

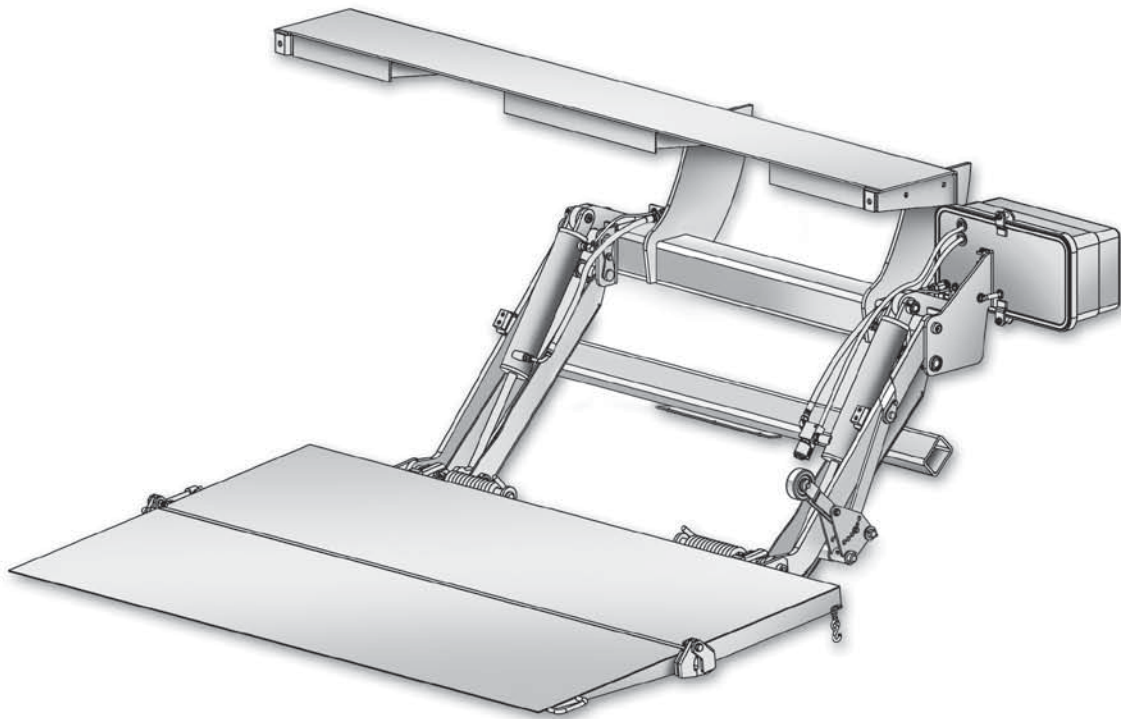
M-11-06
REV. J
FEBRUARY 2016

MAXON[®]

TE-33

INSTALLATION MANUAL

TE-33, TE-33L & TEWR-33



To find **maintenance & parts** information for your **TE-33 Liftgate**, go to **www.maxonlift.com**. Click the **PRODUCTS, TUK-A-WAY & TE-33** buttons. Open the **Maintenance Manual** in the **PRODUCT DOCUMENTATION** window.

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

⚠ WARNING

- Do not stand, or allow obstructions, under the platform when lowering the Liftgate. **Be sure your feet are clear of the Liftgate.**
- **Keep fingers, hands, arms, legs, and feet clear of moving Liftgate parts (and platform edges) when operating the Liftgate.**
- **Correctly stow platform when not in use. Extended platforms could create a hazard for people and vehicles passing by.**
- **Make sure vehicle battery power is disconnected** while installing Liftgate. Connect vehicle battery power to the Liftgate only when installation is complete or as required in the installation instructions.
- If it is necessary to stand on the platform while operating the Liftgate, keep your feet and any objects clear of the inboard edge of the platform. Your feet or objects on the platform can become trapped between the platform and the Liftgate extension plate.
- Never perform unauthorized modifications on the Liftgate. Modifications may result in early failure of the Liftgate and may create hazards for Liftgate operators and maintainers.
- Recommended practices for welding on steel parts are contained in the current **AWS (American Welding Society) D1.1 Structural Welding Code - Steel**. Damage to Liftgate and/or vehicle, and personal injury can result from welds that are done incorrectly.
- Welding on galvanized parts gives off especially hazardous fumes. Comply with WARNING decal on the galvanized part (**FIG. 5-1**). To minimize hazard remove galvanizing from weld area, provide adequate ventilation, and wear suitable respirator.

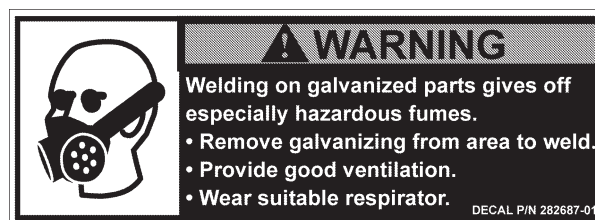


FIG. 5-1

SAFETY INSTRUCTIONS

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

NOTICE

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

STANDARD LIFTGATE COMPONENTS

⚠ CAUTION

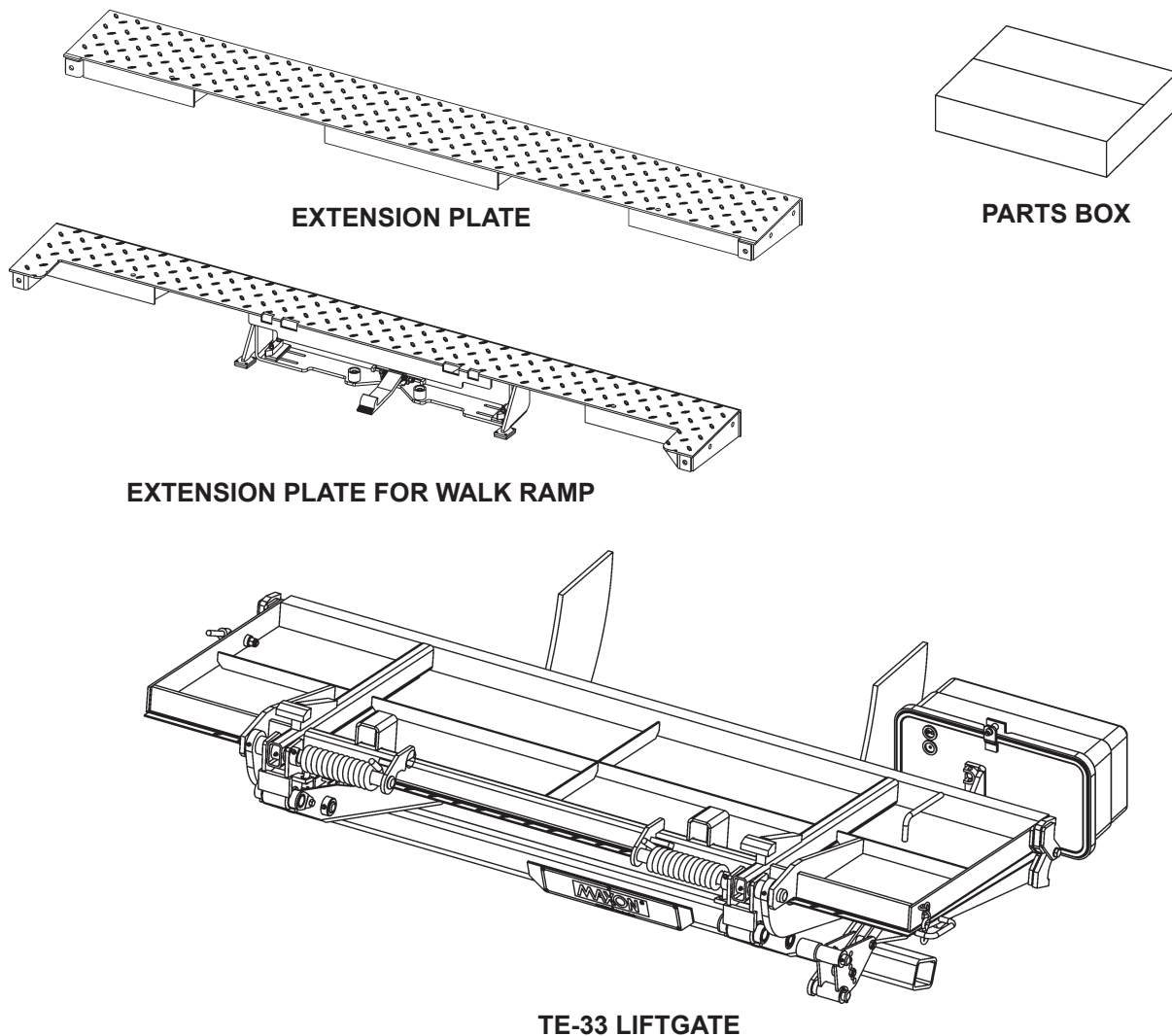
Unpacking the Liftgate on unlevel surface may allow heavy components to slide off when shipping bands are cut. Injury and equipment damage could result. Before the shipping bands are cut, put Liftgate on level asphalt, concrete or compacted dirt surface that will support 1500 lbs. When unpacking the Liftgate, remove heavy components carefully to avoid injury and damage.

NOTE: Make sure you have all components and parts before you start installing Liftgate. Compare parts in the part box and each kit box with packing list enclosed in each box. If parts and components are missing or incorrect, call:

Maxon Customer Service

Call (800) 227-4116 or

Send e-mail to cservice@maxonlift.com



**TE-33 LIFTGATE COMPONENTS
FIG. 7-1**

TE-33 INSTALLATION PARTS BOXES

ITEM	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
REF	PARTS BOX (96" WIDE VEH, GRAVITY DOWN)	1	269465-01
1	FUSED POWER CABLE, 175 AMP, 38' LG.	1	264422
2	MOLDED SWITCH ASSEMBLY	1	267959-01
3	COPPER LUG (2 GAUGE)	1	906497-02
4	SELF-TAPPING SCREW, 10-24 X 1" LG.	4	900057-5
5	SPRING CLIP	7	050079
6	CLAMP, #10 RUBBER LOOM	2	801681
7	TE-33 MANUAL & DECAL KIT	1	269464-01
8	INSTALLATION BRACKET	2	269462-01
9	HEX HEAD CAP SCREW, 1/2"-13 X 1-1/2" LG.	2	900035-3
10	HEX NUT, 1/2"-13	2	901011-9
11	FLAT WASHER, 1/2"	2	902000-13

TABLE 8-1

ITEM	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
REF	PARTS BOX (102" WIDE VEH, GRAVITY DOWN)	1	269465-02
1	FUSED POWER CABLE, 175 AMP, 38' LG.	1	264422
2	MOLDED SWITCH ASSEMBLY	1	267959-01
3	COPPER LUG (2 GAUGE)	1	906497-02
4	SELF-TAPPING SCREW, 10-24 X 1" LG.	4	900057-5
5	SPRING CLIP	7	050079
6	CLAMP, #10 RUBBER LOOM	2	801681
7	TE-33 MANUAL & DECAL KIT	1	269464-01
8	INSTALLATION BRACKET	2	269462-01
9	HEX HEAD CAP SCREW, 1/2"-13 X 1-1/2" LG.	2	900035-3
10	HEX NUT, 1/2"-13	2	901011-9
11	FLAT WASHER, 1/2"	2	902000-13

TABLE 8-2

TE-33 INSTALLATION PARTS BOXES - Continued

ITEM	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
REF	PARTS BOX (96" WIDE VEH, POWER DOWN)	1	269465-03
1	FUSED POWER CABLE, 175 AMP, 38' LG.	1	264422
2	COPPER LUG (2 GAUGE)	1	906497-02
3	SELF-TAPPING SCREW, 10-24 X 1" LG.	4	900057-5
4	SPRING CLIP	7	050079
5	CLAMP, #10 RUBBER LOOM	2	801681
6	MOLDED 6-POSITION SWITCH & CABLE, 9" (POWER DOWN)	1	264951-04
7	TE-33 MANUAL & DECAL KIT	1	269464-01
8	INSTALLATION BRACKET	2	269462-01
9	HEX HEAD CAP SCREW, 1/2"-13 X 1-1/2" LG.	2	900035-3
10	HEX NUT, 1/2"-13	2	901011-9
11	FLAT WASHER, 1/2"	2	902000-13

TABLE 9-1

ITEM	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
REF	PARTS BOX (102" WIDE VEH, POWER DOWN)	1	269465-04
1	FUSED POWER CABLE, 175 AMP, 38' LG.	1	264422
2	COPPER LUG (2 GAUGE)	1	906497-02
3	SELF-TAPPING SCREW, 10-24 X 1" LG.	4	900057-5
4	SPRING CLIP	7	050079
5	CLAMP, #10 RUBBER LOOM	2	801681
6	MOLDED 6-POSITION SWITCH & CABLE, 9" (POWER DOWN)	1	264951-04
7	TE-33 MANUAL & DECAL KIT	1	269464-01
8	INSTALLATION BRACKET	2	269462-01
9	HEX HEAD CAP SCREW, 1/2"-13 X 1-1/2" LG.	2	900035-3
10	HEX NUT, 1/2"-13	2	901011-9
11	FLAT WASHER, 1/2"	2	902000-13

TABLE 9-2

TE-33 MANUALS & DECALS

NOTE: To find **maintenance & parts** information for your **TE-33 Liftgate**, go to **www.maxonlift.com**. Click the **PRODUCTS, TUK-A-WAY & TE-33** buttons. Open the **Maintenance Manual** in the **PRODUCT DOCUMENTATION** window.

ITEM	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
REF	TE-33 MANUAL & DECAL KIT	1	269464-01
1	INSTALLATION MANUAL	1	M-11-06
2	OPERATION MANUAL	1	M-11-07
3	DECALS (SEE DECAL PAGES IN THIS MANUAL)	1	220388-02
			251867-11
			264507
			265736-01
			282522-01
			282847-02
			265441-01
			266013-02

**STANDARD KIT
TABLE 10-1**

ITEM	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
REF	TE-33 MANUAL & DECAL KIT	1	269464-01-200
1	INSTALLATION MANUAL	1	M-11-06
2	OPERATION MANUAL	1	M-11-07
3	DECALS (SEE DECAL PAGES IN THIS MANUAL)	1	220388-02
			251867-11
			264507
			265736-01
			282522-01
			282847-02
			265441-01
			266013-02
			285852-01
			285834-01

**KIT FOR LIFTGATE EQUIPPED WITH TRAILER HITCH
TABLE 10-2**

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

VEHICLE REQUIREMENTS

NOTE: Body Maximum and Minimum Operating Bed Height for Standard Platform:

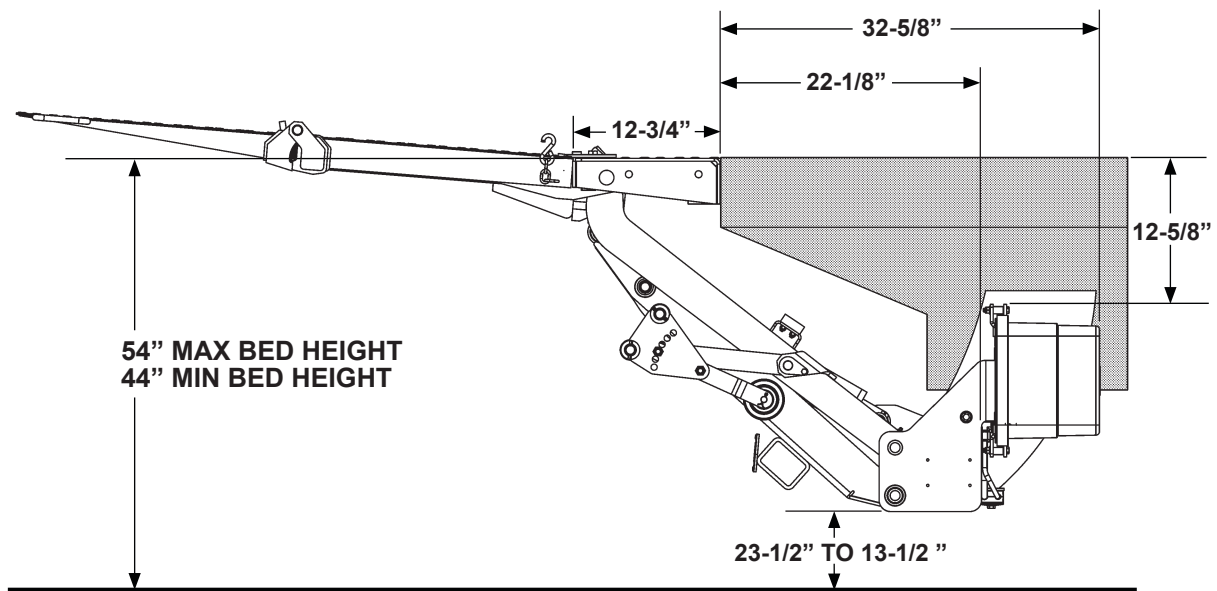
- Maximum height for TE-33 (54" - 44" bed height) is **54"** (Unloaded). Minimum height is **44"** (Loaded).
- Maximum height for TE-33L (44" - 38" bed height) is **44"** (Unloaded). Minimum height is **38"** (Loaded).
- Maximum height for TEWR-33 (Walk ramp, 54" - 44" bed height) is **54"** (Unloaded). Minimum height is **44"** (Loaded).
- Maximum height for **TEWR-33 equipped with trailer hitch** is **52"** (Unloaded). Minimum height is **49"** (Loaded).

If swing door latches interfere with fit of extension plate, do not install this Liftgate on vehicle bodies equipped with **swing open doors**.

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

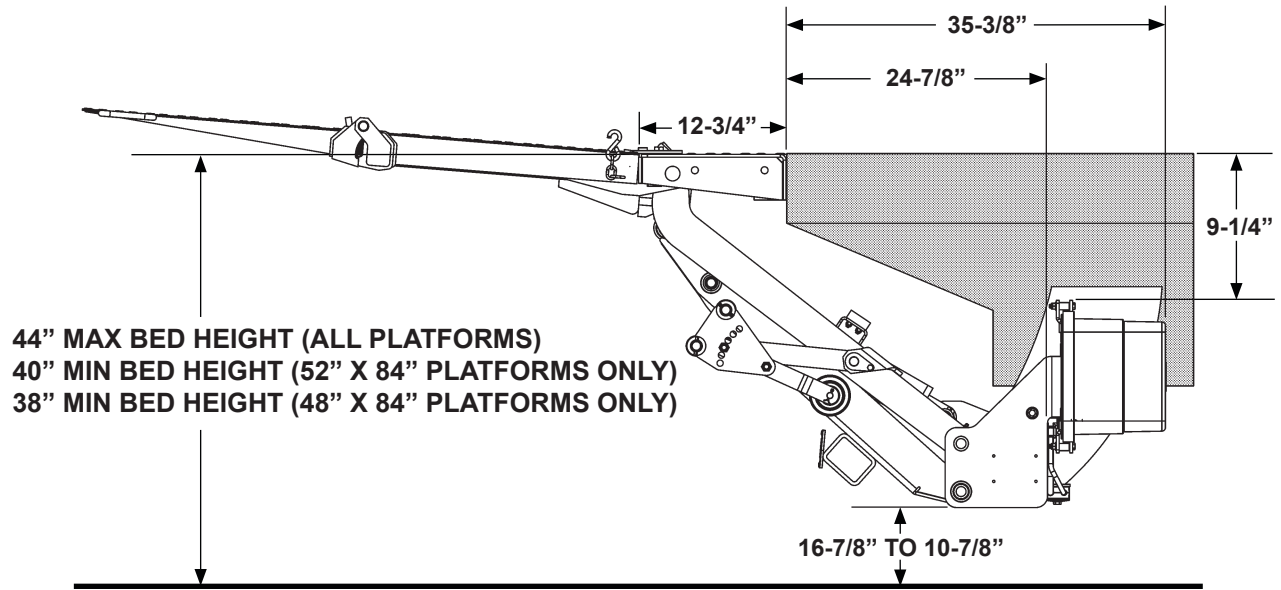
NOTE: Make sure vehicle is parked on level ground while preparing vehicle and installing Liftgate.

1. Check for correct clearances (**FIGS. 11-1, 12-1, and 12-2**) on vehicle to prevent interference between vehicle and Liftgate.



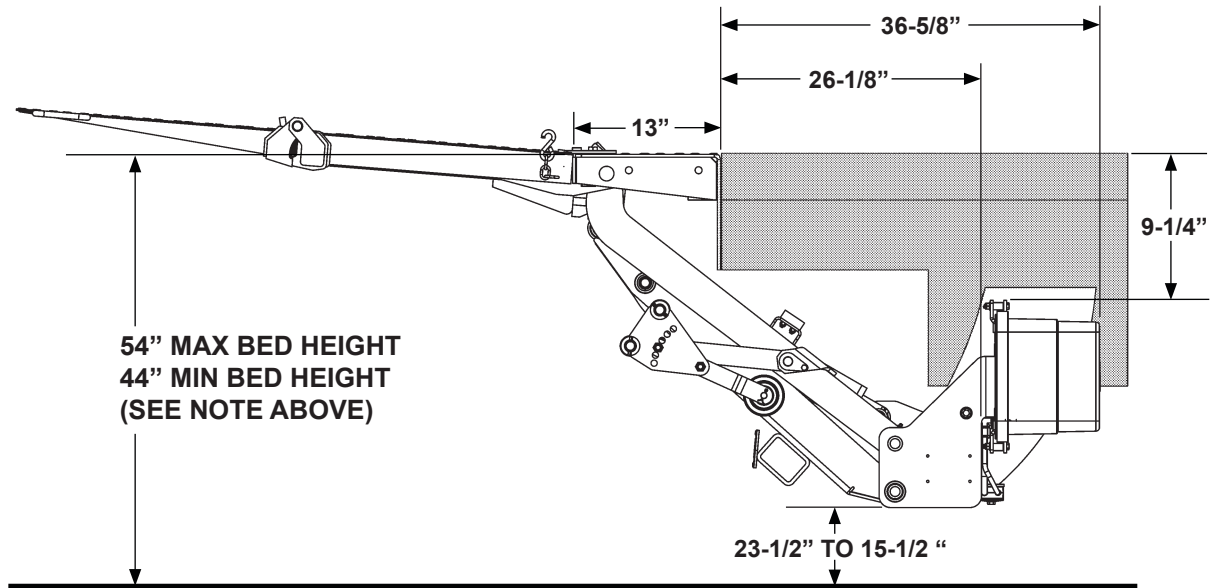
**TE-33 CLEARANCES
(54" TO 44" BED HEIGHT)
FIG. 11-1**

VEHICLE REQUIREMENTS - Continued



**TE-33L CLEARANCES
 (44" TO 38" BED HEIGHT)
 FIG. 12-1**

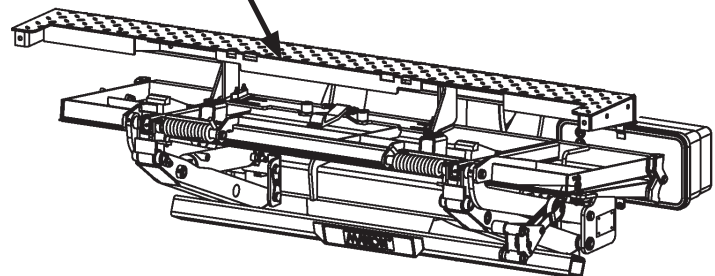
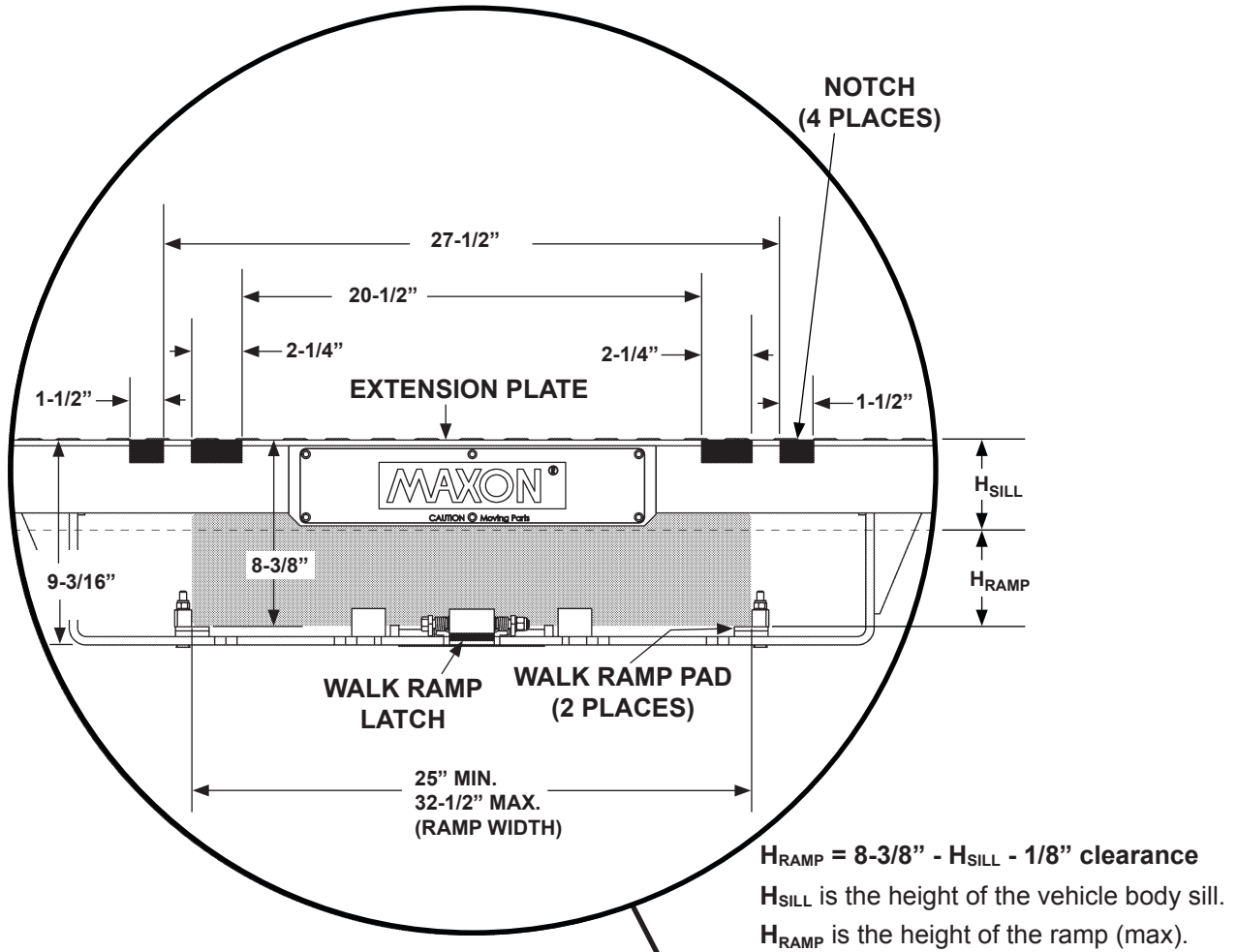
NOTE: TEWR-33 Liftgates equipped with trailer hitch can only be installed on vehicles with 52" to 49" bed height.



**TE-33 WALK RAMP CLEARANCES
 (44" TO 54" BED HEIGHT)
 FIG. 12-2**

VEHICLE REQUIREMENTS - Continued

2. Check for correct clearances between walk ramp, walk ramp box, and the extension plate (FIGS. 13-1A and 13-1B) to prevent interference.



**TE33 LIFTGATE SHOWN WITH WALK RAMP BOX
FIG. 13-1A**

VEHICLE REQUIREMENTS - Continued

⚠ WARNING

Incorrect modification of vehicle frame and/or body could contribute to serious mechanical failure of the vehicle. Serious injury to operator, motorists, and bystanders could result. Installer is responsible for ensuring vehicle body and frame modification do not adversely affect the integrity of the body and frame. If unsure about modifying vehicle, installer should consult truck/trailer body manufacturer.

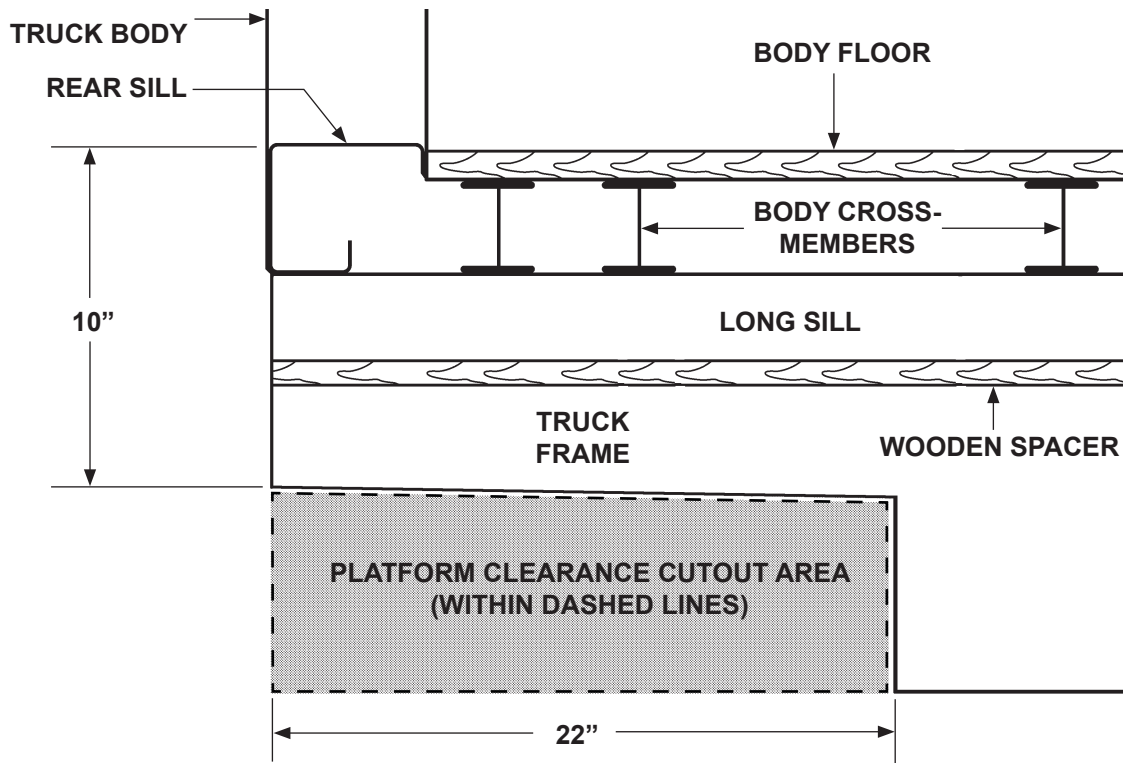
CAUTION

To prevent aluminum platform from being damaged, make sure vehicle frame is cut correctly and rear sills are modified if over 4-1/8" in height. If the cutouts are incorrect, platform may hit vehicle frame or underbody when stowing Liftgate. If rear sill is over 4-1/8" in height, bottom of the platform may hit the sill.

NOTE: Dimensions, shown in illustration below, are maximums except as indicated.

NOTE: The platform cutout area for truck frame, shown below, is required to prevent frame interference when platform is being stowed and unstowed. For trailers, refer to instructions supplied with trailer mounting kit for Liftgate.

3. Fit the Liftgate to vehicle body by cutting vehicle frame as shown in **FIG. 14-1**.



VEHICLE FRAME CUTOUT FOR TE-33 PLATFORM CLEARANCE
(TRUCK FRAME IS SHOWN)

FIG. 14-1

VEHICLE REQUIREMENTS - Continued

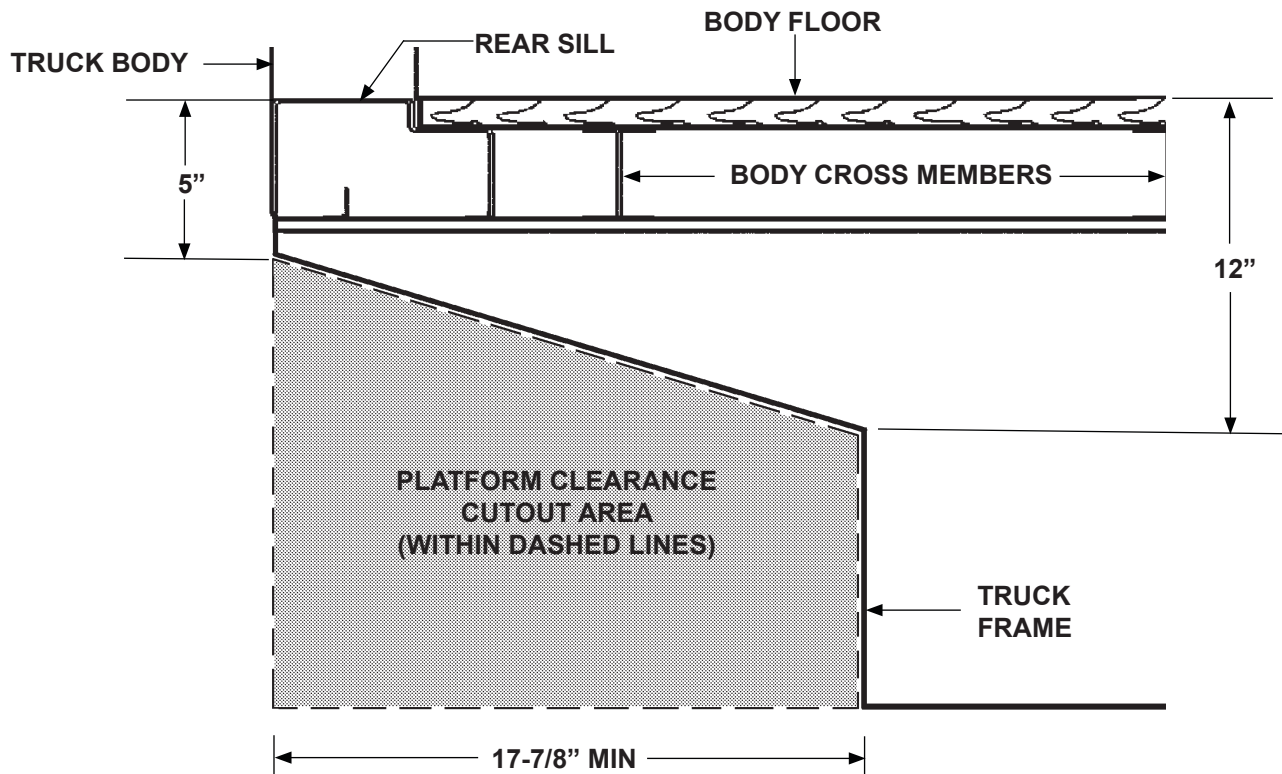
CAUTION

- To prevent platform from being damaged, make sure vehicle frame is cut correctly. If the cutouts are incorrect, platform may hit vehicle frame or underbody when stowing the Liftgate.
- Installer is responsible for ensuring that vehicle body and frame modifications do not adversely affect the integrity of the body and frame.

NOTE: The dimensions, shown in the illustration below, are maximums except as indicated.

NOTE: The platform cutout area shown below applies to trucks and trailers. If the rear sill dimension is taller than 6" it may need to be modified. Check with body manufacturer before modifying the rear sill.

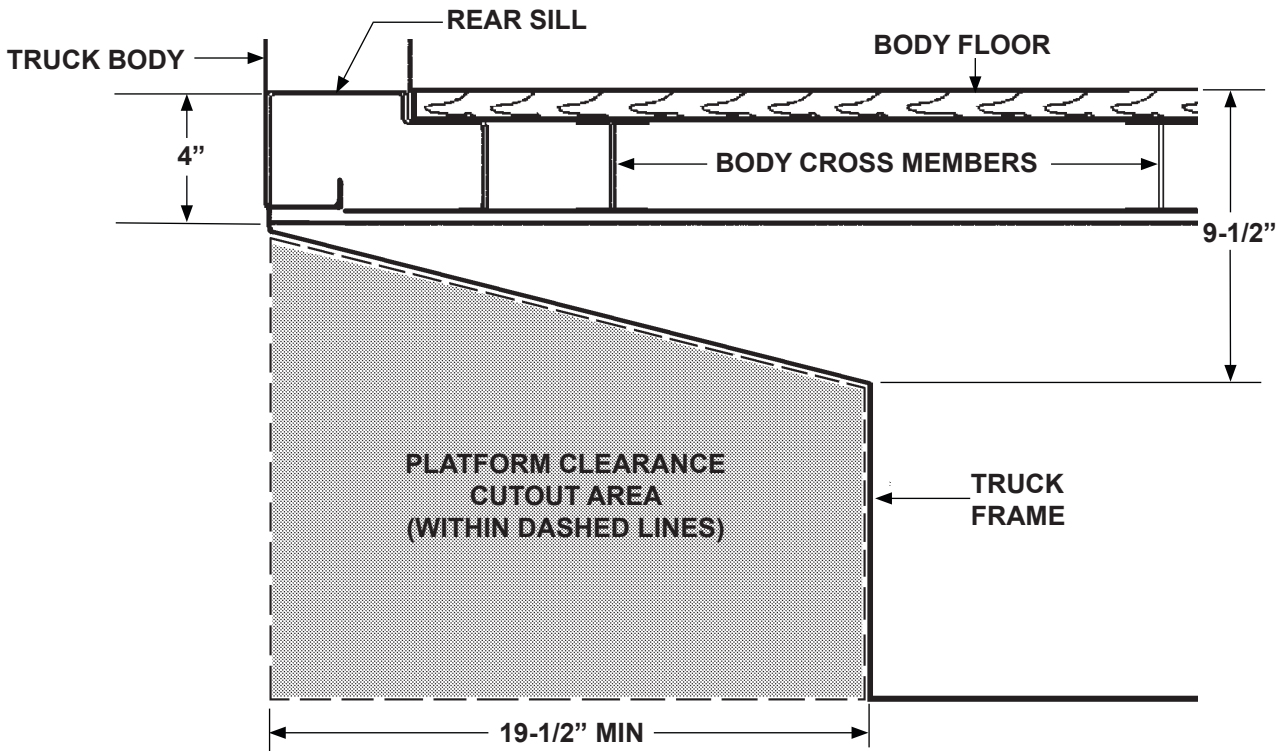
4. Fit the Liftgate to vehicle body by cutting vehicle frame as shown in **FIGS. 14-1, 15-1, or 16-1.**



**VEHICLE FRAME CUTOUT FOR PLATFORM CLEARANCE
(54" TO 44" BED HEIGHT, TRUCK FRAME IS SHOWN)
FIG. 15-1**

VEHICLE REQUIREMENTS - Continued

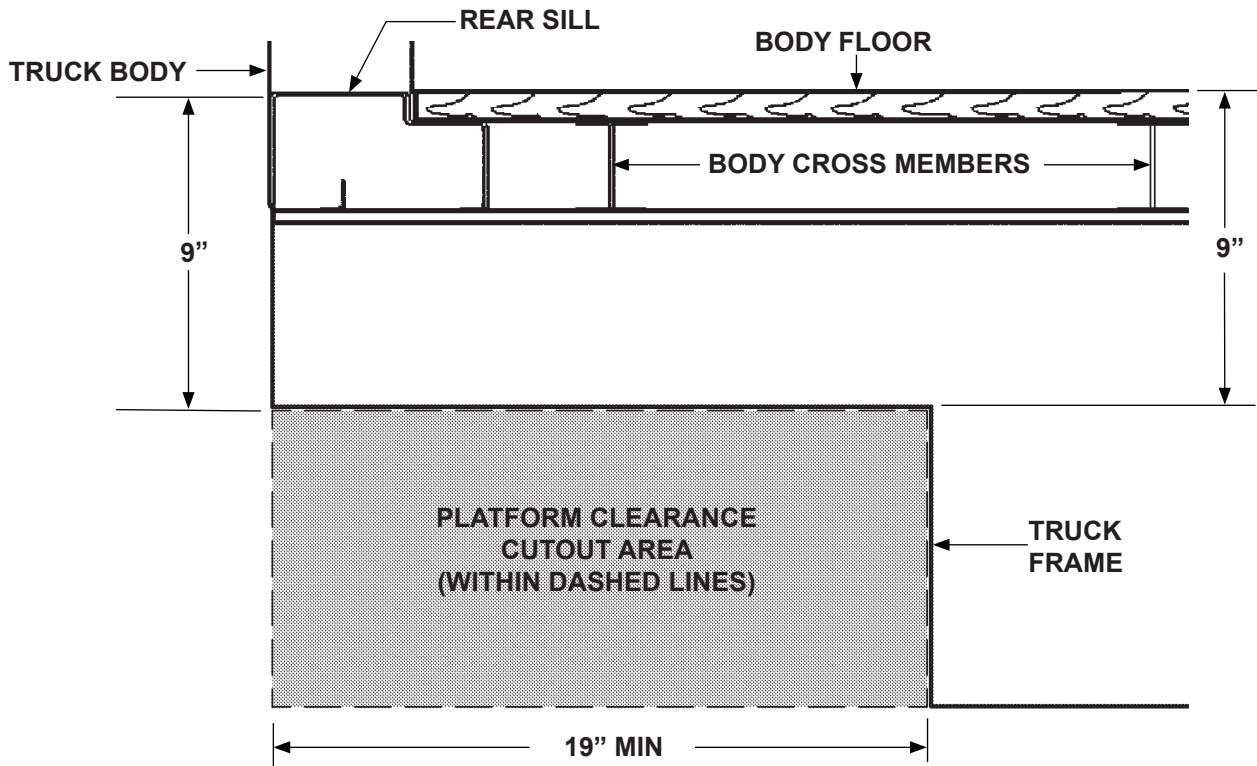
NOTE: The platform cutout area shown below applies to trucks and trailers. If the rear sill dimension is taller than 4" it may need to be modified. Check with body manufacturer before modifying the rear sill.



**VEHICLE FRAME CUTOUT FOR PLATFORM CLEARANCE
(44" TO 38" BED HEIGHT, TRUCK FRAME IS SHOWN)
FIG. 16-1**

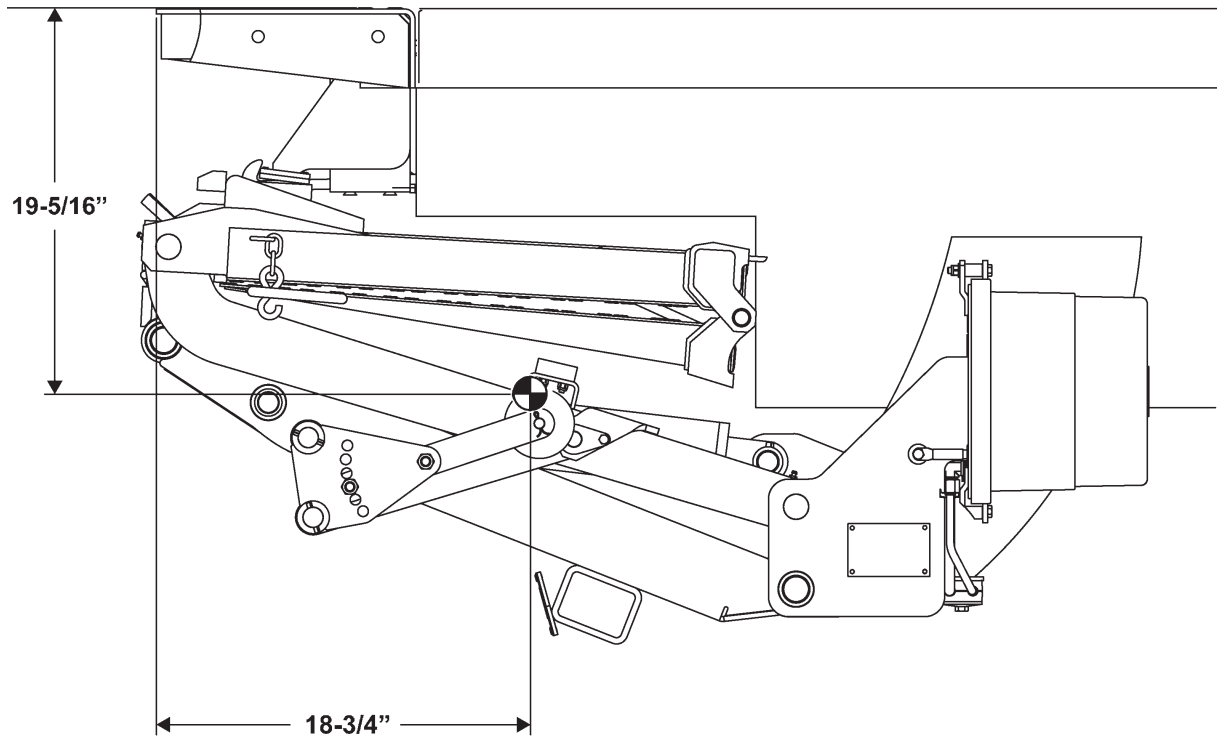
VEHICLE REQUIREMENTS - Continued

NOTE: The platform cutout area shown below applies to trucks and trailers. If the rear sill dimension is taller than 9" it may need to be modified. Check with body manufacturer before modifying the rear sill.



**VEHICLE FRAME CUTOUT FOR PLATFORM CLEARANCE
(54" TO 44" BED HEIGHT WITH WALK RAMP)
(TRUCK FRAME IS SHOWN)
FIG. 17-1**

CENTER OF MASS



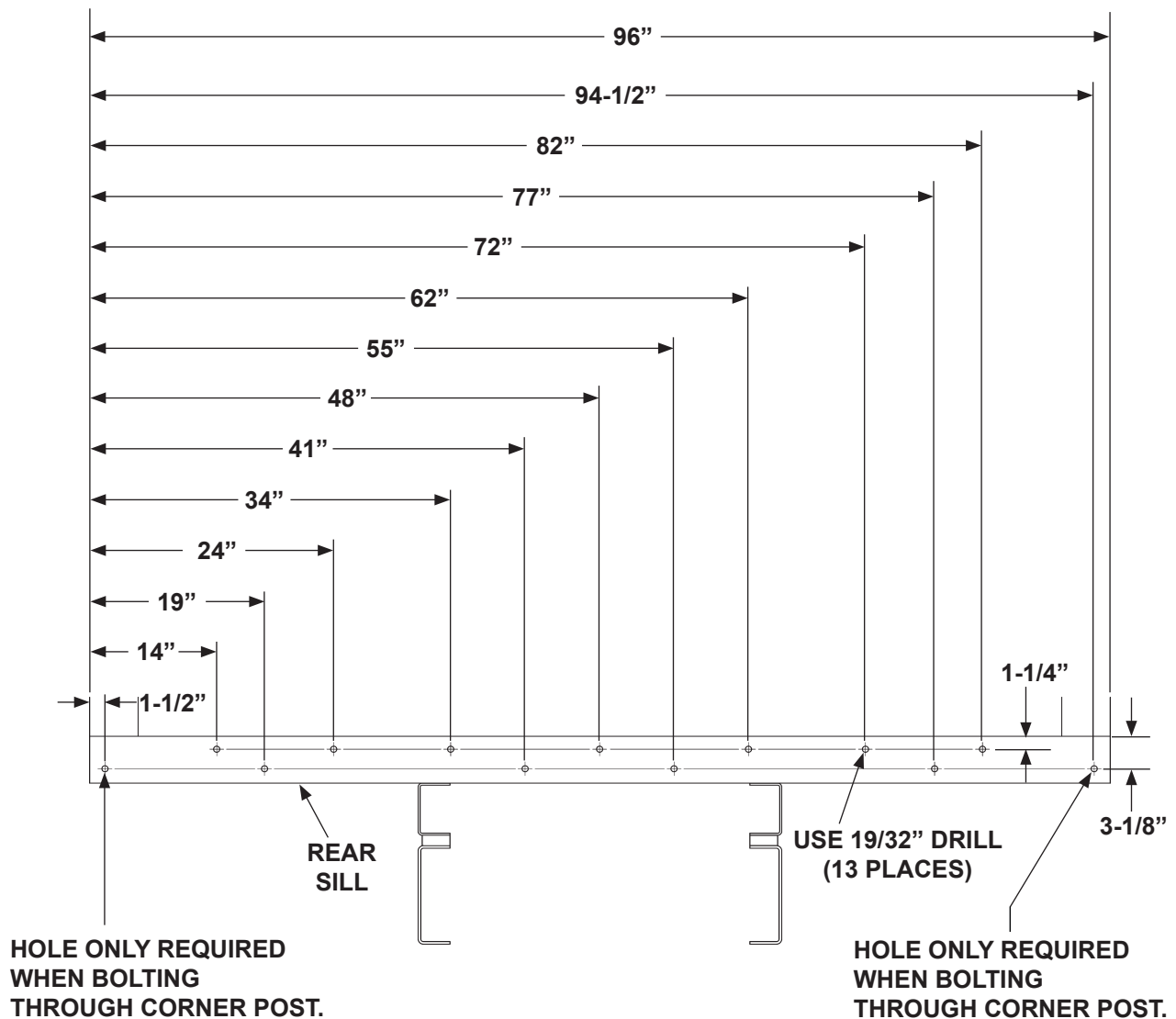
TE-33 CENTER OF MASS
(STOWED POSITION)
FIG. 18-1

STEP 1 - ATTACH EXTENSION PLATE TO VEHICLE

NOTE: The extension plate has bolt holes so it can be bolted to vehicle body. **Grade 8** bolts are required. **MAXON** recommends getting the optional extension plate hardware kit listed in **OPTIONS** section. Vehicle body must be drilled according to instructions. If necessary, extension plate may also be welded to vehicle body. Do the following bolting or welding instructions.

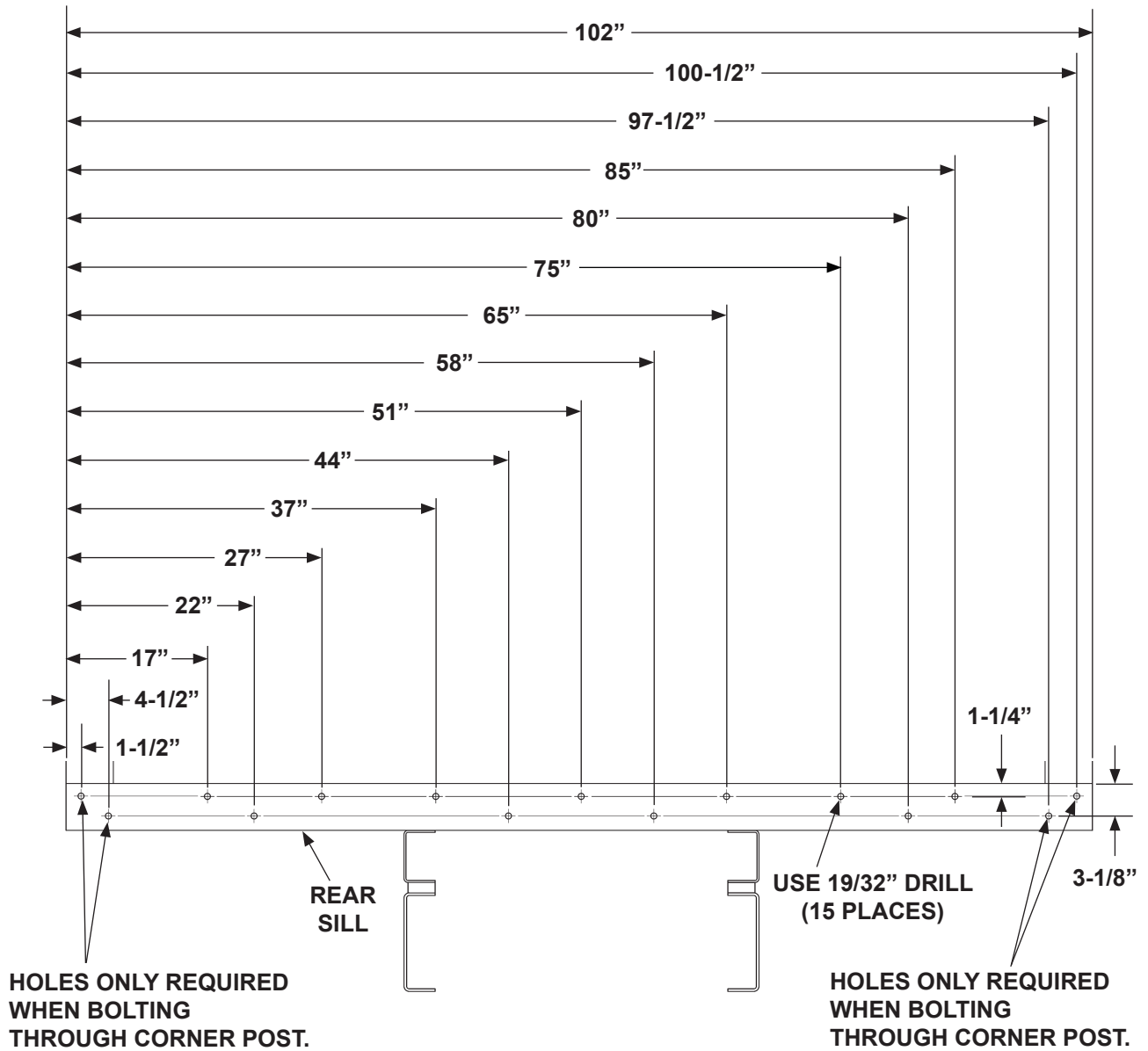
BOLT EXTENSION PLATE

1. Mark and drill holes into rear sill as shown in **FIGS. 19-1 and 20-1**.



**REAR SILL - HOLE LOCATIONS FOR 96" WIDE VEHICLE
FIG. 19-1**

STEP 1 - ATTACH EXTENSION PLATE TO VEHICLE - Continued



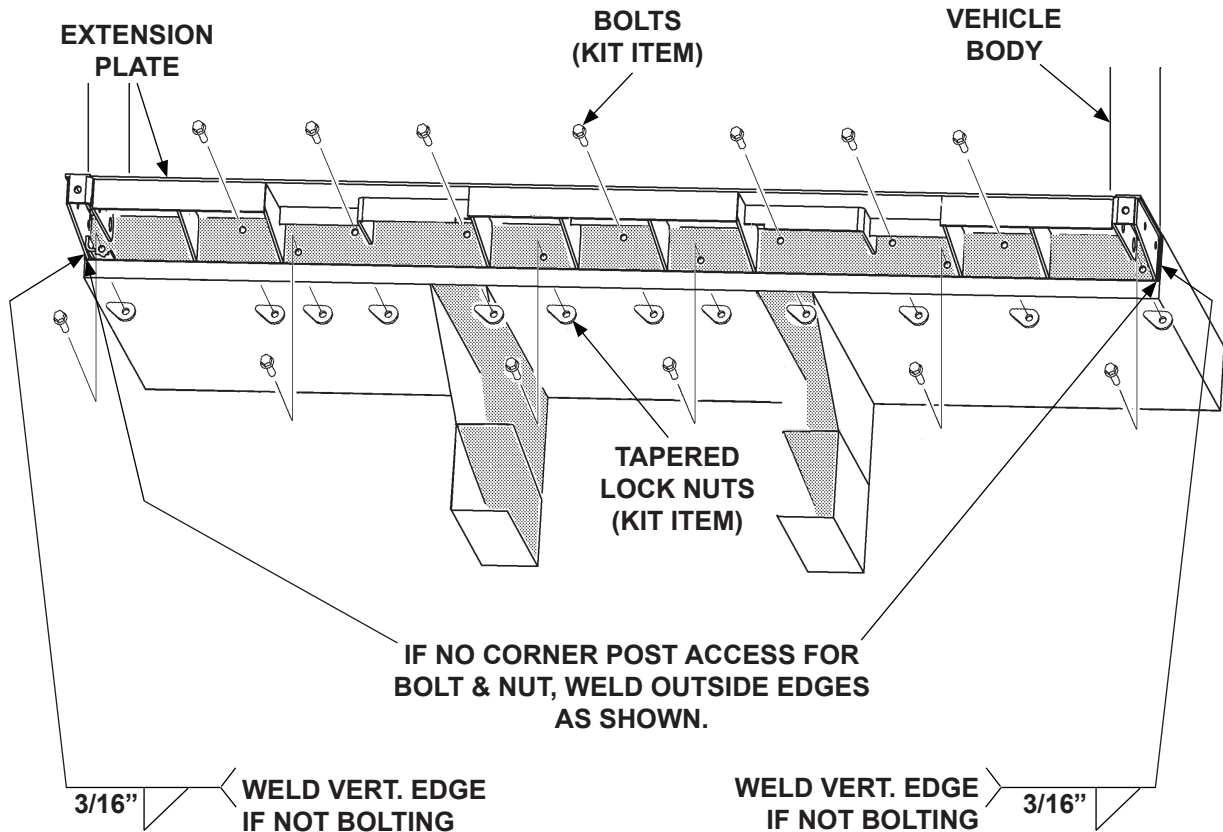
REAR SILL - HOLE LOCATIONS FOR 102" WIDE VEHICLE
FIG. 20-1

STEP 1 - ATTACH EXTENSION PLATE TO VEHICLE - Continued

NOTE: Do not tighten extension plate bolts and lock nuts until:

- All the bolts and lock nuts are in place.
- Top of extension plate is flush with top of rear sill.

2. Bolt extension plate to vehicle as shown in **FIG. 21-1**. If necessary, reposition extension plate so top surface is flush with top surface of sill. Then, torque bolts and lock nuts to **105 lb.-ft.**



**BOLTING EXTENSION PLATE (96" WIDE EXTENSION PLATE SHOWN)
FIG. 21-1**

NOTE: An optional 102" wide extension kit is available for 102" wide vehicles. Refer to Instruction Sheet M-09-06 supplied with kit.

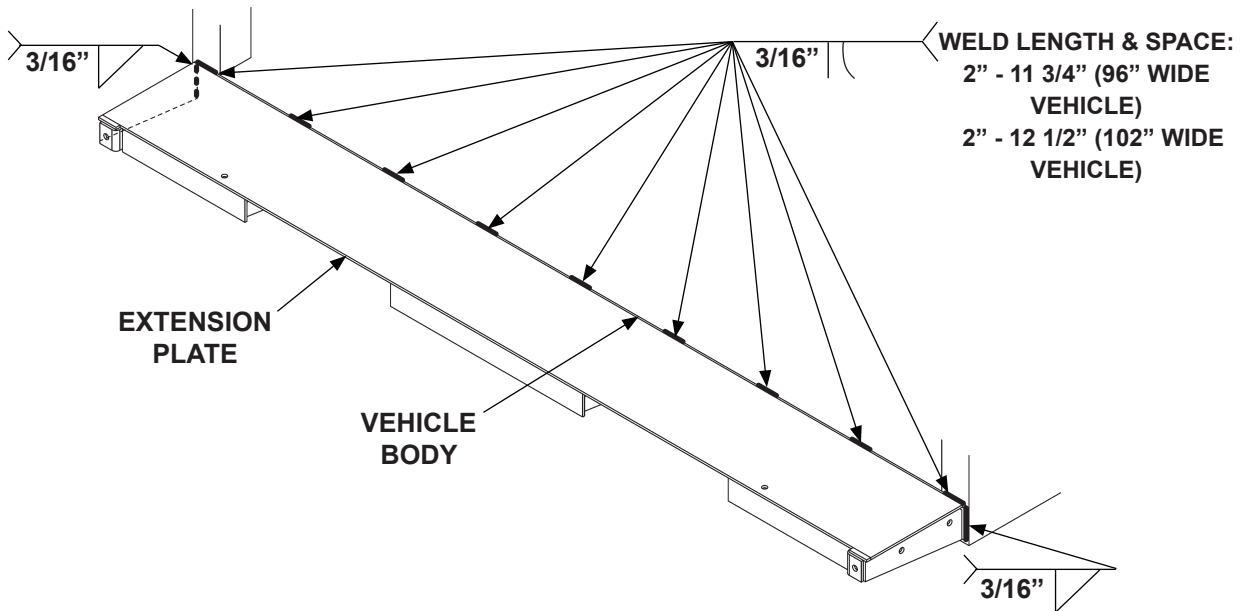
STEP 1 - ATTACH EXTENSION PLATE TO VEHICLE - Continued

WELD EXTENSION PLATE (ALTERNATE METHOD)

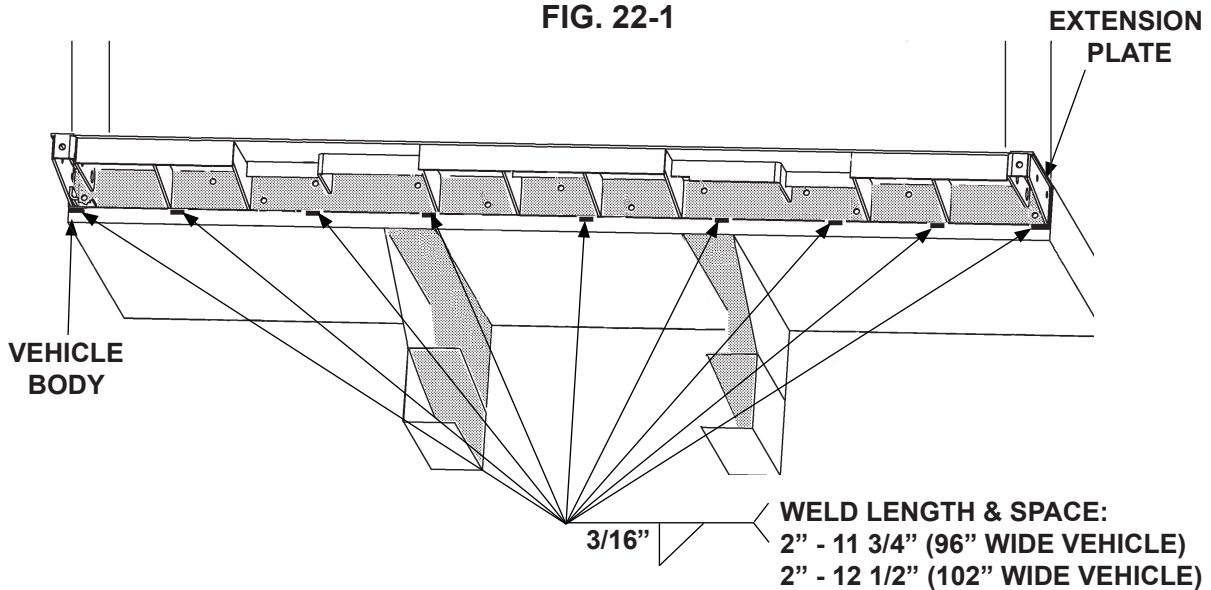
CAUTION

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

1. Center the extension plate on vehicle body. Before welding extension plate to vehicle body, make sure top surface of extension plate is flush with floor of vehicle body. Weld the extension plate to vehicle body sill as shown in **FIGS. 22-1 and 22-2**.



EXTENSION PLATE WELDS - VIEWED FROM ABOVE
FIG. 22-1

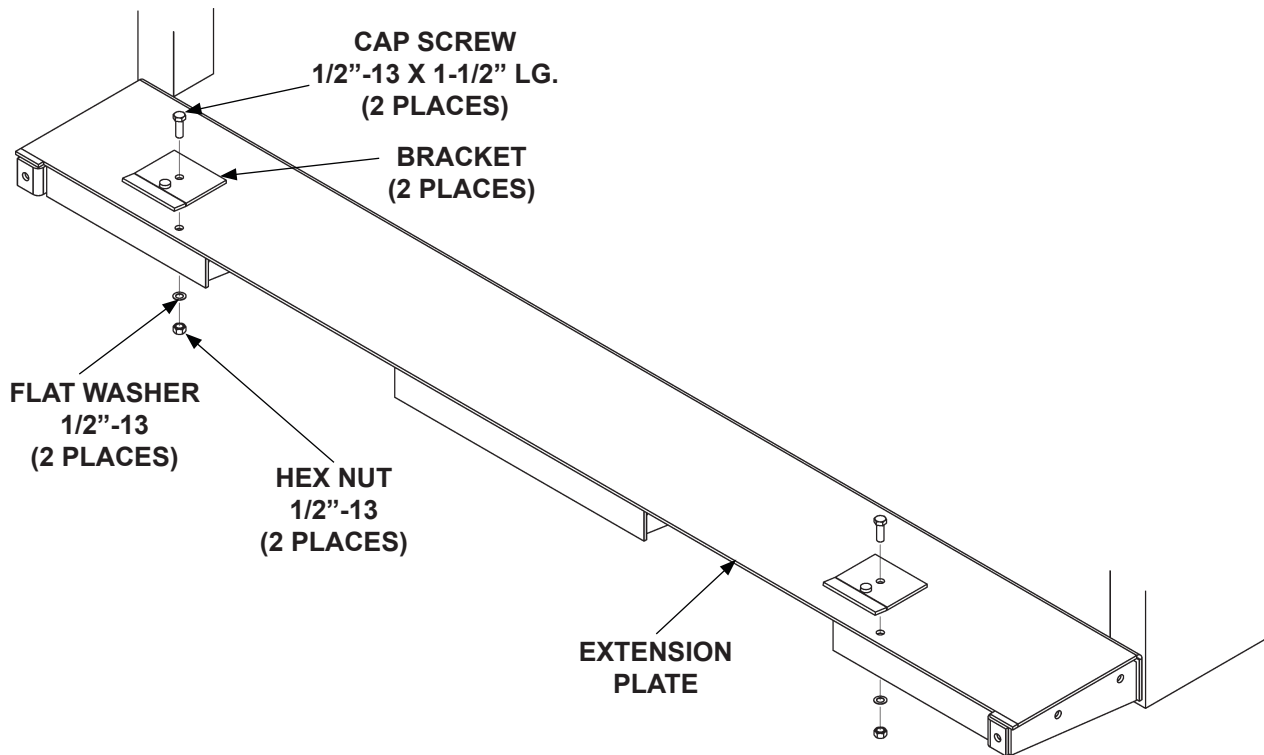


EXTENSION PLATE WELDS - VIEWED FROM UNDERNEATH
FIG. 22-2

STEP 1 - ATTACH EXTENSION PLATE TO VEHICLE - Continued

NOTE: During installation of liftgate, installation brackets keep the heel of the platform level with extension plate and maintain a $\frac{3}{4}$ " gap between extension plate and heel of platform. The extension plate has bolt holes for bolting on the installation brackets provided in parts box.

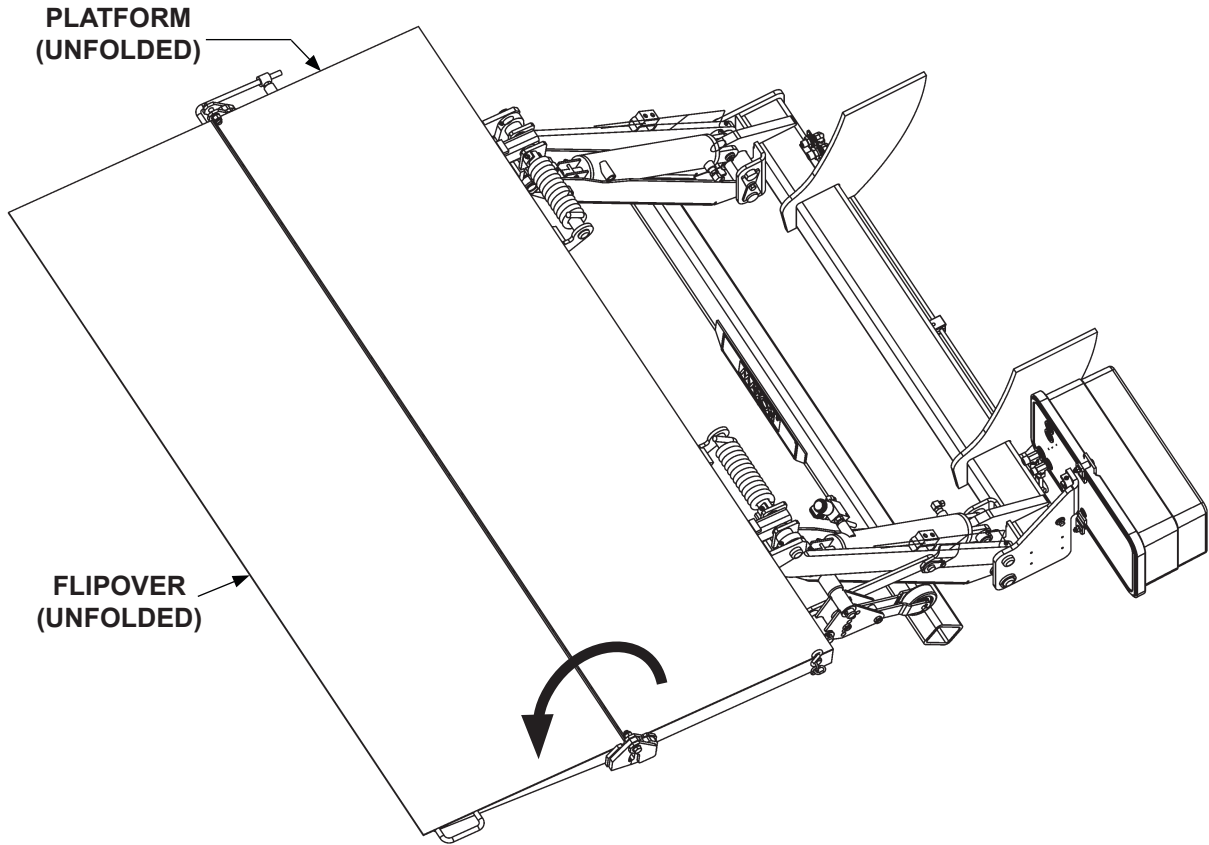
2. Bolt 2 installation brackets (parts box items) on the extension plate as shown in **FIG. 23-1**. Tighten hex nuts securely.



**BOLTING ON INSTALLATION BRACKETS
FIG. 23-1**

STEP 2 - WELD LIFTGATE TO VEHICLE

1. Unfold the platform and flipover (FIG. 24-1).



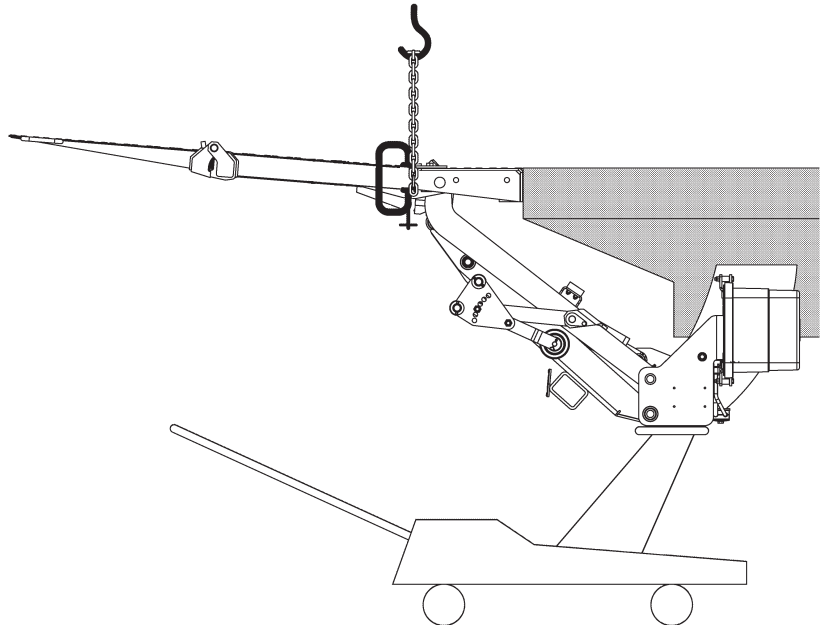
PLATFORM & FLIPOVER UNFOLDED
FIG. 24-1

STEP 2 - WELD LIFTGATE TO VEHICLE - Continued

⚠ CAUTION

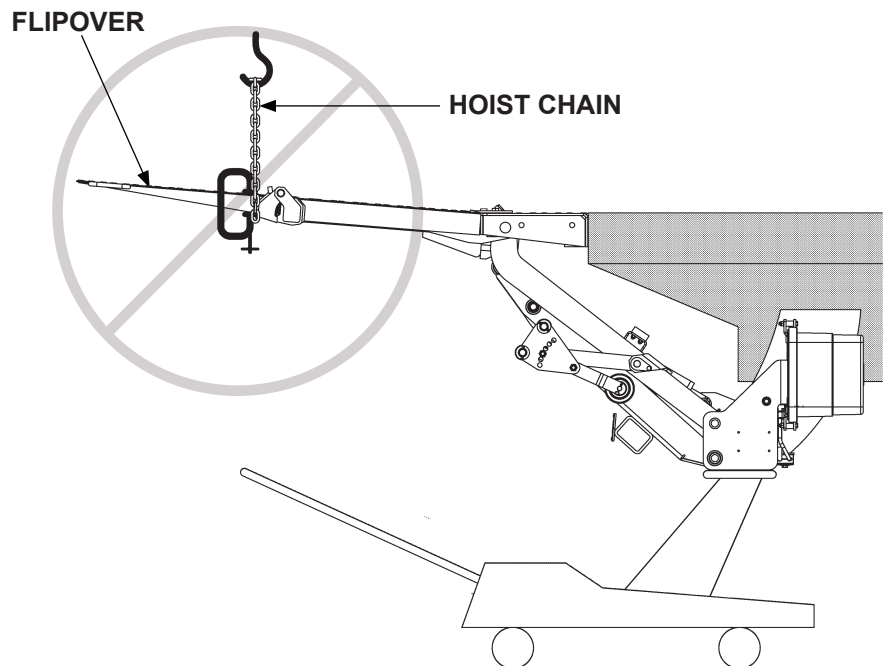
To prevent damage to the flipover, NEVER hoist the Liftgate by the flipover as shown in the NO illustration. Hoist the Liftgate by the platform only as shown in the YES illustration.

2. Make sure hoist is not being set up the incorrect way (FIG. 25-2). Place a "C"-clamp on each side of platform as shown in FIG. 25-1. (Clamps prevent hoist chain from slipping off platform.) Place chain all around platform (FIG. 25-1).



CORRECT WAY TO HOIST LIFTGATE
FIG. 25-1

3. Hoist the Liftgate. Then, place floor jack under main frame (FIG. 25-1). Jack the Liftgate into position. Make sure vehicle floor is horizontal and pins are lined up (FIG. 25-1).



INCORRECT WAY TO HOIST LIFTGATE
FIG. 25-2

STEP 2 - WELD LIFTGATE TO VEHICLE - Continued

⚠ WARNING

Painted Liftgates are shipped from factory with mounting plates that are only tack welded to main frame. Weld painted mounting plates as shown in illustration before operating Liftgate.

CAUTION

Prevent damage to hydraulic hoses. If welding next to hydraulic hoses, use a protective cover such as a welding blanket to cover the hoses.

CAUTION

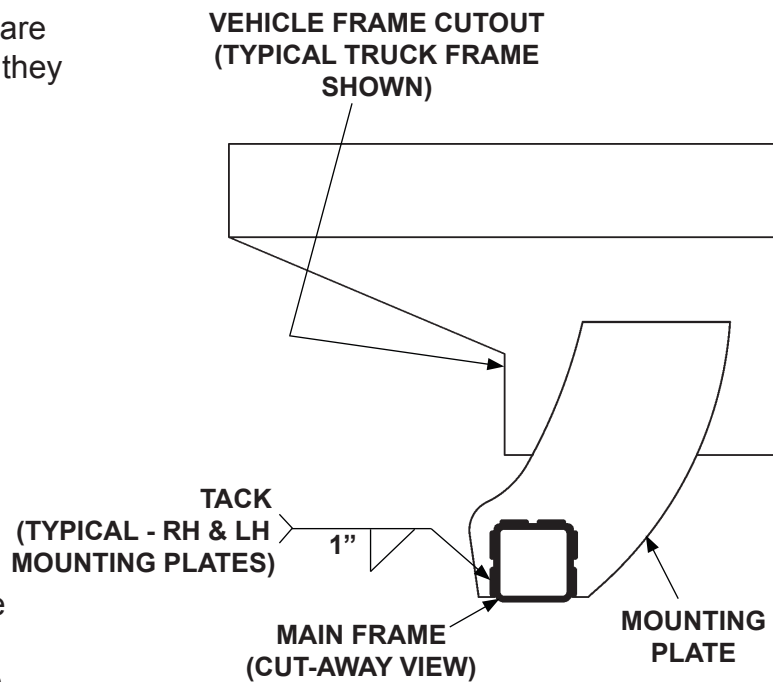
To protect the original paint system if equipped, a 3" wide area of paint must be removed from all sides of the weld area before welding.

NOTE: Mounting plates on galvanized Liftgates are fully welded to main frame at the factory. Galvanized mounting plates are suitable for 34-1/4" vehicle frame width, and should not be removed and repositioned. Painted mounting plates are tack welded and can be repositioned.

4. Check if both mounting plates are **painted or galvanized**, and if they line up with the vehicle frame.

- **Painted mounting plates** are tack-welded and can be repositioned. Do step 4 if painted.
- **Galvanized mounting plates** are fully welded and cannot be repositioned. Skip step 4 if galvanized.

If painted mounting plates do not line up, remove the tack welds from one mounting plate (**FIG. 26-1**). Make sure Liftgate stays centered on vehicle. Reposition the mounting plate against vehicle frame. Tack weld as shown in **FIG. 26-1**. Repeat for second mounting plate (reposition and tack weld).



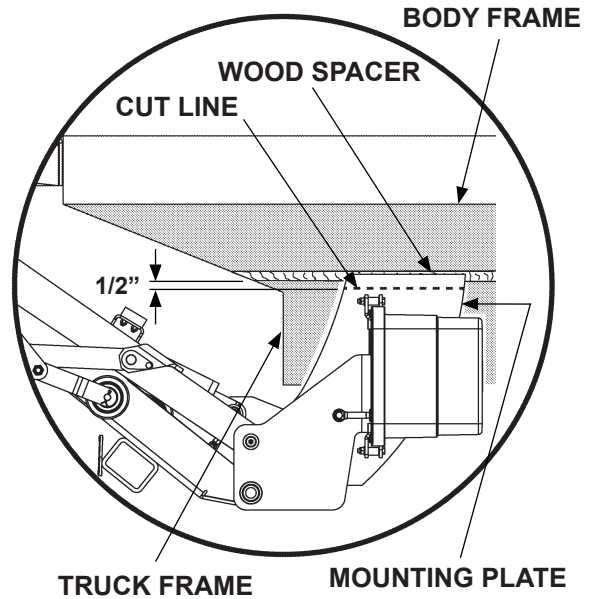
**REPOSITIONING MOUNTING PLATE
(PAINTED PLATE ON RH SIDE SHOWN)**
FIG. 26-1

STEP 2 - WELD LIFTGATE TO VEHICLE - Continued

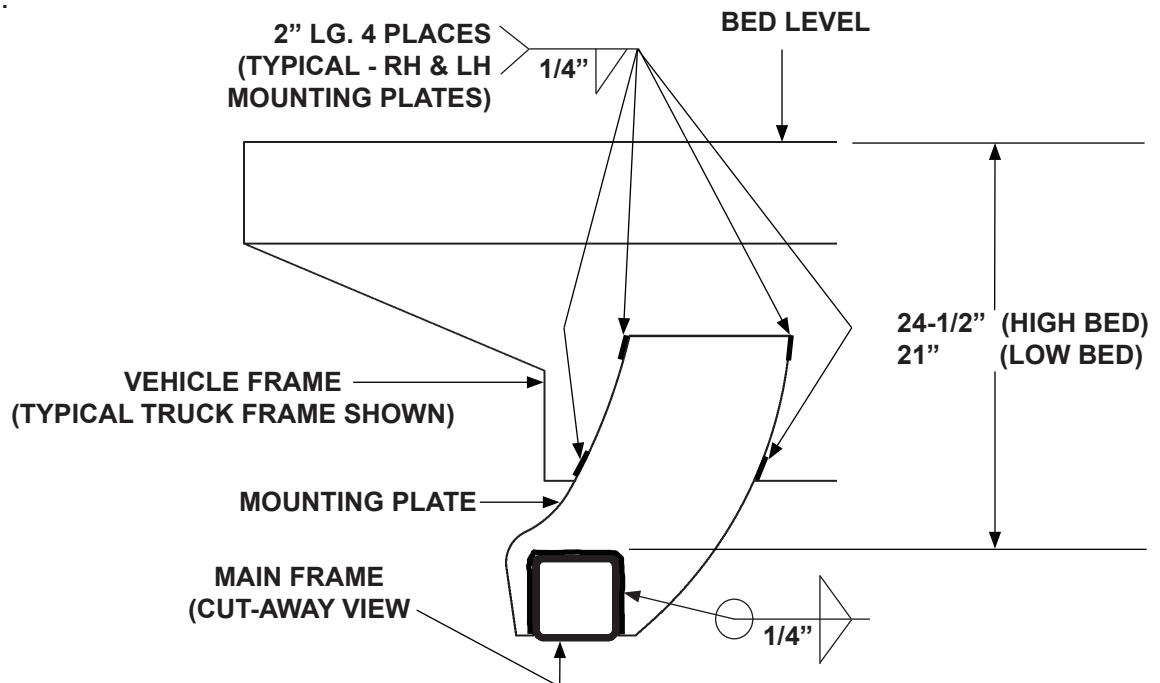
NOTE: If mounting plates cross over the wood spacer on the truck frame or if there is interference with bottom of body frame, mounting plates must be shortened to allow full final weld (**FIG. 27-1**). Maintain dimension, from bed level to top of main frame, shown in **FIG. 27-2**.

NOTE: Weld both mounting plates to vehicle frame before fully welding mounting plates to main frame.

- Clamp both mounting plates to vehicle frame. Check the distance between bed level and top of main frame (**FIG. 27-2**). Maintain the 21" (low bed height) or 24-1/2" (high bed height) distance shown in **FIG. 27-2**. Then, check mounting plates for correct position on truck frame (**FIG. 27-1**).
- Weld the mounting plates to vehicle frame as shown in **FIG. 27-2**. Next, weld both mounting plates to main frame (**FIG. 27-2**). Remove clamps.



**CHECKING MOUNTING PLATES
FOR CORRECT POSITION
ON TRUCK FRAME
FIG. 27-1**



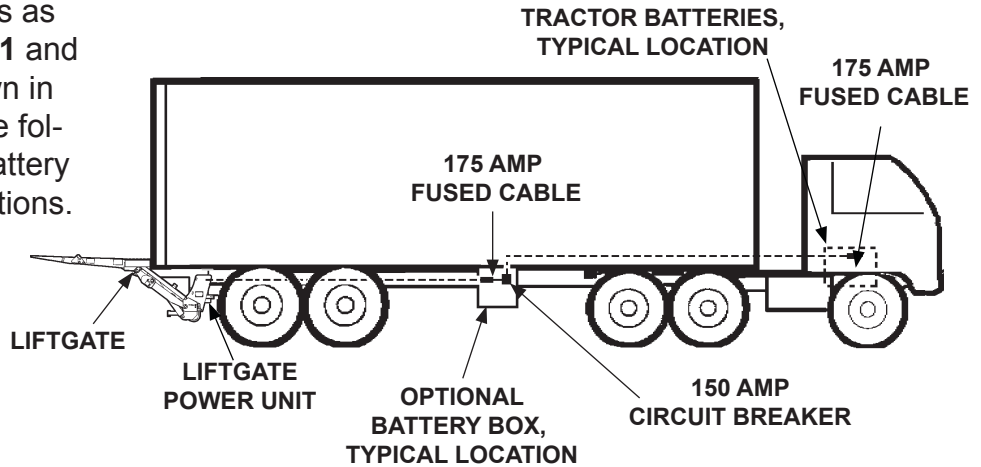
**WELD TO VEHICLE FRAME AND MAIN FRAME
(RH SIDE SHOWN)
FIG. 27-2**

STEP 3 - ATTACH OPTIONAL BATTERY BOX & FRAME TO VEHICLE (IF EQUIPPED)

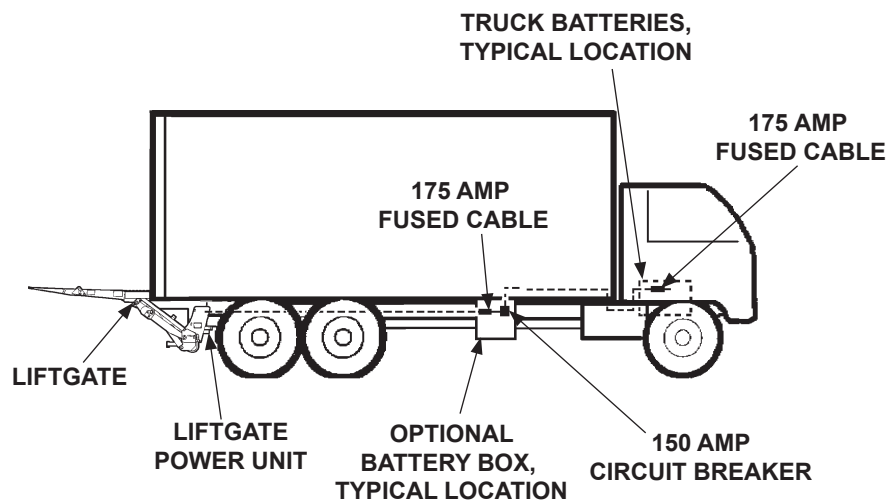
RECOMMENDED CONFIGURATION

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

1. Liftgate and optional battery box are typically installed on trailers as shown in **FIG. 28-1** and on trucks as shown in **FIG. 28-2**. See the following page for battery and cable connections.



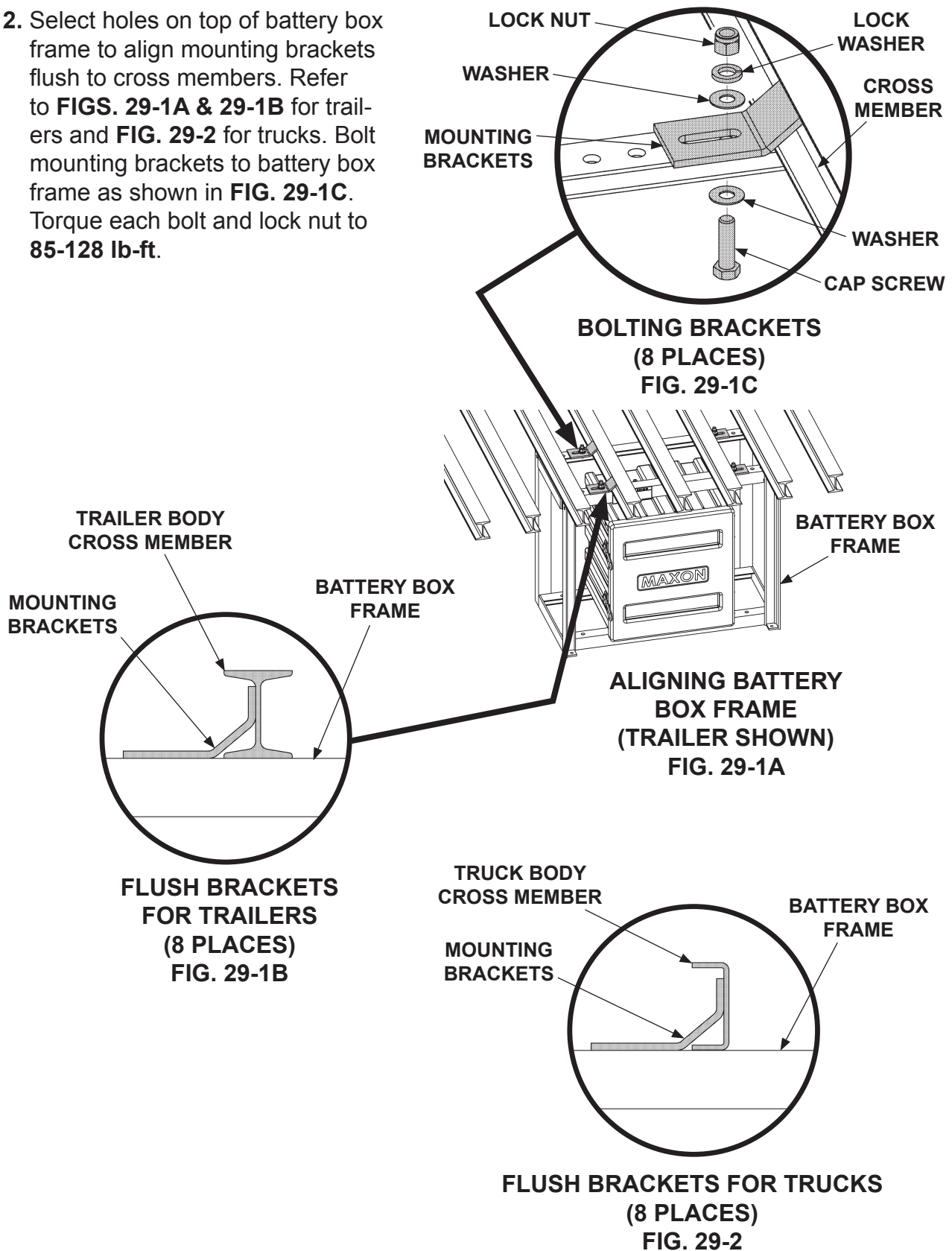
RECOMMENDED LIFTGATE & OPTIONAL BATTERY BOX INSTALLATION ON TRAILER
FIG. 28-1



RECOMMENDED LIFTGATE & BATTERY BOX INSTALLATION ON TRUCK
FIG. 28-2

STEP 3 - ATTACH OPTIONAL BATTERY BOX & FRAME TO VEHICLE (IF EQUIPPED) - Continued

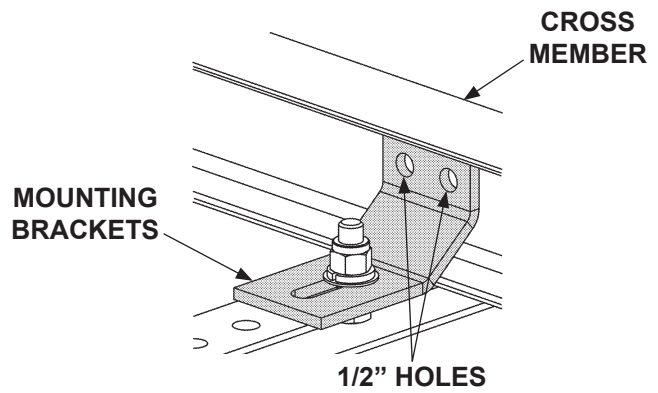
2. Select holes on top of battery box frame to align mounting brackets flush to cross members. Refer to **FIGS. 29-1A & 29-1B** for trailers and **FIG. 29-2** for trucks. Bolt mounting brackets to battery box frame as shown in **FIG. 29-1C**. Torque each bolt and lock nut to **85-128 lb-ft.**



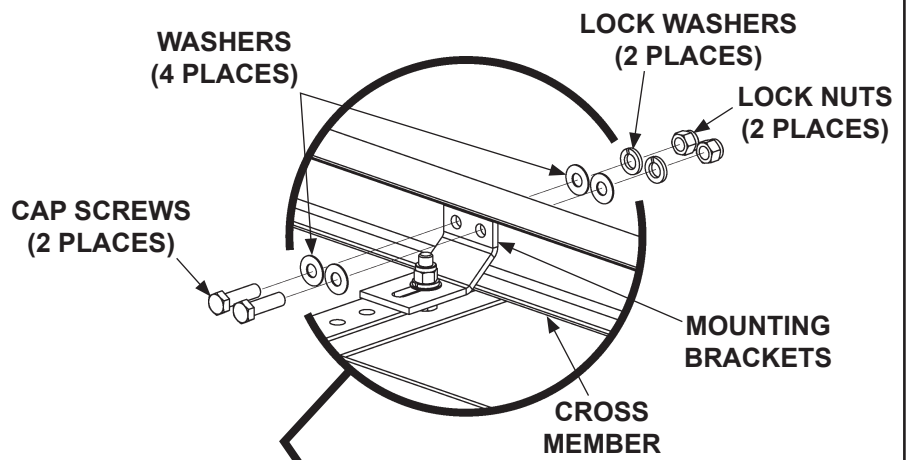
STEP 3 - ATTACH OPTIONAL BATTERY BOX & FRAME TO VEHICLE (IF EQUIPPED) - Continued

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

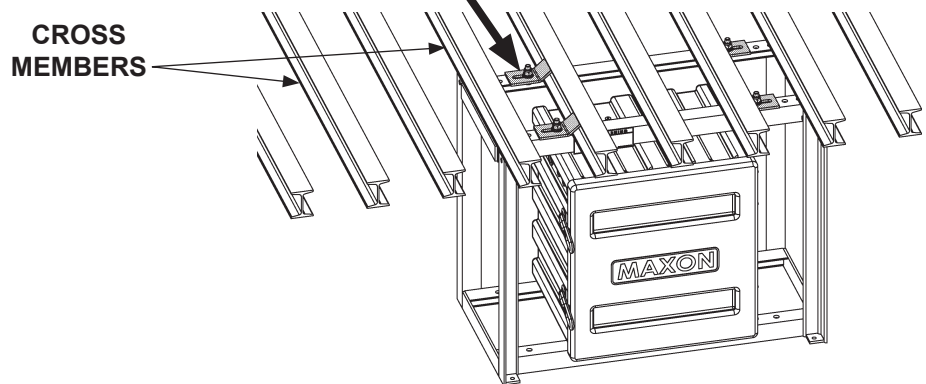
- Using mounting brackets as a template mark and drill holes through cross members (**FIG. 30-1**). Bolt mounting brackets to cross members as shown in **FIGS. 30-2A** and **30-2B**. Torque bolts and lock nuts to 85-128 lb-ft.



**MARK AND DRILL
FIG. 30-1**



**BOLTING BRACKETS
(8 PLACES)
FIG. 30-2B**



**BOLTING BATTERY BOX FRAME
FIG. 30-2A**

STEP 3 - ATTACH OPTIONAL BATTERY BOX & FRAME TO VEHICLE (IF EQUIPPED) - Continued

⚠ WARNING

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

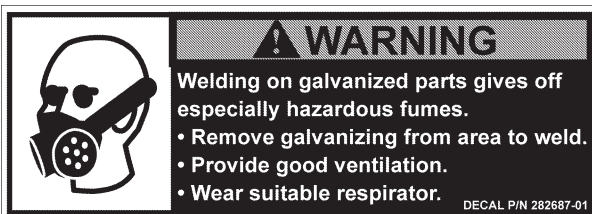
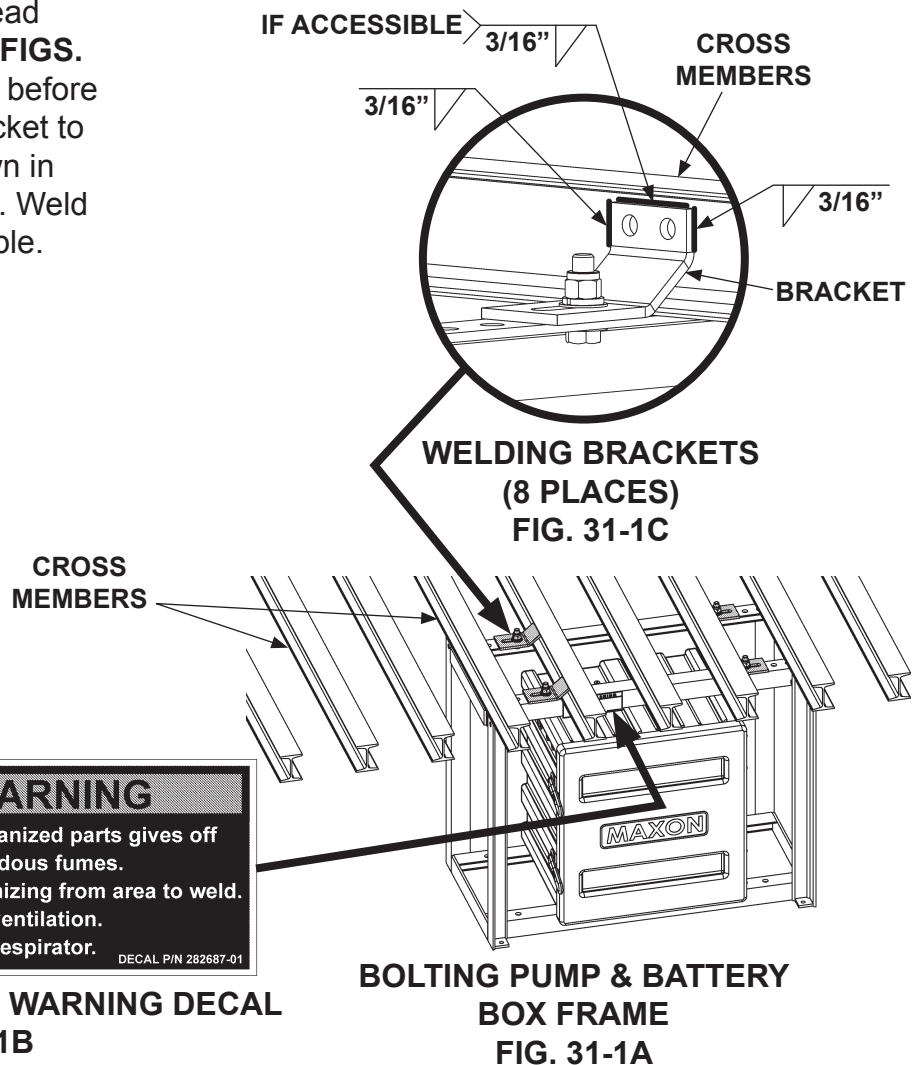
CAUTION

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

CAUTION

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

- For galvanized frame, read warning decal shown in FIGS. 31-1A and FIGS. 31-1B before welding. Weld each bracket to cross members as shown in FIGS. 31-1A and 31-1C. Weld top of bracket if accessible.



WELDING GALVANIZED, WARNING DECAL FIG. 31-1B

STEP 3 - ATTACH OPTIONAL BATTERY BOX & FRAME TO VEHICLE (IF EQUIPPED) - Continued

⚠ WARNING

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

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

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

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

5. Connect battery cables, fused cables, and ground cables as shown in **FIG. 32-1**.

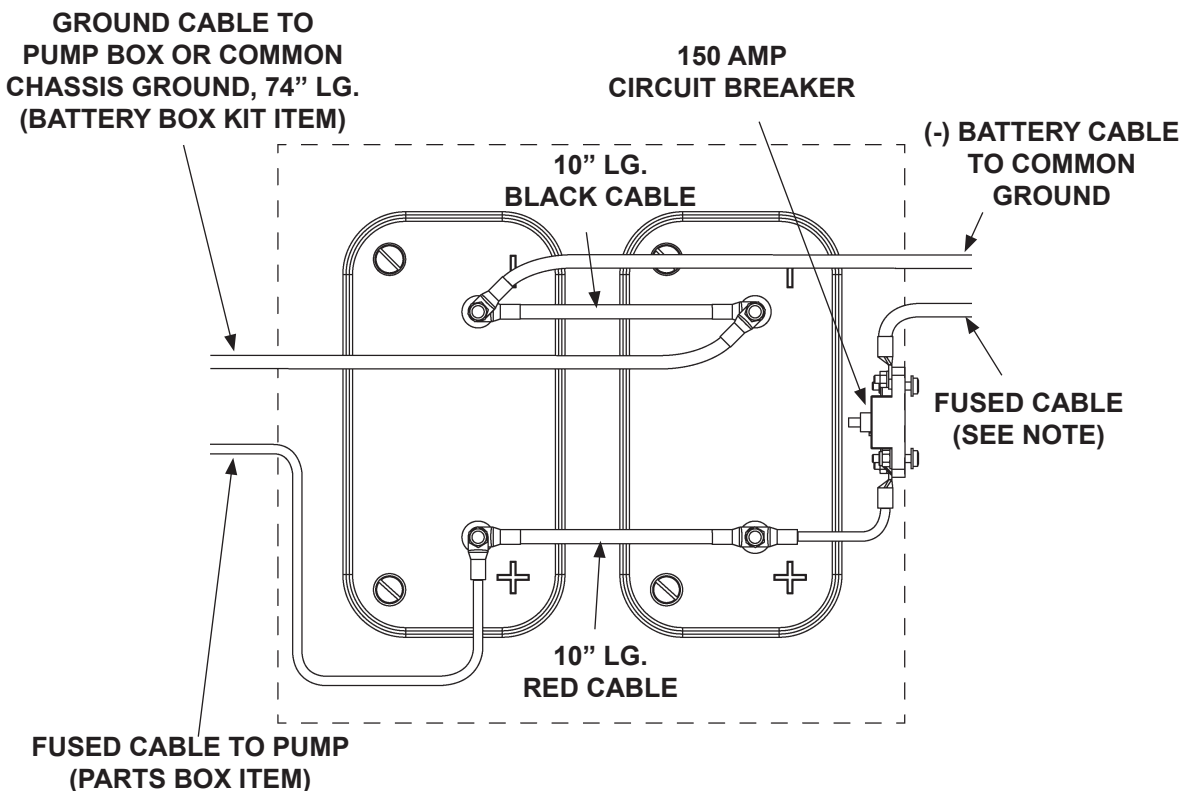
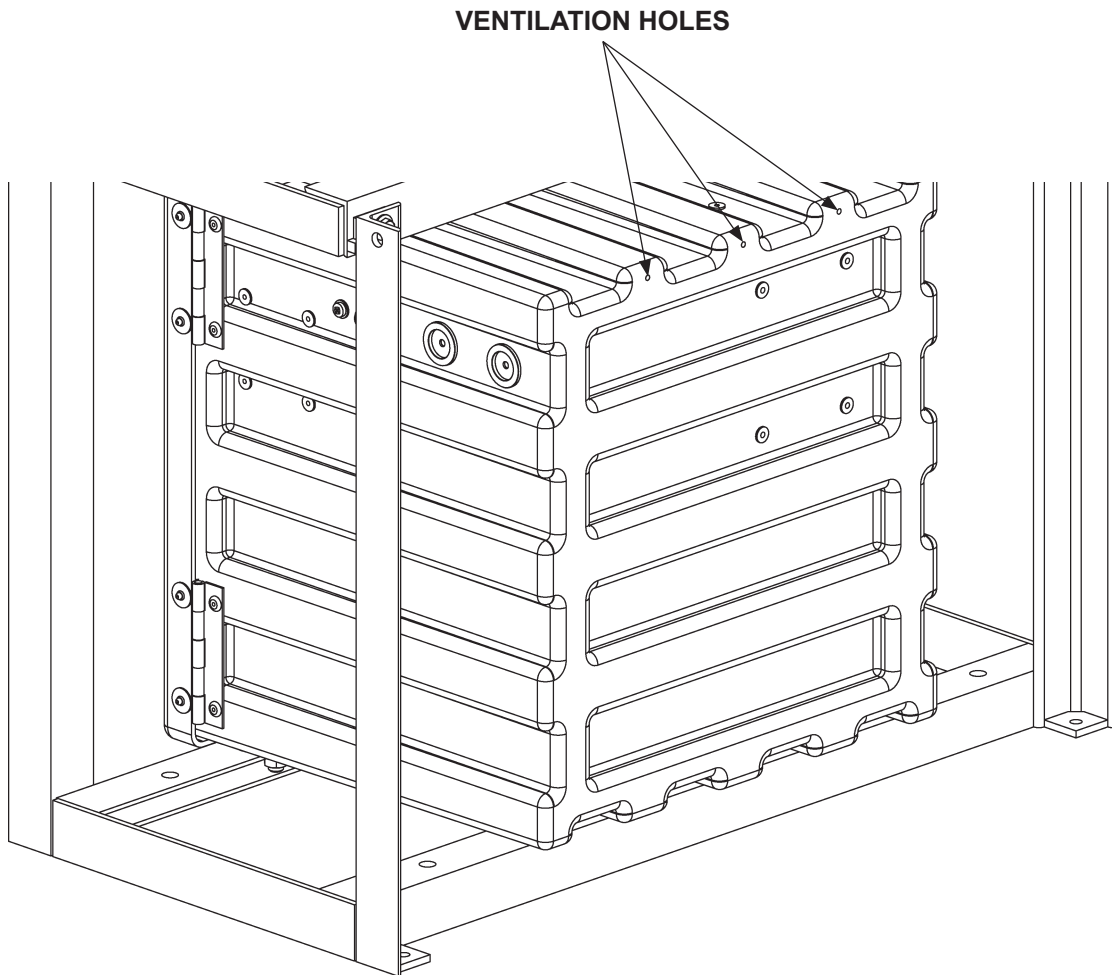


FIG. 32-1

STEP 3 - ATTACH OPTIONAL BATTERY BOX & FRAME TO VEHICLE (IF EQUIPPED) - Continued

⚠ WARNING

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



**BATTERY BOX ASSEMBLY (REAR VIEW SHOWN)
FIG. 33-1**

STEP 3 - ATTACH OPTIONAL BATTERY BOX & FRAME TO VEHICLE (IF EQUIPPED) - Continued

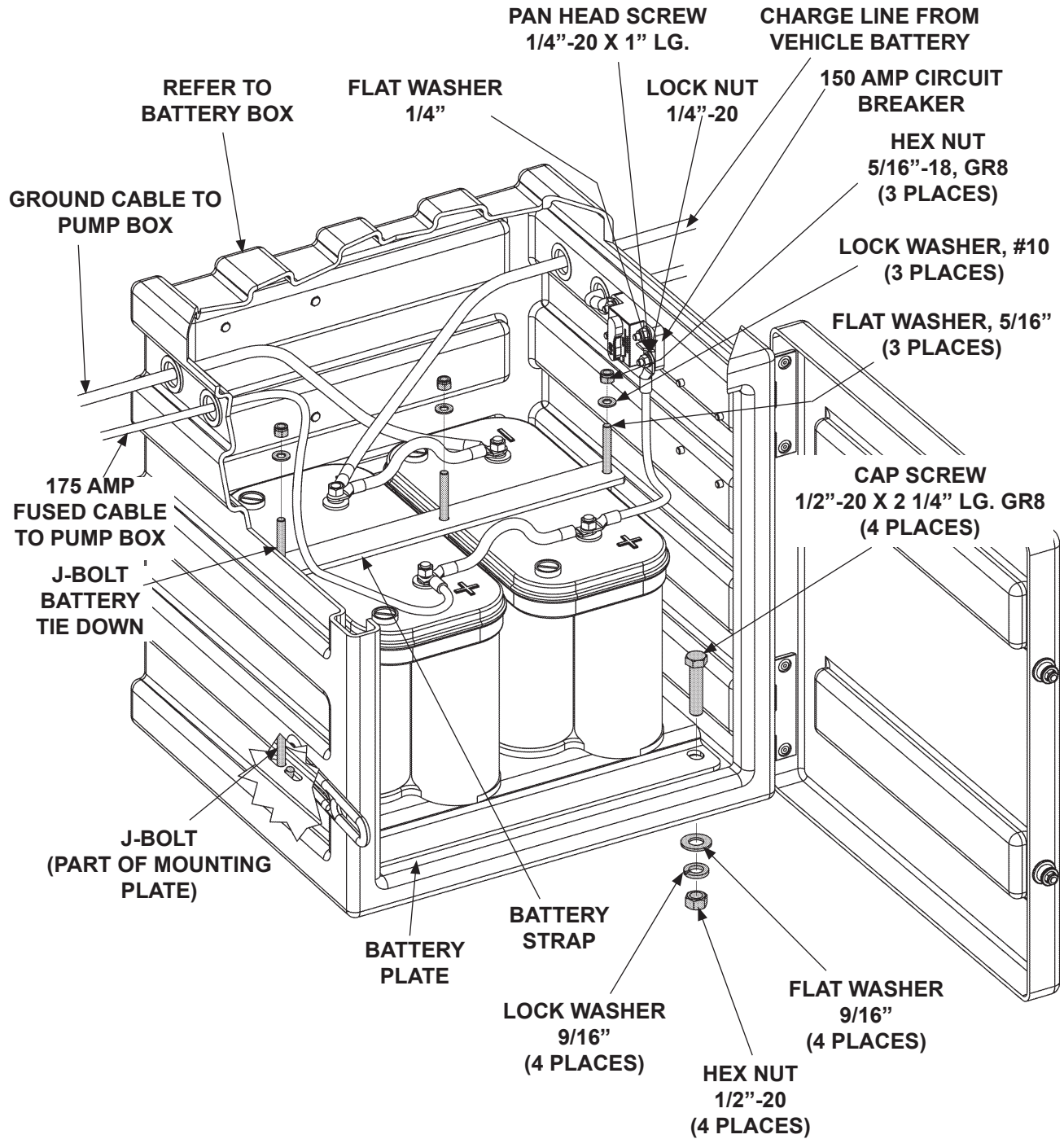


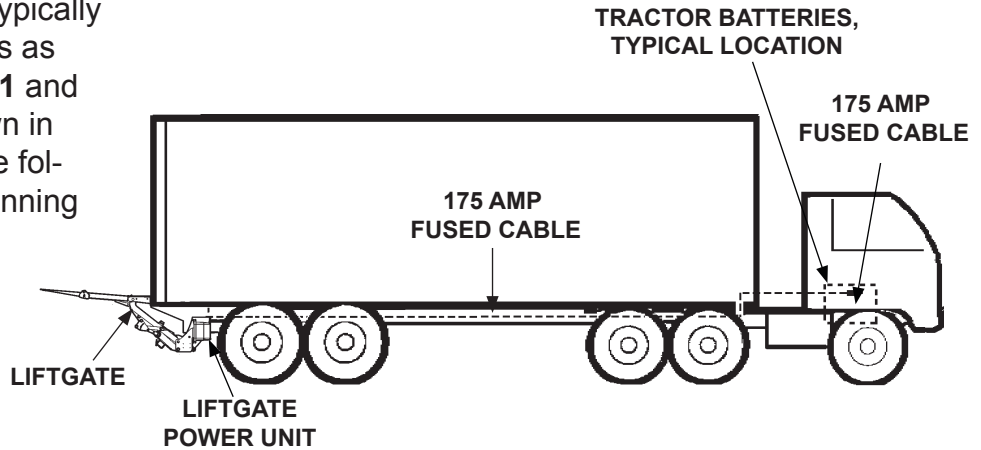
FIG. 34-1

STEP 4 - RUN POWER CABLE

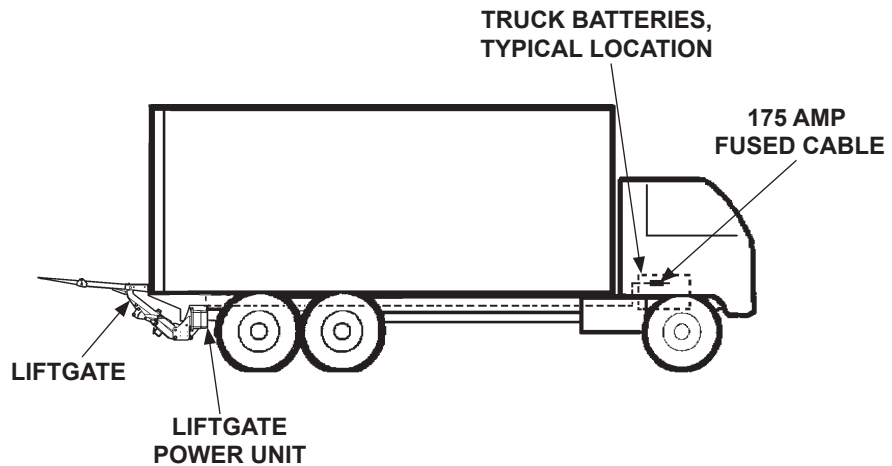
NOTE: Make sure the Liftgate power unit, and all batteries on the vehicle for the power unit, are connected correctly to a common chassis ground.

RECOMMENDED CONFIGURATION

1. Liftgate powered from truck batteries is typically installed on trailers as shown in **FIG. 35-1** and on trucks as shown in **FIG. 35-2**. See the following page for running the battery cable.



**RECOMMENDED LIFTGATE & OPTIONAL BATTERY BOX
INSTALLATION ON TRAILER
FIG. 35-1**



**RECOMMENDED LIFTGATE & BATTERY BOX
INSTALLATION ON TRUCK
FIG. 35-2**

STEP 4 - RUN POWER CABLE - Continued

⚠ 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.

NOTE: If optional battery box was installed in **STEP 3**, run fused cable from vehicle battery to optional battery box.

2. Install fused cable by running the cable along the inside of vehicle frame (**FIG. 36-1**). Make sure **175 amp fuse (FIG. 36-1)** end of cable is by the vehicle battery. Run the cable from vehicle battery to Liftgate pump box positive terminal. Use frame clips (parts box item) and plastic ties (as required) from charge line kit to secure cable.

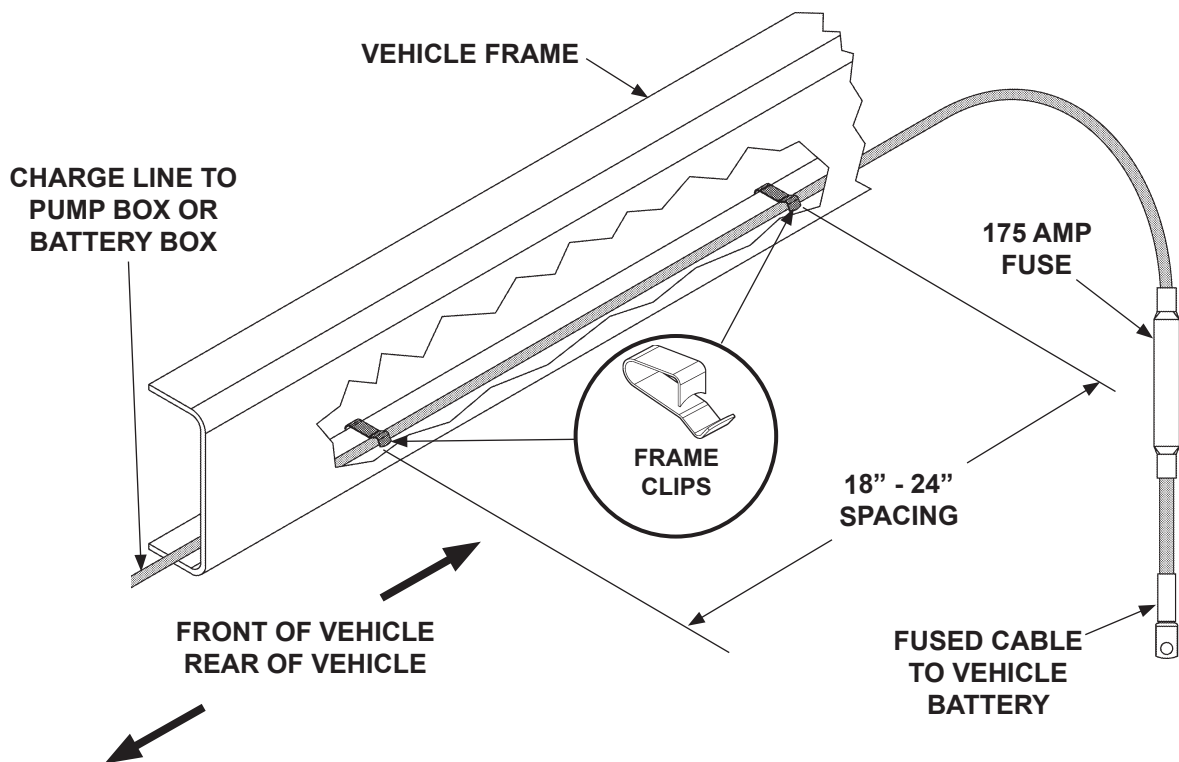
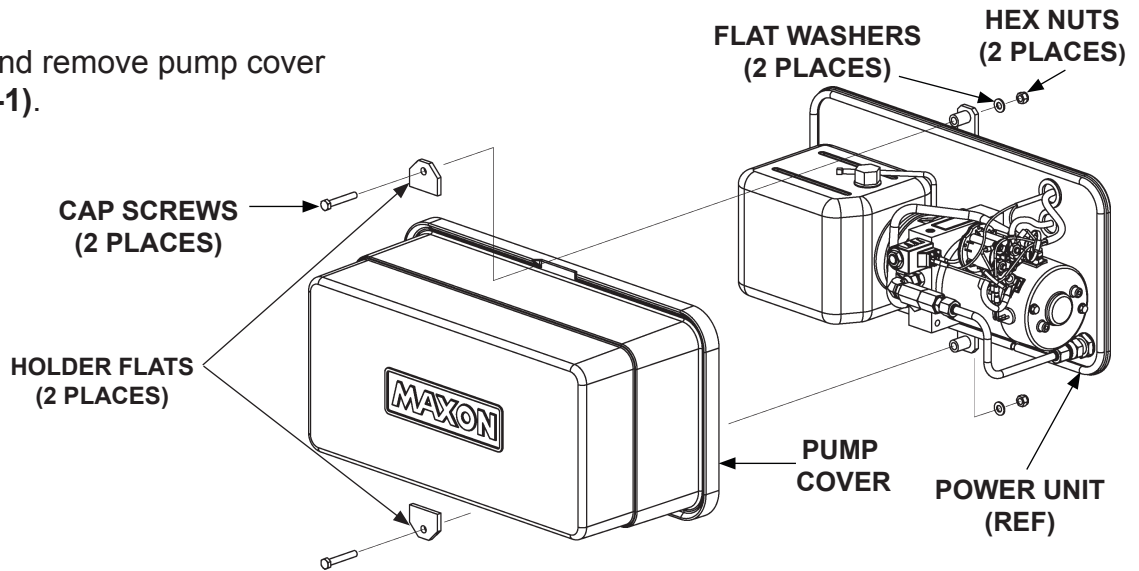


FIG. 36-1

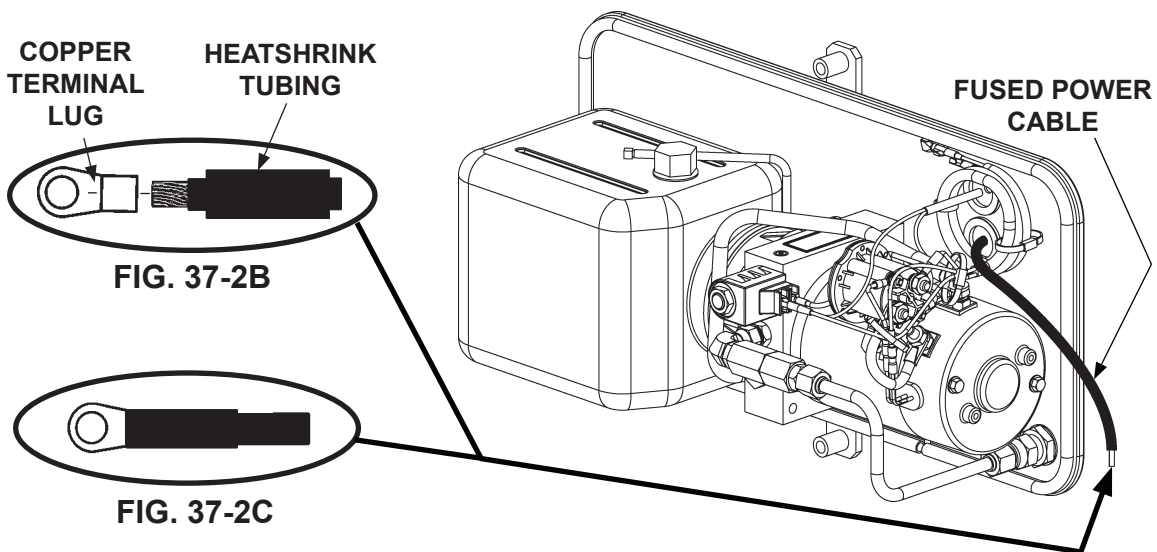
STEP 5 - CONNECT POWER CABLE

1. Unbolt and remove pump cover (FIG. 37-1).



UNBOLTING PUMP COVER
FIG. 37-1

2. On the bare wire end of fused power cable, keep enough length to attach copper terminal lug and reach motor solenoid without putting tension on cable (after connection) (FIG. 37-2A). Cut excess cable from bare wire end of cable. Put heatshrink tubing (parts bag item) (FIG. 37-2B) on the end of the cable and leave room for terminal lug. Crimp copper terminal lug (parts bag item) on the fused power cable and shrink the heatshrink tubing (FIG. 37-2C).



TYPICAL FUSED POWER CABLE ROUTING
FIG. 37-2A

STEP 5 - CONNECT POWER CABLE - Continued

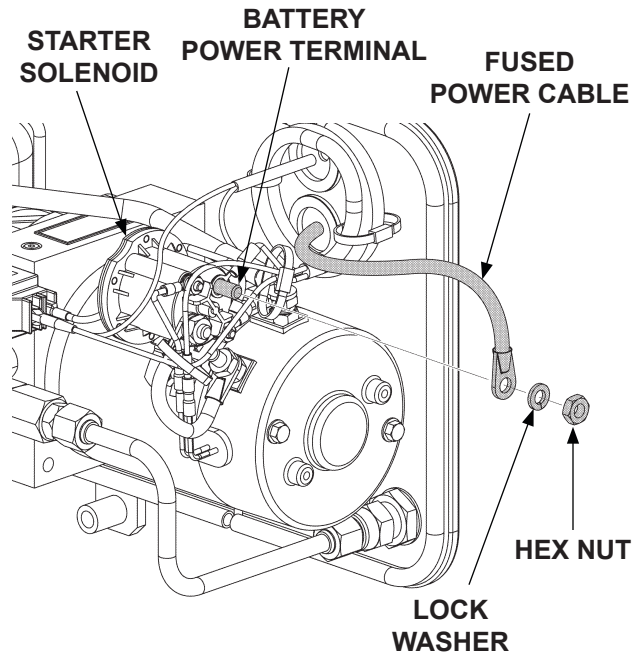
CAUTION

To prevent damage to metal case starter solenoid, hold bottom terminal nut securely with wrench when loosening and tightening top terminal nut. Do not over-tighten the terminal nuts. For the 5/16" load terminals, torque nuts to 35 lbs.-in. Torque the nuts on #10-32 control terminals to 15 lbs.-in.

NOTE: MAXON recommends using dielectric grease on all electrical connections. Do not apply dielectric grease until after connection is complete.

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

3. Remove hex nut and lock washer from battery power terminal on the starter solenoid. Connect the fused power cable to the battery power terminal as shown in **FIG. 38-1**. Reinstall and tighten lock washer and hex nut.



**TYPICAL FUSED POWER
CABLE ELECTRICAL CONNECTION
FIG. 38-1**

STEP 6 - INSTALL CONTROL SWITCH

1. Drill one 3/4" hole and two #21-size holes in the vertical post on curb side of vehicle body as shown in **FIG. 39-1A**. Use template shown in **FIG. 39-1B**.

VEHICLE BODY
VERTICAL POST
(CURB SIDE)

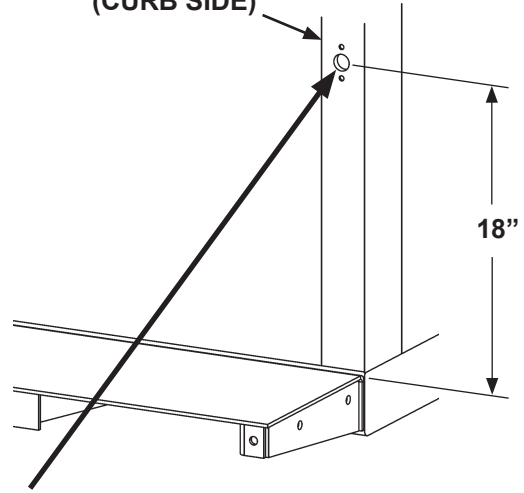
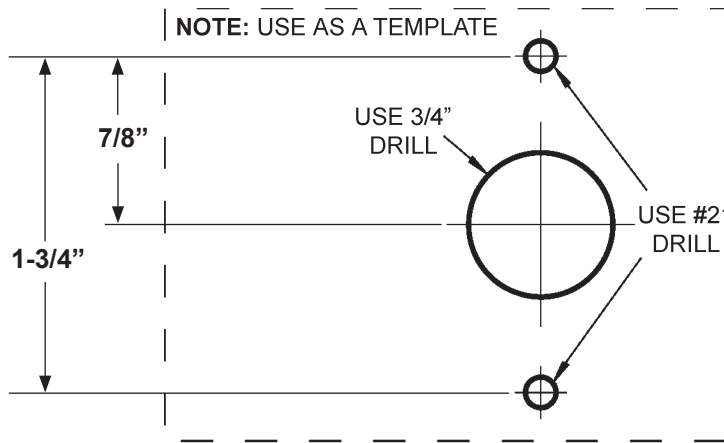


FIG. 39-1A



HOLE DRILLING TEMPLATE
FIG. 39-1B

NOTE: Hydraulic lines and electrical lines must run into pump box through sealing grommets (**FIG. 39-2**). To ensure a good seal on hydraulic & electrical lines, never cut the sealing grommets.

2. Cut tie strap on coiled wiring harness (**FIG. 39-2**). Pull the wiring harness through grommet on the pump mounting plate (**FIG. 39-2**).

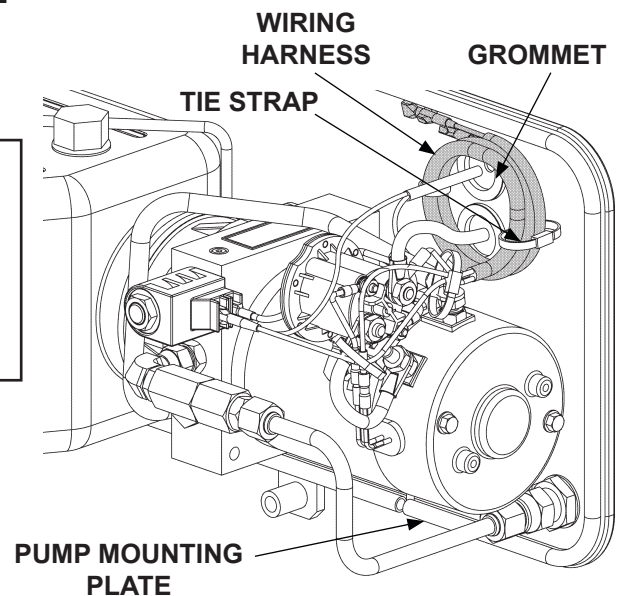
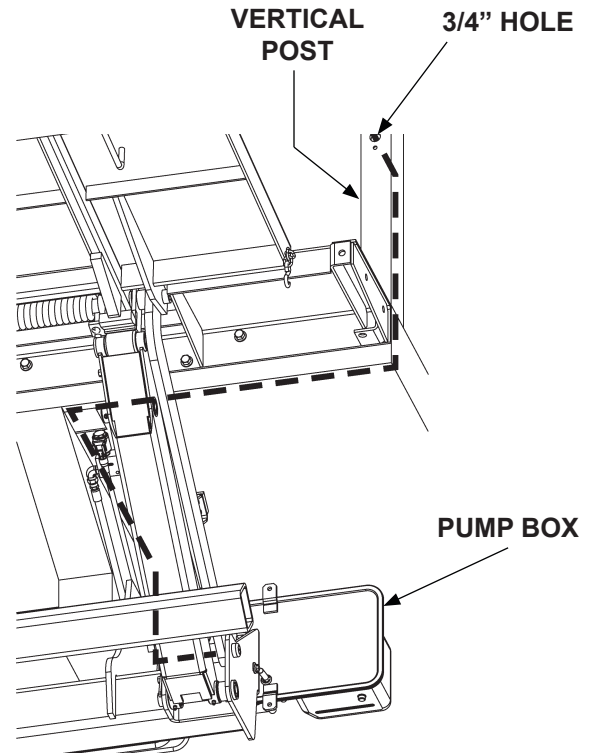


FIG. 39-2

STEP 6 - INSTALL CONTROL SWITCH - Continued

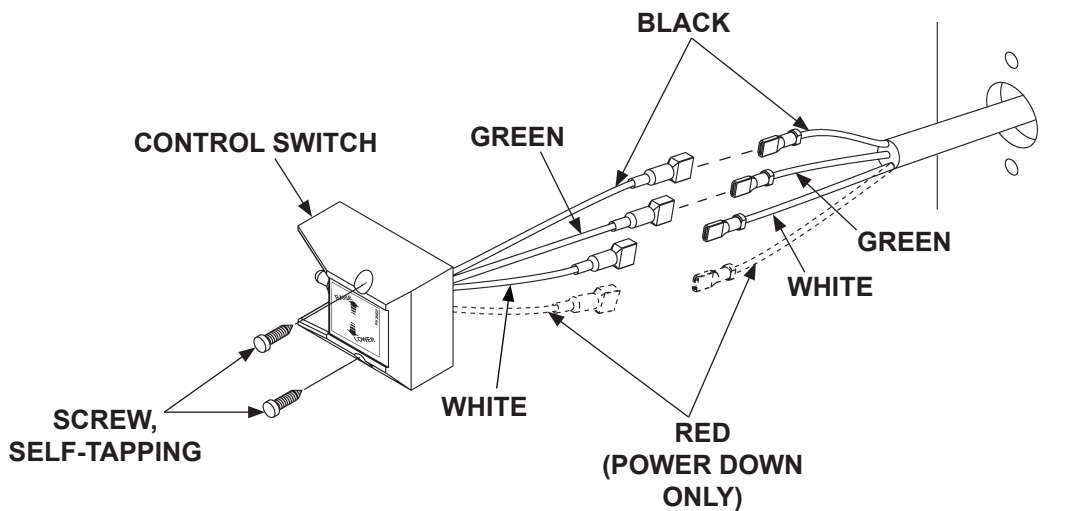
NOTE: MAXON recommends using dielectric grease on all electrical connections.

3. Run wiring harness under vehicle body (see dashed line - FIG. 40-1) and up through inside of vertical post. Pull control switch wiring harness out the 3/4" hole drilled in vertical post (FIG. 40-1). Connect the control switch wiring to the wiring harness as shown in FIG. 40-2. Push extended wiring back into the 3/4" hole in the vertical post until control switch touches the post. Attach control switch to vertical post with 2 self-tapping screws (FIG. 40-2).



ROUTING CONTROL SWITCH WIRING
FIG. 40-1

4. If necessary, use clamps and tapping screws, from installation parts bag, to secure switch wiring harness to vehicle (FIG. 40-1).



CONTROL SWITCH WIRING CONNECTIONS
FIG. 40-2

STEP 7 - ADDING 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.

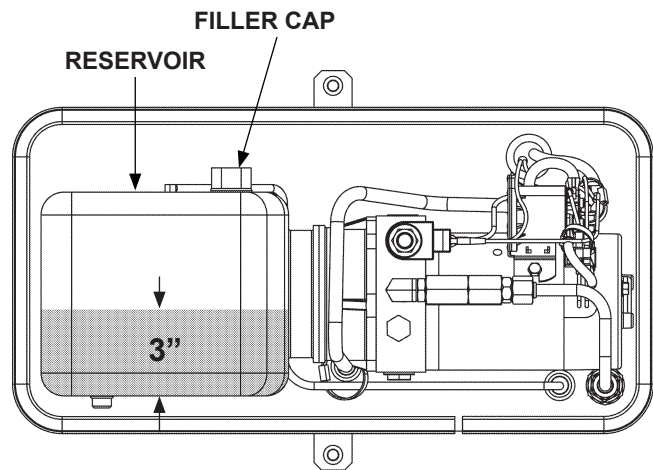
NOTE: Use correct grade of hydraulic fluid for your location.

+50 to +120 Degrees F - Grade ISO 32

Below + 70 Degrees F - Grade ISO 15 or MIL-H-5606

See **TABLES 42-1 & 42-2** for recommended brands.

1. Check the hydraulic fluid level in reservoir as follows. With Liftgate stowed, or platform at vehicle bed height, level should be as shown in **FIG. 41-1**.
2. Add fluid to the reservoir as follows. Pull out (no threads) filler cap (**FIG. 41-1**). Fill the reservoir with hydraulic fluid to 3" level (**FIG. 41-1**). Reinstall filler cap (**FIG. 41-1**).

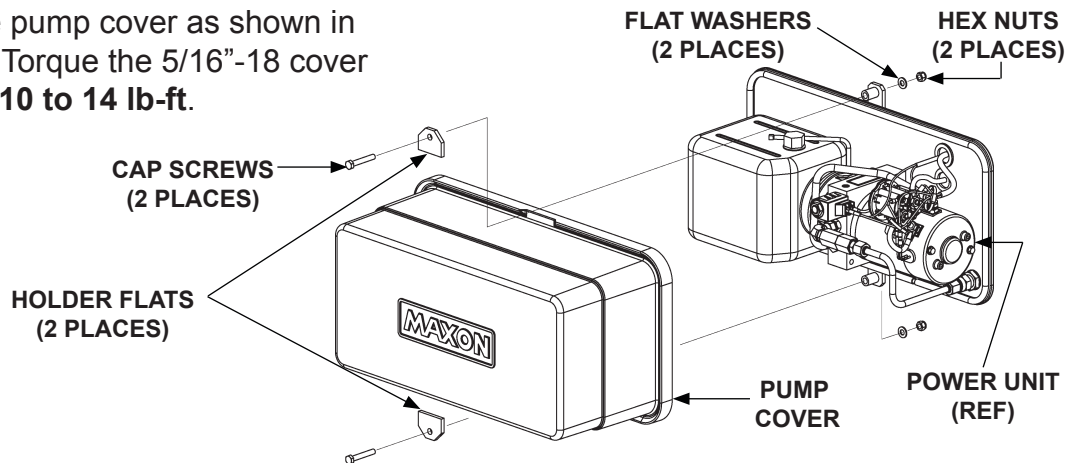


POWER UNIT FLUID LEVEL
FIG. 41-1

CAUTION

Pump cover must be correctly secured to prevent it from becoming a hazard. To secure pump cover, the long side of the holder flats must butt against pump cover as shown in the illustration.

3. Bolt on the pump cover as shown in **FIG. 41-2**. Torque the 5/16"-18 cover bolts from **10 to 14 lb-ft**.



BOLTING PUMP COVER
FIG. 41-2

STEP 7 - ADDING HYDRAULIC FLUID - Continued

ISO 32 HYDRAULIC OIL	
RECOMMENDED BRANDS	PART NUMBER
CHEVRON	HIPERSYN 32
KENDALL	GOLDEN MV
SHELL	TELLUS S2 V32
MOBIL	DTE-13M, DTE-24, HYDRAULIC OIL-13
EXXON	UNIVIS N-32

TABLE 42-1

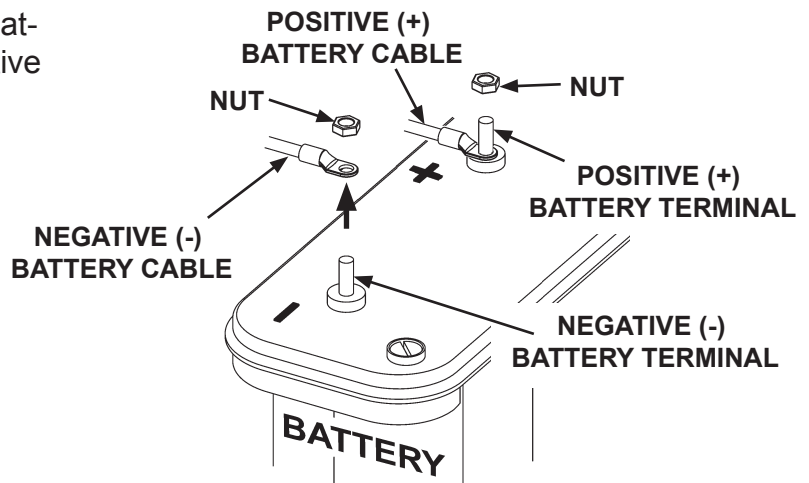
ISO 15 OR MIL-H-5606 HYDRAULIC OIL	
RECOMMENDED BRANDS	PART NUMBER
CHEVRON	FLUID A, AW-MV-15
KENDALL	GLACIAL BLU
SHELL	TELLUS S2 V15
EXXON	UNIVIS HVI-13
MOBIL	DTE-11M
MOBIL (MIL-H-5606)	AERO HFA
ROSEMEAD	THS FLUID 17111

TABLE 42-2

STEP 8 - CONNECT POWER CABLE TO BATTERY

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

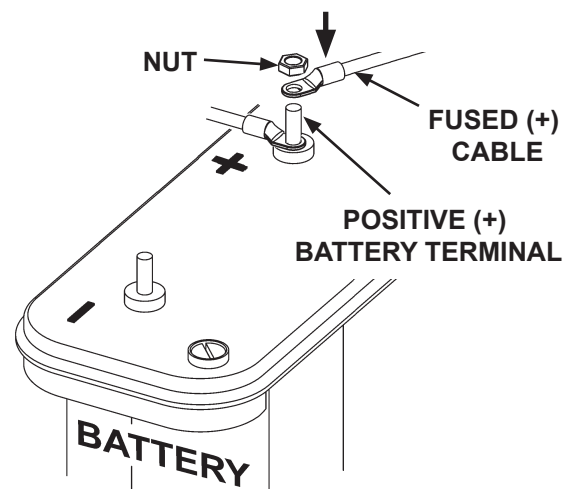
1. Remove nut from negative (-) battery terminal. Disconnect negative (-) battery cable (**FIG. 43-1**).



**DISCONNECTING (-) BATTERY CABLE
FIG. 43-1**

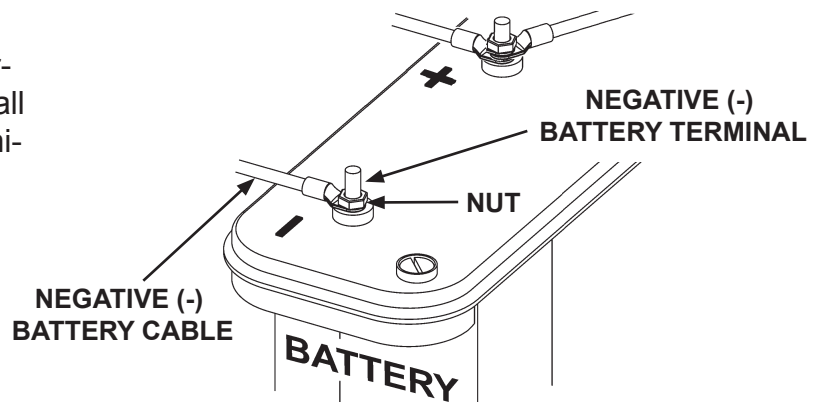
2. Remove nut from positive (+) battery terminal (**FIG. 43-1**).

3. Connect fused positive (+) cable to positive (+) battery terminal (**FIG. 43-2**). Then, reinstall nut on positive (+) battery terminal (**FIG. 43-3**).



**CONNECTING FUSED (+) CABLE
FIG. 43-2**

4. Reconnect negative (-) battery cable to negative (-) battery terminal (**FIG. 43-2**). Then, reinstall nut on negative (-) battery terminal (**FIG. 43-2**).



**RECONNECTED BATTERY CABLES
FIG. 43-3**

STEP 9 - REMOVE LOCKING BRACKETS & CHECK FOR INTERFERENCE

CAUTION

Do not fully pressurize the system in this step. Fully pressurize the system and check for hydraulic leaks after Liftgate is fully welded.

1. Push control switch to **UP** position and hold just enough time to pressurize hydraulic system. Release control switch. Hydraulic system is ready.
2. Remove floor jack and hoist supporting Liftgate (**FIG. 44-1**).

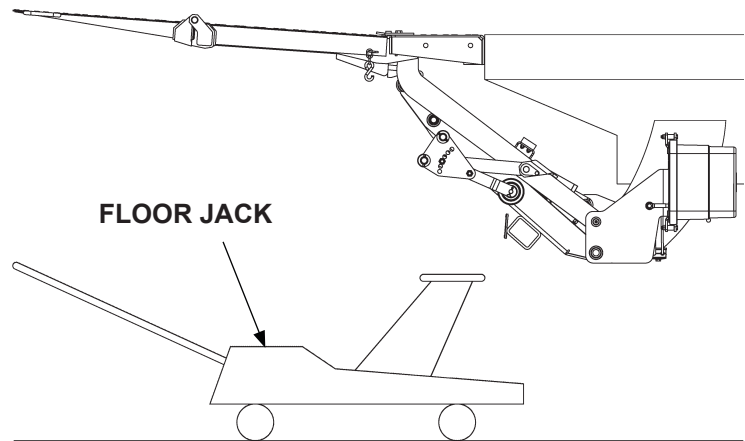


FIG. 44-1

3. Lower platform to the ground. Remove both installation brackets from extension plate (**FIG. 44-2**).

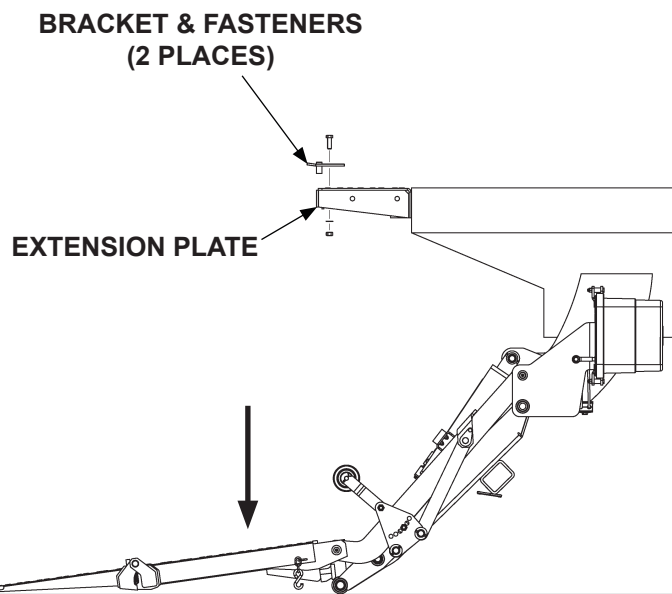
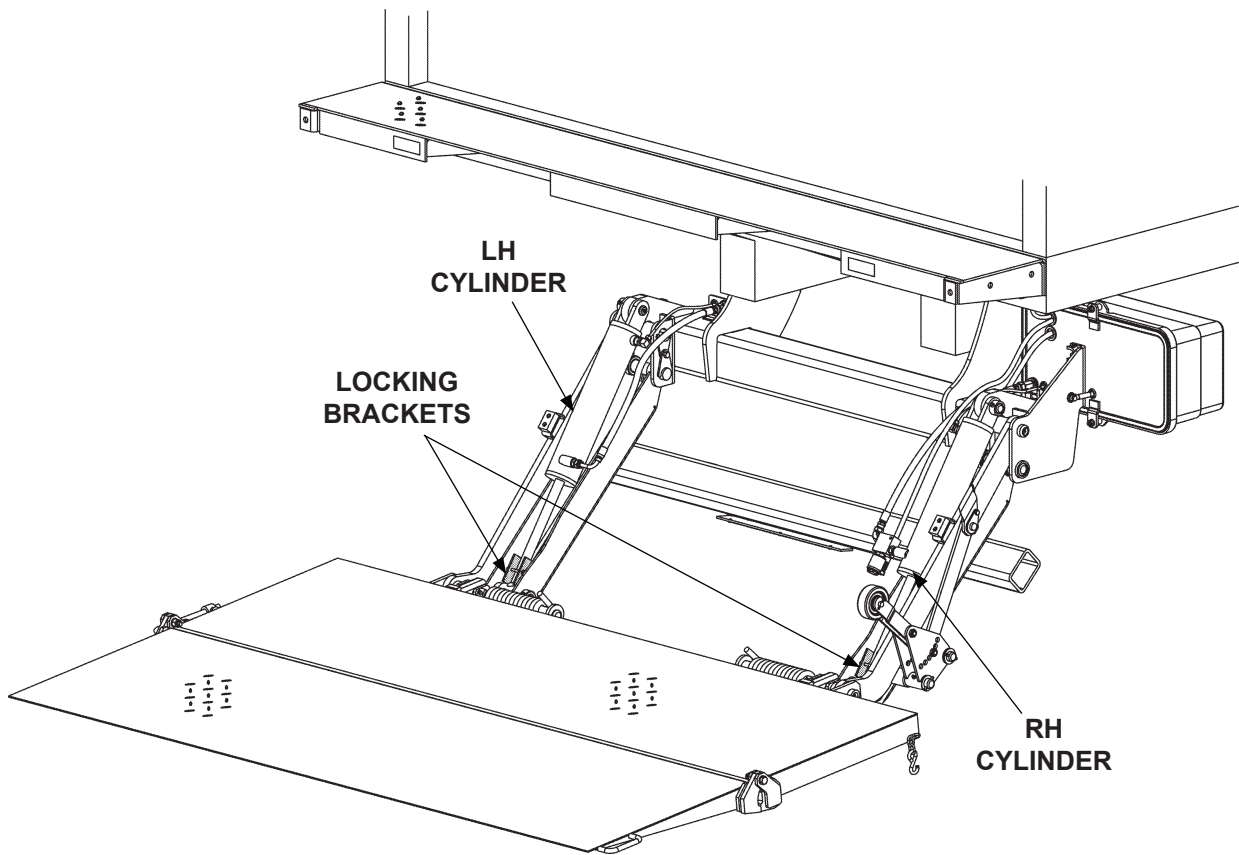


FIG. 44-2

STEP 9 - REMOVE LOCKING BRACKETS & CHECK FOR INTERFERENCE - Continued

NOTE: To operate Liftgate, locking brackets must be removed from cylinders.

4. Remove locking brackets from LH and RH cylinder (**FIG. 45-1**).

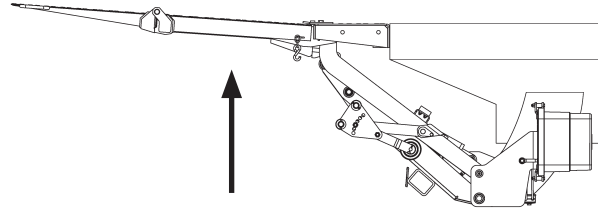


**REMOVING LOCKING BRACKETS
FIG. 45-1**

STEP 9 - REMOVE LOCKING BRACKETS & CHECK FOR INTERFERENCE - Continued

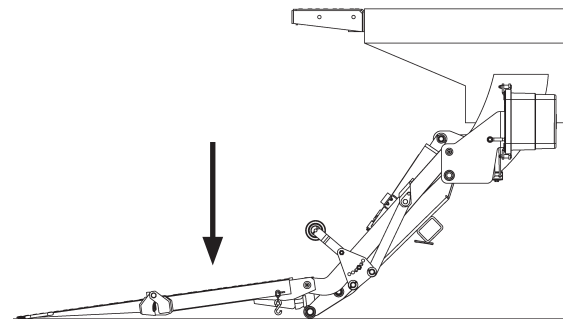
NOTE: Correct any interference problems before continuing with installation.

5. Raise platform to bed height (**FIG. 46-1**). Then, lower platform to the ground (**FIG. 46-2**). Look for any interference between liftgate and vehicle as platform is raised and lowered.



RAISING PLATFORM
FIG. 46-1

6. If the platform lowers with a “jerking” motion, bleed air from the hydraulic system by doing the following. Push the control switch to the **DOWN** position until you hear air escaping into the hydraulic fluid reservoir. Then, raise the platform (**FIG. 46-1**). Repeat this step until there is no air left in the system and platform lowers smoothly (**FIG. 46-2**).

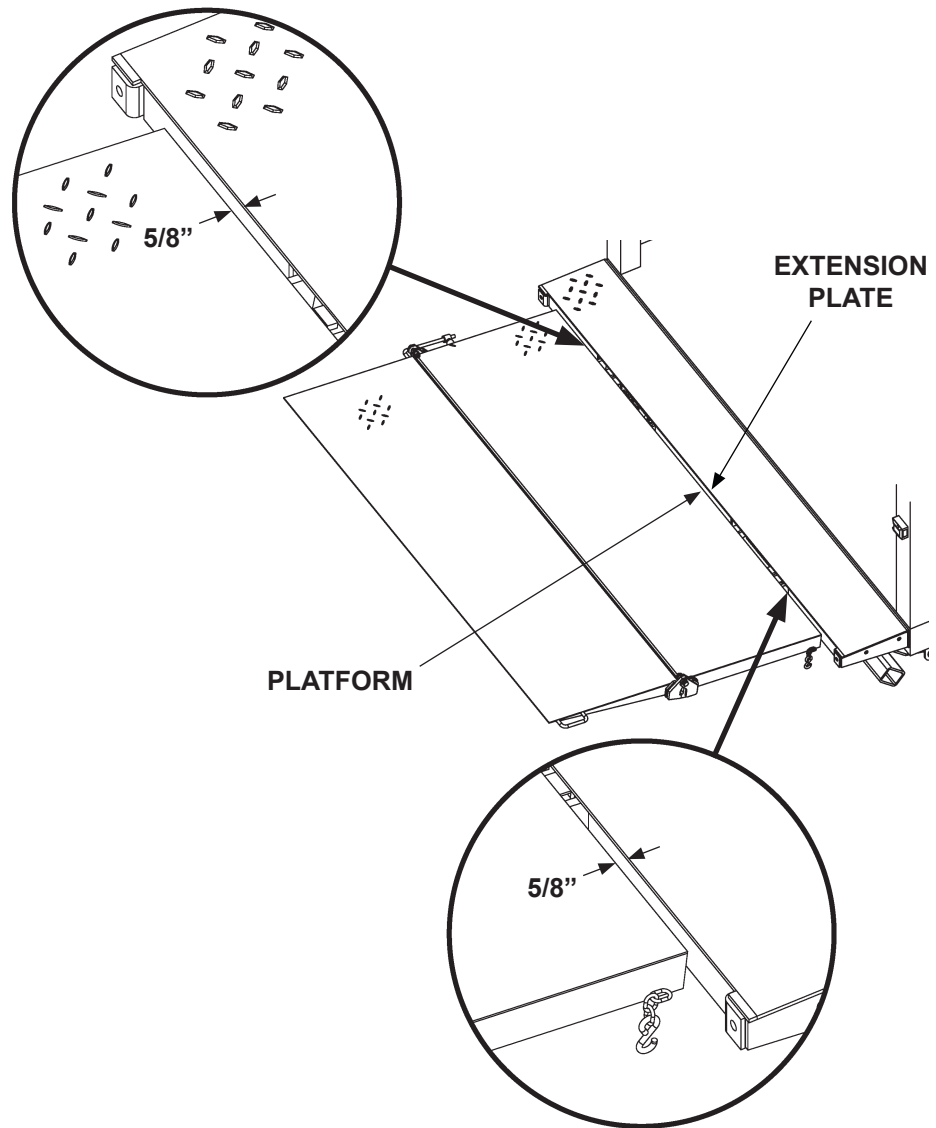


LOWERING PLATFORM
FIG. 46-2

STEP 9 - REMOVE LOCKING BRACKETS & CHECK FOR INTERFERENCE - Continued

NOTE: Correct any fit and interference problems before continuing with installation.

7. Raise platform to bed height (**FIG. 47-1**). Check for 5/8" gap between heel of platform and edge of extension plate (**FIG. 47-1**).

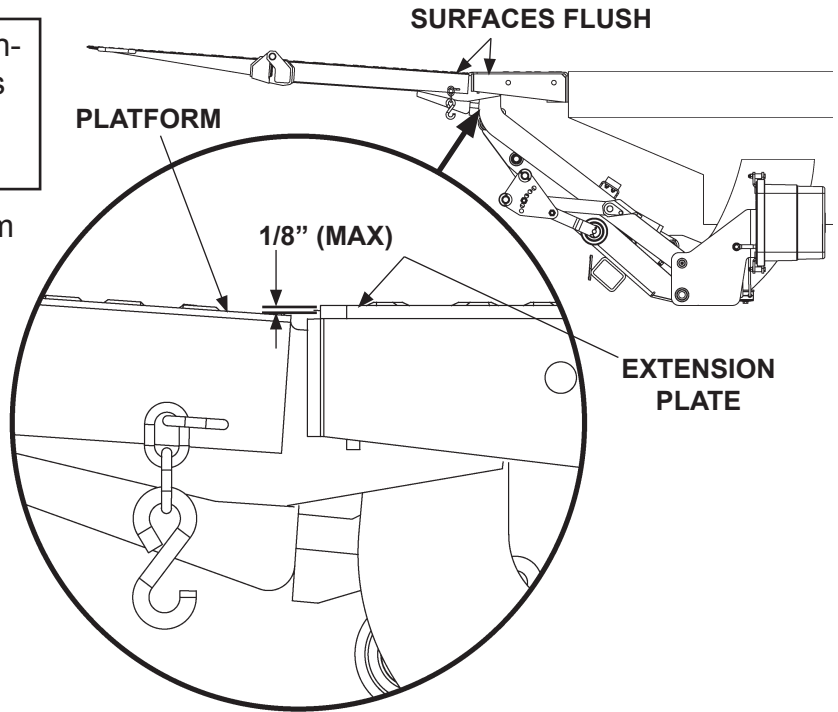


CHECKING GAP BETWEEN PLATFORM
& EXTENSION PLATE
FIG. 47-1

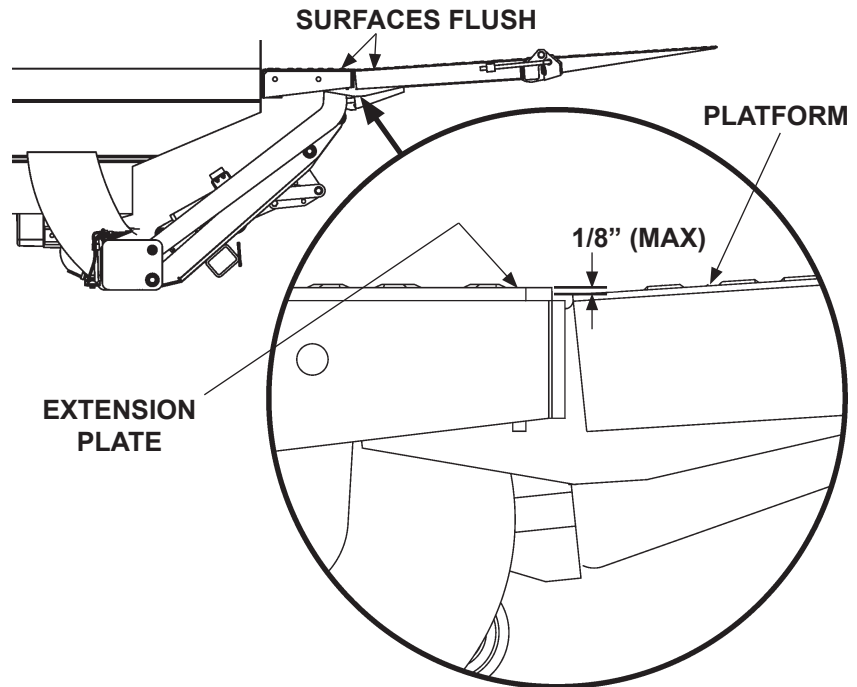
STEP 9 - REMOVE LOCKING BRACKETS & CHECK FOR INTERFERENCE - Continued

NOTE: Correct any fit and interference problems before continuing with installation.

8. Ensure top surface of platform and extension plate are flush at the RH & LH sides of platform (FIGS. 48-1 and 48-2). The allowable difference in height is 1/8" maximum as shown.



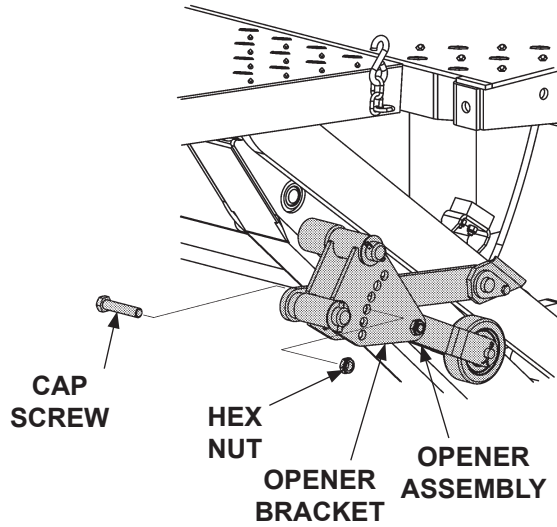
DIFFERENCE IN HEIGHT FOR TOP OF PLATFORM & EXTENSION PLATE (RH VIEW)
FIG. 48-1



DIFFERENCE IN HEIGHT FOR TOP OF PLATFORM & EXTENSION PLATE (LH VIEW)
FIG. 48-2

STEP 10 - ADJUST PLATFORM OPENER

To adjust openers, remove cap screw and hex nut from opener bracket (FIG. 49-1). Rotate opener assembly to the correct hole position (FIG. 49-2 and TABLE 49-1, FIG. 50-1, and TABLE 50-1). Reinstall cap screw and nut.

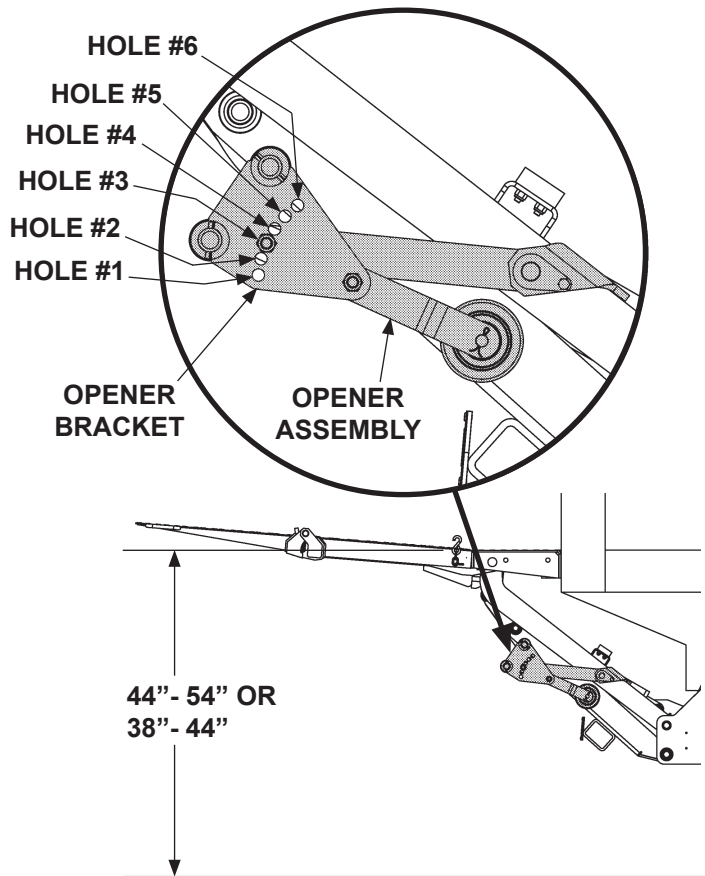


REMOVING BOLT FROM OPENER BRACKET
FIG. 49-1

NOTE: Hole positions are approximate and may have to be adjusted up 1 hole or down 1 hole for best opener function on your vehicle.

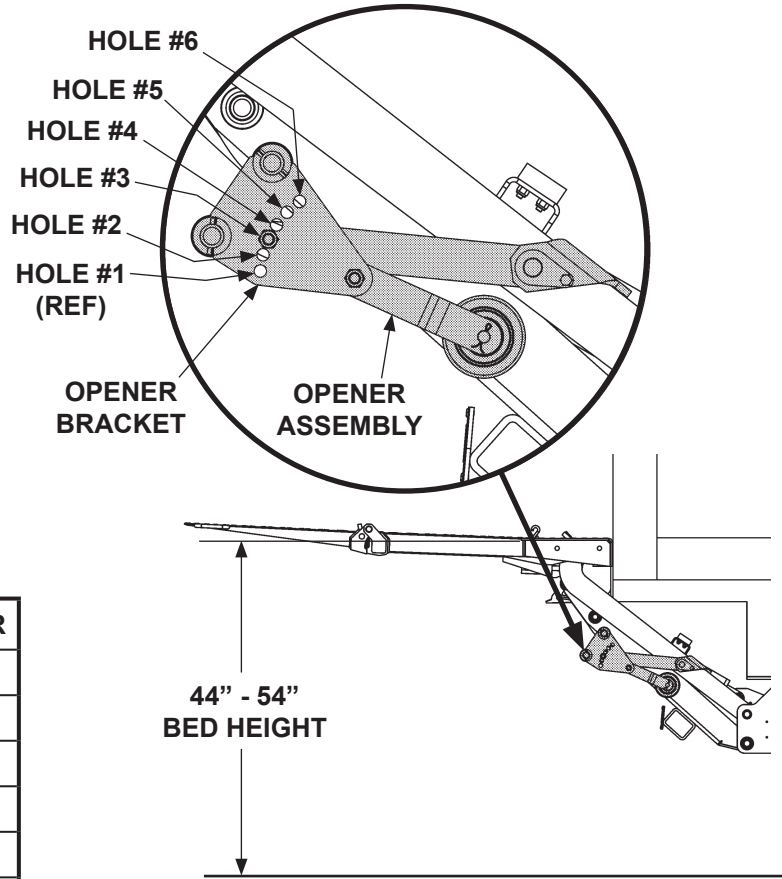
TRUCK BED HEIGHT	HOLE NUMBER
52" - 54"	HOLE #6
51" - 53"	HOLE #5
50" - 52"	HOLE #4
49" - 51"	HOLE #3
48" - 50"	HOLE #2
51" - 53"	HOLE #1
40" - 44" (26" X 26" PLATFORM ONLY)	HOLE #3
38" - 44" (24" X 24" PLATFORM ONLY)	HOLE #1

BOLT HOLE CHART FOR 38" - 44" BED HEIGHT & 44" - 54" BED HEIGHT
TABLE 49-1



POSITIONING OPENER FOR 38" - 44" BED HEIGHT OR 44" - 54" BED HEIGHT
FIG. 49-2

STEP 10 - ADJUST PLATFORM OPENER - Continued



TRUCK BED HEIGHT	HOLE NUMBER
52" - 54"	HOLE #6
51" - 53"	HOLE #5
50" - 52"	HOLE #4
49" - 51"	HOLE #3
46" - 50"	HOLE #2
44" - 47" (24" X 24" PLATFORM ONLY)	HOLE #1

BOLT HOLE CHART FOR 44" - 54" BED HEIGHT WITH WALK RAMP
TABLE 50-1

POSITIONING OPENER FOR 44" - 54" BED HEIGHT WITH WALK RAMP
FIG. 50-1

STEP 11 - ADJUST PLATFORM (IF REQUIRED)

NOTE: Before doing the following procedure, make sure vehicle is parked on level ground.

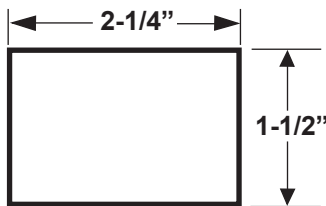
1. Make sure platform is at ground level. Unfold the platform and flipover. As the platform first touches the ground, shackles and tip of flipover must touch the ground at the same time (FIG. 51-1). If the shackles and the tip of flipover touch the ground at the same time, **RAISE** platform to bed height. Tip of flipover should be above bed level (FIG. 51-2). If indications are correct in both cases (FIGS. 51-1 & 51-2), Liftgate is installed correctly and no adjustment is needed. If indications are incorrect, continue with instruction 2.

NOTE: If tip of flipover touches first (FIG. 51-3), do instruction 2. If the shackle touches first (FIG. 49-1), skip instruction 2 and do 3.

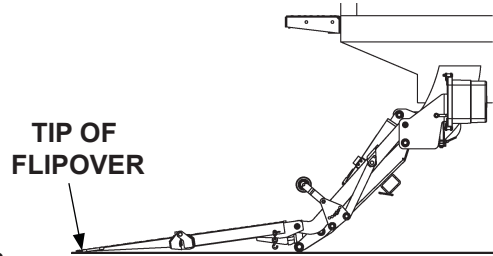
2. Make sure platform is still at ground level. If the shackle is not touching the ground, measure and compare distance "A" (FIG. 51-3) with TABLE 51-1 to determine the correct shim. Make shims as needed (FIG. 51-5). Weld shim as shown in FIG. 51-4.

RAISE TIP OF FLIPOVER THIS DISTANCE "A"	REQUIRED SHIM THICKNESS	WELD SIZE "W"
7/8"	1/16"	1/16"
2"	1/8"	1/8"
3"	3/16"	3/16"
3-15/16"	1/4"	1/4"

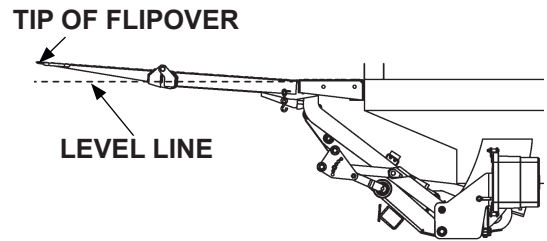
TABLE 51-1



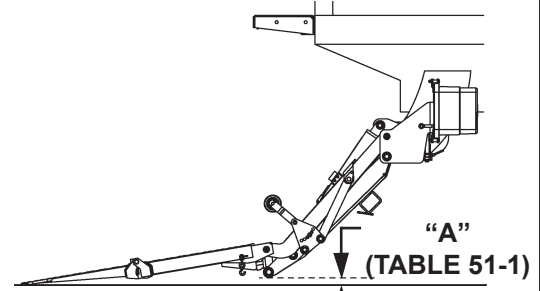
SHIM (1/16", 1/8", 3/16", or 1/4")
MADE FROM STEEL FLAT
FIG. 51-5



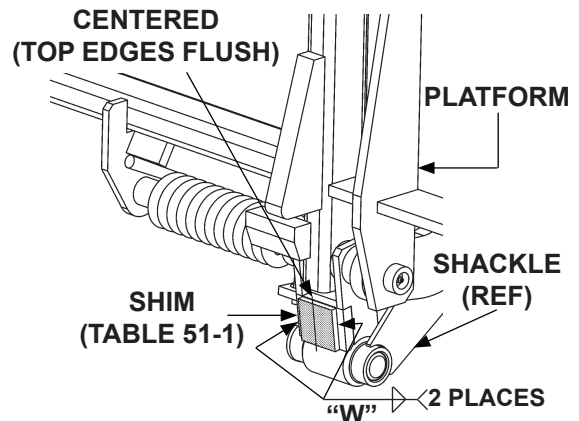
PLATFORM & SHACKLES TOUCH GROUND
FIG. 51-1



PLATFORM EDGE ABOVE BED LEVEL
FIG. 51-2



SHACKLES DO NOT TOUCH GROUND
FIG. 51-3



WELDING SHIMS (CURBSIDE SHOWN)
FIG. 51-4

STEP 11 - ADJUST PLATFORM (IF REQUIRED)

- Continued

3. Make sure platform is still at ground level. If the tip of flipover is not touching the ground, measure and compare distance "B" (FIG. 52-1) with TABLE 52-1 to determine how much to grind from the platform stops (FIG. 52-3).

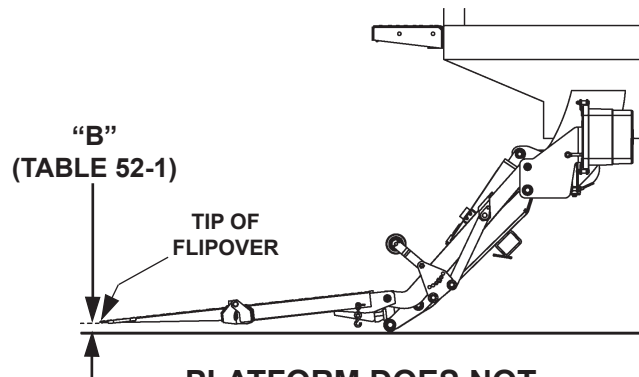
LOWER TIP OF FLIPOVER THIS DISTANCE "B"	GRIND METAL FROM PLATFORM STOP
7/8"	1/16"
2"	1/8"
3"	3/16"
3-15/16"	1/4"

TABLE 52-1

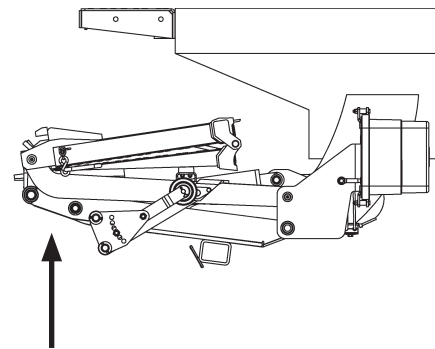
4. RAISE the platform to comfortable work height. Fold flipover and platform for access to platform stops (FIG. 52-2).

5. Grind correct amount of metal (TABLE 52-1) from platform stop as shown in FIG. 52-3.

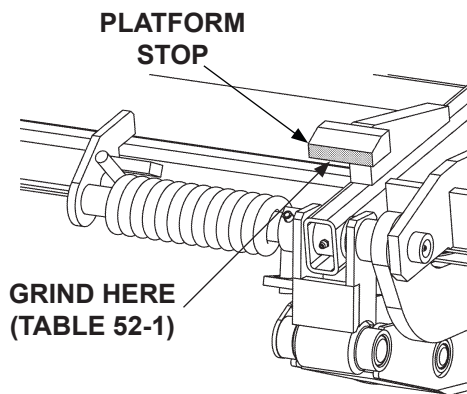
6. Unfold flipover and platform. LOWER platform to the ground. As the platform first touches the ground, the tip of flipover and shackle should touch at the same time as shown in FIG. 51-1.



PLATFORM DOES NOT TOUCH GROUND
FIG. 52-1



PLATFORM RAISED TO WORK HEIGHT
FIG. 52-2



GRINDING PLATFORM STOPS
(CURBSIDE SHOWN)
FIG. 52-3

STEP 12 - FINISH WELDING LIFTGATE TO VEHICLE

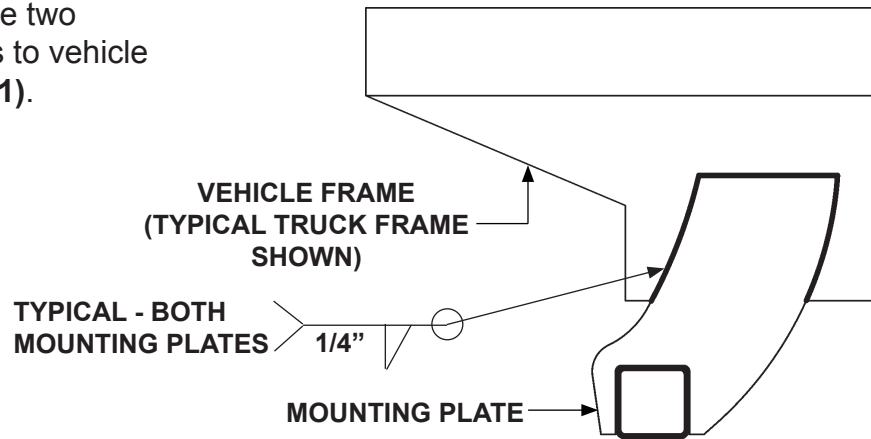
CAUTION

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

CAUTION

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

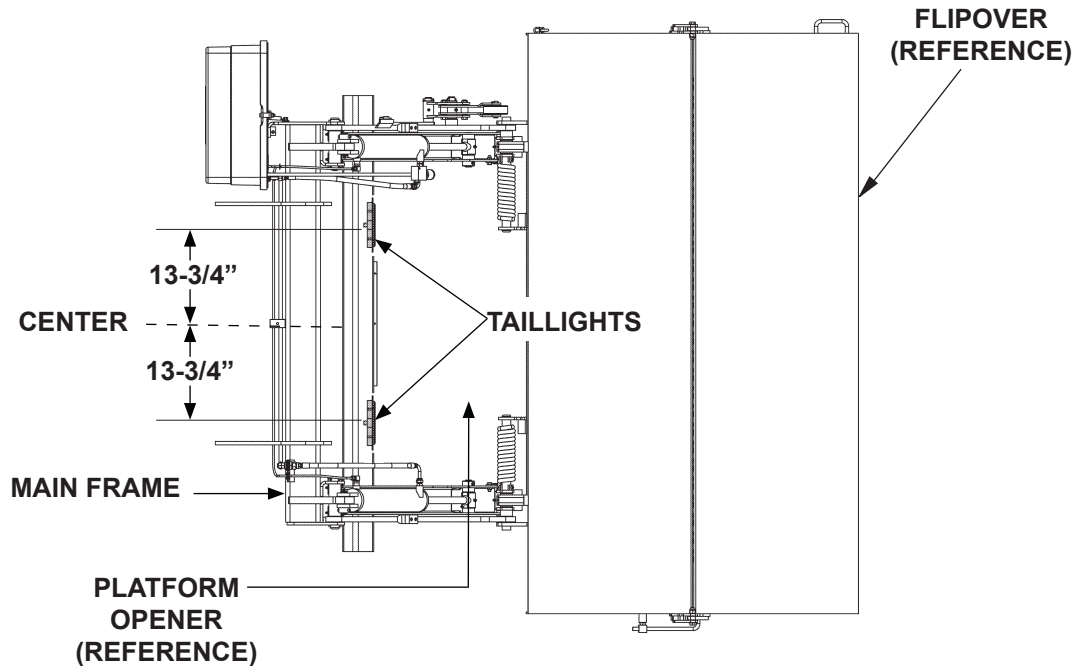
Weld each of the two mounting plates to vehicle frame (FIG. 53-1).



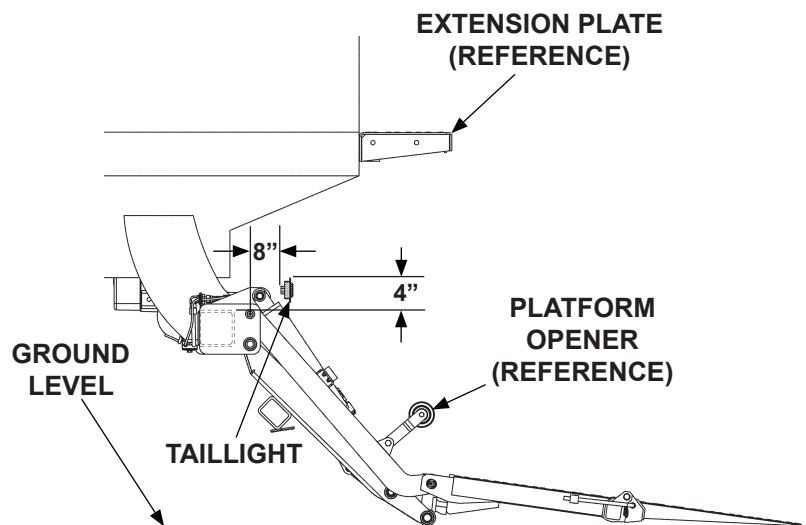
WELDING MOUNTING PLATE
FIG. 53-1

STEP 13 - VEHICLE TAILLIGHT POSITIONING (IF REQUIRED)

NOTE: Positions are based on using oval taillights of 3-1/4" height by 7-7/8" width. Larger taillights may interfere with Liftgate. Taillights and attaching hardware are not provided with the Liftgate.



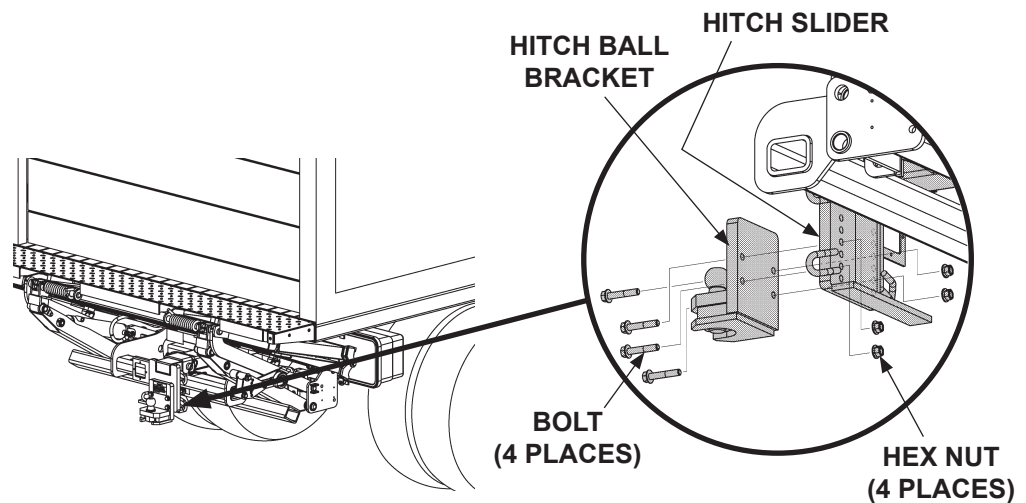
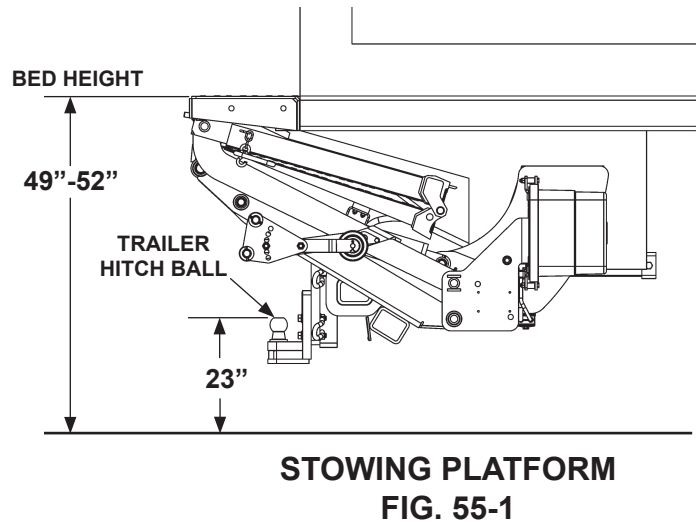
**LIFTGATE TOP VIEW
FIG. 54-1**



**LIFTGATE SIDE VIEW - LEFT HAND SIDE SHOWN
FIG. 54-2**

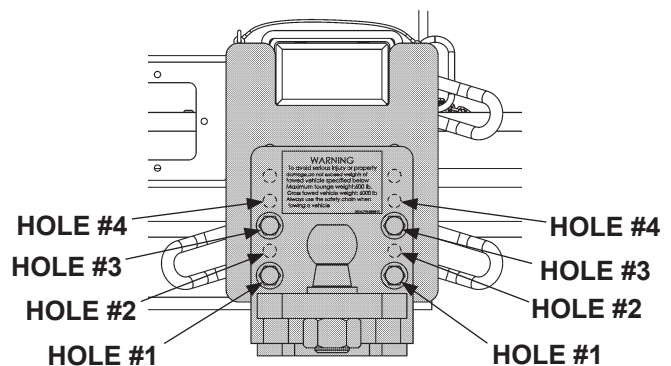
STEP 14 - ADJUST TRAILER HITCH (IF EQUIPPED)

1. With platform in stowed position, check height of trailer hitch ball (FIG. 55-1). If the height is not 23", complete the following steps to adjust the height of the trailer hitch.
2. Unbolt hitch ball bracket from hitch slider (FIG. 55-2). Next, bolt the hitch ball bracket at the correct height as shown in FIGS. 55-2, 55-3, and TABLE 55-1. Then, torque the 4 hitch bolts 85 to 128 lb-ft force.



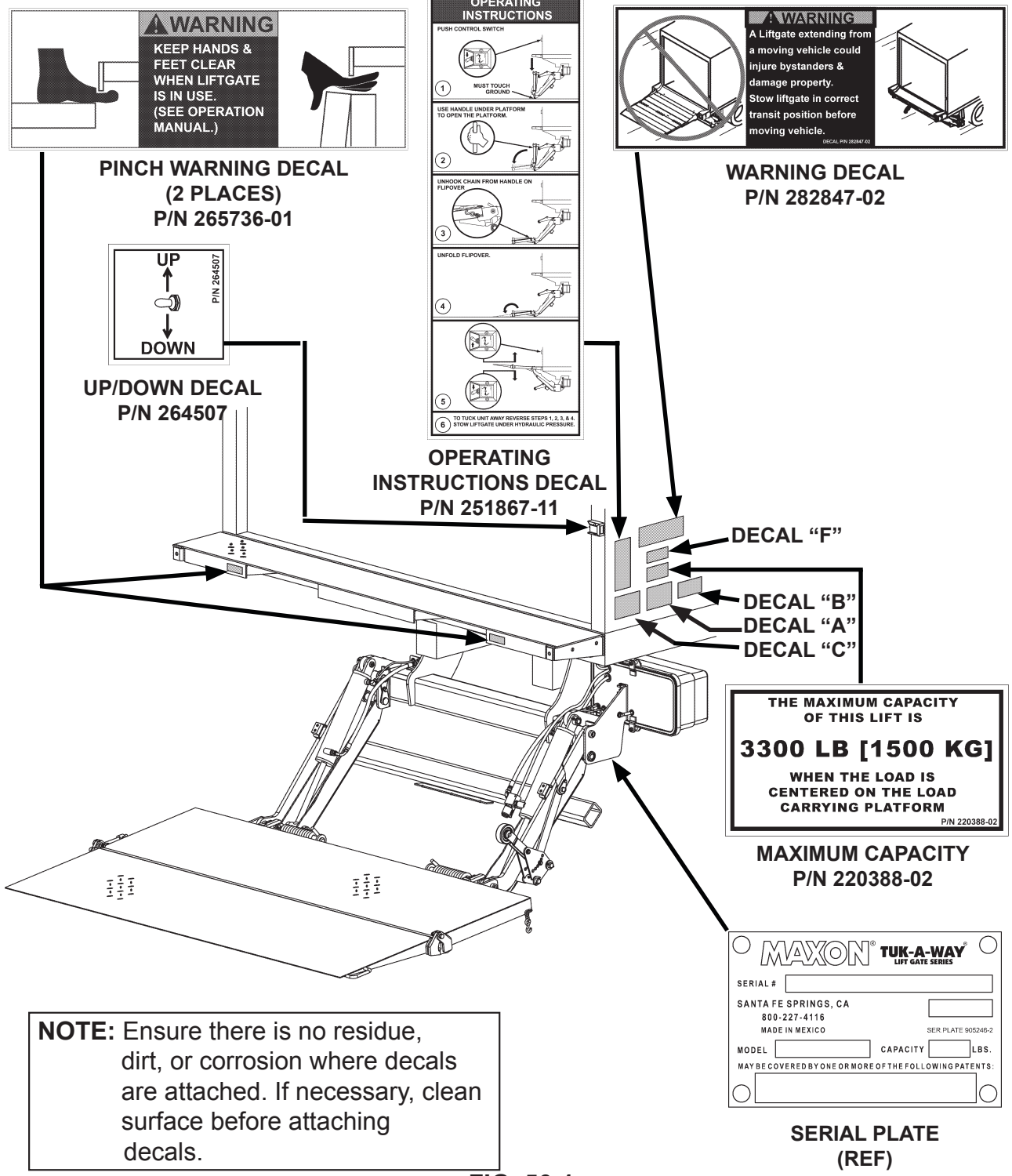
TRUCK BED HEIGHT	HOLE NUMBER
49"	HOLE #1
50"	HOLE #2
51"	HOLE #3
52"	HOLE #4

TABLE 55-1



ATTACH DECALS: TE-33

NOTE: Preferred decal layout is shown, Decals on the Liftgate are attached at the factory. If vehicle does not permit this layout, decals in the manual and decal kit must be applied so that they are easily visible when approaching vehicle to operate Liftgate. Use good common sense when locating these decals on vehicle.



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

FIG. 56-1

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

ATTACH DECALS - Continued

SAFETY INSTRUCTIONS

Read all decals and operation manual before operating liftgate.

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

(A)

WARNING

Read this information carefully.

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

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

(C)



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.

P/N 282522-01 (B)

Read and understand all instructions and WARNINGS before use.

CAUTION

Always stand clear of platform area.

(F)

DECAL SHEET
P/N 282522-01

FIG. 57-1

ATTACH DECALS: TEWR-33

NOTE: Preferred decal layout is shown, Decals on the Liftgate are attached at the factory. If vehicle does not permit this layout, decals in the manual and decal kit must be applied so that they are easily visible when approaching vehicle to operate Liftgate. Use good common sense when locating these decals on vehicle.

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

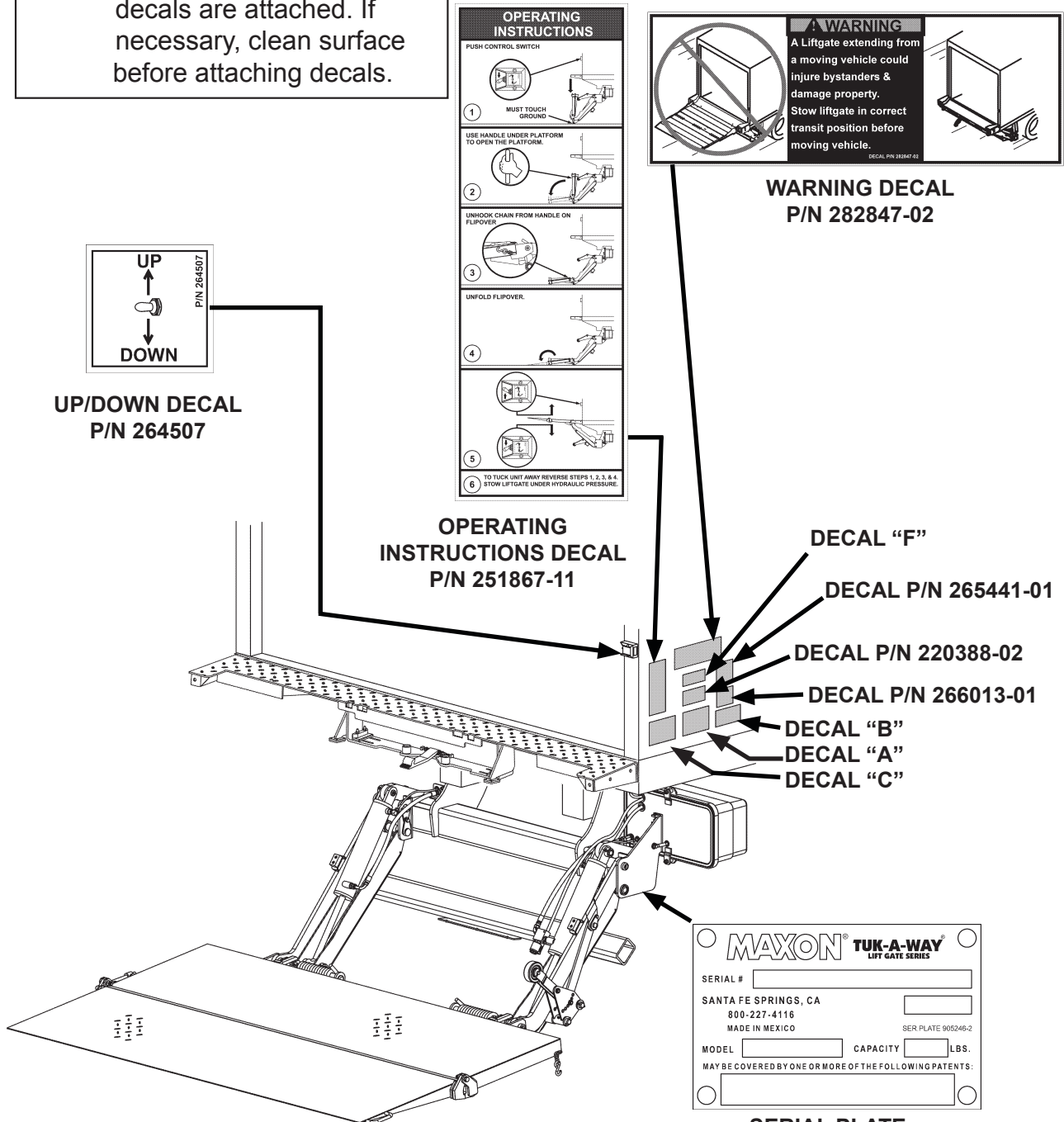


FIG. 58-1


ATTACH DECALS: TEWR-33 - Continued

SAFETY INSTRUCTIONS

Read all decals and operation manual before operating liftgate.

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

(A)



WARNING

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.

P/N 282522-01 (B)

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 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.

(C)

CAUTION

Always stand clear of platform area.

(F)

DECAL SHEET P/N 282522-01

THE MAXIMUM CAPACITY OF THIS LIFT IS

3300 LB [1500 KG]

WHEN THE LOAD IS CENTERED ON THE LOAD CARRYING PLATFORM

P/N 220388-02

MAXIMUM CAPACITY P/N 220388-02

WARNING



NEVER OPERATE LIFTGATE WHEN WALK RAMP IS EXTENDED.

ALWAYS STOW RAMP BEFORE OPERATING LIFTGATE.

DECAL, P/N 265441-01

WARNING DECAL P/N 265441-01

NOTICE

- 1 READ WALK RAMP WARNING DECAL BEFORE YOU SET UP WALK RAMP.
- 2 TO SET UP WALK RAMP & STOW WALK RAMP, REFER TO WALK RAMP MANUFACTURER'S INSTRUCTIONS.

DECAL, P/N 266013-02

NOTICE DECAL P/N 266013-01

FIG. 59-1

ATTACH DECALS: TRAILER HITCH (IF EQUIPPED)

NOTE: Preferred decal layout is shown, Decals on the Liftgate are attached at the factory. If vehicle does not permit this layout, decals in the manual and decal kit must be applied so that they are easily visible when approaching vehicle to operate Liftgate. Use good common sense when locating these decals on vehicle.

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

NOTE: Data plate and decals on the hitch are attached by manufacturer. Installer must attach decals, from manual & decal kit, on vehicle body.

⚠ WARNING

To avoid serious injury or property damage, do not exceed weights of towed vehicle specified below.
 Maximum tongue weight: 600 lb.
 Gross towed vehicle weight: 6000 lb.
 Always use the safety chains when towing a vehicle.

DECAL P/N 285859-01

WARNING DECAL (REF)
P/N 285859-01

MAXON® SANTA FE SPRINGS, CA
 800-227-4116

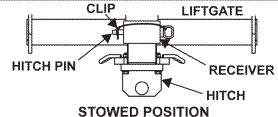
⊕ Class-4 Trailer Hitch
 P/N: 288771-00-100 ⊕
 Maximum tongue weight: 600 lb.
 Gross towed vehicle weight: 6000 lb.

DATA PLATE P/N 285848-01

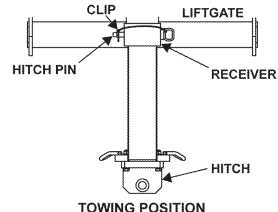
DATA PLATE (REF)
P/N 285848-01

OPERATING INSTRUCTIONS

Ensure hitch pin and locking clip are correctly inserted when hitch is stowed or in towing position. Moving the tow vehicle without securing hitch could result in serious injury or property damage.



STOWED POSITION

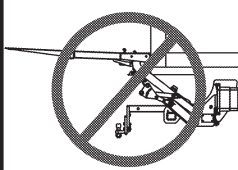


TOWING POSITION

DECAL P/N 285834-01

OPERATING INSTRUCTIONS DECAL
P/N 285834-01

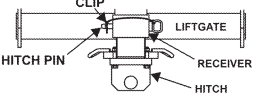
CAUTION



NEVER OPERATE LIFTGATE WHEN TRAILER HITCH IS EXTENDED, PLATFORM & HITCH WILL BE DAMAGED. ALWAYS STOW TRAILER HITCH BEFORE OPERATING LIFTGATE.

DECAL, P/N 285852-01

CAUTION DECAL
285852-01

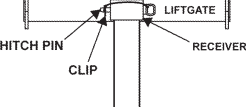


STOWED POSITION

⚠ WARNING

Ensure hitch pin & locking clip are correctly inserted when hitch is stowed or in tow position. Moving the tow vehicle without securing hitch could result in serious injury or property damage.

DECAL P/N 285835-01



TOW POSITION

WARNING DECAL (REF)
P/N 285835-01

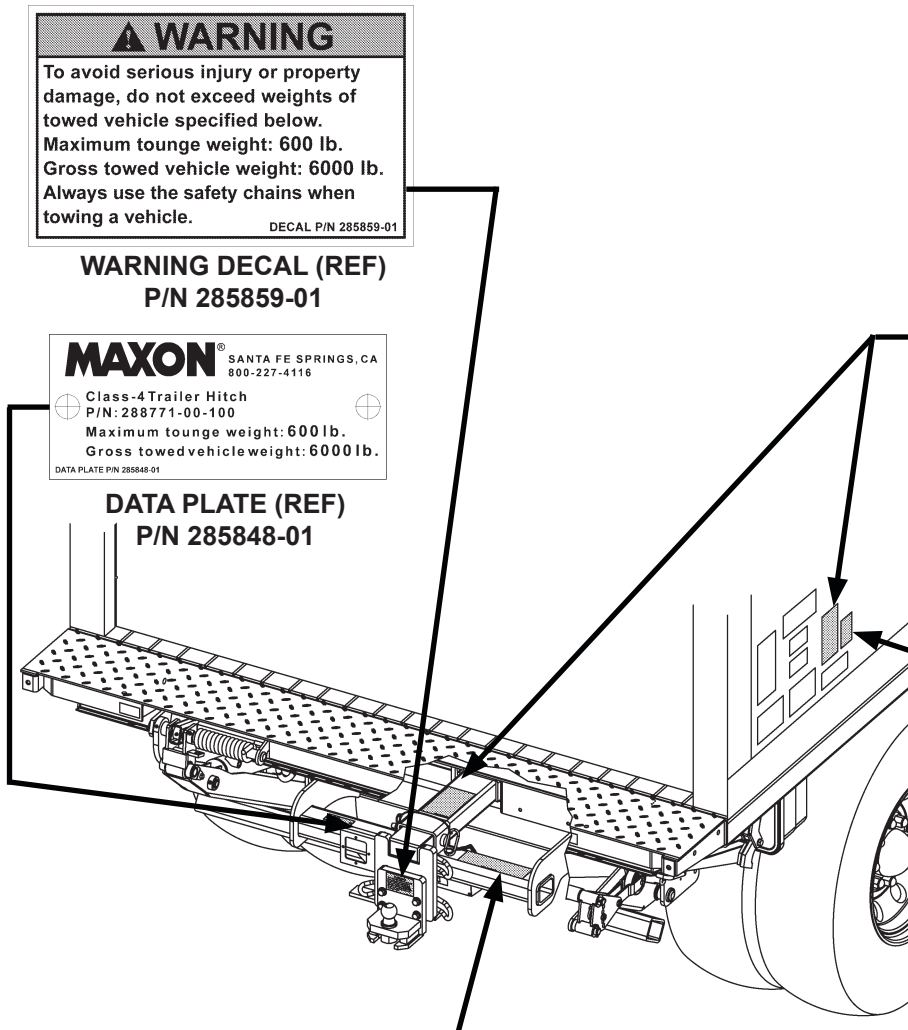


FIG. 60-1

TOUCHUP PAINTED OR GALVANIZED FINISH

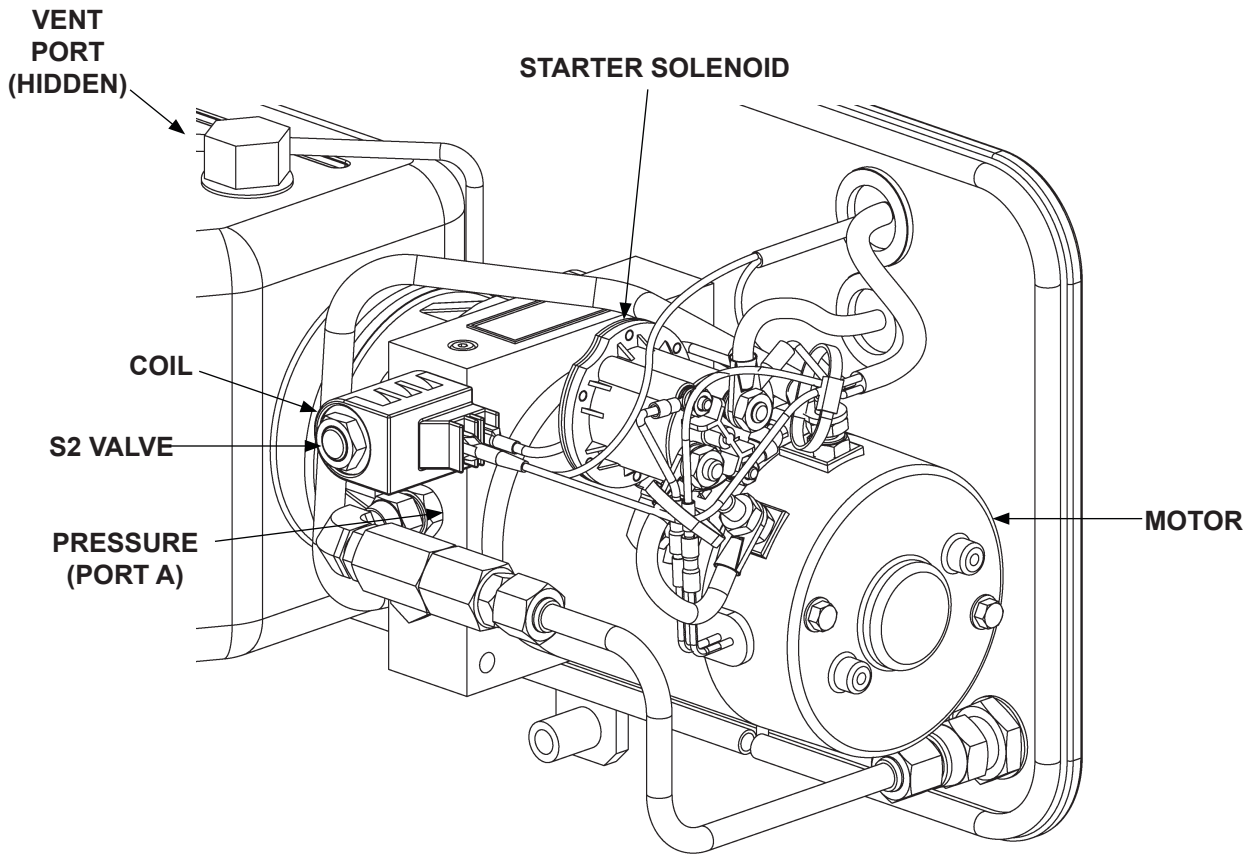
CAUTION

Damaged cylinder seals and contaminated hydraulic fluid can result from painting the polished portion of the cylinder rod. To prevent damage, protect the exposed polished portion of the cylinder rod while painting.

- 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 kit, P/N 908134-01.
- 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, P/N 908000-01.

SYSTEM DIAGRAMS

PUMP & MOTOR SOLENOID OPERATION (GRAVITY DOWN)



**POWER UNIT
FIG. 62-1**

POWER UNIT MOTOR & SOLENOID OPERATION				
LIFTGATE FUNCTION	PORT	SOLENOID OPERATION (✓ MEANS ENERGIZED)		
		STARTER SOL & MOTOR	S2 VALVE	LOCK VALVE (ON RH CYLINDER)
RAISE	A	✓		
LOWER			✓	✓
REFER TO VALVES SHOWN ON HYDRAULIC SCHEMATIC				

TABLE 62-1

HYDRAULIC SYSTEM DIAGRAMS

HYDRAULIC SCHEMATIC (GRAVITY DOWN)

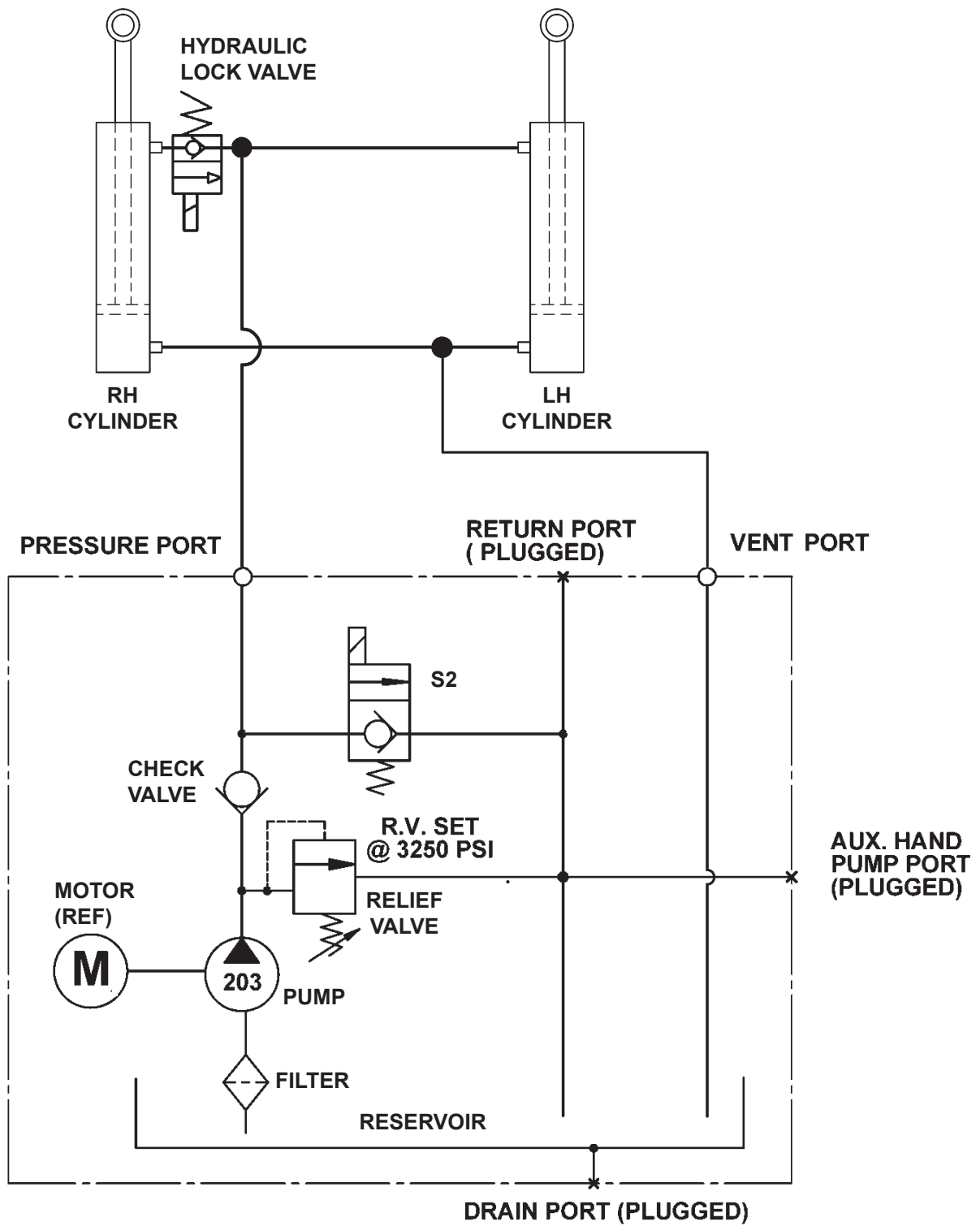


FIG. 63-1

ELECTRICAL SYSTEM DIAGRAMS

ELECTRICAL SCHEMATIC (GRAVITY DOWN)

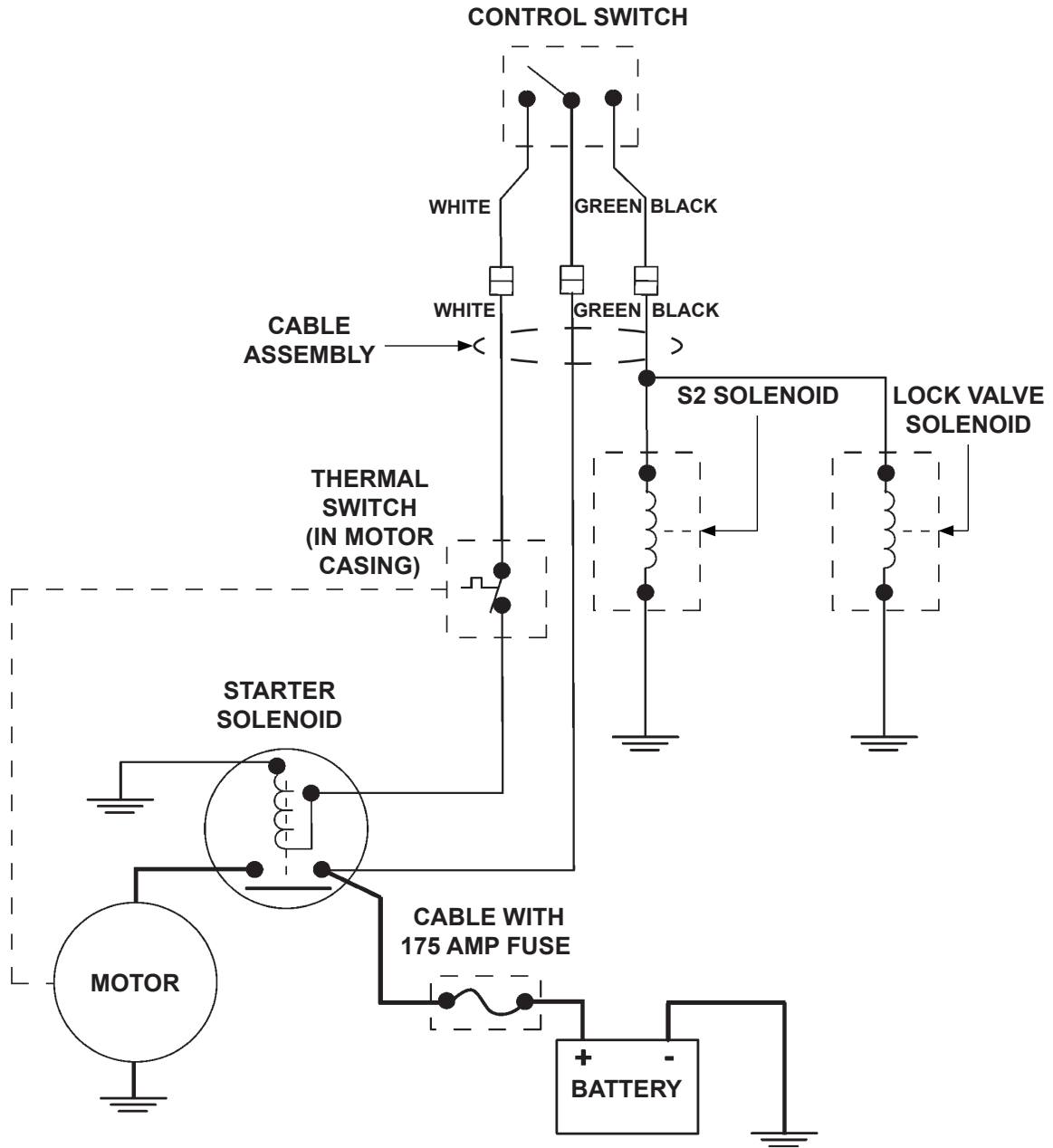
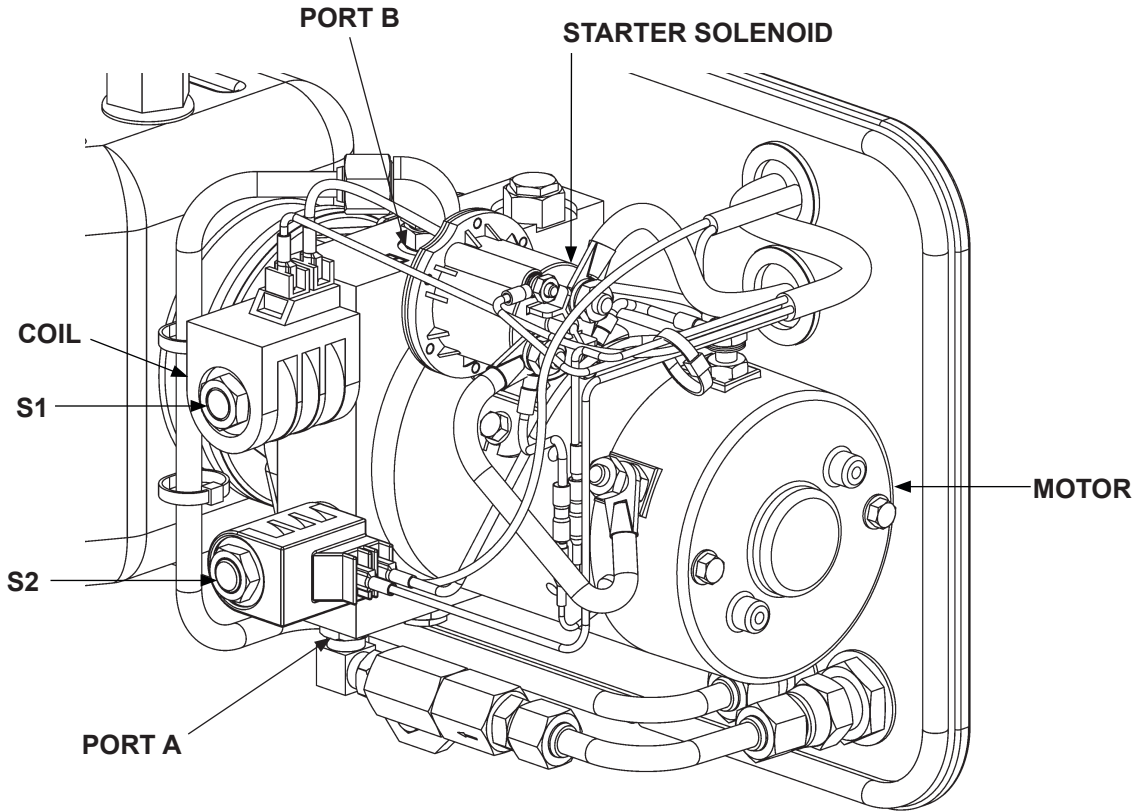


FIG. 64-1

SYSTEM DIAGRAMS

PUMP & MOTOR SOLENOID OPERATION (POWER DOWN)



**POWER UNIT
FIG. 65-1**

POWER UNIT MOTOR & SOLENOID OPERATION					
LIFTGATE FUNCTION	SOLENOID OPERATION (✓ MEANS ENERGIZED)				
	PORT	STARTER SOL & MOTOR	S1 VALVE	S2 VALVE	LOCK VALVE (ON RH CYLINDER)
RAISE	A	✓	✓		
LOWER	B	✓		✓	✓
REFER TO VALVES SHOWN ON HYDRAULIC SCHEMATIC					

TABLE 65-1

HYDRAULIC SYSTEM DIAGRAMS

HYDRAULIC SCHEMATIC (POWER DOWN)

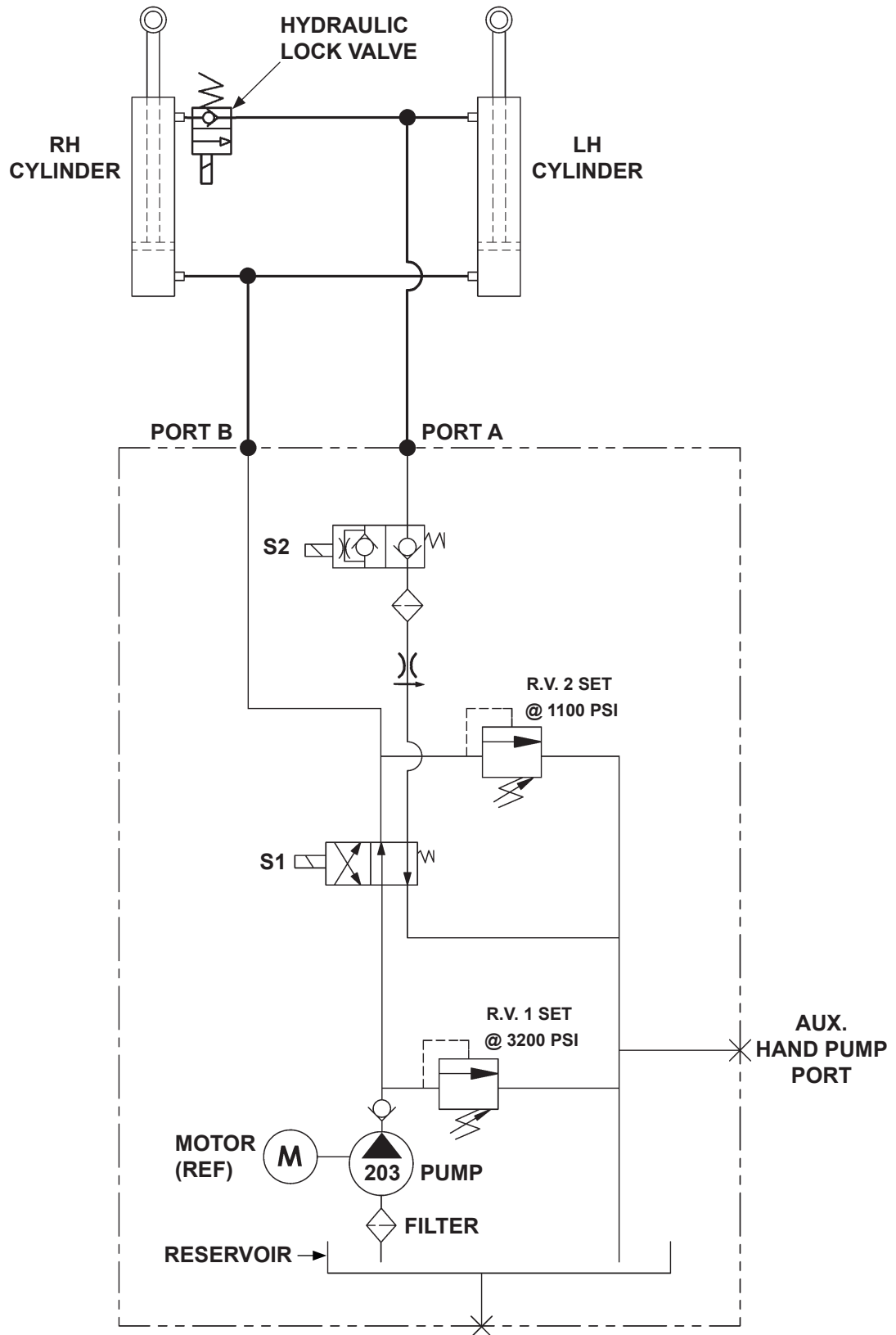


FIG. 66-1

ELECTRICAL SYSTEM DIAGRAMS

ELECTRICAL SCHEMATIC (POWER DOWN)

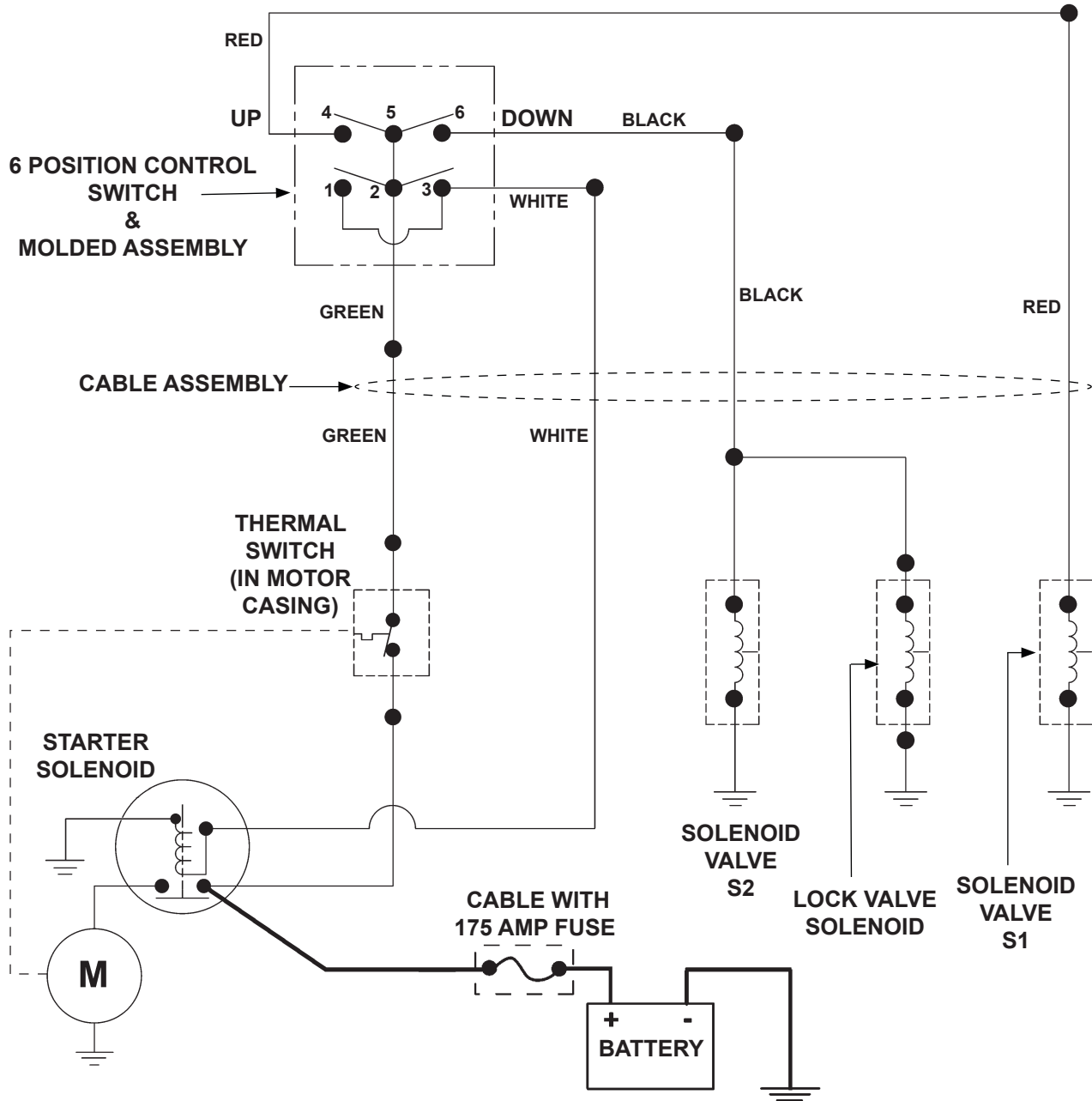


FIG. 67-1

OPTIONS OPTIONAL LIFTGATE COMPONENTS

STEP KITS	PART NO.	GD	PD
DUAL STEP, NO BUMPERS (44" - 54" BED HEIGHT)	285479-01	X	X
DUAL STEP, NO BUMPERS, GALVANIZED (44" - 54" BED HEIGHT)	285479-01G	X	X
DUAL STEP, WITH 24" BUMPERS (44" - 54" BED HEIGHT)	285479-03	X	X
DUAL STEP, WITH 24" BUMPERS, GALVANIZED (44" - 54" BED HEIGHT)	285479-03G	X	X
DUAL STEP WR, WITH 7" BUMPERS (44" - 54" BED HEIGHT)	285479-02	X	X
DUAL STEP, WR, WITH 7" BUMPERS, GALVANIZED (44" - 54" BED HEIGHT)	285479-02G	X	X
DUAL STEP, W/LOWER FLEX STEP & 2-1/2" RUBBER BUMPER, GALVANIZED	285479-04G		
SINGLE STEP, NO BUMPERS (38" - 44" BED HEIGHT)	285895-03	X	X
SINGLE STEP, NO BUMPERS, GALVANIZED (38" - 44" BED HEIGHT)	285895-03G	X	X
SINGLE STEP, WITH 18-3/4" BUMPERS (38" - 44" BED HEIGHT)	285895-04	X	X
SINGLE STEP, WITH 18-3/4" BUMPERS, GALVANIZED (38" - 44" BED HEIGHT)	285895-04G	X	X
DOCK BUMPER KITS			
RUBBER BUMPER, 24" (44" - 54" BED HEIGHT)	283295-02	X	X
BUMPER, 1" X 2" X 7" LG. (44"-54" BED HEIGHT)	283295-03	X	X
BUMPER, 2" X 2" X 11" LG. (38" - 44" BED HEIGHT)	283292-04	X	X
RUBBER BUMPER, 2-1/2" X 3" X 18-3/4" LG.	285472-01	X	X
MISCELLANEOUS KITS			
	PART NO.	GD	PD
TRAFFIC CONES	268893-01	X	X
EXTENSION (FOR EXTENSION PLATE) (102" WIDE VEH)	283134-03	X	X
EXTENSION (FOR EXTENSION PLATE) (102" WIDE VEH), GALVANIZED	283134-03G	X	X
EXTENSION PLATE HARDWARE KIT (96" WIDE VEH)	283257-01	X	X
EXTENSION PLATE HARDWARE KIT (102" WIDE VEH)	283257-02	X	X
ELECTRICAL KITS			
IN CAB ON-OFF SWITCH	250477	X	X
TUK-A-WAY DUAL CONTROL KIT	264845	X	
TUK-A-WAY DUAL CONTROL KIT	264845-02		X
10" EXTENSION TO POWER CABLE	264849	X	X
STREET SIDE CONTROL, TUK-A-WAY, GRAVITY DOWN	280265-01	X	
STREET SIDE CONTROL, TUK-A-WAY, POWER DOWN	280265-03		X
HAND HELD CONTROL ASSEMBLY (3 COND)	280570-01	X	
HAND HELD CONTROL ASSEMBLY (4 COND)	280570-03		X
GROUND CABLE, 2 GAUGE X 38' LG.	269190-01	X	X
CIRCUIT BREAKER (150 AMP)	251576	X	X
OVAL, 2 LIGHT MOUNTING FRAME BRACKET	282372-01	X	X
CYCLE COUNTER	280590-01	X	X
TOUCH-UP PAINT KIT			
TOUCH-UP PAINT (BCG) WITH ALUMINUM PRIMER, SMALL	908134-01	X	X
COLD GALVANIZE SPRAY (GALVANIZED ONLY)	908000-01	X	X
BRIGHT ZINC SPRAY PAINT (GALVANIZED ONLY)	908100-01	X	X

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