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# SUMMARY OF CHANGES: M-08-12, REVISION H

PAGE	DESCRIPTION OF CHANGE	
COVER	Updated REV, date of release and cover image.	
-	Cover image and applicable Illustrations throughout manual are updated to show new impact-absorbing tubes on the back of the slider frame.	
-	This contents of this manual applies only to GPSLR liftgates equipped with standard control switches. All information about SmartStow controls was removed.	
5	Added California Proposition 65 warning.	
7	Removed installation parts box for GPSLR liftgates that were equipped with SmartStow.	
9, 10, 11	Revised dimension "A" clearance in figures from top of floor to bottom of crossmember. Revised dimension "A" crossmember sizes in Tables 9-1, 10-1 & 11-1.	
25	Added Table 25-3 for correct mounting distance and slot information for refrigerated trailers.	
31-38	Updated battery box installation procedure.	
42,43 Added STEP 10 for <b>CHECKING HYDRAULIC FLUID</b> and added Phillips 66 Arctic L Pour oil to table of recommended ISO-15 oils. Step titles after STEP 10 are renum- bered.		
49 Added <b>CAUTIONS</b> for preparing painted bracket for welding and protecting hydrau hoses near the welds.		
51 Changed Operation decal to latest decal with QR code and added decal with parts code.		
53	Added MAXGRIP decal for platforms with knurled surface.	
54	Decal H updated to show new retention ramp.	
55	Changed PRV setting to 1500 PSI on Hydraulic Schematic.	
59 Added 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**.

## 

- Do not stand, or allow obstructions, under the platform when lowering the Liftgate. **Be sure your** feet are clear of the Liftgate.
- Keep fingers, hands, arms, legs, and feet clear of moving Liftgate parts (and platform edges) when operating the Liftgate.
- Correctly stow platform when not in use. Extended platforms could create a hazard for people and vehicles passing by.
- Make sure vehicle battery power is disconnected while installing Liftgate. Connect vehicle battery power to the Liftgate only when installation is complete or as required in the installation instructions.
- If it is necessary to stand on the platform while operating the Liftgate, keep your feet and any objects clear of the inboard edge of the platform. Your feet or objects on the platform can become trapped between the platform and the Liftgate extension plate.
- Never perform unauthorized modifications on the Liftgate. Modifications may result in early failure of the Liftgate and may create hazards for Liftgate operators and maintainers.
- Recommended practices for welding on steel parts are contained in the current AWS (American Welding Society) D1.1 Structural Welding Code Steel. Damage to Liftgate and/or vehicle, and personal injury can result from welds that are done incorrectly.
- 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.

#### NOTICE

- Maxon Lift is responsible for the instructions to correctly install MAXON Liftgates on trucks or trailers only.
- Liftgate installers, not Maxon Lift, are responsible for reviewing and complying with all applicable Federal, State, and Local regulations pertaining to the trailer or truck.
- Installers of the liftgate should ensure that all trucks and trailers are equipped with grab handles as needed. Refer to Technology Maintenance Council (TMC) RP 1428: Entry And Egress Guidelines for Vehicles With Fold-Under Type Liftgates.

## **GPSLR INSTALLATION PARTS BOX**

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

GPSLR PARTS BOX TABLE 7-1

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

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

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

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

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



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

### **VEHICLE REQUIREMENTS - Continued**



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

DRY TRAILER						
"A"	BED HEIGHT	"X"	MAX SILL DEPTH "B"	SLOT POSITION	MOUNT FRAME CLEARANCE	GROUND CLEARANCE "Y"
	46"					14-7/16"
	47"			MIDDLE	79-5/8"	15-7/16"
	48"	40.2/0"	" 12"			16-7/16"
4 2/4"	49"	10-3/8				17-7/16"
4-3/4	50"	0.4/0"				18-7/16"
	51"					19-7/16"
	52"		0.4/0" 40"	воттом	78-3/8"	17-13/16"
	53"	9-1/0	13			18-13/16"
	46"	10-3/4" 12"		ТОР	80"	14-15/16"
	47"		12"			15-15/16"
	48"					16-15/16"
E 0/4 C"	49"					16-7/16'
5-3/16	50"	9-9/16"	" 13"	MIDDLE	78-3/4"	17-7/16"
	51"					18-7/16"
	52"	0.4/47	" <b>14</b> "	воттом	77-1/2"	17-15/16"
	53"	0-1/4				18-15/16"

### **VEHICLE REQUIREMENTS - Continued**



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

REFRIGERATED TRAILER						
"A"	BED HEIGHT	"X"	MAX SILL DEPTH "B"	SLOT POSITION	MOUNT FRAME CLEARANCE	GROUND CLEARANCE "Y"
	46"		9" 13-1/2"	13-1/2" TOP		12-13/16"
	47"					13-13/16"
	48"				78-3/4"	14-13/16"
7 5/46"	49"	0"				15-13/16"
7-5/16	7-5/16" 50" 9"	9				16-13/16"
	51"					17-13/16"
	52"					17-11/16"
	53"					18-11/16"
	46"			ТОР	77-3/4"	12-5/16"
	47"					13-5/16"
	48"					14-5/16"
7 4 2 /4 6 "	49"	0 47/22"	40.4/0"			15-5/16"
7-13/16"	50"	0-1//32	13-1/2"			16-5/16"
	51"					17-5/16"
	52"					17-3/16"
	53"					18-3/16"

**TABLE 10-1** 

### **VEHICLE REQUIREMENTS - Continued**



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

REFRIGERATED TRAILER									
"A"	BED HEIGHT	"X"	MAX SILL DEPTH "B"	SLOT POSITION	MOUNT FRAME CLEARANCE	GROUND CLEARANCE "Y"			
	46"					11-13/16"			
	47"		14"	ТОР	77-9/32"	12-13/16"			
	48"	]				13-13/16"			
7 5/46"	49"	0 4/46"				14-13/16"			
7-5/16" 50" 51" 52"	50"	8-1/16				15-13/16"			
	51"					16-13/16"			
	52"					17-13/16"			
	53"			17-21/32"					
	46"								11-5/16"
	47"			ТОР	76-7/8"	12-5/16"			
	48"	]				13-5/16"			
7 40/40"	49"	7 5/0"				14-5/16"			
7-13/16"	50"	0.2/0	14			15-5/16"			
	51"	1				16-5/16"			
	52"	]				17-5/16"			
	53"						18-5/16"		

**TABLE 11-1** 

#### **VEHICLE REQUIREMENTS - Continued REAR IMPACT GUARD**

**NOTE:** The stowed GPSLR platform functions as a rear impact guard for vehicle. To comply with current Federal Motor Vehicle Safety Standards (FMVSS 223) and Canadian Motor Vehicle Safety Standards (CMVSS 223), the rear impact guard must be within the rear-end, side, and ground clearances shown in FIGS. 12-1 and 12-2.

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



FIG. 12-2

## **STEP 1 - REMOVE SIDE PLATES**

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



FIG. 13-1

#### **STEP 1 - REMOVE SIDE PLATES - Continued**

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

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



FIG. 14-1

## **STEP 2 - WELD SIDE PLATE**

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

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



- **NOTE:** Angle steel pieces must be butted against the side plate and flush with the edge of the side plate. Each angle must be positioned to butt against a chassis crossmember under the vehicle.
- 2. Clamp 2 pieces of angle steel to side plate as shown in **FIG. 15-1**.

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

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

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

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



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

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

**TABLE 16-1** 

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

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

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

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



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

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



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

Example where D = 50": Y = (52 7/8" - 50") x 1/2, Y = 2 7/8" / 2, Y = 1 7/16"



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



#### **A** CAUTION

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

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







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

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



**REAR SILL** 

#### CHECKING FOR CORRECT DIMENSIONS FIG. 21-1

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

3" CROSSMEMBERS TABLE 21-1

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

4" CROSSMEMBERS TABLE 21-2

#### CAUTION

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

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

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



FIG. 22-1

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





FIG. 23-2

# **STEP 3 - PLACE SLIDER ASSEMBLY ON OPTIONAL JIG**

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

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

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





#### **STEP 4 - BOLT ON LIFTGATE**



3" CROSSMEMBERS TABLE 25-1

4" CROSSMEMBERS TABLE 25-2

REFRIGERATED TRAILER TABLE 25-3

25

### **STEP 4 - BOLT ON LIFTGATE - Continued**

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

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



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## **STEP 5 - WELD ON EXTERNAL CONTROL & BRACKET**

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



RECONNECTING CONDUIT TO RH SIDE PLATE FIG. 27-1

#### CAUTION Prevent damage to control box. Make sure installed control box does not protrude from the vehicle body. CAUTION To protect the original paint system, a 3" wide area of paint must be removed from bracket on all sides of the weld area before welding. 2. Weld the control box bracket to vehicle crossmembers on the RH 2 WELDS MIN, side (curbside) near rear sill of 3/16" MORE IF POSSIBLE vehicle (FIG. 27-2). 1"- 2" **REAR SILL** CROSSMEMBER CONTROL BOX BRACKET WELDING BRACKET TO CROSSMEMBERS

(MOLDED SWITCHES EXTERNAL CONTROLLER) FIG. 27-2

### **STEP 6 - BOLT ON INTERNAL CONTROL SWITCH**

**INTERNAL** 

**CONTROL SWITCH** 

**1.** Use internal control switch bracket to mark and drill 4 holes for mounting next to vertical post (curb side). Bolt internal control box to vehicle body with self-tapping screws (FIG. 28-1).



#### STEP 6 - BOLT ON INTERNAL CONTROL SWITCH - Continued

- Run control cable from external control box, under vehicle body (see dashed line, FIG. 29-1A, FIG. 31-1A), and up through vehicle floor. Pull control cable through 3/4" hole (FIG. 29-1A).
- 4. Connect the control cable to the internal control switch (FIG. 29-1B). INTERNAL **CONTROL SWITCH** GREEN BLACK WHITE CONTROL CABLE **EXTERNAL** CONTROL BOX CONNECTING 3/4" HOLE **CONTROL CABLE** FIG. 29-1B **CONNECTING CONTROL BOX CABLE** (MOLDED SWITCHES EXTERNAL CONTROLLER)

FIG. 29-1A

### STEP 6 - BOLT ON INTERNAL CONTROL SWITCH - Continued

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

 Tack weld angle steel to vehicle wall and vehicle post (FIG. 30-1).

![](_page_29_Figure_3.jpeg)

RUNNING CONTROL BOX CABLE FIG. 30-1

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# 

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

#### **RECOMMENDED CONFIGURATION**

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

 Liftgate and optional battery box are typically installed on trailers as shown in FIGS. 31-1 and 34-1. See the following pages for battery and cable connections.

![](_page_30_Figure_6.jpeg)

2. To correctly position battery box frame on trailer, refer to FIG. 32-1 and TABLE 32-1.

![](_page_31_Figure_2.jpeg)

BATTERY BOX POSITIONING ON SLIDER-AXLE TRAILER FIG. 32-1

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

BATTERY BOX INSTALLATION KITS TABLE 32-1

![](_page_32_Figure_1.jpeg)

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

Using mounting brackets as a template, mark and drill holes through cross members (FIG. 34-1). Bolt mounting brackets to cross members as shown in FIGS. 34-2A and 34-2B. Torque bolts and lock nuts to 85-128 lb-ft.

![](_page_33_Figure_3.jpeg)

FIG. 34-2A

34

#### A WARNING

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

# CAUTION

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

## CAUTION

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

 Weld each bracket to cross members as shown in FIGS.
 35-1A and 35-1B. Weld top of bracket if accessible.

![](_page_34_Figure_8.jpeg)

#### **WARNING**

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

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

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

6. Connect battery cables, fused cables, and ground cables for 12 volt power as shown in FIG. 36-1.

![](_page_35_Figure_6.jpeg)

#### 

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

![](_page_36_Figure_3.jpeg)

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![](_page_37_Figure_0.jpeg)

![](_page_37_Figure_1.jpeg)

## **STEP 8 - RUN POWER CABLE**

![](_page_38_Figure_1.jpeg)

 Position fuse-end of 2-pole power cable with fuse nearest the tractor batteries, as shown in FIG. 39-1. Keep enough cable near batteries to reach the positive (+) and (-) terminals without straining cables (after connection). Run 2-pole cable from battery, to the 2-pole cable from pump box. Secure power cable to vehicle chassis.

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## **STEP 8 - RUN POWER CABLE - Continued**

![](_page_39_Figure_1.jpeg)

### **STEP 9 - CONNECTING POWER**

Connect power cable as shown in FIG. 41-1.

![](_page_40_Figure_2.jpeg)

FIG. 41-1

![](_page_40_Figure_4.jpeg)

## **STEP 10 - CHECKING HYDRAULIC FLUID**

# CAUTION

Keep dirt, water and other contaminants from entering the hydraulic system. Before opening the hydraulic fluid reservoir filler cap, drain plug and hydraulic lines, clean up contaminants that can get in the openings. Also, protect the openings from accidental contamination.

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

+50 to +120 Degrees F - Grade ISO 32 Below +70 Degrees F - Grade ISO 15 or MIL-H-5606 See TABLES 43-1 & 43-2 for recommended brands.

- 1. Unstow and lower Liftgate to ground.
- 2. Unlatch and open pump cover (FIG. 42-1).
- 3. Check the hydraulic fluid level in reservoir as follows. With Liftgate on ground, level should be as shown in FIG. 42-2

CAUTION

on the dipstick. Hydraulic fluid can

overflow from the reservoir.

4. If needed, add hydraulic fluid to the reservoir as follows. Remove filler cap (FIG. 42-2). Fill the reservoir with

hydraulic fluid to 3/4" above bottom

Pump cover must be correctly secured to prevent it from becoming a hazard. Ensure pump cover

is latched to pump box.

shown in FIG. 42-1.

cap (FIG. 42-2).

of dipstick (FIG. 42-2). Reinstall filler

CAUTION

![](_page_41_Figure_8.jpeg)

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# **STEP 10 - CHECKING HYDRAULIC FLUID - Continued**

ISO 32 HYDRAULIC OIL		
RECOMMENDED BRANDS	PART NUMBER	
CHEVRON	HIPERSYN 32	
KENDALL	GOLDEN MV	
SHELL	TELLUS S2 VX 32	
EXXONMOBIL	UNIVIS N-32, DTE-24	

**TABLE 43-1** 

ISO 15 OR MIL-H-5606 HYDRAULIC OIL		
RECOMMENDED BRANDS	PART NUMBER	
CHEVRON	FLUID A, AW-MV-15	
KENDALL	GLACIAL BLU	
SHELL	TELLUS S2 VX 15	
EXXONMOBIL	UNIVIS HVI-13	
PHILLIPS 66	ARCTIC LOW POUR	
ROSEMEAD	THS FLUID 17111	

**TABLE 43-2** 

#### **STEP 11 - LEVELING PLATFORM**

![](_page_43_Figure_1.jpeg)

#### PLATFORM FLUSH WITH VEHICLE FLOOR FIG. 44-3

44

## **STEP 12 - FINAL BOLTING**

![](_page_44_Figure_1.jpeg)

![](_page_44_Figure_2.jpeg)

#### **STEP 12 - FINAL BOLTING - Continued**

2. Bolt RH side plate to slider BOLTS frame as shown in FIG. 46-1. (6 PLACES) FLAT WASHER (6 PLACES) Repeat for LH side. Torque each SIDE bolt to **120 lb-ft**. PLATE FLAT WASHER 0-0-6 (6 PLACES) SLIDER LOCK NUT FRAME (6 PLACES) FIG. 46-1

## **STEP 13 - PLATFORM ADJUSTMENT**

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

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

![](_page_46_Figure_6.jpeg)

# **STEP 14 - 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 15 - ATTACH SAFETY CHAIN**

![](_page_48_Picture_1.jpeg)

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### **STEP 15 - ATTACH SAFETY CHAIN - Continued**

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

![](_page_49_Figure_2.jpeg)

![](_page_49_Figure_3.jpeg)

## ATTACH DECALS

FAX (888) 771-7713

(800) 227-4116

90670

CA.

Santa Fe Springs,

Ave.

11921 Slauson

![](_page_50_Figure_1.jpeg)

FIG. 51-1

### **ATTACH DECALS - Continued**

#### SAFETY INSTRUCTIONS

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

- 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

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1

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. 6.

This liftgate is intended for loading and unloading of cargo only. Do not use this liftgate for anything but its intended use.

#### **A** WARNING

A

Liftgate hazards can result in crushing or falling.

Keep hands and feet clear of pinch points.

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

Read and understand all instructions and WARNINGS before use.

#### **A**CAUTION Always stand clear of platform area. C

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

**GPSLR-33 & GPSTLR-33 ONLY** 

B

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

#### **GPSLR-44 & GPSTLR-44 ONLY**

MODEL	DECAL SHEET P/N	DECAL "B"	
GPSLR-33	267431-01	3300 POUNDS	
GPSLR-44	267431-02	4400 POUNDS	
GPSTLR-33	267431-01	3300 POUNDS	
GPSTLR-44	267431-02	4400 POUNDS	

#### **TABLE 52-1**

#### WARNING

#### Read this information carefully.

- Improper operation of this Liftgate can result in serious personal injury. If you do not have a copy of the operating instructions, please obtain them from your employer, distributor, or lessor before you attempt to operate Liftgate. If there are signs of improper maintenance, damage to vital parts, or slippery platform surface, do not use the Liftgate until these problems have been corrected.
- If you are using a pallet jack, be sure it can be maneuvered safely.
- Do not operate a forklift on the platform.
- Do not allow any part of yours or your helper's body to be placed under, within, or around any portion of the moving Liftgate, or its mechanisms, or in a position that would trap them between the platform and the ground or truck when the Liftgate is operated.
- If a helper is riding the platform with you, make sure you are both doing so safely and that you are not in danger of coming in contact with any moving or potentially moving obstacles.

#### USE GOOD COMMON SENSE.

. If load appears to be unsafe, do not lift or lower it.

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

E

## **DECAL POSITIONS**

![](_page_52_Figure_1.jpeg)

![](_page_52_Figure_2.jpeg)

#### **DECAL POSITIONS - Continued**

![](_page_53_Figure_1.jpeg)

SYSTEM DIAGRAMS **PUMP & MOTOR SOLENOID OPERATION** 

![](_page_54_Figure_1.jpeg)

FIGURE 55-1

POWER UNIT MOTOR & SOLENOID OPERATION						
	PORT					
		PORT				
FUNCTION		MOTOR	"S1"	"S2"	"S3"	VALVE
RAISE	L	$\checkmark$	-	-	-	$\checkmark$
LOWER	L	-	-	-	$\checkmark$	$\checkmark$
SLIDE OPEN	А	$\checkmark$	-	$\checkmark$	-	-
SLIDE CLOSED*	В	$\checkmark$	$\checkmark$	-	-	-
REFER TO VALVES SHOWN ON HYDRAULIC SCHEMATIC				C		

MAXON<sup>®</sup> 11921 Slauson Ave.

**TABLE 55-1** 

#### SYSTEM DIAGRAMS - Continued HYDRAULIC SCHEMATIC

![](_page_55_Figure_1.jpeg)

FIGURE 56-1

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#### SYSTEM DIAGRAMS - Continued ELECTRICAL SCHEMATIC

![](_page_56_Figure_1.jpeg)

FIG. 57-1

#### **OPTIONS** OPTIONAL LIFTGATE COMPONENTS

MISCELLANEOUS KITS	PART NO.
CIRCUIT BREAKER (150 AMP)	251576
GPSLR HARNESS (INTERNAL SWITCH)	287837-01
INSTALLATION JIG	
GPSLR INSTALLATION JIG ASSEMBY	268592-01
BATTERY CABLE KITS	
GPSLR 3' BATTERY INSTALLATION	268802-01
GPSLR 10' BATTERY INSTALLATION	268802-02
GPSLR 20' BATTERY INSTALLATION	268802-03
GPSLR 60' BATTERY INSTALLATION	268802-04
GPSLR 30' BATTERY INSTALLATION	268802-05
BATTERY CABLE AND 150 AMP CIRCUIT BREAKER KITS	
GPSLR 3' BATTERY INSTALLATION WITH 150 AMP CIRCUIT BREAKER	299890-01
GPSLR 10' BATTERY INSTALLATION WITH 150 AMP CIRCUIT BREAKER	299890-02
GPSLR 20' BATTERY INSTALLATION WITH 150 AMP CIRCUIT BREAKER	299890-03
GPSLR 60' BATTERY INSTALLATION WITH 150 AMP CIRCUIT BREAKER	299890-04
GPSLR 30' BATTERY INSTALLATION WITH 150 AMP CIRCUIT BREAKER	299890-05
TOUCH-UP PAINT KIT	
TOUCH-UP PAINT (BCG) WITH ALUMINUM PRIMER, SMALL	908134-01

#### **MAXON®** PRE-DELIVERY INSPECTION FORM

**Important!** This pre-delivery checklist is to aid the installer in confirming the proper installation of this Maxon product. It is not a comprehensive list and does not replace the use of the installation manual. The installer is responsible for following all instructions in the installation manual.

Model:	Model:         Date:		
Serial Number:	Serial Number: Technician:		
Pre-Installation Inspection:	Operation Inspection:		
<ul> <li>Correct model Correct capacity</li> <li>Correct platform size Correct options</li> <li>Correct manuals &amp; decals</li> <li>Structural Inspection:</li> <li>Liftgate is centered on vehicle rear door &amp; mounted per dimensions in this manual.</li> <li>Pump box is mounted securely.</li> <li>All installation welds are done per instructions in this manual.</li> <li>All roll pins, bolts &amp; fasteners on liftgate are tight.</li> <li>All hardware &amp; fasteners, used to secure liftgate to vehicle body, are tight.</li> <li>Ensure platform ramp touches ground when shackles are 1" above ground, and platform &amp;</li> </ul>	<ul> <li>NOTE: The following times are for 53" bed height, aluminum platform and flipover, Exxon Univis HVI-13 oil, &amp; temperature at 70°F. Times are for reference only and may vary for larger platforms, smaller platforms, or temperature changes.</li> <li>Check operation of all main and optional control switches.</li> <li>GPSLR-33</li> <li>Unloaded platform lowers in 6 to 10 sec.</li> <li>GPSLR-44</li> <li>Unloaded platform lowers in 7 to 11 sec.</li> <li>Unloaded platform raises in 9 to 13 sec.</li> </ul>		
<ul> <li>flipover are level &amp; touching the ground.</li> <li>Hydraulic Inspection: <ul> <li>Fluid is at correct level (See CHECKING HYDRAULIC FLUID step in this manual.)</li> <li>No leaks from hydraulic fittings in pump box</li> <li>No leaks from hydraulic line connections</li> </ul> </li> <li>Electrical Inspection:</li> </ul>	<ul> <li>All GPSLR: Unloaded platform raises and lowers evenly. At the extension plate, platform must not be more than 1/8" uneven, from side to side.</li> <li>All GPSLR: Platform stores securely under vehicle body.</li> </ul>		
<ul> <li>Power/charge plug and terminals are clean &amp; tight.</li> <li>Individual wire connections are tight.</li> <li>Circuit breaker (150A) is installed in battery box (if equipped) or by truck/tractor battery.</li> <li>Batteries are fully charged, all cable connections are tight &amp; tiedowns are tight.</li> <li>Solenoid wiring connections are tight.</li> <li>Wiring harness connections are tight.</li> <li>Electrical cable connections are tight &amp; secured clear of moving parts &amp; sharp edges.</li> </ul>	<ul> <li>Check if cycle counter works.</li> <li>Decals in correct location and legible.</li> <li>Verify all lights are operational</li> <li>Platform lights turn ON when platform is unfolded, and turn OFF when platform is stowed.</li> <li>Taillights, stop lights, turn lights, and backup lights turn ON and OFF correctly.</li> </ul>		