M-18-08 SEPTEMBER 2020 REV A

GPSLR Series

INSTALLATION MANUAL

GPSLR-35, GPSLR-44 & GPSLR-55 GPSLRT-35, GPSLRT-44 & GPSLRT-55

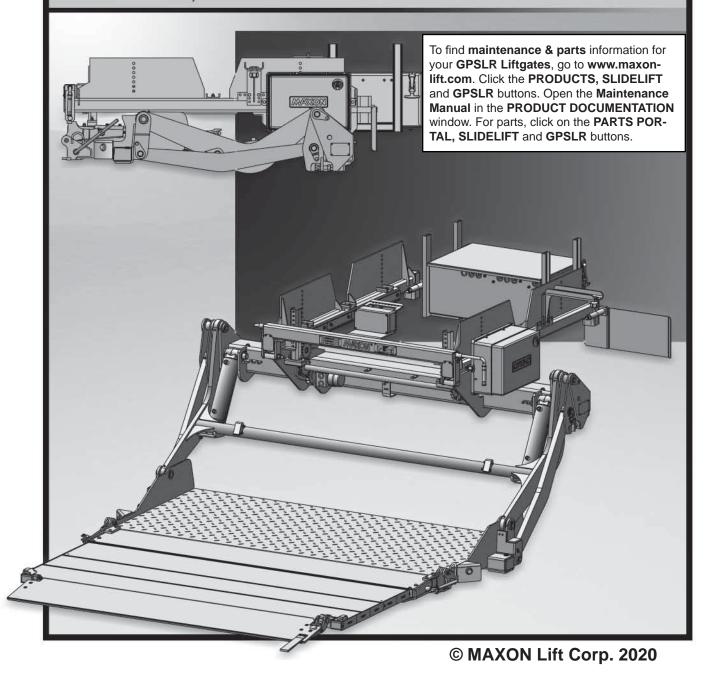


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SUMMARY OF CHANGES: M-18-08, REVISION A

PAGE	DESCRIPTION OF CHANGE		
COVER	Updated REV. and date of release.		
5	Added California Proposition 65 WARNING.		
49, 51, 52	49, 51, 52 Changed torque value for platform adjustment bolt to 100 lb-ft.		
59 CAUTION decals were updated to show commonized GPSLR liftgate.			
61	Parts decal with QR code was added for commonized GPSLR liftgate.		

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

WARNING

Installing and maintaining a liftgate can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, install and maintain liftgate in a well-ventilated area and wear proper Personal protective equipment (PPE). For more information go to www.P65Warnings.ca.gov.

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.
- Remove all rings, watches and jewelry before doing any electrical work.
- 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.
- Recommended practices for welding galvanized steel are contained in the current AWS (American Welding Society) D19.0 Welding Zinc-Coated Steel. Damage to Liftgate and/or vehicle, and personal injury can result from welds that are done incorrectly.

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.

- 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.

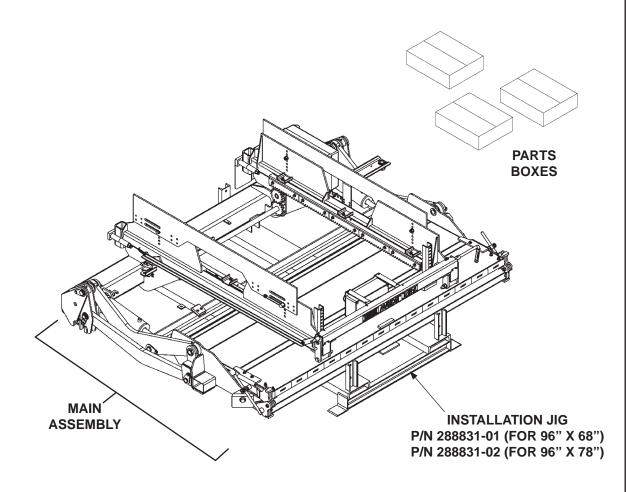
STANDARD LIFTGATE COMPONENTS

A CAUTION

Unpacking the Liftgate on unlevel surface may allow heavy components to slide off when shipping bands are cut. Injury and equipment damage could result. Before the shipping bands are cut, put Liftgate on level surface that will support 1750 lbs. When unpacking the Liftgate, remove heavy components carefully to avoid injury and damage.

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:

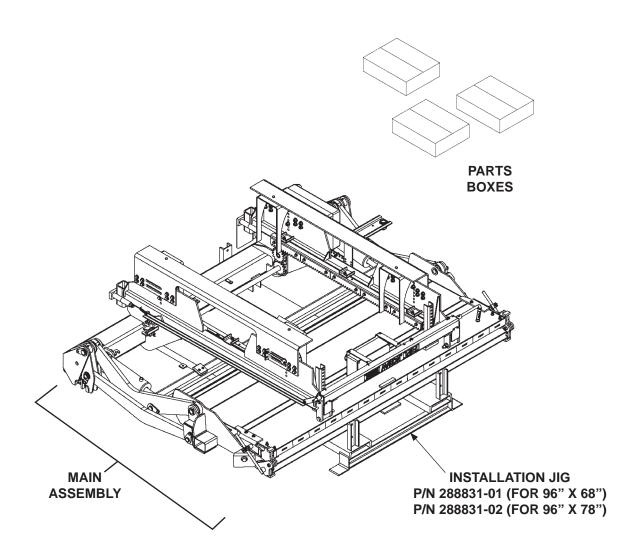
Maxon Customer Service
Call (800) 227-4116 or
Send e-mail to cservice@maxonlift.com



GPSLR TRUCK/TRAILER REAR MOUNT LIFTGATE COMPONENTS FOR SHIPMENT (OPTIONAL COMPONENTS NOT SHOWN)

FIG. 7-1

STANDARD LIFTGATE COMPONENTS - Continued



GPSLRT TRUCK REAR MOUNT LIFTGATE COMPONENTS FOR SHIPMENT (OPTIONAL COMPONENTS NOT SHOWN)
FIG. 8-1

GPSLR INSTALLATION PARTS BOX

	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
REF	GPSLR INSTALLATION PARTS BOX	1	289259-01
1	GUSSET, GPSLR MOUNT	12	268674-01
2	PLATE, GPSLR SUPPORT	12	268675-01
3	PLATE, GPSLR MOUNT	12	268676-01

INSTALLATION ON CROSSMEMBER TABLE 9-1

	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
REF	GPSLR INSTALLATION PARTS BOX	1	289259-02
1	GUSSET, GPSLR MOUNT	12	268674-01

INSTALLATION ON 48-1/8" SLIDE RAIL TABLE 9-2

	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
REF	GPSLR INSTALLATION PARTS BOX	1	289259-03
1	GUSSET, GPSLR MOUNT	12	268674-01
2	FLAT, 1/4" X 3-1/2" X 20" LG.	4	090148-10

INSTALLATION ON 48-5/8" SLIDE RAIL TABLE 9-3

GPSLRT PARTS BOX (TRUCK REAR MOUNT)

	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
REF	PARTS BOX, SLIDER	1	289101-01
1	HEX FRAME BOLT 1/2"-13 X 1-1/2" LG.	16	901024-5
2	FLAT WASHER, 1/2"	16	902013-13
3	FLANGE LOCK NUT, GRADE G	16	901023
4	MAIN CONTROL SWITCH	1	289001-01
5	CONTROL SWITCH MOUNTING BRACKET	1	289134-01G
6	BUTTON SCREW, 1/4"-20 X 1" LG.	2	900719-07
7	NYLON INSERT STOP NUT, 1/4"-20	2	903137-01
8	FLAT WASHER, 1/4"	2	903412-01
9	CONTROL SWITCH ASSEMBLY	1	289353-01
10	DECAL SHEET, UP/DOWN	1	299038-01
11	INTERNAL SWITCH MOUNTING BRACKET, GALVANIZED	1	289255-01G
12	SELF TAPPING SCREW,10-24 X 1/2" LG.	4	900766-02
13	FLAT WASHER, #10	6	903444-01
14	BUTTON SCREW, 10-24 X 1-1/2" LG.	2	900722-09
15	NYLON INSERT NUT, THIN, 10-24	2	903129-01
16	CABLE TIE, SCREW MOUNT, 1-1/2" DIA.	5	905398-01
17	SELF-DRILLING SCREW, #6-20	5	900818-01
18	STOW FLASHING LIGHT KIT, 40'	1	289355-01
19	SAFETY STOW CHAIN, GPSLR	1	287132-01
20	FUSE HOLDER ASSEMBLY, 10 AMP, 3/8" RING	1	285013-04
21	CIRCUIT BREAKER KIT, 175 AMPS, 30 VDC	1	289723-01
22	PLASTIC TIE, 7" LG.	20	205780

TABLE 10-1

MAXON[®] 11921 Slauson Ave.

GPSLR PARTS BOX (TRAILER REAR MOUNT)

	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
REF	PARTS BOX, SLIDER	1	289101-02
1	HEX FRAME BOLT 1/2"-13 X 1-1/2" LG.	16	901024-5
2	FLAT WASHER, 1/2"	16	902013-13
3	FLANGE LOCK NUT, GRADE G	16	901023
4	MAIN CONTROL SWITCH	1	289001-01
5	CONTROL SWITCH MOUNTING BRACKET	1	289134-01G
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13	FLAT WASHER, #10	6	903444-01
14	BUTTON SCREW, 10-24 X 1-1/2" LG.	2	900722-09
15	NYLON INSERT NUT, THIN, 10-24	2	903129-01
16	CABLE TIE, SCREW MOUNT, 1-1/2" DIA.	5	905398-01
17	SELF-DRILLING SCREW, #6-20	5	900818-01
18	STOW FLASHING LIGHT KIT, 60'	1	289355-02
19	SAFETY STOW CHAIN, GPSLR	1	287132-01
20	FUSE HOLDER ASSEMBLY, 10 AMP, 3/8" RING	1	285013-04
21	CIRCUIT BREAKER KIT, 175 AMPS, 30 VDC	1	289723-01
22	PLASTIC TIE, 7" LG.	20	205780

TABLE 11-1

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:

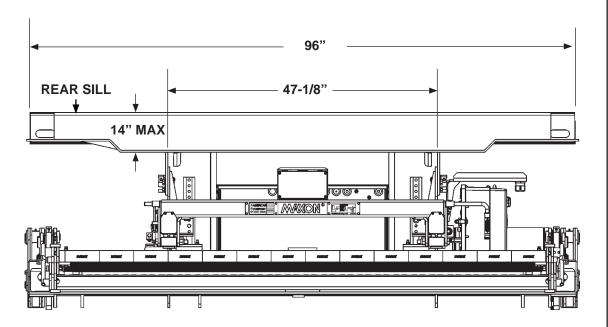
Maximum height is **60**" (Unloaded). Minimum height is **46**" (Loaded). On vehicle bodies equipped with swing-open doors, the platform may have to be modified to install this Liftgate.

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 INSTALLATION **PLATE** procedure in this manual.

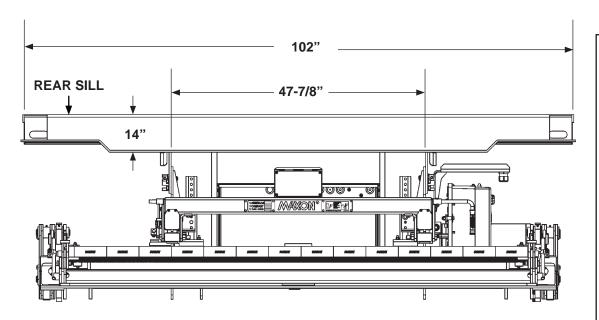
Check for correct clearances (FIGS. 14-1, 14-2, 15-1 and 15-2) on vehicle to prevent interference between vehicle and Liftgate.

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



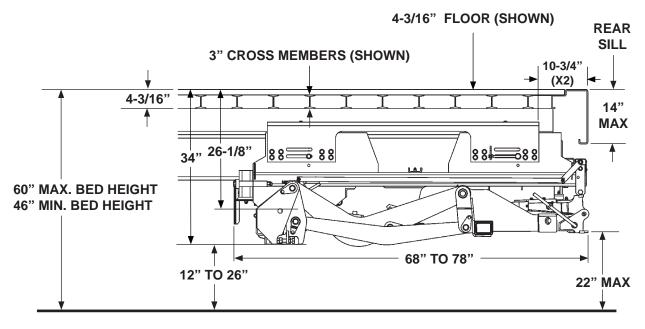
OVERALL WIDTH OF GPSLR LIFTGATE & MOUNTING FRAME FOR 96" WIDE VEHICLE FIG. 12-1

VEHICLE REQUIREMENTS - Continued

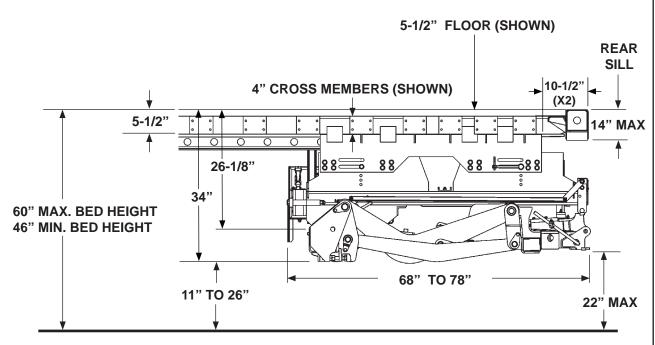


OVERALL WIDTH OF GPSLR LIFTGATE & MOUNTING FRAME FOR 102" WIDE VEHICLE FIG. 13-1

VEHICLE REQUIREMENTS - Continued



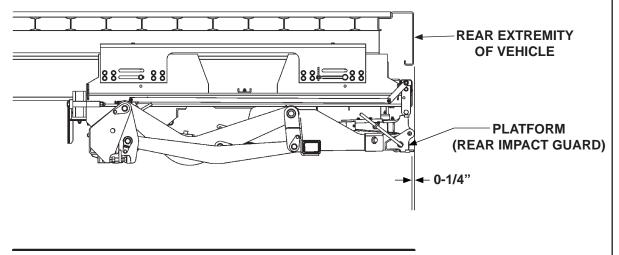
CLEARANCES FOR GPSLR WITH 68" TO 78" SLIDE RAILS (TRUCK) FIG. 14-1



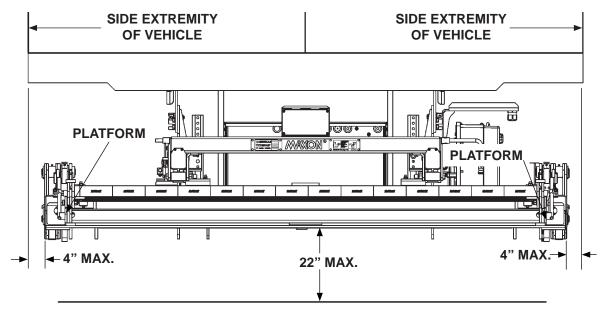
CLEARANCES FOR GPSLR WITH 68"-78" SLIDE RAILS (TRAILER) FIG. 14-2

VEHICLE REQUIREMENTS - Continued REAR IMPACT GUARD

NOTE: The stowed GPSLR platform functions as a rear impact guard for vehicle. To comply with current Canadian Motor Vehicle Safety Standards (CMVSS 223), the rear impact guard must be within the rear-end, side, and ground clearances shown in FIGS. 15-1 & 15-2.



REQUIRED REAR-END CLEARANCES OF REAR IMPACT GUARD FIG. 15-1



REQUIRED GROUND & SIDE CLEARANCES OF REAR IMPACT GUARD FIG. 15-2

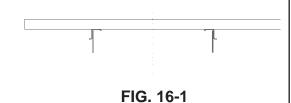
90670 (800) 227-4116 FAX (888) 771-7713 Santa Fe Springs, CA. ALXON[®] 11921 Slauson Ave.

STEP 1 - CHOOSE METHOD OF INSTALLATION

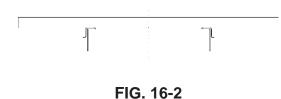
Four methods for mounting a GPSLR Liftgate on a truck or trailer chassis are covered in this manual. Method 1 is the preferred standard method of installation.

INSTALLATION ON REAR OF TRAILER

METHOD 1 - For mounting installation plates flush against slide rail (FIG. 16-1) using gussets (Kit Items) supporting slide rail, refer to WELDING INSTALLATION PLATES TO TRAILER, METHOD 1 instructions in STEP 2.



METHOD 2 - For mounting installation plates on inside slide rail (FIG. 16-2) using 1/4" spacers (Kit items) and gussets (Kit items) supporting slide rail, refer to WELDING INSTALLATION PLATES TO TRAILER, METHOD 2 instructions in STEP 2.



METHOD 3 - For mounting installation plates on crossmembers (FIG. 16-3) using gussets (Kit items) supporting slide rail, refer to WELDING INSTALLATION PLATES TO TRAILER, METHOD 3 instructions in STEP 2.



FIG. 16-3

INSTALLATION ON REAR OF TRUCK

METHOD 4 - For mounting installation plates to vehicle chassis (FIG. 16-4), refer to WELDING INSTALLATION PLATES TO TRUCK BODY, METHOD 4 instructions in STEP 2.

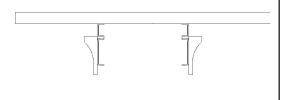


FIG. 16-4

STEP 2 - WELD LIFTGATE ON VEHICLE

A WARNING

Use weld blankets to protect lines and tubes from weld splatter.

WARNING

Welding on galvanized parts gives off especially hazardous fumes. To minimize hazard remove galvanizing from weld area, provide adequate ventilation, and wear suitable respirator.

A CAUTION

To avoid personal injury, use at least 2 people to position Liftgate.

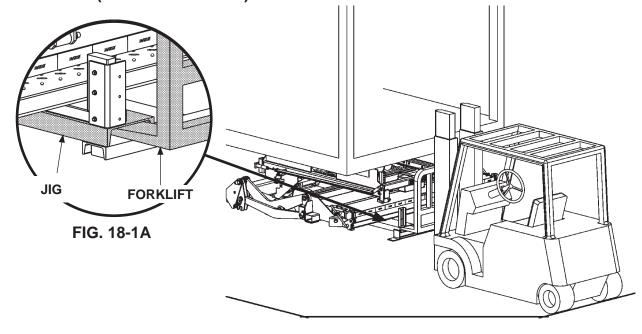
NOTE: For installation of this Liftgate, the maximum distance from bottom of trailer cross members to top of trailer floor is 10-1/2" max.

NOTE: Liftgate must be welded to at least 6 fixed trailer crossmembers that are typically spaced 12" between centers.

NOTE: Ideal installation is for edge of platform to be aligned with rear door opening.

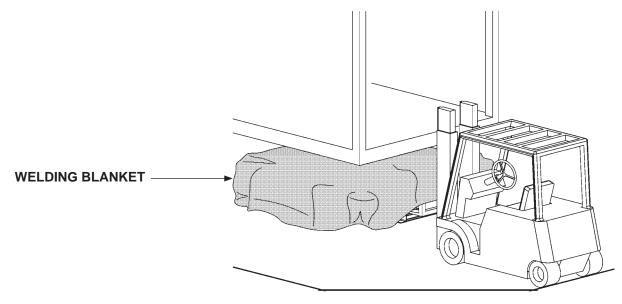
NOTE: Switches, stow mechanism, latch release handle and platform latch may be located on either side of the Liftgate during installation, depending on location of trailer door hinges.

1. With forklift, position the Liftgate centered to the rear of vehicle (FIGS. 18-1 & 18-1A).



POSITIONING LIFTGATE TO VEHICLE FIG. 18-1

2. Cover Liftgate with welding blanket (FIG. 18-2).

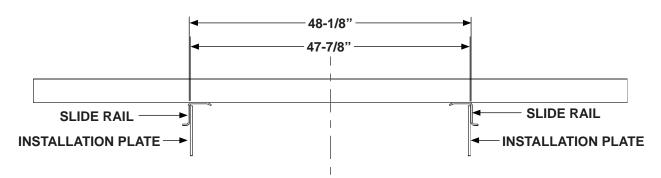


COVERING LIFTGATE WITH WEDLING BLANKET FIG. 18-2

METHOD 1 - WELDING INSTALLATION PLATES FLUSH TO TRAILER SLIDE RAIL

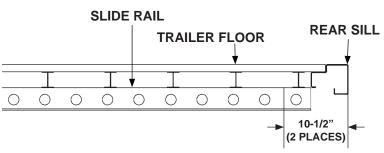
NOTE: Method 1 instructions are intended for mounting Liftgate installation plates (Kit items), on a trailer, flush against slide rail using supporting gussets (Kit items). Reference FIG. 19-1.

NOTE: Although installation plates are attached to Liftgate, for clarity, Liftgate is not shown on following images.



INSTALLING INSTALLATION PLATES FLUSH AGAINST SLIDE RAIL FIG. 19-1

1. Mark position for placement of installation plates on trailer frame as shown in FIG. 19-2.



MARKING POSITION FOR INSTALLATION PLATES FIG. 19-2

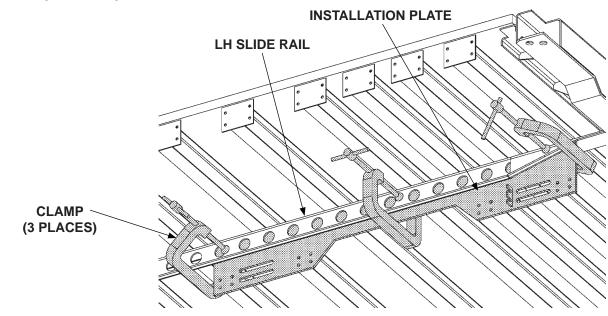
STEP 2 - WELD LIFTGATE ON VEHICLE - Continued **METHOD 1 - WELDING INSTALLATION PLATES FLUSH TO**

TRAILER SLIDE RAIL - Continued

A CAUTION

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

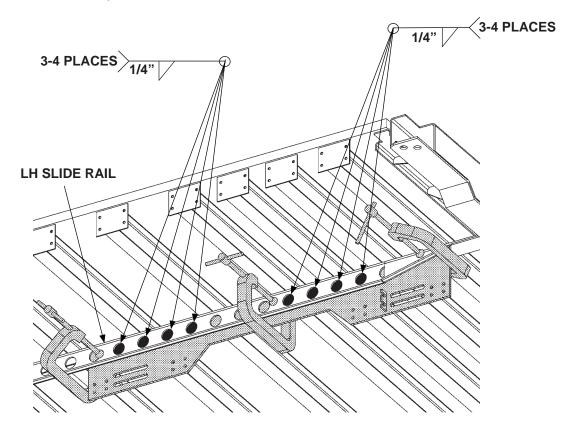
2. Line up end of LH installation plate with the position mark on the slide rail. Clamp installation plate to LH slide rail (FIG. 20-1).



CLAMPING INSTALLATION PLATE TO SLIDE RAIL FIG. 20-1

METHOD 1 - WELDING INSTALLATION PLATES FLUSH TO TRAILER SLIDE RAIL - Continued

3. Weld LH installation plate to slide rail as shown in **FIG. 21-1**.

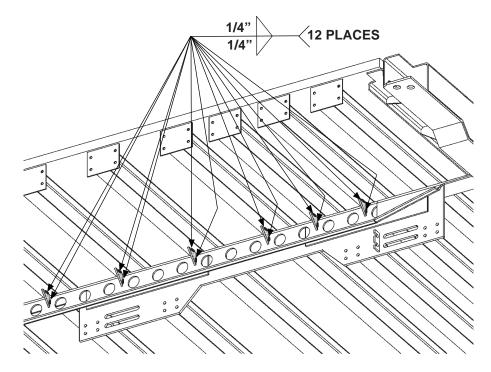


WELDING INSTALLATION PLATE TO SLIDE RAIL FIG. 21-1

4. Remove clamps.

METHOD 1 - WELDING INSTALLATION PLATES FLUSH TO TRAILER SLIDE RAIL - Continued

5. Weld installation gussets (Kit items) to LH slide rail and crossmembers as shown in **FIG. 22-1**.

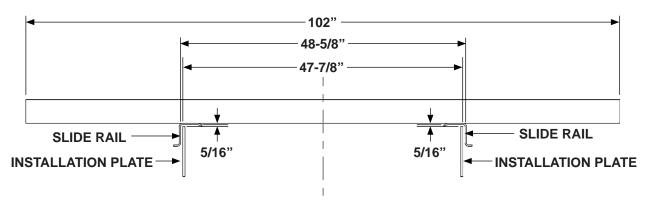


WELDING INSTALLATION GUSSETS TO SLIDE RAIL AND CROSSMEMBERS FIG. 22-1

6. Repeat instructions 1-5 for RH installation plate.

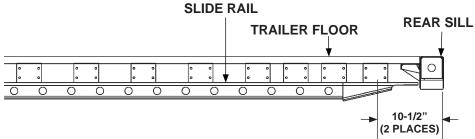
METHOD 2 - WELDING INSTALLATION PLATES TO TRAILER SLIDE RAIL USING 1/4" SPACERS

NOTE: Method 2 instructions are intended for mounting installation plates (Kit items) using 1/4" spacers (Kit items) and slide rail supporting gussets (Kit items) on a trailer. Reference FIG. 23-1.



INSTALLING INSTALLATION PLATES USING 1/4" SPACERS FIG. 23-1

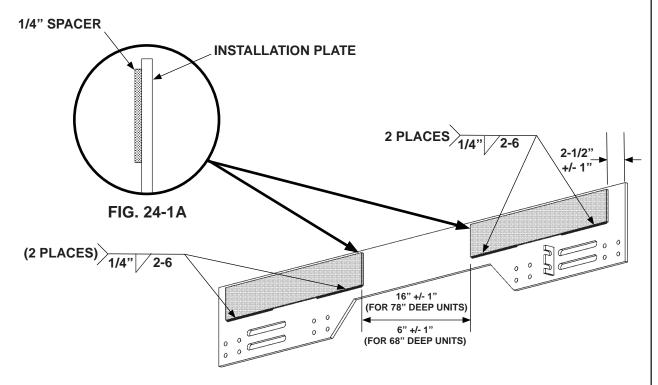
1. Mark position for placement of installation plates on trailer frame as shown in FIG. 23-2.



MARKING POSITION FOR INSTALLATION PLATES FIG. 23-2

METHOD 2 - WELDING INSTALLATION PLATES TO TRAILER SLIDE RAIL USING 1/4" SPACERS - Continued

2. Measure, position and weld 1/4" spacer to outside of LH installation plate as shown in FIGS. 24-1 and 24-1A.



WELDING FLAT SPACER TO INSTALLATION PLATE FIG. 24-1

POSITION MARK

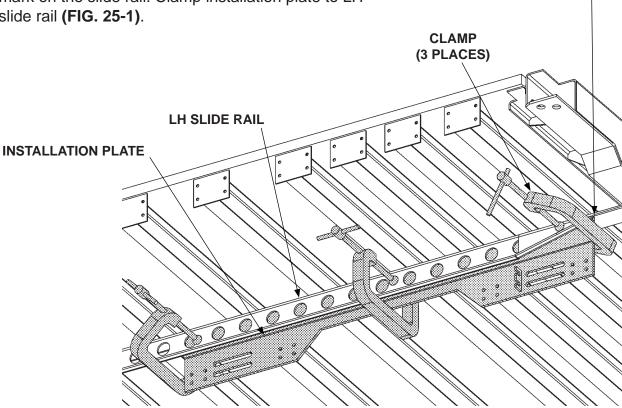
STEP 2 - WELD LIFTGATE ON VEHICLE - Continued

METHOD 2 - WELDING INSTALLATION PLATES TO TRAILER SLIDE RAIL USING 1/4" SPACERS - Continued

A CAUTION

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

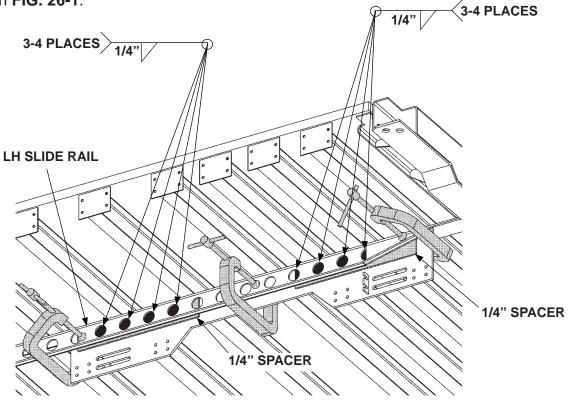
3. Line up end of LH installation plate with the position mark on the slide rail. Clamp installation plate to LH slide rail (FIG. 25-1).



CLAMPING INSTALLATION PLATE TO SLIDE RAIL FIG. 25-1

METHOD 2 - WELDING INSTALLATION PLATES TO TRAILER SLIDE RAIL USING 1/4" SPACERS - Continued

4. Weld LH installation plate to slide rail as shown in **FIG. 26-1**.

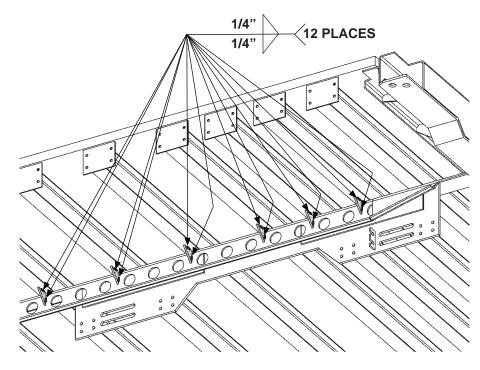


WELDING INSTALLATION PLATE AND SPACER TO SLIDE RAIL FIG. 26-1

5. Remove clamps.

METHOD 2 - WELDING INSTALLATION PLATES TO TRAILER SLIDE RAIL USING 1/4" SPACERS - Continued

6. Weld installation gussets (Kit items) to LH slide rail and crossmembers as shown in **FIG. 27-1**.

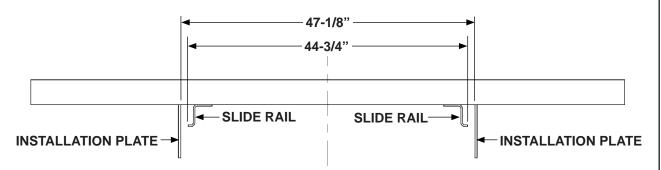


WELDING INSTALLATION GUSSETS TO SLIDE RAIL AND CROSSMEMBERS FIG. 27-1

7. Repeat instructions 1-6 for RH installation plate.

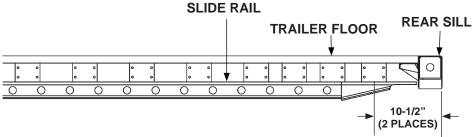
METHOD 3 - WELDING INSTALLATION PLATES TO TRAILER CROSSMEMBERS

NOTE: Method 3 instructions are intended for mounting installation plates (Kit items) on trailer crossmembers using supporting gussets and installation plates (Kit items). Reference FIG. 28-1.



INSTALLING INSTALLATION PLATES ON TRAILER CROSSMEMBERS FIG. 28-1

1. Mark position for placement of installation plate on trailer crossmember as shown in FIG. 28-2.

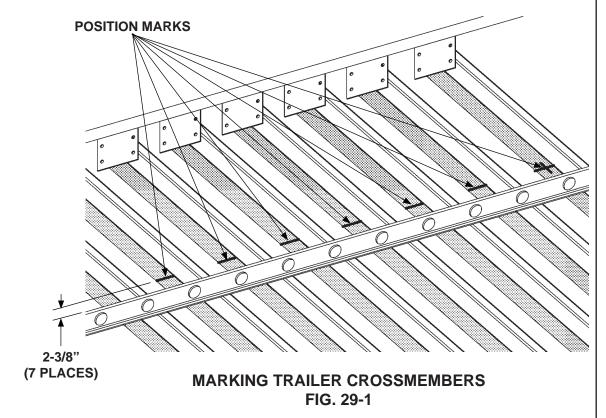


MARKING POSITION FOR INSTALLATION PLATES FIG. 28-2

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METHOD 3 - WELDING INSTALLATION PLATES TO TRAILER CROSSMEMBERS - Continued

2. Mark trailer crossmembers as shown in FIG. 29-1.

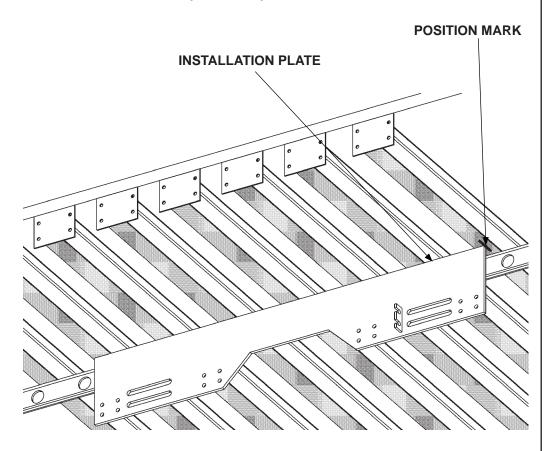


METHOD 3 - WELDING INSTALLATION PLATES TO TRAILER CROSSMEMBERS - Continued

A CAUTION

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

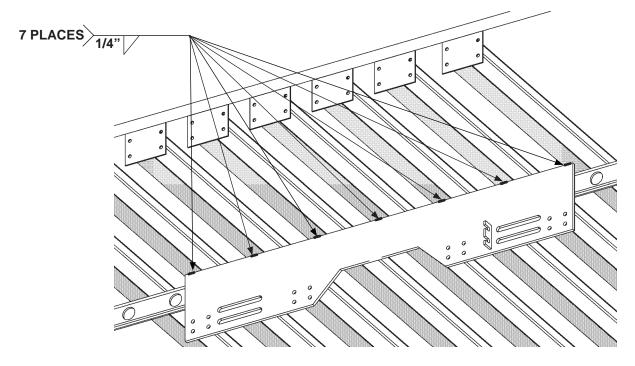
3. Ensure end of LH installation plate is aligned with the first position mark on the crossmember (FIG. 30-1).



POSITIONING INSTALLATION PLATE TO CROSSMEMBERS FIG. 30-1

METHOD 3 - WELDING INSTALLATION PLATES TO TRAILER CROSSMEMBERS - Continued

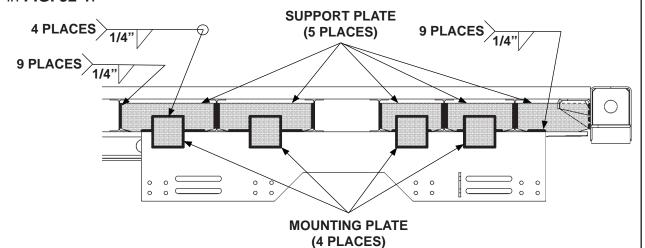
4. Tack weld installation plate to crossmembers as shown in **FIG. 31-1**.



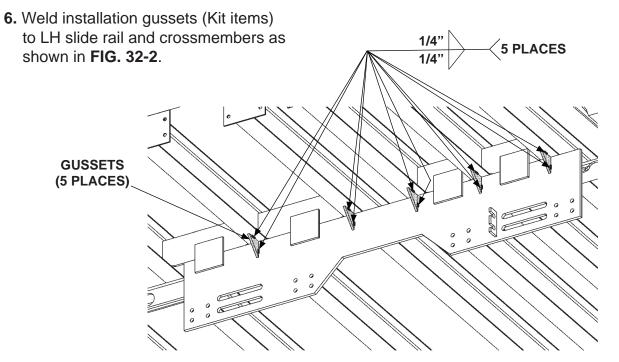
TACK WELDING INSTALLATION PLATE TO CROSSMEMBERS FIG. 31-1

METHOD 3 - WELDING INSTALLATION PLATES TO TRAILER CROSSMEMBERS - Continued

5. Weld installation support plates and mounting gussets (Kit items) to LH slide rail and crossmembers as shown in FIG. 32-1.



WELDING INSTALLATION PLATE TO CROSSMEMBERS FIG. 32-1

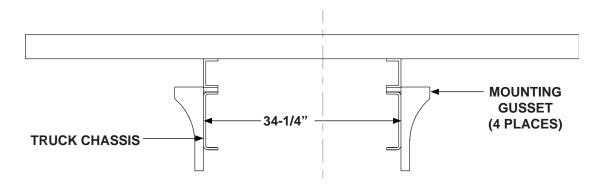


WELDING INSTALLATION GUSSETS TO INSTALLATION PLATE **AND CROSSMEMBERS** FIG. 32-2

7. Repeat instructions 1-6 for RH installation plate.

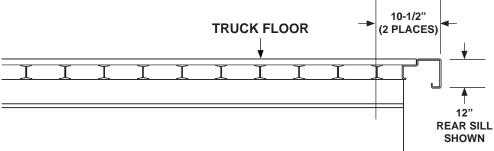
STEP 2 - WELD LIFTGATE ON VEHICLE - Continued **METHOD 4 - WELDING INSTALLATION PLATES TO TRUCK CHASSIS**

NOTE: Method 4 instructions are intended for mounting installation plates (Kit items) on truck chassis. Reference FIG. 33-1.



INSTALLING INSTALLATION PLATES TO TRUCK CHASSIS FIG. 33-1

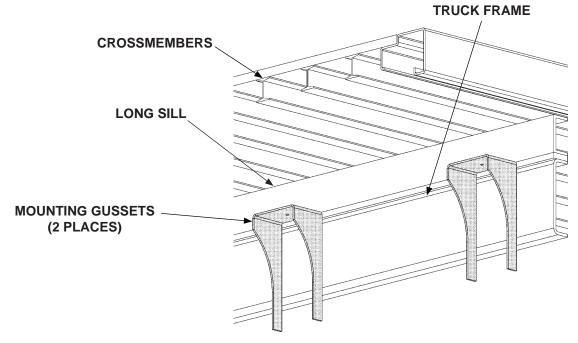
1. Mark position for placement of installation plate on truck chassis as shown in FIG. 33-2.



MARKING POSITION FOR INSTALLATION PLATES FIG. 33-2

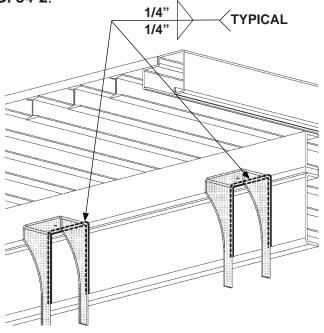
METHOD 4 - WELDING INSTALLATION PLATES TO TRUCK CHASSIS - Continued

2. Ensure liftgate mounting gussets aligned with marks from previous instruction (**FIG. 34-1**).



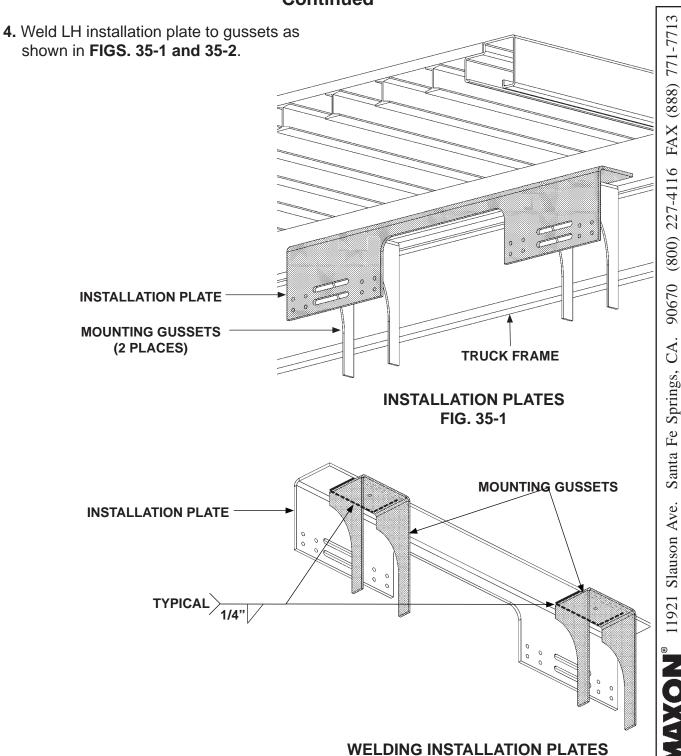
ALIGNING MOUNTING GUSSETS FIG. 34-1

3. Weld installation gussets as shown in FIG. 34-2.



WELDING MOUNTING GUSSETS FIG. 34-2

METHOD 4 - WELDING INSTALLATION PLATES TO TRUCK CHASSIS - Continued



5. Repeat instructions 1- 4 for RH installation plate.

FIG. 35-2

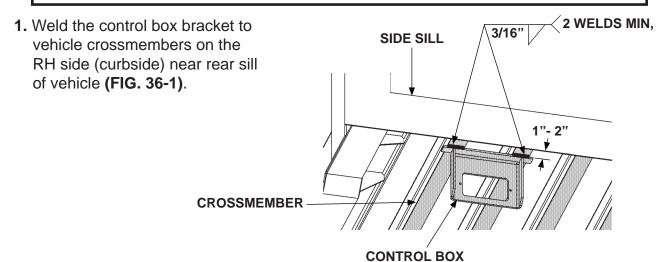
STEP 3 - ATTACH CONTROL SWITCHES

CAUTION

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

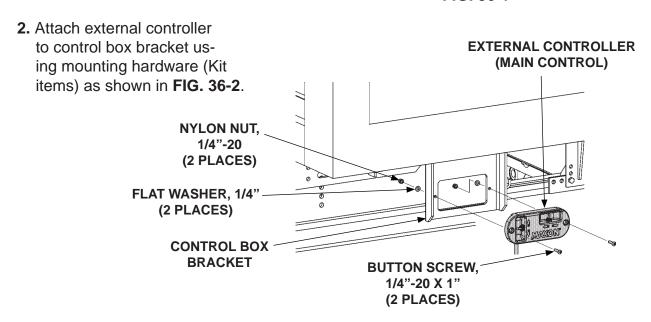
CAUTION

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

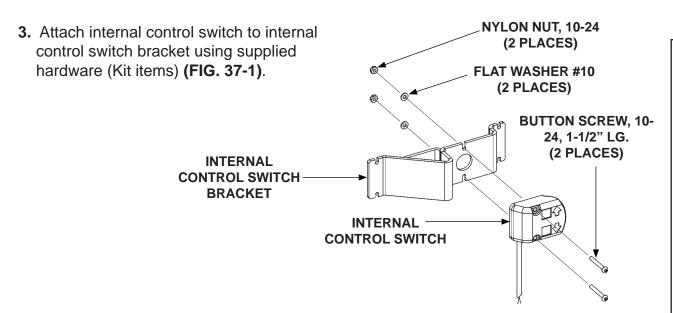


WELDING BRACKET TO CROSSMEMBERS (JOYSTICK EXTERNAL CONTROLLER) FIG. 36-1

BRACKET

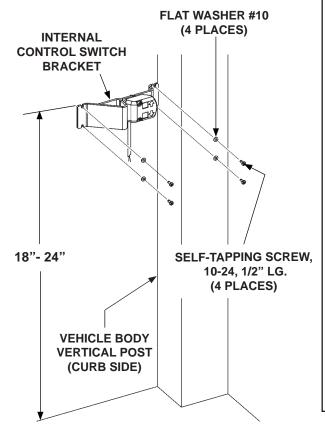


WELDING BRACKET TO CROSSMEMBERS (EXTERNAL CONTROLLER) FIG. 36-2



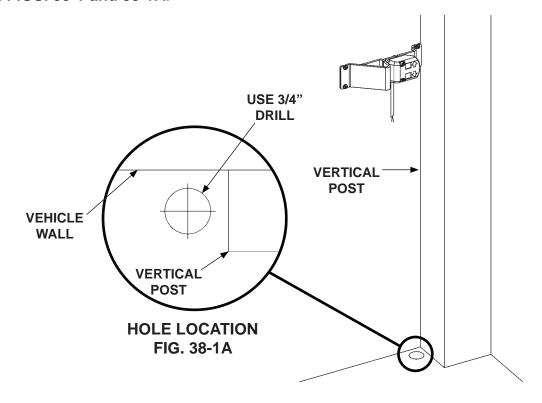
BOLTING INTERNAL CONTROL SWITCH TO BRACKET FIG. 37-1

4. Use internal control switch bracket to mark and drill 4 holes for mounting next to vertical post (curb side). Bolt internal control bracket to vehicle body with self-tapping screws (FIG. 37-2).



BOLTING INTERNAL SWITCH BRACKET TO VEHICLE BODY FIG. 37-2

5. Drill 3/4" hole through vehicle floor as shown in **FIGS. 38-1 and 38-1A**.

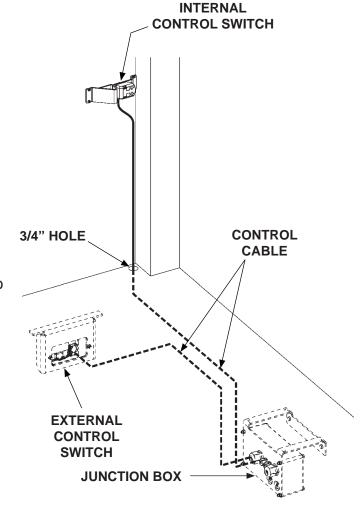


HOLE DRILLED FOR WIRING FIG. 38-1

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STEP 3 - ATTACH CONTROL SWITCHES - Continued

6. Run control cable from junction box, under vehicle body (see dashed line, (FIG. 39-1), and up through vehicle floor. Pull control cable through 3/4" hole (FIG. 39-1).

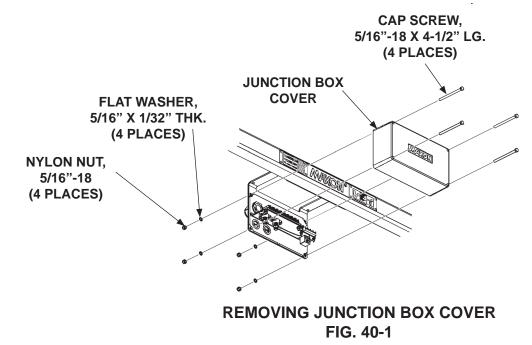


7. Run the internal control switch cable to the junction box (FIG. 39-1).

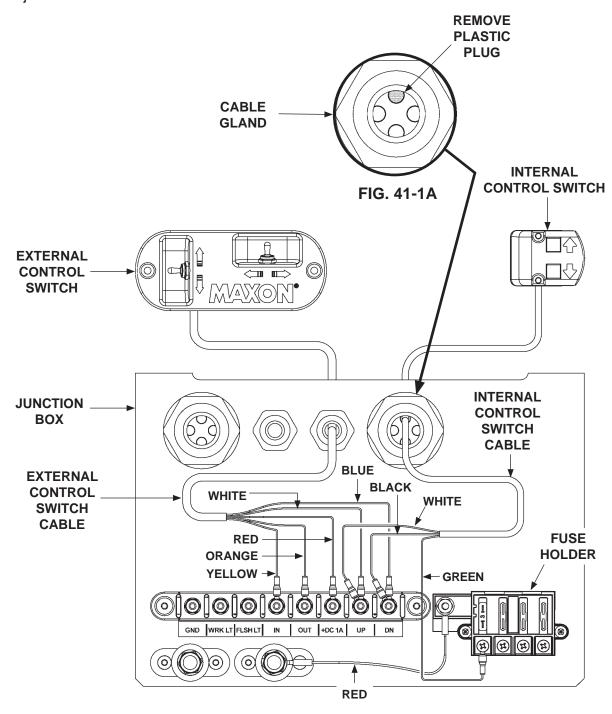
ROUTING CONTROL SWITCH CABLES FIG. 39-1

8. Run the external control switch cable to the junction box (FIG. 39-1).

9. Remove junction box cover as shown in FIG. 40-1.

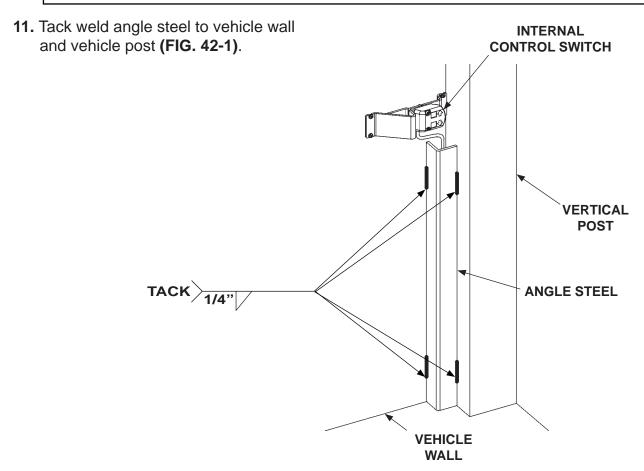


10. Knock out plastic plug from the cable gland as shown in FIG. 41-1A. Next, connect switches (Kit items) to junction box as shown in FIG. 41-1.



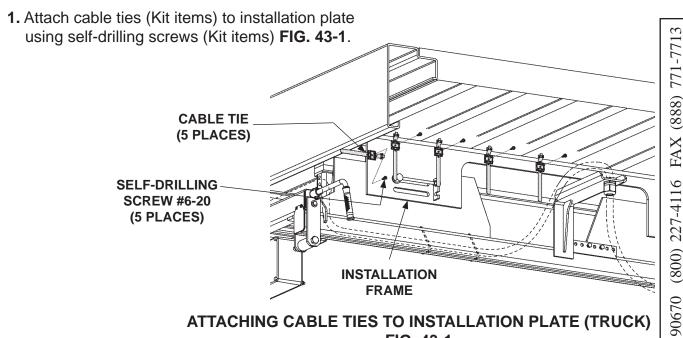
ELECTRICAL HARNESS CONNECTIONS AT JUNCTION BOX FIG. 41-1

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.



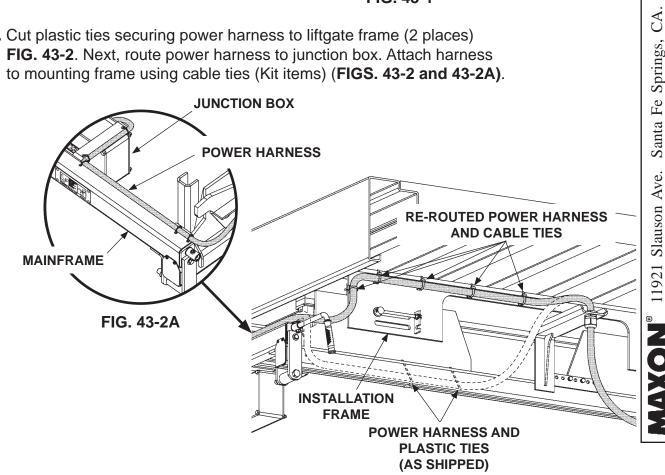
WELDING ANGLE STEEL FIG. 42-1

STEP 4 - CONNECT POWER HARNESS TO JUNCTION BOX



ATTACHING CABLE TIES TO INSTALLATION PLATE (TRUCK) FIG. 43-1

2. Cut plastic ties securing power harness to liftgate frame (2 places) FIG. 43-2. Next, route power harness to junction box. Attach harness to mounting frame using cable ties (Kit items) (FIGS. 43-2 and 43-2A).



RE-ROUTING POWER HARNESS (TRUCK) FIG. 43-2

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STEP 4 - CONNECT POWER HARNESS TO JUNCTION BOX- Continued

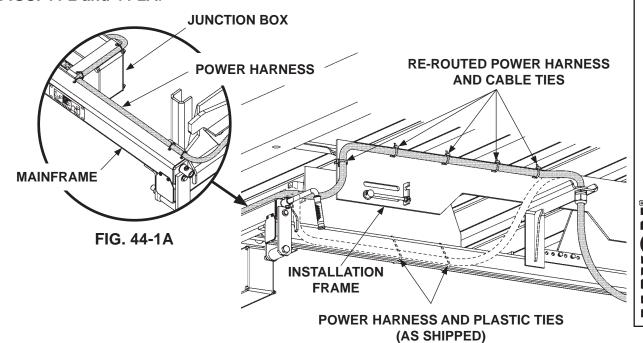
3. Attach cable ties (Kit items) to installation plate using self-drilling screws (Kit items) FIG. 44-1.

CABLE TIE (5 PLACES)

INSTALLATION FRAME

ATTACHING CABLE TIES TO INSTALLATION PLATE (TRAILER) FIG. 44-1

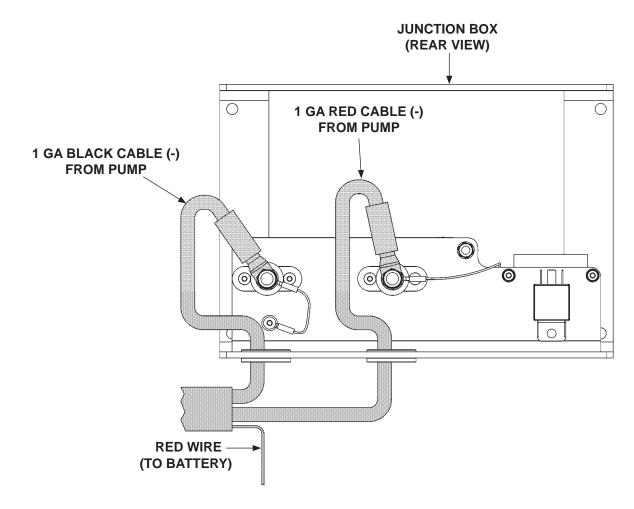
4. Cut plastic ties securing power harness to liftgate frame (2 places) **FIG. 44-2**. Next, route power harness to junction box. Attach harness to mounting frame using cable ties (Kit items) **FIGS. 44-2 and 44-2A**.



RE-ROUTING POWER HARNESS (TRAILER) FIG. 44-2

STEP 4 - CONNECT POWER HARNESS TO JUNCTION **BOX-Continued**

5. Connect power (+) and ground (-) cables from pump box to junction box as shown in FIG. 45-1.



CONNECTING POWER & GROUND FROM PUMP BOX AT JUNCTION BOX FIG. 45-1

STEP 5 - RUN POWER CABLE

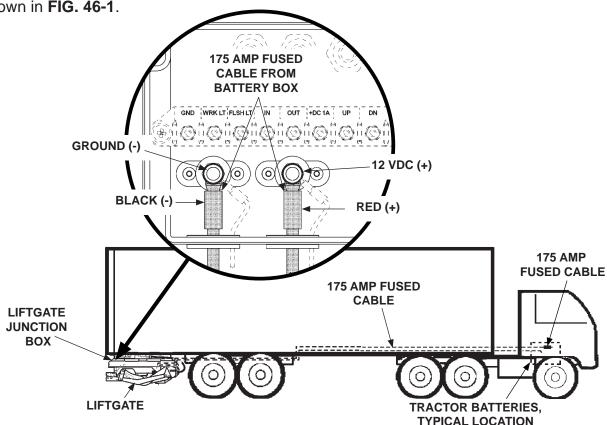
A CAUTION

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. 46-1.

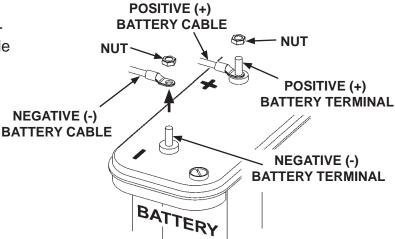


RECOMMENDED LIFTGATE & OPTIONAL BATTERY BOX INSTALLATION ON TRAILER FIG. 46-1

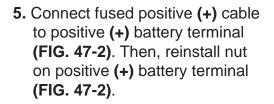
2. Position fuse-end of red (+) cable with fuse nearest the tractor batteries, as shown in FIG. 46-1. Run black (-) cable from tractor batteries, as shown in FIG. 46-1. Keep enough cable near batteries to reach the positive (+) and (-) terminals without straining cables (after connection). Connect cables from battery to junction box. Secure power cable to vehicle chassis.

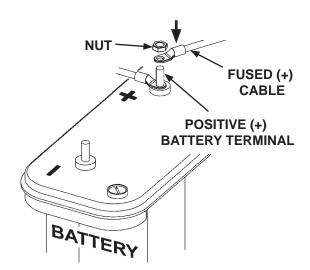
STEP 5 - RUN POWER CABLE - Continued

3. Remove nut from negative (-) battery terminal (FIG. 47-1). Disconnect negative (-) battery cable (FIG. 47-1).



- 4. Remove nut from positive (+) battery terminal (FIG. 47-1).
- **DISCONNECTING (-) BATTERY CABLE** FIG. 47-1





CONNECTING FUSED (+) CABLE FIG. 47-2

6. Reconnect negative (-) battery cable to negative (-) battery terminal (FIG. 47-3). Next, connect negative (-) cable to negative (-) battery terminal (FIG. 47-3). Then, reinstall nut on negative (-) battery terminal (FIG. 47-3).

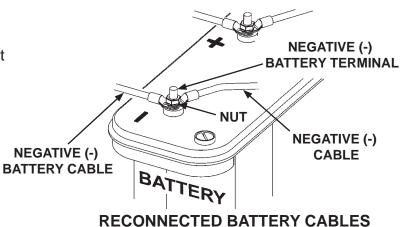


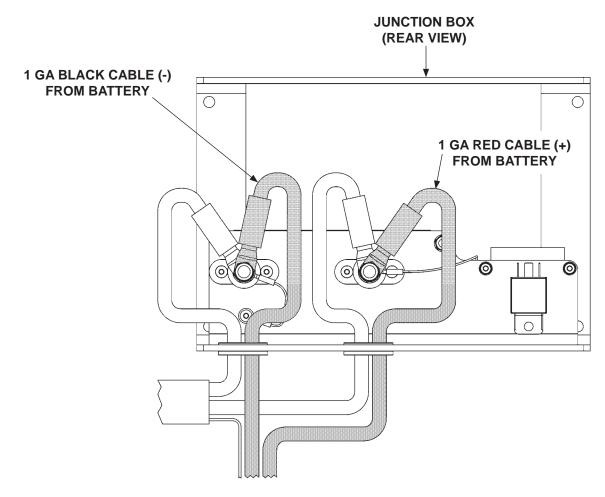
FIG. 47-3

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STEP 6 - CONNECTING POWER

1. Connect power (+) and ground (-) cables from battery to junction box as shown in FIG. 48-1.

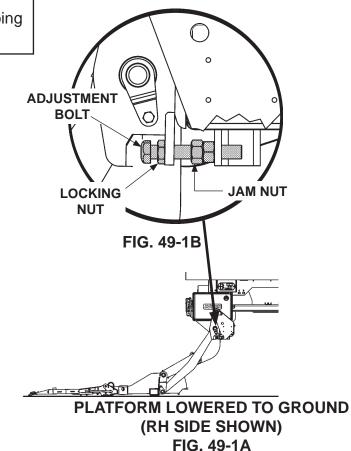


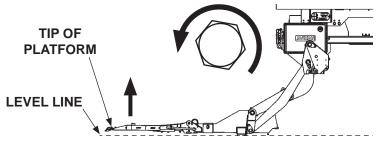
CONNECTING BATTERY POWER & GROUND AT JUNCTION BOX FIG. 48-1

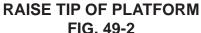
STEP 7 - PLATFORM ADJUSTMENT

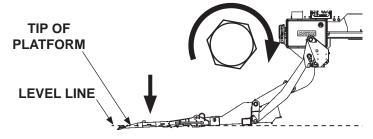
NOTE: Park vehicle on level ground and unload vehicle before doing this procedure.

- 1. Lower platform to ground and unfold flipover (FIG. 49-1A).
- 2. Loosen adjustment bolt jam nut and locking nut on both sides of platform (FIG. 49-1B).
- 3. To adjust platform level with ground, turn adjustment bolts counterclockwise to tilt the tip of platform up (FIG. 49-2), or turn clockwise to tilt down (FIG. 49-3).
- 4. Once platform is adjusted, tighten adjustment bolt jam nut and locking nut securely on both sides of platform (FIG. 49-1B). Torque jam nut 100 lb-ft.









LOWER TIP OF PLATFORM FIG. 49-3

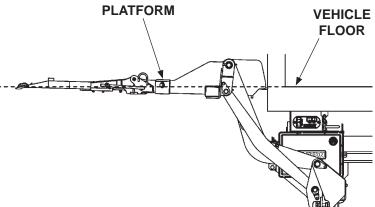
STEP 7 - PLATFORM ADJUSTMENT- Continued

CAUTION

Operate Liftgate with caution and no load until installation is complete.

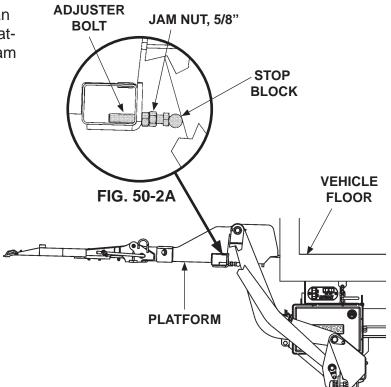
NOTE: Refer to Operating Instructions decal and applicable WARNING & **CAUTION** decals.

5. To adjust platform at bed height, raise platform to vehicle floor height (FIG. 50-1).



PLATFORM RAISED TO VEHICLE FLOOR FIG. 50-1

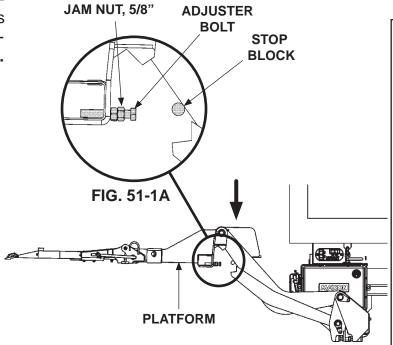
6. If platform is higher, or lower, than vehicle floor, adjust maximum platform height as follows. Loosen jam nut on platform adjuster bolt (FIGS. 50-2 and 50-2A). Turn adjuster bolt until it contacts the stop block (FIG. 50-2A).



ADJUSTING PLATFORM LEVEL WITH VEHICLE FLOOR FIG. 50-2

STEP 7 - PLATFORM ADJUSTMENT- Continued

7. Next, to access jam nut, lower platform approximately 12 to 15 inches and tighten jam nut on platform adjuster bolt (FIGS. 51-1 and 51-1A). Torque jam nut to 100 lb-ft. Raise platform to bed level.



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02906

Santa Fe Springs, CA.

11921 Slauson Ave.

TIGHTENING PLATFORM ADJUSTER BOLT FIG. 51-1

 Next, loosen jam nut on adjuster bolt (FIGS. 51-2 and 51-2A) and loosen rear bolts (FIG. 51-2B) on both installation plates on both sides.

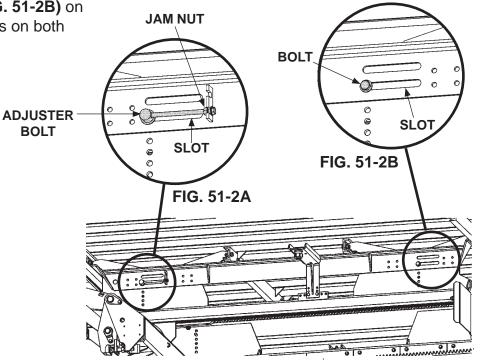


FIG. 51-2

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STEP 7 - PLATFORM ADJUSTMENT- Continued

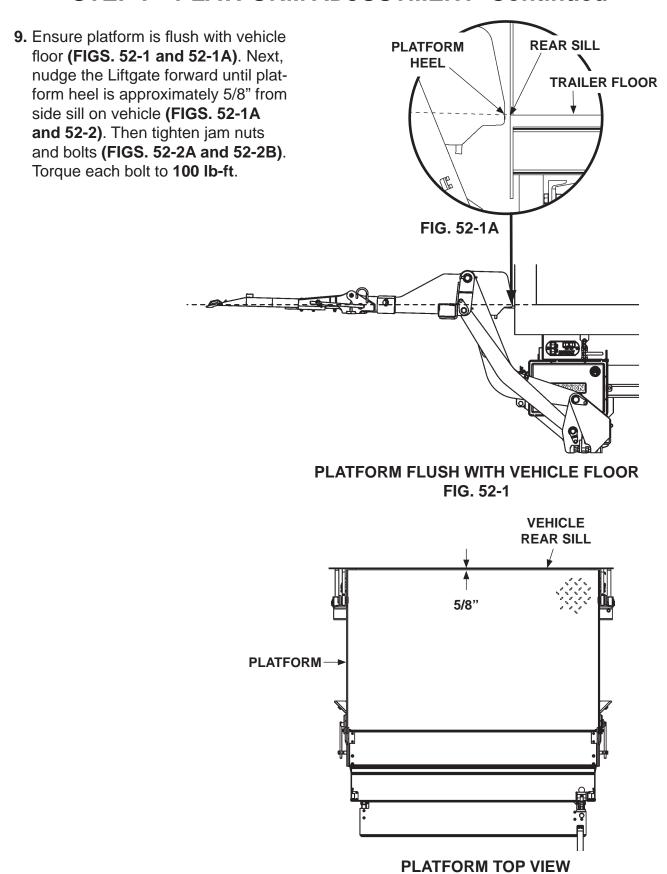


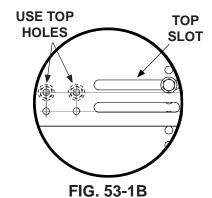
FIG. 52-2

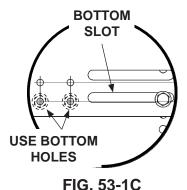
STEP 8 - FINAL BOLTING

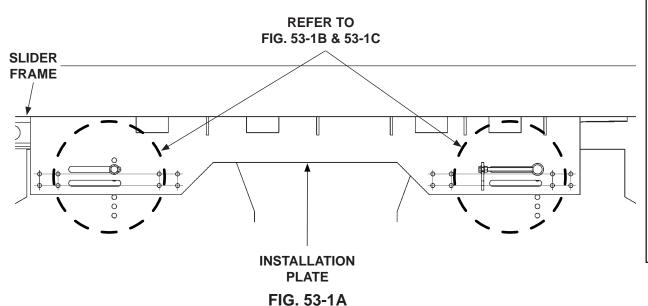
NOTE: Eight holes (min.) must be drilled through each side of the slider frame to bolt RH and LH side plates to slider frame on the Liftgate. (See FIGS. 53-1A, 53-1B, & 53-1C).

NOTE: If trailer interferes with bolts placed in top holes (FIG. 53-1B), the bottom holes can be used for bolting (FIG. 53-1C).

1. Use installation plate as a template to drill eight holes (1/2" dia.) in slider frame (FIG. 53-1A). Repeat for LH side.







STEP 8 - FINAL BOLTING - Continued

2. Bolt RH installation plate to slider frame as shown in FIG. 54-1. Repeat for LH side. Torque each bolt to 120 lb-ft.

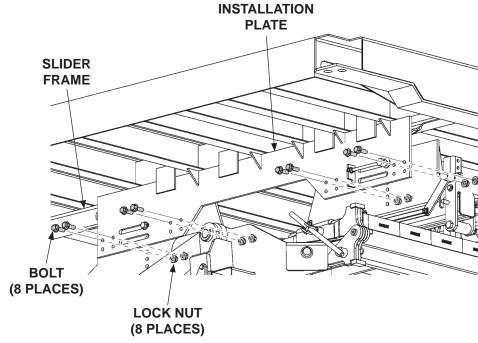


FIG. 54-1

STEP 9 - ATTACH SLIDING AXLE STOPS (IF REQUIRED)

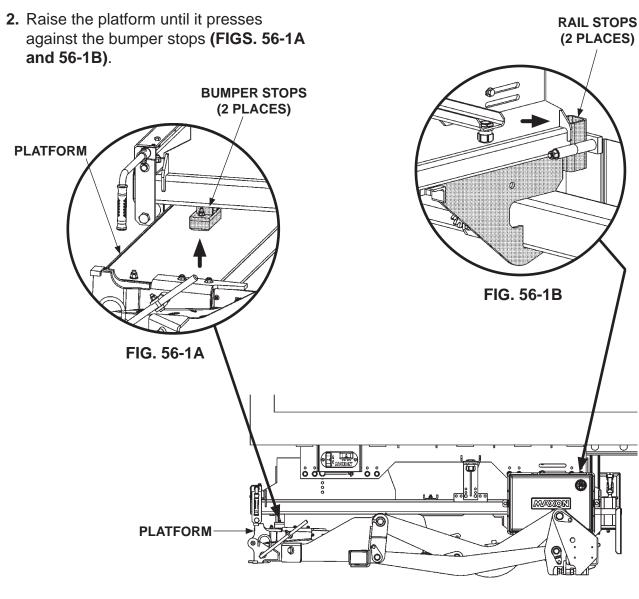
CAUTION

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 10 - ATTACH SAFETY CHAIN

1. Stow Liftgate all the way in until slide mechanism hits the rail stops (FIGS. 56-1 and 56-1B).

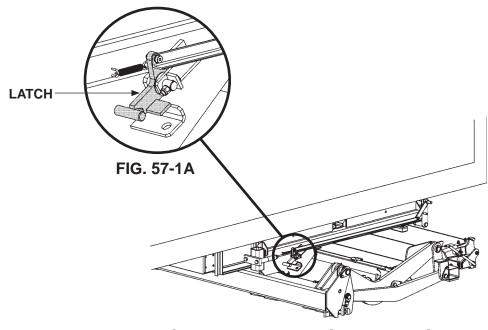


LIFTGATE IN STOWED POSITION FIG. 56-1

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STEP 10 - ATTACH SAFETY CHAIN - Continued

3. Ensure the latch is in locked position (FIGS. 57-1 and 57-1A).

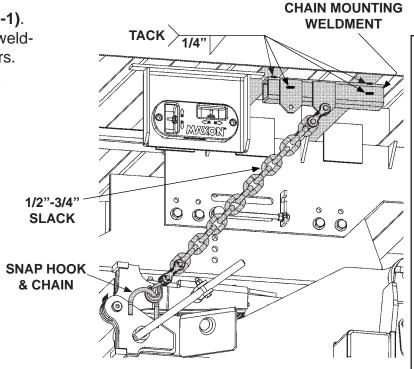


LOCKING LIFTGATE IN STOWED POSITION (LH SIDE SHOWN) FIG. 57-1

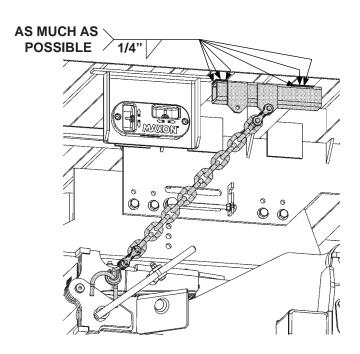
STEP 10 - ATTACH SAFETY CHAIN - Continued

- **4.** Hook chain to platform **(FIG. 58-1)**. Then, position chain mounting weldment to bottom of crossmembers. Keep 1/2" to 3/4" slack in chain.
- **5.** Tack weld the chain mounting weldment as shown in **FIG. 58-1**.

- **6.** Hook and unhook chain from snap hook. Hook should be easy to disengage from snap hook (**FIG. 58-1**).
- 7. When chain mounting weldment is in correct position, finish welding to vehicle crossmembers as shown in **FIG. 58-2**.



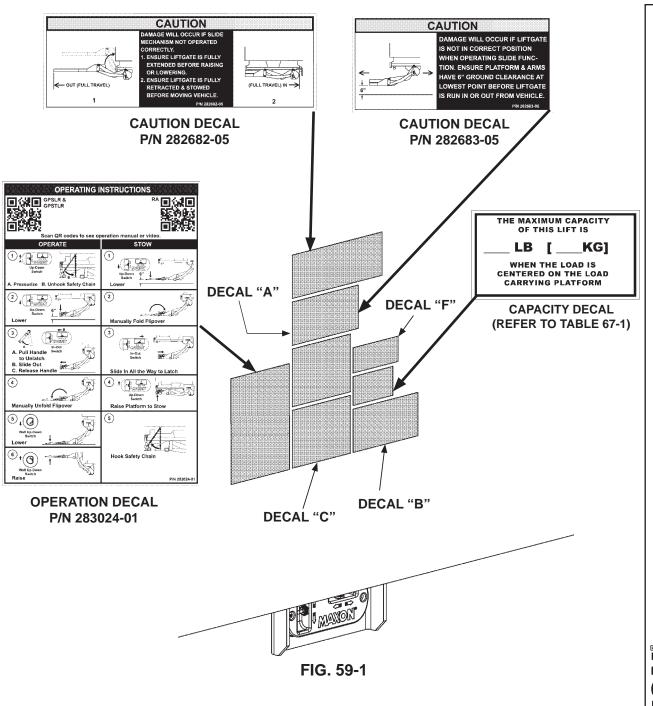
POSITIONING & TACK WELDING CHAIN MOUNTING WELDMENT FIG. 58-1



FINISH WELDING CHAIN MOUNTING
WELDMENT
FIG. 58-2

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ATTACH DECALS



CAPACITY DECAL PART NUMBERS TABLE 59-1

ORDER P/N

220388-04

253155

253161

DECAL "C"

3500 LBS. (1600 KG)

4400 LBS. (2000 KG)

5500 LBS. (2500 KG)

MODEL

GPSLR/GPSLRT-35

GPSLR/GPSLRT-44

GPSLR/GPSLRT-55

ATTACH DECALS - Continued



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 callet lack, 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 partain to this model Liftgate, please visit our website at www.maxonlift.com or call Customer Service at (890) 227-4116.

P/N 282522-01 C

Read all decals and operation manual before operating liftgate.

- 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
- 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
- Make certain the area in which the platform will open and close is clear before opening or closing the platform.
- 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.
- This liftgate is intended for loading and unloading of cargo only. Do not use this liftgate for anything but its intended use.

P/N 282522-01 🛕



DECAL SHEET P/N 282522-01 FIG. 60-1

DECAL POSITIONS

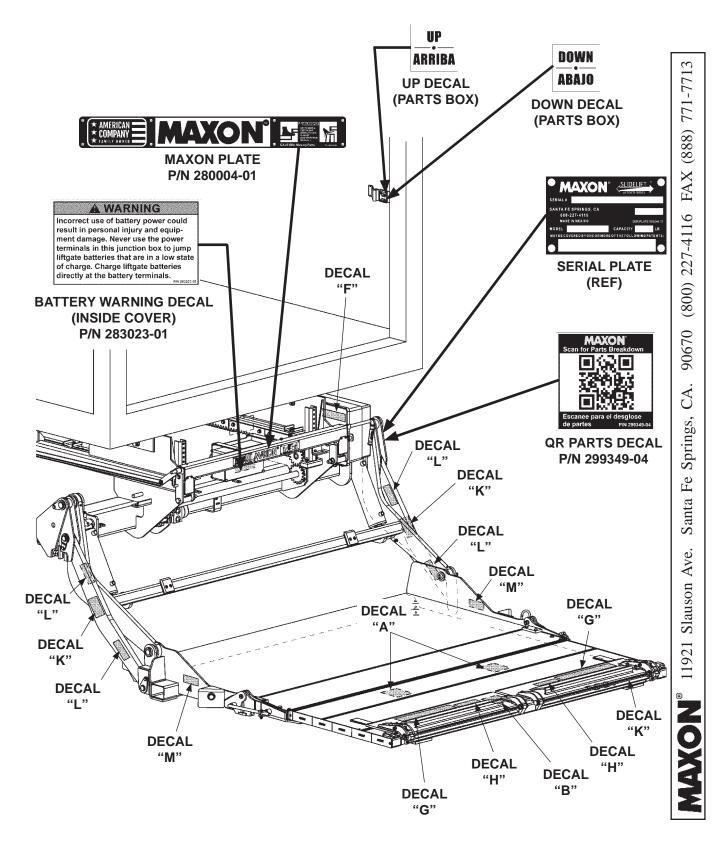


FIG. 61-1

DECAL POSITIONS - Continued





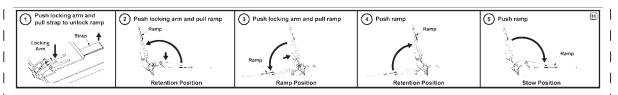


A WARNING

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.



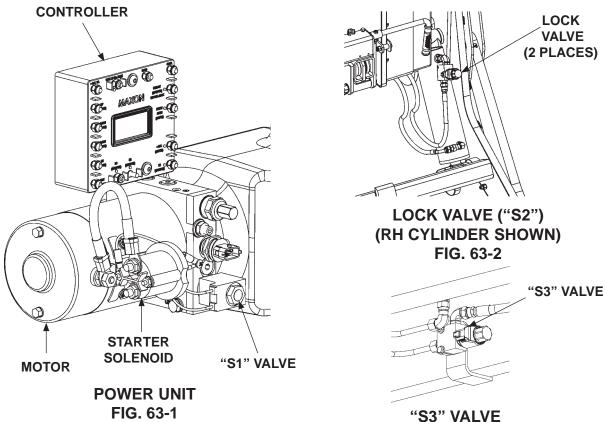






DECAL SHEET P/N 267432-03 FIG. 62-1

SYSTEM DIAGRAMS **PUMP & MOTOR SOLENOID OPERATION - SINGLE PUMP**

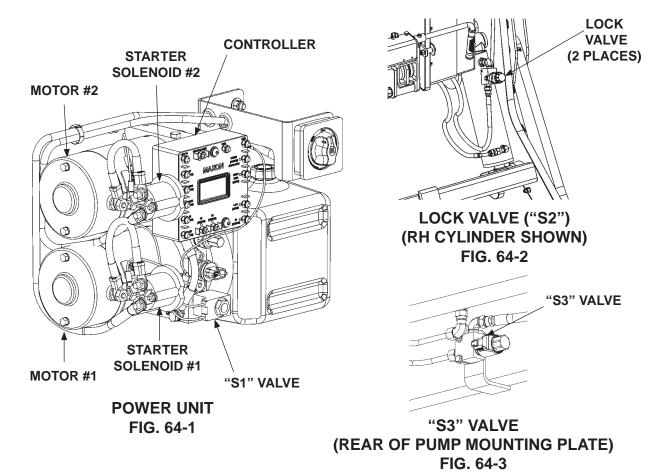


(REAR OF PUMP MOUNTING PLATE) FIG. 63-3

POWER UNIT MOTOR & SOLENOID OPERATION						
LIFTGATE	SOLENOID OPERATION (✓ MEANS ENERGIZED)					
FUNCTION	MOTOR	VALVE "S1"	VALVE "S3"	LOCK VALVES ("S2" VALVES)		
RAISE	✓	•	-	\checkmark		
LOWER (GD)	-	>		\checkmark		
LOWER (PD)	✓	\		\checkmark		
SLIDE OUT	✓	•	>	-		
SLIDE IN	\checkmark	✓	✓	-		
REFER TO VALVES SHOWN ON HYDRAULIC SCHEMATIC						

TABLE 63-1

SYSTEM DIAGRAMS - Continued PUMP & MOTOR SOLENOID OPERATION - DUAL PUMPS

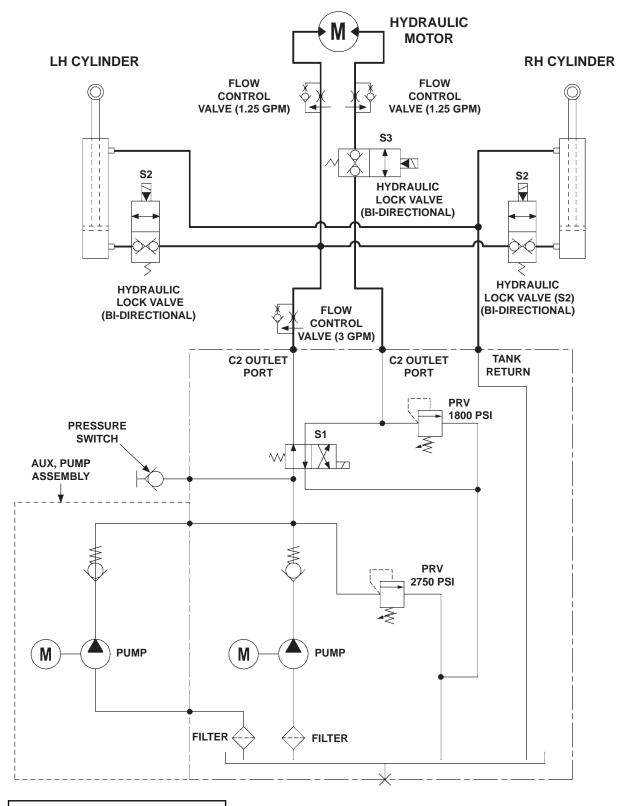


POWER UNIT MOTOR & SOLENOID OPERATION						
LIFTGATE	SOLENOID OPERATION (✓ MEANS ENERGIZED)					
FUNCTION	MOTOR (#1 OR #2)	VALVE "S1"	LOCK VALVES ("S2" VALVES)			
RAISE	✓		-	\checkmark		
LOWER (GD)	-	✓	-	✓		
LOWER (PD)	✓	\	-	✓		
SLIDE OUT	✓		✓	-		
SLIDE IN	✓	✓	✓	-		
REFER TO VALVES SHOWN ON HYDRAULIC SCHEMATIC						

TABLE 64-1

SYSTEM DIAGRAMS - Continued

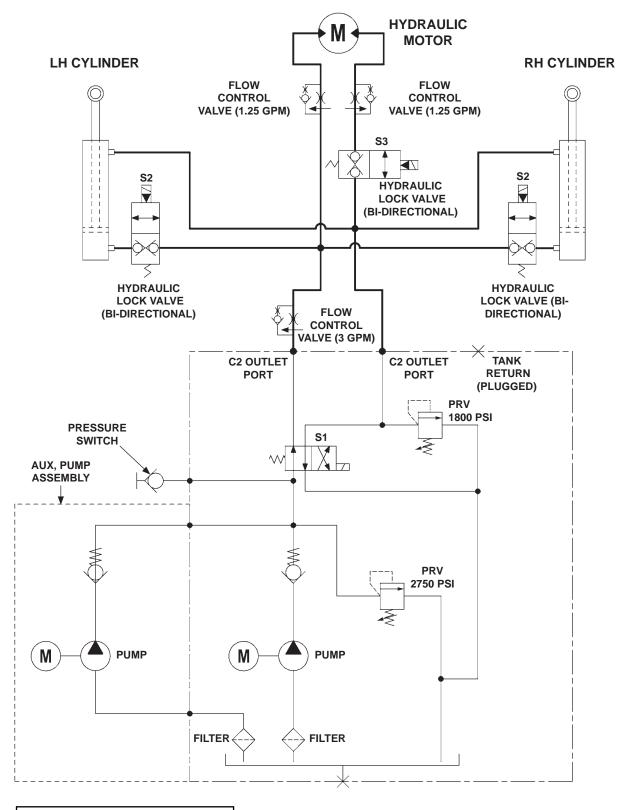
HYDRAULIC SCHEMATIC - GRAVITY DOWN



NOTE: PRV (PRESSURE RELIEF VALVE)

FIG. 65-1

SYSTEM DIAGRAMS - ContinuedHYDRAULIC SCHEMATIC - POWER DOWN



NOTE: PRV (PRESSURE RELIEF VALVE)

FIG. 66-1

SYSTEM DIAGRAMS - Continued ELECTRICAL SCHEMATIC - SINGLE PUMP

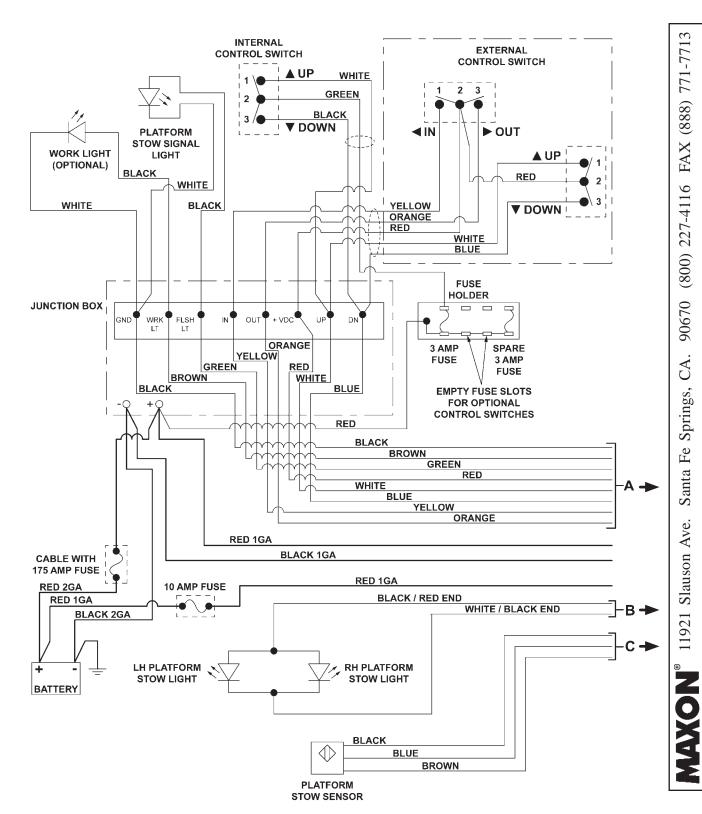


FIG. 67-1

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SYSTEM DIAGRAMS - Continued ELECTRICAL SCHEMATIC - SINGLE PUMP - Continued

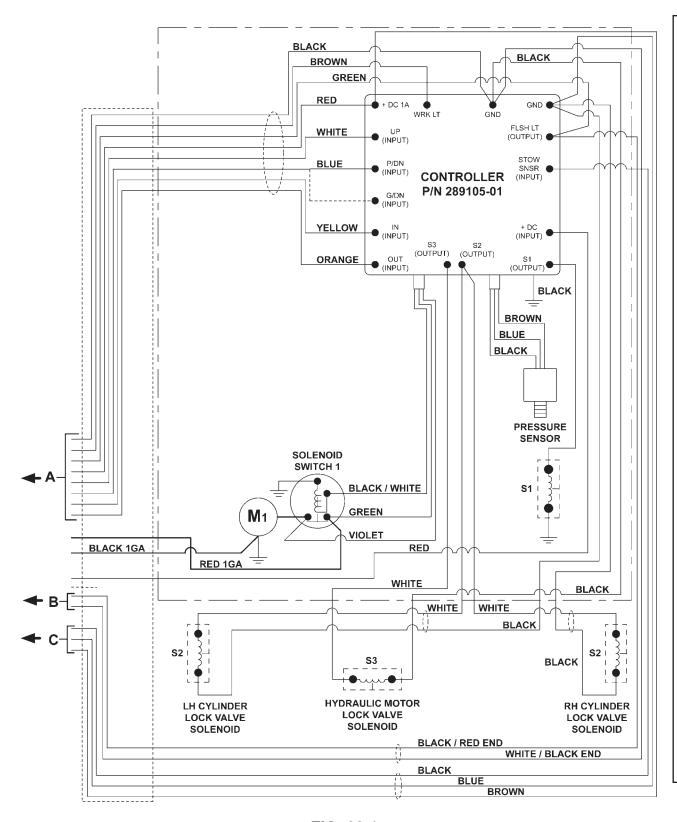


FIG. 68-1

SYSTEM DIAGRAMS - Continued ELECTRICAL SCHEMATIC - DUAL PUMP

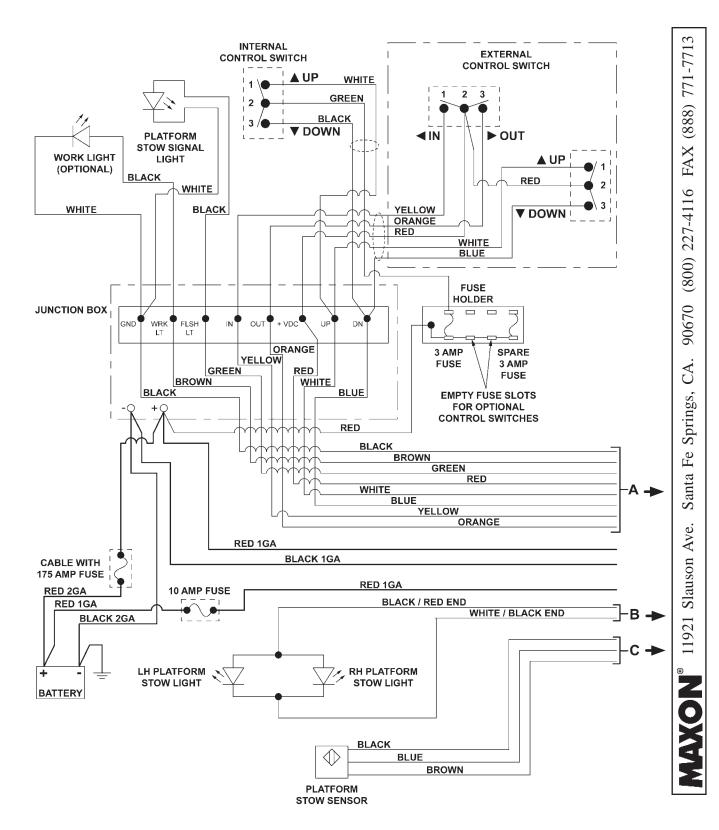


FIG. 69-1

SYSTEM DIAGRAMS - Continued ELECTRICAL SCHEMATIC - DUAL PUMP - Continued

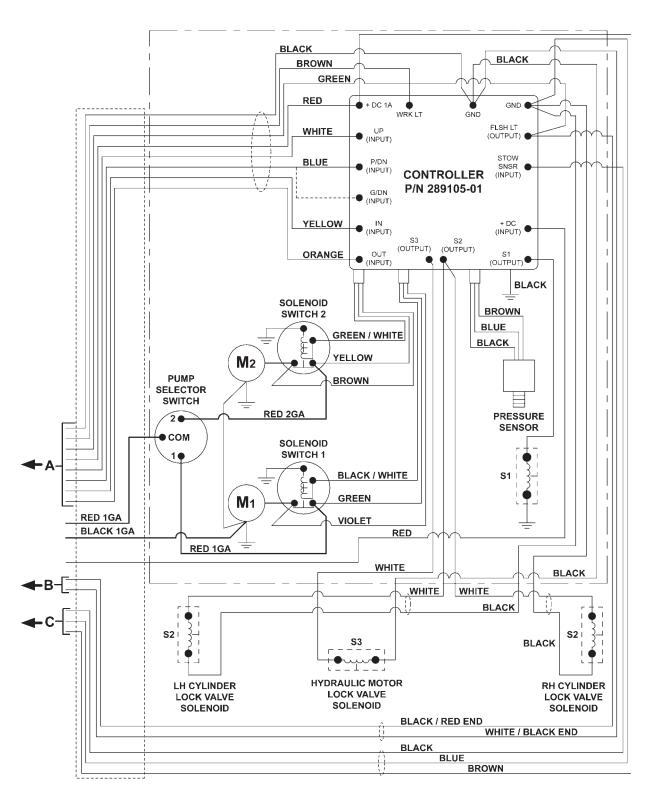


FIG. 70-1

OPTIONS OPTIONAL LIFTGATE COMPONENTS

KITS	PART NO.
POWER CABLE	
POWER CABLE, CHASSIS GROUND	289231-01
POWER CABLE, 20 FT.	289231-02
POWER CABLE, 30 FT.	289231-03
POWER CABLE, 40 FT.	289231-04
POWER CABLE, 50 FT.	289231-05
POWER CABLE, 60 FT.	289231-06
ELECTRICAL	
CIRCUIT BREAKER (150 AMP)	296504-150
DUAL & STREET SIDE CONTROL	289235-01
UNIVERSAL CAB CUTOFF SWITCH, 60 FT.	298905-01
UNIVERSAL CAB CUTOFF SWITCH, 45 FT.	298905-02
HAND HELD CONTROL	289234-01
WORK LIGHT	289175-01
INSIDE SAFETY LIGHT	289860-01
BATTERY BOX ASSEMBLY	
2 BATTERIES, FOR DIRECT CHARGING & CHARGER	289690-01
2 BATTERIES, FOR DIRECT CHARGING	289690-02
2 BATTERIES, WITH CHARGER BRACKET	289690-03
4 BATTERIES, FOR DIRECT CHARGING & CHARGER	289690-11
4 BATTERIES, FOR DIRECT CHARGING	289690-12
4 BATTERIES, WITH CHARGER BRACKET	289690-13
BATTERY CHARGER	
PHILLIPS, STA-CHARGE ASSEMBLY WITH FLAT MOUNTING PLATE	298544-03
PURKEY'S SELECT/DIRECT CHARGING PLATE	289986-01
MECHANICAL	
HANDLE, STOW UNLOCK, 7" LG.	289160-03
RAILING INSTALLATION, GPSLR / RA	299021-01
MISCELLANEOUS	
TRAFFIC CONE	268893-01

MAXON®

PRE-DELIVERY INSPECTION FORM

	TRE-DELIVERT INGI EGITOR FORM					
Model:		Date:				
S	Serial Number:		-	Technician:		
Pre-Installation Inspection:			Operation Inspection:			
	Correct model		N	OTE: The following times are for 60" bed height, steel platform with aluminum flipover, Exxon Univis HVI-13 hydraulic fluid, & temperature at 70°F. Times are for reference only and may vary for larger platforms, smaller platforms, or temperature changes.		
	Inspect all installation welds. Check roll pins, bolts and fasteners. Inspect tightness of hardware used to secure liftgate to vehicle.			Check operation of all main and optional control switches. GPSLR-35		
	Ensure platform ramp touches ground when shackles are 1" above ground, and platform & flipover are level & touching the ground.			Unloaded platform lowers in 10 sec. Unloaded platform raises in 14 sec. Unloaded platform stows IN in 9-10 sec. Unloaded platform to OUT position in 6-7 sec.		
Hydraulic Inspection:				GPSLR-44		
	Proper fluid level (See CHECKING HYDRAULIC FLUID step in this manual). Check hydraulic fittings in pump box for leaks.			Unloaded platform lowers in 7 to 11 sec . Unloaded platform raises in 9 to 13 sec . Unloaded platform stows IN in 12 sec . Unloaded platform to OUT position in 8 sec .		
	Check hydraulic line connections for leaks.			GPSLR-55		
Electrical Inspection:				Unloaded platform lowers in 14 sec.		
	Check power/charge plug and terminal. Check for tight wire connections. Circuit breaker (150A) installed in battery box (if equipped) or by truck/tractor battery. Ensure batteries are fully charged, all cable			Unloaded platform raises in 14 sec . Unloaded platform to stow position in 9-10 sec . Unloaded platform to OUT position in 6-7 sec . All GPSLR: Unloaded platform raises and lowers evenly. At the extension plate, platform must not be more than 1/8" uneven, from side		
	connections are tight & tie-downs are tight. Inspect all solenoid connections. Check all wiring harness connections. Check electrical cable connections are tight &			to side. All GPSLR: Platform stores securely under vehicle body. Check if cycle counter works. Decals in correct location and legible.		
	secure.		Ve	rify all lights are operational Platform lights turn ON when platform is unfolded, and turn OFF when platform is stowed. Taillights, stop lights, turn lights, and backup		

lights turn **ON** and **OFF** correctly.