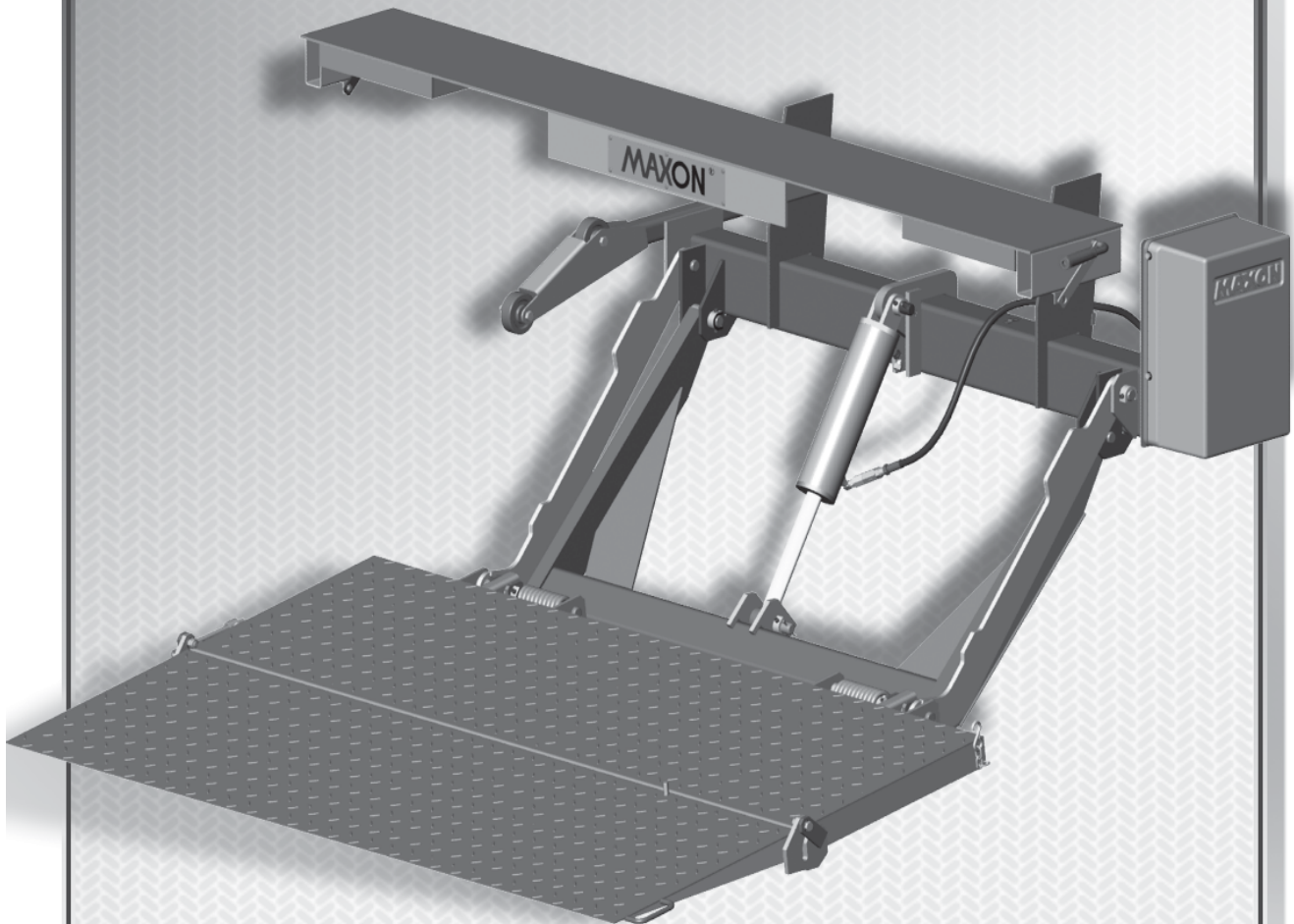


M-05-11
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FEBRUARY 2006

TE-25 TE-25L

INSTALLATION MANUAL



MAXON®

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Comply with the following **WARNINGS** while installing Liftgates. See Operation Manual M-05-12 for operating safety requirements.

⚠ WARNING

- 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 M-05-12**.
- Comply with all **WARNING** and instruction decals attached to the Liftgate.
- Keep decals clean and legible. If decals are defaced 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.
- Do not stand under, 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.
- 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 Toggle Switch and the Liftgate will stop.
- A correctly installed Liftgate operates smoothly and reasonably quiet. The only noticeable noise during operation comes from the pump unit while the platform is raised and lowered. Listen for scraping, grating and binding noises and correct the problem before continuing to operate Liftgate.
- 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 could be 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.

TE-25 & TE-25L LIFTGATE COMPONENTS

⚠ CAUTION

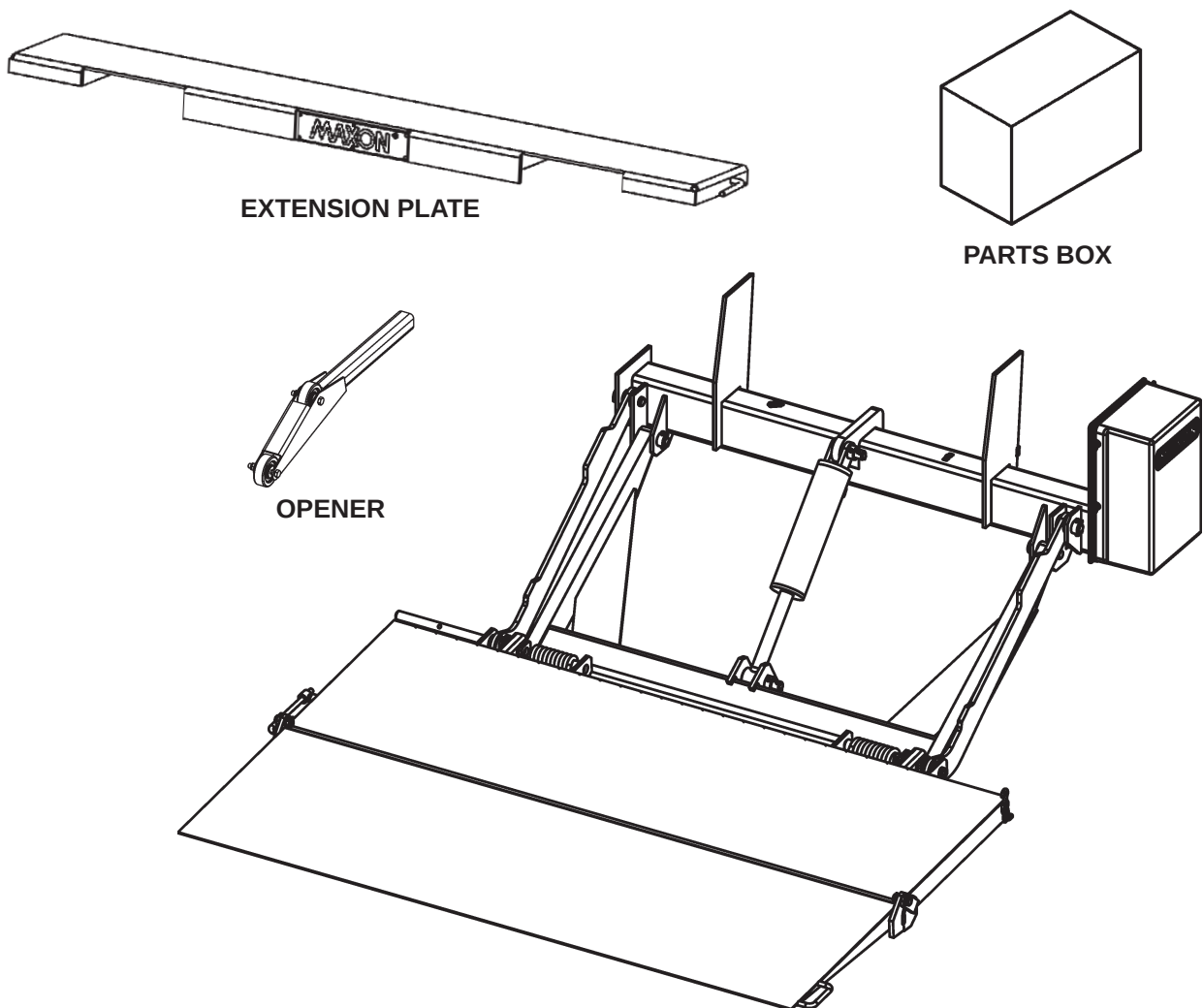
Prevent injuries and equipment damage. Before cutting the shipping straps from the Liftgate, put Liftgate on level ground that will support at least 1500 pounds. Be careful lifting and moving components (such as Extension Plate) after shipping straps are removed.

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 customersupport@maxonlift.com



TE-25 OR TE-25L LIFTGATE
(78-1/2" X 48" WEDGE TYPE PLATFORM)

TE-25 & TE-25L COMPONENTS

FIG. 4-1

PARTS BOX FOR TE-25 & TE-25L GRAVITY DOWN

PARTS BOX COMPONENT		QTY.	PART NUMBER
1	SCREW, TAPPING #10 X 1/2" LG	4	030458
2	CLIP, FRAME	7	050079
3	HANDLE, RUBBER	1	055011
4	CLAMP, JIFFY #130	1	125674
5	ELBOW, BRASS 1/4" X 1/4"	1	202406
6	RENTAL LOCK BRACKET (OPTIONAL)	1	203417
7	INNER BRACKET, RENTAL LOCK (OPTIONAL)	1	203570
8	TIE, PLASTIC 7"	10	205780
9	TIE, PLASTIC 12-14"	10	206864
10	CLAMP, #8 RUBBER LOOM	3	214663
11	SPRING, EXTENSION	1	215345
12	HOSE, 1/4" I.D. PLASTIC, 60-1/2" LG.	1	224370-07
13	LUG, 2 GA COPPER	1	226778
14	ADAPTER, 9/16"-18 M - 1/4 F, STRAIGHT	1	228012
15	FLAT 1/8" X 2" X 2"	2	251333
16	SWITCH AND CABLE ASSY	1	264346
17	CABLE ASSY, 200 AMPS, 38' LG.	1	264422
18	KIT, MANUAL & DECAL	1	-
	A. MANUAL, INSTALLATION	1	M-05-11
	B. MANUAL, OPERATION	1	M-05-12
	C. MANUAL, MAINTENANCE	1	M-05-13
	D. WARRANTY CARD	1	M-78-78
	E. CUSTOMER SURVEY FORM	1	M-94-04
19	HOSE, 3/8" HP, SAE O-RING #6M-JIC#6	1	280635-01
20	SCREW, SELF TAPPING, #10-24 X 1" LG.	2	900057-5
21	VALVE, FLOW REGULATOR, #6SAE, 2GPM	1	906709-02
22	ELBOW, 90 DEG NPSC, O-RING #6M-M	1	906722-01

TABLE 5-1

PARTS BOX FOR TE-25 & TE-25L POWER DOWN

PARTS BOX COMPONENT		QTY.	PART NUMBER
1	SCREW, TAPPING #10 X 1/2" LG	4	030458
2	CLIP, FRAME	7	050079
3	HANDLE, RUBBER	1	055011
4	CLAMP, JIFFY #130	1	125674
5	RENTAL LOCK BRACKET (OPTIONAL)	1	203417
6	INNER BRACKET, RENTAL LOCK (OPTIONAL)	1	203570
7	TIE, PLASTIC 7"	10	205780
8	TIE, PLASTIC 12-14"	10	206864
9	CLAMP, #8 RUBBER LOOM	3	214663
10	SPRING, EXTENSION	1	215345
11	LUG, 2 GA COPPER	1	226778
12	FLAT 1/8" X 2" X 2"	2	251333
13	SWITCH AND CABLE ASSY	1	264346
14	CABLE ASSY, 200 AMPS, 38' LG.	1	264422
15	KIT, MANUAL & DECAL	1	-
	A. MANUAL, INSTALLATION	1	M-05-11
	B. MANUAL, OPERATION	1	M-05-12
	C. MANUAL, MAINTENANCE	1	M-05-13
	D. WARRANTY CARD	1	M-78-78
	E. CUSTOMER SURVEY FORM	1	M-94-04
16	HOSE, 3/8" HP, JIC#6F-JIC#6	1	280634-01
17	HOSE, 3/8" HP, SAE O-RING #6M-JIC#6	1	280635-01
18	SCREW, SELF TAPPING, #10-24 X 1" LG.	2	900057-5
19	ELBOW, 90 DEG, O-RING, SAE6-JIC37 #6	1	905152
20	VALVE, FLOW REGUL.#6SAE, 2GPM	1	906709-02
21	ELBOW, 90 NPSC O-RING #6M-M	1	906722-01

TABLE 6-1

STEP 1 - PREPARE VEHICLE

NOTE: BODY Maximum and Minimum Operating Bed Height:

For Standard Platform -

Maximum height for the TE-25 is **54"** (Unloaded). Minimum height is **44"** (Loaded)

Maximum height for the TE-25L is **44"** (Unloaded). Minimum height is **38"** (Loaded)

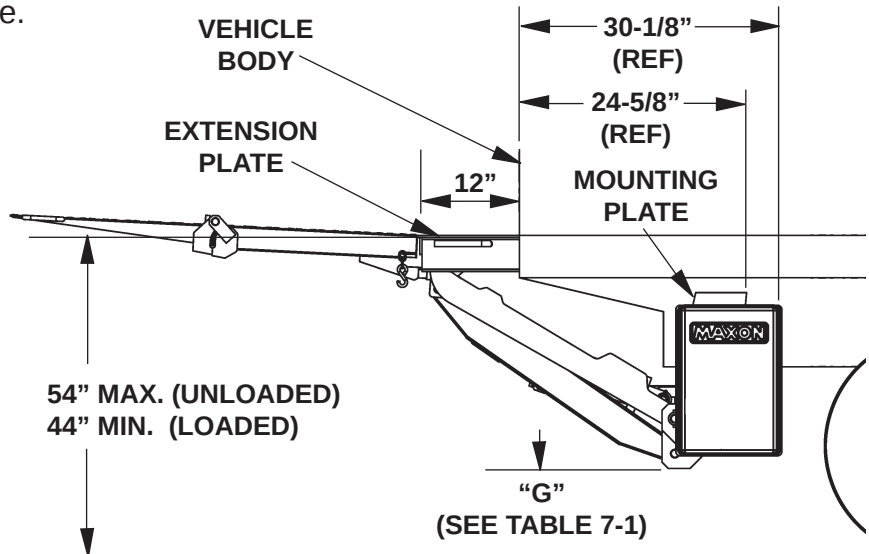
Do not install this Liftgate on vehicle bodies equipped with swing open doors.

NOTE: Dimensions are provided as reference for fitting Liftgate to Vehicle Body.

1. Check for correct clearances (**FIG. 7-1 and 7-2**) on vehicle to prevent interference between vehicle and Liftgate.

VEHICLE BED HEIGHT	CLEARANCE "G"
54"	23-3/4"
53"	22-3/4"
52"	21-3/4"
51"	20-3/4"
50"	19-3/4"
49"	18-3/4"
48"	17-3/4"
47"	16-3/4"
46"	15-3/4"
45"	14-3/4"
44"	13-3/4"

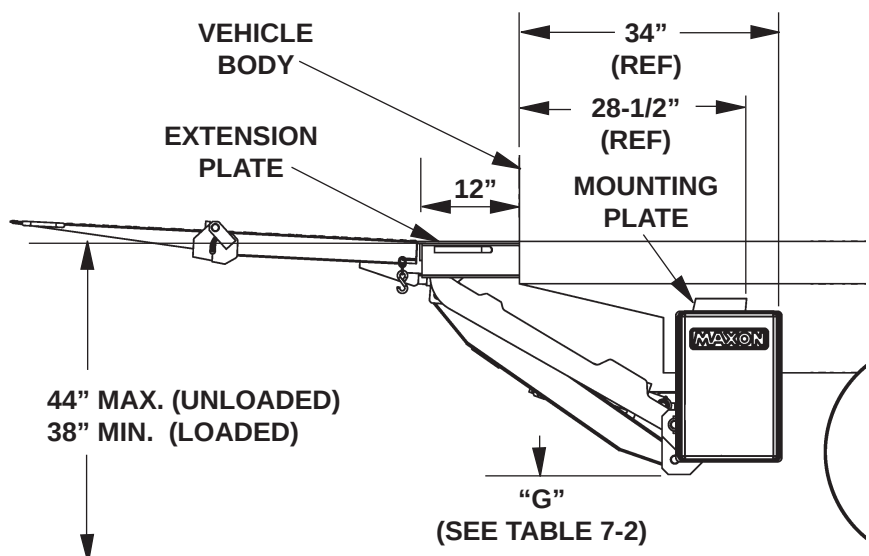
TABLE 7-1



**CLEARANCES FOR TE-25
FIG. 7-1**

VEHICLE BED HEIGHT	CLEARANCE "G"
44"	19-3/16"
43"	18-3/16"
42"	17-3/16"
41"	16-3/16"
40"	15-3/16"
39"	14-3/16"
38"	13-3/16"

TABLE 7-2

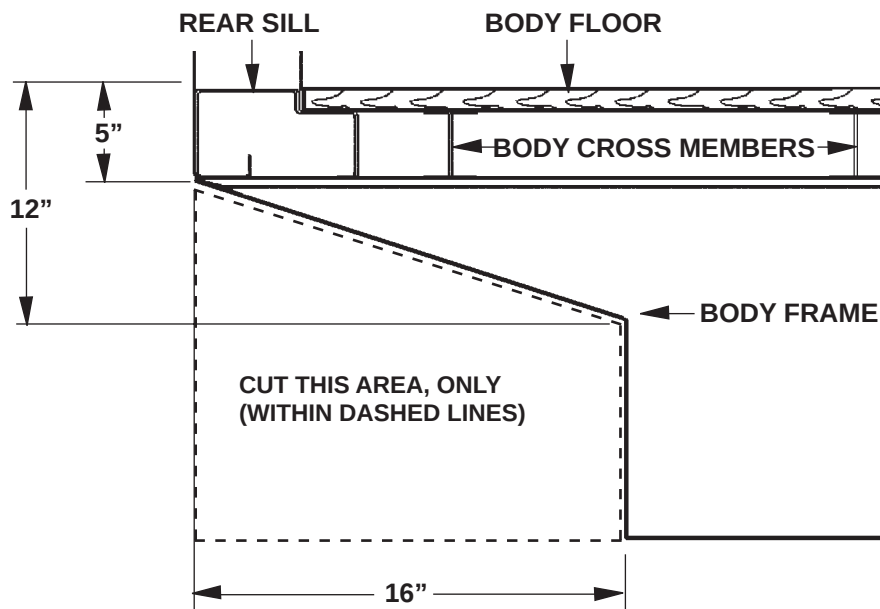


**CLEARANCES FOR TE-25L
FIG. 7-2**

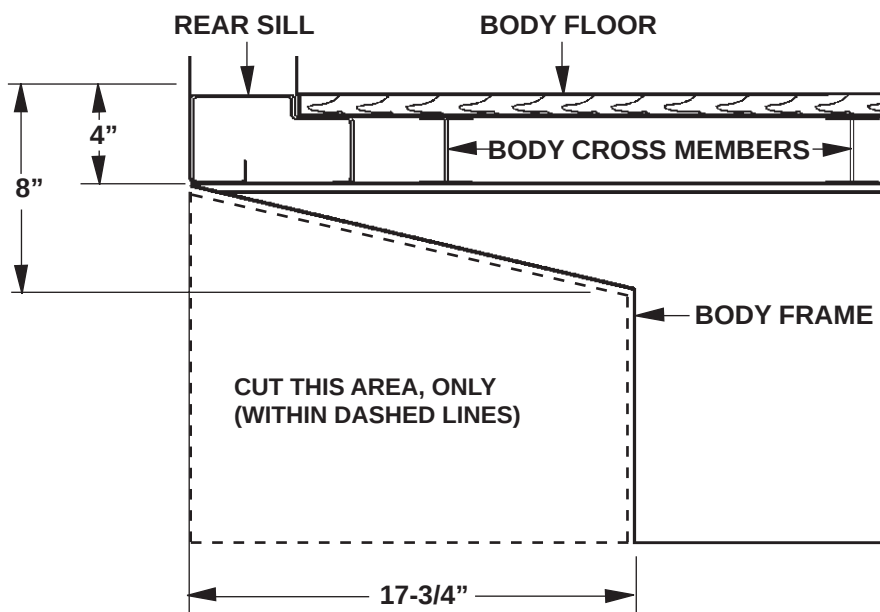
STEP 1 - PREPARE VEHICLE - Continued

NOTE: If installing Liftgate on a trailer skip frame cutting instructions in item 2.

2. Fit Liftgate to a truck body by cutting the truck frame as shown in **FIG. 8-1** and **8-2**.



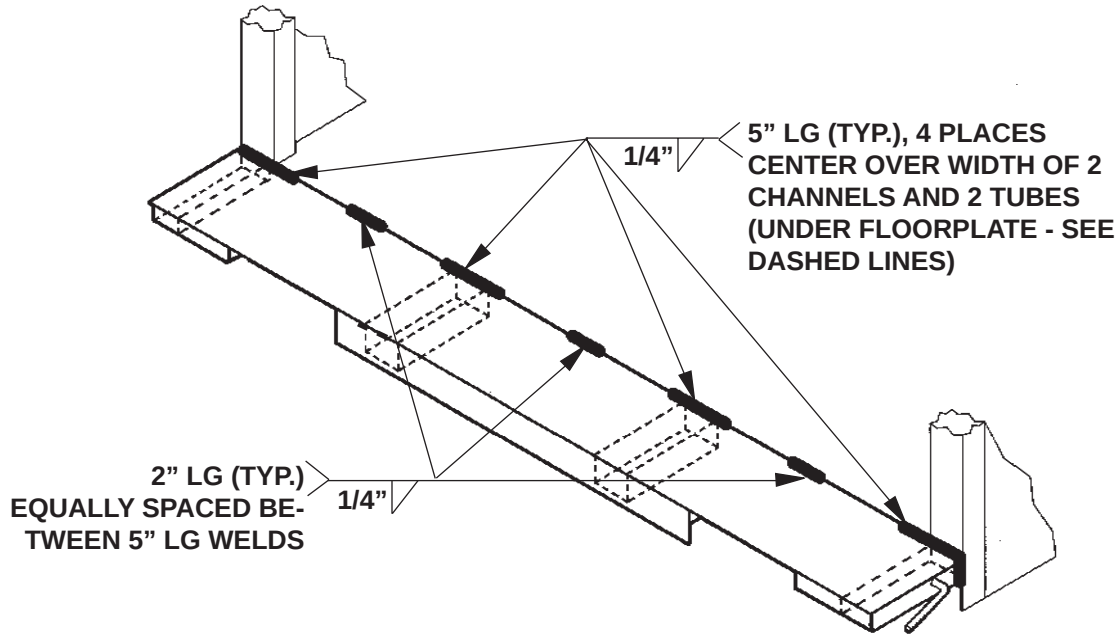
VEHICLE FRAME CUT FOR TE-25
FIG. 8-1



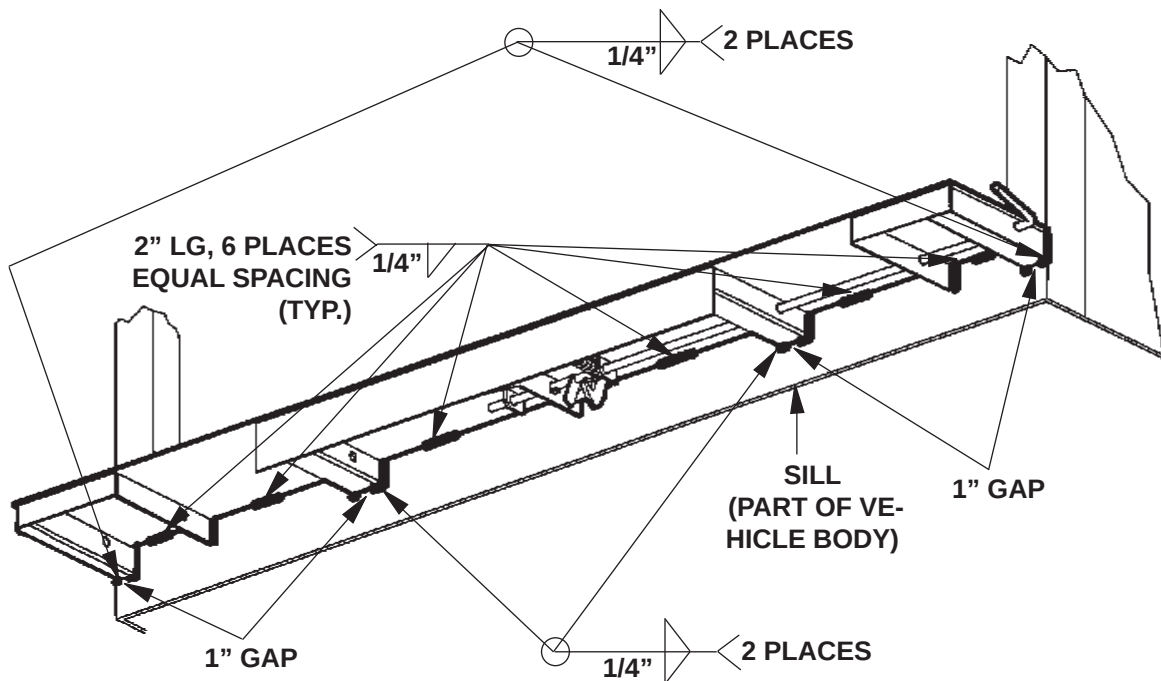
VEHICLE FRAME CUT FOR TE-25L
FIG. 8-2

STEP 2 - WELD EXTENSION PLATE TO VEHICLE

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 **FIG. 9-1** and **FIG. 9-2**.



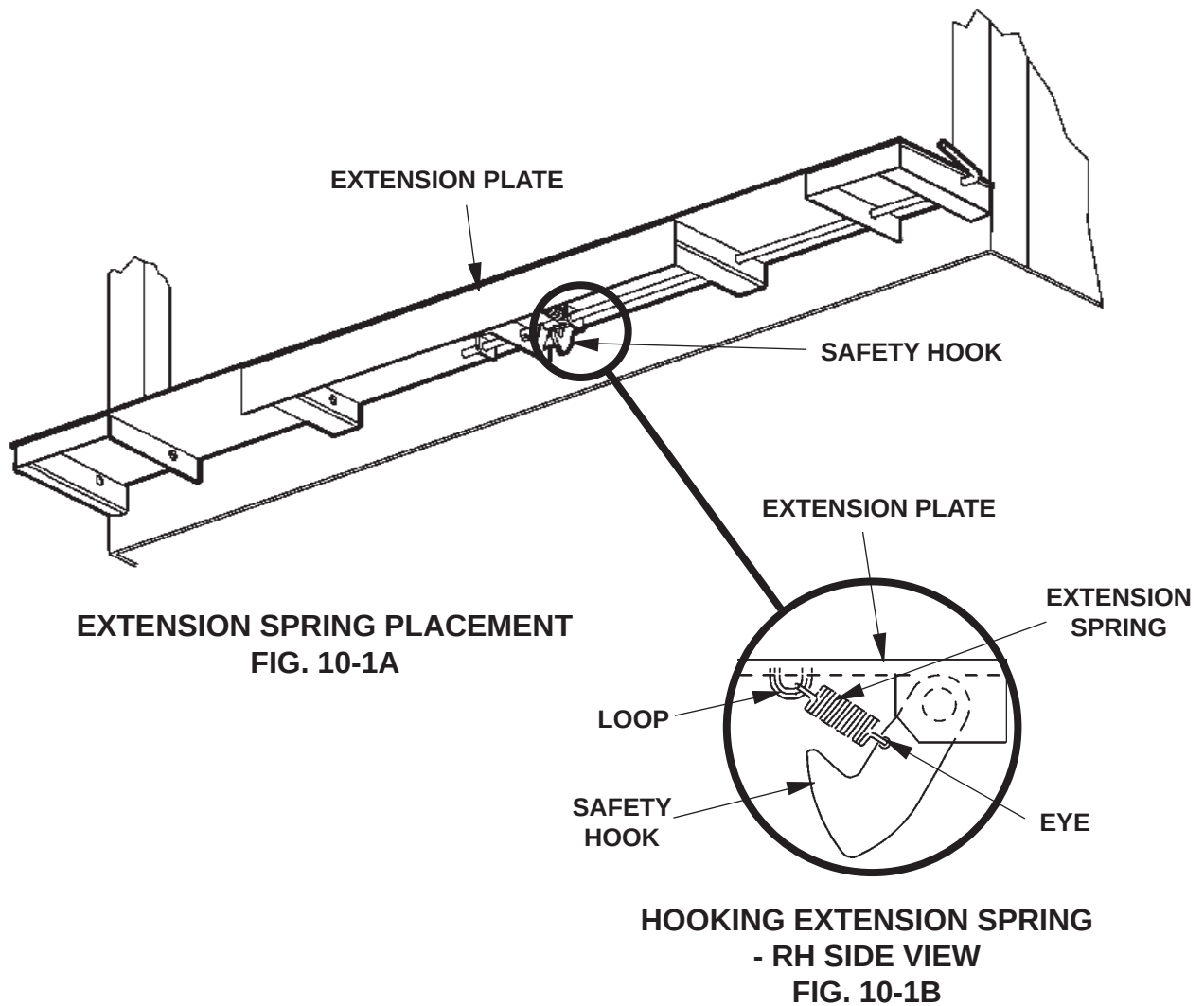
EXTENSION PLATE WELDS - VIEWED FROM ABOVE
FIG. 9-1



EXTENSION PLATE WELDS - VIEWED FROM UNDERNEATH
FIG. 9-2

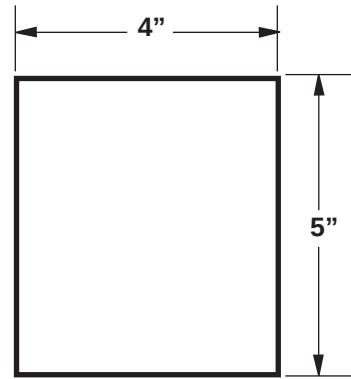
STEP 2 - WELD EXTENSION PLATE TO VEHICLE - Continued

2. Get the Extension Spring (**FIG. 10-1B**) from Parts Box. Hook one end of Spring in loop (**FIG. 10-1B**) under Extension Plate (**FIG. 10-1A**). Then hook opposite end of Spring in eye of the Safety Hook (**FIG. 10-1B**).



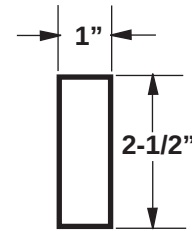
STEP 2 - WELD EXTENSION PLATE TO VEHICLE - Continued

3. Make 2 Support Straps (**FIG. 11-1**) and 2 spacers (**FIG. 11-2**) to keep Liftgate in proper position. (While welding liftgate to vehicle, Support Straps keep Platform level with Extension Plate and Spacers keep 1/8" between Platform and Extension Plate.



SUPPORT STRAP
(3/8" X 4" STEEL FLAT)
FIG. 11-1

4. Place 2 temporary Support Straps on the Extension Plate as shown in **FIGS. 11-3A & 11-3B**. Also, put 2 temporary spacers (**FIG. 11-3B**) between Platform and Extension Plate as shown in **FIG. 11-3B**. Weld the Straps and Spacers to Extension Plate (**FIG. 11-3B**).



SPACER (1/8" X 1" STEEL FLAT)
FIG. 11-2

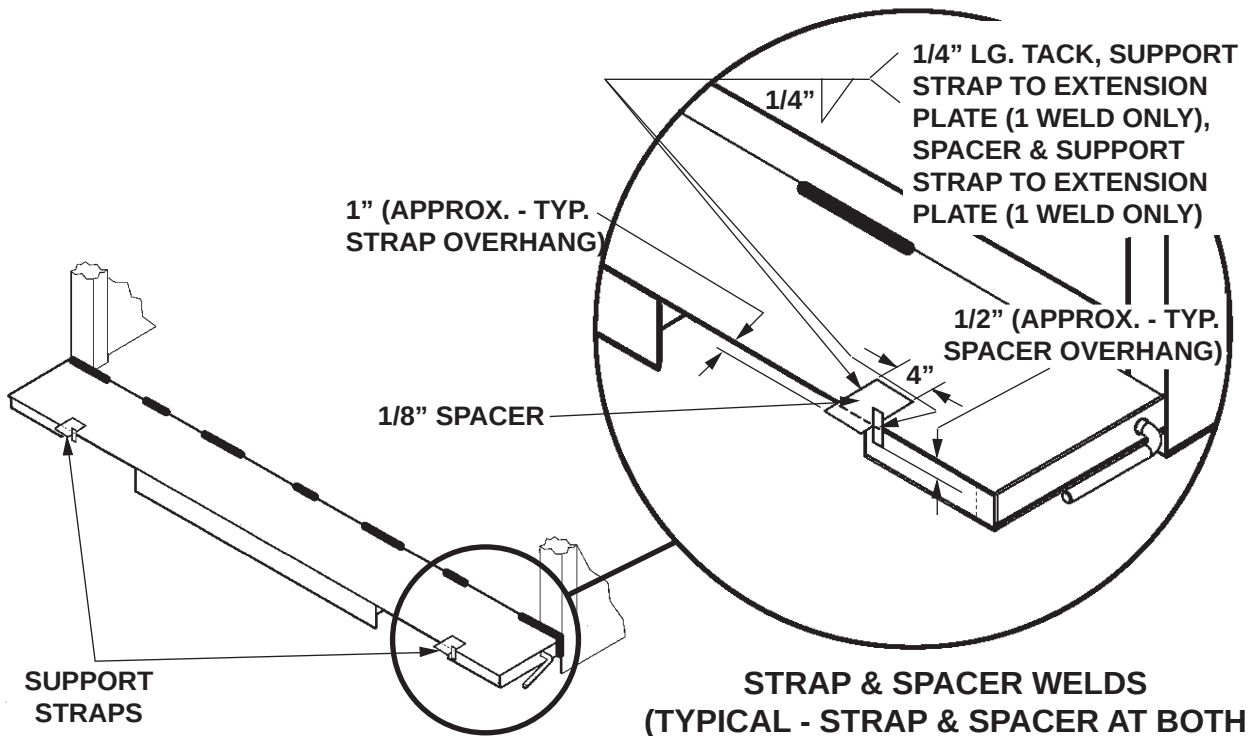


FIG. 11-3A

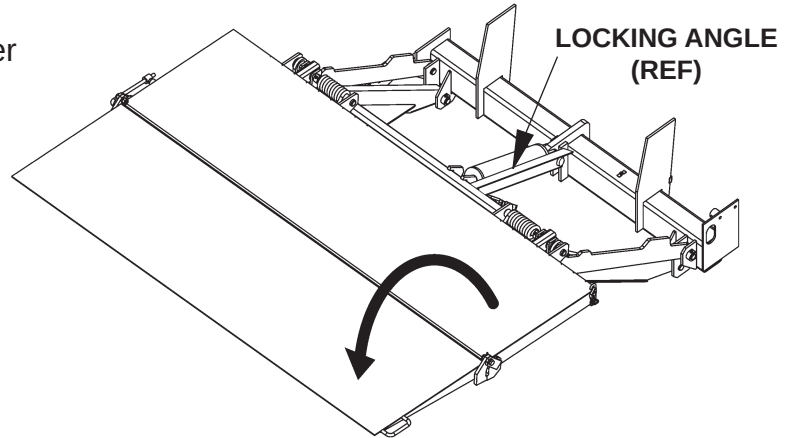
STRAP & SPACER WELDS
(TYPICAL - STRAP & SPACER AT BOTH
ENDS OF EXTENSION PLATE)
FIG. 11-3B

STEP 3 - WELD LIFTGATE TO VEHICLE

WARNING

Prevent injuries and equipment damage. Keep the **LOCKING ANGLE** in place until instructed to remove it.

1. Unfold the Platform and Flipover as shown in **FIG. 12-1**.



PLATFORM & FLIPOVER UNFOLDED
FIG. 12-1

2. Attach Chain and Hoist on each side of Platform at positions shown in **FIG. 12-2**. (Place chain all around Platform). Hoist the Liftgate and then place floor jack under Main Frame (**FIG. 12-2**). Jack the Liftgate in position. Make sure Vehicle Floor is horizontal and Pins are lined up as shown in **FIG. 12-2**.

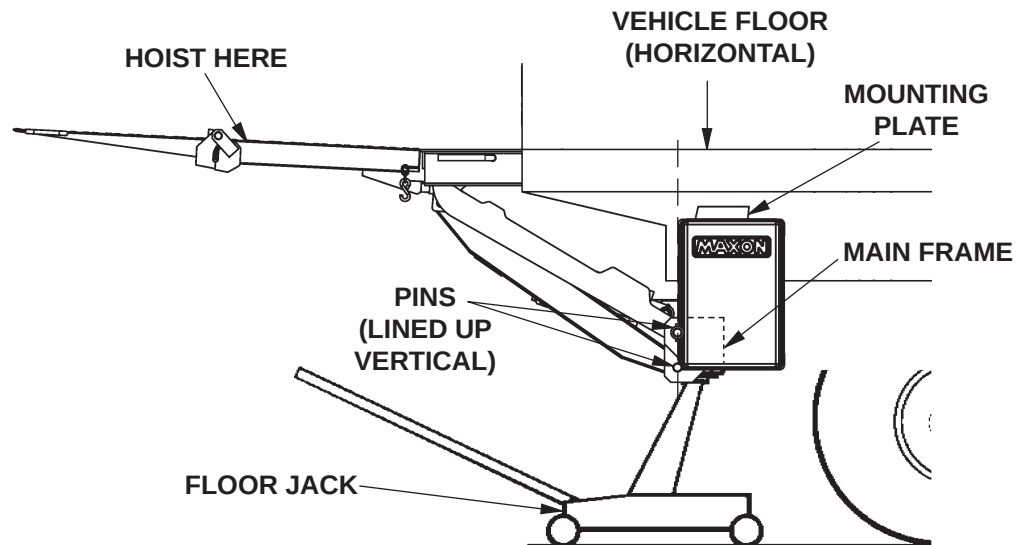


FIG. 12-2

STEP 3 - WELD LIFTGATE TO VEHICLE - Continued

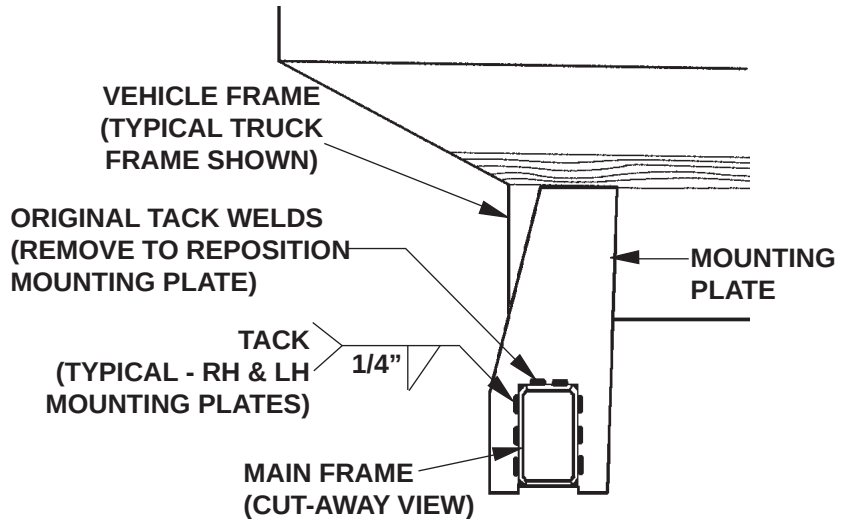
! WARNING

Liftgate is shipped from factory with Mounting Plates that are only Tack Welded to Main Frame. Weld as shown in illustration before operating Liftgate.

CAUTION

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

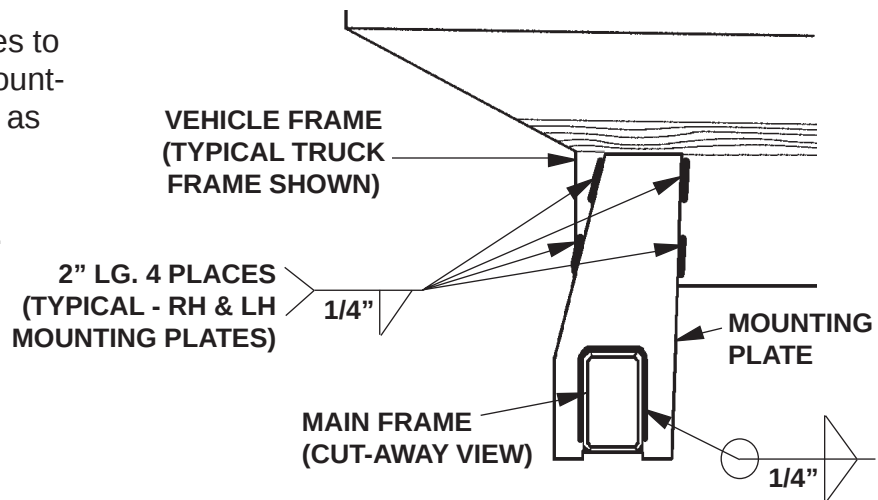
3. Check if both Mounting Plates line up with the vehicle frame. If the Mounting Plates do not line up, remove the tack welds from one Mounting Plate (**FIG. 13-1**). Make sure Liftgate stays centered on vehicle. Reposition the Mounting Plate against vehicle frame. Keep the Mounting Plate in vertical position. Tack weld as shown in **FIG. 13-1**. Repeat for second Mounting Plate (reposition and tack weld).



REPOSITIONING MOUNTING PLATE
(RH SIDE SHOWN)
FIG. 13-1

NOTE: Weld both Mounting Plates to vehicle frame before welding Mounting Plates to Main Frame.

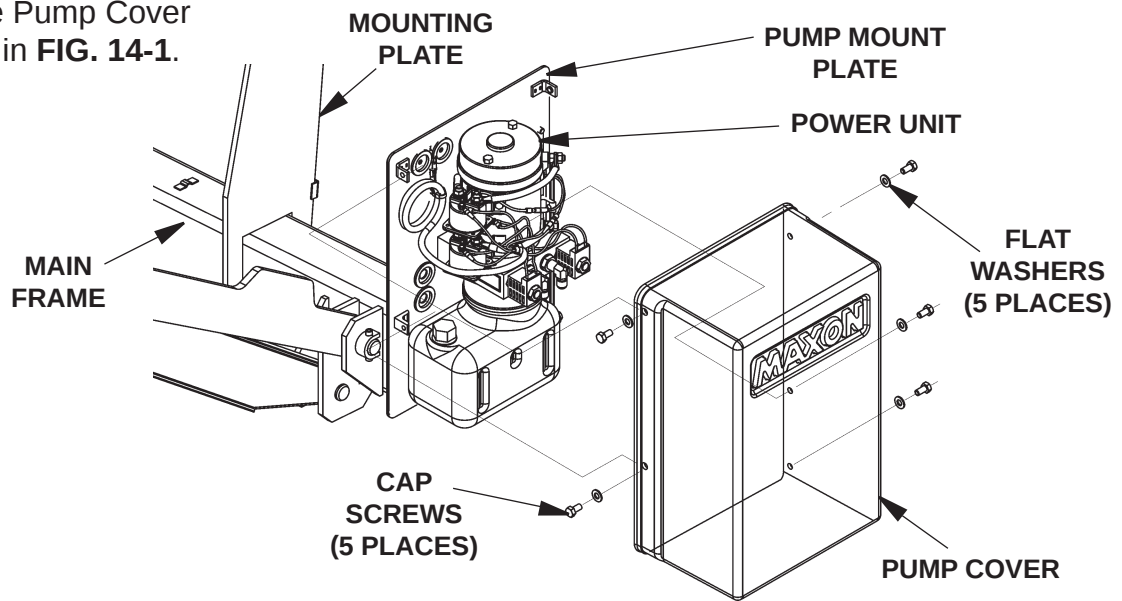
4. Clamp both Mounting Plates to vehicle frame. Weld the Mounting Plates to vehicle frame as shown in **FIG. 13-2**. Next, weld both Mounting Plates to Main Frame (**FIG. 13-2**). Remove clamps.



WELD TO VEHICLE FRAME AND MAIN FRAME
(RH SIDE SHOWN)
FIG. 13-2

STEP 4 - RUN HYDRAULIC LINES (GRAVITY DOWN)

1. Unbolt the Pump Cover as shown in **FIG. 14-1**.



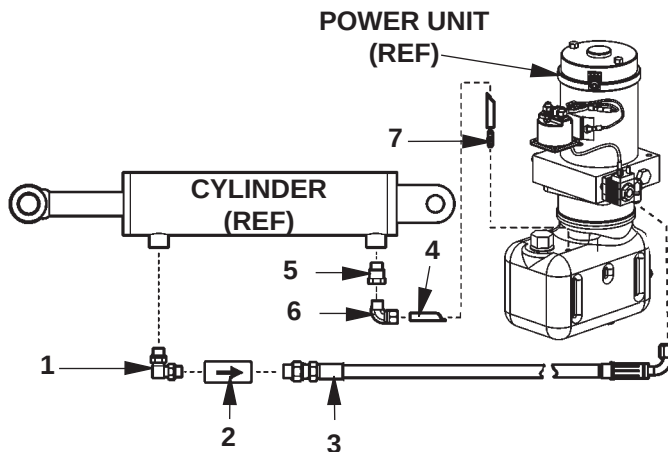
UNBOLTING PUMP BOX COVER
FIG. 14-1

2. Get the Hydraulic System parts (**FIG. 14-1** and **TABLE 14-1**) from Parts Box.

! CAUTION

Always route hydraulic hoses clear of moving parts, brake lines, sharp edges and exhaust systems. Avoid making sharp bends in hoses. Attach securely. If drilling is necessary, first check behind the drilling surface so you do not damage any fuel lines, vent lines, brake lines or wires.

3. Run hose (**FIG. 14-2, ITEM 3**) and plastic hose (**FIG. 14-2, ITEM 4**) from Power Unit to Cylinder as follows.



HYDRAULIC SYSTEM PARTS
FIG. 14-2

NOTE: Make sure arrow on Flow Control Valve points toward the Pump (**FIG. 14-2, ITEM 2**).

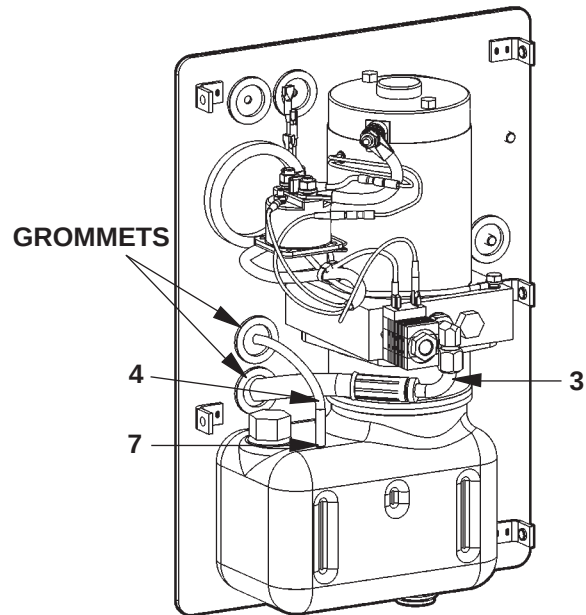
ITEM	DESCRIPTION	QTY.	P/N
1	ELBOW, 90 DEG, O-RING, #6 M-M	1	906722-01
2	FLOW REGULATOR VALVE	1	906709-02
3	HOSE ASSY, 3/8"HP, 54" LG.	1	280635-01
4	PLASTIC HOSE, 60-1/2" LG.	1	224370-07
5	ADAPTER, 9/16"-18"M - 1/4"F	1	228012
6	ELBOW, BRASS 1/4" X 1/4"	1	202406
7	DUAL BARBED FITTING, 1/64" I.D.	1	906728-01

HYDRAULIC SYSTEM PARTS
TABLE 14-1

STEP 4 - RUN HYDRAULIC LINES (GRAVITY DOWN) - Continued

NOTE: Hydraulic lines and electrical lines must be run into Pump Box through sealing grommets (**FIG. 15-1**). To keep a good seal on hydraulic & electrical lines, never cut the sealing grommets.

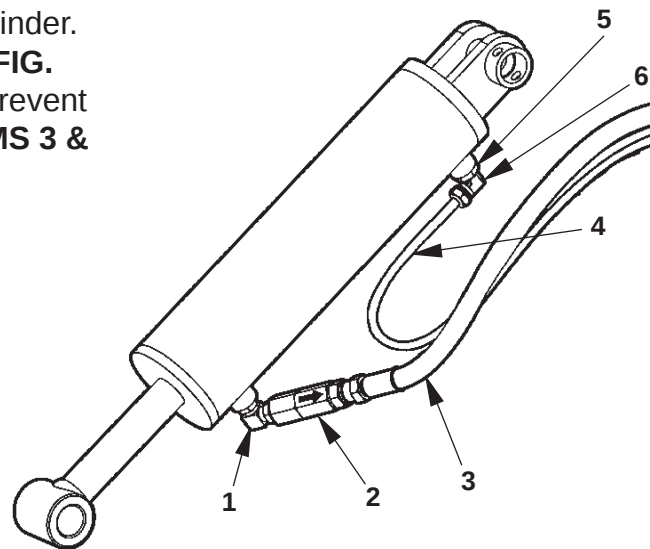
4. Connect hose (**FIG. 15-1, ITEM 3**) to Power Unit. Connect plastic hose and barbed fitting (**FIG. 15-1, ITEMS 4 & 7**) to Pump Reservoir.



**HOSES RUN FROM
POWER UNIT
FIG. 15-1**

NOTE: Make sure arrow on Flow Control Valve points toward the Pump (**FIG. 15-2, ITEM 2**).

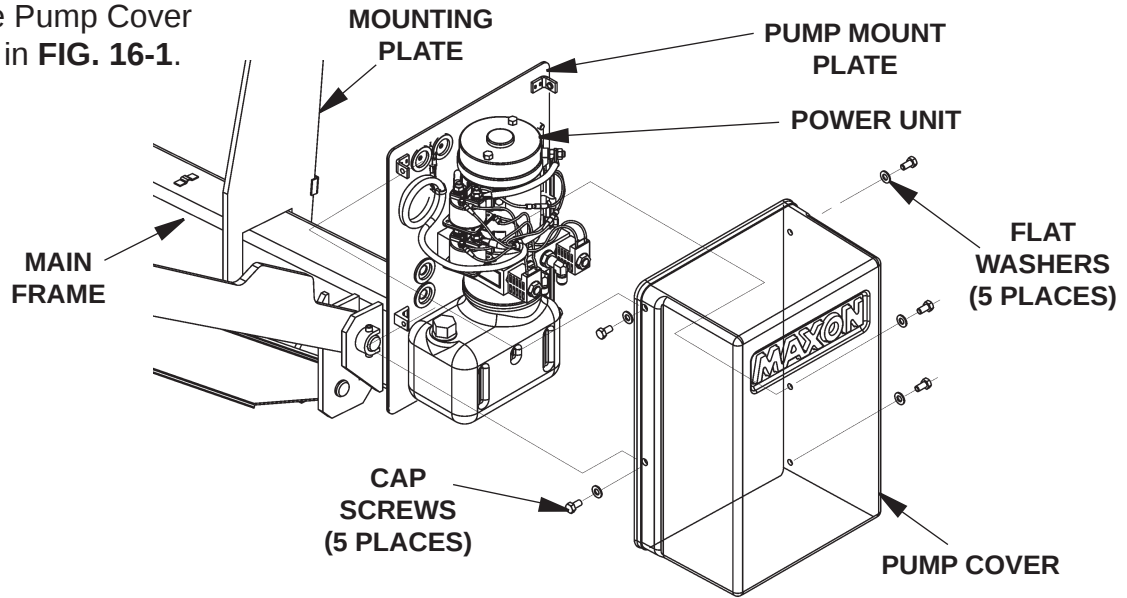
5. Connect elbow, Flow Control Valve, and hose (**FIG. 15-2, ITEMS 1, 2 & 3**) to Cylinder. Also, connect fittings and plastic hose (**FIG. 15-2, ITEMS 4, 5, & 6**) to Cylinder. To prevent kinking, position hoses (**FIG. 15-2, ITEMS 3 & 4**) as shown in **FIG. 15-2**.



**HOSE & TUBING RUN TO
HYDRAULIC CYLINDER
FIG. 15-2**

STEP 4 - RUN HYDRAULIC LINES (POWER DOWN)

1. Unbolt the Pump Cover as shown in **FIG. 16-1**.



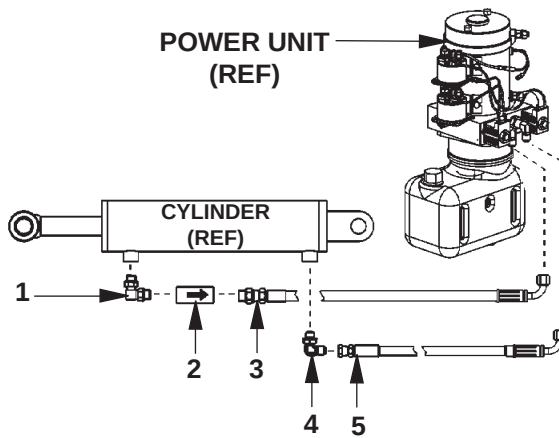
UNBOLTING PUMP BOX COVER
FIG. 16-1

2. Get the Hydraulic System parts (**FIG. 16-1** and **TABLE 16-1**) from Parts Box.

! CAUTION

Always route hydraulic hoses clear of moving parts, brake lines, sharp edges and exhaust systems. Avoid making sharp bends in hoses. Attach securely. If drilling is necessary, first check behind the drilling surface so you do not damage any fuel lines, vent lines, brake lines or wires.

3. Run hoses (**FIG. 16-2**, **ITEMS 3 & 5**) from Power Unit to Cylinder as follows.



HYDRAULIC SYSTEM PARTS
FIG. 16-2

NOTE: Make sure arrow on Flow Control Valve points toward the Pump (**FIG. 16-2**, **ITEM 2**).

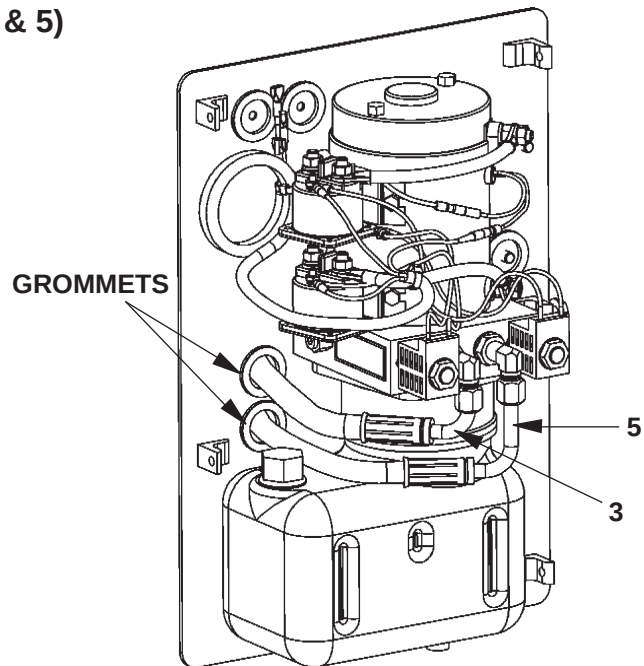
ITEM	DESCRIPTION	QTY.	P/N
1	ELBOW, 90 DEG, O-RING, #6 M-M	1	906722-01
2	FLOW REGULATOR VALVE	1	906709-02
3	HOSE ASSY, 3/8"HP, 50" LG.	1	280634-01
4	ELBOW, 90 DEG. SAE #6-JIC37 #6	1	905152
5	HOSE ASSY, 3/8"HP, 54" LG.	1	280635-01

HYDRAULIC SYSTEM PARTS
TABLE 16-1

STEP 4 - RUN HYDRAULIC LINES (POWER DOWN) - Continued

NOTE: Hydraulic lines and electrical lines must be run into Pump Box through sealing grommets (**FIG. 17-3**). to keep a good seal on hydraulic & electrical lines, never cut the sealing grommets.

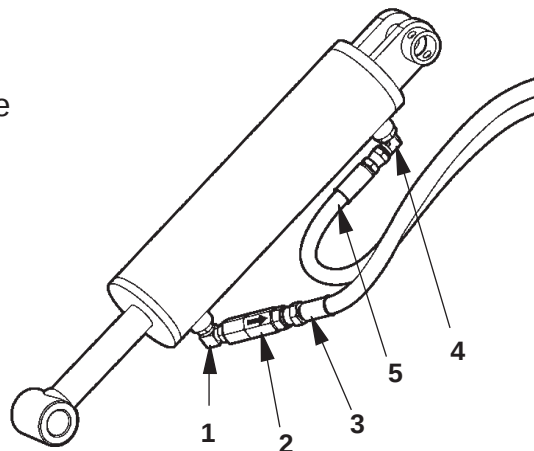
4. Connect hoses (**FIG. 17-1, ITEMS 3 & 5**) to Power Unit.



**HOSES RUN FROM
POWER UNIT
FIG. 17-1**

NOTE: Make sure arrow on Flow Control Valve points toward the Pump (**FIG. 17-2, ITEM 2**).

5. Connect elbow, Flow Control Valve, and hose (**FIG. 17-2, ITEMS 1, 2 & 3**) to Cylinder. Also, connect second elbow and hose (**FIG. 17-2, ITEMS 4 & 5**) to Cylinder. To prevent kinking, position hoses (**FIG. 17-2, Items 3 & 5**) as shown in **FIG. 17-2**.



**HOSES RUN TO
HYDRAULIC CYLINDER
FIG. 17-2**

STEP 5 - ADD HYDRAULIC FLUID TO RESERVOIR

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.

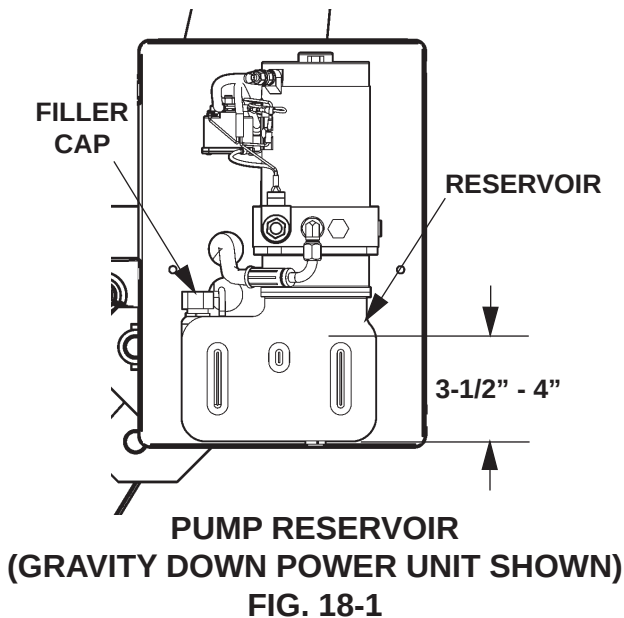
+70 to +140 Degrees F - Grade ISO 32

+40 to +105 Degrees F - Grade ISO 15

Below + 70 Degrees F - Grade ISO 10 or MIL-H-5606

See TABLES 18-1, 18-2, & 18-3 for recommended brands.

1. Pull out Filler Cap (no threads) shown in FIG. 18-1. Fill the Reservoir (FIG. 18-1) with Hydraulic Fluid to 4" above the bottom (FIG. 18-1).



ISO 32 HYDRAULIC OIL	
RECOMMENDED BRANDS	PART NUMBER
AMSOIL	AWH-05
CHEVRON	HIPERSYN 32
KENDALL	GOLDEN MV
SHELL	TELLUS T-32
EXXON	UNIVIS N-32
MOBIL	DTE-13M, DTE-24, HYDRAULIC OIL-13

TABLE 18-1

ISO 32 HYDRAULIC OIL	
RECOMMENDED BRANDS	PART NUMBER
AMSOIL	AWF-05
CHEVRON	FLUID A, AW-MV-15
KENDALL	GLACIAL BLU
SHELL	TELLUS T-15
EXXON	UNIVIS HVI-13
MOBIL	DTE-11M

TABLE 18-2

ISO 32 HYDRAULIC OIL	
RECOMMENDED BRANDS	PART NUMBER
AMSOIL	N/A
CHEVRON	FLUID A, FLUID G
KENDALL	GLACIAL BLU
SHELL	AEROSHELL FLUID-41
EXXON	UNIVIS HVI-13
MOBIL	AERO HFA

TABLE 18-3

2. Reinstall Filler Cap (FIG. 18-1).

STEP 6 - 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 so you do not damage any fuel lines, vent lines, brake lines or wires.

Clip Fused Power Cable to vehicle chassis, with fuse nearest the vehicle battery, as shown in **FIG. 19-1**. Keep enough cable near the battery to reach the positive terminal without putting tension on cable (after connection). Run bare wire end of cable to Liftgate.

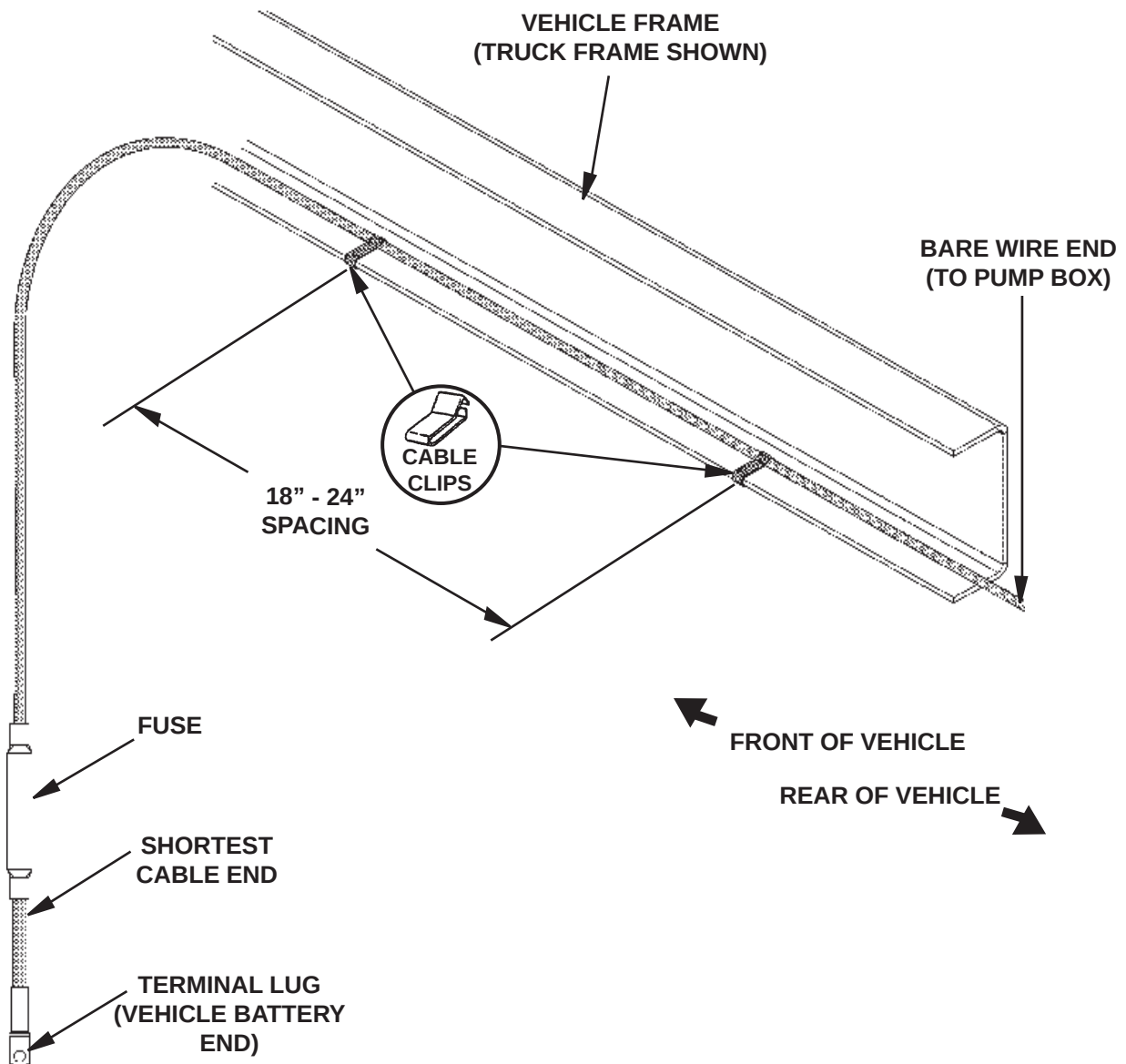
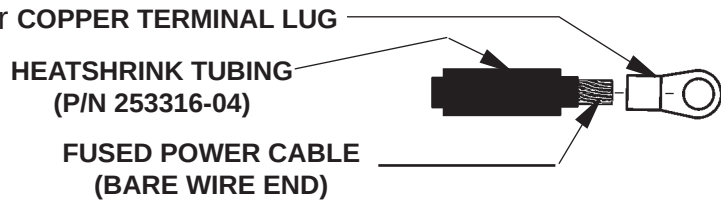


FIG. 19-1

STEP 7 - CONNECT POWER CABLE

NOTE: Hydraulic lines and electrical lines must be run into Pump Box through sealing grommets (**FIG. 20-3**). to keep a good seal on hydraulic & electrical lines, never cut the sealing grommets.

1. 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. 20-1**). Measure (if needed) and then cut excess cable from bare wire end of cable. Put heatshrink tubing (Parts Box) (**FIG. 20-1**) on the end of the cable (leave room for terminal lug). Crimp copper terminal lug (from Parts Box) on the Fused Power Cable and shrink the Heatshrink Tubing (**FIG. 20-2**).



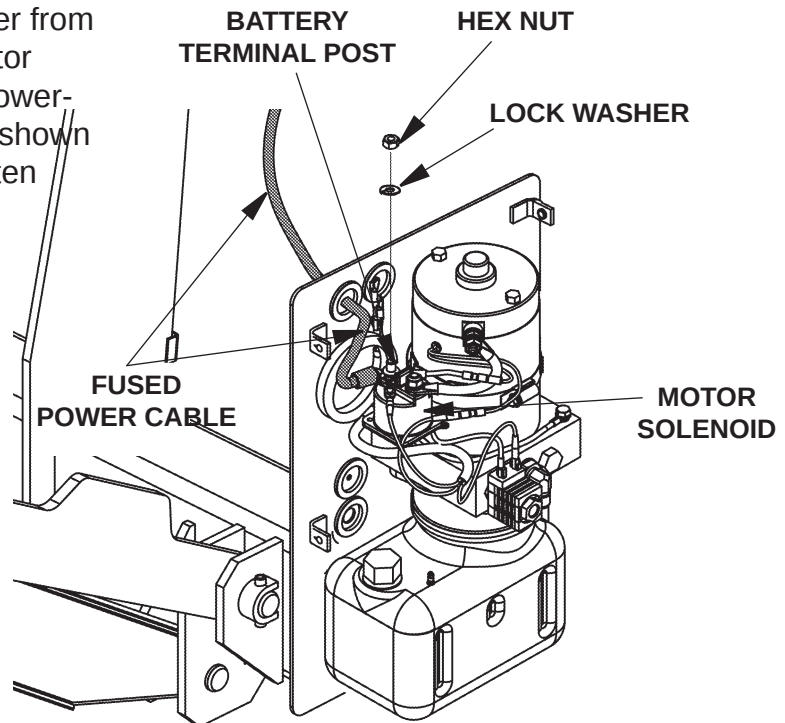
PLACING TERMINAL LUG & HEATSHRINK TUBING ON FUSED POWER CABLE
FIG. 20-1



TYPICAL FUSED POWER CABLE WITH TERMINAL LUG INSTALLED
FIG. 20-2

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

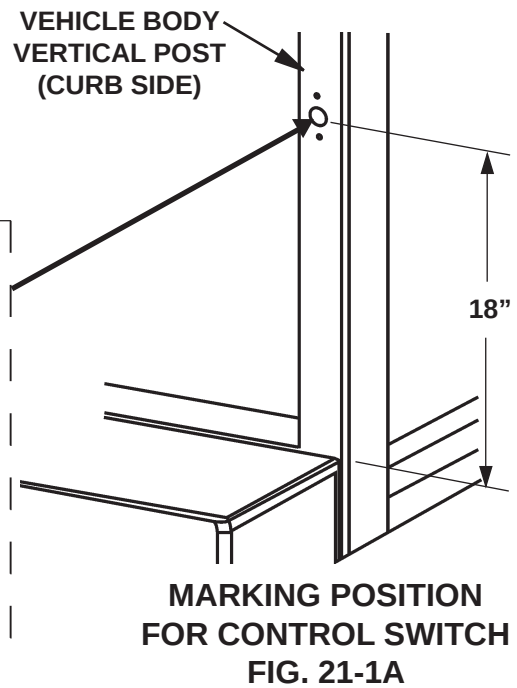
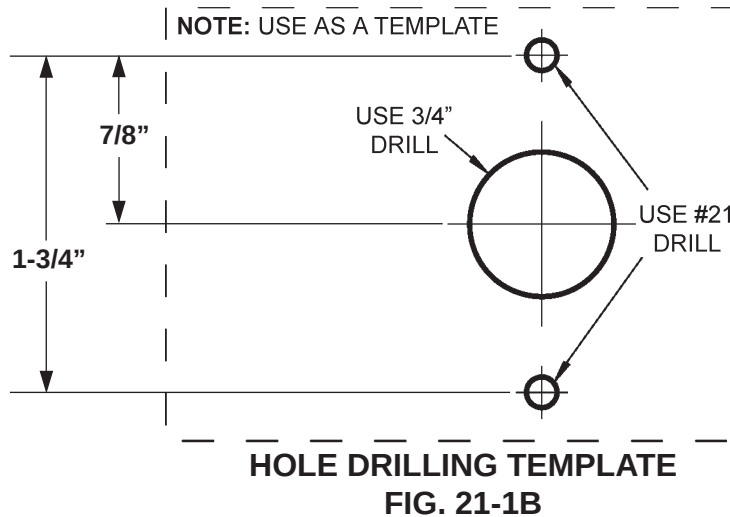
2. Remove hex nut and lock washer from Battery terminal post on the Motor Solenoid. Connect the Fused Power-Cable to the Motor Solenoid as shown in **FIG. 20-3**. Re-install and tighten lock washer and hex nut.



TYPICAL FUSED POWER CABLE CONNECTION
(GRAVITY DOWN PUMP SHOWN, HYDRAULIC HOSES NOT SHOWN)
FIG. 20-3

STEP 8 - 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. 21-1A**. Use template shown in **FIG. 21-1B**.



NOTE: Hydraulic lines and electrical lines must be run into Pump Box through sealing grommets (**FIG. 21-2**). to keep a good seal on hydraulic & electrical lines, never cut the sealing grommets.

2. Cut Tie Strap on coiled Wiring Harness (**FIG. 21-2**). Pull the Wiring Harness through grommet on the Pump Mounting Plate (**FIG. 21-2**).

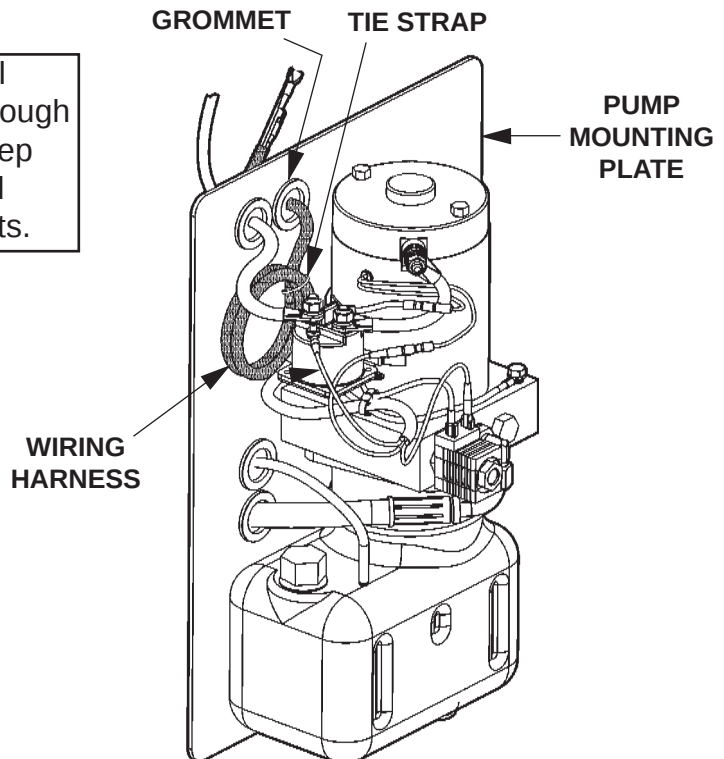
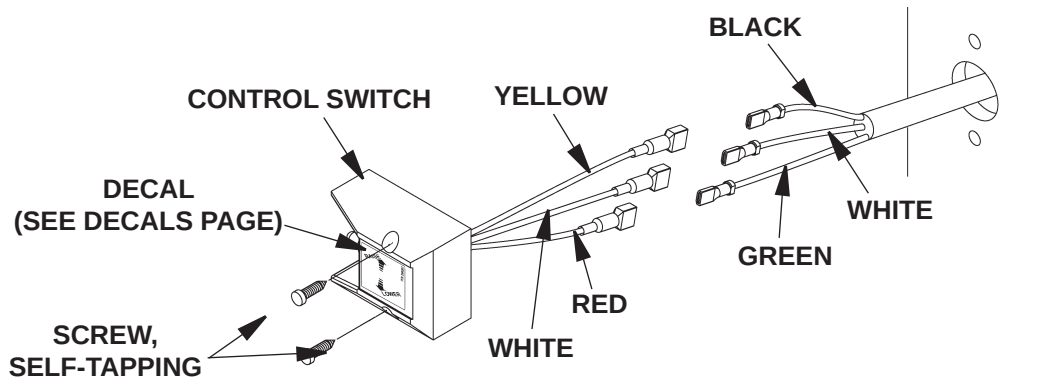
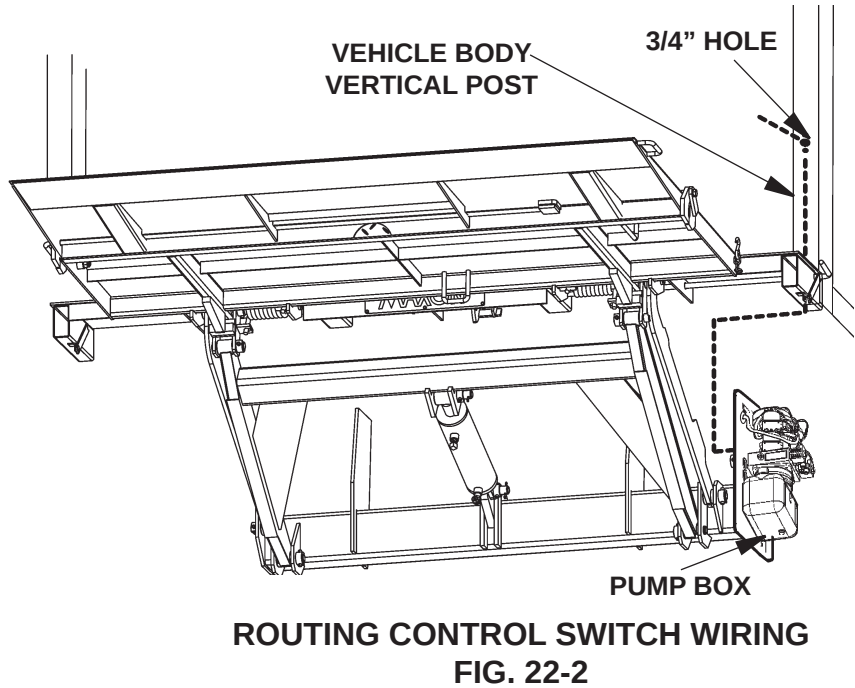


FIG. 21-2

STEP 8 - INSTALL CONTROL SWITCH - Continued

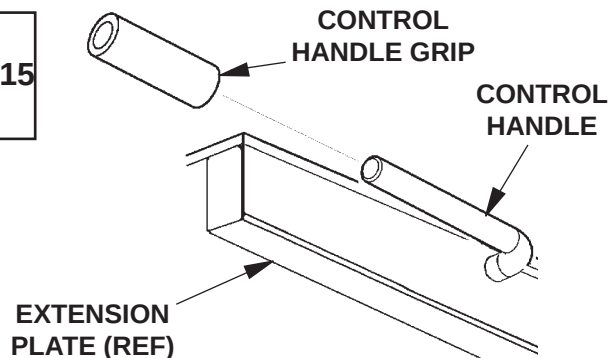
NOTE: MAXON recommends using dielectric grease on all electrical connections.

3. Run wiring harness under Vehicle Body (see dashed line - FIG. 22-1) and up through inside of Vertical Post. Then pull Control Switch wiring harness out the 3/4" hole drilled in Vertical Post (FIG. 22-1). Connect the Control Switch wiring to the wiring harness as shown in FIG. 22-2. 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. 22-2).



NOTE: If you plan to install **Rental Lock** (see STEP 15), wait until STEP 15 to install the Control Handle Grip

4. Get the Control Handle Grip (FIG. 22-3) from Parts Box. Install the Handle Grip on Control Handle as shown in FIG. 22-3.



STEP 9 - CONNECT POWER CABLE TO BATTERY

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

Remove nut from positive (+) battery terminal connector. Connect Power Cable to the positive (+) battery terminal connector (**FIG. 23-1**). Re-install and tighten nut.

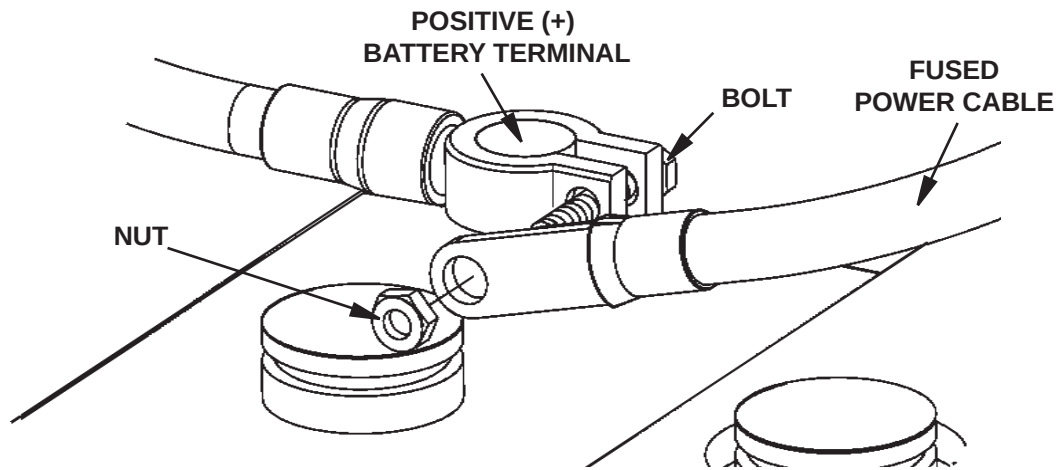


FIG. 23-1

STEP 10 - REMOVE LOCKING ANGLE

1. Push Control Switch to **RAISE** position for 3 - 4 seconds to pressurize Hydraulic System.

⚠ WARNING

To prevent possible injury, never work in the area under the Platform. Get access to the Locking Angle from the back of the Liftgate.

NOTE: To operate Liftgate, Locking Angle must be removed from Hydraulic Cylinder.

2. Remove Locking Angle (**FIG. 24-1**) from Cylinder Pins. Remove the Locking Angle (**FIG. 24-1**).

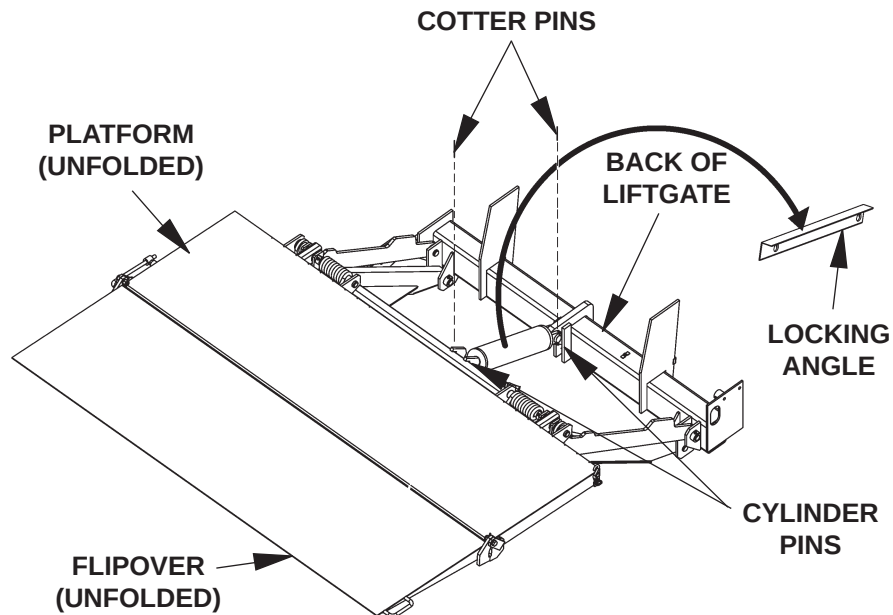


FIG. 24-1

STEP 11 - FINISH WELDING LIFTGATE TO VEHICLE

1. Remove Floor Jack and Hoist supporting Liftgate (**FIG. 25-1**).

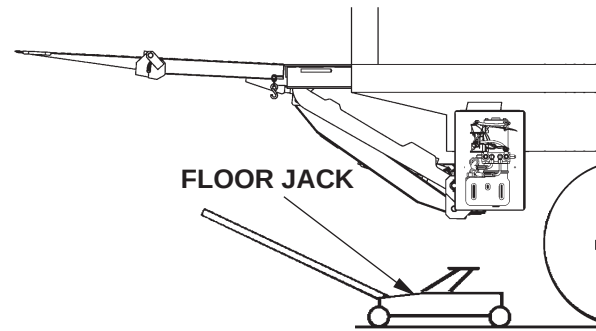


FIG. 25-1

2. **LOWER** the Platform to the ground. Remove both support straps and both spacers from Extension Plate (**FIG. 25-2**).

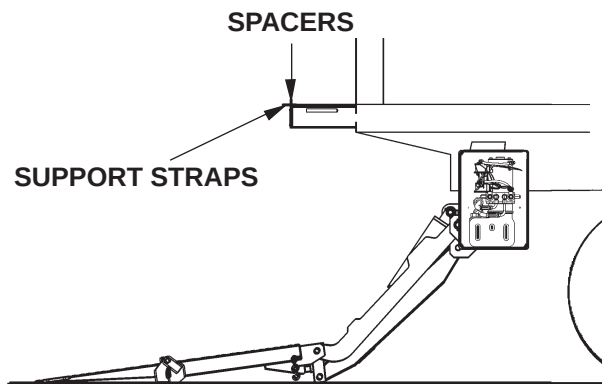


FIG. 25-2

CAUTION

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

3. Weld each of the two Mounting Plates to vehicle frame (**FIG. 25-3**).

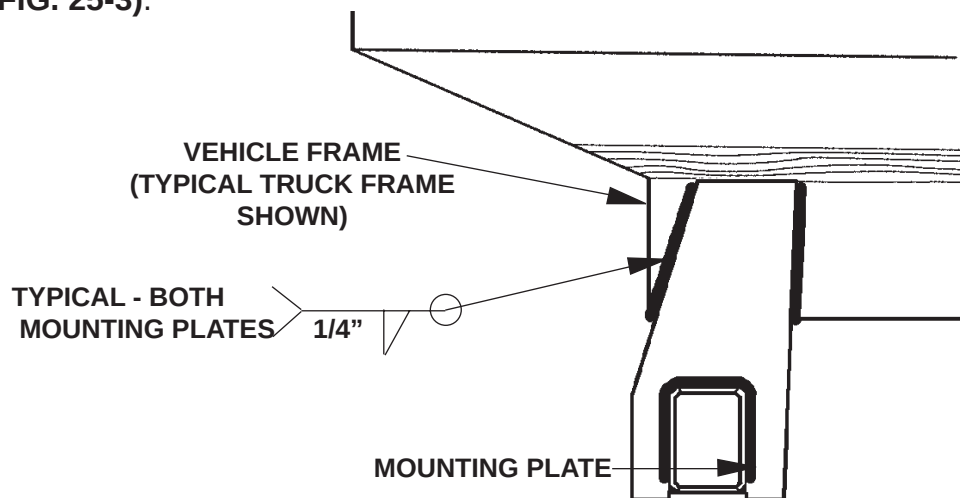
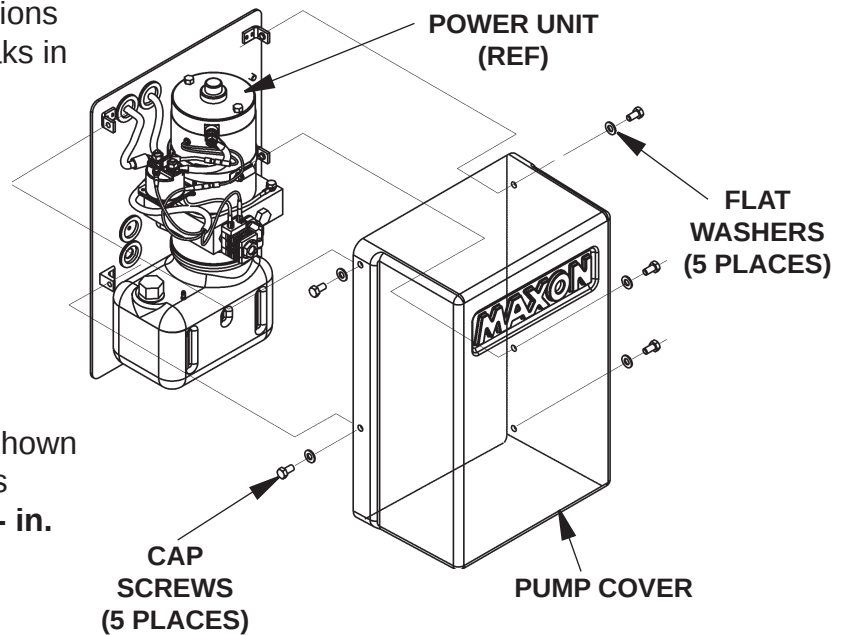


FIG. 25-3

STEP 11 - FINISH WELDING LIFTGATE TO VEHICLE - Continued

4. Check that electrical connections are tight and there are no leaks in hydraulic system.

5. Bolt on the Pump Cover as shown in **FIG. 26-1**. Torque the bolts (Cap Screws) to **10 - 14 lbs.- in.**



**BOLTING ON PUMP COVER
FIG. 26-1**

STEP 12 - PLATFORM ADJUSTMENT (IF REQUIRED)

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

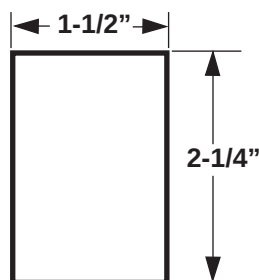
1. Make sure Platform is at ground level. Unfold the Platform and Flipover. As the Platform first touches the ground, Shackles and tip of Flipover must touch the ground at the same time (**FIG. 27-1**). If the Shackles and the tip of Flipover touch the ground at the same time, **RAISE** Platform to bed height. Tip of Flipover should be above bed level (**FIG. 27-2**). If indications are correct in both cases (**FIGS. 27-1 & 27-2**), 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. 27-3**), do instruction 2. If the Shackle touches first (**FIG. 11-1**), skip instruction 2 and do 3.

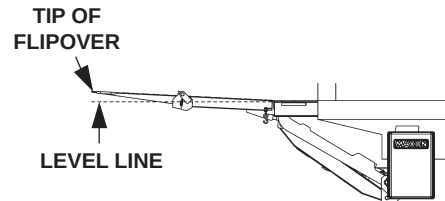
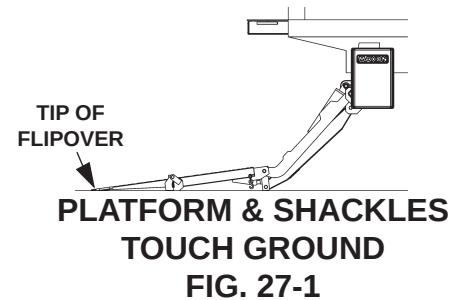
2. Make sure Platform is still at ground level. If the Shackle is not touching the ground, measure and compare distance "A" (**FIG. 27-3**) with **TABLE 27-1** to determine the correct shim. Make shims as needed (**FIG. 27-5**). Weld shim as shown in **FIG. 27-4**.

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"

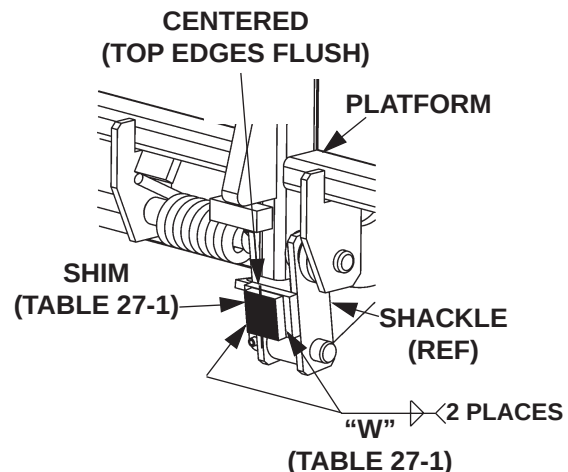
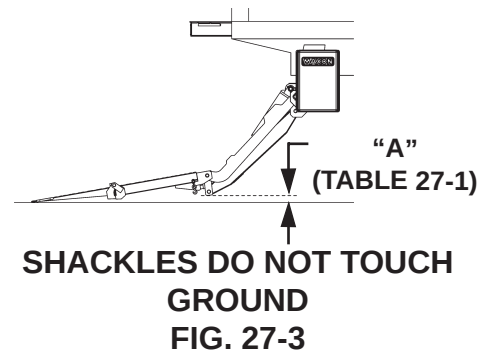
TABLE 27-1



**SHIM (1/16", 1/8", 3/16", or 1/4")
MADE FROM STEEL FLAT
FIG. 27-5**



**PLATFORM EDGE ABOVE
BED LEVEL
FIG. 27-2**



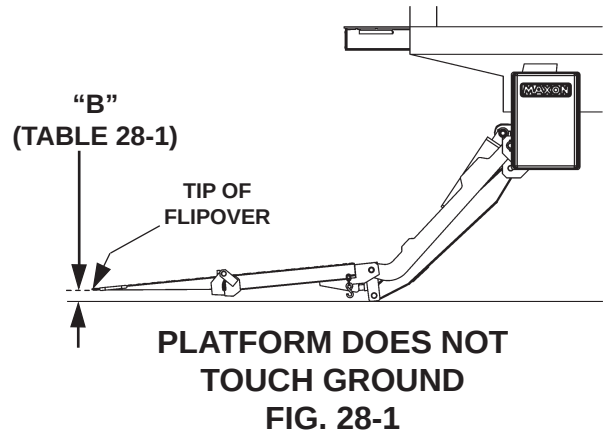
**WELDING SHIMS (CURBSIDE SHOWN)
FIG. 27-4**

STEP 12 - PLATFORM ADJUSTMENT (IF REQUIRED) -Continued

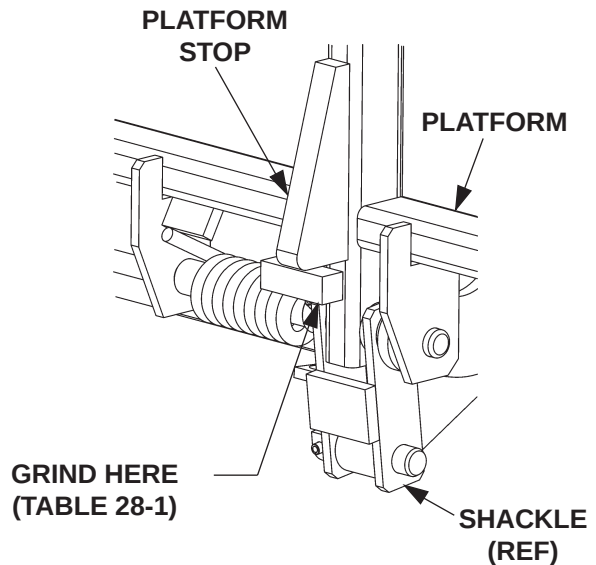
3. Make sure Platform is still at ground level. If the tip of Flipover is not touching the ground, measure and compare distance “B” (**FIG. 28-1**) with **TABLE 28-1** to determine how much to grind from the Platform Stops (**FIG. 28-2**). Grind correct amount of metal (**TABLE 28-1**) from Platform Stop as shown in **FIG. 28-2**.

RAISE 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 28-1



4. **RAISE** the Platform, then **LOWER** it 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. 27-1**.



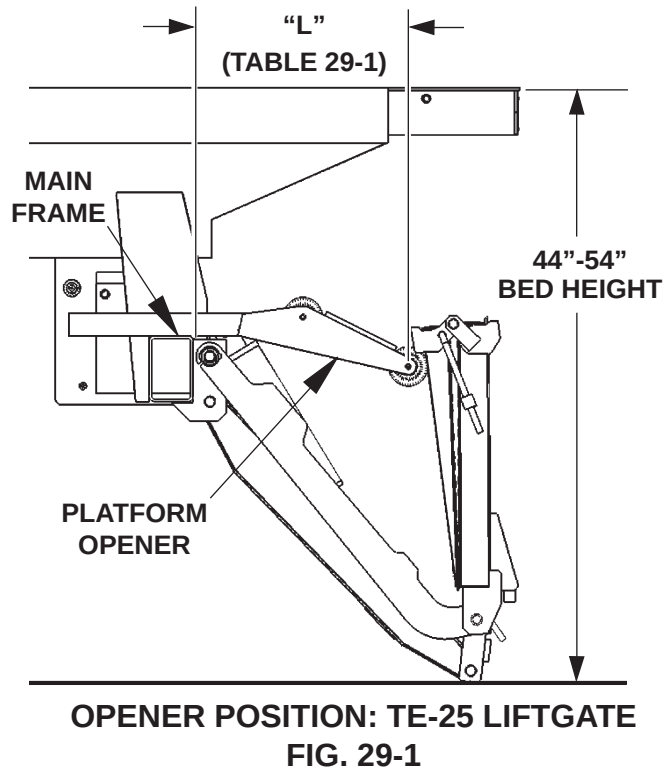
**GRINDING PLATFORM STOPS
(CURBSIDE SHOWN)
FIG. 28-2**

STEP 13 - WELD PLATFORM OPENER TO LIFTGATE

1. Make sure Platform is at ground level.

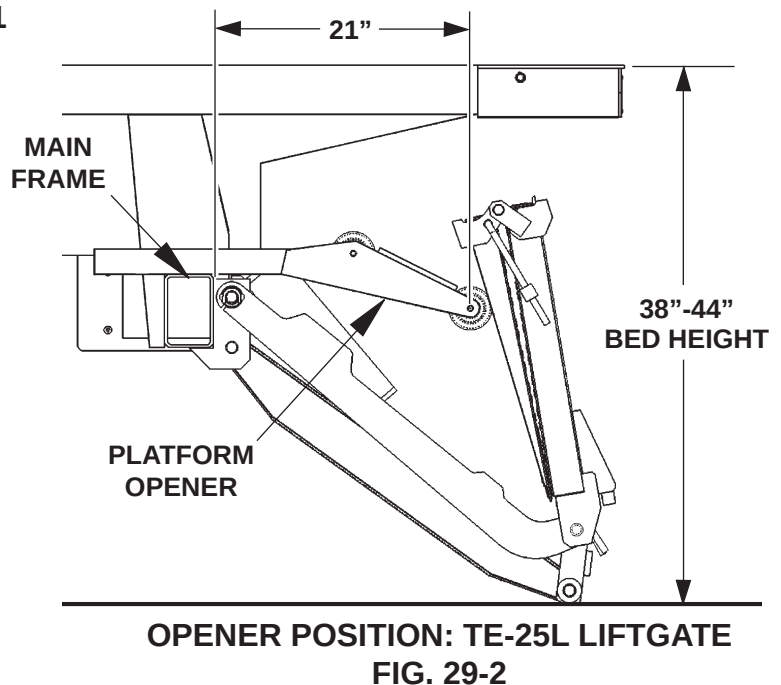
VEHICLE BED HEIGHT (TE-25 ONLY)	"L"
54	19-1/2"
52	21-1/2"
50	22-1/2"
48	24-1/2"
46	26"
44	27"

**TE-25 LIFTGATE OPENER
POSITION DIMENSIONS
TABLE 29-1**



2. Position the Opener on Main Frame as shown.

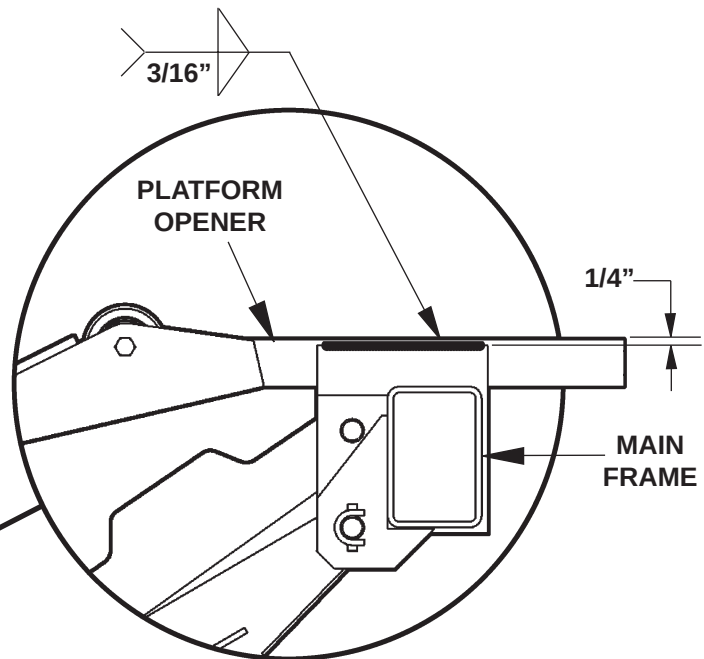
- TE-25 Liftgates:
See FIG. 29-1 and TABLE 29-1
- TE-25L Liftgates:
See FIG. 29-2



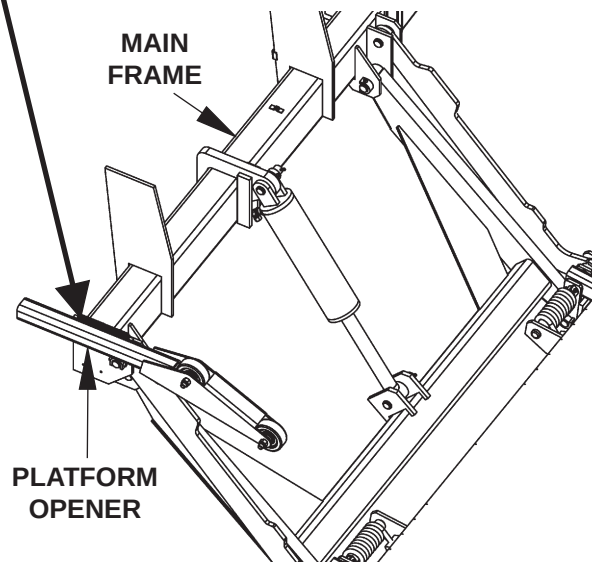
STEP 13 - WELD PLATFORM OPENER TO LIFTGATE - Continued

3. Weld Opener to Main Frame
(FIGS. 30-1A and 30-1B).

4. Stow and unfold Platform several
times to make sure there is no
interference.



WELDING THE OPENER
(VIEW FROM INBOARD SIDE)
FIG. 30-1B



OPENER POSITIONED FOR WELDING
FIG. 30-1A

STEP 14 - ADJUST SAFETY HOOK (IF REQUIRED)

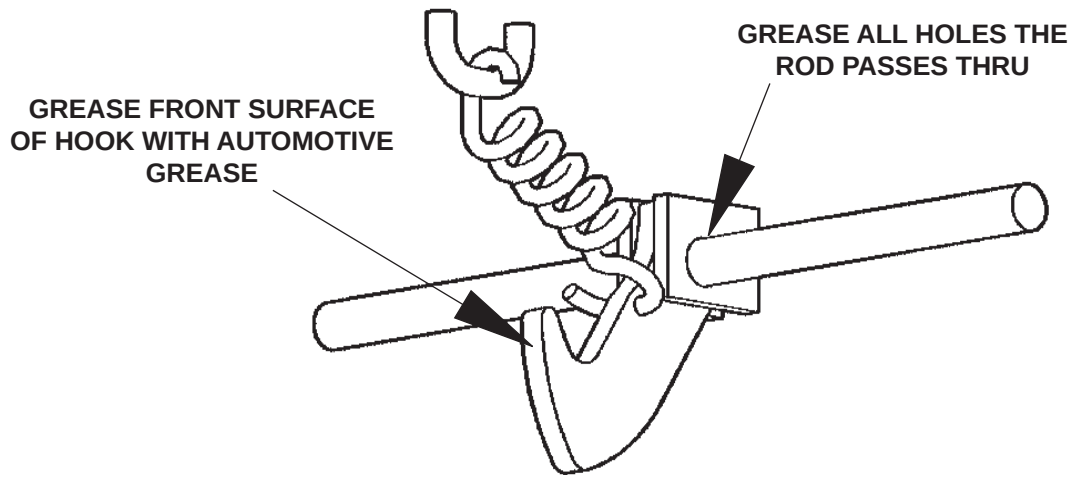


FIG. 31-1

CHECK SAFETY HOOK FUNCTION

1. When raising Platform to stowed position, listen for sound of **Platform Loop** striking **Safety Hook**.
2. When the Liftgate is stowed, see if **Platform Loop** is positioned above the **Safety Hook** as shown in FIG. 31-2.

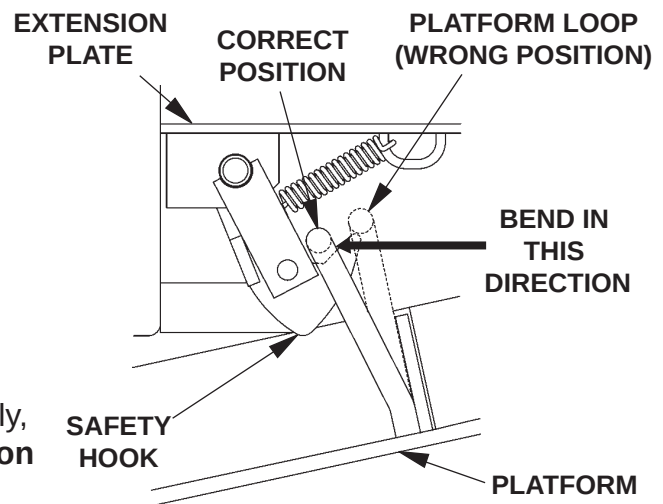


FIG. 31-2

LOOP ADJUSTMENT

1. If the Safety Hook is not positioned correctly, **LOWER** Platform to ground level (**Operation Manual M-98-09**).
2. Adjust by bending the Platform Loop as shown in FIG. 31-2.
3. Stow the Platform and check for correct Safety Hook position. Repeat adjustment if required.

STEP 15 - WELD ON LOCK BRACKET

CAUTION

Prevent damaged Grip. Finish welding Rental Lock before installing Control Handle Grip.

NOTE: Before positioning the Locking Bracket, make sure Safety Hook is hooked correctly to Platform Loop (see previous step).

1. From the Parts Box, get the 6-1/2" Lock Bracket (P/N 203417), 1" Inner Bracket (P/N 203570), 3/8"-16 x 1" Bolt (P/N 900014-4), and 3/8"-16 Nut (P/N 0340634) shown in FIG. 32-1. Bolt the Inner Bracket to the Lock Bracket with 3/8"-16 Bolt and 3/8"-16 Nut. Keep the nut loose so Bracket can rotate.

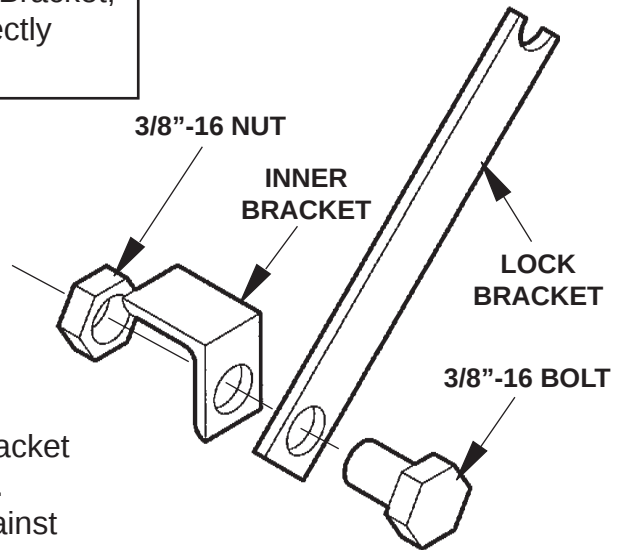


FIG. 32-1

2. Fit the half-round cut-out end of Lock Bracket to Control Handle as shown in FIG. 32-2. Butt the top face of the Inner Bracket against the bottom of Extension Plate.
3. Position the Right Hand (RH) side face of the Inner Bracket flush with RH side of Extension Plate (FIG. 32-2). Weld top face of Inner Bracket to bottom of Extension Plate (FIG. 32-2). Make sure there is a 1/16" gap between Inner Bracket and Lock Bracket (FIG. 32-2). Then weld Lock Bracket to Control Handle (FIG. 32-2). Remove nut and bolt (FIG. 32-2). (If required, a padlock or freight car-type seal can be used to lock the Control Handle.)

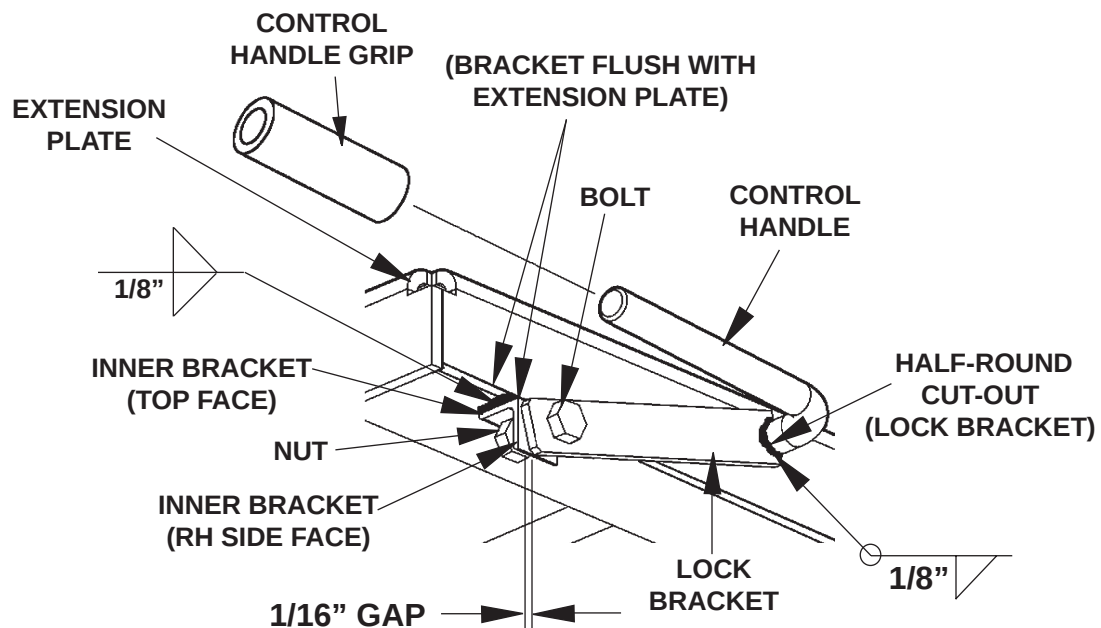


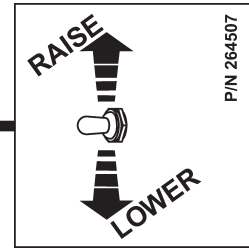
FIG. 32-2

4. Install the Control Handle Grip (from Parts Box) on Control Handle as shown in FIG. 32-2.

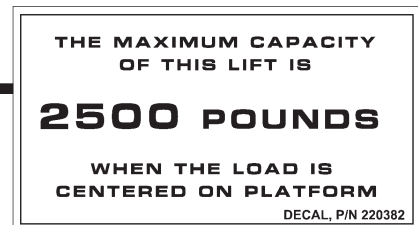
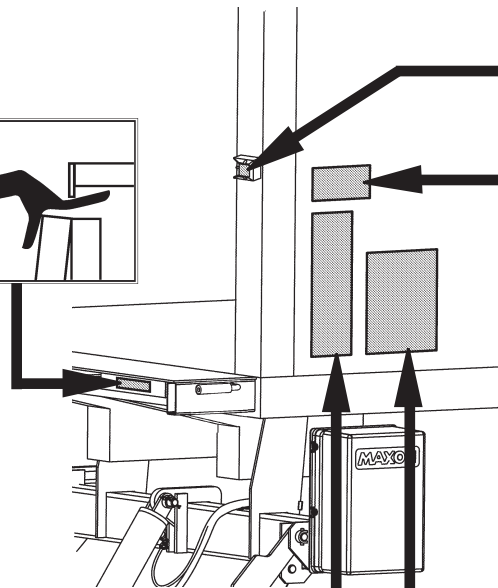
STEP 16 - DECALS



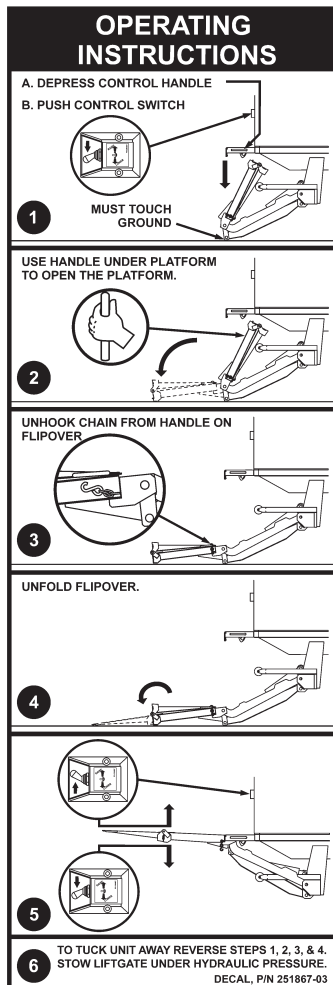
CAUTION DECAL
P/N 265736-01



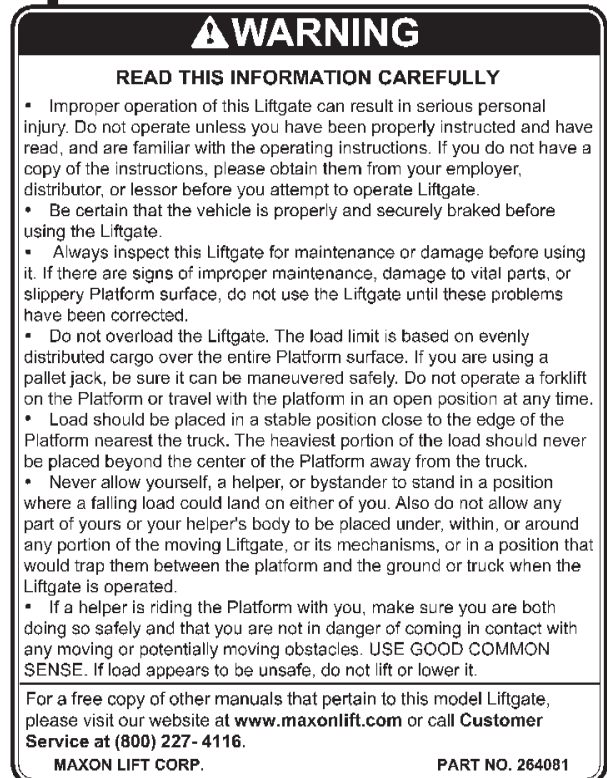
DECAL
P/N 264507



DECAL
P/N 220382



INSTRUCTION DECAL
P/N 251867-03

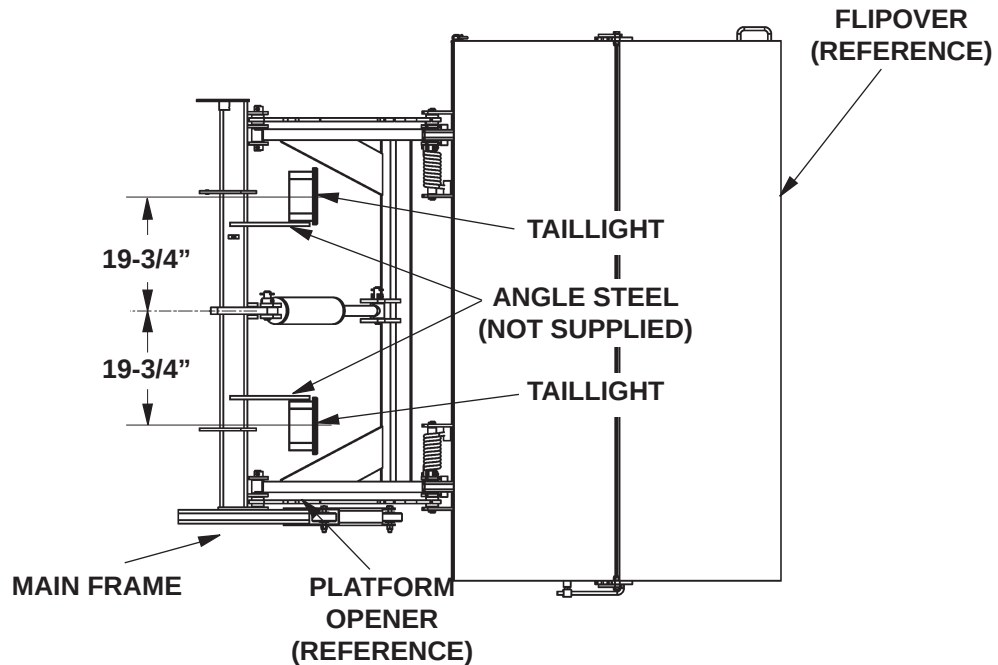


DECAL
P/N 264081

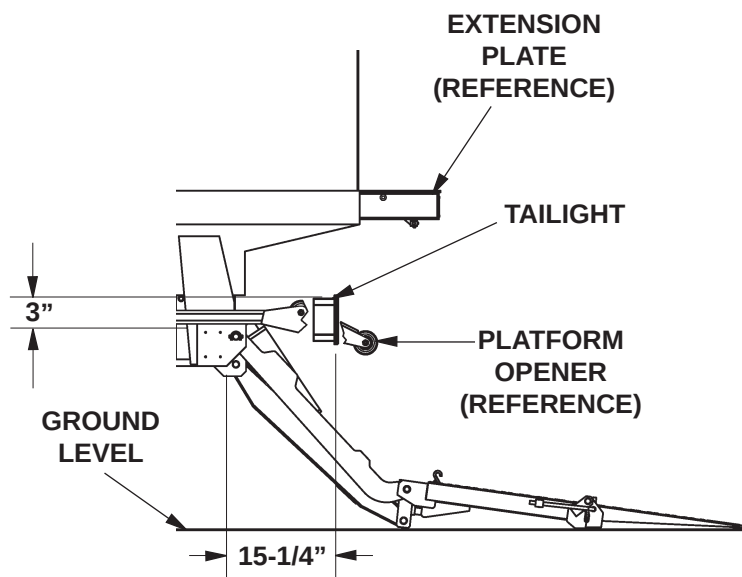
FIG. 33-1

STEP 17 - VEHICLE TAILLIGHT POSITIONING (IF REQUIRED)

NOTE: Positions are based on using taillights of 6-3/4" height by 5-3/4" width. Larger taillights may interfere with Liftgate. Taillights and attaching hardware are not provided with the Liftgate.



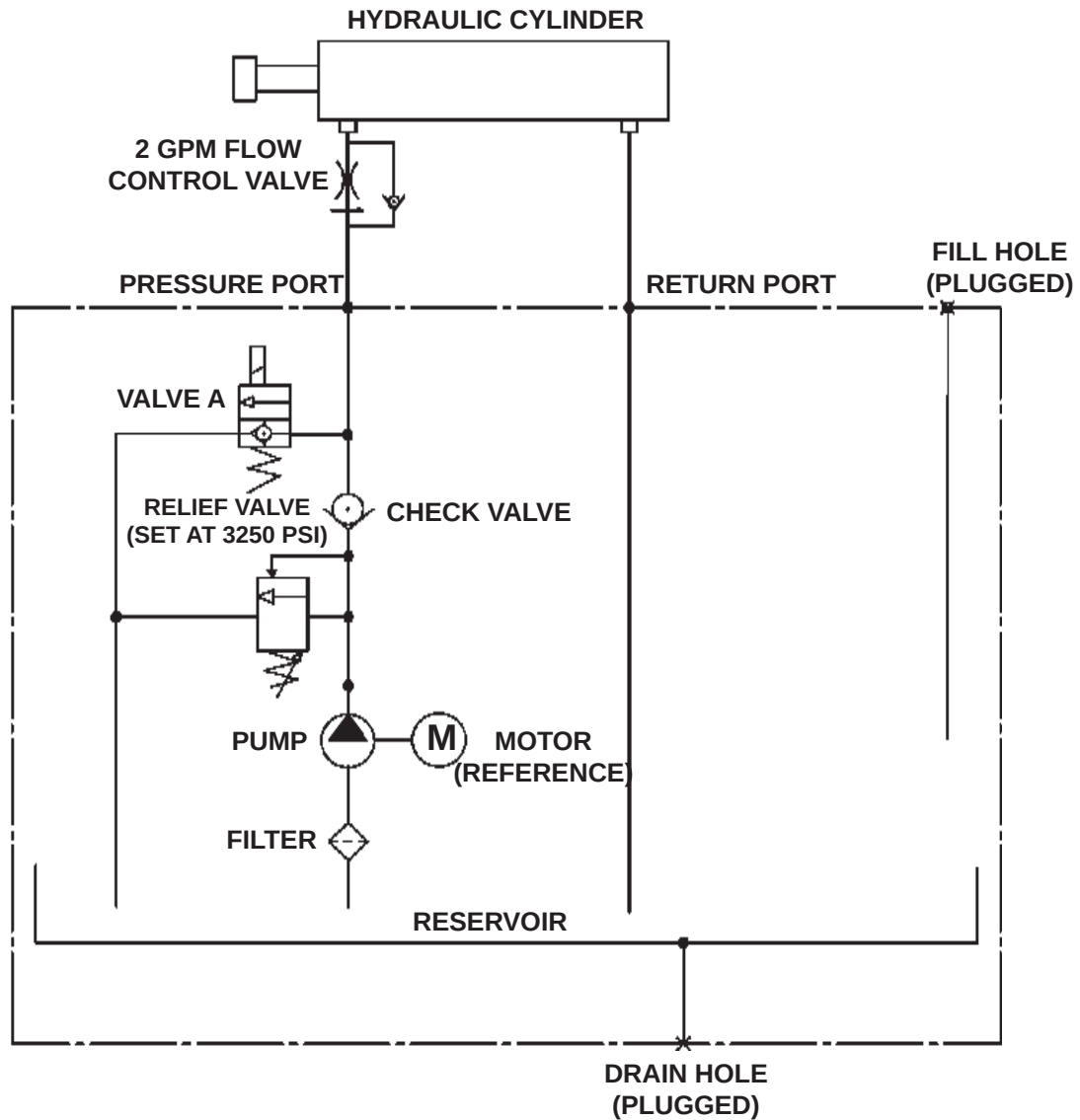
LIFTGATE TOP VIEW
FIG. 34-1



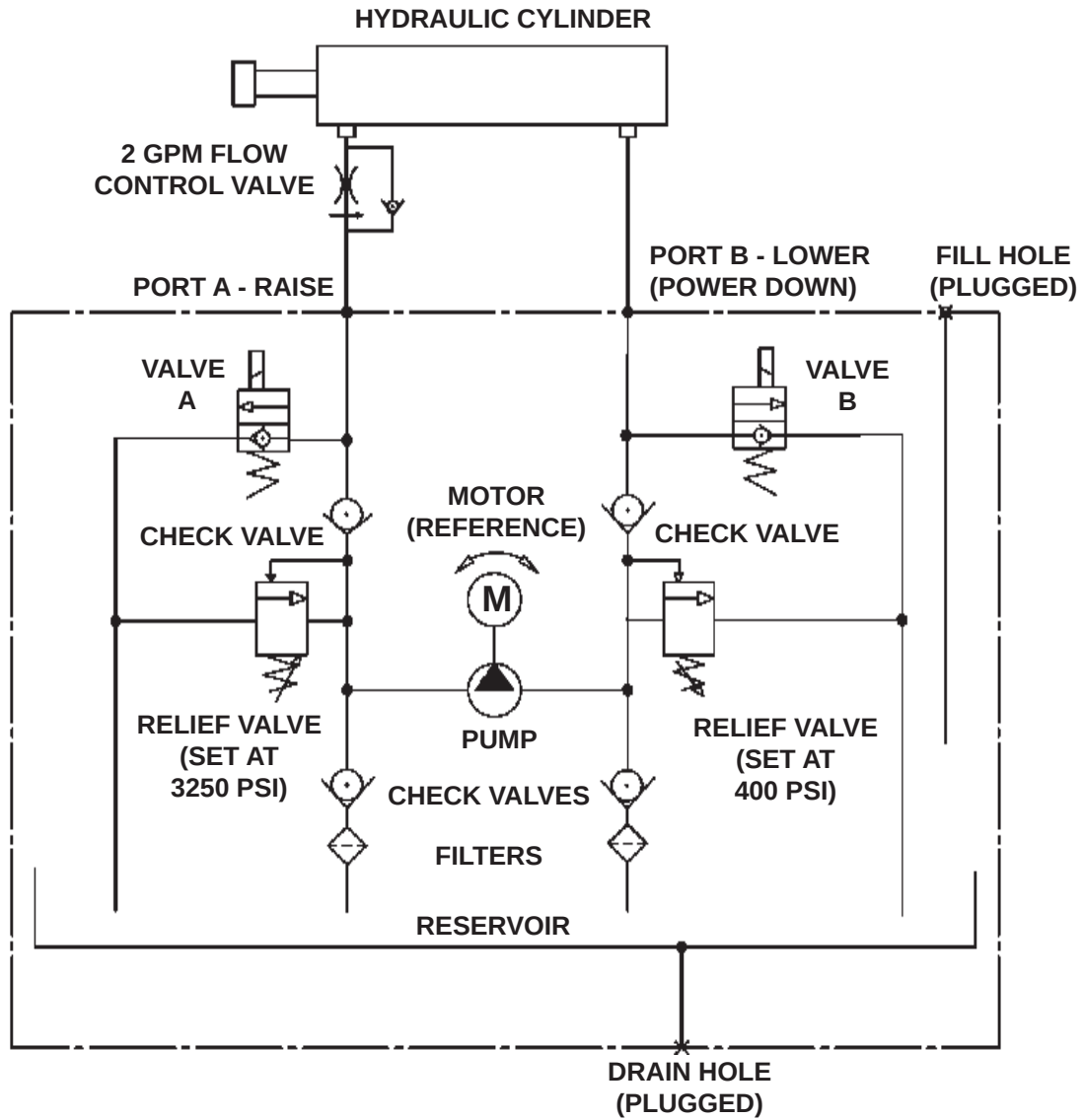
LIFTGATE SIDE VIEW - LEFT HAND SIDE SHOWN
FIG. 34-2

HYDRAULIC SYSTEM DIAGRAMS

HYDRAULIC SCHEMATIC (GRAVITY DOWN)

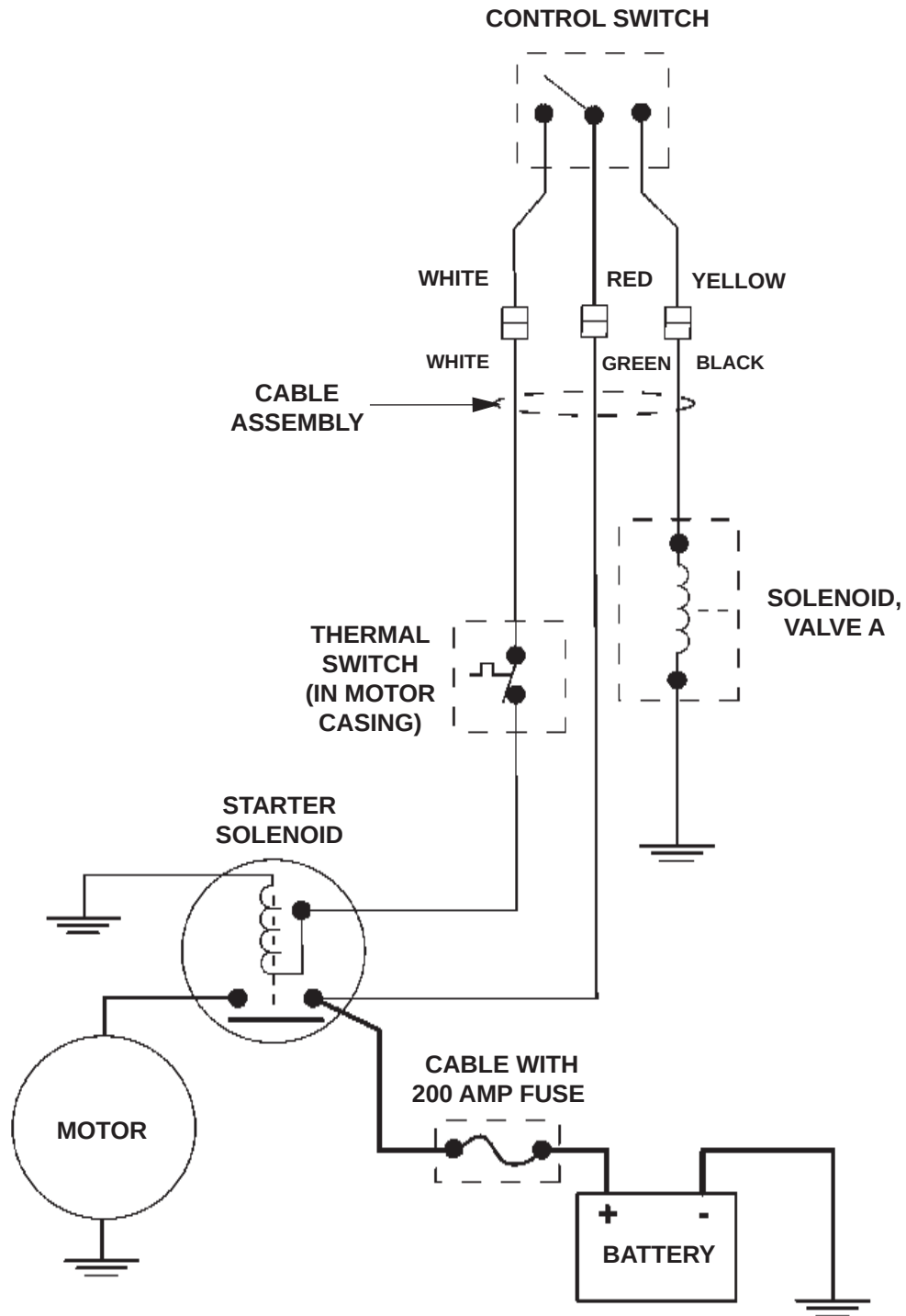


HYDRAULIC SCHEMATIC (POWER DOWN)

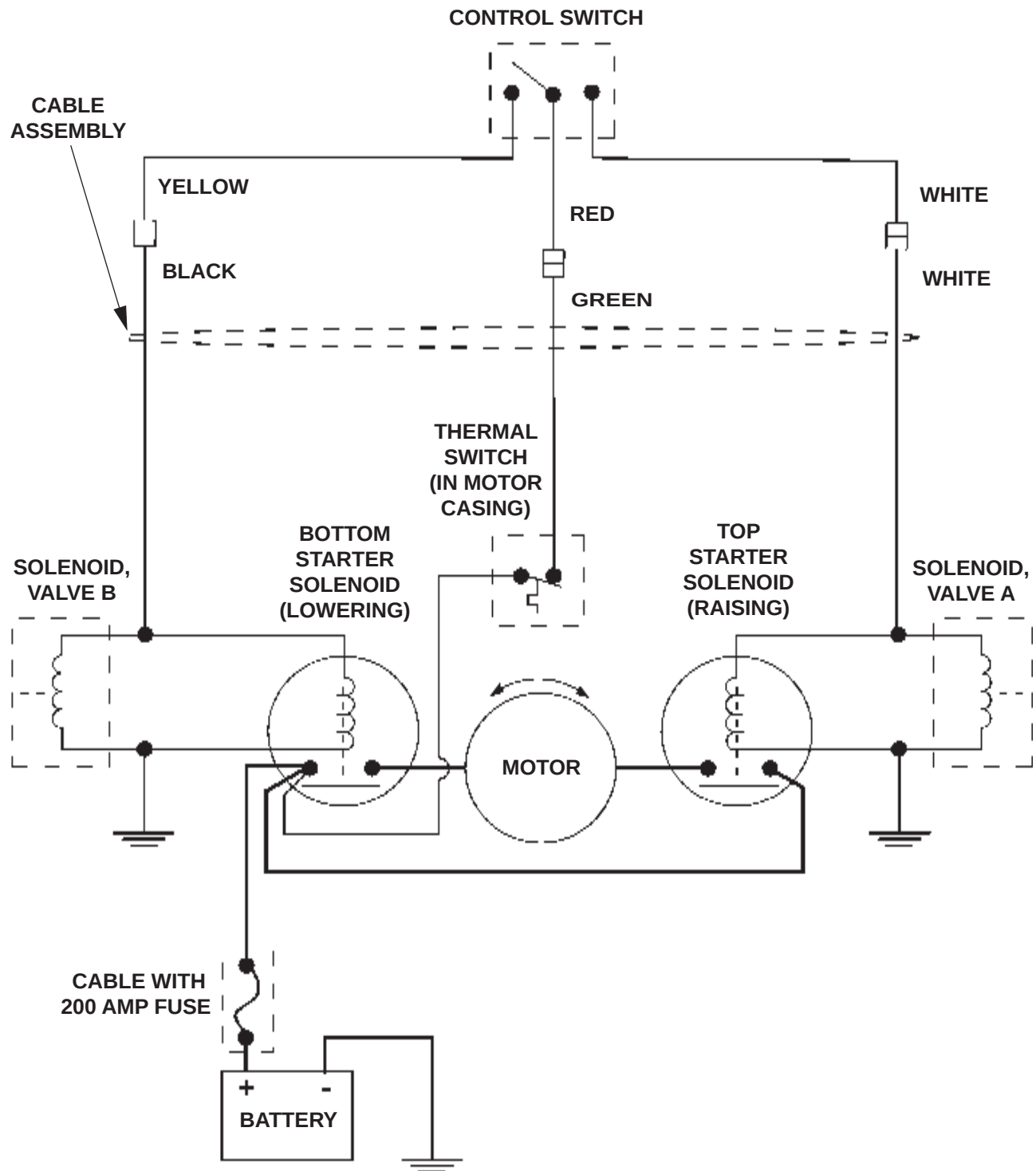


ELECTRICAL SYSTEM DIAGRAMS

ELECTRICAL SCHEMATIC (GRAVITY DOWN)



ELECTRICAL SCHEMATIC (POWER DOWN)

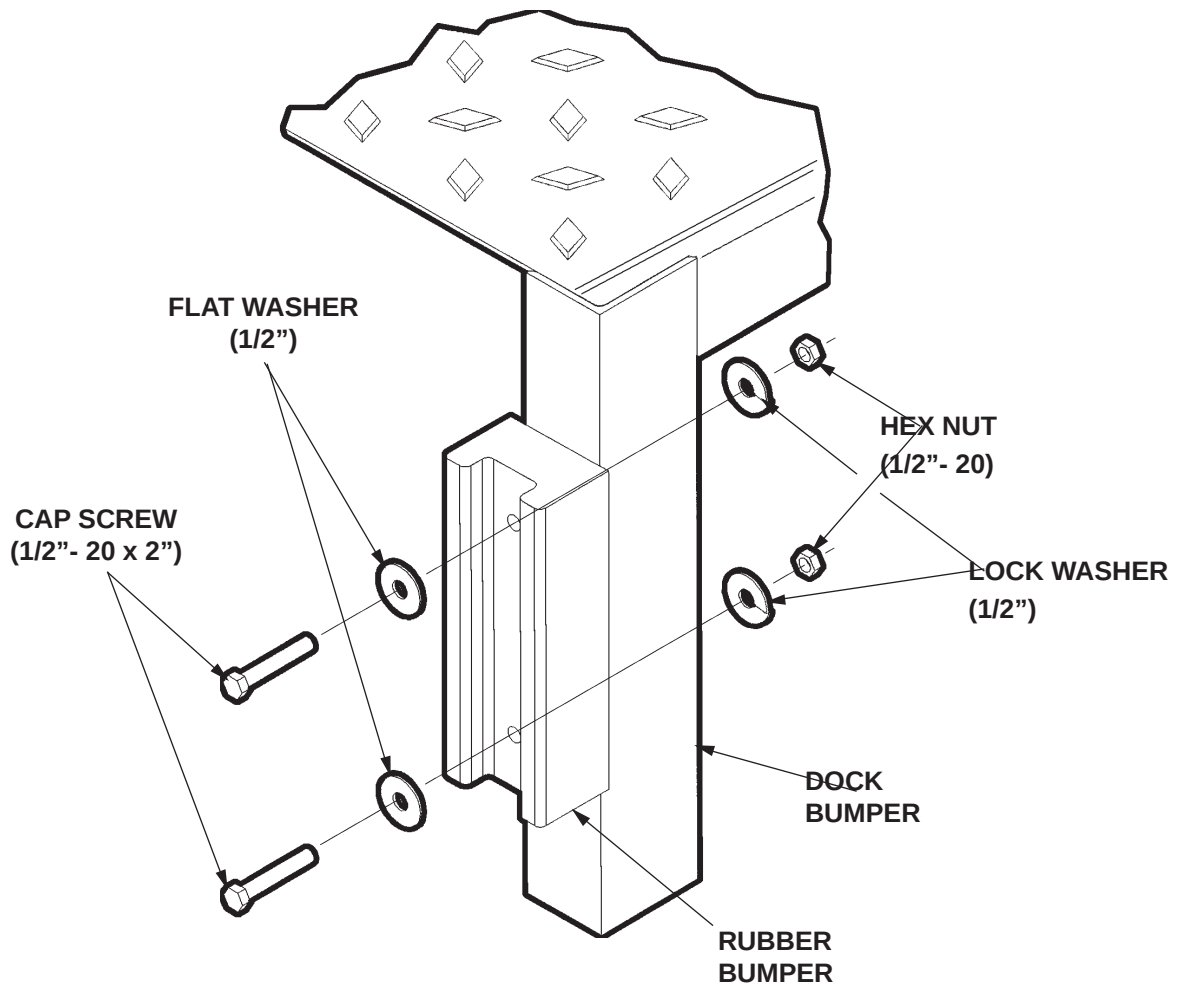


OPTIONS

RUBBER DOCK BUMPER KIT

NOTE: The Rubber Dock Bumpers Kit P/N 203410 contains 2 Rubber Bumpers and 2 sets of fasteners.

Bolt a Rubber Bumper to each of the 2 Dock Bumpers (FIG. 39-1).



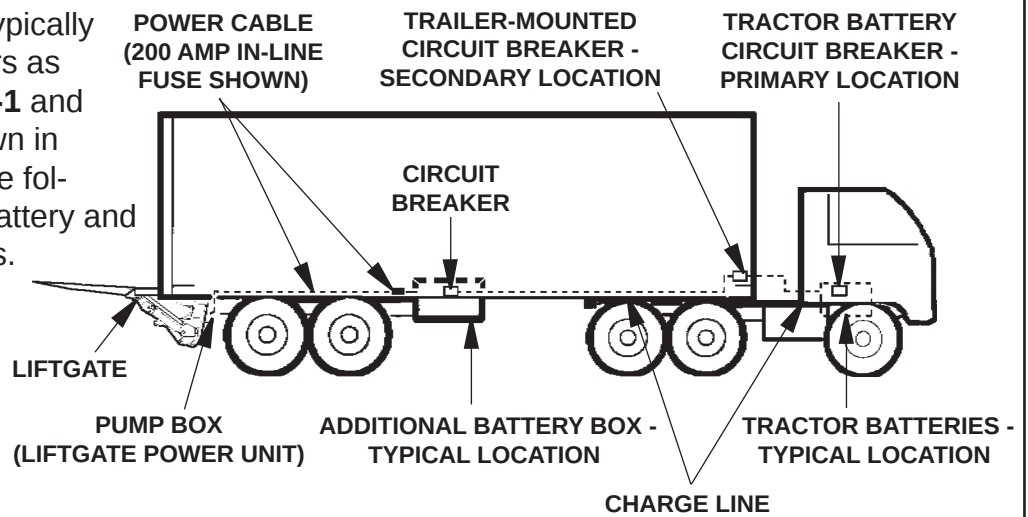
**BOLTING RUBBER BUMPER TO DOCK BUMPER
(RIGHT HAND SIDE DOCK BUMPER SHOWN)**

FIG. 39-1

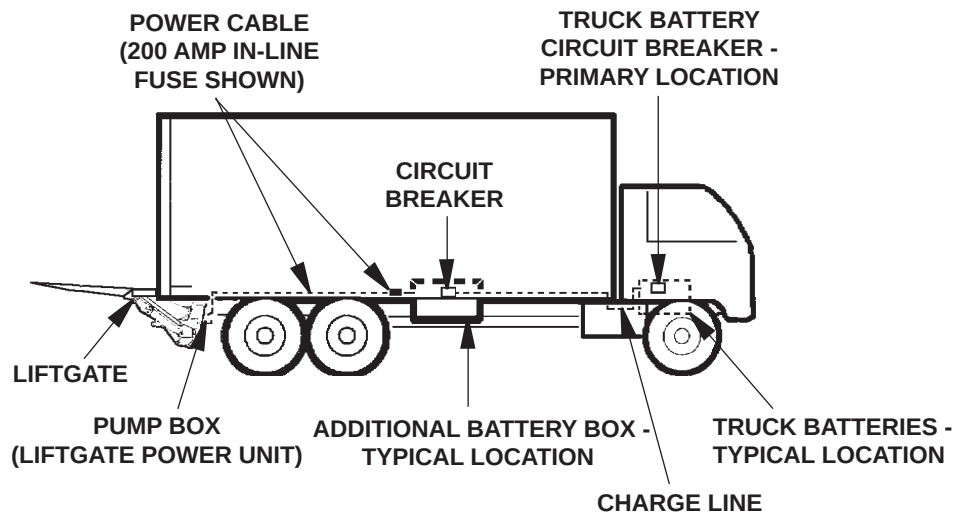
OPTIONS

RECOMMENDED LIFTGATE POWER CONFIGURATION

1. Liftgate and additional Battery Box are typically installed on trailers as shown in **FIG. 40-1** and on trucks as shown in **FIG. 40-2**. See the following page for battery and cable connections.



**RECOMMENDED LIFTGATE & BATTERY BOX
INSTALLATION ON TRAILER
FIG. 40-1**



**RECOMMENDED LIFTGATE & BATTERY BOX
INSTALLATION ON TRAILER
FIG. 40-2**

OPTIONS

RECOMMENDED LIFTGATE POWER CONFIGURATION - Continued

NOTE: If more than 10' of cabling is required to connect Battery Box batteries to Liftgate Power Unit, and/or if cable is run through/along vehicle body crossmembers, use 200 Amp Fused Power Cable from Liftgate Parts Box. Always connect fused end of Cable to Battery.

2. Recommended Battery Box setup for **6 volt batteries** is shown in **FIG. 41-1**.

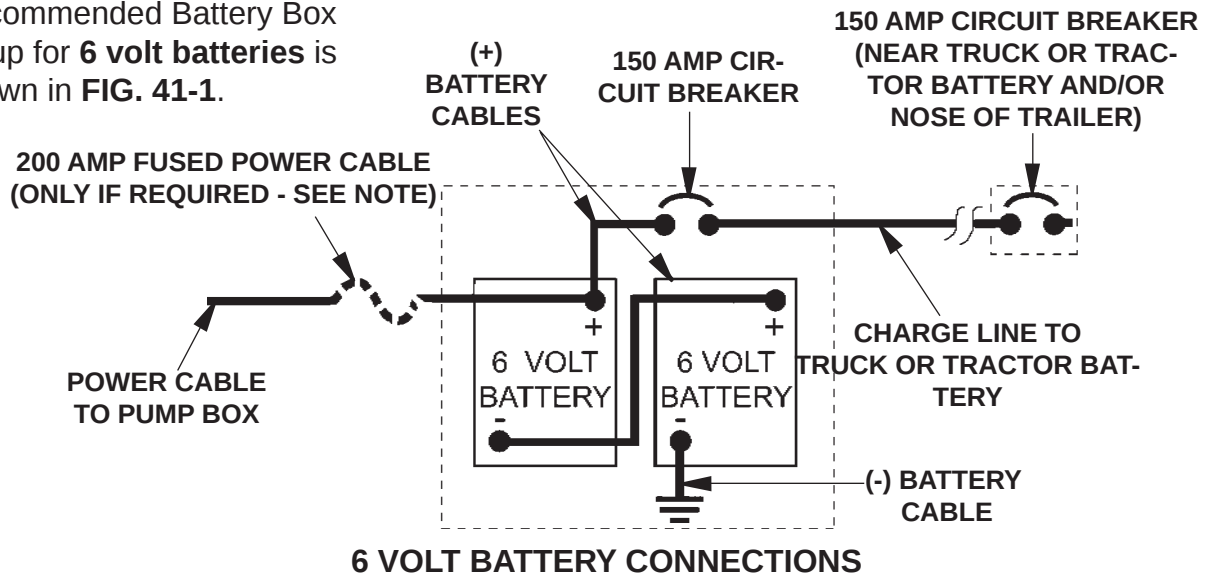


FIG. 41-1

NOTE: If more than 10' of cabling is required to connect Battery Box batteries to Liftgate Power Unit, and/or if cable is run through/along vehicle body crossmembers, use 200 Amp Fused Power Cable from Liftgate Parts Box. Always connect fused end of Cable to Battery.

3. Recommended Battery Box setup for **12 volt batteries** is shown in **FIG. 41-2**.

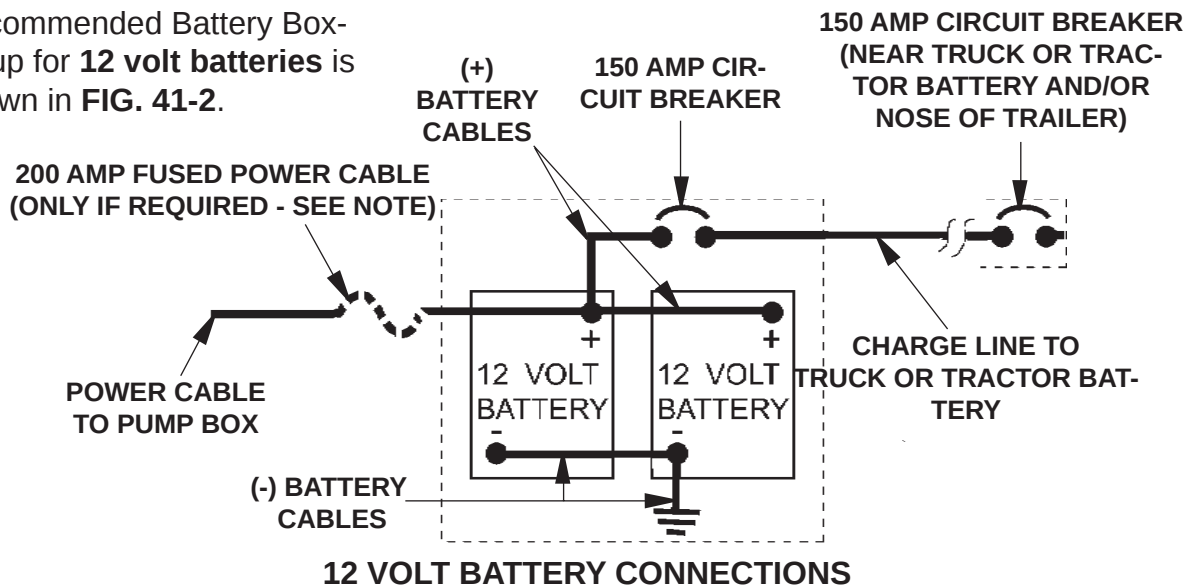


FIG. 41-2

