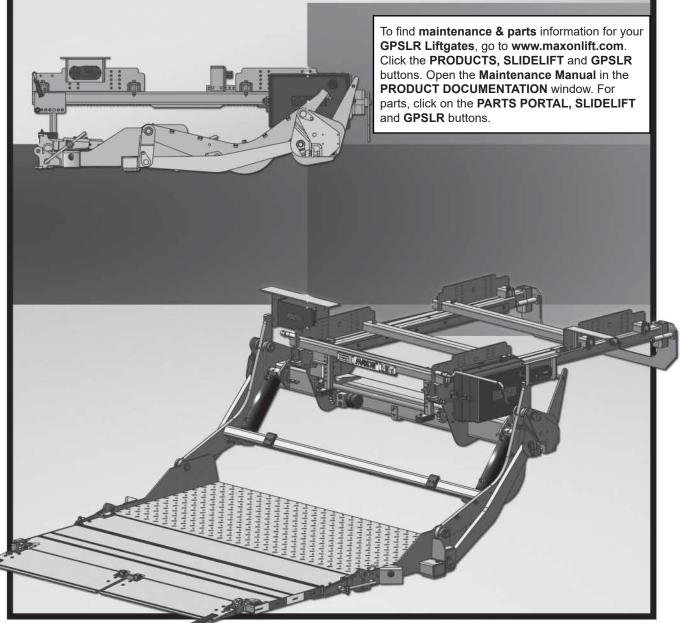


M-18-08 REV B JANUARY 2024

# GPSLR series

# INSTALLATION MANUAL

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



# **TABLE OF CONTENTS**

SUMMARY OF CHANGES: M-18-08, REVISION B	4
WARNINGS	5
SAFETY INSTRUCTIONS	6
NOTICE	6
STANDARD LIFTGATE COMPONENTS	7
GPSLR & GPSLRT INSTALLATION PARTS BOXES	9
GPSLR PARTS BOX FOR TRAILERS	10
GPSLRT PARTS BOX FOR TRUCKS	
ELECTRICAL ASSEMBLY KITS	
VEHICLE REQUIREMENTS FOR TRAILERS	14
INSTALLATION GUIDELINES FOR TRAILERS	16
STEP 1 - INSTALLING LIFTGATE ON TRAILERS	19
INITIAL MOUNTING ADJUSTMENTS BASED ON BED HEIGHT	19
WELD GUSSETS TO TRAILER	
WELD HANDLE SUPPORT ANGLE TO TRAILER	
VEHICLE REQUIREMENTS FOR TRUCKS	
INSTALLATION GUIDELINES FOR TRUCKS	
STEP 1 - INSTALLING LIFTGATE ON TRUCKS	
WELD HANDLE SUPPORT ANGLE TO TRUCK	40
STEP 2 - WELD J-BOX TO UNDERBODY	41
STEP 3 - ATTACH CONTROL SWITCHES	44
STEP 4 - RUN POWER CABLE	50
STEP 5 - CONNECT POWER & GROUND CABLES TO J-BOX	51
STEP 6 - ATTACH STOW LIGHT TO TRAILER	54
STEP 7 - PLATFORM ADJUSTMENT	57
STEP 8 - ATTACH SLIDING AXLE STOPS (IF REQUIRED)	62
STEP 0 - ATTACH SAFETY CHAIN	63

ATTACH DECALS	. 66
DECAL POSITIONS	. 68
SYSTEM DIAGRAMS	. 70
PUMP & MOTOR SOLENOID OPERATION - SINGLE PUMP	. 70
PUMP & MOTOR SOLENOID OPERATION - DUAL PUMPS	. 71
HYDRAULIC SCHEMATIC - GRAVITY DOWN	. 72
HYDRAULIC SCHEMATIC - POWER DOWN	. 73
ELECTRICAL SCHEMATIC, 12V, GRAVITY DOWN, WITH MAX ECU	. 74
ELECTRICAL SCHEMATIC, 12V, POWER DOWN, WITH MAX ECU	. 76
ELECTRICAL SCHEMATIC 12V/24V, GRAVITY DOWN	. 78
ELECTRICAL SCHEMATIC, 12V/24V, POWER DOWN	. 80
OPTIONS	. 82
PRE-DELIVERY INSPECTION FORM	. 83

# SUMMARY OF CHANGES: M-18-08, REVISION B

PAGE	DESCRIPTION OF CHANGE	
COVER	Updated cover image, REV. and date of release.	
	Illustrations changed to new design.	
7, 8	Added Note to cover Liftgate with a welding blanket and cut jig installation channels to avoid interference with vehicle prior to installation. Removed unnecessary part numbers for installation jig.	
9-13	Updated parts tables for installation parts, parts boxes, and electrical assembly kits.	
16	Added clearance dimension of 0 to 1" from rear sill of trailer to GPSLR frame.	
14-40	Reorganized VEHICLE REQUIREMENTS, INSTALLATION GUIDELINES and INSTALLATION instructions according to installation on trailers or trucks. Renumbered installation steps throughout the manual.	
31	Added WARNING & instruction to cover Liftgate with a welding blanket.	
24, 44-44	Added Note to remove galvanized material before welding galvanized steel.	
35	Added instruction to cut a spacer to align mounting gussets mounted on long sill for truck installation.	
44-46	Updated instructions to weld J-box to vehicle frame.	
44-49	Undated precedure for attaching control switches to vehicle hady/under	
49	Changed procedures for running power cable and connecting power to the redesigned J-box.	
51-52	Undeted precedure for connecting power (1) and ground ( ) coblected	
51, 53	Added instructions for preventing corrosion on external electrical connections, including battery cables.	
54-56	Inserted procedure to attach stow light on front of trailer.	
57-61	Updated platform adjustment procedure based on new design adjustment bolts and slider stops.	
65	Identified snaphook and loop in the safety chain instructions.	
68	Updated QR code decal, P/N 299349-04.	
70-71	Updated pump and motor solenoid operation for single and dual pumps.	
72	Updated gravity down hydraulic schematic.	
73	Updated power down hydraulic schematic.	
74-75	Updated electrical schematic for 12V, gravity down with MAX ECU.	
76-77	Updated electrical schematic for 12V, power down with MAX ECU.	
78-79	Updated electrical schematic for 12V/24V, gravity down.	
80-81	Updated electrical schematic for 12V/24V, power down.	
82	Updated Table of Options.	
83	Updated Electrical Inspection on PRE-DELIVERY INSPECTION FORM.	

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 vehicle rear sill.
- 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

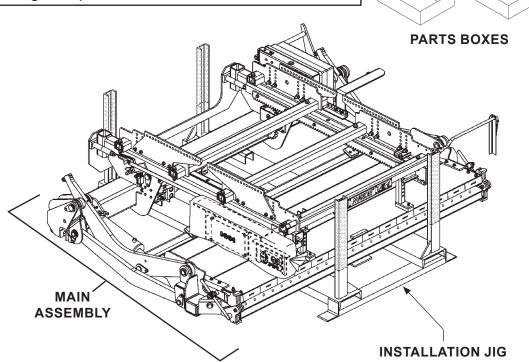
#### **A** CAUTION

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

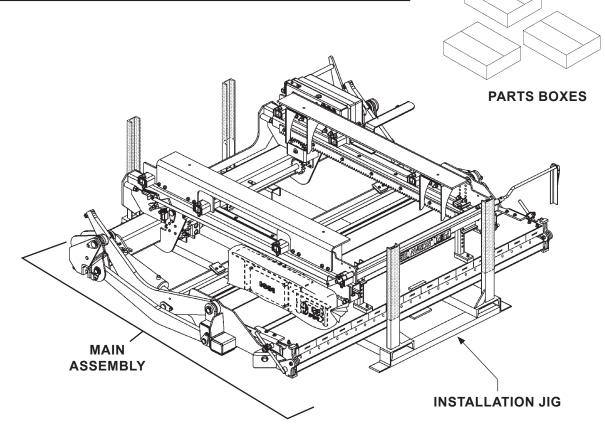
**NOTE:** Vertical channels on Liftgate installation jig may need to be cut shorter to prevent interference with underbody of vehicle. See FIG. 7-1. The shaded portion of each channel shows how much of the channel that may need to be cut to prevent interference. Before installation, keep Liftgate with the installation jig on the ground and covered with a welding blanket. Cut the channels only when Liftgate is protected from debris.



GPSLR LIFTGATE COMPONENTS FOR SHIPMENT FIG. 7-1

# **STANDARD LIFTGATE COMPONENTS - Continued**

NOTE: Vertical channels on Liftgate installation jig may need to be cut shorter to prevent interference with underbody of vehicle. See FIG. 8-1. The shaded portion of each channel shows how much of the channel that may need to be cut to prevent interference. Before installation, keep Liftgate with the installation jig on the ground and covered with a welding blanket. Cut the channels only when Liftgate is protected from debris.



**GPSLRT LIFTGATE COMPONENTS FOR SHIPMENT** FIG. 8-1

# **GPSLR & GPSLRT INSTALLATION PARTS BOXES**

	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
REF	GPSLR INSTALLATION PARTS BOX	1	210975-01
1	FRAME MOUNT BUSHING ADAPTER	16	210916-01
2	HEX BOLT, 1/2"-13 X 2" LG., GR9	16	901635-05
3	FLANGE LOCK NUT, 1/2"-13	16	901023
4	J-BOX MOUNTING FLAT	2	288087-01
5	GUSSET, GPSLR MOUNT	4	268674-01

# INSTALLATION ON TRAILERS WITH 42-1/8" & 48-1/8" SLIDE RAILS TABLE 9-1

	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
REF	GPSLR INSTALLATION PARTS BOX	1	210975-02
1	FRAME MOUNT BUSHING ADAPTER	16	210916-01
2	HEX BOLT, 1/2"-13 X 2" LG., GR9	16	901635-05
3	FLANGE LOCK NUT, 1/2"-13	16	901023
4	WASHER, 2-1/4" O.D. X 1/2" I.D. X 1/4" THICK	16	210978-01
5	J-BOX MOUNTING FLAT	2	288087-01
6	GUSSET, GPSLR MOUNT	4	268674-01

# INSTALLATION ON TRAILERS WITH 42-5/8" & 48-5/8" SLIDE RAILS TABLE 9-2

	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
REF	GPSLRT INSTALLATION PARTS BOX	1	210975-03
1	INSTALLATION BRACKET, CHASSIS SUPPORT	4	288096-01
2	J-BOX MOUNTING FLAT	2	288087-01

# INSTALLATION ON TRUCK CHASSIS TABLE 9-3

# **GPSLR PARTS BOX FOR TRAILERS**

	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
REF	PARTS BOX, GPSLR	1	289101-02
1	CONTROL SWITCH ASSEMBLY	1	289353-02
2	DECAL SHEET, UP/DOWN	1	299038-01
3	INTERNAL SWITCH MOUNTING BRACKET, GALVANIZED	1	289255-01G
4	SELF-TAPPING SCREW,10-24 X 1/2" LG.	4	900766-02
5	FLAT WASHER, #10	6	903444-01
6	BUTTON SCREW, 10-24 X 1-1/2" LG.	2	900722-09
7	LOCK NUT, THIN, 10-24	2	903129-01
8	CABLE TIE, SCREW MOUNT, 1-1/2" DIA.	5	905398-01
9	SELF-TAPPING SCREW, #6-20	5	900818-01
10	STOW FLASHING LIGHT KIT, 70'	1	289355-02
11	SAFETY STOW CHAIN, GPSLR	1	287132-01
12	FUSE HOLDER ASSEMBLY, 10 AMP, 3/8" RING	1	285013-04
13	CIRCUIT BREAKER KIT, 175 AMPS, 30 VDC	1	289723-01
14	CLAMP, RUBBER LOOM, #12	10	214675
15	SELF-TAPPING SCREW, 1/4"-20 X 5/8" LG.	10	900705-02
16	PLASTIC TIE, 7" LG.	20	205780

**TABLE 10-1** 

# **GPSLRT PARTS BOX FOR TRUCKS**

	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
REF	PARTS BOX, GPSLRT	1	289101-01
1	CONTROL SWITCH ASSEMBLY	1	289353-02
2	DECAL SHEET, UP/DOWN	1	299038-01
3	INTERNAL SWITCH MOUNTING BRACKET, GALVANIZED	1	289255-01G
4	SELF-TAPPING SCREW,10-24 X 1/2" LG.	4	900766-02
5	FLAT WASHER, #10	6	903444-01
6	BUTTON SCREW, 10-24 X 1-1/2" LG.	2	900722-09
7	LOCK NUT, THIN, 10-24	2	903129-01
8	CABLE TIE, SCREW MOUNT, 1-1/2" DIA.	5	905398-01
9	SELF-TAPPING SCREW, #6-20	5	900818-01
10	STOW FLASHING LIGHT KIT, 40'	1	289355-01
11	SAFETY STOW CHAIN, GPSLR	1	287132-01
12	FUSE HOLDER ASSEMBLY, 10 AMP, 3/8" RING	1	285013-04
13	CIRCUIT BREAKER KIT, 175 AMPS, 30 VDC	1	289723-01
14	CLAMP, RUBBER LOOM, #12	10	214675
15	SELF-TAPPING SCREW, 1/4"-20 X 5/8" LG.	10	900705-02
16	PLASTIC TIE, 7" LG.	20	205780

**TABLE 11-1** 

# **ELECTRICAL ASSEMBLY KITS**

	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
REF	ELECTRICAL ASSEMBLY, 12V, GRAVITY DOWN	1	287890-01
1	CABLE ASSEMBLY, FLEXIBLE LOOP, 20' LG.	1	211141-02
2	CABLE ASSEMBLY, LOCK VALVE, 16/2, 65" LG.	1	282625-26
3	CABLE ASSEMBLY, LOCK VALVE, 16/2, 120" LG.	1	282625-27
4	CABLE ASSEMBLY, LOCK VALVE, 16/2, 56" LG.	1	282625-07
5	PLASTIC TIE, 8" LG.	20	905322-01
7	LIMIT SWITCH ASSEMBLY, GPSLR/RA	1	211165-01
8	J-BOX & MAIN SWITCH ASSEMBLY, 12V, GRAVITY DOWN, 10' LG.	1	288660-03
9	PLATFORM STOW LIGHTS HARNESS	1	289363-01
10	EMERGENCY WARNING LIGHT, AMBER	2	907111-01
11	HEAT SHRINK TUBING, 4" LG.	4	268041-02
12	NYLON SPLIT LOOM, 1/4" X 78" LG.	1	907011-10
13	NYLON SPLIT LOOM, 1/4" X 36" LG.	2	907011-11

**TABLE 12-1** 

	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
REF	ELECTRICAL ASSEMBLY, 24V, GRAVITY DOWN	1	287890-01-24
1	CABLE ASSEMBLY, FLEXIBLE LOOP, 20' LG.	1	211141-02
2	CABLE ASSEMBLY, LOCK VALVE, 16/2, 65" LG.	1	282625-26
3	CABLE ASSEMBLY, LOCK VALVE, 16/2, 120" LG.	1	282625-27
4	CABLE ASSEMBLY, LOCK VALVE, 16/2, 56" LG.	1	282625-07
5	PLASTIC TIE, 8" LG.	20	905322-01
7	LIMIT SWITCH ASSEMBLY, GPSLR/RA	1	211165-01
8	J-BOX & MAIN SWITCH ASSEMBLY, 24V, GRAVITY DOWN, 10' LG.	1	288660-03-24
9	PLATFORM STOW LIGHTS HARNESS	1	289363-01
10	EMERGENCY WARNING LIGHT, AMBER	2	907111-01
11	HEAT SHRINK TUBING, 4" LG.	4	268041-02
12	NYLON SPLIT LOOM, 1/4" X 78" LG.	1	907011-10
13	NYLON SPLIT LOOM, 1/4" X 36" LG.	2	907011-11

**TABLE 12-2** 

# **ELECTRICAL ASSEMBLY KITS- Continued**

	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
REF	ELECTRICAL ASSEMBLY, 12V, POWER DOWN	1	287890-02
1	CABLE ASSEMBLY, FLEXIBLE LOOP, 22' LG.	1	211141-02
2	CABLE ASSEMBLY, LOCK VALVE, 16/2, 65" LG.	1	282625-26
3	CABLE ASSEMBLY, LOCK VALVE, 16/2, 120" LG.	1	282625-27
4	CABLE ASSEMBLY, LOCK VALVE, 16/2, 56" LG.	1	282625-07
5	PLASTIC TIE, 8" LG.	20	905322-01
7	LIMIT SWITCH ASSEMBLY, GPSLR/RA	1	211165-01
8	J-BOX & MAIN SWITCH ASSEMBLY, 12V, POWER DOWN, 10' LG.	1	288660-04
9	PLATFORM STOW LIGHTS HARNESS	1	289363-01
10	EMERGENCY WARNING LIGHT, AMBER	2	907111-01
11	HEAT SHRINK TUBING, 4" LG.	4	268041-02
12	NYLON SPLIT LOOM, 1/4" X 78" LG.	1	907011-10
13	NYLON SPLIT LOOM, 1/4" X 36" LG.	2	907011-11

**TABLE 13-1** 

	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
REF	ELECTRICAL ASSEMBLY, 24V, POWER DOWN4		287890-02-24
1	CABLE ASSEMBLY, FLEXIBLE LOOP, 20' LG.	1	211141-02
2	CABLE ASSEMBLY, LOCK VALVE, 16/2, 65" LG.	1	282625-26
3	CABLE ASSEMBLY, LOCK VALVE, 16/2, 120" LG.	1	282625-27
4	CABLE ASSEMBLY, LOCK VALVE, 16/2, 56" LG.	1	282625-07
5	PLASTIC TIE, 8" LG.	20	905322-01
7	LIMIT SWITCH ASSEMBLY, GPSLR/RA	1	211165-01
8	J-BOX & MAIN SWITCH ASSEMBLY, 24V, POWER DOWN, 10' LG.	1	288660-04-24
9	PLATFORM STOW LIGHTS HARNESS	1	289363-01
10	EMERGENCY WARNING LIGHT, AMBER	2	907111-01
11	HEAT SHRINK TUBING, 4" LG.	4	268041-02
12	NYLON SPLIT LOOM, 1/4" X 78" LG.	1	907011-10
13	NYLON SPLIT LOOM, 1/4" X 36" LG.	2	907011-11

**TABLE 13-2** 

#### VEHICLE REQUIREMENTS FOR TRAILERS

# CAUTION

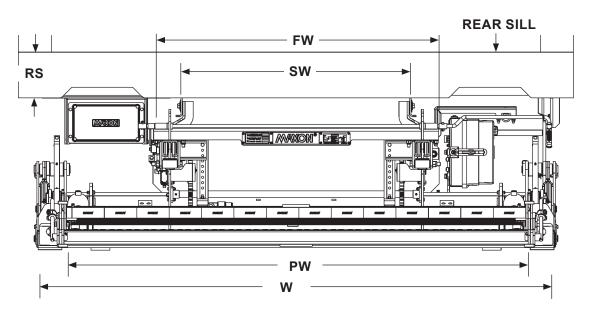
The sliding axle assembly on a trailer can collide with a Liftgate mounted on the slide rails. To prevent damage to Liftgate and trailer, install stops on the slide rails to keep the sliding axles from hitting Liftgate. Refer to Liftgate clearance dimensions in this section of the manual.

**NOTE:** Maximum operating bed height for trailer is is **60**" (**Unloaded**). Minimum bed 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 with parking brake set while preparing vehicle and installing Liftgate.

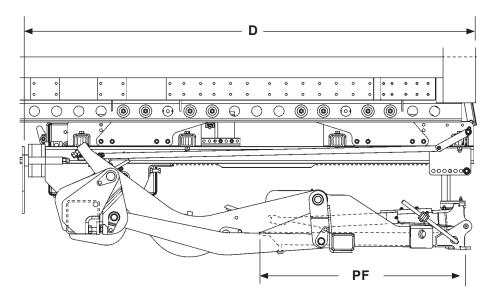
**NOTE:** Dimensions are provided as reference for fitting Liftgate to vehicle body. For detailed ground clearance information, refer to the **BOLT ON INSTAL-LATION PLATE** procedure in this manual.

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



**OVERALL WIDTH OF LIFTGATE & MOUNTING FRAME** FIG. 14-1

# **VEHICLE REQUIREMENTS FOR TRAILERS - Continued**



**DEPTH OF LIFTGATE MOUNTED ON TRAILER** FIG. 15-1

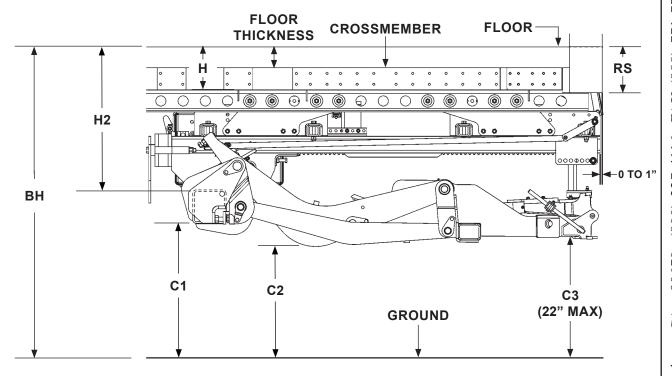
W	PW		PF	FW	SW	D
LIFTGATE WIDTH (SLIDER WIDTH)	PF F/O WIDTH		PF MAIN DEPTH			OVERALL DEPTH
06"	06"	0.5"	27"	E0 E/40"	47 4/0"	71"
96"	86"	85"	37"	53-5/16"	47-1/8"	81"

**CLEARANCE DIMENSIONS TABLE 15-1** 

# (800) 227-4116 FAX (888) 771-7713 02906 CA. Santa Fe Springs, MAXON<sup>®</sup> 11921 Slauson Ave.

## **INSTALLATION GUIDELINES FOR TRAILERS**

**NOTE:** For 48" slide rail trailer installation, refer to **TABLE 17-1**. For 42" slide rail trailer installation, refer to **TABLE 18-1**.



GPSLR INSTALLATION GUIDELINES FIG. 16-1

# **INSTALLATION GUIDELINES FOR TRAILERS - Cont'd**

Use the correct installation brackets kit P/N 287930-01 and dimensions (TABLE 17-1) to prevent interference between vehicle and Liftgate.

VEHIC	CLE INFORM	ATION	INSTALLATION POSITION	GROU	ANCE	REF	
н	В/Н	RS	MOUNT HOLE	C1	C2	C3	H2
10-3/4"	49-60"	14-5/8"	1	14.3-25.3"	12-20.7"		28.7"
9-3/4"	48-60"	13-5/8"	1	14.3-26.3"	12-21.4"	16.6-21.6"	27.7"
0.0/411	47-59"	12-5/8"	1	14.3-26.3"	12-20.7"		27.7"
8-3/4"	60"	13-5/8"	2	26.3"	21.4"	21.6"	28.7"
	46-58"	12-5/8"	1	14.3-26.3"	12-21.4"	16.6-21.6"	26.7"
7-3/4"	59"	13-5/8"	2	26.3"	21.4"		27.7"
	60"	14-5/8"	3	26.3"	21.4"	21.6"	28.7"
	45-55"	10-5/8"	1	14.3-24.3"	12-20.1"	16.5-21.5"	24.7"
0.0/4"	56-57"	11-5/8"	2	24.3-25.3"	20.1-20.7"		25.7"
6-3/4"	58-59"	12-5/8"	3	25.3-26.3"	20.7-21.4"	21.55"	26.7"
	60"	13-5/8"	4	26.3"	21.4"		27.7"
	44-53"	9-5/8"	1	14.3-22.3"	12-19.5"	16.6-21.6"	23.7"
	54-55"	10-5/8"	2	23.3-24.3"	19.5-20.1"		24.7"
5-3/4"	56-57"	11-5/8"	3	24.3-25.3"	20.1-20.7"		25.8"
	58-59"	12-5/8"	4	25.8-26.3"	20.7-21.4"	21.6"	26.8"
	60"	13-5/8"	5	27.3"	21.4"		27.8"
	44-52"	9-1/8"	1	14.8-22.8"	12.6-19"	17.1-21.1"	23.2"
	53-54"	10-1/8"	2	22.8-23.8"	19-19.7"		24.2"
5-3/16	55-56"	11-1/8"	3	23.8-24.8"	19.7-20.3"	21.1"	25.2"
	57-58"	12-1/8"	4	24.8-25.8"	20.3-20.9"	21.1	26.2"
	59-60"	13-1/8"	5	25.3-22.8	20.9-21.6"		27.2"
	43-51"	8-5/8"	1	14.8-22.8"	12.0-18.9"	16.6-21.6"	22.8"
	52"	9-5/8"	2	22.3"	18.9"		23.8"
4-3/4"	53-54"	10-5/8"	3	22.3-23.3"	18.9-19.5"	21.6"	24.8"
	55-56"	11-5/8"	4	23.3-24.3"	19.5-20.1"	21.0	25.8"
	57-58"	12-5/8"	5	24.3-25.3"	20.1-20.7"		26.8"
	43-51"	8-1/8"	1	14.8-22.8"	14.8-22.8"	17.1-21.1"	22.2"
	52"	9-1/8"	2	28.8"	22.8"		23.2"
4-3/16"	53-54"	10-1/8"	3	22.8-23.8"	22.8-23.8"	21.1"	24.2"
	55-56"	11-1/8"	4	23.8-24.8"	23.8-24.8"		25.2"
	57-58"	12-1/8"	5	24.8-25.8"	24.8-25.8"		26.2"

**DIMENSIONS FOR TRAILERS WITH 48" SLIDE RAILS TABLE 17-1** 

# **INSTALLATION GUIDELINES FOR TRAILERS - Cont'd**

Use the correct installation brackets kit P/N 287930-03 and dimensions (TABLE 18-1) to prevent interference between vehicle and Liftgate.

VEHIC	CLE INFORMA	ATION	INSTALLATION POSITION	GROUND CLEARANCE			REF
н	В/Н	RS	MOUNT HOLE	C1	C2	C3	H2
10-3/4"	49-60"	14-5/8"	2	14.3-25.3"	12-20.7"	40.0	28.7"
9-3/4"	48-60"	13-5/8"	2	14.3-26.3"	12-21.4"	16.6- 21.6"	27.7"
0.0/4"	47-59"	12-5/8"	2	14.3-26.3"	12-20.7"	21.0	27.7"
8-3/4"	60"	13-5/8"	3	26.3"	21.4"	21.6"	28.7"
	46-56"	12-5/8"	2	14.3-26.3"	12-21.4"	16.6- 21.6"	26.7"
7-3/4"	57-58"	13-5/8"	3	26.3"	21.4"	21.6"	27.7"
	59-60"	14-5/8"	4	26.3"	21.4"	21.0	28.7"
	45-55"	10-5/8"	2	14.3-24.3"	12-20.1"	16.5- 21.5"	24.7"
6-3/4"	56-57"	11-5/8"	3	24.3-25.3"	20.1-20.7"		25.7"
	58-59"	12-5/8"	4	25.3-26.3"	20.7-21.4"	21.55"	26.7"
	60"	13-5/8"	5	26.3"	21.4"		27.7"
	44-53"	9-5/8"	2	14.3-22.3"	12-19.5"	16.6- 21.6"	23.7"
5-3/4"	54-55"	10-5/8"	3	23.3-24.3"	19.5-20.1"		24.7"
	56-57"	11-5/8"	4	24.3-25.3"	20.1-20.7"	21.6"	25.8"
	58-59"	12-5/8"	5	25.8-26.3"	20.7-21.4"		26.8"
	44-52"	9"	2	14.8-22.8"	12.6-19"	17.1- 21.1"	23.2"
5-3/16	53-54"	10"	3	22.8-23.8"	19-19.7"		24.2"
	55-56"	11"	4	23.8-24.8"	19.7-20.3"	21.1"	25.2"
	57-58"	12"	5	24.8-25.8	20.3- 20.9"		26.2"
	43-51"	8-5/8"	2	14.3-22.3"	12.0-18.8"	16.6-21.6	22.7"
4 2/4"	52-53"	9-5/8"	3	22.3-23.3"	19-19.5"		23.7"
4-3/4"	54-55"	10-5/8"	4	23.3-24.3"	19.5-20.1"	21.6"	24.7"
	56-57"	11-5/8"	5	24.3-25.3"	20.1-20.17"		25.7"
	43-51"	8"	2	14.8-22.8"	12.6-19"	17.1- 21.1"	22.2"
4-3/16"	52-53"	9"	3	3 22.8-23.8" 19-19.6"			23.2"
	54-55"	10"	4	23.8-24.8"	19.7-20.3"	21.1"	24.2"
	56-57"	11"	5	24.8-25.8"	20.3-20.9"		25.2"

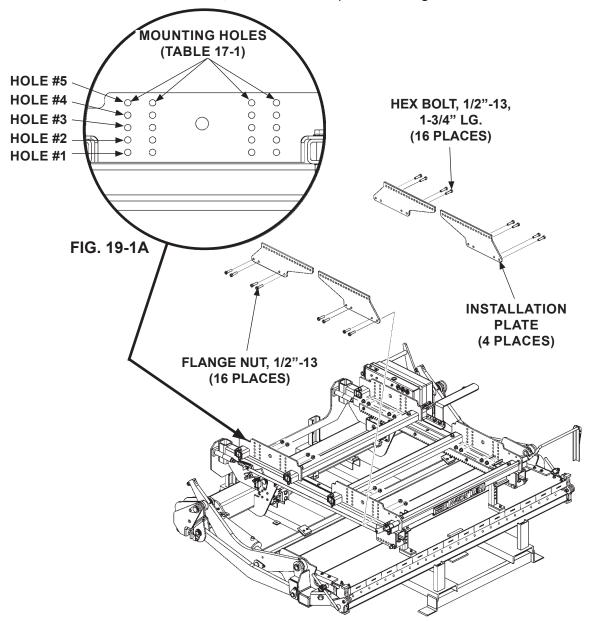
**DIMENSIONS FOR TRAILERS WITH 42" SLIDE RAILS TABLE 18-1** 

#### STEP 1 - INSTALLING LIFTGATE ON TRAILERS

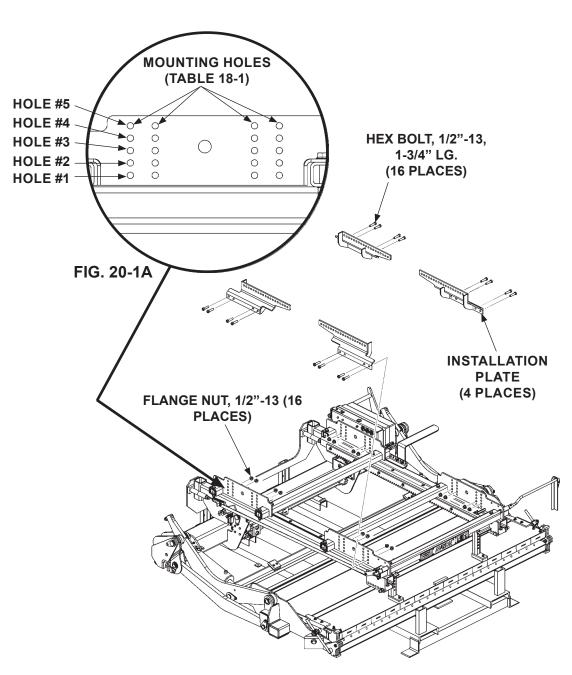
#### INITIAL MOUNTING ADJUSTMENTS BASED ON BED HEIGHT

NOTE: Installation brackets are located on both sides of Liftgate in 4 places...

- 1. Remove shipping bands from liftgate and installation jig.
- Unbolt and remove installation plates from Liftgate (FIG. 19-1). Measure and record trailer floor height (BH), floor thickness (H) and rear sill (RS). Refer to TABLES 17-1 or 18-1.
- 3. Bolt installation plates to Liftgate (FIGS. 19-1 and 19-1A, or FIGS. 20-1 and 20-1A). Use mounting holes listed in TABLES 17-1 or 18-1, according to the dimensions recorded in Instruction 2 for BH, H and RS. Torque mounting bolts to 100 lb-ft.



INSTALLATION PLATES FOR TRAILERS
WITH 48" SLIDE RAILS
FIG. 19-1



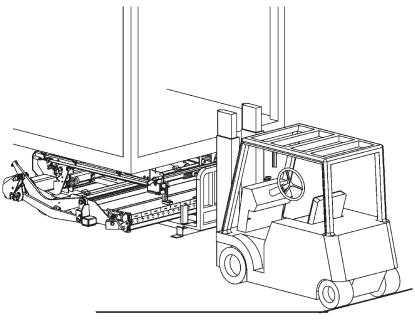
**INSTALLATION PLATES FOR TRAILERS** WITH 42" SLIDE RAILS FIG. 20-1

# **A** CAUTION

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

NOTE: Ensure vertical channels on the installation jig are short enough to prevent interference with underbody of vehicle.

4. Use forklift to center Liftgate on rear of vehicle (FIG. 21-1).



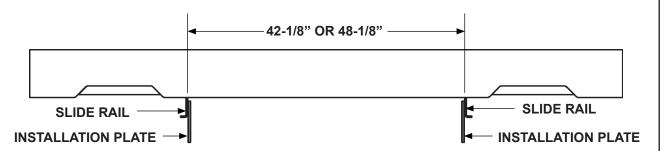
**CENTERING LIFTGATE ON TRAILER** FIG. 21-1

**5.** Bolt the Liftgate installation plates flush to trailer slide rails. Refer to TABLE 21-1 for the correct diagram. Use hex bolts, bushings, flat washers and flange nuts supplied with installation kit. Torque mounting bolts to 100 lb-ft.

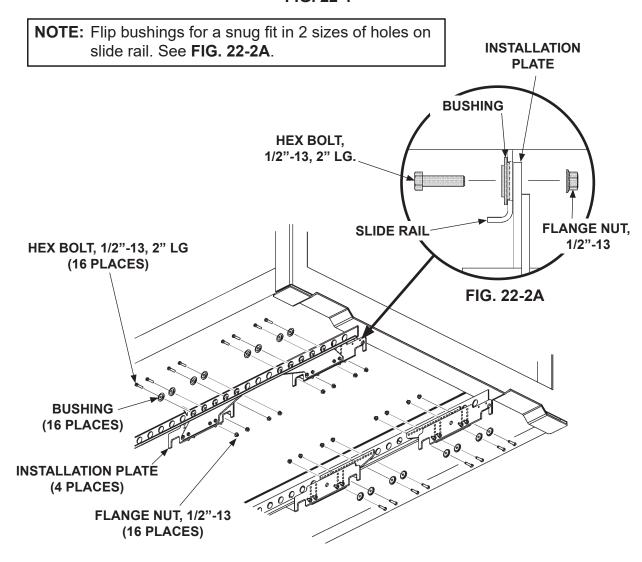
WIDTH BETWEEN SLIDE RAILS	USE DIAGRAM
48-1/8"	FIGS. 22-2 & 22-2A
48-5/8"	FIGS. 23-2 & 23-2A
42-1/8"	FIGS. 24-2 & 24-2A
42-5/8"	FIGS. 25-2 & 25-2A

#### **DIAGRAMS FOR INSTALLATION PLATES TABLE 21-1**

**NOTE:** For clarity Liftgate is not shown in the illustrations below.

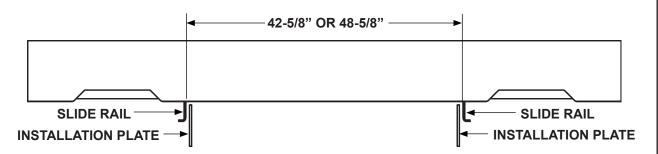


#### INSTALLATION PLATES INSTALLED FLUSH AGAINST INBOARD SIDE OF SLIDE RAILS FIG. 22-1

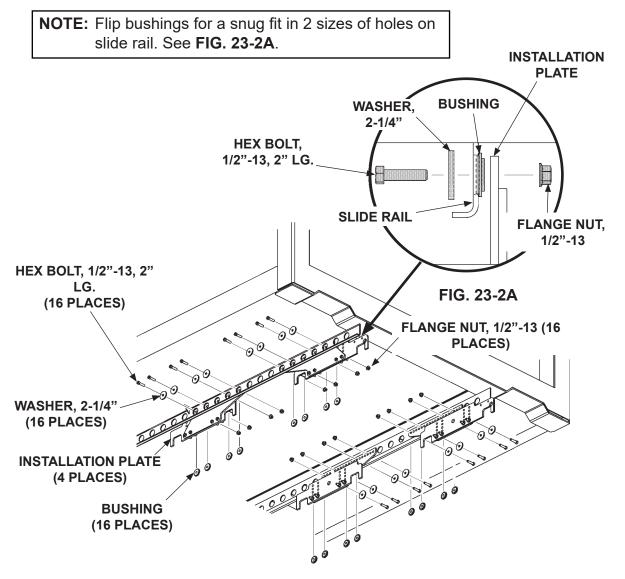


BOLTING INSTALLATION PLATES TO TRAILER WITH 42-1/8" OR 48-1/8" SLIDE RAILS
FIG. 22-2

**NOTE:** For clarity Liftgate is not shown in the illustrations below.



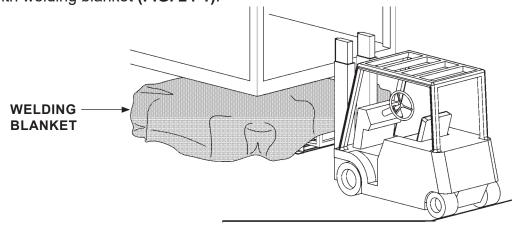
# PLATES INSTALLED FLUSH AGAINST INBOARD SIDE OF SLIDE RAILS FIG. 23-1



BOLTING INSTALLATION PLATES TO TRAILER WITH 42-5/8" OR 48-5/8" SLIDE RAILS
FIG. 23-2

# STEP 1 - INSTALLING LIFTGATE ON TRAILERS - Cont'd **WELD GUSSETS TO TRAILER**

1. Cover Liftgate with welding blanket (FIG. 24-1).

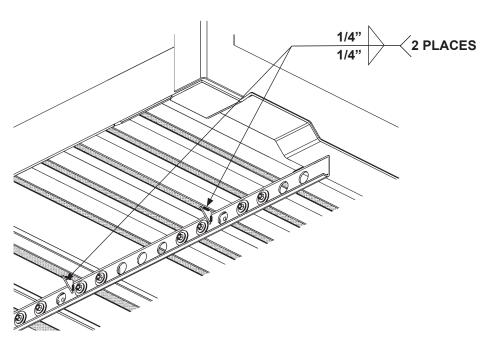


LIFTGATE COVERED WITH WELDING BLANKET FIG. 24-1

**NOTE:** For clarity Liftgate is not shown in the illustration below.

NOTE: Grind galvanized surface material from areas to be welded.

2. Weld installation gussets (Kit items) to LH slide rail and crossmembers as shown in FIG. 24-2. Repeat for RH slide rail.

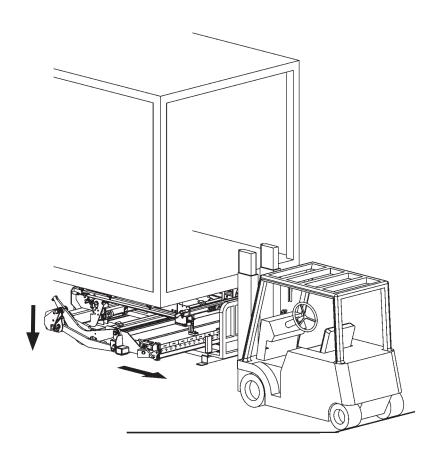


WELDING INSTALLATION GUSSETS TO LH SLIDE RAIL AND CROSSMEMBERS (LIFTGATE NOT SHOWN) FIG. 24-2

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

# STEP 1 - INSTALLING LIFTGATE ON TRAILERS - Cont'd **WELD GUSSETS TO TRAILER - Continued**

**3.** Lower jig and remove from under Liftgate (FIG. 25-1).

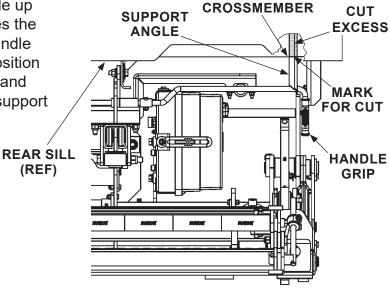


**REMOVING JIG FROM LIFTGATE** FIG. 25-1

# STEP 1 - INSTALLING LIFTGATE ON TRAILERS - Cont'd WELD HANDLE SUPPORT ANGLE TO TRAILER

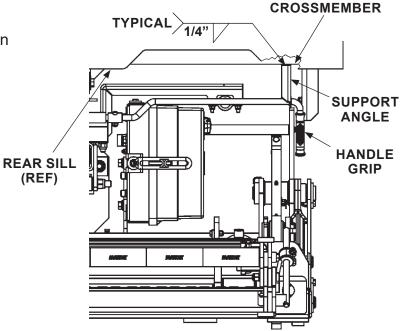
NOTE: Underbody may interfere with position of the handle support angle. If necessary, before welding, the angle support can be marked and cut to fit underbody. Ensure angle support doesn't interfere with handle rotation.

1. Rotate the handle support angle up to the underbody until it touches the crossmember closest to the handle grip (FIG. 26-1). Mark angle position at bottom of the crossmember and cut off excess length of angle support (FIG. 26-1).



POSITIONING HANDLE SUPPORT ANGLE FIG. 26-1

2. Weld handle support angle to crossmember as shown in FIG. 26-2.



WELDING HANDLE SUPPORT ANGLE FIG. 26-2

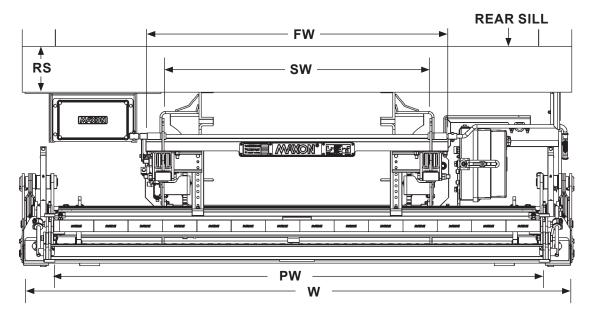
#### VEHICLE REQUIREMENTS FOR TRUCKS

NOTE: Maximum operating bed height for trailer is is 60" (Unloaded). Minimum bed 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 with parking brake set while preparing vehicle and installing Liftgate.

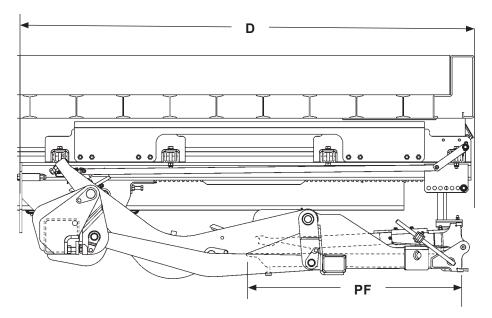
**NOTE:** Dimensions are provided as reference for fitting Liftgate to vehicle body. For detailed ground clearance information, refer to the BOLT ON INSTAL-**LATION PLATE** procedure in this manual.

Check for correct clearances on vehicle to prevent interference between vehicle and Liftgate. Refer to FIGS. 27-1 and 28-1, and TABLE 28-1.



OVERALL WIDTH OF LIFTGATE & MOUNTING FRAME ON TRUCK FIG. 27-1

# **VEHICLE REQUIREMENTS FOR TRUCKS - Continued**



**OVERALL DEPTH OF LIFTGATE** FIG. 28-1

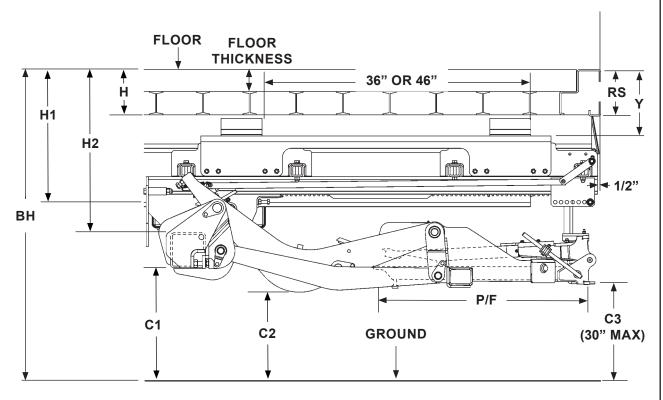
W	PW		PF	FW	SW	D	
LIFTGATE WIDTH (SLIDER WIDTH)	PF F/O WIDTH		PF DEPTH			OVERALL DEPTH	
96"	06" 05"	85"	27"	E2 E/46"	47 1/0"	68"	
90	86"	00	37"	53-5/16"	47-1/8"	78"	

**CLEARANCE DIMENSIONS FOR TRUCKS TABLE 28-1** 

# (800) 227-4116 FAX (888) 771-7713 02906 CA. Santa Fe Springs, MAXON<sup>®</sup> 11921 Slauson Ave.

# **INSTALLATION GUIDELINES FOR TRUCKS**

NOTE: Refer to TABLE 30-1 for installation dimensions for trucks.



INSTALLATION GUIDELINES FOR GPSLRT FIG. 29-1

# **INSTALLATION GUIDELINES FOR TRUCKS - Continued**

VEHICLE INFORMATION				GR	OUND CLEA	REF.	CHASSIS CUT OUT		
н	H1	вн	RS	Y	C1	C2	C3	H2	СН
10-3/4"	27"	48-60"	13.8"	11.75"	14-26"	11.8-23.8"	16.4-28.4"	28"	15.5"
0.2/4"	27"	48-60"	13.8"	11.75"				27"	
9-3/4"	26"	47-60"	12.8"	10.75"	14-27"	11.8-24.8"	16.4-29.4"	28"	14.5"
	27"	48-60"	13.8"	11.75"	14-26"	11.8-23.8"	40 4 00 4"	28"	15.5"
8-3/4"	26"	47-60"	12.8"	10.75"	44.07"	44.0.04.0"	16.4-28.4"	27"	14.5"
	25"	46-59"	11.8"	9.75"	14-27"	11.8-24.8"	16.4-29.4"	26"	13.5"
	27"	48-60"	13.8"	11.75"				28"	15.5"
7-3/4"	26"	47-59"	12.8"	10.75"	14-26"	11.8-23.8"	16.4-28.4"	27"	14.5"
1-3/4	25"	46-58"	11.8"	9.75"	14-20	11.0-23.0		26"	13.5"
	24"	45-57"	10.8"	8.75"				25"	12.5"
	27"	48-60"	13.8"	11.75"	14-26"	11.8-23.8"	16.4-28.4"	28"	15.5"
	26"	47-60"	12.8"	10.75"	14-27"	11.8-24.8"	16.4-29.4"	27"	14.5"
6-3/4"	25"	46-59"	11.8"	9.75"				26"	13.5"
l i	24"	45-58"	10.8"	8.75"				25"	12.5"
i i	23"	44-56"	9.8"	7.75"	14-26"	11.8-23.8"	40 4 00 4"	24"	11.5"
	27"	48-60"	13.8"	11.75"	14-26"	11.8-23.8"	16.4-28.4"	28"	15.5"
	26"	47-60"	12.8"	10.75"	44.07"	44.0.04.0"	16.4-29.4"	27"	14.5"
5-3/4"	25"	46-59"	11.8"	9.75"	14-27"	11.8-24.8"		26"	13.5"
5-3/4	24"	45-57"	10.8"	8.75"	14-26"	11.8-23.8"	16.4-28.4"	25"	12.5"
	23"	44-56"	9.8"	7.75"	14-20	11.0-23.0		24"	11.5"
	22"	43-54"	9.8"	6.75"	14-25" 11.8-22.8"		16.4-27.4"	23"	10.5"
	27"	48-60"	13.8"	11.75"	14-26"	11.8-23.8"	16.4-28.4"	28"	15.5"
	26"	47-60"	12.8"	10.75"	14-27"	11.8-24.8"	16.4-29.4"	27"	14.5"
4-3/4"	25"	46-59"	11.8"	9.75"	14-21			26"	13.5"
4-0/4	24"	45-58"	10.8"	8.75"	14-26"			25"	12.5"
2	23"	44-56"	9.8"	7.75"		11.8-23.8"	16.4-28.4"	24"	11.5"
	22"	43-54"	8.8"	6.75"	14-25"	11.8-22.8"	16.4-27.4"	23"	10.5"

**INSTALLATION DIMENSIONS FOR TRUCKS TABLE 30-1** 

# **STEP 1 - INSTALLING LIFTGATE ON TRUCKS**

## **A WARNING**

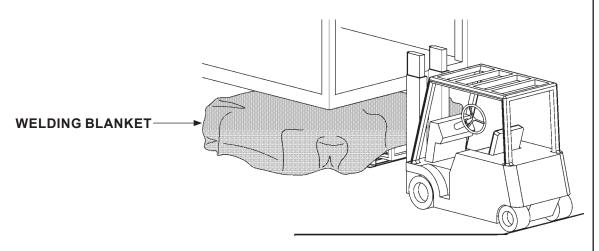
Use welding blankets to protect lines and tubes from weld spatter.

#### **CAUTION**

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

NOTE: Ensure vertical channels on the installation jig are short enough to prevent interference with underbody of vehicle.

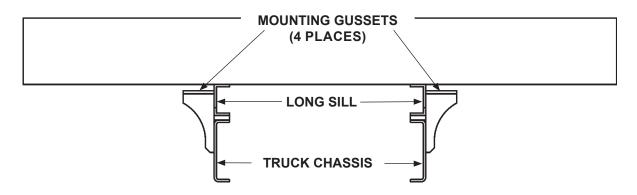
1. Cover Liftgate with welding blanket (FIG. 31-1).



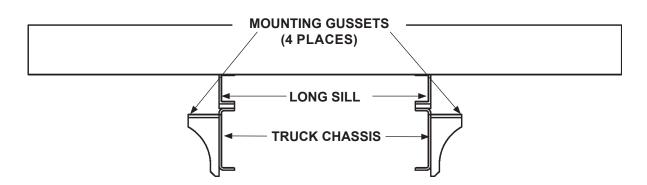
LIFTGATE COVERED WITH WELDING BLANKET FIG. 31-1

NOTE: For clarity Liftgate is not shown in the illustrations below...

2. Refer to the correct bed height and clearance dimensions of the truck (TABLE 30-1) to determine if Liftgate installation plates and gussets should be welded to the truck chassis or long sill under the truck body (FIGS. 32-1 or 32-2). The height of the plates and gussets must provide sufficient clearance between the Liftgate, the underbody, and the ground.



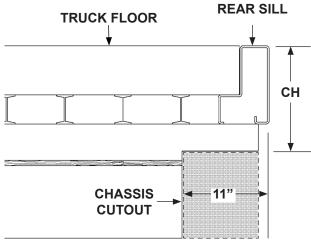
MOUNTING GUSSETS POSITIONED ON LONG SILL FIG. 32-1



MOUNTING GUSSETS POSITIONED ON TRUCK CHASSIS FIG. 32-2

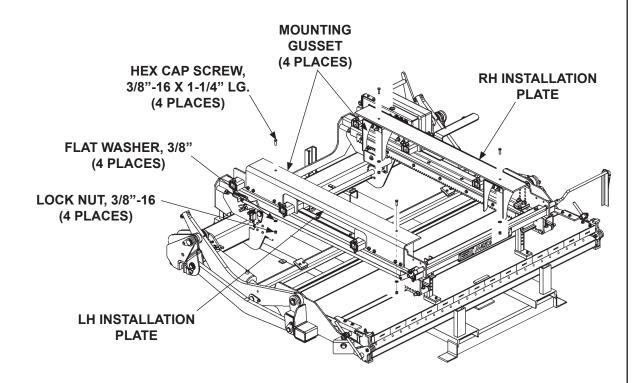
**NOTE:** If truck chassis interferes with Liftgate installation, cut the chassis as shown below. Refer to **TABLE 29-1** for **CH** dimension.

3. If required, mark position for chassis cutout on both sides of the truck chassis (FIG. 33-1). Refer to TABLE 29-1 for dimension CH. Cut chassis to dimensions shown.



TRUCK CHASSIS CUTOUT (LH SIDE SHOWN) FIG. 33-1

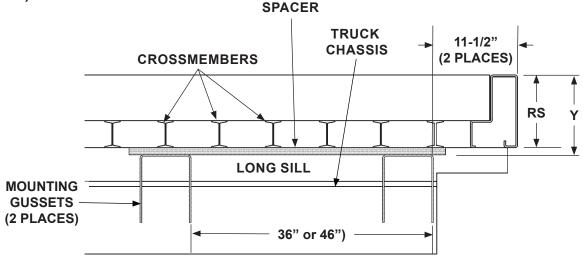
**4.** Unbolt and remove mounting gussets from installation plates on Liftgate. Discard screws, washers and nuts (**FIG. 34-1**).



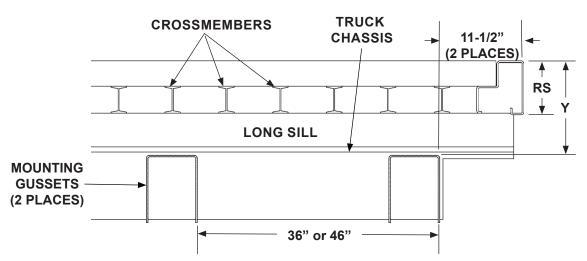
UNBOLTING MOUNTING GUSSETS FROM INSTALLATION PLATES FIG. 34-1

NOTE: Cut a spacer long enough to extend over mounting gussets. Thickness of spacer is determined by dimensions Y or RS+1", whichever is greater. Clamp spacer to crossmembers, and use spacer to align mounting gussets. Refer to FIGS. 35-1 and 35-2, and TABLE 30-1 for RS and Y dimensions.

- 5. Mark positions for the mounting gussets on the truck chassis and long sill (FIG. 35-1).
- **6.** Align the 4 mounting gussets with the marks from instruction 5 (FIGS. 34-1 and 34-2).

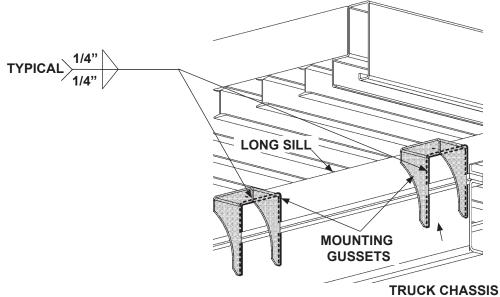


ALIGNING MOUNTING GUSSETS ON LONG SILL FIG. 35-1

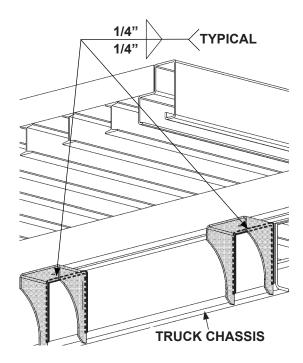


**ALIGNING MOUNTING GUSSETS ON TRUCK CHASSIS** FIG. 35-2

7. Weld mounting gussets to truck chassis and long sill as shown in FIGS. 36-1 or 36-2.

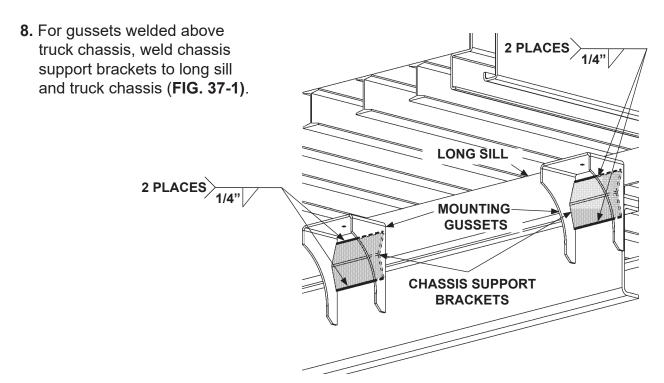


**WELDING MOUNTING GUSSETS ON LONG SILL** FIG. 36-1



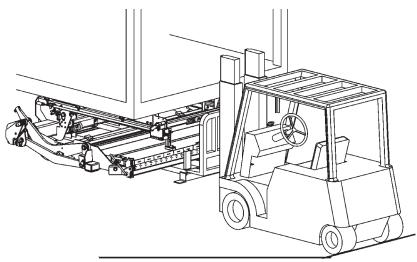
**WELDING MOUNTING GUSSETS ON TRUCK CHASSIS** FIG. 36-2

### STEP 1 - INSTALLING LIFTGATE ON TRUCKS - Cont'd



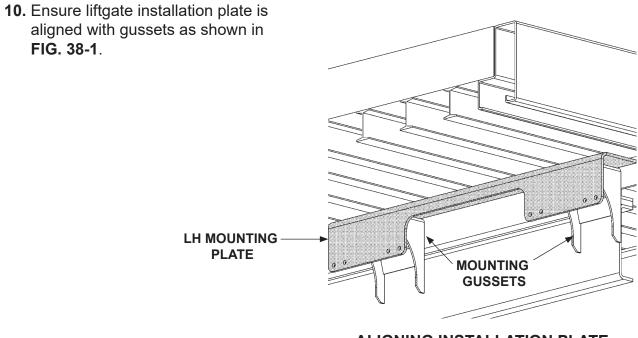
WELDING CHASSIS SUPPORT BRACKETS ON LONG SILL & TRUCK CHASSIS FIG. 37-1

9. Use forklift to position installation plates bolted to Liftgate, on the mounting gussets (FIG. 37-2).

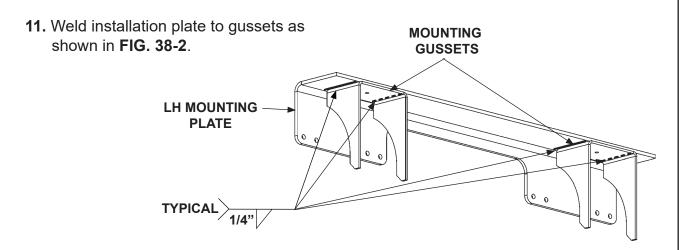


**POSITIONING LIFTGATE** FIG. 37-2

### STEP 1 - INSTALLING LIFTGATE ON TRUCKS - Cont'd

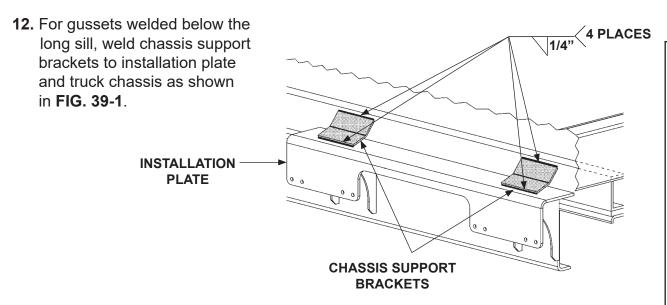


**ALIGNING INSTALLATION PLATE** (LH SHOWN) FIG. 38-1



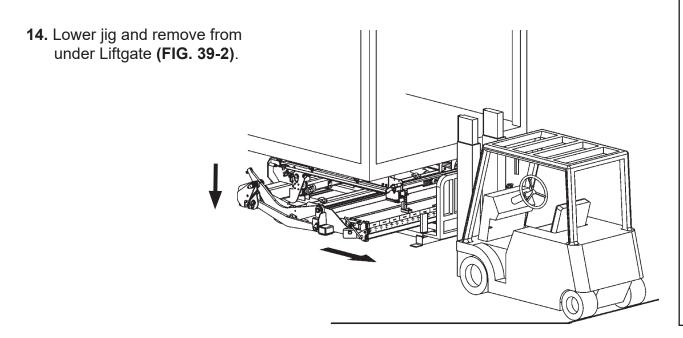
**INSTALLATION PLATE WELDED TO GUSSETS** FIG. 38-2

### STEP 1 - INSTALLING LIFTGATE ON TRUCKS - Cont'd



WELDING CHASSIS SUPPORT BRACKETS TO FIG. 39-1

13. Repeat instructions 4 through 12 for RH installation plate.

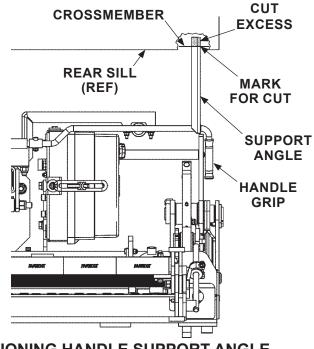


**REMOVING JIG** FIG. 39-2

### STEP 1 - INSTALLING LIFTGATE ON TRUCKS - Cont'd WELD HANDLE SUPPORT ANGLE TO TRUCK

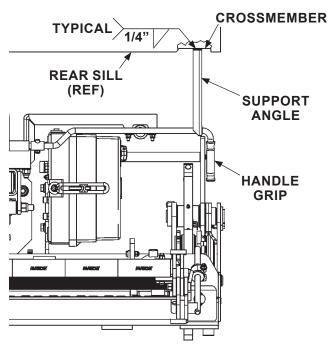
NOTE: Underbody may interfere with position of the handle support angle. If necessary, before welding, the angle support can be marked and cut to fit underbody. Ensure angle support doesn't interfere with handle rotation.

1. Rotate the handle support angle up to the underbody until it touches the crossmember closest to the handle grip (FIG. 40-1). Mark angle position at bottom of the crossmember and cut off excess length of angle support (FIG. 40-1).



POSITIONING HANDLE SUPPORT ANGLE FIG. 40-1

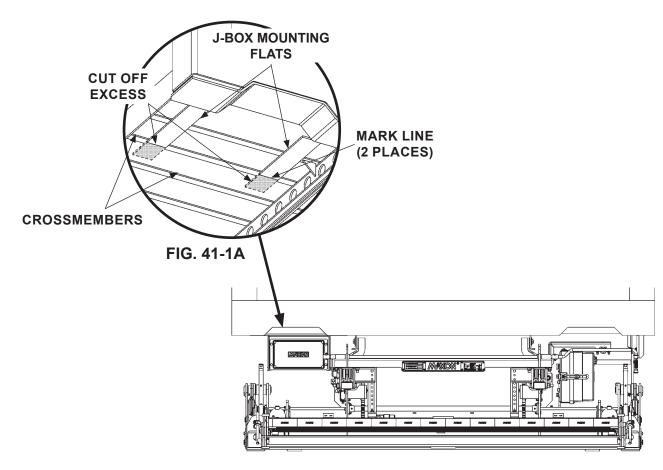
2. Weld handle support angle to crossmember as shown in FIG. 40-2.



WELDING HANDLE SUPPORT ANGLE FIG. 40-2

### STEP 2 - WELD J-BOX TO UNDERBODY

1. Position two J-box mounting flats (Kit items) on vehicle crossmembers (FIGS. 41-1 and 41-1A). Mark position of flats at the bottom of the crossmembers and cut off excess length of flats as shown in FIG. 41-1A.

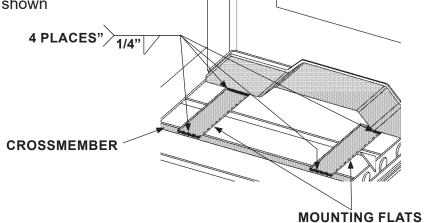


**POSITIONING J-BOX MOUNTING FLATS** FIG. 41-1

### STEP 2 - WELD J-BOX TO UNDERBODY - Continued

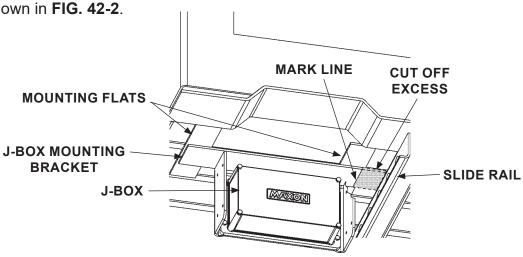
NOTE: Grind galvanized surface material from areas to be welded.

2. Weld J-box mounting flats to vehicle crossmembers as shown in **FIG**. **42-1** 



**WELDING J-BOX MOUNTING FLATS** FIG. 42-1

3. Position J-box mounting bracket on flats (FIG. 42-2). Mark mounting bracket position at the edge of the slide rail and cut excess length from bracket as shown in FIG. 42-2.

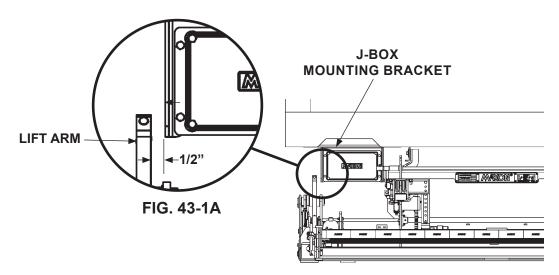


POSITIONING J-BOX MOUNTING BRACKET ON FLATS FIG. 42-2

### STEP 2 - WELD J-BOX TO UNDERBODY - Continued

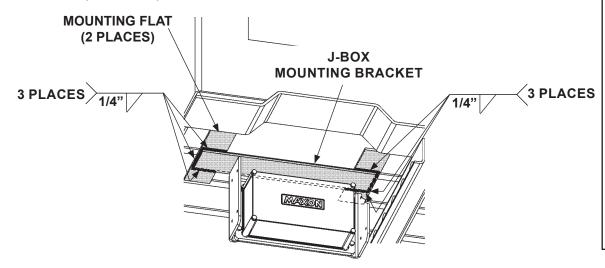
NOTE: Grind galvanized surface material from areas to be welded.

4. Clamp J-box mounting bracket in correct position on mounting flats (FIG. 43-1). Prior to welding, check the clearance between J-box and lift arm in both floor-level and ground-level positions (FIGS. 43-1 and 43-1A). Ensure 1/2" clearance between the lift arm and the J-box bracket (FIG. 43-1A).



POSITIONING J-BOX MOUNTING BRACKET FIG. 43-1

**5.** Weld J-box mounting bracket in correct position on flats **(FIG. 43-2)**.



WELDING J-BOX MOUNTING BRACKET FIG. 43-2

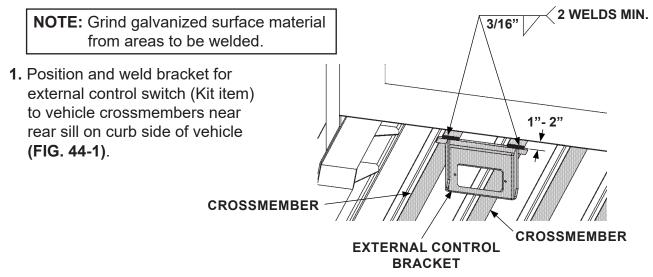
### STEP 3 - ATTACH CONTROL SWITCHES

### **CAUTION**

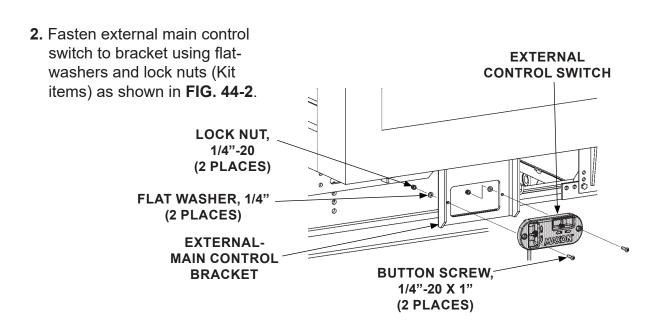
Prevent damage to control box. Make sure installed control box does not protrude from the vehicle body.

### 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.



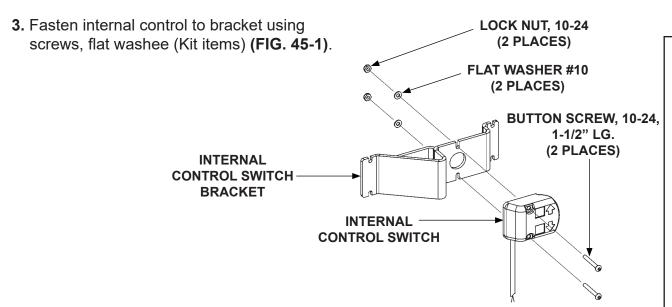
CONTROL BRACKET WELDED TO CROSSMEMBERS FIG. 44-1



**FASTENING MAIN CONTROL TO BRACKET** FIG. 44-2

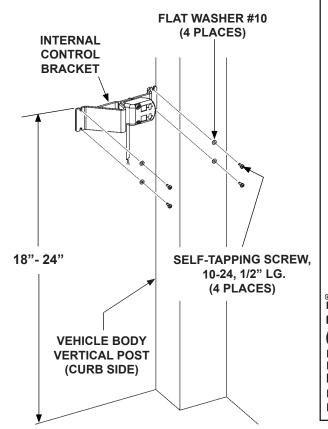
### (800) 227-4116 FAX (888) 771-7713 02906 Santa Fe Springs, CA. Slauson Ave. 11921

### STEP 3 - ATTACH CONTROL SWITCHES - Continued



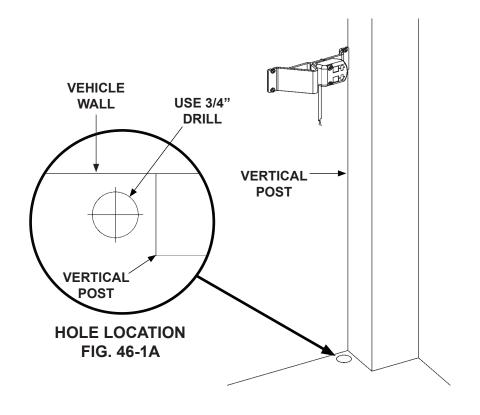
BOLTING INTERNAL CONTROL SWITCH TO BRACKET FIG. 45-1

4. Use internal control bracket to mark and drill 4 holes for mounting next to vertical post (curb side). Bolt bracket to vehicle body with self-tapping screws (FIG. 45-2).



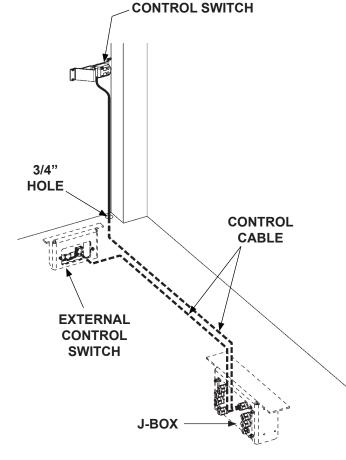
BOLTING INTERNAL SWITCH BRACKET TO VEHICLE BODY FIG. 45-2

**5.** Drill 3/4" hole through vehicle floor as shown in **FIGS. 46-1** and **46-1A**.



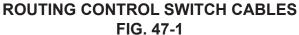
HOLE DRILLED FOR WIRING FIG. 46-1

6. Run control cable from J-box, under vehicle body (see dashed line, (FIG. 47-1), and up through vehicle floor. Pull control cable through 3/4" hole (FIG. 47-1).



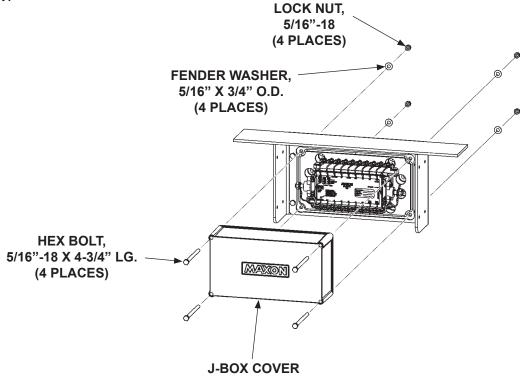
**INTERNAL** 

7. Run the internal control switch cable to the J-box (FIG. 47-1).



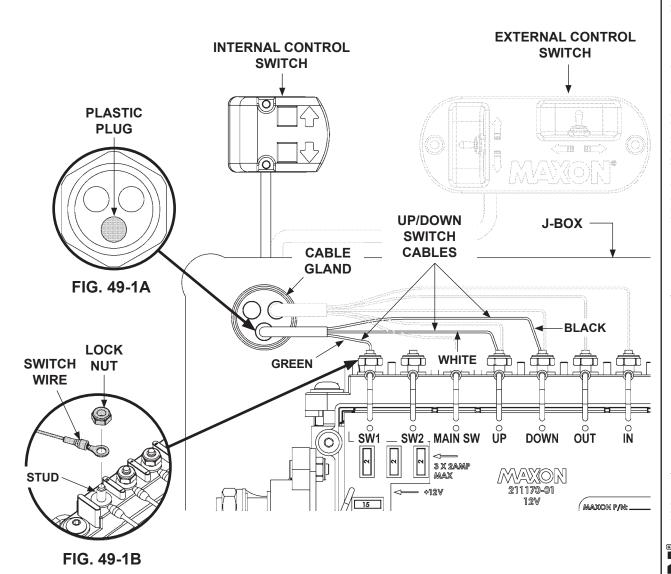
8. Run the external control switch cable to the J-box (FIG. 47-1).

9. Remove J-box cover as shown in **FIG. 48-1**.



**REMOVING J-BOX COVER** FIG. 48-1

**10.** Knock out plastic plug from the cable gland **(FIG. 49-1A)**. Next, connect external and internal control switches (Kit items) to J-box as shown in **FIGS. 49-1 and 49-1B**.



UP/DOWN SWITCH HARNESS CONNECTIONS AT J-BOX FIG. 49-1

### STEP 4 - RUN POWER CABLE

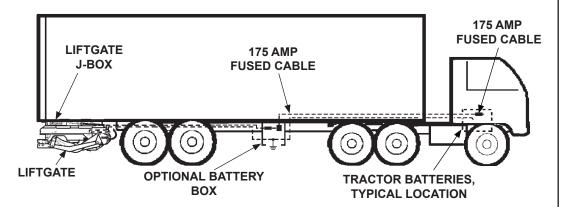
### **A** CAUTION

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 the J-box.

### RECOMMENDED CONFIGURATION

1. Liftgate powered by tractor batteries is typically installed on trailers as shown in FIG. 50-1.



### RECOMMENDED LIFTGATE & OPTIONAL BATTERY BOX **INSTALLATION ON TRAILER** FIG. 50-1

2. Position fuse-end of red (+) cable with fuse nearest the tractor batteries, as shown in **FIG. 50-1**. Run black (-) cable from tractor batteries, as shown in FIG. 50-1. Keep enough cable near batteries to reach the power (+) and ground (-) terminals without straining cables (after connection). Connect cables to optional battery box (trailer) and J-box. Secure power cable to vehicle chassis.

### MAXON

J-BOX

### STEP 5 - CONNECT POWER & GROUND CABLES TO J-BOX

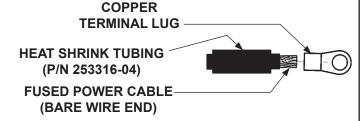
### **NOTICE**

Protect electrical connections on the J-box with a clear corrosion preventative spray. It must be clear to read the labels for the connections.

**NOTE:** Bare wires must not be visible after the heatshrink tubing shrinks on terminal lug.

- Measure (if needed) and then cut excess cable from bare wire end of power (+) and ground (-) cables. Keep enough length to form a drip loop in the cables. Put heat shrink tubing (parts box) (FIG. 51-1) on the end of the cable (leave room for terminal lug). Using a proper crimping tool, crimp copper terminal lug (from parts box), on the power (+) and ground (-) cables and shrink the heat shrink tubing (FIG. 51-2).
- 2. Form a drip loop on the fused power cable where it enters the cable gland from outside the J-box mounting plate (FIG. 51-3).

**3.** Insert power **(+)** cable, from vehicle battery,



PLACING TERMINAL LUG & HEAT SHRINK TUBING ON FUSED POWER CABLE FIG. 51-1



TYPICAL FUSED POWER CABLE WITH TERMINAL LUG INSTALLED FIG. 51-2

POWER CABLE (+) TERMINAL

through cable gland (FIGS 51-3 and 51-3A).

J-BOX
MOUNTING
PLATE

175 AMP FUSED
POWER CABLE (+)

CABLE
GLAND
NUT

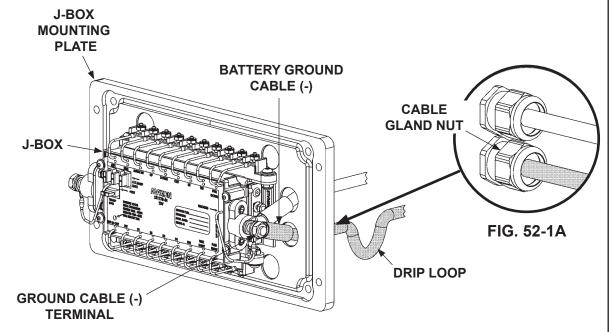
FIG. 51-3A

DRIP LOOP

CONNECTING FUSED BATTERY POWER CABLE (+) AT J-BOX FIG. 51-3

### STEP 5 - CONNECT POWER & GROUND CABLES TO J-BOX - Continued

- 4. Form a drip loop on the ground (-) cable where it enters the cable gland from outside the J-box mounting plate (FIG. 52-1).
- **5.** Insert ground **(-)** cable, from vehicle battery, through cable gland (FIGS 52-1 and 52-1A).



### **CONNECTING BATTERY GROUND CABLE (-) AT J-BOX** FIG. 52-1

6. Connect power (+) and ground (-) cables to J-box as shown in FIGS. 49-3 and 50-1. Torque power (+) and ground (-) cable nuts to 20 lb-ft. Tighten each cable gland nut until the seal has a secure grip on the cable jacket. Ensure the electrical connections are clean, tight, and protected from corrosion.

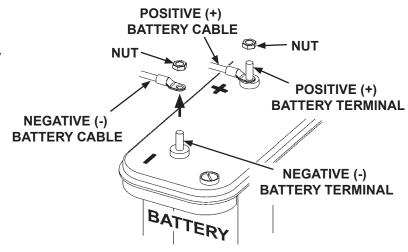
### STEP 5 - CONNECT POWER & GROUND CABLES TO J-BOX - Continued

- **7.** Remove nut from negative (-) battery terminal (FIG. 53-1). Disconnect negative (-) battery cable (FIG. 53-1).
- 8. Remove nut from positive (+) battery terminal (FIG. 53-1).
- 9. Connect fused positive (+) cable to positive (+) battery terminal (FIG. 53-2). Then, reinstall nut on positive (+) battery terminal (FIG. 53-2).
- **10.** Reconnect negative (-) battery cable to negative (-) battery terminal (FIG. 53-3). Next, connect negative (-) cable to negative (-) battery terminal (FIG. 53-3). Then, reinstall nut on negative (-) battery terminal (FIG. 53-3).

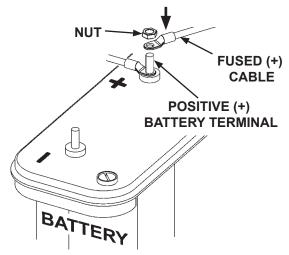
### **NOTICE**

Protect electrical connections on the batteries and circuit breaker with a corrosion preventative spray.

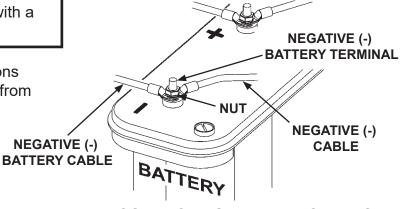
11. Ensure battery cable connections are clean, tight, and protected from corrosion.



### **DISCONNECTING (-) BATTERY CABLE** FIG. 53-1



**CONNECTING FUSED (+) CABLE** FIG. 53-2

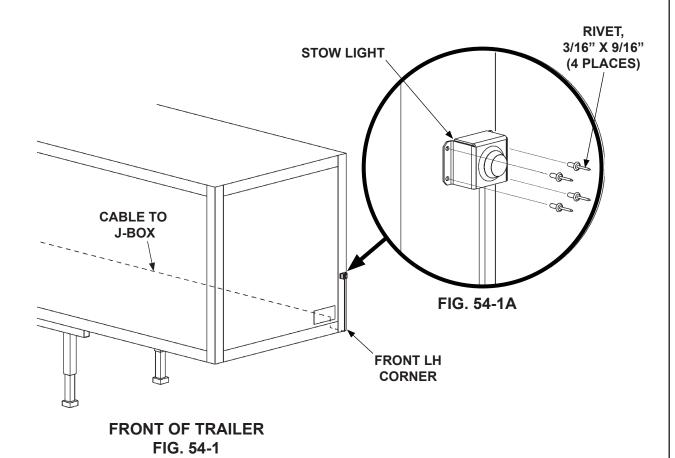


RECONNECTING BATTERY CABLES FIG. 53-3

### STEP 6 - ATTACH STOW LIGHT TO TRAILER

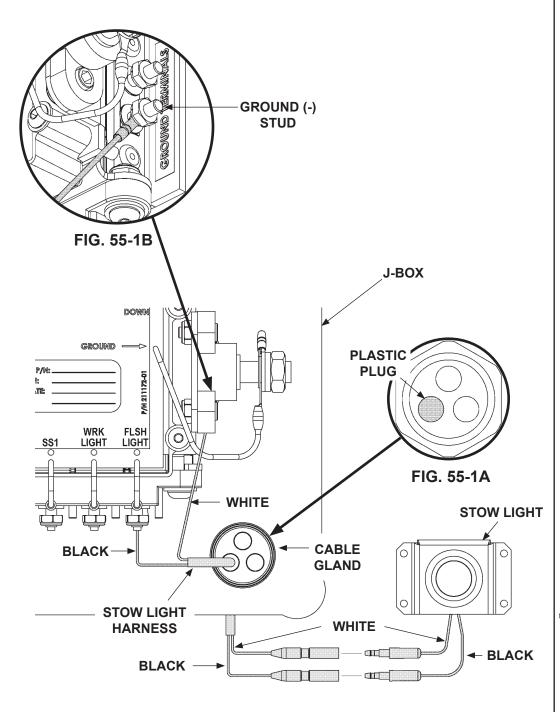
**NOTE:** Stow light will warn vehicle driver if the Liftgate is not stowed. Light must be positioned so the driver can see the light from the driver's side view mirror.

 Position stow light on trailer as shown in FIGS. 54-1 and 54-1A. Rivet (Kit items) the stow light to LH front corner of trailer (FIG. 54-1A).



### STEP 6 - ATTACH STOW LIGHT TO TRAILER - Continued

2. Knock out plastic plug from the cable gland as shown in FIG. 55-1A. Connect stow light to stow light harness at J-box (FIGS. 55-1 and 55-1B).



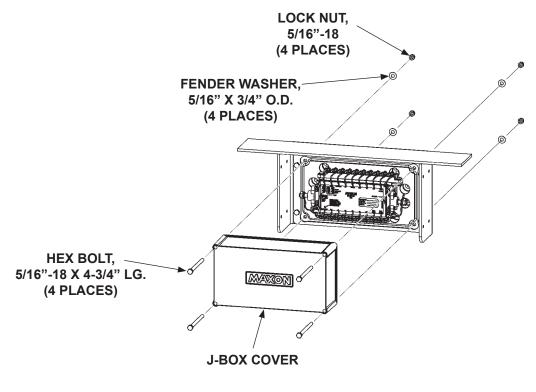
STOW WARNING LIGHT CONNECTIONS AT J-BOX FIG. 55-1

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### STEP 6 - ATTACH STOW LIGHT TO TRAILER - Continued

**3.** Replace J-box cover as shown in **FIG. 56-1**. Torque bolts to **18 - 20 lb-ft**.



ATTACHING J-BOX COVER FIG. 56-1

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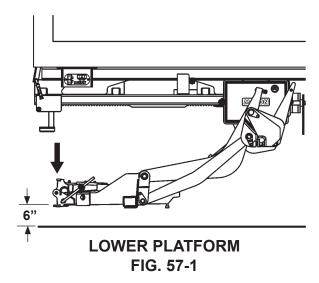
### **STEP 7 - PLATFORM ADJUSTMENT**

### CAUTION

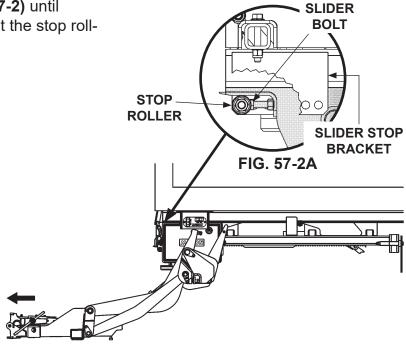
Operate Liftgate with caution and no load until installation is complete.

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

**1.** Lower platform to 6" above ground level (**FIG. 57-1**).

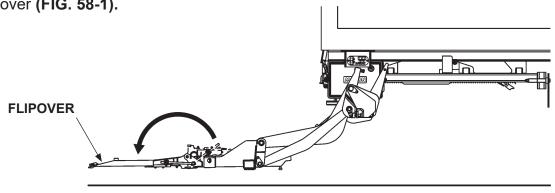


2. Move the platform out (FIG. 57-2) until slider installation plate bolts hit the stop rollers (FIG. 57-2A).



LIFTGATE TRAVELS TO OUTBOARD STOPS FIG. 57-2

3. Unfold flipover (FIG. 58-1).

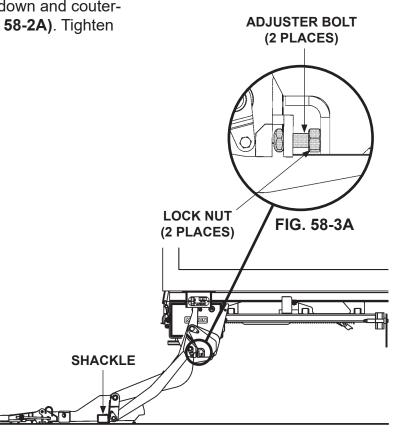


**UNFOLD FLIPOVER** FIG. 58-1

4. Lower platform to ground level (FIG. 58-2). Ensure platform tip and shackle touch ground at the same time (FIG. 58-2). If platform tip or shackle don't touch ground, loosen the adjuster bolt lock nuts on both sides of the unit (FIG. 58-2A). Turn the adjuster bolts clockwise to tilt platform down and couterclockwise to tilt platform up (FIG. 58-2A). Tighten locking nuts to 80-120 lb-ft.

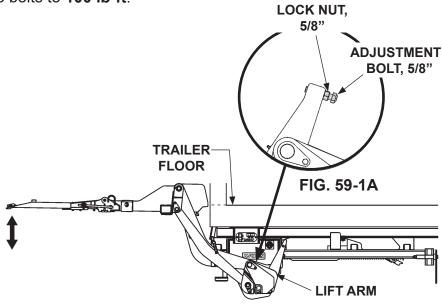
**PLATFORM** 

TIP



PLATFORM LOWERED TO GROUND FIG. 58-2

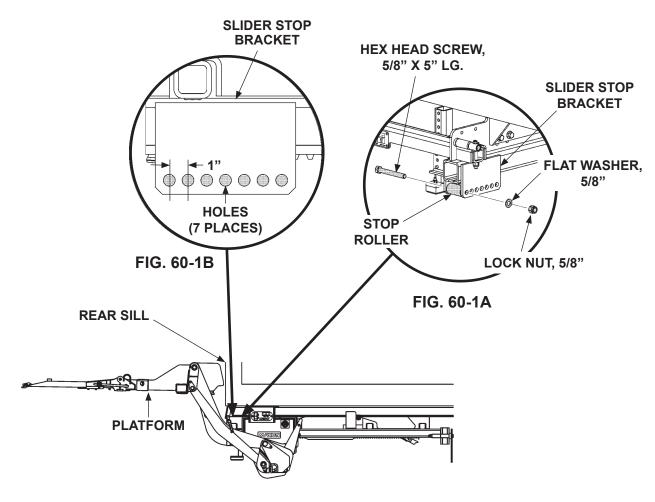
**5.** Raise platform to trailer floor height and level it with trailer floor (**FIG. 59-3**). Use adjustment bolts on LH and RH lift arms to raise or lower platform (**FIG. 59-1A**). Torque bolts to **100 lb-ft**.



PLATFORM RAISED TO FLOOR LEVEL FIG. 59-1

To prevent stop roller from binding, do not overtighten bolts on stop roller. Allow 1/16" gap on each side of stop roller.

**6.** Remove and unbolt stop roller from initial hole in slider stop bracket (FIGS. 60-1 and 60-1A). Push the platform toward the rear sill until approximately 5/8" clearance between the edge of the platform and rear sill (FIG. 60-1). Bolt the stop roller into the hole nearest the head of the adjustment bolt (FIG. 60-1B). Tighten hex bolt, but keep 1/16" gap on each side of roller.



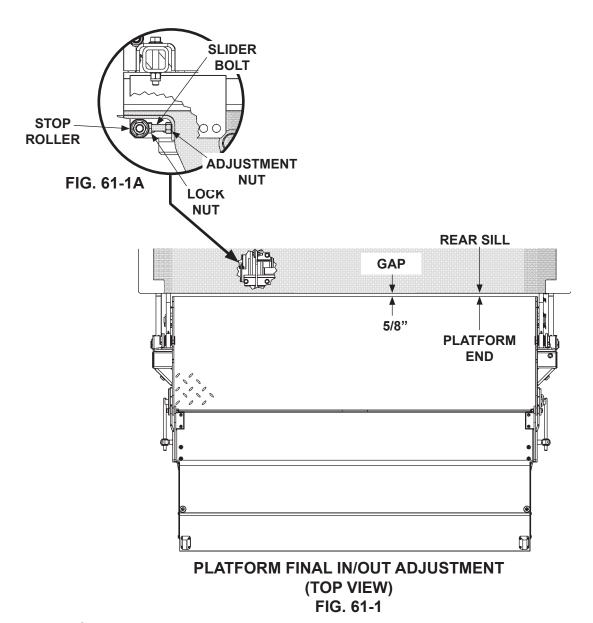
PLATFORM INITIAL IN/OUT ADJUSTMENT FIG. 60-1

### **CAUTION**

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

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

7. Ensure platform is flush with vehicle floor. Use adjustment bolts, located at stop rollers, to adjust platform end to approximately 5/8" gap from rear sill (FIGS. 61-1 and 61-1A). Torque each bolt to 100 lb-ft.



**8.** Operate the Liftgate to ensure correct operation without binding or hitting trailer side sill.

### STEP 8 - ATTACH SLIDING AXLE STOPS (IF REQUIRED)

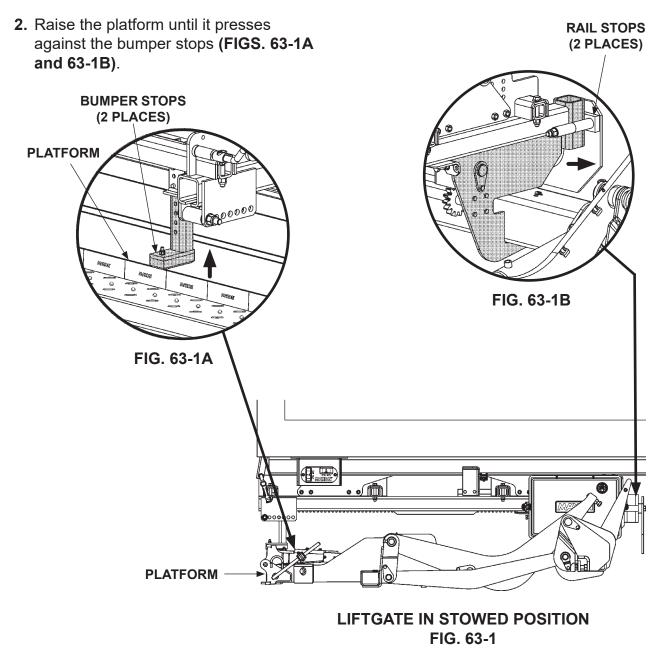
### **CAUTION**

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.

**NOTE:** 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 9 - ATTACH SAFETY CHAIN**

1. Stow Liftgate all the way in until slide mechanism hits the rail stops (FIGS. 63-1 and 63-1B).

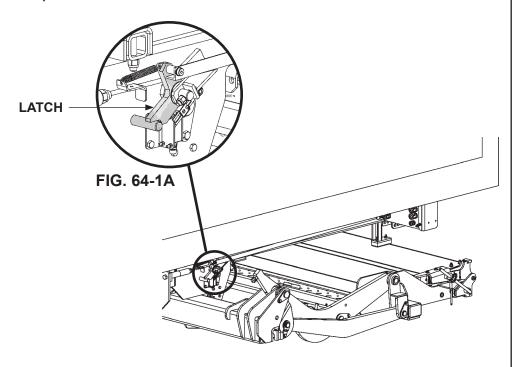


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### **STEP 9 - ATTACH SAFETY CHAIN - Continued**

3. Ensure the latch is in locked position (FIGS. 64-1 and 64-1A).

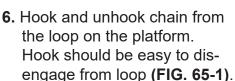


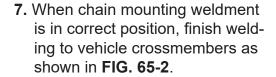
LOCKING LIFTGATE IN STOWED POSITION (LH SIDE SHOWN) FIG. 64-1

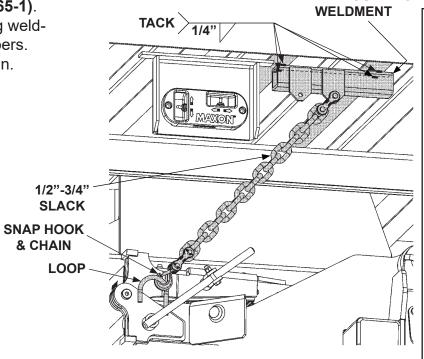
**CHAIN MOUNTING** 

### STEP 9 - ATTACH SAFETY CHAIN - Continued

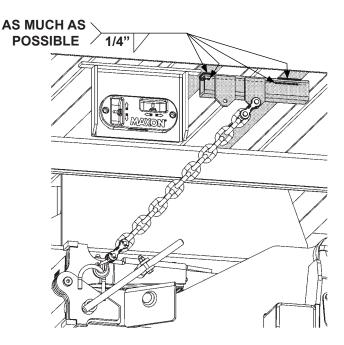
- **4.** Hook chain to platform **(FIG. 65-1)**. Then, position chain mounting weldment to bottom of crossmembers. Keep 1/2" to 3/4" slack in chain.
- **5.** Tack weld the chain mounting weldment as shown in **FIG. 65-1**.





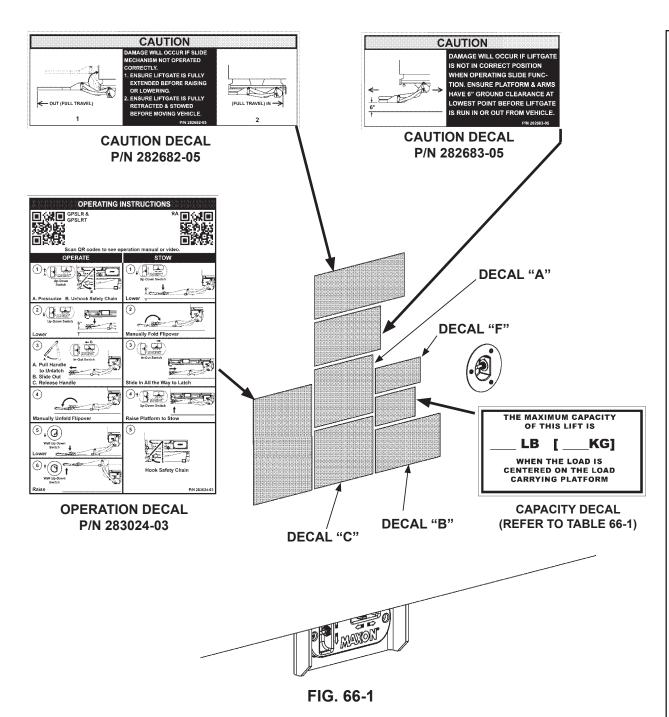


POSITIONING & TACK WELDING CHAIN MOUNTING WELDMENT FIG. 65-1



FINISH WELDING CHAIN MOUNTING WELDMENT FIG. 65-2

### **ATTACH DECALS**



MODEL	ORDER P/N	DECAL "C"
GPSLR/GPSLRT-35	220388-04	3500 LBS. (1600 KG)
GPSLR/GPSLRT-44	253155	4400 LBS. (2000 KG)
GPSLR/GPSLRT-55	253161	5500 LBS. (2500 KG)

**CAPACITY DECAL PART NUMBERS TABLE 66-1** 

### **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 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
- 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 perfain to this model Liftgate, please visit at www.maxonlift.com or call Customer Service at (890) 227-4116

- 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
- 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

P/N 282522-01



**DECAL SHEET** P/N 282522-01 FIG. 67-1

### **DECAL POSITIONS**

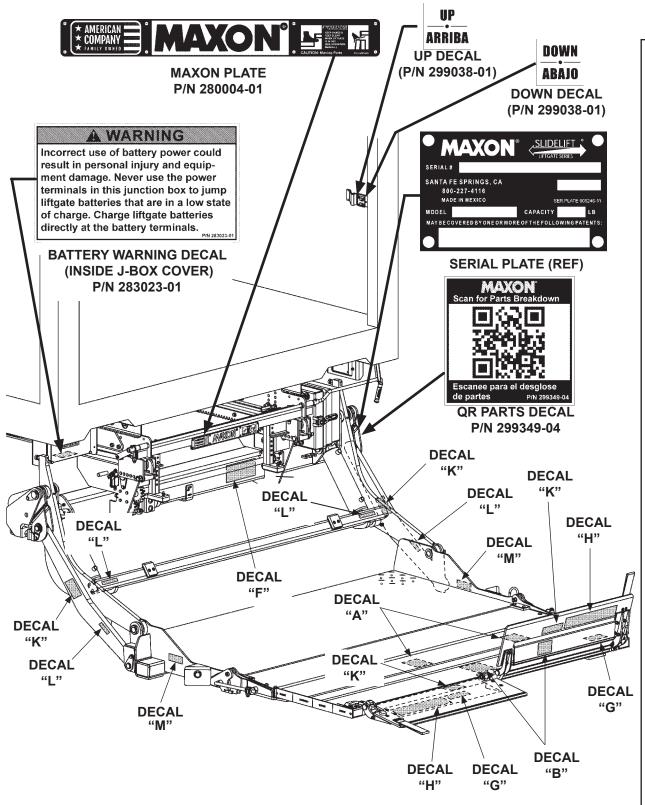


FIG. 68-1

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### **DECAL POSITIONS - Continued**





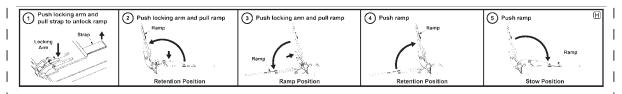


### **A WARNING**

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.



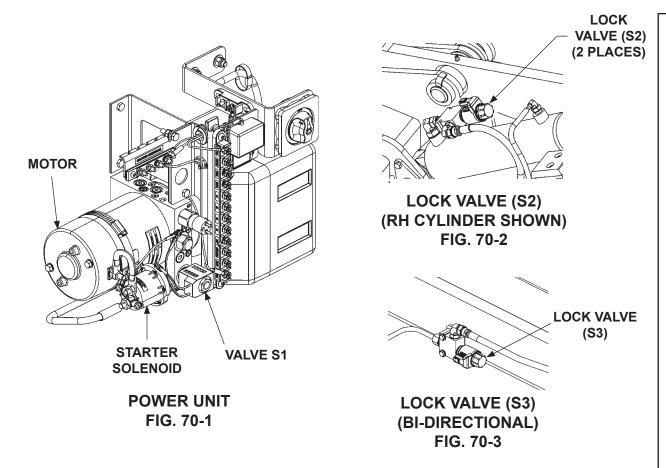






DECAL SHEET P/N 267432-03 FIG. 69-1

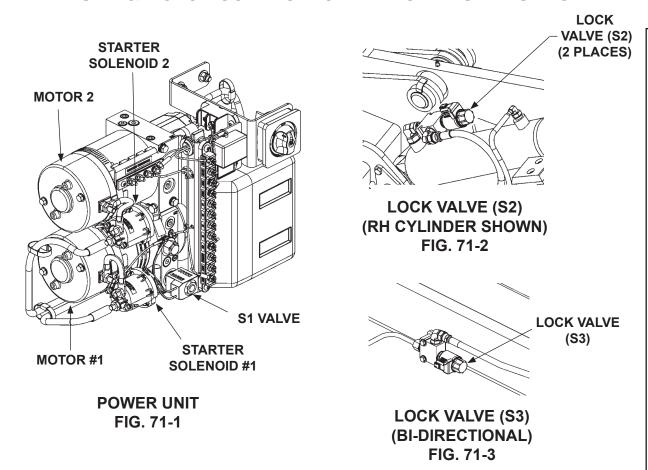
### SYSTEM DIAGRAMS PUMP & MOTOR SOLENOID OPERATION - SINGLE PUMP



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

**TABLE 70-1** 

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



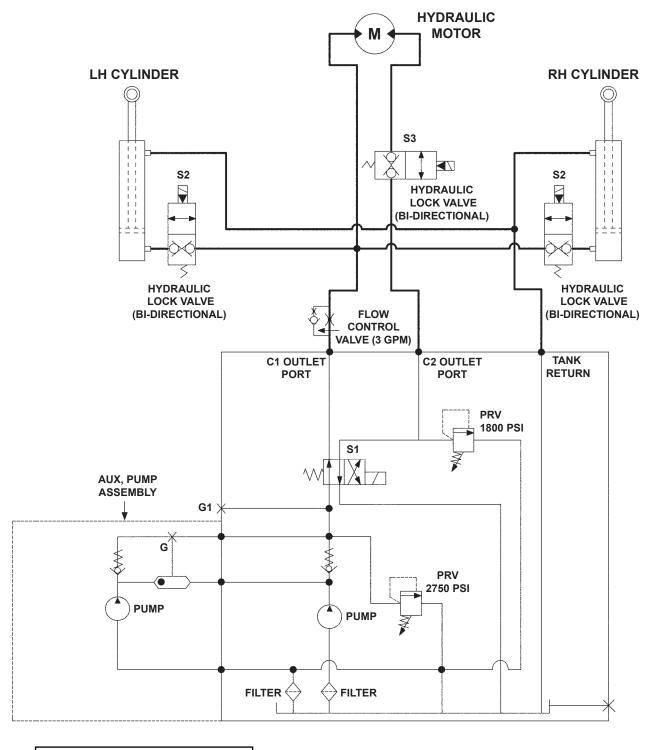
POWER UNIT MOTOR & SOLENOID OPERATION					
LIFTGATE FUNCTION	SOLENOID OPERATION (✓ MEANS ENERGIZED)				
	MOTOR (#1 OR #2)	VALVE (S1)	LOCK VALVES (S2)	LOCK VALVE (S3)	
RAISE	<b>✓</b>	-	<b>✓</b>	-	
LOWER (GD)	-	<b>✓</b>	<b>✓</b>	-	
LOWER (PD)	<b>✓</b>	<b>✓</b>	<b>✓</b>	-	
SLIDE OUT	<b>✓</b>	-	-	<b>✓</b>	
SLIDE IN	<b>✓</b>	<b>✓</b>	-	<b>✓</b>	
REFER TO VALVES SHOWN ON HYDRAULIC SCHEMATIC					

**TABLE 71-1** 

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### **SYSTEM DIAGRAMS - Continued**HYDRAULIC SCHEMATIC - GRAVITY DOWN



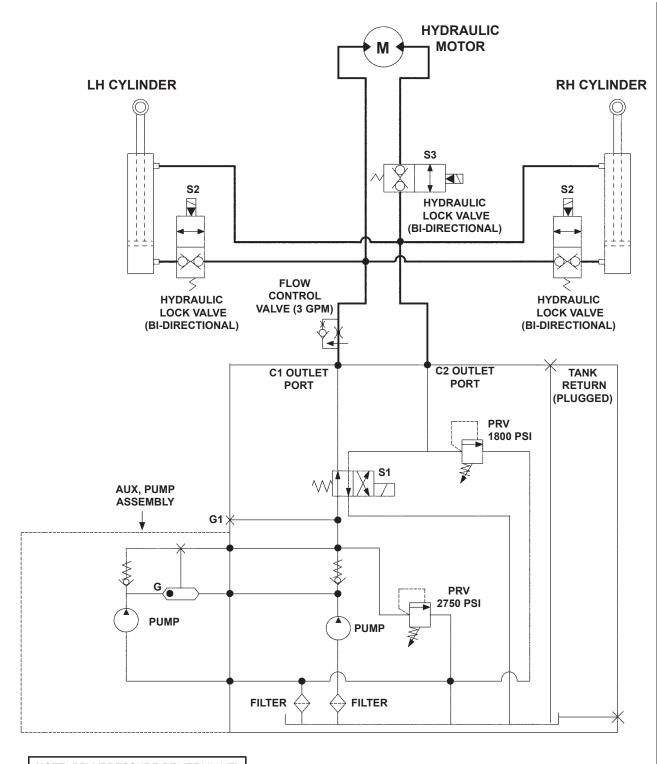
NOTE: PRV (PRESSURE RELIEF VALVE)

FIG. 72-1

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## **SYSTEM DIAGRAMS - Continued**HYDRAULIC SCHEMATIC - POWER DOWN



NOTE: PRV (PRESSURE RELIEF VALVE)

FIG. 73-1

# MAXON<sup>®</sup> 11921 Slauson Ave. S

## SYSTEM DIAGRAMS - Continued ELECTRICAL SCHEMATIC, 12V, GRAVITY DOWN, WITH MAX ECU

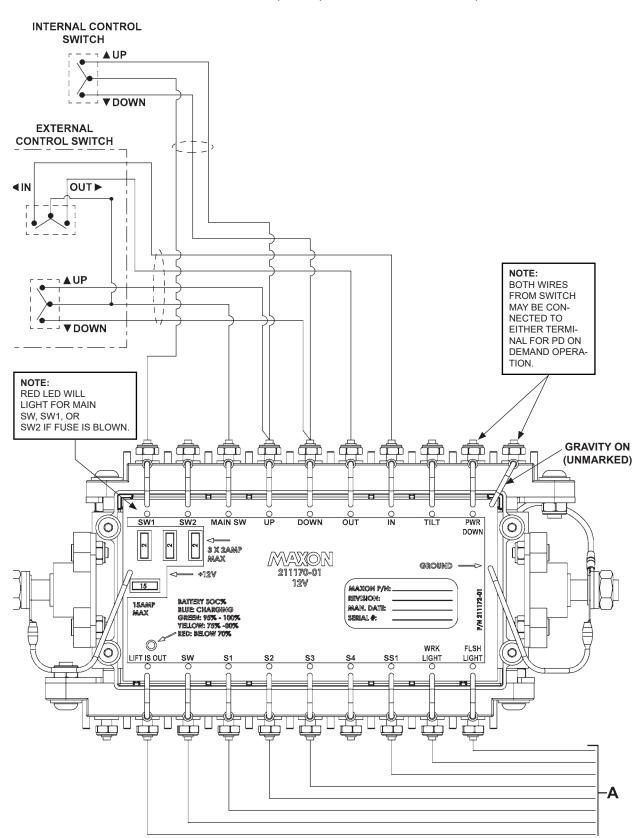
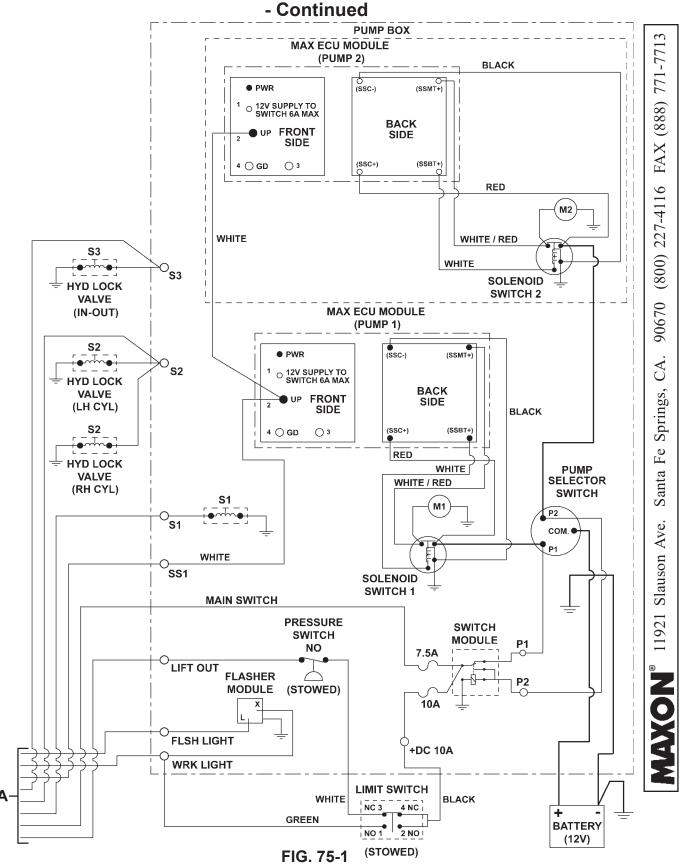


FIG. 74-1

## **SYSTEM DIAGRAMS - Continued**ELECTRICAL SCHEMATIC, 12V, GRAVITY DOWN, WITH MAX ECU



## SYSTEM DIAGRAMS - Continued ELECTRICAL SCHEMATIC, 12V, POWER DOWN, WITH MAX ECU

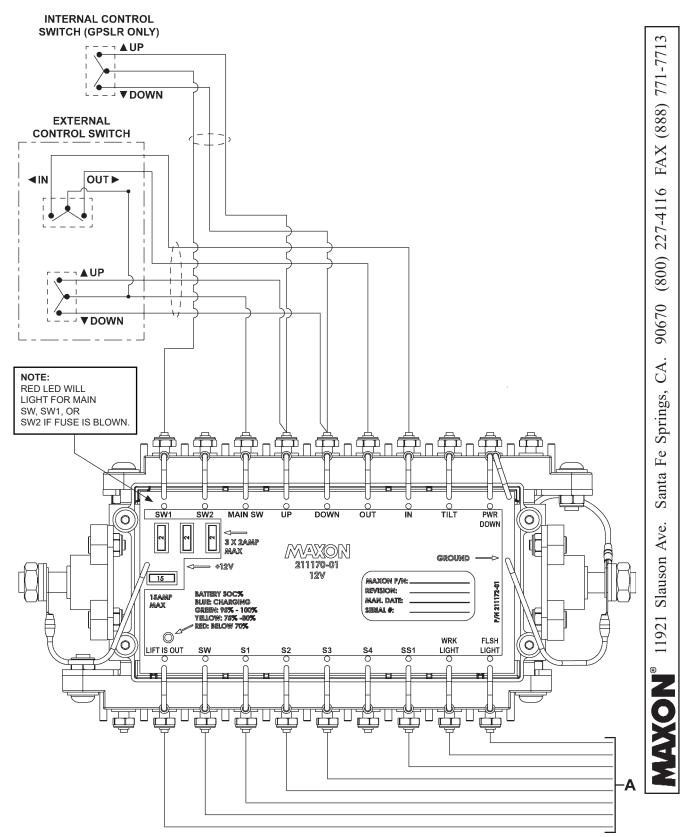


FIG. 76-1

### **SYSTEM DIAGRAMS - Continued ELECTRICAL SCHEMATIC, 12V, POWER DOWN, WITH MAX ECU**

- Continued PUMP BOX MAX ECU MODULE (800) 227-4116 FAX (888) 771-7713 (PUMP 2) **BLACK** (SSC-) PWR (SSMT+ O 12V SUPPLY TO SWITCH 6A MAX BACK SIDE ● UP FRONT SIDE (SSBT+ 4 () GD ○ 3 RED M2 WHITE WHITE / RED S3 WHITE SOLENOID HYD LOCK **SWITCH 2 VALVE** 02906 (IN-OUT) MAXECU MODULE (PUMP 1) (SSC-) (SSMT+) ≫ S2 CA. O 12V SUPPLY TO SWITCH 6A MAX **HYD LOCK** BACK SIDE **VALVE** Santa Fe Springs, UP FRONT (LH CYL) SIDE BLACK S2 (SSC+) (SSBT+) 4 () GD () 3 RED HYD LOCK WHITE **PUMP VALVE SELECTOR** WHITE / RED (RH CYL) **SWITCH** M1 O<u>\_</u> \$1 P2 COM. ALXON<sup>®</sup> 11921 Slauson Ave. WHITE O\_\_\_\_ SOLENOID **SWITCH 1 MAIN SWITCH PRESSURE SWITCH SWITCH MODULE** P1 NO 7.5A LIFT OUT **FLASHER** MODULE (STOWED) 10A **FLSH LIGHT** +DC 10A **WRK LIGHT LIMIT SWITCH** WHITE NC 3 4 NC **BLACK GREEN** 

FIG. 77-1

NO 1 2 NO

(STOWED)

**BATTERY** 

(12V)

# MAXON<sup>®</sup> 11921 Slauson Ave. Santa Fe Springs, CA. 90670

(800) 227-4116 FAX (888) 771-7713

### SYSTEM DIAGRAMS - Continued ELECTRICAL SCHEMATIC 12V/24V, GRAVITY DOWN

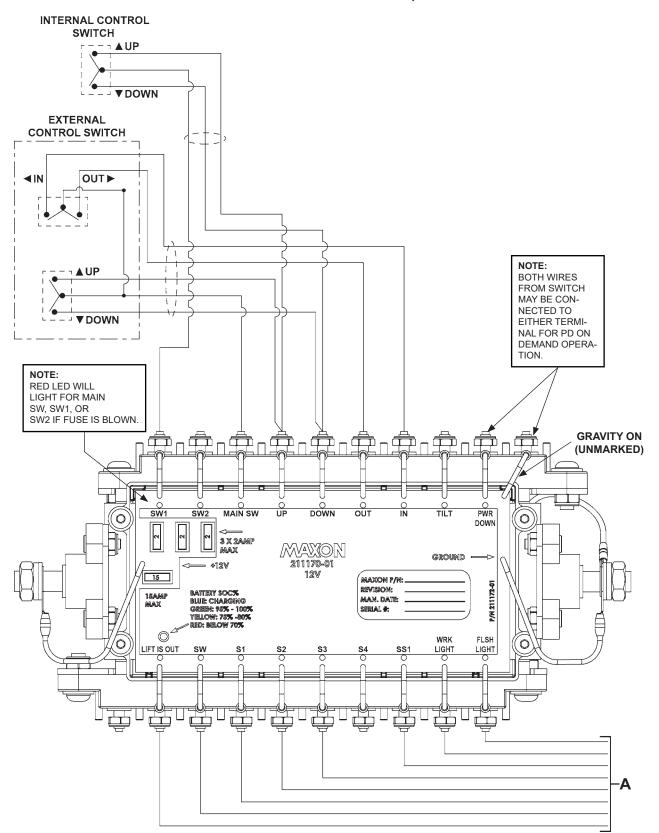


FIG. 78-1

### **SYSTEM DIAGRAMS - Continued**ELECTRICAL SCHEMATIC, 12V/24V, GRAVITY DOWN - Continued

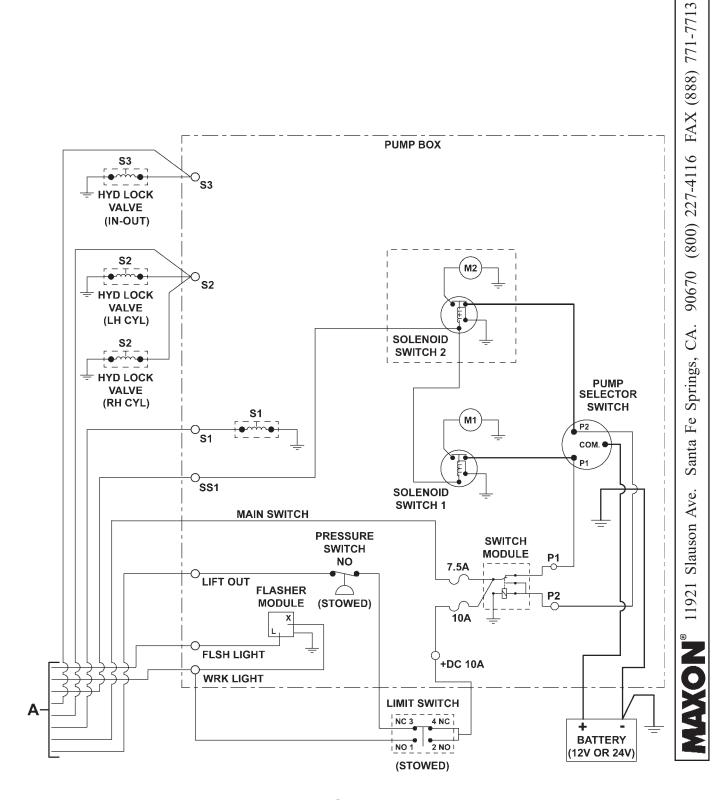


FIG. 79-1

# **SYSTEM DIAGRAMS - Continued ELECTRICAL SCHEMATIC, 12V/24V, POWER DOWN**

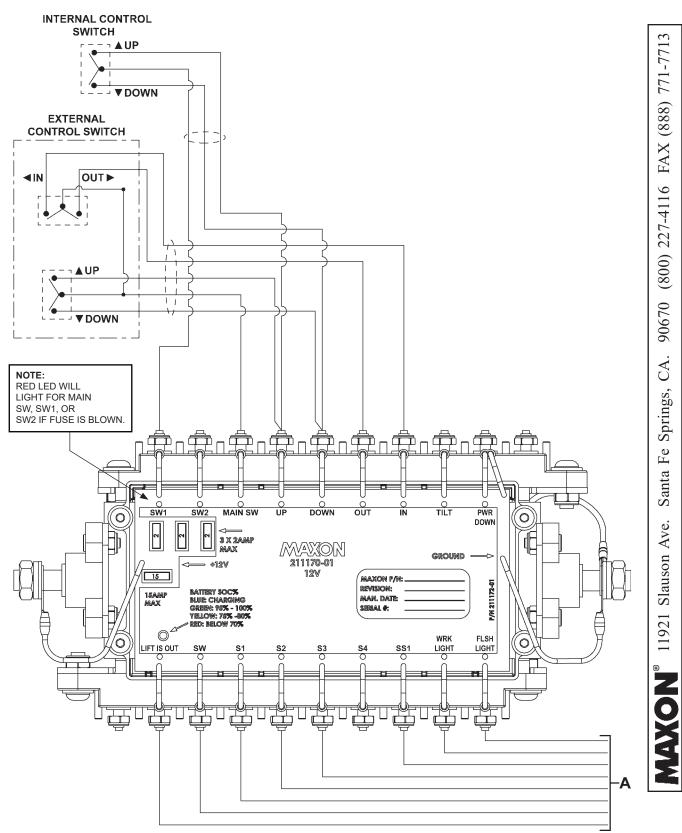
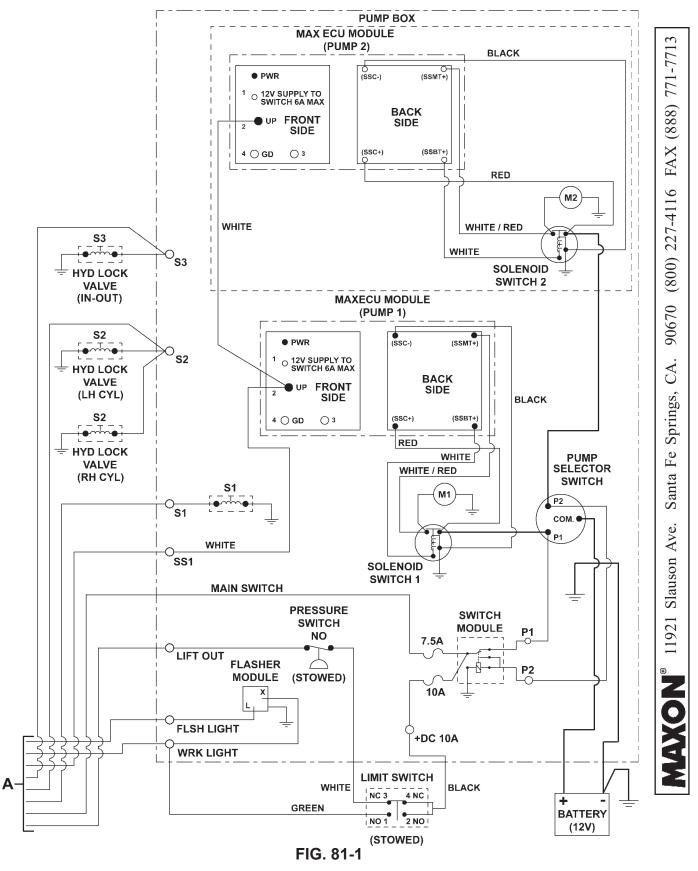


FIG. 80-1

# SYSTEM DIAGRAMS - Continued ELECTRICAL SCHEMATIC, 12V/24V, POWER DOWN - Continued



### **OPTIONS**

KITS	PART NO.
ELECTRICAL	
CIRCUIT BREAKER (150 AMP)	296504-150
HAND HELD CONTROL	211185-01
WORK LIGHT	289175-01
DUAL CONTROL,192" LG CABLE	289235-01
STREET SIDE CONTROL, 96" LG CABLE	289235-02
UNIVERSAL CAB CUT-OFF SWITCH	298905-01
MECHANICAL	
STOW UNLOCK HANDLE, 20" LG.	289160-04
RAILING INSTALLATION, GPSLR / RA	299021-01
MISCELLANEOUS	
TRAFFIC CONE	268893-01
REPLACEMENT INSTALLATION BRACKETS	
INSTALLATION BRACKETS, 48" SLIDE RAILS, 9.13" HT	287930-02
INSTALLATION BRACKETS, 42" SLIDE RAILS, 9.13" HT	287930-04

### **MAXON®**

### PRE-DELIVERY INSPECTION FORM

Model:			Date:			
s	erial Number:		Technician:			
Pr	e-Installation Inspection:  Correct model		Operation Inspection: NOTE: The following times a	are for 60" bed		
	Correct platform size ☐ Correct options  Manuals & decals		height, steel platform flipover, Exxon Univis	with aluminum s HVI-13 hydrau-		
St	Inspect alignment of final assembly. Inspect pump box secure mounting. Inspect all installation welds.		lic fluid, & temperatur are for reference only for larger platforms, s or temperature chang	and may vary smaller platforms,		
	Check roll pins, bolts and fasteners. Inspect tightness of hardware used to secure liftgate to vehicle. Ensure platform ramp touches ground when shackles are 1" above ground, and platform & flipover are level & touching the ground.		<ul> <li>□ Check operation of all main control switches.</li> <li>■ GPSLR-35</li> <li>□ Unloaded platform lowers in Unloaded platform raises in Unloaded platform stows IN Unloaded platform to OUT</li> </ul>	n 10 sec. n 14 sec. l in 9-10 sec.		
Hv	draulic Inspection:		GPSLR-44	<b>-</b>		
	Proper fluid level (See CHECKING  HYDRAULIC FLUID step in this manual).  Check hydraulic fittings in pump box for leaks.		☐ Unloaded platform lowers in ☐ Unloaded platform raises in ☐ Unloaded platform stows IN ☐ Unloaded platform to OUT	n <b>9 to 13 sec</b> . I in <b>12 sec</b> .		
	Check hydraulic line connections for leaks.		GPSLR-55			
	ectrical Inspection: Check power/charge plug and terminal. Check for tight wire connections.		<ul> <li>☐ Unloaded platform lowers in</li> <li>☐ Unloaded platform raises in</li> <li>☐ Unloaded platform to stow platform to OUT</li> </ul>	n <b>14 sec</b> . position in <b>9-10 sec</b> .		
	Circuit breaker (150A) installed in battery box (if equipped) or by truck/tractor battery.  Ensure batteries are fully charged, all cable connections are tight & protected from		All GPSLR: Unloaded plat lowers evenly. At the exten must not be more than 1/8" to side.	sion plate, platform uneven, from side		
	corrosion and tiedowns are tight.  Inspect all solenoid connections.  Check all wiring harness connections.		<ul><li>All GPSLR: Platform store vehicle body.</li><li>Check if cycle counter work</li><li>Decals in correct location a</li></ul>	KS.		
	Check electrical cable connections are tight, secure, and protected from corrosion.		Verify all lights are opera  ☐ Platform lights turn ON when folded, and turn OFF when ☐ Taillights, stop lights, turn lights turn ON and OFF core	en platform is un- platform is stowed. ghts, and backup		