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SUMMARY OF CHANGES: M-16-33, REVISION C

PAGE	DESCRIPTION OF CHANGE
Cover	Updated revison, date & copyright statement. Liftgate has hydraulic lock valve on the hydraulic cylinder, and safety hook is no longer part of the extension plate. Added model info for TE-15 & TE-20.
5	Added California Propositon 65 warning.
8	Replaced ground cable in Parts Box A with a longer ground cable. Removed flat washer listing from Parts Box B.
9-10,67-69	Added new UP/DOWN decals for control switch, OPERATING INSTRUCTIONS decal with QR code, parts portal decal with QR code, and MAXON 24/7 support decal. QR codes are linked to operation manuals or videos on the MAXON website, and parts explosions on the MAXON Parts Portal.
11,12,13	Added vehicle requirement info for TE-15 & TE-20.
16	Added center of mass info vehicle for TE-15 & TE-20.
17	Noted TE-15 & TE-20 are equipped with same extension plates as TE-25 & TE-30.
17-19,22-23	Latest extension plates are not equipped with safety hooks.
29-31	Added welding instructions for TE-15 & TE-20 mounting plates in STEP 2.
38	Corrected CHARGE LINE callout.
43	Removed ground cable terminal lug from pump mounting bracket and added a drip loop to the ground cable.
45,68-69, 72-77	Added lock valve to hydraulic cylinders shown in illustrations and system diagrams.
48	Illustration clarifies the correct level of hydraulic oil in the pump reservoirs.
56	Added platform opener adjustment data for TE-15 & TE-20.
63-66	Added instructions in STEP 14 for bolting on steps.
78	Cycle counter operating voltage is updated.
79-82	Added digital cycle counter, and dual steps for low bed models, to options tables.
83	Added PRE-DELIVERY INSPECTION form.

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

Installing and maintaining a liftgate can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, install and maintain liftgate in a well-ventilated area and wear **proper Personal protective equipment (PPE)**. For more information go to **www.P65Warnings.ca.gov**.

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

SAFETY INSTRUCTIONS

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

NOTICE

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

TE-SERIES LIFTGATE COMPONENTS

ACAUTION

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 closed 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



LIFTGATE COMPONENTS FIG. 7-1

PARTS BOXES FOR TE-SERIES

ITEM	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
REF	PARTS BOX A	1	297502-01
1	SPRING CLIP	10	050079
2	PLASTIC TIE	2	206864
3	#10 LOOM CLAMP	2	801681
4	SCREW TAPPING #10 X 1/2" LG.	2	030458
5	GROUND CABLE ASSEMBLY, 2GA, 48" LG	1	251871-26
6	CABLE ASSEMBLY, 2GA, 49-3/4" LG. (GROUND)		268226-11
7	CAP SCREW, 5/16"-18 X 3/4" LG	1	900009-3
8	CABLE ASSEMBLY, 175A, 38 FT LG.	1	264422

CONTENTS OF PARTS BOX A TABLE 8-1

ITEM	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
REF	PARTS BOX B	1	297049-01
1	TOGGLE SWITCH ASSEMBLY	1	296855-01
2	HEX NUT, 1/2"-13	2	901011-9
3	HEX HEAD CAP SCREW, 1/2"-13 X 1-1/2" LG.	2	900035-3
4	INSTALLATION BRACKET		269462-01
5	SCREW, SELF TAPPING, #10-24 X 1-1/2" LG	2	900057-7
6	LUG, 2GA COPPER	1	906497-02

CONTENTS OF PARTS BOX B TABLE 8-2

ITEM	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER	
REF	PARTS BOX C	1	297502-02	
1	SPRING CLIP	20	050079	
2	PLASTIC TIE	4	206864	
3	GROMMET, 1" DIA, 2 HOLES		266428-09	
4	CABLE ASSY, 175 AMP 38' LG		264422	
5	GROUND CABLE ASSY, 2 GA X 38' LG		269191-01	
6	SCREW TAPPING #10 X 1/2" LG.	2	030458	
7	7 #10 LOOM CLAMP 2 801681			

CONTENTS OF PARTS BOX C TABLE 8-3

MANUALS & DECALS KITS, TE-15 & TE-20

To find **maintenance & parts** information for your **TE-15**, **TE-20**, **TE-25** or **TE-30** Liftgate, go to **www.maxonlift.com**. Click the **PRODUCTS**, **TUK-A-WAY and TE-15/TE-20** or **TE-25/TE-30** buttons. Open the **Maintenance Manual** in the **PRODUCT DOCUMENTATION** window. For parts, click on the **PARTS PORTAL**, **TUK-A-WAY & TE-15/TE-20** or **TE-25/TE-30** buttons.

ITEM	QTY.	PART NO.	DESCRIPTION
REF.	1	297048-01	KIT, MANUAL & DECAL TE-15
1	1	220386	DECAL, 1500# CAPACITY
2	1	285800-03	DECAL, OPERATING INSTRUCTIONS
3	1	265736-03	DECAL, PINCH HAZARD WARNING
4	1	282522-01	DECAL, SHEET, SMALL WARNING & CAUTION
5	1	282847-02	DECAL, WARNING, STOW
6	1	299038-01	DECAL SHEET, UP & DOWN, BILINGUAL
7	1	299348-01	DECAL, QR CODE, TE
8	1	299634-01	DECAL, MAXON 24/7 SUPPORT
9	1	M-16-33	MANUAL, TE-SERIES INSTALLATION
10	1	M-16-34	MANUAL, TE-SERIES OPERATION

TABLE 9-1

ITEM	QTY.	PART NO.	DESCRIPTION
REF.	1	297048-02	KIT, MANUAL & DECAL TE-20
1	1	220387	DECAL, 2000# CAPACITY
2	1	285800-03	DECAL, OPERATING INSTRUCTIONS
3	1	265736-03	DECAL, PINCH HAZARD WARNING
4	1	282522-01	DECAL, SHEET, SMALL WARNING & CAUTION
5	1	282847-02	DECAL, WARNING, STOW
6	1	299038-01	DECAL SHEET, UP & DOWN, BILINGUAL
7	1	299348-01	DECAL, QR CODE, TE
8	1	299634-01	DECAL, MAXON 24/7 SUPPORT
9	1	M-16-33	MANUAL, TE-SERIES INSTALLATION
10	1	M-16-34	MANUAL, TE-15/TE-20 OPERATION

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TABLE 9-2

MANUALS & DECALS KITS, TE-25 & TE-30

To find maintenance & parts information for your TE-15, TE-20, TE-25 or TE-30 Liftgate, go to www.maxonlift.com. Click the PRODUCTS, TUK-A-WAY and TE-15/TE-20 or TE-25/TE-30 buttons. Open the Maintenance Manual in the PRODUCT DOCUMENTATION window. For parts, click on the PARTS PORTAL, TUK-A-WAY & TE-15/TE-20 or TE-25/TE-30 buttons.

ITEM	QTY.	PART NO.	DESCRIPTION
REF.	1	297048-03	KIT, MANUAL & DECAL TE-25
1	1	220382	DECAL, 2500# CAPACITY
2	1	285800-03	DECAL, OPERATING INSTRUCTIONS
3	1	265736-03	DECAL, PINCH HAZARD WARNING
4	1	282522-01	DECAL, SHEET, SMALL WARNING & CAUTION
5	1	282847-02	DECAL, WARNING, STOW
6	1	299038-01	DECAL SHEET, UP & DOWN, BILINGUAL
7	1	299348-02	DECAL, QR CODE, TE-25/TE-30
8	1	299634-01	DECAL, MAXON 24/7 SUPPORT
9	1	M-16-33	MANUAL, TE-SERIES INSTALLATION
10	1	M-16-34	MANUAL, TE-SERIES OPERATION

TABLE 10-1

ITEM	QTY.	PART NO.	DESCRIPTION
REF.	1	297048-04	KIT, MANUAL & DECAL TE-30
1	1	220388	DECAL, 3000# CAPACITY
2	1	285800-03	DECAL, OPERATING INSTRUCTIONS
3	1	265736-03	DECAL, PINCH HAZARD WARNING
4	1	282522-01	DECAL, SHEET, SMALL WARNING & CAUTION
5	1	282847-02	DECAL, WARNING, STOW
6	1	299038-01	DECAL SHEET, UP & DOWN, BILINGUAL
7	1	299348-02	DECAL, QR CODE, TE-25/TE-30
8	1	299634-01	DECAL, MAXON 24/7 SUPPORT
9	1	M-16-33	MANUAL, TE-SERIES INSTALLATION
10	1	M-16-34	MANUAL, TE-SERIES OPERATION

TABLE 10-2

NOTE: The vehicle bed height for **TE-Series** high bed Liftgates is 54" maximum (unloaded) and 42" minimum (loaded). For the **TE-Series** low bed Liftgates, the bed height is 44" maximum (unloaded) and 36" minimum (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.

NOTE: Measure the width of the Liftgate and the width of the vehicle body before you start doing this procedure. Ensure the Liftgate is the correct width for vehicle.

- See TE-15 and TE-20 high bed installation dimensions in FIG. 12-1.
- See TE-15 and TE-20 low bed installation dimensions in FIG. 12-2.
- See TE-15 and TE-20 high bed truck frame cut-out dimensions in FIG. 13-1.
- See TE-15 and TE-20 low bed truck frame cut-out dimensions in FIG. 13-2.
- See TE-25 and TE-30 high bed installation dimensions in FIG. 14-1.
- See TE-25 and TE-30 low bed installation dimensions in FIG. 14-2.
- See TE-25 and TE-30 high bed truck frame cut-out dimensions in FIG. 15-1.
- See TE-25 and TE-30 low bed truck frame cut-out dimensions in FIG. 15-2.

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



CLEARANCES FOR TE-15 & TE-20 LOW BED INSTALLATION (PAINTED) FIG. 12-2



VEHICLE FRAME CUT-OUT (36" TO 44" BED HEIGHTS) FIG. 13-2



CLEARANCES FOR TE-25 & TE-30 LOW BED INSTALLATION FIG. 14-2

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VEHICLE FRAME CUT-OUT (36" TO 44" BED HEIGHTS) FIG. 15-2

CENTER OF MASS



CENTER OF MASS FOR TE-SERIES LIFTGATES (TE-25/TE-30 SHOWN WITH PLATFORM STOWED) FIG. 16-1

MODEL	PLATFORM	X (+/-3/16")	Y (+/-3/16")
	22"+14" STEEL	5-3/4"	14-1/4"
	24"+24" STEEL	5-5/8"	13-7/8"
	24"+24" STEEL & ALUM	5-3/4"	14"
1E-25/1E-30	24"+24" ALUM	5-3/8"	13-5/8"
	26"+26" STEEL & ALUM	6"	14.1"
	26"+26" ALUM	5-5/8"	13-7/8"
TE 45/TE 20	22"+14" STEEL	5-3/4"	14-1/4"
TE-15/TE-20	24"+18" ALUM	5-5/8"	13-7/8"

CENTER OF MASS DIMENSIONS FOR TE-SERIES LIFTGATES TABLE 16-1

STEP 1 - INSTALL EXTENSION PLATES

NOTE: TE-15, TE-20, TE-25 & TE-30 Liftgates may be equipped with two types of extensions plates. The weld-on extension plate is shown in FIG. 17-1. The bolt-on extension plate (FIG. 17-2) 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. It also has holes for bolt-on steps and installation brackets, provided with components for installation. Refer to the following instructions for installing extension plates.



FIG. 17-2

STEP 1 - INSTALL EXTENSION PLATES - Continued WELD EXTENSION PLATE TO VEHICLE

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.

NOTE: Before welding extension plate to vehicle body, make sure:

• Inboard edge of extension plate is flush with the top of sill on vehicle body.

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• Top surface of extension plate is level with the ground.



FIG. 18-2

STEP 1 - INSTALL EXTENSION PLATES - Continued WELD A BOLT-ON EXTENSION PLATE TO VEHICLE

CAUTION

To preserve the corrosion resistance properties of the galvanized finish, MAXON recommends bolting the galvanized extension plate to vehicle.

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. 19-1 and 19-2**.



FIG. 19-2

STEP 1 - INSTALL EXTENSION PLATES - Continued BOLT EXTENSION PLATE TO VEHICLE

CAUTION

To preserve the corrosion resistance properties of the galvanized finish, MAXON recommends bolting the 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.
- 1. Mark and drill holes into rear sill as shown in FIGS. 20-1 and 21-1.



FIG. 20-1

STEP 1 - INSTALL EXTENSION PLATES - Continued



REAR SILL - HOLE LOCATIONS FOR 102" WIDE VEHICLE FIG. 21-1

STEP 1 - INSTALL EXTENSION PLATES - Continued BOLT EXTENSION PLATE TO VEHICLE - Continued

CAUTION

The mating surface between the bolt-on extension plate and vehicle rear sill must be as flat as possible. Interference between the mating surfaces could result in a distorted top surface of extension plate when all the bolts are tightened. Distorted extension plate can also make the dual steps difficult to install correctly. Remove interference or shim rear sill to eliminate or reduce the possibility of a distorted extension plate.

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

- All the bolts and lock nuts are in place.
- Mating surfaces of extension plate and rear sill are made flat as possible.
- Top of extension plate is flush with top of rear sill.

NOTE: Weld the LH and RH ends of the extension plate to vehicle body as shown in **FIG. 22-1** if any of the following conditions apply.

- Bolt holes are not accessible on the corner posts of the vehicle body.
- Liftgate will be used for dock loading applications.
- As required by body/trailer manufacturer
- 2. Bolt extension plate to vehicle as shown in **FIG. 22-1**. If necessary, reposition extension plate so top surface is flush with top surface of sill. Then, torque bolts and lock nuts to **105 +/-20 lb-ft**.



BOLTING EXTENSION PLATE (96" WIDE EXTENSION PLATE SHOWN) FIG. 22-1

NOTE: An optional 102" wide extension kit is available for 102" wide vehicles.

STEP 1 - INSTALL EXTENSION PLATES - Continued BOLT INSTALLATION BRACKETS TO EXTENSION PLATE

NOTE: During installation of liftgate, installation brackets keep the heel of the platform level with extension plate and maintain a 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.

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

NOTE: TE- Series Liftgates are equipped with 2 types of mounting plates.

- Mounting plates on painted Liftgates are temporarily bolted to the main frame for shipping (FIG. 25-2). These mounting plates must be unbolted, repositioned, and welded to main frame and truck frame as shown in these instructions.
- On galvanized Liftgates, mounting plates are bolted to the main frame (**FIGS. 24-1, 24-2 and 25-1**). Liftgates are shipped at a standard distance of 34-1/4" between mounting plates (**FIG. 24-1**). For narrower chassis, the RH and LH plates may be unbolted from the main frame and bolted on the opposite side at a distance of 33-3/4" between plates (**FIG. 24-2**). For chassis that are wider than standard, a kit is available to set a distance of 42-1/4" between plates (**FIG. 25-2**).

If necessary, unbolt mounting plates from galvanized main frame (FIG. 24-1). Then, bolt in opposite position (FIG. 24-2). Torque mounting plate nuts and bolts 220 - 240 Ib-ft.





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A WARNING Do not remove lock angle except when instructed to do so in this manual. **NOTE:** Liftgates are shipped with a locking angle that positions Liftgate correctly for high bed or low bed installation. LOCKING ANGLE 1. Unfold the flipover as shown in FIG. 26-1. 2. Measure distance "D" between the 2 cylinder pins captured by locking angle (FIG. **FLIPOVER** 26-1). Refer to TABLE 26-1 to PIN verify if Liftgate is a high bed D or low bed model. PIN

UNFOLDING FLIPOVER FIG. 26-1

To prevent injury, support Liftgate to keep it from tipping over. Stay clear of place under the platform where Liftgate could fall on you.

CAUTION

To prevent damage to latch on the flipover, attach hoist chains with clearance from the latch.

 Attach chain and hoist on each side of platform near the heel (FIG. 26-2). (Place chain all around platform.) Hoist the Liftgate, and then place floor jack under main frame (FIG. 26-2). Jack the Liftgate into position. Make sure vehicle floor is horizontal. Maintain distance between floor and top of main frame as shown in FIG. 26-2.

LIFTGATE MODEL	DISTANCE "D" BETWEEN PINS
HIGH BED (42"-54" HT)	18-1/2"
LOW BED (36"-44" HT)	19-1/4"

DISTANCE BETWEEN CYLINDER PINS TABLE 26-1



FIG. 26-2

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.

CAUTION

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

A WARNING

Painted Liftgate is shipped from factory with mounting plates temporarily bolted to main frame. Before operating Liftgate unbolt, position, & weld mounting plates to main frame as shown in illustrations below.

NOTE: On some low bed trucks, wood spacer may interfere with having two 7" vertical welds per mounting plate. If the spacer interferes with minimum 7" welds, cut and weld the top of each mounting plate 1/2" below the top radius of the truck frame.

NOTE: If main frame is galvanized, skip instructions 4 and 5. Go to instruction 6.



NOTE: For painted Liftgates, weld both mounting plates to vehicle frame before fully welding mounting plates to painted main frame.



 If necessary, unbolt mounting plate to cut at the top as shown in FIGS. 30-1 or 30-2. Repeat for LH mounting plate. Then, bolt mounting plates in correct positon. Torque mounting plate nuts and bolts 220 - 240 lb-ft.



 Clamp both mounting plates to vehicle frame. Weld the mounting plates to vehicle frame as shown in FIGS. 30-1 or 30-2. Remove clamps.



TE-25 & TE-30 WELD TO VEHICLE FRAME (RH SIDE SHOWN) FIG. 30-2



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.







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

3. Using mounting brackets as a tem-CROSS plate mark and drill holes through MEMBER cross members (FIG. 33-1). Bolt mounting brackets to cross members as shown in FIGS. 33-2A and 33-2B. Torque bolts and lock nuts MOUNTING to 85-128 lb-ft. BRACKETS 1/2" HOLES MARK AND DRILL BRACKET HOLES FIG. 33-1 WASHERS LOCK NUTS (4 PLACES) (2 PLACES) 00 **CAP SCREWS** LOCK WASHERS (2 PLACES) (2 PLACES) O O MOUNTING BRACKETS CROSS MEMBER **BOLTING BRACKETS** (8 PLACES) FIG. 33-2B CROSS **MEMBERS BOLTING BATTERY BOX FRAME**

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FIG. 33-2A

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.

4. Weld each bracket to cross IF ACCESSIBLE CROSS members as shown in FIGS. MEMBERS 34-1A and 34-1B. Weld top of 3/16" bracket if accessible. 3/16" ((0)BRACKET WELDING BRACKETS (8 PLACES) FIG. 34-1B CROSS MEMBERS **BOLTING PUMP & BATTERY BOX FRAME** FIG. 34-1A

A 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.

5. Connect battery cables, fused cables, and ground cables for 12 volt power as shown in FIG. 35-1 or 24 volt power as shown in FIG. 36-1.

GROUND CABLE TO PUMP



12 VOLT BATTERY CONNECTIONS FOR 12 VOLT POWER FIG. 35-1



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

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.



FIG. 37-1

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

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FIG. 38-1

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



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STEP 4 - RUN POWER CABLE - Continued

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. 40-1. Keep enough cable near the battery to reach the positive terminal without straining cable (after connection). Run cable to pump box on Liftgate.





STEP 5 - CONNECT POWER CABLE

1. Unbolt the pump cover as shown in **FIG. 41-1**.



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STEP 5 - CONNECT POWER CABLE - Continued

NOTE: Hydraulic lines and electrical lines must be run into pump box through sealing grommets **(FIG. 42-3)**. To ensure a good seal on hydraulic & electrical lines, never cut the sealing grommets.

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. 42-1). Measure (if needed) and then cut excess cable from bare wire end of cable. Put heat shrink tubing (parts box) (FIG. 42-2) 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 heat shrink tubing (FIG. 42-2).
COPPER TERMINAL LUG HEAT SHRINK TUBING (P/N 253316-04)
FUSED POWER CAB (BARE WIRE END)
PLACING TERMINAL TUBING ON FUSION (FIG. 42-2)
TUBING ON FUSION (FIG. 42-2).

(P/N 253316-04) FUSED POWER CABLE (BARE WIRE END) PLACING TERMINAL LUG & HEAT SHRINK TUBING ON FUSED POWER CABLE FIG. 42-1 TYPICAL FUSED POWER CABLE WITH TERMINAL LUG INSTALLED FIG. 42-2

CAUTION

Do not over-tighten the terminal nuts. For the 5/16" load terminals, torque nuts to 35 lb-in. Torque the nuts on #10-32 control terminals to 15 lb-in.

- 3. Route fused power cable through grommet on the pump mounting plate (FIG. 42-3). Then, remove hex nut and lock washer from battery terminal post on the starter solenoid (FIG. 42-3). Connect fused power cable to starter solenoid as shown in FIG. 42-3. Reinstall and tighten lock washer and hex nut.
- 4. Form a drip loop on the fused power cable where the cable enters the grommet from outside the pump mounting plate (FIG. 42-3).



FIG. 42-3

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STEP 6 - CONNECT GROUND CABLE



FIG. 43-1B

STEP 6 - CONNECT GROUND CABLE - Continued

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

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

4. Extend the ground cable to reach vehicle frame (FIG. 44-2) without **VEHICLE CHASSIS** putting tension on cable (after con-(TRUCK FRAME SHOWN) nection). Connect to an existing grounding point if available. **TERMINAL LUG 5.** If necessary, drill a 11/32" (0.343") 5/16" FLAT (GROUND CABLE) BARE hole in vehicle frame for bolting WASHER METAL the ground cable terminal lug (FIG. 44-2). 0 Ð 6. Bolt the ground cable terminal 5/16"-18 lug to vehicle frame as shown in LOCK NUT FIG. 44-2. 5/16"-18 X 1" LG **CAP SCREW**



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STEP 7 - INSTALL CONTROL SWITCH



STEP 7 - INSTALL CONTROL SWITCH - Continued

CAUTION

Do not over-tighten the terminal nuts. For the 5/16" load terminals, torque nuts to 35 lb-in. Torque the nuts on #10-32 control terminals to 15 lb-in.

NOTE: Hydraulic lines and electrical lines run into pump box through sealing grommets (FIG. 46-1). To ensure a good seal on hydraulic & electrical lines, never cut the sealing grommets.



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STEP 7 - INSTALL CONTROL SWITCH - Continued



STEP 8 - CHECKING HYDRAULIC OIL

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: Liftgate is shipped with ISO 32 oil. Use correct oil for climate conditions.
 +50 to +120 Degrees F - Grade ISO 32 Below + 70 Degrees F - Grade ISO 15 or MIL-H-5606
 See TABLES 49-1 & 49-2 for recommended brands of ISO 32 & ISO 15 oils.

RESERVOIR

2-1/4" +/- 1/4" (GD) 2-3/4" +/- 1/4" (PD)

NOTE: Hydraulic oil level must be minimum of 1-1/2" above the bottom of reservoir to operate Liftgate.

- With platform at bed height, check oil level in the pump reservoir (FIG. 48-1). To add oil, pull out filler cap (no threads) (FIG. 48-1). Add hydraulic oil in reservoir to the level shown in FIG. 48-1.
- 2. Reinstall filler cap (FIG. 48-1).

FILÌER CAP PUMP RESERVOIR (GRAVITY DOWN POWER UNIT SHOWN) FIG. 48-1

 \bigcirc

3. Bolt on the pump cover as shown in **FIG. 48-2**. Torque the bolts (cap screws) to **10 - 14 lb-in**.



STEP 8 - ADD HYDRAULIC FLUID - Continued

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

TABLE 49-1

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

TABLE 49-2

STEP 9 - CONNECT POWER CABLE TO BATTERY



FIG. 50-3

STEP 10 - REMOVE LOCKING ANGLE AND 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.

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 cotter pins (FIG. 51-1) from 2 cylinder pins. Remove the locking angle (FIG. 51-1).



......

STEP 10 - REMOVE LOCKING ANGLE AND CHECK FOR INTERFERENCE - Continued

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3. Remove floor jack and hoist supporting Liftgate (FIG. 52-1). FLOOR JACK FIG. 52-1 4. Lower platform to the ground (FIG. 52-2). Look for any interference between liftgate and vehicle as platform is lowered. Then, raise the platform (FIG. 52-3). Look for any interference between liftgate and vehicle as platform is raised. LOWERING PLATFORM FIG. 52-2 **RAISING PLATFORM** FIG. 52-3 5. Lower platform to the ground (FIG. 52-4). **BOLT (2 PLACES)** INSTALLATION **BRACKET (2 PLACES)** NUT (2 PLACES) 6. Unbolt and remove the 2 installa-**EXTENSION** tion brackets from extension plate PLATE (FIG. 52-4). **REMOVING INSTALLATION BRACKETS** FIG. 52-4

STEP 10 - REMOVE LOCKING ANGLE AND CHECK FOR INTERFERENCE - Continued

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



PLATFORM AT BED LEVEL WITH 5/8" GAP BETWEEN HEEL & EXTENSION PLATE FIG. 53-1

STEP 10 - REMOVE LOCKING ANGLE AND CHECK FOR INTERFERENCE - Continued

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



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STEP 11 - BOLT PLATFORM OPENER TO LIFTGATE



 Position platform opener on bracket (FIG. 55-1). Then, bolt opener to bracket in 2 places at holes A and C, or holes B and C (FIG. 55-1). Refer to TABLE 56-1 to select the correct mounting holes based on liftgate model, platform size, platform type, and vehicle bed height.

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STEP 11 - BOLT PLATFORM OPENER TO LIFTGATE
- Continued

MODEL	PLATFORM & FLIPOVER	BED HEIGHT	HOLE ON OPENER ARM	HOLE ON BRACKET
	22". 44" STEEL & STEEL	44" TO 50"	#1	В
	22 +14 SIEEL & SIEEL	50" TO 54"	#2	А
	22"+18" ALUM & ALUM	44" TO 54"	#1	Α
TE-25/TE-30		48" TO 52"	#2	
(HIGH BED)		52" TO 54"	#3	
	26"+26" STEEL & ALUM, OR ALUM & ALUM	42" TO 48"	#1	А
		48" TO 52"	#2	
		52" TO 54"	#3	
TE-15/TE-20 (HIGH BED)	22"+14" STEEL & STEEL	42" TO 50"	#1	В
		50" TO 54"	#2	А
	22"+18" ALUM & ALUM	42" TO 48"	#1	A
		48" TO 52"	#2	
		52" TO 54"	#3	
TE-25L/TE-30L (LOW BED)	22"+14" STEEL & STEEL	26" TO 44"	#1	А
	24"+24" STEEL & STEEL, OR ALUM & ALUM	30 10 44		
TE-15L/TE-20L (LOW BED)	22"+14" STEEL & STEEL	26" TO 44"	#1	А
	22"+18" ALUM & ALUM	30 10 44		

PLATFORM OPENER & BRACKET MOUNTING HOLES TABLE 56-1

STEP 11 - BOLT PLATFORM OPENER TO LIFTGATE - Continued

A CAUTION

If there is any interference with the platform while stowing Liftgate, check for damage on bottom of platform, flipover, and the hinge in between. A damaged platform or flipover may result in personal injury and additional damage to Liftgate.

- **3.** Fold platform and flipover against opener **(FIG. 57-1)**. Platform and flipover should stay in near vertical position without falling open.
- OPENER

CHECKING OPENER POSITION FIG. 57-1

 Stow and unstow platform several times to verify it stows and unstows correctly and there is no interference (FIGS. 57-2 and 57-3).



PLATFORM STOWED FIG. 57-2



PLATFORM UNSTOWED FIG. 57-3

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STEP 12 - PLATFORM ADJUSTMENT (IF REQUIRED)

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

- 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. 58-1). If the shackles and the tip of flipover touch the ground at the same time, raise platform to bed height. Outboard edge on top of flipover should be above bed level (FIG. 58-2). If indications are correct in both cases (FIGS. 58-1 & 58-2), 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. 58-3A), do instructions 2 and 3. If the shackle touches first (see FIG. 60-1), skip 2 and 3 and do instructions 4 and 5.
- Make sure platform is still at ground level. If the shackle is not touching the ground, measure and compare distance "A" (FIG. 58-3A) with TABLE 58-1 to determine the correct shim. Next, mark position on shackle (FIG. 58-3B).

RAISE TIP OF FLIPOVER THIS DISTANCE "A"	REQUIRED SHIM THICKNESS	WELD SIZE "W"
9/16"	1/16"	1/16"
1-1/4"	1/8"	1/8"
1-15/16"	3/16"	3/16"
2-5/8"	1/4"	1/4"

SHIMS TO RAISE TIP OF FLIPOVER TABLE 58-1



SHACKLES DO NOT TOUCH GROUND FIG. 58-3A

STEP 12 - PLATFORM ADJUSTMENT (IF REQUIRED) - Continued

3. Make shims as needed (FIG. 59-1). Position bottom edge of shim to line up with mark on shackle (FIG. 59-2). Then, weld the shim to shackle as shown in FIG. 59-2.



FIG. 59-2

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STEP 12 - PLATFORM ADJUSTMENT (IF REQUIRED) - Continued

 Make sure platform is still at ground level. If the tip of flipover is not touching the ground, measure and compare distance "B" (FIG. 60-1) with TABLE 60-1 to determine how much to grind from the platform stops (FIG. 60-2).

LOWER TIP OF FLIPOVER THIS DISTANCE "B"	GRIND METAL FROM PLATFORM STOP	
9/16"	1/16"	
1-1/4"	1/8"	
1-15/16"	3/16"	
2-5/8"	1/4"	

GRIND TO LOWER TIP TABLE 60-1

5. Grind correct amount of metal (TABLE

60-1) from platform stop as shown in

6. 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

FIG. 60-2.

in FIG. 60-3.



FIG. 60-3

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STEP 13 - 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 if equipped, a 3" wide area of paint must be removed from all sides of the weld area before welding.



TE-15 & TE-20 MOUNTING PLATE WELDED TO TRUCK FRAME & BOLTED TO MAIN FRAME FIG. 61-2 90670 (800) 227-4116 FAX (888) 771-7713

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STEP 13 - FINISH WELDING LIFTGATE TO VEHICLE -Continued



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STEP 14 - BOLT STEPS TO EXTENSION PLATE

1. Lower platform to the ground (FIG. 63-1).



STEP 14 - BOLT STEPS TO EXTENSION PLATE - Continued

CAUTION

To prevent interference with Liftgate and possible damage, maintain 90° angle between steps and extension plate. Tighten bolts only in the order shown in illustration.

NOTE: If 102" extension kit is to be installed for 102" wide vehicle, install the extension kit before installing the steps.

3. Line up the LH step (Kit item) on LH side of the extension plate. Bolt step to extension plate (FIG. 64-1). Tighten **FLANGE LOCK NUT** LOCK NUT bolts 1, 2, 3 and 4 in the numbered (2 PLACES) (2 PLACES) order shown in FIG. 64-1. Then, torque PART OF each bolt and lock nut to 105 lb-ft in **EXTENSION** the same order. PLATE 0 FLAT WASHER (2 PLACES) 1/2"-13 (C) Ø **CARRIAGE BOLT** 3 (2 PLACES) 0 1/2" X 1-1/2" LG FRAME BOLT 0 (2 PLACES) 90° 0 LH STEP 0 **BOLTING STEP TO EXTENSION PLATE** (LH DUAL STEP SHOWN) FIG. 64-1

STEP 14 - BOLT STEPS TO EXTENSION PLATE - Continued



FIG. 65-1

- 5. Butt the flat part of the mounting channel against bottom of vehicle rear sill and I-beams. Then, butt the step support against back of the step (FIG. 65-1).
- 6. Ensure slotted hole in the step support is lined up with the hole on the step (FIG. 65-1). Then, bolt the support to step (FIG. 65-1). Torque the lock nuts (FIG. 65-1) to 105 lb-ft force.

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STEP 14 - BOLT STEPS TO EXTENSION PLATE - Continued



STEP 15 - VEHICLE TAILLIGHT POSITIONING

NOTE: Taillights may interfere with Liftgate. Taillights and attaching hardware are not provided with the Liftgate. If needed, install vehicle taillights to comply with state and federal vehicle lighting requirements, such as FMVSS 108.

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.



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ATTACH DECALS - Continued



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FIG. 69-1

ATTACH DECALS - Continued



DECAL SHEET P/N 282522-01 FIG. 70-1

MODEL	DECAL P/N	CAPACITY
TE-15	220386	1500 POUNDS [680 KG]
TE-20	220387	2000 POUNDS [907 KG]
TE-25	220382	2500 POUNDS [1134 KG]
TE-30	220388	3000 POUNDS [1360 KG]

CAPACITY DECALS TABLE 70-1 FAX (888) 771-7713 (800) 227-4116 90670 CA. Santa Fe Springs, Ave. 11921 Slauson NOXE

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.
- 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.

SYSTEM DIAGRAMS

PUMP, MOTOR & SOLENOID OPERATION - GRAVITY DOWN



GRAVITY DOWN PUMP MOTOR & SOLENOID SWITCH OPERATION				
LIFTGATE FUNCTION	PORT	SOLENOID SWITCH OPERATION		
		MOTOR	SOLENOID VALVE A	LOCK VALVE
RAISE	PRESSURE	\checkmark	-	
LOWER	VENT	-	\checkmark	\checkmark
REFER TO VALVES SHOWN ON HYDRAULIC SCHEMATIC				

TABLE 72-1
SYSTEM DIAGRAMS

PUMP, MOTOR & SOLENOID OPERATION - POWER DOWN



POWER DOWN PUMP MOTOR & SOLENOID SWITCH OPERATION							
LIFTGATE		LIFTGATE		SOLEN (√	OID SWITC MEANS EN	H OPERAT	ION
FUNCTION	PORT	MOTOR	VALVE "S2"	VALVE "S1"	LOCK VALVE	POWER DOWN MODULE	
RAISE	А	\checkmark	-	\checkmark		-	
LOWER	В	\checkmark		-	\checkmark	\checkmark	
REFER TO VALVES SHOWN ON HYDRAULIC SCHEMATIC							

TABLE 73-1

HYDRAULIC SYSTEM DIAGRAMS HYDRAULIC SCHEMATIC (GRAVITY DOWN)



FIG. 74-1

HYDRAULIC SYSTEM DIAGRAMS HYDRAULIC SCHEMATIC (POWER DOWN)



ELECTRICAL SYSTEM DIAGRAMS ELECTRICAL SCHEMATIC (GRAVITY DOWN)

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FIG. 76-1

ELECTRICAL SYSTEM DIAGRAMS ELECTRICAL SCHEMATIC (POWER DOWN)



FIG. 77-1

SYSTEM DIAGRAMS

Solenoid Switch	12V	24V	
Coil Resistance:	5.4Ω @70°F, ±15%	20.1Ω @70°F, ±15%	
Ampere:	2.2A	1.2A	
Coil terminal torque: 10-15 lb-in max.			
Contact terminal torque: 30-35 lb-in max.			
Solenoid Valves (S1 & S2)			
S1 Coil Resistance:	6.6Ω @ 70ºF, ±15%	26.7Ω @ 70°F, ±15%	
S1 Ampere:	1.8A	0.9A	
S2 Coil Resistance:	7.5Ω @ 70ºF, ±15%	30.8Ω @ 70°F, ±15%	
S2 Ampere:	1.6A	0.78A	
Coil terminal torque: 15-45 lb-in max.			
Valve cartridge torque: 25-30 lb-ft max.			
Coil nut torque: 15-45 lb-in			
Digital Cycle Counter			
Operating Voltage:	7V - 30 VDC		
Ampere:	<2mA		
Solenoid Lock Valve			
Coil Resistance:	8.0Ω @ 70°F, ±15%	30Ω @ 70°F, ±15%	
Ampere:	1.5A	0.8A	
Coil nut torque: 3-4.5 lb-ft max.			
Valve cartridge torque: 18.5-22 lb-ft max.			
Ground Cable			
Cap Screw Torque: 24 lb-ft max.			

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TABLE 78-1

OPTIONAL LIFTGATE COMPONENTS

MISCELLANEOUS KITS	PART NO.	GD	PD
TRAFFIC CONES	268893-01	Х	X
RELOCATE PUMP MTG KIT, GD TUK-A-WAY	297619-01	Х	
RELOCATE PUMP MTG KIT, GD TUK-A-WAY, GALVANIZED	297619-01G	Х	
RELOCATE PUMP MTG KIT, PD TUK-A-WAY	297619-02		Х
RELOCATE PUMP MTG KIT, PD TUK-A-WAY, GALVANIZED	297619-02G		X
EXTENSION PLATE HARDWARE, 96" & 102" LG INSTALLATIONS	283257-02	X	X
MOUNTING PLATES, TE, 42-1/4" INSIDE	298385-01	X	X
	297005.01		
102 EXTENSION, 11 EXT. PLATE (1/4 THICK EXTENSION PLATES ONLY)	287095-01	X	
102" EXTENSION, GALVANIZED, 11" EXT. PLATE (1/4" THICK EXT. PLATES ONLY)	287095-01G	X	X
ELECTRICAL KITS			
CAB CUT OFF SWITCH	250477	Х	X
DUAL CONTROL, TUK-A-WAY	297115-01	Х	X
STREET SIDE CONTROL, TUK-A-WAY	297116-01	Х	X
HAND HELD CONTROL KIT	280570-07	Х	Х
HAND HELD CONTROL KIT, 120" LG (CURB SIDE MOUNT)	263260-13	Х	Х
HAND HELD CONTROL KIT, 240" LG (STREET SIDE MOUNT)	263260-14	Х	X
FRAME MOUNTING BRACKET FOR 2 OVAL LIGHTS	282372-01	Х	Х
FRAME MOUNTING BRACKET FOR 2 OVAL LIGHTS, GALVANIZED	282372-01G	Х	Х
CYCLE COUNTER (DIGITAL), TUK-A-WAY	297620-01	Х	X
	207117.01		
KII, HAND FUIVIF, TUK-A-WAT (GRAVITT DUWIN)	29/11/-01		

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OPTIONAL LIFTGATE COMPONENTS - Continued

HIGH BED STEP OPTIONS (42" TO 54" BED HEIGHT, 30" OVERALL STEP HEIGHT)			
PAINTED DUAL STEP KITS WITH BUMPER	PART NO.	GD	PD
DUAL STEPS, 14" RUBBER BUMPERS	288705-01	X	X
DUAL STEPS, 13.5" RUBBER BUMPERS	288705-02	X	X
DUAL FLEX STEPS 14" RUBBER BUMPERS WITH FLEXIBLE WIRE ROPE LOWER STEP & 14" LG. RUBBER BUMPER	288705-21	х	x
DUAL FLEX STEPS WITH FLEXIBLE WIRE ROPE LOWER STEP & 13.5" LG. RUBBER BUMPER	288705-22	x	X
DUAL STEPS WITH BRACKET FOR LIGHT AND 14" RUBBER BUMPERS	288705-31	X	X
DUAL STEPS WITH BRACKET FOR LIGHT AND 13.5" PLASTIC BUMPERS	288705-32	Х	X
PAINTED DUAL STEP KITS WITH BUMPERS AND NO STEPS ON STREET SIDE			
DUAL STEPS, STREETSIDE NO STEPS, 14" BUMPER	288705-03	X	X
DUAL STEPS, STREETSIDE NO STEPS, 13.5" BUMPER	288705-04	X	X
DUAL FLEX STEPS, STREETSIDE NO STEPS, 14" BUMPER	288705-23	X	X
DUAL FLEX STEPS, STREETSIDE NO STEPS, 13.5" BUMPER	288705-24	X	X
DUAL STEPS, WITH LIGHT, STREETSIDE NO STEPS, 14" BUMPER	288705-33	X	X
DUAL STEPS, WITH LIGHT, STREETSIDE NO STEPS, 13.5" BUMPER	288705-34	X	X
PAINTED DUAL STEP KITS WITHOUT BUMPERS			
	288705-05	x	x
DUAL STEPS STREETSIDE NO STEPS NO BUMPERS	288705-06	X	X
DUAL FLEX STEPS NO BUMPERS	288705-25	X	X
DUAL FLEX STEPS, STREETSIDE NO STEPS, NO BUMPERS	288705-26	X	X
DUAL STEPS WITH LIGHT NO BUMPERS	288705-35	X	X
DUAL STEPS WITH LIGHT, STREETSIDE NO STEPS, NO BUMPER	288705-36	X	X
GALVANIZED DUAL STEP KITS WITH BUMPERS			
DUAL STEPS 14" RUBBER BUMPERS	288705-01G	x	X
DUAL STEPS, 13.5" PLASTIC BUMPERS	288705-02G	X	X
DUAL FLEX STEPS 14" RUBBER BUMPERS	288705-21G	X	X
DUAL FLEX STEPS 13 5" PLASTIC BUMPERS	288705-22G	X	X
DUAL FLEX STEPS W/LIGHT. 14" RUBBER BUMPERS	288705-31G	X	X
DUAL FLEX STEPS W/LIGHT, 13.5" PLASTIC BUMPERS	288705-32G	X	X
GALVANIZED DUAL STEPS WITH BUMPERS AND NO STEPS STREET SIDE			
DUAL STEP KIT. STREETSIDE. NO STEPS. 14" RUBBER BUMPER	288705-03G	X	X
DUAL STEP KIT. STREETSIDE. NO STEPS. 13.5" BUMPER	288705-04G	X	X
DUAL FLEX STEP KIT, STREETSIDE, NO STEPS, 14" RUBBER BUMPERS	288705-23G	X	X
DUAL FLEX STEP KIT, STREETSIDE, NO STEPS, 13.5" RUBBER BUMPERS	288705-24G	X	X
DUAL STEPS W/LIGHT STREETSIDE, NO STEPS, 14" RUBBER BUMPERS	288705-33G	X	X
DUAL STEPS W/LIGHT, STREETSIDE, NO STEPS,13.5" RUBBER BUMPERS	288705-34G	X	X
GALVANIZED DUAL STEPS WITHOUT BUMPERS			
DUAL STEPS NO BUMPERS	288705-05G	x	×
	288705-060		
	288705.250		
DIAL FLEX STEPS, NO DOWIFENS, GALVANIZED	200705-200	\uparrow	$\vdash $
DUAL I LEA STEFS, STREETSIDE, NO STEFS, NO DUMPERS	200705-200	\uparrow	\vdash
	200705-330	\uparrow	\downarrow
DUAL STEPS W/LIGHT, STREETSIDE, NO STEPS, NO BUWPER, GALVANIZED	1200100-300		1 ^

OPTIONAL LIFTGATE COMPONENTS - Continued

LOW BED SINGLE STEPS OPTIONS (36" TO 44" BED HEIGHT, 21" OVERALL STEP HEIGHT)			
PAINTED SINGLE STEP KITS WITH BLIMPERS			
SINGLE STEP 14" RUBBER BUMPERS	288705-11	x	
SINGLE STEP, 13 5" PLASTIC BUMPERS	288705-12	X	X
	200700 12		
PAINTED SINGLE STEP KITS WITH BUMPERS, NO STEPS ON STREET SIDE			
SINGLE STEPS, STREETSIDE NO STEPS, 14" RUBBER BUMPERS	288705-13	X	X
SINGLE STEPS, STREETSIDE NO STEPS,13.5" PE BUMPERS	288705-14	X	Х
PAINTED SINGLE STEP KITS WITHOUT BUMPERS			
SINGLE STEP, NO BUMPERS	288705-15	X	X
SINGLE STEP, STREETSIDE NO STEPS, NO BUMPERS	288705-16	Х	Х
GALVANIZED SINGLE STEP KITS WITH BUMPERS			
SINGLE STEP, 14" RUBBER BUMPERS	288705-11G	X	X
SINGLE STEP, 13.5" PLASTIC BUMPERS	288705-12G	Х	Х
GALVANIZED SINGLE STEP KITS WITH BUMPERS, NO STEPS ON STREET SIDE			
SINGLE STEP, STREETSIDE NO STEPS, 14" RUBBER BUMPERS	288705-13G	X	X
SINGLE STEP, STREETSIDE NO STEPS, 13.5" PLASTIC BUMPERS	288705-14G	Х	Х
GALVANIZED SINGLE STEP KITS WITHOUT BUMPERS			
SINGLE STEP WITH NO BUMPERS	288705-15G	X	X
SINGLE STEP, STREETSIDE NO STEPS, NO BUMPERS	288705-16G	X	Х
PAINTED STEP KITS WITHOUT BUMPERS (WELD-ON STEPS)			
2 STEP DOCK BUMPER	251416	x	x
RUBBER DOCK BUMPER (2.5"W X 3"H X 14" LG RUBBER BUMPERS)	203410	X	X

OPTIONAL LIFTGATE COMPONENTS - Continued

LOW BED DUAL STEPS OPTIONS (36" TO 44" BED HEIGHT, 21" OVERALL STEP HEIGHT)			
PAINTED DUAL STEPS WITH BUMPERS (WITH LIGHTS)			
DUAL STEPS WITH LIGHT (2.5"W X.3"H X.14" LG RUBBER BUMPERS)	288705-41	X	X
DUAL STEPS WITH LIGHT (2.0"W X 1 5"H X 13 5" LG PLASTIC BUMPERS)	288705-42	X	X
	200703-42		
PAINTED DUAL STEPS WITH BUMPERS NO STEPS ON STREET SIDE (WITH LIGHTS)			
DUAL STEPS WITH LIGHT (NO STEP ON STREET SIDE, 14" RUBBER BUMPERS)	288705-43	Х	Х
DUAL STEPS WITH LIGHT (NO STEP ON STREET SIDE, 13.5" RUBBER BUMPERS)	288705-44	Х	Х
PAINTED DUAL STEPS WITHOUT BUMPERS (WITH LIGHTS)			
DUAL STEPS WITH LIGHT, NO BUMPERS	288705-45	Х	Х
DUAL STEPS WITH LIGHT, STREETSIDE NO STEPS, NO BUMPERS	288705-46	Х	Х
GALVANIZED DUAL STEPS WITH BUMPERS (WITH LIGHTS)			
DUAL STEPS WITH LIGHT, GALV. (2.5"W X 3"H X 14" LG RUBBER BUMPERS)	288705-41G	X	X
DUAL STEPS WITH LIGHT, GALV. (2.9"W X 1.5"H X 13.5" LG PLASTIC BUMPERS)	288705-42G	X	X
DUAL STEPS WITH LIGHT GALV (NO STEP ON STREET SIDE, 14" RUBBER BUMPERS)	288705-43G	X	x
DUAL STEPS WITH LIGHT, GALV (NO STEP ON STREET SIDE, 13.5" RUBBER BUMPERS)	288705-44G	X	X
	000705 450		
DUAL STEPS WITH LIGHT, NO BUMPERS, GALV	288705-45G		X
DUAL STEPS WITH LIGHT, STREETSIDE, NO STEPS, NO BUMPERS, GALV.	288705-46G	X	X
BUMPERS KIT			
RUBBER BUMPER KIT, 14" BUMPERS (2.5"W X 3"H X 14" LG)	288706-01	Х	Х
RUBBER BUMPER KIT, 13.5" PLASTIC BUMPERS (2.9"W X 1.5"H X 13.5" LG)	288707-01	X	X

MAXON®

PRE-DELIVERY INSPECTION FORM

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

Model:	Date:			
Serial Number:	Technician:			
Pre-Installation Inspection:	Operation Inspection:			
 Correct model Correct capacity Correct platform size Correct options Manuals & decals Structural Inspection: Inspect alignment of final assembly Inspect pump box secure mounting Inspect all installation welds Check roll pins, bolts and fasteners Inspect tightness of hardware used to secure liftgate to vehicle. Ensure platform ramp tip and bottom of shackles touch the ground at the same time. 	 NOTE: The following times are for 55" bed height, aluminum platform and flipover, Exxon Univis HVI-13 oil, & temperature at 70°F. Times are for reference only and may vary for larger platforms, smaller platforms, or temperature changes. Check operation of all main and optional control switches. TE-15 or TE-20 only Unloaded platform lowers in 6 sec. Unloaded platform raises in 15 sec. 			
 Hydraulic Inspection: Proper fluid level (See CHECKING HYDRAULIC FLUID step in this manual.) Check hydraulic fittings in pump box for leaks Check hydraulic line connections for leaks 	 TE-25 or TE-30 only Unloaded platform lowers in 10 sec. Unloaded platform raises in 25 sec. All TE-Series: Unloaded platform raises and lowers evenly. At the extension plate, platform must not be more than 1/4" uneven, from side to side 			
 Electrical Inspection: Check power/charge plug and terminal Check for tight wire connections Circuit breaker (150A) installed in battery box (if equipped) or by truck/tractor battery. Ensure batteries are fully charged, all cable connections are tight & tiedowns are tight. Inspect all solenoid connections Check all wiring harness connections Check electrical cable connections are tight & secure. 	 All TE-Series: Breakaway force to unfold platform is 30 lb-ft maximum. Breakaway force to fold platform is 40 lb-ft maximum. All TE-Series: Platform stores securely under vehicle body Check if cycle counter works Decals in correct location and legible Verify all lights are operational (For lights supplied by MAXON only) Platform lights turn ON when platform is unfolded, and turn OFF when platform is stowed. Taillights, stop lights, turn lights, and backup lights turn ON and OEE correctly 			