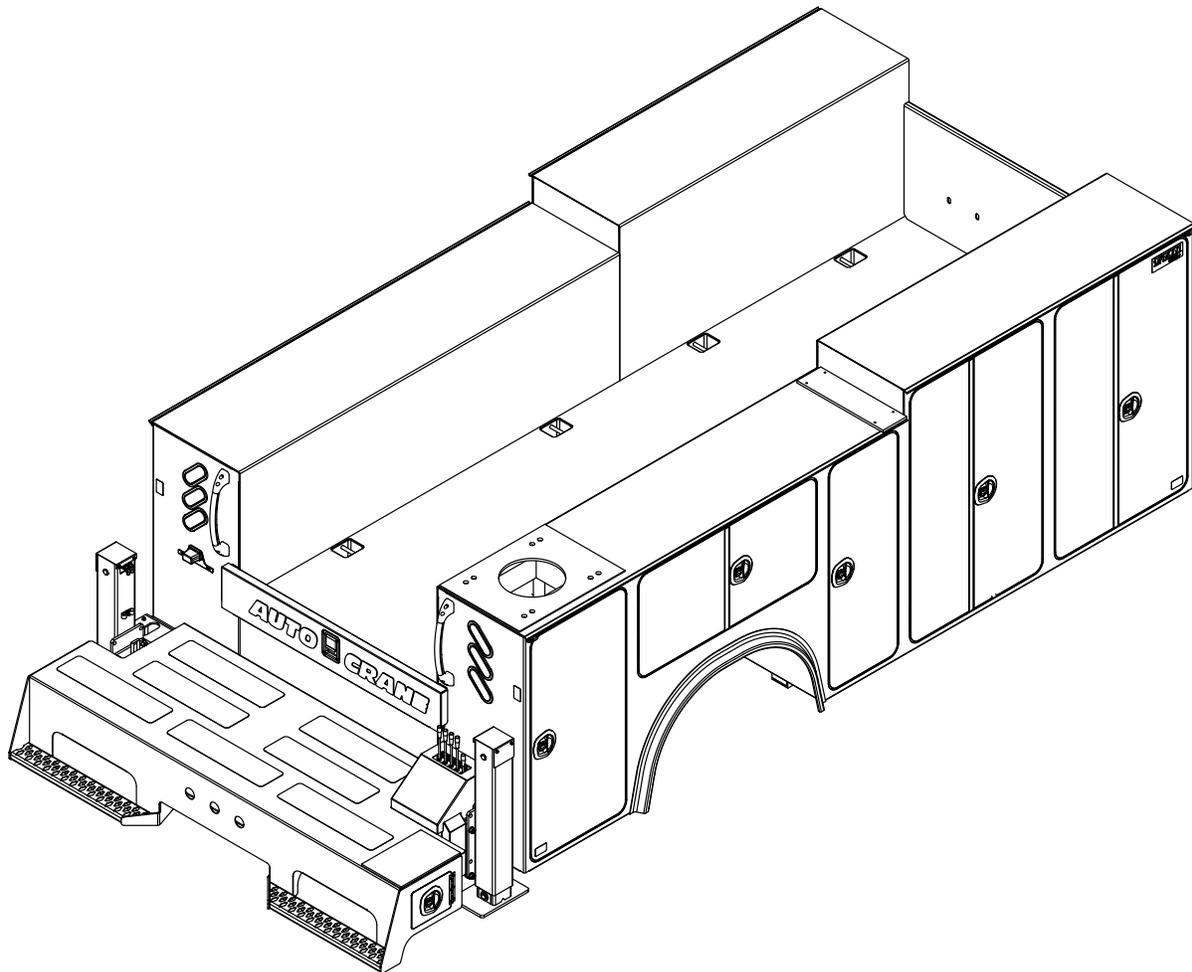




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*Technical Manual*  
**Titan 85**



Serial No. \_\_\_\_\_

772900001-0817-A

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Mailing Address:  
P.O. Box 580697  
Tulsa, OK 74158

Phone: 1-800-777-2760  
Fax: (918) 269-6688  
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At the time of publishing this manual is accurate to the best of our knowledge. Auto Crane reserves the right to change any or all items, components and parts, necessary for any reason. This right does not obligate Auto Crane to immediately update the manual. If in doubt, please call your local Auto Crane distributor for the most up-to-date information.

Auto Crane Company issues a limited warranty with each unit sold. See warranty pages at the end of the manual.



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# 1 Safety Tips and Precautions

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## DANGER

Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

## WARNING

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

## CAUTION

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

## NOTICE

Indicates information considered important, but not hazard-related.

---

## WARNING

Federal law (49 cfr 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 state 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). In applications, where the rotation of the load is hazardous, a tag or restraint line should be used, (ref. OSHA 1910.180(h)(3)(xvi)). To reduce the potential for the load to rotate or rope twist, operate at minimal boom angles and extension.

## WARNING

Do not weld, modify, or use unauthorized components on any Auto Crane unit! This will void any warranty or liability. Also failure of the crane may result.

## WARNING

Vehicle must meet Federal Law (49 CFR 393) which states the required parts and accessories necessary for safe operation. THIS includes lighting, reflectors, etc..

## WARNING

Federal Law (49 CFR 568) requires each final-stage manufacturer to complete the vehicle in such a manner that it conforms to the standards in effect on the date of manufacture of the incomplete vehicle, the date of the final completion, or a date between those two dates. This requirement shall, however, be superseded by any conflicting provisions of a standard that applies by its terms to vehicles manufactured in two or more stages. Each final-stage manufacturer shall affix a label to the completed vehicle in accordance with 49 CFR 567.5.

### NOTICE

Keep this manual with the body at all times.

Auto Crane products are designed to provide many years of safe, trouble-free, dependable service when properly used and maintained.

To assist you in obtaining the best service from your body and to avoid untimely crane and/or vehicle failure, this manual provides the following operating and service instructions. It is specifically recommended that all operating and service personnel consider this manual as mandatory material for reading and study before operating or servicing Auto Crane products. It is highly recommended body owners, equipment managers, and supervisors also read this manual.

For your convenience the overall dimensions of the body are included on the General Dimension Drawing.

Remember, the body adds weight to the vehicle. Adding weight may change the driving and riding characteristics of the vehicle unless the appropriate overload spring(s) are installed on the truck. The payload of the vehicle is reduced by the weight of the body. The operator should exercise care when loading the vehicle. Distributing the payload on the vehicle evenly will greatly improve the driving and riding characteristics of the vehicle.

**Auto Crane Company issues a limited warranty certificate with each unit sold. See last page for warranty.**

It has always been Auto Crane Company policy to handle all warranty claims we receive as promptly as possible. If a warranty claim involves discrepant material or workmanship, Auto Crane will take immediate corrective action. It is understandable that Auto Crane Company cannot assume responsibility of liability when it is obvious that our products have been abused, misused, overloaded or otherwise damaged by inexperienced persons trying to operate the equipment without reading the manual.

### NOTICE

Auto Crane will not assume responsibility or liability for any modifications or changes made to unit, or installation of component parts without authorization.

Auto Crane maintains a strong distributor network and a knowledgeable Customer Service Department. In most cases, an equipment problem is solved via phone conversation with our customer service department. The customer service department also has the ability to bring a local distributor, a regional sales manager, or a factory serviceman into the solution of an equipment problem.

If, through no fault of Auto Crane Company, it is necessary to send an experienced factory serviceman on a field service call the rates stated in the Auto Crane Distributor's Flat Rate Manual will apply.

Auto Crane Company's extensive Research and Development Program allow our customers to use the best equipment on the market. Our Engineering Staff and our knowledgeable sales people are always available to our customers in solving crane and winch-type application problems. When in doubt, call the Auto Crane factory.

## 2 Introduction

---

Should you require any assistance not given in this manual, we recommend that you consult your nearest Auto Crane Distributor. Our distributors sell authorized parts and have service departments that can solve almost any needed repair. This manual does not cover all maintenance, operating, or repair instructions pertinent to all possible situations.

If you require additional information, please contact the Auto Crane Company at the following telephone number: **1-800-777-2760**

The information contained in the manual is in effect at the time of this printing. Auto Crane Company reserves the right to update this material without notice or obligation.

## **IMPORTANT READ FIRST!!**

### **VEHICLE PREPARATION FOR OUTRIGGER AND CRANE OPERATION**

1. 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 worn or damaged parts before outrigger operation.
3. Check for and repair leaks on hydraulic units if they occur.

### **HYDRAULIC OUTRIGGER OPERATION**

1. Divert hydraulic flow from control valve to outrigger operations.
2. Use the hydraulic control valve to extend outrigger slides from stowed position to the fully extended position.
3. Make sure the slides are fully extended.
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.

### **HYDRAULIC OUTRIGGER STOWING PROCEDURE**

5. Fully retract vertical legs in stowed position.
6. Retract outrigger slides from extended to the fully retracted position.
7. Make sure the slides are fully retracted in the stowed position.
8. Make sure the sling is secured in place around the outrigger leg.

# 3 Vehicle Operation and Preparedness

---

## RECOMMENDATIONS FOR EXTERIOR SURFACES ON TRUCK SERVICE BODIES

### Paint Finish Preventative 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 TOP COAT PAINT PREPARATION INSTRUCTIONS section.

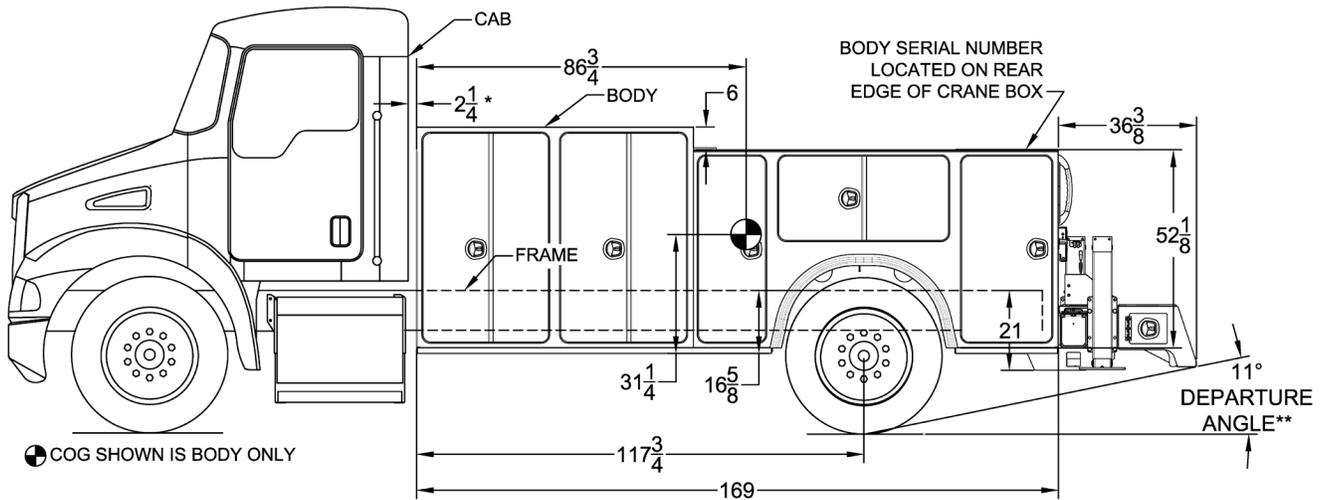
### Top Coat Paint Preparation Instructions

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

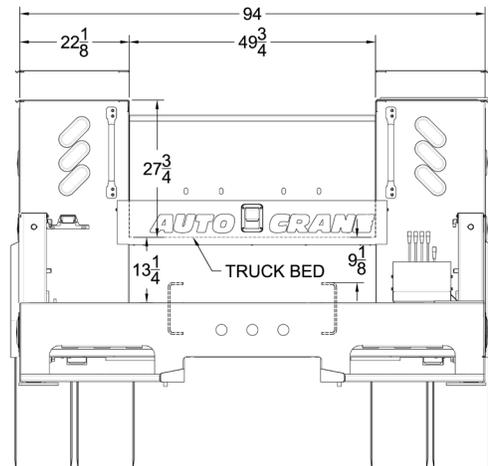
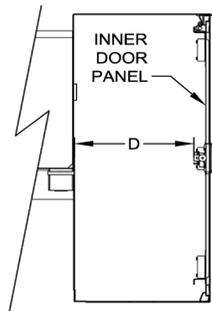
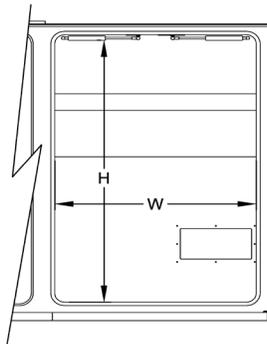
**(Note: Unbolt doors from body and paint separately per instructions shown below)**

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 manufacturer's instructions. The primer must be compatible with Sherwin Williams' E2W932 epoxy 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.
5. Apply a 2 mil dry film thickness top coat per the manufacturer's instructions within 24 hours of completing steps 1-4. The top coat paint must be compatible with Sherwin Williams' E2W932 epoxy primer. The final primer and top coat should have approximately a 4 millimeter dry film thickness. Allow paint to fully cure before delivery to customer.

# General Dimensions 4



\* Standard gap using 120ca body. Check chassis body builder book for required gap between body & chassis.  
 \*\* Departure angle shown for reference only. Angle will vary depending on chassis.



120CA				
DOOR OPENING SIZES/DEPTH	WEIGHT		4134#	
	WIDTH (W)	HEIGHT (H)	DEPTH (D)	VOLUME (FT <sup>3</sup> ) <sup>^</sup>
FRONT (1)	32-3/8	53-1/4	19-1/8	25.85
FRONT (2)	32-3/8	53-1/4	19-1/8	25.98
MID	16-3/8	47-1/4	19-1/8	13.15
HORIZONTAL	44	20-1/2	19-1/8	14.70
REAR***	23-1/8	47-1/4	19-1/8	17.28
TOTAL BODY VOLUME				191.03

\*\*\* Rear compartment dimensions/volume are for non crane box only  
<sup>^</sup> Volume is taken from wall to wall dimensions **NOT DOOR OPENING SIZES**

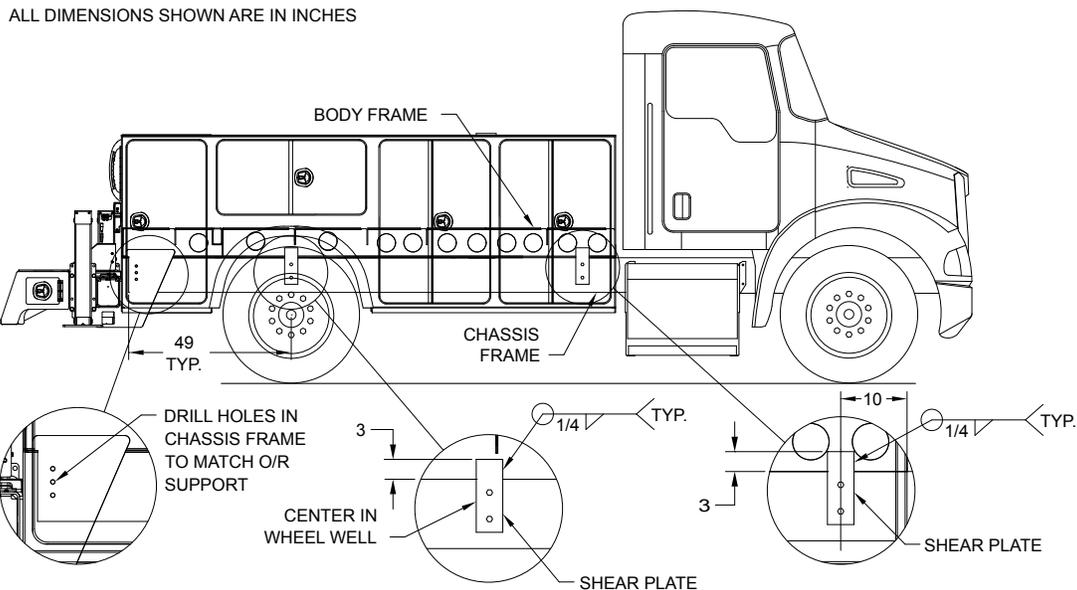
# 5 Mounting and Installation

## WARNING

Do not weld to truck frame. Refer to body-builders manual for further information. Installation instructions below are common mounting practices. Always refer to Chassis body-builders manual for acceptable mounting options. Cutting After-frame may be required. Refer to chassis body-builders manual for proper cutting procedure.

### Minimum Chassis Requirements

- 33,000 lbs GVWR
- 34" frame width
- Heavy-duty reinforced frame



### MOUNTING INSTRUCTIONS:

Available mounting kit (P/N: 560581000) includes hardware & shear plates

1. Pick up body using a 4-point choke chain rated for the body weight shown in General Dimension page. Use the tie-down locations in bed for lifting points.
2. Center body along the width of the chassis and center the wheel well with the tires.

## NOTICE

Make sure you have enough clearance between body and chassis cab per The manufacturers requirements.

3. Locate the shear plates as shown in the above diagram. Drill (2) 21/32" dia. holes into each shear plate and chassis frame.

## NOTICE

Locate hole for bolt so that the bolt, washer, and nut will not interfere with any chassis components. Locations of shear plates shown above are preferred locations. They may need to be moved to accommodate components on the chassis rails.

## Mounting and Installation 5

4. Using the pre-drilled holes in the outrigger support, drill (3) 21/32" dia. holes into chassis rail per side.
5. Weld shear plates to the body frame.

### NOTICE

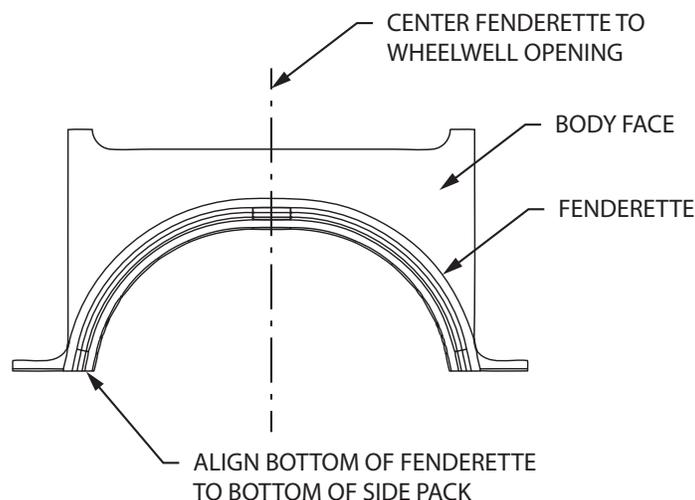
Follow chassis recommendations when welding body components.

6. Bolt Body to Chassis Frame using 5/8" UNC Grade 8 Hardware (Bolt, Washer, Nut, Etc...) Torque to 180 Ft-Lbs

### NOTICE

If you would like to mount the body using another method, please refer to the chassis manufacturer's body builder guide or the NTEA handbook.

7. Install Fenderettes (Supplied) to the body:
  - A. Wipe mounting surface with clean cloth to remove any dirt or oils.
  - B. Locate Fenderette to sidepack, aligning the bottom edges and centering it on fender well opening.
  - C. Draw lines on fender with oil pencil or other erasable marker to assist with alignment when adhesive is applied.
  - D. 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.
  - E. Use lines from step 3 to locate fenderette to sidepack, aligning the bottom edges and centering it on the fender well opening as before.
  - F. Using wide surface area clamps, clamp fenderette into place to insure full contact between the fenderette flange and the sidepack.
  - G. Remove any excess adhesive from outer edges.
  - H. Allow adhesive to cure 3 to 4 hours before removing clamps. Adhesive will be fully cured in 8 to 24 hours.



8. Install wiring, lights, and reflectors onto body. Reference schematic for wiring detail. Reference Mounting and Installation section for location of remaining components.

# 5 Mounting and Installation

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## OUTRIGGER RELIEF VALVE SETTING INSTRUCTIONS

For 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 back pressure 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.



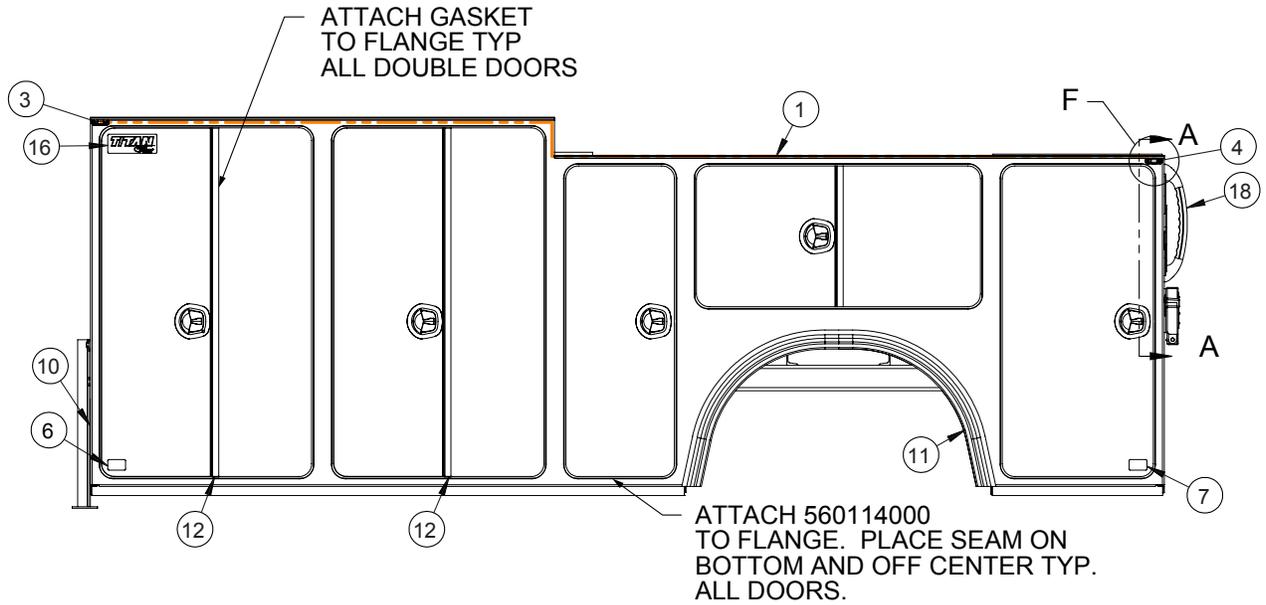
### WARNING

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.

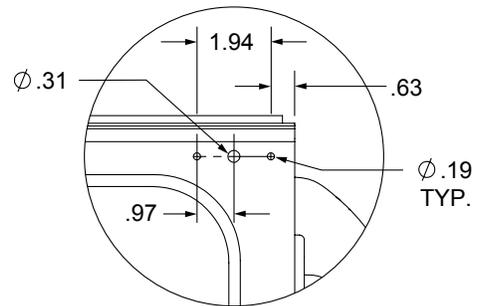
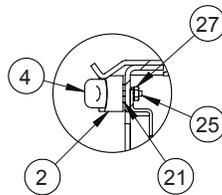
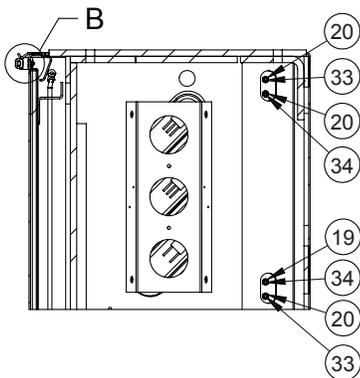
1. The outrigger hydraulic relief valve should be adjusted to 200 psi above the crane hydraulic relief valve. Please consult the appropriate owner's manual for this setting or contact the crane manufacturer for this value.
2. Install the hydraulic pressure gauge in-line with the incoming pressure line 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 100°F.
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 into the deadhead position.
5. Using the hand hold, 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 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.

# Mounting and Installation 5

## BODY SHIP KIT



## TYPICAL BOTH LEFT & RIGHT SIDE



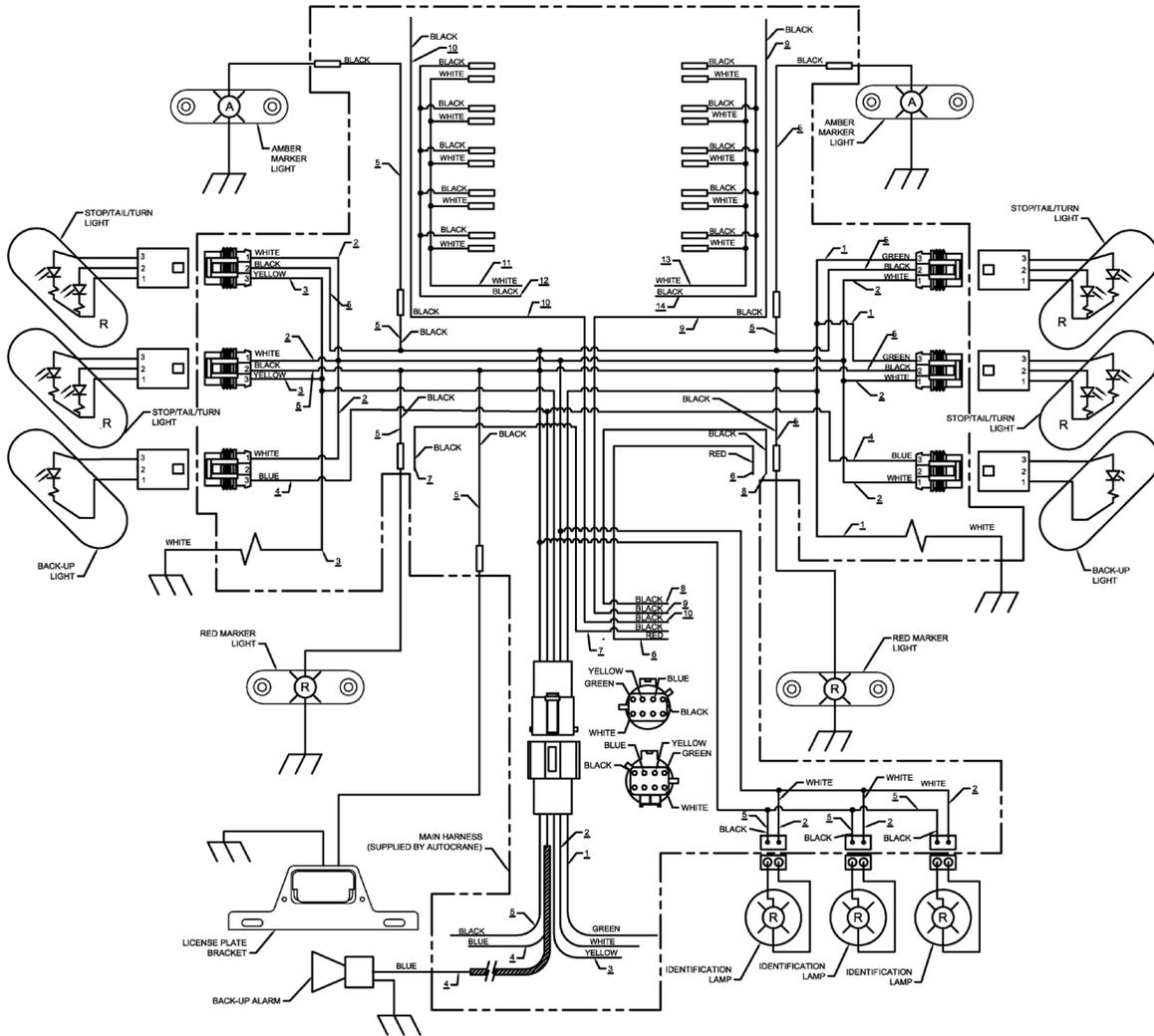


# Mounting and Installation 5

ITEM NO.	QTY	PART NO.	DESCRIPTION
1	2	560114000	GASKET, DOOR 2003
2	4	560449000	BRACKET MOUNTING
3	2	560450000	CLEARANCE MARKER AMBER
4	2	560451000	CLEARANCE MARKER RED
5	1	750980000	LIGHT, LICENSE W/BRKT.
6	2	560452000	REFLECTOR AMBER
7	4	560453000	REFLECTOR RED
8	1	752221000	PANEL LOUVER
9	2	752222000	PANEL BLANK F/ MID VENT OPENING
10	2	750732000	ROCK GUARD
11	1	752912000	FENDERETTE (TPO) INSTL KIT TITAN 50
12	265"	750740000	GASKET FL 1 IN. X 1/8
13	12	750737000	TIE WRAP PUSH-IN
14	12	750738000	STICK-ON, CABLE TIE MOUNT
15	32"	750736000	LOOM, CONVOLUTED, 7/16 ID
16	2	560510000	DECAL "TITAN"
17	20	754028000	RIVET POP 3/16 DIA X 1/4 - 3/8 GRIP SS
18	2	760629000	HANDLE, GRAB PLASTIC BLACK W/GRIP
19	8	020200000	WASHER SP LK 1/4
20	8	015900000	NUT HX 1/4-20 UNC SS
21	5	560540000	GROMMET, NYLON
22	2	002609000	SCREW RD HD #10-32 UNF X 5/8 LG
23	2	019900000	WASHER FL #10
24	2	015800000	NUT HX NYLK #10-32 UNF GR3 ZP
25	8	000602000	SCREW PN HD #6-32 UNC X 1LG
26	8	019600000	WASHER SP LK #6
27	8	015400000	NUT HX #6-32 UNC
28	4	739408003	LIGHT, STOP/TURN/TAIL OVAL
29	6	739408005	GROMMET, LIGHT OVAL
30	2	739408004	LIGHT, BACK-UP OVAL
31	1	560106003	HARNESS, BODY WIRING 3-LIGHT
32	1	772900001	MANUAL, TITAN 85
33	4	739408008	SCREW, FLAT 1/4-20 UNC 1-3/8LG SOCKET
34	4	739408007	SCREW, FLAT 1/2-20 UNC 1-3/4LG SOCKET

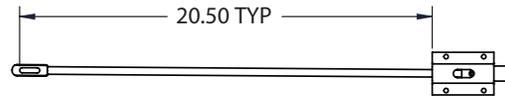
# 5 Mounting and Installation

## WIRING SCHEMATIC FOR BODY WIRING HARNESS

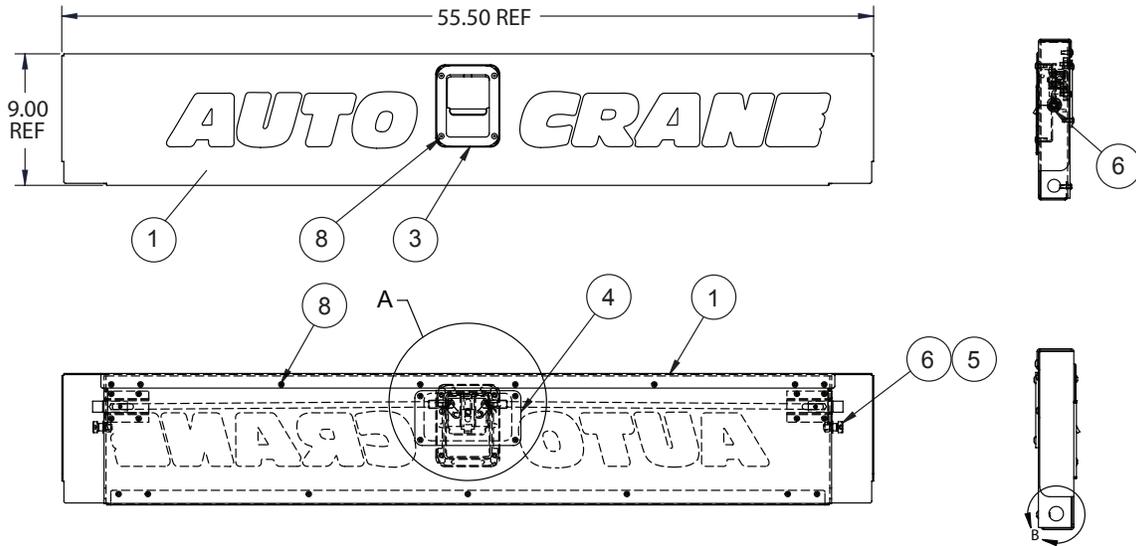


1	GREEN	STOP/TURN SIGNAL RIGHT SIDE	
2	WHITE	GROUND	
3	YELLOW	STOP/TURN SIGNAL LEFT SIDE	
4	BLUE	BACK-UP SIGNAL	
5	BLACK	TAIL LIGHT SIGNAL	
6	RED	OPTIONAL HALOGEN SUPPLY WIRE	HALOGEN
7	BLACK	OPTIONAL REAR WORK LIGHT LEFT SIDE	WRK LT LFT
8	BLACK	OPTIONAL REAR WORK LIGHT RIGHT SIDE	WRK LT RT
9	BLACK	OPTIONAL LIGHTING RIGHT SIDE	OPTIONAL LIGHTING
10	BLACK	OPTIONAL LIGHTING LEFT SIDE	OPTIONAL LIGHTING
11	WHITE	INTERIOR COMPARTMENT LIGHT LEFT SIDE (OPTIONAL)	
12	BLACK	INTERIOR COMPARTMENT LIGHT LEFT SIDE (OPTIONAL)	
13	WHITE	INTERIOR COMPARTMENT LIGHT RIGHT SIDE (OPTIONAL)	
14	BLACK	INTERIOR COMPARTMENT LIGHT RIGHT SIDE (OPTIONAL)	

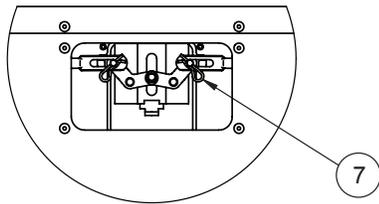
# Tailgate Diagram 6



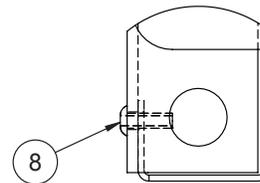
ROD INSTALL DETAIL



BACK VIEW



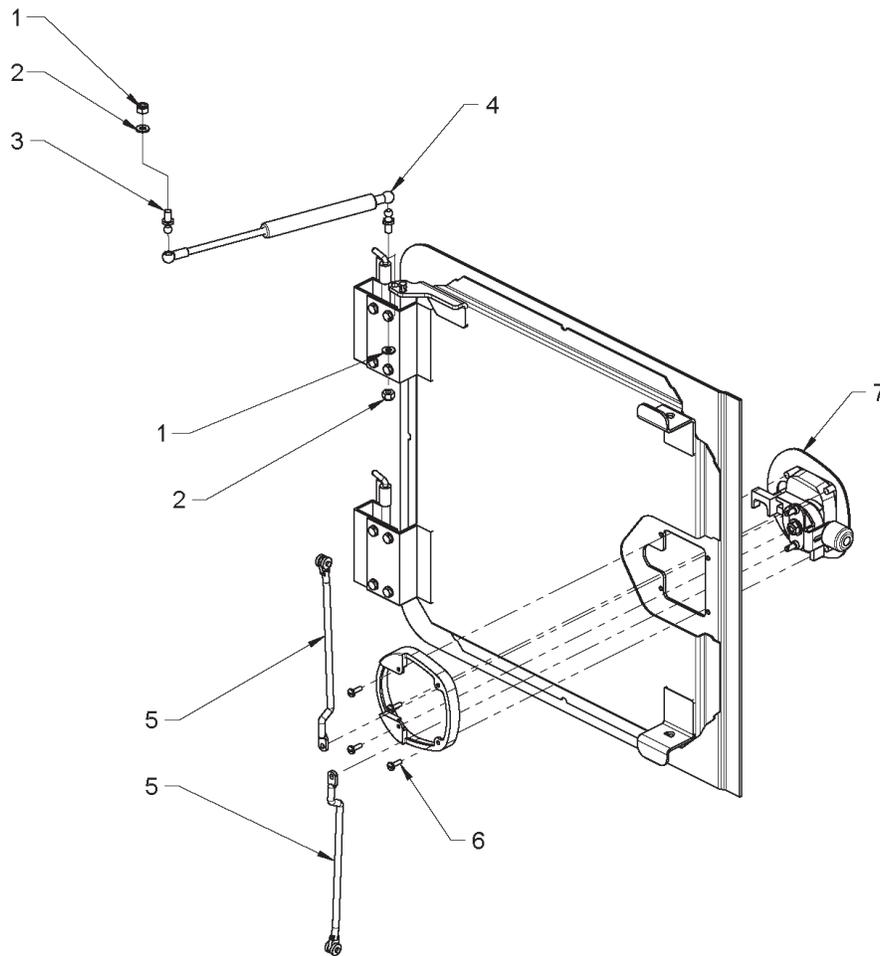
DETAIL A  
ACCESS PANEL REMOVED



DETAIL B

ITEM NO.	QTY	PART NO.	DESCRIPTION
1	1	560082003	TAILGATE OUTER PANEL W/SIDES
2	1	560095001	TAILGATE INNER PANEL WELDMENT
3	1	560092000	LATCH ASSY TAILGATE
4	1	560084000	ACCESS PNL TAILGATE
5	2	021403000	WASHER, FLAT-HARDENED 3/8
6	2	560091000	SCREW SHOULDER 1/2 X 3/8-16 UNC
7	2	560093001	HAIR PIN .080 DIA X 1 3/16 LG
8	31	754028000	RIVET POP 3/16 DIA X 1/4 - 3/8 GRIP SS

# 7 Door Diagram

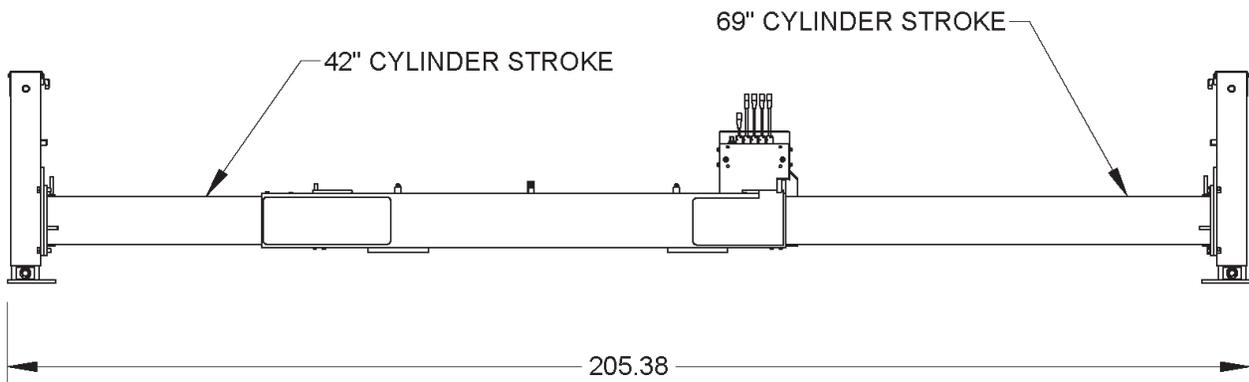
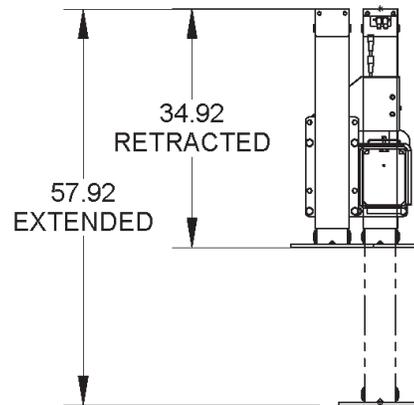
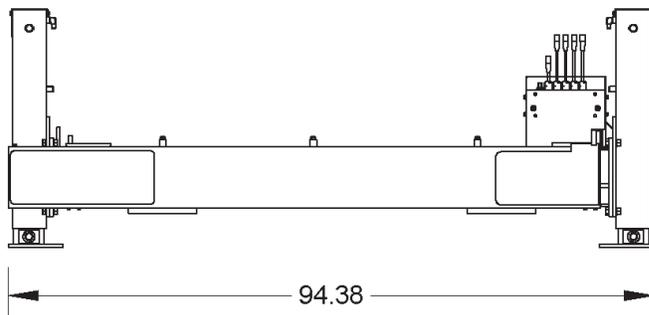
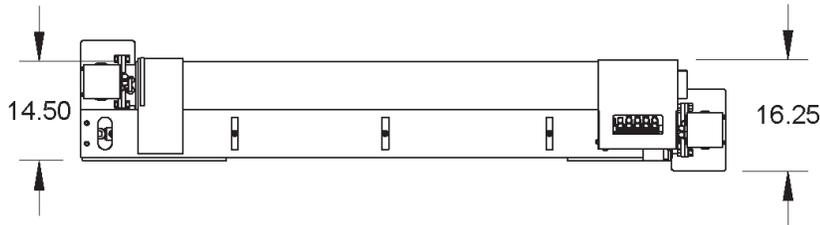


ITEM NO.	QTY	PART NO.	DESCRIPTION
1	2	016801000	NUT NYLK 5/16-18 UNC CP
2	2	020300000	WASHER FL 1/4 CP
3	2	760535002	BALL STUD THREADED 5/16-18
4	1	760535003	DOOR PROP
5	2	*SEE CHART	DOOR ROD
6	4	750074000	NUT #10 STAINLESS
7	1	560525100	T-HANDLE

PART NO.	USED ON	DESCRIPTION
560101000	USED ON ALL 52" COMPARTMENT DOORS, UPPER/LOWER	DOOR ROD STD
560102000	USED ON ALL 58" COMPARTMENT DOORS, UPPER	DOOR ROD TALL
560103000	USED ON HORIZ. COMP. LOWER 52" BODY	DOOR ROD HORIZ
560111000	USED ON HORIZ. COMP. LOWER 58" BODY	DOOR ROD HORIZ TALL CAB STYLE

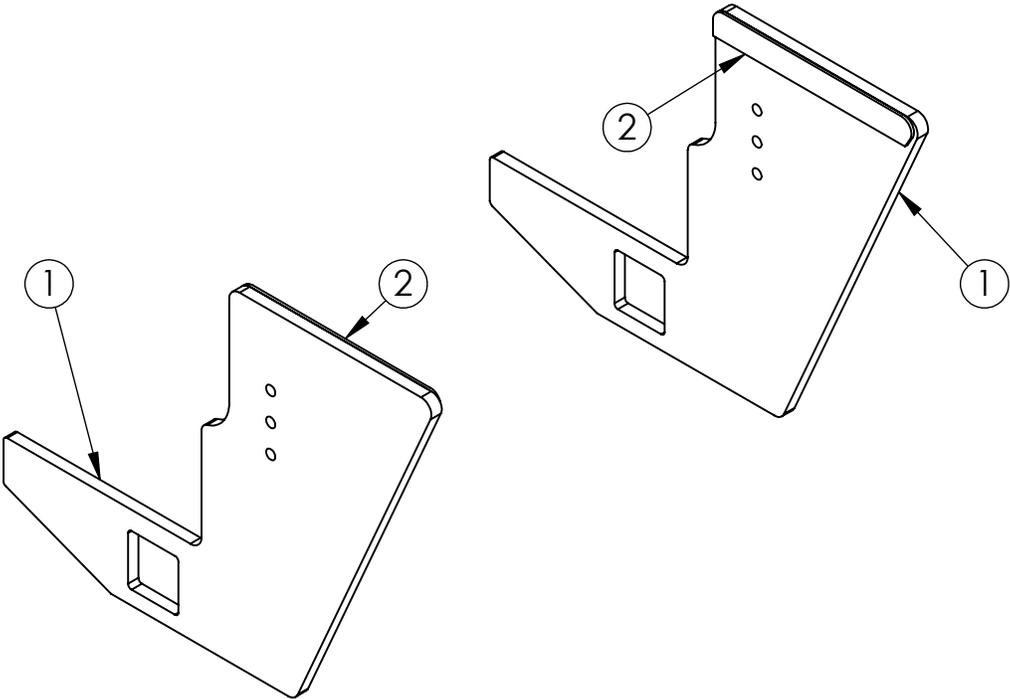
# Outrigger Assembly 8

## OUTRIGGER ASS, FULLY HYDRAULIC GENERAL DIMENSIONS RIGHT SIDE CRANE P/N: 772020001



# 8 Outrigger Assembly

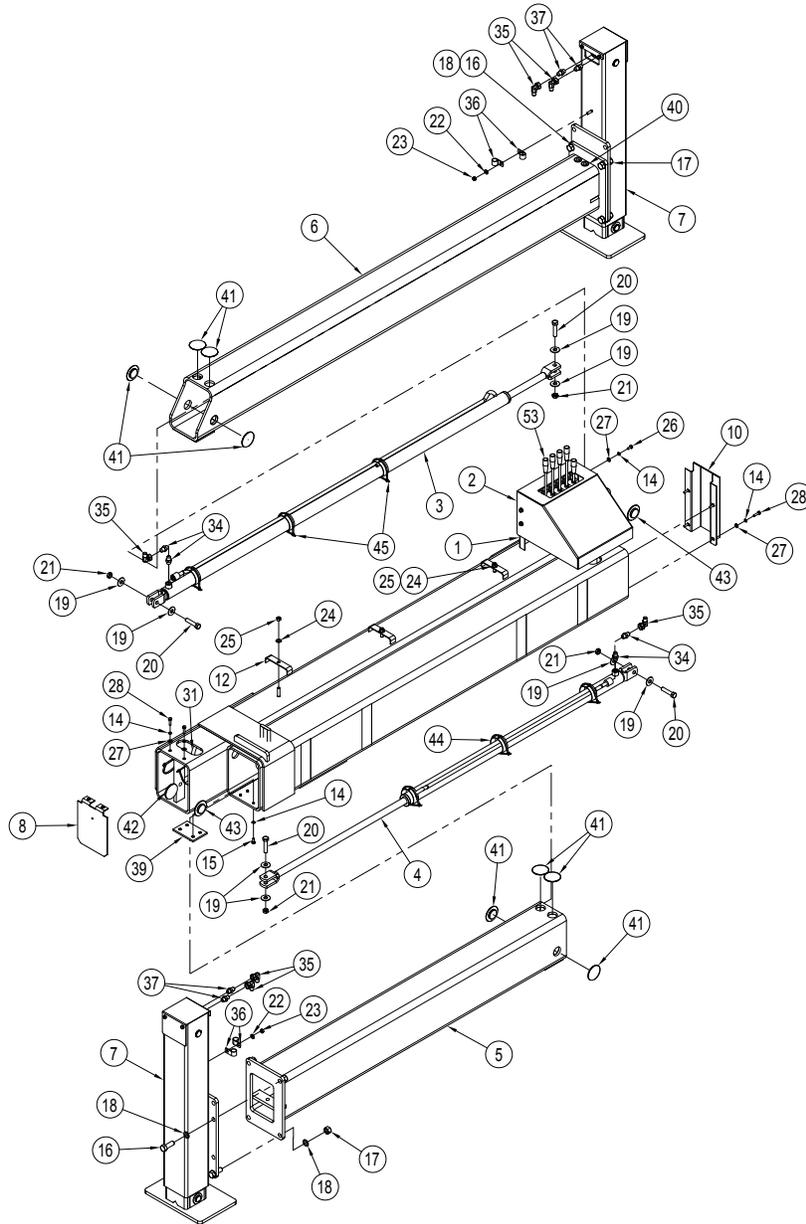
## OUTRIGGER SUPPORT PLATE



ITEM NO.	QTY	PART NO.	DESCRIPTION
1	2	760288001	OUTRIGGER SUPPORT PLATE F/HITCH
2	1	750989	SPACER OUTRIGGER SUPPORT

# Outrigger Assembly 8

P/N: 772020001

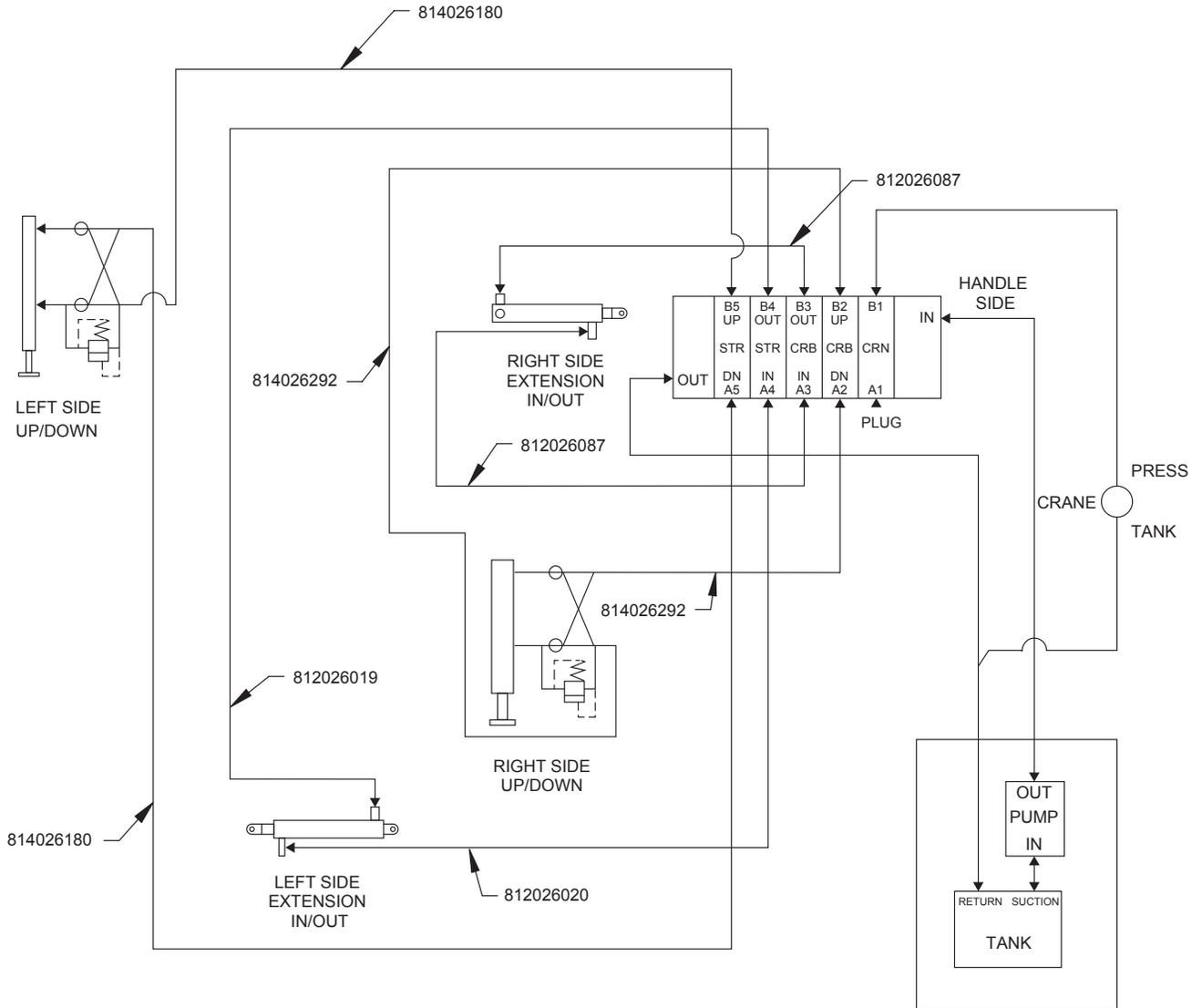


ITEM NO.	QTY	PART NO.	DESCRIPTION
1	1	772030000	MAIN CROSS TUBE WELDMENT, CSC, TITAN 60/70
2	1	760268000	VALVE COVER, TITAN 60
3	1	772023000	CYLINDER, 1.5 BORE, 69 IN STROKE
4	1	772024000	CYLINDER, 1.50 BORE X 42 STROKE X 1.00 ROD
5	1	772034000	SLIDE WELD SHORT, CSC, T60/70
6	1	772022006	SLIDE WELDMENT, LONG, RSC, TITAN 85
7	2	772029000	VERTICAL LEG ASSY, TITAN 60/70

# 8 Outrigger Assembly

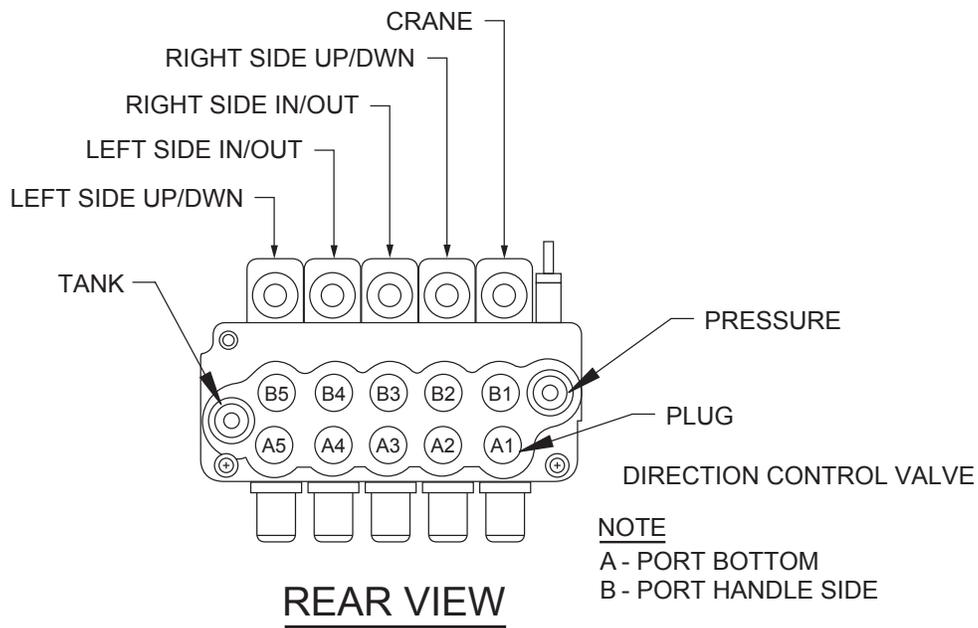
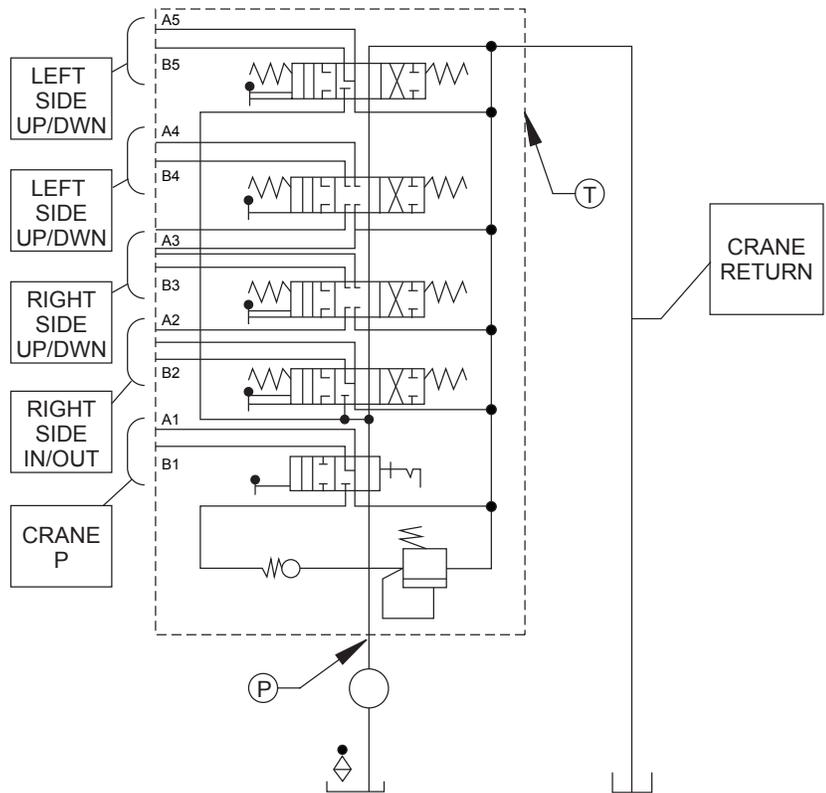
ITEM NO.	QTY	PART NO.	DESCRIPTION
8	1	760417000	COVER ASSEMBLY, OUTRIGGER TUBE
9	1	760248000	BRACKET ASSEMBLY, COVER
10	1	760249000	COVER, HOSE
11	18	374086000	NYLON HOSE SLEEVE, 1.81" ID
12	3	407216000	HOSE RETAINER, 4.75 WIDE
13	4	736272000	NUTSERT 1/4-20 UNC X .027-.165 GRIP
14	18	020200000	WASHER SP LK 1/4
15	8	005102000	SCREW HX HD 1/4-20 UNF X 5/8 LG
16	8	012198000	SCREW HX HD 5/8-11 UNC X 1 3/4 LG GR8
17	8	407315000	NUT HX 5/8 NC CP GR8
18	16	023902000	WASHER FL 5/8 HARDENED
19	8	021600000	WASHER FL 1/2
20	4	011511000	SCREW HX HD 1/2-20 UNF X 2 1/4 LG GR5
21	4	017700000	NUT LK 1/2-20 UNF
22	2	020901000	WASHER FL 5/16
23	2	016500000	NUT HX 5/16-18 UNC
24	3	021200000	WASHER FL 3/8
25	3	017301000	NUT HX NYLK 3/8-16 UNC CP
26	4	005401000	SCREW HX HD 1/4-20 UNC X 5/8 LG CP
27	10	020400000	WASHER FL SAE 1/4
28	6	005604000	SCREW HX HD 1/4-20 UNC X 1 LG
29	1	772035000	HYDRAULIC KIT TITAN 60/70, CSC
30	2	814026180	HOSE ASSY, R7, -6JICF/-6JICF X -4 HOSE, 180"L
31	2	814026292	HOSE ASSY, R7, -6JICF/-6JICF X -4 HOSE, 292"L
32	1	812026019	HOSE ASSY, -6JICF/-6JICF, -4 HOSE
33	2	812026087	HOSE ASSY, -6JICF/-6JICF X -4 HOSE, 87"
34	4	760203000	FITTING, STR, -6 SAE/6 JIC RESTRICTED
35	6	480194000	FITTING 6 SWIVEL NUT ELBOW
36	4	480024000	MOUNT PENDANT CABLE RETAINER
37	4	200876000	FITTING 6 SAE/6 JIC STRAIGHT
38	26	760229000	TRIM EDGE, 5/16
39	2	772033000	PAD, 4.25 X 3.0 X .25, 1/4-28 NUTS
40	4	772027000	GROMMET, RUBBER, 1/2" ID, 1/2" THICK PLATE
41	9	470048000	PAD, BOOM 2.50 O.D. X 0.063 THICK
42	12	407202000	PAD BOOM 2.50 O.D.
43	2	560356000	PAD BOOM 2.50 OD x .125
44	8	772042000	RUBBER STRIP, 1 X 8 X .06
45	12	772043000	ZIP TIE STRAP, 12 IN, NYLON, BLACK
46	7	772046006	SPIRAL HOSE WRAP, 1/2", 6" LONG
47	1	772089000	SHIP KIT, OUTRIGGER, TITAN 60/70, HYDRAULIC
48	1	760245000	DECAL INSTALLATION, TITAN 60
49	2	008400000	SCREW HX HD 3/8-16 UNC X 3/4 LG GR 5
50	2	021100000	WASHER SP LK 3/8
51	2	330372000	NUT HX 3/8 NC GR5
52	1	812026020	6 FEMALE JIC/6 FEMALE JIC, 20 INCHES LONG
53	1	760260000	CONTROL VALVE SUB-ASSY, 5 SECTION

## HYDRAULIC DIAGRAM

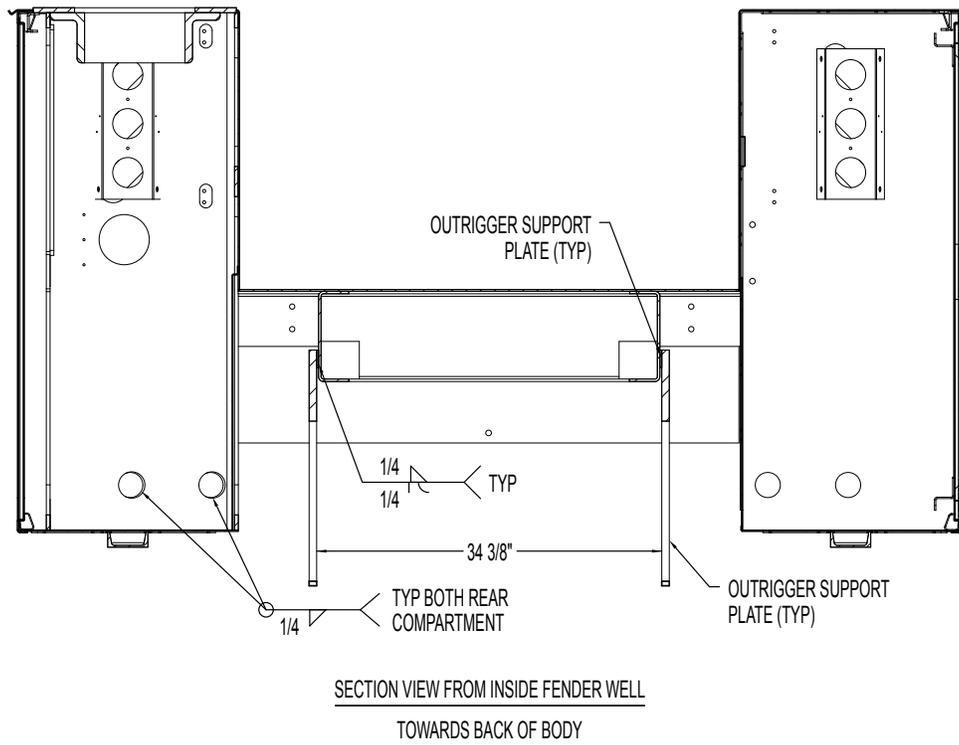
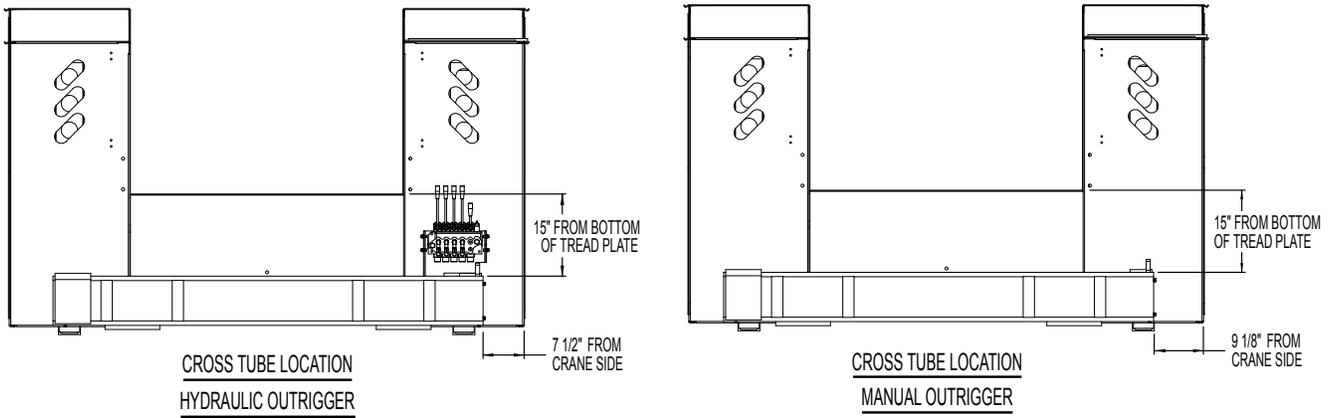


# 8 Outrigger Assembly

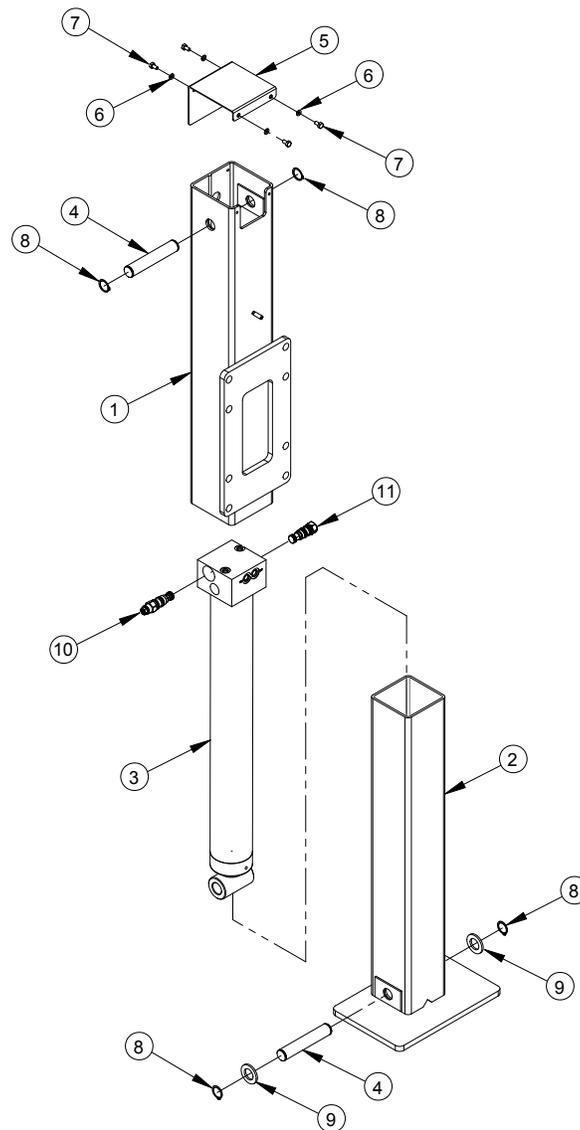
## HYDRAULIC SCHEMATIC



# Outrigger Installation 9



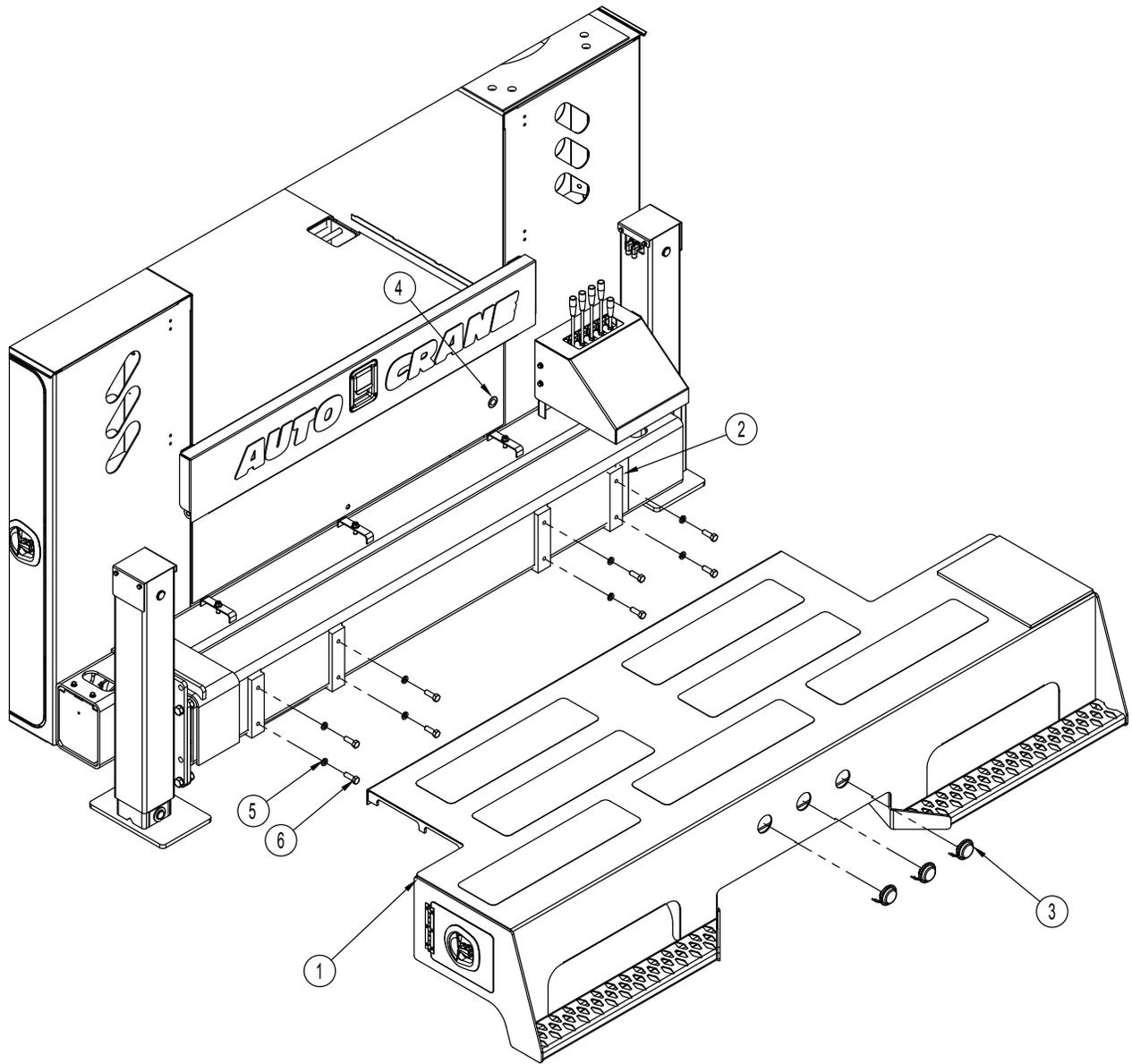
# 10 Outrigger Hydraulic Leg Assembly



ITEM NO.	QTY	PART NO.	DESCRIPTION
1	1	772038000	LEG WELDMENT, UPPER, T60/70
2	1	560150001	LOWER OUTRIGGER WDMT
3	1	560550000	CYLINDER, 3.00 BORE X 23.00 STROKE X 2.50 ROD
4	2	560367000	PIN 1 DIA. X 5.438 LG
5	1	560156001	COVER OUTRIGGER
6	4	020200000	WASHER SP LK 1/4
7	4	005901000	SCREW HX HD 1/4-20 UNC X 1/2 LG
8	4	738734000	RING RETAINING 5100-100
9	2	560562000	WASHER, FL 1.0312 ID X 1.75 OD X .156 THICK ZINC YELLOW
10	1	480186000	SPOOL ASSY F/480184
11	1	480231001	VALVE CARTRIDGE (30 PSI CRACKING PRESSURE)

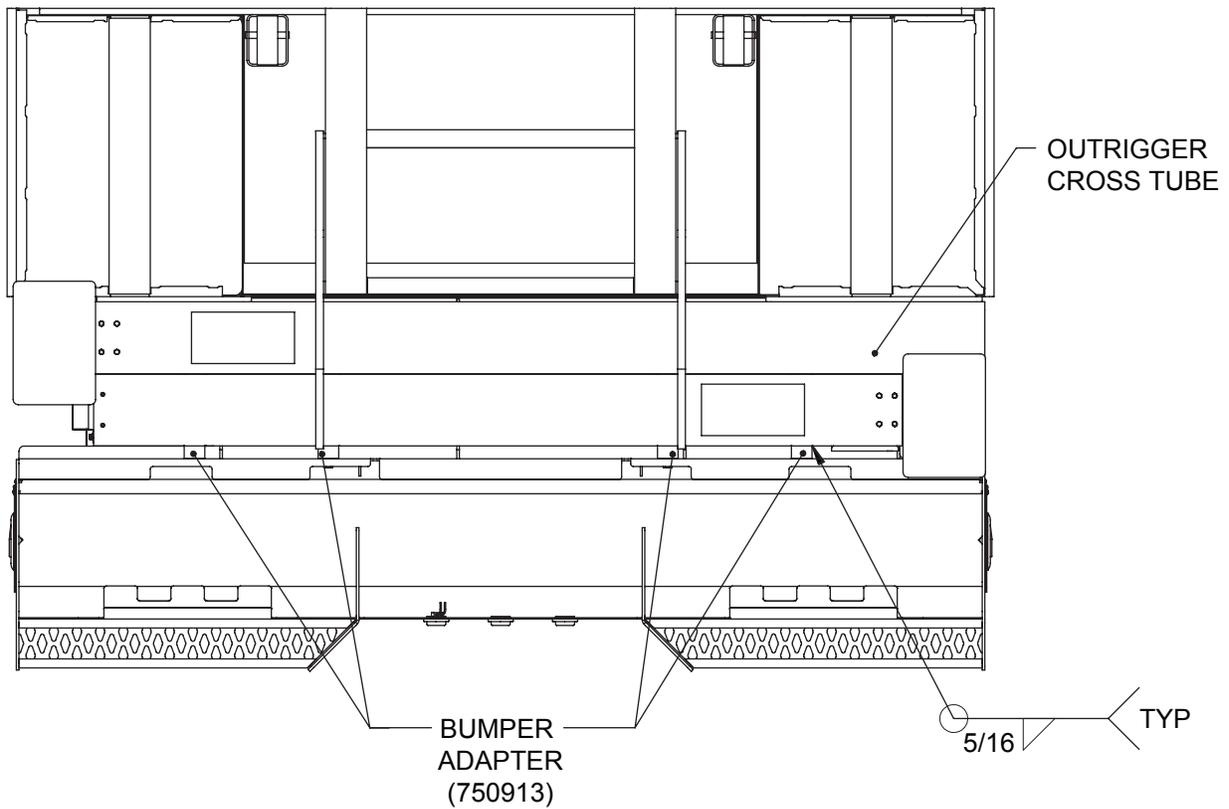
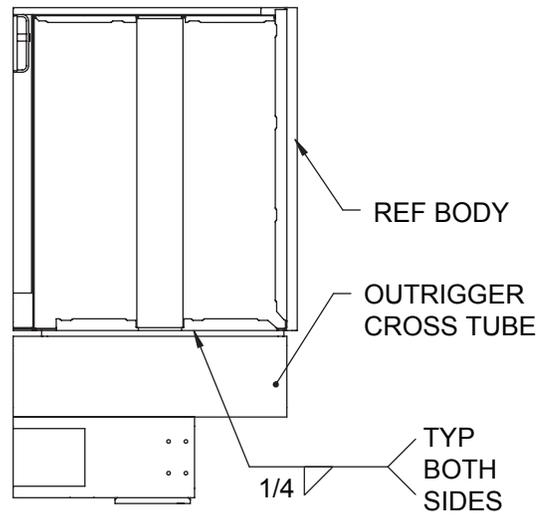
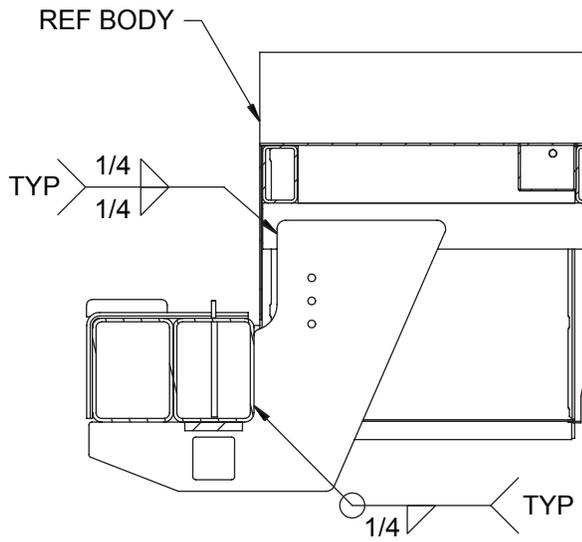
# Bumper Assembly 11

P/N: 772059000

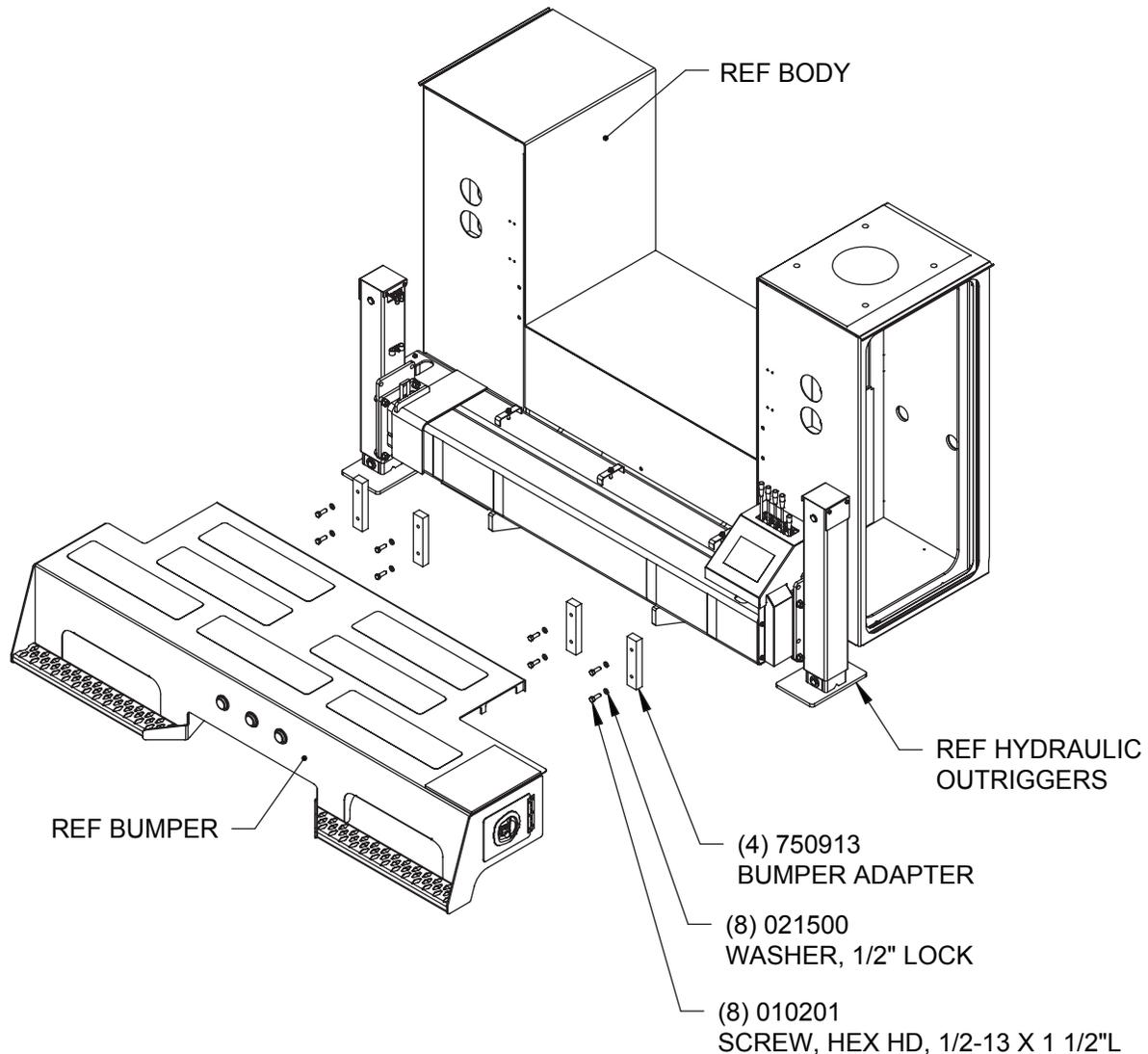


ITEM NO.	QTY	PART NO.	DESCRIPTION
1	1	772059000	BUMPER ASSY, 30", RECEIVER, CSC, T60/70
2	4	750913000	BUMPER ADAPTER
3	3	560105000	LIGHT MARKER LED 2"
4	1	750282000	GROMMET, RUBBER
5	8	021500000	WASHER, SP LK 1/2
6	8	010201000	SCREW HX HD 1/2-13 UNC x 1 1/2 LG

# 12 Bumper Installation



# Bumper Installation 12



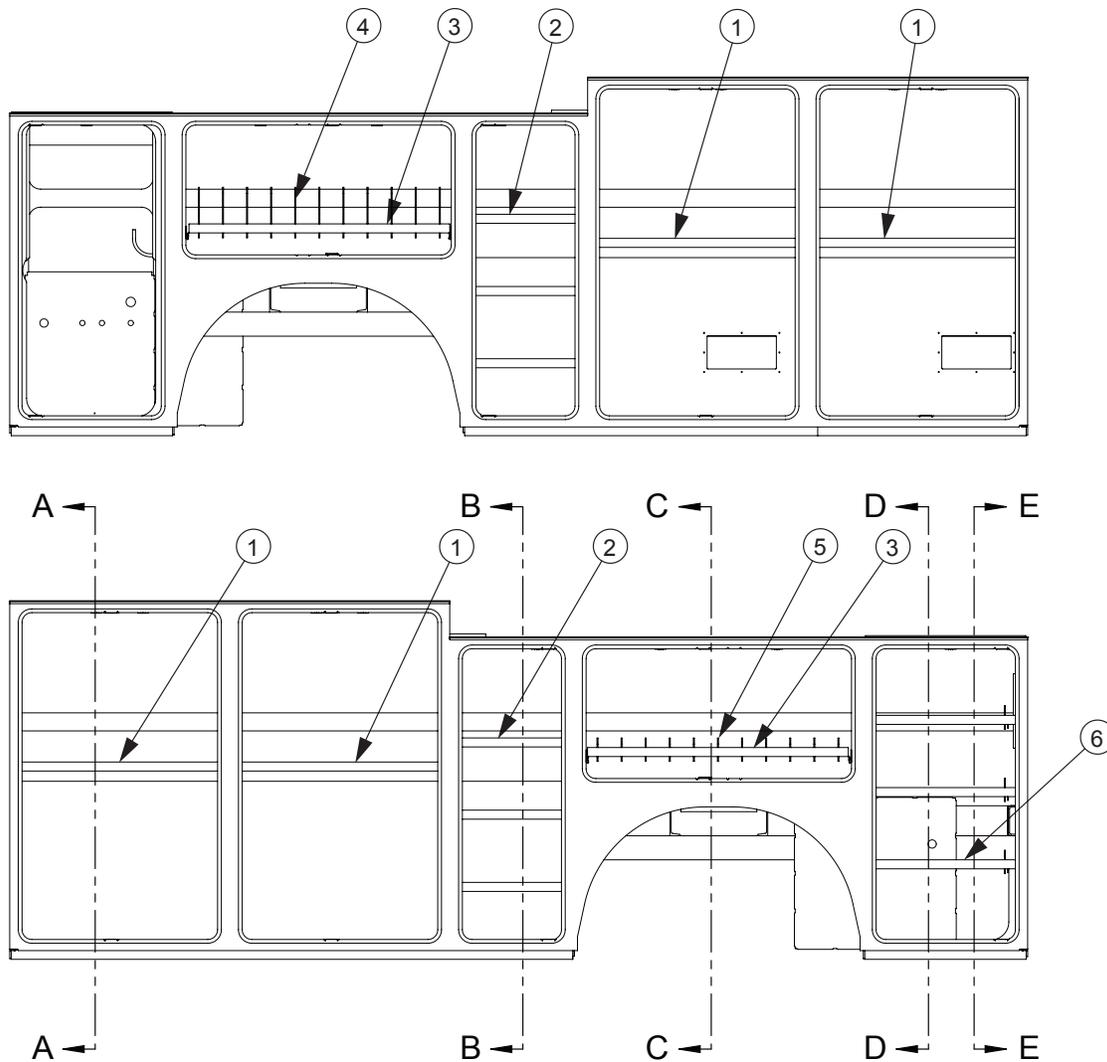
WELD: MINIMUM YIELD 50,000 PSI

## BUMPER INSTALLATION INSTRUCTIONS

1. Attach the (4) bumper adapters (750913) with 1/2" bolt (010201) and 1/2" lock washer (021500).
2. Place the bumper in place with the bumper adapters against the outrigger cross tube and the bumper top plate resting on top of the cross tube.
3. Square and center the bumper to the rear of the body, then tack weld the adapters to the cross tube.
4. Remove the bumper by removing the 1/2" hardware.
5. Weld all (4) adapters with a 5/16 fillet weld all around.
6. Reinstall bumper with 1/2" hardware.

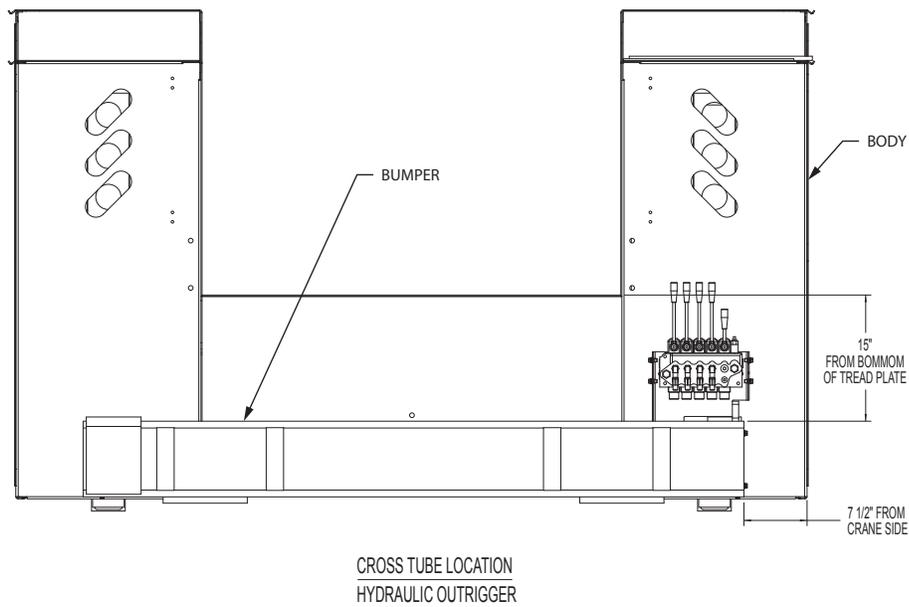
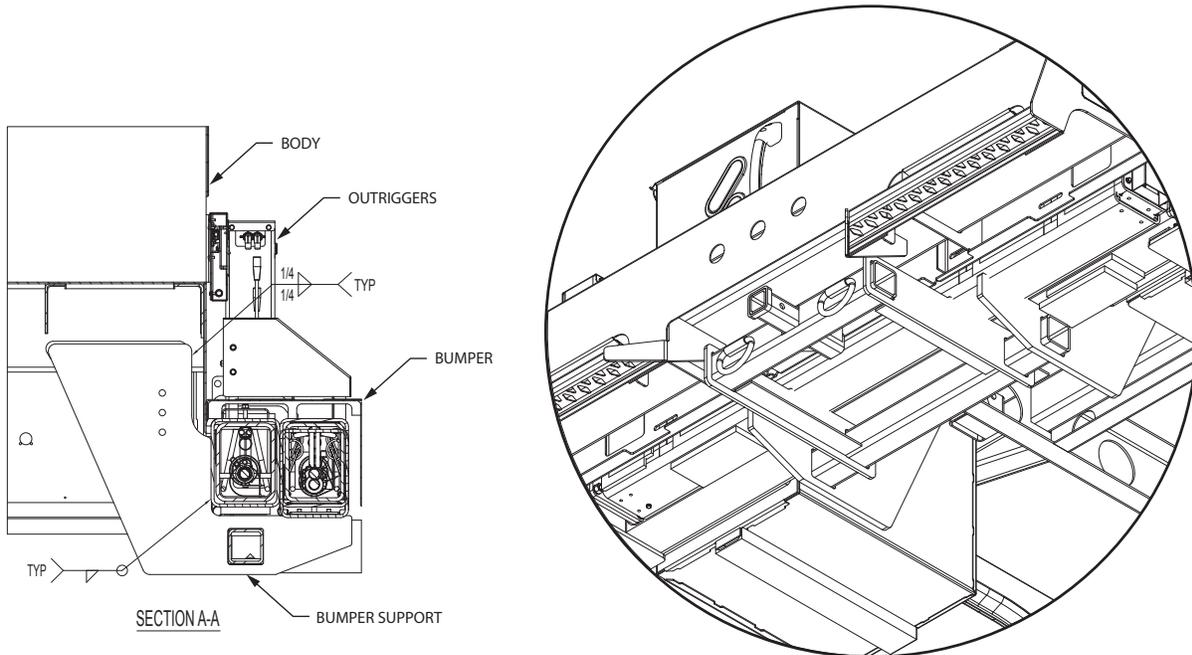
# 13 Shelf Location

P/N: 760537000



ITEM NO.	QTY	PART NO.	DESCRIPTION
1	4	560476000	SHELF FRONT COMP
2	6	760538000	SHELF MID COMP
3	2	60536000	SHELF HORIZ (PLASTIC DIVIDERS)
4	11	560481001	DIVIDER, SHELF TALL (PLASTIC)
5	14	560480001	DIVIDER, SHELF SHORT (PLASTIC)
6	3	560537002	SHELF REAR COMP (PLASTIC DIVIDERS)

# Receiver Hitch Installation 14



## NOTE:

1. Insert the end of the 3 1/2" tube of the receiver assembly in the hole of the bumper support.
2. Continue to slide receiver assembly over and insert the other end of the tube in the other bumper support.
3. Locate the receiver assembly as shown and weld into place.
4. Also weld the receiver assembly to the bottom of the outrigger tube as shown.

# 14 Receiver Hitch Installation

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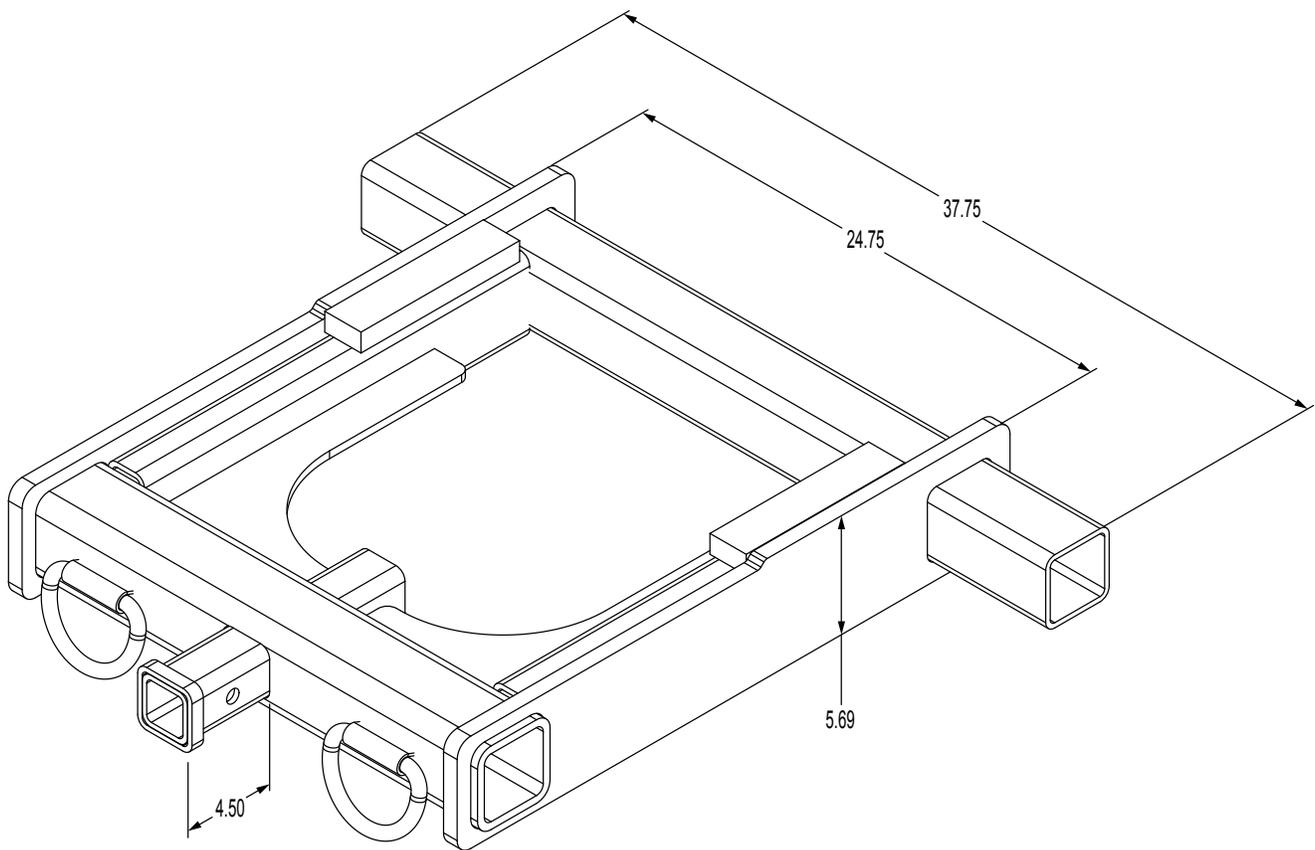
P/N: 760365000

**Specifications:**

12,000 lbs. rating

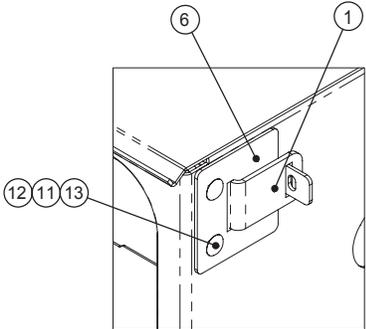
3" Opening

This Hitch is for use with a 30" bumper.

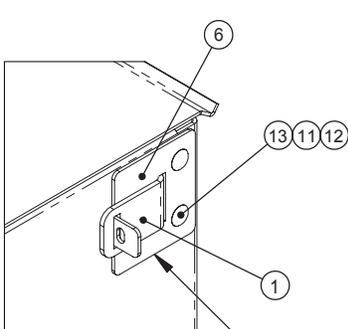


# Master Lock System 15

P/N: 760551005

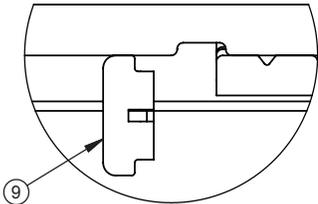


DETAIL A



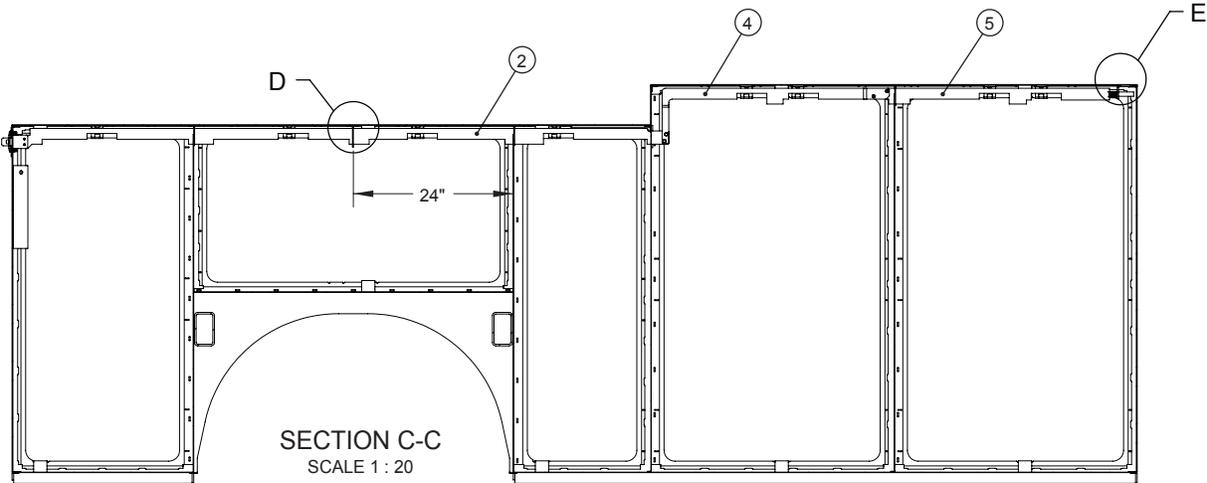
DETAIL B

SEE CUTOUT DETAIL FOR HOLE LOCATIONS

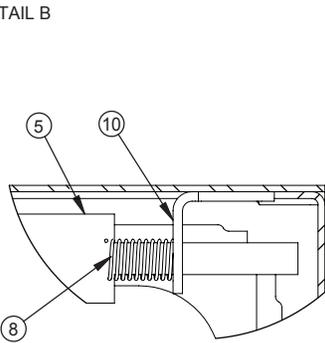
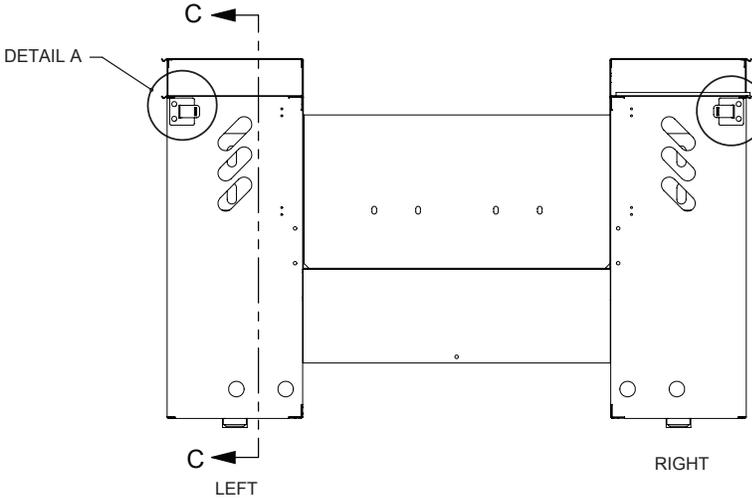


LOOKING DOWN  
W/TOP REMOVED FOR CLARITY

DETAIL D

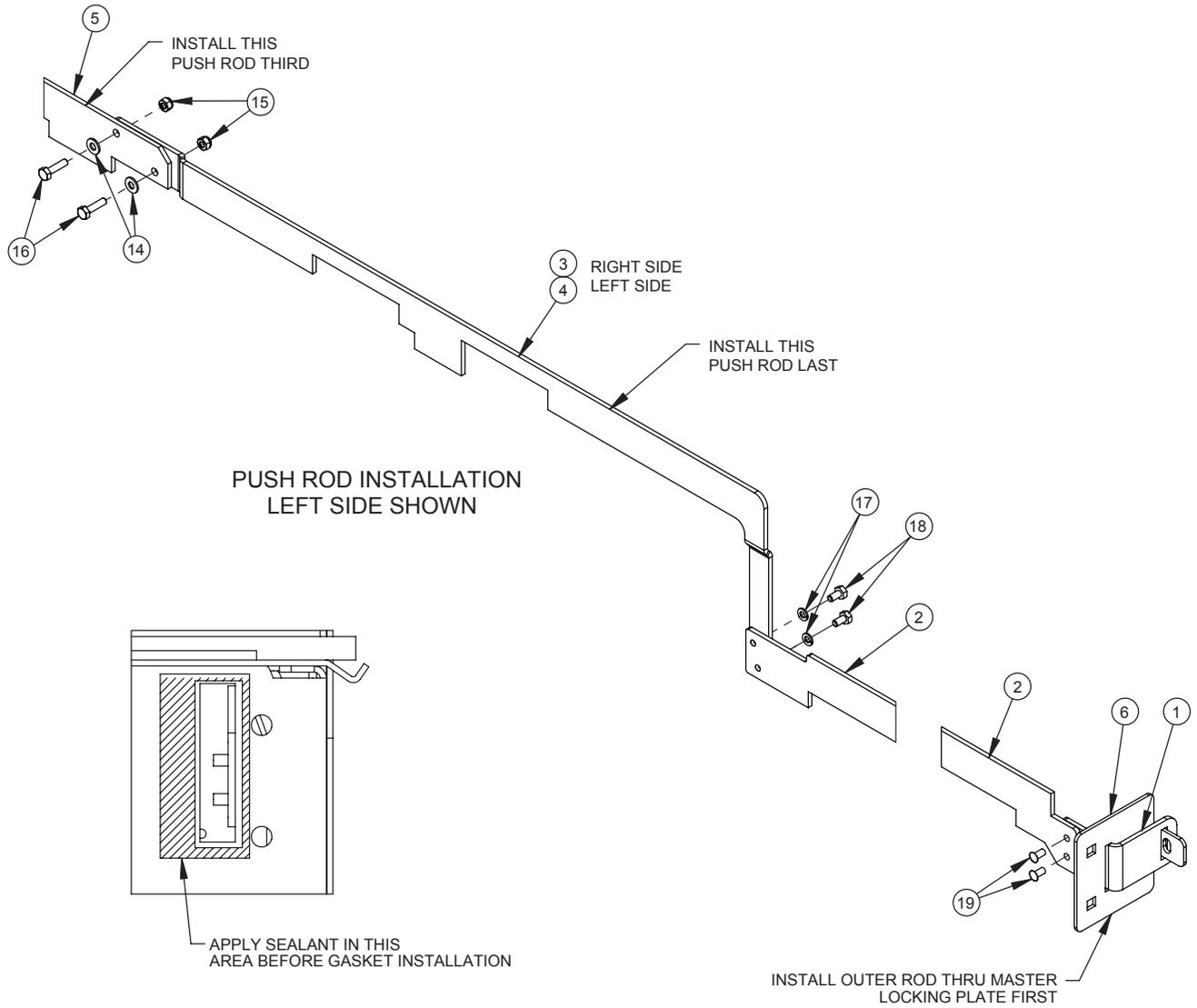


SECTION C-C  
SCALE 1:20



DETAIL E

# 15 Master Lock System

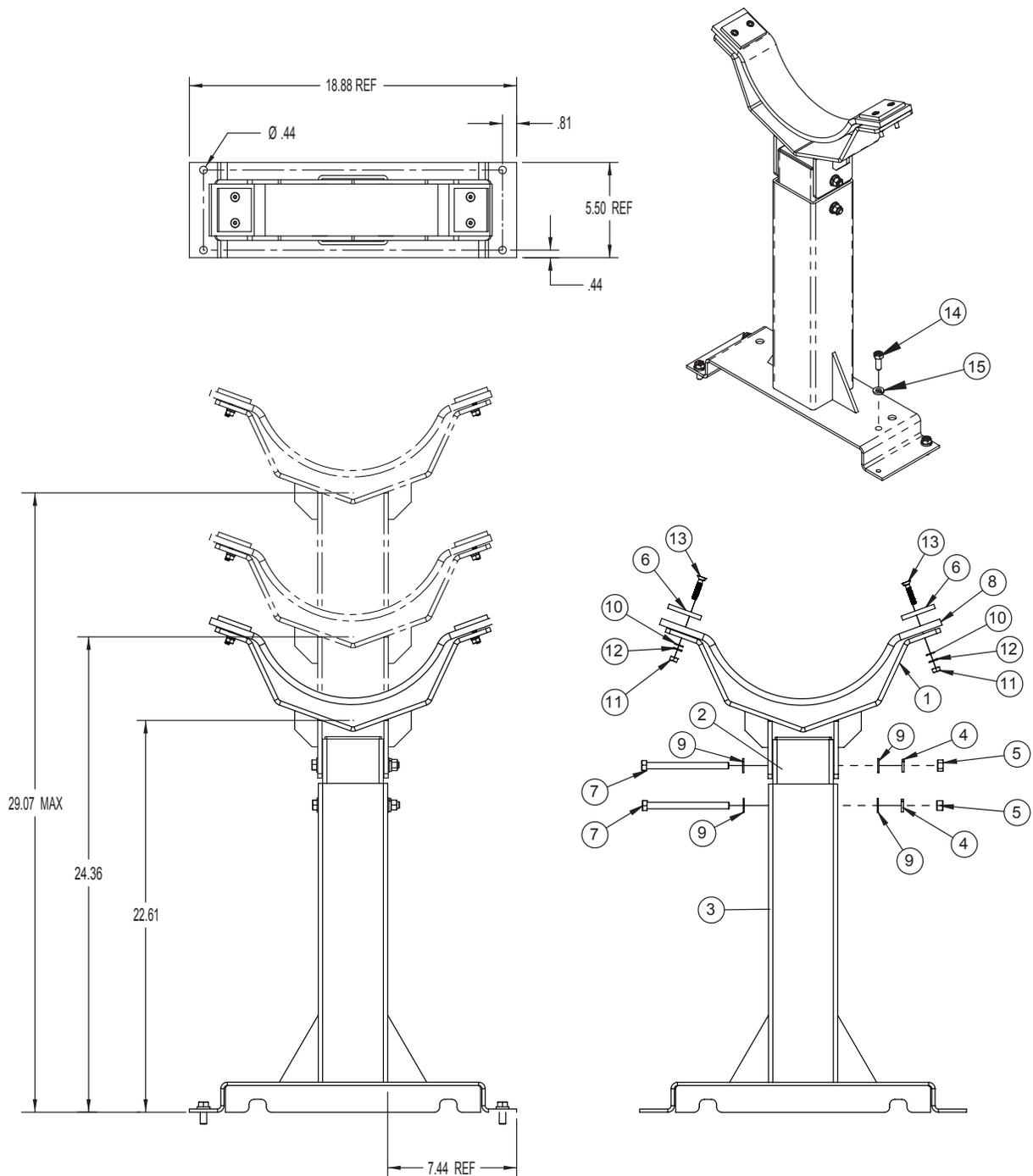


# Master Lock System 15

ITEM NO.	QTY	PART NO.	DESCRIPTION
1	2	760560005	SS OUTER PUSH BAR
2	2	760560007	PUSH BAR, TITAN 60/120
3	1	760561000	PUSH BAR FRONT CS, TITAN 60/120CA
4	1	760561002	PUSH BAR FRONT SS, TITAN 60/120CA
5	2	760562000	PUSH BAR FRONT FWD, TITAN 60/120CA
6	2	760560008	ALUM. MASTER LOCK LOCKING PLATE
7	2	560139000	GASKET MASTER LOCK
8	2	736730000	SPRING
9	2	560119000	MASTER LOCK GUIDE
10	2	560122000	MASTER LOCK MOUNT
11	4	021100000	WASHER SP LK 3/8
12	4	330372000	NUT HX 3/8-16 UNC
13	4	560138000	SCREW CARRIAGE 3/8-16 UNC X 1 LG
14	4	020300000	WASHER FL 1/4
15	4	016300000	NUT HX NYLK 1/4-20 UNC
16	4	005604000	SCREW HX HD 1/4-20 UNC X 1 LG
17	4	020200000	WASHER SP LK 1/4
18	4	005406000	SCREW HX HD 1/4-28 UNF X 1/2 LG
19	4	560631050	RIVET, 1/4" DIA 1/2" LG TRUSS HEAD

# 16 Boom Support

P/N: 715064010



# Boom Support 16

ITEM NO.	QTY	PART NO.	DESCRIPTION
1	1	560200010	WELDMENT, CRADLE BOOM SUPPORT
2	1	560198010	UPPER TUBE WELDMENT, LARGE BOOM SUPPORT
3	1	715066010	BASE, LARGE BOOM SUPPORT WELD
4	2	021100000	WASHER SP LK 3/8
5	2	330372000	NUT HX 3/8 NC GR5
6	2	715063012	STRAP SUPPORT, LARGE BOOM SUPPORT
7	2	009800010	SCREW HX HD 3/8UNC X 4 3/4 GR5
8	1	715063013	RUBBER STRAP
9	4	021200000	WASHER FL 3/8
10	4	019900000	WASHER FL #10
11	4	015900000	NUT HX 1/4-20UNC SS
12	4	020200000	WASHER SP LK 1/4
13	4	739408008	SCREW, FLAT 1/4-20UNC 1-3/8LG SOCKET
14	4	330371000	SCREW HX HD 3/8-16 UNC X 1 LG GR8
15	4	021100000	WASHER SP LK 3/8



P.O. Box 580697 Phone: (918) 438-2760  
4707 N. Mingo Rd. Tulsa, OK 74158-0697

## 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 Owner's 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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4707 N. Mingo Rd. Tulsa, OK 74158-0697

## 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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4707 N. Mingo Rd. Tulsa, OK 74158-0697

## 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.**



