

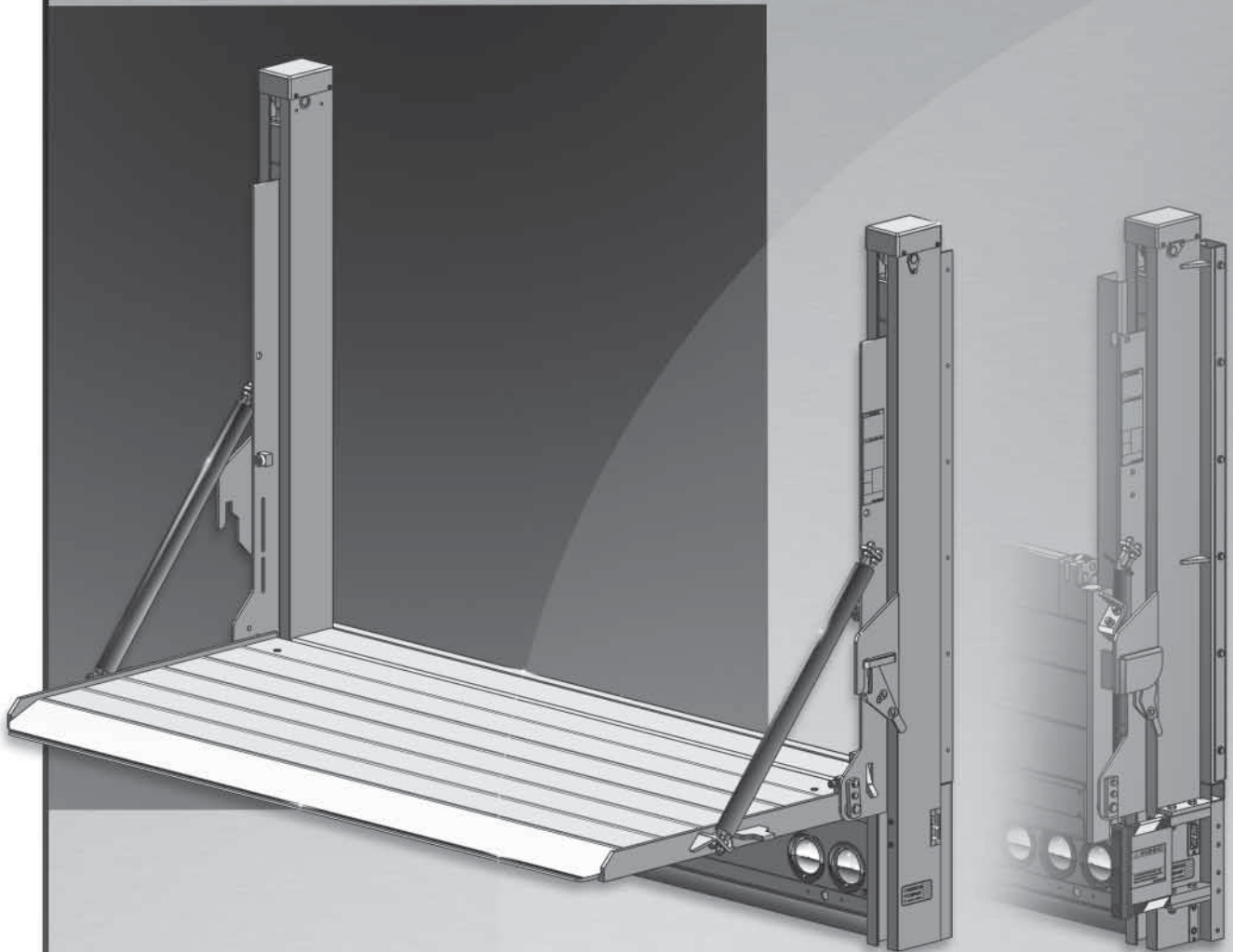
M-16-38  
REV. D  
NOVEMBER 2024



# MAXON<sup>®</sup>

## DMD Series

INSTALLATION MANUAL  
DMD-18, DMD-22 & DMD-33



To find **maintenance & parts** information for your **DMD Liftgate**, go to [www.maxonlift.com](http://www.maxonlift.com). Click the **PRODUCTS, RAILIFT & DMD** buttons. Open the **Maintenance Manual** in the **PRODUCT DOCUMENTATION** window. For parts, click on the **PARTS PORTAL, RAILIFT & DMD** buttons.

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## SUMMARY OF CHANGES: M-16-38 REVISION D

PAGE	DESCRIPTION OF CHANGE
COVER	Updated REV and date. Added image of DMD with dock bumper.
9	Updated Above Bed Options Table to show that dimensions for Above Bed installation are only for DMD without dock bumpers. Dimensions A, BH & C on FIG. 9-2 changed to reference TABLE 9-1.
13	Added components page for DMD with dock bumpers.
14	Added table of parts kit for dock bumper angle braces kit.
33	Added instruction to ensure there is no offset on the inboard side of columns.
35	Added instruction to bolt dock bumper angle braces to RH and LH columns.
36	Added instruction to weld RH and LH dock bumper angle braces to crossmembers of underbody.
42, 43	Added WARNING decal P/N 212449-01.
42-44	Replaced decal sheet P/N 298155-03 with P/N 212464-01.
43, 46	Added decal pages for DMD with dock bumpers.

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](http://www.P65Warnings.ca.gov).

## **WARNING**

- Do not stand, or allow obstructions, under the platform when lowering the Liftgate. **Be sure your feet are clear of the Liftgate.**
- **Keep fingers, hands, arms, legs, and feet clear of moving Liftgate parts (and platform edges) when operating the Liftgate.**
- **Correctly stow platform when not in use. Extended platforms could create a hazard for people and vehicles passing by.**
- **Make sure vehicle battery power is disconnected** while installing Liftgate. Connect vehicle battery power to the Liftgate only when installation is complete or as required in the installation instructions.
- **Remove all rings, watches and jewelry before doing any electrical work.**
- If it is necessary to stand on the platform while operating the Liftgate, keep your feet and any objects clear of the inboard edge of the platform. Your feet or objects on the platform can become trapped between the platform and the Liftgate extension plate.
- Never perform unauthorized modifications on the Liftgate. Modifications may result in early failure of the Liftgate and may create hazards for Liftgate operators and maintainers.
- Recommended practices for welding on steel parts are contained in the current **AWS (American Welding Society) D1.1 Structural Welding Code - Steel**. Damage to Liftgate and/or vehicle, and personal injury can result from welds that are done incorrectly.
- Recommended practices for welding galvanized steel are contained in the current **AWS (American Welding Society) D19.0 Welding Zinc-Coated Steel**. Damage to Liftgate and/or vehicle, and personal injury can result from welds that are done incorrectly.

## SAFETY INSTRUCTIONS

- Read and understand the instructions in this **Installation Manual** before installing Liftgate.
- Before operating the Liftgate, read and understand the operating instructions in **Operation Manual**.
- Comply with all **WARNING** and instruction decals attached to the Liftgate.
- Keep decals clean and legible. If decals are illegible or missing, replace them. Free replacement decals are available from **Maxon Customer Service**.
- Consider the safety and location of bystanders and location of nearby objects when operating the Liftgate. Stand to one side of the platform while operating the Liftgate.
- Do not allow untrained persons to operate the Liftgate.
- Wear appropriate safety equipment such as protective eyeglasses, faceshield and clothing while performing maintenance on the Liftgate and handling the battery. Debris from drilling and contact with battery acid may injure unprotected eyes and skin.
- Be careful working by an automotive type battery. Make sure the work area is well ventilated and there are no flames or sparks near the battery. Never lay objects on the battery that can short the terminals together. If battery acid gets in your eyes, immediately seek first aid. If acid gets on your skin, immediately wash it off with soap and water.
- If an emergency situation arises (vehicle or Liftgate) while operating the Liftgate, release the control switch to stop the Liftgate.
- A correctly installed Liftgate operates smoothly and reasonably quiet. The only noticeable noise during operation comes from the power unit while the platform is raised and lowered. Listen for scraping, grating and binding noises and correct the problem before continuing to operate Liftgate.

## NOTICE

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

# VEHICLE REQUIREMENTS

**NOTE:** Installer is responsible for ensuring vehicle meets Federal, State, and Local standards and regulations.

## BODY STRENGTH

### **⚠ WARNING**

**Consult truck body manufacturer for truck body strength data. Make sure the forces created by the Liftgate are within the limits prescribed by the truck body manufacturer.**

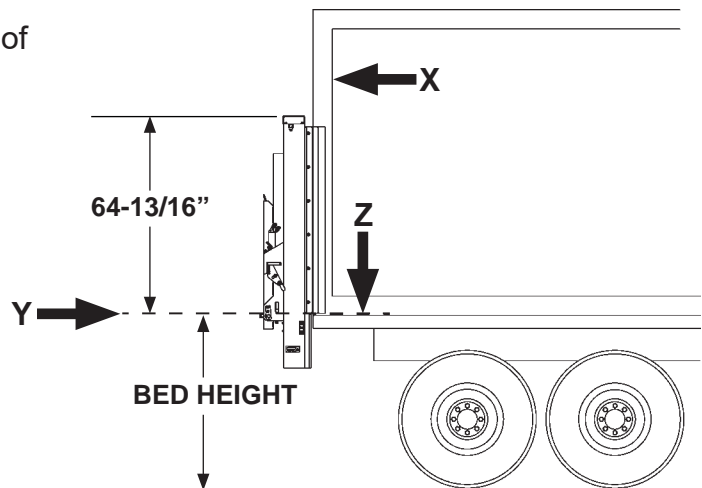
**NOTE:** Maximum Operating Bed Height for body is **54" (Unloaded)**. Minimum is **30" (Loaded)**. Do not install this Liftgate on vehicle bodies equipped with swing open doors.

The DMD is a body mounted Liftgate that puts forces on the side walls of truck bodies (**FIG. 7-1**). For correct installation, truck bodies must be strong enough to withstand the tension, compression and shear forces shown in **FIG. 7-1**. Use **TABLES 8-1, 8-2,** and **8-3** on the following page to determine the forces that apply to the type of platform, size of platform, and load capacity of your Liftgate.

**X= Tension on each sidewall**

**Y= Compression on each sidewall**

**Z= Shear on each sidewall**



**FIG. 7-1**

## VEHICLE REQUIREMENTS - Continued BODY STRENGTH - Continued

DMD-18 FORCES		96" WIDE		102" WIDE	
MODEL CAPACITY	P/F SIZE	(X) (Y) LB	(Z) LB	(X) (Y) LB	(Z) LB
1800 LB	36	496	2125	499	2439
	42	560	2438	566	2461
	48	644	2458	633	2480
	54	694	2475	701	2500
	60	762	2496	771	2522
	72	902	2534	914	2565

**TABLE 8-1**

DMD-22 FORCES		96" WIDE		102" WIDE	
MODEL CAPACITY	P/F SIZE	(X) (Y) LB	(Z) LB	(X) (Y) LB	(Z) LB
2200 LB	36	606	2958	610	2982
	42	685	2980	692	3009
	48	767	3005	774	3032
	54	848	3026	857	3056
	60	932	3051	942	3083
	72	1103	3098	1117	3136

**TABLE 8-2**

DMD-33 FORCES		96" WIDE		102" WIDE	
MODEL CAPACITY	P/F SIZE	(X) (Y) LB	(Z) LB	(X) (Y) LB	(Z) LB
3300 LB	36	831	4058	831	4037
	42	938	4080	938	4058
	48	1047	4105	1047	4081
	54	1157	4126	1157	4096
	60	1269	4151	1269	4121
	72	1495	4198	1495	4168

**TABLE 8-3**

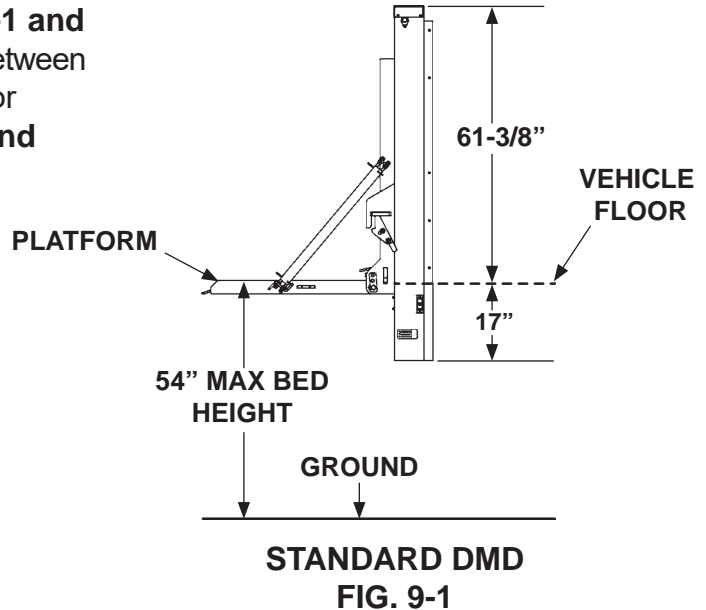


# VEHICLE REQUIREMENTS - Continued

**NOTE:** Dimensions are provided as reference for fitting Liftgate to body.

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

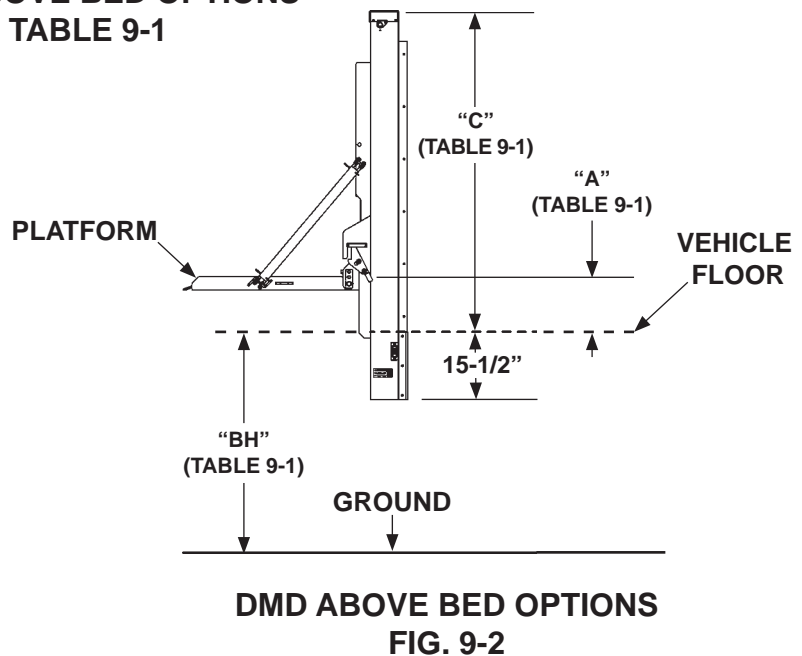
1. Check for correct clearances (**FIGS. 9-1 and 9-2**) on vehicle to prevent interference between vehicle and Liftgate. Refer to **FIG. 9-1** for a standard installation. See **FIG. 9-2 and TABLE 9-1** for above bed options.



ABOVE BED TRAVEL "A"	8"	12" *	16" *
MAX BED HEIGHT "BH"	46"	42"	38"
COLUMN HEIGHT ABOVE BED "C"	69-3/8"	73-3/8"	77-3/8"

\* DMD WITHOUT DOCK BUMPER ONLY

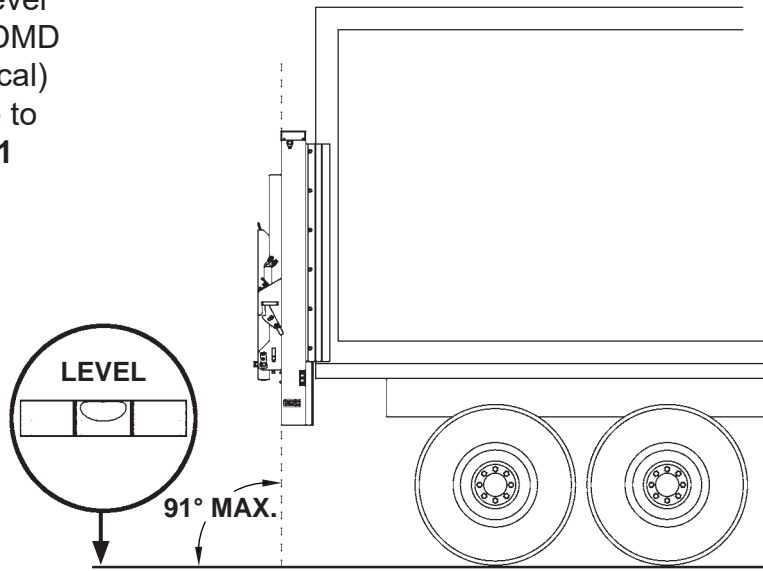
**DMD ABOVE BED OPTIONS  
TABLE 9-1**



## VEHICLE REQUIREMENTS - Continued

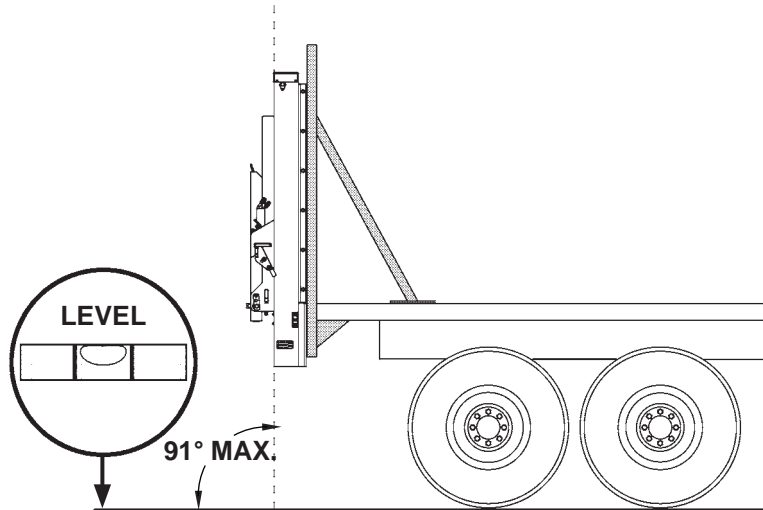
**NOTE:** If Liftgate columns exceed a 91 degree angle from level ground when installed on body, or if columns cannot be mounted flush against rear of vehicle, a steel filler may be used to bridge gap between vehicle body and Liftgate columns. Make sure the added materials and welds meet the **BODY STRENGTH** requirements shown on the previous pages.

2. With the vehicle parked on level ground, the columns of the DMD must be perpendicular (vertical) to the ground for the Liftgate to operate correctly (**FIGS. 10-1 and 10-2**).



**LIFTGATE INSTALLED ON VAN BODY (COLUMNS SHOWN PERPENDICULAR TO LEVEL GROUND)**

**FIG. 10-1**

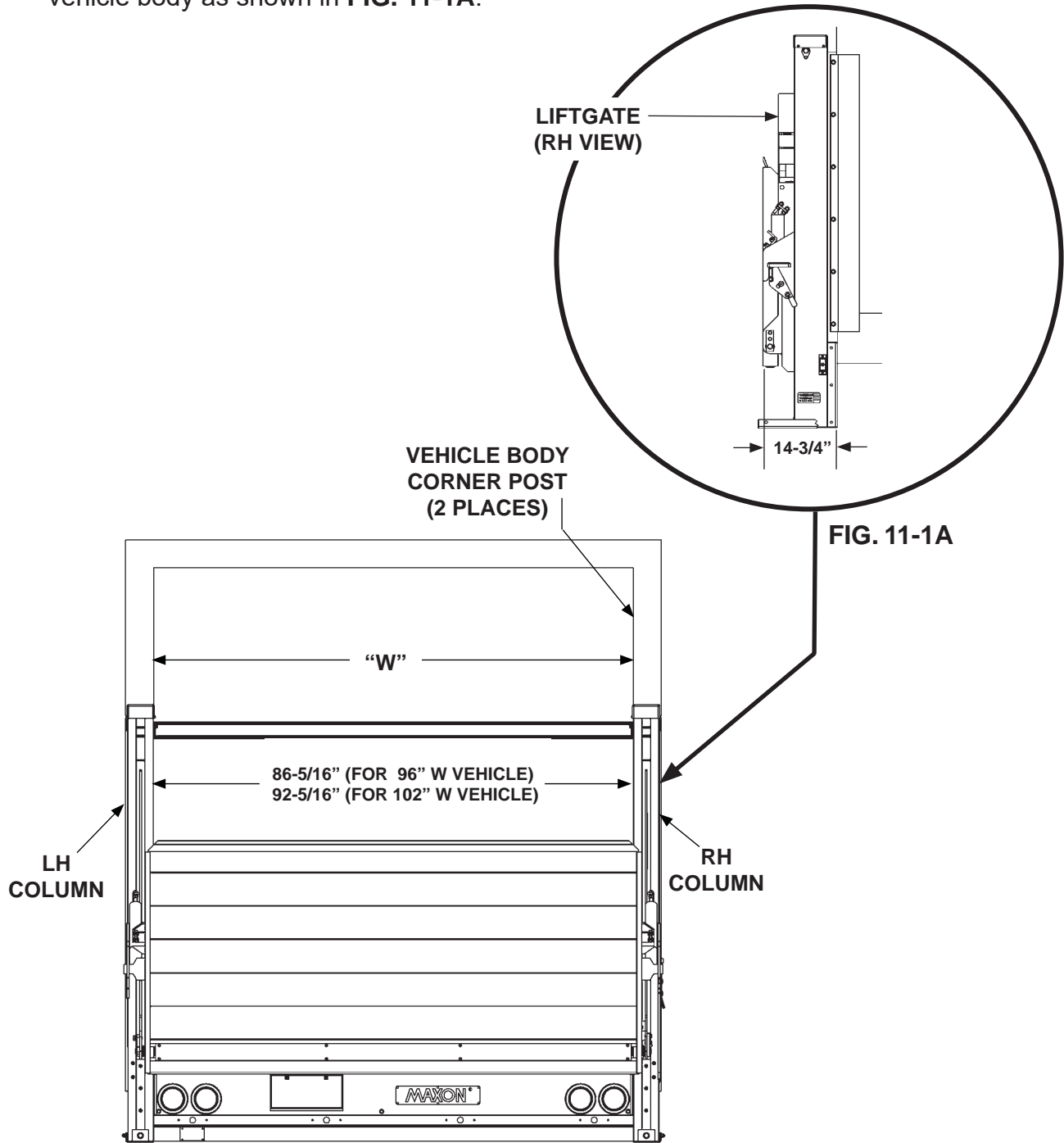


**LIFTGATE INSTALLED ON FLAT BED (COLUMNS & SUPPORTS SHOWN PERPENDICULAR TO LEVEL GROUND)**

**FIG. 10-2**

## VEHICLE REQUIREMENTS - Continued

3. With Liftgate centered on vehicle body, each column should fit on the corner posts of vehicle body with little or no offset (**FIG. 11-1**). Some offset from corner posts is allowed on the inboard side of the columns. Liftgate in stowed position is extended from rear of vehicle body as shown in **FIG. 11-1A**.



**LIFTGATE COLUMNS FITTED TO BODY CORNER POSTS WITH LITTLE OR NO OFFSET**  
**FIG. 11-1**

# LIFTGATE INSTALLATION COMPONENTS

**NOTE:** Make sure you have 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](mailto:cservice@maxonlift.com)**

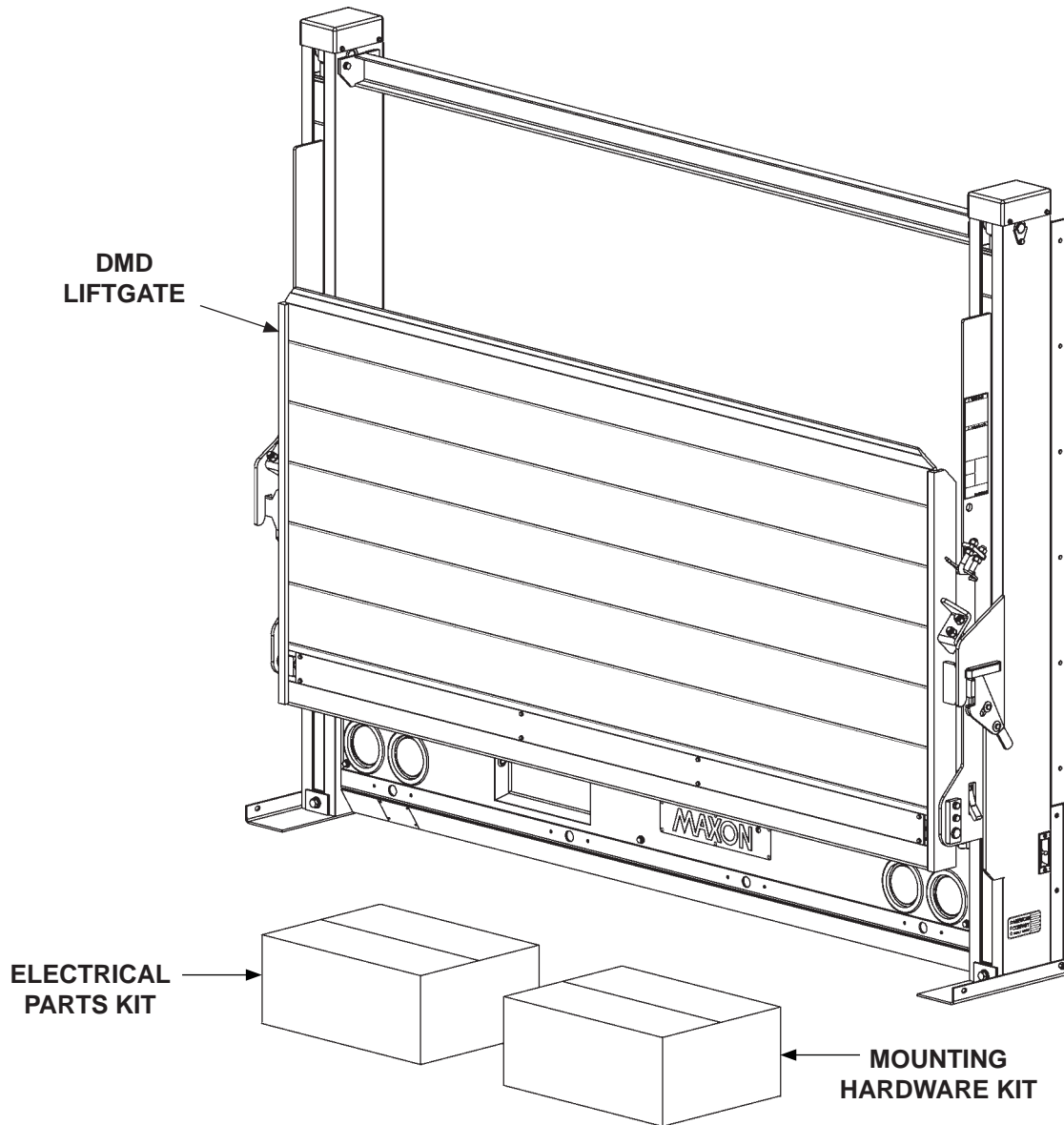


FIG. 12-1

# LIFTGATE INSTALLATION COMPONENTS - Continued

**NOTE:** Make sure you have 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](mailto:cservice@maxonlift.com)

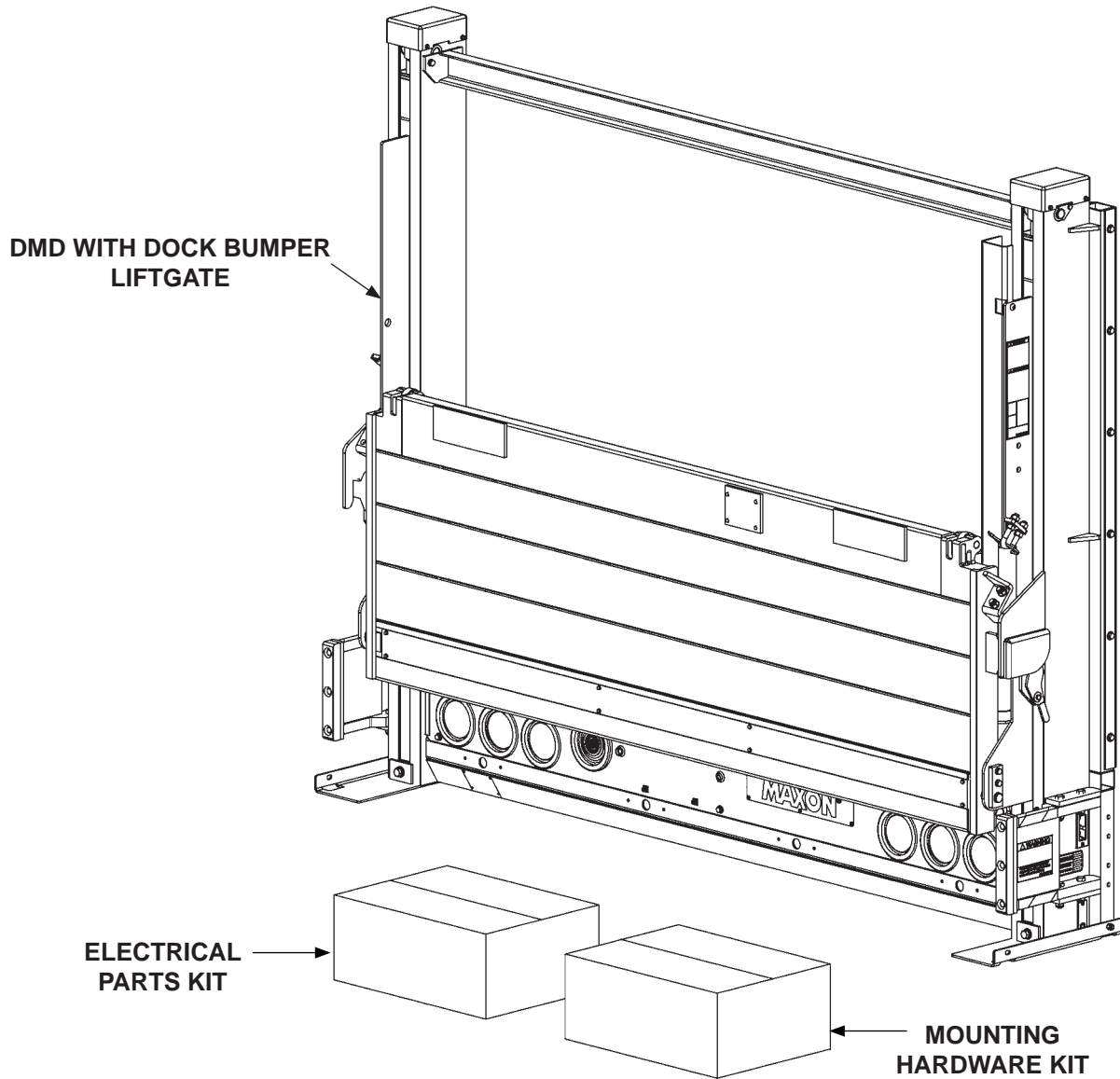


FIG. 13-1

# INSTALLATION & MANUALS KITS

To find **maintenance & parts** information for your **DMD Liftgate**, go to **www.maxonlift.com**. Click the **PRODUCTS, RAILIFT & DMD** buttons. Open the **Maintenance Manual** in the **PRODUCT DOCUMENTATION** window. For parts, click on the **PARTS PORTAL, RAILIFT & DMD** buttons.

ITEM	NOMENCLATURE OR DESCRIPTION	QTY	PART NUMBER
REF	DMD MOUNTING HARDWARE KIT	1	298881-01
1	FLANGE LOCK NUT, 3/8"-16	12	901023-03
2	HEX CAP SCREW, 3/8"-16 X 4" LG, GRADE 8	12	900014-14
3	THIN HEAD, LOCKING HEX NUT, 3/8"-16	12	901016-4
4	FLAT WASHER, 3/8", GRADE 8	12	903442-03

**TABLE 14-1**

ITEM	NOMENCLATURE OR DESCRIPTION	QTY	PART NUMBER
REF	DMD ELECTRICAL PARTS KIT	1	298882-01
1	CABLE ASSEMBLY, 2 GA, 5/16", 3/8" RING, 74" LG.	1	268226-06
2	COPPER LUG, 2 GA, 5/16"	2	906497-02
3	CABLE ASSEMBLY, 2 GA, RED, 5/16", 1/4" RING, 35' LG.	1	295968-04
4	CAP SCREW, 5/16"-18 X 1" LG., GRADE 8	1	900009-2
5	HEX HEAD NUT, 5/16"-18	1	901011-3
6	FLAT WASHER, 5/16", 1/16" THICK	1	902000-8
7	EXT. TOOTH WASHER, 5/16" I.D.	1	903429-01
8	SPRING CLIP	8	050079
9	CIRCUIT BREAKER, 150 AMP	1	907207-01
10	JUMPER, BATTERY CIRCUIT BREAKER	1	295967-01

**TABLE 14-2**

ITEM	NOMENCLATURE OR DESCRIPTION	QTY	PART NUMBER
REF	DMD ANGLE BRACES KIT	1	298189-201G
1	ANGLE BRACE, RH, GALVANIZED	1	298149-201G
2	ANGLE BRACE, LH, GALVANIZED	1	298149-202G
3	HEX CAP SCREW, 3/8"-16 X 1" LG.	6	900014-4
4	FLAT WASHER, 3/8"	6	902013-11
5	FLANGE LOCK NUT, 3/8"-16	6	901023-03

**TABLE 14-3**

ITEM	NOMENCLATURE OR DESCRIPTION	QTY	PART NUMBER
REF	DMD MANUALS KIT	1	298884-01
1	INSTALLATION MANUAL	1	M-16-38
2	OPERATION MANUAL	1	M-16-39
3	DECAL, MAXON 24/7 SUPPORT	1	298634-01

**TABLE 14-4**

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# STEP 1 - PREPARE VEHICLE IF REQUIRED

**NOTE:** Perform the following step for flatbed vehicle body only. If vehicle body is not a flatbed, skip this step.

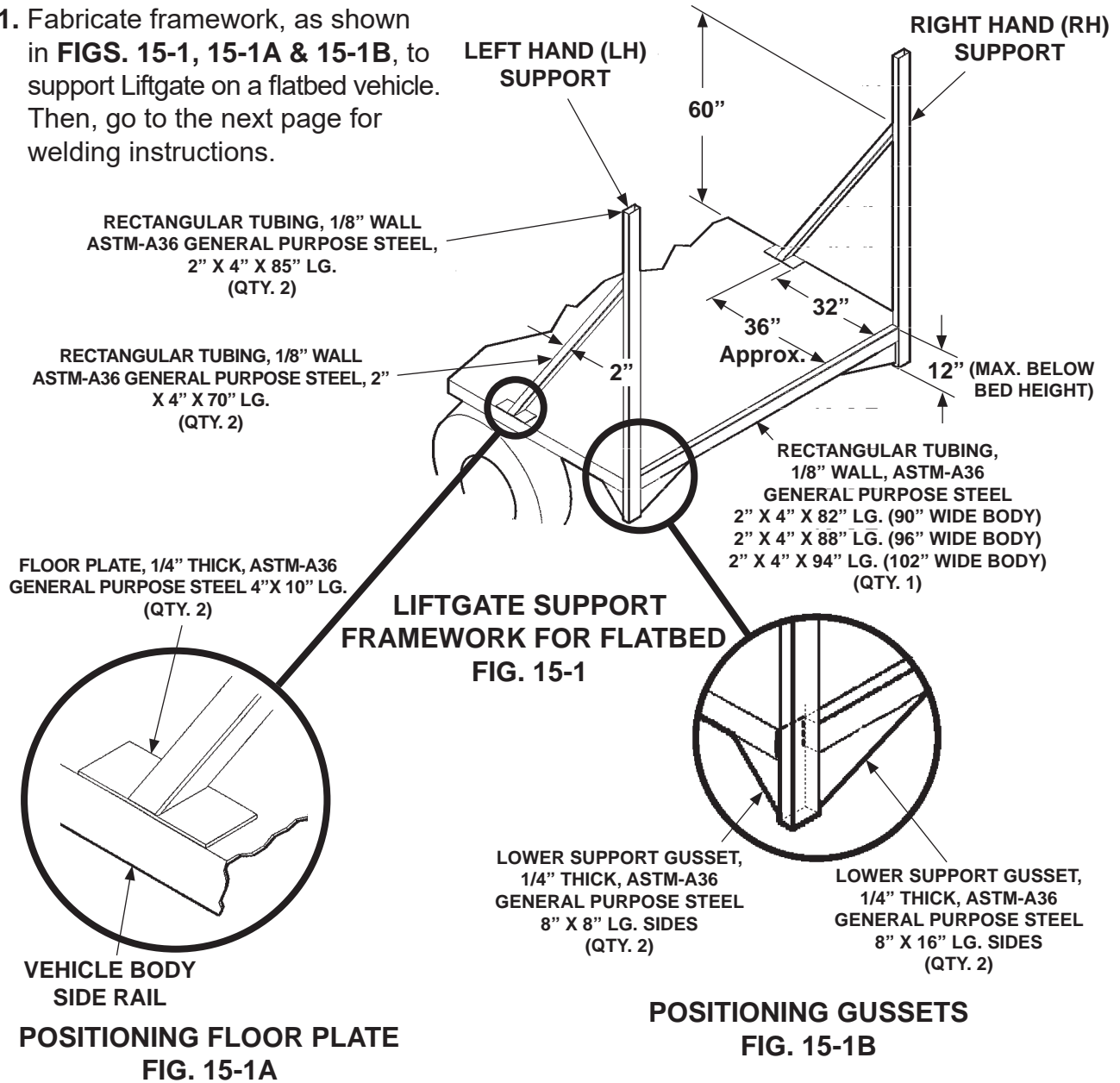
**NOTE:** LH and RH supports must be perpendicular to level ground. See **VEHICLE REQUIREMENTS, INSTALLED LIFTGATE.**

**NOTE:** Materials for support framework are not provided with Liftgate.

## ⚠ 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.

1. Fabricate framework, as shown in **FIGS. 15-1, 15-1A & 15-1B**, to support Liftgate on a flatbed vehicle. Then, go to the next page for welding instructions.



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**MAXON**

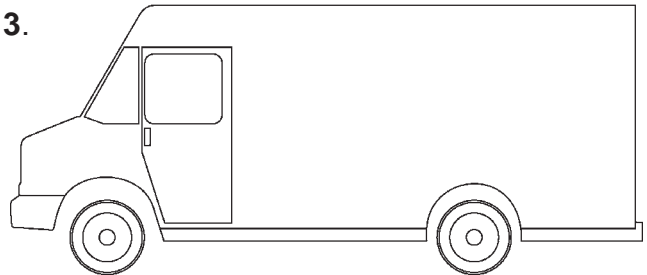




## STEP 2 - CHOOSE METHOD OF INSTALLATION

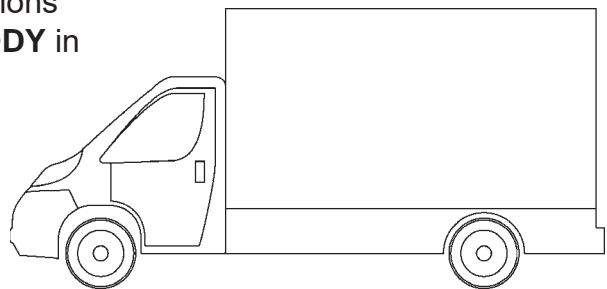
Two methods for mounting a DMD Liftgate on a vehicle body are covered in this manual.

**METHOD 1** - Use this method for **STEP VAN** or **WALK-IN** style body equipped with pre-installed Original Equipment Manufacturer (OEM) mounting channels (**FIG. 17-1**). Refer to **BOLTING LIFTGATE TO BODY** instructions in **STEP 3**.



**STEP VAN/WALK-IN TRUCK BODY**  
**FIG. 17-1**

**METHOD 2** - Use this method for installing liftgate equipped with mounting channels on a **BOX TRUCK** body that does not have pre-installed mounting channels (**FIG. 17-2**). Refer to instructions for **WELDING LIFTGATE TO BODY** in **STEP 3**.

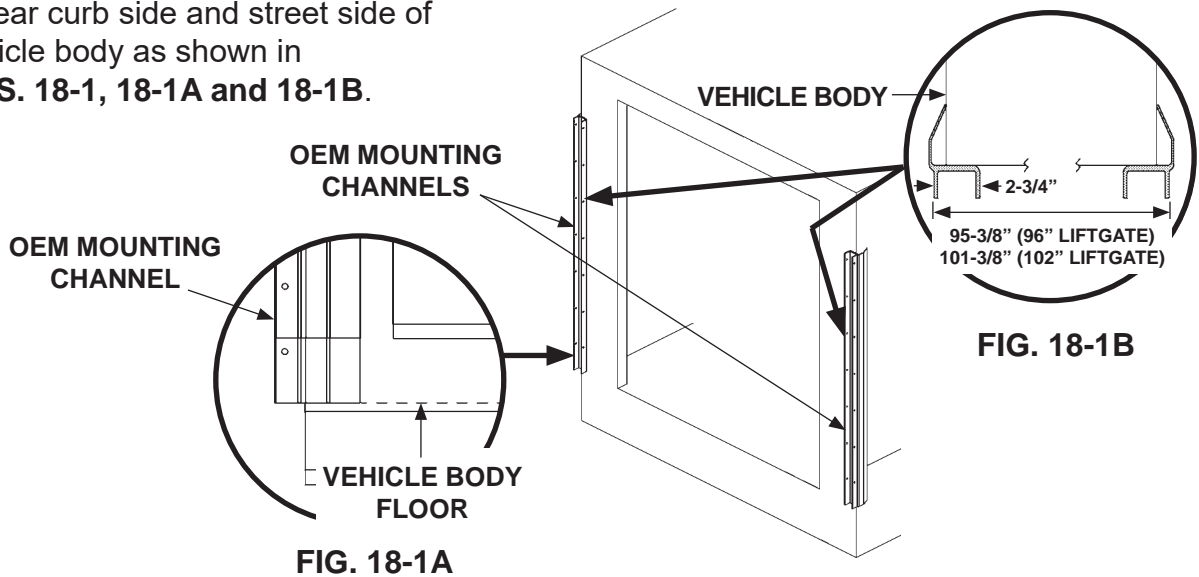


**BOX TRUCK BODY**  
**FIG. 17-2**

## STEP 3 - POSITION LIFTGATE METHOD 1 - BOLTING LIFTGATE TO BODY

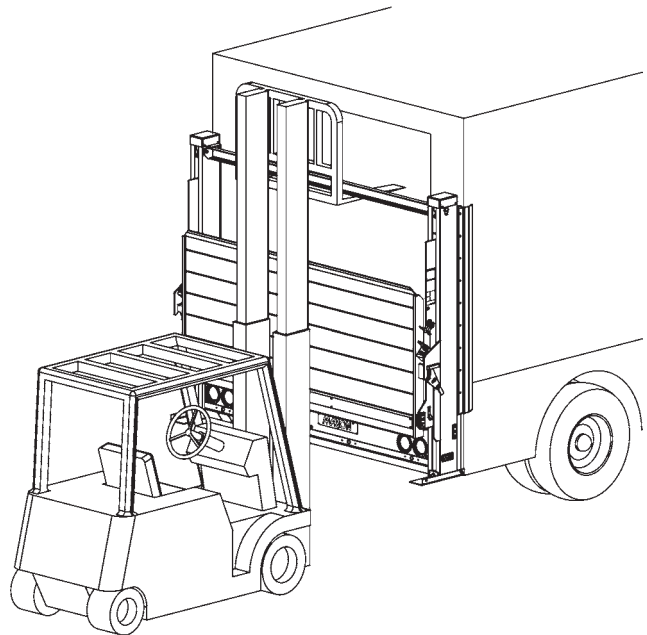
**NOTE:** Method 1 instructions are intended for Liftgate installation on a **STEP VAN** or **WALK-IN STYLE** vehicle with OEM mounting channels pre-mounted on the vehicle body. Mounting channels are NOT provided with Liftgate.

1. Mounting channels must be installed at rear curb side and street side of vehicle body as shown in **FIGS. 18-1, 18-1A and 18-1B**.



**PRE-INSTALLED (OEM) MOUNTING CHANNELS ON VEHICLE BODY**  
**FIG. 18-1**

2. Use overhead hoist or fork lift to center Liftgate in correct position on rear of vehicle body (**FIG. 18-2**). Raise the Liftgate until the top of the main frame housing is against the mounting channels and flush with the body floor (**FIG. 18-2**).



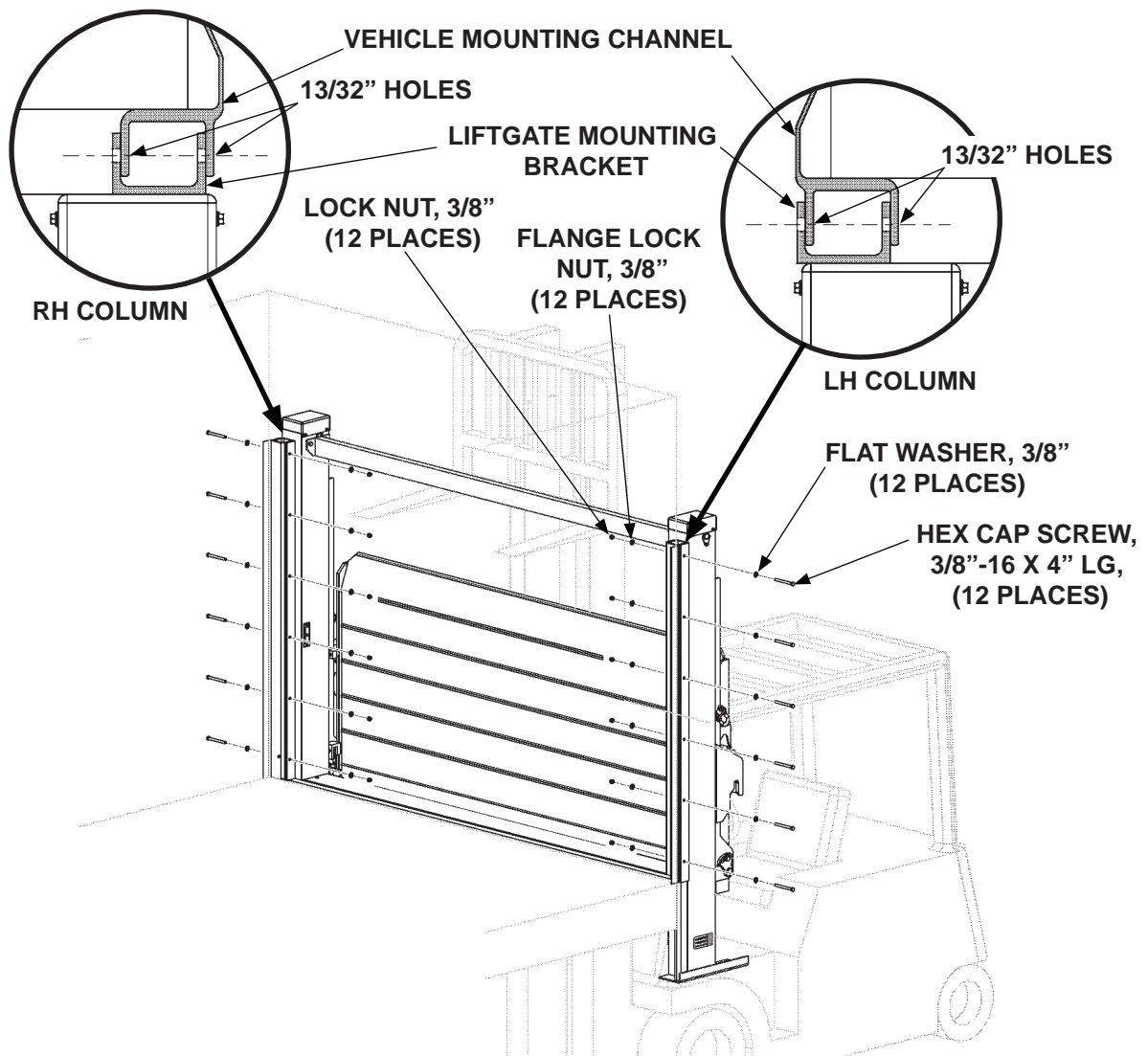
**POSITIONING LIFTGATE ON VEHICLE BODY**  
**FIG. 18-2**

## STEP 3 - POSITION LIFTGATE - Continued

### METHOD 1 - BOLTING LIFTGATE TO BODY - Continued

**NOTE:** If needed, use a clamp to secure Liftgate column channel to truck mounting channel before drilling holes on vehicle body channel.

3. Once the Liftgate is positioned on the body as in **FIG. 18-2**, use holes of the Liftgate mounting bracket as a template to drill mating holes on the mounting channel on the vehicle body. Drill 13/32" holes, using 5" LG. drill bit, through the vehicle mounting channel as shown in **FIG. 19-1**.
4. Bolt Liftgate to mounting channels on vehicle body using hex cap screws, flat washers, hex nuts and lock nuts (Kit items) as shown in **FIG. 19-1**. Torque nuts to **18 +/- 4 lb-ft**.



**BOLTING LIFTGATE ON VEHICLE BODY**  
**FIG. 19-1**

**GO TO STEP 4: CONNECT GROUND CABLE**

## STEP 3 - POSITION LIFTGATE - Continued

### METHOD 2 - WELDING LIFTGATE TO BODY

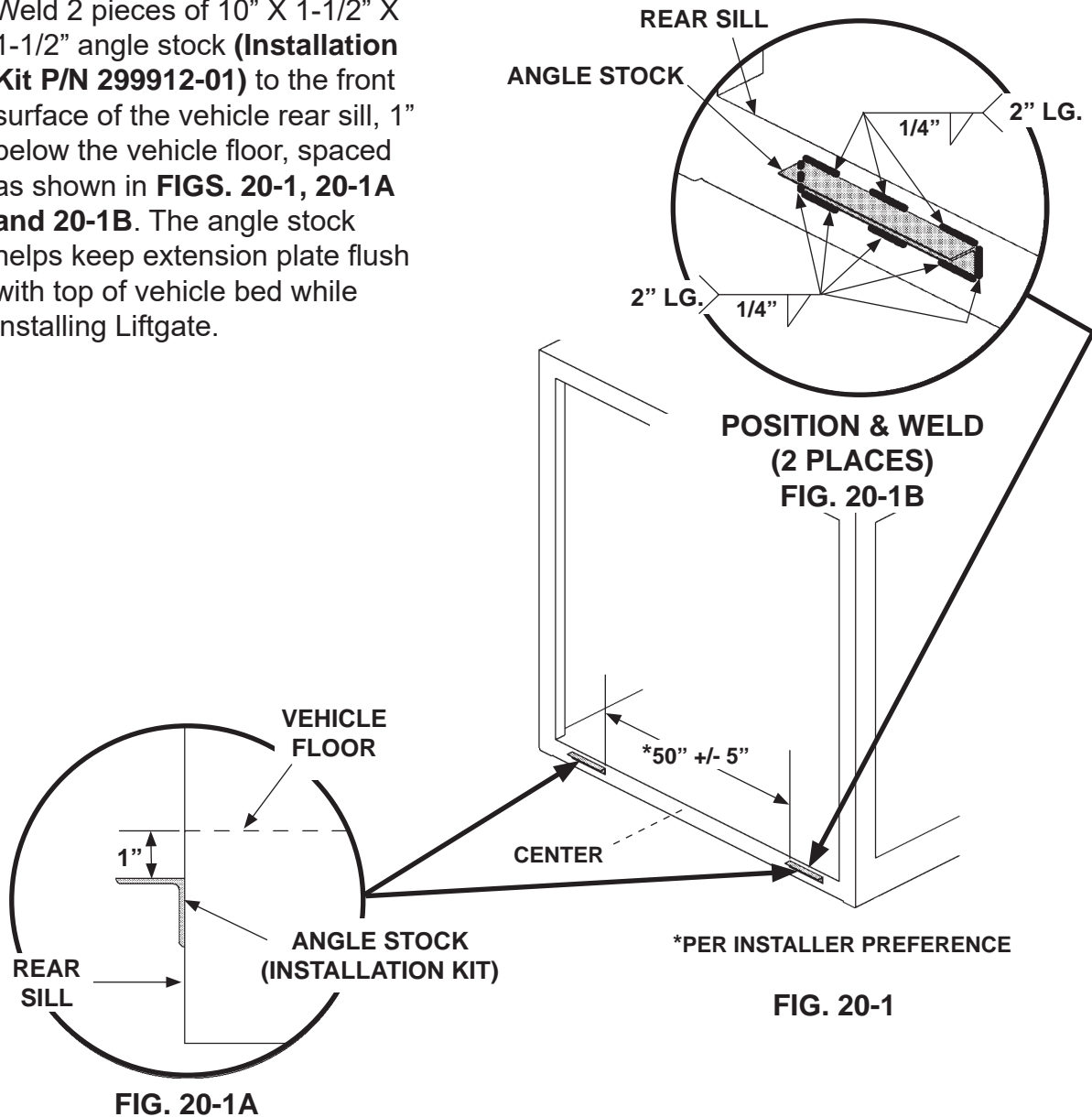
#### ⚠ WARNING

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.

**NOTE:** Before welding Liftgate mounting channels to vehicle body, make sure:

- Inboard edge at top of main housing is flush with the top of the rear sill on vehicle body.
- Top surface of main housing is level with the ground.

1. Weld 2 pieces of 10" X 1-1/2" X 1-1/2" angle stock (**Installation Kit P/N 299912-01**) to the front surface of the vehicle rear sill, 1" below the vehicle floor, spaced as shown in **FIGS. 20-1, 20-1A and 20-1B**. The angle stock helps keep extension plate flush with top of vehicle bed while installing Liftgate.



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## STEP 3 - POSITION LIFTGATE - Continued

### METHOD 2 - WELDING LIFTGATE TO BODY - Continued

- Use overhead hoist or forklift to center Liftgate against the vehicle (FIG. 21-1). Position Liftgate until the mounting tube on the housing sits flush against the angle stock as shown in FIG. 21-1A.

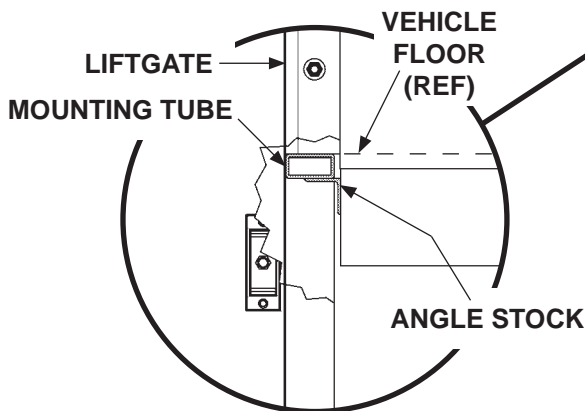
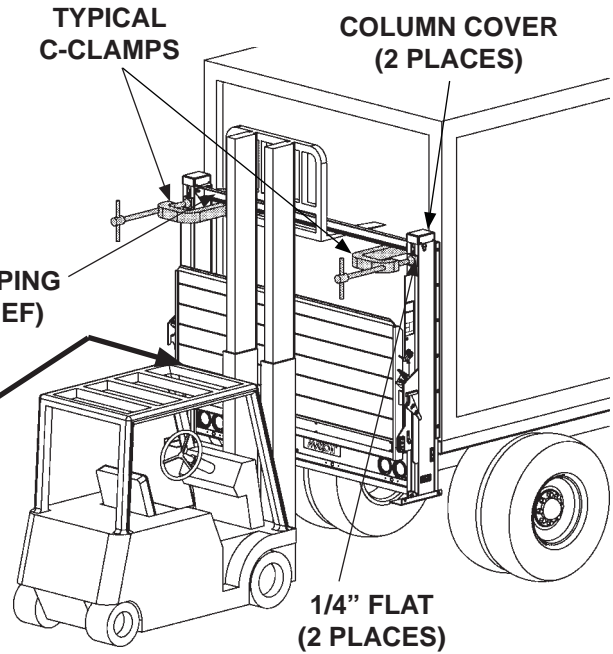


FIG. 21-1A



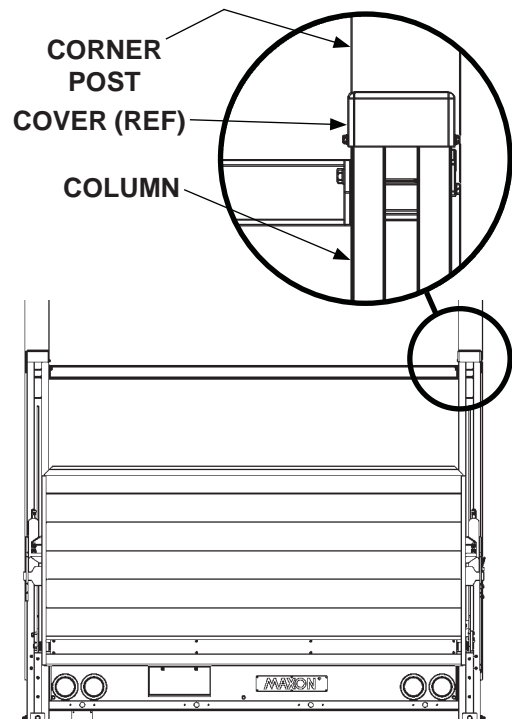
POSITIONING LIFTGATE ON  
VEHICLE BODY  
FIG. 21-1

- Ensure liftgate columns are centered on corner posts of vehicle body (FIG. 21-2).

**CAUTION**

Clamping columns to vehicle at top covers can damage the covers and will not securely clamp the columns. Clamp each column to body corner post below top covers and below upper shipping fixture. Place 1/4" steel flat (not provided by MAXON) between clamp and clamping surface.

- Clamp top of each column to vehicle body to prevent gap (FIG. 21-1).

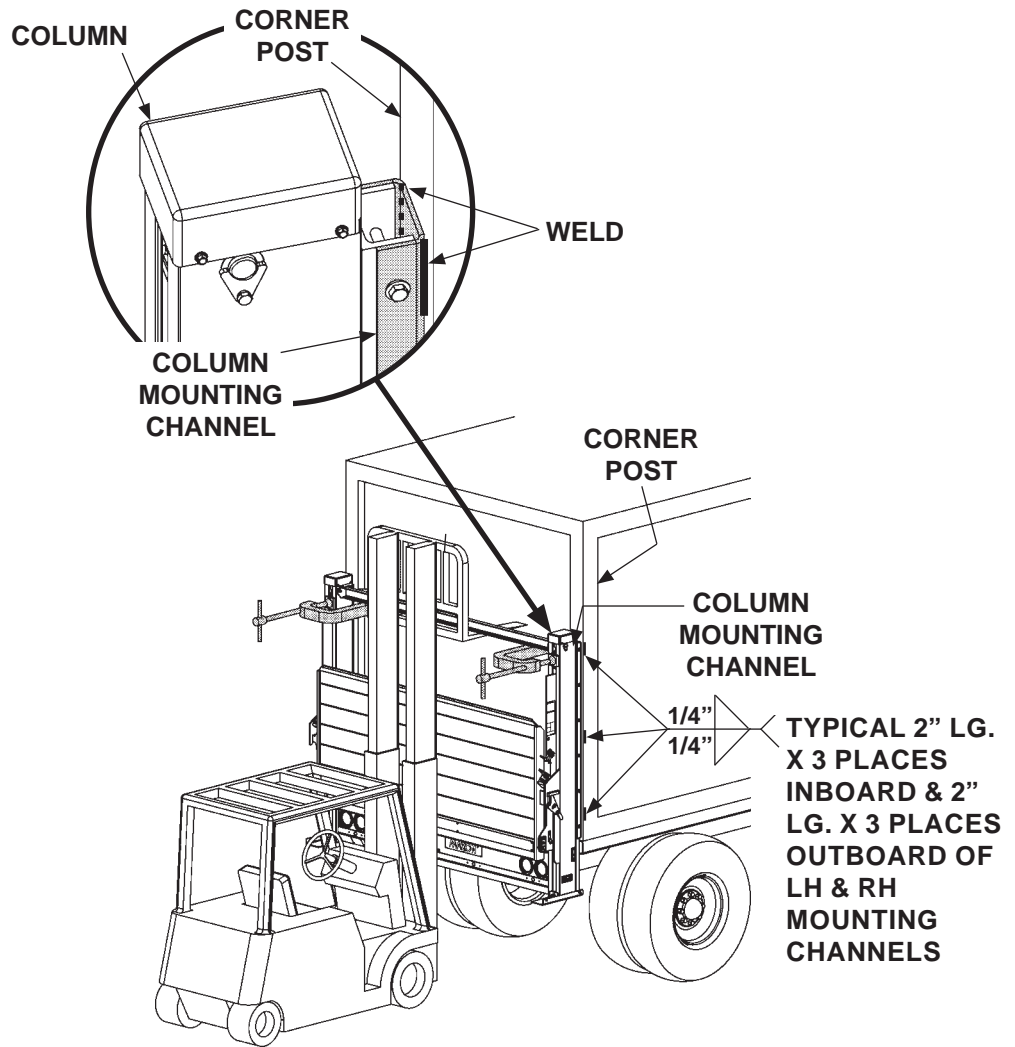


CENTERING LIFTGATE ON  
VEHICLE BODY  
FIG. 21-2

# STEP 3 - POSITION LIFTGATE - Continued

## METHOD 2 - WELDING LIFTGATE TO BODY - Continued

5. Weld the RH and LH column mounting channels to vehicle body as shown in **FIG. 22-1**.

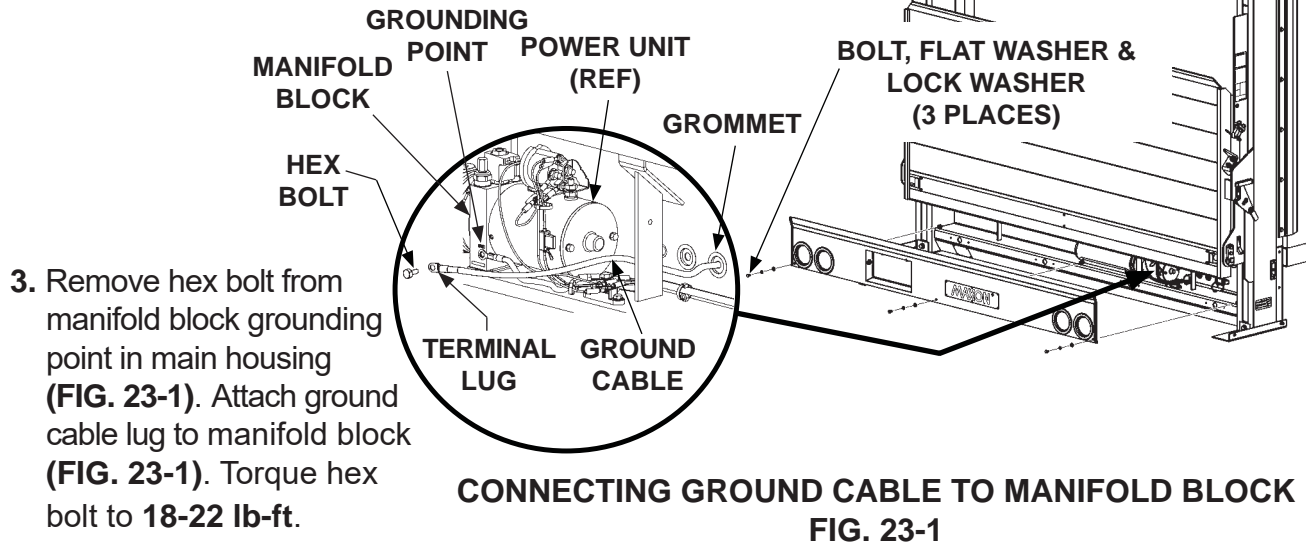


**WELDING LIFTGATE TO VEHICLE BODY**  
**FIG. 22-1**

## STEP 4 - CONNECT GROUND CABLE

**NOTE:** To ensure power unit is correctly grounded, connect 2 gauge ground cable (Parts Box item) from grounding point on manifold block to a grounding point on the vehicle frame.

1. Unbolt and remove main frame cover for access to power unit (**FIG. 23-1**).
2. Run ground cable (**FIG. 23-1**) through grommet on back wall of main housing.

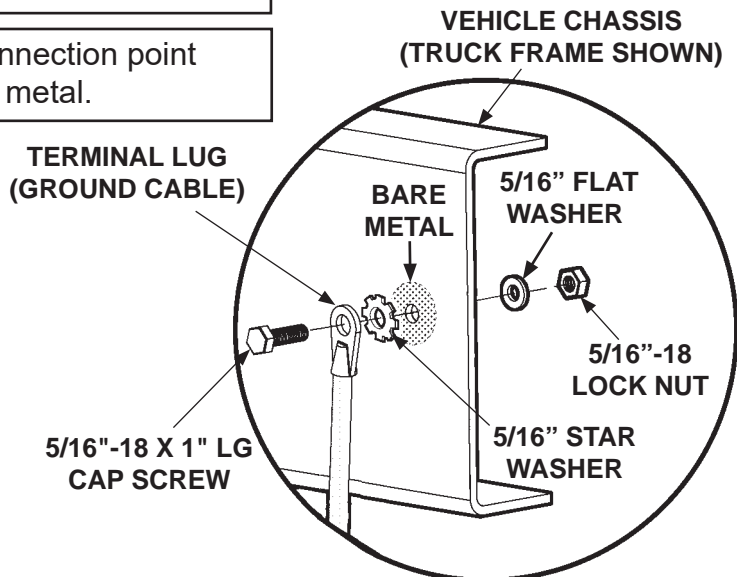


3. Remove hex bolt from manifold block grounding point in main housing (**FIG. 23-1**). Attach ground cable lug to manifold block (**FIG. 23-1**). Torque hex bolt to **18-22 lb-ft**.

**NOTE:** If there is a grounding point on the frame, use it to connect ground cable. Then, skip the step for drilling a hole.

**NOTE:** Clean the ground cable connection point on the frame down to bare metal.

4. Extend the ground cable to reach vehicle frame (**FIG. 23-2**) without putting tension on cable (after connection). Connect to existing grounding point if available.
5. If necessary, drill a  $11/32$ " (0.343") hole in vehicle frame for bolting the ground cable terminal lug (**FIG. 23-2**).
6. Bolt the ground cable terminal lug to vehicle frame as shown in **FIG. 23-2**. Torque cap screw to **24 lb-ft**.



## STEP 5 - RUN POWER CABLE

### ⚠ CAUTION

Never route an energized wire. Make sure the vehicle battery is disconnected. Always route electrical wires clear of moving parts, brake lines, sharp edges and exhaust systems. Avoid making sharp bends in wiring. Attach securely. If drilling is necessary, first check behind the drilling surface to prevent damage to any fuel lines, vent lines, brake lines or wires.

**NOTE:** Make sure cable is long enough to reach positive terminal on Liftgate pump box without putting tension on the cable.

Install vehicle power cable by running the cable along the inside of vehicle frame (FIG. 24-1). Run the power cable from vehicle battery to Liftgate pump box positive terminal. Use frame clips (Parts Box item) and plastic ties (as required) to secure cable.

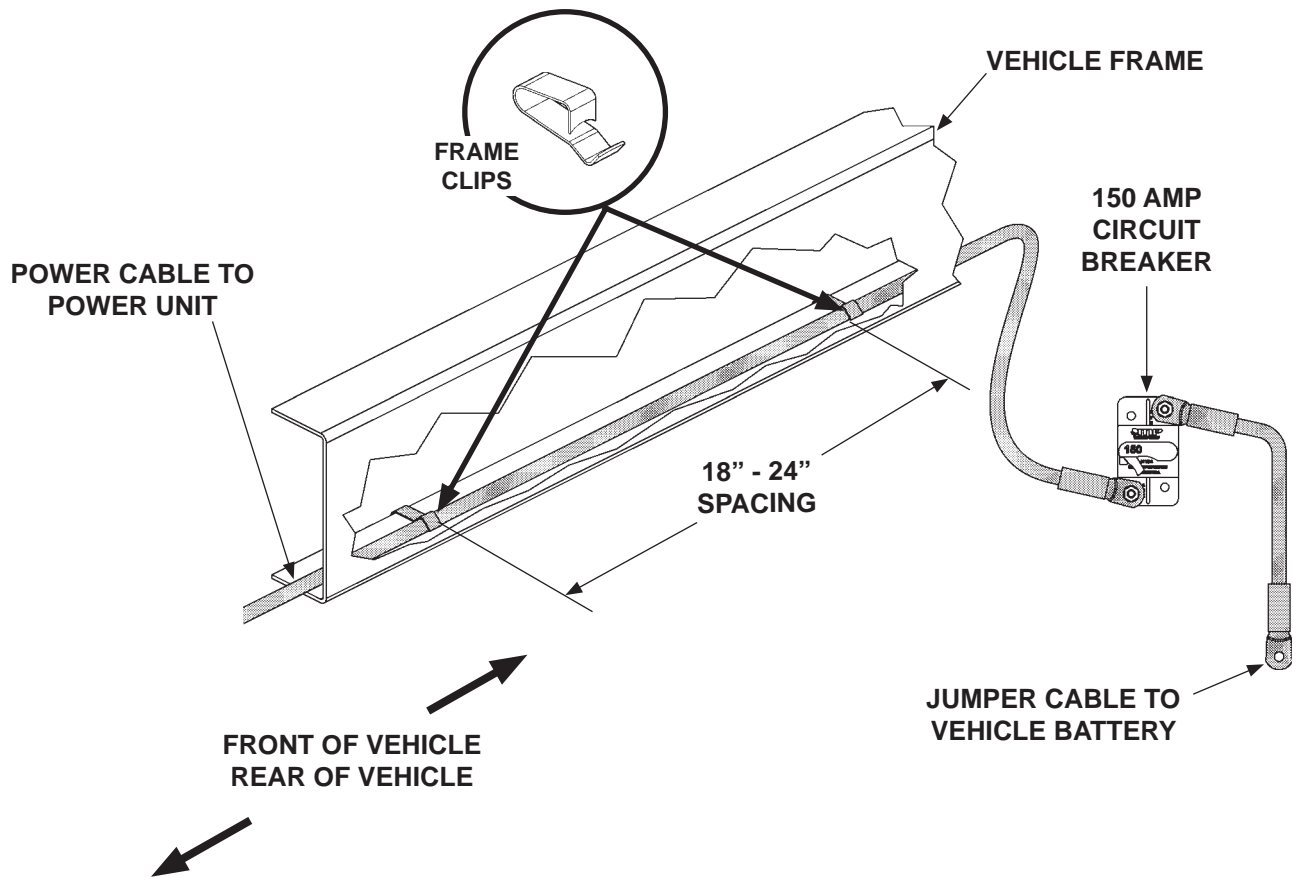


FIG. 24-1



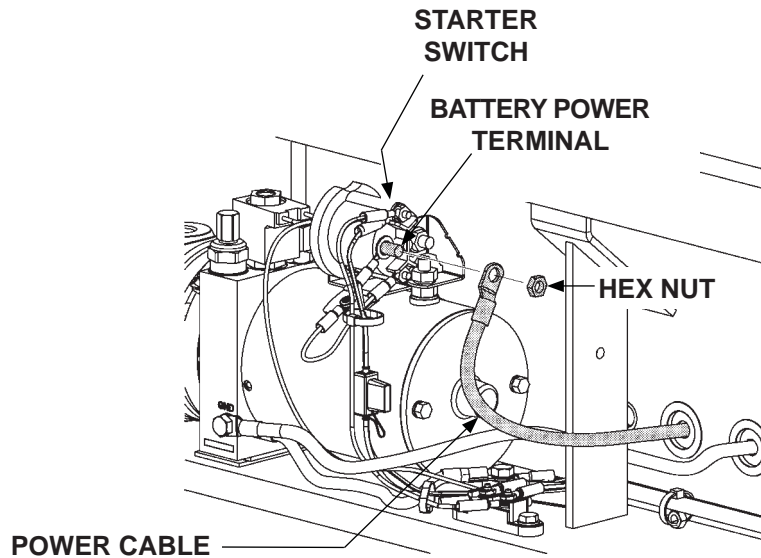
## STEP 6 - CONNECT POWER CABLE

### CAUTION

Do not over-tighten the terminal nuts on starter solenoid. For the load terminals, torque nuts to 30-35 lb-in max. Torque the nuts on #10-32 control terminals 10-15 lb-in.

**NOTE:** Do not remove flat washer from the battery power terminal.

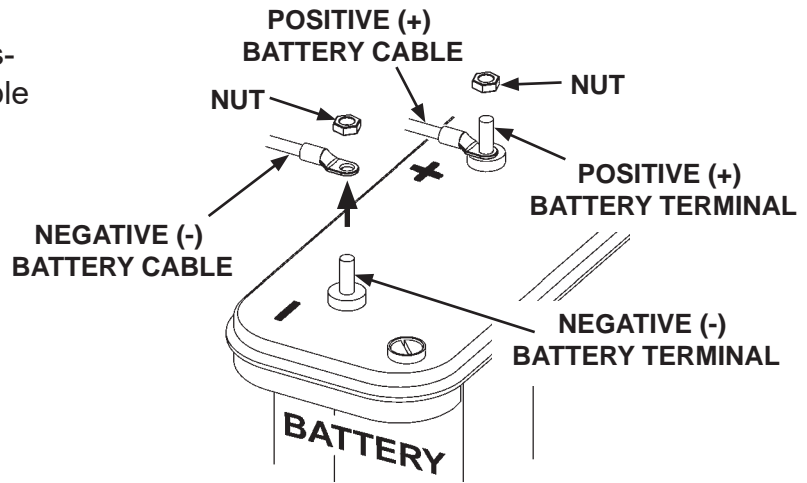
1. Remove hex nut from battery power terminal on the starter switch. Connect the power cable to the starter switch as shown in **FIG. 25-1**. Reinstall and tighten hex nut.



CONNECTING POWER CABLE TO POWER UNIT  
(MANUAL CLOSE POWER UNIT SHOWN)  
FIG. 25-1

## STEP 6 - CONNECT POWER CABLE - Continued

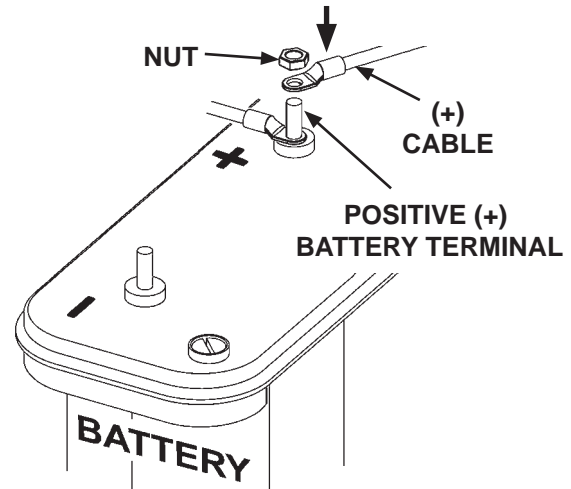
2. Remove nut from negative (-) battery terminal (FIG. 26-1). Disconnect negative (-) battery cable (FIG. 26-1).



DISCONNECTING (-) BATTERY CABLE  
FIG. 26-1

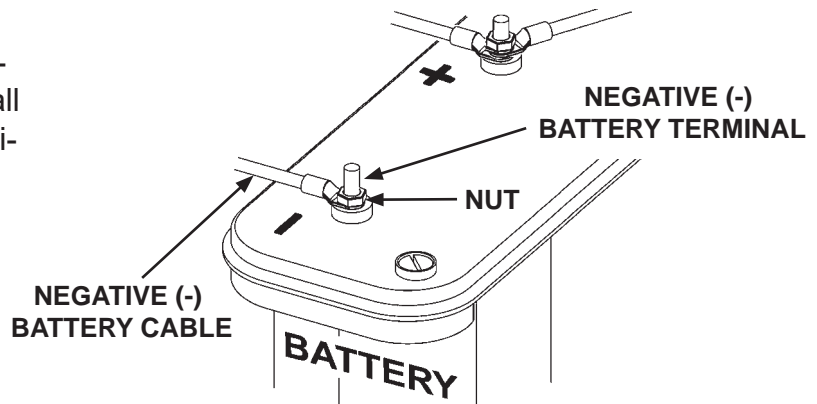
3. Remove nut from positive (+) battery terminal (FIG. 26-1).

4. Connect circuit breaker jumper (+) cable to positive (+) battery terminal (FIG. 26-2). Then, reinstall nut on positive (+) battery terminal (FIG. 26-2).



CONNECTING (+) CABLE  
FIG. 26-2

5. Reconnect negative (-) battery cable to negative (-) battery terminal (FIG. 26-3). Then, reinstall nut on negative (-) battery terminal (FIG. 26-3).



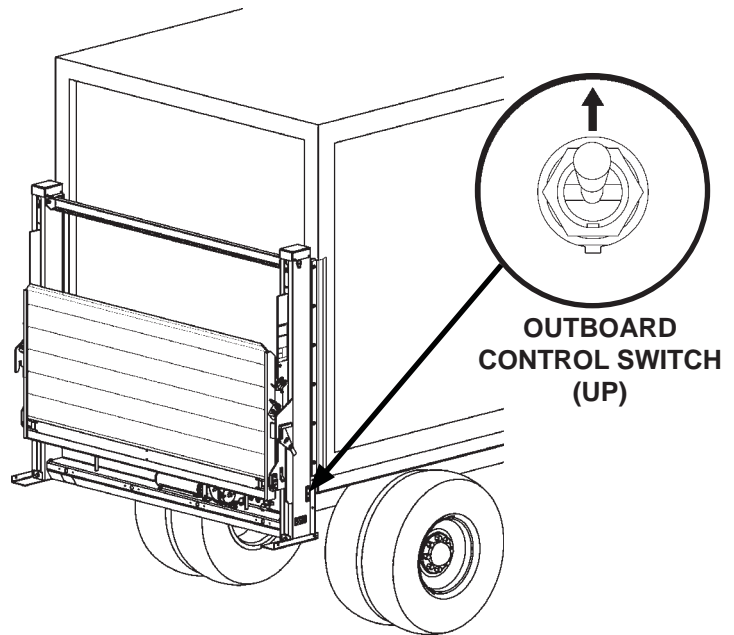
RECONNECTED BATTERY CABLES  
FIG. 26-3

## STEP 7 - PRESSURIZE HYDRAULIC SYSTEM

### **WARNING**

To prevent injury and equipment damage, pressurize hydraulic system before removing lower support fixtures and operating Liftgate.

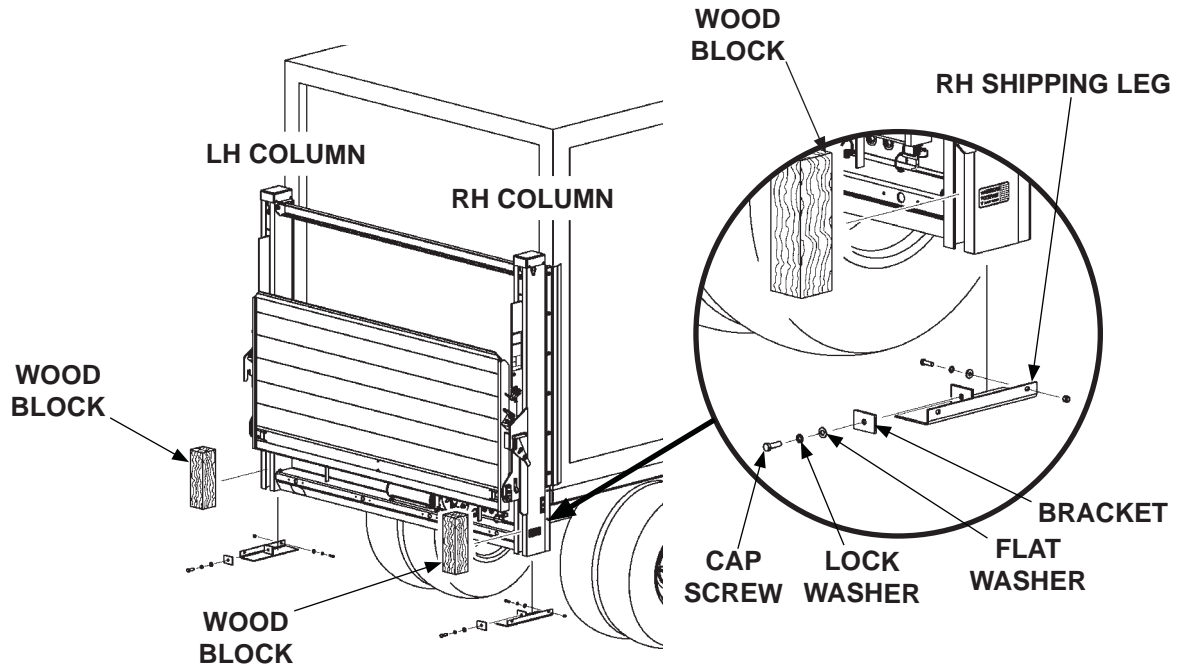
To pressurize lifting cylinders, hold outboard control switch in **UP** position for 5-10 seconds (**FIG. 27-1**). Then, release switch.



**PRESSURIZING LIFTING CYLINDERS**  
**FIG. 27-1**

## STEP 8 - REMOVING LOWER SUPPORTS

1. Unbolt shipping leg from bottom of RH column (FIG. 28-1). Repeat for LH column.



UNBOLTING LOWER SUPPORTS FROM COLUMN  
FIG. 28-1

2. Remove and discard wood shipping blocks (FIG. 28-1).

## STEP 9 - CHECKING HYDRAULIC FLUID

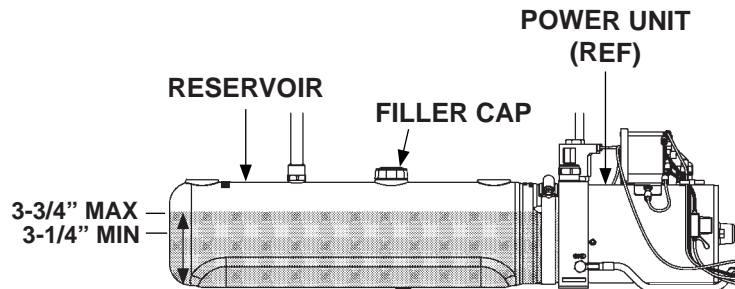
### CAUTION

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.

Never mix synthetic fluids with conventional hydraulic fluids. Hydraulic system must be purged if the fluids are mixed.

**NOTE:** Liftgate is shipped with **Exxon Univis HVI-13** hydraulic fluid in the hydraulic cylinders. **Exxon Univis HVI-13** hydraulic fluid is recommended for operating temperatures of **-40 to +120° F**. Refer to decal in pump box. Under certain conditions, other brands and grades of oil may be used as substitutes for the recommended oil. See **TABLE 30-1** for recommended brands of **ISO 15** oils.

1. Open and lower platform to the ground. Refer to **Operation Manual** for detailed operating instructions.
2. Check the hydraulic fluid level in reservoir as follows. With platform on the ground, level should be as shown in **FIG. 29-1**.
3. If needed, add fluid to the reservoir as follows. Remove filler cap (**FIG. 29-1**). Fill the reservoir with hydraulic fluid to level shown in **FIG. 29-1**. Reinstall filler cap.



**POWER UNIT FLUID LEVEL  
(STANDARD POWER UNIT SHOWN)**

**FIG. 29-1**

# STEP 9 - CHECKING HYDRAULIC FLUID - Continued

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
ROSEMEAD	THS FLUID 17111

TABLE 30-1

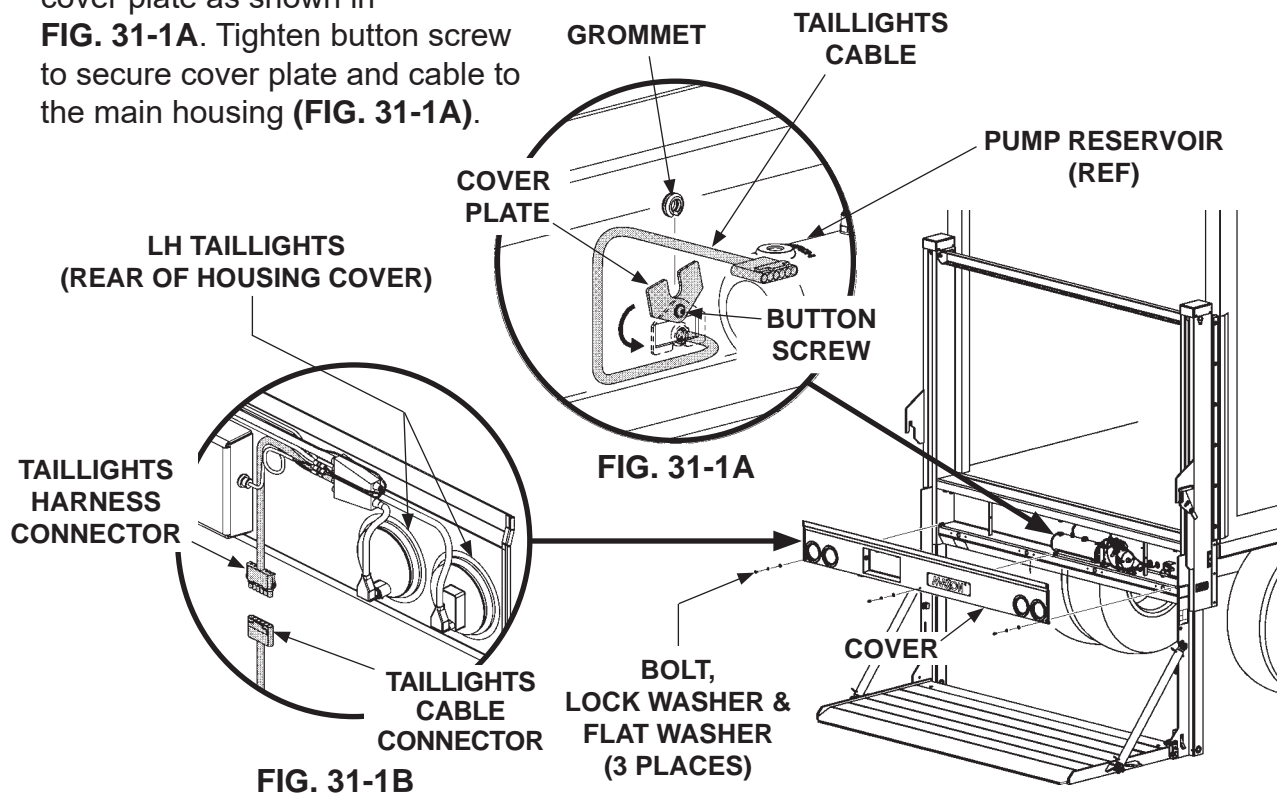
**MAXON**<sup>®</sup> 11921 Slauson Ave. Santa Fe Springs, CA. 90670 (800) 227-4116 FAX (888) 771-7713

## STEP 10 - CONNECTING TAILLIGHTS

### CAUTION

Route enough of the taillights cable inside the main housing to prevent strain on wiring harness connections for taillights on the housing cover.

1. Loosen button screw on cover plate inside of the main housing at the rear (**FIG. 31-1** and **FIG. 31-1A**).
2. Run taillights cable through rear of main housing (**FIGS. 31-1** and **31-1A**). Next, place split grommet over taillight cable and insert into cover plate (**FIG. 31-1A**). Rotate cover plate as shown in **FIG. 31-1A**. Tighten button screw to secure cover plate and cable to the main housing (**FIG. 31-1A**).



### CAUTION

Main housing cover must be correctly secured to prevent it from becoming a hazard.

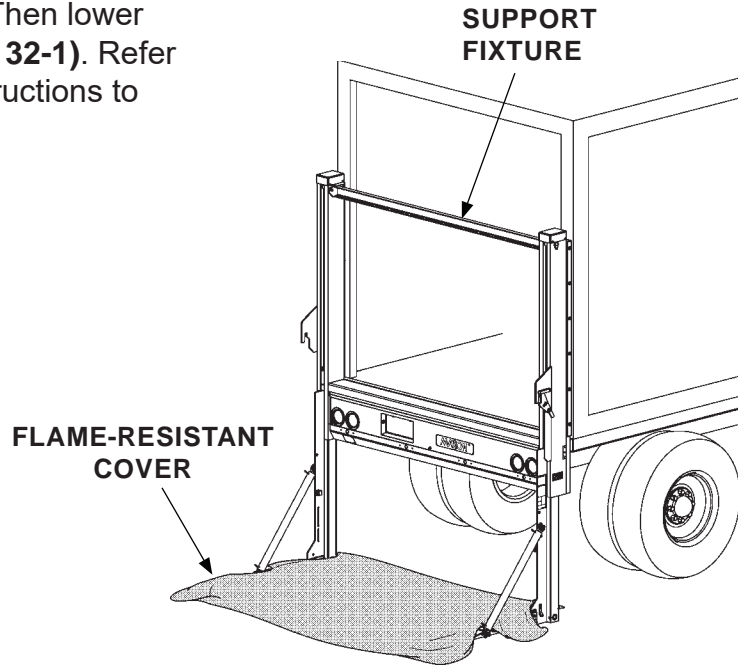
3. Connect the taillights harness to the taillights cable as shown in **FIG. 31-1B**. Then, bolt on the main housing cover as shown in **FIG. 31-1**. Torque the 5/16"-18 cover bolts from **10 to 14 lb-ft**.

# STEP 11 - FINISH WELDING LIFTGATE TO VEHICLE

## ⚠ WARNING

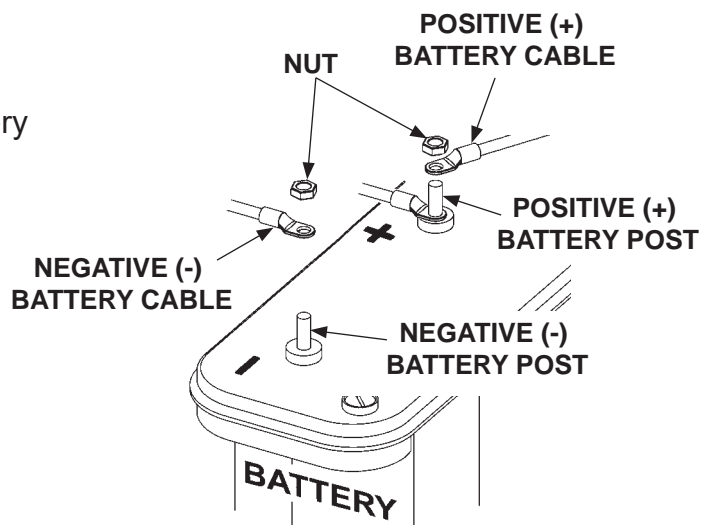
Remove support fixture from Liftgate only after the columns and housing are welded to vehicle body according to this procedure.

1. Unfold platform and flipover. Then lower platform to ground level (**FIG. 32-1**). Refer to **Operation Manual** for instructions to operate Liftgate.
2. Cover platform as shown in **FIG. 32-1**.



PLATFORM COVERED BEFORE WELDING  
FIG. 32-1

3. Disconnect power to the pump by disconnecting negative (-) and positive (+) cables from battery (**FIG. 32-2**). Reinstall nuts on negative (-) and positive (+) battery terminals.



DISCONNECTING BATTERY POWER  
FIG. 32-2



# STEP 11 - FINISH WELDING LIFTGATE TO VEHICLE - Continued

## ⚠ WARNING

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

## CAUTION

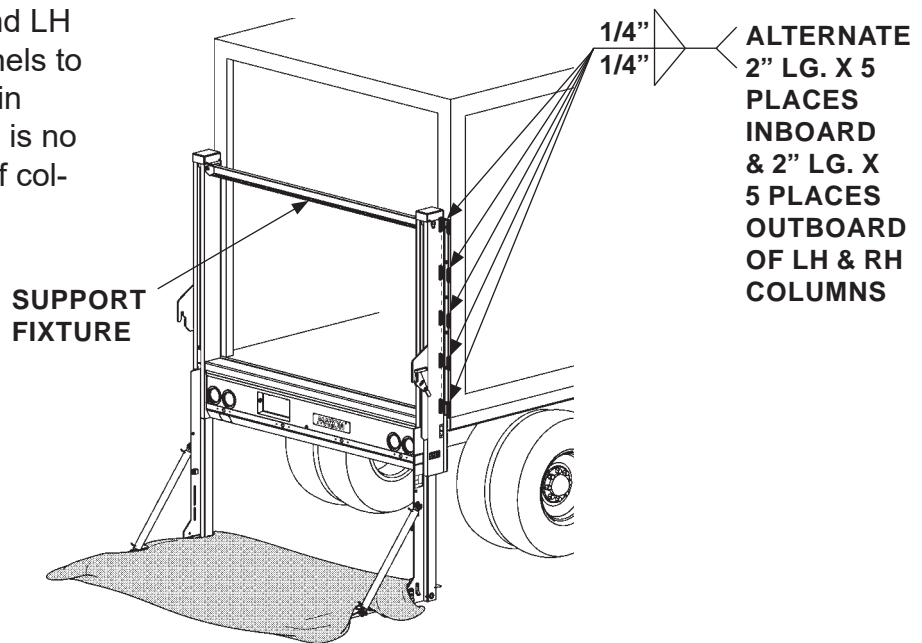
When using an electric welder, connect the welder ground to one of the parts being welded, as close to the weld as possible. Failure to comply could result in damage to cylinders and electrical parts.

## CAUTION

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

**NOTE:** If Liftgate mounting channels cannot be mounted flush against rear of vehicle, a filler such as tubing, channel, or plate stock may be used to bridge gap between vehicle body and Liftgate columns. Make sure the added materials and welds meet the **BODY STRENGTH REQUIREMENTS** indicated in this manual.

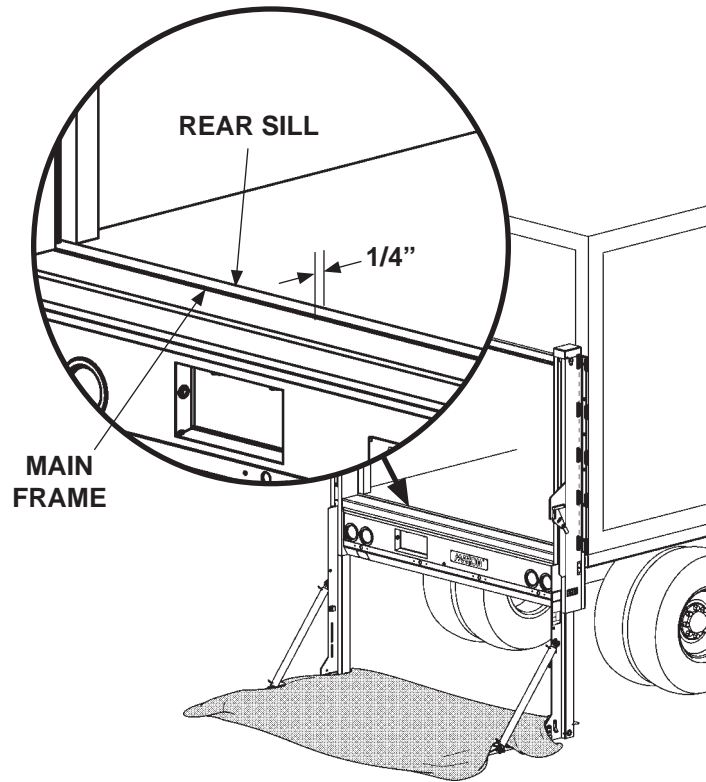
4. Weld the Liftgate RH and LH column mounting channels to vehicle body as shown in **FIG. 33-1**. Ensure there is no offset on inboard side of columns.



**WELDING COLUMN MOUNTING  
BRACKETS TO VEHICLE BODY  
FIG. 33-1**

## STEP 11 - FINISH WELDING LIFTGATE TO VEHICLE - Continued

5. Verify there is a  $1/4'' \pm 1/8''$  gap between main frame housing and rear sill on the vehicle body (**FIG. 34-1**).

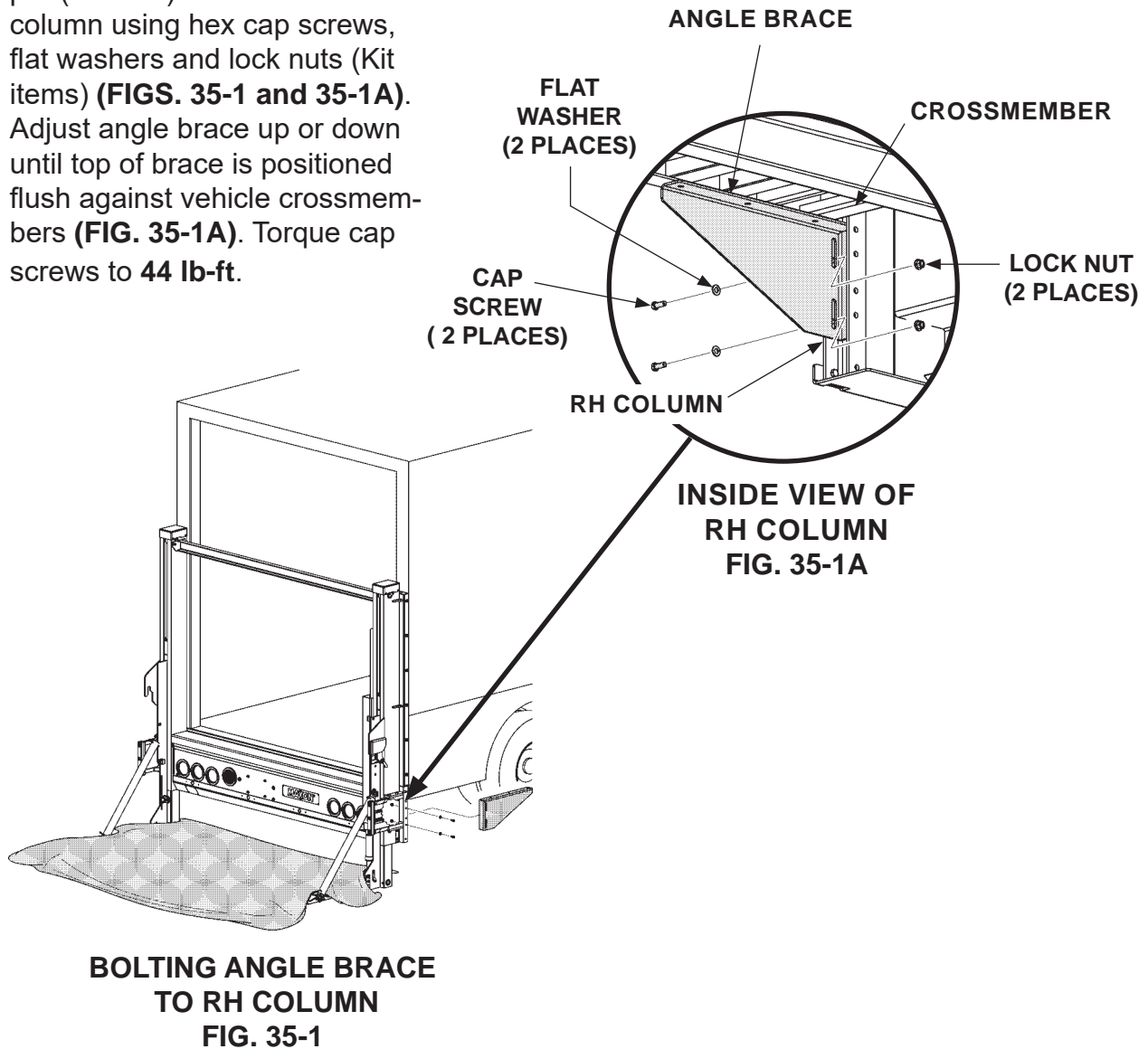


**CHECKING FOR  $1/4''$  GAP BETWEEN  
MAIN FRAME HOUSING & REAR SILL  
FIG. 34-1**

# STEP 11 - FINISH WELDING LIFTGATE TO VEHICLE - Continued

## FOR DOCK BUMPERS

6. Bolt angle brace for dock bumper (Kit item) to inside RH column using hex cap screws, flat washers and lock nuts (Kit items) (**FIGS. 35-1 and 35-1A**). Adjust angle brace up or down until top of brace is positioned flush against vehicle crossmembers (**FIG. 35-1A**). Torque cap screws to **44 lb-ft**.

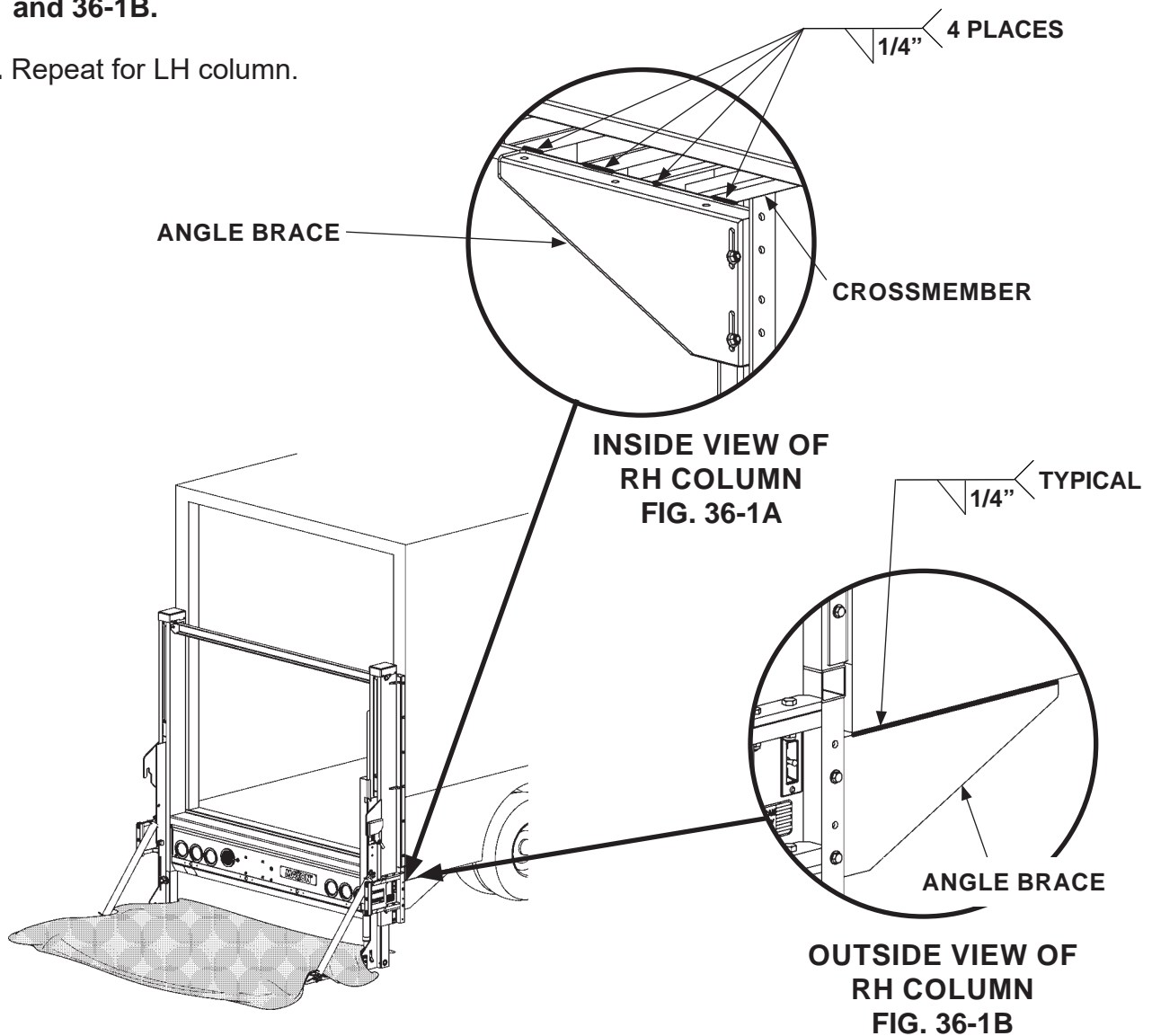


7. Repeat for LH column.

# STEP 11 - FINISH WELDING LIFTGATE TO VEHICLE - Continued

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

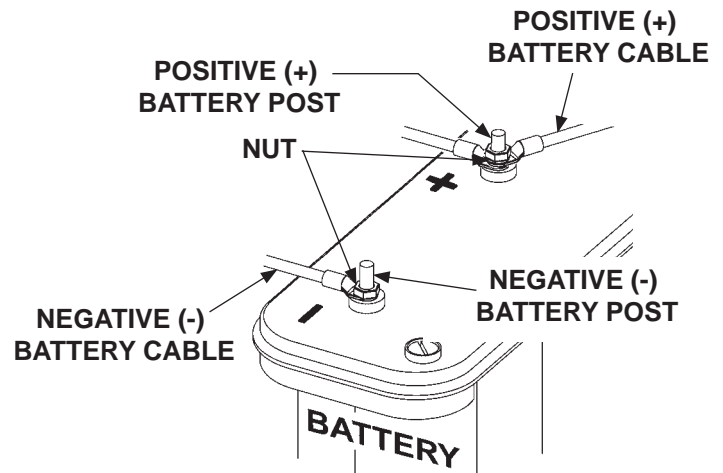
8. Weld angle brace for dock bumper (Kit items) to crossmembers by the RH column (**FIGS. 36-1, 36-1A and 36-1B**).
9. Repeat for LH column.



**WELDING ANGLE BRACE TO CROSSMEMBERS  
FIG. 36-1**

## STEP 11 - FINISH WELDING LIFTGATE TO VEHICLE - Continued

10. Reconnect power to the pump by reconnecting positive (+) and negative (-) cables to battery (**FIG. 37-1**). Reinstall and tighten nut when each battery cable is reconnected.



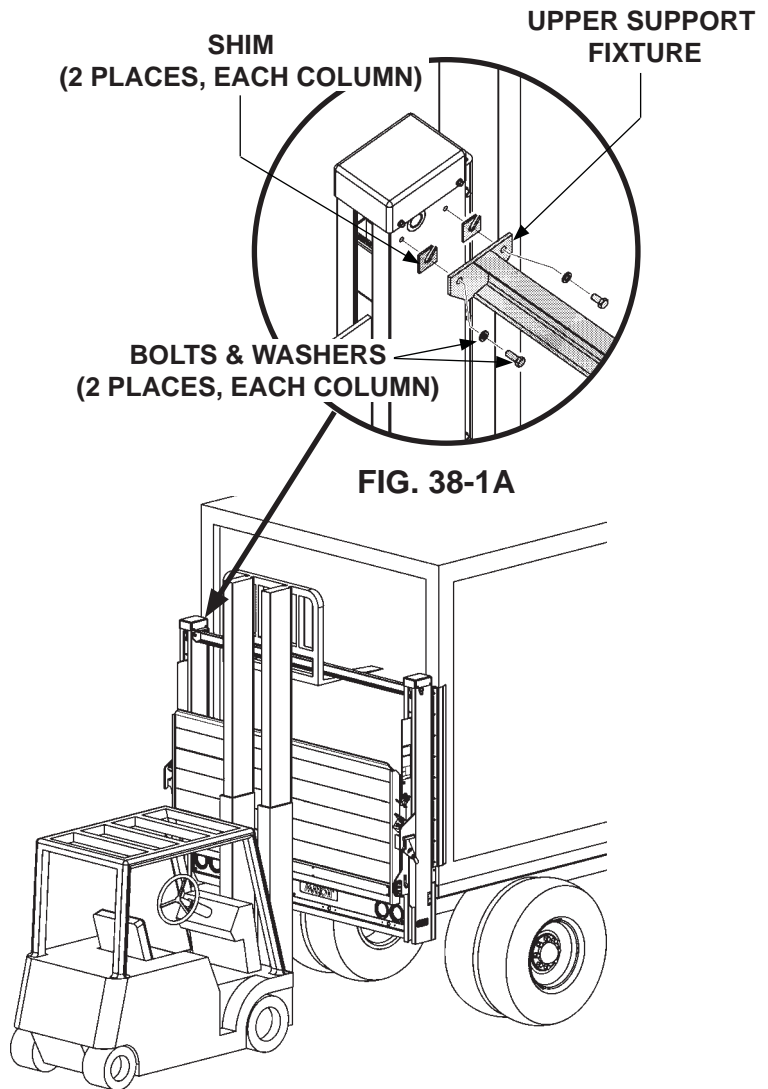
RECONNECTED BATTERY CABLES  
FIG. 37-1

## STEP 12 - REMOVE UPPER SUPPORT FIXTURE

### ⚠ CAUTION

Upper support fixture is heavy. To prevent injury to installer and damage to Liftgate, use forklift or hoist to hold support fixture during removal.

1. Stow the platform as shown in **FIG. 38-1**.
2. Position forklift or hoist to hold upper support fixture as shown in **FIG. 38-1**.
3. Unbolt the upper support fixture from the LH column (**FIG. 38-1A**). Repeat for RH column. Remove upper support fixture from work area.



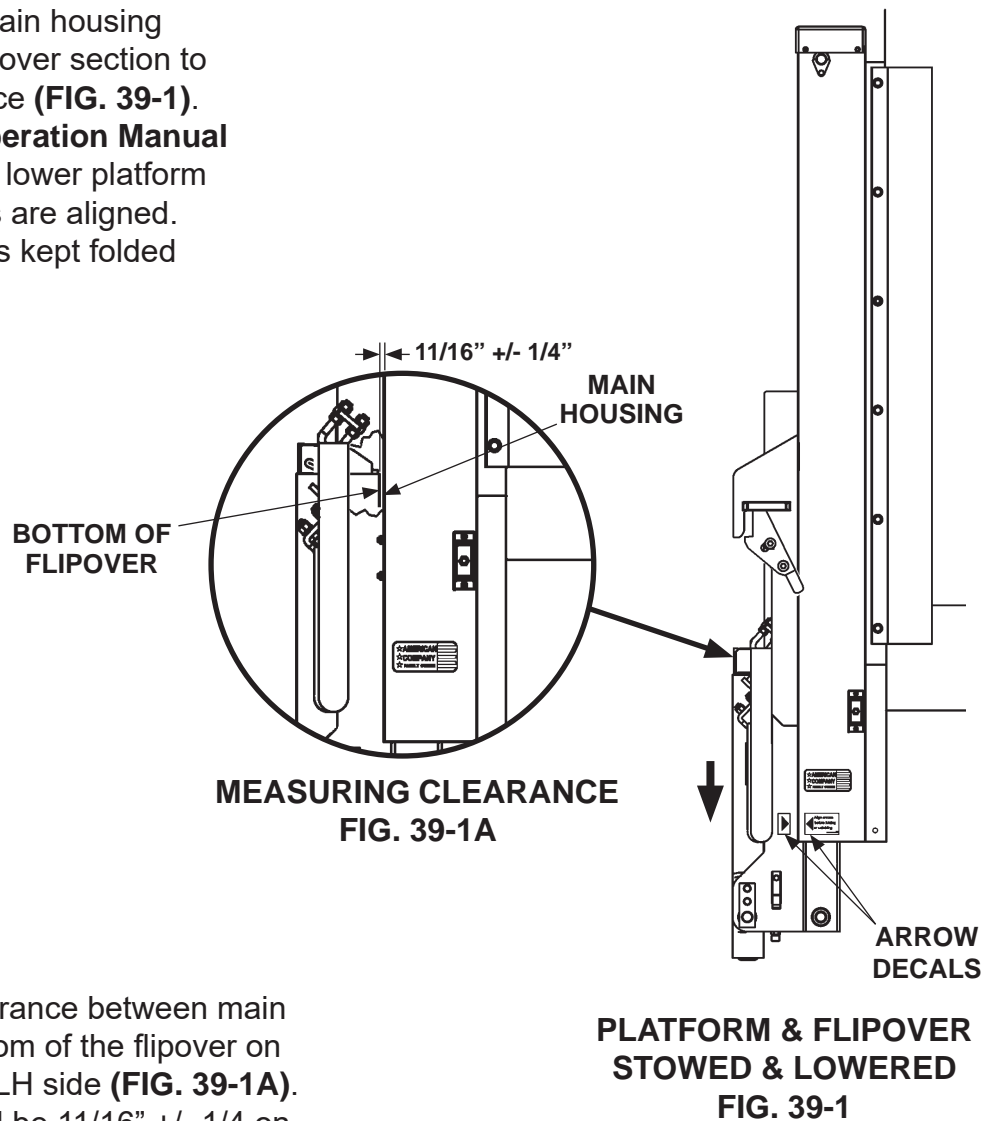
UNBOLTING UPPER SUPPORT FIXTURE  
(VIEW OF LH COLUMN AND SUPPORT FIXTURE)

FIG. 38-1

# MEASURE & ADJUST CLEARANCE FOR PLATFORM WITH FLIPOVER

**NOTE:** This procedure only applies to platforms equipped with a flipover section. The platform and flipover must be in the stowed position to accurately measure clearance between main housing and bottom of flipover. The platform and flipover may be lowered below bed height in stowed position for better access to measure clearance.

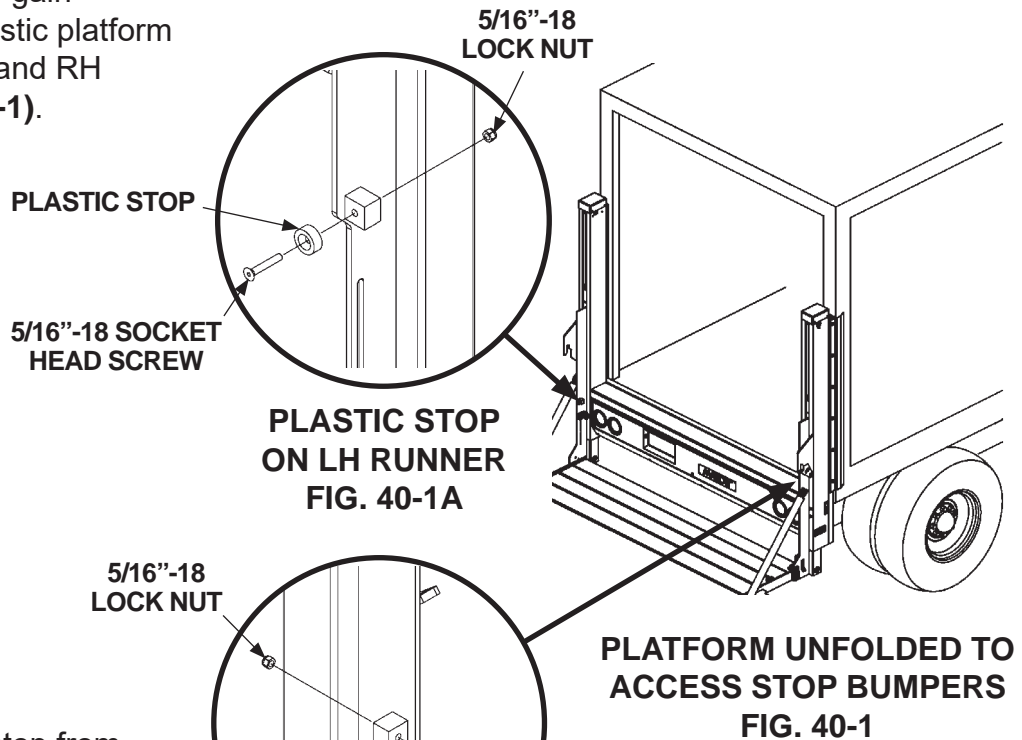
1. Gain access to main housing and bottom of flipover section to measure clearance (**FIG. 39-1**). Refer to **DMD Operation Manual** for instructions to lower platform until arrow decals are aligned. Ensure platform is kept folded (stowed).



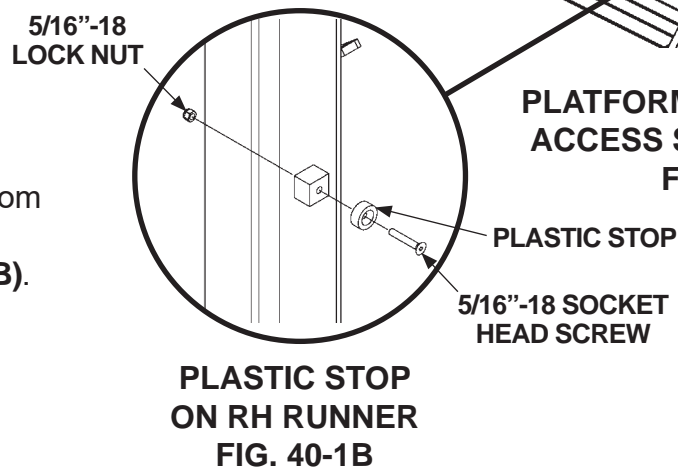
2. Measure the clearance between main housing and bottom of the flipover on the RH side and LH side (**FIG. 39-1A**). Clearance should be  $1\frac{1}{16}'' \pm \frac{1}{4}''$  on both sides of the housing and flipover. No adjustment is required with this clearance. When clearance is incorrect, on the LH and/or RD sides adjust the clearance starting with step 3.

## MEASURE & ADJUST CLEARANCE FOR PLATFORM WITH FLIPOVER - Continued

3. Unfold platform to gain access to the plastic platform stops on the LH and RH runners (FIG. 40-1).



4. Remove plastic stop from LH and/or RH runner (FIGS. 40-1A and 40-1B).



5. Calculate the minimum thickness of shim washers needed to increase clearance to  $11/16'' \pm 1/4''$  between main housing and bottom of flipover. For example, if minimum clearance should be  $7/16''$  and the measured clearance is only  $3/8''$  ( $7/16'' - 6/16'' = 1/16''$ ), a  $1/16''$  thick washer will restore the minimum clearance shown in step 2.

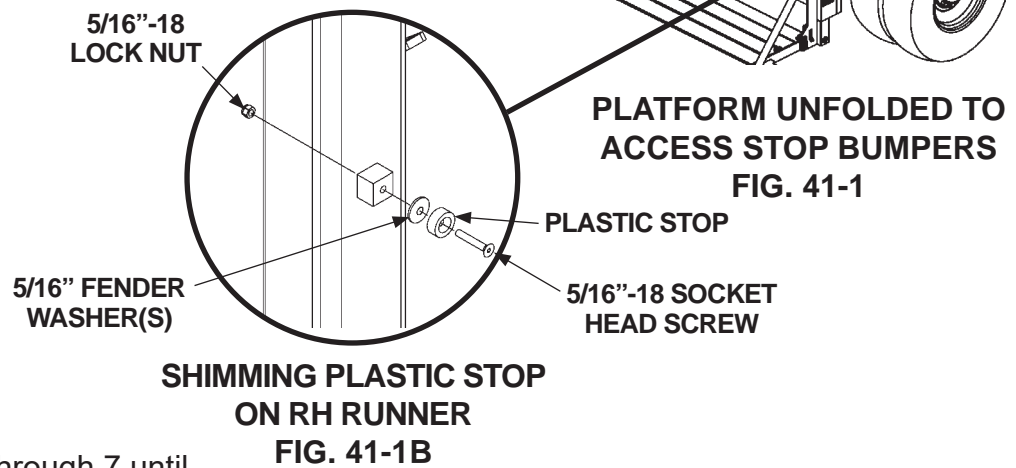
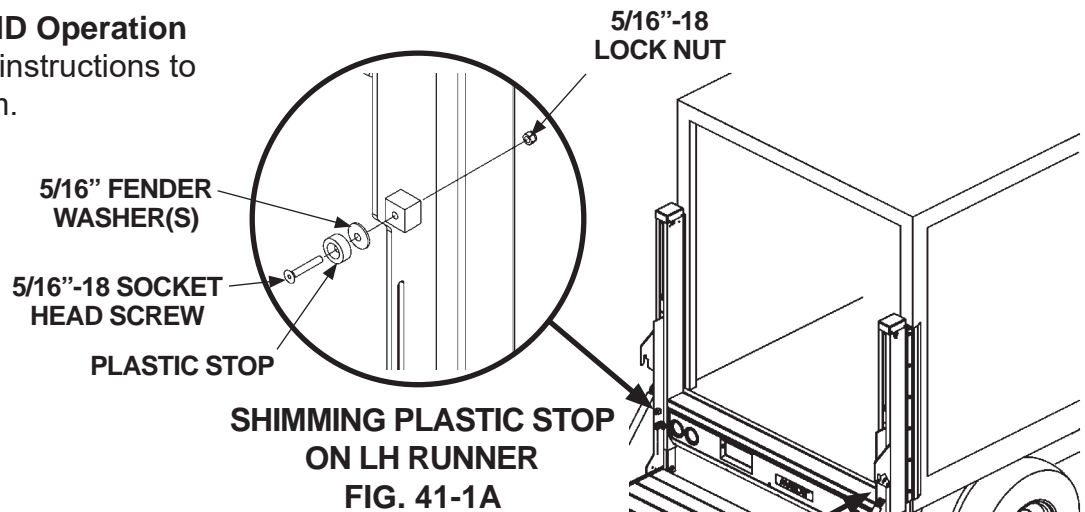


# MEASURE & ADJUST CLEARANCE FOR PLATFORM WITH FLIPOVER - Continued

**NOTE:** MAXON does not supply the fender washers to shim the stops.

- Reinstall plastic stop bumper with 1 or more 1/16" thick fender washers, for 5/16" screws, to shim the plastic stops (**FIGS. 41-1A and 41-1B**). This will adjust the clearance between main housing and bottom of flipover as necessary on the LH and/or RH side of the platform.

- Refer to **DMD Operation Manual** for instructions to fold platform.



**PLATFORM UNFOLDED TO ACCESS STOP BUMPERS**  
**FIG. 41-1**

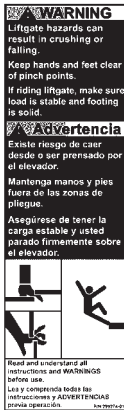
- Repeat steps 2 through 7 until clearance is 11/16" +/- 1/4" between the main housing and bottom of the flipover.
- When adjustment is done correctly, refer to **DMD Operation Manual** for instructions to stow the platform or use the Liftgate to load and unload vehicle.

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

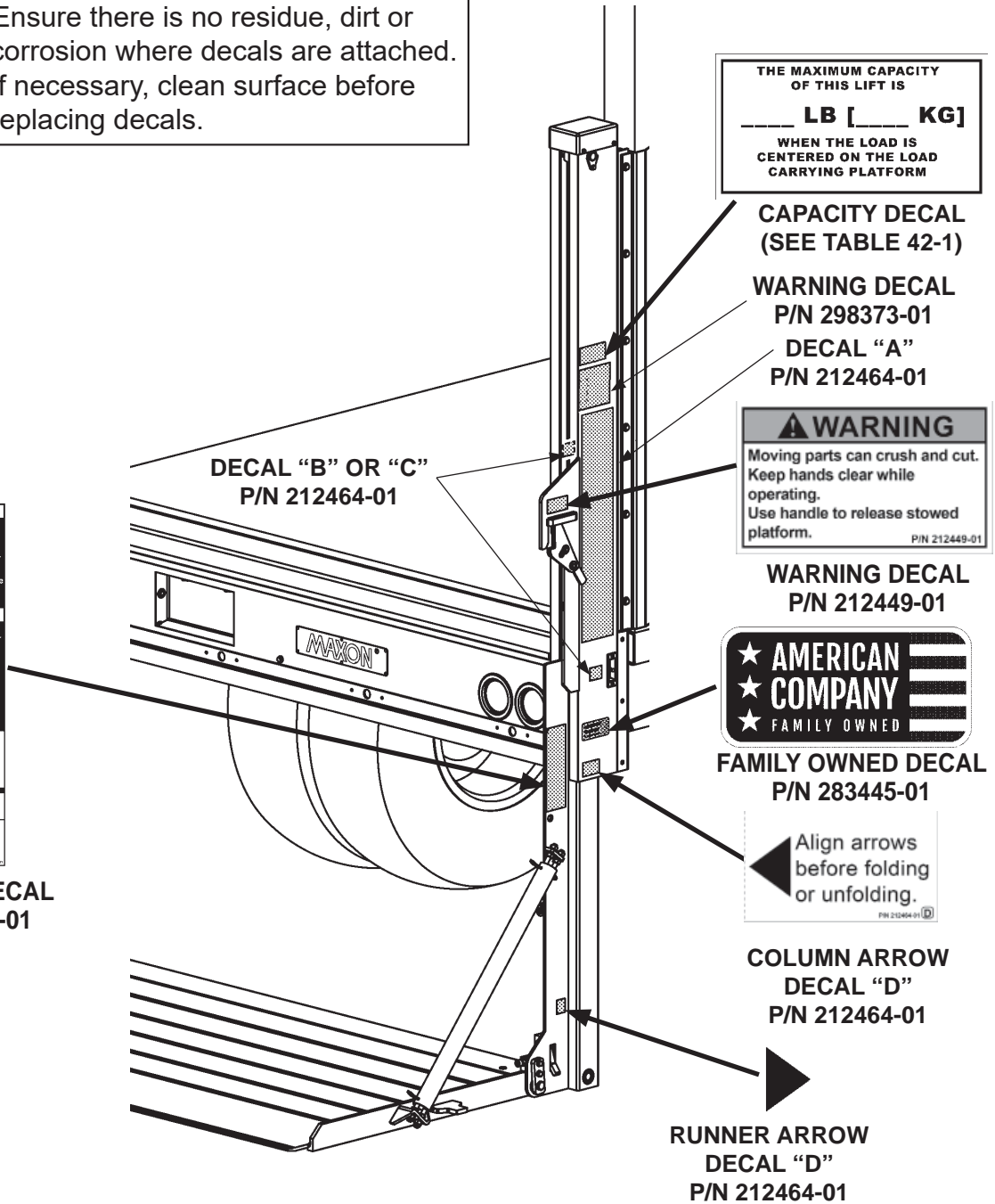
# DECALS

**NOTE:** Decals are preinstalled at factory.  
Decal location shown for reference.

**NOTE:** Ensure there is no residue, dirt or corrosion where decals are attached.  
If necessary, clean surface before replacing decals.



**WARNING DECAL**  
P/N 299274-01



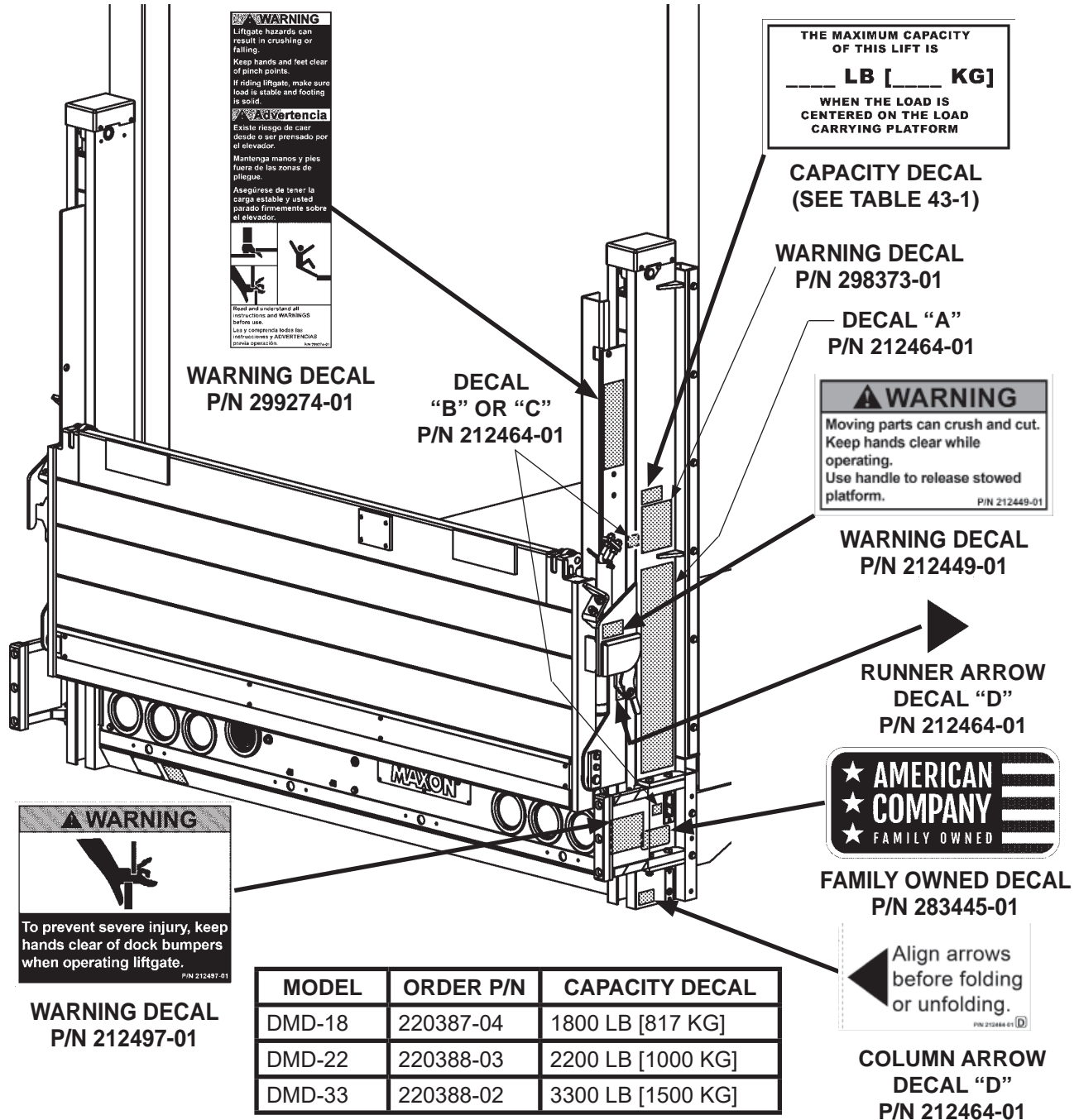
MODEL	ORDER P/N	CAPACITY DECAL
DMD-18	220387-04	1800 LB [817 KG]
DMD-22	220388-03	2200 LB [1000 KG]
DMD-33	220388-02	3300 LB [1500 KG]

**DECAL SHEET PART NUMBERS**  
TABLE 42-1

# DECALS - DMD WITH DOCK BUMPERS

**NOTE:** Decals are preinstalled at factory.  
Decal location shown for reference.

**NOTE:** Ensure there is no residue, dirt or corrosion where decals are attached.  
If necessary, clean surface before replacing decals.



MODEL	ORDER P/N	CAPACITY DECAL
DMD-18	220387-04	1800 LB [817 KG]
DMD-22	220388-03	2200 LB [1000 KG]
DMD-33	220388-02	3300 LB [1500 KG]

**DECAL SHEET PART NUMBERS  
TABLE 43-1**

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

# DECALS - Continued

**CAUTION**  
Always stand clear of platform area.

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

Read and understand all instructions and WARNINGS before use.

**WARNING**  
Read this information carefully.

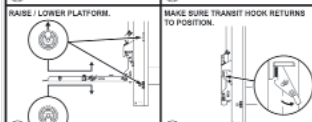
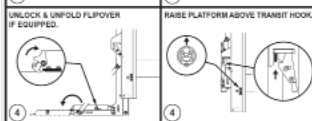
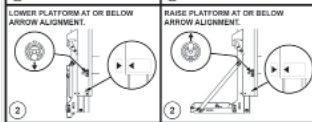
\* Improper operation of this Liftgate can result in serious personal injury. If you do not have a copy of the operating instructions, please obtain them from your supplier, distributor, or lessor before you attempt to operate Liftgate.  
\* If there are signs of improper maintenance, damage to vital 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 mechanism, or in a position that would trap them between the platform and the ground or truck when the Liftgate is operated.  
\* If a hooper 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 unstable, 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](http://www.maxonlift.com) or call Customer Service at (800) 227-4116.

## OPERATING INSTRUCTIONS

OMD  
Scan this QR code to see operation manual or video.

OPERATE STOW

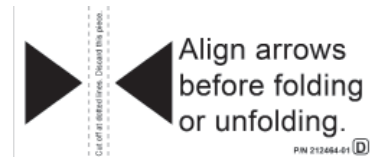
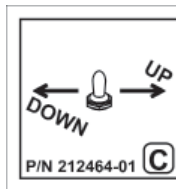
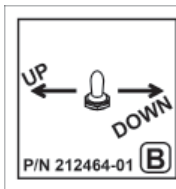


**SAFETY INSTRUCTIONS**  
Rotate handle to release stowed platform.

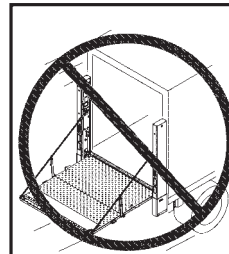
**SAFETY INSTRUCTIONS**  
Read all decals and operation manual before operating liftgate.

- Do not use liftgate unless you have been properly instructed and have read, and are familiar with, the operating instructions.
- Be certain vehicle is properly and securely braked before using the liftgate.
- 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.
- Do not overload.
- Make certain the area in which the platform will open and close is clear before opening or closing the platform.
- Make certain platform area, including the area in which loads may fall from platform, is clear before and at all times during operation of liftgate.
- This liftgate is intended for loading and unloading of cargo only. Do not use this liftgate for anything but its intended use.

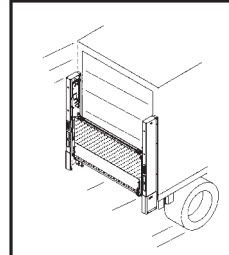
P/N 212464-01 (A)



DECAL SHEET  
P/N 212464-01



**WARNING**  
A Liftgate extending from a moving vehicle could injure bystanders & damage property. Stow liftgate in correct transit position before moving vehicle.



**Advertencia**  
Un elevador hidráulico abierto en vehículo en movimiento puede ocasionar daños y lesiones a objetos y personas circundantes. Cierre apropiadamente antes de poner el vehículo en movimiento.

P/N 298373-01

WARNING DECAL  
P/N 298373-01

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

**Advertencia**  
Existe riesgo de caer desde o ser prensado por el elevador.  
Mantenga manos y pies fuera de las zonas de pliegue.  
Asegúrese de tener la carga estable y usted parado firmemente sobre el elevador.

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

**Advertencia**  
Existe riesgo de caer desde o ser prensado por el elevador.  
Mantenga manos y pies fuera de las zonas de pliegue.  
Asegúrese de tener la carga estable y usted parado firmemente sobre el elevador.



Read and understand all instructions and WARNINGS before use.

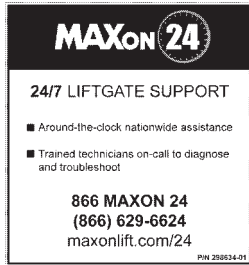
Lea y comprenda todas las instrucciones y ADVERTENCIAS previa operación.  
P/N 299274-01

WARNING DECAL  
P/N 299274-01

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# DECALS & PLATES

**NOTE:** Preferred decal layout is shown. Decals on the Liftgate are attached at the factory, except for the 24/7 SUPPORT decal. The 24/7 SUPPORT decal is placed at customer's or installer's preference.



**MAXON 24/7  
SUPPORT DECAL  
P/N 298634-01**



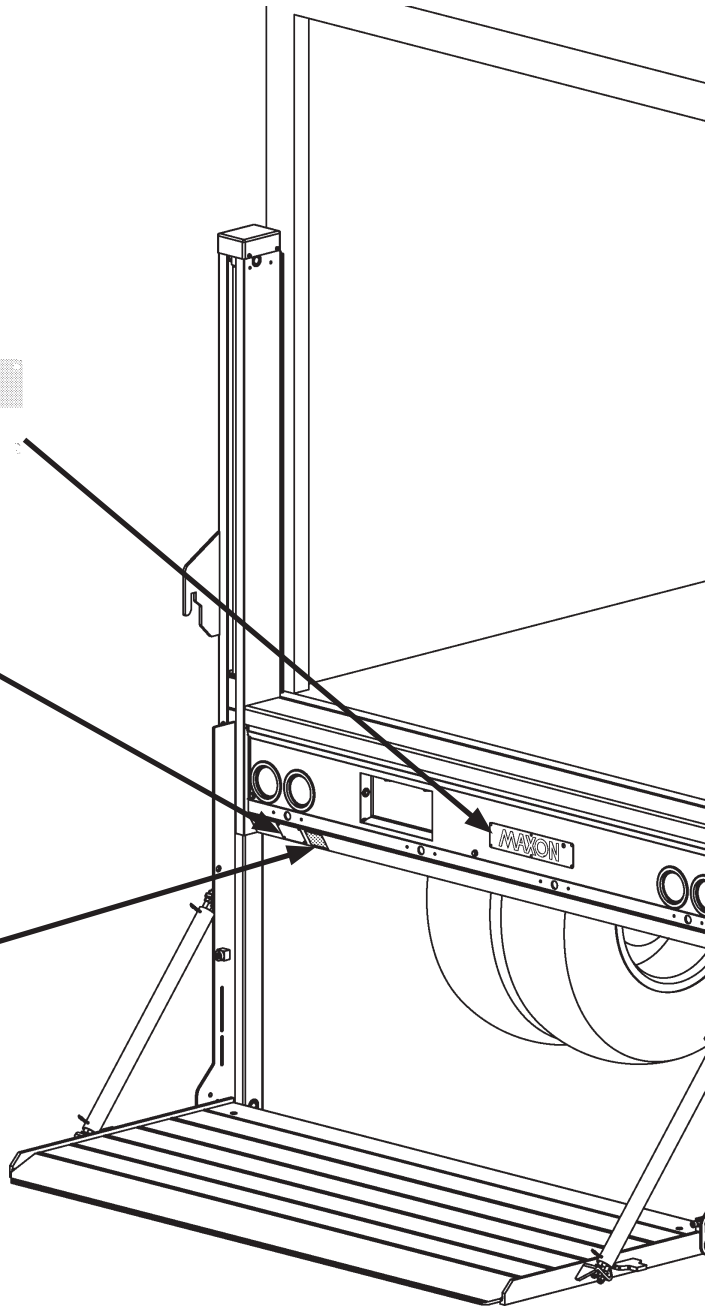
**MAXON NAME PLATE  
P/N 050175**



**SERIAL PLATE  
(REF)**



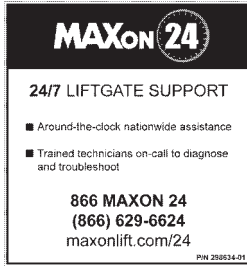
**PARTS QR CODE  
DECAL  
P/N 299143-01**



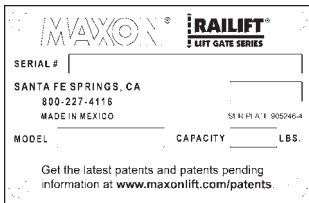
**FIG. 45-1**

# DECALS AND PLATES- DMD WITH DOCK BUMPERS

**NOTE:** Preferred decal layout is shown. Decals on the Liftgate are attached at the factory, except for the 24/7 SUPPORT decal. The 24/7 SUPPORT decal is placed at customer's or installer's preference.



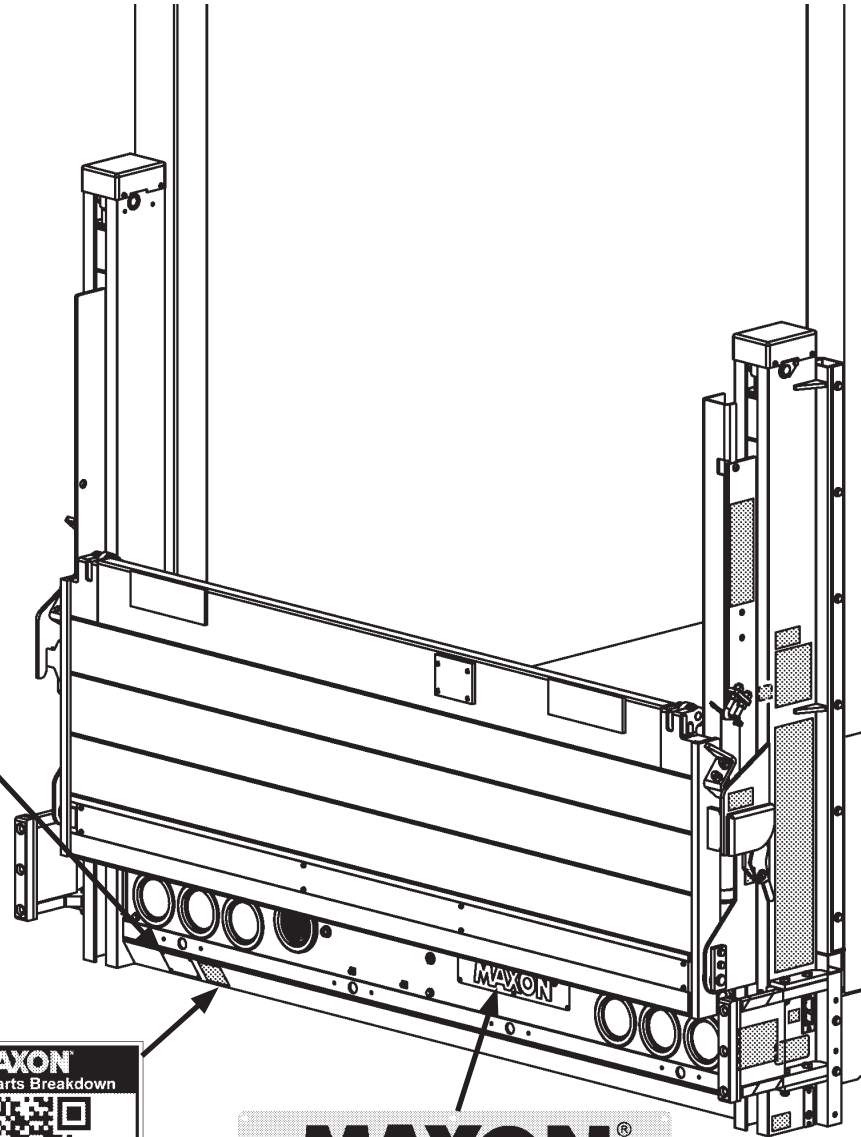
**MAXON 24/7  
SUPPORT DECAL  
P/N 298634-01**



**SERIAL PLATE  
(REF)**



**PARTS QR CODE  
DECAL  
P/N 299143-01**



**MAXON NAME PLATE  
P/N 050175**

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**FIG. 46-1**

## TOUCHUP PAINT

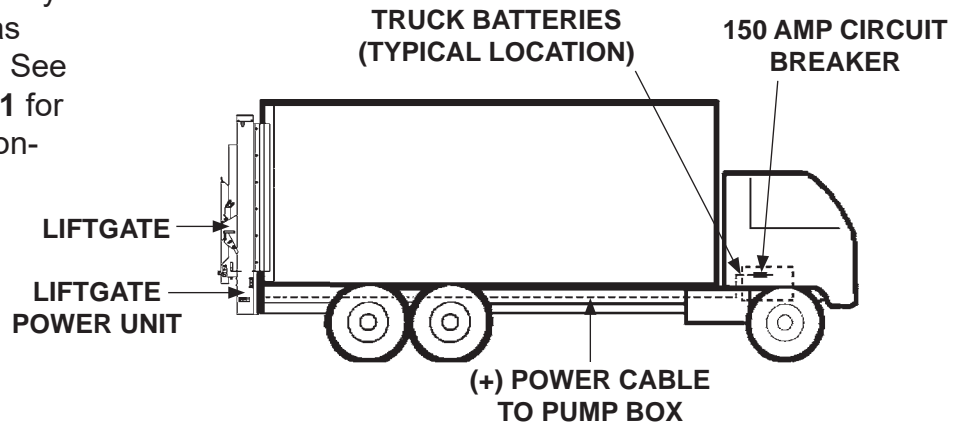
- If bare metal or primer is exposed on the painted portions of the Liftgate, touch up the paint. To maintain the protection provided by the original paint system, **MAXON** recommends aluminum primer touchup paint.
- If bare metal is exposed on galvanized portions of the Liftgate, touch up the galvanized finish. To maintain the protection provided by the original galvanized finish, **MAXON** recommends cold galvanize spray.

# POWER OPTIONS

## RECOMMENDED LIFTGATE POWER CONFIGURATION

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

1. Liftgate and additional battery box are typically installed on trucks as shown in **FIG. 48-1**. See **FIGS. 49-1 and 50-1** for battery and cable connections.



**RECOMMENDED BATTERY BOX  
INSTALLATION ON TRUCK  
FIG. 48-1**

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



## RECOMMENDED LIFTGATE POWER CONFIGURATION - Continued

### ⚠ WARNING

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

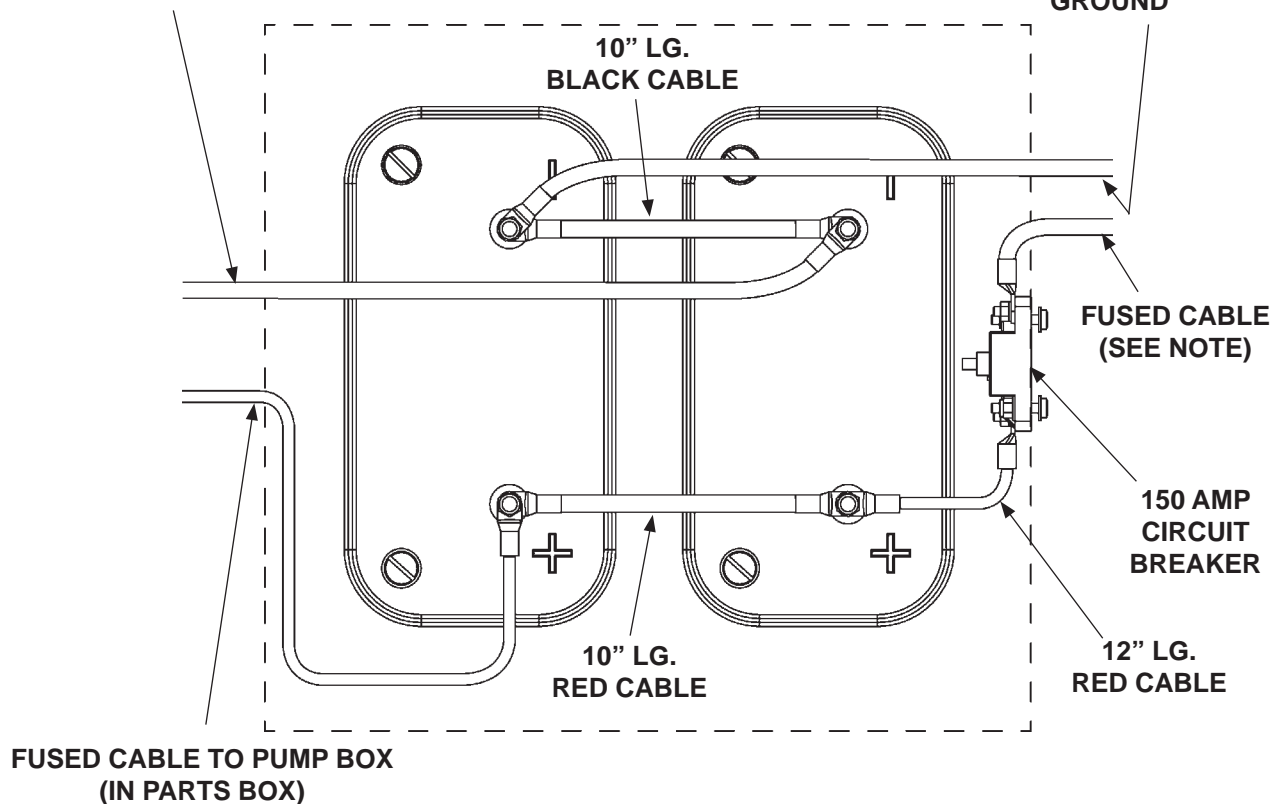
**NOTE:** Always connect fused end of power cable to battery positive (+) terminal.

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

2. Connect battery cables, fused cables, and ground cables for 12 volt power as shown in **FIG. 49-1** or 24 volt power as shown in **FIG. 50-1**.

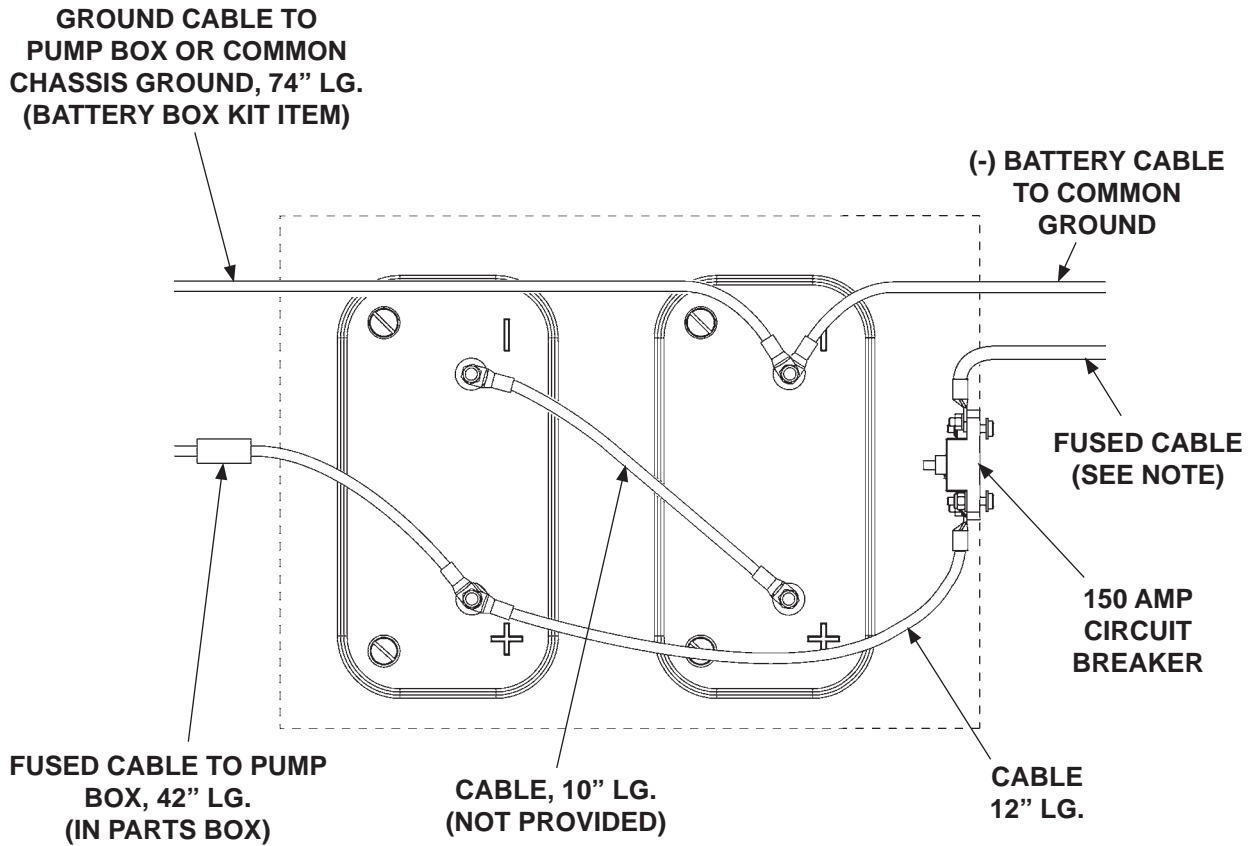
GROUND CABLE TO PUMP  
BOX OR COMMON CHASSIS  
GROUND, 74" LG.  
(BATTERY BOX KIT ITEM)

(-) BATTERY CABLE  
TO COMMON  
GROUND



12 VOLT BATTERY CONNECTIONS  
FOR 12 VOLT POWER  
FIG. 49-1

## RECOMMENDED LIFTGATE POWER CONFIGURATION - Continued

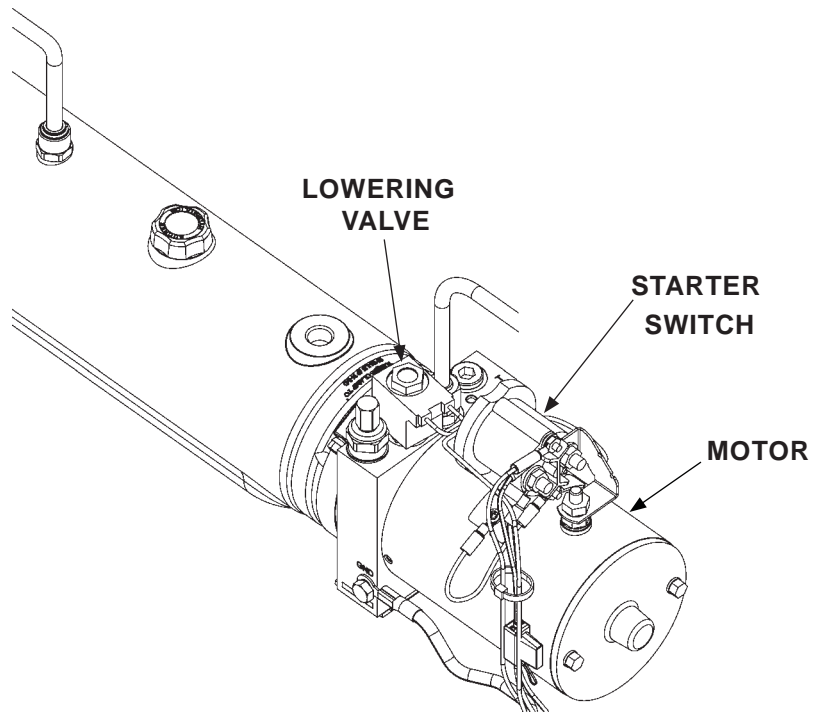


12 VOLT BATTERY CONNECTIONS  
FOR 24 VOLT POWER  
FIG. 50-1

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# SYSTEM DIAGRAMS

## PUMP MOTOR & VALVE OPERATION (MANUAL CLOSE)

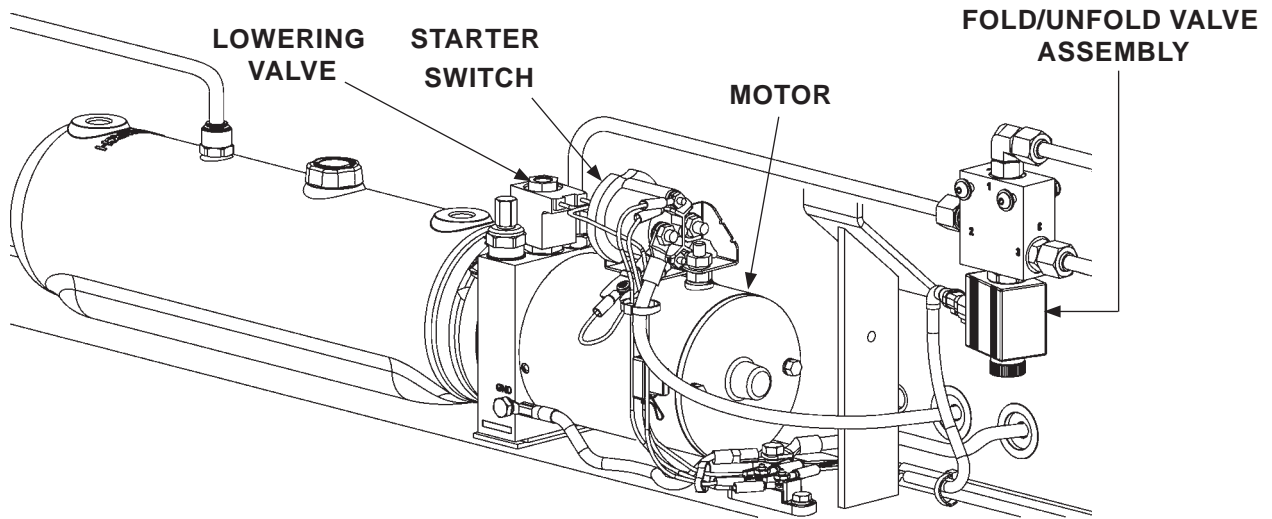


**POWER UNIT  
FIG. 51-1**

<b>POWER UNIT MOTOR &amp; SOLENOID OPERATION</b>		
<b>LIFTGATE FUNCTION</b>	<b>SOLENOID OPERATION (✓ MEANS ENERGIZED)</b>	
	<b>MOTOR STARTER SWITCH</b>	<b>LOWERING VALVE</b>
<b>RAISE</b>	✓	-
<b>LOWER</b>	-	✓
<b>REFER TO VALVES SHOWN ON HYDRAULIC SCHEMATIC</b>		

**TABLE 51-1**

## PUMP MOTOR & VALVE OPERATION (EQUIPPED WITH HYDRAULIC CLOSER)



**POWER UNIT  
FIG. 52-1**

<b>POWER UNIT MOTOR &amp; VALVE OPERATION</b>			
<b>LIFTGATE FUNCTION</b>	<b>SOLENOID OPERATION (✓ MEANS ENERGIZED)</b>		
	<b>MOTOR</b>	<b>LOWERING VALVE</b>	<b>FOLD/UNFOLD VALVE</b>
<b>RAISE</b>	✓		
<b>LOWER</b>		✓	
<b>UNFOLD</b>		✓	✓
<b>FOLD</b>	✓		✓
<b>REFER TO VALVES SHOWN ON HYDRAULIC SCHEMATIC</b>			

**TABLE 52-1**

# HYDRAULIC SCHEMATIC (MANUAL CLOSE)

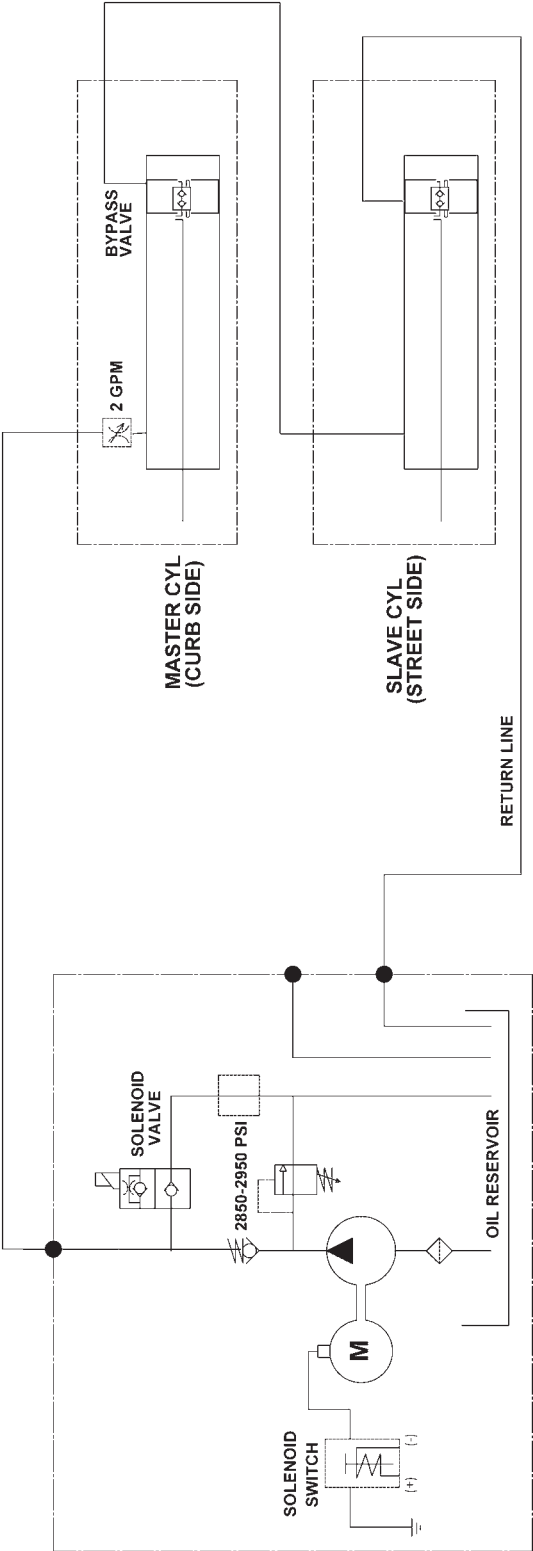


FIG. 53-1

# HYDRAULIC SCHEMATIC (EQUIPPED WITH HYDRAULIC CLOSER)

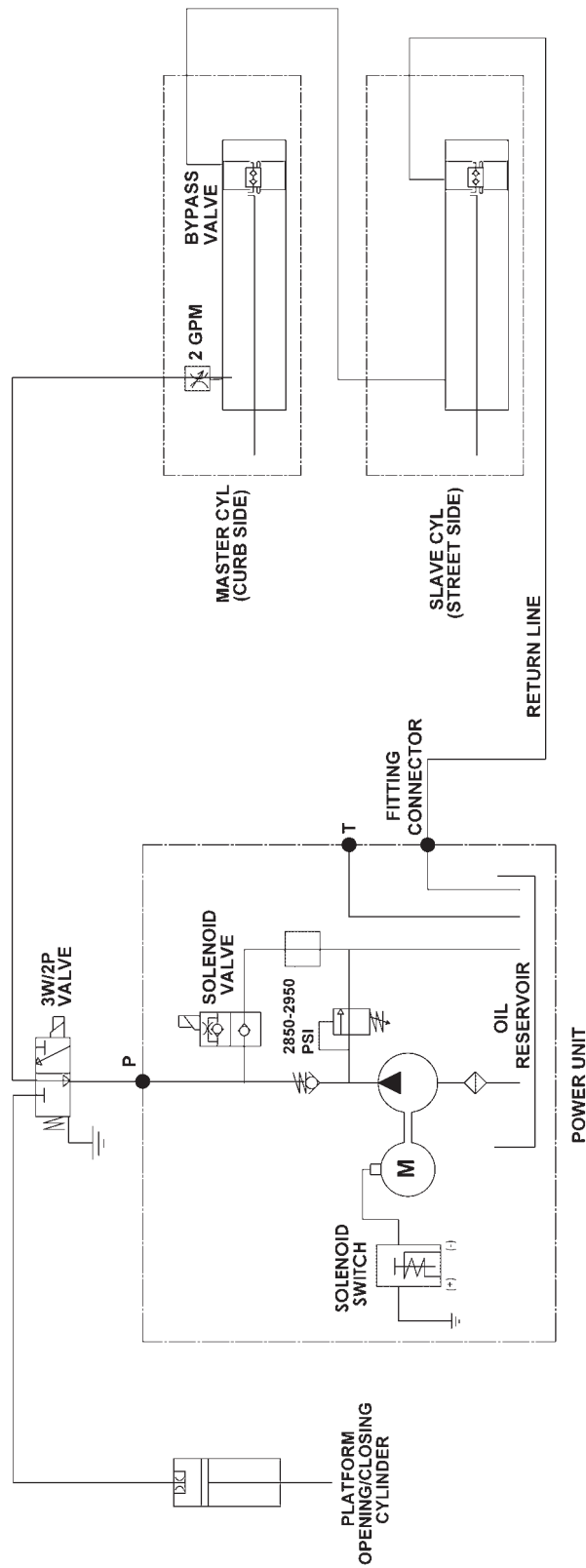


FIG. 54-1

# ELECTRICAL SCHEMATIC (MANUAL CLOSE)

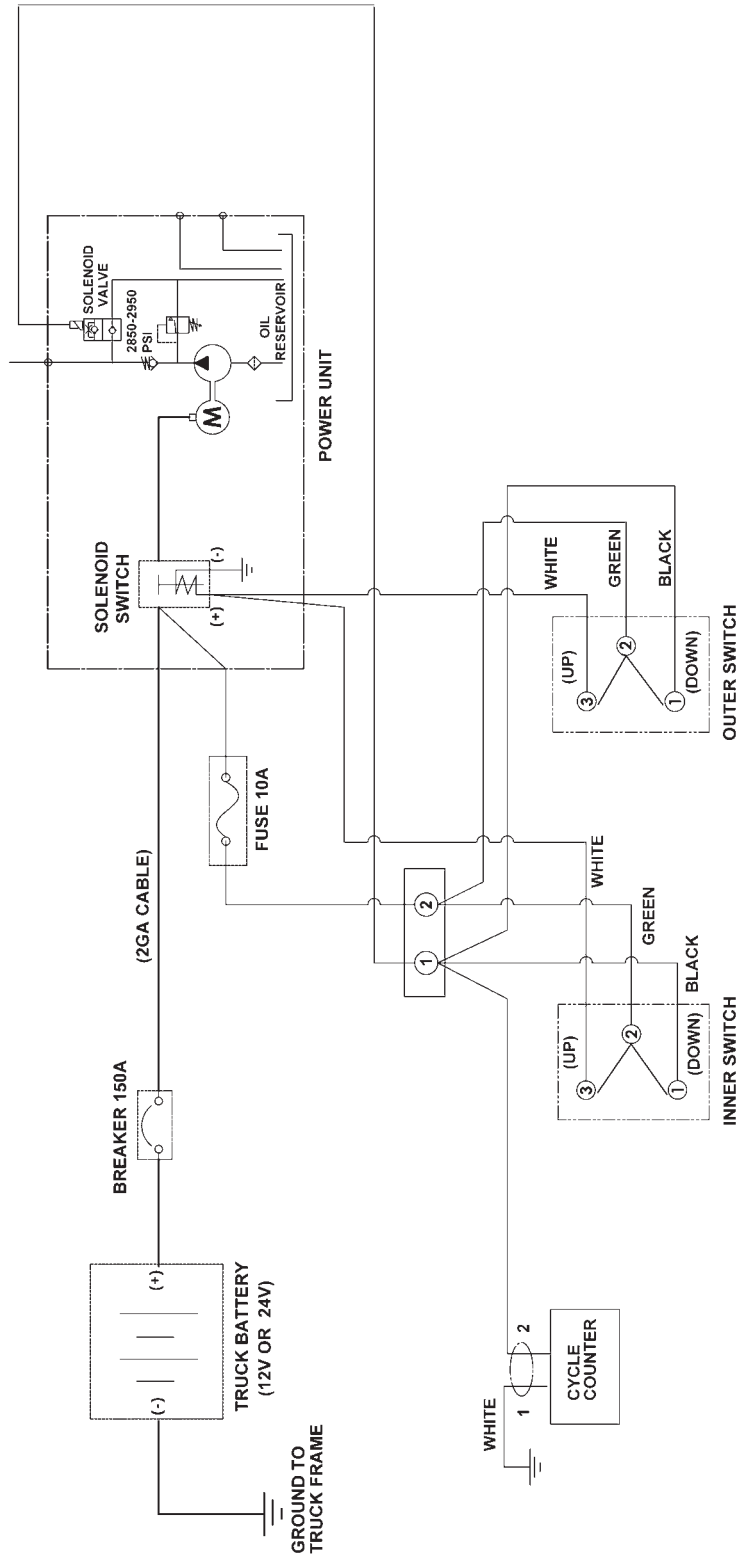


FIG. 55-1

# ELECTRICAL SCHEMATIC (EQUIPPED WITH HYDRAULIC CLOSER)

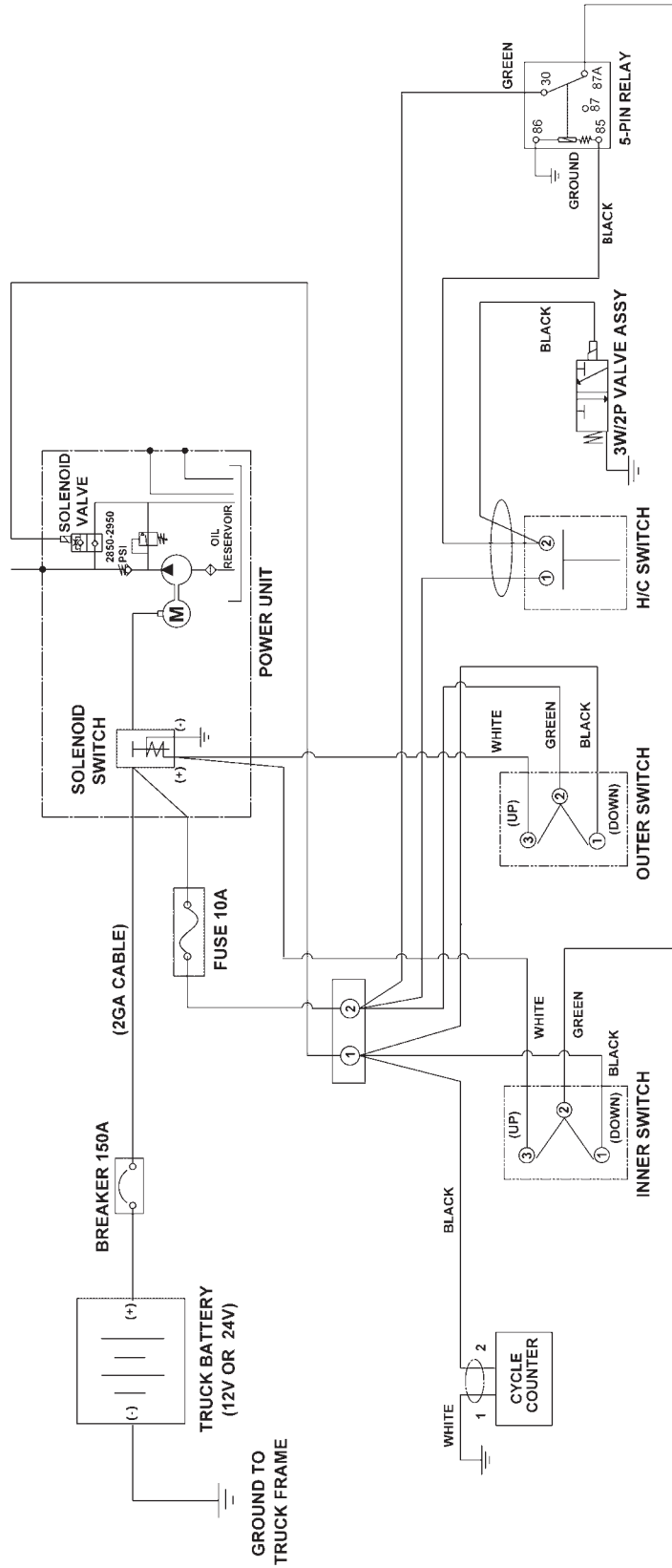


FIG. 56-1



# ELECTRICAL SCHEMATIC - JUMPER HARNESS ASSEMBLY

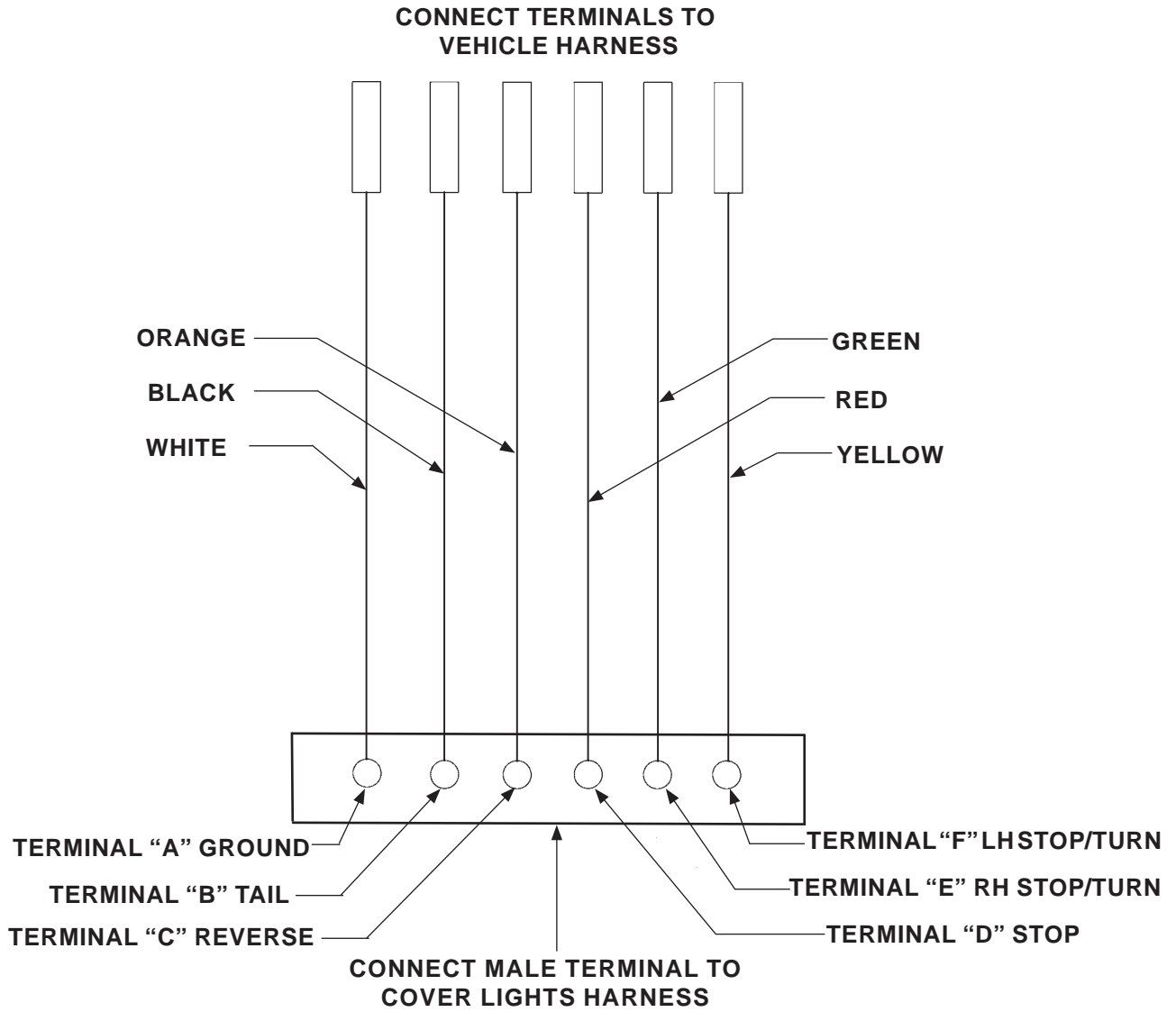


FIG. 57-1

# SYSTEM DIAGRAMS

## ELECTRICAL SCHEMATIC - HOUSING COVER ASSEMBLY (WITHOUT LIGHTS)

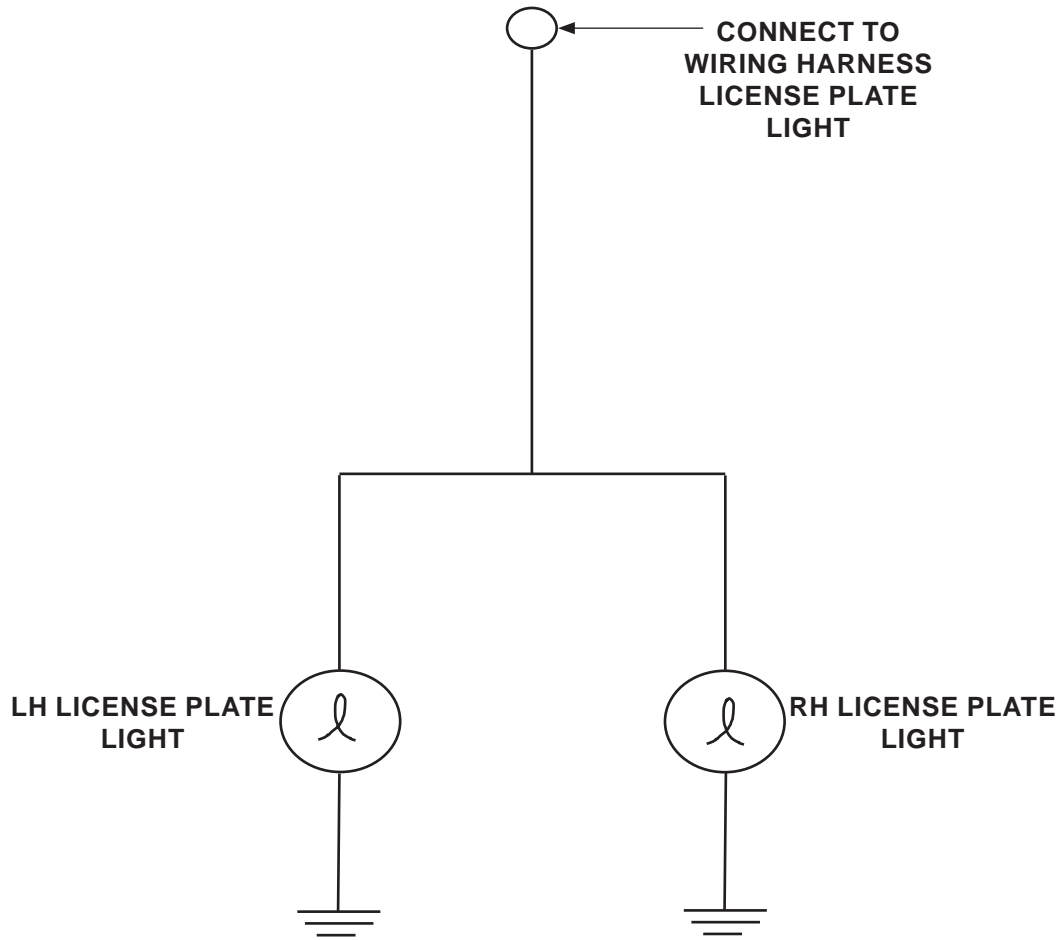
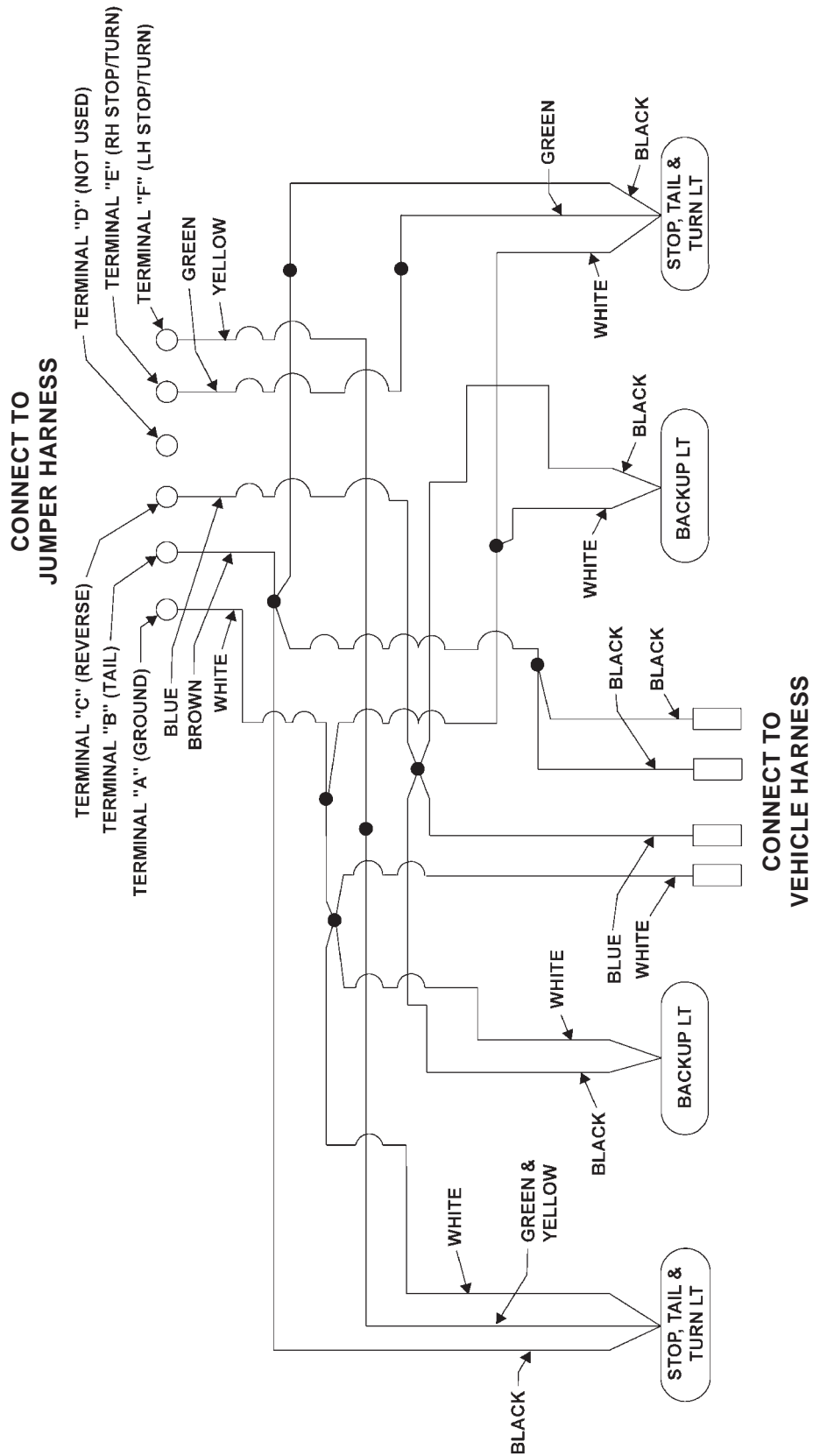


FIG. 58-1

# ELECTRICAL SCHEMATIC - HOUSING COVER ASSEMBLY (WITH FOUR LIGHTS)



**FIG. 59-1**

# SYSTEM DIAGRAMS

## ELECTRICAL SCHEMATIC - HOUSING COVER ASSEMBLY, FOREIGN VEHICLE (WITH SIX LIGHTS)

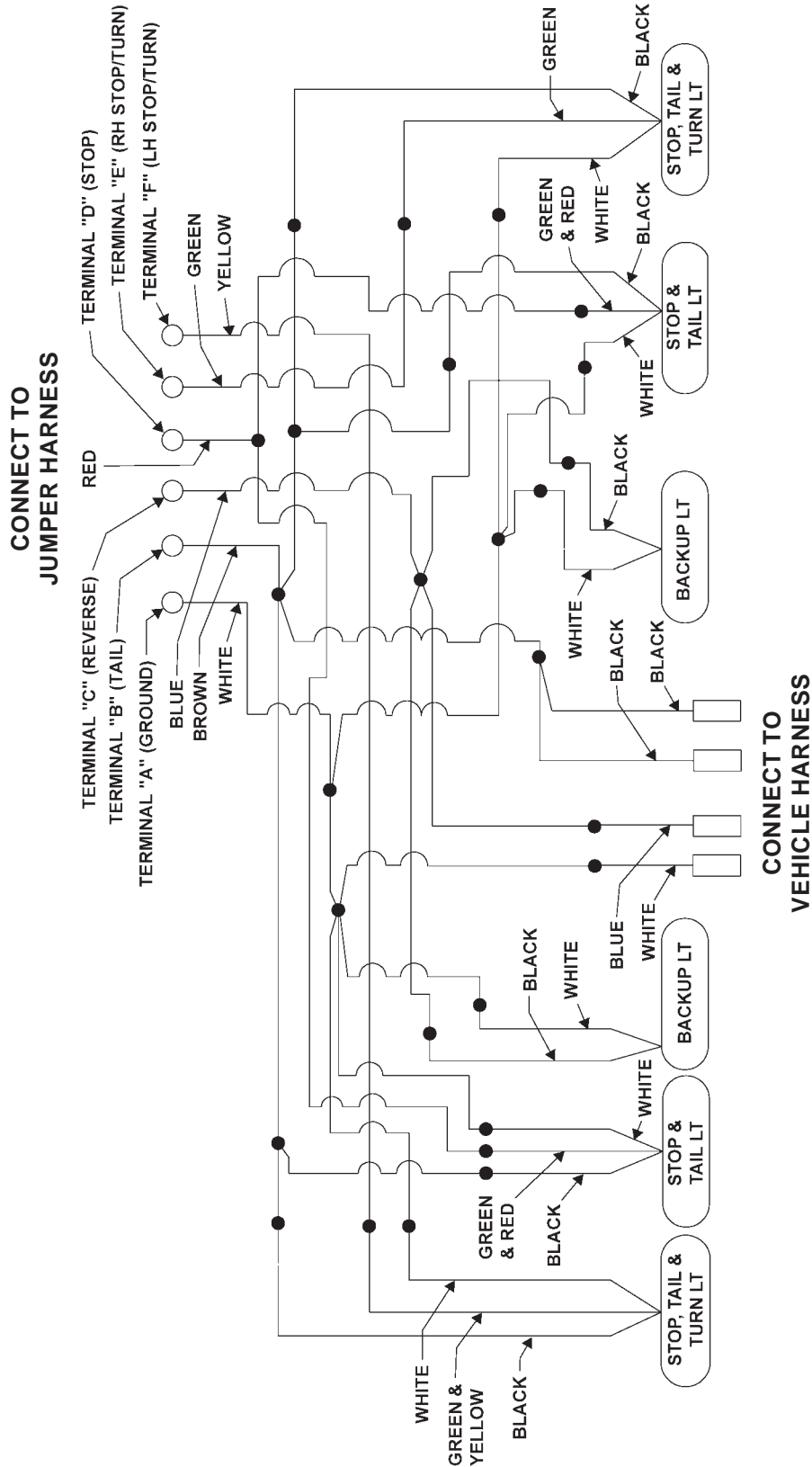


FIG. 60-1

## SYSTEM DIAGRAMS

### DMD ELECTRICAL VALUES & TORQUE SPECIFICATIONS

SOLENOID SWITCH	12V	24V
Coil resistance:	5.4Ω @70°F. ±15%	20.1Ω @70°F. ±15%
Ampere:	2.2A	1.2A
Coil terminal torque: <b>10-15 lb-in</b> max.		
Contact terminal torque: <b>30-35 lb-in</b> max.		
<b>LOWERING VALVE</b>		
Coil resistance:	6.6Ω @ 70°F. ±15%	26.7Ω @ 70°F. ±15%
Ampere:	1.8A	0.9A
Coil terminal torque: <b>15-45 lb-in</b> max.		
Valve cartridge torque: <b>25-30 lb-ft</b> max.		
Coil nut torque: <b>15-45 lb-in</b>		
<b>FOLD/UNFOLD VALVE</b>		
Coil resistance:	8.0Ω @ 70°F. ±15%	30Ω @ 70°F. ±15%
Ampere:	1.5A	0.8A
Coil terminal torque: <b>3-4.5 lb-ft</b> max.		
Valve cartridge torque: <b>18.5-22 lb-ft</b> max.		
<b>GROUND CABLE</b>		
Cap screw torque: <b>24 lb-ft</b> max.		
<b>CYCLE COUNTER</b>		
Operation voltage	7V - 30V	7V - 30V
<b>150 AMP CIRCUIT BREAKER</b>		
1/4"-20 nut torque: <b>50 lb-in</b> max.		

TABLE 61-1

# OPTIONS

## OPTIONAL LIFTGATE COMPONENTS

<b>ELECTRICAL KITS</b>	<b>PART NO.</b>	<b>STD</b>	<b>HC</b>
IN CAB ON-OFF SWITCH	286691-01	X	X
HAND HELD CONTROL ASSEMBLY, MANUAL CLOSER	298675-01	X	
HAND HELD CONTROL ASSEMBLY, HYDRAULIC CLOSER	298675-02		X
STREET SIDE CONTROL, MANUAL CLOSER	298674-01	X	
STREET SIDE CONTROL, HYDRAULIC CLOSER	298674-02		X
<b>MISCELLANEOUS KITS</b>	<b>PART NO.</b>	<b>STD</b>	<b>HC</b>
TRAFFIC CONE	268893-01	X	X
BACK-UP SENSOR ADAPTER, .75"	299392-01	X	X
BACK-UP SENSOR ADAPTER, .96"	299392-02	X	X
BACK-UP SENSOR ADAPTER, .87"	299392-03	X	X

# 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:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Serial Number:** \_\_\_\_\_

**Technician:** \_\_\_\_\_

### Pre-Installation Inspection:

- Correct model
- Correct capacity
- Correct platform size
- Correct options
- Manuals & decals

### Structural Inspection:

- Inspect alignment of final assembly
- Inspect pump box secure mounting
- Inspect all installation welds
- Check roll pins, bolts and fasteners
- Check for no twists in chain (if applicable)
- Inspect tightness of hardware used to secure liftgate to vehicle.
- Ensure platform ramp touches ground when runner is 1" above ground, and platform & flipover are level & touching the ground.
- Check for clearance of 11/16" +/-1/4" between main housing & bottom plates of flipover section with platform stowed. Refer to **MEASURE & ADJUST CLEARANCE FOR PLATFORM WITH FLIPOVER.**

### Hydraulic Inspection:

- Proper fluid level (See **CHECKING HYDRAULIC FLUID** step in this manual.)
- Check hydraulic fittings in pump box for leaks
- Check hydraulic line connections for leaks

### Electrical Inspection:

- Check power/charge plug and terminal
- Check for tight wire connections
- Circuit breaker (150A) installed in battery box (if equipped) or by truck/tractor battery.
- Ensure batteries are fully charged, all cable connections are tight & tiedowns are tight.
- Inspect all solenoid connections
- Check all wiring harness connections

- Outside control box location
- Check electrical cable connections (at the bottom of the curb-side runner) are tight & secure.

### Operation Inspection:

**NOTE:** The following times are for 54" bed height, aluminum platform and flipover, Exxon Univis HVI-13 oil, & temperature at 79°F. Times are for reference only and may vary for larger platforms, smaller platforms, or temperature changes.

- Check operation of all main and optional control switches.
- All DMD**
- Unloaded platform lowers in **19 to 34 sec.**
- Unloaded platform raises in **12 to 32 sec.**
- DMD with hydraulic platform closer, only**
- Platform unfolds in **6 to 8 sec.**
- Platform folds in **4 to 6 sec.**
- All DMD:** Unloaded platform raises and lowers evenly. Maximum 1" difference of runners from side to side.
- All DMD:** Platform stores securely on transit latches.
- Check if cycle counter works
- Decals in correct location and legible
- Verify all lights are operational**
- Taillights, stop lights, turn lights, and backup lights turn **ON** and **OFF** correctly.

