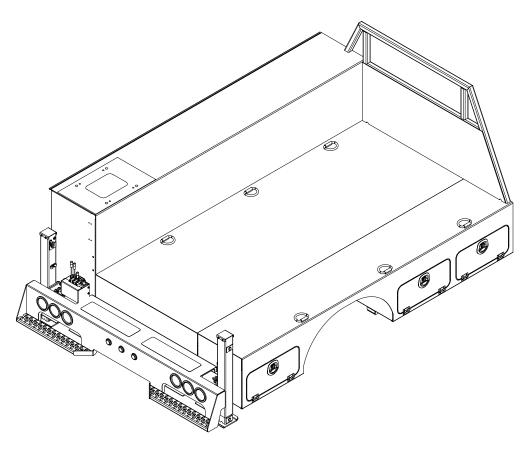


TITAN 38 PROPANE OWNERS MANUAL

Manual No. 739900000



Serial No.

Mailing Address: P.O. Box 580697 Tulsa, OK 74158-0697 Physical Address: 4707 N. Mingo Rd. Tulsa, OK 74117-5904

Phone (918) 836-0463 Fax (918) 834-5979 http://www.autocrane.com



Auto Crane Warranty Registration

Fax Transmission

To:	Warranty Depar	rtment	Fax:	(918) 83	34-5979
From:			Date:	•	
Re:	Product Registr	ation	Page	es:	
End Use	r Information:	(Required for Warranty Ac	tivation)		
Name:			Phon	ie:	
Address:					
City:		State:		Zip:	
Contact:		E-mail A	ddress:		
<u>Distribu</u>	tor Information:	(Required for Warranty Ac	tivation)		
Name:					
Address:					
City:		State:		Zip:	
Contact:		E-mail A	ddress:		
<u>Product</u>	Information:	(Required for Warranty Ac	tivation)		
Model No	o.:		Serial No.:		
Date Pro	duct Delivered:		Date Processe	ed:*	
VIN#					* For Auto Crane use only

ONE REGISTRATION FORM PER UNIT (CRANE OR BODY)

Registration form must be mailed or faxed within 15 days of customer installation.

Mail to:

Warranty Department Auto Crane Company P.O. Box 581510 Tulsa, OK 74158-0697

Warranty Registration Rev. 072403

OWNER'S MANUAL REVISION RECORD TITAN 38 PROPANE

Revision Date	Section(s) Or Page(s)	Description of Change
10/14/05	New Manual	New Body Design
03/14/06	Sections 4-3, 5-3	Update Gen Dim's, Hyd Outrigger
	Thru 5-8	
06/05/07	Sections 5-1 & 6-1	Updated Manual & Hyd Outriggers & Bumper Assy
10/02/09	17-1.0	Updated Preventive Maint. and Paint Instructions
07-07-10	Sect. 5 & Back	Added valve setting. Added Note on Ship Kit and Warranty

Notes:

- 1. The information contained in this manual is in effect at the time of this printing. It does not cover all instructions, configurations, accessories, etc. If you require additional information, please contact **Auto Crane Company** at **(918) 836-0463**.
- 2. **Auto Crane Company** reserves the right to update this material without notice or obligation.

WARNINGS

- WARNING! Federal Law (49CFR part 571) requires that the Final Stage Manufacturer of a vehicle, certify that the vehicle complies with all applicable federal regulations. Any modifications performed on the vehicle prior to the final stage are also considered intermediate stage manufacturing and must be certified as to compliance. The installer of this crane and body is considered one of the manufacturers of the vehicle. As such a manufacturer, the installer is responsible for compliance with all applicable federal and state regulations, and is required to certify that the vehicle is in compliance.
- **WARNING!** It is the further responsibility of the installer to comply with the OSHA Truck Crane Stability Requirements as specified by 29 CFR part 1910.180 (c) (1).
- WARNING! NEVER OPERATE THE CRANE NEAR ELECTRICAL POWER LINES!
 Death or serious injury will result from boom, line, or load contacting electric lines. Do not use crane within 10 feet of electric power lines carrying up to 50,000 volts. One foot additional clearance is required for every additional 30,000 volts or less.
- **WARNING!** Failure to correctly plumb and wire crane can cause inadvertent operation and damage to crane and/or personnel!

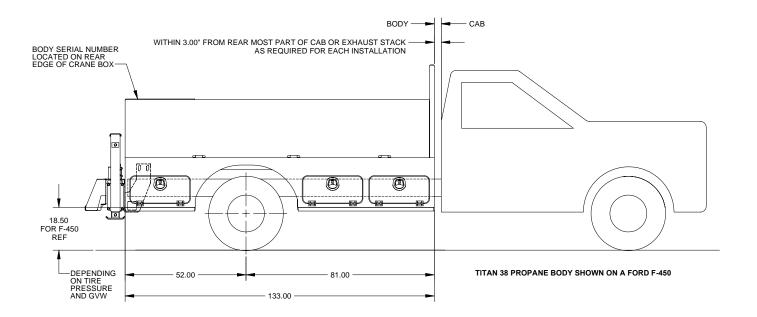
READ THIS PAGE

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NOTES

MOUNTING AND INSTALLATION TITAN 38 PROPANE



DIMENSIONS ARE APPROXIMATE, NOT TO SCALE AND FOR REFERENCE ONLY.

NOTES:

- Rear Mounting
 - Drill rear existing outrigger support 4 places (21/32 drill) using staggered pattern.
 - Match drill truck frame. Refer to the truck body-builders manual on drilling.
 - Use (8) 5/8", grade-8 hardware (bolts, nuts, washers, etc.) for mounting. (4) per shear plate. Torque them to their recommended specs.
 - Typical both sides of body.
 - <u>Do not weld to truck frame</u>. Refer to truck body-builders manual for further info.

Forward Mounting

- Using minimum 3/8" thick steel plate with minimum yield of 50,000 PSI x 4" to 6" wide, length as required, drill (3) 21/32"-dia. holes in a staggered pattern.
- Match drill truck frame. Refer to the truck body-builders manual on drilling.
- Use (6) 5/8", grade-8 hardware (bolts, nuts, washers, etc.) for mounting. Torque them to their recommended specs.
- Weld upper portion of 3/8" plate to body longitudinal sill, (weld 3/8" fillet).
- Typical both sides of body.
- <u>Do not weld to truck frame</u>. Refer to truck body-builders manual for further info.
- 3. Minimum truck chassis of 10,500 lbs. GVWR, 34" frame rail width outside and heavy-duty reinforced frame.

TITAN 38 MOUNTING AND INSTALLATION

TITAN BODY GASKET INSTALLATION INSTRUCTION

1-2.0 05/16/19

Door Gasket, Backer Rod and Silicon Installation

Removal and installation time:

5 Minutes per single door, 10 Minutes per double door, 30 minutes cure time.

List of Materials needed to perform installation door seal, vinyl tubing, and silicone:

- New door gasket seal
- Clear vinyl tubing 3.5 inches long by ½ inch outside diameter
- Clear vinyl tubing 1 inch long by ½ inch outside diameter
- Double door seal gasket (D-shaped gasket) full length of door
- 100% Clear Silicone fast cure Water Proof non-paintable caulking 1 tube per body
- Shears to cut weather-stripping
- Adhesion Remover (Paint Thinner, Mineral Spirits)
- Rubber Mallet
- Prv bar
- Small Flat Head Screw Driver
- Flat Blade Putty Knife
- Box Cutter with extra blades
- Caulking gun

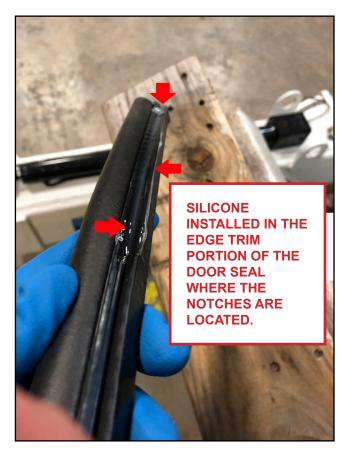
After removing the old door gasket and preforming the caulking inspection and repair, new door gaskets and vinyl tubing will be installed. This is a time sensitive installation so install the silicone to the door gasket edge trim after cutting the correct length and prepare to do the install.



Allow for 30 minute cure time before shutting of doors.

1. Before installing gasket, apply silicone to both sets of notches in the door frame, top and bottom. Also apply silicone to the edge trim where the notches will be located.





- 2. Insert the Door Gasket behind the hinges so that the door gasket bulb is facing outwards towards the door but do not apply to the door frame edge until the door gasket ends are at the center of the bottom door frame.
- 3. Start by applying one end of the door gasket onto the bottom center of the door frame and work your way into the 1st corner, then up the side of the frame until the 2nd corner making sure to keep the corners pushed tight. Then work the door gasket into the 3rd corner and behind the door hinges by moving the door back and forth so you have room behind the hinges to work the door gasket onto the edge. Use a pry bar to push on the door gasket onto the edge and a rubber mallet to evenly install the door gasket. When you reach the 4th corner install tight and continue until needed to trim excess door gasket, leaving about 1 inch excess after cutting for pressure retention between the seams. Trim the door gasket ends as straight as possible. Use a rubber mallet to ensure fit in corners and remove door dampener if necessary to facilitate installation.







4. Install the 1 inch clear vinyl tubing, leaving about 1/2 inch sticking out to install into the other seam. Apply the silicone on the bulbs around the diameter of the vinyl tubing and onto and into the edge trim portion of the door gasket on both sides of the seam. Insert the door gasket with silicone applied to the vinyl tubing and surface into the other seam and push down the door gasket until flush onto the edge. (The extra silicone will push out of the seam so wipe away excess but leave the silicon in the center to make a flush molded seal).





WHEN THE TWO SEAMS ARE PUSHED TOGETHER, INSTALL BOTH SEAM ONTO THE DOOR FRAME EDGE TRIM.

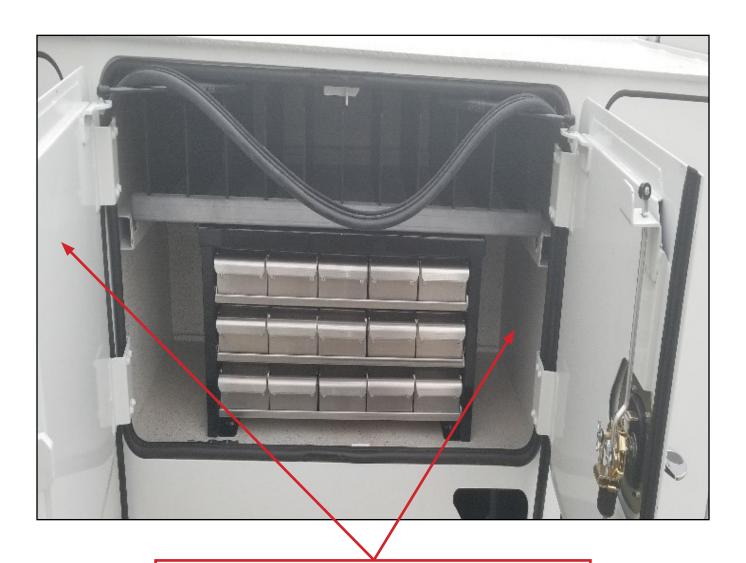


WIPE EXCESS SILICONE OFF THE OUTER PORTION OF DOOR GASKET BULB AND EDGE TRIM.

5. Insert the door gasket behind the hinges so that the door gasket bulb is facing outwards to the door, but do not apply to the door frame edge until the door gasket ends are positioned correctly at the bottom door frame.

NOTICE

Position of door gasket end is described in step 2.



POSITION THE DOOR GASKET IN THE CORRECT DIRECTION AND PLACE THRU THE HINGES FOR EASIER ADJUSTMENT AND INSTALLATION.

NOTICE

Apply silicone to notches in double door the same as in single doors

6. Start by applying one seam of the door gasket onto the bottom of the door frame. The position of the seam needs to be behind the inner door about ½ inch from the outside edge of the door. Work your way into the 1st corner, then up the side of the frame behind the hinges (using rubber mallet and pry bar if needed) until the 2nd corner. Make sure to keep the corners pushed tight. If needed remove the door dampeners (shocks). Work the door seal into the 3rd corner and behind the door hinges by moving the door back and forth so you have room behind the hinges to work the door gasket onto the edge. Use a pry bar to push the door gasket on and a rubber mallet to evenly install the door gasket. When you reach the 4th corner, install tight and continue until it is necessary to trim excess door gasket, leaving about 1 inch excess after cutting for pressure retention between the seams. Trim the door gasket ends as straight as possible.



7. The 3.5 inch vinyl tubing needs to be installed correctly based on the beginning of the first seam. The vinyl tubing needs to be positioned so it is installed into both bulb seams and between the inner door and outer door. Insert the 3.5 inch vinyl tubing into the bulb seam about 1/2 inch behind the inner door seam, using the silicone. Apply the silicone to the seam and edge trim and apply around the tubing where it meets the seam. On the second seam, apply silicone to the bulb and edge trim. Slide the rest of the 3 inches of the tubing inside the 2nd seam tight and push the seam onto the edge, flush. Work the door gasket down on the edge trim. Wipe off excess silicone leaving the silicone in the center to make a flush molded seal. (Lubricant can be added to the tubing for assemble easier. Before applying silicone remove any oil or grease from the sealing surfaces.)



How to install vinyl tubing and silicone the seams:

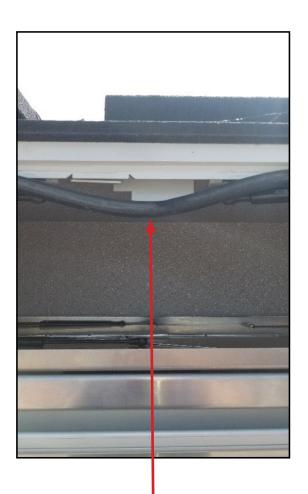




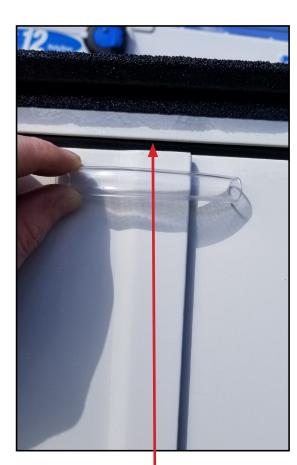




8. Once the bottom seams of the door frame are complete, pull the door gasket down from the top of the door frame where the 2nd 3.5 inch tubing will be installed and sealed. Once the door gasket is pulled down enough away from the edge to cut the door gasket into 2 pieces, cut the door gasket keeping the cut straight. After cutting the door gasket, install the tubing as the same as the bottom portion by installing the tubing 1/2 inch into the door gasket seam behind the inner door and 3 inches inside the other seam leading to the outer door. Silicone the door gasket edge trim that was removed to cut and install the tubing. Silicone the tubing seam area, the bulb, and edge trim and install the seams flush and flat. Wipe away excess silicone leaving the silicone in the center to make a flush molded seal. (Lubricant can be added to the tubing to assembly easier. Before applying silicone remove any oil or grease from the sealing surfaces.)



TOP PORTION OF DOOR GASKET PULLED DOWN TO MAKE CLEARANCE TO CUT WITH SHEARS.



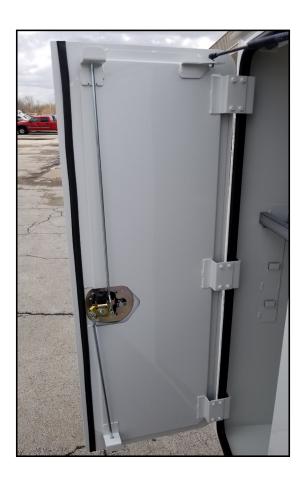
ACCOMPLISH TOP PORTION IN SIMILAR FASHION AS THE BOTTOM.



9. The door seam gasket (D-shaped seal with adhesive) must be applied to the full length of the outer door. It must be applied to the inside radius of the double bend. Before applying gasket to door, position the red tape in line with the tangent line of the radius as shown below.



10. Cut door seam gasket to full length of door and apply flush. Firmly press gasket into door to make sure adhesive holds



NOTICE

Now that the door gasket is installed on the door frame, the T-handle, roller guides and door rods will need to be adjusted to accommodate the extra diameter and pressure from the vinyl tubing and door seam gaskets. Review the roller guide, door rod and T-handle section of the work instructions to adjust the doors properly.

Adjustment time: 10 minutes per door

List of materials needed to perform adjustment:

- Pry bar
- Table top vise
- · Small rubber mallet
- SAE allen wrench pack

The final phase of the work instructions, the adjustment of these components will not only help seal the door better, it will help by allowing the T-handle latch to open easily but remain a tight 3 point contact with the locking system. To help evenly distribute and close any gaps and set in the door gasket, pressure is required to ensure that the door face meets the bulb seal 100% around the doors.

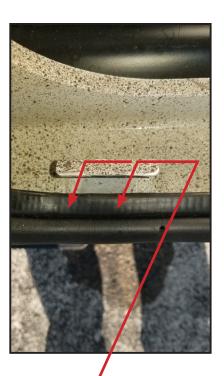
Once all of the modifications have been performed, the T-handle gasket installation, the caulking inspection and repair, the removal and installation of the tape gasket, the installation of door gaskets and backer rods. Adjustment of the door rod, roller guide, and T-handle will be required due to the stiffness of the backer rod and pressure required for the double doors and on the single doors to remain leak free.

Single door Adjustments

1. The adjustment of the roller guides may be required. The roller guide may need to be pried in small gap increments (1/16 inch, 1/8 inch, 3/16 inch, 1/4 inch) in the direction of the back of the compartment. This will tighten the door rod rollers and pull the door into the door gasket when turning the T-handle to the close the door.







ROLLER GUIDE ADJUSTMENT ON SINGLE DOORS. GAP THE DOOR FRAME'S TOP AND BOTTOM ROLLER GUIDE AWAY FROM THE DOOR GASKET SO THE DOOR WILL MAINTAIN CONSTANT PRESSURE WHEN CLOSED.

VERIFY T-HANDLE LATCH WILL OPERATE CORRECTLY AFTER ADJUSTMENT. IF NEEDED, ADJUST ROLLER GUIDE TOWARDS THE DOOR GASKET UNTIL THE T-HANDLE WHALE TAIL TURNS EASILY.

- 2. After adjustment, the T-handle whale tail should turn moderately with one hand without pushing in on the door. You will notice as you turn the T-handle that the door pressure against the bulb will increase and flatten the bulb seal. The adjustments should be performed evenly to the top and bottom roller guide. If the T-handle whale tail is difficult to turn due to over-gapping the roller guide, shorten the gap with a mallet until the T-handle whale tail will turn with moderate ease.
- 3. After the adjustment of the roller guide, adjustment of the T-handle pivot tensioner will need to be performed. On most single doors the black bump stop roller with its allen head screw will need to be positioned to its tightest setting. Loosen the allen head screw and pull the black bump stop roller toward the inside of the door until it stops then tighten. Close the door and turn the T-handle latch to lock the door, then close the whale tail into its stowage position. If closing the whale tail in the stowage position is extremely difficult then loosen the black bump stop roller and adjust accordingly.







SINGLE DOOR ADJUSTMENT DIRECTION.

NOTICE

When the T-handle whale tail is stowed in its locked position, it should pull the door into the door frame even tighter. If it doesn't pull the middle of the door tighter then it is not contacting with the door frame. The middle of the door will not retain tension and could leak water. This can cause the T-handle whale tail to open during mobile operation.

Double Door Adjustments

Correct adjustments of the latching system is crucial to help remain easy operation and pressure to help maintain the compartments to be leak free. The opposite will be performed on the double doors due to the extra diameter of the door seal backer rods. Without adjustments to the rods and T-handle latching system, it will be next to impossible to operate and close, and the doors will not shut correctly.

The adjustment of the door rods will need to be performed, The roller guide on most double doors will most likely be at the closed position so adjustment of the striker roller guide will not affect the tension on the doors unless it is gapped in the direction of the back of the compartment. If there is a gap between the striker plate and the door seal edge trim then it can be adjusted by using a rubber mallet and closing the gap if necessary.

1. Remove the doors rods from the T-handle pivot retainer and place the door rod in a vice so that about 4 inches is sticking up beneath the rollers. The direction the door rods are placed in the vice is crucial to perform the bend in the correct direction. In 99% of adjustments, the bend of the roller neck will need to be in the same direction as the bend that is in the lower portion of the door that meets the T-handle pivot tensioner. This bend will allow the rollers to meet the tapered portion of the striker plate when the doors are close instead of the flat portion of the striker plate which will make the T-handle whale tail difficult to turn to shut.









DIRECTION TO BEND ROD NECK ROLLER HEAD WHEN ORIENTED CORRECTLY.

NOTICE

Bending the neck of the rod rollers too far will result in a loss of pressure against the door and door seal and could potentially develop a leak. When the rod bend is correct, pressure from the latching system when the door is closed and shut, will be great enough to close all the door seal gaps evenly against the backer rod and the rest of the door. The D-profile gasket should be crushed flat against the door seal and inner door when the door is closed and shut.







NOT BENT FAR ENOUGH

BENT TOO FAR

BENT CORRECTLY

2. After the adjustment of the door rods and/or roller guide, adjustment of the T-handle pivot tensioner will need to be performed. The black bump stop roller with its allen head screw will need to be positioned so that the whale tail will shut moderately in the stowage position. Loosen the allen head screw and adjust the black bump stop roller accordingly so when the door is closed and shut, and the whale tail is in the stowage position, it closes the doors gap between the inner and outer door. This adjustment should put even more pressure on at top, middle, and bottom of the D-profile gasket.









DOUBLE ADJUSTMENT DIRECTION

NOTICE

Close the door and turn the T-handle latch to shut the door then close the whale tail into its stowage position. If closing the whale tail in the stowage position is extremely difficult then loosen the black bump stop roller and adjust accordingly.

3. When the T-handle whale tail is stowed in the locked position it should pull the door into the door frame even tighter. If it doesn't pull the middle of the door tighter then it is not contacting with the inner door strike plate and the middle of the door will not retain tension and could leak water. This can cause the T-handle whale tail to open during mobile operation.

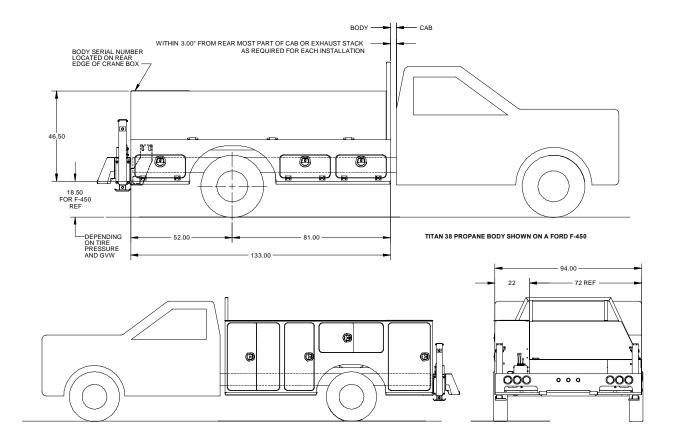








GENERAL DIMENSIONS TITAN 38



84CA				
COMPARTMENT	WIDTH	HEIGHT	DEPTH	CU. FT.
FRONT STD	36 1/4	46	21 7/8	21.11
FRONT TALL	36 1/4	57 3/4	21 7/8	26.50
MID	22 1/4	46	21 7/8	12.96
HORIZONTAL	44	21 1/2	21 7/8	11.98
REAR	29 15/16	46	21 7/8	17.43
INSIDE COMPARTMENT SIZES (STD)		TOTAL BODY CU. FT.		126.95
INSIDE COMPARTMENT SIZES (TALL)		TOTAL BODY CU. FT.		132.34

GENERAL DIMENSIONS TITAN 38

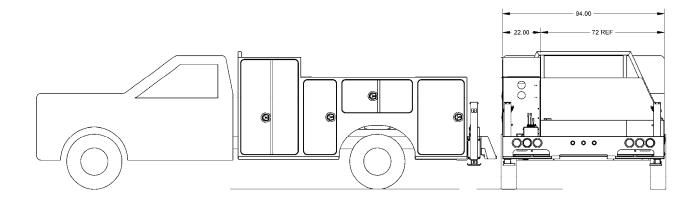
BODY SERIAL NU BER LOCATED ON REAR PART OF CAB OR EXHAUST STACK
AS REQUIRED FOR EACH INSTALLATION

18.50
FOR F-450
REF

DEFENDING
ON TIRE
REF

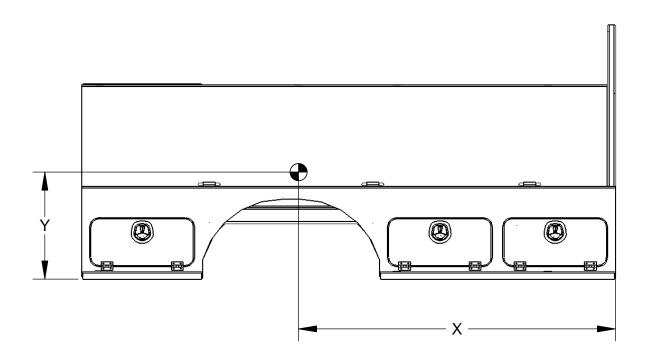
133.00

TITAN 38 PROPANE BODY SHOWN ON A FORD F-450



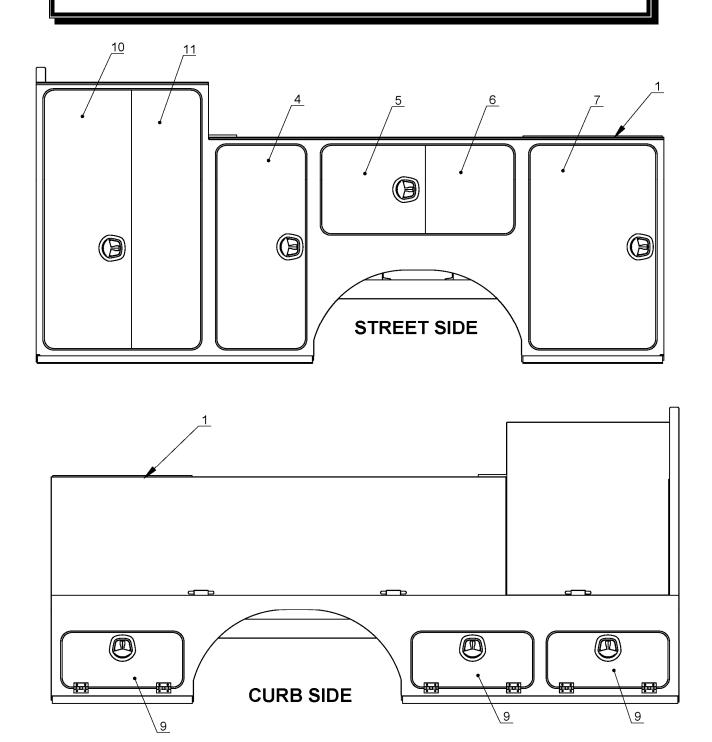
NOTES

BODY CG INFORMATION TITAN 38 PROPANE

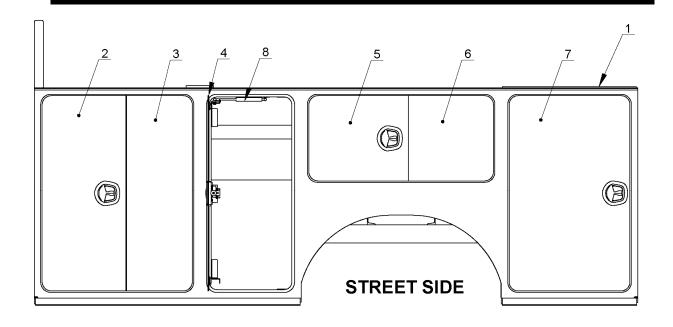


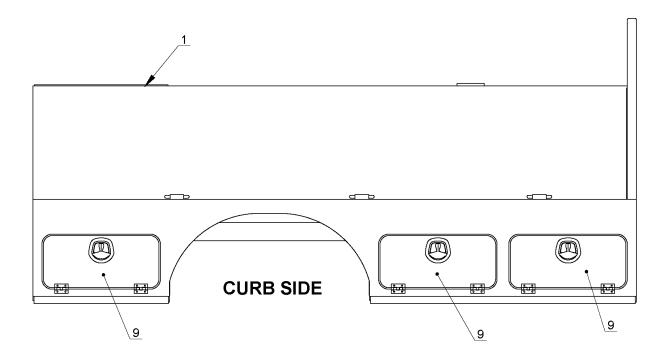
BODY ASSY	Х	Υ
TITAN 38 PROPANE	79	26.53

BODY ASSEMBLY TITAN 38 PROPANE – P/N: 739100000



BODY ASSEMBLY TITAN 38 PROPANE – P/N: 739100000



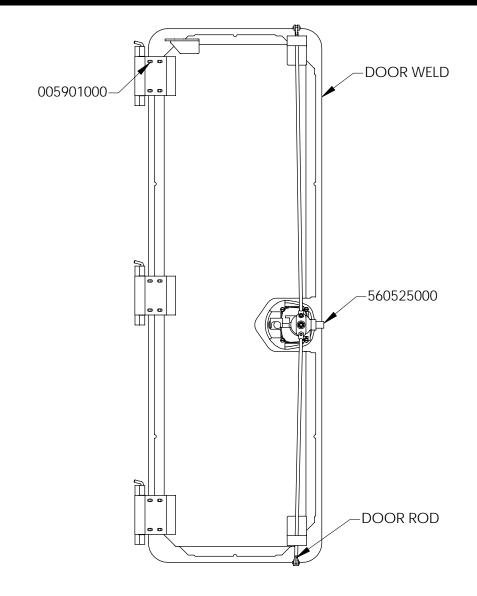


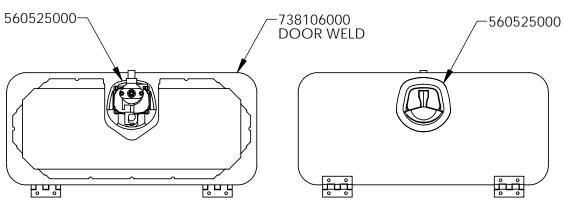
NOTES

BODY ASSEMBLY TITAN 38 PROPANE – P/N: 739100000

ITEM NO.	PART NO.	DESCRIPTION	-000 STD	-001 TALL
1	739044000	BODYWELD, TITAN 38 PROPANE STD SSC	1	-
2	738595005	DOOR ASSYFRONT STD SS	1	-
3	738595007	DOOR ASSYFRONT STD BLANK SS	1	-
4	738595009	DOOR ASSYMID SS	1	1
5	738595011	DOOR ASSY HORIZ SS	1	1
6	738595013	DOOR ASSY HORIZ BLANK SS	1	1
7	738595015	DOOR ASSYREAR SS	1	1
8	760535000	DOOR CHECK ASSY	6	6
9	739044001	BODY WELD, TITAN 38 PROPANE TALL SSC	-	1
10	738595001	DOOR ASSYFRONT TALL SS	-	1
11	738595003	DOOR ASSYFRONT TALL BLANK SS	-	1
12	739088000	SHIP KIT, TITAN 38 PROPANE BODY	1	1

DOOR ASSEMBLY TITAN 38 PROPANE

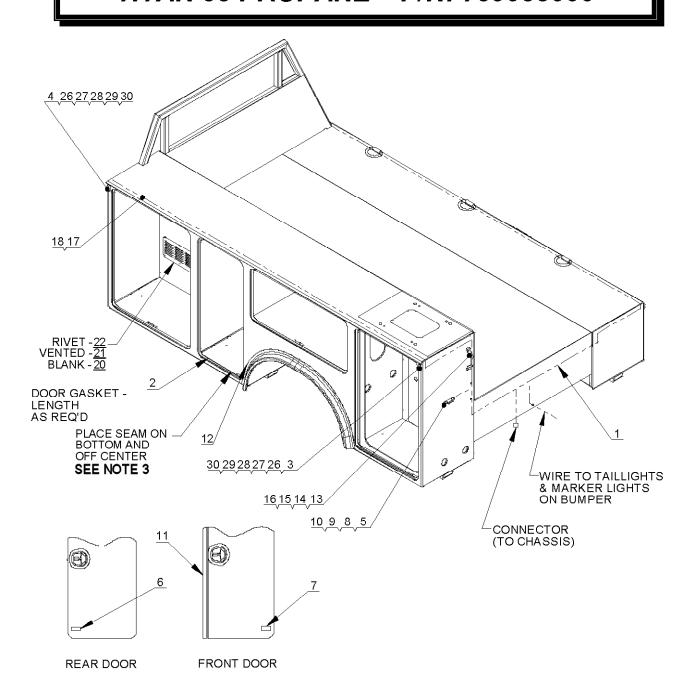




DOOR ASSEMBLY TITAN 38 PROPANE

DOOR ASSEMBLY CHART		-001 DOOR ASSY FRONT TALL SS	-003 DOOR ASSY FRONT TALL BLANK SS	-005 DOOR ASSY FRONT STD SS	-007 DOOR ASSY FRONT STD BLANK SS	-009 DOOR ASSY MID SS	-011 DOOR ASSY HORIZ SS	-013 DOOR ASSY HORIZ BLANK SS	-015 DOOR ASSY REAR SS	-017 DOOR ASSY FRONT STD SS	-018 DOOR ASSY FRONT STD CS	-019 DOOR ASSY FRONT STD BLANK SS	-021 DOOR ASSY FRONT TALL SS	-023 DOOR ASSY FRONT TALL BLANK SS	-025 DOOR ASSY FRONT PROPANE
DOOR WELD FRONT TALL SS	738596001	1													
DOOR WELD FRONT TALL BLANK SS	738596003		1												
DOOR WELD FRONT STD SS	738596005			1											
DOOR WELD FRONT STD BLANK SS	738596007				1										
DOOR WELD MID SS	738596009					1									
DOOR WELD HORIZ SS	738596011						1								
DOOR WELD HORIZ BLANK SS	738596013							1							
DOOR WELD REAR CS	738596015								1						
DOOR WELD REAR SS	738596016														
DOOR WELD FRONT STD SS	738596017									1					
DOOR WELD FRONT STD CS	738596018										1				
DOOR WELD FRONT STD BLANK SS											1				
DOOR WELD FRONT STD BLANK CS	738596020														
DOOR WELD FRONT TALL SS	738596021												1		
DOOR WELD FRONT TALL BLANK SS	738596023													1	
DOOR WELD FRONT TALL BLANK CS	738596024														
DOOR WELD FRONT PROPANE	738596025														1
DOOR LATCH	560525000	1		1		1	1		1	1	1		1		
DOOR ROD	560415000	1		2		2			2	2	2		1		

SHIP KIT TITAN 38 PROPANE – P/N: 739088000



NOTES:

- P/N'S 750738000 AND 750737000 ARE TO BE USED TO SECURE WIRE HARNESS IN COMPARTMENT AREA.
- 2. P/N 560540000 INSTALLED IN LARGE WIRING HOLE AT CLEARANCE LIGHT AREA. APPLY P/N 750736000 WITH WIRING HARNESS TO GROMMET AT CLEARANCE LIGHT.
- 3. APPLY ATV SEALANT TO ONE END OF THE DOOR GASKET. PRESS BOTH ENDS TOGETHER AFTER INSTALLING. SMEAR ANY EXCESS SEALANT AROUND THE SEAM WHEN COMPLETE.

SHIP KIT TITAN 38 PROPANE – P/N: 739088000

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	560106002	HARNESS, WIRING BODY
2	1	560114000	GASKET, DOOR
3	2	560451000	LAMP CLEARANCE MARKER RED
4	2	560450000	LAMP CLEARANCE MARKER AMB
5	1	750980000	LAMP LICENSE W/BRACKET
6	2	560453000	REFLECTOR RED
7	2	560452000	REFLECTOR AMBER
8	2	002609000	SCREW RD HD #10-32UNF X 5/8 LG
9	2	019900000	WASHER FL #10
10	2	015800000	NUT HX LK #10-32UNF
11	154"	750740000	GASKET DOUBLE DOORS
12	1	738597001	FENDERETTE INST'N KIT
13	1	750863000	HANDLE
14	8	015900000	NUT HX 1/4-20UNC
15	14	020200000	WASHER SP LK 1/4
16	8	330389304	SCREW SOC HD 1/4-20UNC X 3/4 LG
17	12	750737000	TIE CABLE
18	12	750738000	STICK-ON, CABLE TIE MOUNT
*19	2	750732000	ROCK GUARD
20	2	752222000	BLANK PANEL F/CUTOUT
21	1	752221000	VENT PANEL F/CUTOUT
22	16	754028000	RIVET 3/16 (1/4 - 3/8 GRIP)
*23	4	560449000	BRACKET MOUNTING
*24	2	738706000	COVER FUEL LINE
*25	6	005800000	SCREW 1/4-20UNC X 1/2 LG
26	8	000602000	SCREW RD HD #6-32UNC X 1 LG
27	8	015400000	NUT HX #6
28	8	019600000	WASHER SP LK #6
29	2	560540000	GROMMET, NYLON
30	16in	750736000	LOOM, CONVOLUTED
*	ITEM N	NOT SHOWN	

NOTES

VEHICLE PREPARATIONS AND OUTRIGGER OPERATIONAL INSTRUCTIONS

VEHICLE PREPARATION FOR OUTRIGGER AND CRANE OPERATION

- Park vehicle within crane operating distance from object that is to be lifted. Notes:
 - Make sure there are no obstructions preventing safe handling of load during crane operation.
 - Verify that no obstructions will prevent the full extension of the outrigger legs on both sides of vehicle.
 - Regardless of load to be lifted the outriggers should always be fully extended to keep vehicle stable.
 - Grade shall not exceed 1° of level. Level truck with blocks if grade exceeds 1° of level.
- 2. **ALWAYS** set the vehicle emergency brake before beginning crane operations.
- 3. Use wheel chocks on the front wheels of vehicle.

INSPECT OUTRIGGERS BEFORE USE

- 1. Visually inspect outrigger before use making sure the outrigger is in good working order.
- 2. Replace or repair any warn or damaged parts before outrigger operation.
- 3. Check for and repair leaks on hydraulic units if they occur.

MANUAL OUTRIGGER OPERATION

- 1. Un-hook the sling from around the outrigger leg.
- 2. Extend outrigger slide from stowed position by releasing pull pin and extending the outrigger slide fully.
- 3. Make sure the slide is fully extended and locked into position with pull pin.
- 4. Lower both outrigger legs until they contact the ground then extend another inch to insure good ground contact.

Notes:

- Use blocks under pads to increase surface area if required for stability on soft ground.
- **DO NOT LIFT TRUCK WHEELS WITH OUTRIGGERS.** The outriggers are intended for vehicle stability during lifting operations not for complete vehicle support.

MANUAL OUTRIGGER STOWING PROCEDURE

- 5. Fully retract vertical legs to stowed position.
- 6. Retract outrigger slide from extended position by releasing pull pin and pushing slide in fully.
- 7. Make sure the slide is fully retracted and locked into position with pull pin.
- 8. Make sure the sling is secured in place around the outrigger leg.

HYDRAULIC OUTRIGGER OPERATION

- 1. Divert hydraulic flow from control valve to outrigger operations.
- 2. Use the hydraulic control valve to extend outrigger slide from stowed position to the fully extended position.
- 3. Make sure the slide is fully extended.
- Lower both outrigger legs until they contact the ground then extend another inch to insure good ground contact.

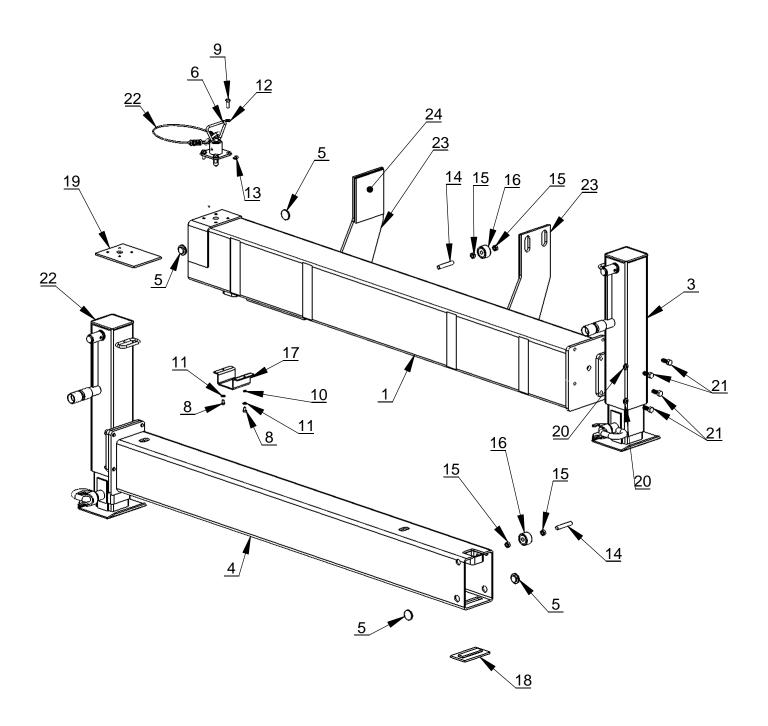
Notes:

- Use blocks under pads to increase surface area if required for stability on soft ground.
- DO NOT LIFT TRUCK WHEELS WITH OUTRIGGERS. The outriggers are intended for vehicle stability during lifting operations not for complete vehicle support.

HYDRAULIC OUTRIGGER STOWING PROCEDURE

- 5. Fully retract vertical legs to stowed position.
- 6. Retract outrigger slide from extended to the fully retracted.
- 7. Make sure the slide is fully retracted and in the stowed position.

OUTRIGGER ASSY, FULLY MANUAL STREET SIDE - P/N: 738897000

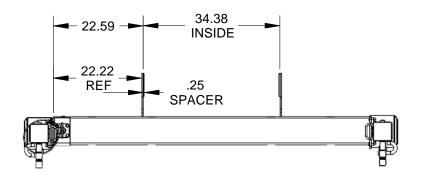


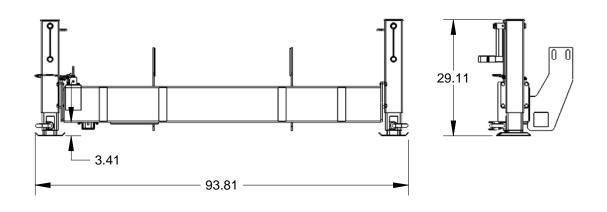
OUTRIGGER ASSY, FULLY MANUAL STREET SIDE - P/N: 738897000

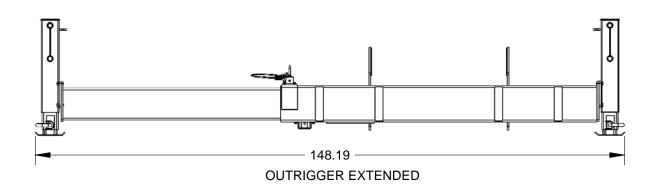
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	738602001	TITAN 38 OUTRIGGER TUBE WELD (MANUAL)
2	1	738645000	SHIP KIT TITAN 38 OUTRIGGER
3	1	738899000	TITAN 38 LEG WELD CS MANUAL
4	1	738888001	TITAN 38 SLIDE ASSY SS MANUAL
5	4	407277000	PAD BOOM 1.5 O.D.
6	1	738685000	PULL PIN WELD (REMOVABLE)
7	1	738606000	DECAL LAYOUT MANUAL
8	2	005901000	SCREW HX HD 1/4-20UNC X 1/2 LG
9	4	00880000	SCREW HX HD 3/8-24UNF X 1 LG
10	2	020200000	WASHER SP LK 1/4
11	2	020400000	WASHER FL SAE 1/4
12	4	021200000	WASHER FL 3/8
13	1	239300000	ZERK, GREASE
*14	1	372218000	SCREW SET 1/2UNC X 3 LG
*15	2	372219000	NUT, HX JAM 1/2-13UNC
*16	1	240234000	BEARING, NEEDLE
17	1	372216000	COVER ROLLER
18	1	460055000	WEAR PAD, TOP MID
19	1	738682000	DOUBLER PULL PIN
20	4	021500000	WASHER SP LK 1/2
21	4	738647000	SCREW HX HD 1/2-13UNC X 1 1/4 LG GR8
22	1	738898000	TITAN 38 LEG WELD SS MANUAL
**23	2	738563001	TITAN 38 BUMPER SUPPORT F/HITCH
**24	2	738669000	BAR RT 1/4 X 3 X 5.75
*		I	TEMS ARE PART OF ITEM #4
**			TEMS ARE PART OF ITEM #2

NOTES

OUTRIGGER ASSY, FULLY MANUAL STREET SIDE - P/N: 738897000





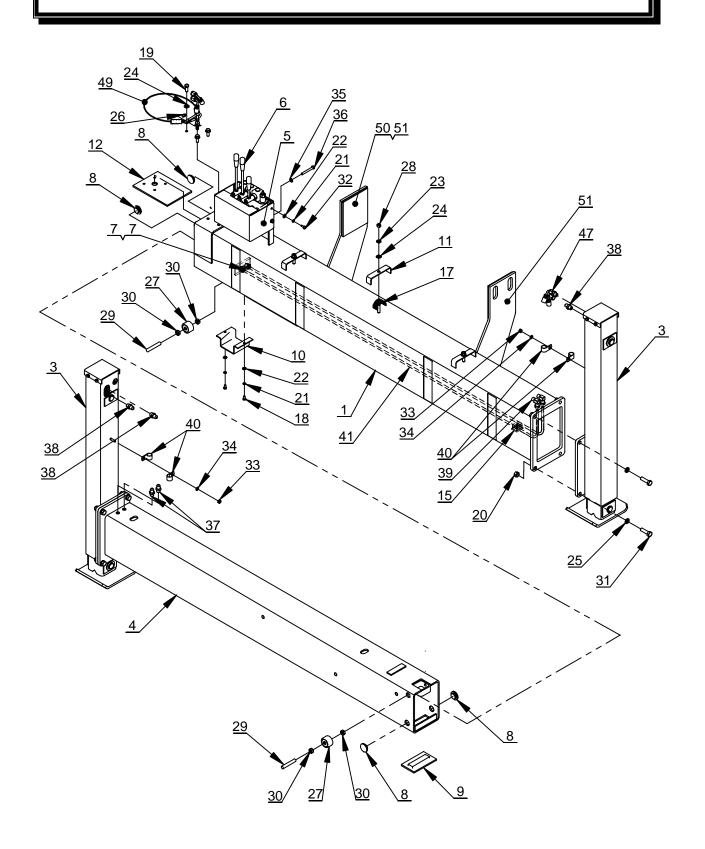


GENERAL DIMENSIONS

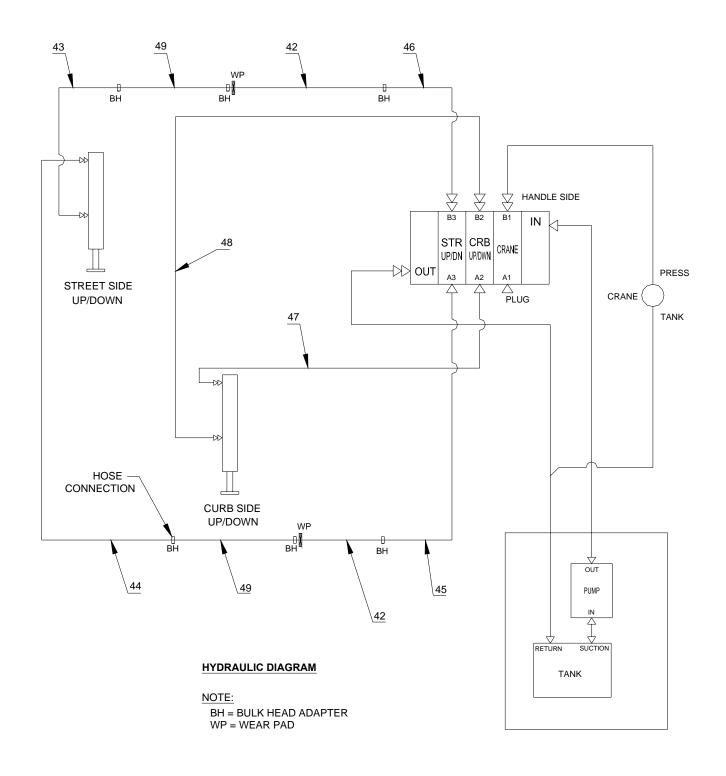
MANUAL EXTENSION DISTANCE = 54.00in

UP/DOWN LEG STROKE = 27.00in

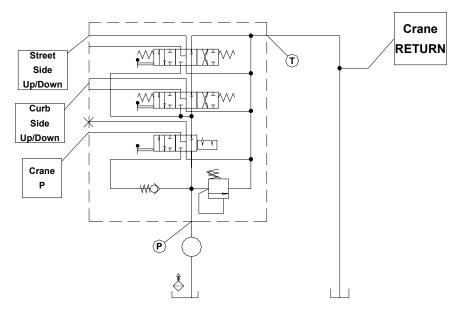
OUTRIGGER ASSY, MANUAL OUT HYD DOWN STREET SIDE - P/N: 738844000



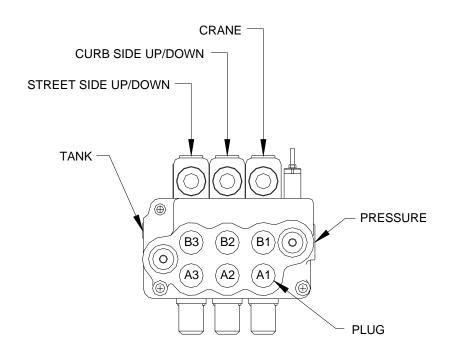
OUTRIGGER ASSY, MANUAL OUT HYD DOWN STREET SIDE – P/N: 738844000



OUTRIGGER ASSY, MANUAL OUT HYD DOWN STREET SIDE - P/N: 738844000



HYDRAULIC SCHEMATIC



DIRECTION CONTROL VALVE (REAR VIEW)

NOTE:
A-PORT BOTTOM
B-PORT HANDLE SIDE

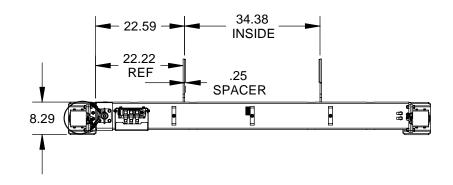
OUTRIGGER ASSY, MANUAL OUT HYD DOWN STREET SIDE – P/N: 738844000

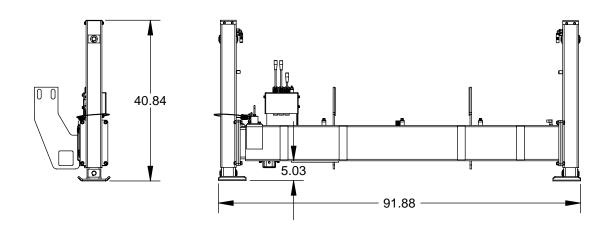
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	738622001	TITAN 38 OUTRIGGER TUBE WELD SSC
2	1	738645000	SHIP KIT TITAN 38 OUTRIGGER
3	1	738837000	TITAN 38 HYD LEG ASSY
4	1	738848001	TITAN 38 SLIDE ASSY SS (MAN OUT HYD DN)
5	1	738632000	COVER, DIRECTIONAL CTR VALVE
6	1	738630000	CONTOL VALVE SUB-ASSY, 3 SECTION
7	1	738689000	WEAR PAD 1.75 X 3.5 X 3/8
8	4	407277000	PAD BOOM 1.5 O.D.
9	1	460055000	WEAR PAD, TOP MID
10	1	372216000	COVER ROLLER
11	3	407216000	HOSE RETAINER 4.75 WIDE
12	1	738682000	DOUBLER PULL PIN
13	1	738634000	DECAL LAYOUT MAN OUT HYD DN
14	1	738847001	KIT, HYD OUTRIGGER SSC (MAN OUT HYD DN)
15	1	560186000	TUBING MTG ASSY (# 6)
16	1	715048000	EDGE TRIM 3/32
17	18	374086000	NYLON HOSE SLEEVE
18	2	005901000	SCREW HX HD 1/4-20UNC X 1/2 LG
19	3	008701000	SCW HX 3/8 UNC X 1 GR5
20	4	017701000	NUT HX 1/2-13UNC
21	5	020200000	WASHER SP LK 1/4
22	5	020400000	WASHER FL SAE 1/4
23	3	021100000	WASHER SP LK 3/8
24	7	021200000	WASHER FL 3/8
25	4	021500000	WASHER SP LK 1/2
26	1	239300000	ZERK, GREASE
27	1	240234000	BEARING, NEEDLE
28	3	330372000	NUT HX 3/8-16UNC
29	1	372218000	SCREW SET 1/2-13UNC X 3 LG
30	2	372219000	NUT, HX JAM 1/2-13UNC
31	4	738642000	SCREW HX HD 1/2-13UNC X 1 3/4 LG GR8
32	3	005401000	SCREW HX HD 1/4-20UNC X 5/8 LG CP
33	2	016500000	NUT HX 5/16-18UNC
34	2	020601000	WASHER SP LK 5/16
35	3	020901000	WASHER FL 5/16
36	3	811029000	SCREW HX HD 5/16-18UNC X 2 1/2 LG
*37	4	241170000	FITTING BULHD 6 SAE/6 JIC STRAIGHT
*38	4	200876000	FITTING 6 SAE/6 JIC STRAIGHT
*39	2	367136000	FITTING 90 6-SAE/6-JIC
40	4	480024000	MOUNT PENDANT CABLE RETAINER

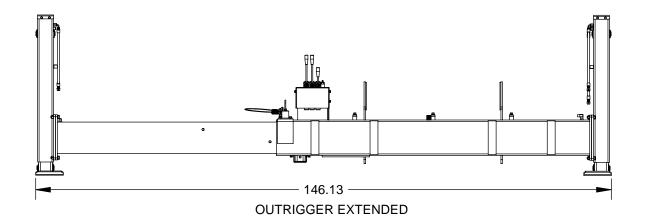
OUTRIGGER ASSY, MANUAL OUT HYD DOWN STREET SIDE - P/N: 738844000

ITEM NO.	QTY.	PART NO.	DESCRIPTION			
40	4	480024	MOUNT PENDANT CABLE RETAINER			
*41	2	738678000	TUBE ASSY -6 JICF X -6 TUBE			
*42	1	812037023	HOSE ASSY, -6 JICF/ -6 90 DEG ELL, -4 HOSE x 23"			
*43	1	812037025	HOSE ASSY, -6 JICF/ -6 90 DEG ELL, -4 HOSE x 25"			
*44	1	812026072	HOSE ASSY -6 JICF/-6 JICF X -4 HOSE x 72 LG			
*45	1	812026073	HOSE ASSY -6 JICF/-6 JICF X -4 HOSE x 73" LG			
*46	1	812037094	HOSE ASSY, -6 JICF/ -6 90 DEG ELL, -4 HOSE x 94"			
*47	1	812037096	HOSE ASSY, -6 JICF/ -6 90 DEG ELL, -4 HOSE x 96"			
*48	2	812026134	HOSE ASSY -6 JICF/-6 JICF X -4 HOSE X 134" LG			
49	1	772067000	SLING, OUTRIGGER			
**50	2	738669000	BAR RT HR 1/4 x 3.00 x 5.75 LG			
**51	2	738563001	TITAN38 BUMPER SUPPORT			
**52	1	1 738646000 INSTALLATION DRAWING				
*	THESE ITEMS ARE A PART OF ITEM # 14					
**		THESE ITEMS ARE A PART OF ITEM # 2				

OUTRIGGER ASSY, MANUAL OUT HYD DOWN STREET SIDE – P/N: 738844000

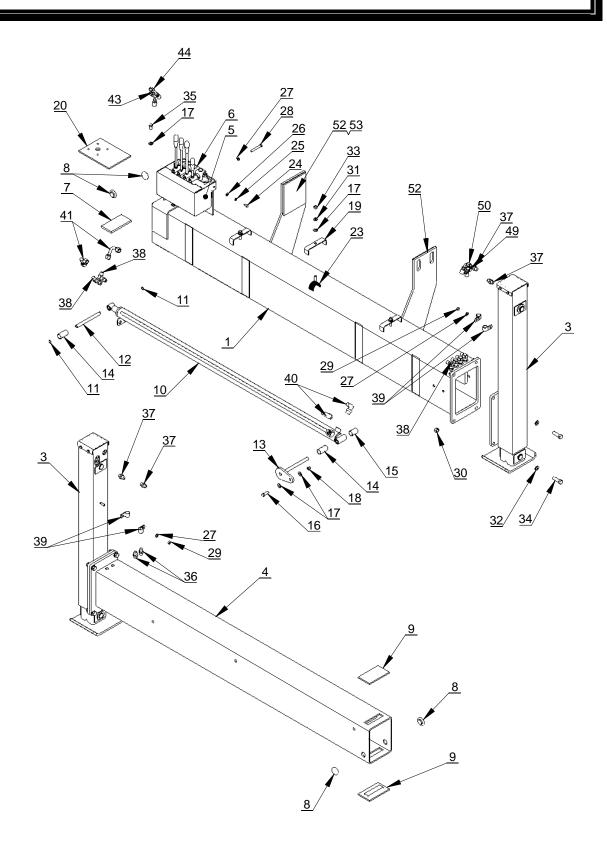


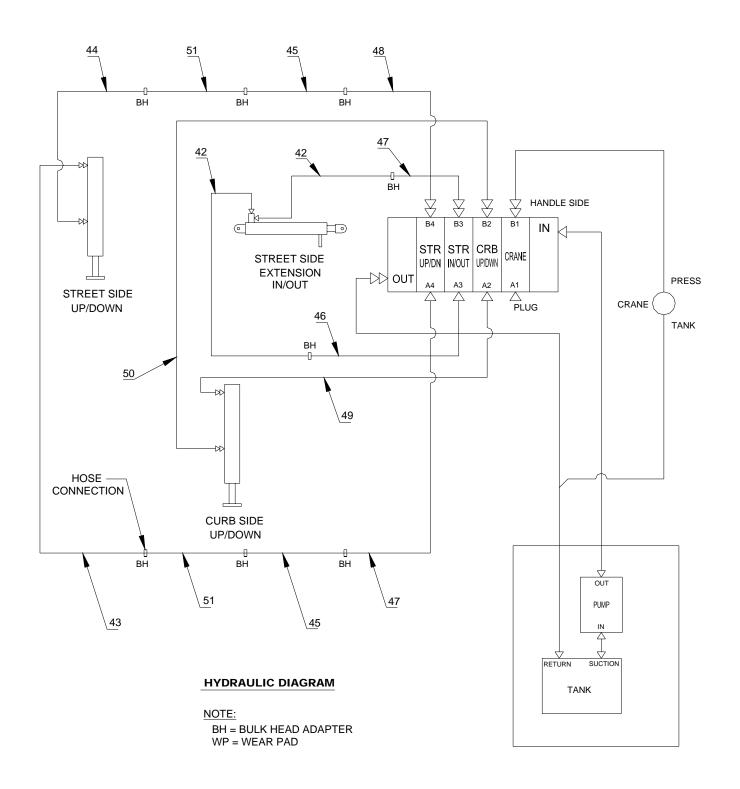


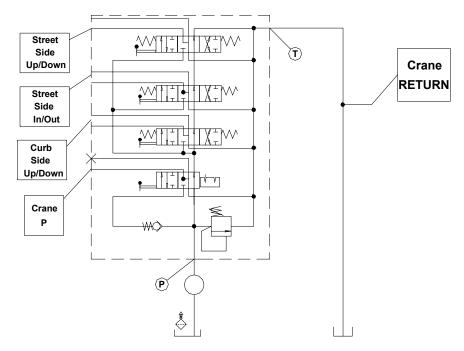


GENERAL DIMENSIONS

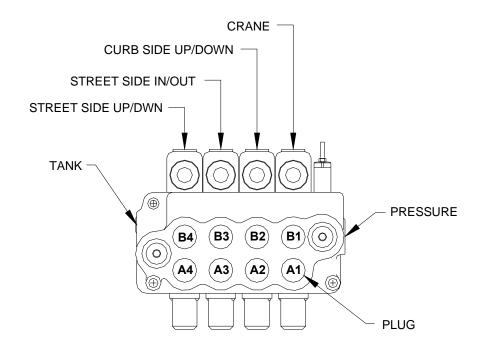
EXTENSION STROKE = 54.00in UP/DOWN LEG STROKE = 27.00in







HYDRAULIC SCHEMATIC



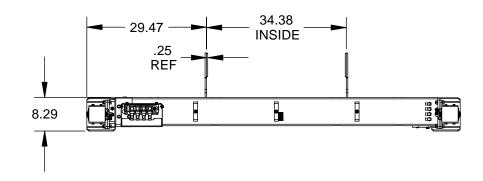
DIRECTION CONTROL VALVE (REAR VIEW)

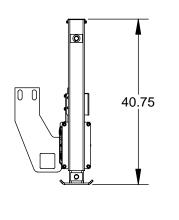
NOTE:

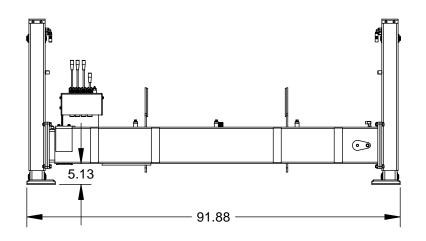
A-PORT BOTTOM B-PORT HANDLE SIDE

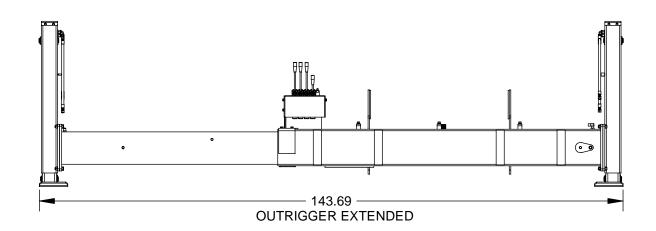
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	738637001	TITAN 38 OUTRIGGER TUBE WELD SSC
2	1	738645000	SHIP KIT TITAN 38 OUTRIGGER
3	1	738837000	TITAN 38 HYD LEG ASSY
4	1	738838001	TITAN 38 SLIDE ASSY SS (HYD)
5	1	560244001	COVER, DIRECT CTR VALVE S/S
6	1	560145000	CONTROL VALVE SUB-ASSY, 4 SECTION
7	1	366353000	PAD WEAR 5.25 X 2.63 X .38
8	4	407277000	PAD BOOM 1.5 O.D.
9	2	460055000	WEAR PAD, TOP MID
10	1	738569000	CYL HYD IN/OUT
11	2	560148000	RING RETAINING 1/2 ID
12	1	560158000	PIN 1/2 DIA X 6.25 LG
13	1	560165000	PIN WDMT 1/2 OD x 7.38
14	2	560202000	SPACER, EXT CYL
15	1	560202001	SPACER, EXT CYL
16	1	008702000	SCREW HX HD 3/8-16UNC X 1 1/4 LG GR5
17	9	021200000	WASHER FL 3/8
18	1	017301000	NUT HX NYLK 3/8-16UNC CP
19	3	407216000	BOOM ASSEMBLY
20	1	738682000	DOUBLER PULL PIN
21	1	738644001	DECAL LAYOUT SSC (HYD)
22	1	738840001	KIT, HYD OUTRIGGER SSC (FULLY HYD)
23	18	374086000	NYLON HOSE SLEEVE
24	3	005401000	SCREW HX HD 1/4-20UNC X 5/8 LG CP
25	3	020200000	WASHER SP LK 1/4
26	3	020400000	WASHER FL SAE 1/4
27	5	020901000	WASHER FL 5/16
28	3	811029000	SCREW HX HD 5/16-18UNC X 2 1/2 LG
29	2	016500000	NUT HX 5/16-18UNC
30	4	017701000	NUT HX 1/2-13UNC
31	3	021100000	WASHER SP LK 3/8
32	4	021500000	WASHER SP LK 1/2
33	3	330372000	NUT HX 3/8-16UNC
34	4	738642000	SCREW HX HD 1/2-13UNC X 1 3/4 LG GR8
35	4	008400000	SCREW HX HD 3/8-16UNC X 3/4 LG GR 5
*36	2	241170000	FITTING BULHD 6 SAE/6 JIC STRAIGHT
*37	4	200876000	FITTING 6 SAE/6 JIC STRAIGHT
*38	6	367136000	FITTING 90 6-SAE/6-JIC
39	4	480024000	MOUNT PENDANT CABLE RETAINER
*40	2	560203000	FITTING 90 6-SAE/6-JIC RESTRICTED

ITEM NO.	QTY.	PART NO.	DESCRIPTION				
*41	2	560434000	ADAPTER, BENT STEM 90 DEG				
*42	2	812026020	HOSE ASSY -6 JICF/-6 JICF X -4 HOSE				
*43	1	812037023	HOSE ASSY, -6 JICF/ -6 90 DEG ELL, -4 HOSE				
*44	1	812037025	HOSE ASSY, -6 JICF/ -6 90 DEG ELL, -4 HOSE				
*45	2	812026066	HOSE ASSY -6 JICF/-6 JICF X -4 HOSE x 66"				
*46	1	812026073	HOSE ASSY -6 JICF/-6 JICF X -4 HOSE x 73"				
*47	2	812026075	HOSE ASSY -6 JICF/-6 JICF X -4 HOSE X 75"				
*48	1	812026076	HOSE ASSY -6 JICF/-6 JICF X -4 HOSE X 76"				
*49	1	812037096	HOSE ASSY, -6 JICF/ -6 90 DEG ELL, -4 HOSE				
*50	1	812037100	HOSE ASSY, -6 JICF/-6 90 DEG ELL, -4 HOSE				
**51	2	738563001	TITAN 38 BUMPER SUPPORT				
**52	2	738669000	BAR RT HR 1/4 x 3.00 x 5.75 LG				
**53	1	738646000	INSTALLATION DRAWING				
*	THESE ITEMS ARE A PART OF ITEM #22						
**	THESE	THESE ITEMS ARE A PART OF ITEM #22					









GENERAL DIMENSIONS

EXTENSION STROKE = 54.00in UP/DOWN LEG STROKE = 27.00in

OUTRIGGER HYDRAULIC RELIEF VALVE SETTING INSTRUCTIONS - TITAN SERIES

Hydraulic powered outrigger control valves provided by Auto Crane

Auto Crane hydraulic powered outriggers utilize a control valve which contain an integral hydraulic relief valve that is preset at the factory. This preset is NOT the final setting and must be adjusted to account for hydraulic system backpressure once the installation is complete. The adjustment is straight forward and requires basic hand tools, thermometer or means to measure hydraulic oil temperature, and a hydraulic pressure gauge with a minimum rating of 5,000 psi and hydraulic fittings necessary to install the gauge in-line with the incoming pressure line to the outrigger control valve body.

Follow the procedure below to make the final adjustments to this relief valve.

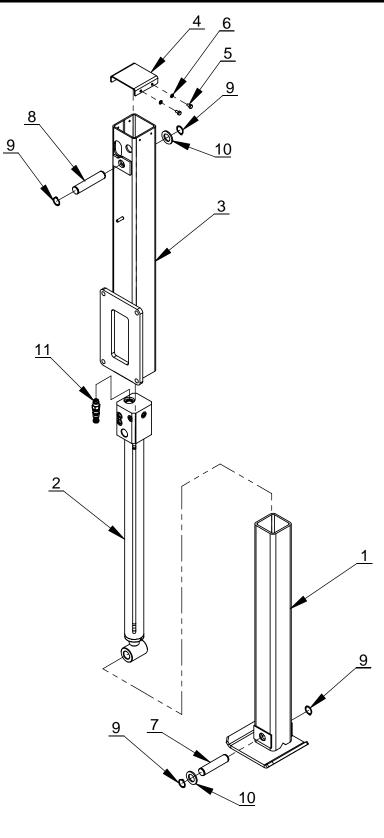
1. The outrigger hydraulic relief valve contains should be adjusted 200 psi above the crane hydraulic relief valve. Please consult the appropriate owner's manual for this setting or contact the crane manufacturer for this value.

WARNING!

Under no circumstances should this relief valve setting exceed any of the hydraulic system components ratings or limitations as component damage or personal injury may result.

- 2. Install the hydraulic pressure gauge in-line with the incoming pressure line to the outrigger control valve body.
- 3. With all personnel clear of the vehicle, start the engine and engage the vehicle PTO. Let the hydraulic oil warm until it reaches 100F.
- 4. While watching the hydraulic pressure gauge, activate a hydraulic outrigger function to deadhead the hydraulic system. Read the gauge value quickly and do not hold the function in the deadhead position.
- 5. Using the hand tools, back off the lock nut on the hydraulic relief valve and make small rotation adjustments (1/2 turn) to the relief valve stem.
- 6. Repeat the Step 4 to check if this adjustment meets the system requirements. If not, then repeat Step 5 and Step 4 until correct.
- 7. Tighten the lock nut on the hydraulic relief valve.
- 8. Remove the hydraulic pressure gauge and fittings and re-attach the pressure supply line to the hydraulic valve body.

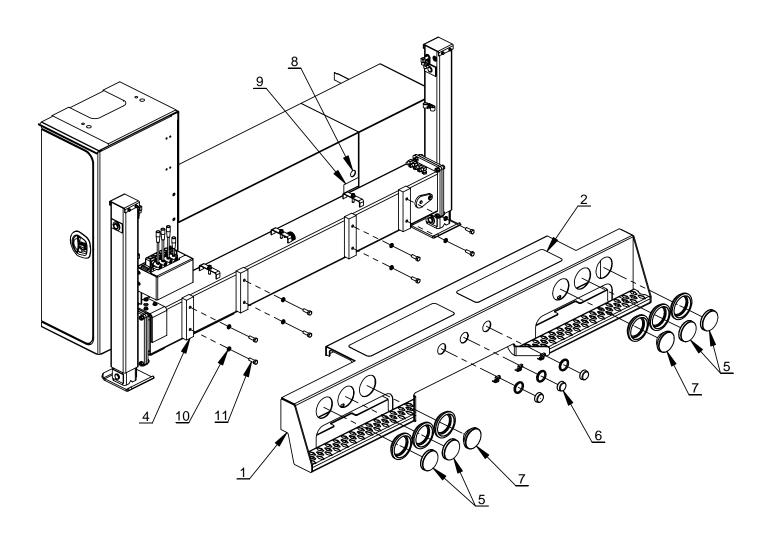
OUTRIGGER HYDRAULIC LEG ASSEMBLY TITAN SERIES – P/N: 738837000



OUTRIGGER HYDRAULIC LEG ASSEMBLY TITAN SERIES – P/N: 738837000

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	738880000	TUBE INNER (WELD) SS/CS
2	1	738834000	CYL HYD OUTRIGGER UP/DOWN
3	1	738839000	TITAN 38 HYD LEG OUTER TUBE WELD
4	1	725945000	CAP TUBE TOP
5	4	005901000	SCREW HX HD 1/4-20UNC X 1/2 LG
6	4	020200000	WASHER SP LK 1/4
7	1	738732000	PIN 1 DIA X 4.063 LG
8	1	738731000	PIN 1 DIA X 4.563 LG
9	4	738734000	RING RETAINING 5100-100
10	2	560562000	WASHER, FL 1.0312ID x 1.75OD x .156 THICK ZINC
*11	1	480188000	COUNTERBALANCE VALVE
*			ITEM PART OF ITEM # 2

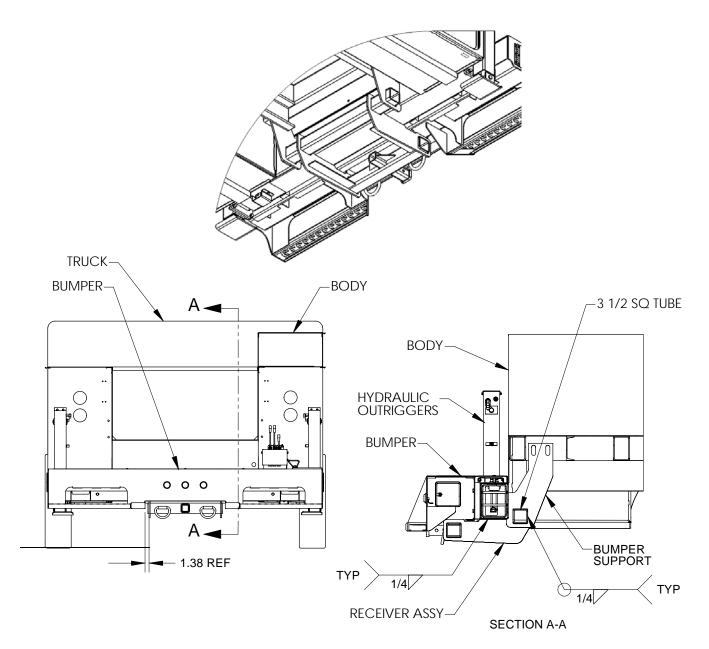
BUMPER ASSEMBLY TITAN 38 PROPANE – P/N: 738870000



BUMPER ASSEMBLY TITAN 38 PROPANE – P/N: 738870000

ITEM NO.	QTY.	PART NO.	DESCRIPTION				
1	1	738871000	BUMPER WELD, 12in RECEIVER, W/TAIL				
1	' '	1 1 7 3007 1000	LIGHTS SSC				
2	2	766141000	DECAL, SAFETY SURFACE				
3	1	738873000	SHIP KIT, BUMPER WITH TAILLIGHTS				
4	4	750913000	BUMPER ADAPTER				
5	4	560104000	LIGHT, STOP/TURN LED				
6	3	560105000	LIGHT MARKER LED 2"				
7	2	759337000	LIGHT BACKUP				
8	1	750282000	GROMMET 1 3/8 OD				
9	12	752269000	TRIM EDGE				
10	8	021500000	WASHER SP LK 1/2				
11	8	010201000	SCREW HX HD 1/2-13UNC x 1 1/2 LG				
*		THESE ITEMS ARE A PART OF ITEM #3					

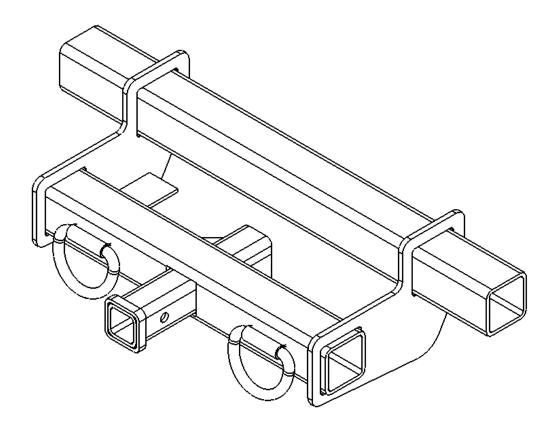
RECEIVER HITCH INSTALLATION TITAN SERIES



NOTE:

- 1. INSERT THE END OF THE 3 1/2" TUBE OF THE RECEIVER ASSY IN THE HOLE OF THE BUMPER SUPPORT.
- 2. CONTINUE TO SLIDE RECEIVER ASSY OVER AND INSERT THE OTHER END OF THE TUBE IN THE OTHER BUMPER SUPPORT.
- 3. LOCATE THE RECEIVER ASSY AS SHOWN AND WELD INTO PLACE.
- 4. ALSO WELD THE RECEIVER ASSY TO THE BOTTOM OF THE OUTRIGGER TUBE AS SHOWN.

RECEIVER HITCH INSTALLATION TITAN 38 – P/N: 738860000



THIS HITCH IS FOR USE WITH A 12" BUMPER.

FENDER-ET TITAN SERIES – P/N: 738597001

INSTALLING

WIPE MOUNTING SURFACES WITH CLEAN CLOTH TO REMOVE ANY DIRT OR OILS. (USE RUBBING ALCOHOL IF NECESSARY)

- LOCATE FENDERETTE TO SIDEPACK, ALIGNING THE BOTTOM EDGES AND CENTERING IT ON THE FENDERWELL OPENING.
- 2. DRAW LINES ON FENDER WITH OIL PENCIL OR OTHER ERASABLE MARKER TO ASSIST WITH ALIGNMENT WHEN ADHESIVE IS APPLIED.
- 3. APPLY ADHESIVE TO FENDERETTE FLANGE PER INSTRUCTIONS ON CARTRIDGE. 1/8" BEAD IN CENTER OF FLANGE IS RECOMMENDED. THE NOZZLE DOES NOT NEED TO BE CUT TO PROVIDE 1/8" BEAD.
- 4. USE LINES FROM STEP #3 TO LOCATE FENDERETTE TO SIDEPACK, ALIGNING THE BOTTOM EDGES AND CENTERING IT ON THE FENDERWELL OPENING AS BEFORE.
- 5. USING WIDE SURFACE AREA CLAMPS, CLAMP FENDERETTE INTO PLACE TO INSURE FULL CONTACT BETWEEN THE FENDERETTE FLANGE AND THE SIDEPACK.
- 6. REMOVE ANY EXCESS ADHESIVE FROM OUTER EDGES.
- 7. ALLOW ADHESIVE TO CURE THREE TO FOUR HOURS BEFORE REMOVING CLAMPS. ADHESIVE WILL BE FULLY CURED IN EIGHT TO 24 HOURS.
- 8. (OPTIONAL) PAINT AREA UNDER FENDERETTE WITH FLAT BLACK PAINT.

PAINTING

- 1. THE OUTER SURFACE OF THE FLARE MUST BE CLEANED WITH DUPONT #3919S PREP-SOL OR EQUIVALENT. DO NOT USE LACQUER THINNER OR ENAMEL REDUCER AS A CLEANER.
- 2. A POLYPROPYLENE PRIMER (DITZLER DPX800 OR EQUIVALENT) MUST BE USED TO ASSURE COLOR COAT ADHESION. USE 3 COATS OF HIGH FILL PRIMER AND BLOCK SAND.
- 3. THE COLOR COAT MUST HAVE A FLEX ADDITIVE (DITZLER DX369 OR EQUIVALENT) ADDED TO PREVENT PAINT CRACKING.

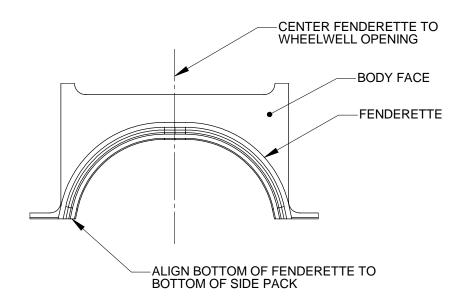
REMOVING

IF THE FENDERETTE CANNOT BE PEELED OFF, CUT THE BULK OF THE MATERIAL AWAY USING A KNIFE AND GRIND THE REMAINING MATERIAL

FENDER-ET TITAN SERIES – P/N: 738597001

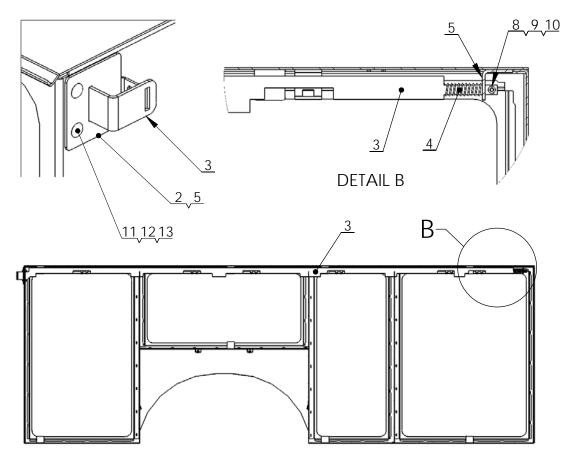
NOTE:

APPLICATOR KIT P/N: 752893000 INCLUDES APPLICATOR/PLUNGER/MIXING NOZZLE

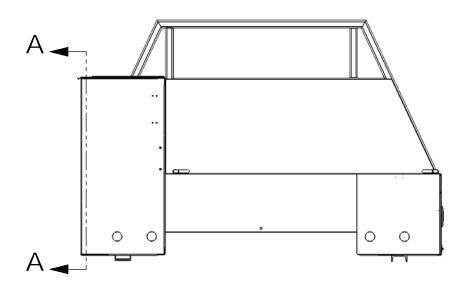


ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	2	738597000	FENDER FLARE TPO TITAN 25/38
2	1	752914000	ADHESIVE DP-8005 BLACK
3	1	752891000	PLUNGER, EPX PLUS II

MASTER LOCK SYSTEM TITAN 38 PROPANE – P/N: 738695004



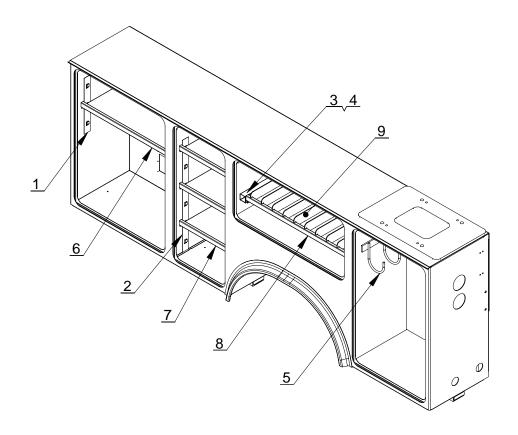
SECTION A-A



MASTER LOCK SYSTEM TITAN 38 PROPANE – P/N: 738695004

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	2	560119000	MASTER LOCK GUIDE
2	2	560121001	MASTER LOCK LOCKING PLATE
3	1	739190000	PUSH BAR LONG SS
4	1	560139000	GASKET MASTERLOCK
5	1	739191000	PUSH BAR SHORT SS
5	1	560122000	MASTER LOCK MOUNT
6	1	736730000	SPRING
7	1	760559000	SPACER, PUSH ROD
8	1	020300000	WASHER FL 1/4
9	1	005604000	SCREW HX HD 1/4-20UNC X 1 LG
10	1	016300000	NUT HX NYLK 1/4-20UNC
11	1	005401000	SCREW HX HD 1/4-20UNC X 5/8 LG CP
12	2	560138000	SCREW CARRIAGE 3/8-16UNC X 1 LG
13	2	021100000	WASHER SP LK 3/8
14	2	330372000	NUT HX 3/8-16UNC

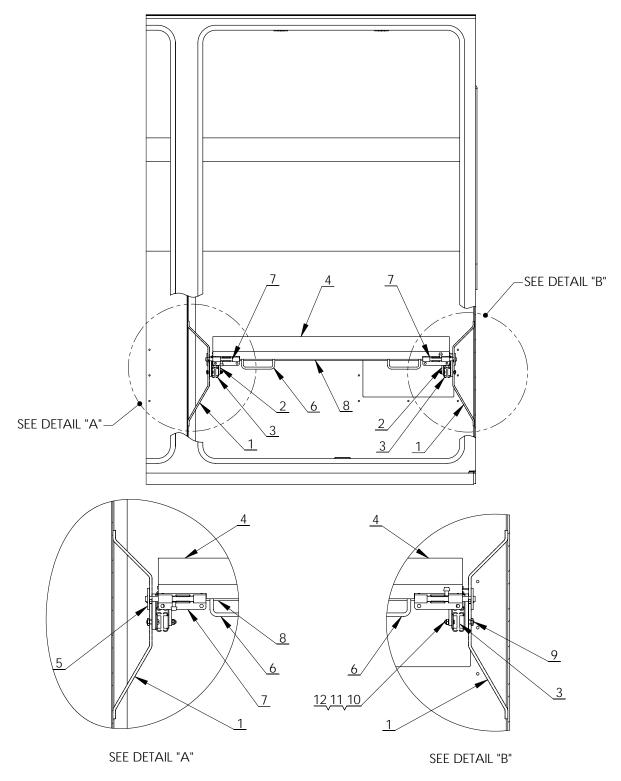
SHELF LOCATION TITAN 38 PROPANE – P/N: 738830009



ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	4	750798000	SHELF STRIP SUPPORT 18"
2	4	750799000	SHELF STRIP SUPPORT 36"
3	2	340196000	TBG SQ 2 X .083W X 17
4	2	750804000	BRACKET SHELF
5	1	750807000	CHAIN HOOK ASS'Y
6	1	738825000	SHELF FRONT COMP
7	3	738741000	SHELF MID TITAN 38
8	1	738831000	SHELF HORIZ (PLASTIC DIVIDERS)
9	13	560480001	DIVIDER, SHELF SHORT (PLASTIC)

SLIDE OUT TRAY TITAN SERIES – P/N: 560238000

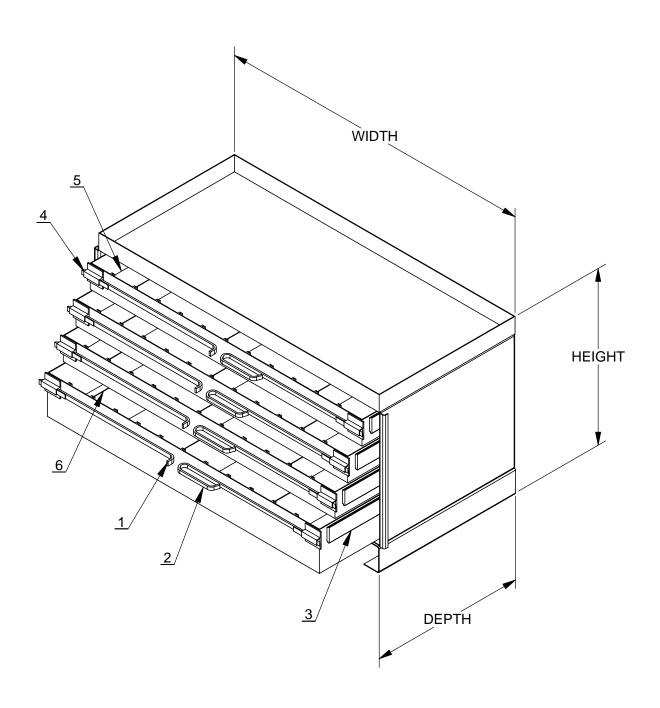
(TO BE USED IN FRONT STREET OR CURB SIDE COMPARTMENT)



SLIDE OUT TRAY TITAN SERIES – P/N: 560238000

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	2	560240000	SUPPORT WDMT SLIDE OUT TRAY
2	2	754554000	SUPPORT SHELF
3	1	754551000	SLIDE SET 18/550#
4	1	560241000	SHELF SLIDE OUT TRAY
5	2	750747000	BARREL BOLT RETAINER
6	2	725317000	DRAWER PULL
7	2	750742000	BARREL BOLT
8	2	340040000	ANG 1 X 1 X 1/4 X 27.50
9	20	001204000	SCREW FL HD #8-32UNC X 3/4 LG
10	20	753275000	SCREW SOC BUT HD #8-32UNC X 5/8 LG GR8
11	20	019700000	WASHER SP LK #8
12	20	725321000	NUT HX NYLK #8-32UNC

TOOL BOX TITAN SERIES

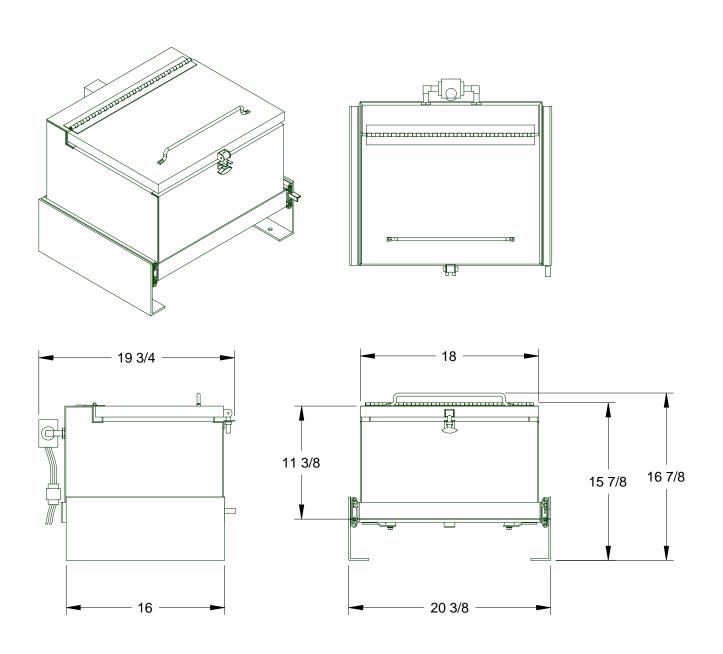


TOOL BOX TITAN SERIES

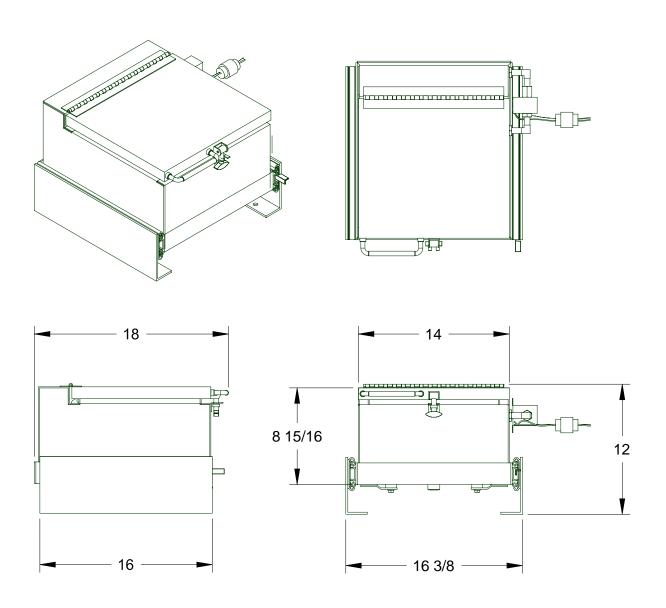
TOOL BOX SPECS						
COMPARTMENT	PART NO.	DESCRIPTION	WIDTH	HEIGHT	DEPTH	DRAWER CONFIG.
FRONT (STD)	560320000	TOOL BOX (P) 1F7", 2F5", 5F3"	28.00	37.25	18.00	(5) 3", (2) 5", (1) 7"
FRONT (TALL)	560127000	TOOL BOX (P) 2F7", 2F5", 5F3"	30.00	44.44	18.00	(5) 3", (2) 5", (2) 7"
MID	560321000	TOOL BOX (P) 1M7", 2M5", 5M3"	16.00	36.75	18.00	(5) 3", (2) 5", (1) 7"
HORIZONTAL	560420000	TOOL BOX (P) 1H5", 2H3"	37.00	15.75	18.00	(2) 3", (1) 5"
REAR	560421000	TOOL BOX (P) 1R7", 3R5", 4R3"	24.00	38.75	18.00	(4) 3", (3) 5", (1) 7"

	SERVICE PARTS				
ITEM	PART NO.	DESCRIPTION			
1	560332000	HANDLE & THUMB RELEASE			
2	560330000	BRUSHED HANDL W/O LOGO			
3	560333000	HEAVY DUTY DRAWER SLIDES 16"			
4	560331000	LATCH BOLT			
5	560336000	DIVIDER 7" HIGH X 16"D (NOMINAL)			
6	560335000	DIVIDER 5" HIGH X 16"D (NOMINAL)			
*7	560334000	DIVIDER 3" HIGH X 16"D (NOMINAL)			
*		NOT SHOWN			

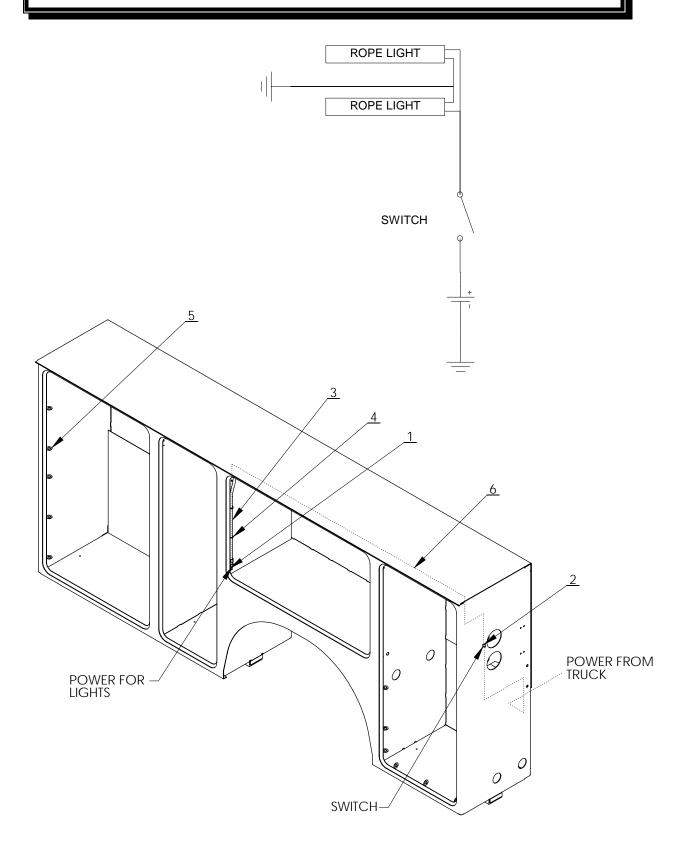
PARTS WASHER - LARGE TITAN SERIES - P/N: 560600000



PARTS WASHER - SMALL TITAN SERIES - P/N: 560601000



ROPE LIGHT KIT TITAN 38 PROPANE – P/N: 739102000



ROPE LIGHT KIT TITAN 38 PROPANE – P/N: 739102000

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	3	750169000	GROMMET, RUBBER
2	1	750739000	SWITCH TOGGLE(ON-OFF)
3	2	560116000	LIGHTING, ROPE
4	10	560383000	TIE WRAP PUSH-IN
5	32	407314000	WASHER FL 5/8 X 1 5/16 OD HARDENED
6	15'	800590000	WIRE 16GA 600V BLACK

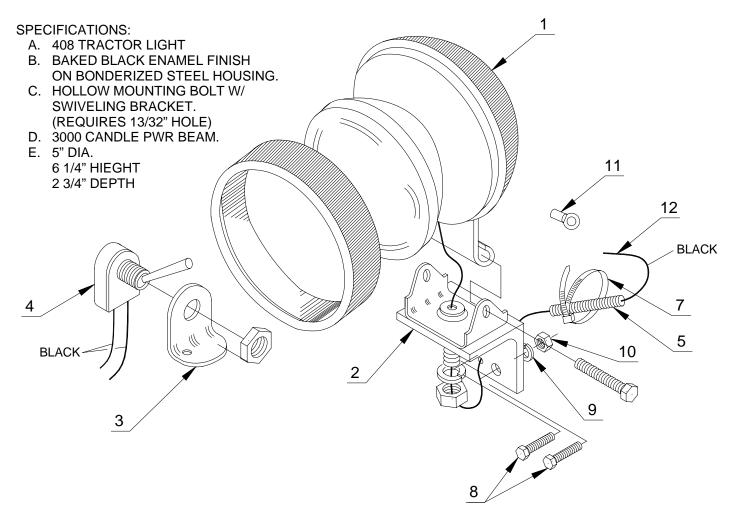
COMPARTMENT LIGHT KIT TITAN 38 PROPANE – P/N: 739102001

LIGHT NOTES: 1. THE COMPARTMENT LIGHTS ARE MOUNTED BACK TO 1 BACK ON THE DIVIDER PANEL BETWEEN THE FRONT AND MID COMPARTMENT AS WELL AS THE LIGHT HORIZONTAL AND REAR COMPARTMENTS. 1 2 3 4 5 LIGHT LIGHT POWER FOR LIGHTS 0 0 **POWER FROM** TRUCK **POWER FOR LIGHTS**

COMPARTMENT LIGHT KIT TITAN 38 PROPANE – P/N: 739102001

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	4	750730000	LIGHT, COMPARTMENT
2	8	019701000	WASHER FL #8
3	8	001503000	SCREW RD HD #8-32UNC X 3/4 LG GR3
4	8	019700000	WASHER SP LK #8
5	8	015500000	NUT HX #8-32UNC
6	20'	800590000	WIRE 16 GA 600V BLACK

FLOOD LIGHT KIT TITAN SERIES – P/N: 750825000

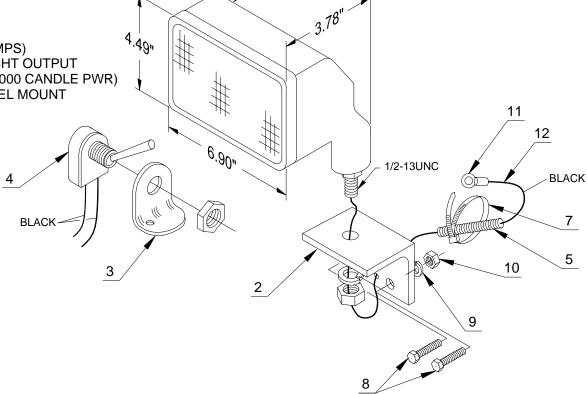


ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	750737000	LIGHT, FLOOD
2	1	750878000	BRACKET, MOUNTING FLOOD LAMP
3	1	750877000	BRACKET, MOUNT (TOGGLE SWITCH)
4	1	750739000	SWITCH, TOGGLE (ON-OFF)
5	1 FT	750736000	LOOM, CONVOLUTED (SPRIAL WRAP)
6	1	750738000	STICK-ON, CABLE TIE MOUNT
7	1	750737000	TIE-CABLE
8	2	006200000	SCREW HX HD 1/4-20UNC X 1 1/4 LG
9	2	020200000	WASHER SP LK 1/4 CP
10	2	015900000	NUT HX 1/4-20UNC CP
11	2	000302000	TERMINAL, WIRE (2RB14)
12	1 FT	800590000	WIRE, 16GA 600V 1C BLACK

QUARTZ FLOOD LIGHT KIT TITAN SERIES - P/N: 750825001

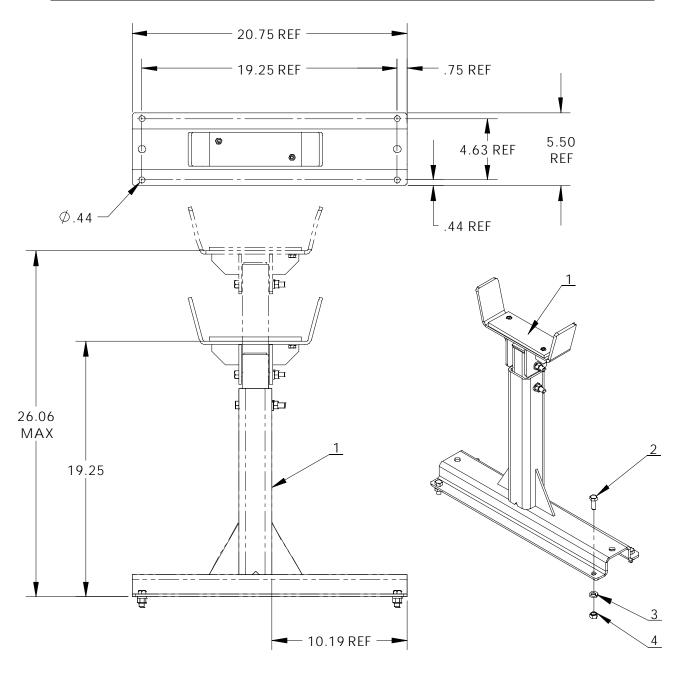
SPECIFICATIONS:

- A. HIGH BULB LIFE, 400 HR. AVERAGE
- B. EASILY REPLACEABLE BEAM
- C. FIELD TESTED UNDER EXTREME **CONDITIONS**
- D. 80 DEG X 30 FLOOD
- E. TRAPEZOID
- F. SOPT
- G. 12 VOLT
- H. 50 WATT
- I. DRAW (4 AMPS)
- J. HIGHER LIGHT OUTPUT (UP TO 200,000 CANDLE PWR)
- K. EASY SWIVEL MOUNT



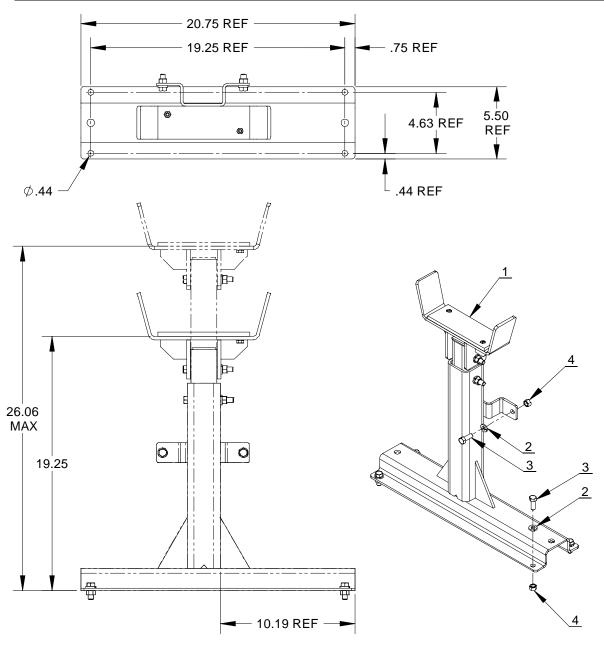
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	750026000	LIGHT, SEALED BEAM
2	1	750878000	BRACKET, MOUNTING FLOOD LAMP
3	1	750877000	BRACKET, MOUNT (TOGGLE SWITCH)
4	1	750739000	SWITCH, TOGGLE (ON-OFF)
5	1 FT	750736000	LOOM, CONVOLUTED (SPRIAL WRAP)
6	1	750738000	STICK-ON, CABLE TIE MOUNT
7	1	750737000	TIE-CABLE
8	2	006200000	SCREW HX HD 1/4-20UNC X 1 1/4 LG
9	2	020200000	WASHER SP LK 1/4 CP
10	2	015900000	NUT HX 1/4-20UNC CP
11	2	000302000	TERMINAL, WIRE (2RB14)
12	1 FT	800590000	WIRE, 16GA 600V 1C BLACK

BOOM SUPPORT TITAN SERIES - P/N: 560455000



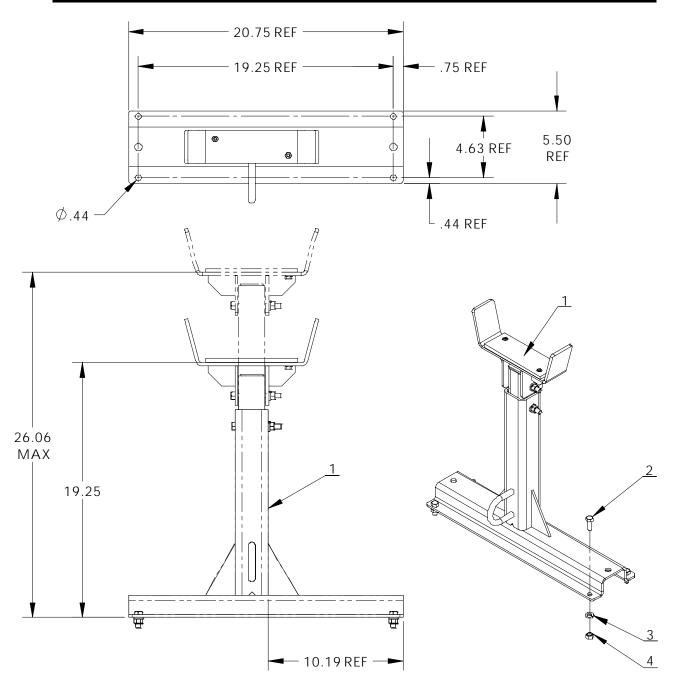
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	560195000	BOOM SUPPORT ASSY
2	4	330371000	SCREW HX HD 3/8-16UNC X 1 LG GR8
3	4	021100000	WASHER SP LK 3/8
4	4	330372000	NUT HX 3/8-16UNC

BOOM SUPPORT (TALL COMPARTMENTS) TITAN SERIES – P/N: 738505000



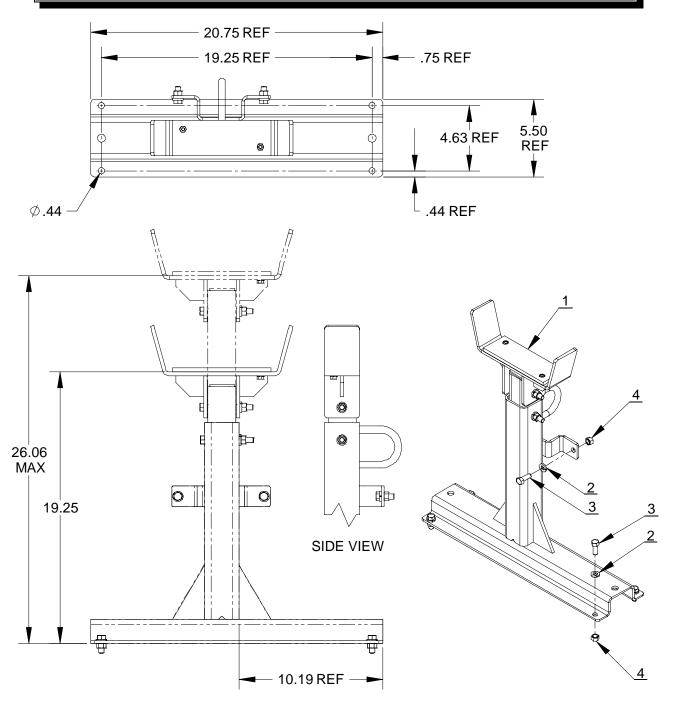
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	738506000	BOOM SUPPORT ASSY
2	6	021100000	WASHER SP LK 3/8
3	6	330371000	SCREW HX HD 3/8-16UNC X 1 LG GR8
4	6	330372000	NUT HX 3/8-16UNC

BOOM SUPPORT TITAN SERIES - P/N: 560455001



ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	560195001	BOOM SUPPORT ASSY
2	4	330371000	SCREW HX HD 3/8-16UNC X 1 LG GR8
3	4	021100000	WASHER SP LK 3/8
4	4	330372000	NUT HX 3/8-16UNC

BOOM SUPPORT (TALL COMPARTMENTS) TITAN SERIES – P/N: 738505001



ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	738506001	BOOM SUPPORT ASSY
2	6	021100000	WASHER SP LK 3/8
3	6	330371000	SCREW HX HD 3/8-16UNC X 1 LG GR8
4	6	330372000	NUT HX 3/8-16UNC

NOTES

FIRE EXTINGUISHER TITAN SERIES – P/N: 750061000

TYPE:

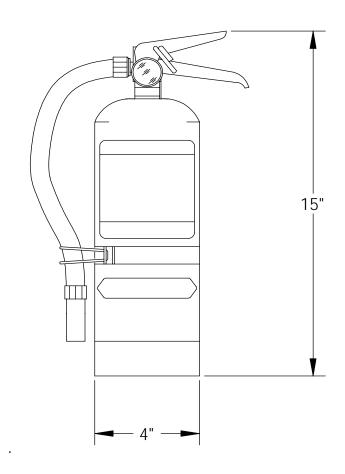
5 LB/LEVER SQUEEZE/HOSE & HORN/PRESSURE GAUGE PER NATIONAL FIRE PROTECTION ASSOCIATION STD, NO.10 "PORTABLE FIRE EXTINGUISHERS."

SPECIFICATIONS:

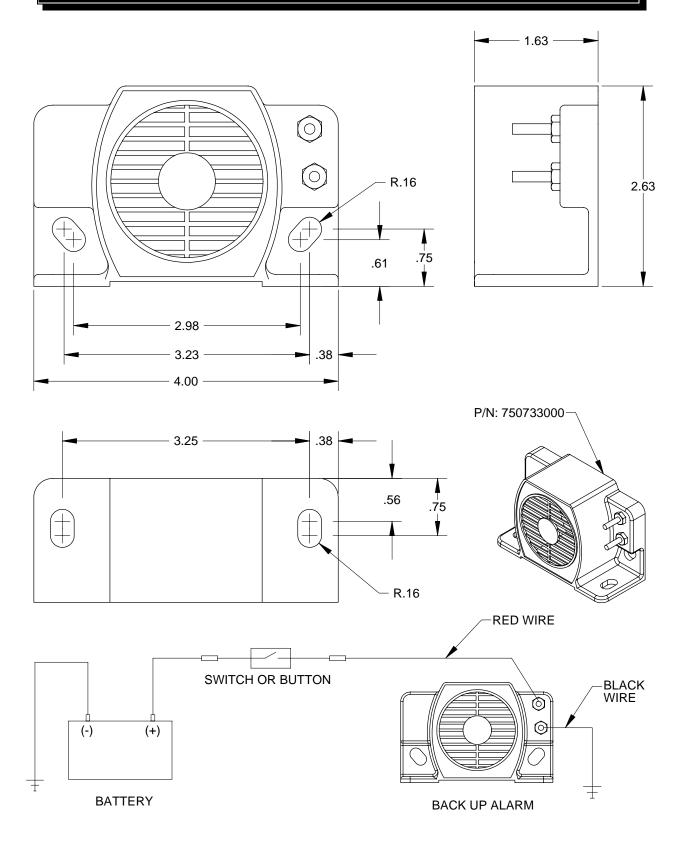
- (A) UNDERWRITERS LABORATORIES (UL LISTED)
- (B) DRY CHEMICAL FIRE EXTINGUISHER CLASSIFICATION 2-A: 10-B:C. TESTED TO ANSI/UL 711 & ANSI/UL299.
- (C) 5 LB (2.27 KG) MULTI-PURPOSE DRY CHEMICAL (AMMONIUM PHOSPHATE BASE)
- (D) SUITABLE FOR USE AT TEMPERATURE FROM -65° F TO 120° F (54° C TO 49° C)

NOTE:

EXTINGUISHER TO COME WITH OWNER MANUAL FOR HAND PORTABLE FIRE EXTINGUISHERS.



BACK-UP ALARM TITAN SERIES – P/N: 750681000



BACK-UP ALARM TITAN SERIES – P/N: 750681000

DESCRIPTION

BACK-UP SAFETY ALARM MEETS OR EXCEEDS SAE J99 4b

MODEL: TONEMASTER 380 LIGHT DUTY ALARM

SERIES: 900-001
VOLUME: 102 Db
VOLTAGE: 12/24 VDC
PULSE RATE: 90/MINUTE

 HEIGHT:
 2.63"

 WIDTH:
 4

 DEPTH:
 1.63"

 WEIGHT:
 .6 LBS

 FREQUENCY:
 100 HZ

MOUNTING: (2) BOLTS 1/4-20UNC X 1 1/2 LG

DRILL (2) .31 DIA HOLES ON 3 1/4 CENTERS

POWER CONNECTION: 2-18", 16 GA. LEADS; RED LEAD TO POSITIVE;

BLACK LEAD TO GROUND.

MOUNTING INSTRUCTIONS:

- 1. DRILL TWO HOLES FOR 1/4" BOLTS 3 1/8" BETWEEN CENTERS.
- 2. MOUNT ALARM TO VEHICLE OR BRACKET.
- 3. UNIT MAY BE CONNECTED DIRECTLY INTO THE BACK-UP LIGHT CIRCUIT, IF NOT AVAILABLE, MOUNT A SWITCH SUCH THAT IT OPERATES WHEN THE VEHICLE IS PLACED IN REVERSE. APPLY VOLTAGE 12 THRU 24 VDC FOR MODEL 380 VIA SWITCH TO THE RED LEAD, CONNECT THE BLACK LEAD TO GROUND. ALARM WILL SOUND EACH TIME WHEN VEHICLE PLACED IN REVERSE.

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	750733000	BACK-UP SAFETY ALARM
2	1	750866000	SCREW PN HD #8 X 3/4 LG SELF TAPPING
3	1	000302000	TERMINAL WIRE
4	1	000300000	TERMINAL WIRE
5	3 FT	800562000	WIRE, 18 GA 600V 1C (BLUE)
6	2 FT	800590000	WIRE, 16 GA 600V 1C (BLACK)

NOTES

BODY PREVENTIVE MAINTENANCE and PAINTING INSTRUCTIONS TITAN SERIES

PREVENTIVE MAINTENANCE RECOMMENDATIONS FOR EXTERIOR SURFACES ON TRUCK SERVICE BODIES

PAINT FINISH PREVENTIVE MAINTENANCE INSTRUCTIONS

The paint finish on Auto Crane products can become damaged during normal use when chipped, scratched, exposed to harsh chemicals, cleaned with high pressure washers, etc. During periods when the truck is exposed to salt or other corrosive chemicals, the truck should be washed weekly. The paint finish should be inspected when washed or at least monthly. Any exposed bare metal or visible rust should be repaired immediately. The repairs should be performed in the damaged area by following steps 1-5 in the PAINT PREPARATION INSTRUCTIONS •^&at } È

PAINT PREPARATION INSTRUCTIONS

The following paint process steps should be used by Auto Crane distributors when top coating bodies that were primed by Auto Crane:

- 1. Clean all surfaces to be top coated so dirt, oil, and other contaminants do not get embedded in the primer when sanded.
 - a. Wash with a mild detergent in warm water.
 - b. Rinse with clean water.
 - c. Wipe dry with a clean cloth.
- 2. Scuff sand all primed areas to be top coated with 320 grit sandpaper or an equivalent abrasive. Sand any areas with visible rust to bare metal.
- 3. Solvent clean all areas to be top coated to remove sanding residue. Wipe dry with a clean cloth to remove any remaining residue.
- 4. Re-prime the following areas to a minimum 2 mil dry film thickness per the primer Ámanufacturer's instructions. The primer must be compatible with ÚÚÕÂÛ] ^&dæ&![} ÁÏ H Áepoxy primer.
 - a. All bare metal.
 - b. All exposed corners and narrow edges, such as on doors, door openings, drip rails, and bumpers. This is necessary because excessive primer tends to get removed when sanding corners and narrow edges.
 - c. All areas to be top coated if the body has been stored in an outside environment for more than 3-6 months. This is necessary because more primer tends to get removed when sanding a primed-only body that has been exposed to the sun and outside environment for an extended period.



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LIMITED WARRANTY 2 YEAR PARTS AND LABOR

Auto Crane will warranty to the consumer for a period of (2) years parts and labor from the date of purchase. Each new Auto Crane unit they sell will be free under normal use and service from defects in material and workmanship. Date of purchase will be honored as the date indicated on the Bill of Sale, which must accompany the Warranty Registration and be on file with Auto Crane. Absent a valid Warranty Registration and appropriate documentation, the original date of manufacture, as indicated by the serial number on the product, will be used to determine the effective date of the 2 year warranty.

The obligation of Auto Crane under this warranty is limited to the replacement or repair of parts that appear to the manufacturer after review and/or inspection to be defective and paid flat rate labor for replacing defective parts. This warranty does not obligate Auto Crane to bear the travel time charges in connection with the replacement or repair of defective parts. Responsibility for customer's claims arising from misapplication, abuse, misuse or alteration of equipment or parts lies with the distributor or user and no warranty obligation is assumed in these circumstances by Auto Crane.

Auto Crane will in no event be liable for any consequential damages or contingent liabilities arising out of the failure of any Auto Crane Product or parts to operate properly.

Auto Crane makes no warranty in respect to component accessories, it being subject to the warranties of their respective manufacturers.

If field service, at the request of the distributor, is rendered and fault is found not to be with Auto Crane's product, the distributor shall pay the time and expense of the field representative.

Claims for service labor or other expenses that have incurred by the buyer without approval or authorization or Auto Crane will not be accepted.

When applying for warranty, claims may be handled by contacting your nearest authorized Auto Crane Distributor. All claims are to be filed in writing on an Auto Crane Warranty Claim Form.

AUTO CRANE COMPANY IS UNDER NO OBLIGATION TO EXTEND THIS WARRANTY TO ANY CUSTOMER FOR WHICH AN AUTO CRANE DELIVERY REPORT FORM HAS NOT BEEN COMPLETED AND ON FILE WITH AUTO CRANE COMPANY



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5 YEAR LIMITED BODY WARRANTY

COVERED PRODUCTS:

- * Auto Crane Service Bodies no rust-thru guarantee to the first owner/user of record for five (5) years from the date of purchase.
- * Door Hinges Guarantee the hinges will not fail to operate or come off the product, to the first owner/user of record for five (5) years from the date of purchase.

ELIGIBILITY:

- * Product(s) warranted must be properly maintained and serviced.
- * The selling distributor must file for the first owner/user the application for warranty by completing the delivery report form enclosed in the Owners Manual within 30 days of the product purchase date. The complete delivery report form must be forwarded to Auto Crane Company. The warranty agreement issued is not transferable.

EXCLUSIONS:

- * Warranty applies to the Auto Crane bodies only and excludes all options, modifications and alterations.
- * Paint required following repairs or replacement of parts under warranty after the first year from the date of delivery.
- * Product(s) that have been misused or damaged, inclusive of, but not limited to, accidents.
- * Absent a completed and valid delivery report form, the original date of manufacture will be used as the effective date for the limited warranty.

SPECIFIC NON-RUST-THRU WARRANTY EXCLUSIONS:

- * Product(s) that have been used to carry corrosive materials, where such materials result in rust-thru conditions.
- * Product(s) purchased by the first owner/user in prime paint condition.
- * Consequential damages including, but not limited to, transportation costs, lost profit and loss of income, as a result of a vehicle being out of service.
- * Product(s) purchased and used outside the U.S.A. or Canada.

APPLYING FOR WARRANTY:

- * Claims may be handled by contacting your nearest authorized Auto Crane Distributor. All claims are to be filed in writing on an Auto Crane Warranty Claim Form.
- * The Auto Crane Company reserves the sole right to inspect item(s) claimed for warranty and decide the best way to handle any and all claims, including the replacement or repair of the warranted part.
- * Should the warranted product rust thru, the hinges fail to operate or come off the product, Auto Crane will pay the cost of parts and flat rate labor to repair or replace as necessary the defective component. NOTE: Paint following repair or replacement of a part is exclusive under warranty after the first year from date of delivery.
- * DEFECTS FROM MANUFACTURING WORKMANSHIP AND/OR MATERIAL NOT SPECIFIED ABOVE WILL BE SUBJECT TO WARRANTY INCLUSIVE OF MATERIALS AND LABOR TO THE FIRST OWNER/USER OF RECORD FOR TWO (2) YEARS FROM THE DATE OF DELIVERY. Exclusions, as well as methods of applying for warranty remain the same as stated in the limited five (5) year warranty covered above.



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LIMITED WARRANTY 1 YEAR PURCHASED REPLACEMENT PARTS

Auto Crane will warranty to the consumer for a period of (1) year from the date that a new Auto Crane replacement part was purchased from an authorized Auto Crane distributor. Each new Auto Crane part they sell will be free under normal use and service from defects in material and workmanship. Date of purchase will be honored as the date indicated on the Bill of Sale to the consumer.

The obligation of Auto Crane under this warranty does not apply to parts replaced under the limited warranty for a new Auto Crane product. The warranty for parts replaced under the limited warranty of a new Auto Crane product expires when the warranty for that product expires.

The obligation of Auto Crane under this warranty is limited to the replacement or repair of purchased replacement parts that appear to the manufacturer to be defective after review of documentation (Auto Crane Warranty Claim Form, photos, data, etc.) provided by the Auto Crane distributor and/or inspection of parts returned to Auto Crane. This warranty does not obligate Auto Crane to bear labor costs to replace the defective parts or travel time charges in connection with the replacement or repair of defective parts. Responsibility for customer's claims arising from misapplication, abuse, misuse or alteration of equipment or parts lies with the distributor or user and no warranty obligation is assumed in these circumstances by Auto Crane.

Auto Crane will in no event be liable for any consequential damages or contingent liabilities arising out of the failure of any Auto Crane product or parts to operate properly.

Auto Crane makes no warranty in respect to parts for component accessories, it being subject to the warranties of their respective manufacturers.

If field service, at the request of the distributor, is rendered and fault is found not to be with Auto Crane's product, the distributor shall pay the time and expense of the field representative.

Claims for service labor or other expenses that have incurred by the buyer without approval or authorization or Auto Crane will not be accepted.

When applying for warranty, claims may be handled by contacting your nearest authorized Auto Crane **Distributor**. **All claims are to be filed in writing on an Auto Crane Warranty Claim Form**.

