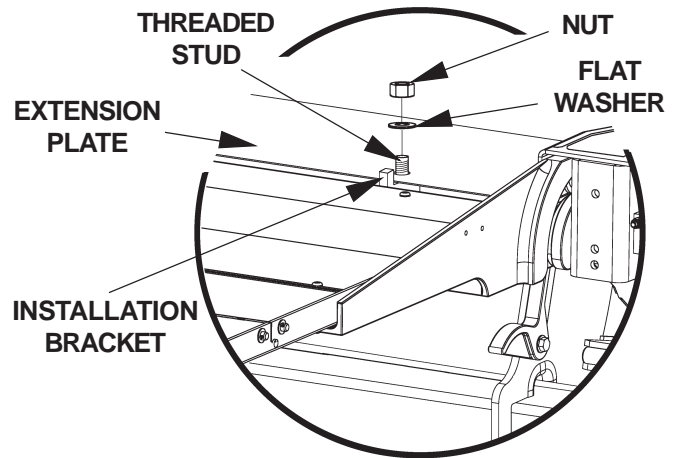


FIG. 28-2A

STEP 10 - ADJUST PLATFORM (IF REQUIRED) - Continued

10. Carefully **RAISE** the Platform to Vehicle Bed Height. Make sure threaded stud on each Installation Bracket comes up through hole in Extension Plate (**FIG. 29-1**). Bolt the Installation Bracket (**FIG. 29-1**) to Extension Plate. Torque nut from **39 to 59 LBS.-FT.** Repeat for bolting and torquing the Installation Bracket on the LH Side.

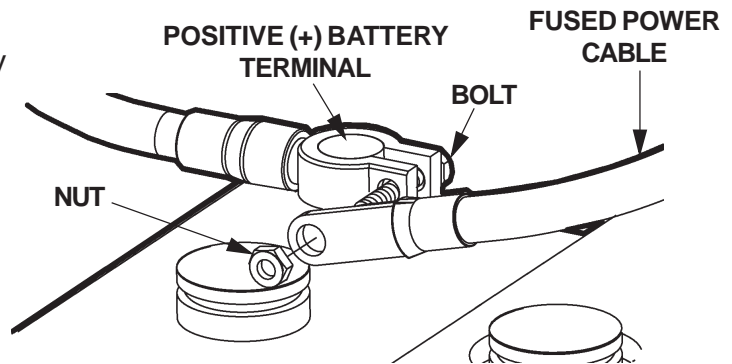


**INSTALLATION BRACKET
(RH SIDE SHOWN)
FIG. 29-1**

⚠ WARNING

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

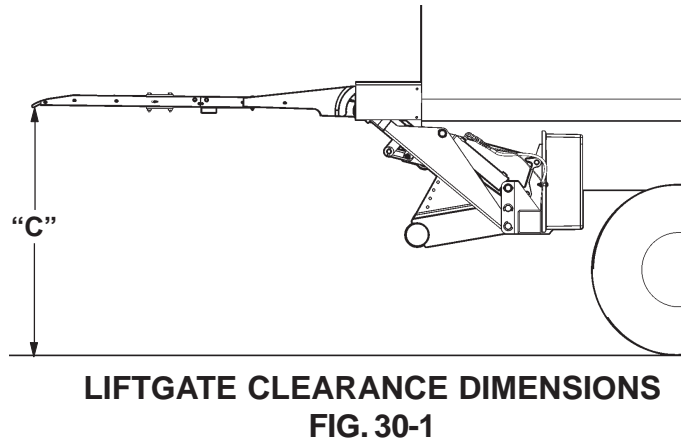
11. Disconnect power from Liftgate by removing nut from positive (+) battery terminal connector and disconnect Power Cable (**FIG. 29-2**). Reinstall nut on positive (+) battery terminal connector.



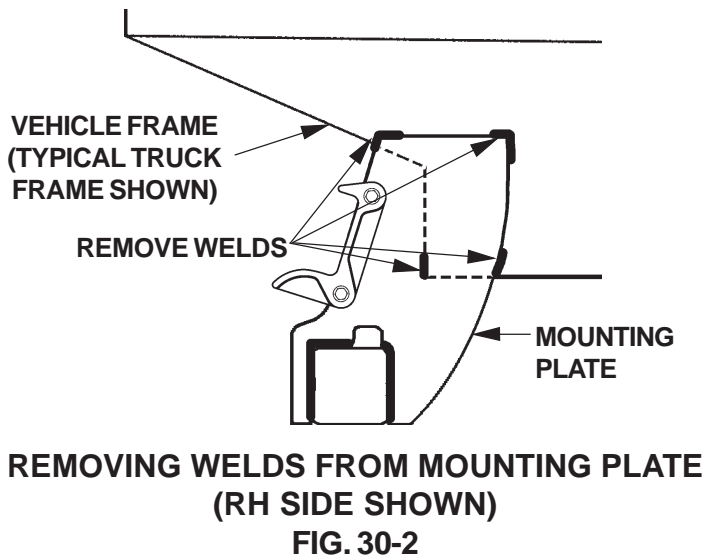
**DISCONNECTING BATTERY
FIG. 29-2**

STEP 10 - ADJUST PLATFORM (IF REQUIRED) - Continued

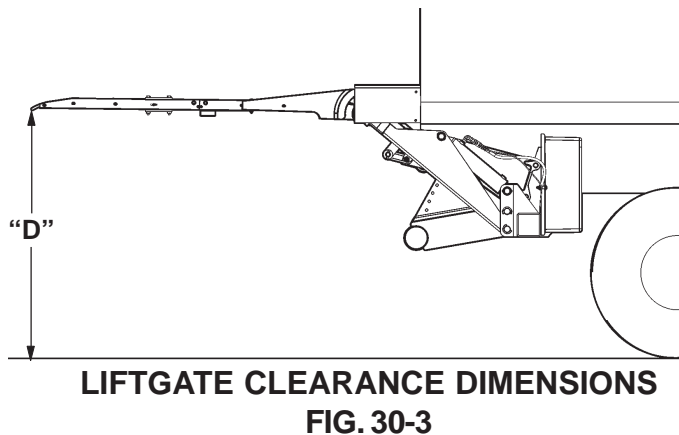
12. Support the Liftgate under Main Frame with a floor jack.
13. Measure distance “C” from the tip of the Flipover to ground level (FIG. 30-1). Then subtract the distance “B” measured in instruction 6. The result is distance “D” for the Platform adjustment (FIG. 30-3). For example, if you measured 50” for “C” and 1” for “B”, the calculated distance “D” for the Platform adjustment is 49”.



14. Remove welds from RH Side and LH Side Mounting Plates (FIG. 30-2).



15. Raise or lower the floor jack to adjust distance “D” between tip of Flipover and ground level (FIG. 30-3). Use the distance “D” calculated in instruction 12.



STEP 10 - ADJUST PLATFORM (IF REQUIRED) - Continued

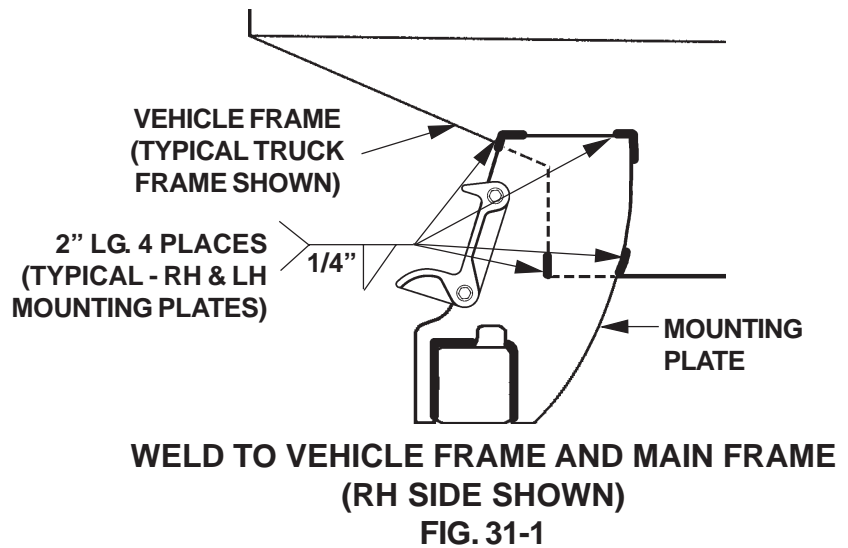
CAUTION

When using electrical welder to weld on Mounting Plates, make sure the welder ground lead is connected directly to the Mounting Plate, as close as possible to the place being welded. Failure to comply can result in damaged cylinders and electrical parts.

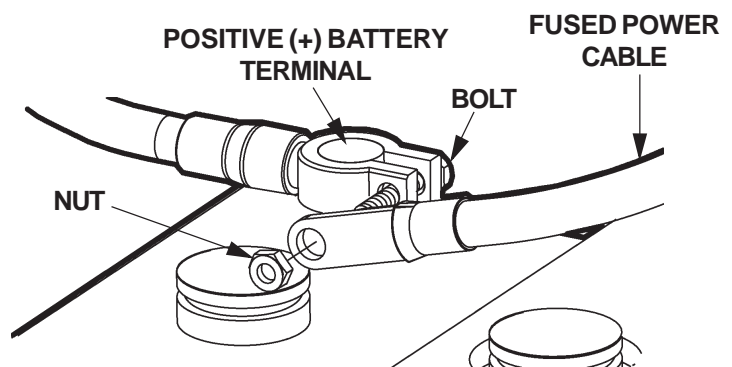
CAUTION

Prevent damaged hydraulic hoses and saddles. Before welding next to hydraulic hoses and saddles, protect the hoses and saddles with a heat-resistant cover.

16. Clamp the RH Side and LH Side Mounting Plates to vehicle frame. Weld the Mounting Plates to vehicle frame as shown in **FIG. 31-1**. Remove clamps.



17. Connect power to Liftgate by removing nut from positive (+) battery terminal connector and connect Power Cable (**FIG. 31-2**). Reinstall and tighten nut on positive (+) battery terminal connector.

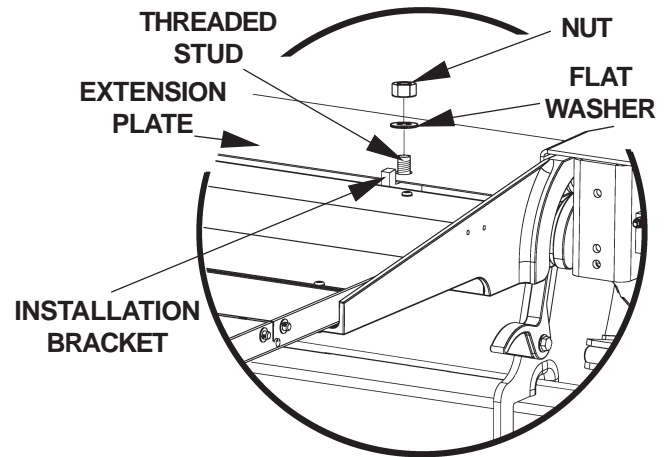


**RECONNECTING BATTERY
FIG. 31-2**

18. Lower the floor jack and move it away from the Liftgate.

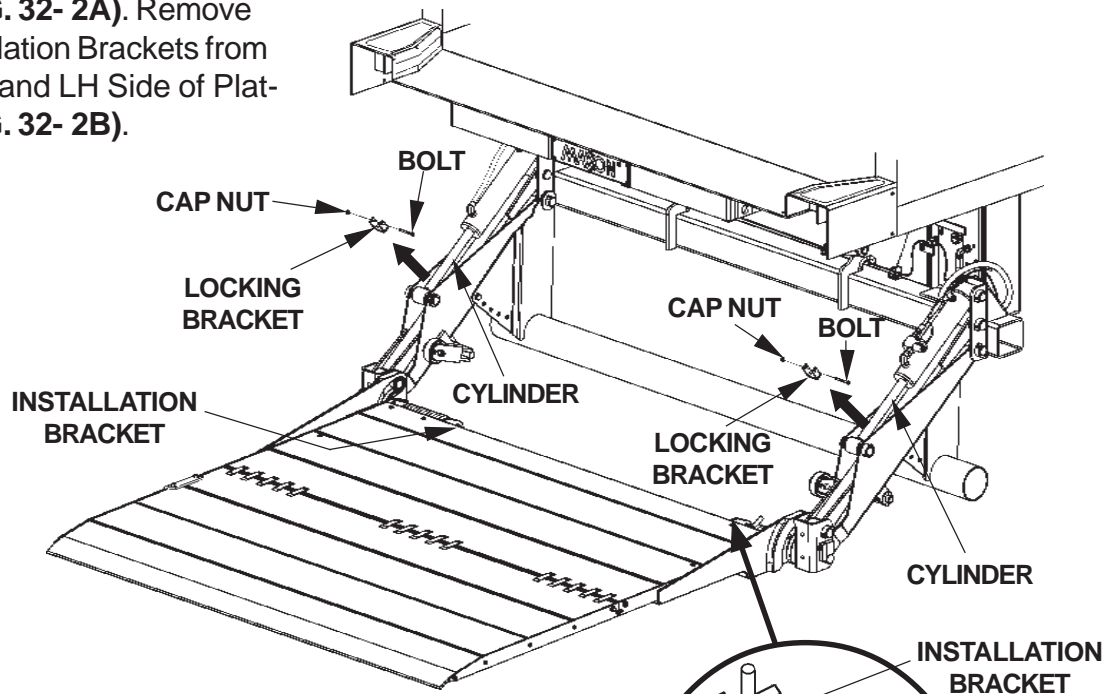
STEP 10 - ADJUST PLATFORM (IF REQUIRED) - Continued

19. Unbolt the Installation Brackets (FIG. 32-1) from RH Side and LH side of Extension Plate.



**INSTALLATION BRACKET
(RH SIDE SHOWN)
FIG. 32-1**

20. LOWER the Liftgate to ground level (FIG. 32- 2A). Remove the Installation Brackets from RH Side and LH Side of Platform (FIG. 32- 2B).



**REMOVING LOCKING BRACKETS
FIG. 32-2A**

21. Unbolt the Locking Brackets from both Cylinders (FIG. 32- 2). Remove the Locking Brackets.

**REMOVING INSTALLATION
BRACKET (RH SIDE SHOWN)
FIG. 32-2B**

STEP 11 - FINISH WELDING LIFTGATE TO VEHICLE

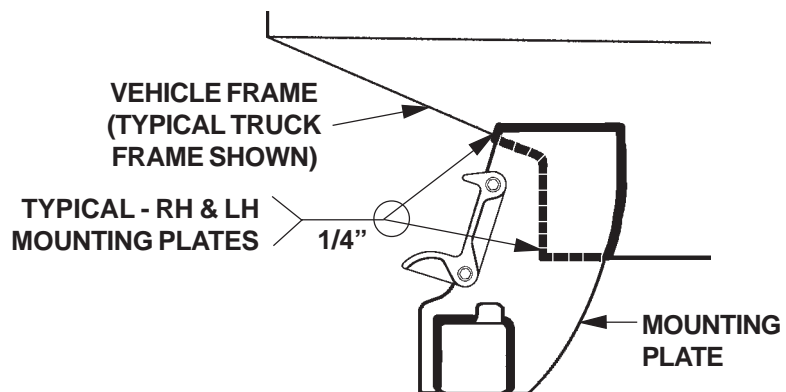
CAUTION

When using electrical welder to weld on Mounting Plates, make sure the welder ground lead is connected directly to the Mounting Plate, as close as possible to the place being welded. Failure to comply can result in damaged cylinders and electrical parts.

CAUTION

Prevent damaged hydraulic hoses and saddles. Before welding next to hydraulic hoses and saddles, protect the hoses and saddles with a heat-resistant cover.

1. Clamp the RH Side and LH Side Mounting Plates to vehicle frame. Weld the Mounting Plates to vehicle frame as shown in **FIG. 33-1**. Remove clamps.

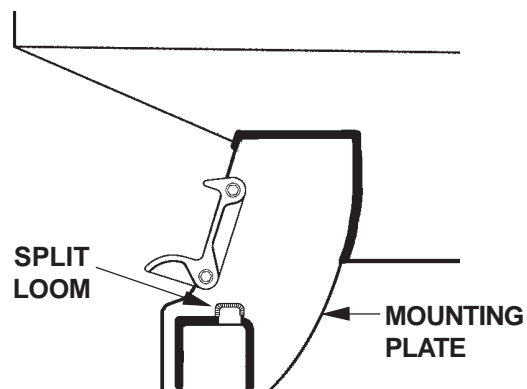


WELD TO VEHICLE FRAME (RH SIDE SHOWN)
FIG. 33-1

⚠ CAUTION

To prevent injury and damaged parts, let Mounting Plate cool off from welding before reinstalling split Loom.

2. Reinstall the Split Looms on RH Side and LH Side Mounting Plates (**FIG. 33-2**).



REINSTALLING SPLIT LOOM (RH SIDE SHOWN)
FIG. 33-2

STEP 12 - WELD TRUCK BODY TO FRAME (TRUCKS ONLY)

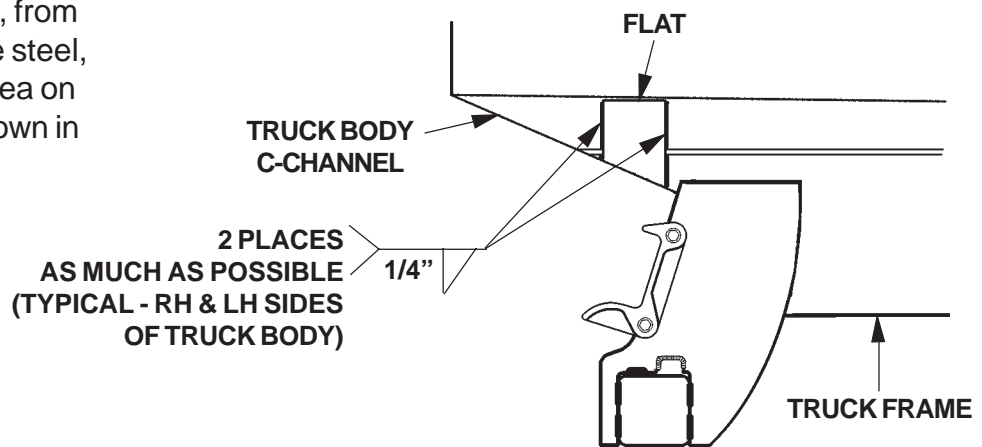
CAUTION

When using electrical welder to weld flats on truck frame, make sure the welder ground lead is connected directly to the flat, as close as possible to the place being welded. Failure to comply can result in damaged cylinders and electrical parts.

CAUTION

To prevent truck body from moving out of position, weld the C-channels on each side of truck body to truck frame.

1. Fabricate two flats, from 1/4" thick x 4" wide steel, that will fit in the area on the truck frame shown in **FIG. 34-1**.



**WELDING TRUCK BODY TO FRAME
(RH SIDE SHOWN)
FIG. 34-1**

2. Weld flat to the truck frame and the C-channel on the right hand side of truck body as shown in **FIG. 34-1**. Repeat for the LH side of the truck body.

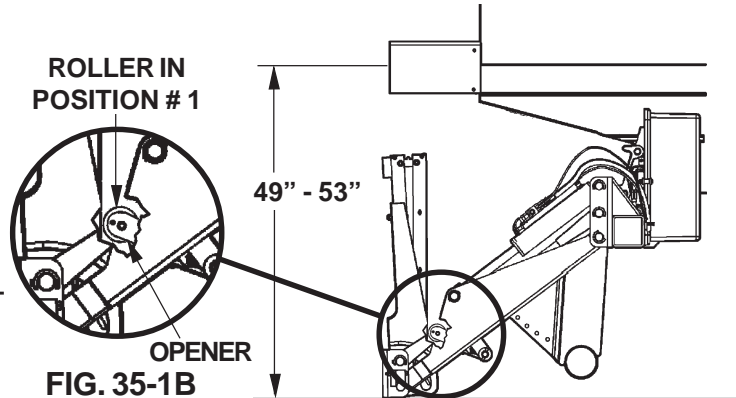
STEP 13 - ADJUST OPENER (IF REQUIRED)

NOTE: Platform Openers are set at the factory for Vehicle Bed Heights of 49"-53".
If your Vehicle Bed Height is 49"-53", adjustment usually is not needed.

NOTE: If additional room is needed for a walk-up ramp under the Vehicle Body, do instructions 2 through 8 in the following procedure. Move the Opener Roller to position #2 and the Cam Follower to position #2. Disregard the information pertaining to Vehicle Bed Height.

1. The **MAXON-recommended** procedures for adjusting Openers are as follows.

- The illustrations in **FIGS. 35-1A and 35-1B** show the Roller in Position #1 for 49"-53" Vehicle Bed Height.
- If your Vehicle Bed Height is 44"-49", do instructions 2 through 4.
- For Vehicle Bed Heights of 53" - 55", do instructions 5 through 8.
- For Vehicle Bodies equipped with walk-up ramps, see the preceding **NOTE**.
- Different settings for only the Roller are possible for the full range of bed heights. However, the Liftgate must always stow and unfold without hitting underside of Vehicle. Platform should unfold as close as possible to position shown in **FIG. 35-1A**, but must never be positioned so it falls open.

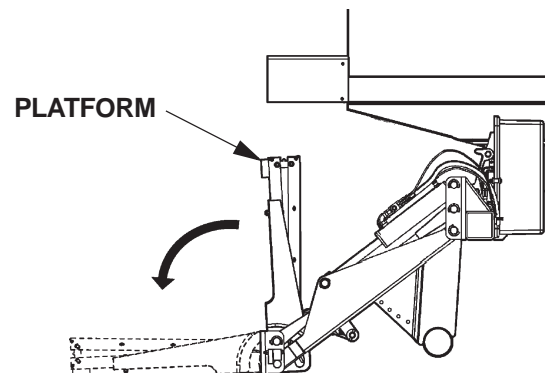


ROLLER POSITION FOR 49"- 53" BED HEIGHT (RH SIDE ROLLER SHOWN)
FIG. 35-1A

CAUTION

To prevent injury, unfold Platform before repositioning Rollers on Openers.

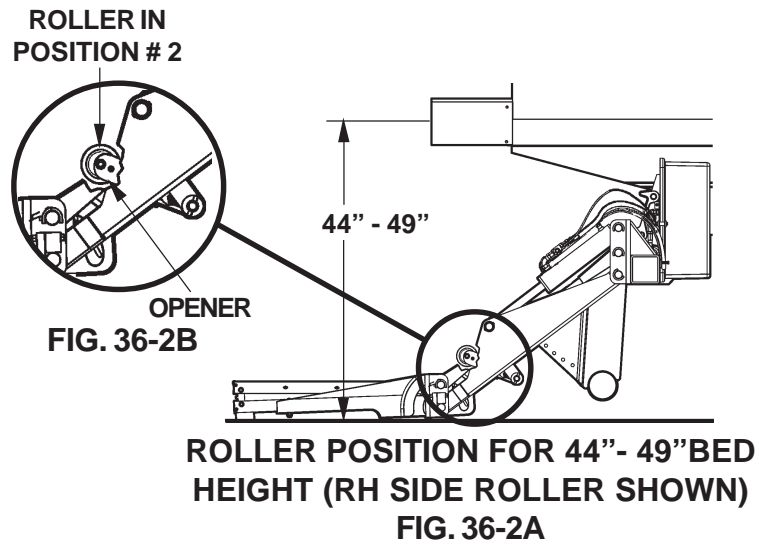
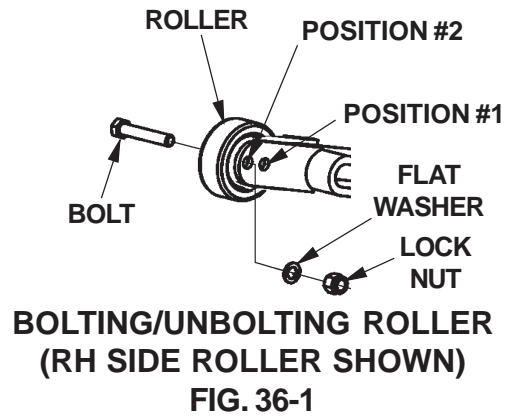
2. Unfold the Platform (**FIG. 35-2**).



UNFOLDING PLATFORM
FIG. 35-2

STEP 13 - ADJUST OPENER (IF REQUIRED) - Continued

- Unbolt Roller from Opener (FIG. 36-1). Move Roller to position #2 (FIGS. 36-1 & 36-2). Bolt Roller to Opener. Torque the 1/2"-13 opener bolt to 85 LBS.-FT.

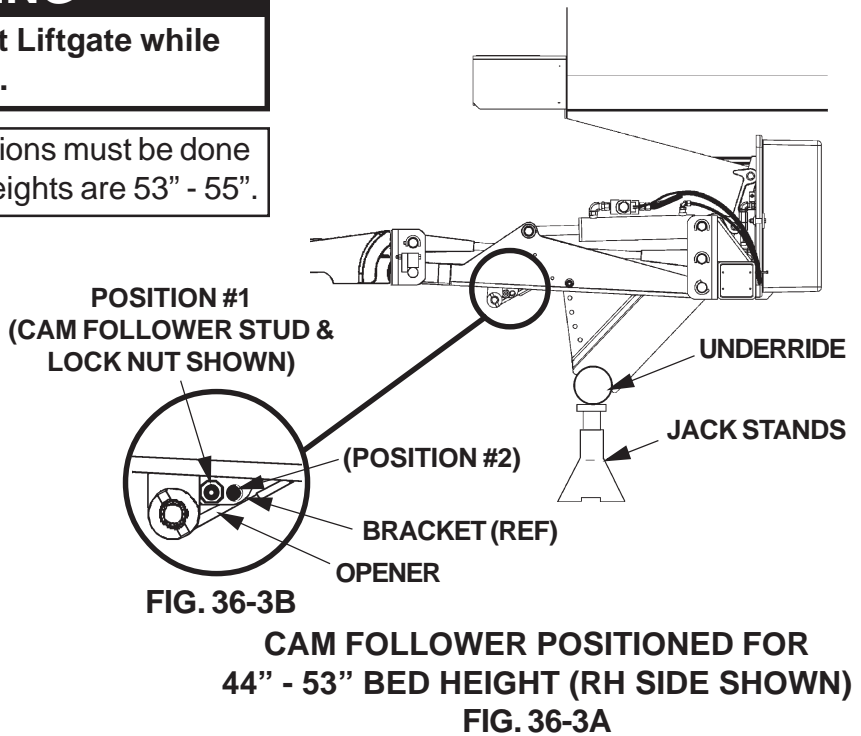


- Repeat instruction 3 for Opener on RH side of Liftgate.

⚠ WARNING
Use jack stands to support Liftgate while performing this procedure.

NOTE: The following instructions must be done when Vehicle Bed Heights are 53'' - 55''.

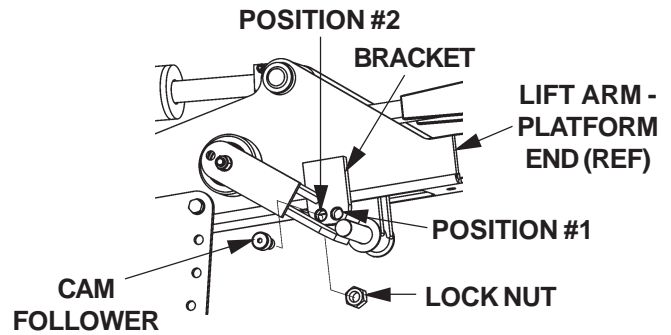
- Raise the Platform enough to gain access to lock nut on each Cam Follower (FIGS. 36-3A & 34-3B). Use jack stands, positioned below Underride, to support Liftgate (FIG. 36-3A).



11921 Slauson Ave. Santa Fe Springs, CA. 90670 (800) 227-4116 FAX (888) 771-7713
MAXON

STEP 13 - ADJUST OPENER (IF REQUIRED) - Continued

6. Unfasten Cam Follower and press it from Bracket (**FIG. 37-1**). Move Cam Follower and press it in position #2 on Bracket (**FIGS. 37-1 & 37-2**). Fasten the Cam Follower to Bracket with 1/2"-13 lock nut. Then torque lock nut to **85 LBS.-FT.**



**REPOSITIONING CAM FOLLOWER
(INBOARD VIEW, RH SIDE OF LIFTGATE)
FIG. 37-1**

7. Repeat instruction 6 for the Cam Follower on LH side of Liftgate.

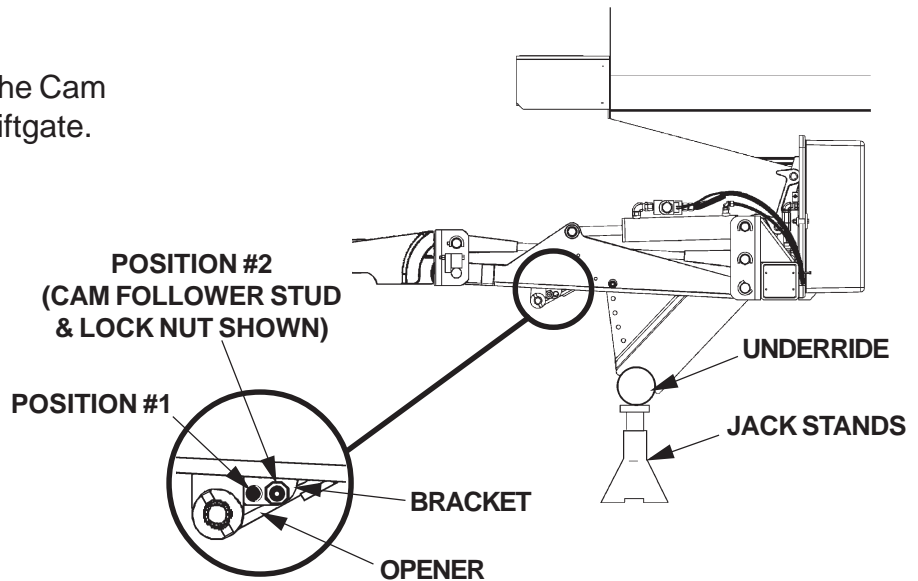


FIG. 37-2B

**CAM FOLLOWER POSITIONED FOR
53" - 55" BED HEIGHT (RH SIDE SHOWN)
FIG. 37-2A**

8. Raise the Liftgate enough to remove jack stands. Then remove the jack stands. Lower the Platform to the ground (**FIG. 37-3**).

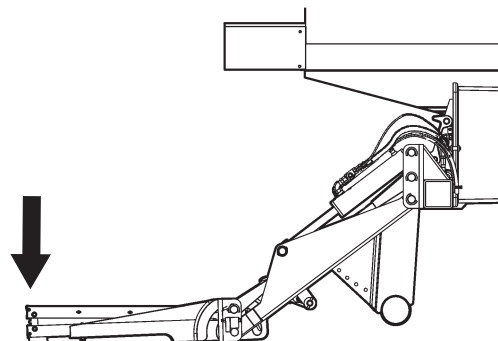


FIG. 37-3

STEP 14 - ADJUST SADDLES & WELD ON SUPPORTS

1. Fold the Flipover on Platform.
Place 1/4" Spacer between tip of Flipover and Platform on RH side and LH side (**FIG. 38-1**).
2. Stow Liftgate under hydraulic pressure (**FIG. 38-2A**). Make sure 1/4" Spacers are still in place (**FIG. 38-2B**).
3. Loosen the 2 bolts and lock nuts on RH side Mounting Plate (**FIG. 38-2A**). Repeat for Saddle on LH side. Butt each Saddle against Platform, and tighten lock nuts. Torque lock nuts to **85 LBS.-FT.**

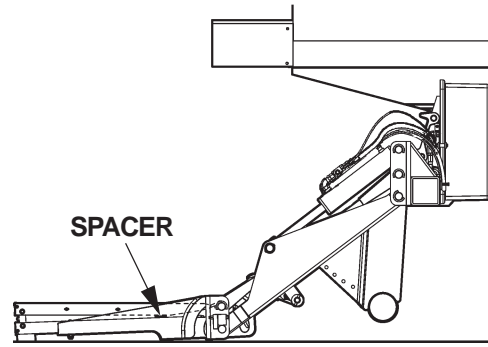
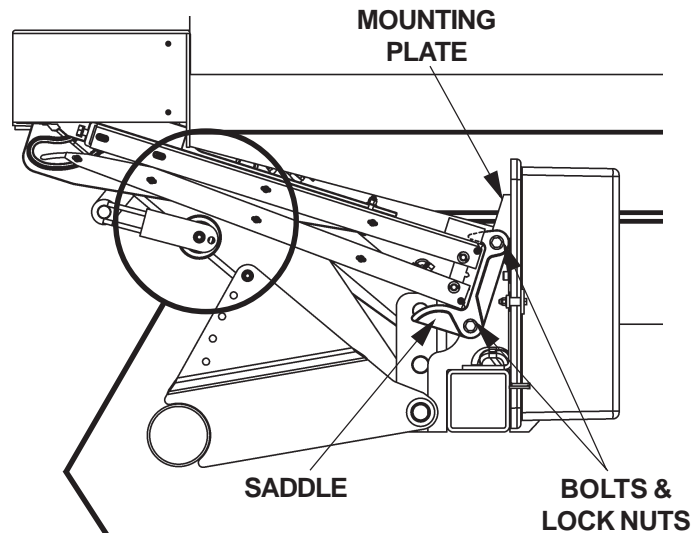
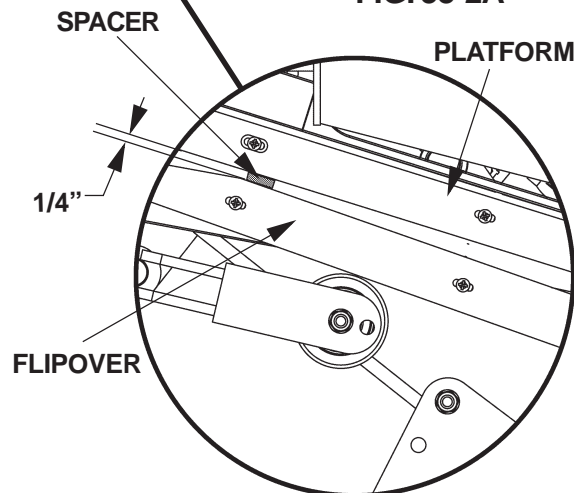


FIG. 38-1



**STOWED LIFTGATE - SIDE VIEW
(RH SIDE SHOWN)
FIG. 38-2A**



**SPACER BETWEEN PLATFORM &
OPENER
FIG. 38-2B**

STEP 14 - ADJUST SADDLES & WELD ON SUPPORTS - Continued

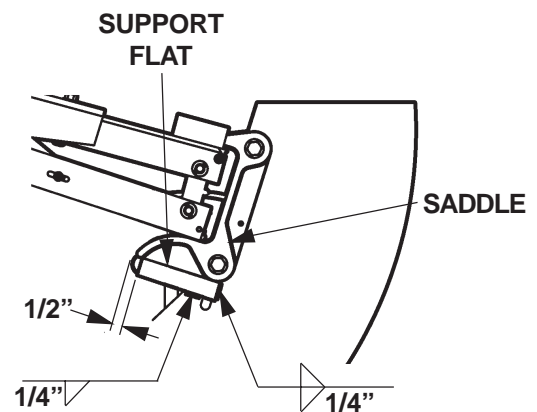
CAUTION

When using electrical welder to weld on Mounting Plates, make sure the welder ground lead is connected directly to the Mounting Plate, as close as possible to the place being welded. Failure to comply can result in damaged cylinders and electrical parts.

CAUTION

Prevent damaged hydraulic hoses. Before welding next to hydraulic hoses, protect the hoses with a heat-resistant cover such as a welding blanket.

4. Position a Support Flat against the bottom of Saddle and weld as shown in **FIG. 39-1**. Repeat this step on LH side.



**WELDING SUPPORT FLAT
(RH SIDE SHOWN)
FIG. 39-1**

5. Lower the Liftgate. Then unfold Platform and Flipover. Remove the 1/4" Spacers.

STEP 15 - ADJUST UNDERRIDE (IF REQUIRED)

1. Stow the Liftgate under hydraulic pressure (**FIG. 40-1**).

2. Check the Underride clearance dimensions shown in **FIG. 40-1**. If the Underride needs adjustment, do instruction 3.

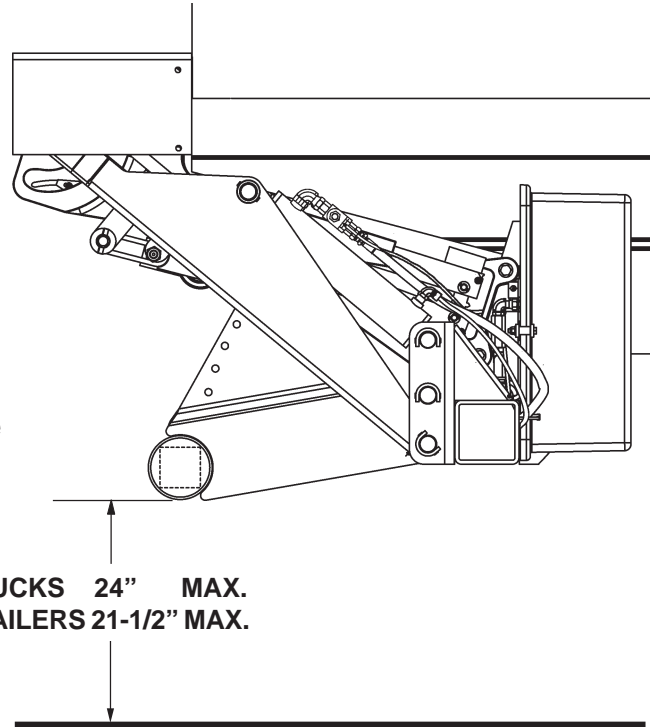
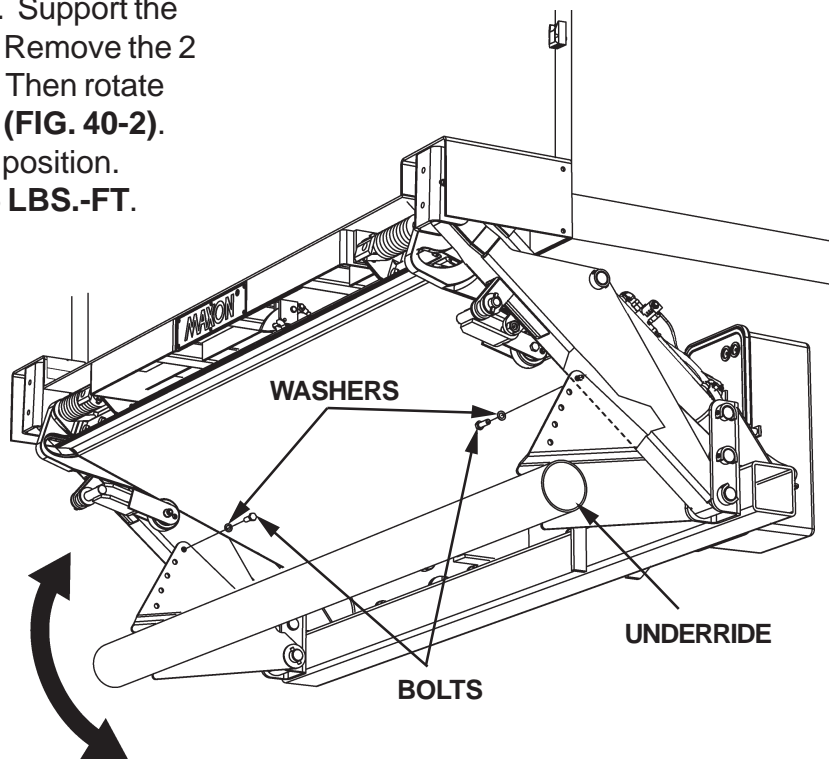


FIG. 40-1

NOTE: If the Vehicle Bed Height is more than 53", skip instruction 3.

3. Stow the Platform (**FIG. 40-2**). Support the Underride with forklift or jack. Remove the 2 adjuster bolts and 2 washers. Then rotate Underride to desired position (**FIG. 40-2**). Bolt the Underride in the new position. Torque the 1/2"-13 bolts to **85 LBS.-FT.**



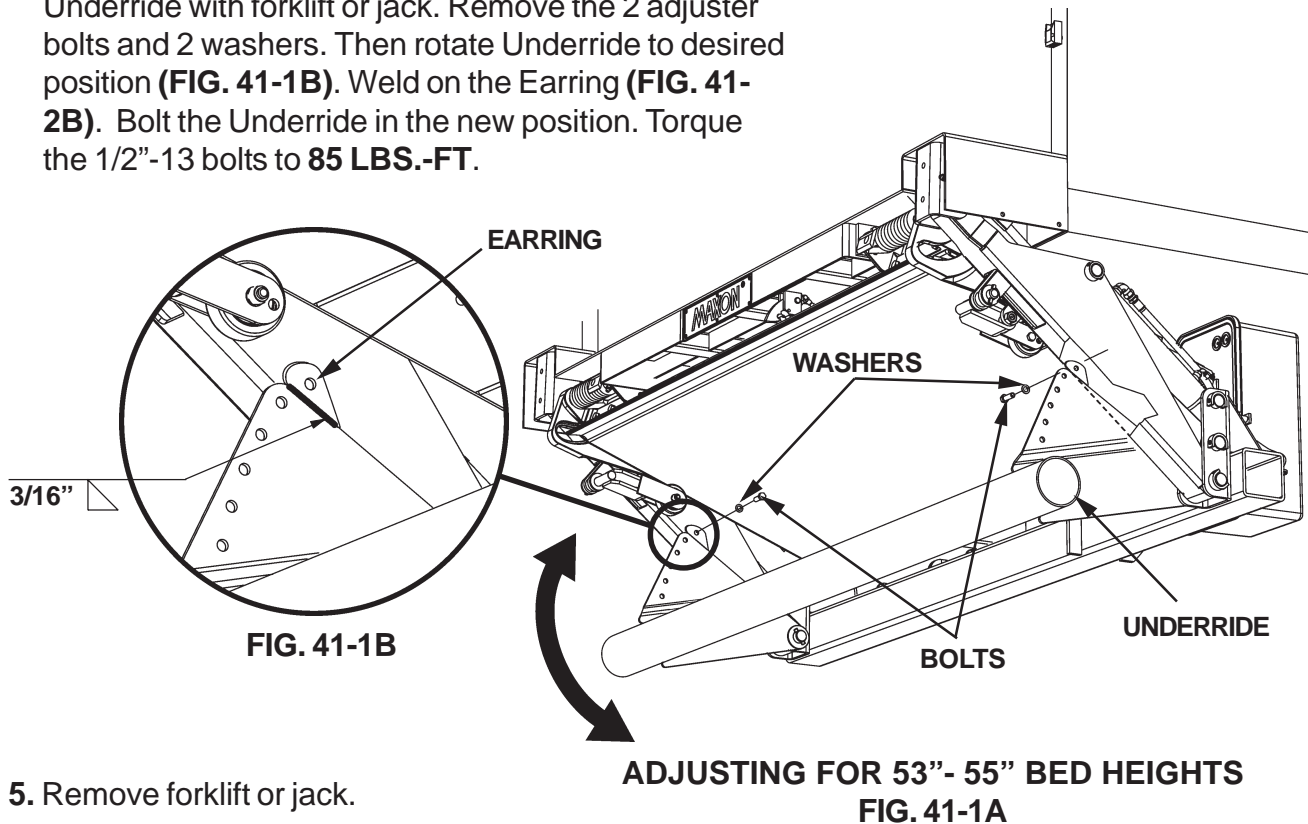
**ADJUSTING FOR 44" - 55" BED HEIGHTS
FIG. 40-2**

STEP 15 - ADJUST UNDERRIDE (IF REQUIRED) - Continued

CAUTION

When using electrical welder to weld on Underride, make sure the welder ground lead is connected directly to the Underride, as close as possible to the place being welded. Failure to comply can result in damaged cylinders and electrical parts.

4. Stow the Platform (**FIG. 41-1A**). Support the Underride with forklift or jack. Remove the 2 adjuster bolts and 2 washers. Then rotate Underride to desired position (**FIG. 41-1B**). Weld on the Earring (**FIG. 41-2B**). Bolt the Underride in the new position. Torque the 1/2"-13 bolts to **85 LBS.-FT.**



5. Remove forklift or jack.

STEP 16 - DECALS

THE MAXIMUM CAPACITY
OF THIS LIFT IS

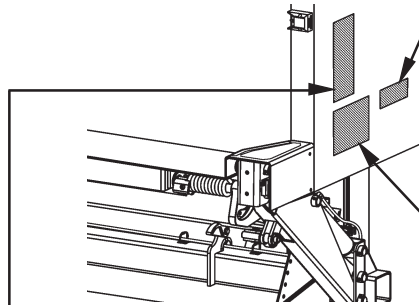
POUNDS

WHEN THE LOAD IS
CENTERED ON PLATFORM

CAPACITY DECAL (SEE TABLE 42-1)

CAPACITY DECALS	
CAPACITY	PART NO.
2500 LBS.	220382
3300 LBS.	220388-02
4400 LBS.	253155
5500 LBS.	253161

TABLE 42-1



OPERATING INSTRUCTIONS

PUSH CONTROL SWITCH

1 MUST TOUCH GROUND

UNFOLD PLATFORM

2

UNFOLD FLIPOVER.

3

RAISE/LOWER

4

5 TO TUCK UNIT AWAY REVERSE STEPS 1, 2, 3, & 4. DECAL, P/N 251867-08

INSTRUCTION DECAL
P/N 251867-08.

WARNING

READ THIS INFORMATION CAREFULLY

- Improper operation of this Liftgate can result in serious personal injury. Do not operate unless you have been properly instructed and have read, and are familiar with the operating instructions. If you do not have a copy of the instructions, please obtain them from your employer, distributor, or lessor before you attempt to operate Liftgate.
- Be certain that the vehicle is properly and securely braked before using the Liftgate.
- Always inspect this Liftgate for maintenance or damage before using it. If there are signs of improper maintenance, damage to vital parts, or slippery Platform surface, do not use the Liftgate until these problems have been corrected.
- Do not overload the Liftgate. The load limit is based on evenly distributed cargo over the entire Platform surface. If you are using a pallet jack, be sure it can be maneuvered safely. Do not operate a forklift on the Platform or travel with the platform in an open position at any time.
- Load should be placed in a stable position close to the edge of the Platform nearest the truck. The heaviest portion of the load should never be placed beyond the center of the Platform away from the truck.
- Never allow yourself, a helper, or bystander to stand in a position where a falling load could land on either of you. Also do not allow any part of yours or your helper's body to be placed under, within, or around any portion of the moving Liftgate, or its mechanisms, or in a position that would trap them between the platform and the ground or truck when the Liftgate is operated.
- If a helper is riding the Platform with you, make sure you are both doing so safely and that you are not in danger of coming in contact with any moving or potentially moving obstacles. USE GOOD COMMON SENSE. If load appears to be unsafe, do not lift or lower it.

For a free copy of other manuals that pertain to this model Liftgate, please visit our website at www.maxonlift.com or call Customer Service at (800) 227- 4116.

MAXON LIFT CORP. PART NO. 264081

WARNING DECAL
P/N 264081

FIG. 42-1

STEP 16 - DECALS - Continued

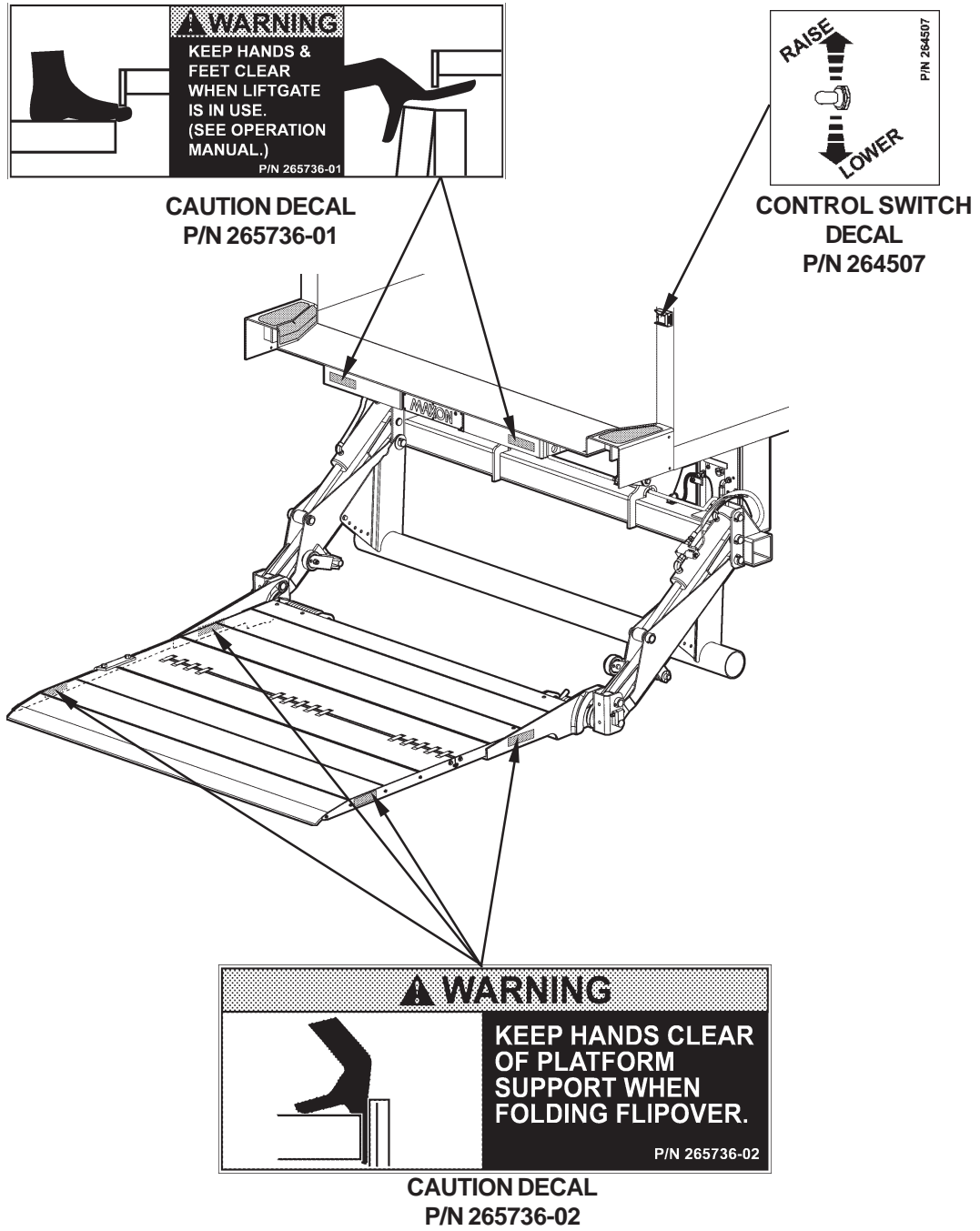


FIG. 43-1

STEP 17 - NONSKID & SAFETY STRIPING

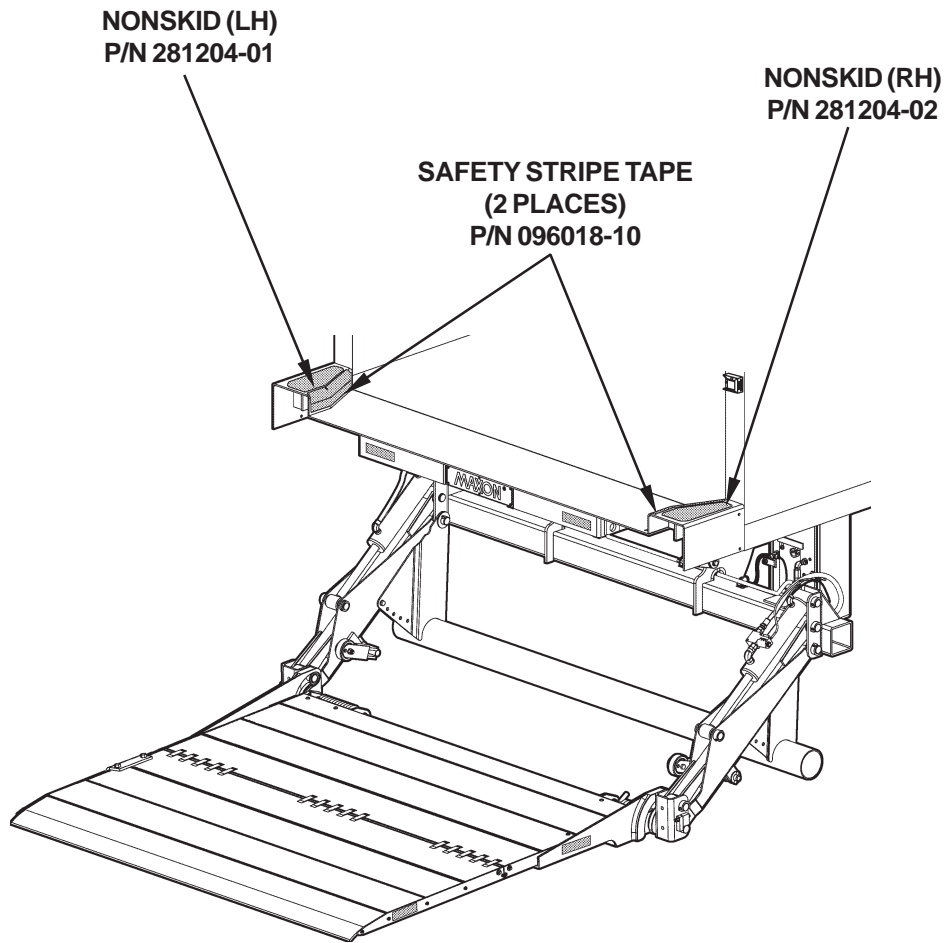


FIG. 44-1

STEP 18 - VEHICLE TAILLIGHT POSITIONING (IF REQUIRED)

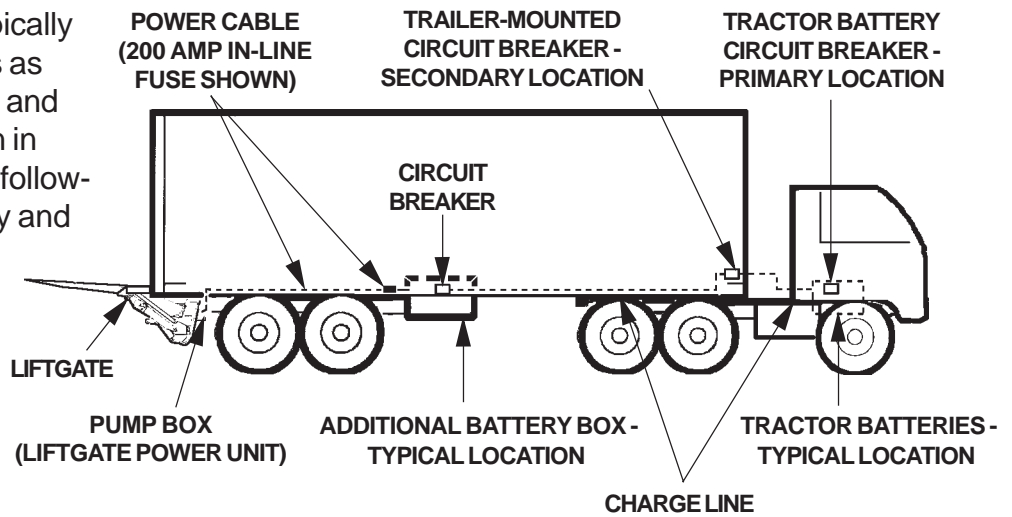
NOTE: Positions are based on using taillights of 6-3/4" height by 5-3/4" width. Larger taillights may interfere with Liftgate. Taillights and attaching hardware are not provided with the Liftgate.

UPDATED INSTRUCTIONS WILL BE PROVIDED AT A LATER DATE.

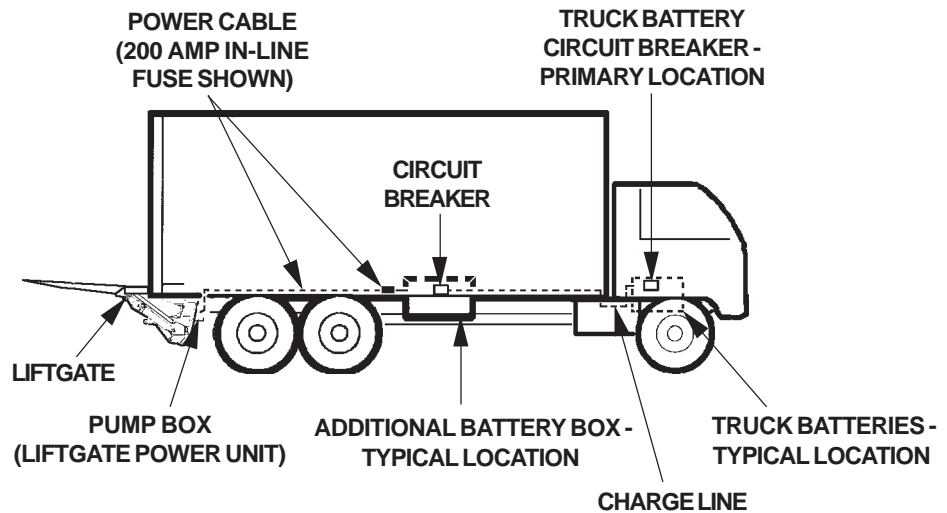
OPTIONS

RECOMMENDED LIFTGATE POWER CONFIGURATION

1. Liftgate and additional Battery Box are typically installed on trailers as shown in **FIG. 46-1** and on trucks as shown in **FIG. 46-2**. See the following page for battery and cable connections.



**RECOMMENDED LIFTGATE & BATTERY BOX
INSTALLATION ON TRAILER
FIG. 46-1**



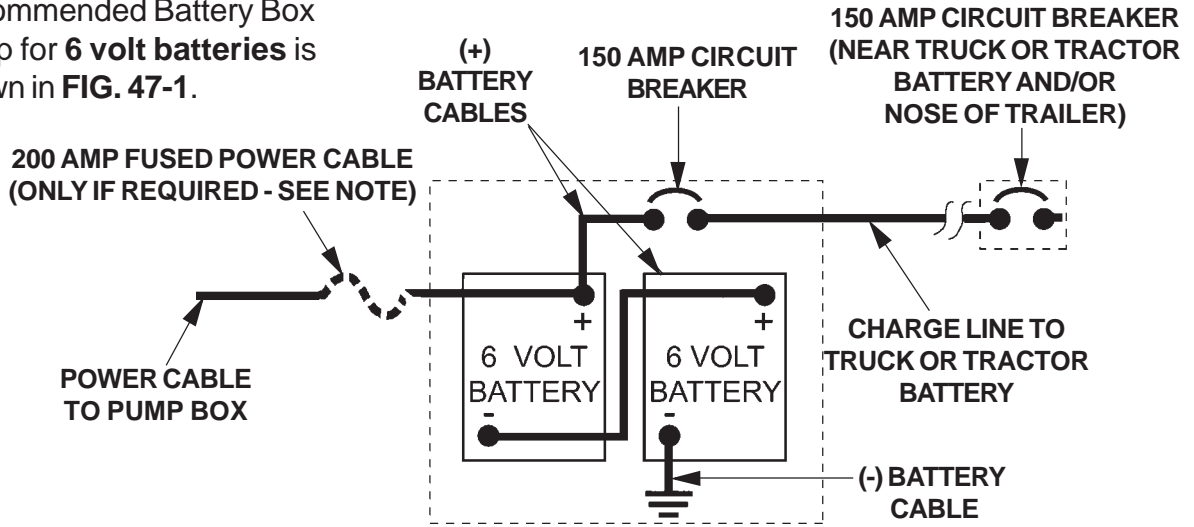
**RECOMMENDED LIFTGATE & BATTERY BOX
INSTALLATION ON TRAILER
FIG. 46-2**

OPTIONS

RECOMMENDED LIFTGATE POWER CONFIGURATION - Continued

NOTE: If more than 10' of cabling is required to connect Battery Box batteries to Liftgate Power Unit, and/or if cable is run through/along vehicle body crossmembers, use **200 Amp Fused Power Cable** from Liftgate Parts Box. Always connect fused end of Cable to Battery.

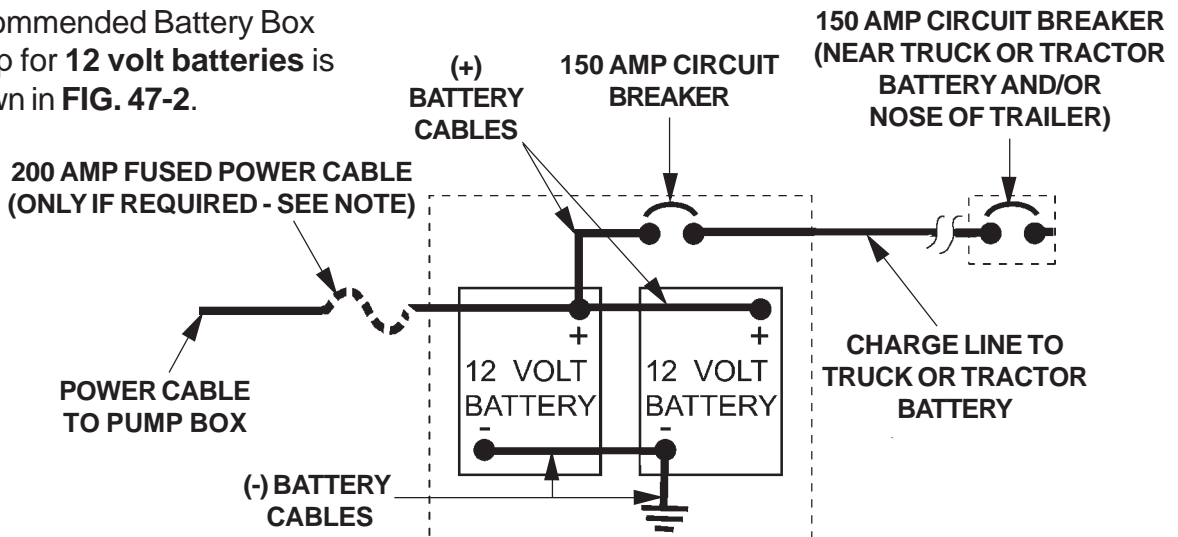
2. Recommended Battery Box setup for **6 volt batteries** is shown in **FIG. 47-1**.



6 VOLT BATTERY CONNECTIONS
FIG. 47-1

NOTE: If more than 10' of cabling is required to connect Battery Box batteries to Liftgate Power Unit, and/or if cable is run through/along vehicle body crossmembers, use **200 Amp Fused Power Cable** from Liftgate Parts Box. Always connect fused end of Cable to Battery.

3. Recommended Battery Box setup for **12 volt batteries** is shown in **FIG. 47-2**.



12 VOLT BATTERY CONNECTIONS
FIG. 47-2

MAXON® 11921 Slauson Ave. Santa Fe Springs, CA. 90670 (800) 227-4116 FAX (888) 771-7713

