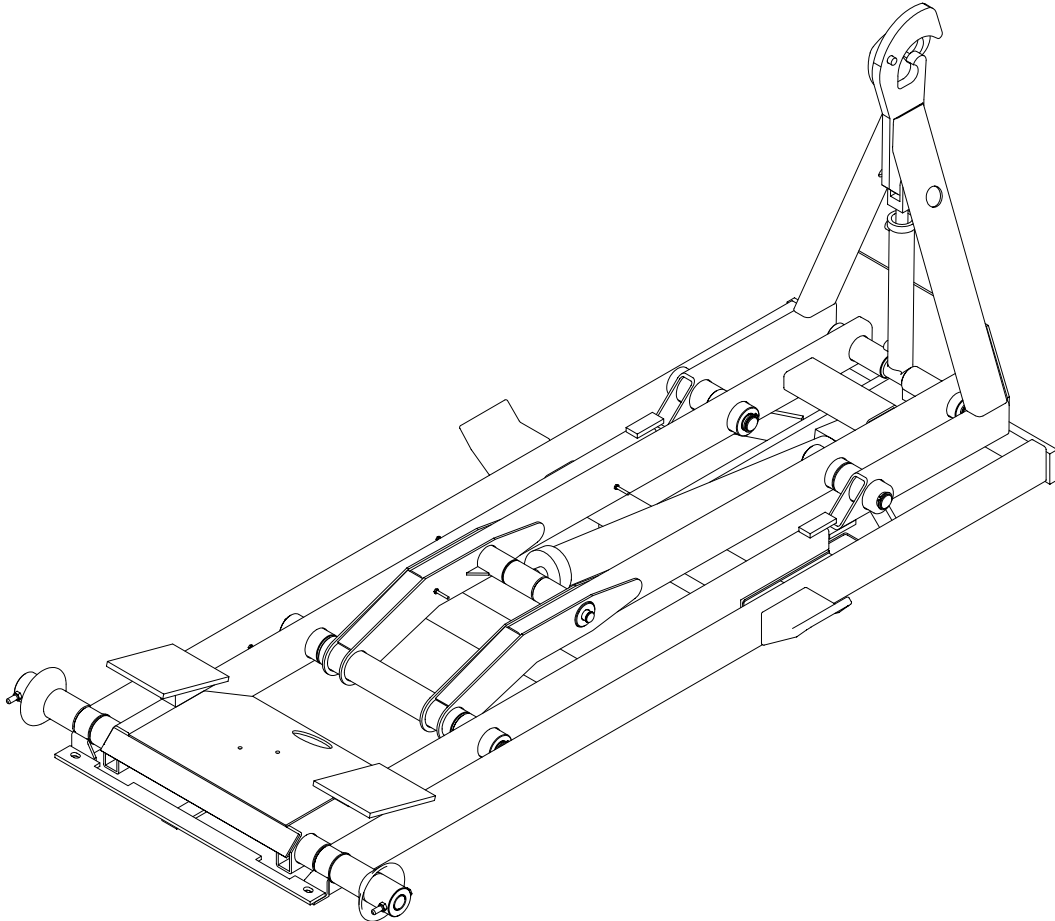




***STELLAR SHUTTLE***  
***MODEL 60-10-5 G***  
***P/N (D0265)***  
***ASSEMBLY***  
***AND***  
***INSTALLATION***  
***MANUAL***



Updated 02/26/03

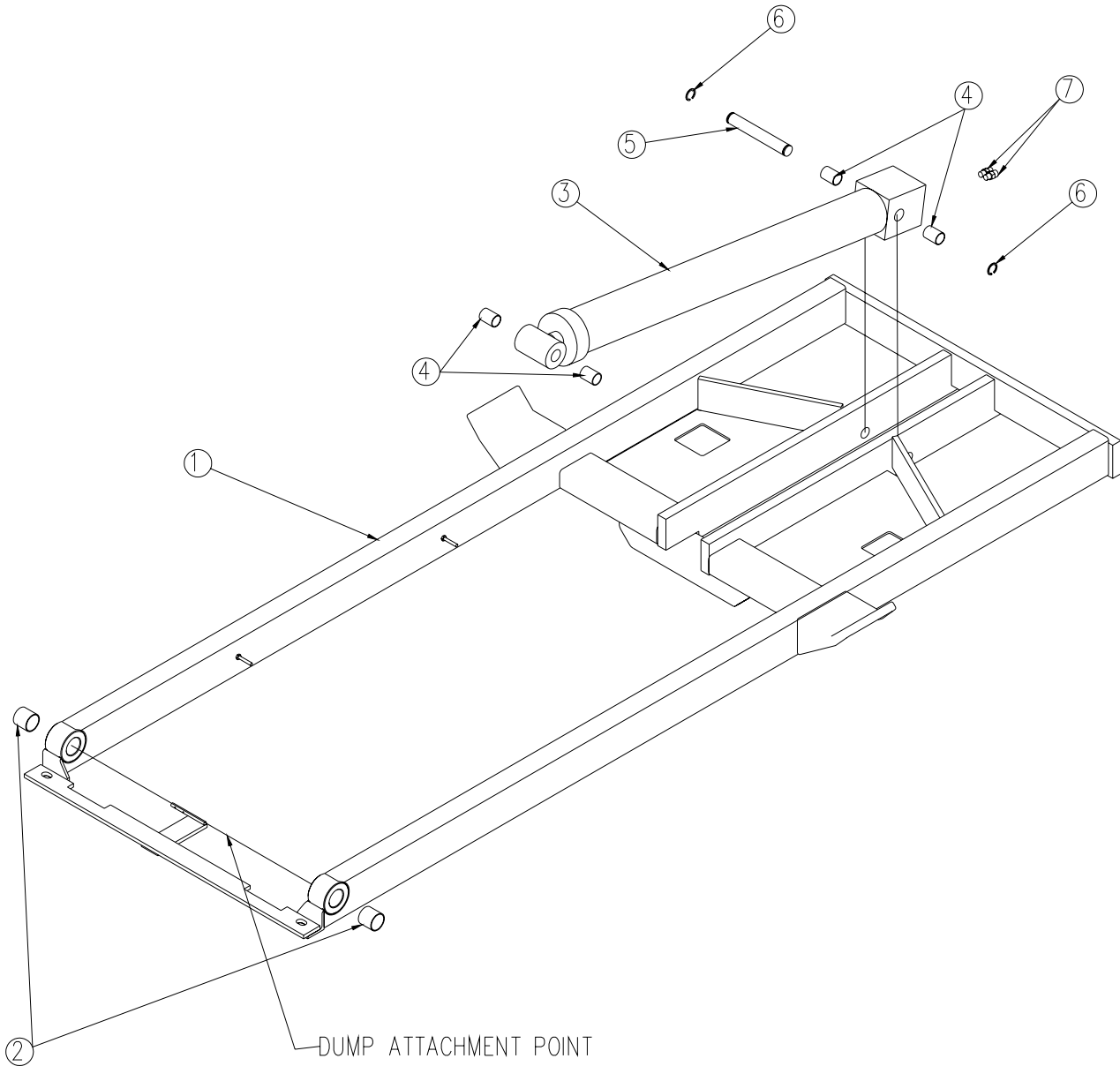
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## Hydraulic Hook Lift Specifications

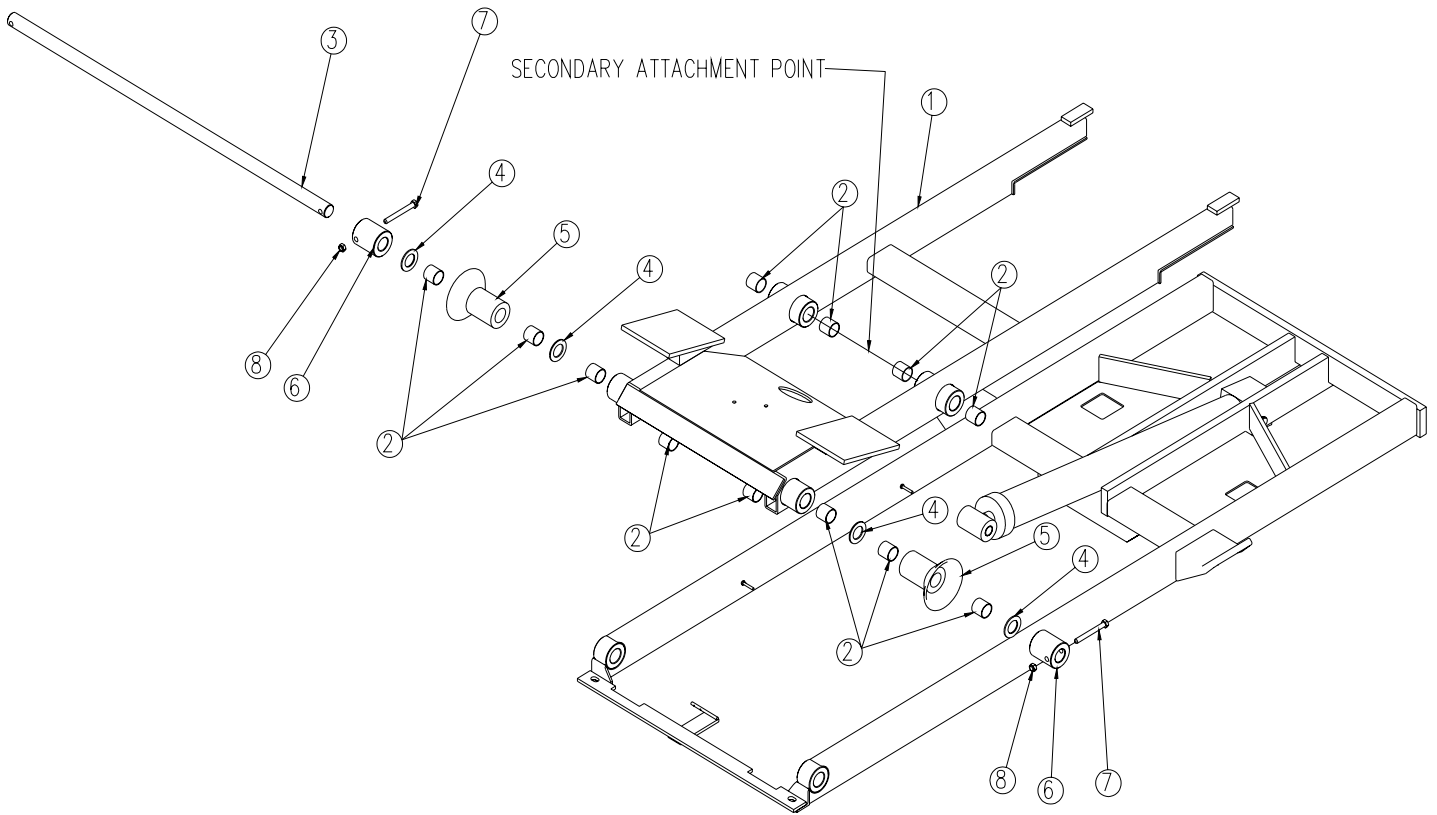
<b>Lifting Capacity:</b>	5,000 pounds gross weight evenly distributed in, or on, body.
<b>Container Length:</b>	8-foot through 10-foot from front A-frame to rear of skid rails. Longer bodies may be accommodated if full dump angle is not required (may require special body-mounted or extendable truck-mounted bumper to meet the Office of Motor Carrier Safety (OMCS) Rear End Protection regulation 393.86)
<b>Maximum Dump Angle:</b>	56°
<b>Operating Pressure:</b>	2500 PSI maximum
<b>Weight of Loader:</b>	Loader weight not to exceed 1,100 pounds
<b>Height of Loader:</b>	Loader height not to exceed 4" as measured from top of truck frame to top of loader rollers
<b>Hook Height:</b>	36.25-inches from bottom of skid rails to centerline of hook bar. Loader must be able to pick up 10-inches below grade when mounted on a truck with 26" frame height.
<b>Hydraulic Pump:</b>	Direct-coupled high-pressure gear pump.
<b>Hydraulic Control Valve:</b>	Hydraulic valve mounted directly onto the oil reservoir.
<b>Controls:</b>	Dual manual levers with sealed cable actuators mounted in the truck cab to allow full feathering of all loader functions.
<b>Tilting Hook Assembly:</b>	Loader must have pivoting type front tilt section (jib) to provide a low degree loading/unloading angle. Hook to include automatic mechanical safety latch, which disengages only when the container/body is in proper position to be picked up or dropped off.
<b>Tilt Cylinder:</b>	Single 2-inch bore with 1.125-inch diameter rod cylinder. Cylinder must be double acting and include dual integral pilot-operated check valves to prevent cylinder collapse in case of hose failure.
<b>Tilt Section Operation:</b>	Loader must include a hydraulic lock-out device to prevent operation of the tilt section while loader is in the dumping mode.
<b>Lift/Dump Cylinder:</b>	Single 3.5-inch bore with 1.50-inch diameter rod cylinder. Cylinder must be double acting and include dual integral pilot-operated counterbalance valves to prevent cylinder collapse in case of hose failure.
<b>Dump/Tilt Interlock:</b>	Dumping must be accomplished through a rear pivot. Tilt and lift sections must lock into a rigid full length 25" wide frame with front saddles to provide support for the container while in the dump mode. These sections form this frame without the use of mechanical latches, which rely on gravity, springs, or container/body mounted latches.
<b>Rear Body Hold-Downs:</b>	Dual fixed-position hold-down devices mounted to the dump frame to secure the body to the loader through all ranges of the dump mode. This must be accomplished without the use of steel springs and/or hydraulic/air cylinders.
<b>Rear Dump Hinge Pin:</b>	1 ½-inch diameter hardened, stainless steel minimum
<b>Pins &amp; Bushings</b>	All pins to be 300 series stainless steel. All bushings to be of the permanently lubricated variety. No grease zerks allowed.
<b>Hoses &amp; Hydraulic Fittings:</b>	All hoses and fittings are to be SAE: metrics not allowed. O-ring face seal fittings to be utilized wherever possible.
<b>Origin of Manufacture:</b>	Loader to be designed and manufactured in the United States of America.

## Base Assembly P/N 22401



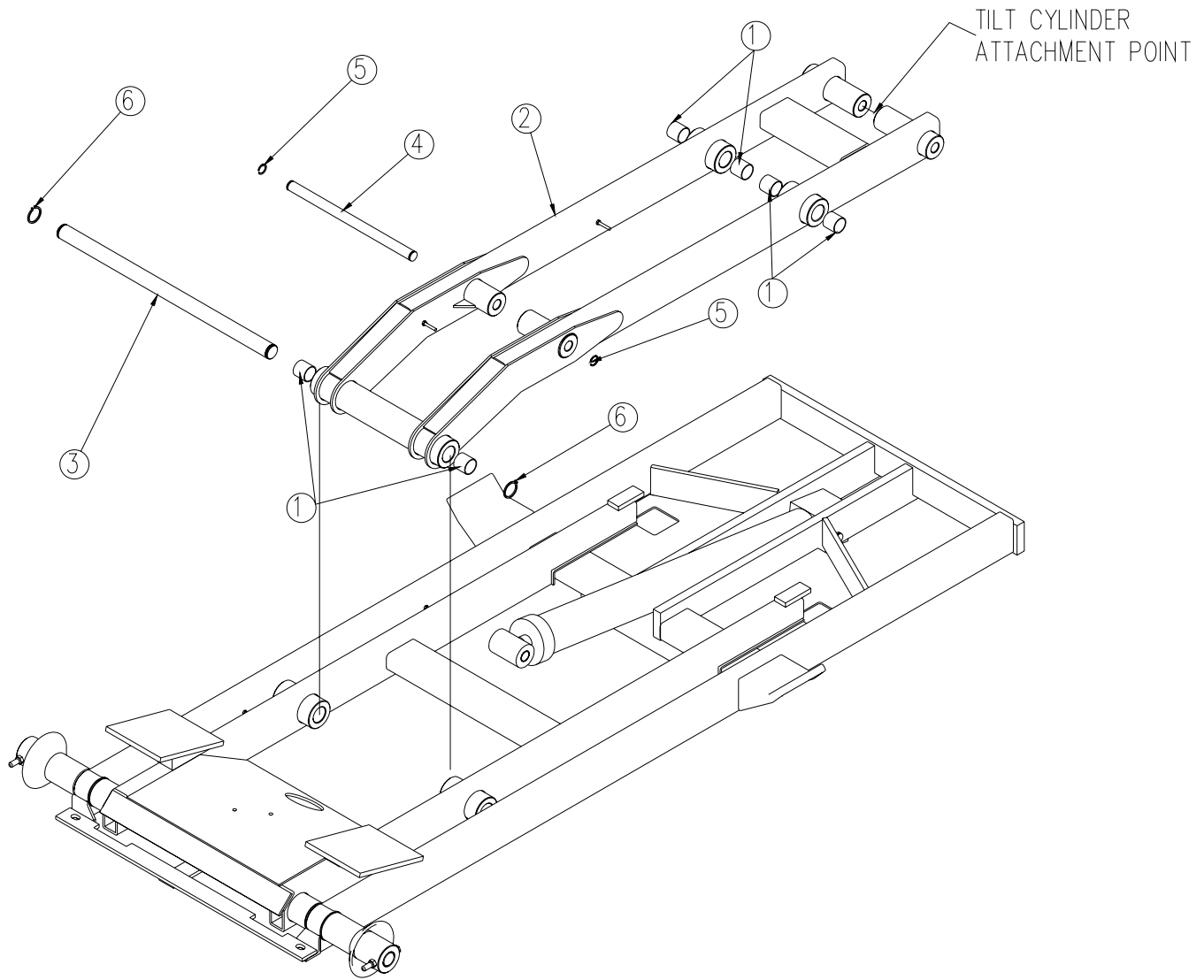
ITEM	PART	DESCRIPTION	QTY.
1	2503	BASE 60-10-5	1
2	0067	BUSHING QSI-2426-24	2
3	0671	CYLINDER 3.50X34.00	1
4	0068	BUSHING QSI-1618-24	4
5	2533	PIN 1.00X7.00	1
6	0110	SNAP RING 1.00 ID 7200-100	2
7	0279	FTG ADAPT 6-F50LO-S	2

# Dump Assembly P/N 22402



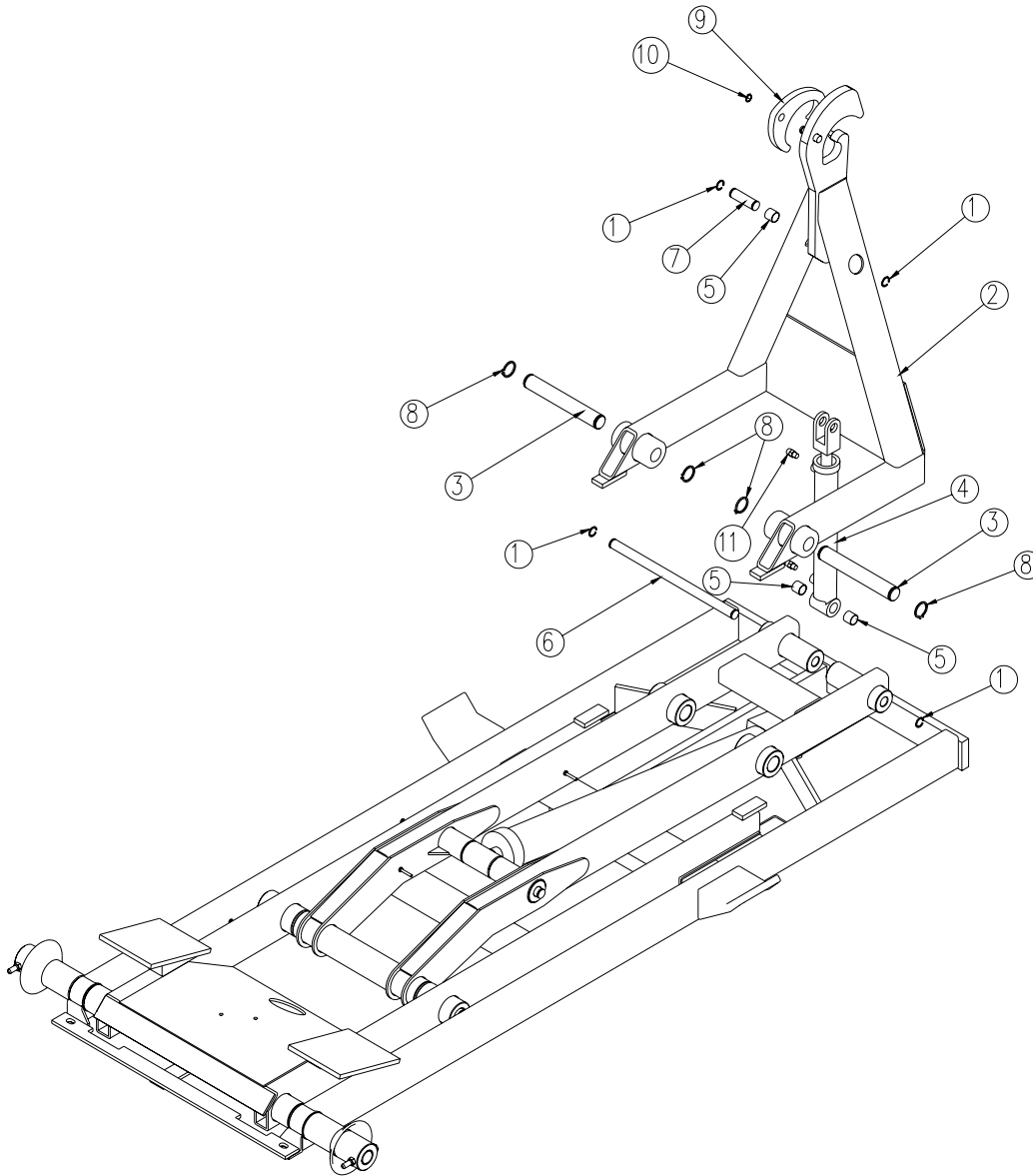
ITEM	PART	DESCRIPTION	QTY.
1	2504	DUMP 60-10-5	1
2	0067	BUSHING QSI-2426-24	12
3	2535	PIN 1.50X49.88	1
4	D0419	THRUST WASHER	4
5	2534	ROLLER 60-10-5	2
6	2805	COLLAR ROLLER	2
7	0507	CAP SCR 0.50-13X4.50 HHGR5	2
8	C6106	NUT 0.50-13 HHGR5 NYLOC	2

## Secondary Assembly P/N 22403



ITEM	PART	DESCRIPTION	QTY.
1	0067	BUSHING QSI-2426-24	6
2	2505	SECONDARY 60-10-5	1
3	2536	PIN 1.50X29.00	1
4	D0267	PIN 1.00X17.00	1
5	0110	SNAP RING 1.00 ID 7200-100	2
6	0246	SNAP RING ID 7200 150	2

## Tilt Assembly P/N 22404



ITEM	PART	DESCRIPTION	QTY.
1	0110	SNAP RING 1.00 ID 7200-100	4
2	2506	TILT 60-10-5	1
3	0245	PIN 1.50X10.50	2
4	0206	CYLINDER 2.00X12.00	1
5	0069	BUSHING QSI-1618-16	3
6	0163	PIN 1.00X17.88	1
7	0064	PIN 1.00X3.38	1
8	0246	SNAP RING ID 7200 150	4
9	0295	LATCH 12,000#	1
10	0298	SNAP RING 0.75 HD	1
11	0279	FTG ADAPT 6-F50L0-S	2

# INSTALLATION INSTRUCTIONS

## READ ALL INSTRUCTIONS BEFORE PROCEEDING

MOUNT PTO AND PUMP

MOUNT RESERVOIR VALVE COMBO TO TRUCK FRAME

CONNECT SUCTION AND PRESSURE TO TANK, VALVE BANK, AND PUMP

FILL OIL RESERVOIR TO 3" OF THE TOP (DEXTRON II IS RECOMMENDED)

INSTALL CONTROLLERS AND CABLES IN CAB

SET SHUTTLE ON THE TRUCK SO THAT ITS FRONT PLATE IS AT LEAST 2" BEHIND THE CAB

SQUARE THE SHUTTLE ON THE TRUCK FRAME

DRILL 2-11/16" DIAMETER HOLES THROUGH THE TRUCK FRAME AT THE BACK USING THE LOADER'S HOLES AS A GUIDE

USING 5/8" BOLTS, WASHERS, NUTS, AND TIE DOWN SPACER BOLT THE REAR OF THE LOADER TO THE TRUCK FRAME

SHORTEN THE TRUCK FRAME TO ABOUT 2" FROM THE REAR TO THE LOADER

USING 5/8" BOLTS, WASHERS, AND NUTS ATTACH THE 4 MOUNTING CHANNELS TO THE 4 ANGLES AS SHOWN IN THE INSTALLATION DRAWING ON PAGE 8

PLACE THE TIE DOWN CHANNELS IN THE APPROXIMATE POSITIONS SHOWN ON PAGE 8, WITH THE TOP OF THE LOWER CHANNEL FLUSH TO THE TOP OF THE TRUCK FRAME (NOTE: FRONT TIE DOWNS **MUST** BE WITHIN 6 INCHES OF THE FRONT OF THE LOADER)

USING THE MOUNTING CHANNELS AS A GUIDE DRILL (6) 11/16" HOLES THROUGH THE TRUCK FRAME.

USING 5/8" BOLTS, WASHERS, AND NUTS SECURE ALL TIE DOWNS TO THE TRUCK FRAME AND THE LOADER

WELD MOUNTING ANGLE TO LOADER BASE

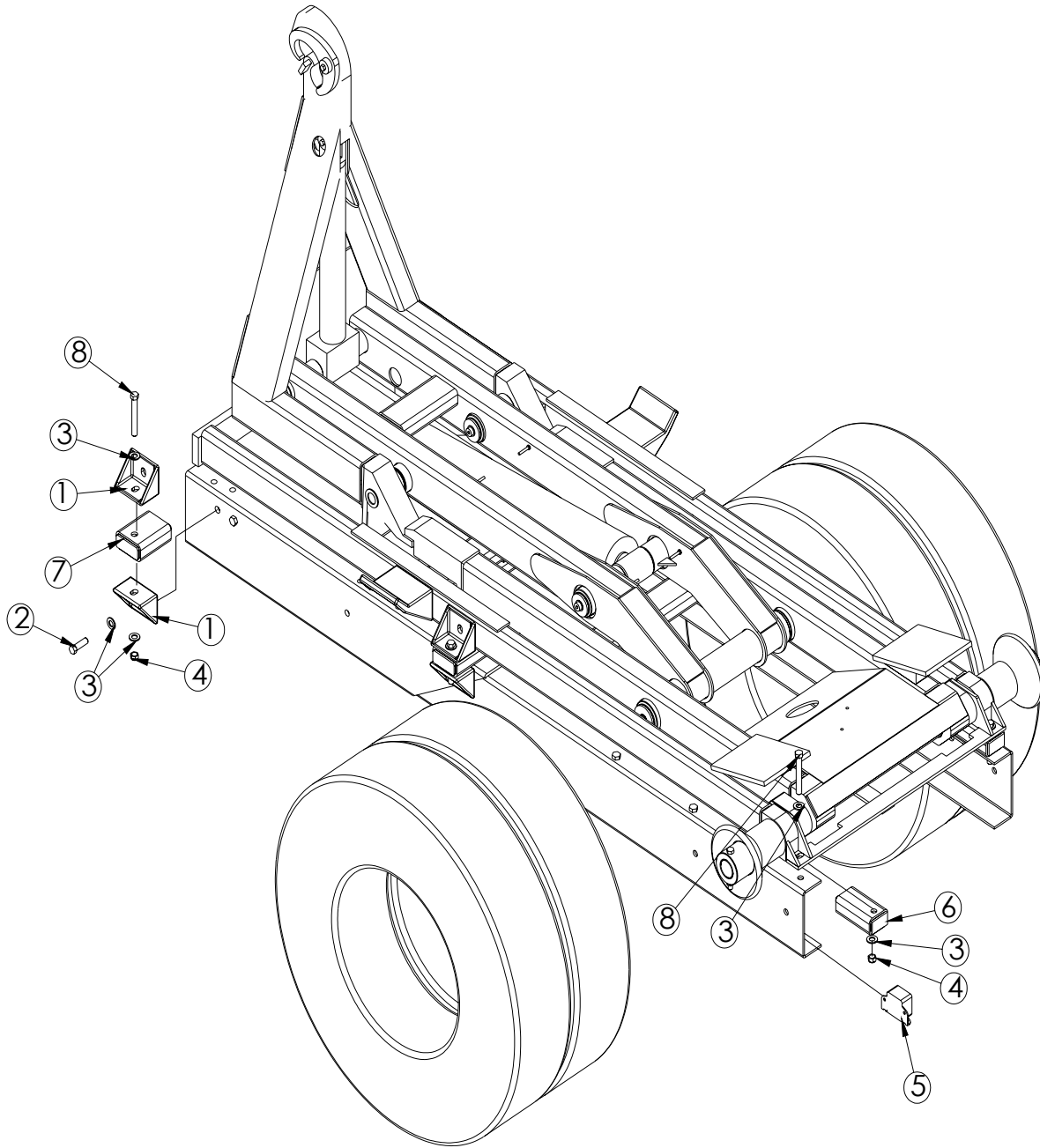
CONNECT HOSES TO VALVE BANK AS INDICATED IN HYDRAULIC ASSEMBLY

SET THE RELIEF VALVE TO 2500 PSI

OPERATE THE LOADER TO ELIMINATE AIR FROM THE SYSTEM

CHECK THE OIL LEVEL AND ADD OIL IF REQUIRED

# Mounting Kit P/N 16230



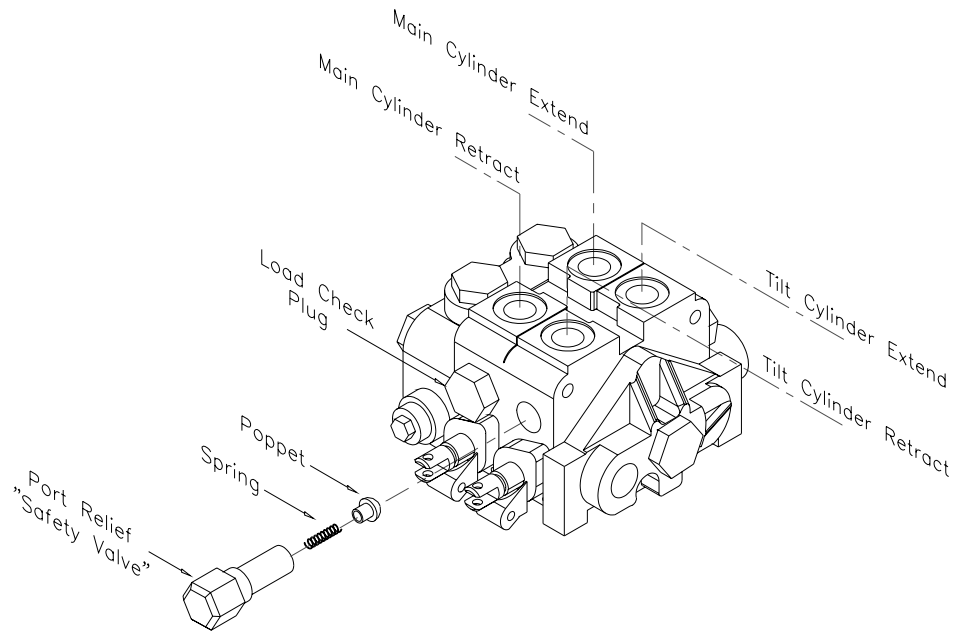
ITEM	PART	DESCRIPTION	QTY.
1	D0143	TIE DOWN CHANNEL	8
2	C1025	CAP SCR 0.63-11X2.00 HHGR8	4
3	0358	WASHER 0.63 FLAT SAE	20
4	24868	NUT 0.63-11 HH NYLOC	10
5	D0045	OVERLOAD ALARM	1
6	0640	TIE DOWN SPACER	2
7	16229	TIE DOWN SPACER 2X4	4
8	8522	CAP SCR 0.63-11X4.50 HHGR8	6

## Safety Valve Installation

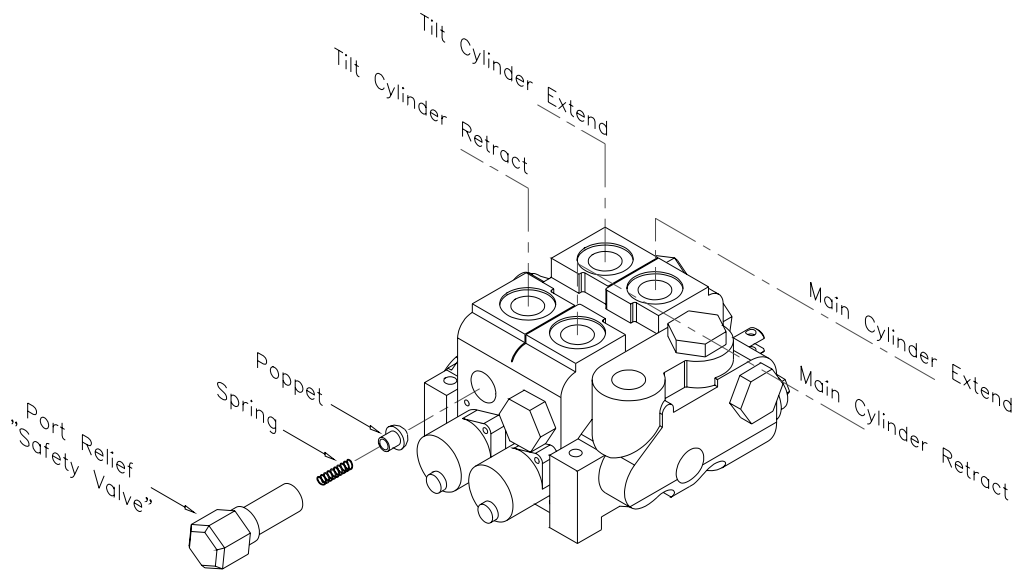
Incorporated into the standard Stellar Hooklift is a safety valve designed to protect the dump section tabs from being damaged by the tilt section.

It is important to locate this valve properly for safe operation of the Stellar Hooklift.

This cartridge is located in the main valve stack and **MUST** be placed off of the tilt cylinder retract port. The following illustrations show a standard (driver side) installation and an optional (passenger side) installation. Passenger side installations are common when mounting to cab-over chassis. All valve stacks are shipped for standard (driver side) installations. The safety valve must be moved to the tilt cylinder retract port for all non-standard installations. This valve will be switched with a load check plug when being moved to an alternate position. A poppet and spring are located behind the safety valve and load check plugs. Care should be taken not to lose these parts when modifying.

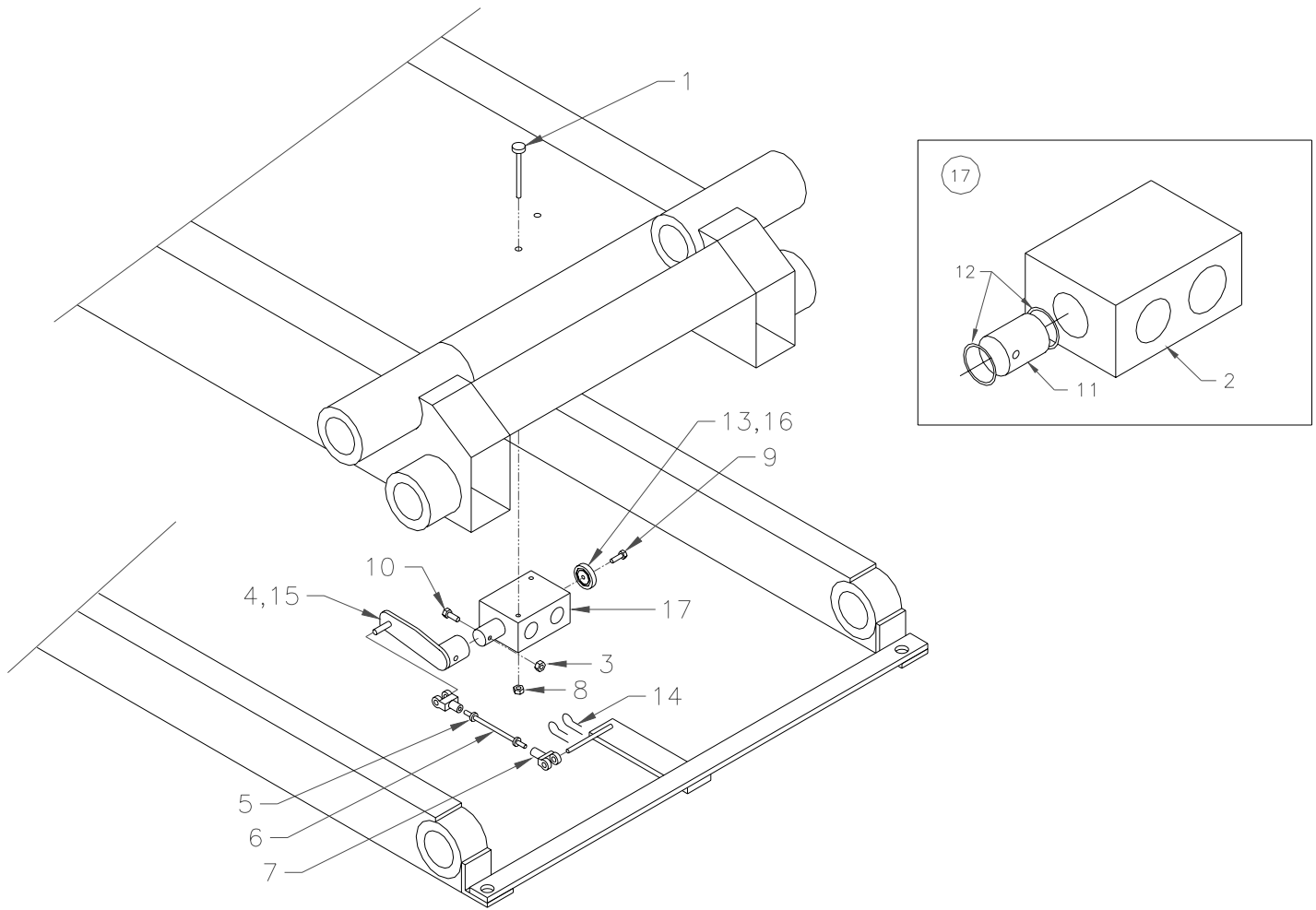


**Valve stack for standard installation**



**Valve stack for non-standard installation**

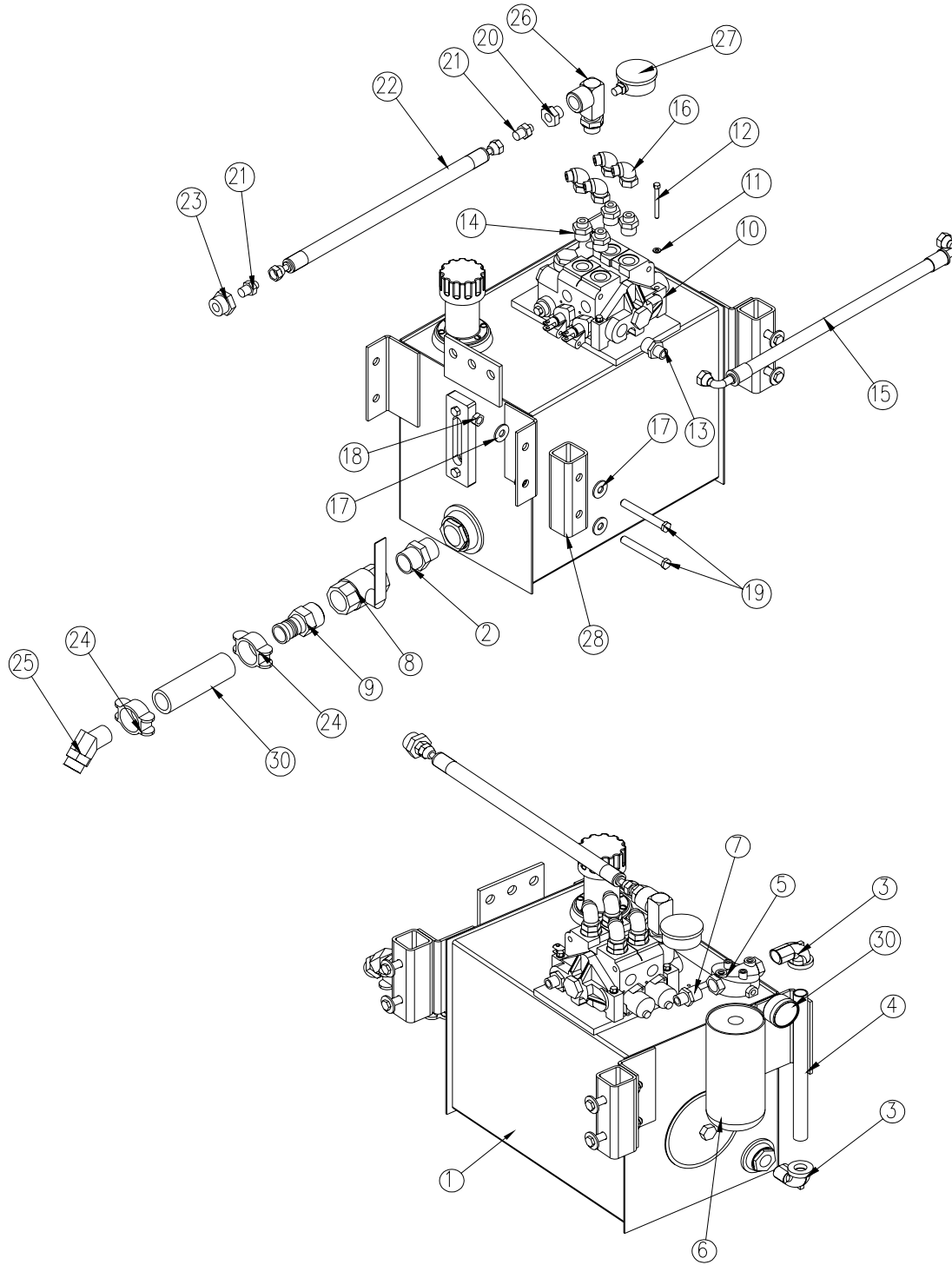
# Rotary Valve Installation P/N D0000



ITEM	P/N	DESCRIPTION	QTY	ITEM	P/N	DESCRIPTION	QTY
1	0482	Cap Screw, 0.25-20x3.00	2	10	0353	Cap Screw, 0.38-16x2.00	1
*2	0933	Body, Rotary Valve	1	*11	D0270	Spool, Rotary Valve	1
3	0347	Nut, 0.38-16 Nyloc	1	*12	0979	Seal, U-Cup	2
4	1521	Rod, Rotary Valve	1	13	3748	Washer, Rotary Valve	1
5	2478	Nut, 0.31-24	2	14	C6113	Cotter, 0.094x1.00	2
6	2476	Rod, 0.31-24 Threaded GR7	12"	15	0977	O'Ring, 1.00x1.25x0.12	1
7	2479	Clevis, 0.31 Pin	2	16	D1638	O'Ring, 1.12x1.38x0.12	1
8	0333	Nut, 0.25-20 Nyloc	2	17	0877	Rotary Valve Assembly	1
9	0480	Cap Screw, 0.25-20x1.00	1				

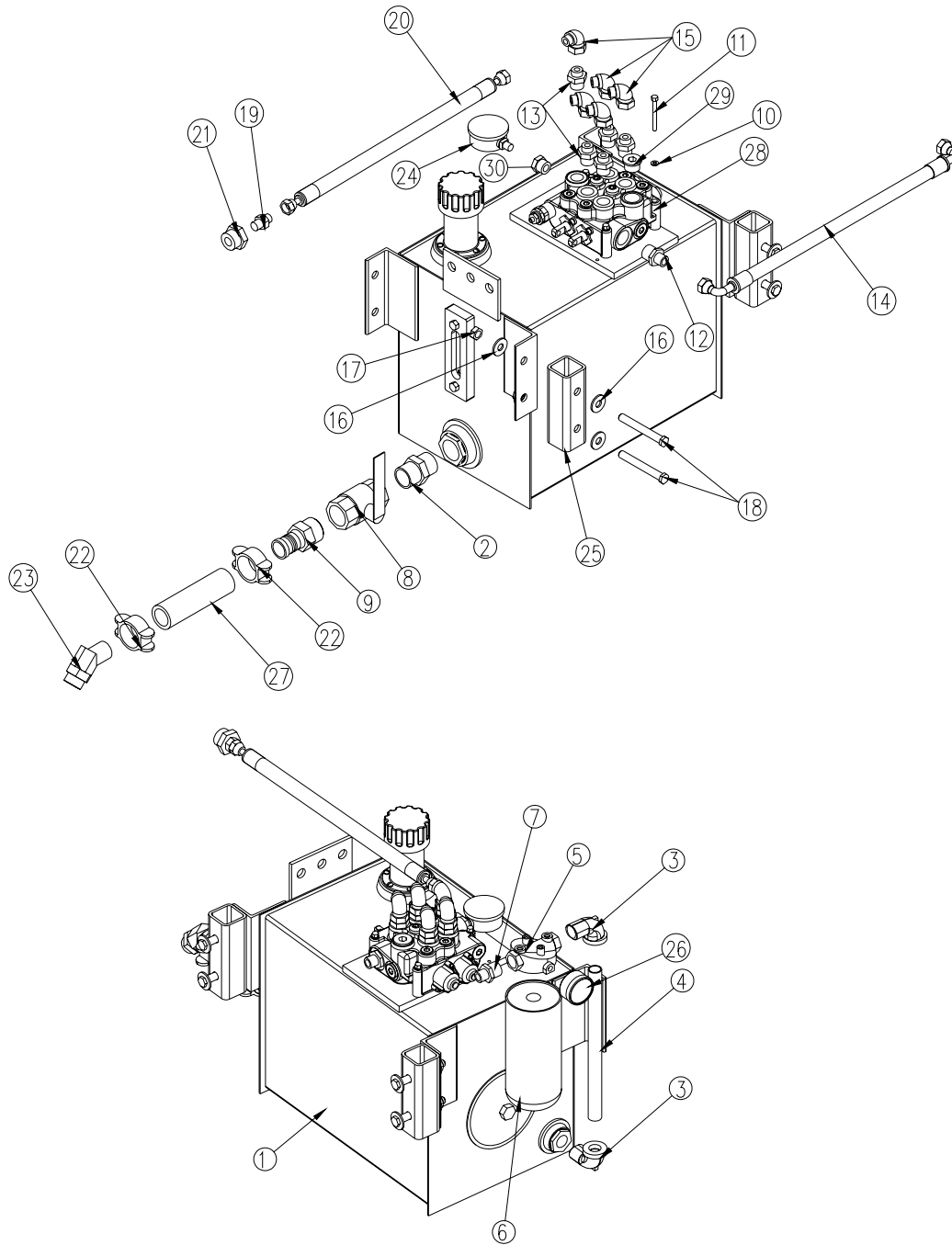
\* Items are part of #17(0877- Rotary Valve Assembly)

# Hydraulic Assembly P/N 17542



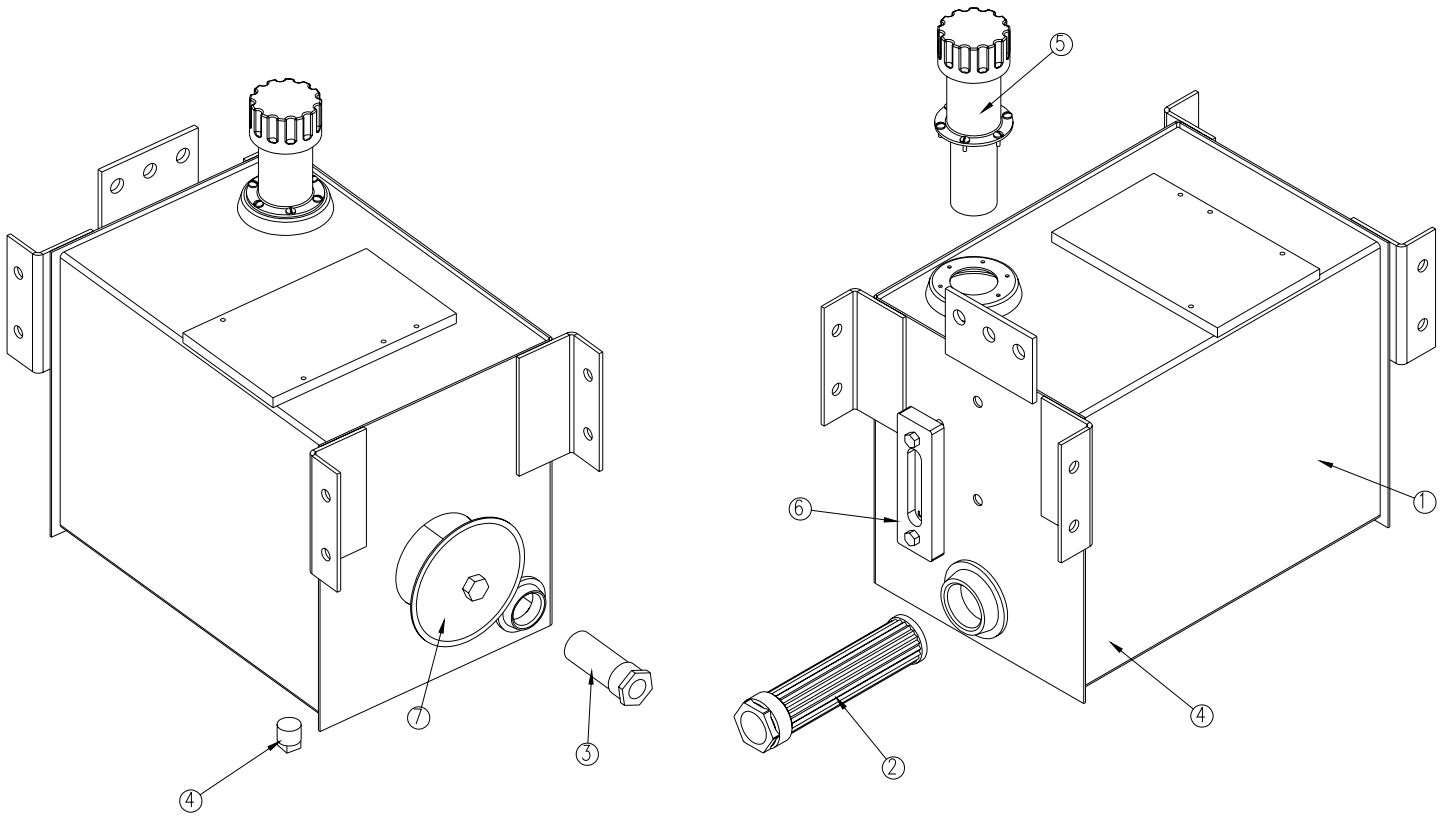
ITEM NO.	PART NO.	DESCRIPTION	QTY.	ITEM NO.	PART NO.	DESCRIPTION	QTY.	ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	15623	RSVR ASM 10GAL	1	13	C1180	FTG ADAPT 8-12 F50LO-S	1	25	C4747	NIPPLE O'RING 45 4603-20-16	1
2	1115	FTG NIPPLE HEX MALE 0101-20-20	1	14	C1855	FTG ADAPT 6-10 F50LO-S	4	26	14631	FTG MSTR/ESTR 90 12-12 HOOKLIFT	1
3	c2242	ST EL 0.75 90 DEG BLK	2	15	14826	HOSE 0.50(381-J9-J9-8-8-8-18-0)	1	27	10094	GAUGE OIL LF 2.5" 0-500 BM	1
4	3320	NIPPLE 0.75X12.00 PIPE	1	16	C2248	FTG ADAPT 6-C6LO-S	4	28	9892	SPACER TANK MOUNTING 10 GAL	2
5	c6226	FILTER HEAD	1	17	0352	WASHER 0.50 USS FLAT ZINC	8	29	16145	GAUGE PRES FILTER SERVICE C120	1
6	C6229	FILTER LARGE AE-10L	1	18	C6106	NUT 0.50-13 HHGR5 NYLOC	4	30	17767	HOSE SUCT 1.25 10FT	1
7	C6014	FTG ADAPT 8-12 FOLO-S	1	19	0506	CAP SCR 0.50-13X4.00 HHGR5	4				
8	C5511	VALVE BALL 1.25	1	20	C2053	FTG ADAPT 6-8 F50LO-S	1				
9	C2282	FTG 1.25 NPT TO 1.25 BARB	1	21	C1854	FTG ADAPT 6-8 F50LO-S	2				
10	2380	VB 2 SECT GRESSEN V20	1	22	14927	HOSE 0.38(381-JC-JC-6-6-6-120)	1				
11	0621	WASHER 0.25 LOCK	3	23	D0549	FTG ADAPT 16-8 F50G5-S	1				
12	0339	CAP SCR 0.25-20X2.50 HHGR5	3	24	C1123	HOSE CLAMP 88 DB-20	2				

# Hydraulic Assembly P/N 25629



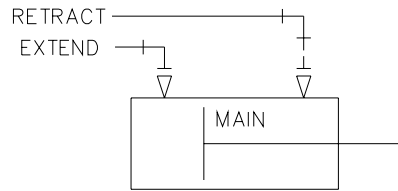
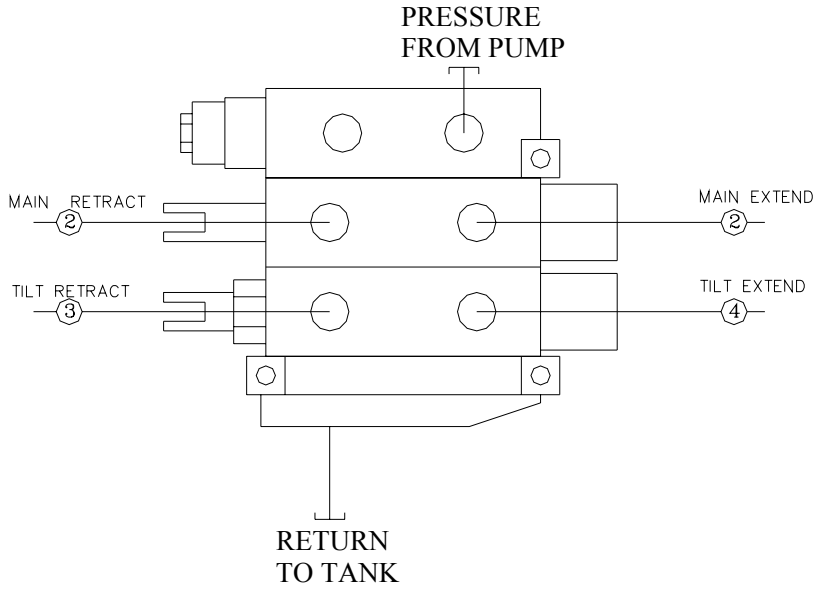
ITEM NO.	PART NO.	DESCRIPTION	QTY.	ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	15623	RSRVR ASM 10GAL	1	16	0352	WASHER 0.50 USS FLAT ZINC	8
2	1115	FTG NIPPLE HEX MALE 0101-20-20	1	17	C6106	NUT 0.50-13 HHGR5 NYLOC	4
3	c2242	ST EL 0.75 90 DEG BLK	2	18	0506	CAP SCR 0.50-13X4.00 HHGR5	4
4	3320	NIPPLE 0.75X12.00 PIPE	1	19	C1854	FTG ADAPT 6-8 F5OLO-S	1
5	c6226	FILTER HEAD	1	20	14927	HOSE 0.38(381-JC-JC-6-6-120)	1
6	C6229	FILTER LARGE AE-10L	1	21	D0549	FTG ADAPT 16-8 F5OG5-S	1
7	C6014	FTG ADAPT 8-12 FOLO-S	1	22	C1123	HOSE CLAMP 88 DB-20	2
8	C5511	VALVE BALL 1.25	1	23	C4747	NIPPLE O'RING 45 4603-20-16	1
9	C2282	FTG 1.25 NPT TO 1.25 BARB	1	24	10094	GAUGE OIL LF 2.5" 0-500 BM	1
10	0521	WASHER 0.25 LOCK	3	25	9892	SPACER TANK MOUNTING 10 GAL	2
11	0339	CAP SCR 0.25-20X2.50 HHGR5	3	26	16145	GAUGE PRES FILTER SERVICE CI20	1
12	C1180	FTG ADAPT 8-12 F5OLO-S	1	27	17767	HOSE SUCT 1.25 10FT	1
13	C1855	FTG ADAPT 6-10 F5OLO-S	5	28	24611	VB S-SECTION VDM8	1
14	14826	HOSE 0.50(381-J9-J9-8-8-18-0)	1	29	4591	PLUG STR HOLLOW HEX 0.75 12-HP5ON	1
15	C2248	FTG ADAPT 6-C6LO-S	5	30	25630	FTG ADAP 10-1/4 F5OG	1

## 10 Gallon Tank Assembly P/N 15623

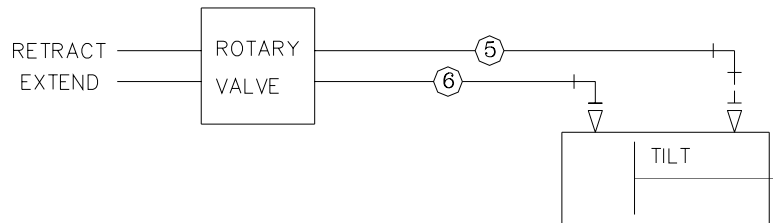


ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	15622	RSRVR 10GAL	1
2	C5552	FILTER STRAINER TFS-1220-0	1
3	C6326	DIFFUSER 5-17GAL	1
4	C2126	MAGNETIC PLUG DRAIN 3/4"	1
5	15462	CAP FILL ASM W/3" NECK	1
6	15463	THERMO SIGHT GAUGE	1
7	15464	TANK COVER	1

# Hose Kit P/N 22253

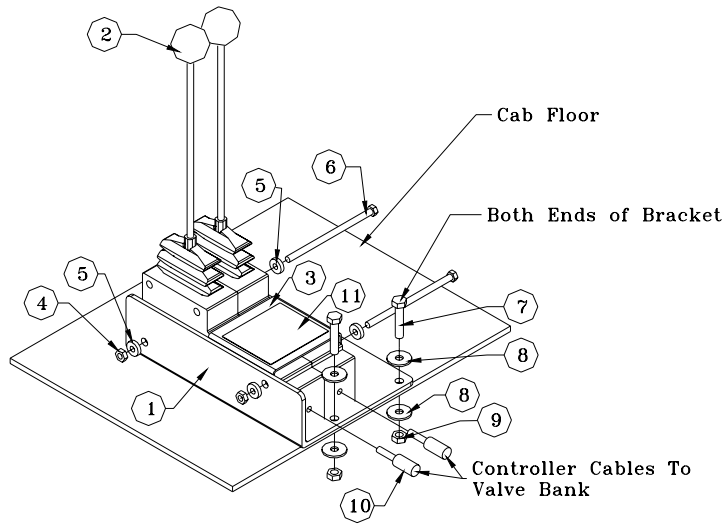


**NOTE: IF RESERVOIR IS MOUNTED ON CS  
HOSES 3 AND 4 ARE REVERSED**

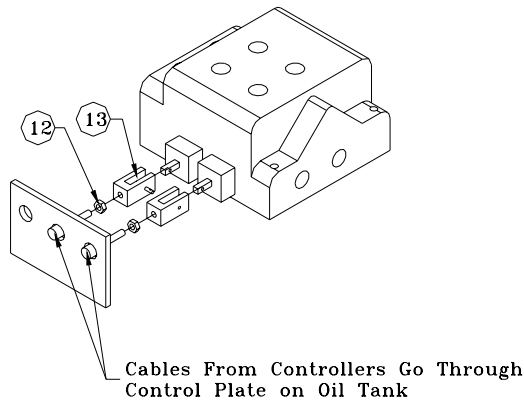


06	22254	HOSE .25 X 104.00	1ref
05	22255	HOSE .25 X 108.00	1ref
04	15512	HOSE .25 X 130.00	1ref
03	14828	HOSE .25 X 150.00	1ref
02	21029	HOSE .25 X 60.00	2ref
01	22253	HOSE KIT 60-10-5 G	1
ITEM	PART No.	DESCRIPTION	QTY

# Controller Assembly P/N 6869



## Controllers



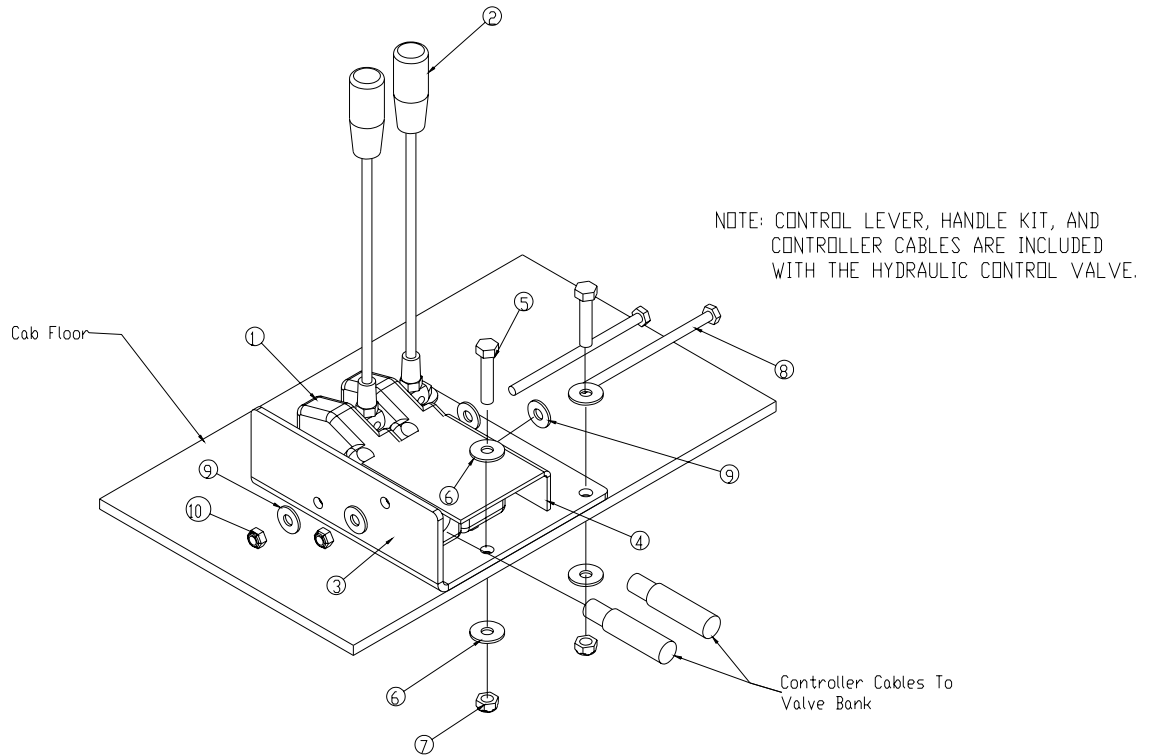
## Valve Bank

ITEM	P/N	DESCRIPTION	QTY	ITEM	P/N	DESCRIPTION	QTY
1	2103	Bracket Controller	1	8	0343	Washer, 0.31 Flat	8
2	0608	Control Lever	2	9	0342	Nut, 0.31-18 Nyloc	4
3	0663	Bracket, Decal	1	10	0607	Controller Cable	2
4	0333	Nut, 0.25-20 Nyloc	2	11	0651	Decal, Operation	1
5	0340	Washer, 0.25 Flat	4	12	1056	Nut, 0.25 Fine Thread	2
6	0528	Cap Screw, 0.25-20x4.50	2	13	0662	Cable Ends, 0.25	2
7	0486	Cap Screw, 0.31-18x1.50	4				

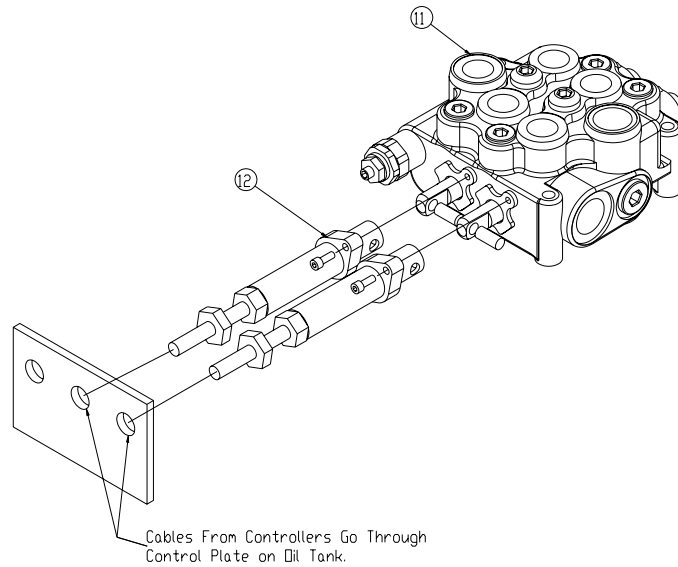
## Miscellaneous Parts

P/N	DESCRIPTION	QTY
D0045	Alarm, Backup	1

# Controller Assembly P/N 25937



## In Cab Installation



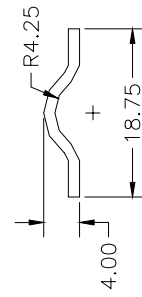
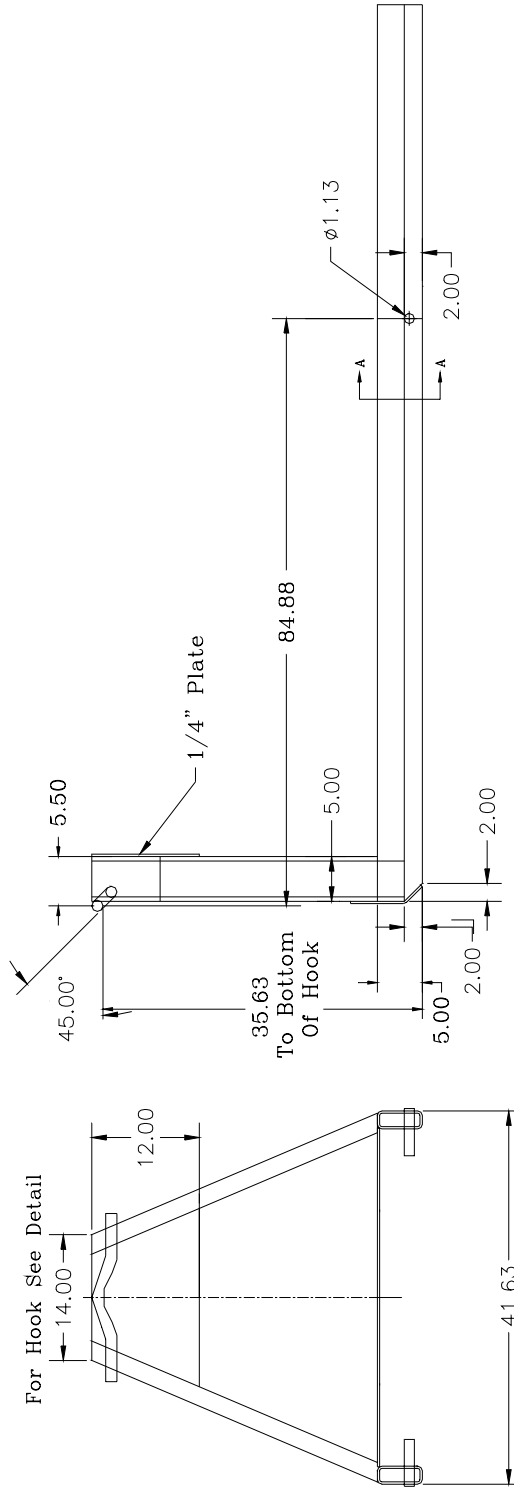
## At Valve Installation

ITEM	PART	DESCRIPTION	QTY.	ITEM	PART	DESCRIPTION	QTY.
1	24746	CONTROL LEVER SALAMI	2	7	0342	NUT 0.31-18 HH NYLOC	4
2	25934	HANDLE KIT 24 INCH SALAMI	1	8	0528	CAP SCR 0.25-20X4.50 HHGR 5	2
3	25932	PLATE CONTROLLER MNT	1	9	0340	WASHER 0.25 FLAT	4
4	25933	BRKT CONTROLLR DECAL	1	10	0333	NUT 0.25-20 HHGR5	2
5	0486	CAP SCR 0.31-18X1.50 HHGR5	4	11	24611	VB 2-SECTION VDM8	1
6	0343	WASHER 0.31 FLAT	8	12	24620	CABLE HOOK UP KIT SALAMI	2

Effective 03/01/03

# Subframe

Minimum recommended rail construction.	
60-10-5	5x2x1/4



Note: Cap all tube ends.

1.25 Round



Section A-A



### Limited Warranty Statement

Stellar Industries, Inc. (Stellar) warrants products designed and manufactured by Stellar to be free from defects in material and workmanship under proper use and maintenance. Products must be installed and operated in accordance with Stellar's written instructions and capacities. The warranty period shall cover the following:

Twelve (12) month warranty on parts from the date recorded by Stellar as the in-service date, not to extend beyond twenty-four (24) months from date of manufacture,

Twelve (12) month repair labor from the date recorded by Stellar as the in-service date, not to extend beyond twenty-four (24) month from date of manufacture, and

Thirty-six (36) month warranty on all Stellar Crane and Hooklift structural parts from the date recorded by Stellar as the in-service date, not to extend beyond forty-eight (48) months from date of manufacture.

The in-service date will be derived from the completed warranty registration card. In the event a warranty registration card is not received by Stellar, the factory ship date will be used.

Stellar's obligation under this warranty is limited to, and the sole remedy for any such defect shall be, the repair and/or replacement (at Stellar's option) of the unaltered part and/or component in question. Stellar after-sales service personnel must be notified by telephone, fax, or letter of any warranty-applicable damage within fourteen (14) days of its occurrence. If at all possible, Stellar will ship the replacement part within 24-hours of notification by the most economical, yet expedient, means possible. Expedited freight delivery will be at the expense of the owner.

Warranty claims must be submitted and shall be processed in accordance with Stellar's established warranty claim procedure. Stellar after-sales service personnel must be contacted prior to any warranty claim. A return materials authorization (RMA) account number must be issued to the claiming party prior to the return of any warranty parts. Parts returned without prior authorization will not be recognized for warranty consideration. All damaged parts must be returned to Stellar freight prepaid; freight collect returns will be refused. Freight reimbursement of returned parts will be considered as part of the warranty claim.

Warranty service will be performed by any Stellar new equipment distributor, or by any Stellar-recognized service center authorized to service the type of product involved, or by the Stellar factory in the event of a direct sale. At the time of requesting warranty service, the owner must present evidence of date of delivery of the product. The owner shall be obligated to pay for any overtime labor requested of the servicing company by the owner, any field service call charges, and any towing and/or transportation charges associated with moving the equipment to the designated repair/service provider.

All obligations of Stellar and its authorized dealers and service providers shall be voided if someone other than an authorized Stellar dealer provides other than routine maintenance service without prior written approval from Stellar. In the case repair work is performed on a Stellar-manufactured product, original Stellar parts must be used to keep the warranty in force. The warranty may also be voided if the product is modified or altered in any way not approved, in writing, by Stellar.

The owner/operator is responsible for furnishing proof of the date of original purchase of the Stellar product in question. Warranty registration is the ultimate responsibility of the owner and may be accomplished by the completion and return of the Stellar product registration card provided with the product. If the owner is not sure of registration, he is encouraged to contact Stellar at the address below to confirm registration of the product in question. This warranty covers only defective material and workmanship. It does not cover depreciation or damage caused by normal wear and tear, accident, mishap, untrained operators, or improper or unintended use. The owner has the obligation of performing routine care and maintenance duties as stated in Stellar's written instructions, recommendations, and specifications. Any damage resulting from owner/operator failure to perform such duties shall void the coverage of this warranty. The owner will pay the cost of labor and supplies associated with routine maintenance.

The only remedies the owner has in connection with the breach or performance of any warranty on the Stellar product specified are those set above. In no event will Stellar, the Stellar distributor/dealer, or any company affiliated with Stellar be liable for business interruptions, costs of delay, or for any special, indirect, incidental, or consequential costs or damages. Such costs may include, but are not limited to, loss of time, loss of revenue, loss of use, wages, salaries, commissions, lodging, meals, towing, hydraulic fluid, or any other incidental cost.

All products purchased by Stellar from outside vendors shall be covered by the warranty offered by that respective manufacturer only. Stellar does not participate in, or obligate itself to, any such warranty.

Stellar reserves the right to make changes in design or improvement upon its products without imposing upon itself the same upon its products theretofore manufactured.

This warranty will apply to all Stellar Hooklifts, Stellar Service Trucks, & Truck-mounted Cranes shipped from Stellar's factory after July 1, 2005. The warranty is for the use of the original owner only and is not transferable without prior written permission from Stellar.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. REMEDIES UNDER THIS WARRANTY ARE LIMITED TO THE PROVISION OF MATERIAL AND SERVICES, AS SPECIFIED HEREIN. STELLAR INDUSTRIES, INC. IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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