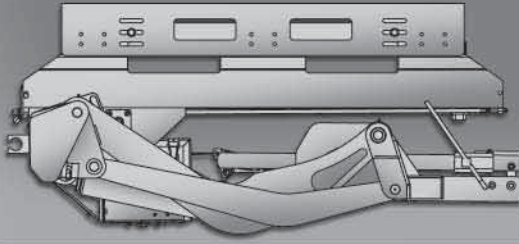


M-08-12
REV. G
OCTOBER 2016



MAXON[®] GPSLR Series

INSTALLATION MANUAL

GPSLR-33 & GPSLR-44

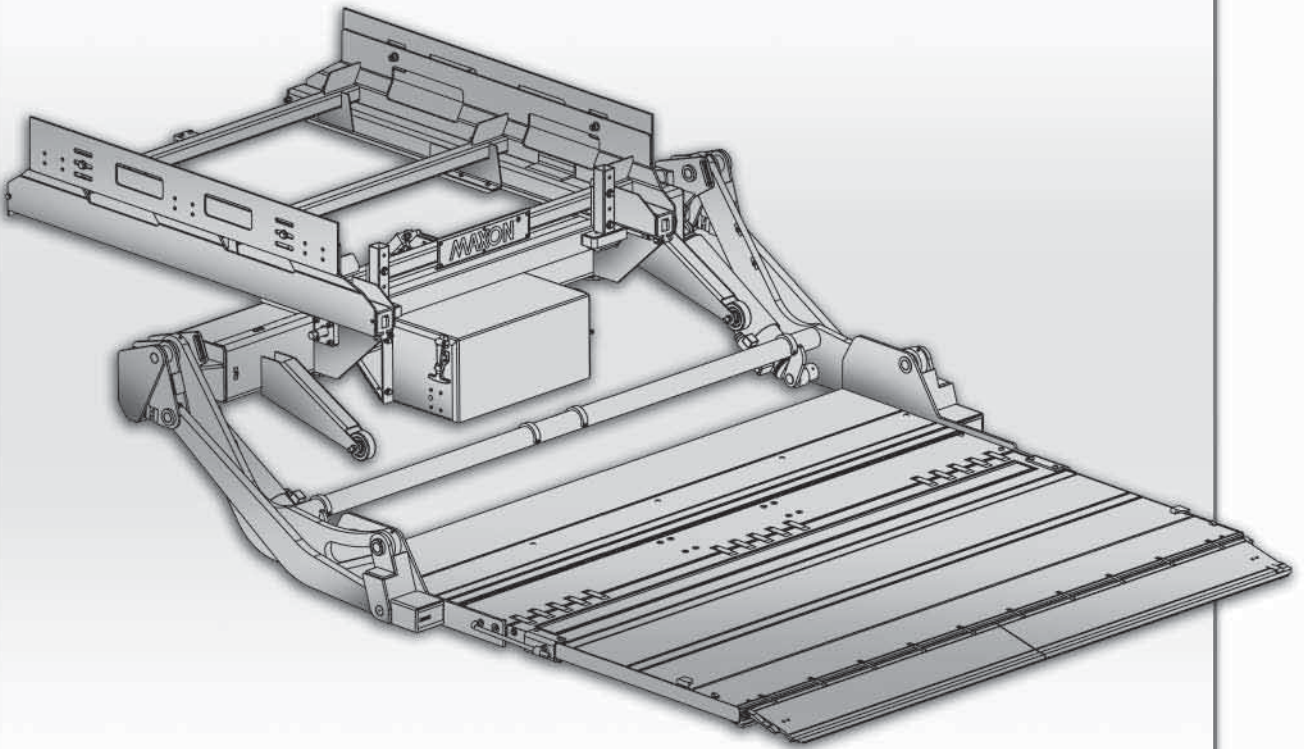


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SUMMARY OF CHANGES: M-08-12, REVISION G

PAGE	DESCRIPTION OF CHANGE
COVER	Updated REV, date of release and cover image.
58	Updated hydraulic schematic to be correct for the current power unit.

Comply with the following **WARNINGS** and **SAFETY INSTRUCTIONS** while installing Liftgates. See Operation Manual for operating safety requirements.

! WARNING

- Do not stand, 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.
- 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 can become 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.
- Recommended practices for welding on steel parts are contained in the current **AWS (American Welding Society) D1.1 Structural Welding Code - Steel**. Damage to Liftgate and/or vehicle, and personal injury can result from welds that are done incorrectly.
- Welding on galvanized parts gives off especially hazardous fumes. Comply with **WARNING** decal on the galvanized part (**FIG. 5-1**). To minimize hazard remove galvanizing from weld area, provide adequate ventilation, and wear suitable respirator.

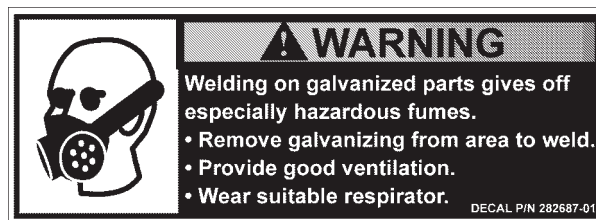


FIG. 5-1

SAFETY INSTRUCTIONS

- 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**.
- Comply with all **WARNING** and instruction decals attached to the Liftgate.
- Keep decals clean and legible. If decals are illegible 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.
- 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 switch to stop the Liftgate.
- A correctly installed Liftgate operates smoothly and reasonably quiet. The only noticeable noise during operation comes from the power unit while the platform is raised and lowered. Listen for scraping, grating and binding noises and correct the problem before continuing to operate Liftgate.

NOTICE

- Maxon Lift is responsible for the instructions to correctly install **MAXON** Liftgates on trucks or trailers only.
- Liftgate installers, not Maxon Lift, are responsible for reviewing and complying with all applicable Federal, State, and Local regulations pertaining to the trailer or truck.

GPSLR INSTALLATION PARTS BOX

	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
REF	PARTS BOX, GPSLR MOUNTING (NO CONTROLLER)	1	268801-02
1	FLAT WASHER, 1/2"	24	902013-13
2	FLANGE LOCK NUT	12	901023
3	HEX FRAME BOLT, 1/2"-13 X 1-3/4" LG.	12	901024-2
4	SUPPORT PLATE, 7-7/8" LG.	4	268675-02
5	TAP SCREW, 10-24 X 1" LG.	6	030444-01
6	ANGLE, 2" X 2" X 1/8" X 6" LG.	2	091068-17
7	MOUNTING PLATE	6	268676-01
8	SUPPORT PLATE	6	268675-01
9	MOUNTING GUSSET	8	268674-01
10	SAFETY STOW CHAIN	1	287132-01

**GPSLR PARTS BOX
(NO CONTROLLER)
TABLE 7-1**

	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
REF	PARTS BOX, GPSLR MOUNTING	1	268801-01
1	FLAT WASHER, 1/2"	24	902013-13
2	FLANGE LOCK NUT	12	901023
3	HEX FRAME BOLT, 1/2"-13 X 1-3/4" LG.	12	901024-2
4	SUPPORT PLATE, 7-7/8" LG.	4	268675-02
5	TAP SCREW, 10-24 X 1" LG.	6	030444-01
6	ANGLE, 2" X 2" X 1/8" X 6" LG.	2	091068-17
7	MOUNTING PLATE	6	268676-01
8	SUPPORT PLATE	6	268675-01
9	MOUNTING GUSSET	8	268674-01

**GPSLR PARTS BOX
(WITH SMART STOW)
TABLE 7-2**

VEHICLE REQUIREMENTS

CAUTION

The sliding axle assembly on a trailer can collide with a Liftgate mounted on the slide rails. To prevent damage to Liftgate and trailer, install stops on the slide rails to keep the sliding axles from hitting Liftgate. Refer to Liftgate clearance dimensions in this section of the manual.

NOTE: BODY maximum and minimum operating bed height:

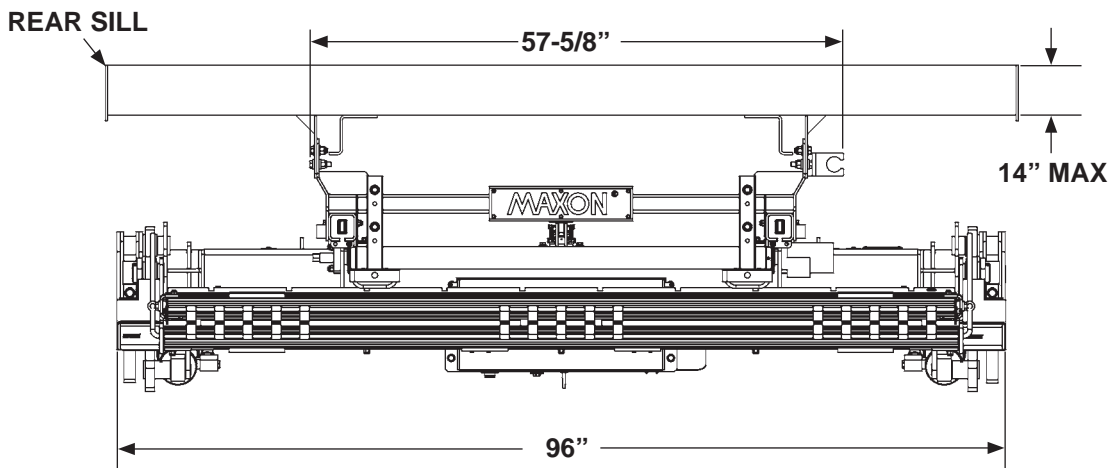
Maximum height is **53"** (Unloaded). Minimum height is **46"** (Loaded).
On vehicle bodies equipped with swing-open doors, the platform may have to be modified to install this Liftgate.

NOTE: Make sure vehicle is parked on level ground while preparing vehicle and installing Liftgate.

NOTE: Dimensions are provided as reference for fitting Liftgate to vehicle body.
For detailed ground clearance information, refer to the **WELD SIDE PLATE** procedure in this manual.

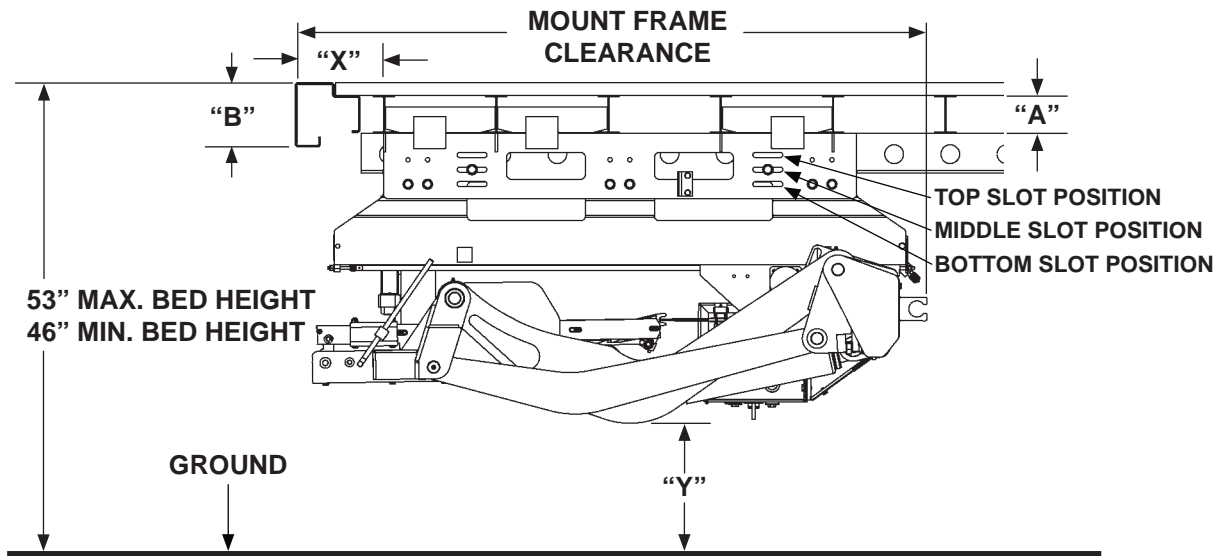
Check for correct clearances (**FIGS. 8-1 to 12-2**) on vehicle to prevent interference between vehicle and Liftgate.

NOTE: For installation of this Liftgate on a trailer, the maximum allowable thickness of the vehicle body rear sill is 14".



**OVERALL WIDTH OF GPSLR LIFTGATE & MOUNTING FRAME
FIG. 8-1**

VEHICLE REQUIREMENTS - Continued

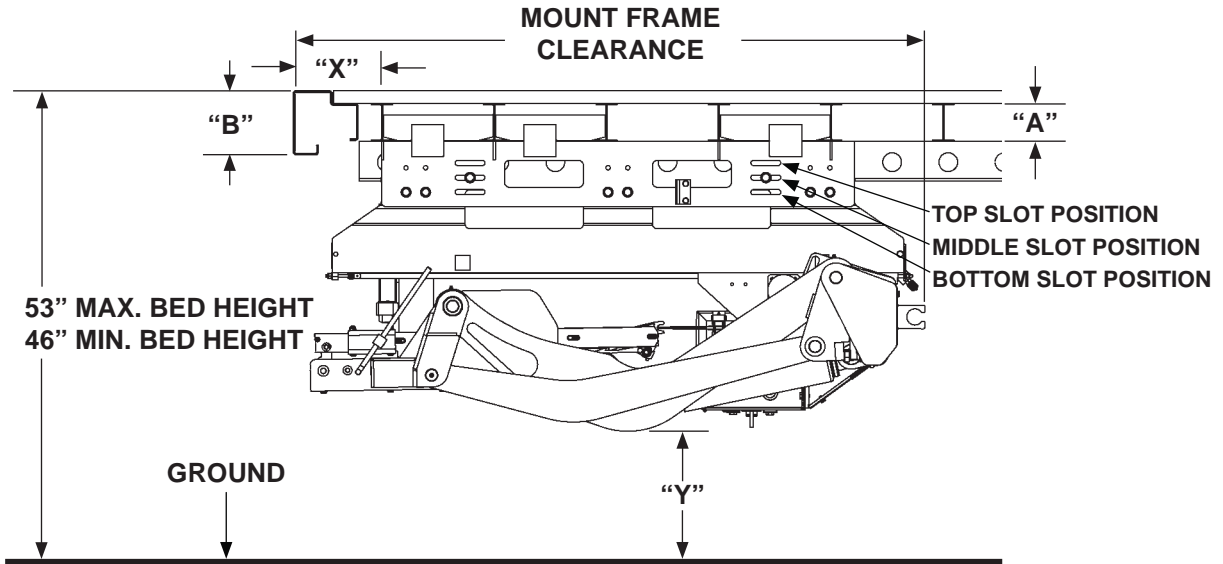


**CLEARANCES FOR GPSLR MOUNTED ON DRY TRAILER
FIG. 9-1**

DRY TRAILER						
"A"	BED HEIGHT	"X"	MAX SILL DEPTH "B"	SLOT POSITION	MOUNT FRAME CLEARANCE	GROUND CLEARANCE "Y"
4-3/16"	46"	10-3/8"	12"	MIDDLE	78"	14-7/16"
	47"					15-7/16"
	48"					16-7/16"
	49"					17-7/16"
	50"					18-7/16"
	51"	19-7/16"				
	52"	9-1/8"	13"	BOTTOM	76-3/4"	17-13/16"
	53"					18-13/16"
5-3/16"	46"	10-3/4"	12"	TOP	78-3/8"	14-15/16"
	47"					15-15/16"
	48"					16-15/16"
	49"	9-9/16"	13"	MIDDLE	77-3/16"	16-7/16"
	50"					17-7/16"
	51"					18-7/16"
	52"					17-15/16"
	53"	8-1/4"	14"	BOTTOM	75-7/8"	18-15/16"

TABLE 9-1

VEHICLE REQUIREMENTS - Continued

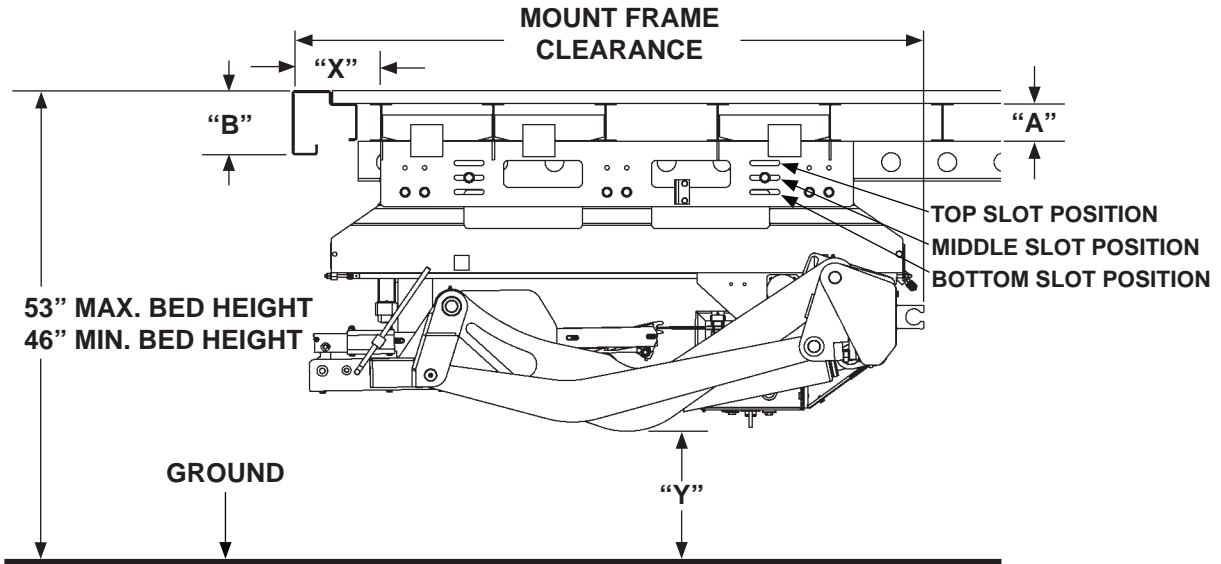


**CLEARANCES FOR GPSLR MOUNTED ON REFRIGERATED TRAILER
FIG. 10-1**

REFRIGERATED TRAILER						
"A"	BED HEIGHT	"X"	MAX SILL DEPTH "B"	SLOT POSITION	MOUNT FRAME CLEARANCE	GROUND CLEARANCE "Y"
7-5/16"	46"	9"	13-1/2"	TOP	76-5/8"	12-13/16"
	47"					13-13/16"
	48"					14-13/16"
	49"					15-13/16"
	50"					16-13/16"
	51"					17-13/16"
	52"					17-11/16"
	53"					18-11/16"
7-13/16"	46"	8-17/32"	13-1/2"	TOP	76-5/32"	12-5/16"
	47"					13-5/16"
	48"					14-5/16"
	49"					15-5/16"
	50"					16-5/16"
	51"					17-5/16"
	52"					17-3/16"
	53"					18-3/16"

TABLE 10-1

VEHICLE REQUIREMENTS - Continued



**CLEARANCES FOR GPSLR MOUNTED ON REFRIGERATED TRAILER
FIG. 11-1**

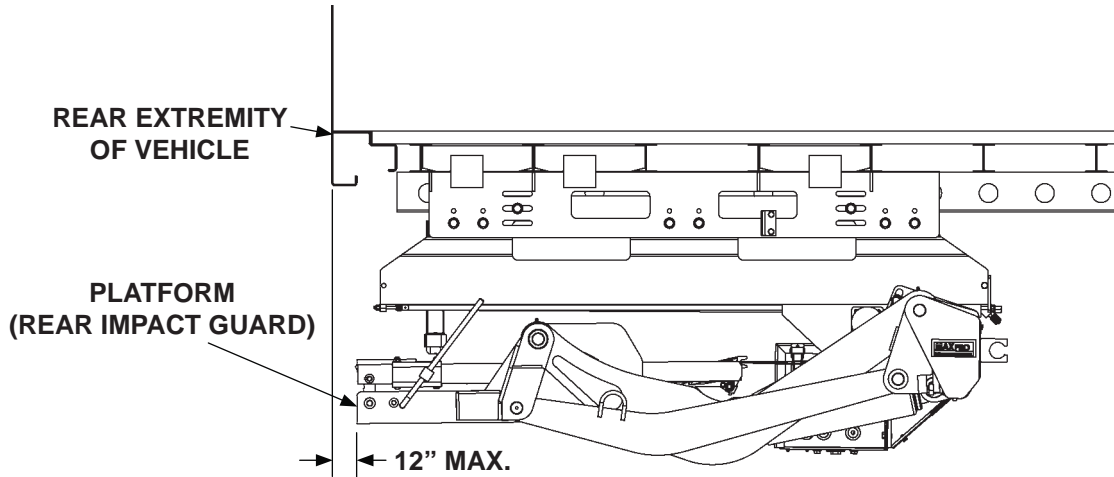
REFRIGERATED TRAILER						
"A"	BED HEIGHT	"X"	MAX SILL DEPTH "B"	SLOT POSITION	MOUNT FRAME CLEARANCE	GROUND CLEARANCE "Y"
8-5/16"	46"	8-1/16"	14"	TOP	75-21/32"	11-13/16"
	47"					12-13/16"
	48"					13-13/16"
	49"					14-13/16"
	50"					15-13/16"
	51"					16-13/16"
	52"					17-13/16"
	53"					17-21/32"
8-13/16"	46"	7-5/8"	14"	TOP	75-1/4"	11-5/16"
	47"					12-5/16"
	48"					13-5/16"
	49"					14-5/16"
	50"					15-5/16"
	51"					16-5/16"
	52"					17-5/16"
	53"					18-5/16"

TABLE 11-1

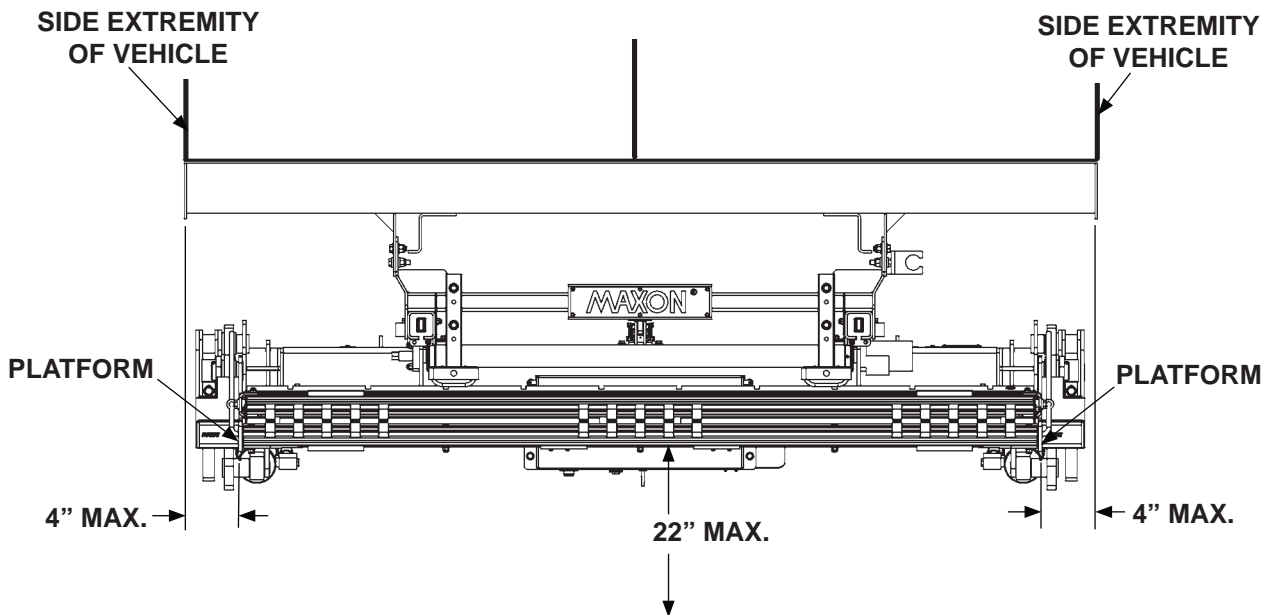
VEHICLE REQUIREMENTS - Continued

REAR IMPACT GUARD

NOTE: The stowed GPSLR platform functions as a rear impact guard for vehicle. To comply with current Federal Motor Vehicle Standards (**FMVSS 224**), the rear impact guard must be within the rear-end, side, and ground clearances shown in **FIGS. 12-1 and 12-2**.



REQUIRED REAR-END CLEARANCES OF REAR IMPACT GUARD
FIG. 12-1



REQUIRED GROUND & SIDE CLEARANCES OF REAR IMPACT GUARD
FIG. 12-2

STEP 1 - REMOVE SIDE PLATES

1. Disconnect conduit from right side plate as shown in FIG. 13-1.

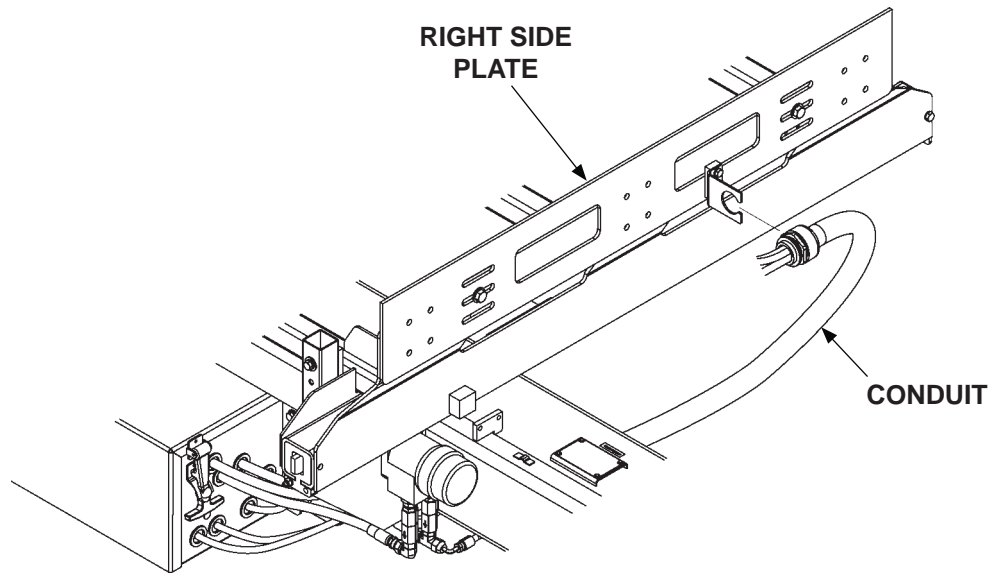


FIG. 13-1

STEP 1 - REMOVE SIDE PLATES - Continued

NOTE: Save bolts, nuts, and flat washers for reinstallation.

2. Unbolt side plates as shown in FIG. 14-1.

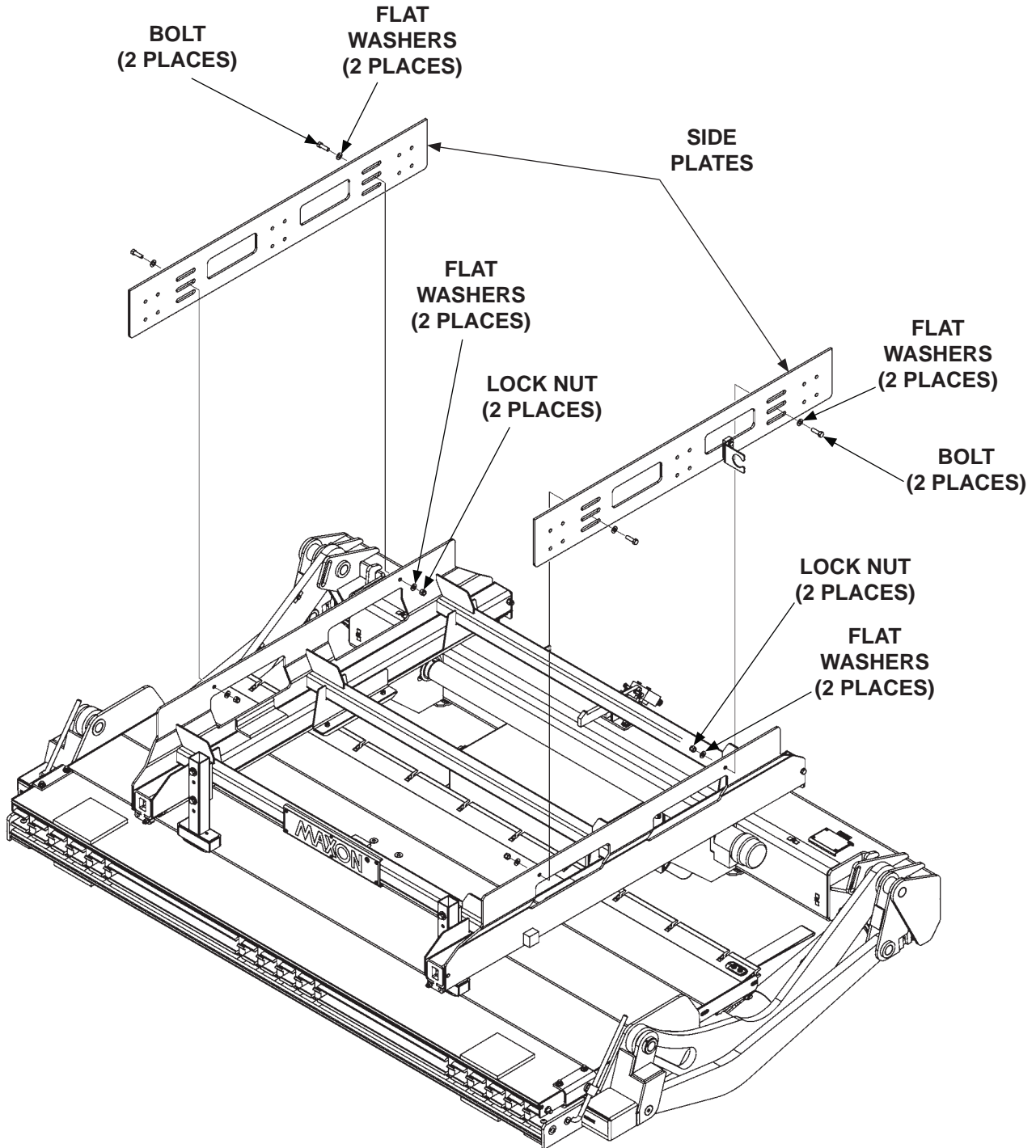


FIG. 14-1

STEP 2 - WELD SIDE PLATE

NOTE: Parts box contains 2 angle steel pieces for positioning side plates under vehicle body. The angles allow side plates to be positioned and clamped to bottom of chassis crossmembers before welding the side plates.

1. Position RH side plate with rounded corners facing up (**FIG. 15-1**).

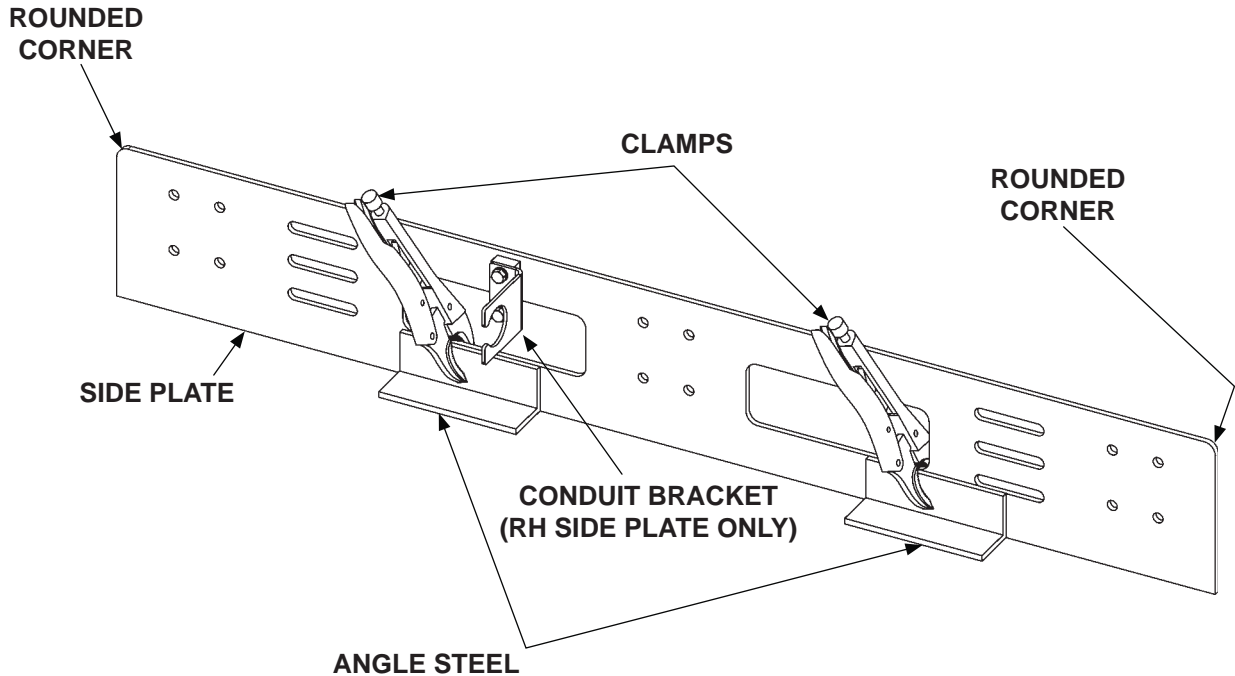


FIG. 15-1

NOTE: Angle steel pieces must be butted against the side plate and flush with the edge of the side plate. Each angle must be positioned to butt against a chassis crossmember under the vehicle.

2. Clamp 2 pieces of angle steel to side plate as shown in **FIG. 15-1**.

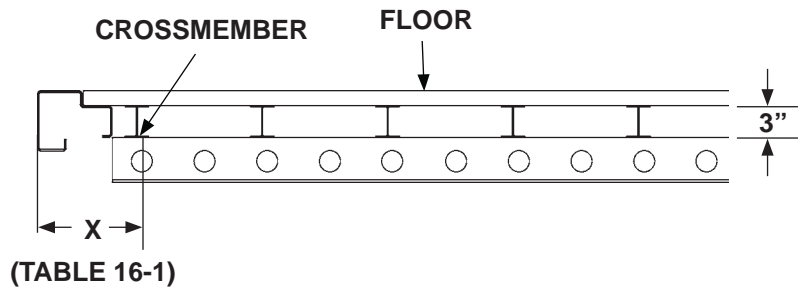
STEP 2 - WELD SIDE PLATE - Continued

NOTE: The instruction below only applies to trailers with 3" crossmembers. If trailer has 4" crossmembers, go to the next page.

NOTE: To mark a position between 2 crossmembers, attach tape from crossmember-to-crossmember. Remove slack before marking the tape.

NOTE: If vehicle bed height is a fractional number between the whole numbers shown in **TABLE 16-1**, round to the closest whole number. For example, round **51-1/4" BED HEIGHT to 51"** and round **51-1/2" BED HEIGHT to 52"**.

3. For 3" trailer crossmembers, mark position for side plate on crossmember (**FIG. 16-1** and **TABLE 16-1**).



**SIDE VIEW - 3" TRAILER CROSSMEMBERS
FIG. 16-1**

BED HEIGHT	DISTANCE ("X")	EXPECTED GROUND CLEARANCE ("Y")
46"	10-3/8"	12-1/8"
47"	10-3/8"	13-1/8"
48"	10-3/8"	14-1/8"
49"	10-3/8"	15-1/8"
50"	10-3/8"	16-1/8"
51"	10-3/8"	17-1/8"
52"	9-1/8"	16-5/8"
53"	9-1/8"	17-5/8"

TABLE 16-1

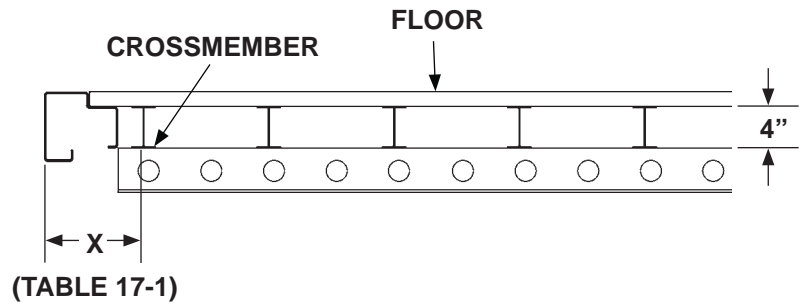
STEP 2 - WELD SIDE PLATE - Continued

NOTE: The instruction below only applies to trailers with 4" crossmembers. If trailer has 3" crossmembers, go to the previous page.

NOTE: To mark a position between 2 crossmembers, attach tape from crossmember-to-crossmember. Remove slack before marking the tape.

NOTE: If vehicle bed height is a fractional number between the whole numbers shown in **TABLE 17-1**, round to the closest whole number. For example, round **48-1/4" BED HEIGHT to 48"** and round **48-1/2" BED HEIGHT to 49"**.

4. For 4" trailer crossmembers, mark position for side plate on crossmember (**FIG. 17-1** and **TABLE 17-1**).



**SIDE VIEW - 4" TRAILER CROSS MEMBERS
FIG. 17-1**

BED HEIGHT	DISTANCE ("X")	EXPECTED GROUND CLEARANCE ("Y")
46"	10-3/4"	12-5/8"
47"	10-3/4"	13-5/8"
48"	10-3/4"	14-5/8"
49"	9-9/16"	14-1/8"
50"	9-9/16"	15-1/8"
51"	9-9/16"	16-1/8"
52"	8-1/4"	15-5/8"
53"	8-1/4"	16-5/8"

TABLE 17-1

STEP 2 - WELD SIDE PLATE - Continued

5. Refer to **FIG. 18-1**. Measure the distance (“D”) between slide rails. Then calculate dimension “Y” as follows: $(52\ 7/8" - D) \times 1/2 = Y$

Example where $D = 50"$:

$$Y = (52\ 7/8" - 50") \times 1/2, Y = 2\ 7/8" / 2, Y = 1\ 7/16"$$

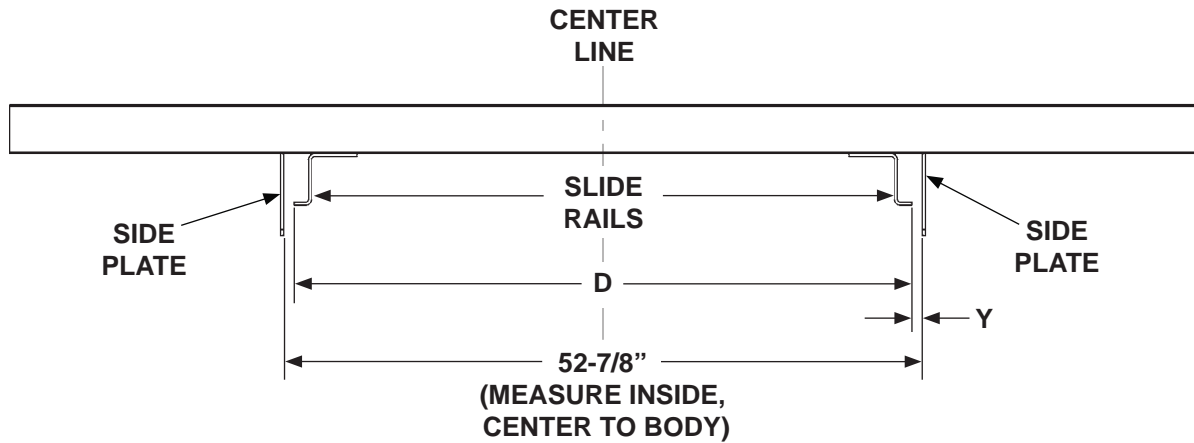


FIG. 18-1

6. Adjust a combination square to the “Y” dimension (**FIG. 18-2**) or fabricate a spacer equal to the thickness of “Y”.

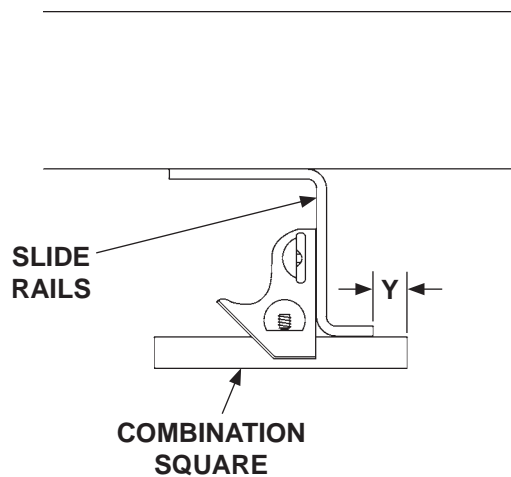


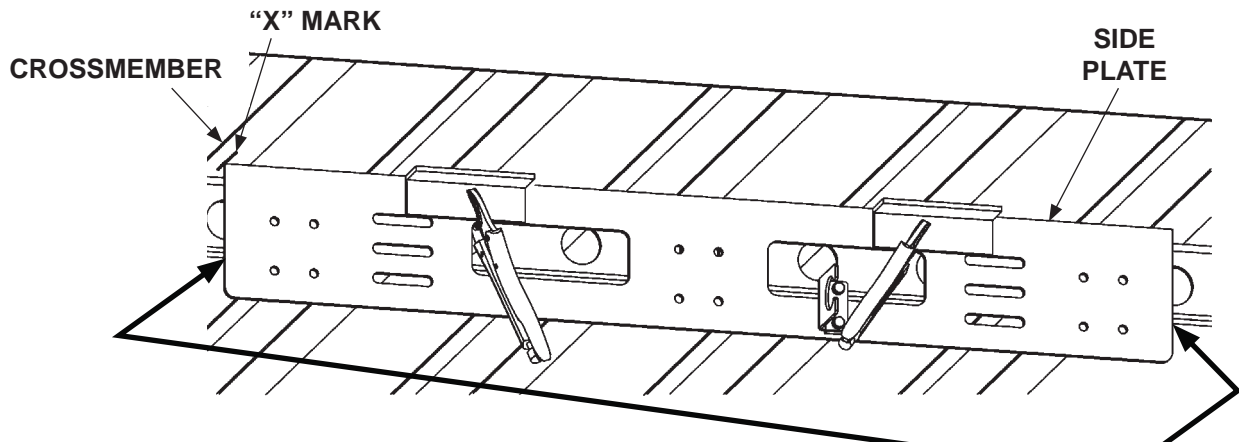
FIG. 18-2

STEP 2 - WELD SIDE PLATE - Continued

⚠ CAUTION

To avoid personal injury, use at least 2 people to position the side plate.

7. Line up end of the side plate with "X" mark on cross-member (FIG. 19-1A) and with the slide rail (FIG. 19-1B).



ALIGNING SIDE PLATE
FIG. 19-1A

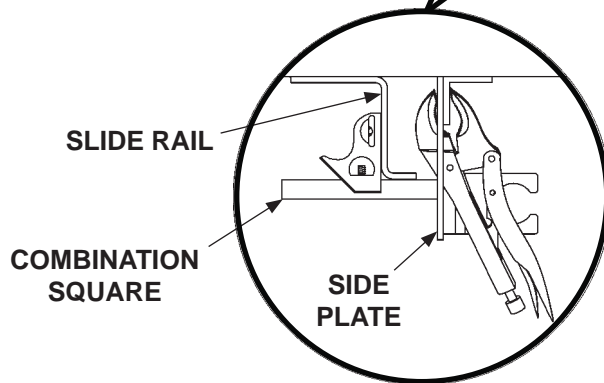


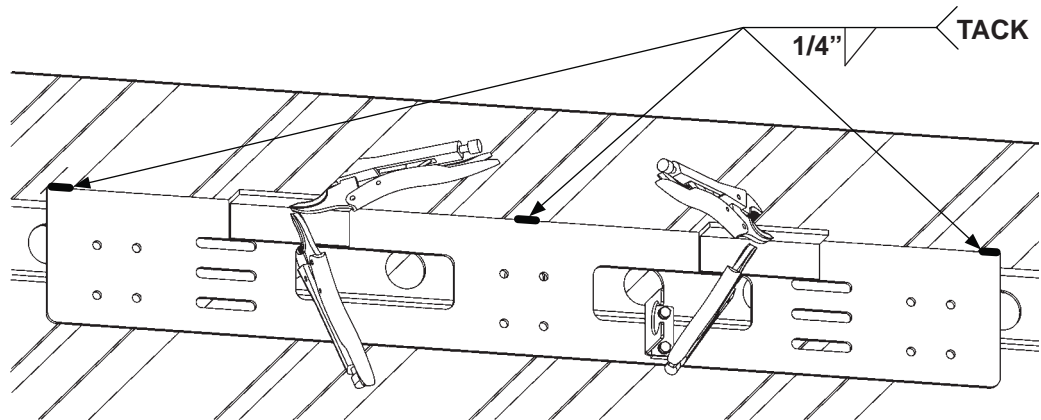
FIG. 19-1B

STEP 2 - WELD SIDE PLATE - Continued

CAUTION

To protect the original paint system on the Liftgate, a 3" wide area of paint must be removed from all sides of the weld area before welding.

8. Tack weld side plate as shown in FIG. 20-1.

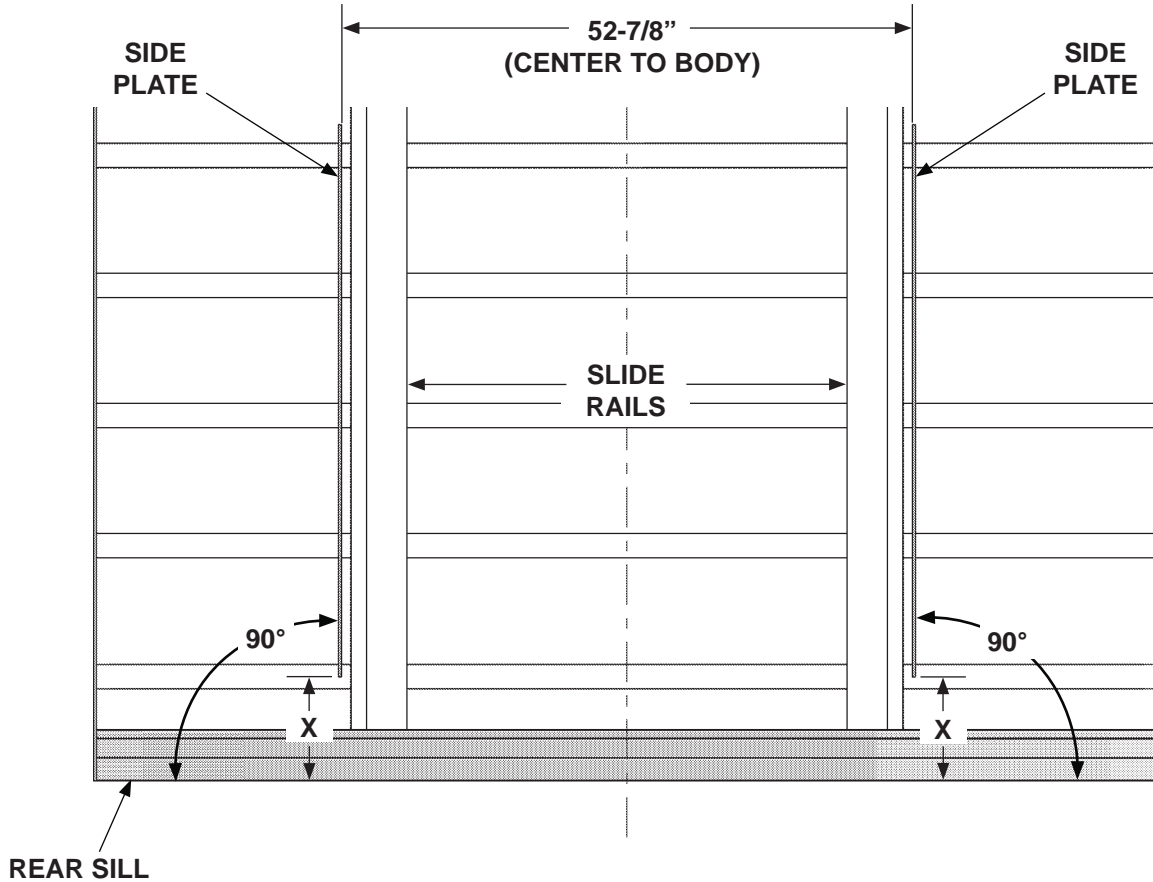


TACK WELDING SIDE PLATES TO CROSSMEMBER
FIG. 20-1

9. Remove clamps and the 2 angles.
10. Repeat 1 through 9 for the LH side plate.

STEP 2 - WELD SIDE PLATE - Continued

11. Ensure the correct dimensions are held. For 3" crossmembers, refer to FIG. 21-1 and TABLE 21-1. For 4" crossmembers, refer to FIG. 21-1 and TABLE 21-2.



CHECKING FOR CORRECT DIMENSIONS
FIG. 21-1

BED HEIGHT	DISTANCE ("X")
46"	10-3/8"
47"	10-3/8"
48"	10-3/8"
49"	10-3/8"
50"	10-3/8"
51"	10-3/8"
52"	9-1/8"
53"	9-1/8"

3" CROSSMEMBERS
TABLE 21-1

BED HEIGHT	DISTANCE ("X")
46"	10-3/4"
47"	10-3/4"
48"	10-3/4"
49"	9-9/16"
50"	9-9/16"
51"	9-9/16"
52"	8-1/4"
53"	8-1/4"

4" CROSSMEMBERS
TABLE 21-2

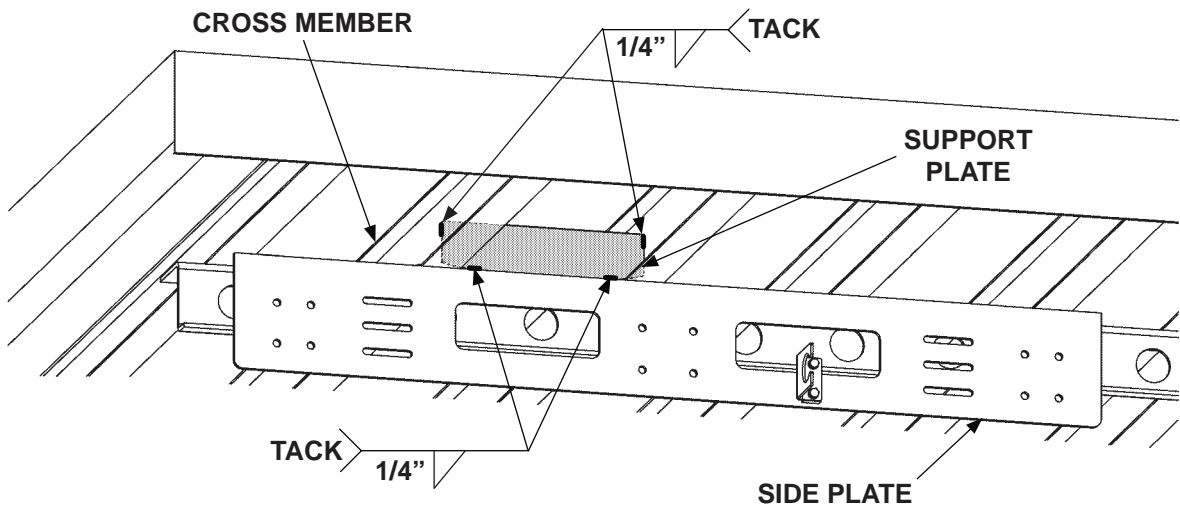
STEP 2 - WELD SIDE PLATE - Continued

CAUTION

To protect the original paint system on the Liftgate, a 3" wide area of paint must be removed from all sides of the weld area before welding.

NOTE: Support plates were made for crossmembers positioned at 12" center distance. If distance is less than 12", cut support plate to the applicable length.

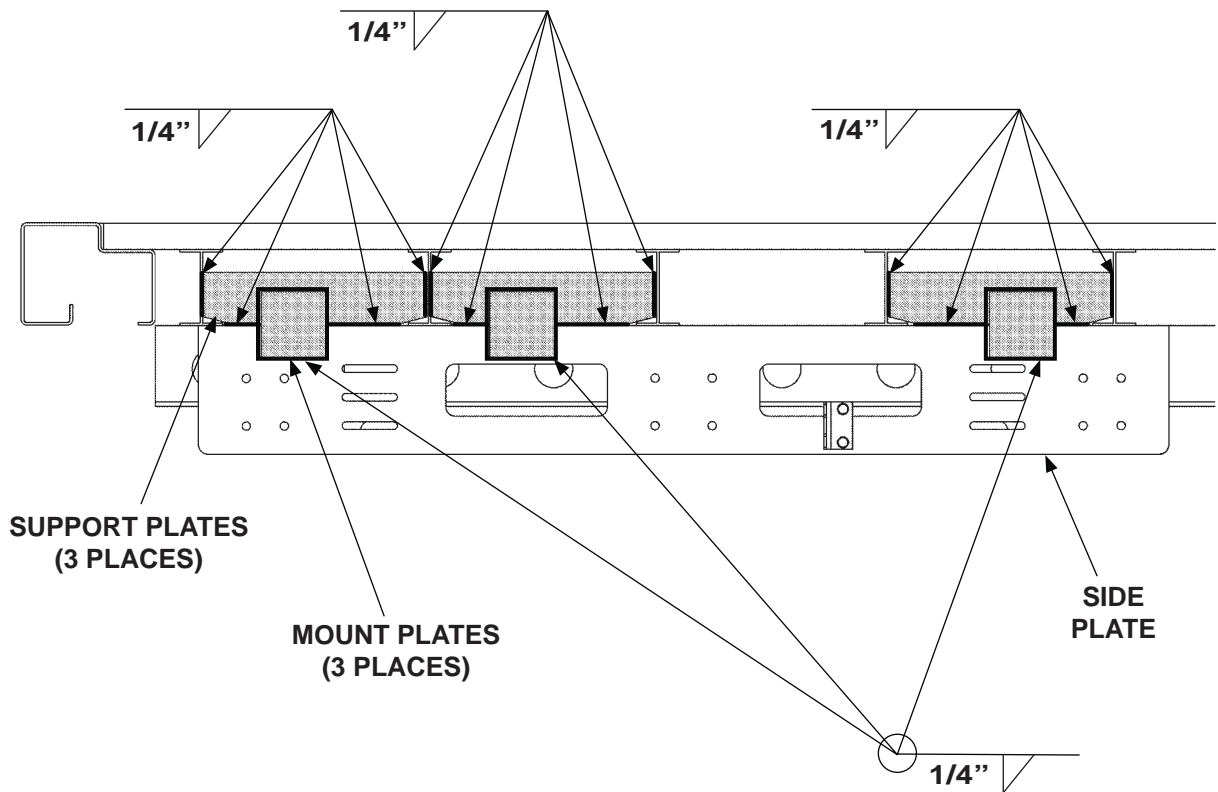
12. Tack weld RH side plate and support plate to crossmembers (**FIG. 22-1**). Repeat for LH side plate.



**TACK WELDING SIDE PLATE & SUPPORT PLATE
TO VEHICLE CROSSMEMBERS (RH SIDE SHOWN)
FIG. 22-1**

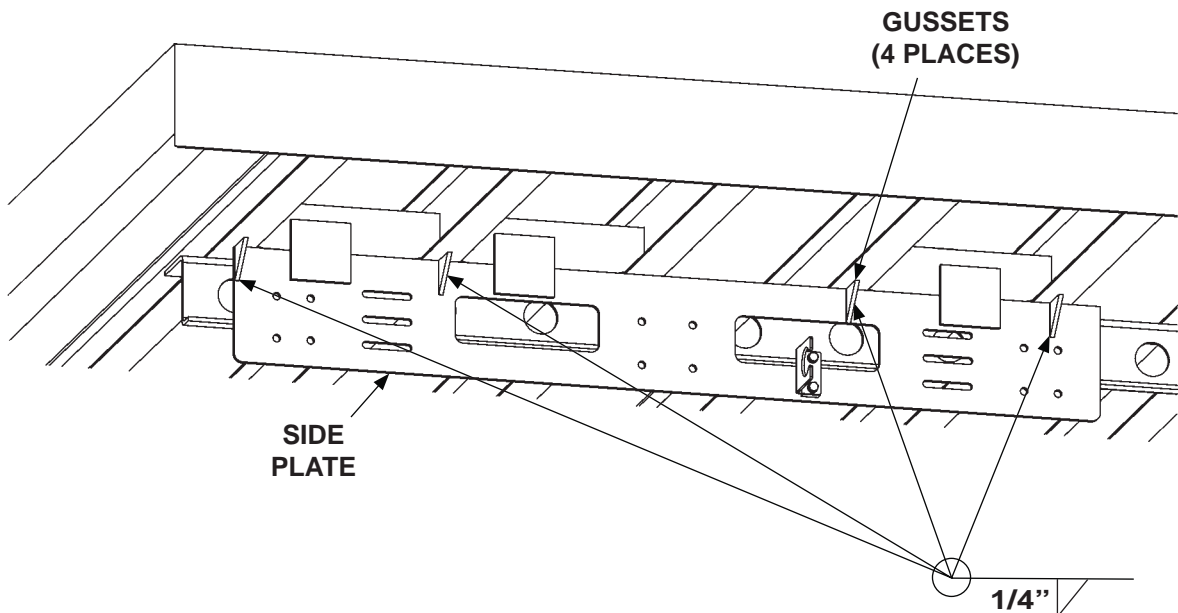
STEP 2 - WELD SIDE PLATE - Continued

13. Weld RH side plate, support plates, and mount plates as shown in FIG. 23-1. Repeat step for LH side plate.



WELDING SIDE PLATE TO CROSSMEMBERS (RH SHOWN)
FIG. 23-1

14. Weld gussets to RH side plate as shown in FIG. 23-2. Repeat step for LH side plate.



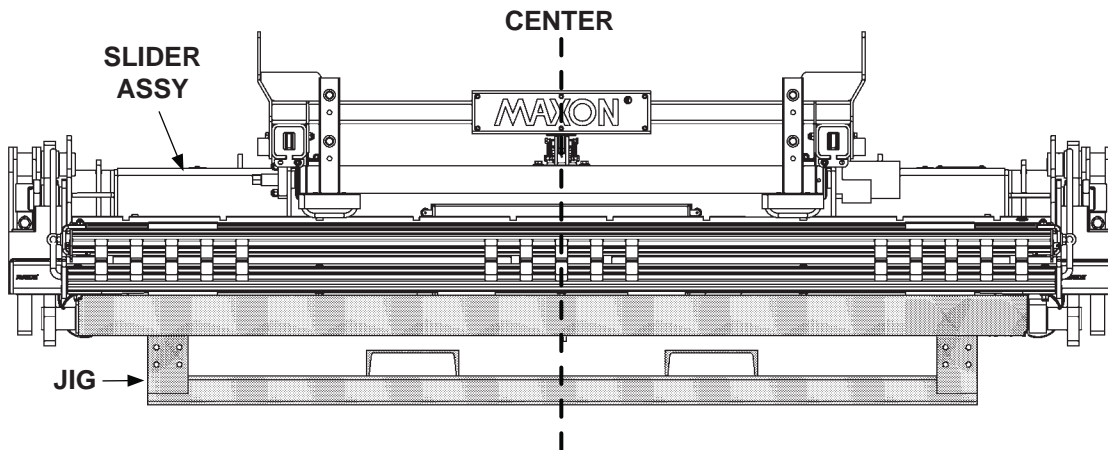
WELDING GUSSETS TO SIDE PLATE (RH SHOWN)
FIG. 23-2

STEP 3 - PLACE SLIDER ASSEMBLY ON OPTIONAL JIG

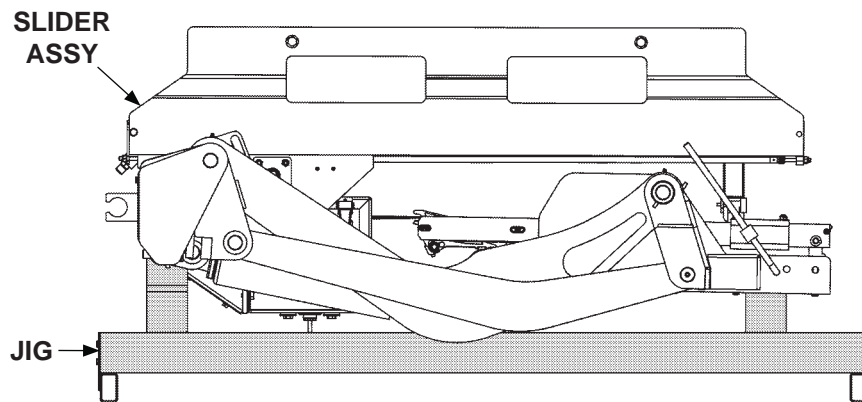
NOTE: MAXON recommends using optional installation jig for lifting and maneuvering slider assembly under the vehicle.

Use forklift to place slider assembly on the installation jig.
Ensure the slider assembly is:

- Centered on the jig (**FIG. 24-1**)
- Correctly supported by the jig (**FIG. 24-2**)



**SLIDER ASSEMBLY CENTERED
ON JIG (FRONT VIEW)
FIG. 24-1**



**SLIDER ASSEMBLY SUPPORTED
BY JIG (LH SIDE VIEW)
FIG. 24-2**

STEP 4 - BOLT ON LIFTGATE

NOTE: Refer to TABLES 25-1 (3" Crossmembers) & 25-2 (4" Crossmembers) for correct mounting distance and slot information.

1. Raise Liftgate to line up the holes in the slider with the proper mounting slots on the side plates (FIGS. 25-1A & 25-1B).

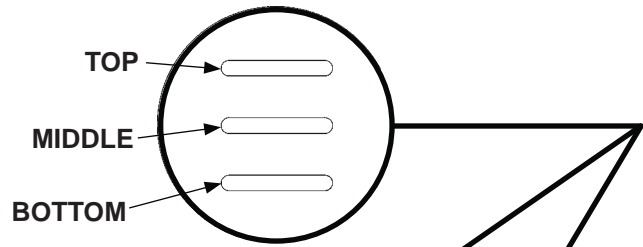
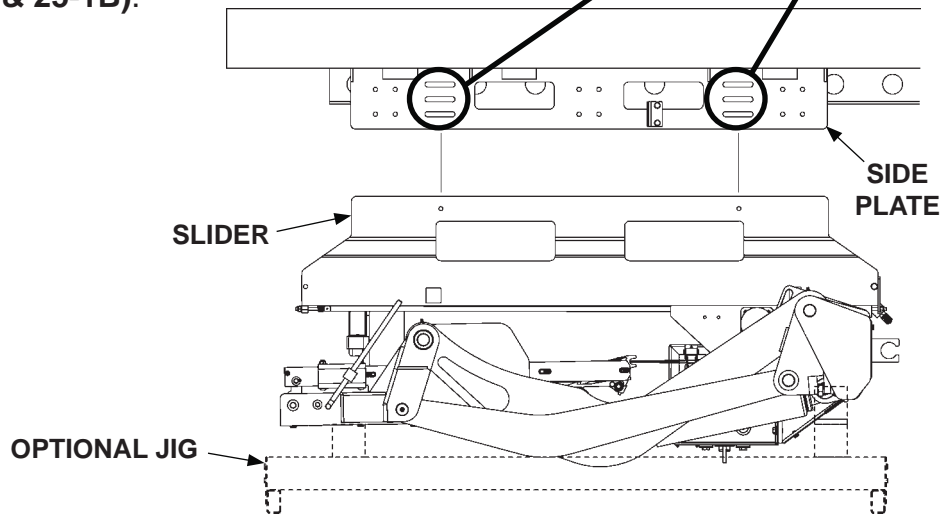


FIG. 25-1B



LINING UP SLIDER WITH SIDE PLATES
(RH SIDE SHOWN)

FIG. 25-1A

BED HEIGHT	SLOT
46"	MIDDLE
47"	MIDDLE
48"	MIDDLE
49"	MIDDLE
50"	MIDDLE
51"	MIDDLE
52"	BOTTOM
53"	BOTTOM

3" CROSSMEMBERS
TABLE 25-1

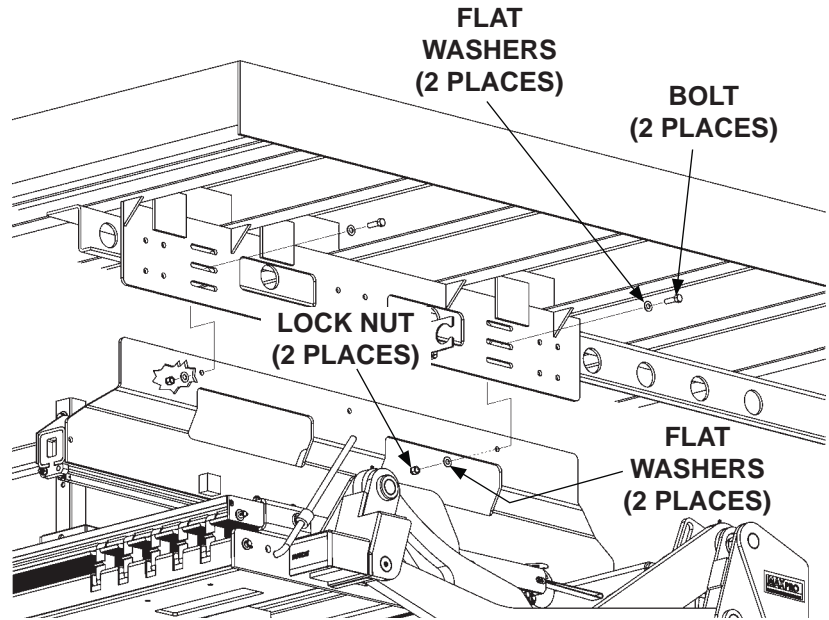
BED HEIGHT	SLOT
46"	TOP
47"	TOP
48"	TOP
49"	MIDDLE
50"	MIDDLE
51"	MIDDLE
52"	BOTTOM
53"	BOTTOM

4" CROSSMEMBERS
TABLE 25-2

STEP 4 - BOLT ON LIFTGATE - Continued

NOTE: Use the bolts, nuts, and flat washers removed from the side plates in STEP 1, for bolting on the Liftgate.

2. Bolt Liftgate to RH side plate as shown in **FIG. 26-1**. Repeat step for LH side plate. Before bolts are tightened, position Liftgate all the way toward rear of vehicle body (**FIG. 26-2**).



**BOLTING LIFTGATE TO SIDE PLATES
(RH SIDE SHOWN)
FIG. 26-1**

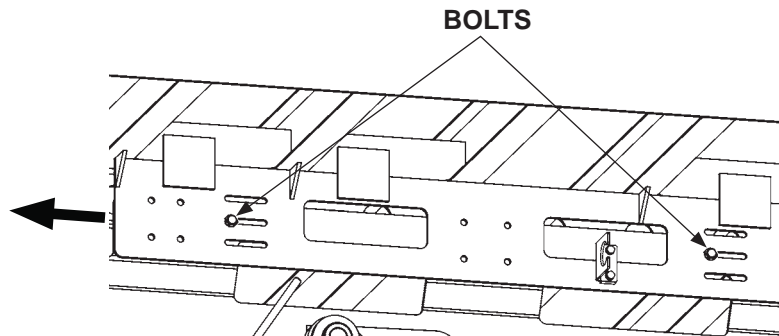
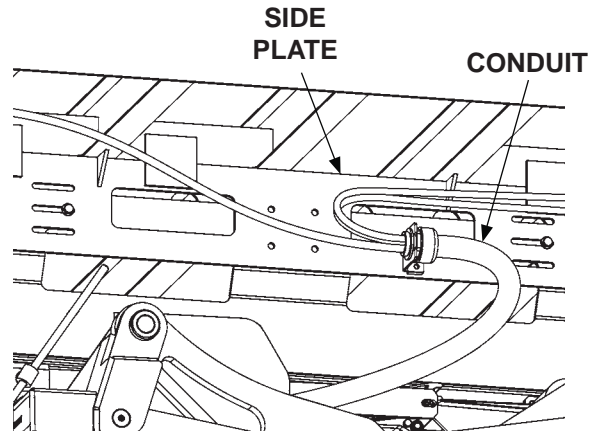


FIG. 26-2

STEP 5 - WELD ON EXTERNAL CONTROL & BRACKET

1. Reconnect conduit to right side plate as shown in **FIG. 27-1**.



**RECONNECTING CONDUIT
TO RH SIDE PLATE
FIG. 27-1**

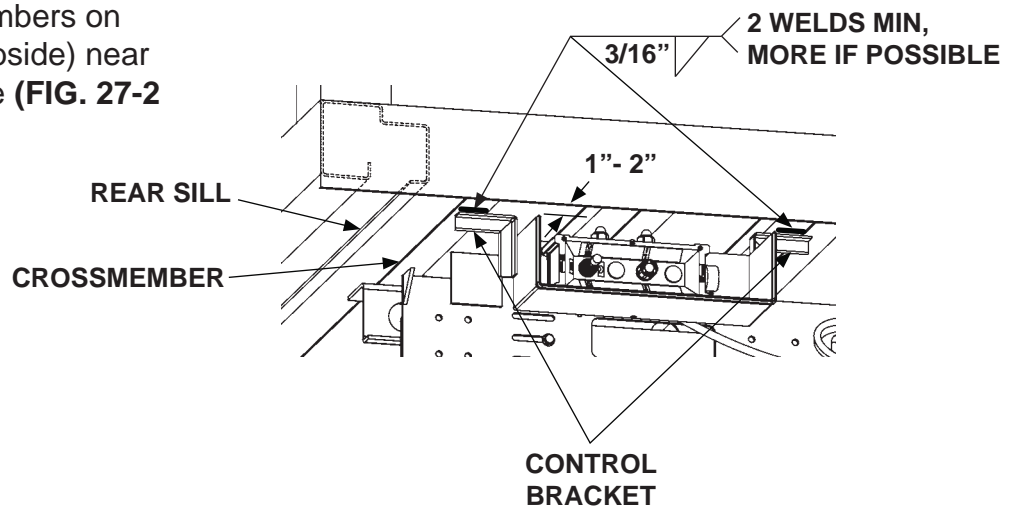
CAUTION

Prevent damage to control box.
Make sure installed control box
does not protrude from the vehicle
body.

CAUTION

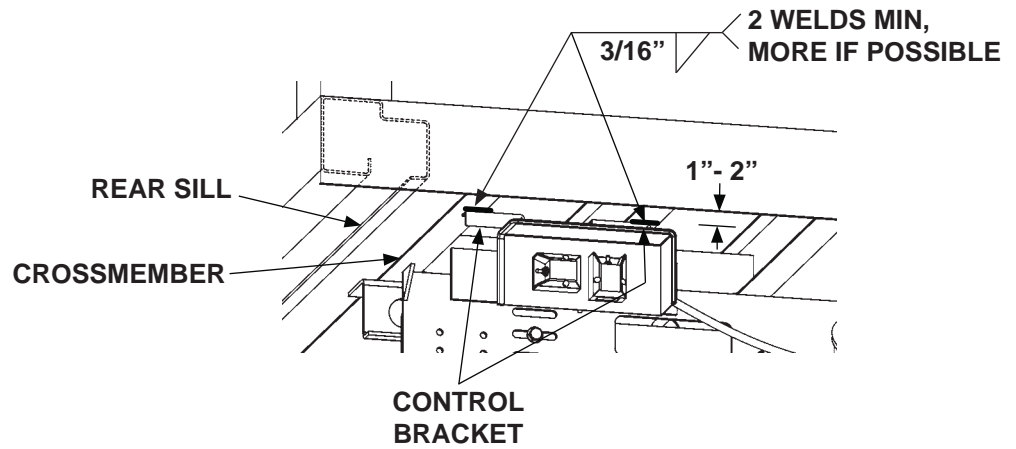
To protect the original paint system,
a 3" wide area of paint must be re-
moved from bracket on all sides of
the weld area before welding.

2. Weld the external bracket to vehicle crossmembers on the RH side (curbside) near rear sill of vehicle (**FIG. 27-2 & FIG. 26-1**).



**WELDING BRACKET TO CROSSMEMBERS
(JOYSTICK EXTERNAL CONTROLLER)
FIG. 27-2**

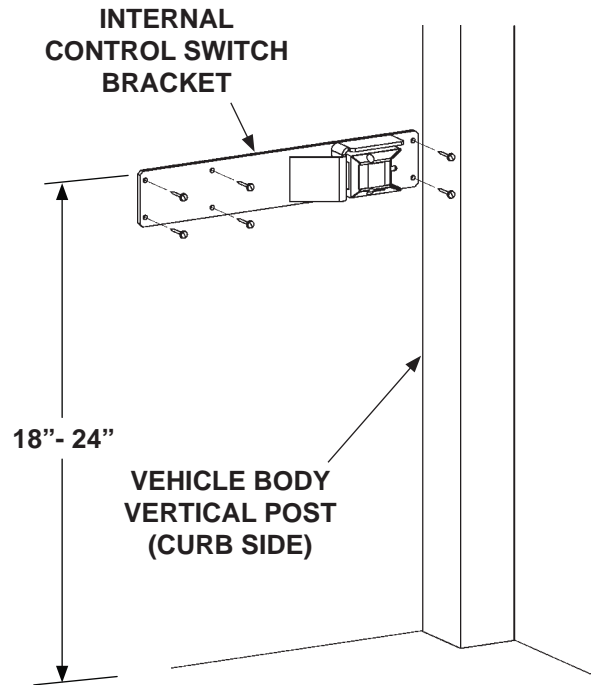
STEP 5 - WELD ON EXTERNAL CONTROL & BRACKET - Continued



**WELDING BRACKET TO CROSSMEMBERS
(MOLDED SWITCHES EXTERNAL CONTROLLER)
FIG. 28-1**

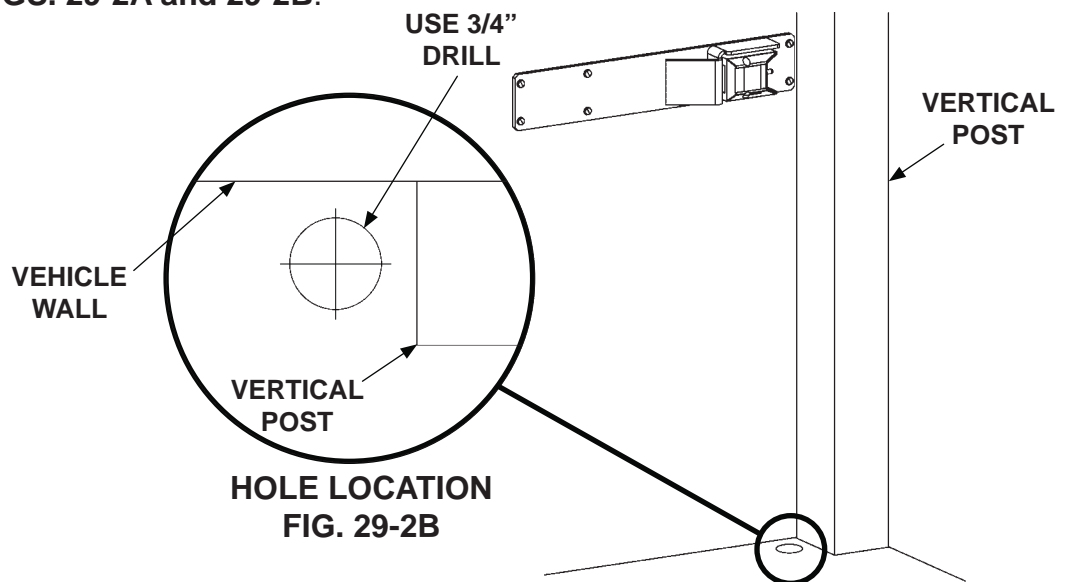
STEP 6 - BOLT ON INTERNAL CONTROL SWITCH

1. Use internal control switch bracket to mark and drill 6 holes for mounting next to vertical post (curb side). Bolt internal control box to vehicle body with self-tapping screws (**FIG. 29-1**).



**BOLTING INTERNAL SWITCH BRACKET
TO VEHICLE BODY
FIG. 29-1**

2. Drill 3/4" hole through vehicle floor as shown in **FIGS. 29-2A and 29-2B**.

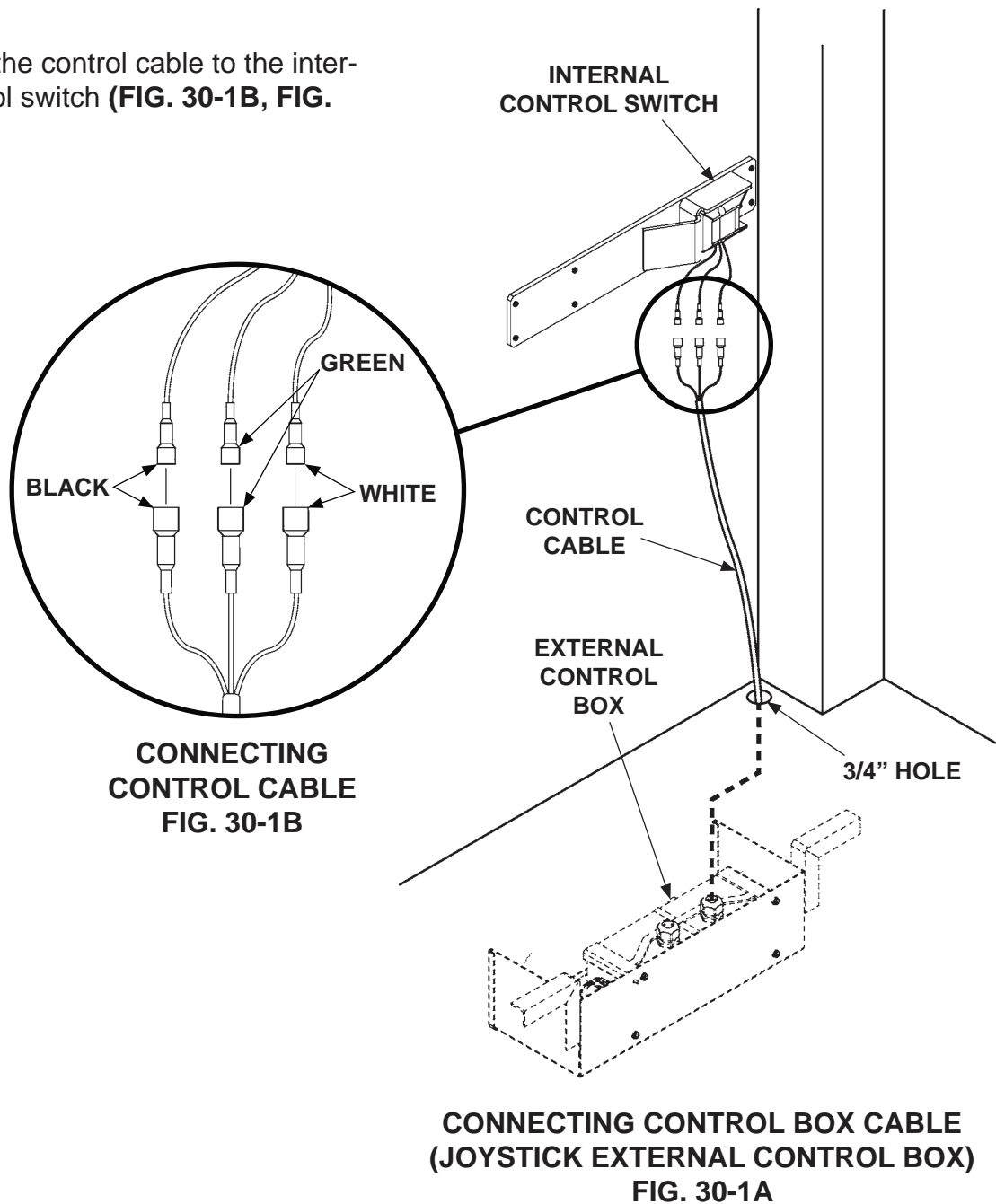


**HOLE DRILLED FOR WIRING
FIG. 29-2A**

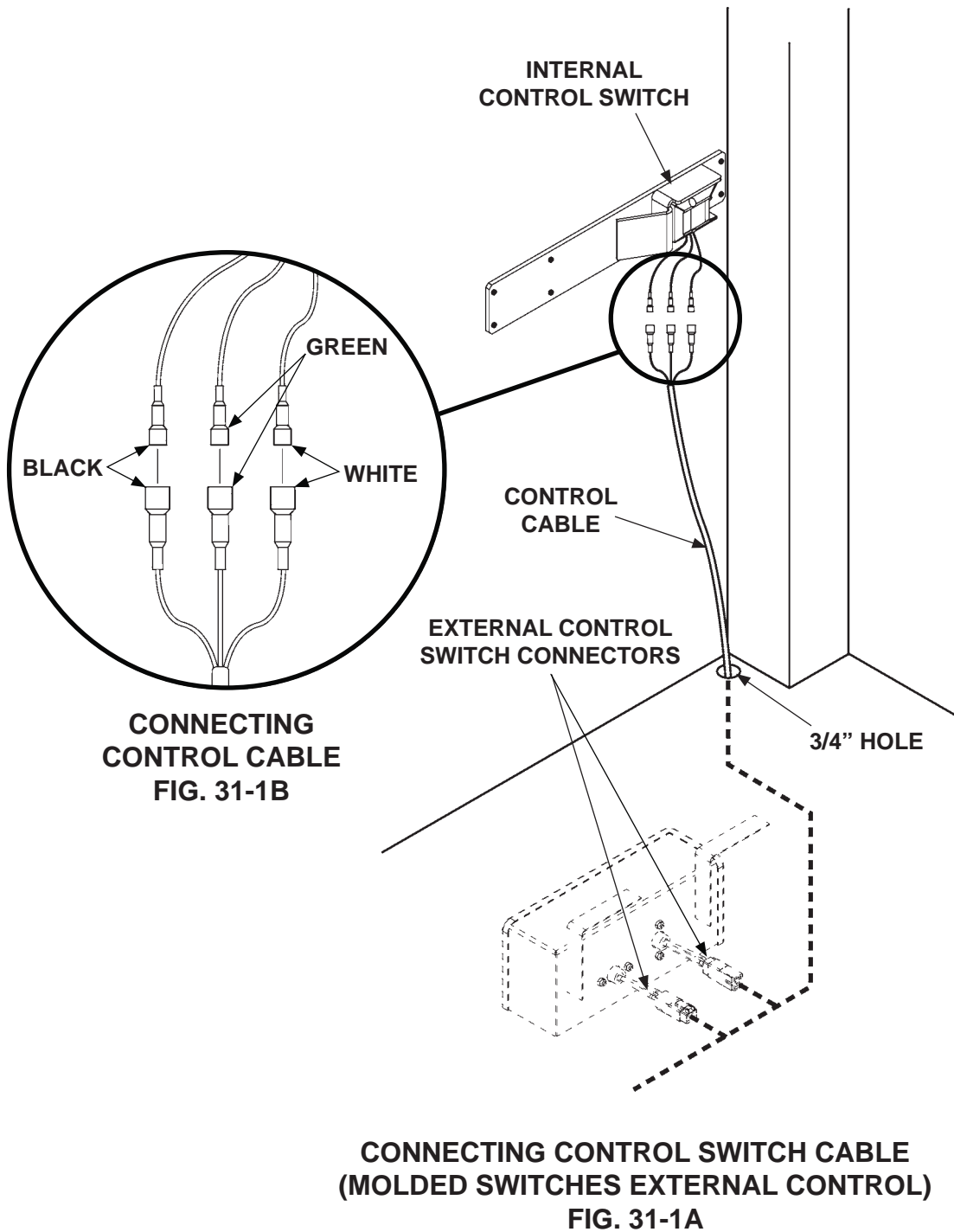
STEP 6 - BOLT ON INTERNAL CONTROL SWITCH - Continued

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

3. Run control cable from external control box, under vehicle body (see dashed line, FIG. 30-1A, FIG. 31-1A), and up through vehicle floor. Pull control cable through 3/4" hole (FIG. 30-1A, FIG. 31-1A).
4. Connect the control cable to the internal control switch (FIG. 30-1B, FIG. 31-1B).



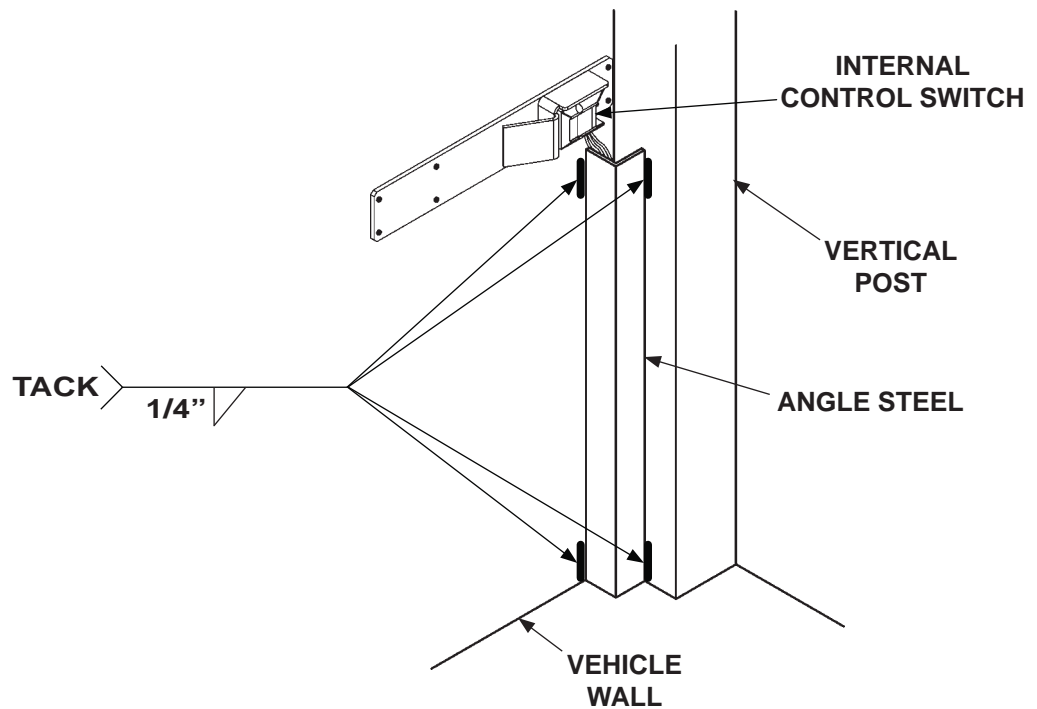
STEP 6 - BOLT ON INTERNAL CONTROL SWITCH - Continued



STEP 6 - BOLT ON INTERNAL CONTROL SWITCH - Continued

NOTE: MAXON recommends using angle steel to protect control switch cable as shown in the illustration below. MAXON does not supply the angle steel. If necessary, installer may use an alternate method, such as loom clamps and screws, to secure cable to vehicle wall or vertical post. If screws are used, ensure screws do not break through to outside of vehicle wall.

5. Tack weld angle steel to vehicle wall and vehicle post (**FIG. 32-1**).



**RUNNING CONTROL BOX CABLE
FIG. 32-1**

STEP 7 - ATTACH OPTIONAL BATTERY BOX & FRAME TO VEHICLE (IF EQUIPPED)

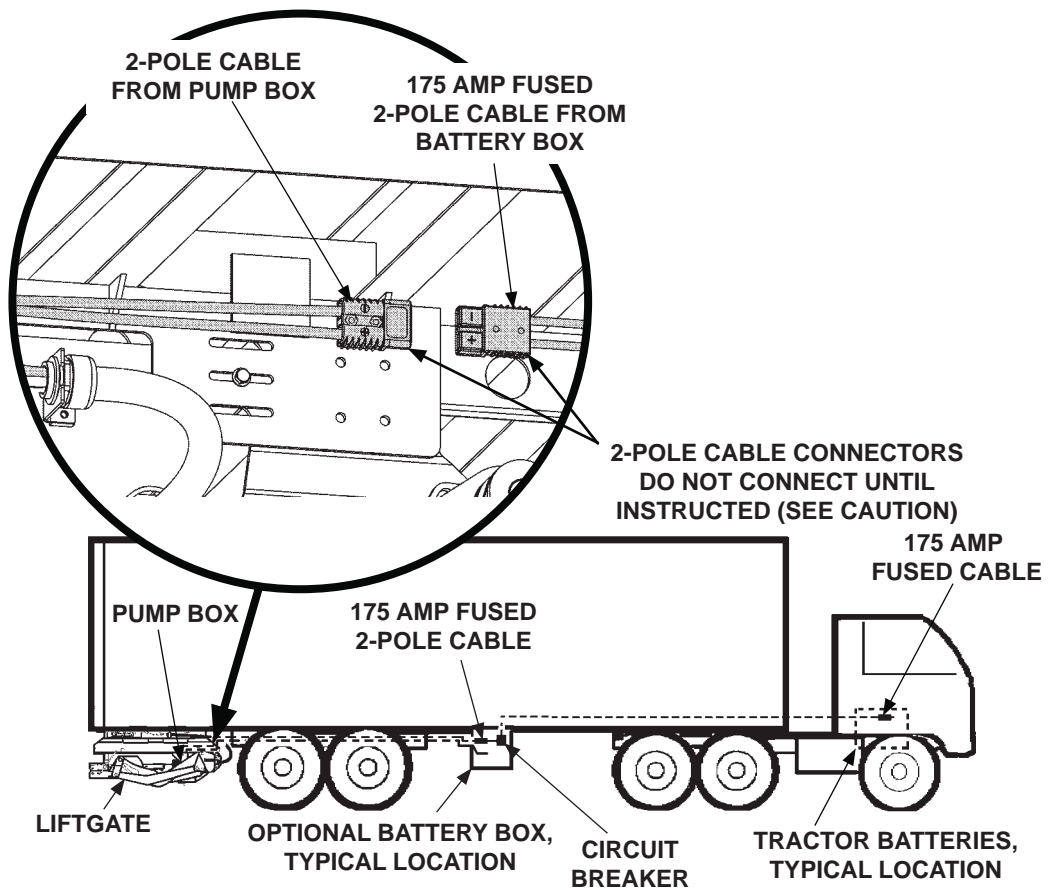
⚠ CAUTION

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.

RECOMMENDED CONFIGURATION

NOTE: Make sure the Liftgate power unit, and all batteries on the vehicle for the power unit, are connected correctly to a common chassis ground.

1. Liftgate and optional battery box are typically installed on trailers as shown in **FIGS. 33-1 and 34-1**. See the following pages for battery and cable connections.

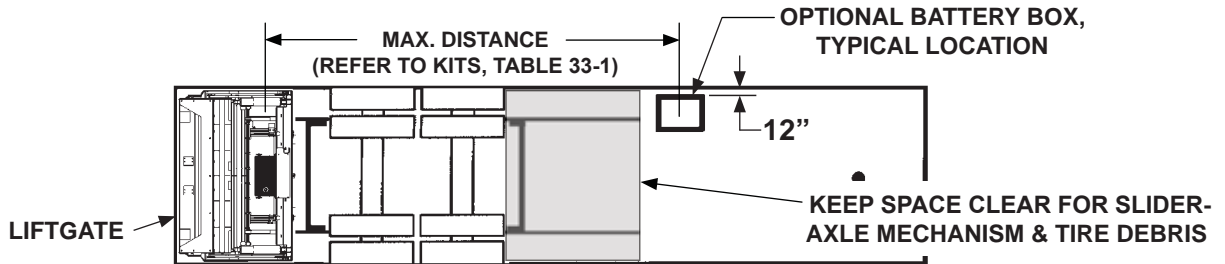


**RECOMMENDED LIFTGATE & OPTIONAL BATTERY BOX
INSTALLATION ON TRAILER**

FIG. 33-1

STEP 7 - ATTACH OPTIONAL BATTERY BOX & FRAME TO VEHICLE (IF EQUIPPED) - Continued

- To correctly position battery box frame on trailer, refer to **FIG. 34-1** and **TABLE 34-1**.



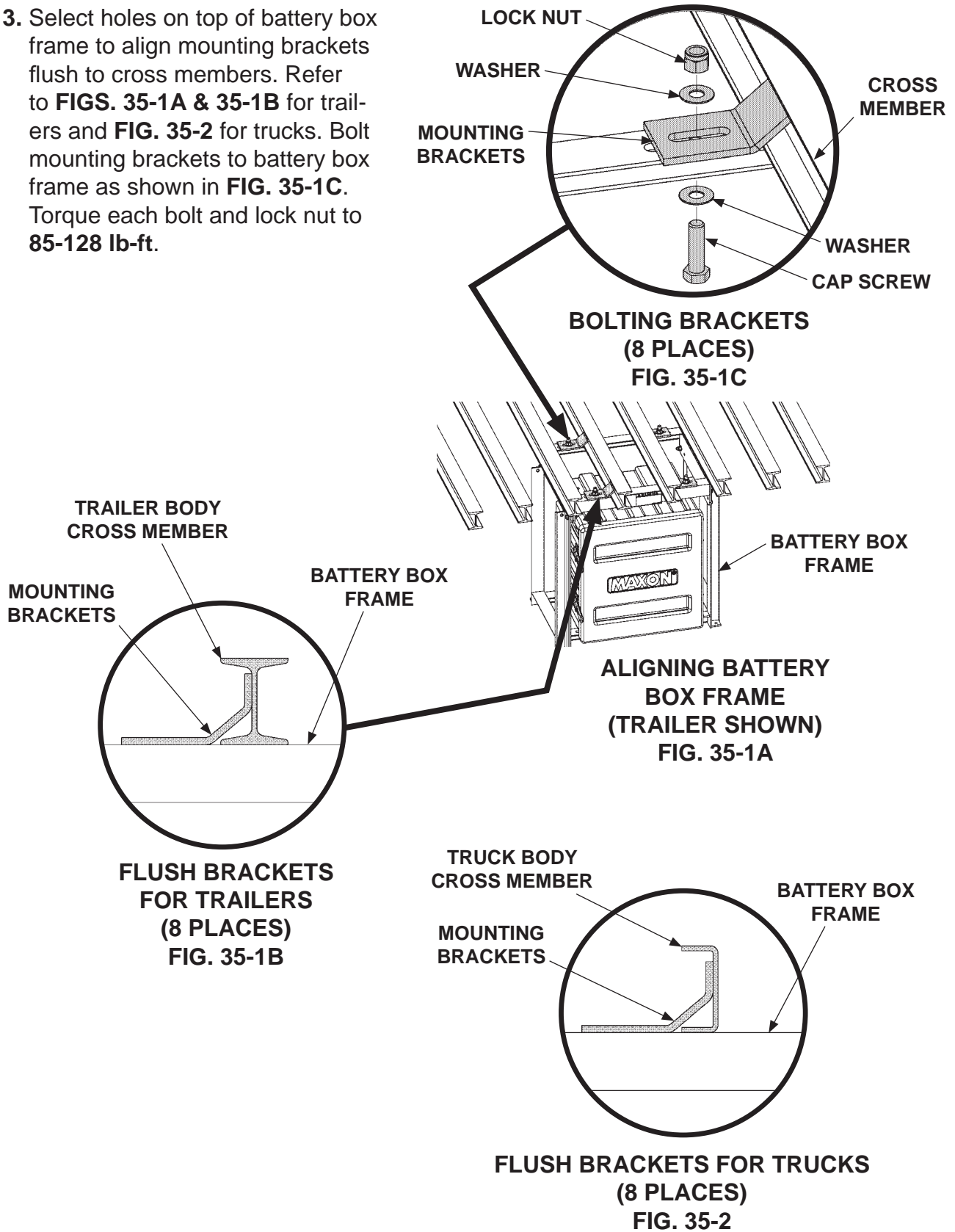
BATTERY BOX POSITIONING ON SLIDER-AXLE TRAILER
FIG. 34-1

CABLE KITS	P/N
GPSLR 3' BATTERY INSTALLATION	268802-01
GPSLR 10' BATTERY INSTALLATION	268802-02
GPSLR 20' BATTERY INSTALLATION	268802-03
GPSLR 60' BATTERY INSTALLATION	268802-04
GPSLR 30' BATTERY INSTALLATION	268802-05

BATTERY BOX INSTALLATION KITS
TABLE 34-1

STEP 7 - ATTACH OPTIONAL BATTERY BOX & FRAME TO VEHICLE (IF EQUIPPED) - Continued

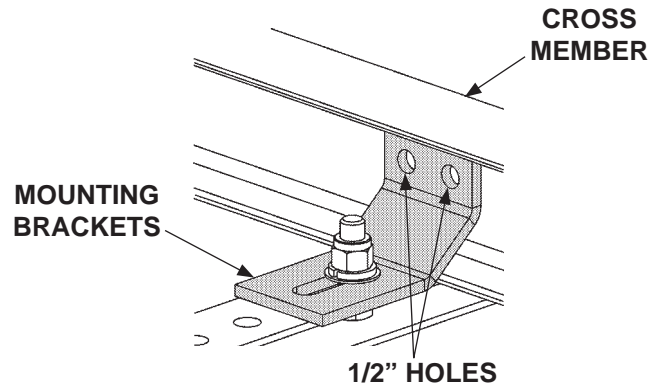
3. Select holes on top of battery box frame to align mounting brackets flush to cross members. Refer to **FIGS. 35-1A & 35-1B** for trailers and **FIG. 35-2** for trucks. Bolt mounting brackets to battery box frame as shown in **FIG. 35-1C**. Torque each bolt and lock nut to **85-128 lb-ft.**



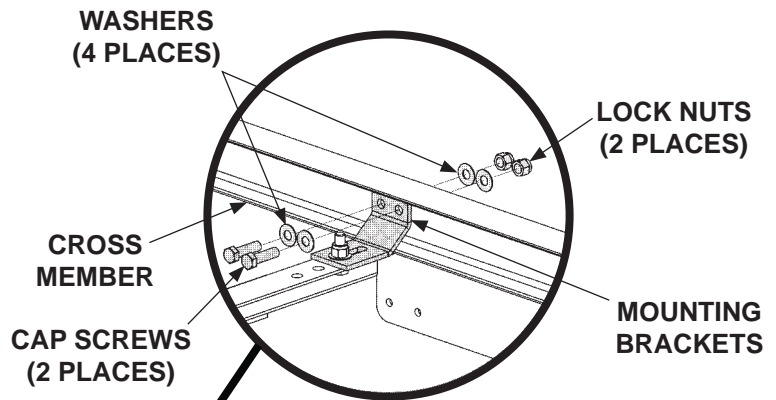
STEP 7 - ATTACH OPTIONAL BATTERY BOX & FRAME TO VEHICLE (IF EQUIPPED) - Continued

NOTE: If welding mounting brackets to cross members, skip instruction 3.

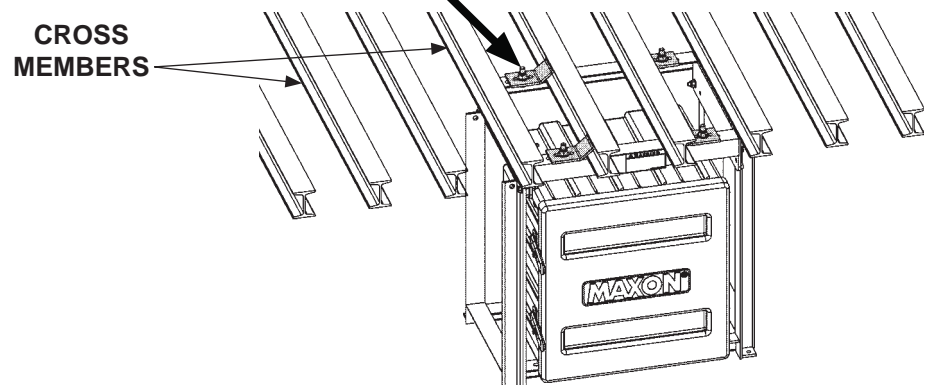
- Using mounting brackets as a template mark and drill holes through cross members (FIG. 36-1). Bolt mounting brackets to cross members as shown in FIGS. 36-2A and 36-2B. Torque bolts and lock nuts to 85-128 lb-ft.



**DRILLING CROSSMEMBERS
FIG. 36-1**



**BOLTING BRACKETS
(8 PLACES)
FIG. 36-2B**



**BOLTING BATTERY BOX FRAME
FIG. 36-2A**

STEP 7 - ATTACH OPTIONAL BATTERY BOX & FRAME TO VEHICLE (IF EQUIPPED) - Continued

⚠ WARNING

Recommended practices for welding on steel parts are contained in the current AWS (American Welding Society) D1.1 Structural Welding Code - Steel. Damage to Liftgate and/or vehicle, and personal injury can result from welds that are done incorrectly.

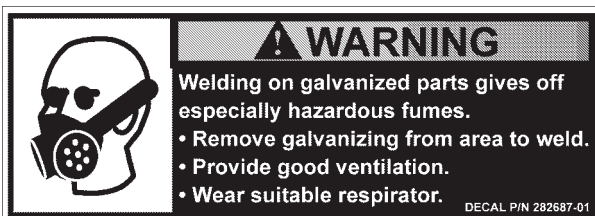
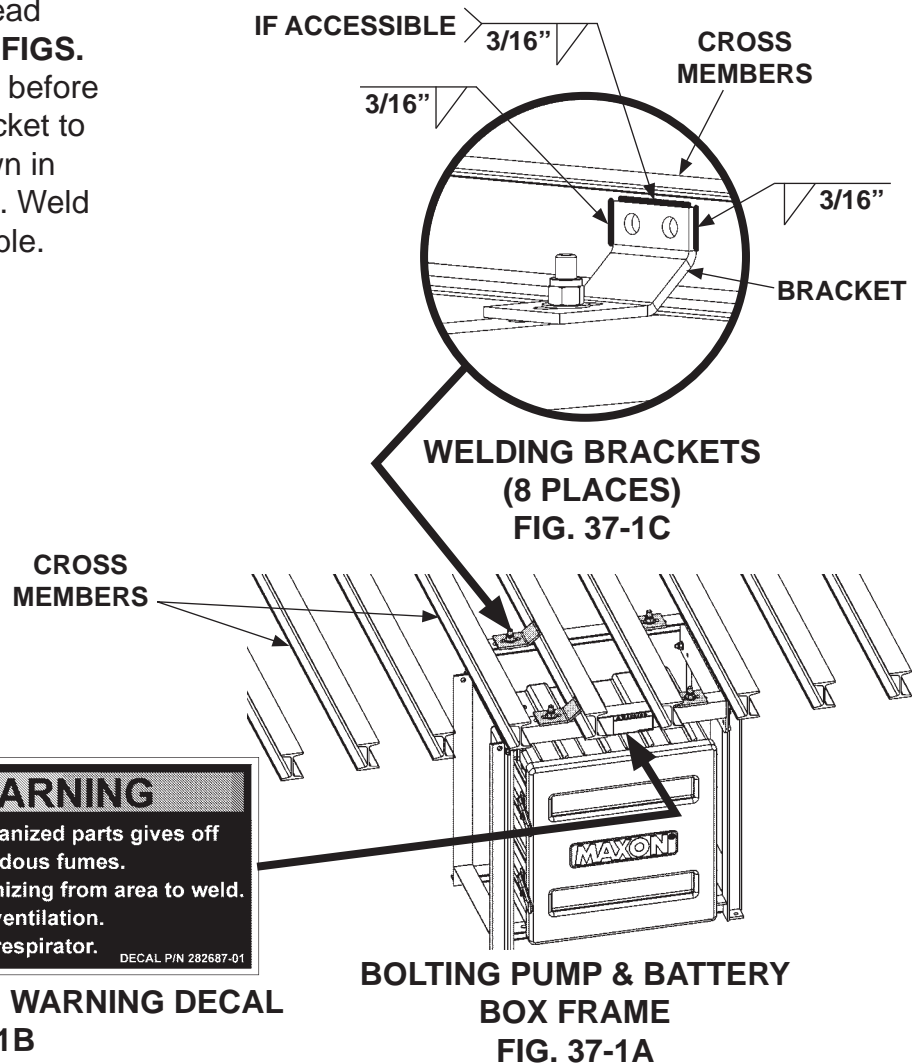
CAUTION

To prevent pump box components from being damaged by electric current from welding, connect welder grounding cable to the part being welded.

CAUTION

Cover pump box and optional battery box with flame-resistant covering before welding pump box frame to vehicle.

- For galvanized frame, read warning decal shown in FIGS. 37-1A and FIGS. 37-1B before welding. Weld each bracket to cross members as shown in FIGS. 37-1A and 37-1C. Weld top of bracket if accessible.



WELDING GALVANIZED, WARNING DECAL FIG. 37-1B

STEP 7 - ATTACH OPTIONAL BATTERY BOX & FRAME TO VEHICLE (IF EQUIPPED) - Continued

⚠ WARNING

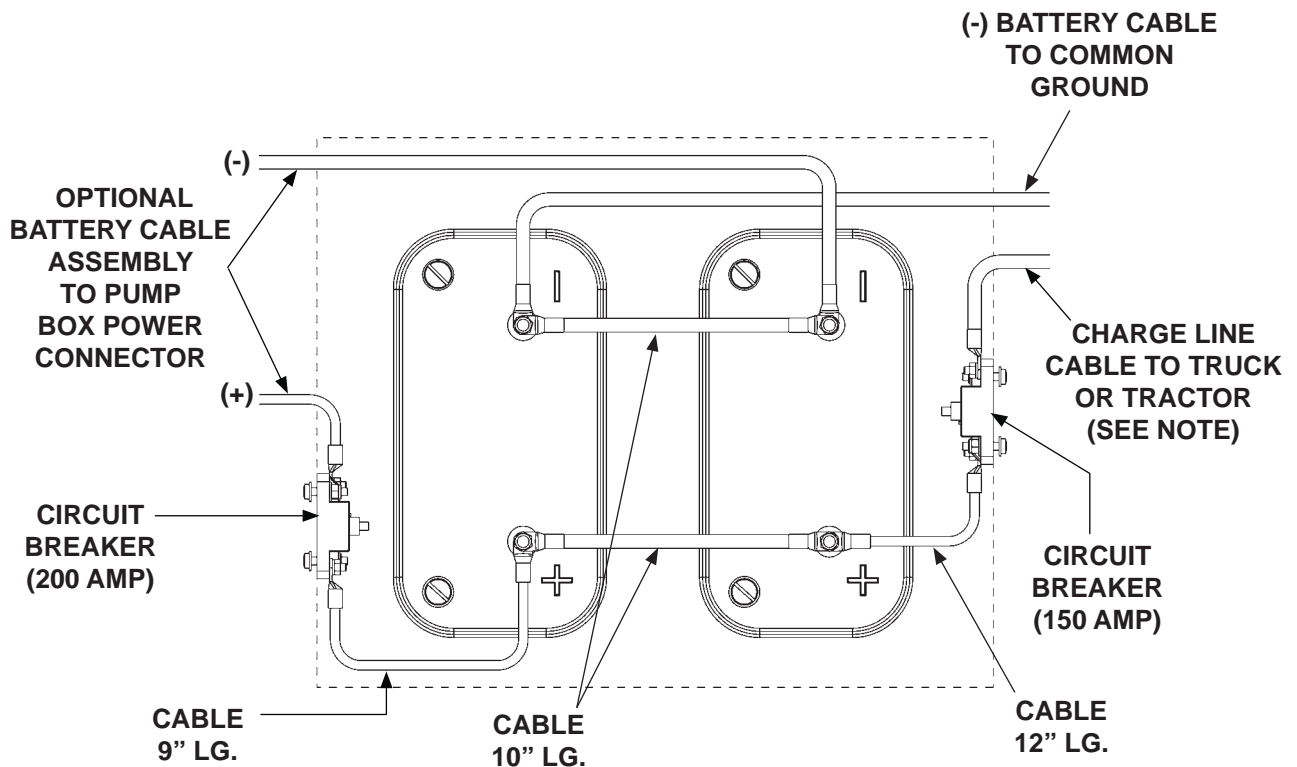
Remove all rings, watches and jewelry before doing any electrical work.

NOTE: Always connect fused end of power cable to battery positive (+) terminal.

NOTE: To connect charge lines, refer to instructions provided with each charge line kit.

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

6. Connect battery cables, fused cables, and ground cables for 12 volt power as shown in **FIG. 38-1**.

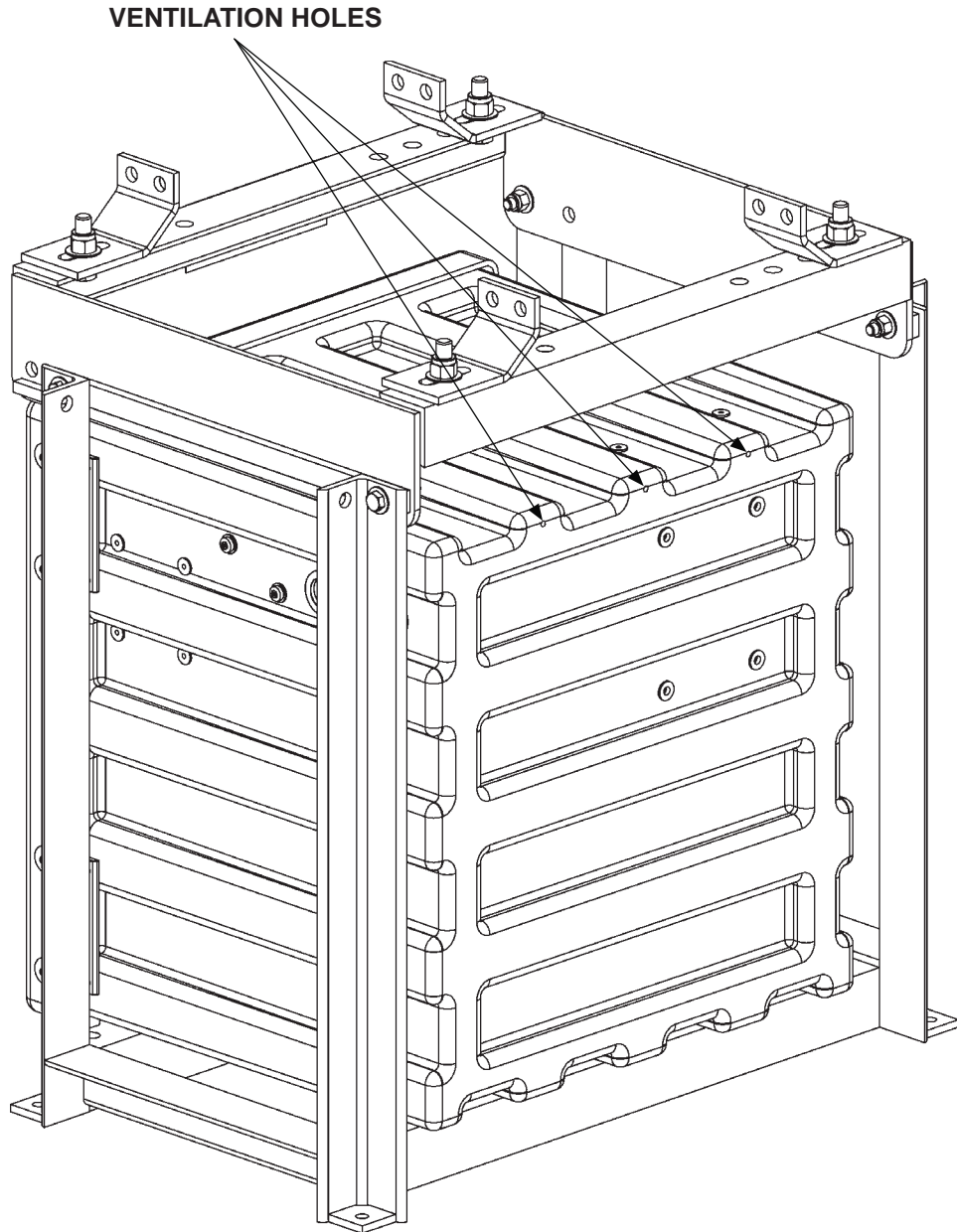


12 VOLT BATTERY CONNECTIONS
FOR 12 VOLT POWER
FIG. 38-1

STEP 7 - ATTACH OPTIONAL BATTERY BOX & FRAME TO VEHICLE (IF EQUIPPED) - Continued

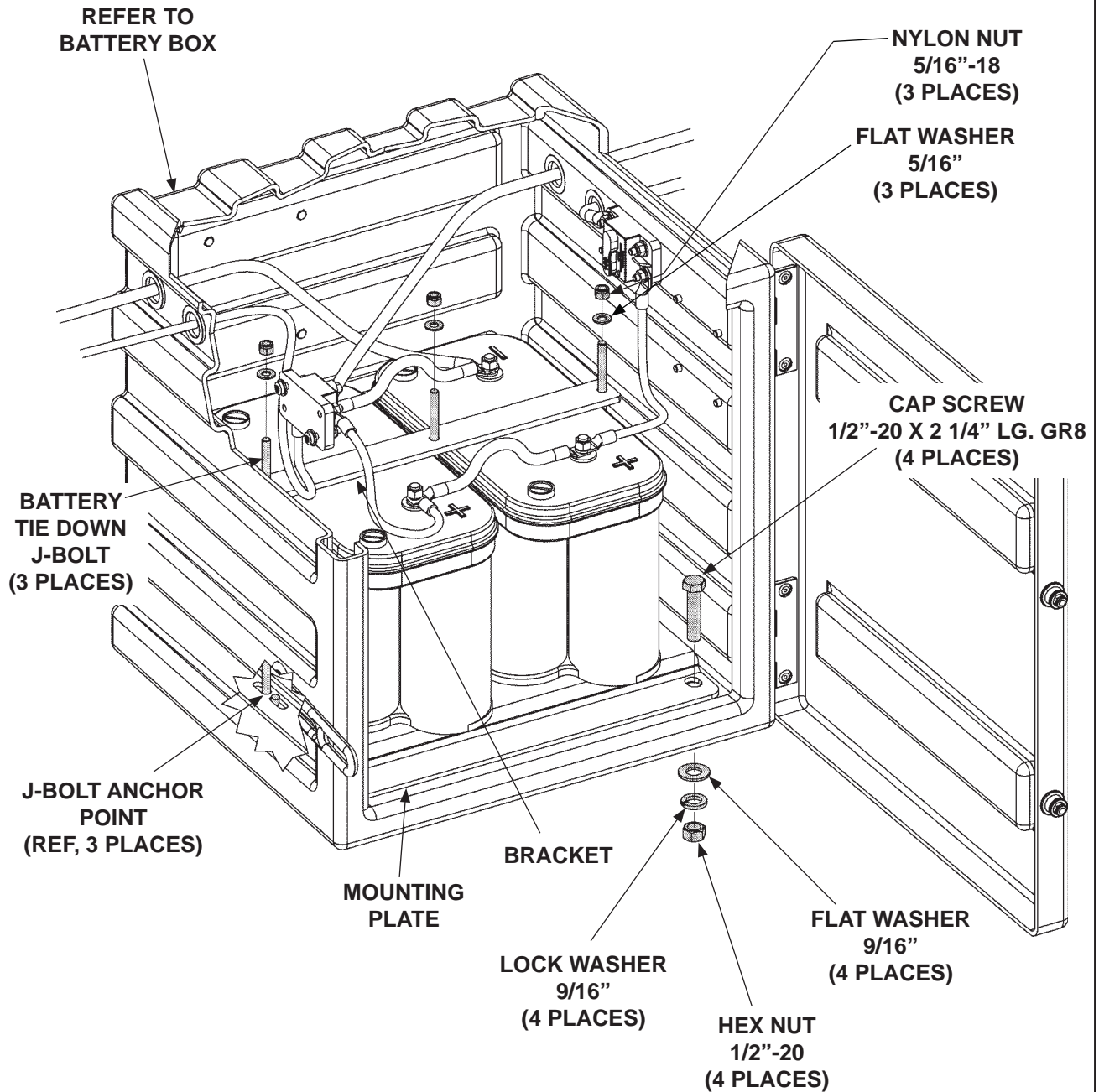
⚠ WARNING

Explosive hydrogen gas from charging batteries can accumulate in battery box if not vented from the box. To prevent hydrogen gas from accumulating, ensure the 3 ventilation holes in battery box are not plugged or covered.



**BATTERY BOX ASSEMBLY
(REAR VIEW SHOWN)
FIG. 39-1**

STEP 7 - ATTACH OPTIONAL BATTERY BOX & FRAME TO VEHICLE (IF EQUIPPED) - Continued



**BATTERY BOX ASSEMBLY
(12 VOLT POWER CONNECTIONS SHOWN)
FIG. 40-1**

STEP 8 - RUN POWER CABLE

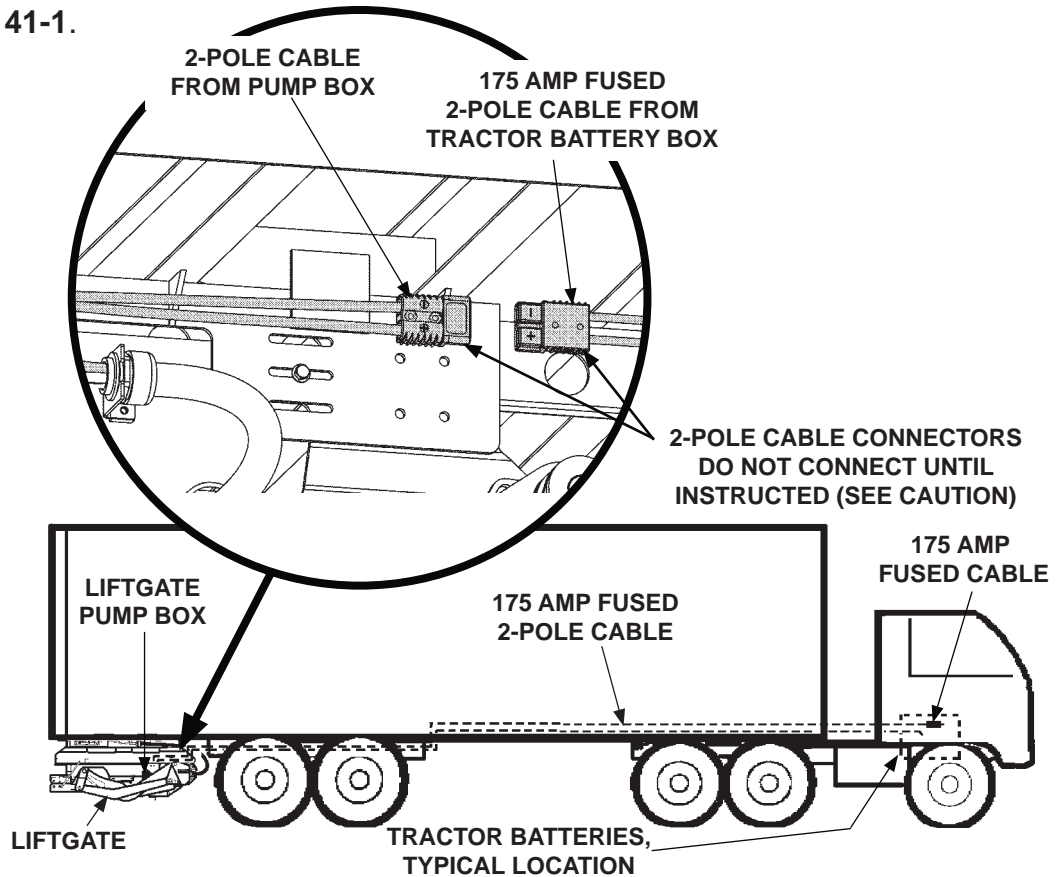
⚠ CAUTION

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.

NOTE: Make sure the Liftgate power unit, and all batteries on the vehicle for the power unit, are connected correctly to a common chassis ground.

RECOMMENDED CONFIGURATION

1. Liftgate powered from tractor batteries is typically installed on trailers as shown in **FIG. 41-1**.



RECOMMENDED LIFTGATE & OPTIONAL BATTERY BOX INSTALLATION ON TRAILER

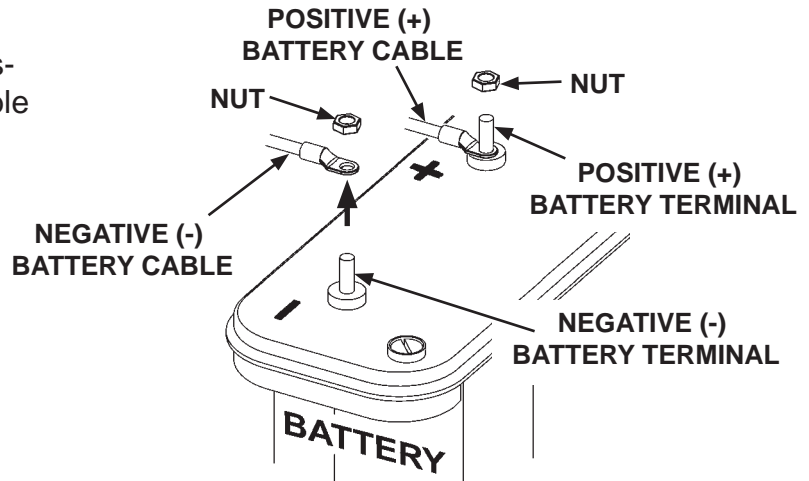
FIG. 41-1

2. Position fuse-end of 2-pole power cable with fuse nearest the tractor batteries, as shown in **FIG. 41-1**. Keep enough cable near batteries to reach the positive (+) and (-) terminals without straining cables (after connection). Run 2-pole cable from battery, to the 2-pole cable from pump box. Secure power cable to vehicle chassis.

STEP 8 - RUN POWER CABLE - Continued

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

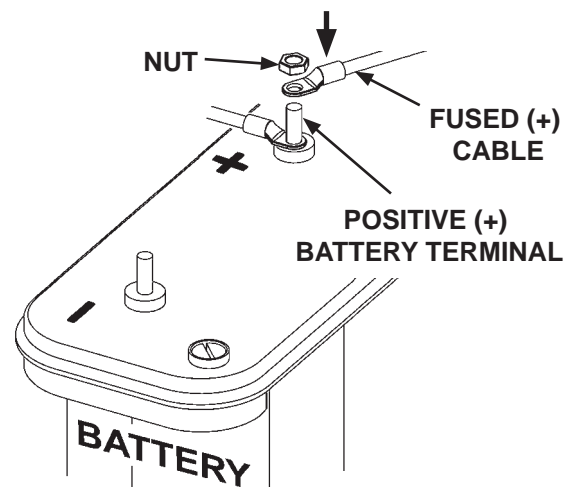
3. Remove nut from negative (-) battery terminal (**FIG. 42-1**). Disconnect negative (-) battery cable (**FIG. 42-1**).



**DISCONNECTING (-) BATTERY CABLE
FIG. 42-1**

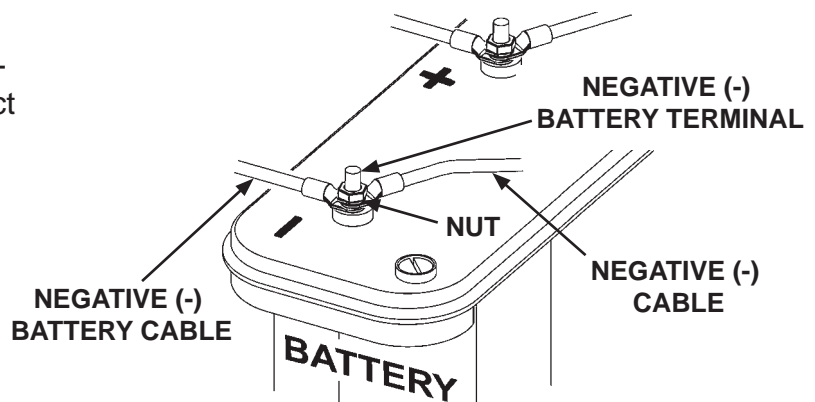
4. Remove nut from positive (+) battery terminal (**FIG. 42-1**).

5. Connect fused positive (+) cable to positive (+) battery terminal (**FIG. 42-2**). Then, reinstall nut on positive (+) battery terminal (**FIG. 42-2**).



**CONNECTING FUSED (+) CABLE
FIG. 42-2**

6. Reconnect negative (-) battery cable to negative (-) battery terminal (**FIG. 42-3**). Next, connect negative (-) cable to negative (-) battery terminal (**FIG. 42-3**). Then, reinstall nut on negative (-) battery terminal (**FIG. 42-3**).



**RECONNECTED BATTERY CABLES
FIG. 42-3**

STEP 9 - CONNECTING POWER

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

Connect power cable as shown in **FIG. 43-1**.

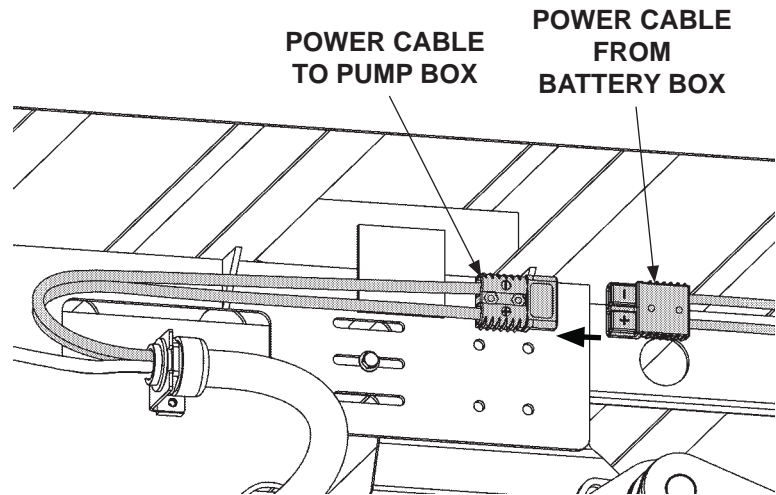


FIG. 43-1

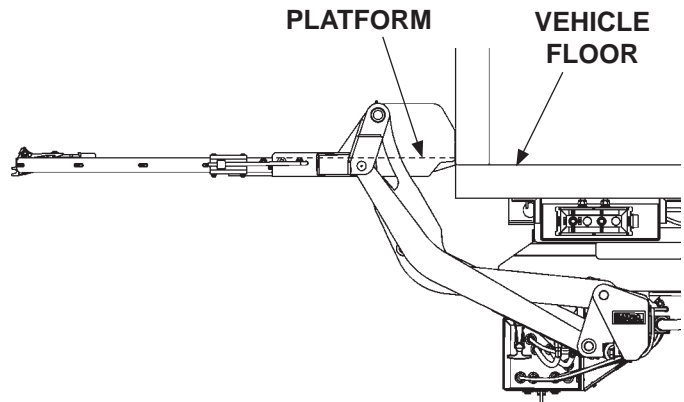
STEP 10 - LEVELING PLATFORM

CAUTION

Operate Liftgate with caution until installation is complete.

NOTE: Refer to **Operating Instructions** decal and applicable **WARNING & CAUTION** decals.

1. Raise platform above vehicle floor height (**FIG. 44-1**).



PLATFORM ABOVE VEHICLE FLOOR
FIG. 44-1

2. Loosen bolts on both side plates (**FIG. 44-2**). Lower platform flush with vehicle floor (**FIG. 44-3**). Next, nudge the Liftgate forward until platform heel contacts rear sill on vehicle (**FIG. 44-3**). Then tighten bolts. Torque each bolt to **120 lb-ft**.

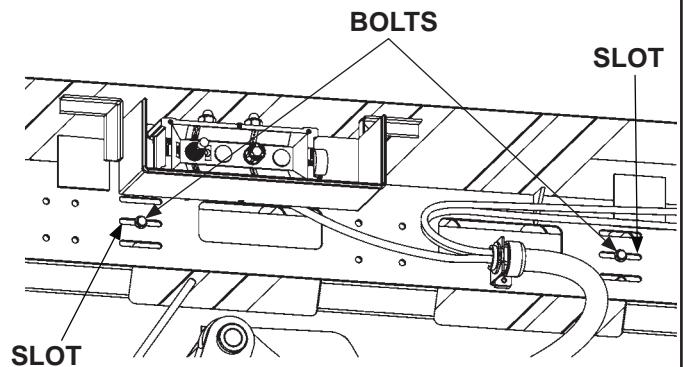
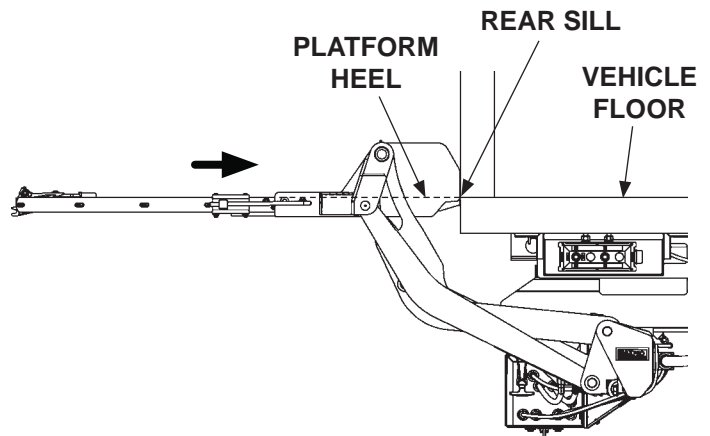


FIG. 44-2



PLATFORM FLUSH WITH VEHICLE FLOOR
FIG. 44-3

STEP 11 - FINAL BOLTING

NOTE: Six holes must be drilled through each side of the slider frame to bolt RH and LH side plates to slider frame on the Liftgate. (See FIGS. 45-1A, 45-1B, 45-1C & 45-1D.)

NOTE: If middle slot is used for bolting Liftgate, and if trailer chassis interferes with bolts placed in top holes (FIG. 45-1C), the bottom holes can be used for bolting.

1. Use side plate as a template to drill 6 holes (1/2" dia.) in slider frame (FIG. 45-1A). Repeat for LH side.

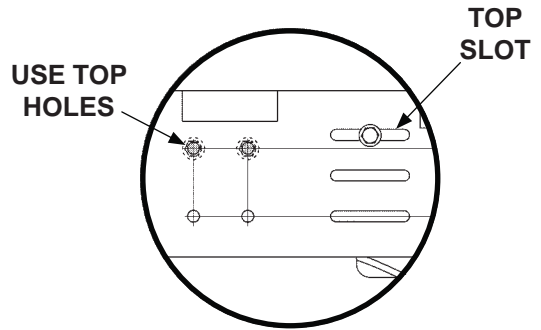


FIG. 45-1B

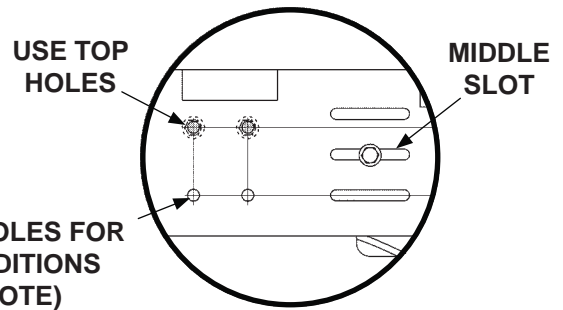


FIG. 45-1C

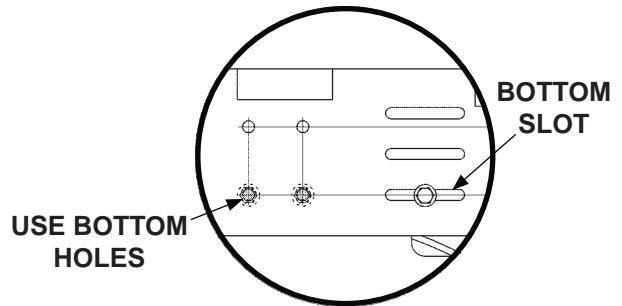


FIG. 45-1D

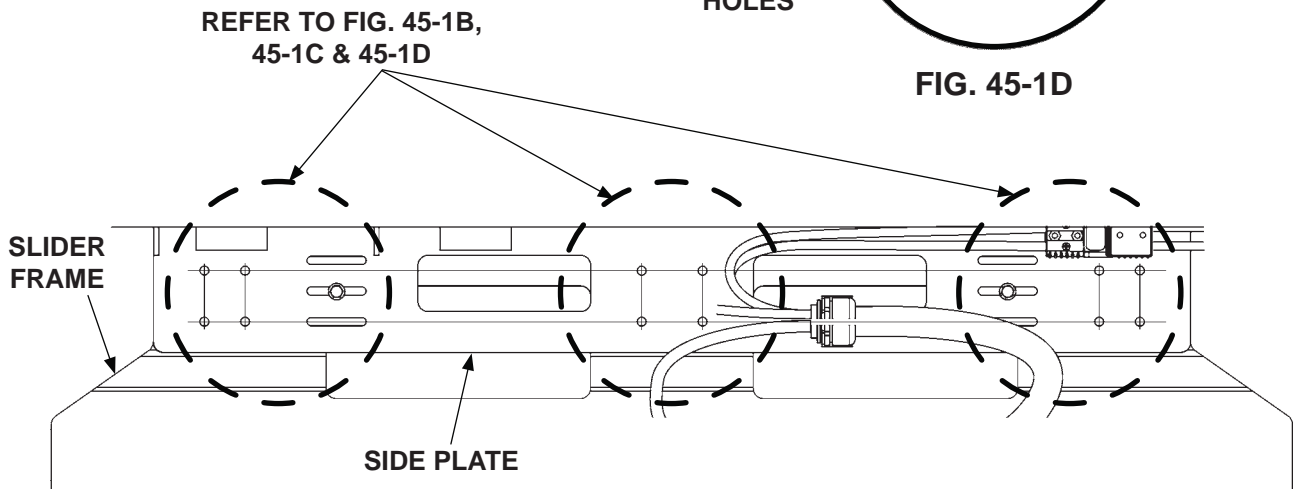


FIG. 45-1A

STEP 11 - FINAL BOLTING - Continued

2. Bolt RH side plate to slider frame as shown in **FIG. 46-1**. Repeat for LH side. Torque each bolt to **120 lb-ft**.

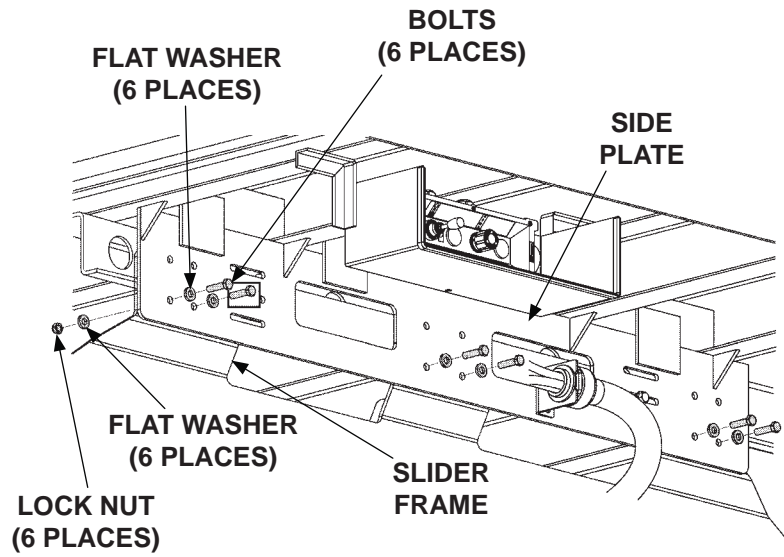
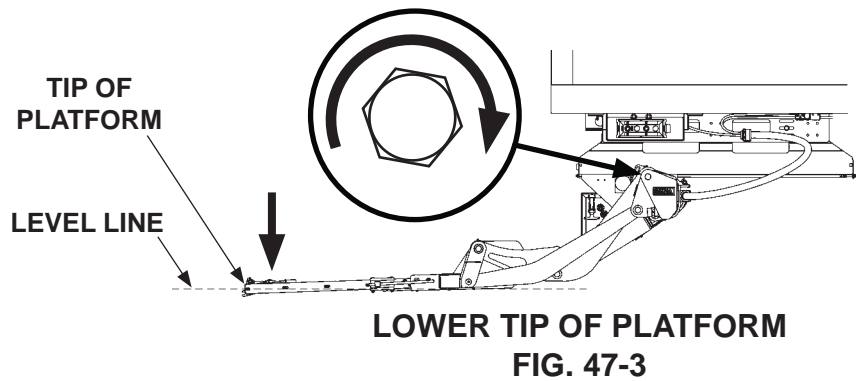
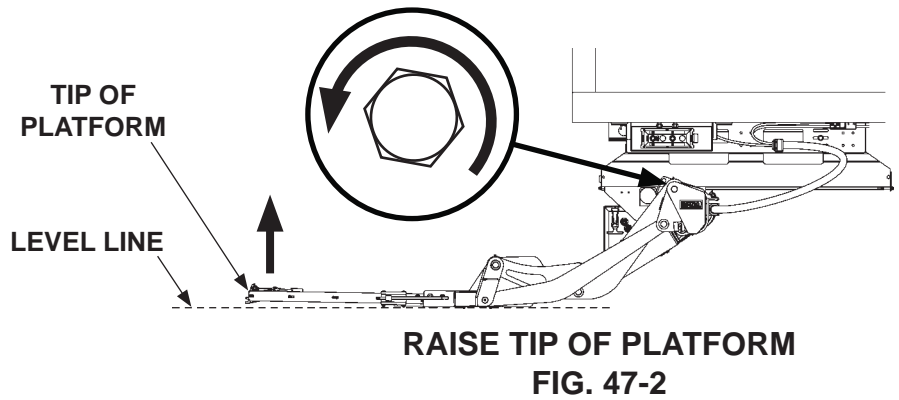
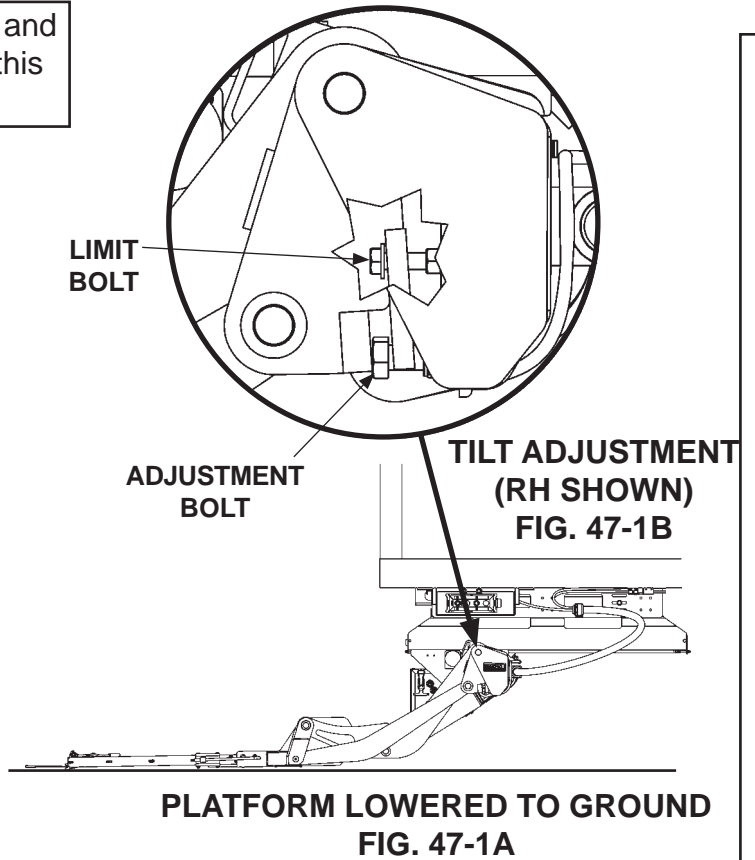


FIG. 46-1

STEP 12 - PLATFORM ADJUSTMENT

NOTE: Park vehicle on level ground and unload vehicle before doing this procedure.

1. Lower platform to ground and unfold flipover (**FIG. 47-1A**).
2. Loosen adjustment and limit bolts on both sides of platform (**FIG. 47-1B**).
3. Turn adjustment bolts counterclockwise to tilt the tip of platform up (**FIG. 47-2**), or turn clockwise to tilt down (**FIG. 47-3**).
4. Once platform is adjusted, tighten limit bolts securely on both sides of platform (**FIG. 47-1B**).



STEP 13 - ATTACH SLIDING AXLE STOPS (IF REQUIRED)

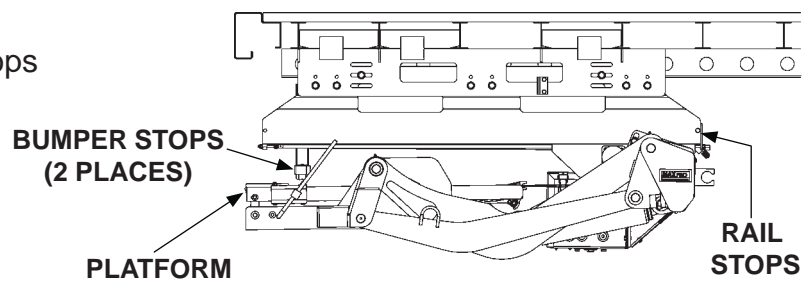
CAUTION

The sliding axle assembly on a trailer can collide with a Liftgate mounted on the slide rails. To prevent damage to Liftgate and trailer, install stops on the slide rails to keep the sliding axles from hitting Liftgate. Refer to Liftgate clearance dimensions in this section of the manual.

If the Liftgate is mounted on a slide-axle trailer, attach stops on the slide rails to prevent the slide axles from hitting the Liftgate. Refer to the **VEHICLE REQUIREMENTS** section in this manual.

STEP 14 - ATTACH SAFETY CHAIN (NO-CONTROLLER MODELS ONLY)

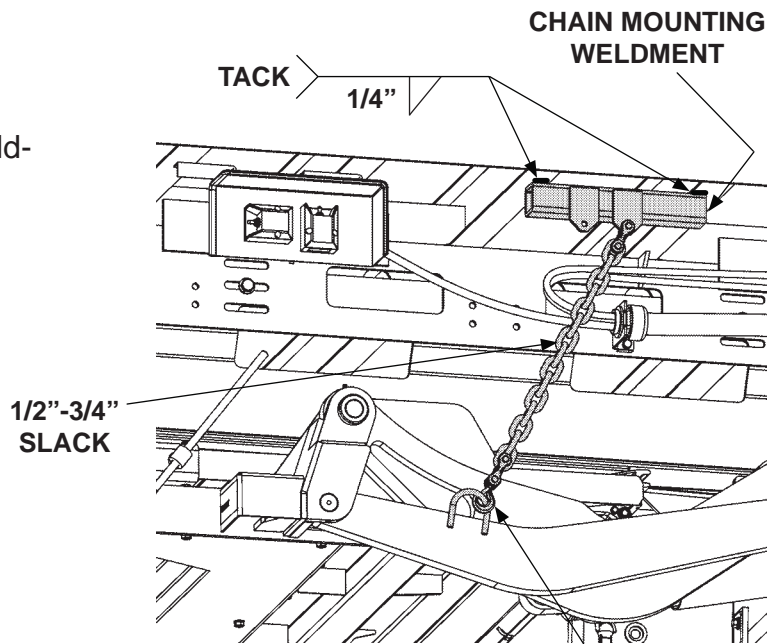
1. Stow Liftgate all the way in until slide mechanism hits the rail stops (FIG. 49-1).



LIFTGATE IN STOWED POSITION
FIG. 49-1

2. Raise the platform until it presses against the bumper stops (FIG. 49-1).

3. Hook chain to tilt arm (FIG. 49-2). Then, position chain mounting weldment to bottom of crossmembers. Keep 1/2" to 3/4" slack in chain.

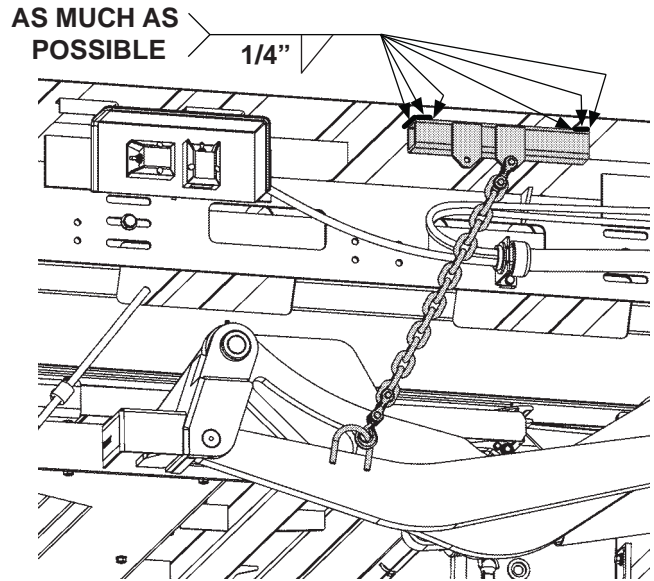


SNAP HOOK & CHAIN
POSITIONING & TACK WELDING
CHAIN MOUNTING WELDMENT
FIG. 49-2

5. Hook and unhook chain from tilt arm. Hook should be easy to disengage from tilt arm (FIG. 49-2).

STEP 14 - ATTACH SAFETY CHAIN (NO CONTROLLER MODELS ONLY) - Continued

6. When chain mounting weldment is in correct position, finish welding to vehicle crossmembers as shown in **FIG. 50-1**.



**FINISH WELDING CHAIN MOUNTING
WELDMENT
FIG. 50-1**

ATTACH DECALS (WITH SMART STOW)

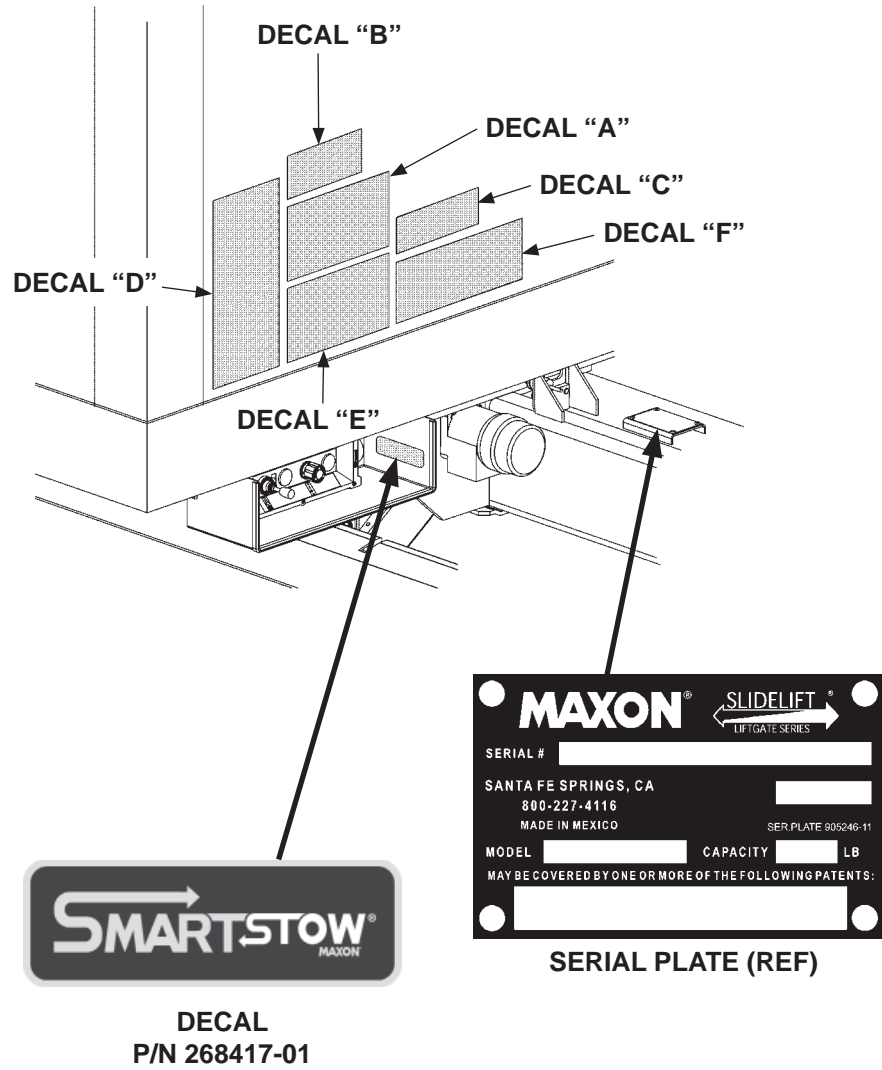


FIG. 51-1

ATTACH DECALS - Continued WITH SMART STOW

SAFETY INSTRUCTIONS

Read all decals and operation manual before operating liftgate.

1. Do not use liftgate unless you have been properly instructed and have read, and are familiar with, the operating instructions.
2. Be certain vehicle is properly and securely braked before using the liftgate.
3. Always inspect this liftgate for maintenance or damage before using it. Do not use liftgate if it shows any sign of damage or improper maintenance.
4. Do not overload.
5. Make certain the area in which the platform will open and close is clear before opening or closing the platform.
6. Make certain platform area, including the area in which loads may fall from platform, is clear before and at all times during operation of liftgate.
7. This liftgate is intended for loading and unloading of cargo only. Do not use this liftgate for anything but its intended use.

A

WARNING

Read this information carefully.

- Improper operation of this Liftgate can result in serious personal injury. If you do not have a copy of the operating instructions, please obtain them from your employer, distributor, or lessor before you attempt to operate Liftgate.
- 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.
- If you are using a pallet jack, be sure it can be maneuvered safely.
- Do not operate a forklift on the platform.
- 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.

E



WARNING
Liftgate hazards can result in crushing or falling.
Keep hands and feet clear of pinch points.
If riding liftgate, make sure load is stable and footing is solid.

Read and understand all instructions and WARNINGS before use.

F

CAUTION
Always stand clear of platform area.

C

THE MAXIMUM CAPACITY OF THIS LIFT IS
3300 POUNDS
WHEN THE LOAD IS CENTERED ON THE LOAD CARRYING PLATFORM

B









GPSLR 33 & GPSTLR 33 ONLY

THE MAXIMUM CAPACITY OF THIS LIFT IS
4400 POUNDS
WHEN THE LOAD IS CENTERED ON THE LOAD CARRYING PLATFORM

B

GPSLR 44 & GPSTLR 44 ONLY

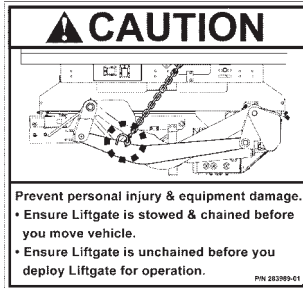
OPERATING INSTRUCTIONS

1. ←  Power On
2. ←  2 Hand Switch
Slide Out To Unstow
3.  Manually unfold using strap.
4. ↑  2 Hand Switch
Raise
5. ↓  2 Hand Switch
Lower
6.  Manually fold using strap.
7. →  2 Hand Switch
Slide In To Stow
IMPORTANT: Release switches when liftgate shuts off.
8. →  Power Off

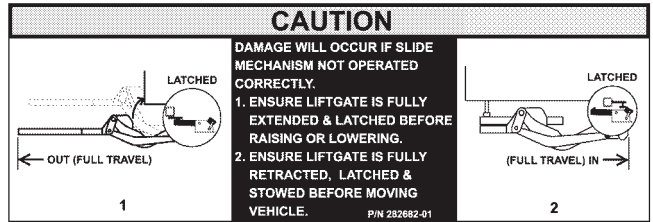
D

DECAL SHEET P/N 267431-01 (GPSLR-33 & GPSTLR-33)
& P/N 267431-02 (GPSLR-44 & GPSTLR-44)

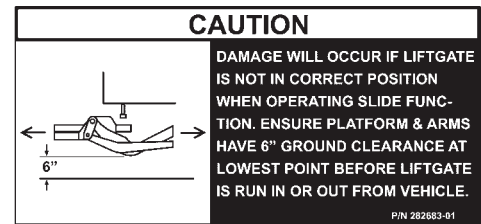
DECALS (WITHOUT CONTROLLER)



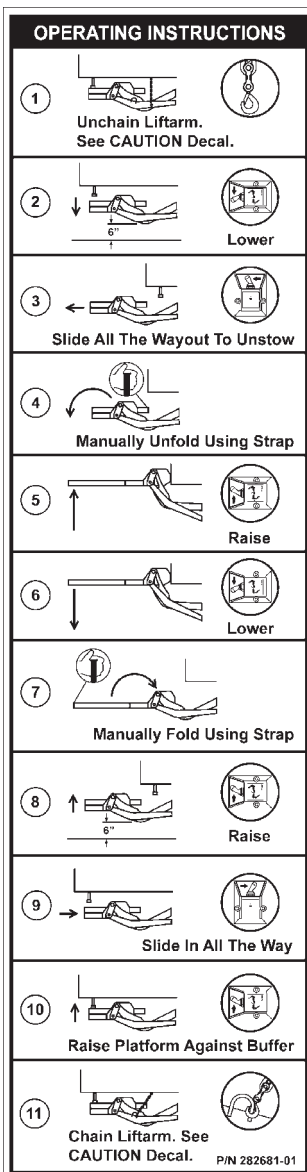
**CAUTION DECAL
P/N 283989-01**



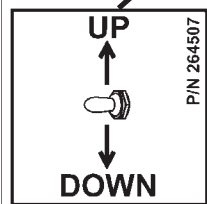
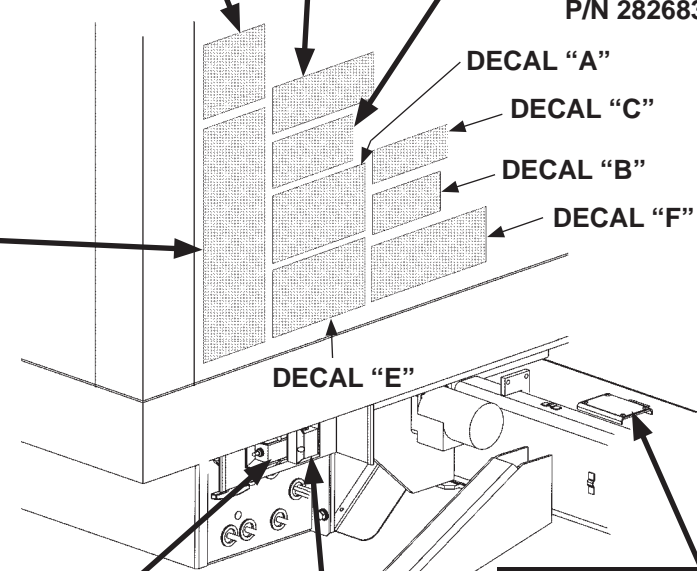
**CAUTION DECAL
P/N 282682-01**



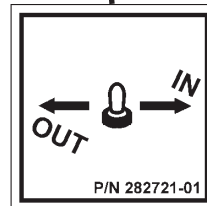
**CAUTION DECAL
P/N 282683-01**



**OPERATION DECAL
P/N 282681-01**



**DECAL
P/N 264507**



**DECAL
P/N 282721-01**



SERIAL PLATE (REF)

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

ATTACH DECALS - Continued WITHOUT CONTROLLER

SAFETY INSTRUCTIONS

Read all decals and operation manual before operating liftgate.

1. Do not use liftgate unless you have been properly instructed and have read, and are familiar with, the operating instructions.
2. Be certain vehicle is properly and securely braked before using the liftgate.
3. Always inspect this liftgate for maintenance or damage before using it. Do not use liftgate if it shows any sign of damage or improper maintenance.
4. Do not overload
5. Make certain the area in which the platform will open and close is clear before opening or closing the platform.
6. Make certain platform area, including the area in which loads may fall from platform, is clear before and at all times during operation of liftgate.
7. This liftgate is intended for loading and unloading of cargo only. Do not use this liftgate for anything but its intended use.

(A)

WARNING

Read this information carefully.

- Improper operation of this Liftgate can result in serious personal injury. If you do not have a copy of the operating instructions, please obtain them from your employer, distributor, or lessor before you attempt to operate Liftgate.
- 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.
- If you are using a pallet jack, be sure it can be maneuvered safely.
- Do not operate a forklift on the platform.
- 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.

(E)

WARNING

Liftgate hazards can result in crushing or falling.

Keep hands and feet clear of pinch points.

If riding liftgate, make sure load is stable and footing is solid.

(F)

Read and understand all instructions and WARNINGS before use.

CAUTION

Always stand clear of platform area.

(C)

THE MAXIMUM CAPACITY OF THIS LIFT IS

3300 POUNDS

WHEN THE LOAD IS CENTERED ON THE LOAD CARRYING PLATFORM

(B)

GPSLR 33 & GPSTLR 33 ONLY

THE MAXIMUM CAPACITY OF THIS LIFT IS

4400 POUNDS

WHEN THE LOAD IS CENTERED ON THE LOAD CARRYING PLATFORM

(B)

GPSLR 44 & GPSTLR 44 ONLY

DECAL SHEET P/N 282464-01 (GPSLR-33 & GPSTLR-33)
& P/N 282464-02 (GPSLR-44 & GPSTLR-44)

DECAL POSITIONS

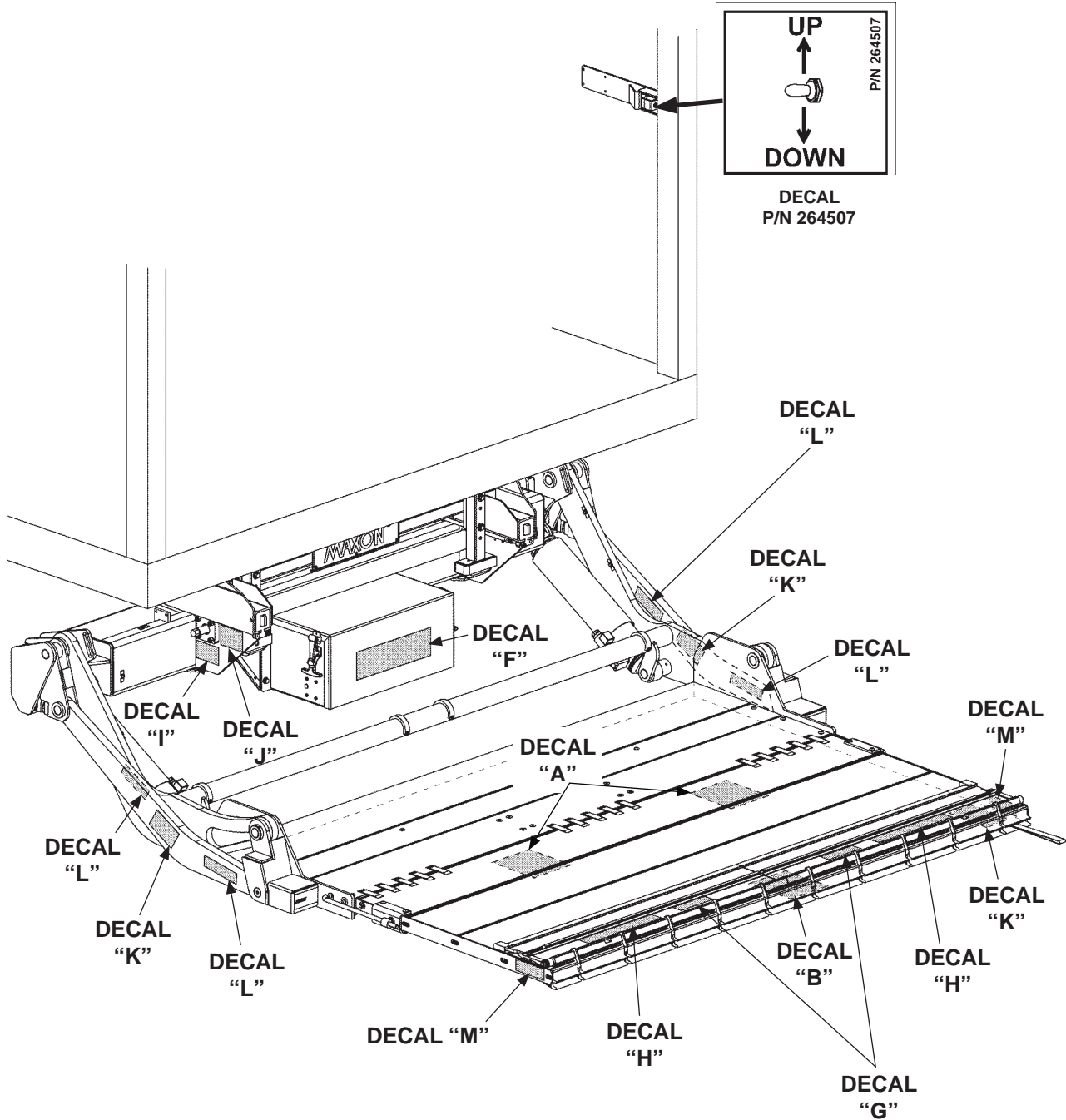


FIG. 55-1

DECAL POSITIONS - Continued

WARNING

When unstowing & stowing platform, stay clear of bumpers.

P/N 267432-01 **A**

WARNING

To avoid injury stay out of the path where the platform unfolds. Unfold platform from the side.

P/N 267432-01 **B**

WARNING

Avoid possible injury & damage to equipment if slider moves under power. Ensure battery is disconnected from lift-gate before operating the slider manually.

P/N 267432-01 **J**

MANUAL SLIDER OPERATION & ACCESS INSTRUCTIONS

P/N 267432-01 **I**

WARNING

Keep hands & feet clear of lifting arms.

P/N 267432-01 **L**

WARNING

Keep hands clear of pinch points when folding flipover.

P/N 267432-01 **M**

WARNING

To avoid possible injury and damage to equipment, never stand on lift arms, parallel arms, or bottom side of platform.

P/N 267432-01 **K**

WARNING

To prevent personal injury & equipment damage, avoid working under the platform while platform is raised off the ground. Refer to Maintenance Manual for additional safety instructions.

P/N 267432-01 **E**

WARNING

To prevent personal injury & damaged equipment, ramp must be in retention position when cart is being raised or lowered on platform.

P/N 267432-01 **G**

1 a. Lift
b. Pull to unhook ramp

2 Release RH ramp and/or LH Ramp

3 a. Slide
b. Rotate

4 a. Pull
b. Rotate

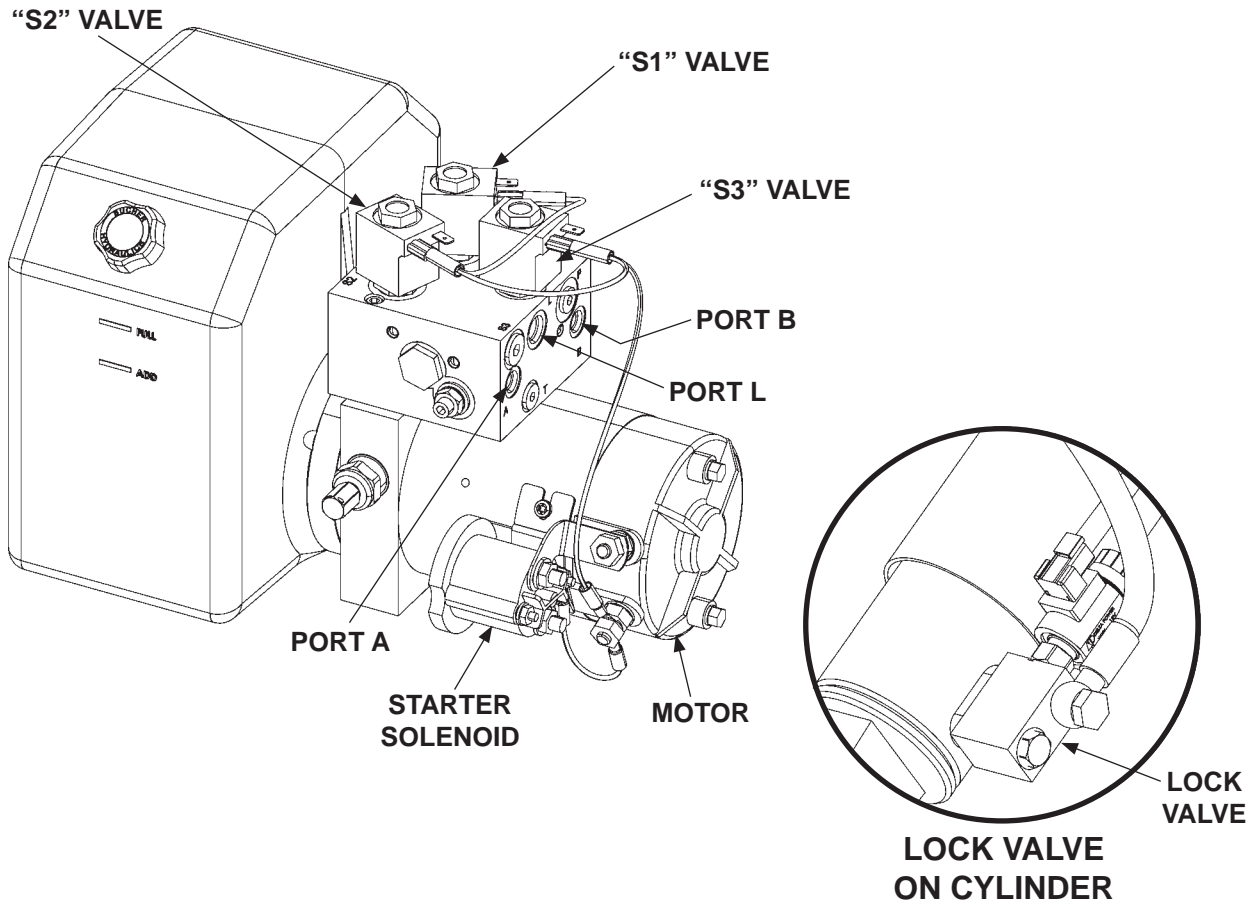
5 a. Rotate
b. Slide
c. Hook

P/N 267432-01 **H**

DECAL SHEET 267432-01
FIG. 56-1

SYSTEM DIAGRAMS

PUMP & MOTOR SOLENOID OPERATION



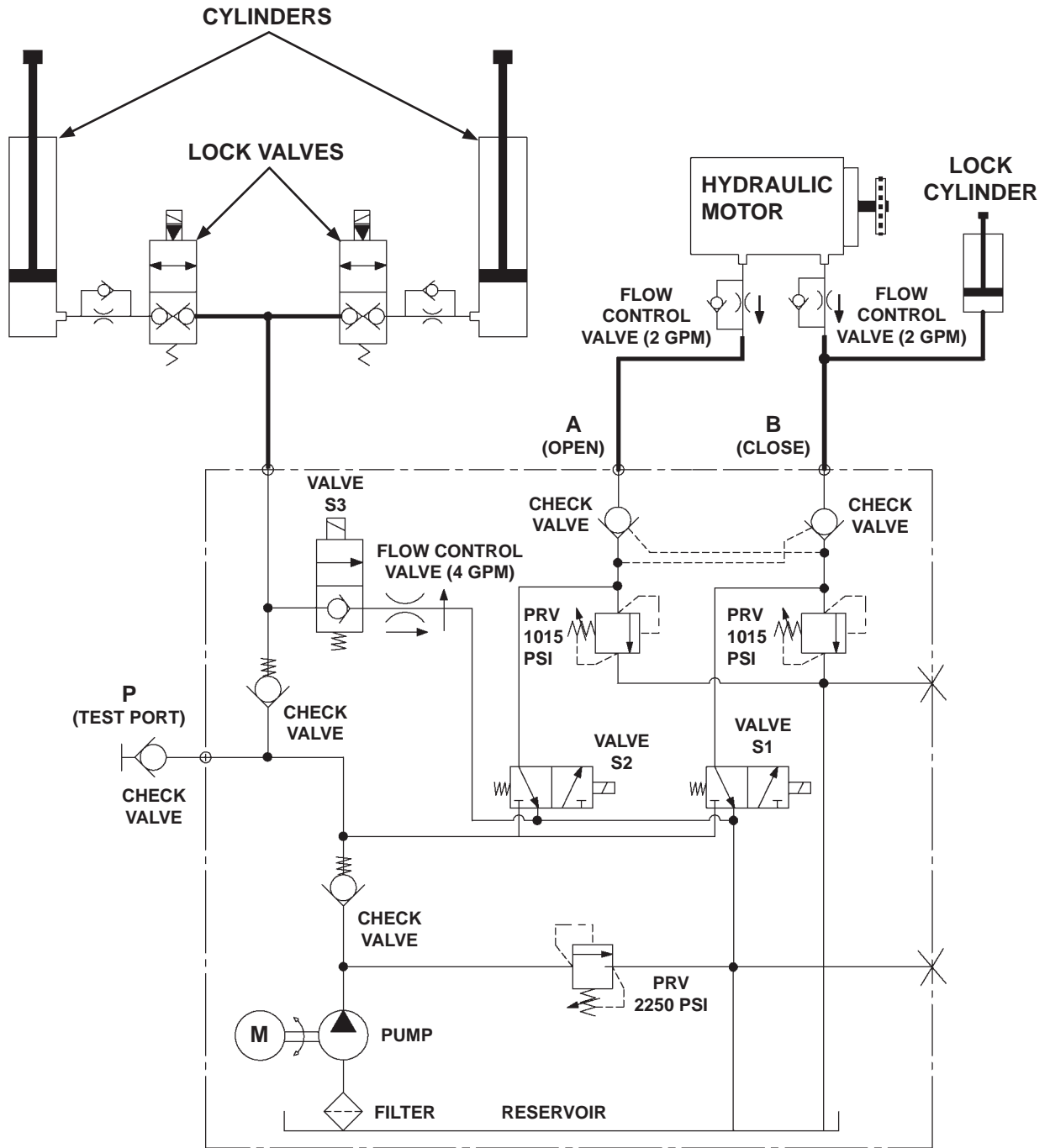
POWER UNIT MOTOR & SOLENOID OPERATION						
TAIL LIFT FUNCTION	PORT	SOLENOID OPERATION (✓ MEANS ENERGIZED)				
		MOTOR	VALVE "S1"	VALVE "S2"	VALVE "S3"	LOCK VALVE
RAISE	L	✓	-	-	-	✓
LOWER	L	-	-	-	✓	✓
SLIDE OPEN	A	✓	-	✓	-	-
SLIDE CLOSED*	B	✓	✓	-	-	-

*Platform may raise or lower automatically to the correct height to be stowed.

REFER TO VALVES SHOWN ON HYDRAULIC SCHEMATIC

TABLE 57-1

HYDRAULIC SCHEMATIC



NOTE: PRV (PRESSURE RELIEF VALVE)

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

SYSTEM DIAGRAMS - Continued

ELECTRICAL SCHEMATIC (SMART STOW)

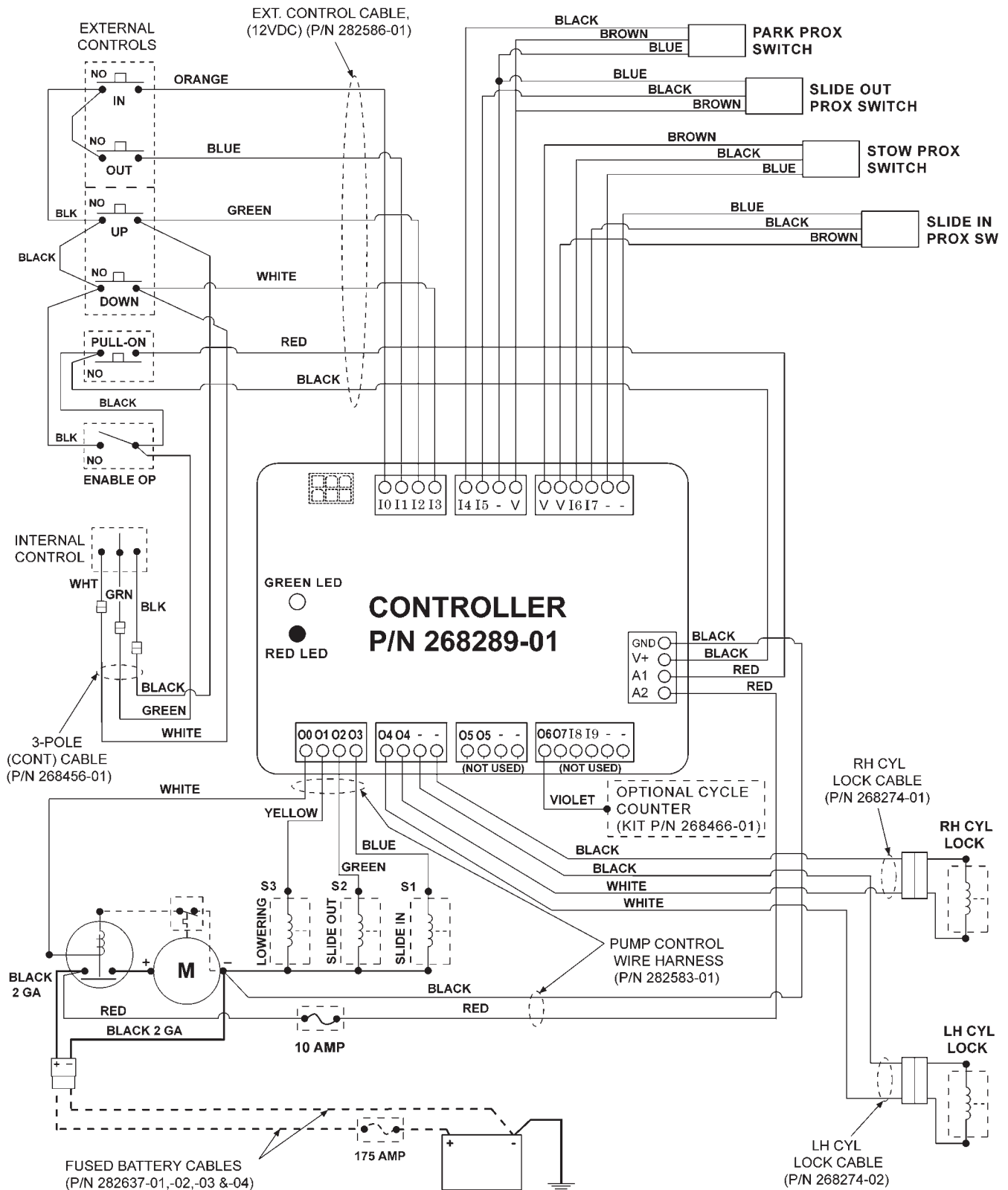


FIG. 59-1

SYSTEM DIAGRAMS - Continued

ELECTRICAL SCHEMATIC (WITHOUT CONTROLLER)

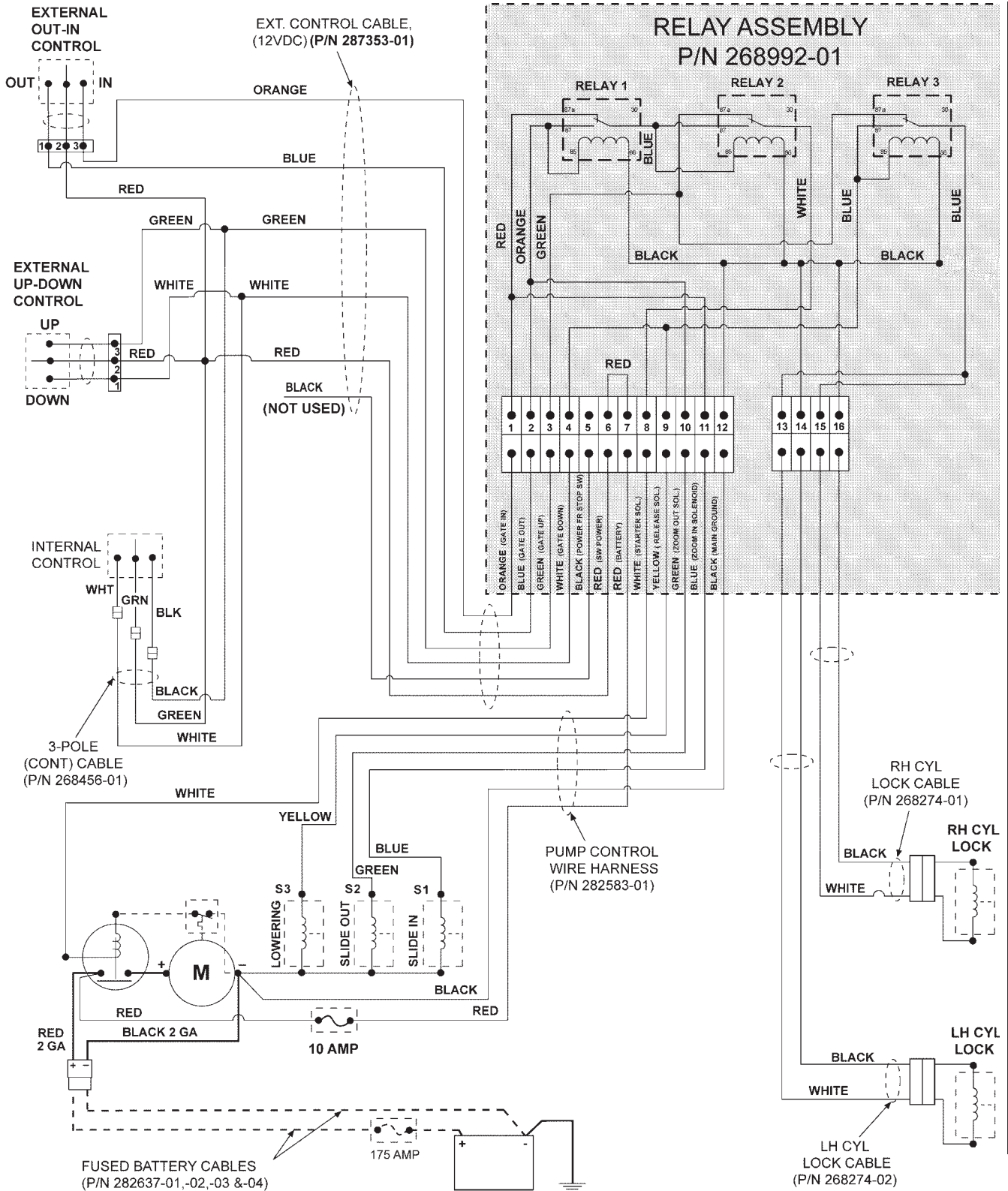


FIG. 60-1

OPTIONS OPTIONAL LIFTGATE COMPONENTS

MISCELLANEOUS KITS	PART NO.
CIRCUIT BREAKER (150 AMP)	251576
GPSLR HARNESS (INTERNAL SWITCH)	287837-01
INSTALLATION JIG	
GPSLR INSTALLATION JIG ASSEMBY	268592-01
BATTERY CABLE KITS	
GPSLR 3' BATTERY INSTALLATION	268802-01
GPSLR 10' BATTERY INSTALLATION	268802-02
GPSLR 20' BATTERY INSTALLATION	268802-03
GPSLR 60' BATTERY INSTALLATION	268802-04
GPSLR 30' BATTERY INSTALLATION	268802-05
CYCLE COUNTER KIT	
CYCLE COUNTER, GPSLR	268466-01
TOUCH-UP PAINT KIT	
TOUCH-UP PAINT (BCG) WITH ALUMINUM PRIMER, SMALL	908134-01

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