



973P - 120' / 132'
3P BOOM SPRAYER
PARTS MANUAL



ILLUSTRATED PARTS LIST





Limited Warranty

Fast Ag Solutions warrants to the buyer that the new machinery is free from defects in material and workmanship.

This warranty is only effective as to any new machinery which has not been altered, changed, repaired or treated since its delivery to the buyer, other than by Fast Ag Solutions or its authorized dealers or employees, and does not apply to accessories, attachments, tools or parts, sold or operated with the new machinery, if they have not been manufactured by Fast Ag Solutions.

Fast Ag Solutions shall only be liable for defects in the materials or workmanship attributable to faulty material or bad workmanship that can be proved by the buyer, and specifically excludes liability for repairs arising as a result of normal wear and tear of the new machinery or in any other manner whatsoever, and without limiting the generality of the foregoing, excludes application or installation of parts not completed in accordance with this operator's manual, specifications, or printed instructions.

Written notice shall be given by registered mail, to the Manufacturer within seven (7) days after the defect shall have become apparent or the repairs shall have become necessary, addressed as follows:

Fast Ag Solutions
4130 Commerce Boulevard
Windom, MN 56101

This warranty shall expire one (1) year after the date of delivery of the new machinery.

If these conditions are fulfilled, Fast Ag Solutions shall at its own cost and at its own option either repair or replace any defective parts provided that the buyer shall be responsible for all expenses incurred as a result of repairs, labor, parts, transportation or any other work, unless Fast Ag Solutions has authorized such expenses in advance.

The warranty shall not extend to any repairs, changes, alterations, or replacements made to the new equipment other than by Fast Ag Solutions or its authorized dealers or employees.

This warranty extends only to the original owner of the new equipment.

Rubber parts (including tires, hoses, grommets) are not warranted.

This warranty is limited to the terms stated herein and is in lieu of any other warranties whether express or implied, and without limiting the generality of the foregoing, excluded all warranties, express or implied or conditions whether statutory or otherwise as to quality and fitness for any purpose of the new equipment. The Manufacturer disclaims all liability for incidental or consequential damages.

This 3P Boom Sprayer is subject to design changes and Fast Ag Solutions shall not be required to retrofit or exchange items on previously sold units except at its own option.

Warranty void if not registered.



ILLUSTRATED PARTS LIST

FAST 3P BOOM SPRAYER

Warranty Registration

This form must be filled out by the dealer and signed by both the dealer and the customer at the time of delivery.

Customer Name					
Address					
City		State		Zip	
Phone					

Dealer Name					
Address					
City		State		Zip	

Sprayer Model					
Serial Number					
Delivery Date					

Warranty Inspection Report

DEALER INSPECTION REPORT

- ☐ All Fasteners Tight
- ☐ Wheel Bolts Torqued
- ☐ Hydraulic Hoses and Fittings Free and Tight
- ☐ Fertilizer Hoses and Fittings Free and Tight
- ☐ Wheel Drive Turns Freely
- ☐ Lubricate Machine
- ☐ Check Tire Pressure
- ☐ Frame and Wings Level
- ☐ Monitors and Controllers Function
- ☐ Wiring Harness Connected

SAFETY

- ☐ Safety Chain Installed
- ☐ All Guards Installed
- ☐ All Safety Signs Installed
- ☐ Reflectors, SMV, and Lights Clean
- ☐ Review Operating and
- ☐ Safety Instructions

I have thoroughly instructed the buyer on the above-described equipment which review included the Operator's Manual content, equipment care, adjustments, safe operation, and applicable warranty policy.

Date _____

Dealer's Rep. Signature _____

The above equipment and Operator's Manual have been received by me, and I have been thoroughly instructed as to care, adjustments, safe operation, and applicable warranty policy.

Date _____

Owner's Signature _____

White - FAST
Yellow - Dealer
Pink - Customer



ILLUSTRATED PARTS LIST

FAST 973P Series Sprayer

SPRAYER SERIAL NUMBER _____

DATE PURCHASED _____ / _____ / _____

BOOM WIDTH (CIRCLE ONE) 120 FT. 132 FT.

NOZZLE SPACING (CIRCLE ONE) 15 IN. 20 IN. 22 IN.

PUMP MANUFACTURER:

(CIRCLE ONE)

ACE 205F-304 WET SEAL

ACE 205F-304 PWM WET SEAL

ACE 255F-304 WET SEAL

ACE 255F-304 PWM WET SEAL

ACE FMC-750-HYD OASIS

ACE FMC-750 OASIS PWM

HYPRO 9306C-HM1C-3U

HYPRO 9306S-HM1C-3U

General Information

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Parts information in this manual represents components installed when product was manufactured based upon the best available information. Modifications made subsequent to initial delivery are not included. Always verify the parts and color required when ordering parts.

If you have any questions, please contact your Fast Ag Solutions Parts and Service Department.

Explanation of Parts Lists

The parts list is organized as follows:

Table of Contents

FRAME & WINGS

TANK & PUMP

PRODUCT PLUMBING

PRODUCT ELECTRICAL COMP.S

BOOM CONTROL - NORAC

BOOM CONTROL - RAVEN

ISO AUTOBOOM

FOLD BOX ELECTRICAL

HYDRAULICS

LIGHTS

The parts lists are broken down into sub-assemblies and listed in four (4) columns:

- **ITEM** - These numbers are found on the illustration associated with the parts list.
 - NS - This item is NOT SHOWN, included for reference.
- **QTY.** - This is the quantity of parts needed in an assembly.
 - AR - The quantity of this item is applied AS REQUIRED for the location.
- **PART NO.** - These are the part numbers associated with the ITEM.
- **DESCRIPTION** - This is the description of the part.



ILLUSTRATED PARTS LIST

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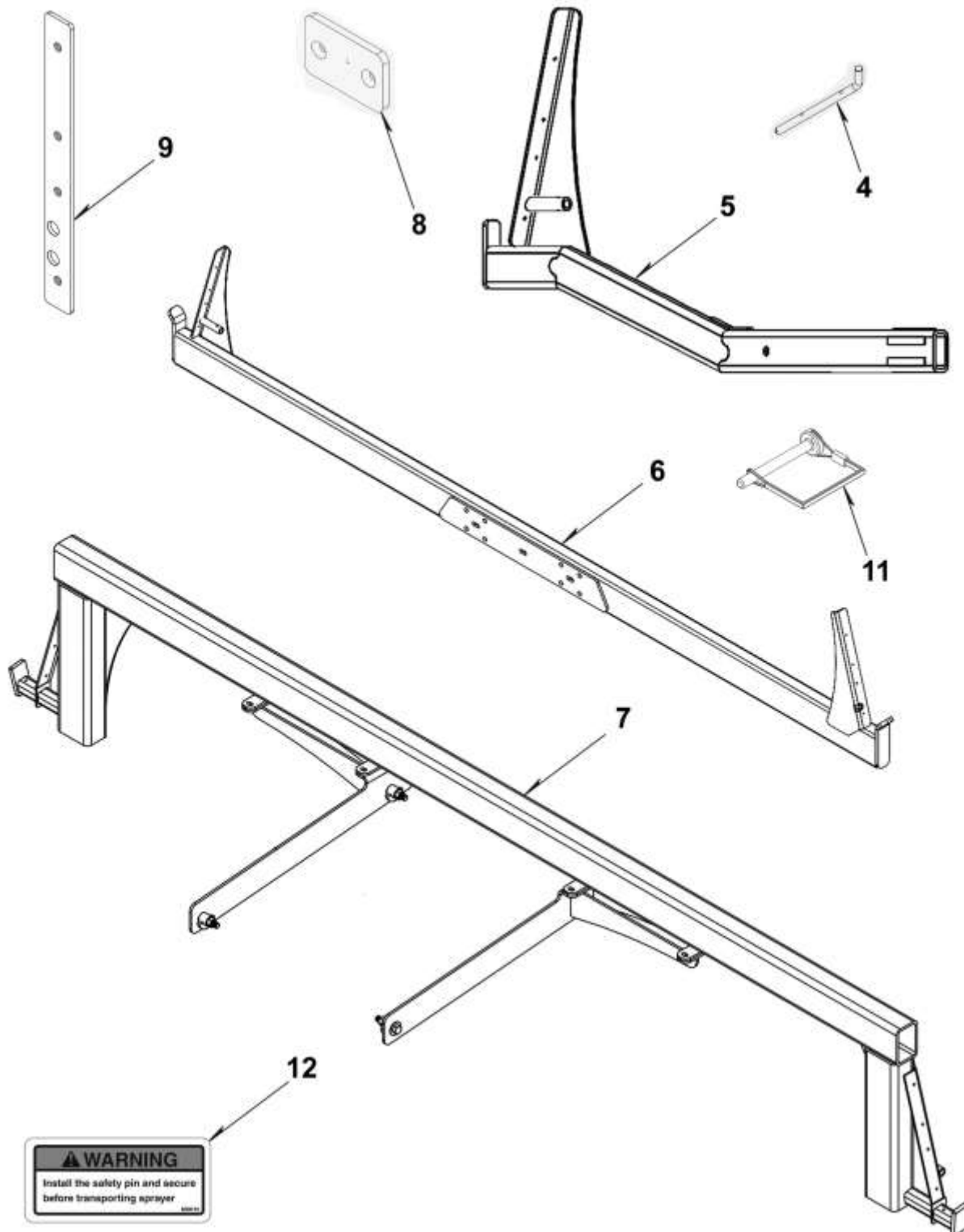
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FRAME & WINGS

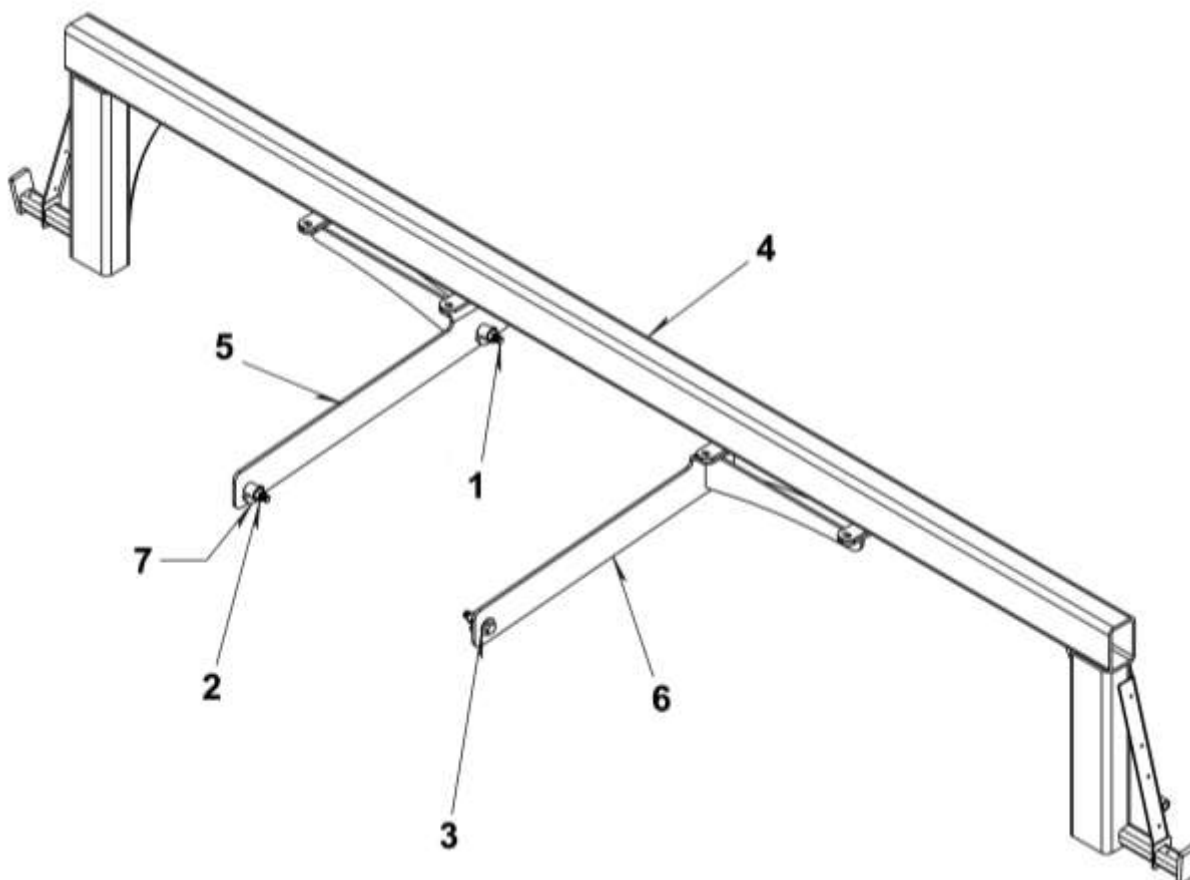
Wing Rest



Parts List: Wing Rest

ITEM	PART NO.	QTY.	DESCRIPTION
1	596175M	2	BOLT, HH 5/8 X 3-1/2 NC GR5 MAGNI
2	596223M	2	NUT, HH JAM 1/2 NC MAGNI
3	596232M	2	NUT, HH NYLOCK 5/8" NC MAGNI
4	7618	2	SAFETY LATCH PIN
5	16850	2	3PT TRUSS WING REST WELDMENT - JD
6	16477	1	3PT TRUSS WING REST WELDMENT - CAT
7	23785	1	3PT TRUSS WING REST ASSEMBLY - CASE
8	590106	2	SADDLE BASE, PLASTIC
9	590114	2	BUMP PLATE, RH
10	596725M	2	SQUARE-HEAD SET SCREW 1/2 X 1-1/2
11	720001	2	PIN, SNAP
12	800010	2	DECAL, WARNING, INSTALL PIN

Wing Rest Case

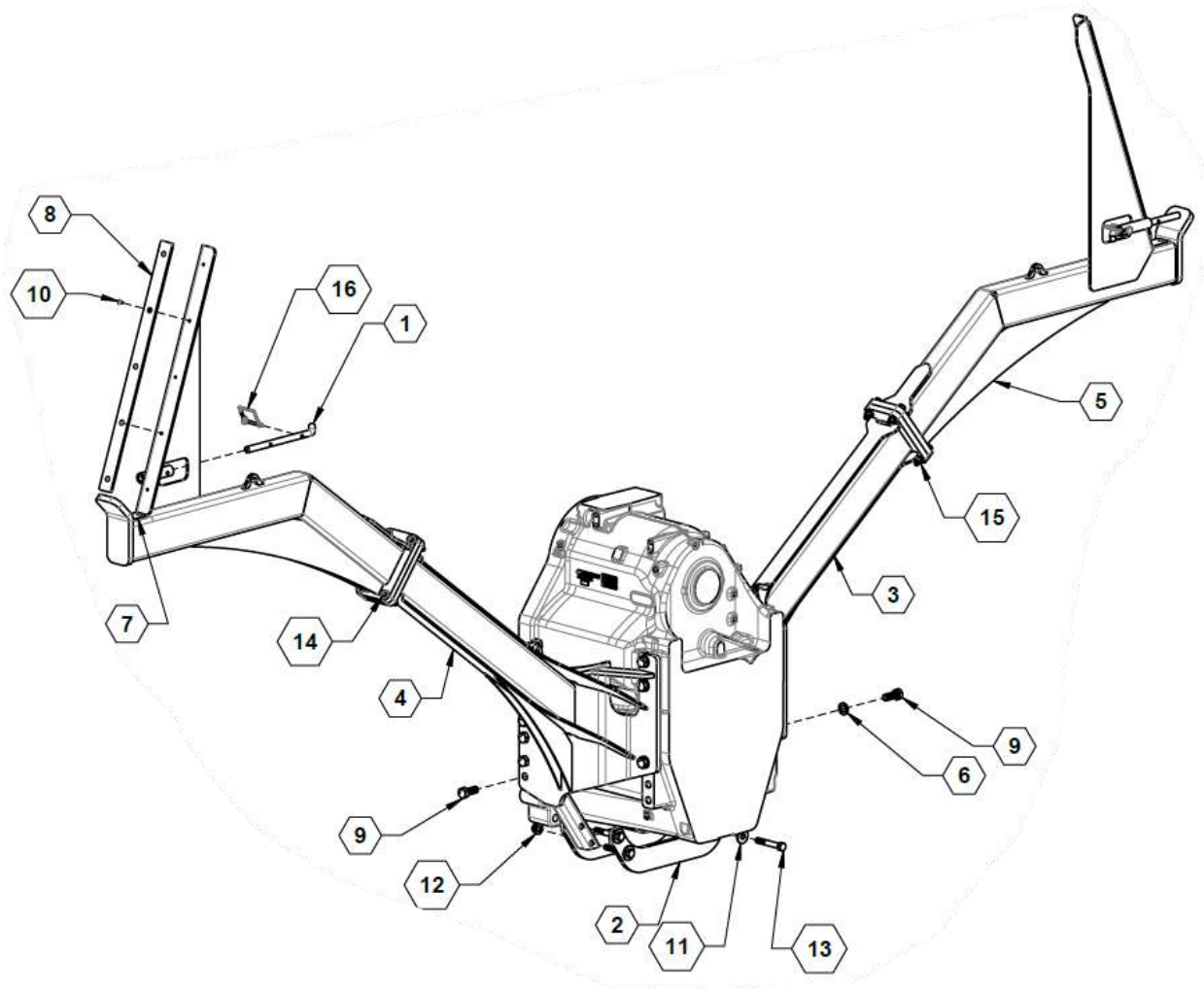


Parts List 23785: Wing Rest Case

ITEM	PART NO.	QTY.	DESCRIPTION
1	596187M	4	3/4-10 x 3 1/2" HEX BOLT MAGNI
2	596233M	4	NUT, HEX NYLOCK 3/4-10 MAGNI
3	596262M	4	WASHER, FLAT 3/4 MAGNI
4	23792	1	WING REST, TUBE MAIN, WELDMENT
5	23793L	1	SUB-FRAME, LH WING REST, WELDMENT
6	23793R	1	SUB-FRAME, RH WING REST, WELDMENT
7	23796	4	PIN, MOUNT, WING REST, WELDMENT



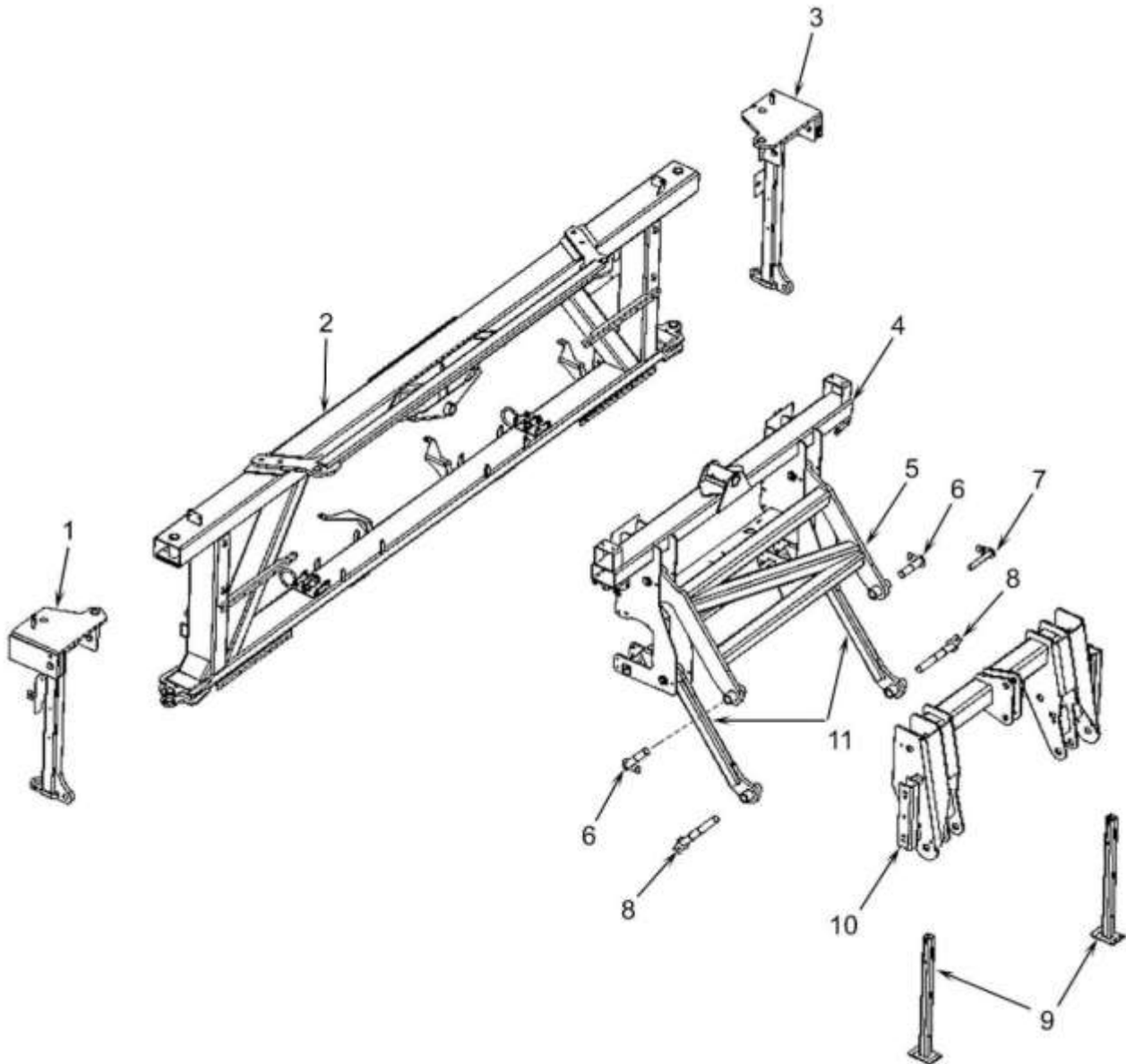
Wing Rest, John Deere 8RX



Parts List 36250: Wing Rest, John Deere 8RX

ITEM	PART NO.	QTY.	DESCRIPTION
1	7618	2	3/4" CRR 1018, 14" LG
2	36246	2	PLATE, CROSS SUPPORT
3	36248	1	WLDMNT, LH REST
4	36249	1	WLDMNT, RH BOOM REST
5	36253	2	WLDMNT, RH BOOM REST
6	590090	6	WASHER, M20 NARROW FLAT
7	590106	2	PAD, TRANSPORT
8	590431	2	POLY, WING BUMP
9	590580	18	BOLT, HEX M20 X 2.5 X 50MM GR. 10.9
10	590581	14	RIVET, POUND IN, 1/4 X 7/16
11	596261M	4	WASHER, FLAT 5/8 MAGNI
12	596742M	4	NUT, TOP LOCK FLANGE 5/8-11 MAGNI
13	596800M	4	BOLT, HH 5/8-11 X 4 GR8 MAGNI

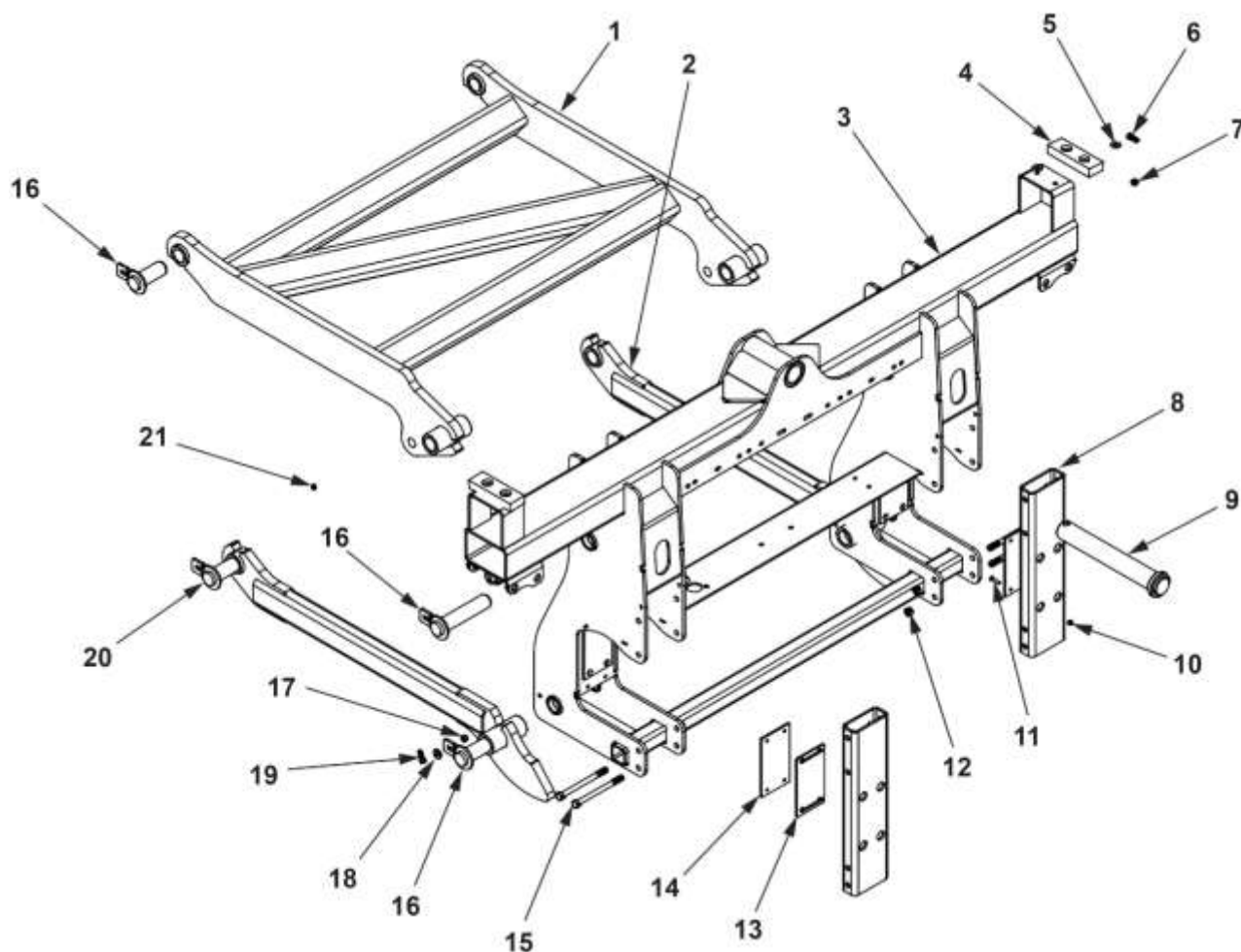
Interior Pivot, Parallel Links



Parts List 20135TC: Interior Pivot, Parallel Links

ITEM	PART NO.	QTY.	DESCRIPTION
1	22204R	1	WING PIVOT, 3PT, RH
2	22202	1	CENTER SECTION, 3PT, TRUSS, HYDRAULIC YAW
3	22204L	1	WING PIVOT, 3PT, LH
4	16320	1	PIVOT, CENTER, PASSIVE
5	16382	1	3P TRUSS UPPER LINK
6	16334	1	PIN, UPPER PARALLEL LINK
7	16331	1	PIN, LIFT CYLINDER
8	1225	1	PIN, 3PT UPPER
8	16329	2	PIN, 3PT LOWER
9	16340	2	STAND, 3PT
10	16310	1	WELDMENT, 3PT HOOKUP
11	16386	2	LINK, LOWER WELDMENT 3P TRUSS
NS	1056	4	PIN, JACK STAND
NS	8877	1	RING, BOLT ASSEMBLY
NS	14146	1	BRACKET, HOSE RING
NS	530308	4	WASHER, HEAVY 13/32 X 1-5/8
NS	530309	4	WASHER, HEAVY 13/32 X 1
NS	540052	3	CLAMP, HOSE, 3" WITH 3/8 ID
NS	620028	2	CYLINDER 3" X 12", 1-1/4 ROD
NS	800208	1	DECAL, HYDRAULIC HOSE KEY SPRAYER

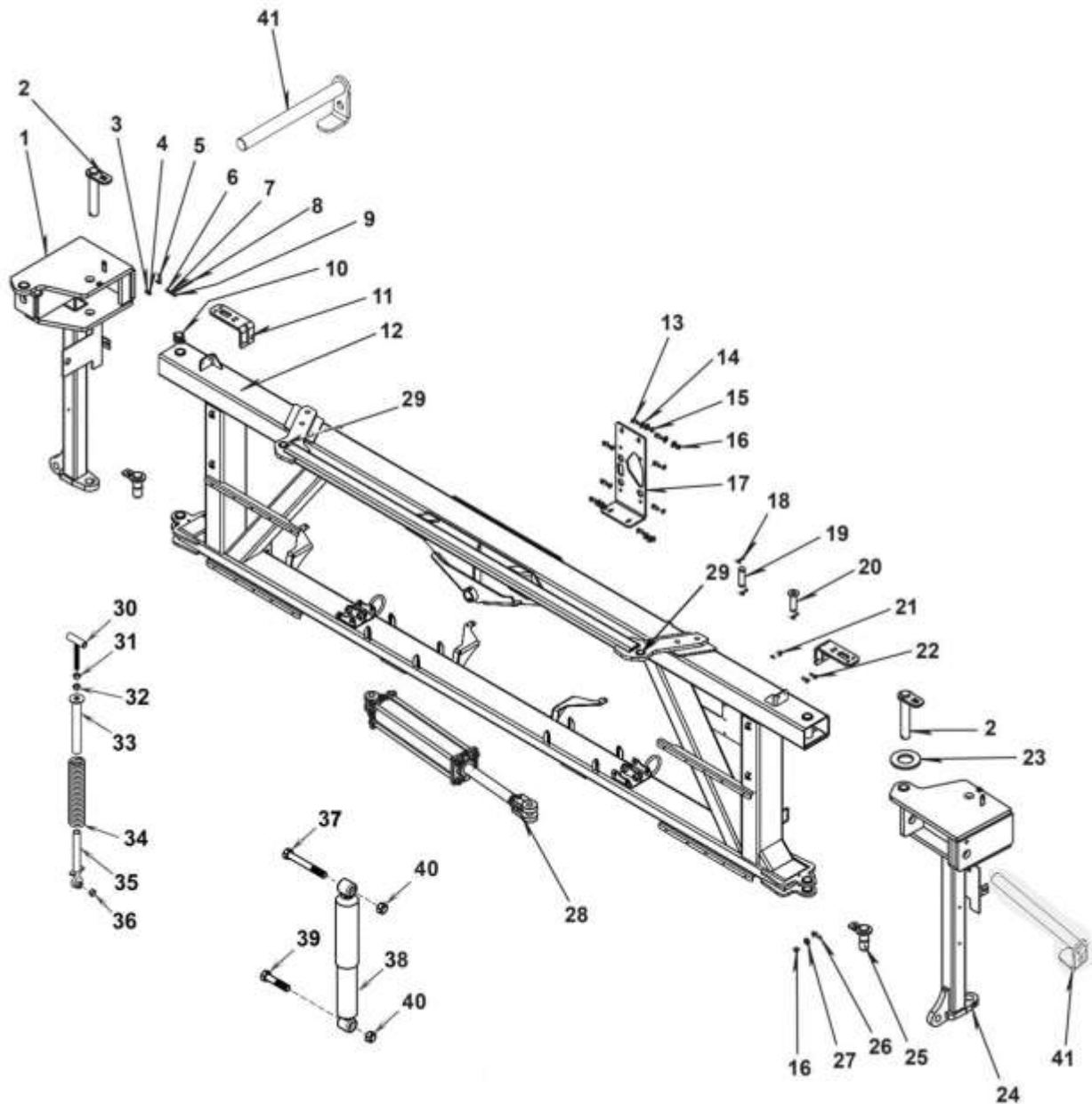
Interior Pivot, Parallel Links, continued



Parts List 20135TC: Interior Pivot, Parallel Links, continued

ITEM	PART NO.	QTY.	DESCRIPTION
1	16382	1	LINK PARALLEL UPPER (REPLACE ITEMS 16 & 20 ALSO)
2	16386	2	LINK PARALLEL LOWER
3	16320	1	INTERIOR PIVOT TRUSS BOOM
4	590184	2	BUMPER PAD, RUBBER 1" X 4"
5	596258M	4	WASHER FLAT 3/8" MAGNI
6	596128M	4	BOLT HH 3/8 X 1 GR5 MAGNI
7	596237M	4	NUT HEX 3/8" CENTERLOCK MAGNI
8	16518	2	TRUSS BOOM STRAP TUBE
9	11515	1	PIN CENTER SECTION PIVOT
10	596227M	8	NUT NYLOCK 1/4 MAGNI
11	596102M	8	BOLT FLAT HEAD 1/4 X 1" MAGNI
12	596239M	4	NUT HEX HEAD 1/2" CENTERLOCK MAGNI
13	16216	AR	PLATE SPACER 7GA
13	16217	AR	PLATE SPACER 10GA
13	16218	AR	PLATE SPACER 12GA
13	16219	AR	PLATE SPACER 14GA
14	590079	4	TRUSS BOOM POLY RUB PLATE
15	596163M	4	BOLT HH 1/2 X 6-1/2" GR5 MAGNI
16	16334	4	PIN, UPPER PARALLEL LINK
17	596237M	8	NUT HH 3/8" CENTERLOCK MAGNI
18	530309	8	WASHER HEAVY 3/8" ZP
19	596128M	8	BOLT HH 3/8 X 1" GR5 MAGNI
20	16329	4	PIN, LOWER 3PT
21	759	10	ZERK 1/4-28TPI

ISO Yaw Center



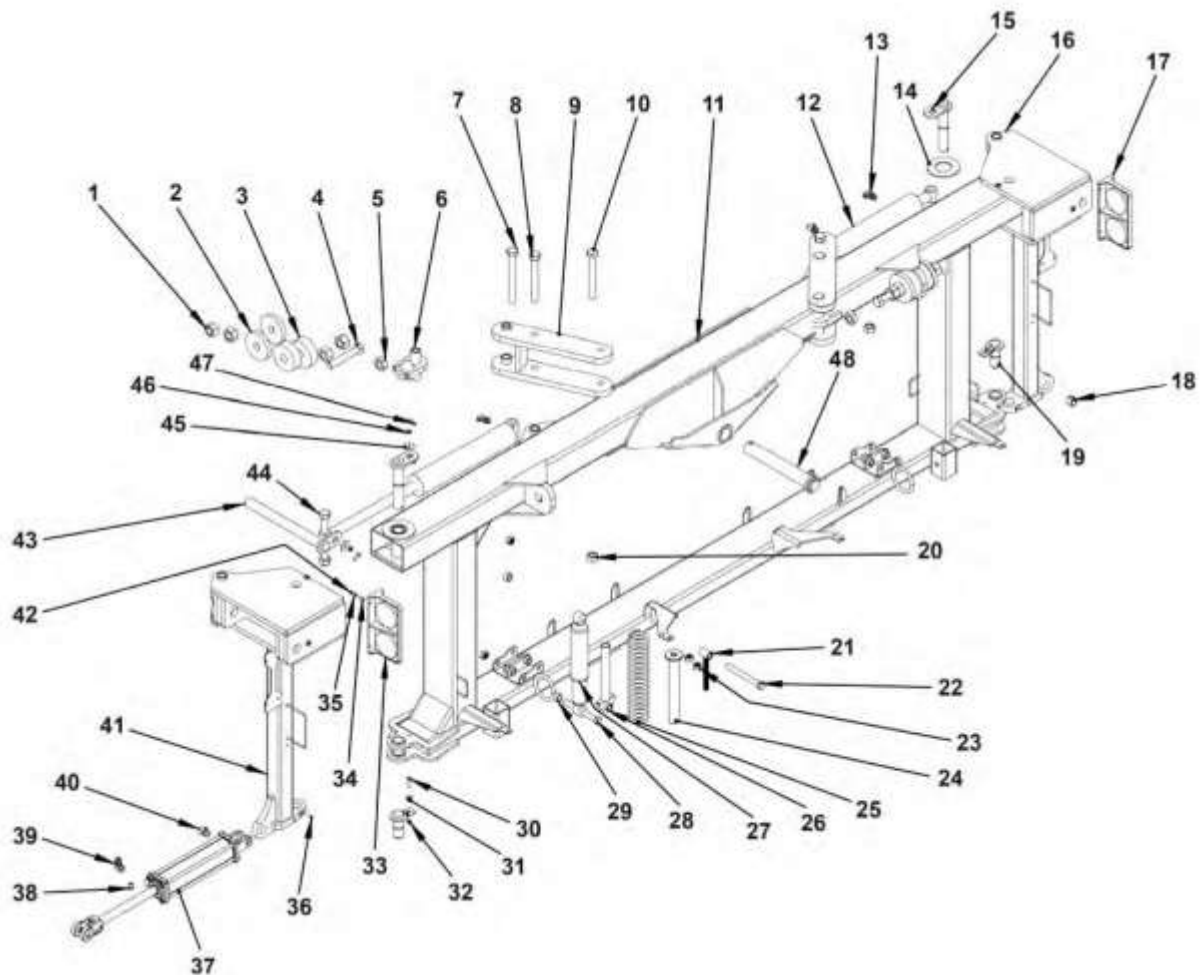
Parts List: ISO Yaw Center

ITEM	VENDOR NO.	PART NO.	QTY.	DESCRIPTION
1		22204R	1	WING PIVOT YAW RIGHT HAND
2		22020	2	PIN WING PIVOT TOP
3		590274	4	NUT NYLON 10-24SS18-8
4		590272	4	WASHER SAE #10SS18-8
5		590273	4	SCREW PAN HEAD #2 PHILIPS 10-24 X 1.75 SS
6		590275	2	SCREW PAN HEA 2 PHILIPS 3-48 X .625 SS
7		590277	4	WASHER #3 SS
8		590276	4	NUT NYLOCK 3-48SS
9		22906	2	SHAFT SENSOR POSITION YAW
10		22955	2	SENSOR POSITION YAW
11		22904	2	SENSOR MOUN TBRACKET
12		22202	1	CENTER SECTION, 3PT TRUSS, HYDRAULIC ISO YAW
13		596128M	8	BOLT HEX HEAD 3/8 X 1GR5 MAGNI
14		596258M	8	WASHER FLAT 3/8 MAGNI
15		252	4	WASHER LOCK 3/8 ZP
16		596237M	4	NUT CENTER LOCK 3/8" MAGNI
17		18389	1	BRACKET ISO YAW BLOCK
18	MI135995		8	PIN COTTER 3/16 X 1.5ZP
19	MI134963		6	PIN CYLINDER
20		28111	2	PIN CYLINDER W/HEAD
21		596236M	4	NUT HEX 5/16" CENTERLOCK MAGNI
22		596115M	4	BOLT HEX 5/16 X 1 GR5 MAGNI
23	22036	590038	2	WASHER NYLON 2.625 ID X 3/8" THICK
24		22204L	1	WING PIVOT YAW LEFT HAND
25		18270	2	WING PIVOT LOWER PIN
26		596129M	2	BOLT HEX HEAD 3/8 X 1-1/2 GR5 MAGNI
27		530309	2	WASHER HEAVY 13/32 X 1"
28		620077	2	CYLINDER 40THC18-175, BOOM SWING
29		590248	2	BUSHING
30		7444	4	ADJUSTER, SPRING
31		596217M	4	NUT, HEX, 3/4-10 G5 MAGNI
32		596225M	4	NUT, HEX JAM, 3/4-10 G5 MAGNI

ITEM	VENDOR NO.	PART NO.	QTY.	DESCRIPTION
33		7442	4	OUTER SPRING GUIDE
34		590011	2	CENTER SECTION SPRING
35		11620	4	MOUNT, BASE SPRING
36		596626M	4	NUT, TOPLOCK, 3/4-10 G5 MAGNI
37		596192M	4	BOLT, HH, 3/4-10X6 GR5 MAGNI
38		790010	6	SHOCK ABSORBER
39		596187M	4	BOLT, HH, 3/4-10X3-1/2 GR5 MAGNI
40		596626M	4	NUT, CENTERLOCK, 3/4-10 G5 MAGNI
41		18265	2	PIN, TRUSS BOOM, 16" LONG
NS		800111	6	DECAL, RED/ORANGE NON-REFLECTIVE
NS		800006	2	DECAL, DANGER ELECTROCUTION HAZARD
NS		800287	7	DECAL, GREASE PIVOT POINTS
NS		800106	4	DECAL, DANGER, STAND CLEAR
NS		800109	4	DECAL, RED REFLECTOR
NS		800110	4	DECAL, AMBER REFLECTOR



Puck Yaw Center



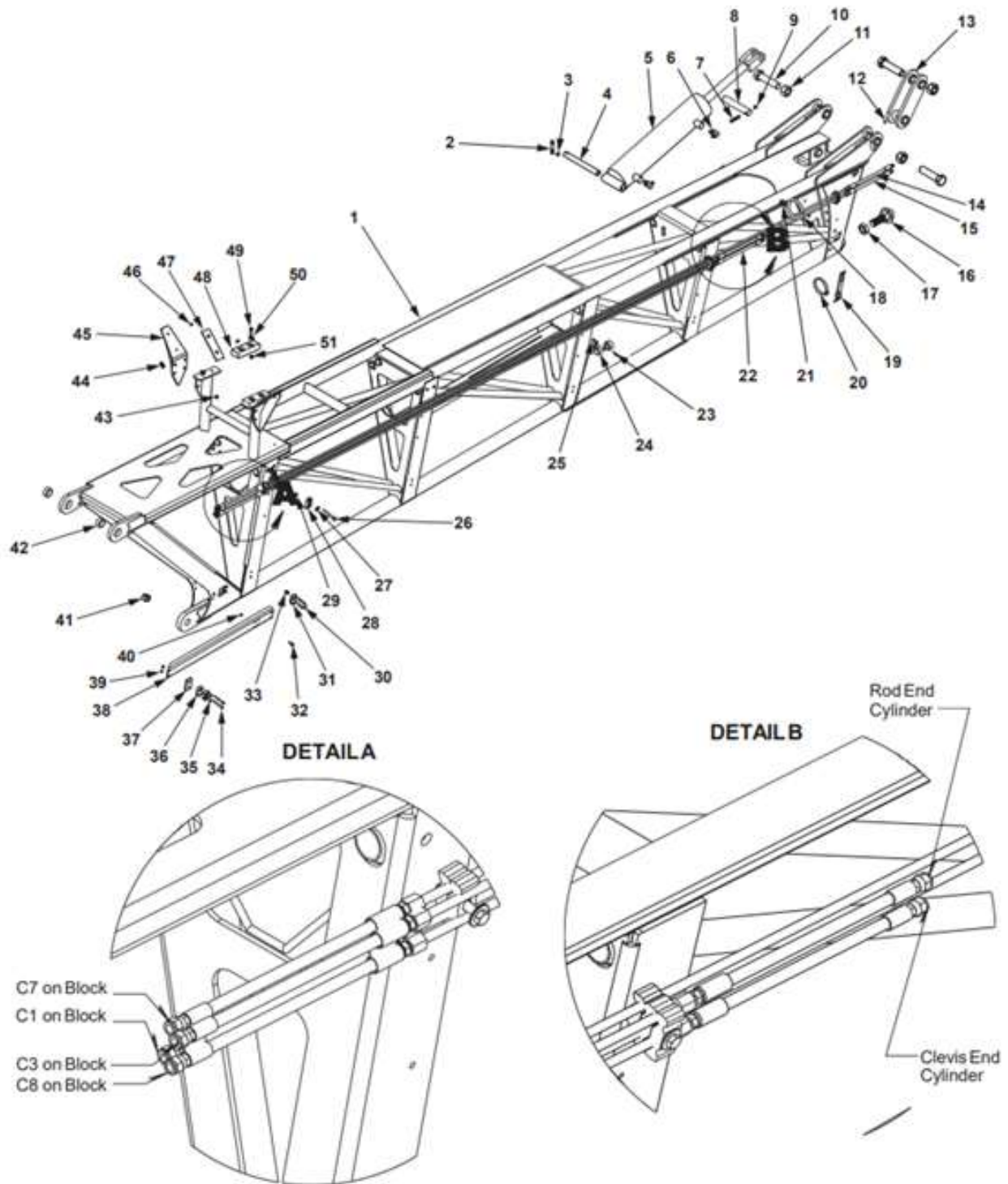
Parts List: Puck Yaw Center

ITEM	VENDOR NO.	PART NO.	QTY.	DESCRIPTION
1		617	8	NUT HEX HEAD 1-1/4" ZP
2		16017	4	MECHANICAL YAW WASHER PLATE
3		790037	4	POLY PUCK YAW DAMPNER
4		16016	2	THREADED ROD MECHANICAL YAW
5		558	2	NUT HEX JAM 1-1/4" ZP
6		16008	2	MECHANICAL YAW LUG MOUNT
7		590125	2	BOLT HEX HEAD 1 X 10 GR8 ZP
8		590135	2	BOLT HEX HEAD 1 X 8-1/2 GR8 ZP
9		18362	2	MECHANICAL YAW MULTIPLIER
10		590136	2	BOLT HEX HEAD 1 X 8-1/2 GR8 ZP
11		16525	1	CENTER SECTION 120' TRUSS BOOM PUCK YAW
NS		22005		CENTER SECTION 120' TRUSS BOOM ISO YAW
12	MI675418	620079	2	CYLINDER 3 X16 WELED 1.75" ROD (2014-)
NS	649209 (RK 30WR-175 TSS)			SEAL KIT FOR 620079
12		620031		CYLINDER 3X16 WELED 1.5" ROD (2010-2013)
NS	RKWP-3015-3B-WP-1			SEAL KIT FOR 620031
13	RST6801-4-8-0.032	610039	4	FITTING HYDRAULIC 8ORB-4JIC RST 0.032
14		590038	4	WASHER POLY PIVOT 1-5/8" OD
15		16155	2	PIN WING PIVOT UPPER
16		16105R	1	RIGHT HAND WING PIVOT 120' TRUSS BOOM PUC YAW
17		740002	1	SAFETY LIGHT RIGHT HAND
18		530281	2	BUSHING 1" ID X 1" LONG
19		13871	2	PIN WING PIVOT LOWER
20		242	8	NUT HEX 1" CENTERLOCK ZP
21		7444	4 (120')	SPRING ADJUSTMENT EYEBOLT
			6 (132')	
NS		194	4 (120')	BOLT HEX HEAD 3/4 X 7 GR5 ZP
			2 (132')	
22		489	2 (132')	BOLT HEX HEAD 3/4 X 9 GR5 ZP

ITEM	VENDOR NO.	PART NO.	QTY.	DESCRIPTION
23		217	8	NUT HEX HEAD 3/4" ZP
24		7442	4	OUTER SPRING MOUNT
25		590011	4	SPRING COMPRESSION
26		11620	4 (120')	LOWER SPRING MOUNT
			6 (132')	
27	PI-65421	790010	4 (120')	SHOCK
			12 (132')	
NS		194	4 (120')	BOLT HH 3/4 X 7 GR5 ZP
			2 (132')	
28		489	2 (132')	BOLT HEX HEAD 3/4 X 9 GR5 ZP
29		14461	8 (120')	SPACER DOM
30		129	AR	BOLT HEX HEAD 3/8 X 1-1/2 GR5 ZP
31		530309	2	WASHER THICK 1" OD
32		237	2	NUT HEX 3/8" CENTERLOCK ZP
33		740001	1	SAFETY LIGHT LEFT HAND
34		102	8	BOLT HEX HEAD 1/4 X 1 GR5 ZP
35		256	8	WASHER FLAT 1/4" ZP
36		759	6	ZERK 1/4-28 TPI
37	671378	620028	2	CYLINDER 30TD12-125
NS	648992	620032		CYLINDER 30TD12-125 SA PUSH SUPERCEDED BY 620028 AFTER 4/15/2013
38	BV3	610035	2	BREATHER 3/8" NPT
39	8/6/6500	610036	2	FITTING HYDRAULIC 8ORB-3/8" NPT
40	6/8/6801	610030	2	FITTING HYDRAULIC 8ORB-6JIC
41		16105L	1	LEFT HAND WING PIVOT 120' TRUSS BOOM
42		767	8	NUT HEX WHIZLOCK ZP
43		16145	2	PIN MAIN WING PIVOT
44		528	2	BOLT HEX HEAD 1 X 10 GR8 ZP
45		530308	2	WASHER THICK 1-5/8" OD
46		250	4	WASHER LOCK 3/8" ZP
47		128	2	BOLT HEX HEAD 3/8 X 1 GR5 ZP
48		11515	1	MAIN CENTER PIVOT PIN



Main Wing



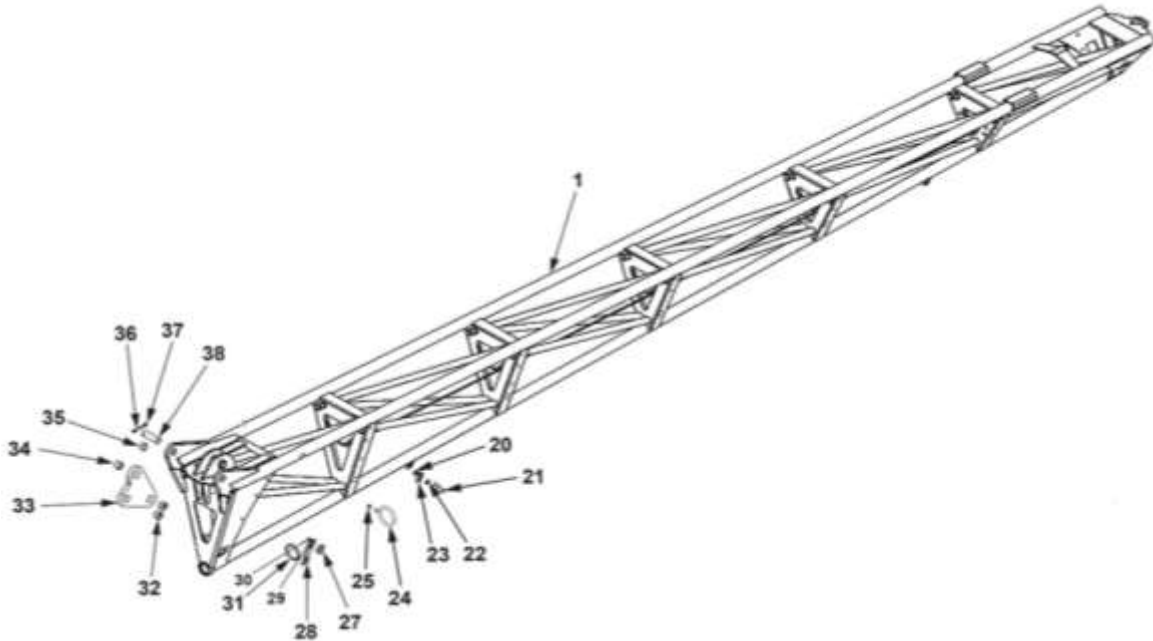
Parts List: Main Wing

ITEM	VENDOR NO.	PART NO.	QTY.	DESCRIPTION
1		22260	2	WING, MAIN TRUSS (120')
1		22261	2	WING, MAIN TRUSS (132')
2		596131M		BOLT HH 3/8 X 2.5 GR5 MAGNI
3		596237M		NUT HEX 3/8" CENTER LOCK MAGNI
4		16268		PIN CYLINDERMOUNT
5	MHFD10013	620043	2	CYLINDER CUSHION 5 X 16 9518T-3394-0111 & UP
	MHFDI0013			SEAL KIT FOR 620043
6	TO6801-4-8	610029	4	FITTING HYDRAULIC 8ORB X 4JIC90°
7		596130M	2	BOLT HH 3/8 X 2 GR5 MAGNI
8		16149	2	PIN CYLINDER MOUNT
9		596237M	2	NUT HH 3/8" CENTER LOCK MAGNI
10		590183	4	BOLT HH (REWORK) 1.25 X 5 GR5ZP
11		790072	4	NUT HH 1.25" CENTER LOCK ZP
12		759	2	ZERK 1/4"STRAIGHT
13		16197	2	LINK, SCISSOR
14	600039-3A		2	HOSE HYDRAULIC 29.5"OAL
15	600039-4A		2	HOSE HYDRAULIC 33" OAL
16		16185	2	CONE, LINEUP
17		596722M	2	NUT HH JAM 1.25 MAGNI
18		8877	2	RING BOLT ASSEMBLY
19		16271	AR	BRACKET WETBOOM
20	BR64044H	540018	AR	HOSE CLAMP SIZE 44
21		596223M	2	NUT HH 1/2" JAM MAGNI
22	600039-5A		2	HOSE HYDRAULIC TO BASE CYLINDER PORT
22	600039-6A		2	HOSE HYDRAULIC TO ROD CYLINDER PORT
23		596101M	4	BOLT HH 1/4 X 3/4" GR5 MAGNI
24		540048	4	HOLDER SPRAY HOSE
25		596227M	4	NUT HH 1/4" NYLOCK MAGNI
26		596637M	8	BOLT HH 3/8 X 2-3/4" GR5 MAGNI
27		596258M	8	WASHER 3/8 MAGNI
28	AG-2		28	STEEL TUBE HOLDER
29		596213M	8	NUT HH 3/8" MAGNI
30		590048	AR	U-BOLT 1/4 X 1 STAINLESS
31		540029	AR	TUBE CLAMP FOR 1" SS TUBE

ITEM	VENDOR NO.	PART NO.	QTY.	DESCRIPTION
32		596235M	AR	NUT HH 1/4" CENTERLOCK MAGNI
33		596101M	8	BOLT HH 1/4 X 3/4" GR5 MAGNI
34		596105M	4	BOLT HH 1/4 X 2-1/2" GR5 MAGNI
35		596256M	4	WASHER 1/4" MAGNI
36		540029	4	TUBE CLAMP FOR 1" SS TUBE
37		11494	2	SPACER WETBOOM
38		16378	2	BRACKET WET BOOM SUPPORT
39		596235M	4	NUT HH 1/4" CENTERLOCK SS
40		596256M	AR	WASHER 1/4" MAGNI
41		530281	2	BUSHING SPRING 1"ID
42		530280	4	BUSHING SPRING 1-1/2"ID
43		596237M	8	HUT HH 3/8" CENTERLOCK GR5 MAGNI
44		596128M	8	BOLT HH 3/8 X 1 GR5 MAGNI
45		16794	2	GUIDE, WING REST, BOLT-ON
46		581	4	RIVET DRIVE 1/4"
47	7781	590024	4	SADDLE BASE
48		590094	4	BUMPER PAD, 6"LG
49		596129M	4	BOLT HH 3/8 X 1-1/2" GR5 MAGNI
50		596258M	4	WASHER 3/8" MAGNI
51		596237M	4	HUT HH 3/8" CENTERLOCK GR5 MAGNI
52	600039-1A		4	HOSE HYDRAULIC BLOCK TO HYDRAULIC TUBE LH
NS	600039-2A		4	HOSE HYDRAULIC BLOCK TO HYDRAULIC TUBE RH
53	FDMP603		4	HYDRAULIC TUBE 3/8" X124"
54	FDMP604	620043	4	HYDRAULIC TUBE 3/8" X162"



Flip Wing

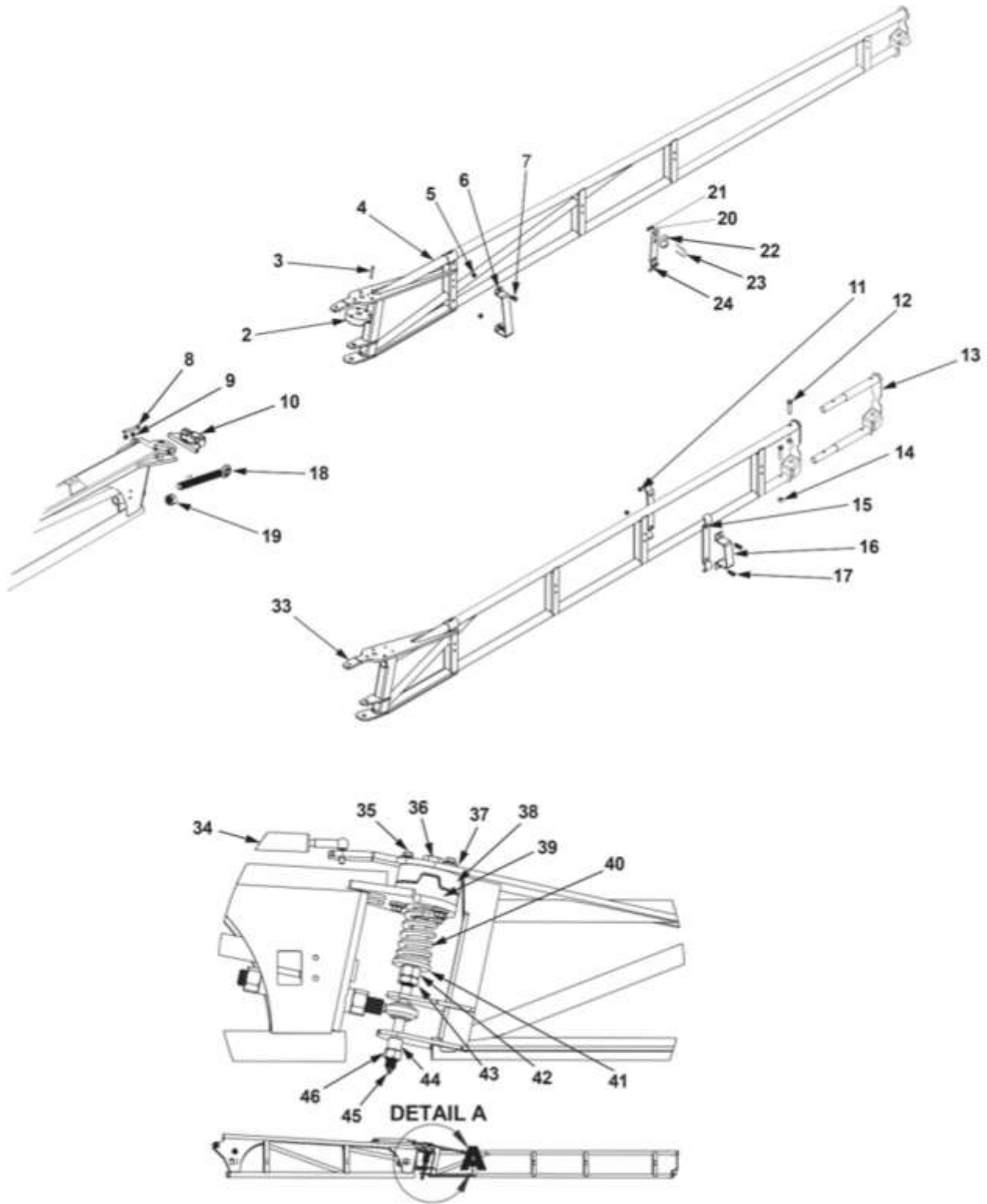


Parts List: Flip Wing

ITEM	VENDOR NO.	PART NO.	QTY.	DESCRIPTION
1		16580	2	FLIP WING TRUSS BOOM
20		596237M	12	NUT HH 3/8" CENTERLOCK MAGNI
21		596128M	12	BOLT HH 3/8 X 1 GR5 MAGNI
22		596258M	12	WASHER FLAT 3/8" MAGNI
23	AG-2		24	STEEL TUBE HOLDER
24		8877	2	RING BOLT ASSEMBLY
25		596223M	2	NUT HH JAM 1/2" MAGNI
27	NT-3254PP	540029	AR	1" TUBE CLAMP
28		16271	AR	CLAMP WET BOOM HOLDER
29		596256M	AR	WASHER 1/4" MAGNI
30		596227M	AR	NUT HH 1/4" CENTERLOCK MAGNI
31	BR64032H	540017	AR	CLAMP STAINLESS STEEL
32		530291	4	BUSHING 1.5 OD X 1.25 ID X 1" LONG
33		16198	2	LINK, SCISSOR TRUSS BOOM
34		530312	2	BUSHING 1.5 OD X 1.0 ID X 1" LONG
35		530282	4	BUSHING 1.5 OD X 1.25 ID X 3/4" LONG
36		596131M	2	BOLT HH 3/8 X 2-1/2" GR5 MAGNI
37		596237M	2	NUT HH 3/8" CENTERLOCK MAGNI
38		21076	2	PIN, WING PIVOT 1-1/4" X 4"LONG



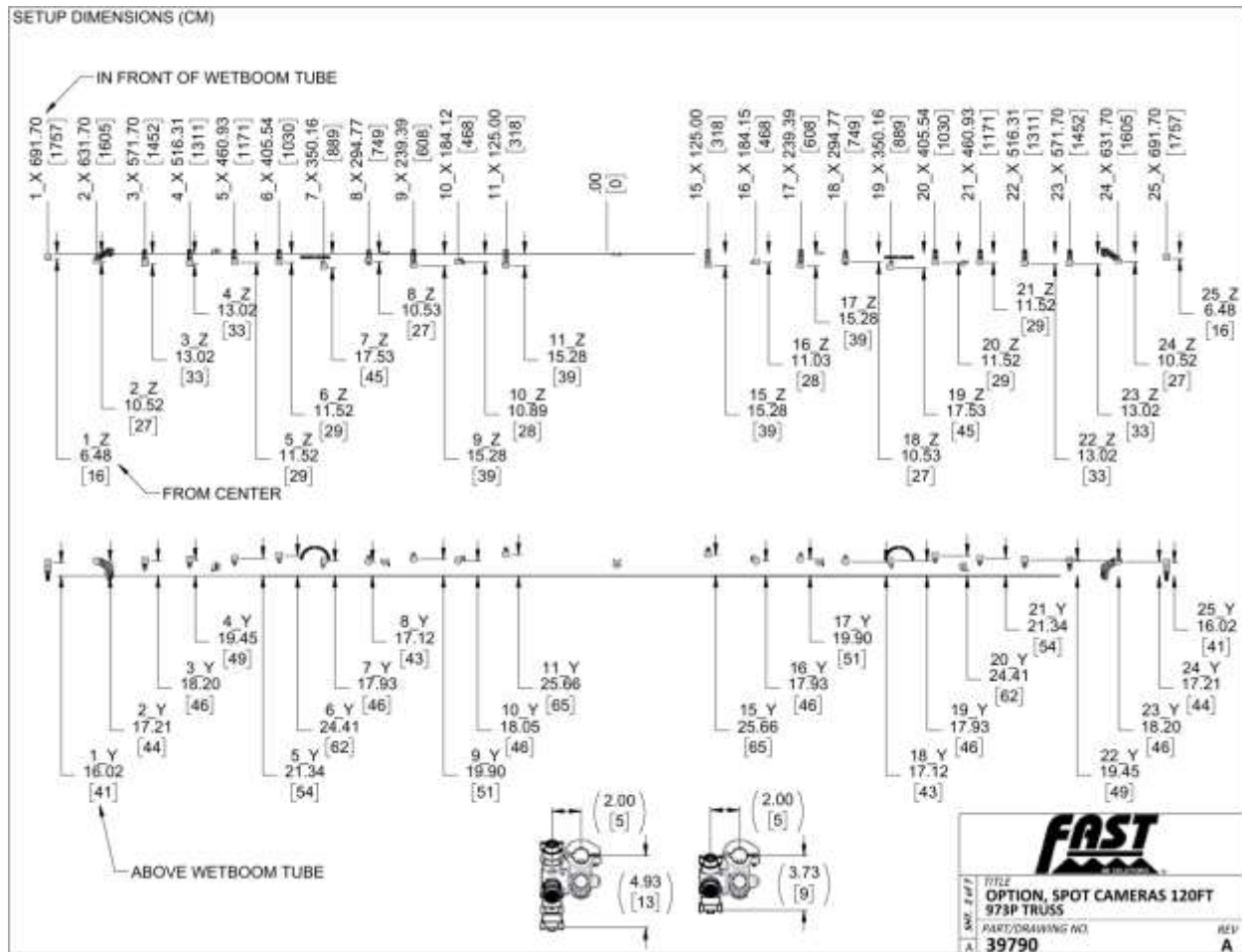
Breakaway Wing



Parts List: Breakaway Wing

ITEM	For Width	VENDOR NO.	PART NO.	QTY.	DESCRIPTION
2	132'		18409	2	BREAKAWAY CLUTCH TOP
3	132'		687	2	PIN SPRING 1/4 X2
4	132'		14000	2	BREAKAWAY132'
5	132'		596237M	4	NUT HEX CENTERLOCK 3/8 MAGNI
6	132'		16180	2	BREAKAWAYGUIDE
7	132'		596127M	4	BOLT HH 3/8 X 3/4 GR5 MAGNI
8	132'		590200	4	BOLT HH 3/8 X 3 GR5 MAGNICOATED FULL THREAD
9	132'		596213M	4	NUT HEX 3/8 MAGNI
10	132'		18400	2	BREAKAWAY CLUTCH WITH STOP
11	120'		596236M	4	NUT HEX CENTERLOCK 5/16 MAGNI
12	120'		596142M	4	BOLT HH 7/16 X 2 GR5 MAGNI
13	120'		14295	2	BREAKAWAY EXTENSION 15" PLUMBING 120' BOOM
14	120'		596238M	4	NUT HEX CENTERLOCK 7/16 MAGNI
15	120'		18315	4	BREAKAWAY CLAMP
16	120'		16671	2	BREAKAWAY GUIDE
17	120'		596115M	4	BOLT HH 5/16 X 1 GR5 MAGNI
18	All		16176	2	ADJ. BREAKAWAY SUPPORT
19	All		596218M	4	NUT HH 1"-8 MAGNI
20	All		596235M	AR	NUT HEX CENTERLOCK 1/4" MAGNI
21	All		596256M	AR	WASHER 1/4" MAGNI
22	All		540029	AR	TUBE CLAMP BASE
23	All		590048	AR	U-BOLT STAINLESS STEEL
24	All		16271	AR	CLAMP WET BOOM HOLDER
33	120'		18300	2	BREAKAWAY 93"
34	All		790028	2	SHOCK BREAKAWAY HEAVY
35	All		596634M	6	BOLT HH 3/8 X 1-1/4 GR8 MAGNI
36	All		590112	2	BOLT HH BREAKAWAY PIVOT
37	All		530309	6	FLAT WASHER HEAVY 3/8"
38	120'	14458	590074	2	BREAKAWAY CLUTCH FEMALE'
39	120'	14457	590073	2	BREAKAWAY CLUTCH MALE
40	All		590006	2	SPRING, BREAKAWAY
41	All		14013	2	GUIDE SPRING BREAKAWAY
42	All		596217M	2	NUT HH 3/4" MAGNI
43	All		596225M	2	NUT HH JAM 3/4" MAGNI
44	All		14268	2	COLLAR
45	All		759	2	ZERK 1/4-28 STRAIGHT
46	All		596216M	2	NUT HH 5/8" MAGNI

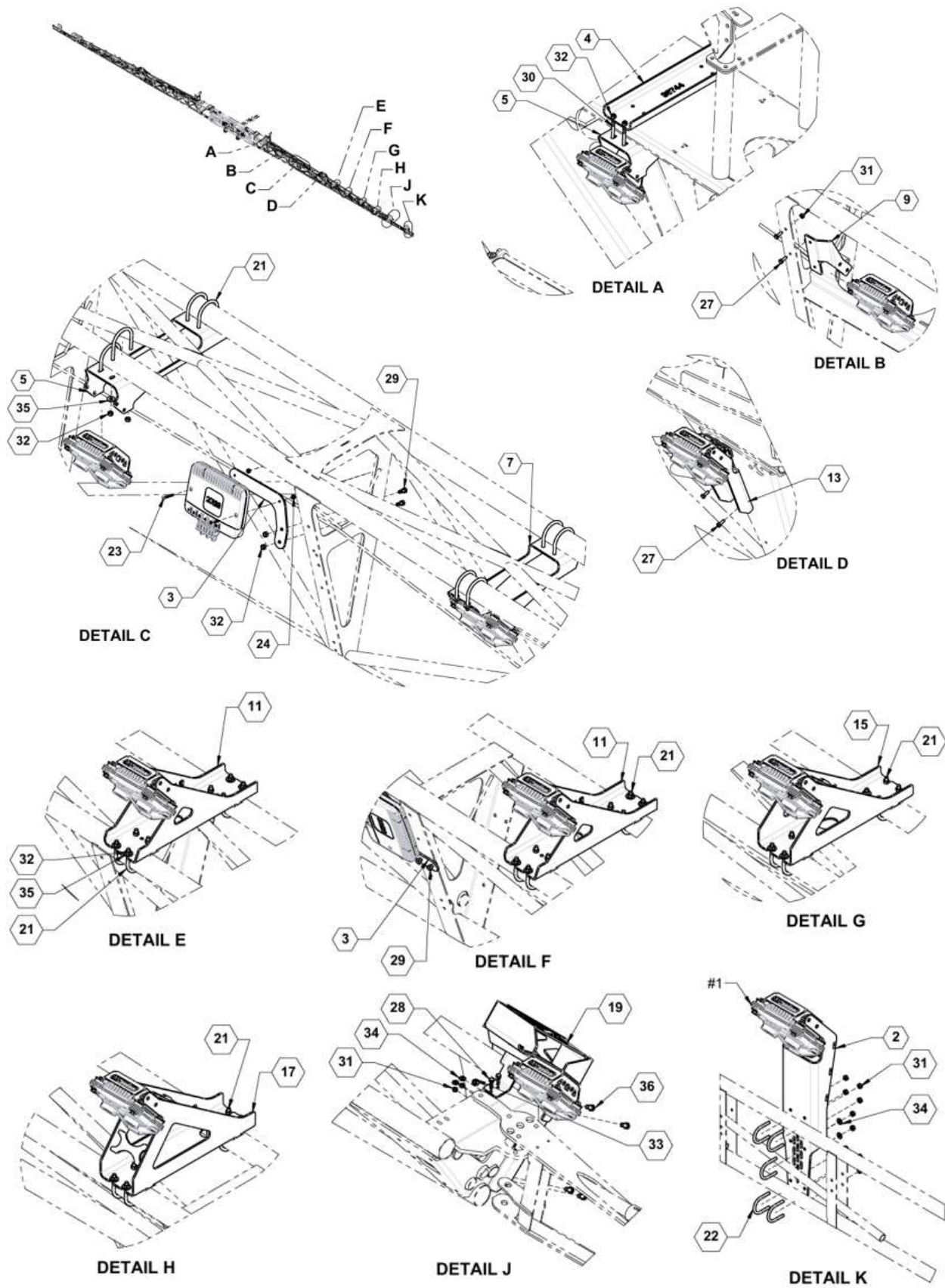
Cameras, 120ft

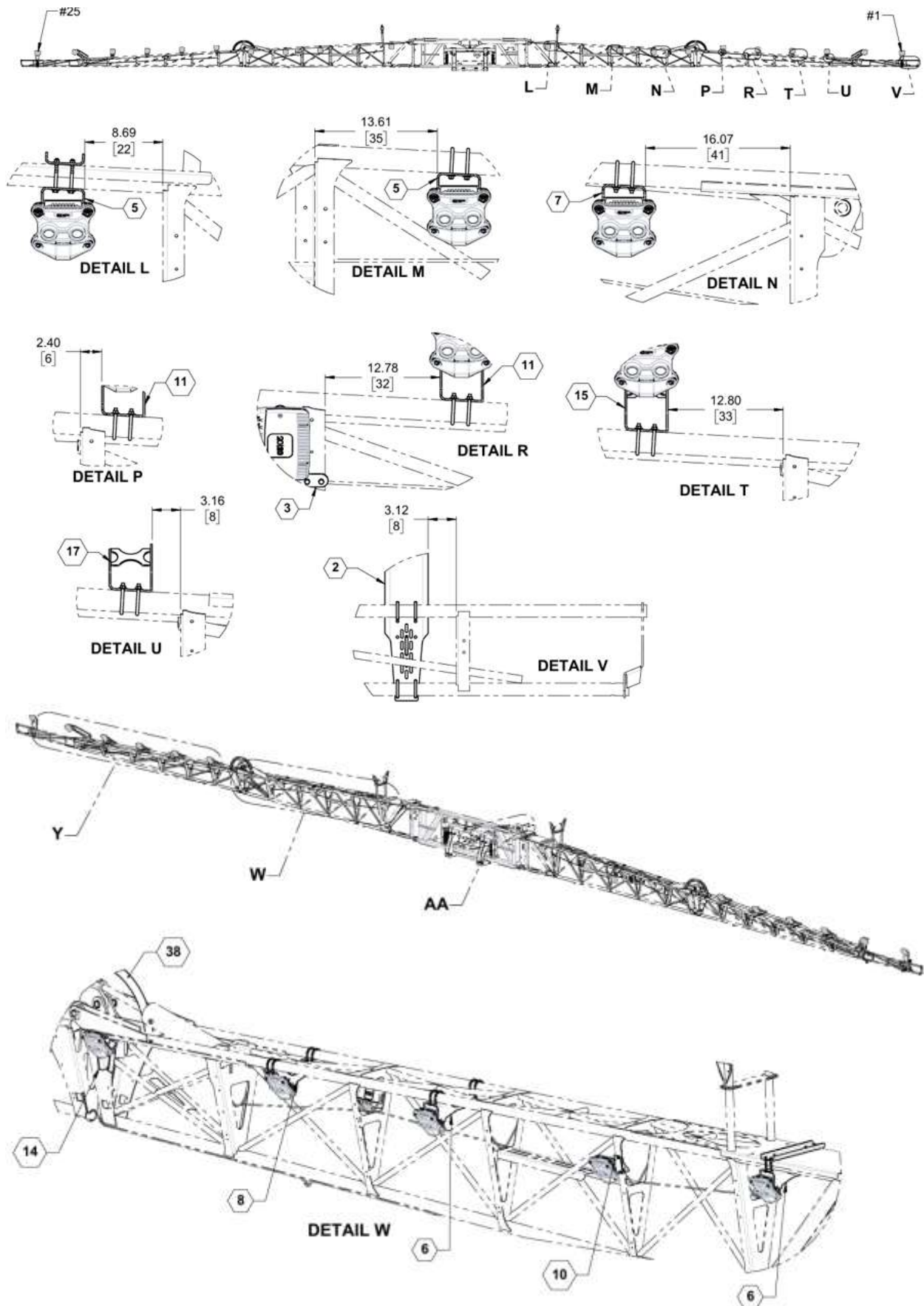


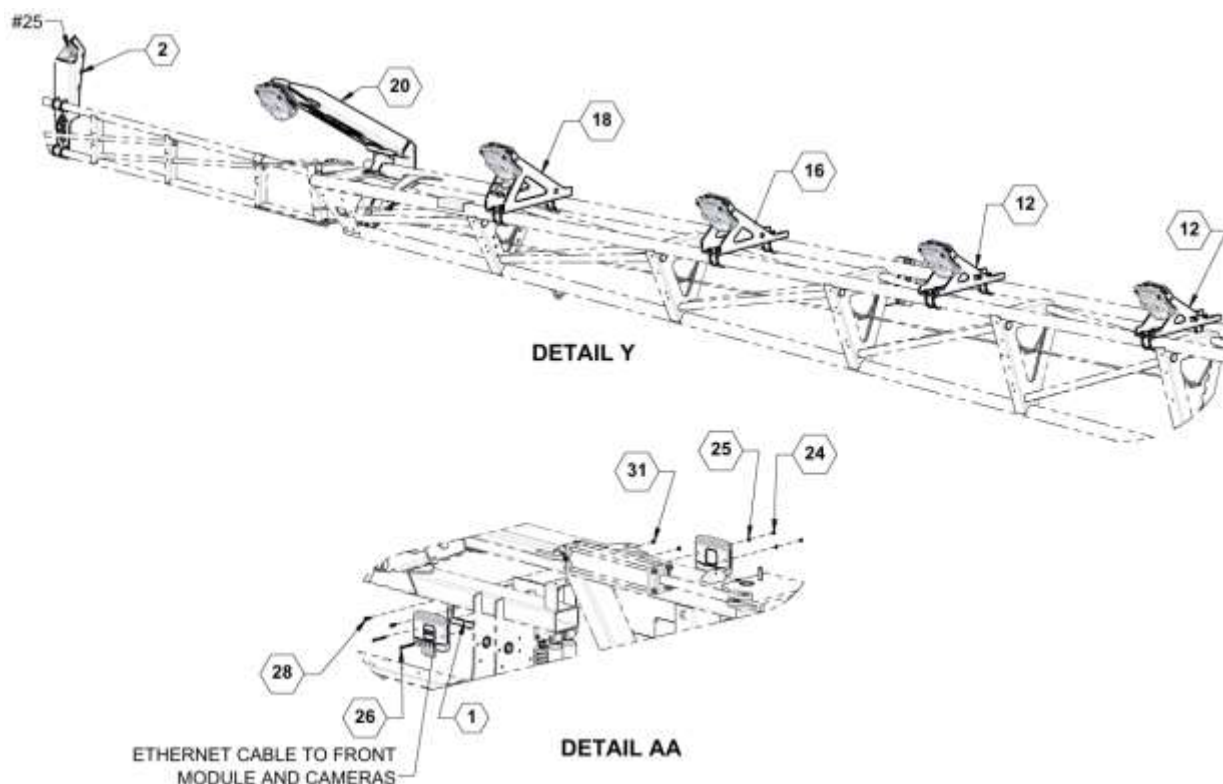
Inches [centimeters]

Setup dimensions required for initial startup

Center cameras are 120in [305cm] apart





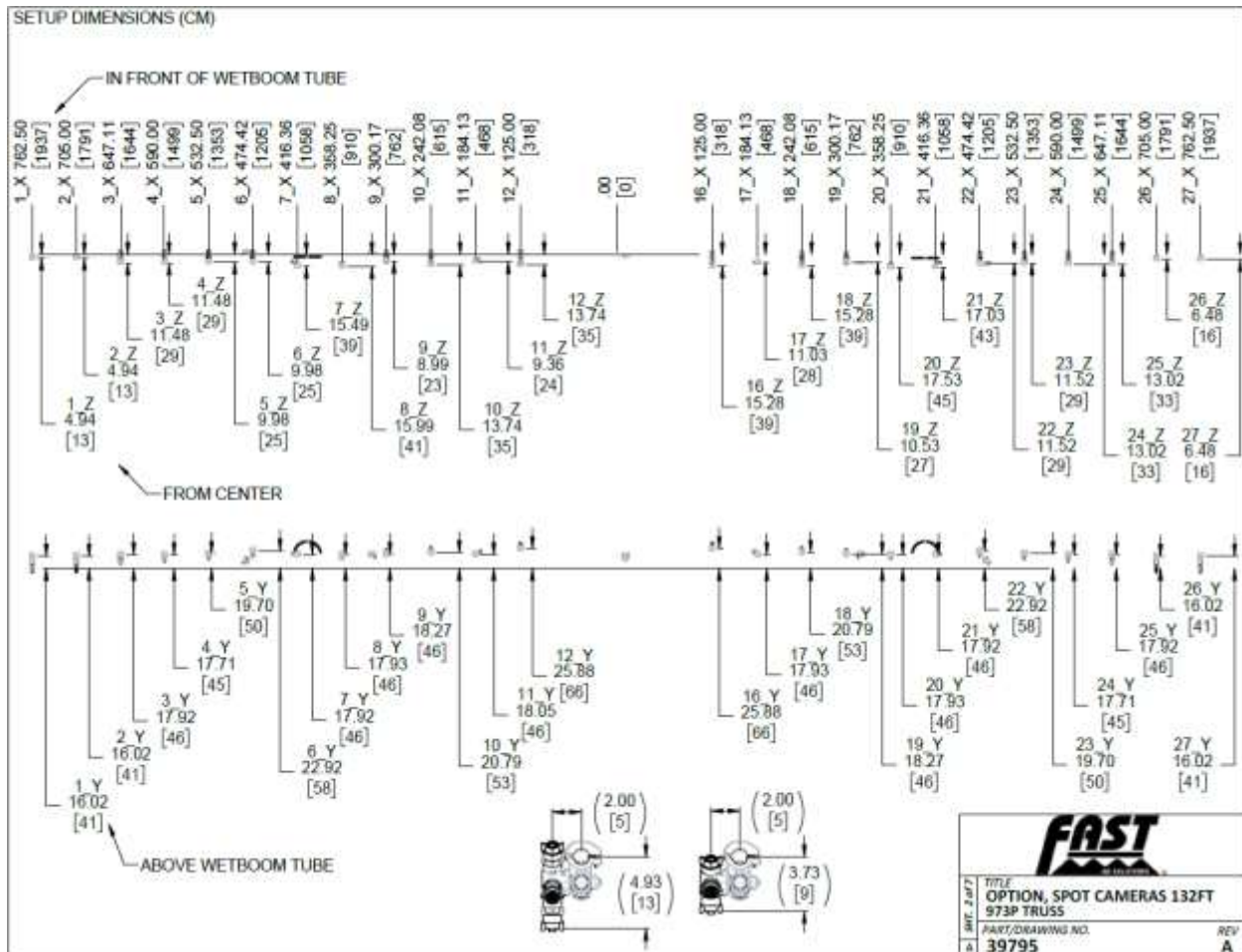


Parts List 37970: Cameras, 120ft

ITEM	PART NO.	QTY.	DESCRIPTION
1	36451-0010	1	PLATE, CENTER SWITCH MOUNT
2	38299	2	WELDMENT, W4 BRACKET
3	39736	4	PLATE, ETHERNET SWITCH MOUNT
4	39744	2	PLATE, CAMERA SENSOR MOUNT
5	39746L	2	PLATE, UNDER TUBE MOUNT
6	39746R	2	PLATE, UNDER TUBE MOUNT
7	39747L	1	PLATE, UNDER TUBE SHORT
8	39747R	1	PLATE, UNDER TUBE SHORT
9	39748	1	BRACKET, INT CORNER 120L
10	39753	1	BRACKET, EXT CORNER 120R
11	39760L	2	WELDMENT, FLIP SHORT CAM
12	39760R	2	WELDMENT, FLIP SHORT CAM
13	39761L	1	BRACKET, MAIN END CAM 120
14	39761R	1	BRACKET, MAIN END CAM 120
15	39765L	1	WELDMENT, MID FLIP
16	39765R	1	WELDMENT, MID FLIP
17	39770L	1	WELDMENT, PENULT FLIP

ITEM	PART NO.	QTY.	DESCRIPTION
18	39770R	1	WELDMENT, PENULT FLIP
19	39820L	1	WELDMENT, ULTIMATE FLIP CAM
20	39820R	1	WELDMENT, ULTIMATE FLIP CAM
21	590058	48	ROUND U-BOLT, 5/16 x 3.0
22	590118	10	1/4" 1 1/2 U-BOLT
23	590243	8	SCREW, #10-32 X 1 1/2", STAINLESS
24	590244	10	NYLOCK, #10-32, STAINLESS
25	590272	2	WASHER SAE #10 SS18-8
26	590591	2	SHCS, 10-24 x 3.0, PART THD, SS
27	596101M	8	BOLT, HH 1/4-20 X 3/4 GR5 MAGNI
28	596102M	6	BOLT, HH 1/4-20 X 1 GR5 MAGNI
29	596114M	8	BOLT, HH 5/16-18X3/4 GR5 MAGNI
30	596120M	12	BOLT, HH 5/16-18 X 3-1/2 GR5 MAGNI
31	596235M	34	NUT, CENTERLOCK, 1/4-20 MAGNI
32	596236M	116	NUT, CENTERLOCK, 5/16-18 MAGNI
33	596237M	8	NUT, CENTERLOCK 3/8-16 MAGNI
34	596256M	8	WASHER, FLAT 1/4 USS MAGNI
35	596257M	60	WASHER, FLAT 5/16 USS MAGNI
36	596818M	8	BOLT, HH 3/8-16 X 3/4 GR5 MAGNI
37	632304	1	PRECISION VISION KIT, SPOT 120FT BOOM
38	750112	14	(FT) 1.5IN BLACK HOSE SLEEVE

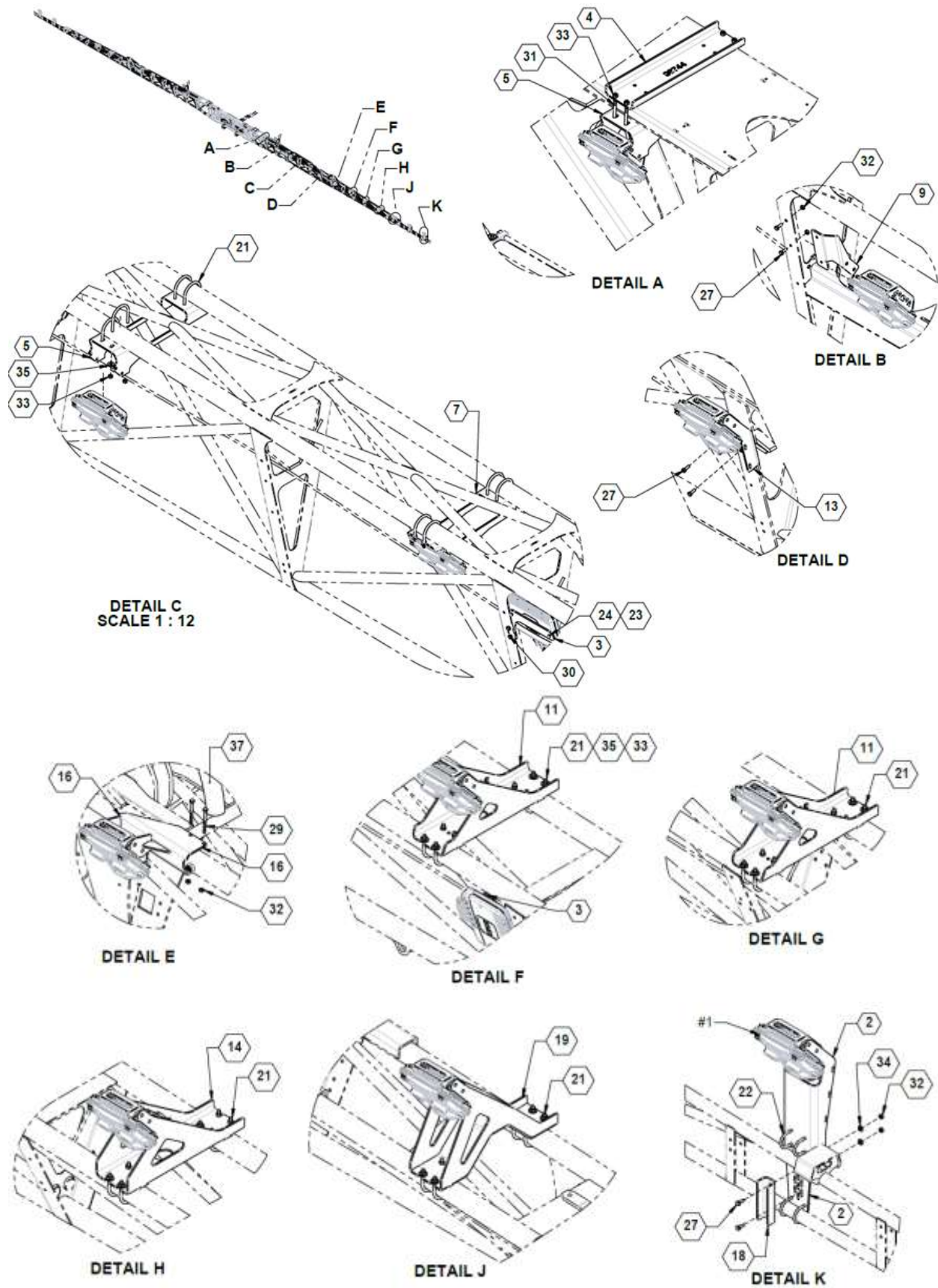
Cameras, 132ft

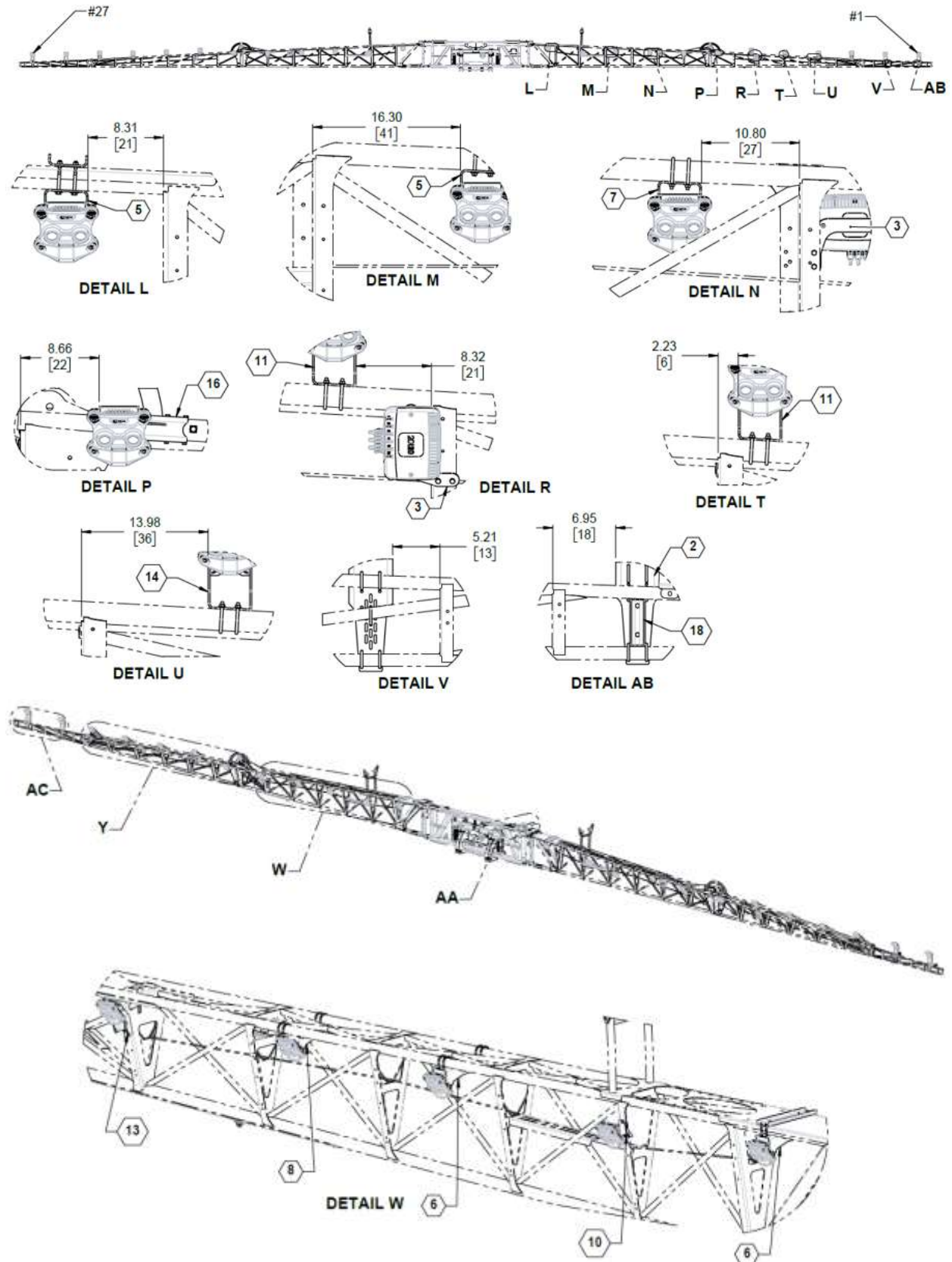


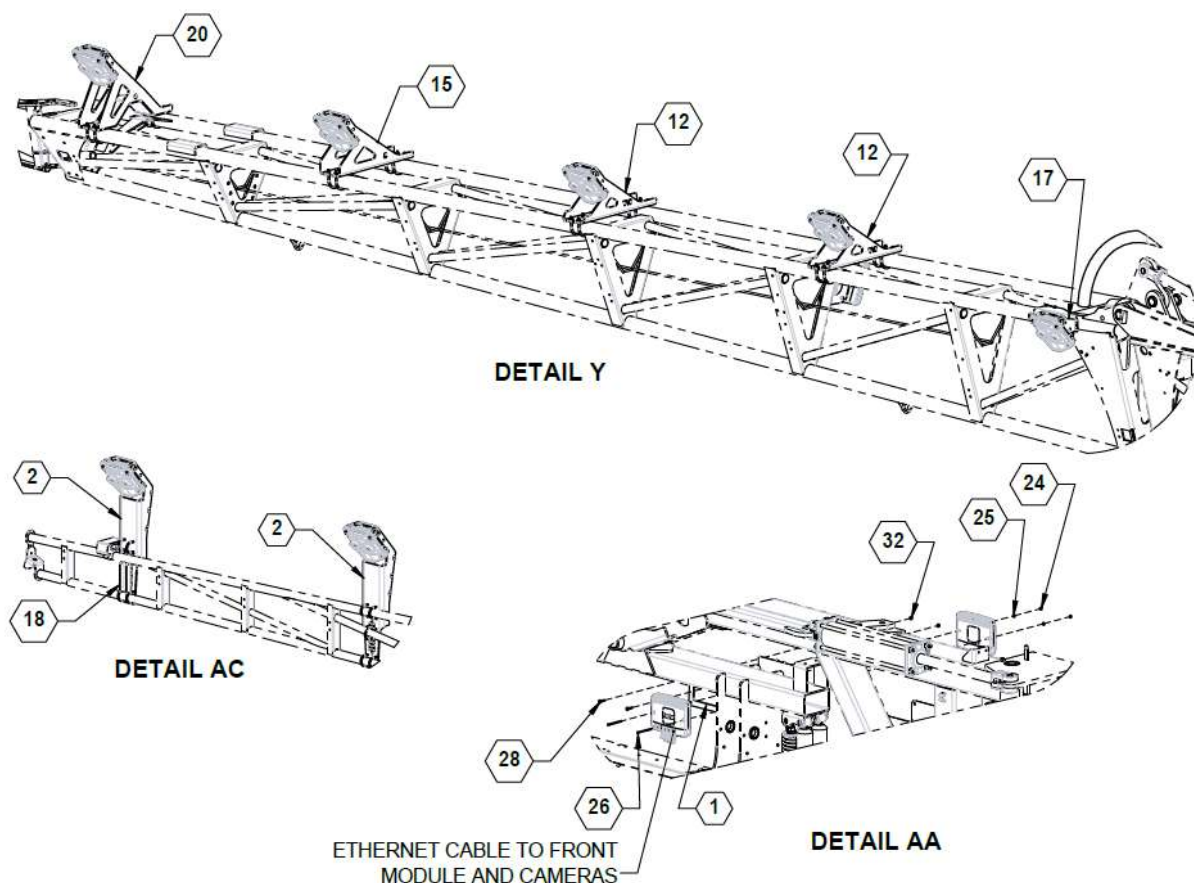
Inches [centimeters]

Setup dimensions required for initial startup

Center cameras are 120in [305cm] apart







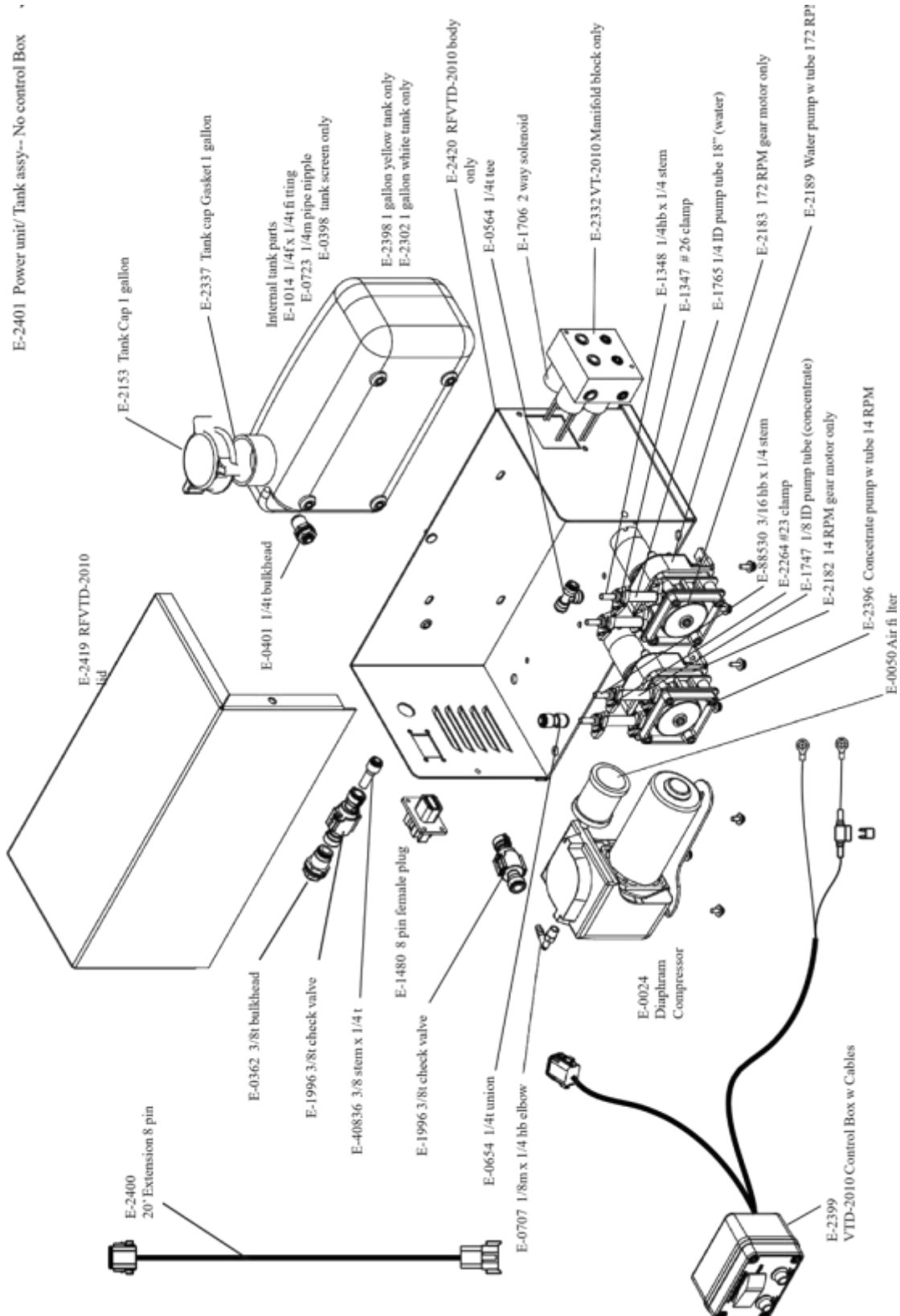
Parts List 39795: Cameras, 132ft

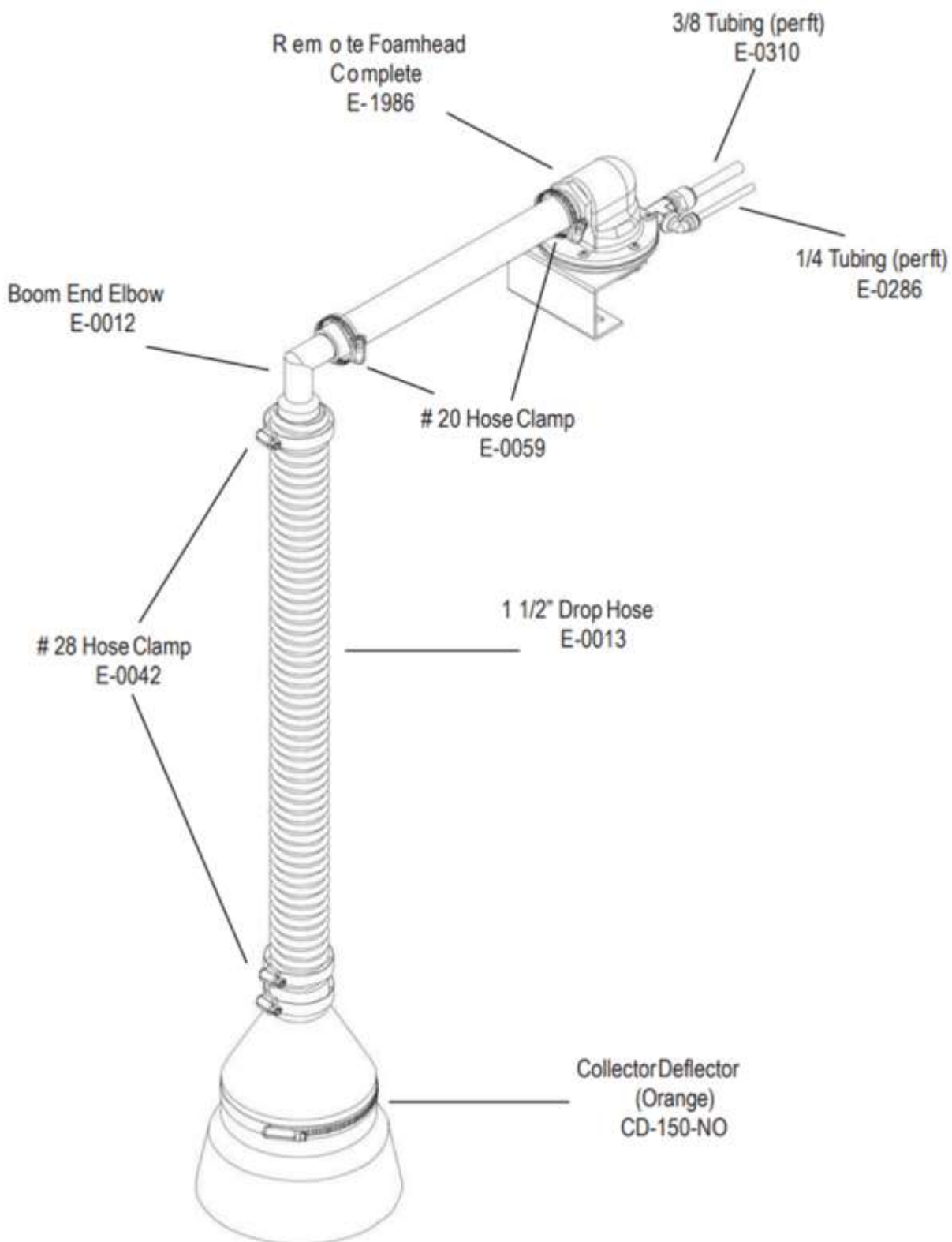
ITEM	PART NO.	QTY.	DESCRIPTION
1	36451-0010	1	PLATE, CENTER SWITCH MOUNT
2	38299	4	WELDMENT, W4 BRACKET
3	39736	4	PLATE, ETHERNET SWITCH MOUNT
4	39744	2	PLATE, CAMERA SENSOR MOUNT
5	39746L	2	PLATE, UNDER TUBE MOUNT
6	39746R	2	PLATE, UNDER TUBE MOUNT
7	39747L	1	PLATE, UNDER TUBE SHORT
8	39747R	1	PLATE, UNDER TUBE SHORT
9	39749	1	BRACKET, INT CORNER 132L
10	39754	1	BRACKET, EXT CORNER 120R
11	39760L	2	WELDMENT, FLIP SHORT CAM
12	39760R	2	WELDMENT, FLIP SHORT CAM
13	39762	2	BRACKET, MAIN END CAM 132
14	39765L	1	WELDMENT, MID FLIP
15	39765R	1	WELDMENT, MID FLIP
16	39775L	1	WELDMENT, REACH BACK MOUNT
17	39775R	1	WELDMENT, REACH BACK MOUNT

ITEM	PART NO.	QTY.	DESCRIPTION
18	39779	2	PLATE, BREAKAWAY CHANNEL
19	39780L	1	WELDMENT, FLIP BRIDGE
20	39780R	1	WELDMENT, FLIP BRIDGE
21	590058	48	ROUND U-BOLT, 5/16 x 3.0
22	590118	20	1/4" 1 1/2 U-BOLT
23	590243	8	SCREW, #10-32 X 1 1/2", STAINLESS
24	590244	10	NYLOCK, #10-32, STAINLESS
25	590272	2	WASHER SAE #10 SS18-8
26	590591	2	SHCS, 10-24 x 3.0, PART THD, SS
27	596101M	12	BOLT, HH 1/4-20 X 3/4 GR5 MAGNI
28	596102M	2	BOLT, HH 1/4-20 X 1 GR5 MAGNI
29	596110M	4	BOLT, HH 1/4-20 X 3 MAGNI
30	596114M	8	BOLT, HH 5/16-18X3/4 GR5 MAGNI
31	596120M	12	BOLT, HH 5/16-18 X 3-1/2 GR5 MAGNI
32	596235M	54	NUT, CENTERLOCK, 1/4-20 MAGNI
33	596236M	116	NUT, CENTERLOCK, 5/16-18 MAGNI
34	596256M	8	WASHER, FLAT 1/4 USS MAGNI
35	596257M	60	WASHER, FLAT 5/16 USS MAGNI
36	632305	1	PRECISION VISION KIT, SPOT 132FT BOOM
37	750112	14	(FT) 1.5IN BLACK HOSE SLEEVE

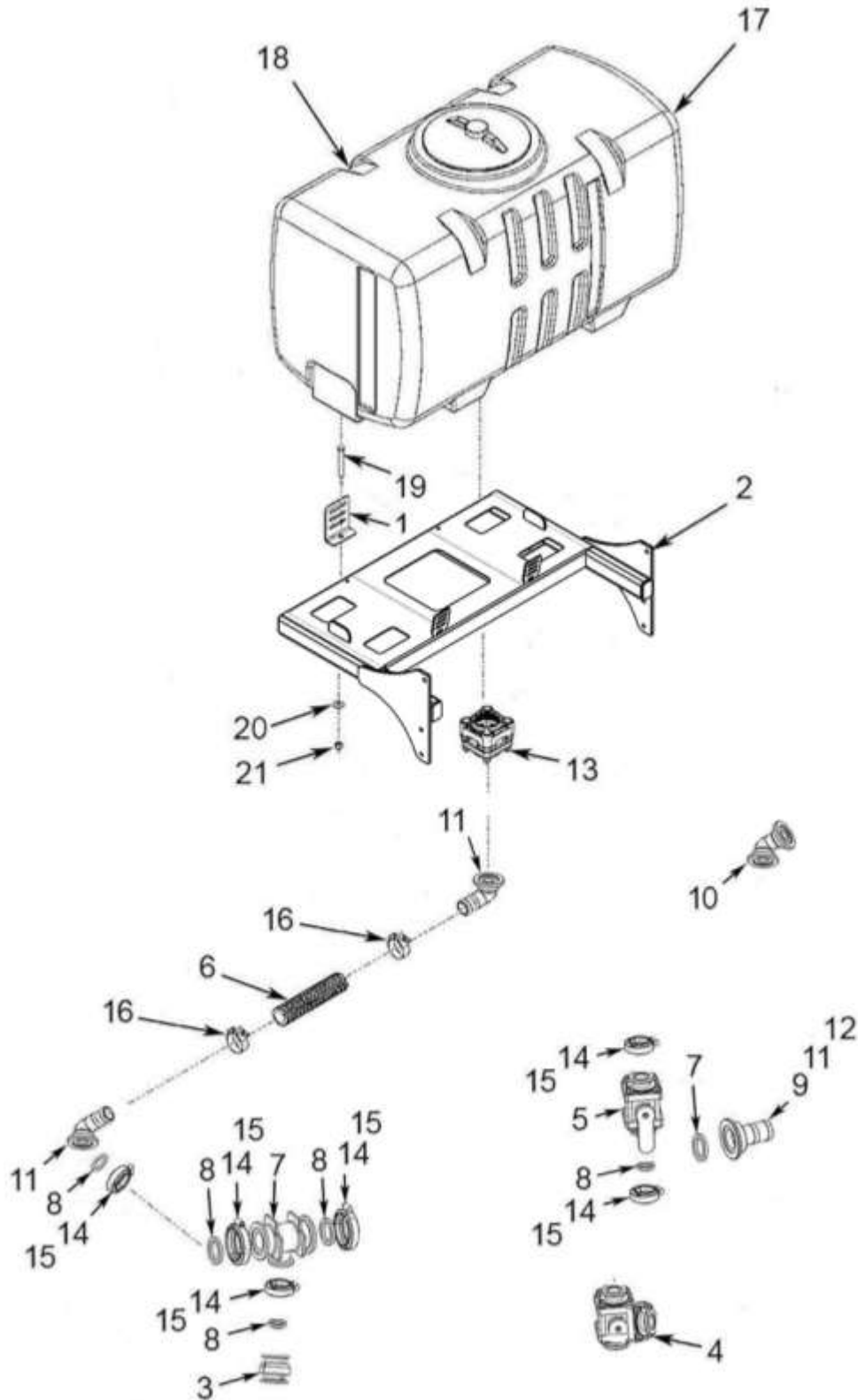
TANK & PUMP

1 Gal. Foamer Tank





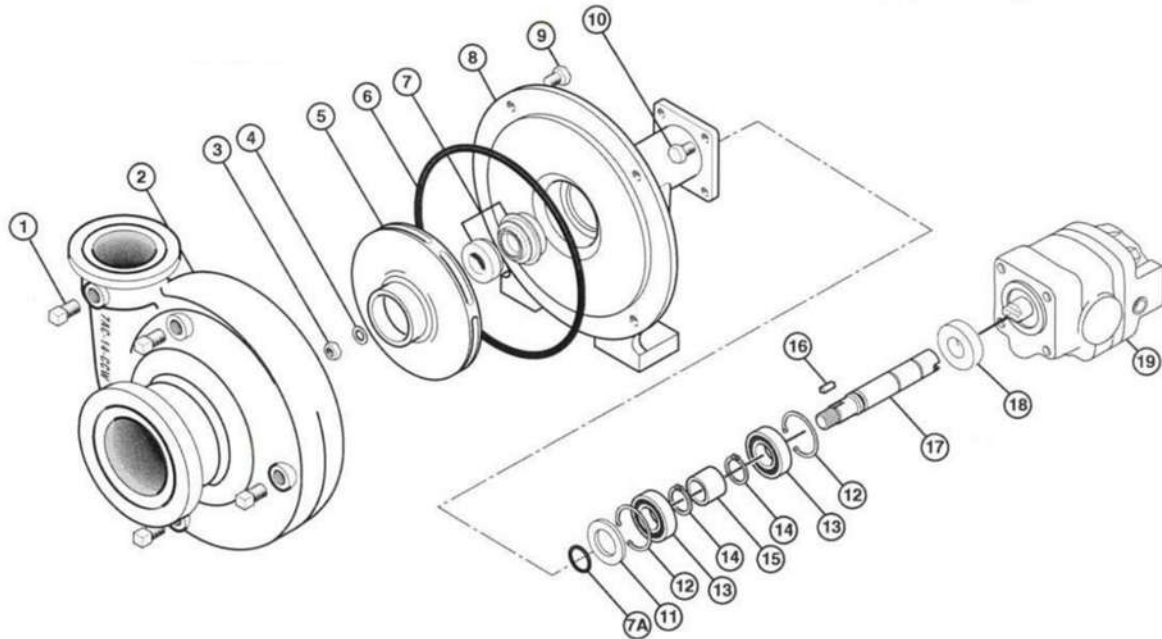
50 Gal. Rinse Tank



Parts List 99RT50973PT: 50 Gal. Rinse Tank

ITEM	PART NO.	QTY.	DESCRIPTION
1	3071	2	BUCKLE, 2", SS
2	16802	1	3PT TRUSS RINSE TANK
3	500002	1	VALVE, 2" MANIFOLD CHECK ASSEMBLY
4	500034	1	VALVE, 2" BOTTOM LOAD FPF
5	500039	1	VALVE, 2" X 2" FLANGE
6	510002	15	HOSE, 1-1/2" FERTILIZER
7	530014	4	1-1/2" EPDM GASKET
8	530019	5	2" EPDM GASKET
9	530079	1	2" MANIFOLD X 1-1/2" HOSE BARB
10	530089	1	2" MANIFOLD COUPLING X 90 DEGREE - SHORT
11	530100	1	2" FP FLANGE X 1-1/2" HOSE BARB
12	530103	2	2" FP FLANGE X 2" HOSE BARB
13	530129	1	1-1/2 X 2" MANIFOLD BOLTED TANK FITTING
14	540001	4	CLAMP, 2" STANDARD WORM SCREW
15	540002	5	CLAMP, 2" FULL WORM SCREW
16	540005	2	CLAMP, 1-1/4" T-BOLT HOSE, 1.6"
17	570034	1	TANK PCO 50 GALLON, YELLOW
18	580004	12	WEBBING, NYLON, 1.75" WIDE
19	596660M	4	BOLT, HH 3/8 X 3" FULL THREAD
20	23160	4	WASHER, FLAT 3/8"
21	596229M	4	NUT, HH NYLOCK 3/8" NC ZP

Pump ACE 205-304



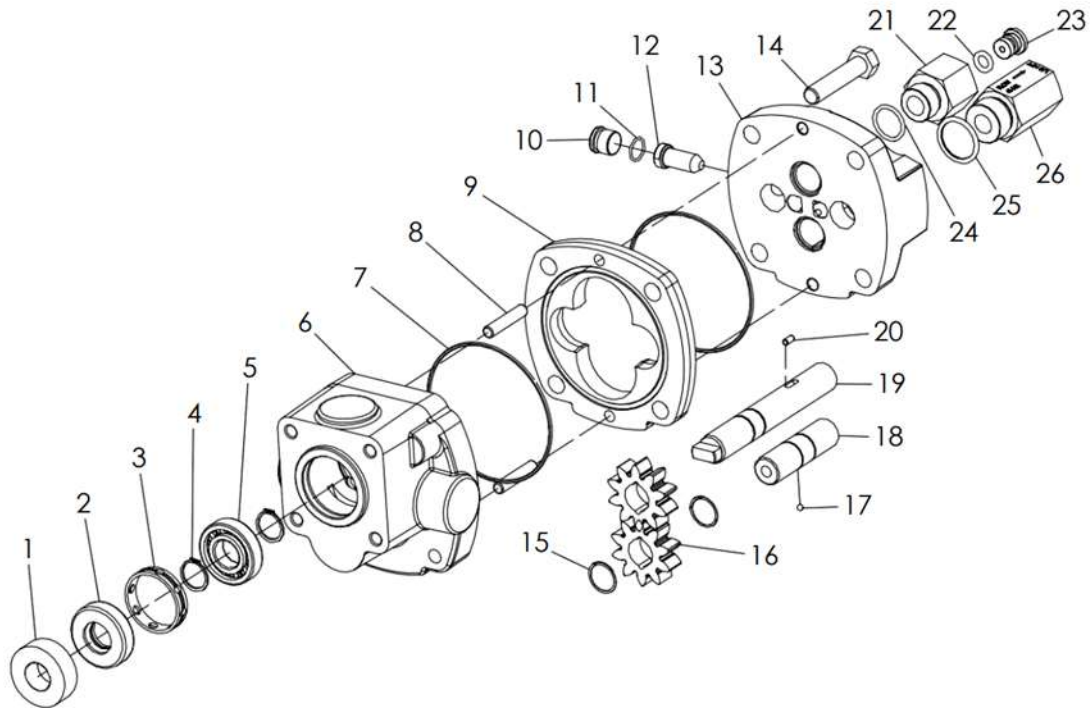
Parts List 550025/550054: Pump ACE 205-304

ITEM	EDP NO.	VENDOR NO.	QTY.	DESCRIPTION
0	-	550025 (550054)	1	PUMP, 205-304 (SS) FLANGED, COMPLETE PUMP
1	41110	BAC-53	4	PIPE PLUG
1	41120	41120	4	PIPE PLUG, STAINLESS STEEL (OPTIONAL)
2	41530	7AC-14-FLG	1	VOLUTE, 300 STANDARD FLANGE X 220 FULL PORT FANGE
3	40391	BAC-23-A	1	NUT, 3/8" NF, CAD PLATED
4	40400	BAC-24-HYD- SS	1	WASHER, 3/8" STAR, STAINLESS STEEL
5	40433	BAC-26-200-CI	1	IMPELLER, WITH EXTENDED KEYWAY, CAST IRON (OPTIONAL)
5	40434	BAC-26-200-P	1	IMPELLER, WITH EXTENDED KEYWAY, THERMOPLASTIC
6 ¹	40005	BAC-4A	1	O-RING, BODY SEAL
7 ¹	40151	BAC-7V	1	SEAL, CARBON/CERAMIC/VITON (INCLUDES 40160 "O" RING)
7 ²	40152	BAC-7SC	1	SEAL, SILICON CARBIDE (INCLUDES 40160 "O" RING) (OPTIONAL)
7A	40160	40160	1	O-RING, SHAFTSEAL

ILLUSTRATED PARTS LIST

ITEM	EDP NO.	VENDOR NO.	QTY.	DESCRIPTION
8	40314	BAC-14-HYD-300A	1	MOUNTING FRAME (FOR -300A SERIES HYDRAULIC MOTOR)
9	40950	40950	4	CAP SCREW, 3/8" NC X 3/4" HEX HEAD
9	40930	40930	4	CAP SCREW, 3/8" NC X 3/4" HEX HEAD, STAINLESS STEEL (OPTIONAL)
10	41330	41330	4	CAP SCREW, 5/16" NC X 3/4" HEX HEAD, MOTOR TO PUMP
11	41130	BAC-54	1	SLINGER
12	40810	BAC-33	2	SNAP RING, INTERNAL, BAC-14 MOUNTING FRAME
13	40870	BAC-37	2	BALL BEARING, SEALED, BAC-6 SHAFT
14	40790	BAC-32	2	SNAP RING, EXTERNAL, BAC-6 SHAFT
15	40795	BAC-32S	1	SPACER FOR BAC-6SHAFT
16	40425	BAC-25	1	KEY, 1/8" X 1/8" X 13/16", EXTENDED KEYWAY
17	40063	BAC-6-HYD-200-SS	1	SHAFT, EXTENDED KEYWAY, TANG, STAINLESS STEEL
18	40162	S300	1	SEAL SUPPORT SPACER FOR 300 SERIES HYD MOTOR
19	41388	BAC-75-HYD-304A	1	HYDRAULIC MOTOR, 11 GPM, 1/2" NPT PORTS
19	41426	BAC-75-HYD-304A-12SAE	1	HYDRAULIC MOTOR, 11 GPM, #12 SAE END PORTS (OPTIONAL)
1	52700	RK-FMC	-	REPAIR KIT FOR FMC SERIES PUMP
2	52706	RK-FMCSC	-	REPAIR KIT FOR FMC SERIES PUMP WITH SILICON CARBIDE SHAFT SEAL
#	41362	RK-BAC-75-HYD-300-L	-	REPAIR KIT FOR 300 SERIES - LMOTOR

Pump ACE 205-304 continued

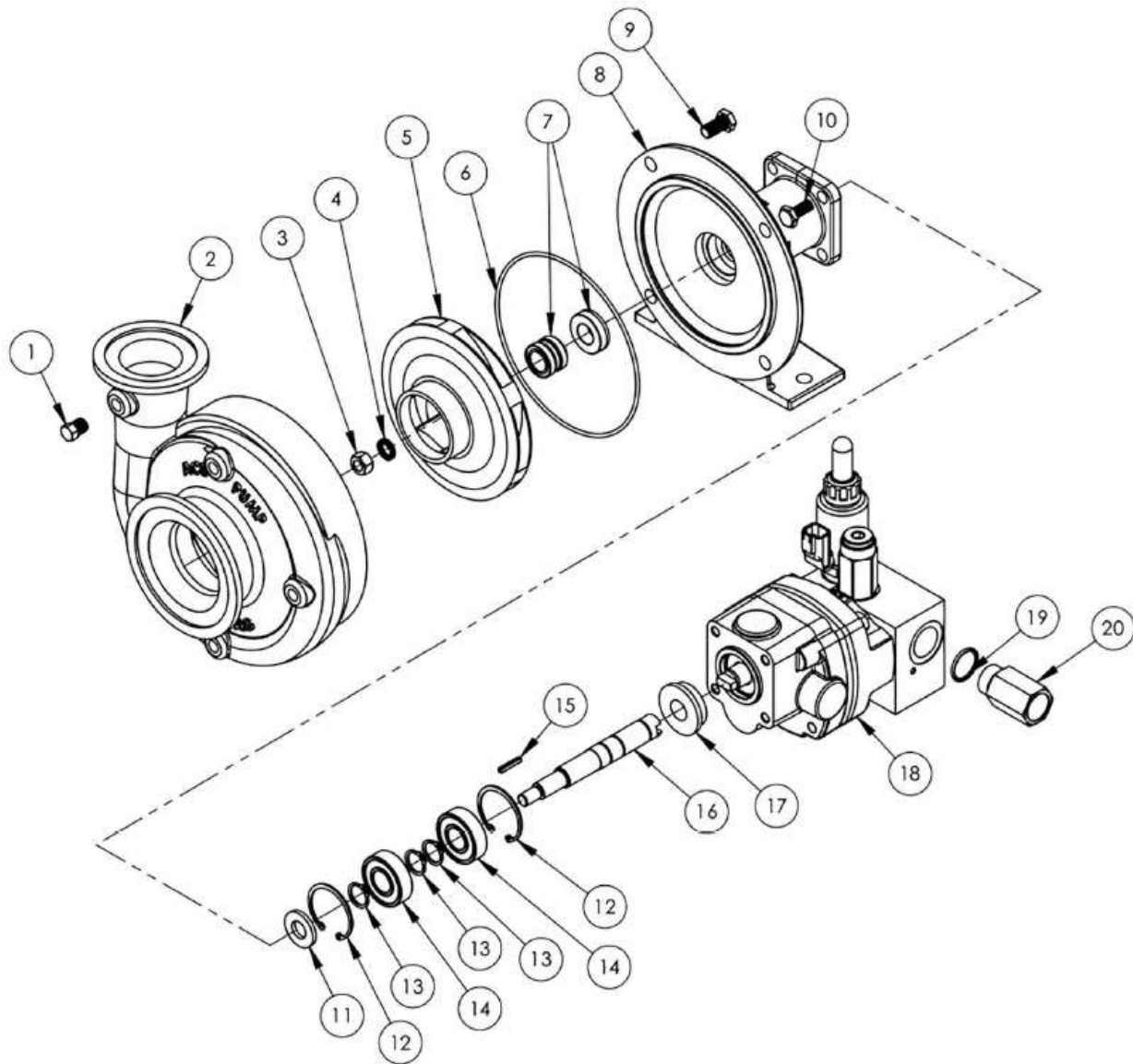


Parts List: Pump ACE 205-304

ITEM	EDP NO.	VENDOR NO.	QTY.	DESCRIPTION
1	41110	BAC-53	4	PIPE PLUG
1	41120	41120	4	PIPE PLUG, STAINLESS STEEL (OPTIONAL)
2	41535	7AC-14-FLG-A	1	VOLUTE, 300 STANDARD FLANGE X 220 FULL PORT FLANGE
3	40393	BAC-23-B-SS	1	NUT, 3/8" NF, STAINLESS STEEL
4	42702	BAC-24-B-SS	1	WASHER, 3/8", STAINLESS STEEL, SELF-LOCKING
5	40434	BAC-26-200-P	1	IMPELLER, WITH EXTENDED KEYWAY, THERMOPLASTIC
5	40433	BAC-26-200-CI	1	IMPELLER, WITH EXTENDED KEYWAY, CAST IRON (OPTIONAL)
5	40436	BAC-26-200-SS	1	IMPELLER, WITH EXTENDED KEYWAY, 316 STAINLESS STEEL (OPTIONAL)
6 ¹	40149	BAC-7SC-205V	1	SEAL, SILICON CARBIDE
7 ¹	40005	BAC-4A	1	O-RING, BODY SEAL
8	40338	BAC-14-205-HYD	1	MOUNTING FRAME FOR 205 PUMP

ITEM	EDP NO.	VENDOR NO.	QTY.	DESCRIPTION
9	40950	40950	4	CAP SCREW, 3/8" NC X 3/4" HEX HEAD
9	40930	40930	4	CAP SCREW, 3/8" NC X 3/4" HEX HEAD, STAINLESS STEEL (OPTIONAL)
10	41330	41330	4	CAP SCREW, 5/16" NC X 3/4" HEX HEAD, MOTOR TO PUMP
11	41130	BAC-54	1	SLINGER
12	40820	BACH-33	2	SNAP RING, INTERNAL, BAC-14-205 MOUNTING FRAME
13	40385	BACH-32-HD	3	SNAP RING, EXTERNAL, BAC-6-205 SHAFT
14	40880	40880	2	BALL BEARING, SEALED, BAC-6-205 SHAFT
15	40068	BAC-6-205-HYD-SS	1	SHAFT, EXTENDED KEYWAY, TANG, STAINLESS STEEL
16	40425	BAC-25	1	KEY, 1/8" X 1/8" X 13/16", EXTENDED KEYWAY
17	40163	S305	1	SEAL SUPPORT SPACER FOR 205 SERIES PUMP
18	41343	BAC-75-HYD-304N	1	HYDRAULIC MOTOR, 11 GPM, EFFECTIVE 5/13
19	41875	41875	1	O-RING, #8 SAE FITTING
20	41445	41445	1	O-RING, #10 SAE FITTING
21	41455	BAC-80-8SAE	1	BODY, RESTRICTOR ORIFICE, #8 SAE X 1/2"NPT
22	41448	41448	1	O-RING, ORIFICE INSERT
23	41447	BAC-79-8	1	ORIFICE INSERT, RESTRICTOR INSERT, 0.125
24	41442	41442	1	REVERSE CHECK ASSEMBLY, #10 SAE X 1/2"NPT
25	41429	LS-304N	1	FLOW LIMITER (OPTIONAL)
1	52705	RK-FMCSC-205		REPAIR KIT FOR FMC-205 PUMP WITH SILICON CARBIDE SHAFT SEAL
#	41362	RK-BAC-75-HYD-300-L	4	REPAIR KIT FOR 300 SERIES HYDRAULIC MOTOR

Pump ACE 205-304 PWM

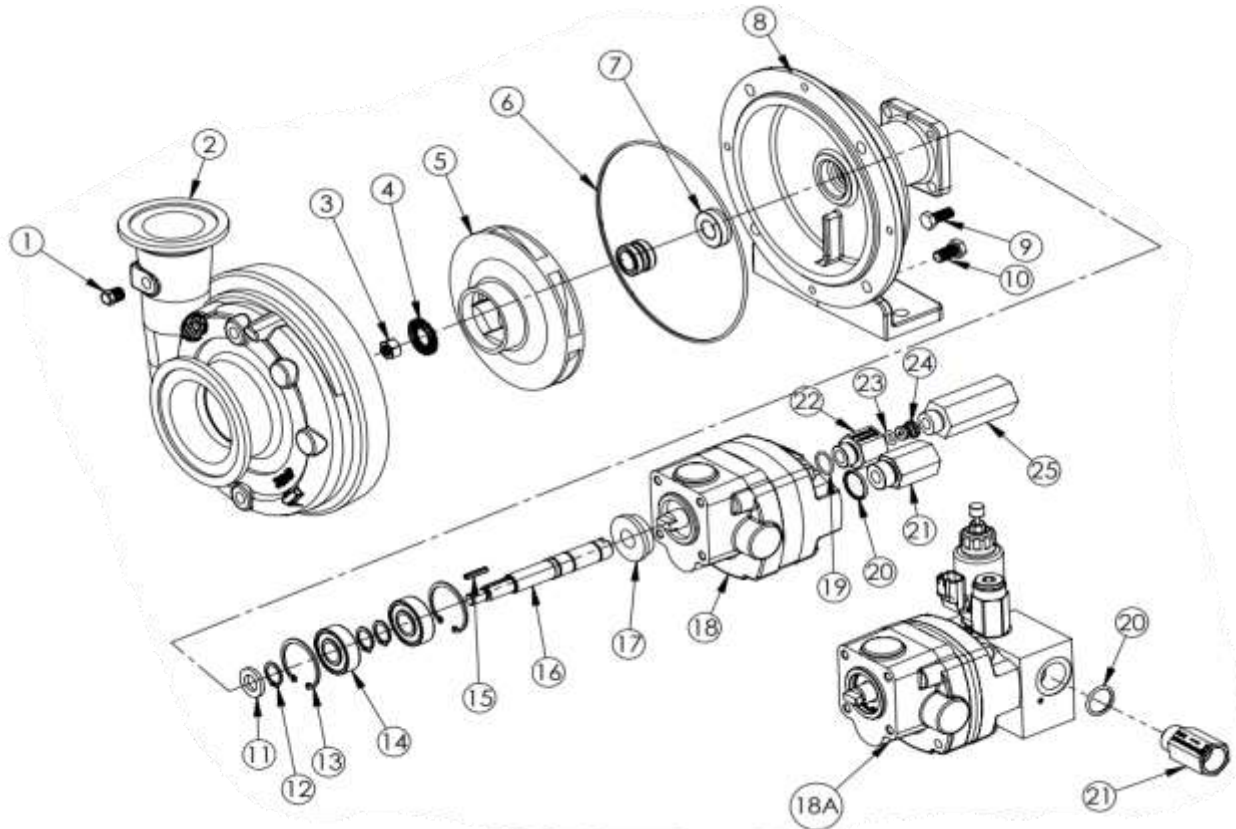


Parts List 550035: Pump ACE 205-304 PWM

ITEM	EDP NO.	VENDOR NO.	QTY.	DESCRIPTION
0		550035	1	PUMP, 205-304 FLANGED, PWM, COMPLETE PUMP
1	41110	BAC-53	4	PIPE PLUG
1	41120	41120	4	PIPE PLUG, STAINLESS STEEL (-FS MODEL) (OPTIONAL)
2	41530	7AC-14-FLG	1	VOLUTE, 300 STANDARD FLANGE X 220 FULL PORT FLANGE, CAST IRON
2	41532	7AC-14-FLG-SS	1	VOLUTE. 300 FLANGE X 220 FLANGE, 316 STAINLESS STEEL (-FS MODEL)
3	40393	BAC-23-B-SS	1	NUT, 3/8" NF, STAINLESS STEEL

ITEM	EDP NO.	VENDOR NO.	QTY.	DESCRIPTION
4	42702	BAC-24-B-SS	1	WASHER, 3/8", STAINLESS STEEL, SELF-LOCKING
5	40434	BAC-26-200-P	1	IMPELLER, THERMOPLASTIC
5	40433	BAC-26-200-CI	1	IMPELLER, CAST IRON (OPTIONAL)
5	40436	BAC-26-200-SS	1	IMPELLER, 316 STAINLESS STEEL (-FS MODEL) (OPTIONAL)
6	40005	BAC-4A	1	O-RING, BODY SEAL
7	40149	BAC-7SC-205V	1	SEAL, SILICON CARBIDE
8	40338	BAC-14-205-HYD	1	MOUNTING FRAME FOR 205 PUMP
8	40346	BAC-14-205-HYD-SS	1	MOUNTING FRAME FOR 205 PUMP, 316 STAINLESS STEEL (-FS MODEL)
9	40950	40950	4	CAP SCREW, 3/8" NC X 3/4" HEX HEAD
9	40930	40930	4	CAP SCREW, 3/8" NC X 3/4" HEX HEAD, STAINLESS STEEL (-FS MODEL)
10	41330	41330	4	CAP SCREW, 5/16" NC X 3/4" HEX HEAD, MOTOR TO PUMP
11	41130	BAC-54	1	SLINGER
12	40820	BACH-33	2	SNAP RING, INTERNAL, BAC-14-205 MOUNTING FRAME
13	40385	BACH-32-HD	3	SNAP RING, EXTERNAL, BAC-6-205 SHAFT
14	40880	40880	2	BALL BEARING, SEALED, BAC-6-205 SHAFT
15	40425	BAC-25	1	KEY, 1/8" X 1/8" X 13/16", EXTENDED KEYWAY
16	40068	BAC-6-205-HYD-SS	1	SHAFT, EXTENDED KEYWAY, TANG, STAINLESS STEEL
17	40163	S305	1	SEAL SUPPORT SPACER FOR 205 SERIES PUMP
18	41348	BAC-75-HYD-304-PWM	1	HYDRAULIC MOTOR, 11 GPM, PWM
19	41445	41445	1	O-RING, #10 SAE FITTING
20	41467	BAC-78-10X10SAE	1	REVERSE CHECK ASSEMBLY, #10 SAE X #10 SAE
NS	52705	RK-FMCSC-205	-	REPAIR KIT FOR FMC-205 PUMP WITH SILICON CARBIDE SHAFT SEAL INCLUDES ITEMS 6 AND 7
NS	41362	RK-BAC-75-HYD-300-L	-	REPAIR KIT FOR 300 SERIES HYDRAULIC MOTOR

Pump ACE 255F-304 & 255F-304 PWM

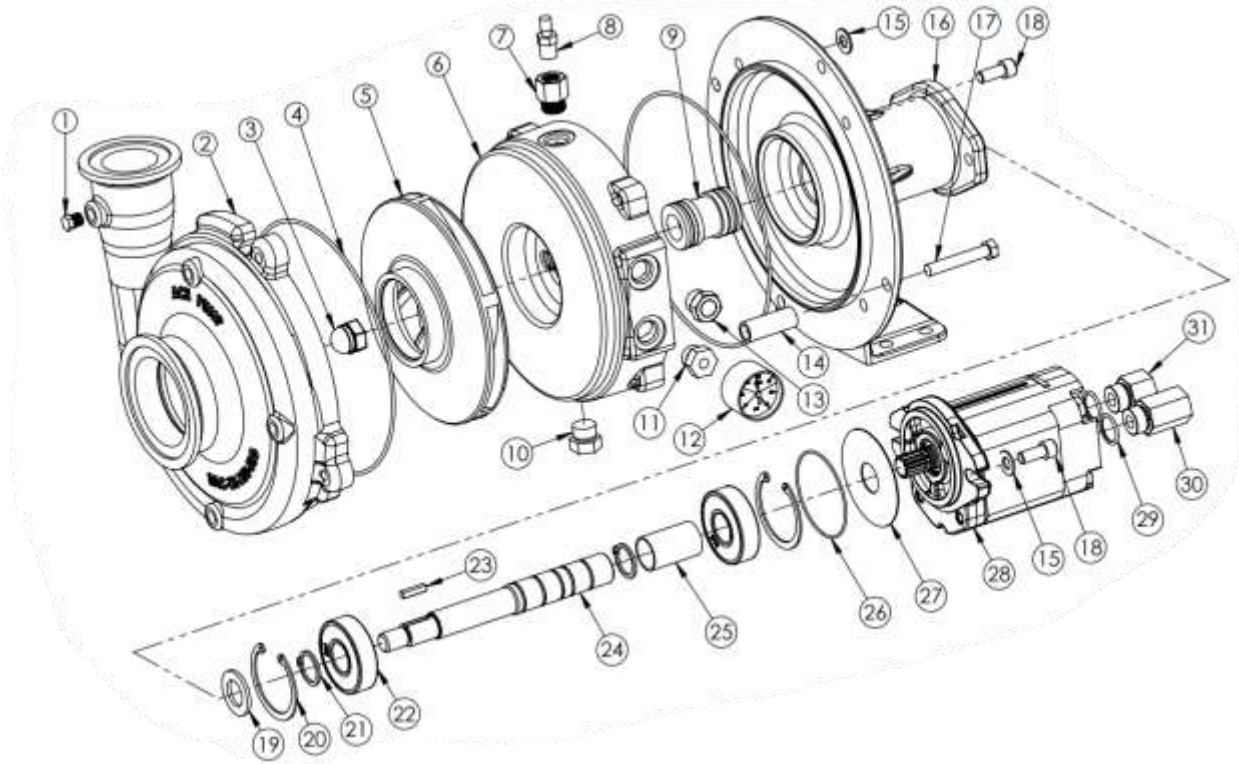


Parts List 550055/550056: Pump ACE 255F-304 & 255F-304 PWM

ITEM	EDP NO.	VENDOR NO.	QTY.	DESCRIPTION
0	-	550055 (550056)	1	PUMP, 255-304 WET SEAL (PWM)
1	41100	BAC-53	4	PIPE PLUG
1	41120	41120	4	PIPE PLUG, STAINLESS STEEL (OPTIONAL)
2	30149	BAC-12-255- FLG	1	VOLUTE, CAST IRON, 300 X 220 FLANGED, E-COATED
3	40393	BAC-23-B-SS	1	NUT, 3/8" NF, SS
4	42702	BAC-24-B-SS	1	WASHER, 3/8" SS, VIBRATION PROOF
5	40434	BAC-26-200-P	1	IMPELLER, THERMOPLASTIC, KEYWAY
5	40433	BAC-26-200- CI	1	IMPELLER, CAST IRON, KEYWAY (OPTIONAL)
5	40436	BAC-26-200- SS	1	IMPELLER, STAINLESS STEEL, KEYWAY (OPTIONAL)
6	40015	BAC-4-150	1	O-RING, BODY SEAL
7	40149	BAC-7SC- 205V	1	SEAL, TYPE 2106 SILICON CARBIDE MECHANICAL SEAL
8	40288	BAC-14-5- HYD	1	MOUNTING FRAME, CAST IRON, E-COATED

ITEM	EDP NO.	VENDOR NO.	QTY.	DESCRIPTION
9	41330	41330	2	CAP SCREW, 5/16" NC X 3/4"
10	40950	40950	4	CAP SCREW, 3/8"NC X 3/4" HEX HEAD
10	40930	40930	4	CAP SCREW, 3/8"NC X 3/4" HEX HEAD, STAINLESS STEEL (OPTIONAL)
11	41130	BAC-54	1	SLINGER
12	40385	BACH-32-HD	3	SNAP RING, EXTERNAL, SHAFT
13	40820	BACH-33	2	SNAP RING, INTERNAL, MOUNTING FRAME
14	40880	40880	2	BEARING
15	40425	BAC-25	1	KEY, 1/8" X 1/8" X 13/16" SS
16	41584	BAC-6-255-HYD-SS	1	SHAFT, .625 DIA, 255, SS
17	40163	S305	1	SEAL SUPPORT SPACER (304N)
18	41343	BAC-75-HYD-304	1	HYDRAULIC MOTOR, 9 GPM (INCLUDES 17,18, 19,20,21,22,23, 24)
18	41312	BAC-75-HYD-306	1	HYDRAULIC MOTOR, 16.5 GPM (INCLUDES 17,18B, 19,20,21,22,23, 24A)
18A	41348	BAC-75-HYD-304-PWM	1	HYDRAULIC MOTOR, INTEGRATED PWM VALVE, 9 GPM (INCLUDES 17,18A,20,21A)
19	41875	41875	1	O-RING, #8 SAE FITTING
20	41445	41445	1	O-RING, #10 SAE FITTING
21	41442	BAC-78-10SAE	1	REVERSE CHECK ASSEMBLY, #10 SAE X 1/2" NPT, W/ O-RING
21A	41467	BAC-78-10X10SAE	1	REVERSE CHECK ASSEMBLY, #10 SAE X #10 SAE, W/ O-RING (OPTIONAL)
22	41455	BAC-80-8SAE	1	BODY, RESTRICTOR ORIFICE, #8 SAE X 1/2" NPT, W/ O-RING
23	41448	41448	1	O-RING, RESTRICTOR
24	41447	BAC-79-8	1	ORIFICE INSERT, RESTRICTOR, W/ O-RING (304) (DO NOT USE WITH 304-PWM)
24A	41449	BAC-79-9	1	ORIFICE INSERT, RESTRICTOR, W/ O-RING (306)
25	41429	LS-304N	1	FLOW LIMITING VALVE, #8 MSAE X 1/2" FNPT (304) (OPTIONAL)
NS	52717	RK-FMCSC-PRO5	-	REPAIR KIT, INCLUDES ITEMS 6 AND 7
*	41362	RK-BAC-75-HYD-300-L	-	REPAIR KIT; 300 SERIES HYD MOTOR WITH HIGH PRESSURE LIP SEAL

Pump ACE 750

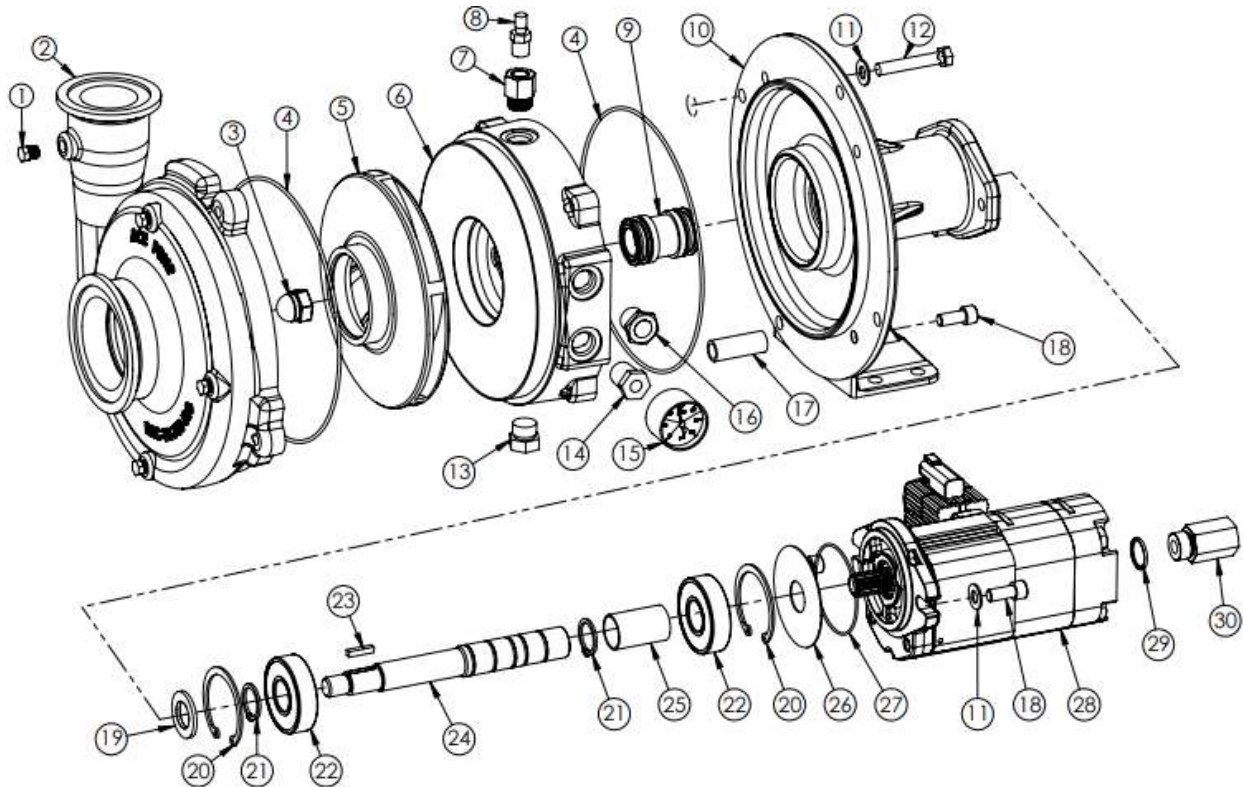


Parts List 550018/550050: Pump ACE 750

ITEM	EDP NO.	VENDOR NO.	QTY.	DESCRIPTION
0	-	550018 (550050)	1	PUMP 750 OASIS ACE (STAINLESS), COMPLETE
1	41110	BAC-53	4	PIPE PLUG, 1/8" NPT
2	30158	BAC-12-750-FLG	1	VOLUTE, 300 X 220 FLANGE, CAST IRON, E-COATED
3	40397	40397	1	ACORN NUT, 5/8"-11 STAINLESS STEEL
4	30009	ACAL-4	2	O-RING, VOLUTE SEAL
5	30182	BAC-26-750-CI	1	IMPELLER, CAST IRON, E-COATED
5	30189	BAC-26-750-SS	1	IMPELLER, 316 STAINLESS STEEL (OPTIONAL)
6	45264	BAC-16-750	1	SEAL PLATE, CAST IRON, E-COATED
7	41107	41107	1	PLUG, #8 SAE X 1/4" FNPT, HEX HEAD, WITH O-RING
8	41316	41316	1	AIR VALVE, 1/4" NPT
9	40147	BAC-7-750V	1	DUAL SEAL ASSEMBLY, TYPE 21, .875 SHAFT
10	41108	41108	1	PLUG, SAE #8, HEX HEAD, WITH O-RING
11	44039	44039	1	BUSHING, #8 SAE X 1/8" FNPT

ITEM	EDP NO.	VENDOR NO.	QTY.	DESCRIPTION
11	44038	44038	1	BUSHING, 1/2" MNPT X 1/8" FNPT (PRIOR TO 11/11)
12	50150	50150	1	PRESSURE GAUGE, 0-60 PSI, 1/8" NPT
13	55851	55851	1	SITE GAUGE, #8 SAE, STEEL
13	55850	55850	1	SITE GAUGE, BRASS 1/2" NPT
14	45267	45267	4	SPACER, SEAL PLATE
15	42701	42701	3	WASHER, 3/8", VOLUTE AND MOTOR MOUNT
16	40333	BAC-14-750-HYD	1	MOUNTING FRAME, CAST IRON, E-COATED
17	40952	40952	4	CAP SCREW, 3/8" NC X 2-1/2", HEX HEAD (VOLUTE)
18	41907	41907	4	CAP SCREW, 3/8" NC X 1", SOCKET HEAD (SEAL PLATE, MOTOR MOUNT)
19	41132	BAC-54-650	1	SLINGER, 7/8" SHAFT
20	41943	41943	2	SNAP RING, INTERNAL, FRAME
21	30174	ACAL-32	2	SNAP RING, EXTERNAL, SHAFT
22	40875	40875	2	BALL BEARING, SEALED
23	41085	41085	1	KEY, .188 X .188 X .875
24	40066	BAC-6-750-HYD-SS-WS	1	SHAFT, 11T FEMALE SPLINE, STAINLESS STEEL
25	40793	BAC-32-750	1	SPACER, SHAFT
26	43419	43419	1	O-RING, FLANGE, M SERIES MOTOR (EFFECTIVE 6/15)
27	43414	43414	1	PAD, ABSORBENT, M SERIES MOTOR (EFFECTIVE 6/15)
28	41355	BAC-75-HYD-M22	1	HYDRAULIC MOTOR, PRESSURE PLATED GEAR TYPE, 18 GPM
28	41356	BAC-75-HYD-M25	1	HYDRAULIC MOTOR, PRESSURE PLATED GEAR TYPE, 20 GPM
29	41445	41445	2	O-RING, #10 SAE FITTING
30	41442	BAC-78-10SAE	1	REVERSE CHECK, #10 SAE MALE X 1/2" NPT FEMALE
31	41446	BAC-80-10SAE	1	BODY, ADAPTER/RESTRICTOR, #10 SAE MALE X 1/2" NPT FEMALE
NS	55032	55032	1.32	BARRIER FLUID, ROYAL PURPLE, QUART
NS	52724	RK-FMC-750	-	REPAIR KIT, INCLUDES ITEMS 4 (2 PCS.), 9, AND 32 (2 QTS.)

Pump ACE 750 PWM

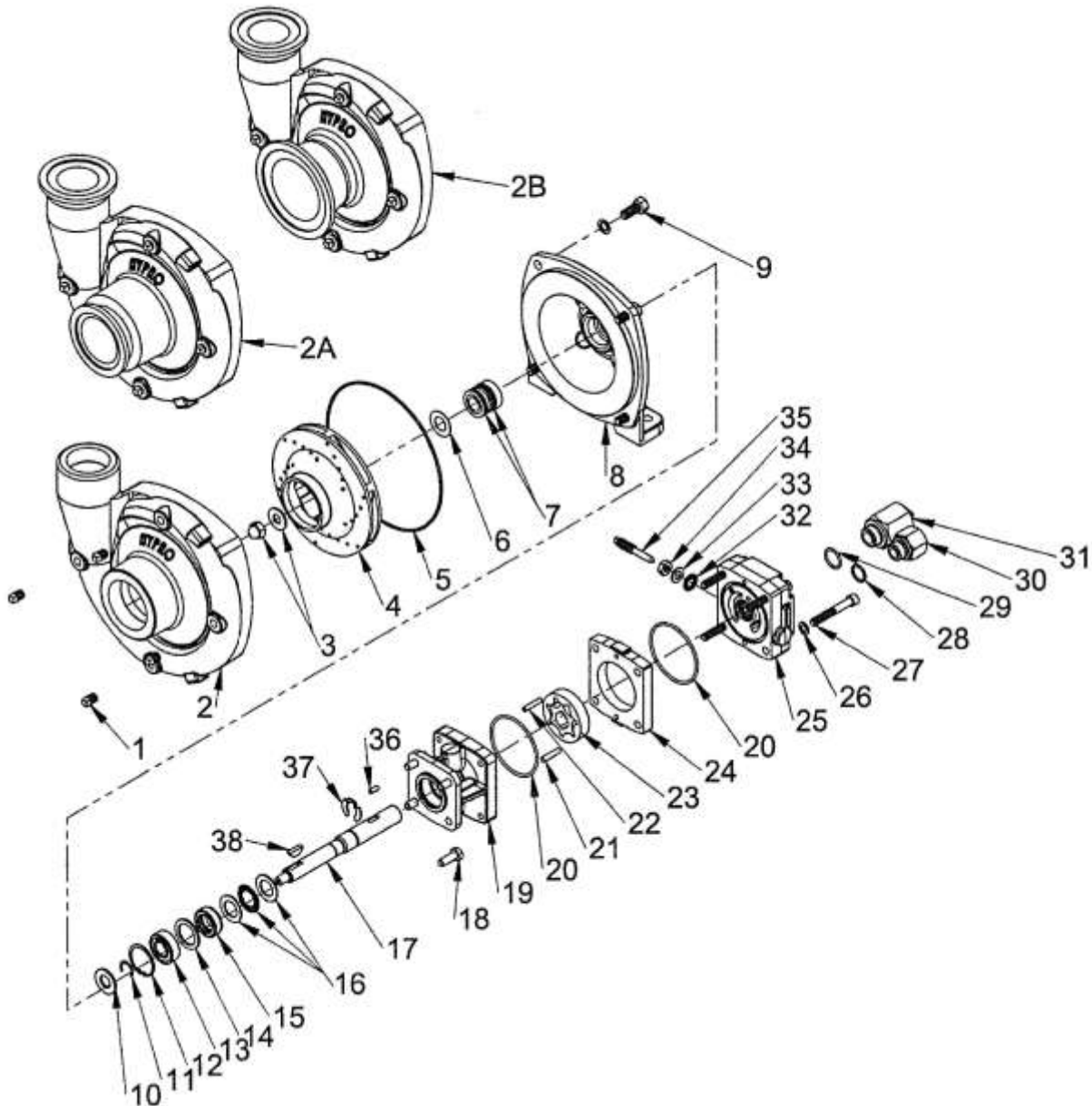


Parts List 550044: Pump ACE 750 PWM

ITEM	EDP NO.	VENDOR NO.	QTY.	DESCRIPTION
0	-	550044	1	PUMP ACE OASIS 750, PWM, COMPLETE
1	41110	BAC-53	4	PIPE PLUG, 1/8" NPT
2	30158	BAC-12-750-FLG	1	VOLUTE, 300 X 220 FLANGE, CAST IRON, E-COATED
3	40397	40397	1	ACORN NUT, 5/8"-11 STAINLESS STEEL
4	30009	ACAL-4	2	O-RING, VOLUTE SEAL
5	30182	BAC-26-750-CI	1	IMPELLER, CAST IRON, E-COATED
5	30189	BAC-26-750-SS	1	IMPELLER, 316 STAINLESS STEEL (OPTIONAL)
6	45264	BAC-16-750	1	SEAL PLATE, CAST IRON, E-COATED
7	41107	41107	1	PLUG, #8 SAE X 1/4" FNPT, HEX HEAD, WITH O-RING
8	41316	41316	1	AIR VALVE, 1/4" NPT
9	40147	BAC-7-750V	1	DUAL SEAL ASSEMBLY
10	40333	BAC-14-750-HYD	1	MOUNTING FRAME, CAST IRON, E-COATED
11	42701	42701	3	WASHER, 3/8", VOLUTE DISCHARGE AND MOTOR MOUNT

ITEM	EDP NO.	VENDOR NO.	QTY.	DESCRIPTION
12	40952	40952	4	CAP SCREW, 3/8" NC X 2-1/2", HEX HEAD (VOLUTE)
13	41108	41108	1	PLUG, SAE #8, HEX HEAD, WITH O-RING
14	44039	44039	1	BUSHING, #8 SAE X 1/8" FNPT
15	50150	50150	1	PRESSURE GAUGE, 0-60 PSI, 1/8" NPT
16	55851	55851	1	SITE GAUGE, #8 SAE, STEEL
17	45267	45267	4	SPACER, SEAL PLATE
18	41907	41907	1	CAP SCREW, 3/8" NC X 1", SOCKET HEAD (SEAL PLATE, MOTOR MOUNT) 6 19 BAC-54-650 41132 SLINGER, 7/8" SHAFT
20	41943	41943	2	SNAP RING, INTERNAL, FRAME
21	30174	ACAL-32	2	SNAP RING, EXTERNAL, SHAFT
22	40875	40875	2	BALL BEARING, SEALED
23	41085	41085	1	KEY, .188 X .188 X .875
24	40066	BAC-6-750-HYD-SS-WS	1	SHAFT, 11T FEMALE SPLINE, STAINLESS STEEL
25	40793	BAC-32-750	1	SPACER, SHAFT
26	43414	43414	1	PAD, ABSORBENT, M SERIES MOTOR
27	43419	43419	1	O-RING, FLANGE, M SERIES MOTOR
28	41336	BAC-75-HYD-M22-PWM	1	HYDRAULIC MOTOR, 18 GPM (65.9 LPM), WITH INTEGRATED VALVE
29	41445	41445	2	O-RING, #10 SAE FITTING
30	41442	BAC-78-10X10SAE	1	REVERSE CHECK, #10 SAE MALE X #10 SAE FEMALE
31	55032	55032	1.32	55032 BARRIER FLUID, QUART 1.32 J RK-FMC-750
NS	52724		-	REPAIR KIT, INCLUDES ITEMS 4 (2 PCS.), 9, AND 31 (2 QTS.)

Pump Hypro 9306



Parts List 550045/550046: Pump Hypro 9306

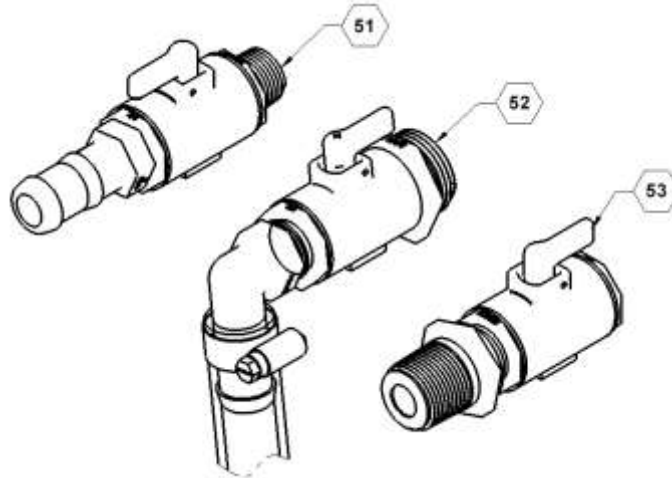
ITEM	PART NO.	QTY.	DESCRIPTION
0	550045 (550046)	1	COMPLETE PUMP ASSEMBLY, CAST (STAINLESS)
1	2406-0016	4	DRAIN/VENT PLUG
2	0154-9200C1	1	PUMP CASING (9306C)
2	0154-9200S1	1	PUMP CASING (9306S)
2A	0157-9200C	1	PUMP CASING (UNIVERSAL FLANGE 2' X 2' CAST)
2A	0157-9200S	1	PUMP CASING (UNIVERSAL FLANGE 2' X 2' SS)

ITEM	PART NO.	QTY.	DESCRIPTION
2B	0158-9200C	1	PUMP CASING (UNIVERSAL FLANGE 3' X 2' CAST)
2B	0158-9200S	1	PUMP CASING (UNIVERSAL FLANGE 3' X 2' SS)
3	3430-0825	1	IMPELLER NUT (9306C and 9306S)
4	0401-9200P2	1	IMPELLER (NYLON STD 9306S)
4	0405-9100P2	1	IMPELLER (POLY OPTIONAL) (STD 9306S)
4	0405-9100P2	1	IMPELLER (GTX OPTIONAL)
5	3430-0332	1	O-RING
6	3430-0332	1	GASKET
7	3430-0332	1	MECHANICAL SEAL (VITON/CERAMIC (STD 9306C)
7	3430-0589	1	MECHANICAL SEAL (SILICON CARBIDE) (STD 9306S)
8	0750-9300C2	1	MOUNTING FLANGE (9306C)
8	0756-9300S	1	MOUNTING FLANGE (9306S)
9	2210-0020	4	HEX HEAD CAP SCREW (9306C)
9	2210-0125	4	HEX HEAD CAP SCREW (9306S)
10	1410-0056	1	SLINGER RING
11	1810-0015	1	SNAP RING
12	1820-0013	1	RETAINING RING
13	3430-0881	1	BALL BEARING
14	1410-0154	1	SPACER
15	3430-0881	1	LIP SEAL
16	2029-0014	1	THRUST BEARING ASSEMBLY
17	3430-0852	1	SHAFT (HM1C/HM5C)
17	3430-0855	1	SHAFT (HM3C)
18	2210-0005	1	HEX HEAD CAP SCREW
19	0150-2540C	1	MOTOR BODY (INCLUDES NEEDLE BEARING)
19	0150-2542C	1	MOTOR BODY CASE DRAIN SAE-4 (INCLUDES NEEDLE BEARING)
20	3430-0881	1	O-RING
21	1600-0095	1	DOWEL PIN (HMIC/HM5C)
21	1600-0096	1	DOWEL PIN (HMIC/HM3C)
22	1600-0084	1	DOWEL PIN (HMIC/HM5C)
22	1600-0085	1	DOWEL PIN (HMIC/HM3C)
23	3900-0022	1	GEROTOR (HM1C)
23	3900-0048	1	GEROTOR (HM3C)
23	3900-0048	1	GEROTOR (HM5C)
24	0720-2603	1	GEROTOR HOUSING (HM1C MODELS) 1/2" WIDE
24	0720-2606	1	GEROTOR HOUSING (HM3C MODELS) 1" WIDE

ITEM	PART NO.	QTY.	DESCRIPTION
24	0720-2604	1	GEROTOR HOUSING (HM5C MODELS) 5/8" WIDE
25	0254-2500C2	1	MOTOR END PLATE (INCLUDES NEEDLE BEARING)
25	0254-2500C3	1	MOTOR END PLATE, -8, -10 SAE, NO BYPASS (INCLUDES NEEDLE BEARING)
26	2270-0039	4	WASHER
27	2220-0021	4	CAP SCREW (HM1C MODELS)
27	2220-0044	4	CAP SCREW (HM3C MODELS)
27	2220-0032	4	CAP SCREW (HM5C MODELS)
28	3430-0881	1	O-RING
29	3430-0881	1	O-RING
30	3360-0021A	1	PRESSURE PORT ADAPTER (INCLUDES O-RING)
31	3320-0051A	1	TANK PORT ADAPTER (INCLUDES O-RING)
32	3430-0881	1	GASKET
33	3430-0881	1	WASHER
34	2250-0038	1	LOCK NUT
35	3220-0029	1	BYPASS ADJUSTING SCREW
36	1610-0031	1	GEROTOR KEY (HM1C/HM5C)
36	1610-0055	1	GEROTOR KEY (HM3C)
37	1810-0026	1	SNAP RING
38	1610-0012	1	WOODRUFF KEY (9306C)
38	04432-SHW	1	WOODRUFF KEY (9306S)
REF	3430-0589	1	SILICON CARBIDE SEAL KIT (CONTAINS: ITEM # 7 & 5)
REF	3430-0332	1	REPAIR PARTS KIT (CONTAINS: ITEM 7, 5 AND 6)
REF	3430-0881	1	PARTS KIT (CONTAINS: ITEM 13, 15, 32, 33, 20, 28 & 29)
REF	2540-0806C	1	HYDRAULIC MOTOR (HM1C)
REF	2540-1606C	1	HYDRAULIC MOTOR (HM3C)
REF	2540-1006C	1	HYDRAULIC MOTOR (HM5C)

PRODUCT PLUMBING

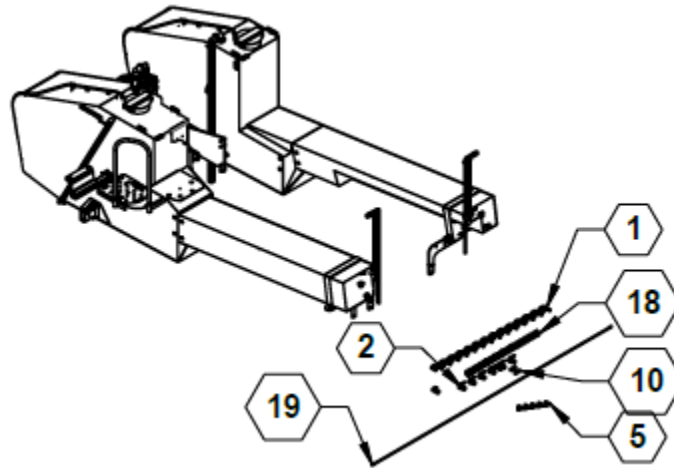
Boom Plumbing Cleanout options



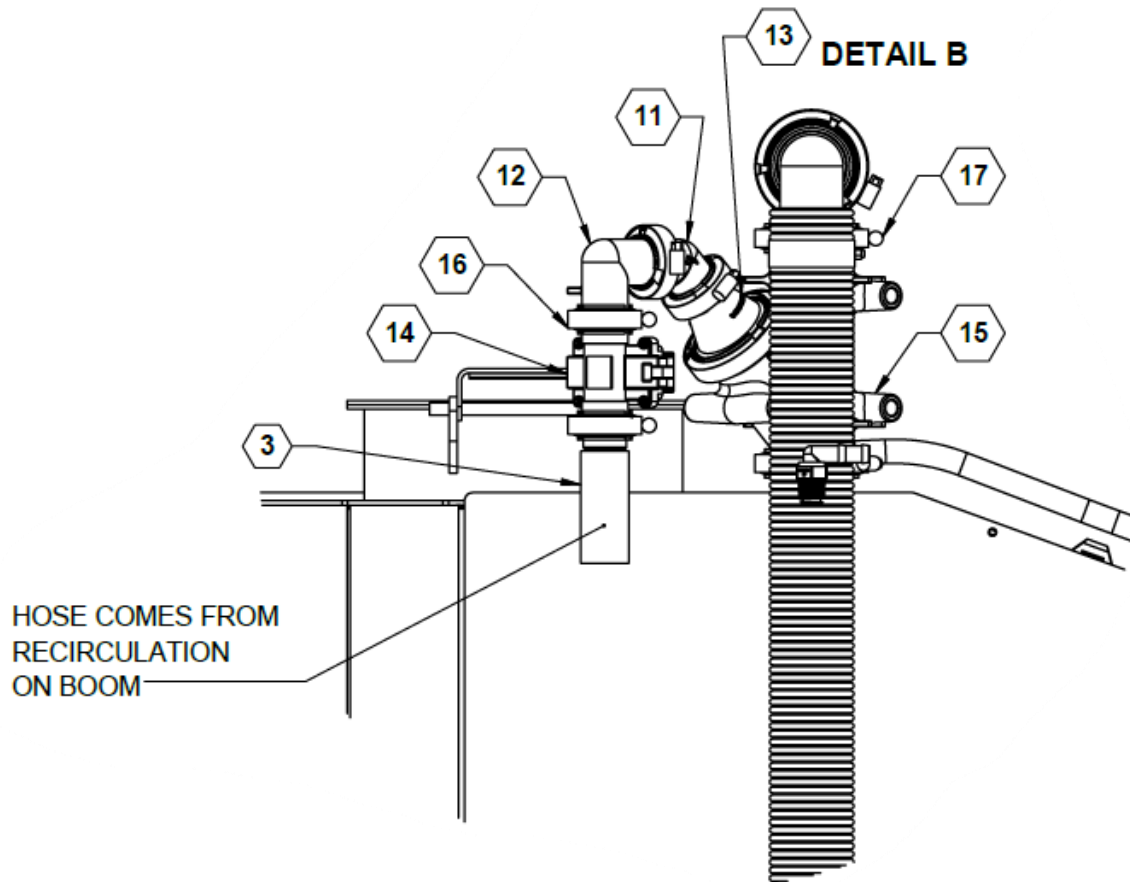
Parts List: Boom Plumbing Cleanout options

ITEM	PART NO.	QTY.	DESCRIPTION
51	90SASC1	AR	ASSEMBLY, STRAINER DRAIN 1"
52	90SASC2	AR	ASSEMBLY, STRAINER DRAIN 2"
53	90SASC3	AR	ASSEMBLY, STRAINER DRAIN 3"

Capstan Boom Recirculation Option for Fast Track Tanks



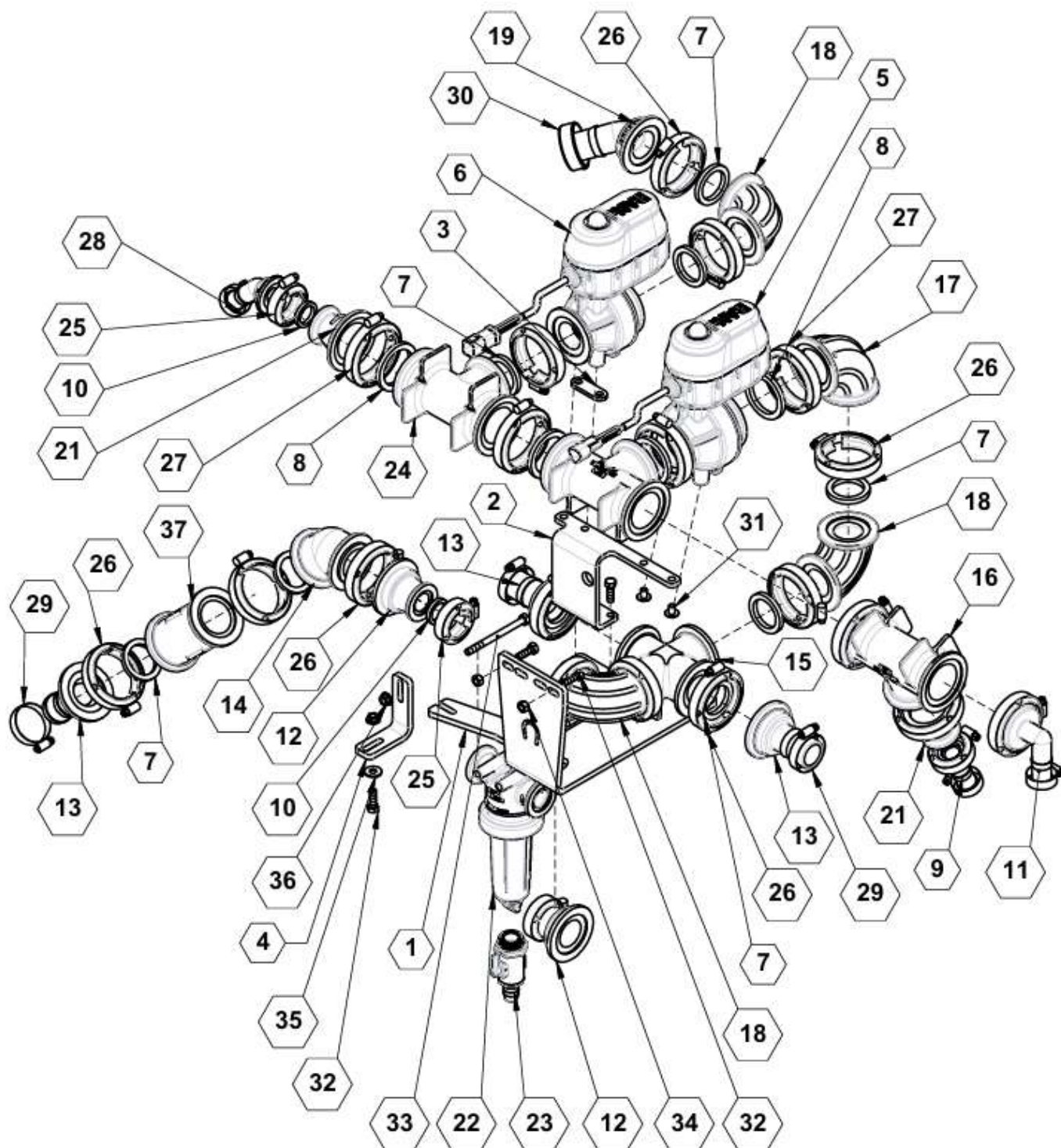
ADD RECIRCULATION FITTINGS
ON TO THE LEFT TANK OVERFLOW

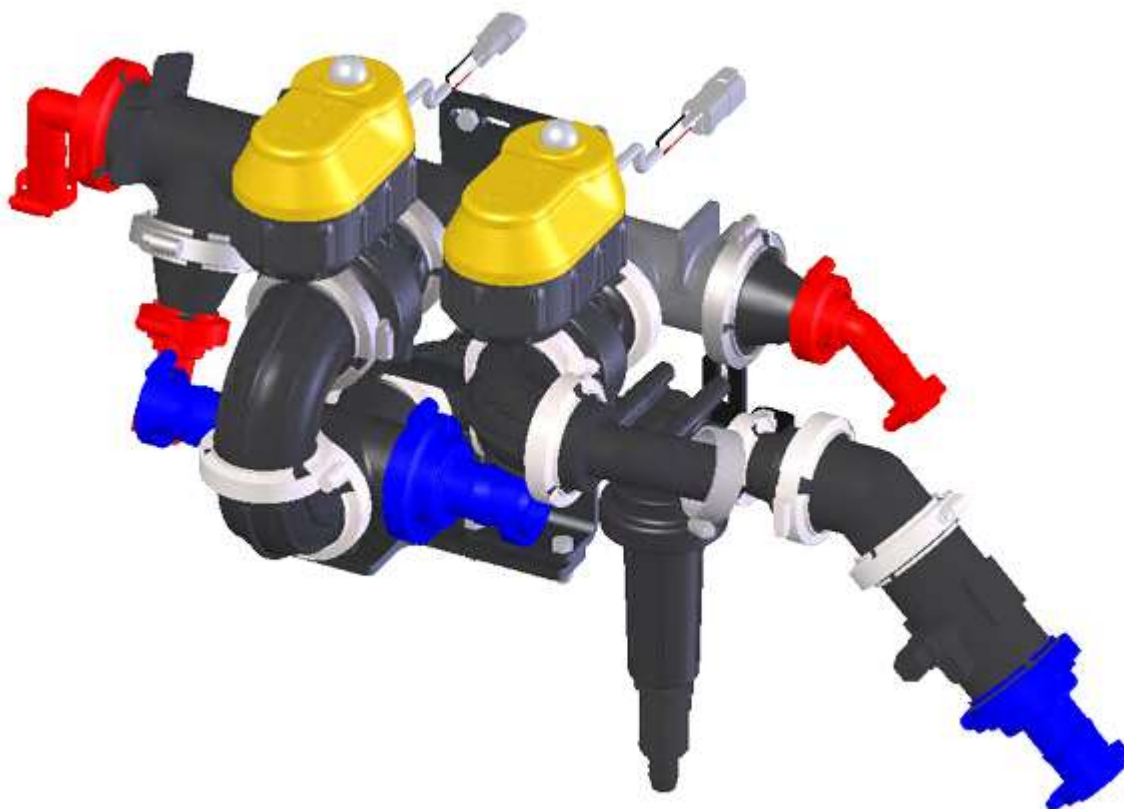


Parts List 36270: Capstan Boom Recirculation Option for Fast Track Tanks

ITEM	PART NO.	QTY.	DESCRIPTION
1	90SAU	14	SUB ASSY U-FITTING
2	500043	6	VALVE, 3/4" UNION
3	510016	170	(FT) HOSE, 1.00" EPDM
4	530019	2	GASKET, 2.00 EPDM
5	530036	5	ELBOW, .75 MPT X 1.00 HB, 90
6	530066	1	FITTING, 1.00 MANIFOLD X 1.00 HB
7	530068	4	GASKET, 1.00 EPDM
8	530156	2	TEE, 3/4" POLY PIPE
9	530181	4	TEE, .75 MPT X 1.00 HB X 1.00 HB
10	530203	2	FITTING, .750 MNPT X 1.00 HB, POLY
11	530324	1	1" MANIFOLD CPLNG-45°
12	530362	1	Coupling 90° 1" Flanged
13	530447	1	MANIFOLD, 2 IN FP X 1 IN COUPLING
14	530530	1	ELECTRONIC MANIFOLD VALVE
	500084		(2025 & LATER) VALVE, 2-WAY, 344
15	530532	1	FITTING, 2" FULL PORT 45° Y FLANGE
16	540000	4	CLAMP, WORM SCREW, 1.00
17	540002	2	CLAMP, FP WORM SCREW, 2.00
18	540014	44	HOSE CLAMP, SS 1.00 #16
19	632205	1	3 PIN DEUTSCH EXTENSION 12"

Center Section Recirculation Valves



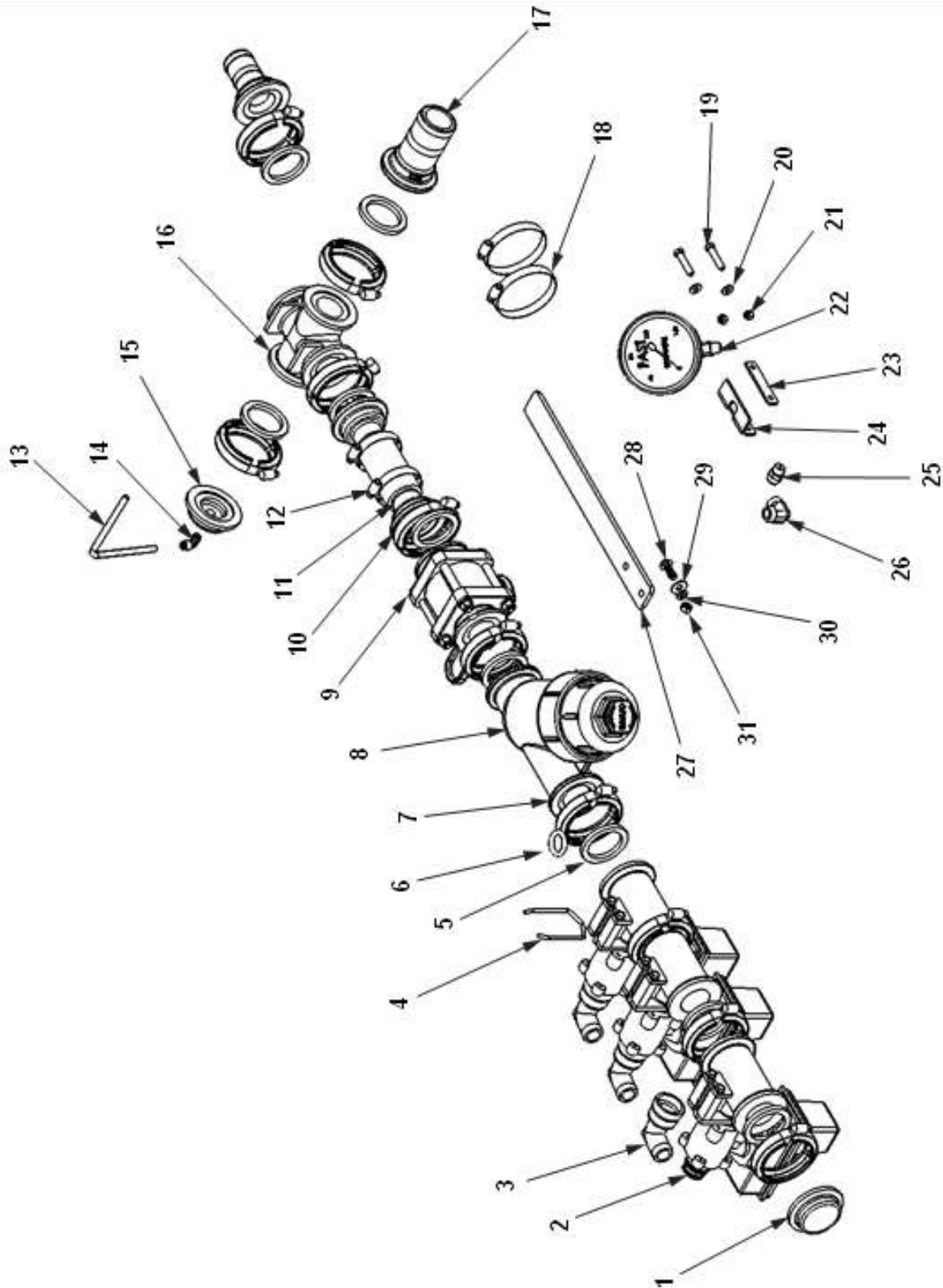


Parts List 23380: Center Section Recirculation Valves

ITEM	PART NO.	QTY.	DESCRIPTION
1	23379	1	PLATE, RECOVERY NODE MOUNT
2	38338	1	PLATE, VALVE STANDOFF
3	38599	1	PLATE, FEEDBACK VALVE SPACER
4	39208	1	PLATE, FILTER BRACKET
5	500086	1	VALVE, SHUTOFF, EVX220, DT04-3P
6	500088	1	VALVE, SHUTOFF, EVX200F3, RECOVERY
7	530014	13	GASKET, 1.500 EPDM
8	530019	6	GASKET, 2.00 EPDM
9	530066	1	FITTING, 1.00 MANIFOLD X 1.00 HB
10	530068	4	GASKET, 1.00 EPDM
11	530073	1	MANIFOLD, 2" FLANGE X 1" HB 90°
12	530074	2	FLANGE, REDUCER MANIFOLD 2" X 1"
13	530079	3	MANIFOLD FLANGE, 2" X 1-1/2" HB
14	530087	1	FLANGE COUPLER, 2" X 45°
15	530090	1	CROSS, MANIFOLD 2.00
16	530110	2	MANIFOLD TEE, 2"

ITEM	PART NO.	QTY.	DESCRIPTION
17	530388	1	MANIFOLD SWEEP, 2" FP X 2" STD
18	530393	3	MANIFOLD SWEEP, 2" STD X 2" STD 90°
19	530423	1	2" MANIFOLD X 1-1/2" HOSE BARB X 45
20	530426	1	ELBOW 45, 1.00 FLANGE X 1.00 HB
21	530447	2	MANIFOLD, 2 IN FP X 1 IN COUPLING
22	530474	1	STRAINER, TEE, 1.00 MANIFOLD-80 MESH
23	530517	1	MICRO VALVE, 3/4" HB X 1" MPT
24	530564	1	FITTING, TEE M220X220X200
25	540000	4	CLAMP, WORM SCREW, 1.00
26	540001	13	CLAMP, 2.00 STD WORM SCREW
27	540002	6	CLAMP, FP WORM SCREW, 2.00
28	540014	3	HOSE CLAMP, SS 1.00 #16
29	540016	3	CLAMP, SS 1.500 #24
30	540079	1	CLAMP, HOSE, PRESSURE SEAL HD, 1.62-2.12"
31	590361	4	BHCS M8 X 1.25 X 12MM
32	596115M	5	BOLT, HH 5/16-18 X 1 GR5 MAGNI
33	596121M	1	BOLT, HEX 5/16 X 4-1/2" GR5 MAGNI
34	596236M	4	NUT, CENTERLOCK, 5/16-18 MAGNI
35	596257M	1	WASHER, FLAT 5/16 USS MAGNI
36	596768M	2	NUT, HEX FLANGE 5/16-18 MAGNI
37	631804	1	FLOW METER, 60P

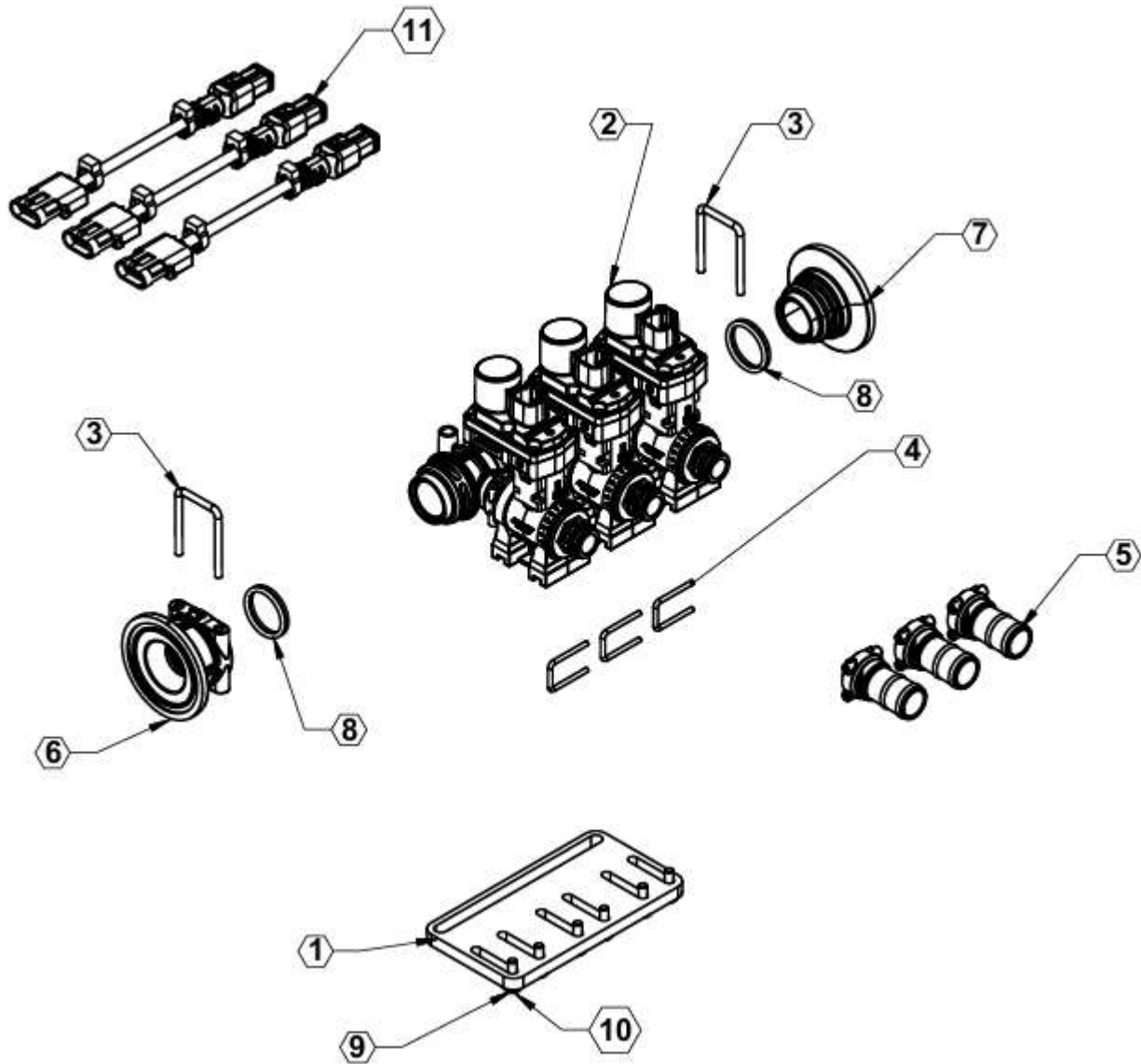
Boom Shutoff, Gauge Plumbing



Parts List: Boom Shutoff, Gauge Plumbing (*FOR 3 BALL VALVES)

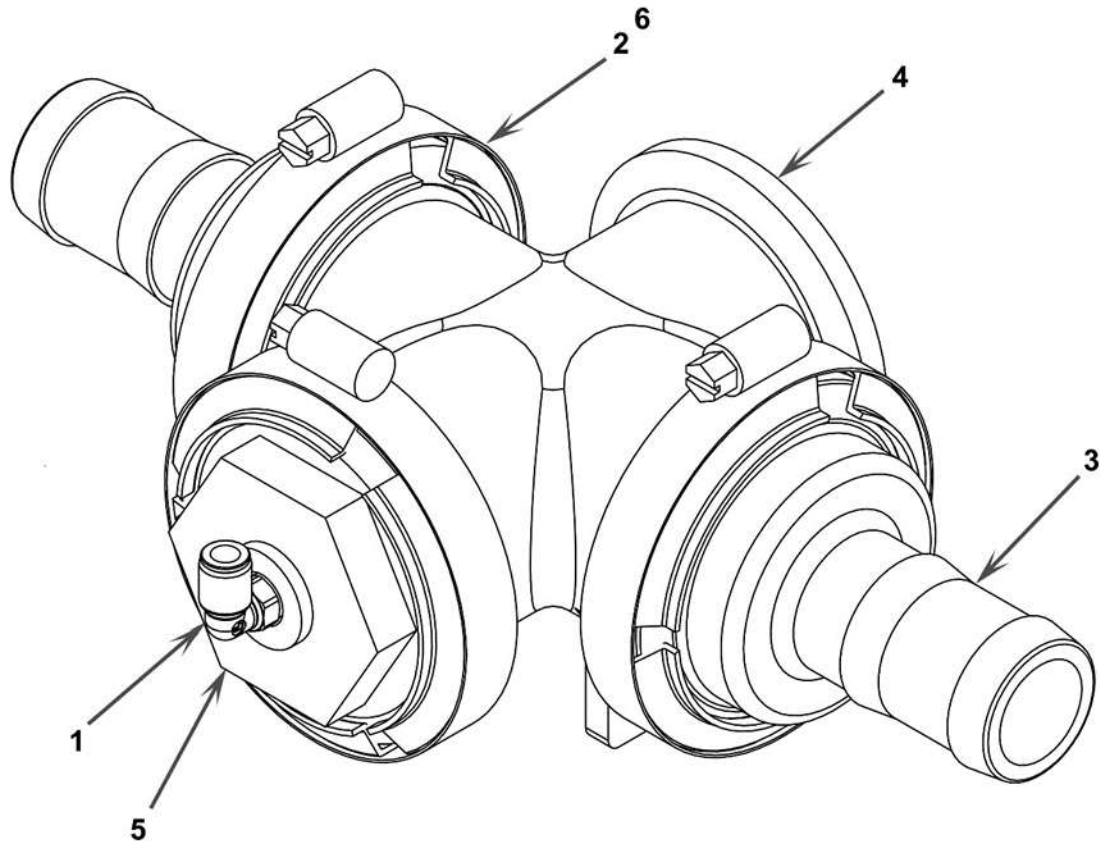
ITEM	VENDOR NO.	PART NO.	QTY.	DESCRIPTION
1	BJ-M200PLG	530093	1	MANIFOLD PLUG2"
2		520027	3*	VALVE 450BEC MANIFOLD (NARROW) (NON-FLOWBACK)
	TT-56608-11-450BEC	500028	3*	VALVE 450BEC MANIFOLD (WIDE) (NON-FLOWBACK)
		500085	1	KZ SECTION VALVE, BANK OF 4
3	TT-45529-90X1	530190	3*	90° QUICK CONNECT HOSE BARB
4	TT-CP37166-1-302SS	530193	3*	CLIP
5	BJ-150G	530019	10*	GASKET2"
6	TT-CP7717-3-912-VI	530198	3*	O-RING VITON
7	BJ-FC200	540002	10*	CLAMP2"
8	BJ-MLS200	530124	1	MANIFOLD FILTER2"
NS	BJ-LS250			FILTER 50 MESH (RED) (INCL. IN 530124)
9	BJ-MV200CF	500039	1	MANIFOLD VALVE 2" STD.FLOW
10	BJ-M200150BRB	530079	4	MANIFOLD1-1/ 2" HOSEBARB
11	BS-1-1/2BH200	510014	AR	HOSE 1-1/2"EDPM
12	BR-64024H	540016	4	CLAMP STAINLESS 1-1/4IN
13	SS-2T200403BK	510023	AR	HOSE POLY BLACK 1/4"
14	AP-44103211	530004	1	ELBOW, MALE
15	BJ-M200PLG025	530094	1	MANIFOLD PLUG .25 PORT
16	BJ-M200CR	530090	1	MANIFOLD CROSS 2"
17	BJ-M200BRB	530082	1	MANIFOLD 2" HOSEBARB
18	BR-64044H	540018	2	HOSE CLAMP (CLAMPS 16 TO 27)
19		596103M	2	BOLT HH 1/4 X 1-1/2" GR5 MAGNI
20		596256M	2	WASHER FLAT 1/4" MAGNI
21		596235M		NUT HH CENTERLOCK 1/4" MAGNI
22	4154-GXX-160	790020	1	PRESSURE GUAGE 0-160PSI
23		11786	1	GUAGE- STRAP
24		11758	1	GUAGE BRACKET
25	AP-44103206	530001	1	Q-LOCK ADAPTER 1/4" MPT X 1/4"HOSE
26	PA-5504-04-04-SS	610006	1	ELBOW 1/4" NPTSS
27		16682	1	MOUNT, CROSS (ITEM 16)
28		596582M	2	BOLT, CARRIAGE 5/16 X 1 MAGNI
29		596257M	2	WASHER, 5/16 FLAT MAGNI
30		596249M	2	WASHER, LOCK 5/16 MAGNI
31		596236M	2	NUT, CENTERLOCK 5/16 MAGNI

Section Valve Bank – KZ Co



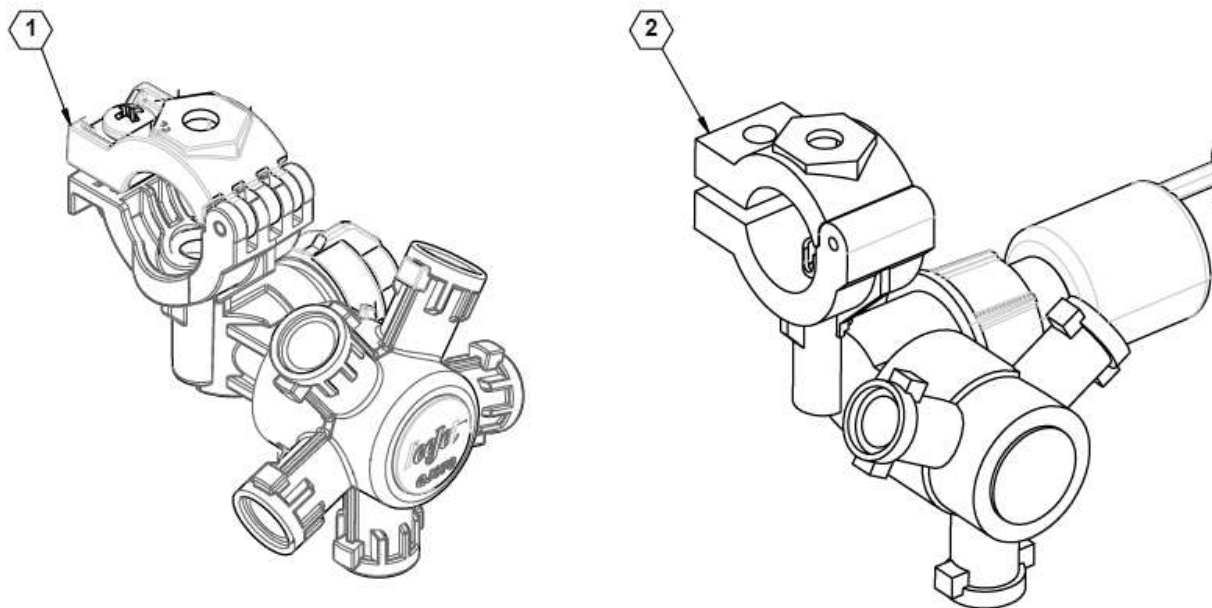
Parts List 39666 / 39667: Section Valve Bank – KZ Co

ITEM	PART NO.	QTY.	DESCRIPTION
1	37966	AR	PLATE, ADAPTER, 2 SECTION EH6 VALVE
	37967		PLATE, ADAPTER, 3 SECTION EH6 VALVE
2	500085	AR	SECTION VALVE BANK, (4 ea.)
3	530580	AR	3/16" HAIRPIN RETAINER, KZ QF FITTINGS
4	530581	AR	1/8" HAIRPIN RETAINER, KZ QD FITTINGS
5	530584	AR	FITTING, TX2 3/4" BARB STR
	530582		FITTING, TX2 3/4" BARB 90
	530585		FITTING, TX2 1" BARB STR
	530583		FITTING, TX2 1" BARB 90
6	530588	AR	FITTING, FEMALE QF X M200
7	530591	AR	FITTING, MALE QF X M200
8	530592	AR	GASKET, QF EPDM
9	596256M	AR	WASHER, FLAT 1/4 USS MAGNI
10	596492M	AR	BOLT, HH, M6 X 20MM, 8.8, MAGNI
11	632317	AR	ADAPTER CABLE, 26" DT06-4 X 3-PIN FEMALE WEATHERPACK

Cross Assembly**Parts List 90SACROSS/TRUSS: Cross Assembly**

ITEM	PART NO.	QTY.	DESCRIPTION
1	530004	1	FITTING, ELBOW, .250 QC X .250 MST, 90D
2	530014	3	GASKET, 1.500 EPDM
3	530076	2	MANIFOLD, 2" X 1-1/4" BARB
4	530090	1	CROSS, MANIFOLD 2.00
5	530094	1	PLUG, MANIFOLD 2.00 W/ HOLE
6	540001	3	CLAMP, 2.00 STD WORM SCREW

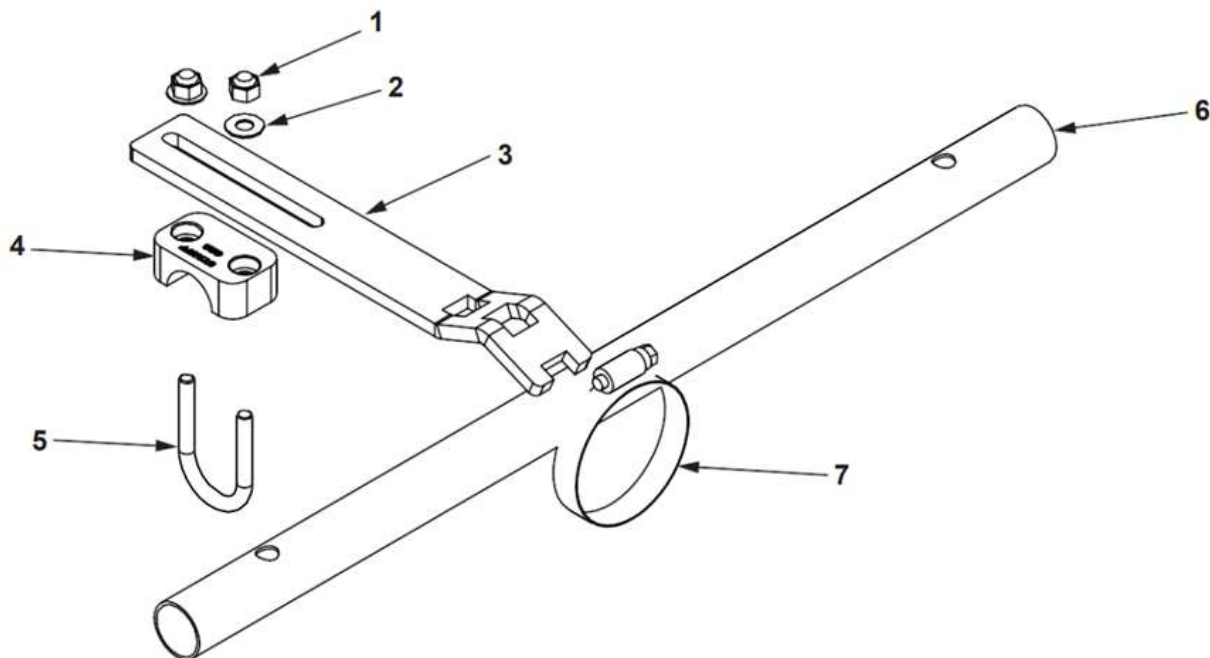
Wet Boom Quick TeeJet Nozzle Body



Parts List: Wet Boom Quick TeeJet Nozzle Body

ITEM	PART NO.	QTY.	DESCRIPTION
1	520085	AR	NOZZLE BODY, QUINTUPLE 25mm, QJ375
2	520084	AR	NOZZLE BODY, TRIPLE 25mm, QJ373 RH
NS	520102	AR	NOZZLE BODY, TRIPLE 25mm, QJ373 LH

Wet Boom & Brackets



Parts List: Wet Boom & Brackets

ITEM	VENDOR NO.	PART NO.	DESCRIPTION
1		596227M	NUT 1/4" NYLOCK MAGNI
2		596256M	WASHER 1/4" MAGNI
3		16271	DELIVERY TUBE SUPPORT
4		540029	TUBE CLAMP BASE
5	ZM1473140	590048	U-BOLT STAINLESS STEEL
6		14301	TUBE, 6 PORT 15 INCH SPACING + FENCELINE VALVE
		14302	TUBE, 2 PORT 15 INCH SPACING
		14303	TUBE, 3 PORT 15 INCH SPACING
		14304	TUBE, 4 PORT 15 INCH SPACING
		14305	TUBE, 5 PORT 15 INCH SPACING
		14306	TUBE, 6 PORT 15 INCH SPACING
		14307	TUBE, 7 PORT 15 INCH SPACING
		14308	TUBE, 8 PORT 15 INCH SPACING
		14310	TUBE, 10 PORT 15 INCH SPACING
		14311	TUBE, 7 PORT 20 INCH SPACING + FENCELINE VALVE
		14312	TUBE, 2 PORT 20 INCH SPACING
		14313	TUBE, 3 PORT 20 INCH SPACING

ITEM	VENDOR NO.	PART NO.	DESCRIPTION
		14314	TUBE, 4 PORT 20 INCH SPACING
		14315	TUBE, 5 PORT 20 INCH SPACING
		14316	TUBE, 6 PORT 20 INCH SPACING
		14317	TUBE, 7 PORT 20 INCH SPACING
		14318	TUBE, 8 PORT 20 INCH SPACING
		14319	TUBE, 9 PORT 20 INCH SPACING
		14320	TUBE, 5 PORT 20 INCH SPACING + FENCELINE VALVE
		14321	TUBE, 6 PORT 20 INCH SPACING + FENCELINE VALVE
		14322	TUBE, 2 PORT 22 INCH SPACING
		14323	TUBE, 3 PORT 22 INCH SPACING
		14324	TUBE, 4 PORT 22 INCH SPACING
		14325	TUBE, 5 PORT 22 INCH SPACING
		14326	TUBE, 6 PORT 22 INCH SPACING
		14327	TUBE, 7 PORT 22 INCH SPACING
		14330	TUBE, 5 PORT 22 INCH SPACING + FENCELINE VALVE
7	BR64032H	540017	CLAMP HOSE

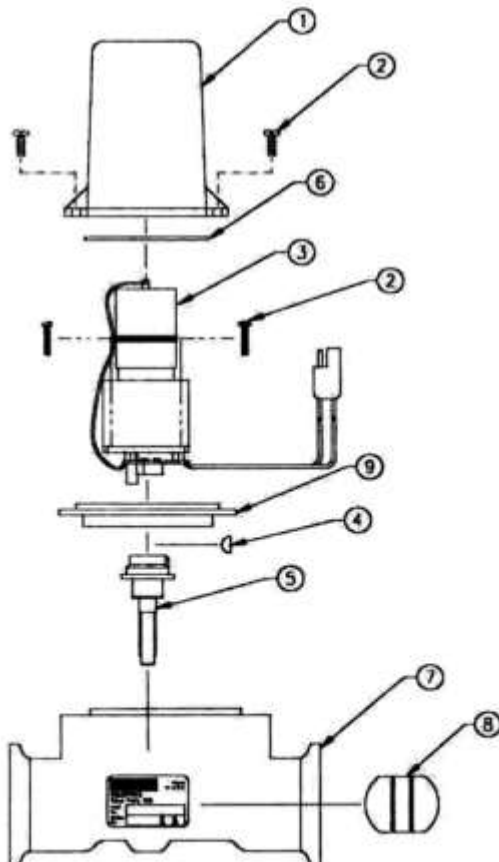
Motorized Control Valve (MCV1-1/2")

1 1/2" POLY CONTROL VALVE REPLACEMENT PARTS

063-0171-894

ITEM	DESCRIPTION	RAVEN PART #
1	Valve Cover	106-0159-407
2	#6-32 x 3/4" Lg. Screw	321-0000-256
3	Motor Assembly	063-0159-409
4	Woodruff Key	321-0000-062
5	Coupler Shaft Assembly (1 1/2" Valve)	063-0171-893
6	Seal Tetraseal	219-0000-020
7	Valve Body Assembly (1 1/2" Valve)	063-0171-892
8	Butterfly (1 1/2" Valve)	106-0159-414
9	Isolation Flange Assembly	063-0159-457
10	*Iso-Body Kit (1 1/2" Valve) (Not Shown)	117-0159-739
11	*Polarity Reversal Jumper (Not Shown)	115-0159-415
12	Loctite RC-609 (Not Furnished)	222-1001-050

*NOT SUPPLIED WITH STANDARD UNIT



When servicing Valve:

Replace valve body with iso-body kit (item 10) if valve has been leaking internally.

Replace motor assembly if the motor will not run.

Before reassembling valve, remove the coupler shaft from the valve body. Apply Loctite (item 12) to coupler shaft and woodruff key. Place the coupler shaft (item 5) and the woodruff key (item 4) onto the motor shaft. Plug motor into the valve connector coming from Sprayer Control Console. Check that the motor rotates in both directions. Motor must stop when coupler shaft CAM releases printed circuit board button.

When reassembling valve, grease both sealing surfaces of coupler shaft. Insert coupler shaft into iso-flange and be sure seal properly seats on shaft. Install motor on valve body and apply silicon sealant to mounting holes. Reassemble remaining items as shown in parts diagram.

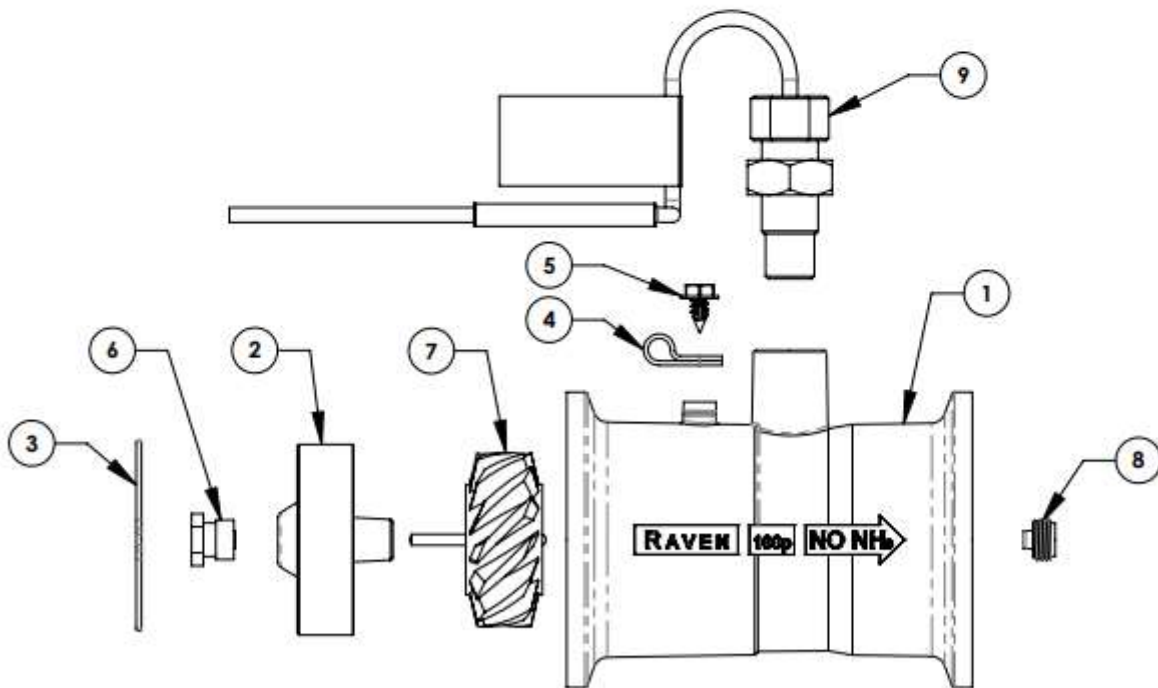
RAVEN INDUSTRIES, INC.

054-0159-185
1/03 REV. E
SHEET 1 OF 1

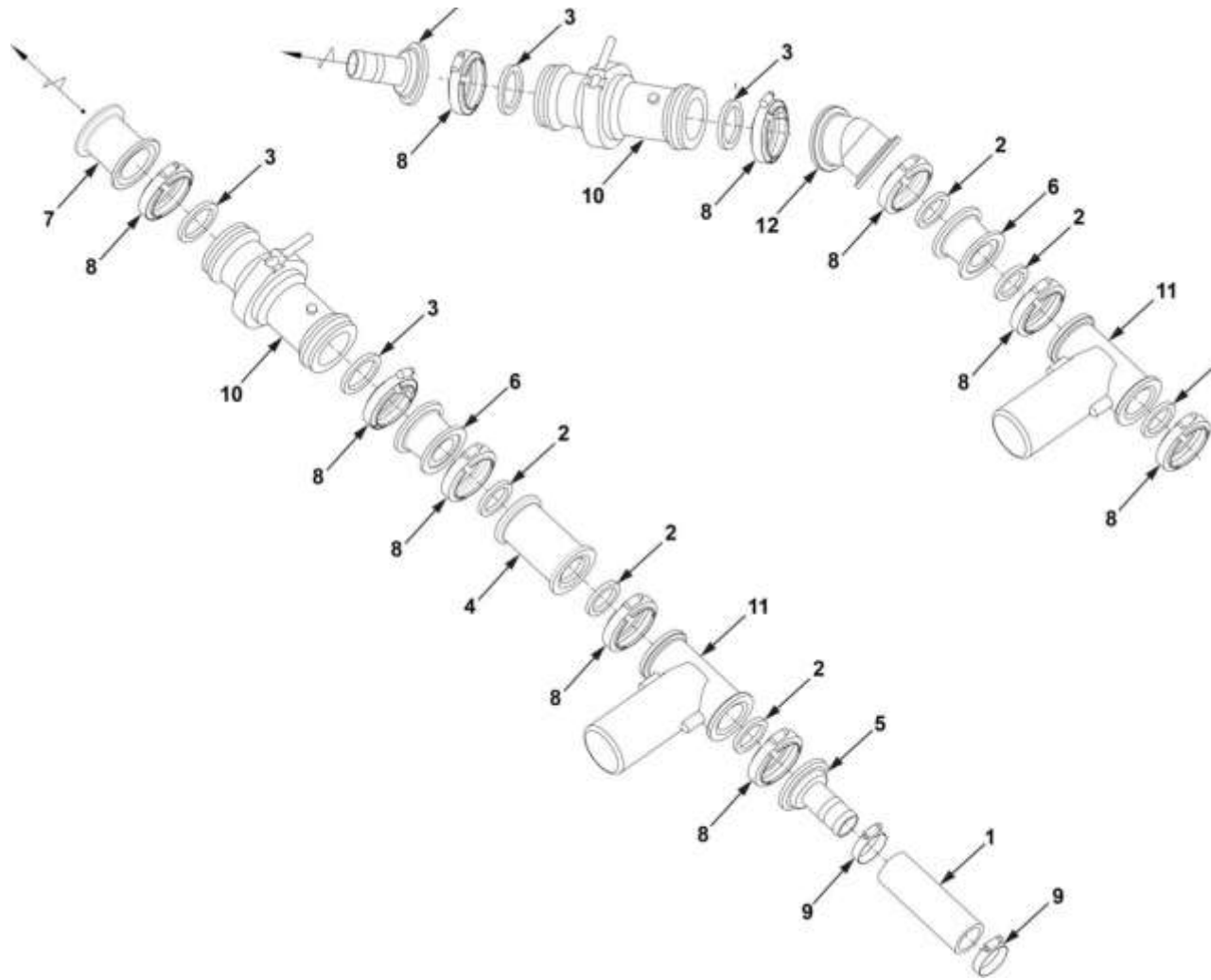
Raven Flow Meter (631801)

REPLACEMENT PARTS, FLOWMETER, RFM-100p

ITEM	DESCRIPTION	RAVEN P/N:
1	BODY, MOLDED, RFM-100p, FLOWMETER	106-0159-710
2	HUB/BEARING ASSEMBLY, UPSTREAM, RFM-100p	063-0173-580
3	RING, RETAINING, WIREFORM, RFM-100	335-0003-198
4	CLAMP, CABLE, PLASTIC, 1/4" x 1/2"	435-3002-017
5	SCREW, THREAD FORMING, #10-16 UNC x 3/8" LONG	310-0002-137
6	TURBINE, STUD, POLY, RFM-100p	063-0173-057
7	TURBINE, FLOWMETER, 4 MAGNET, RFM-100p	063-0173-596
8	STUD, DOWNSTREAM, CUP BEARING, FLOWMETER	063-0173-744
9	SENSOR ASSEMBLY, EXTERNAL, DTM	063-0172-458
	SENSOR ASSEMBLY, EXTERNAL, DT	063-0172-447
	SENSOR ASSEMBLY, EXTERNAL, CON-X-ALL	063-0172-004
	SENSOR ASSEMBLY, EXTERNAL, METRI-PACK (JD)	063-0173-855
REF. KIT 117-0171-646 FOR ITEMS 3, 6, 7, & 8		



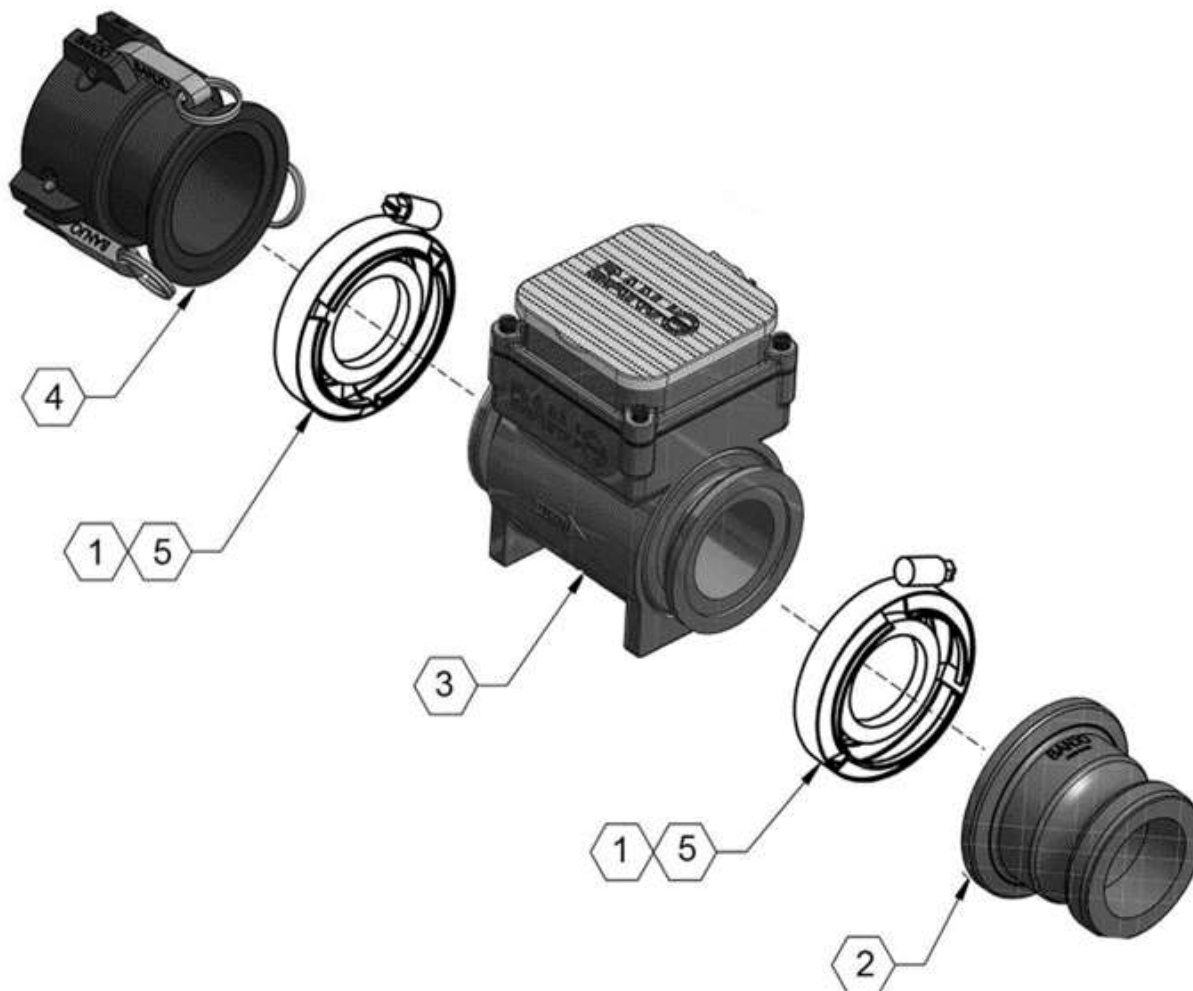
Raven Flow Meter and MCV



Parts List: Raven Flow Meter and MCV

ITEM	VENDOR NO.	PART NO.	QTY.	DESCRIPTION
1	BS-1-1/2BH200	510014	1	HOSE, 1-1/2" EPDM
2	BJ-150G	530014	3	GASKET, 2" EPDM
3	BJ-200G	530019	2	GASKET, 2" EPDM
4	BJ-M200CPG	530084	1	2" X 2" STANDARD PORT FLANGE
5	BJ-M220150BRB	530100	1	2" FP FLANGE X 1 1/2" HOSE BARB
6	BJ-M220200CPG	530102	1	2" FULL PORT - 2" REDUCER FLANGE
7	BJ-M220CPG	530244	1	2" X 2" FULL PORT FLANGE
8	BJ-FC200	540001	5	CLAMP, 2" STD WORM SCREW
9	BR-64024H	540016	2	CLAMP, 1-1/2" SS
10	-	520059	1	802 FLOWMETER
11	RA-063-0171-894	631805	1	CONTROL VALVE, 1-1/2"
12	BJ-M200CPG45	530087	1	2" SP FLANGE COUPLING, 45 DEG

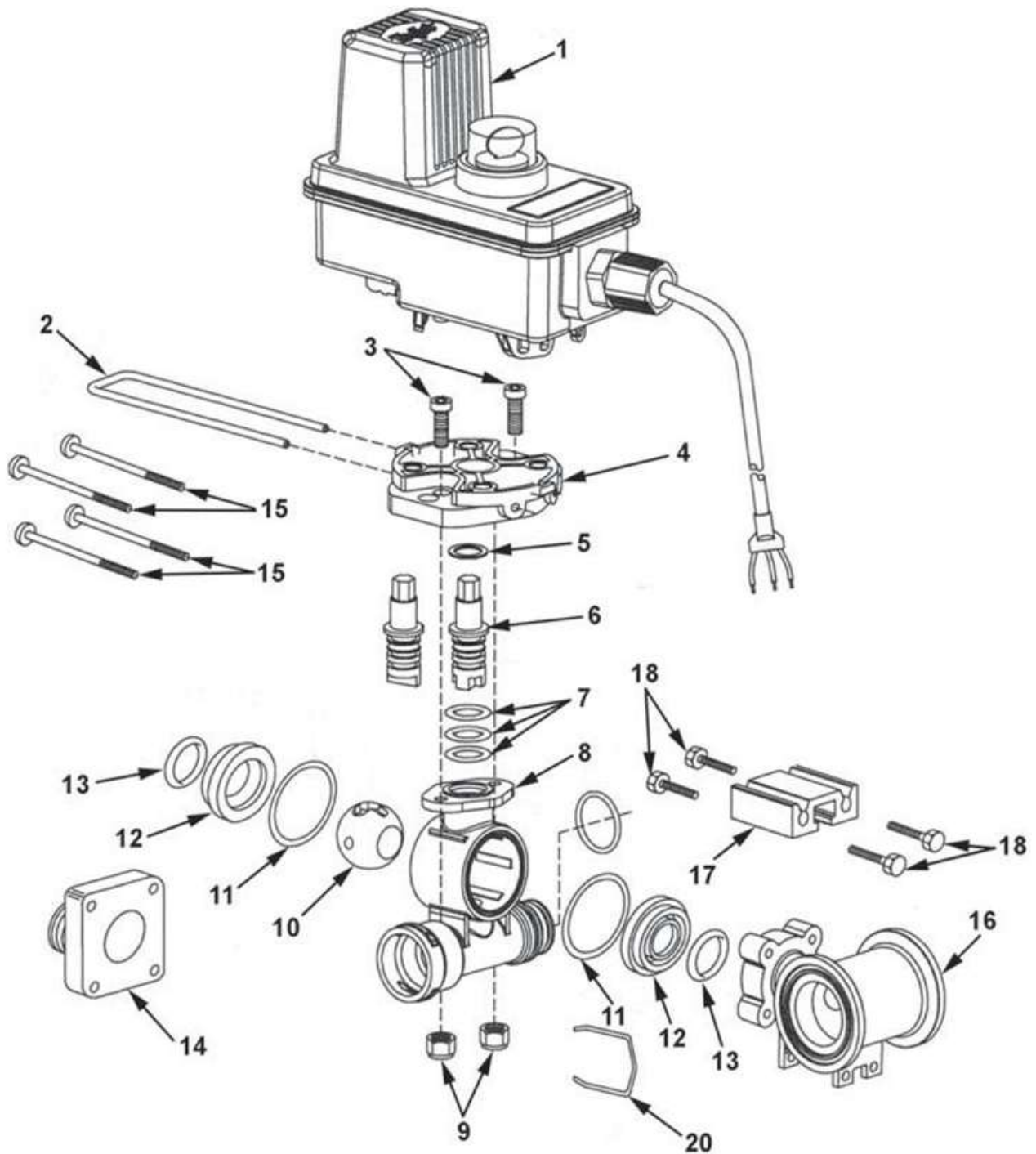
Banjo 2" Full Port Flow Meter



Parts List: Banjo 2" Full Port Flow Meter

ITEM	PART NO.	QTY.	DESCRIPTION
1	530019	2	2" EPDM GASKET
2	530271	1	2" FULL PORT FLANGE - 2" MALE ADAPTER
3	530311	1	2" FULL PORT FLOW METER
4	530323	1	2" FULL PORT FLANGE X FEMALE COUPLER
5	540002	2	CLAMP, 2" FULL WORM SCREW

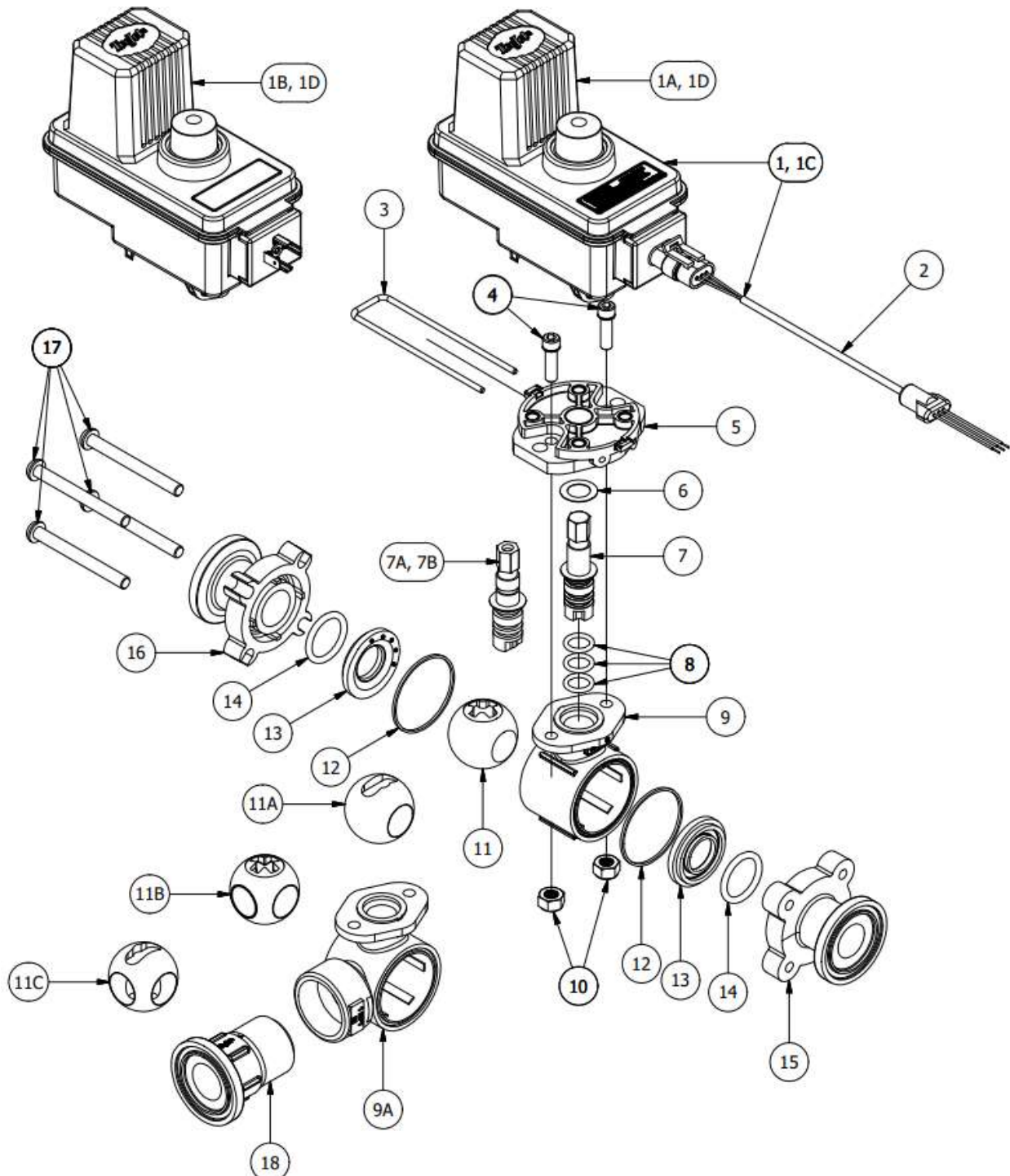
Electric Shut-Off Flow Back Ball Valve (2014 & Prior) Red Indicator



Parts List: Electric Shut-Off Flow Back Ball Valve (2014 & Prior) Red Indicator

ITEM	VENDOR NO.	DESCRIPTION
1	50515-22CP05	BEC MOTOR, 22-RPM (0.7-SEC), 0.5- METER CABLE, POSITIVELY SWITCHED
2	CP50517-SSPV	RETAINING CUP, 304 STAINLESS STEEL.
3	CP26197-7/8-SS	SOCKET HEAD CAP SCREW, 1/4"-20 X 7/8", STAINLESS STEEL (2 REQ'D)
4	CP50514-PP	MOTOR ADAPTER, POLYPROPYLENE (BLACK)
5*	CP20125-TEF	THRUST WASHER, TEFON
6	CP56613-SS	STEM, 303 STAINLESS STEEL (FOR POLYPROPYLENE BALL)
7*	CP7717-M12 X 2.5-VI	O-RING, VITON (3 REQ'D)
8	CP55223-NYB	FLOW BACK BODY, NYLON (BLACK)
9	CP55223-NYB	ELASTIC LOCKNUT, 1/4" 20, STAINLESS STEEL (2 REQ'D)
10	CP20106 2 PP	FLOW BACK BALL POLYPROPYLENE (WHITE)
11*	CP20564-VI	GASKET, VITON (2 REQ'D)
12*	CP20103-TEF	SEAL, TEF ON (2 REQ'D)
13*	CP7717-2-213-VI	O-RING, VITON (2 REQ'D)
14	CP45514-NYB	END CAP, NYLON (BLACK) (QUICK CONNECT)
15	CP45252-2-3/4-SSPV	SCREW, 1/4"-12 X 2-3/4" PAN HEAD, STAINLESS STEEL (4 REQ'D)
16	CP55224-PP	#75 NARROW TEE BODY, POLYPROPYLENE (BLACK)
17	CP45216-AL	MOUNTING RAIL, ALUMINUM
18	CP45259-SS	SCREW, M6 X 1 X 16 MM HEX, STAINLESS STEEL (4 REQ'D)
19	CP7717-J-912-VI	O-RING, VITON
20	CP37166-1-302SS	QUICK CONNECT RETAINING CUP, 302 STAINLESS STEEL
	56609-3FB	VALVE BODY SUB-ASSY, SPECIFY OUTLET SIZE & BALL MATERIAL (INC. ITEMS 3-19)

Electric Shut-Off Recirculation Valve (2025 & Later)

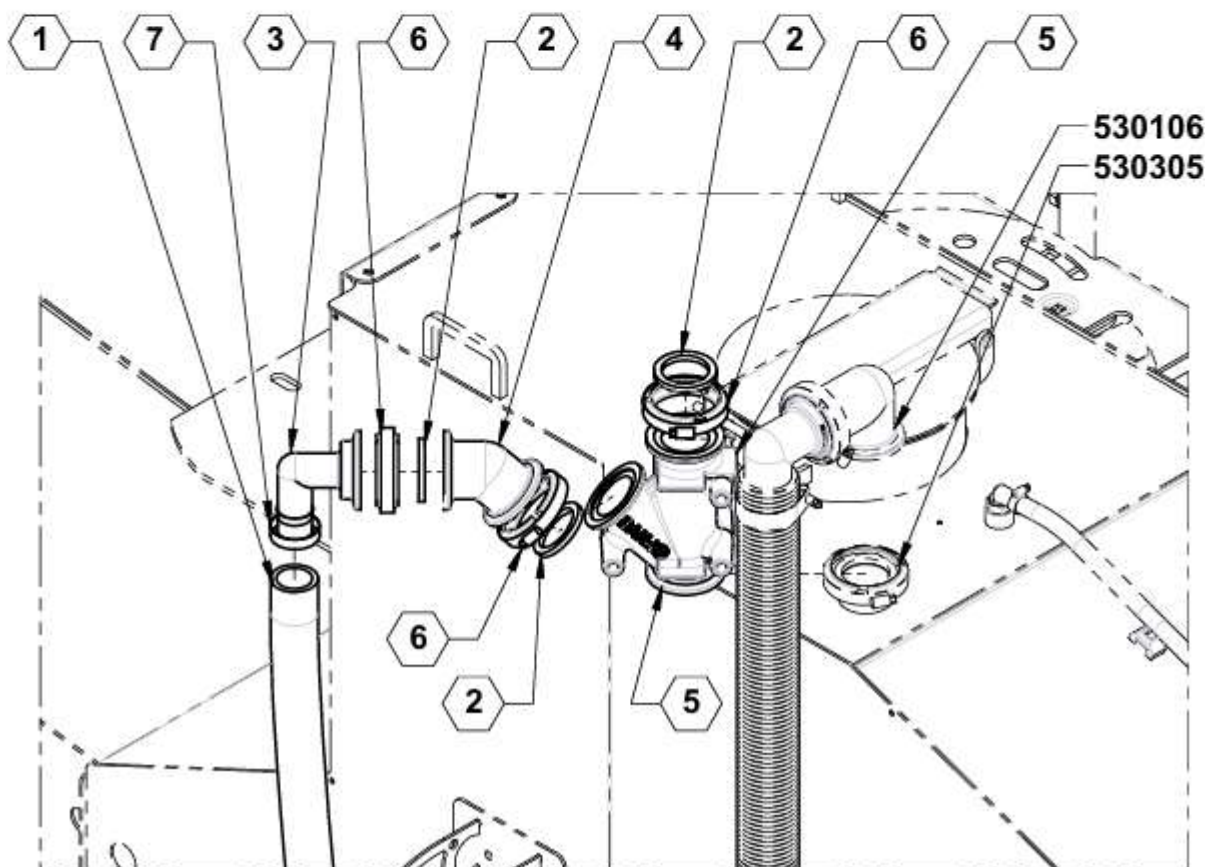
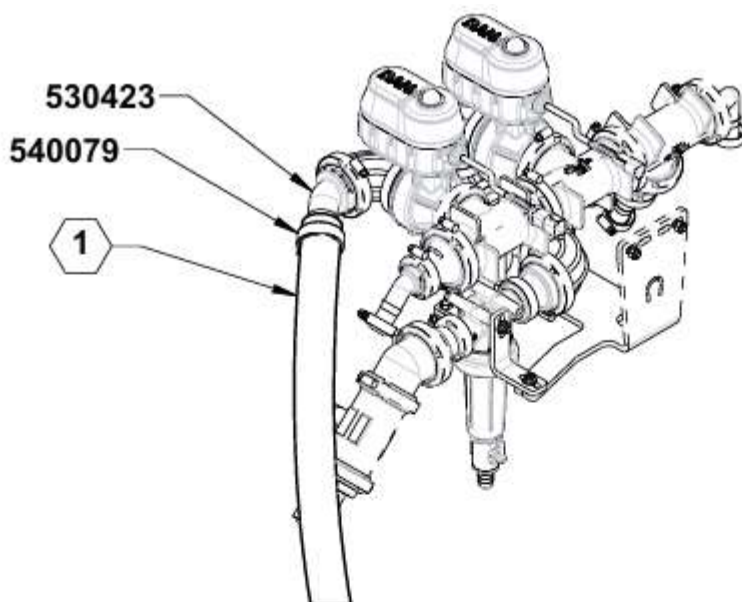


See <https://www.teejet.com/-/media/dam/agricultural/usa/technical-documentation/other/pl344bec-f.pdf>

Parts List 500084: Electric Shut-Off Recirculation Valve (2025 & Later)

ITEM	PART NUMBER	DESCRIPTION
# 1	50515-22CP03	BEC MOTOR, 22-RPM (0.7-SEC), 0.3-METER CABLE, POSITIVELY SWITCHED
	50515-22CP05	BEC MOTOR, 22-RPM (0.7-SEC), 0.5-METER CABLE, POSITIVELY SWITCHED
	50515-22CP15	BEC MOTOR, 22-RPM (0.7-SEC), 1.5-METER CABLE, POSITIVELY SWITCHED
	50515-22CP60	BEC MOTOR, 22-RPM (0.7-SEC), 6.0-METER CABLE, POSITIVELY SWITCHED
# 1A	50515-22P	BEC MOTOR, 22-RPM (0.7-SEC), W/O CABLE, POSITIVELY SWITCHED
# 1B	50515-22DP	BEC MOTOR, 22-RPM (0.7-SEC), DIN CONNECTION, POSITIVELY SWITCHED
# 1C	50533-22C03	BE MOTOR, 22-RPM (0.7-SEC), 0.3-METER CABLE
	50533-22C05	BE MOTOR, 22-RPM (0.7-SEC), 0.5-METER CABLE
	50533-22C15	BE MOTOR, 22-RPM (0.7-SEC), 1.5-METER CABLE
	50533-22C60	BE MOTOR, 22-RPM (0.7-SEC), 6.0-METER CABLE
# 1D	50533-22P	BE MOTOR, 22-RPM (0.7-SEC), W/O CABLE
# 1E	50533-22DP	BE MOTOR, 22-RPM (0.7-SEC), DIN CONNECTION
2	98546EC-	3-WIRE CABLE W/ METRI-PACK TOWER CONNECTION
3	CP50517-SSPV	RETAINING CLIP, 304 STAINLESS STEEL
4	CP26197-7/8-SS	SOCKET HEAD CAP SCREW, STAINLESS STEEL (2 REQ'D)
5	CP50514-PP	MOTOR ADAPTER, POLYPROPYLENE (BLACK)
* 6	CP20125-TEF	THRUST WASHER, TEFLON
7	CP56613-SS	STEM, 303 STAINLESS STEEL (FOR POLYPROPYLENE BALL)
7A	CP56615-SS	STEM, 303 STAINLESS STEEL (FOR 2-WAY STAINLESS STEEL BALL)
7B	CP56614-SS	STEM, 303 STAINLESS STEEL (FOR 3-WAY STAINLESS STEEL BALL)
* 8	CP7717-M12X2.5-VI	O-RING, VITON (3 REQ'D)
9	CP20101-NYB	BODY, NYLON (BLACK) (2-WAY)
9A	CP20102-1-NYB	BODY, NYLON (BLACK) (3-WAY, 1" NPT THREAD)
10	CP38435-1/4-SSNY	ELASTIC LOCKNUT, STAINLESS STEEL (2 REQ'D)
11	CP20106-1-PP	BALL, POLYPROPYLENE (WHITE) (2-WAY)
11A	CP19926-SS	BALL, STAINLESS STEEL (2-WAY)
11B	CP20109-1-PP	BALL, POLYPROPYLENE (WHITE) (3-WAY)
11C	CP45510-1-SS	BALL, STAINLESS STEEL (3-WAY)
* 12	CP20564-VI	GASKET, VITON (2 REQ'D)
* 13	CP20103-TEF	SEAL, TEFLON (2 REQ'D)
* 14	CP7717-2/213-VI	O-RING, VITON (2 REQ'D)
15	CP48265-NYB	#50 FLANGED END CAP, NYLON (BLACK)
16	CP45253-NYB	#50 FLANGED END CAP, NYLON (BLACK)
17	CP45252-2-3/4-SSPV	PAN HEAD SCREW, STAINLESS STEEL (4 REQ'D)
18	CP48155-PP	#50 FLANGE X 1" MALE NPT FITTING, POLYPROPYLENE (BLACK)
19	56601-_-F-_-	FLANGED VALVE BODY SUB-ASS'Y, SPECIFY TYPE AND BALL MATERIAL, INCLUDES ITEMS 3-18; EXAMPLE: 56601-2-F-SS
AB344AE-KIT, SPARE PARTS KIT (INCLUDES ALL ITEMS MARKED WITH *)		

Precision Boom Recirculation Option for Fast Track Tanks





ILLUSTRATED PARTS LIST

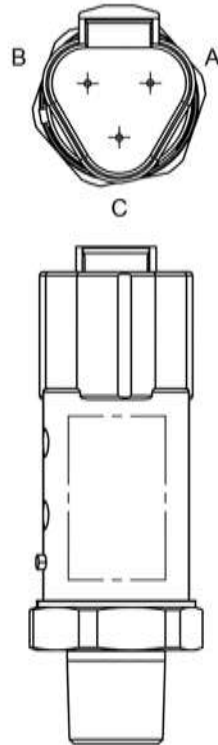
Parts List 39395: Precision Boom Recirculation Option for Fast Track Tanks

ITEM	PART NO.	QTY.	DESCRIPTION
1	510014	29	(FT) HOSE, 1.5IN EPDM
2	530019	3	GASKET, 2.00 EPDM
3	530101	1	2INCHFP FLANGE X 1-1/2INCHHB-90
4	530105	1	MANIFOLD, 2" FP X 2" FP CPLG 45 DEG
5	530532	1	FITTING, 2" FULL PORT 45° Y FLANGE
6	540002	3	CLAMP, FP WORM SCREW, 2.00
7	540016	1	CLAMP, SS 1.500 #24



PRODUCT ELECTRICAL COMP.S

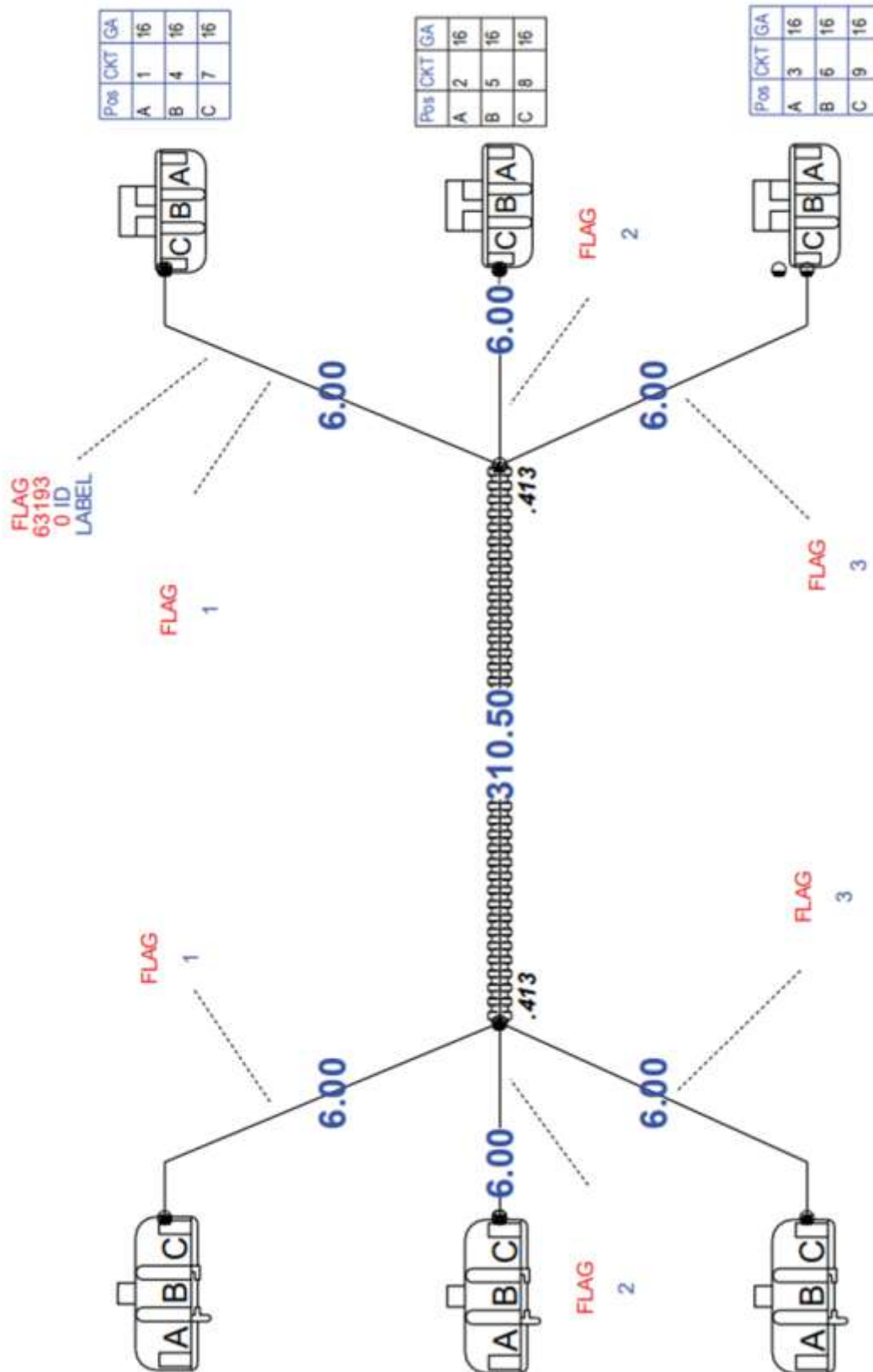
Pressure Transducer



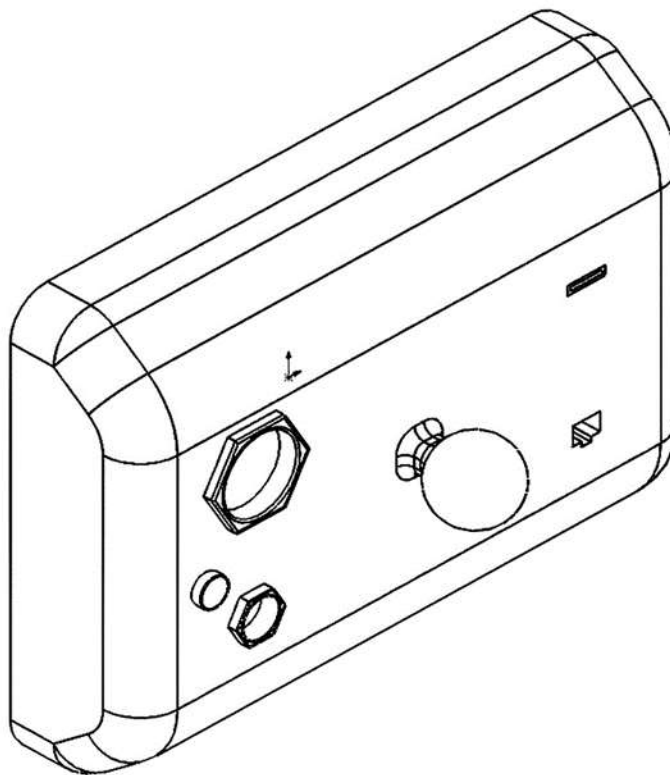
Parts List: Pressure Transducer

ITEM	PART NO.	QTY.	DESCRIPTION
-	530400	1	TEE: 1/4" FPT, POLY
-	530401	1	NIPPLE: 1/4 X 1/4" MPT, POLY
-	632036	1	PRESSURE TRNSDCR 1-5V 0-250PSI

Harness 3-Ball Valve Control - 631930



Raven CR7



Parts List: Raven CR7, Non-Deere ISO Controller

ITEM	PART NO.	QTY.	DESCRIPTION
1	632063	1	RAVEN PRECISION CR7 DISPLAY
2	632065	1	CABLE, CAN/POWER OEM ISO
3	632066	1	CABLE, CR7 ISO VT ONLY

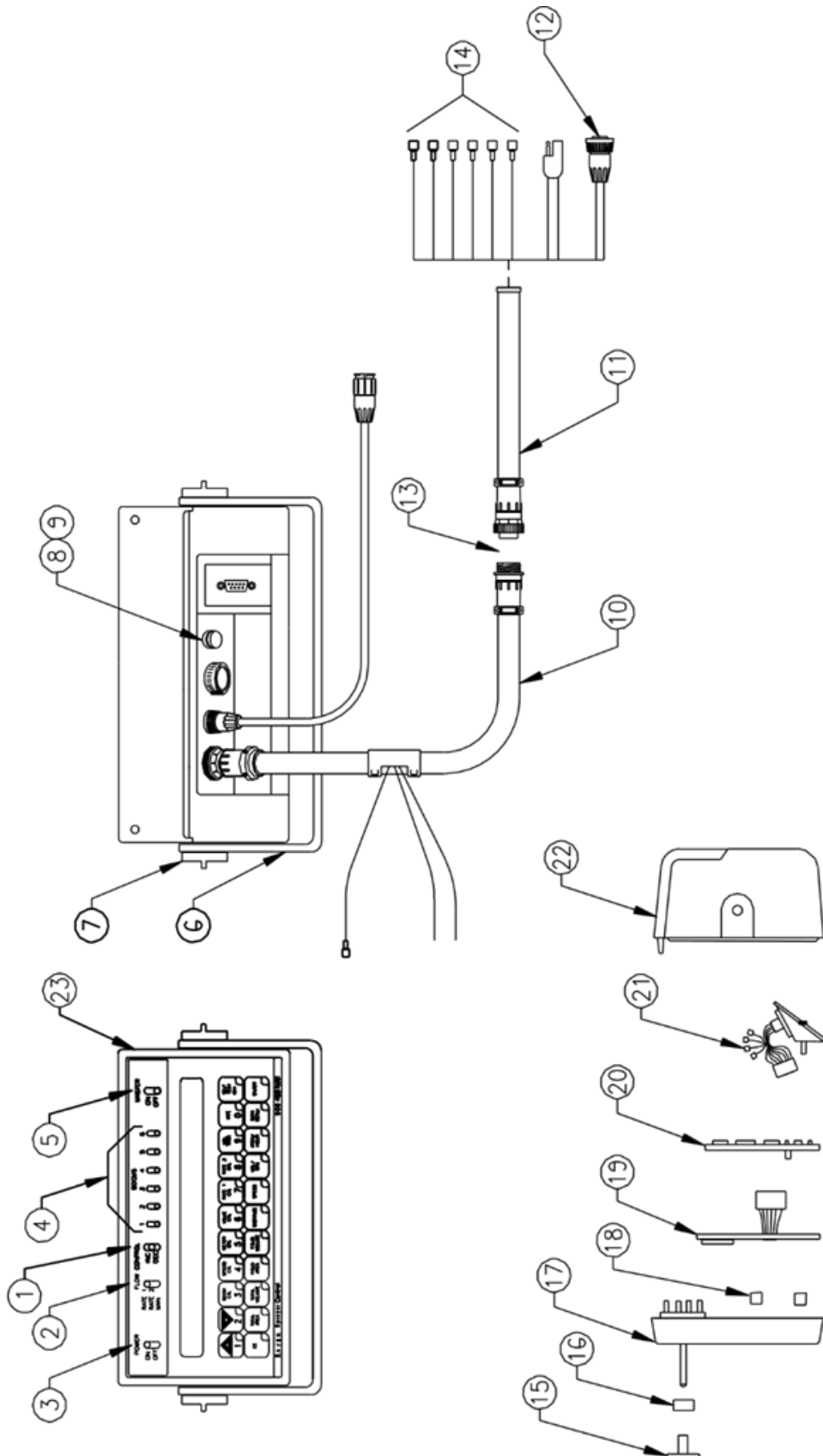
Parts List: Raven CR7, Non-ISO Tractor

ITEM	PART NO.	QTY.	DESCRIPTION
1	632063	1	RAVEN PRECISION CR7 DISPLAY
2	632064	1	CABLE, RAVEN ISO/POWER
3	632066	1	CABLE, CR7 ISO VT ONLY

Parts List: Raven CR7, Deere ISO Tractor

ITEM	PART NO.	QTY.	DESCRIPTION
1	632063	1	RAVEN PRECISION CR7 DISPLAY
2	632067	1	CABLE, DISPLAY PORT, Y ADAPTER
3	632066	1	CABLE, CR7 ISO VT ONLY

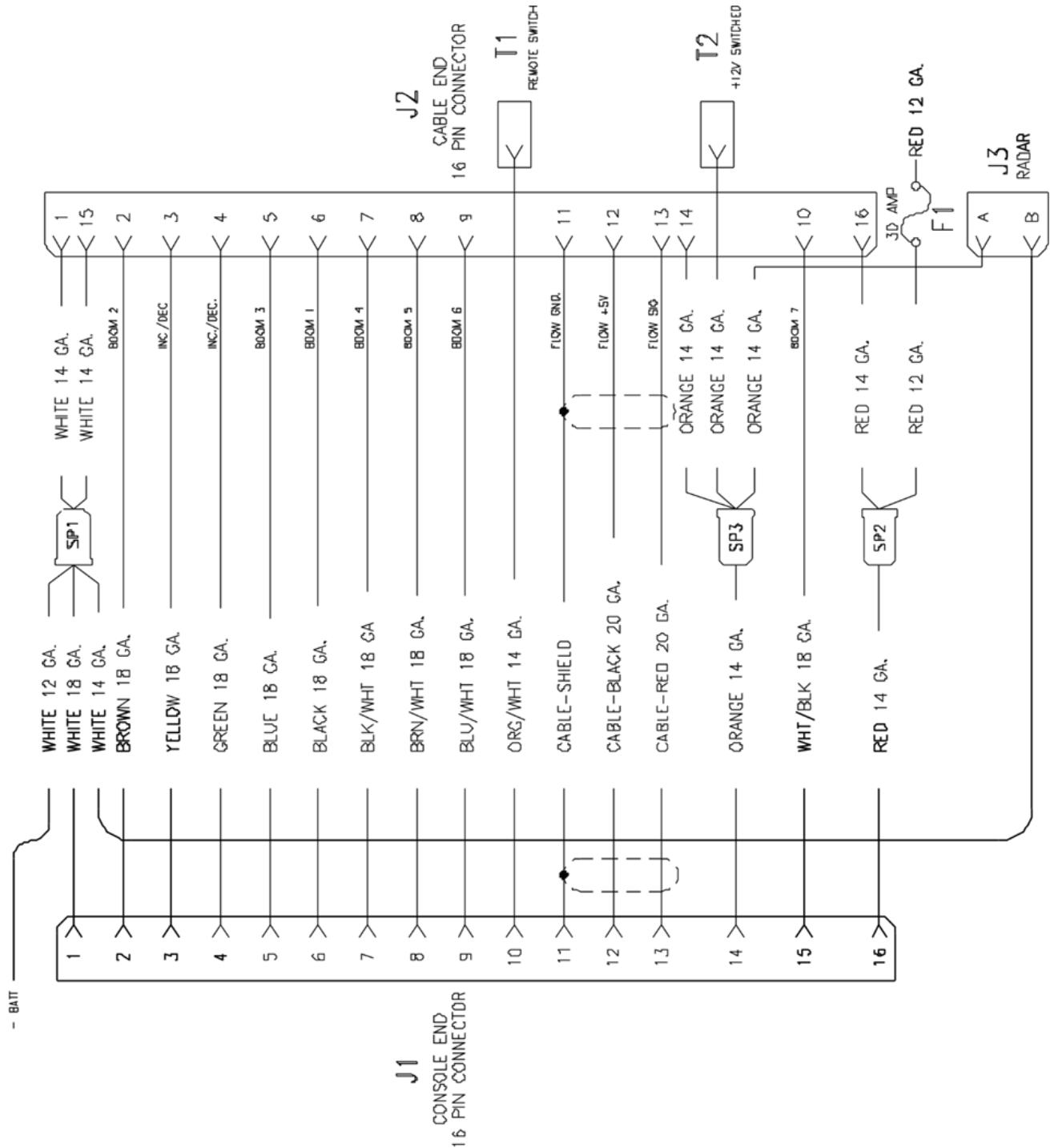
Raven SCS450 Console



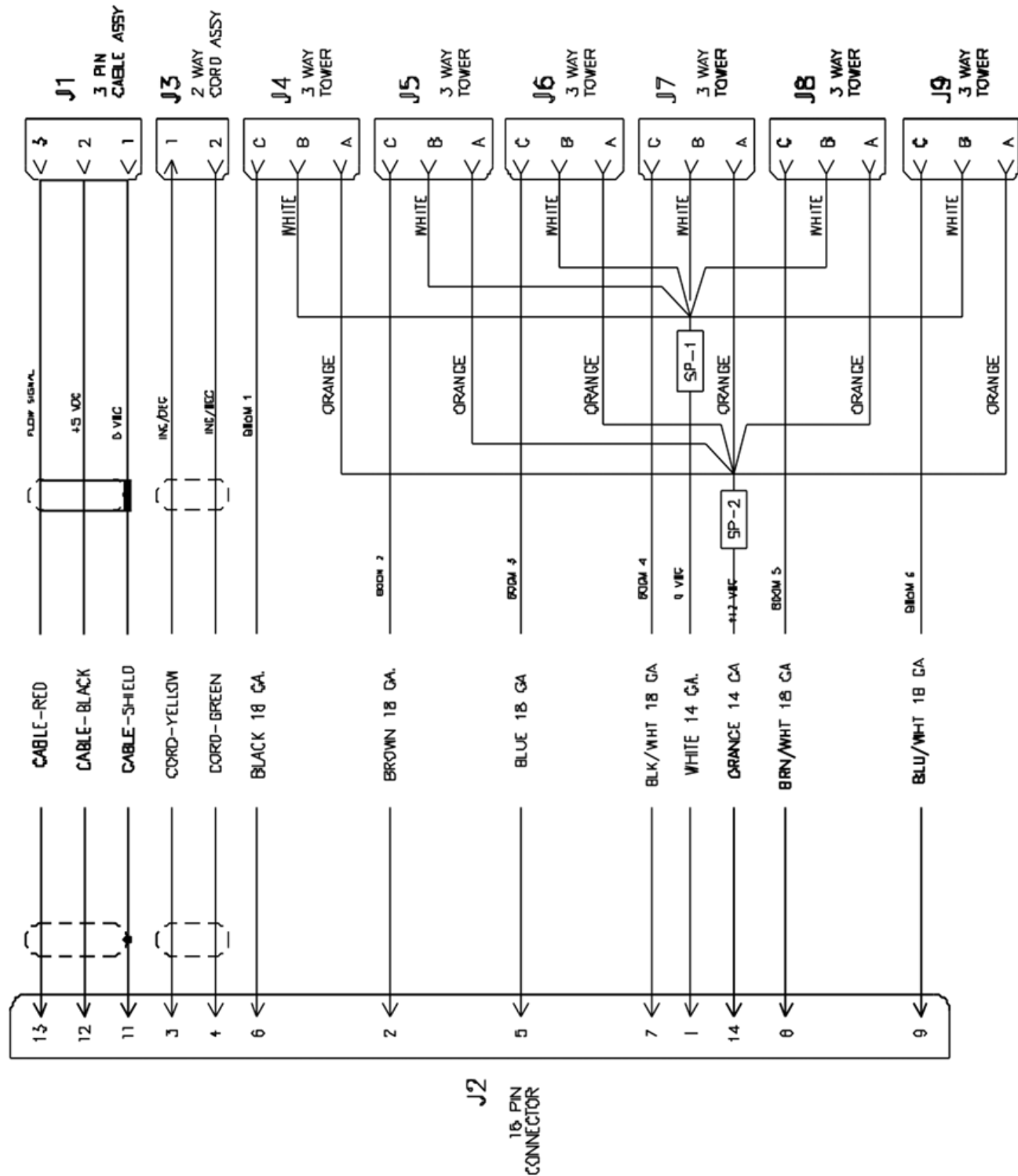
Parts List: Raven SCS450 Console

ITEM	VENDOR NO.	DESCRIPTION
1	412-2011-049	MANUAL ADJ. SWITCH
2	019-0159-078	RATE1/RATE2/MANUAL SWITCH
3	412-2011-048	POWER SWITCH
4	412-2003-010	BOOM SWITCH
5	412-2011-046	MASTER SWITCH
6	106-0159-437	MOUNTING BRACKET
7	106-0159-438	MOUNTING KNOB
8	510-2001-018	FUSE HOLDER
9	510-1003-003	FUSE, 15AMP.
10	631818	CONSOLE CONTROL CABLE (10FT.)
11	631819	FLOW CONTROL CABLE (6FT.)
	631820	FLOW CONTROL CABLE (12FT.)
12	115-0159-016	FLOW METER CABLE EXT. (6FT.)
	115-0159-017	FLOW METER CABLE EXT. (12FT.)
13	631814	FLOW EXT. CABLE (12FT.)
	631815	FLOW EXT. CABLE (24FT.)
14	117-0159-402	ASSORTED TERMINAL KIT
15	063-0159-734	SWITCH COVER
16	117-0159-421	1-SET FILLER SPACERS
17	063-0172-024	FACE PLATE ASSEMBLY
18	107-0159-478	DISPLAY BOARD SPACER
19	063-0171-961	LCD DISPLAY BOARD
20	064-0159-745	PROCESSOR BOARD (SERIAL INTERFACE)
21	063-0172-022	CONNECTOR PLATE ASSEMBLY (SERIAL INTERFACE)
22	063-0159-530	BACK ASSEMBLY
23	063-0171-220	SCS450 CONSOLE (SERIAL INTERFACE)

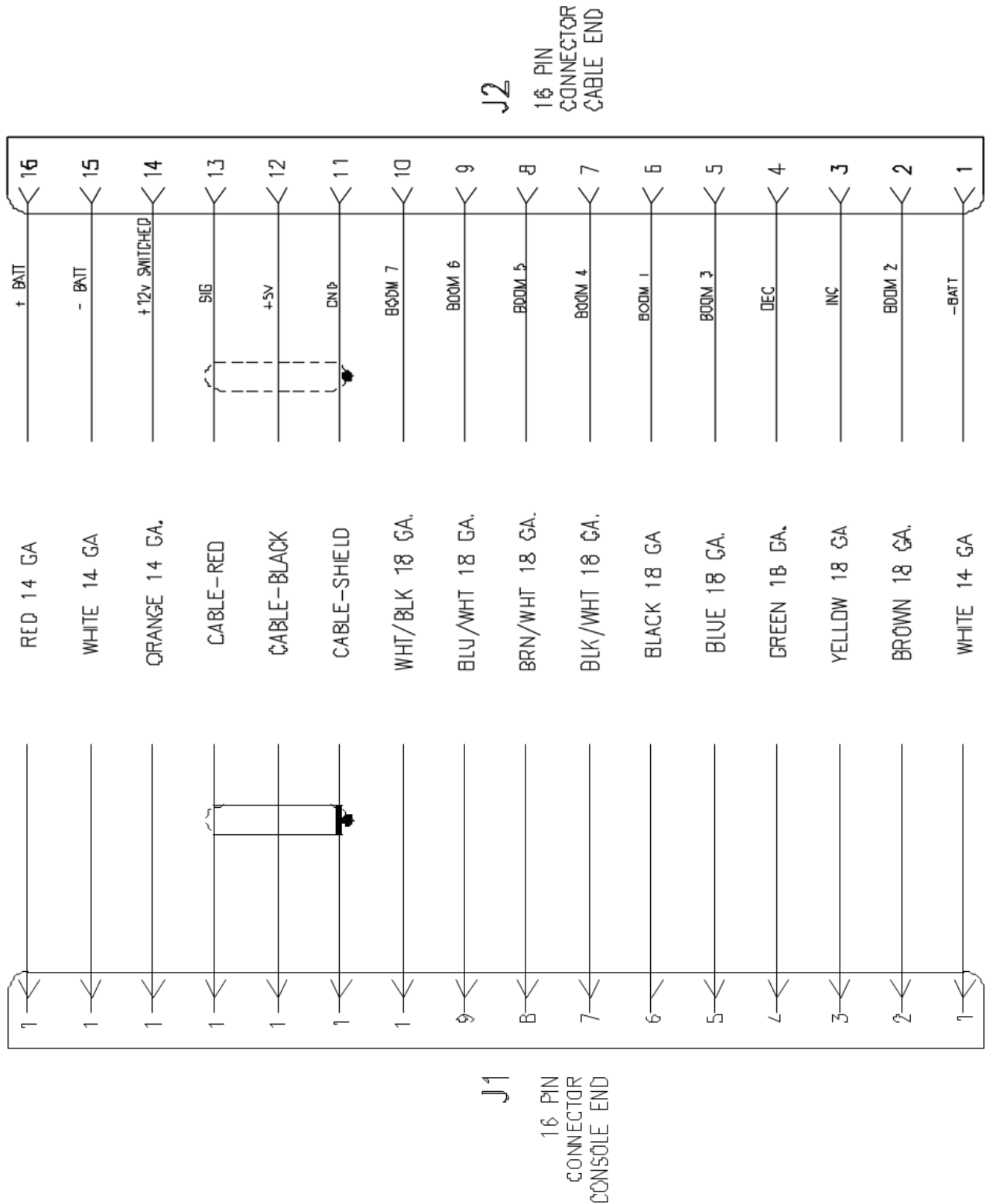
Control Harness 115-0171-085



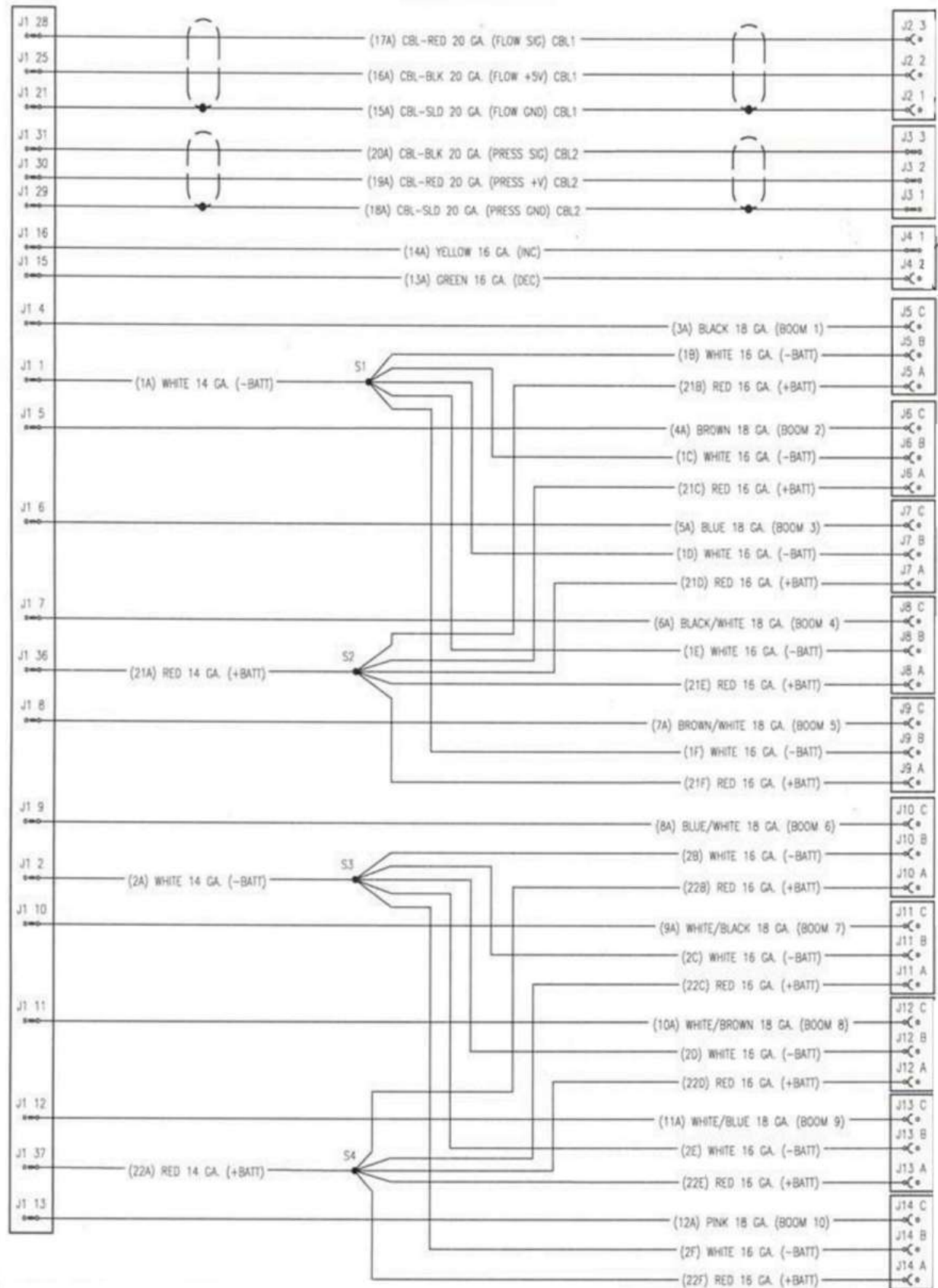
Control Harness 115-0171-086 (6') or 115-0171-129 (12')



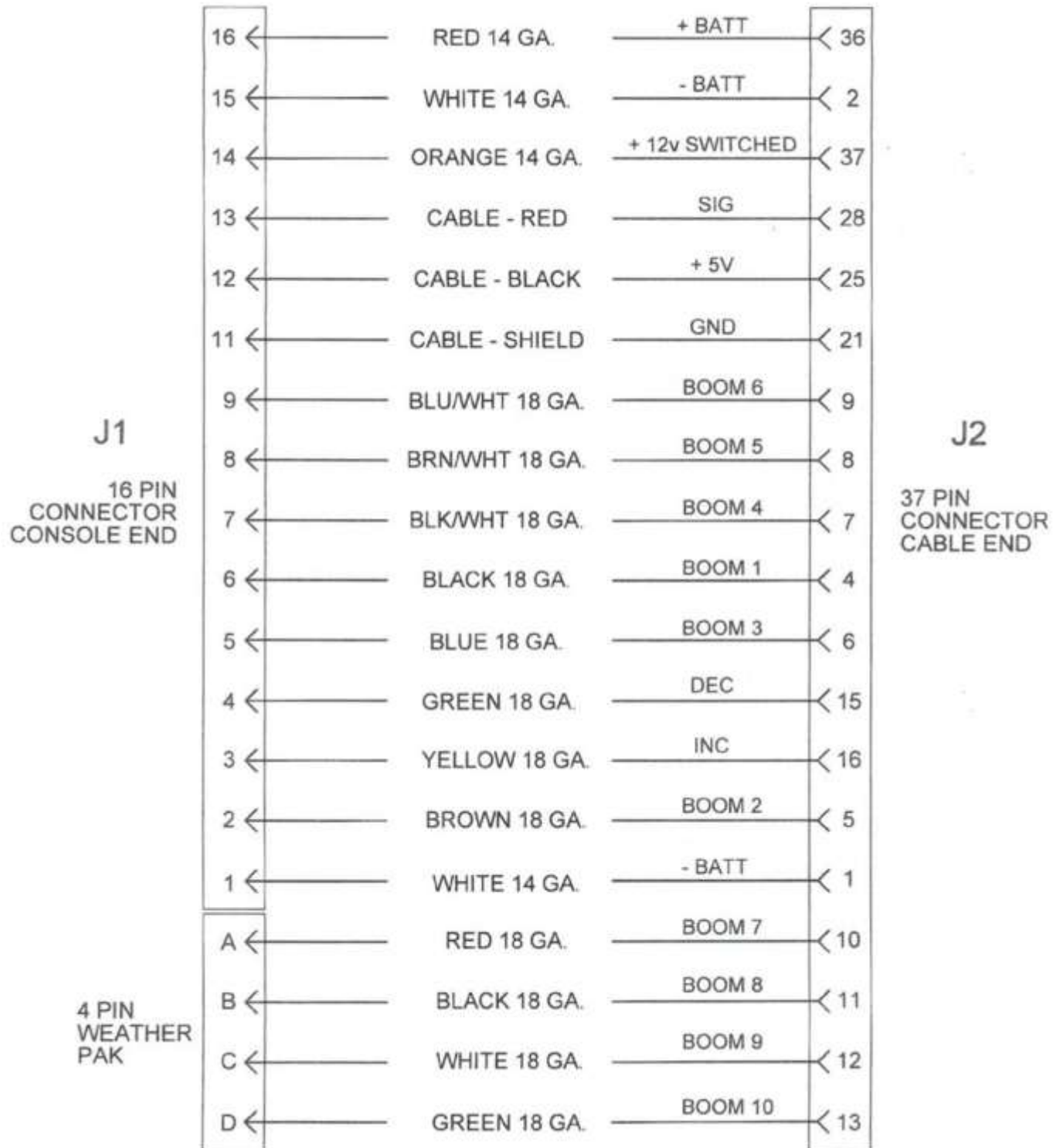
Harness Extension 115-0159-856 (12') or 115-0159-857 (24')



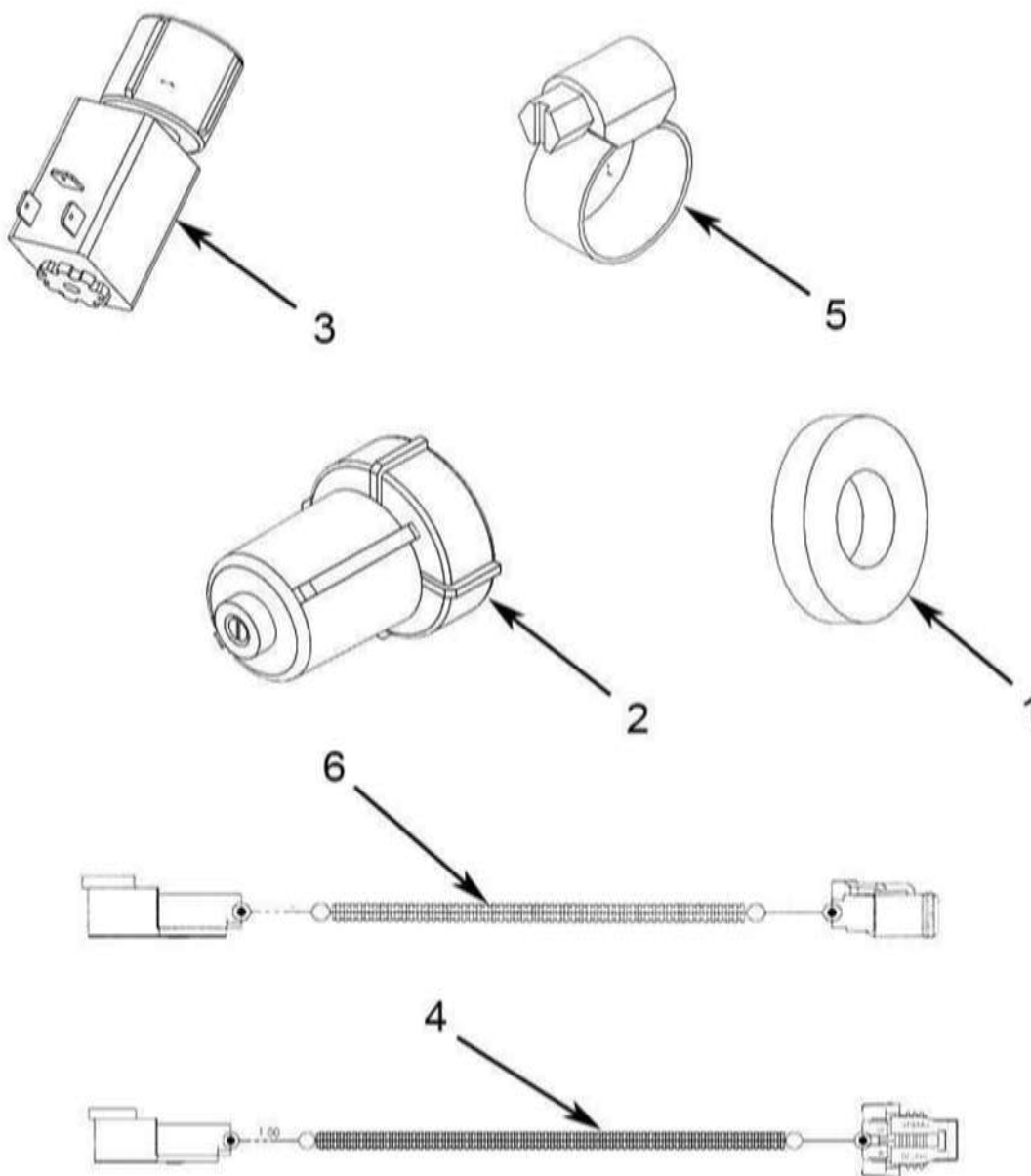
Cable 10-Boom 115-0171-314 (24')



Cable Adapter 6- to 10-Boom - 631889



Fence Row (optional)



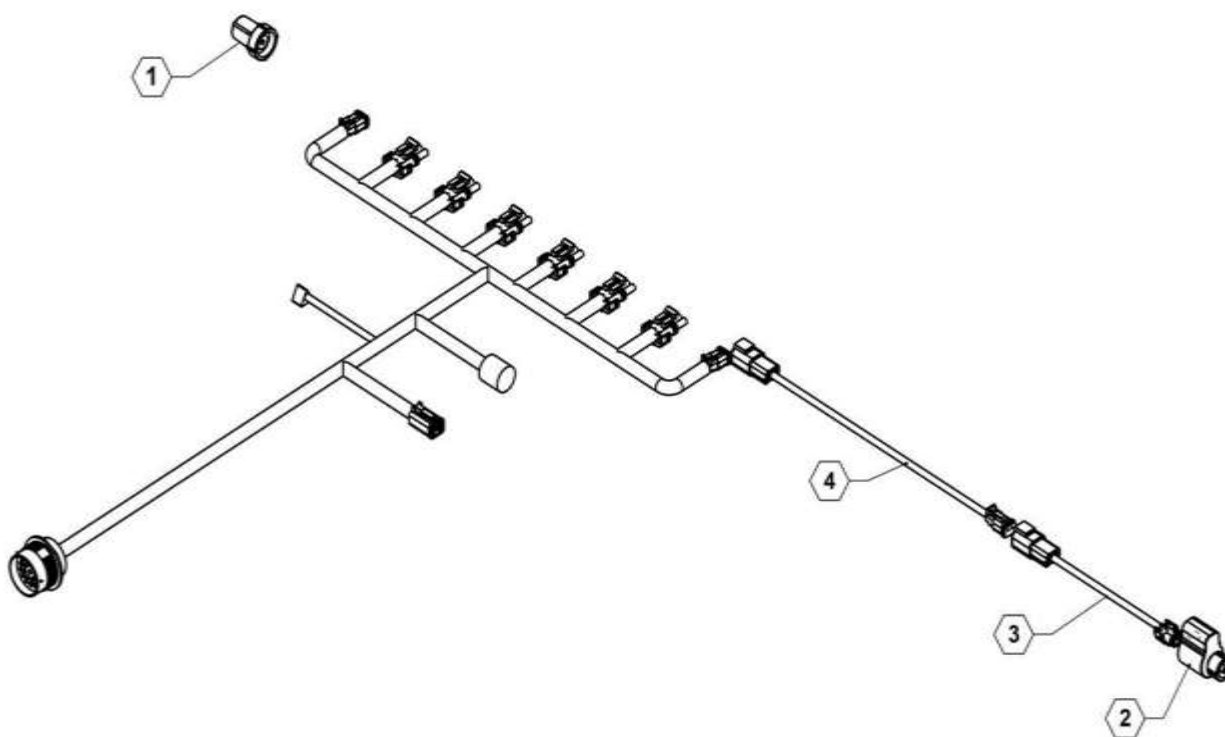
Parts List: Fence Row (optional)

ITEM	PART NO.	QTY.	DESCRIPTION
1	520016	2	NOZZLE SEAT WASHER, RUBBER
2	520037	2	NOZZLE MANUAL CHEM SAVER
3	520038	2	NOZZLE ELECTRIC CHEM SAVER
4	632044	2	CABLE ADAPTER 2P DT TO 2P 6"
5	540032	4	CLAMP, HOSE 5/16"
6	632054	2	55' FENCE ROW CABLE

Single Fence Line, Display Control

NOTE:

1. FOR USE WITH RAVEN RCM AND JD RC2000



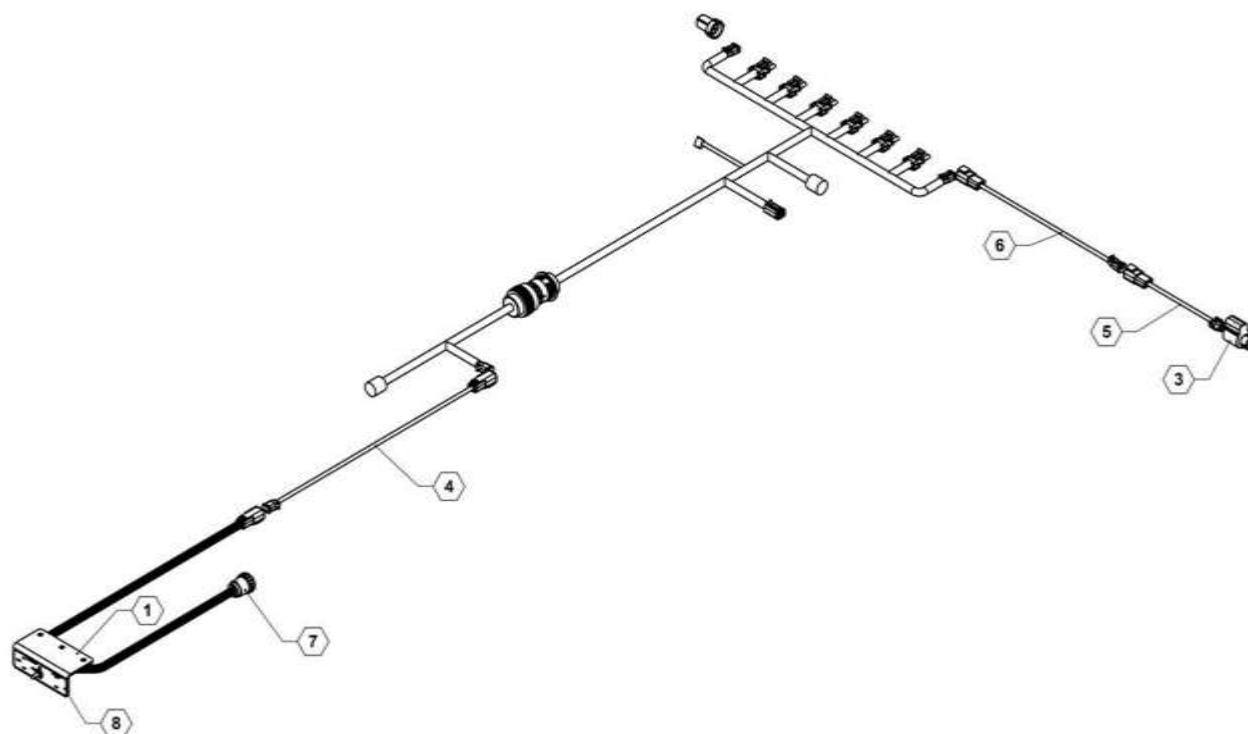
Parts List 27360: Single Fence Line, Display Control

ITEM	PART NO.	QTY.	DESCRIPTION
1	520037	1	VALVE, MANUAL CHEMSAVER
2	520038	1	VALVE, ELECTRIC CHEMSAVER
3	632044	1	FENCEROW ADAPTER CABLE, 6"
4	632054	1	FENCEROW CABLE, 55'

Single Fence Row, Toggle Switch Control

NOTE:

1. FOR USE WITH RAVEN 450, JD GREENSTAR & OTHER 16 & 37 PIN CABLING CONTROLLERS

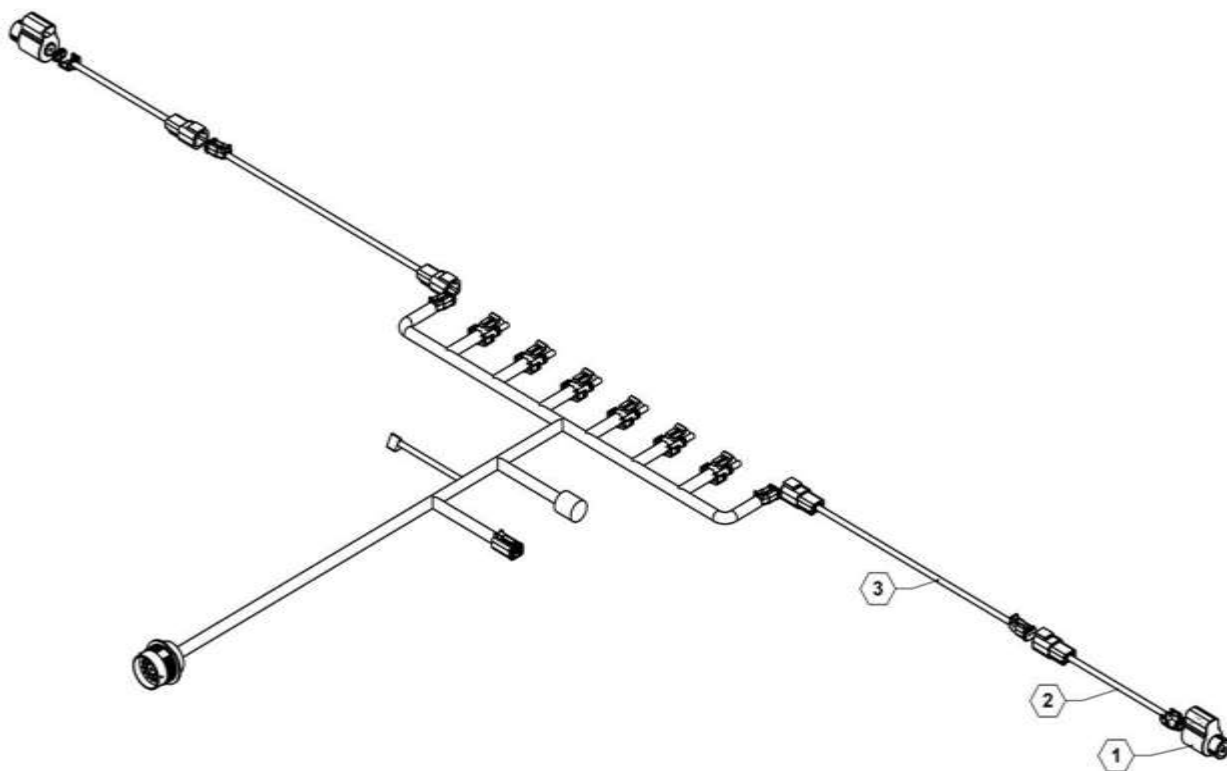


Parts List 27362: Single Fence Row, Toggle Switch Control

ITEM	PART NO.	QTY.	DESCRIPTION
1	18437	1	PLATE, MOUNT
2	520037	1	VALVE, MANUAL CHEMSAVER
3	520038	1	VALVE, ELECTRIC CHEMSAVER
4	632204	1	2 PIN DT 20' CABLE EXTENSION
5	632044	1	FENCEROW ADAPTER CABLE 6"
6	632054	1	FENCEROW CABLE, 55'
7	632089	1	CABLE, SINGLE ELECTRIC FENCELINE NOZZLE
8	800261	1	DECAL, FENCELINE & AGITATION

Dual Fence Line, Display Control

NOTE:
1. FOR USE WITH RAVEN RCM AND JD RC2000

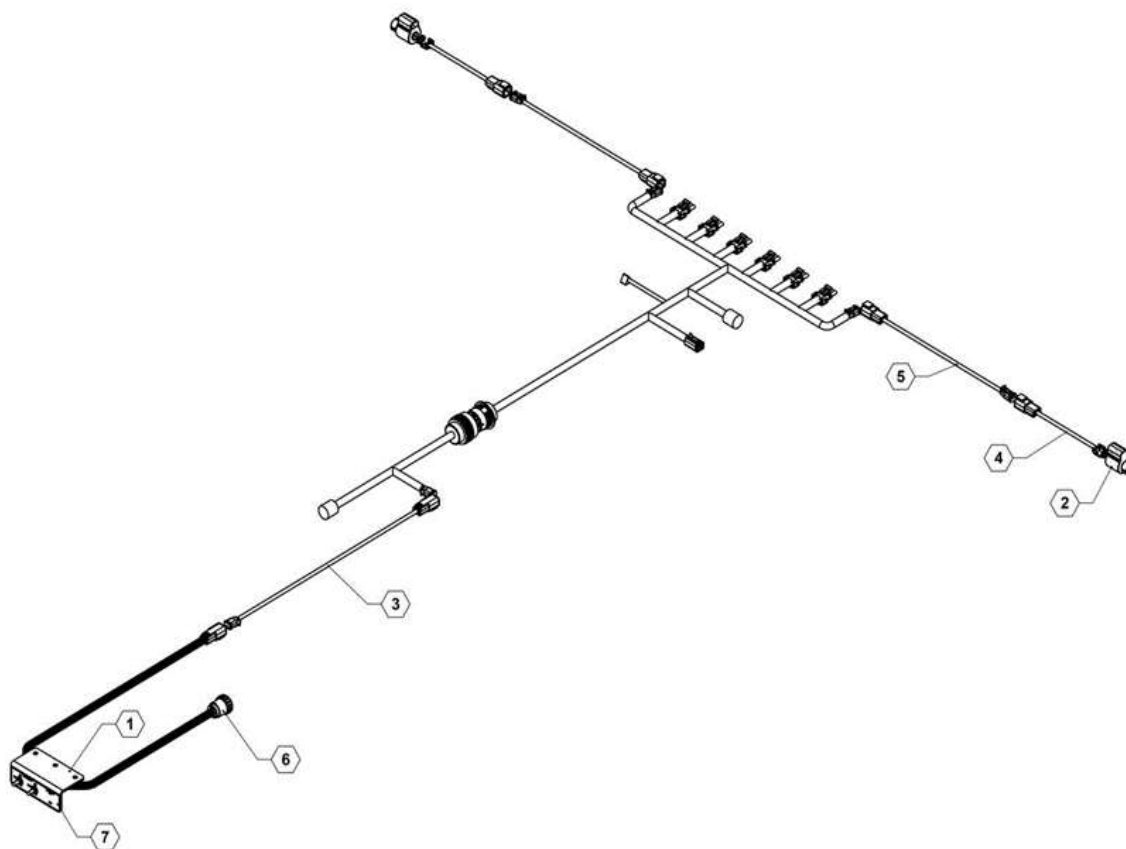


Parts List 27361: Dual Fence Line, Display Control

ITEM	PART NO.	QTY.	DESCRIPTION
1	520038	2	VALVE, ELECTRIC CHEMSAVER
2	632044	2	FENCEROW ADAPTER CABLE, 6'
3	632054	2	FENCEROW CABLE, 55'

Dual Fence Row, Toggle Switch Control

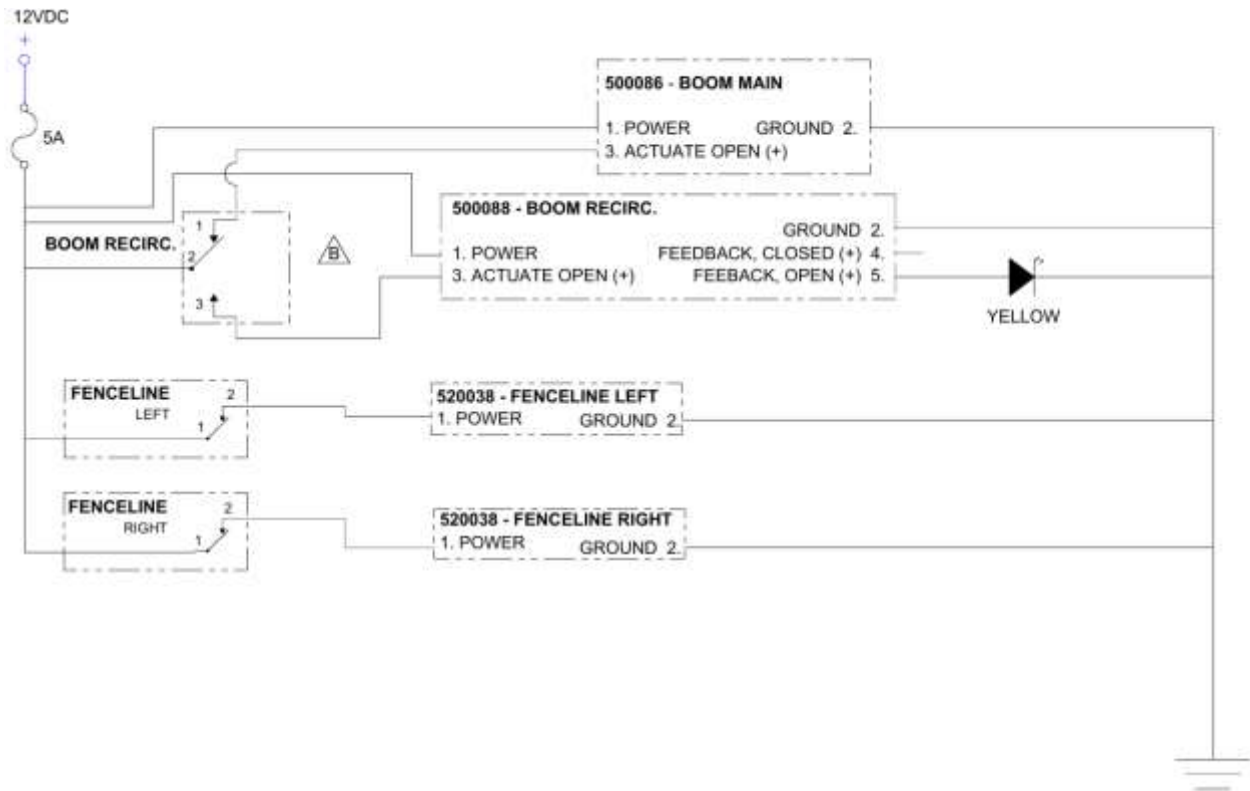
NOTE:
1. FOR USE WITH RAVEN 450, JD GREENSTAR & OTHER 16 & 37 PIN CABLING CONTROLLERS



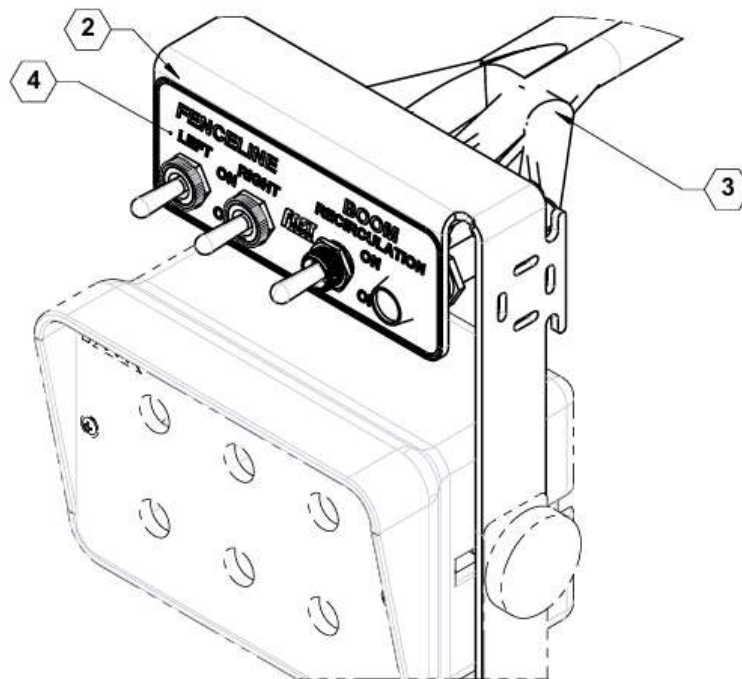
Parts List 27363: Dual Fence Row, Toggle Switch Control

ITEM	PART NO.	QTY.	DESCRIPTION
1	18437	1	PLATE, MOUNT
2	520038	2	VALVE, ELECTRIC CHEMSAVER
3	632204	1	2 PIN DT 20' CABLE EXTENSION
4	632044	2	FENCEROW ADAPTER CABLE, 6"
5	632054	2	FENCEROW CABLE, 55'
6	632088	1	CABLE, DUAL ELECTRIC FENCELINE NOZZLES
7	800261	1	DECAL, FENCELINE & AGITATION

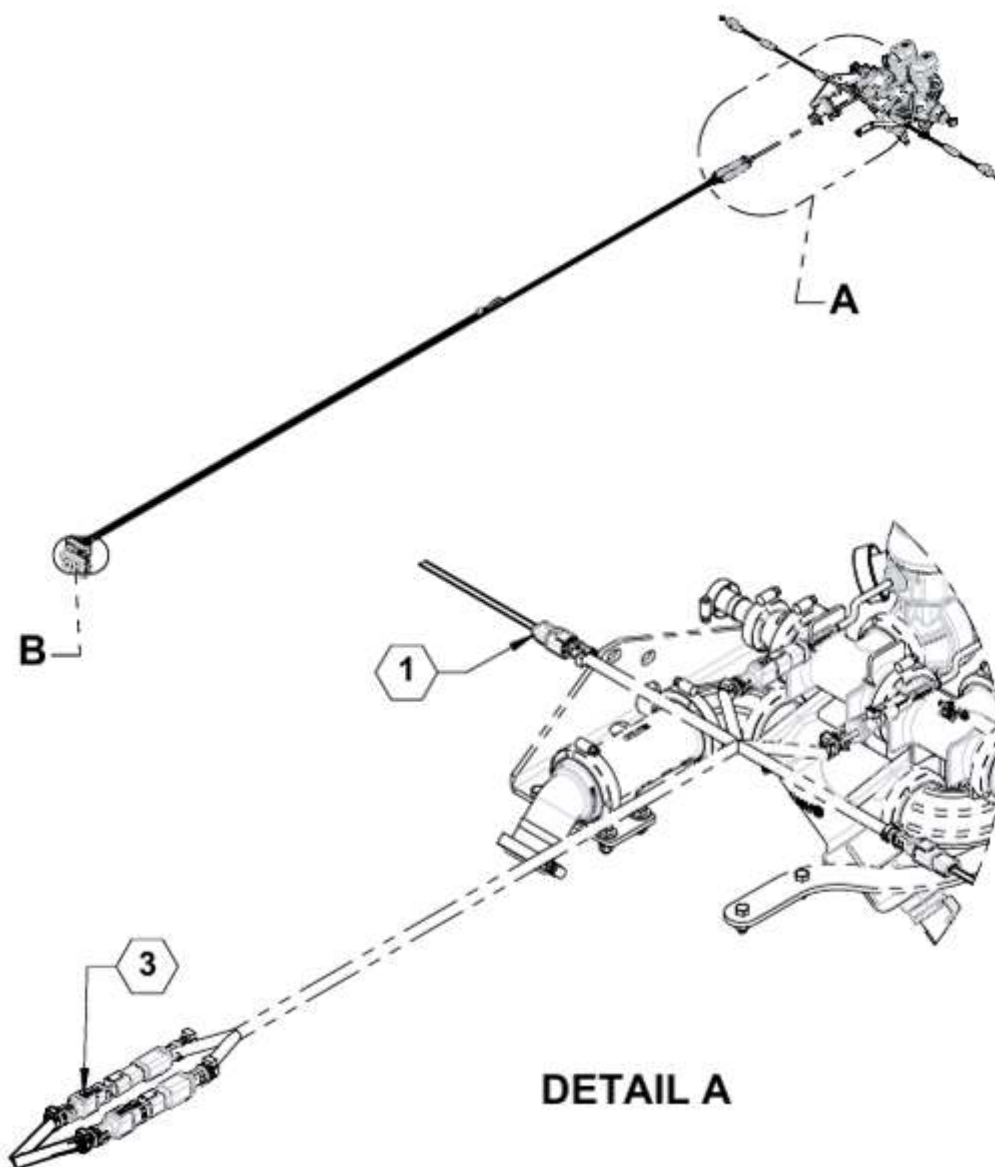
Precision Fenceline & Recirculation Control Schematic (830023)



Precision Fenceline Nozzle & Recirculation Control



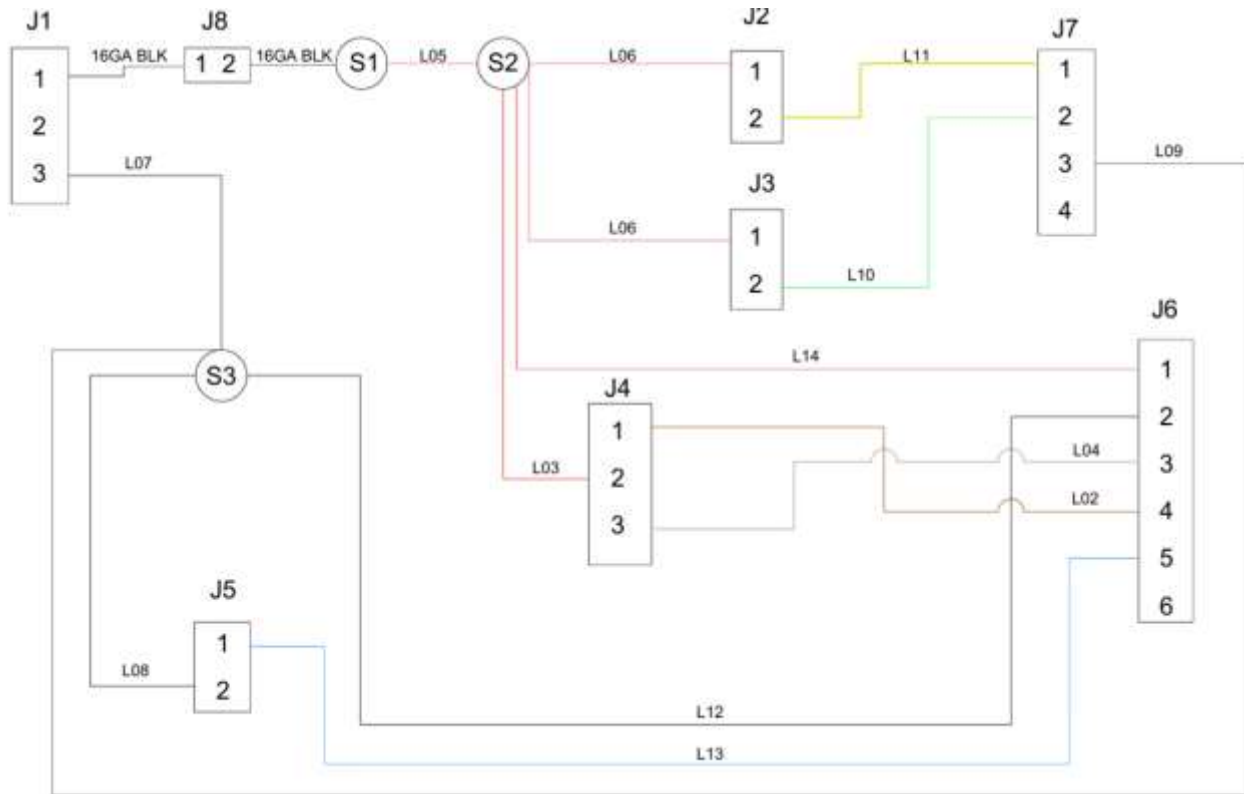
DETAIL B
SCALE 1 : 2



Parts List 39114: Precision Fenceline Nozzle & Recirculation Control

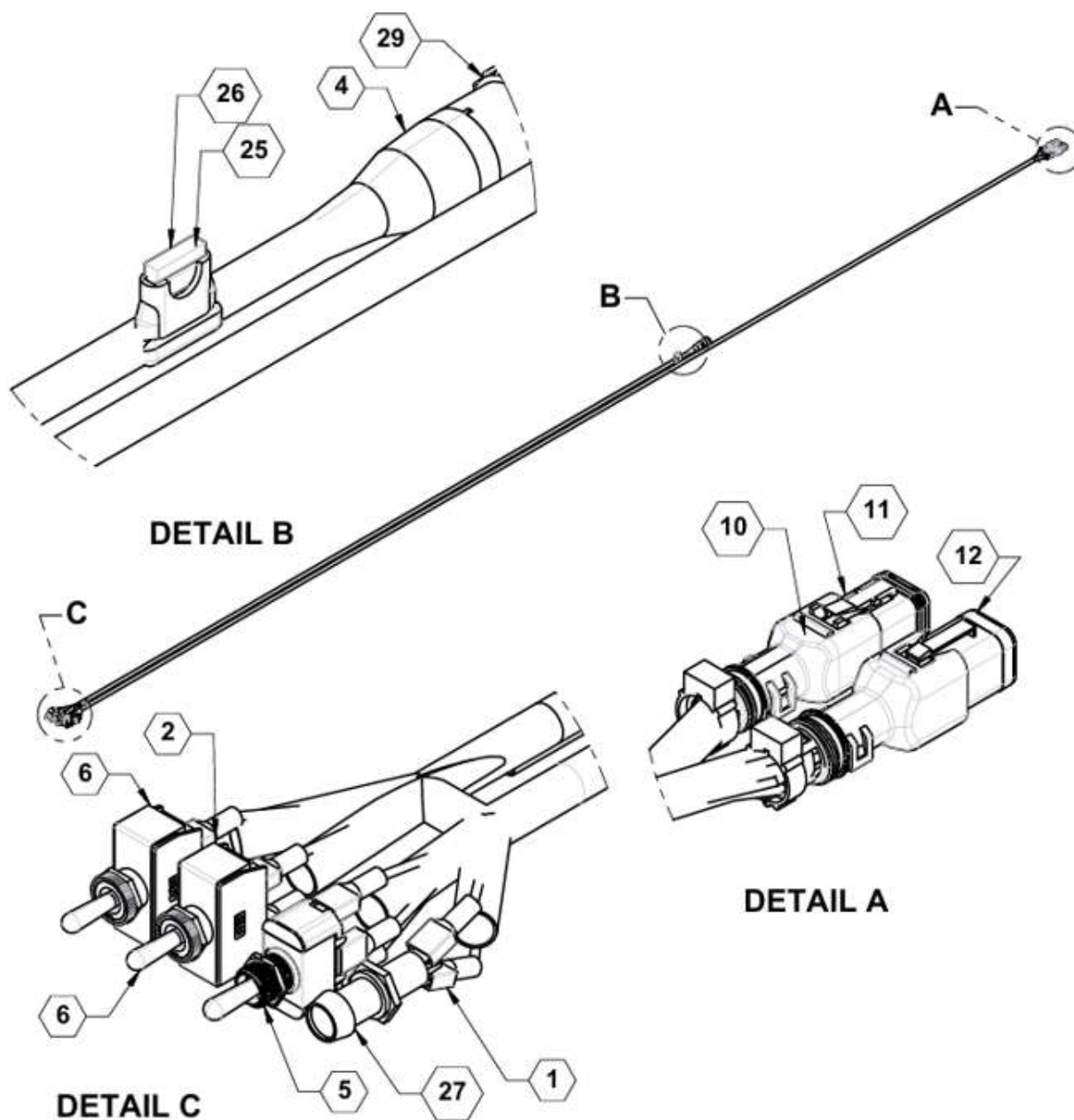
ITEM	PART NO.	QTY.	DESCRIPTION
1	27361	1	DUAL ELECTRIC FENCELINES - DISPLAY CONTROL
2	39112	1	PLATE, TOGGLE PANEL BRACKET
3	632286	1	HARNESS, FENCELINE & RECOVERY VALVE CONTROL
NS	632322	1	HARNESS, RECOVERY & FENCELINE DISTRIBUTION
NS	740083	1	FENCELINE CABLE, 6FT EXTENSION 2P
NS	632204	1	FENCELINE CABLE, 20FT EXTENSION 2P
4	800405	1	DECAL, FENCELINE & BOOM RECIRC

Precision Fenceline & Recirculation Control Harness



CONNECTOR TABLE

IDENTIFIER	GAUGE	COLOR	FROM	TO	CUT_LEN
L02	18	BROWN	J4-1	J6-4	183
L03	18	RED	S2	J4-2	5
L04	18	GRAY	J4-3	J6-3	183
L05	16	RED	S1	S2	104
L06	16	RED	S2	J2-1	7
L07	16	BLACK	J1-3	S3	113
L08	18	BLACK	S3	J5-2	5
L09	16	BLACK	S3	J7-3	183
L10	16	GREEN	J3-2	J7-2	184
L11	16	YELLOW	J2-2	J7-1	184
L12	16	BLACK	S3	J6-2	183
L13	18	BLUE	J5-1	J6-5	183
L14	16	RED	S2	J6-1	183

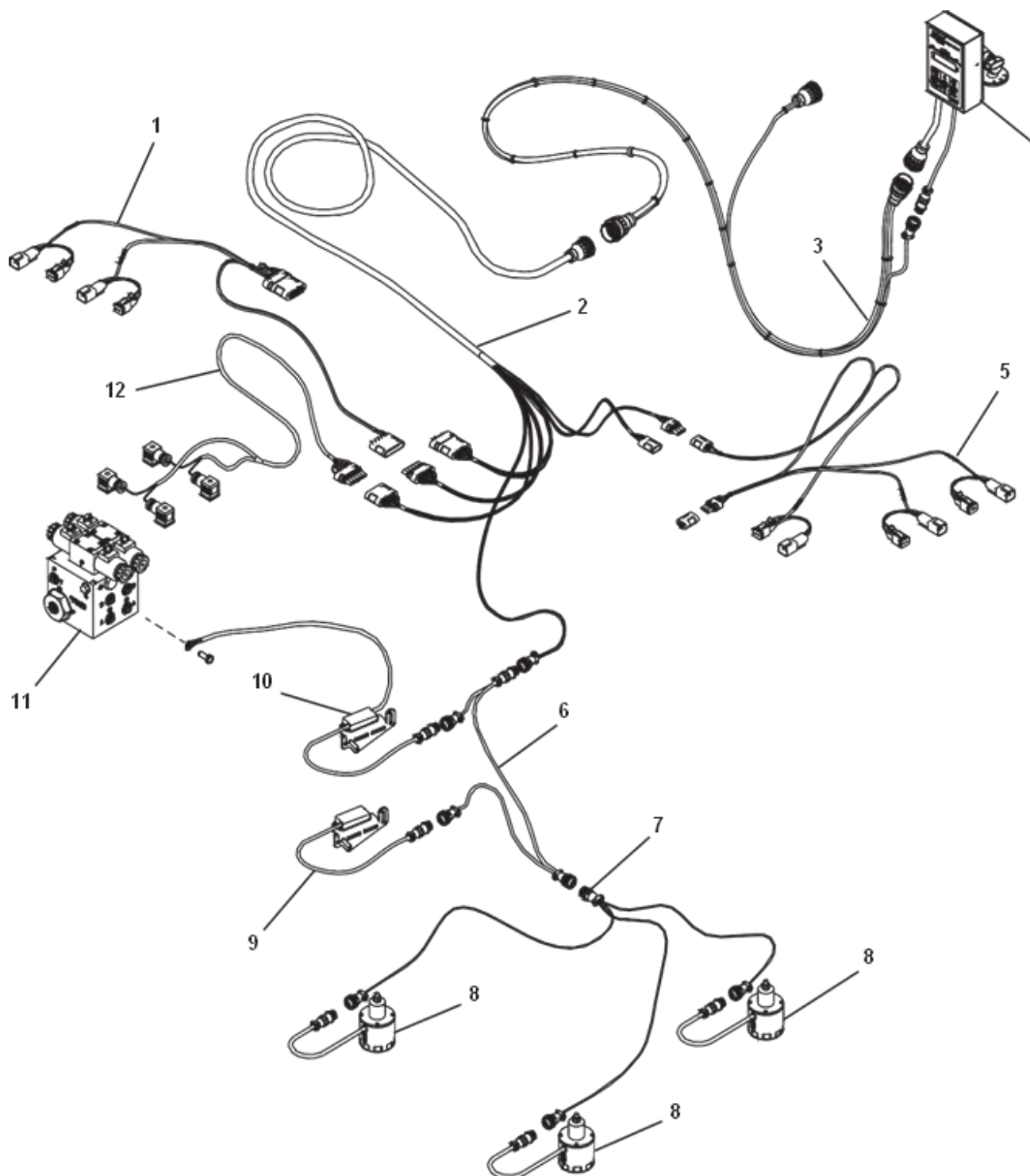


Parts List 632286: Precision Fenceline & Recirculation Control Harness

ITEM	PART NO.	QTY.	DESCRIPTION
5	CARLING 2FC53- 78_TABS	1	TOGGLE SWITCH, SPDT-NO, MAINTAINED, 24V 15A, 1/4 QDC
6	CWIND GTS447A101HR	2	TOGGLE SWITCH, SPST-NO, MAINTAINED, 24VDC 10A, 1/4" QDC
26	LITTELFUSE 0287005.PXCN	1	FUSE, ATOF BLADE, 5A
27	SWITCHCOMP LM2-8-1-A	1	LED, AMBER 12VDC, PANEL, 1/4 QDC

BOOM CONTROL - NORAC

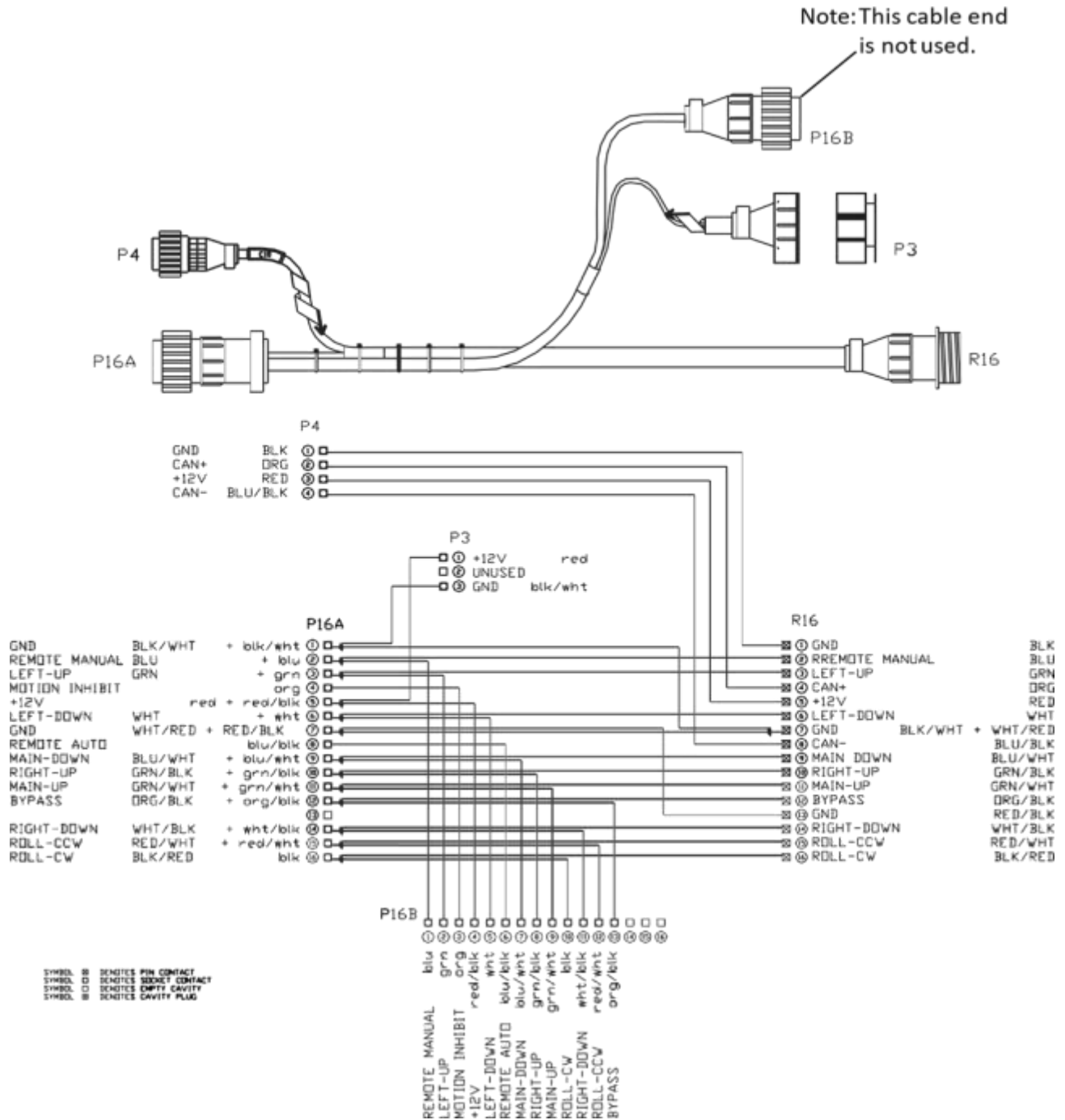
See also [NORAC Hydraulic Valve Block](#) and [NORAC Auto Height Boom Control Hydraulic Schematic UC4+ & UCS](#)

NORAC Auto Height Boom Control UC4+

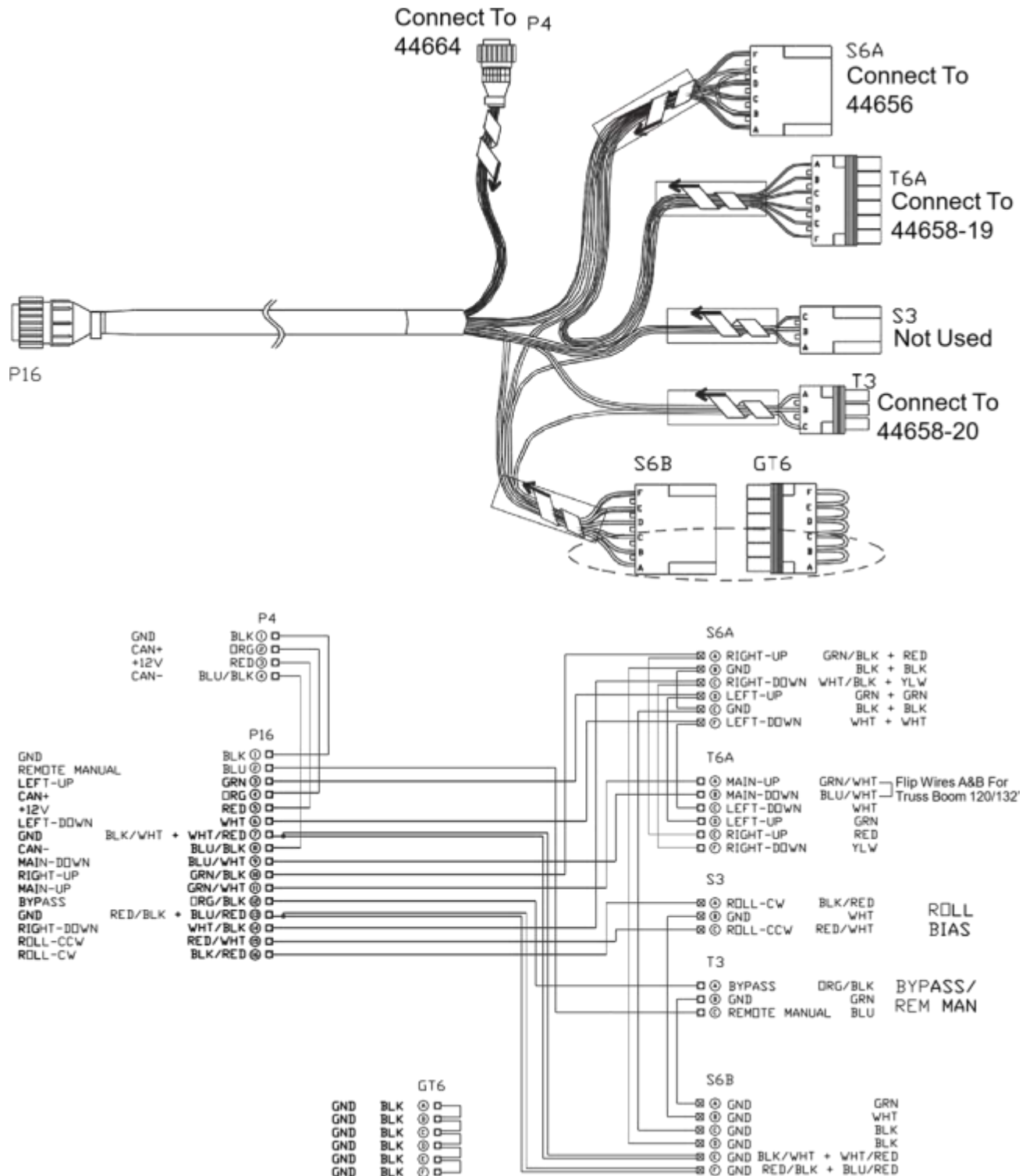
Parts List 631902: NORAC Auto Height Boom Control UC4+

ITEM	PART NO.	QTY.	DESCRIPTION
1	44658-19	1	CABLE INTERFACE UC4 BC C13 FT1 MAIN
2	44651-03	1	CABLE EXTENSION VALVE GENERIC
3	44650-35	1	CABLE POWER GENERIC PULL-TYPE
4	4461BC+	1	UC4 PLUS BOOM CONTROL PANEL
5	44658-20	1	CABLE INTERFACE UC4 BC C12 FT1 WINGS
6	44664	1	CABLE UC4 CAN NODE DUAL
7	44668	1	CABLE UC3 SENSOR BRANCH 1 AMP RECEPT 3 AMP PLUGBC
8	44631	3	UC4 ULTRASOUND SENSOR
9	44642	1	UC4 PLUS ROLL SENSOR
10	44641	1	UC4 PLUS ROLL SENSOR W TEMPERATURE PROBE
11	44933D	1	VALVE BLOCK UC4-BC 2-STATION CC/LS VARIABLE RATE DUETSCH
12	44656D	1	CABLE VALVE VARIABLE RATE DUETSCH
NS	44656	NS	CABLE VALVE VARIABLE RATE DIN TERMINAL

NORAC Auto Height Boom Control Harness

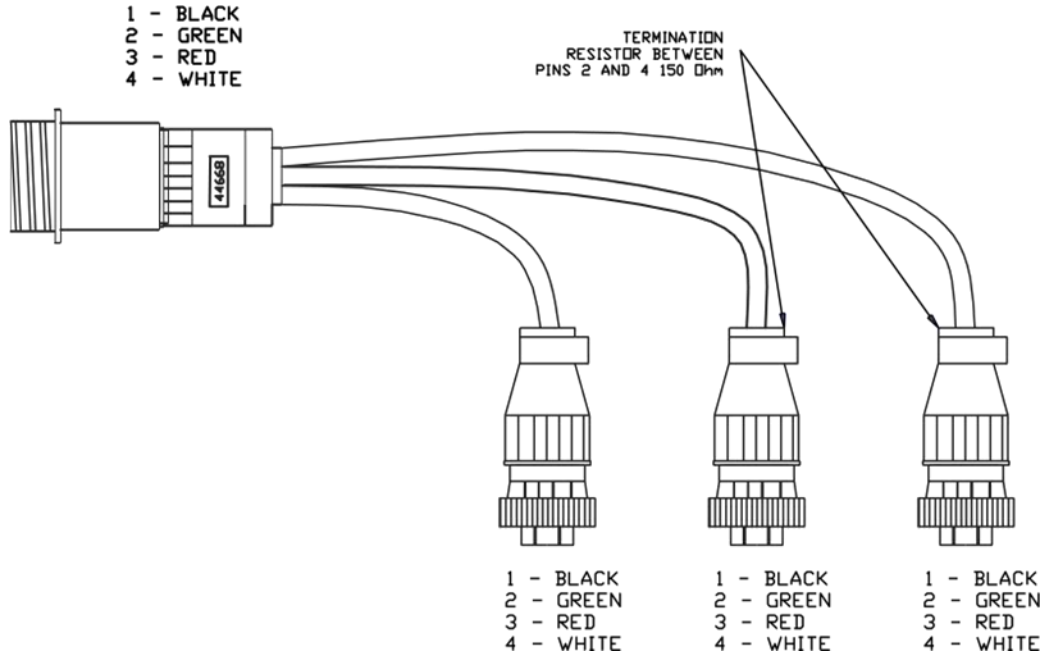


NORAC Auto Height Boom Control Extension Harness - No. 4465103

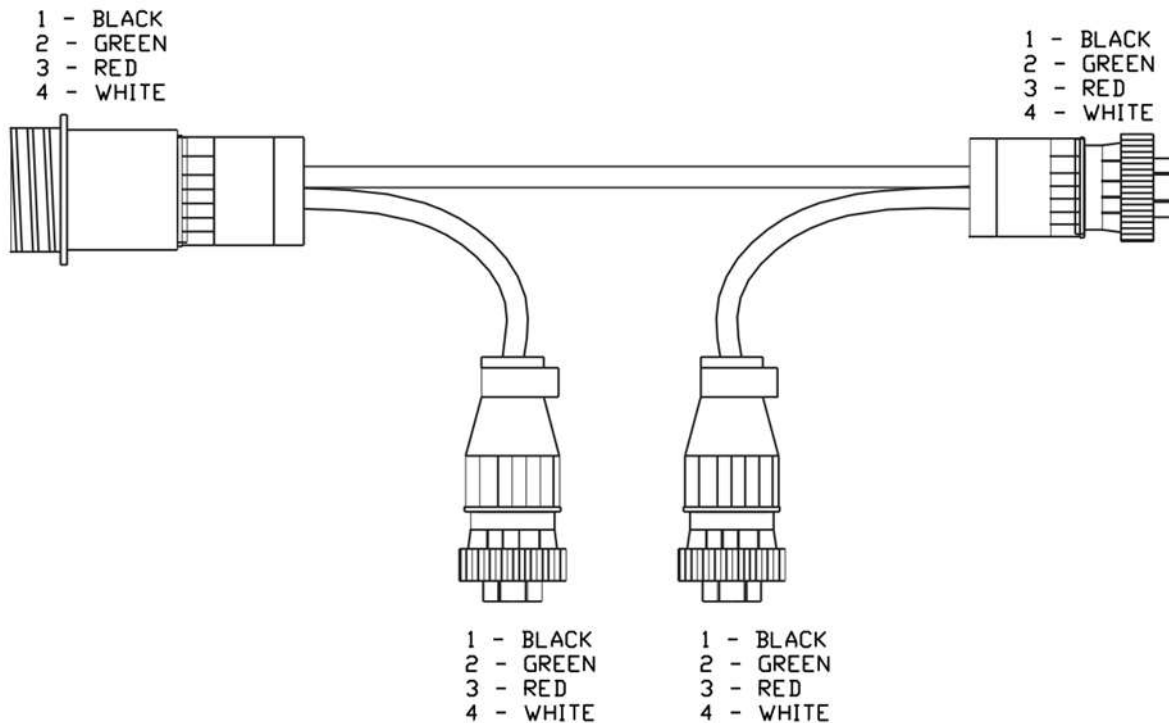


NORAC Auto Height Boom Control Sensor Cables

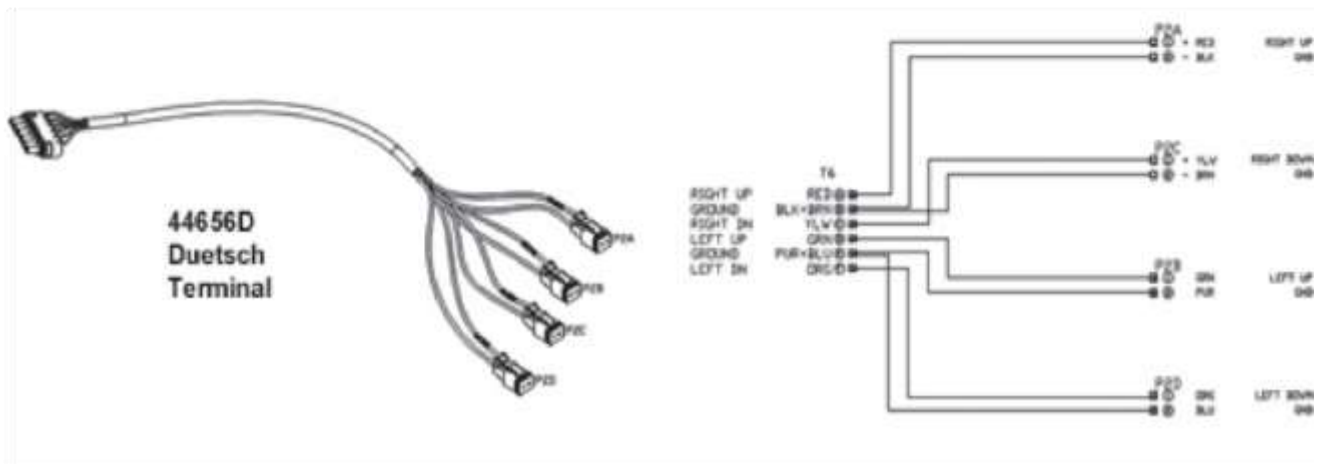
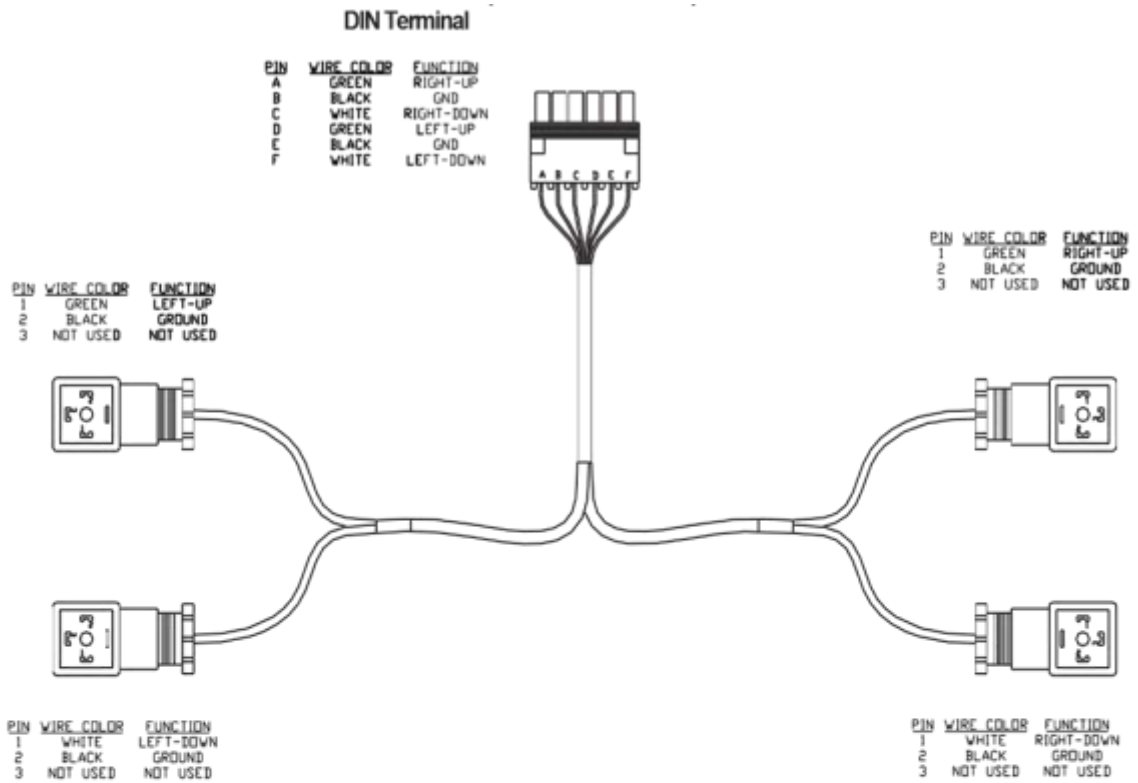
Item C02: 44668 – Sensor Branch Cable



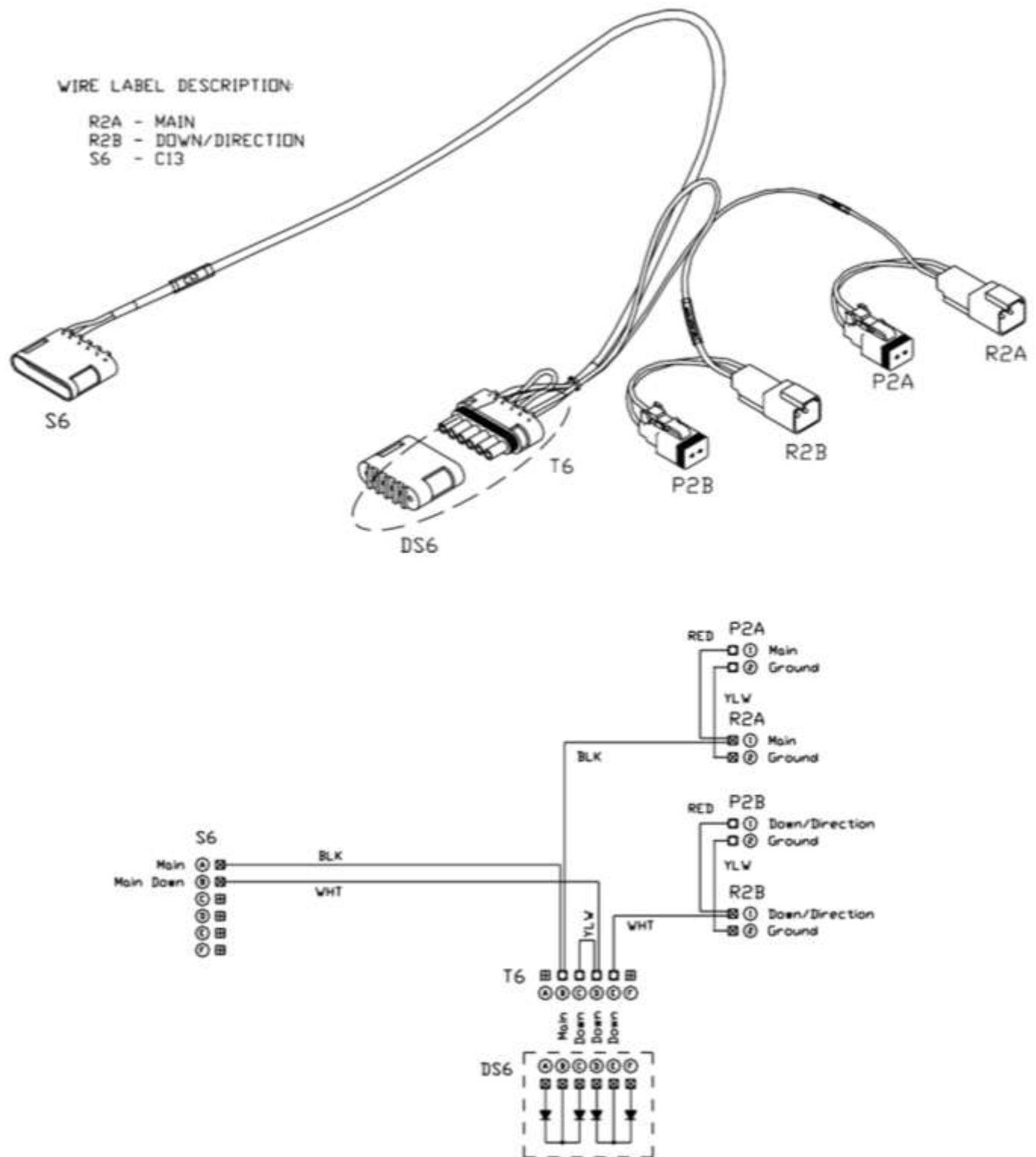
Item C02B: 44664 – Cable UC4 CAN Node Dual



Item C03: 44656 – Valve Cable (Variable Rate)



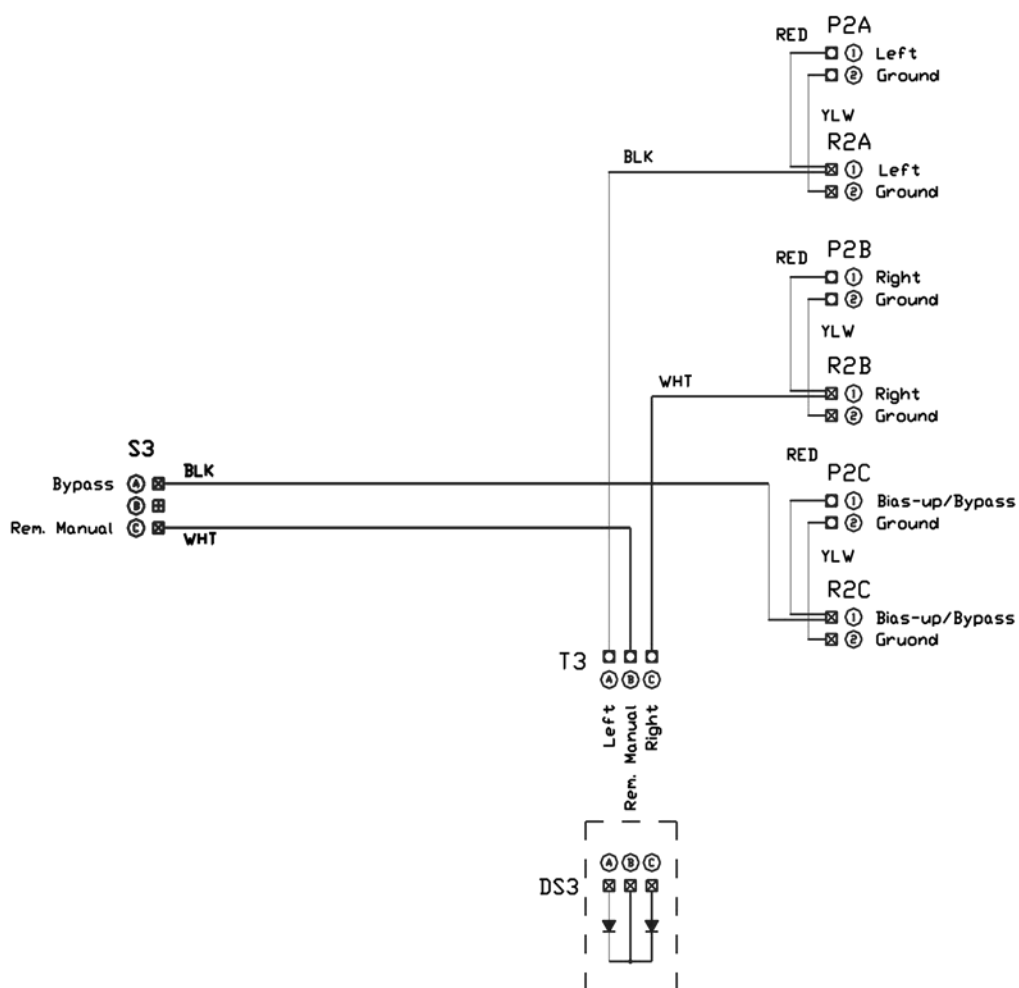
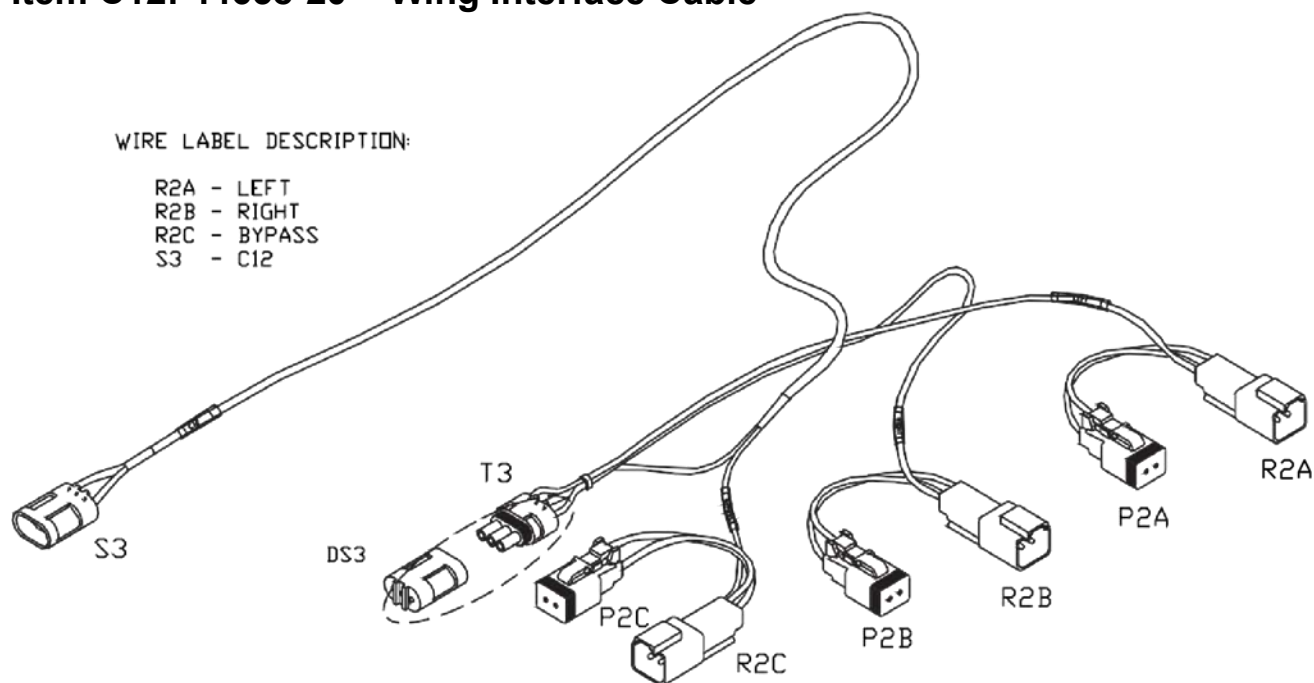
Item C13: 44658-19 – Main Interface Cable



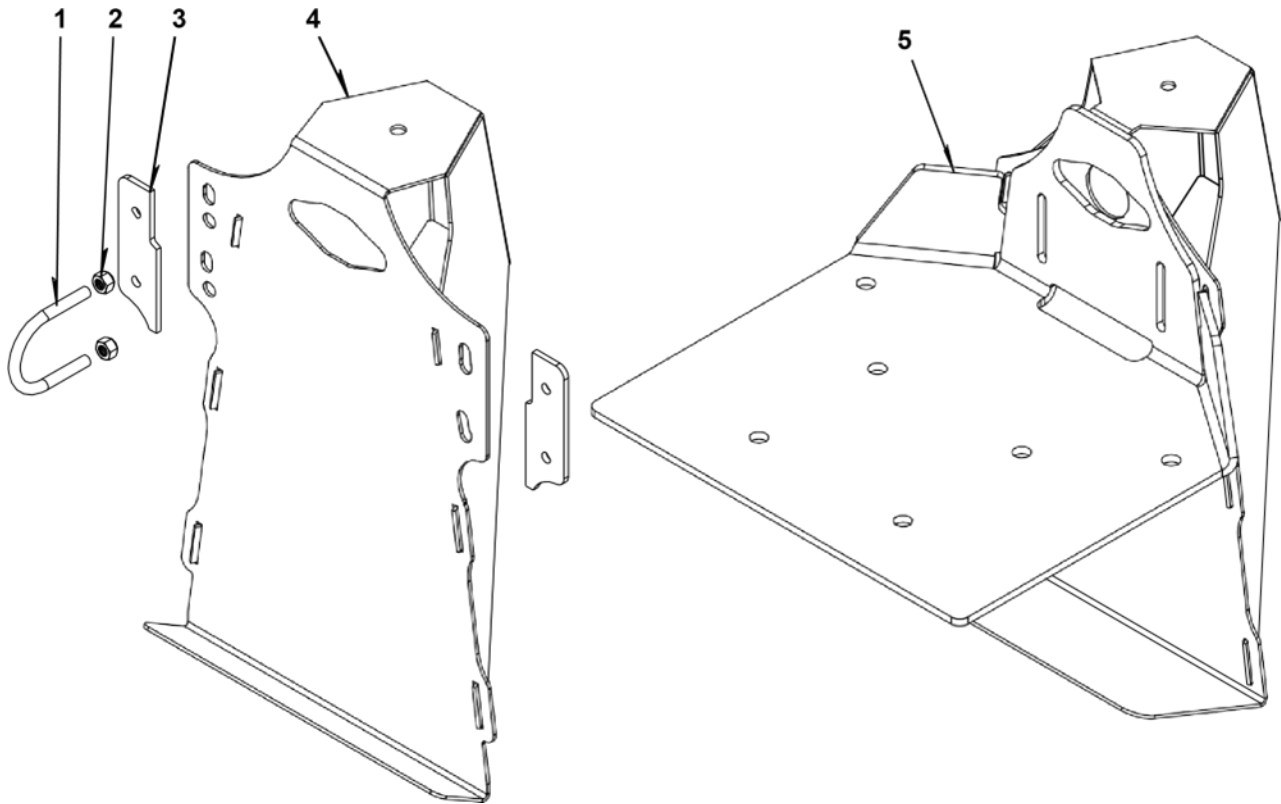
Item C12: 44658-20 – Wing Interface Cable

WIRE LABEL DESCRIPTION:

R2A - LEFT
R2B - RIGHT
R2C - BYPASS
S3 - C12



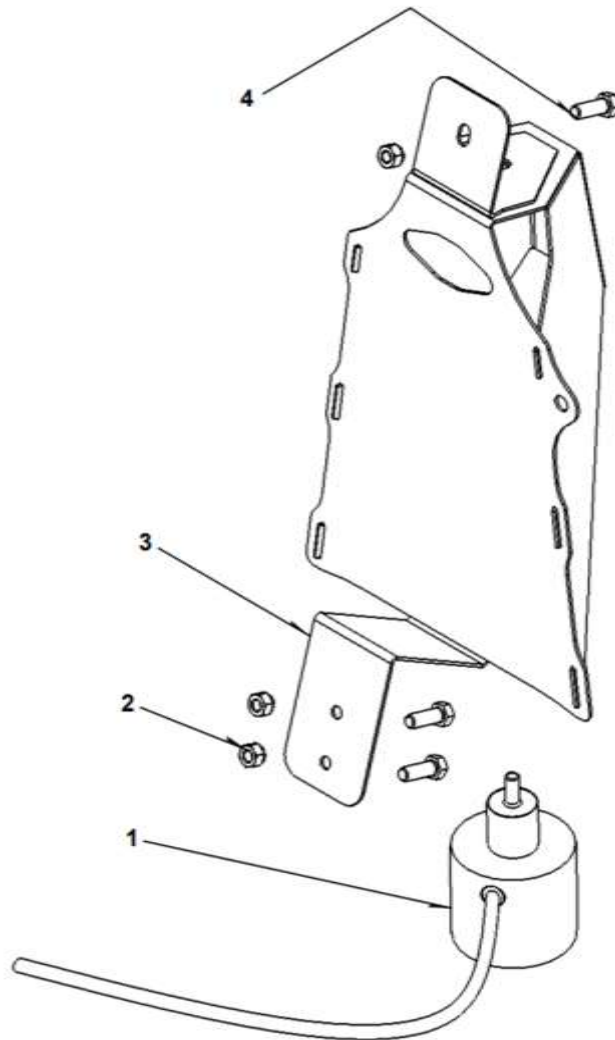
NORAC Sensor Brackets



Parts List 99NOR120132PRTB: NORAC Sensor Brackets

ITEM	PART NO.	QTY.	DESCRIPTION
1	590118	2	U-BOLT 1/4 X2
2	596227M	4	NUT HEX 1/4" NYLOCK MAGNI
3	16737	4	SPACER SENSOR MOUNT
4	16715	2	MOUNT BREAKAWAY SENSOR
5	16721	1	MOUNT CENTER SECTION

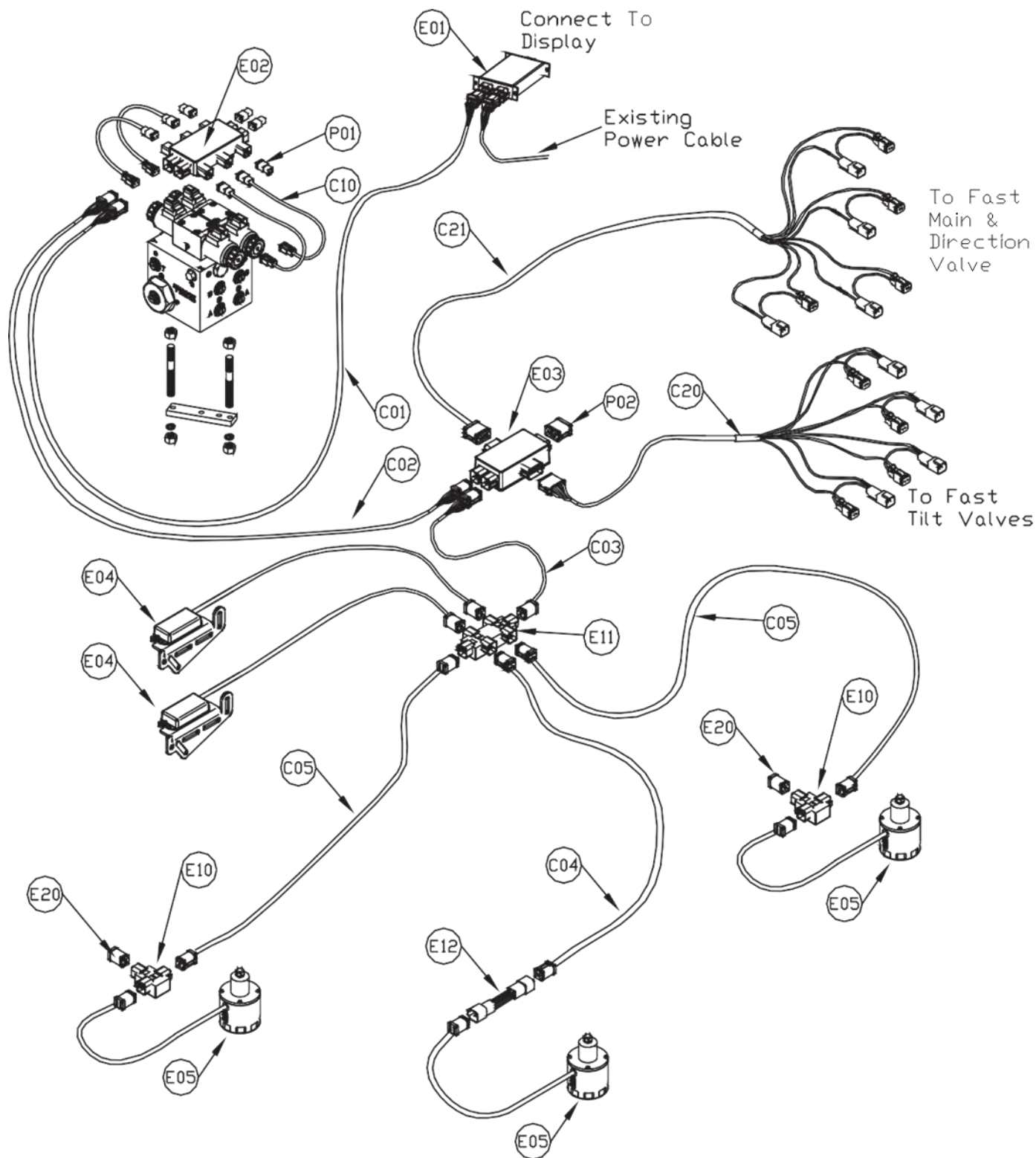
Severe Terrain Kit UC4/UC5



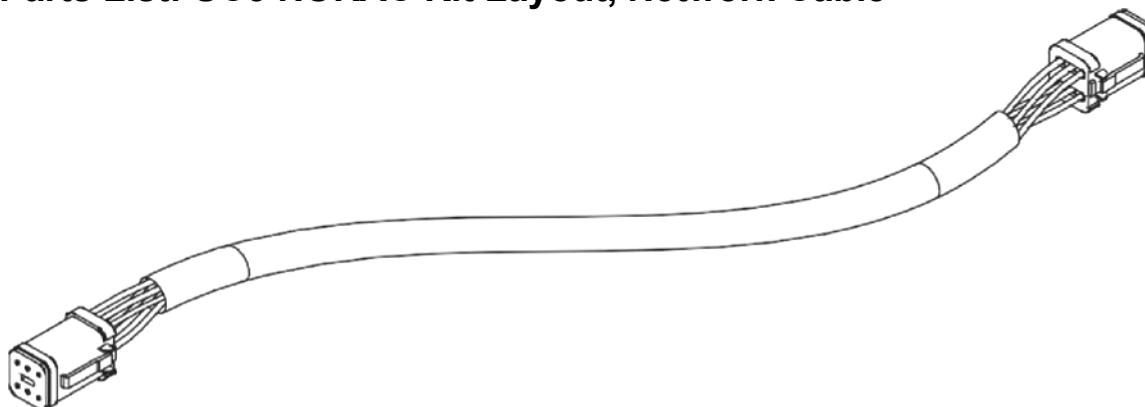
Parts List 99NOSTK: Severe Terrain Kit UC4/UC5

ITEM	VENDOR NO.	PART NO.	QTY.	DESCRIPTION
1	NO44631	631900	2	SENSOR UC4
NS	NO43750	631911	2	SENSO RUC5
2		596227M	3	NUT HEX 1/4" NYLOCK MAGNI
3		16720	2	SENSOR MOUNT
4		596115M	3	BOLT HH 5/16 X 1 GR5 MAGNI
NS	NO44669	631901	1	CABLE SEVERE TERRAIN UC4
NS	NO4222010A		1	CABLE SEVERE TERRAIN UC5

UC5 NORAC Kit Layout



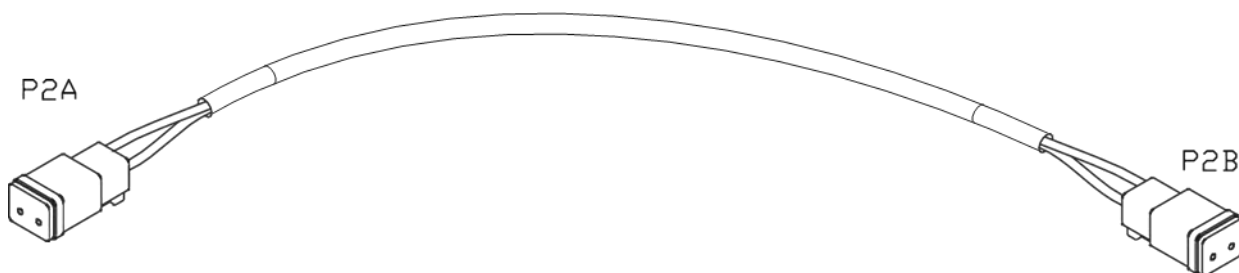
Parts List: UC5 NORAC Kit Layout, Network Cable



P6A		P6B	
ECU GND	BLK ①	① BLK	ECU GND
SIG GND	DRG ②	② DRG	SIG GND
CANL	WHT ③	③ WHT	CANL
CANH	GRN ④	④ GRN	CANH
SIG PWR	BLU ⑤	⑤ BLU	SIG PWR
ECU PWR	RED ⑥	⑥ RED	ECU PWR

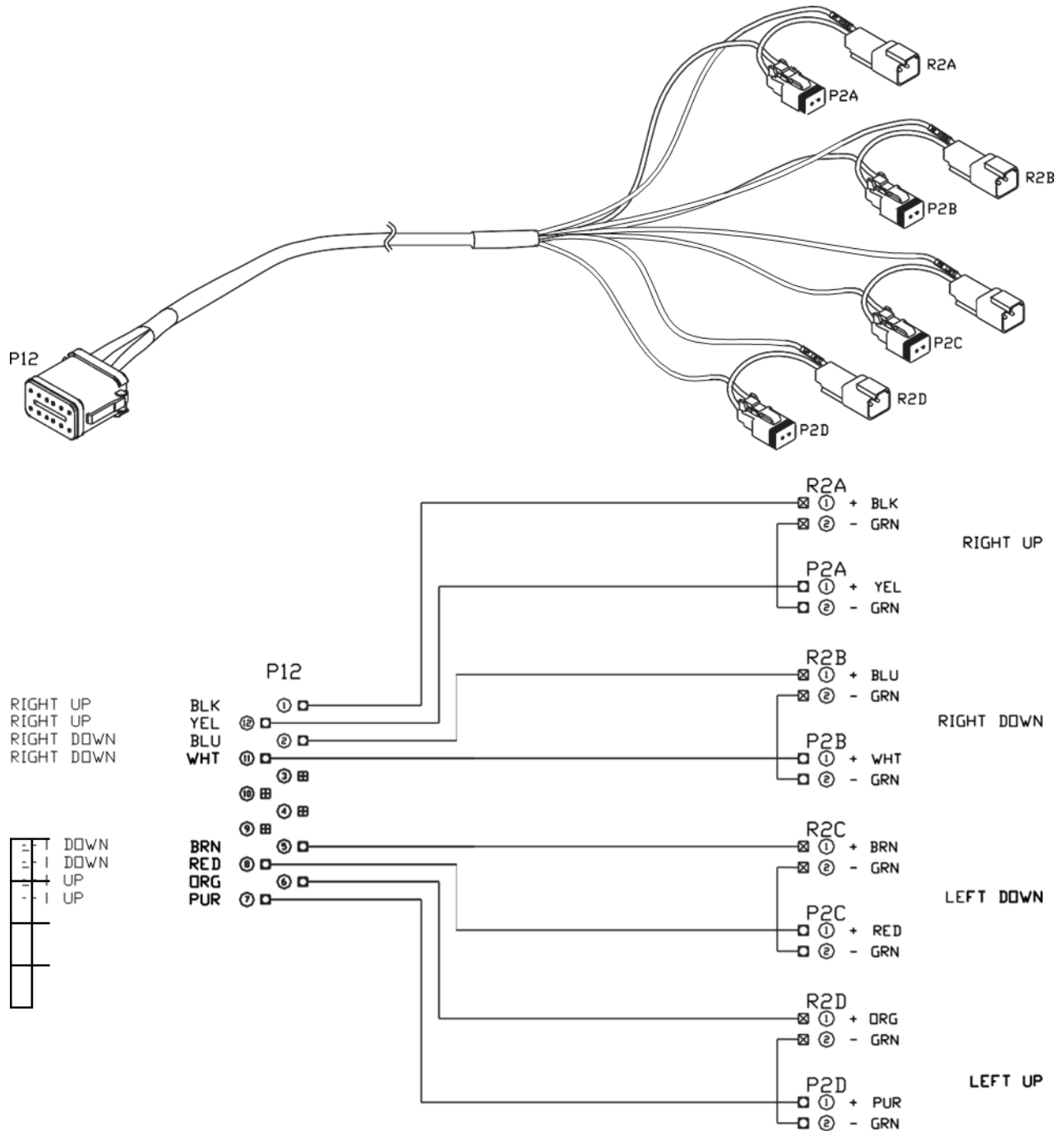
ITEM	PART NO.	QTY.	DESCRIPTION
C01	43220-10A	-	Cable UC5 Network 14 AWG – 10M
C02	43220-01A	-	Cable UC5 Network 14 AWG – 1M
C03	43210-03A	-	Cable UC5 Network 18 AWG - 3M
C04	43210-01A	-	Cable UC5 Network 18 AWG - 1M
C05	43210-20A	-	Cable UC5 Network 18 AWG – 20M

Parts List: UC5 NORAC Kit Layout, Valve Cable

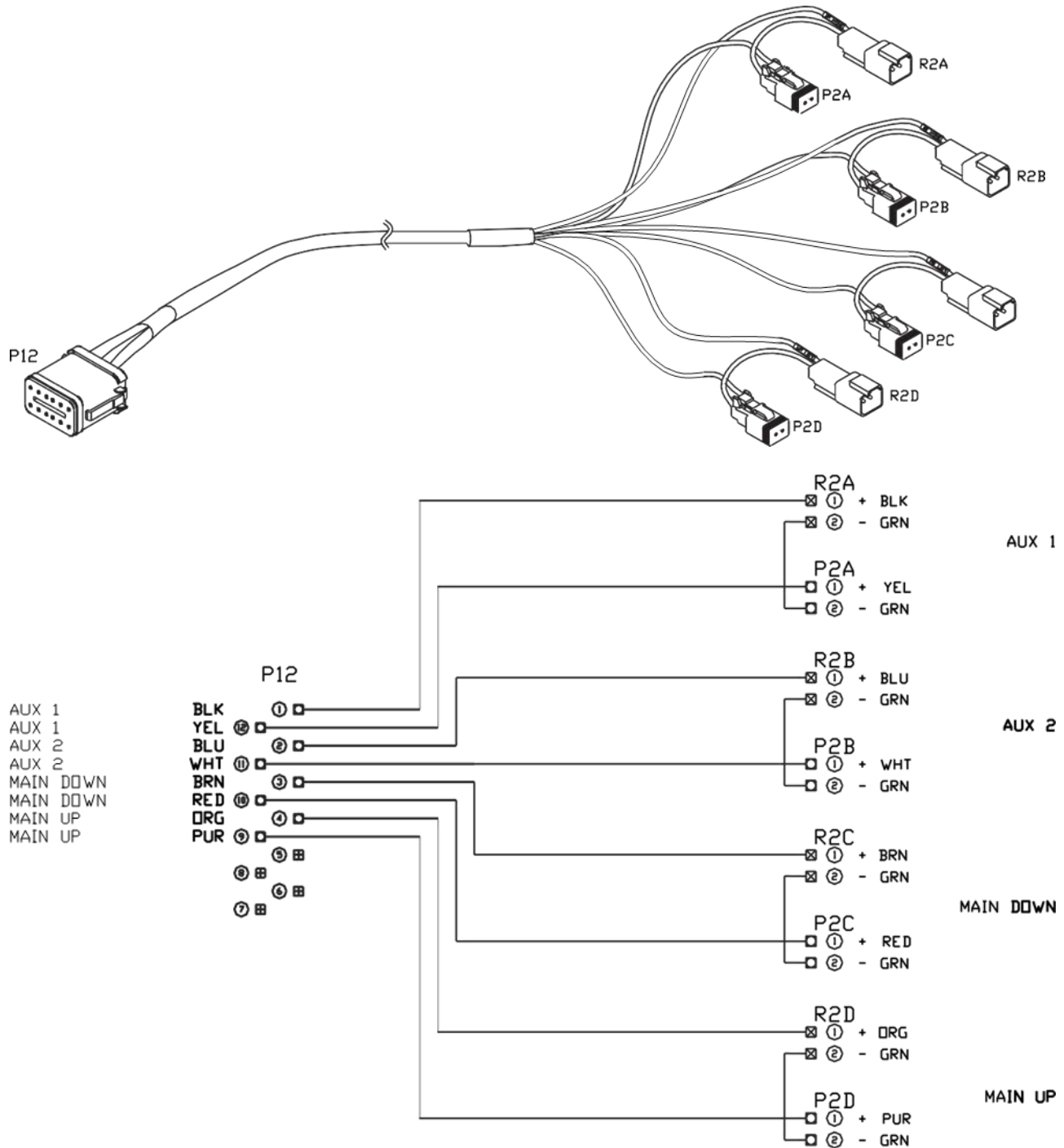


ITEM	PART NO.	QTY.	DESCRIPTION
C10	43230-04A	-	Cable UC5 Valve DT to DT

Item C20: 43240-01B – Cable UC5 Interface Tilt DT

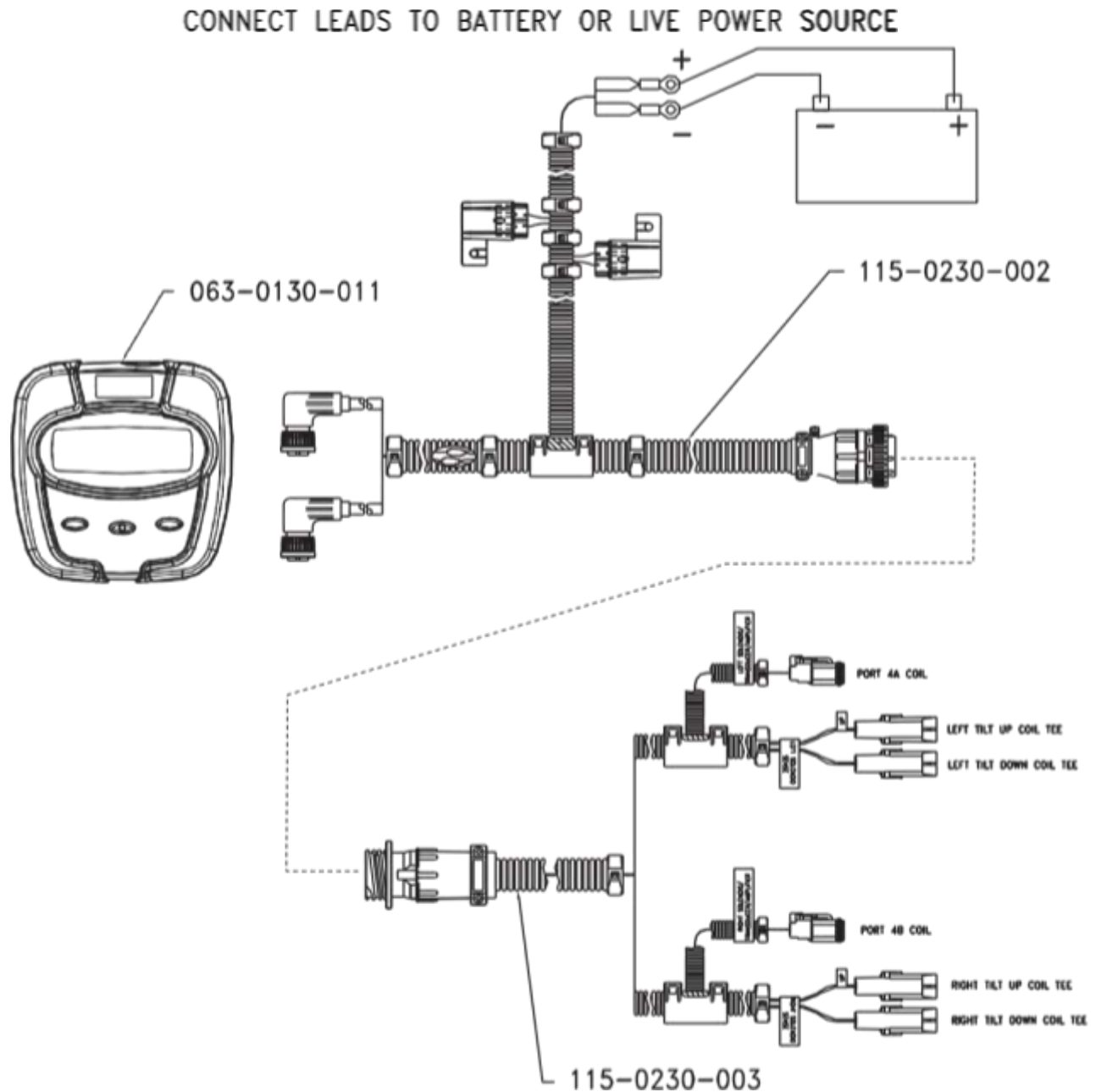


Item C21: 43240-07B Interface Main DT (With Aux 1 & 2)

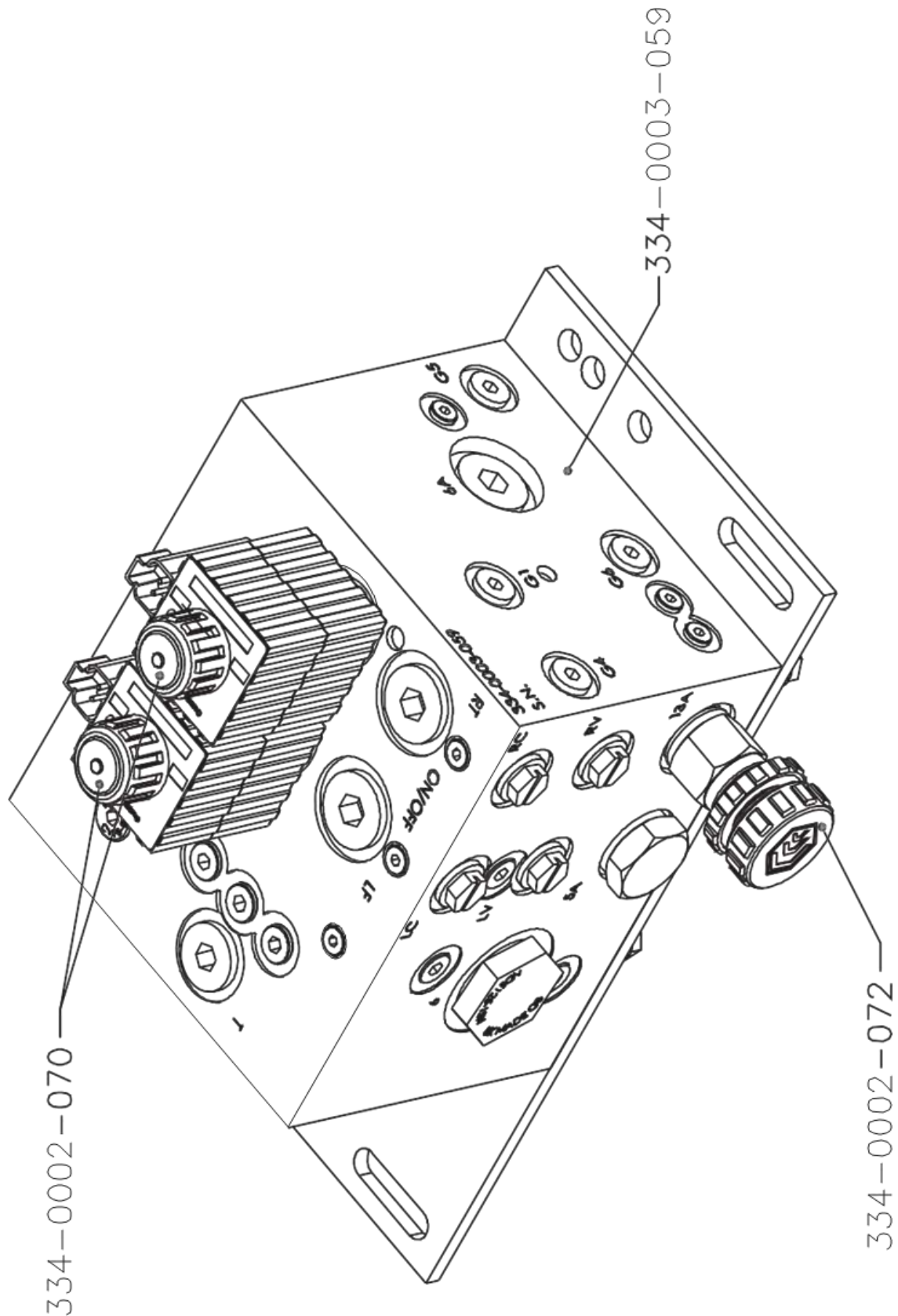


BOOM CONTROL - RAVEN

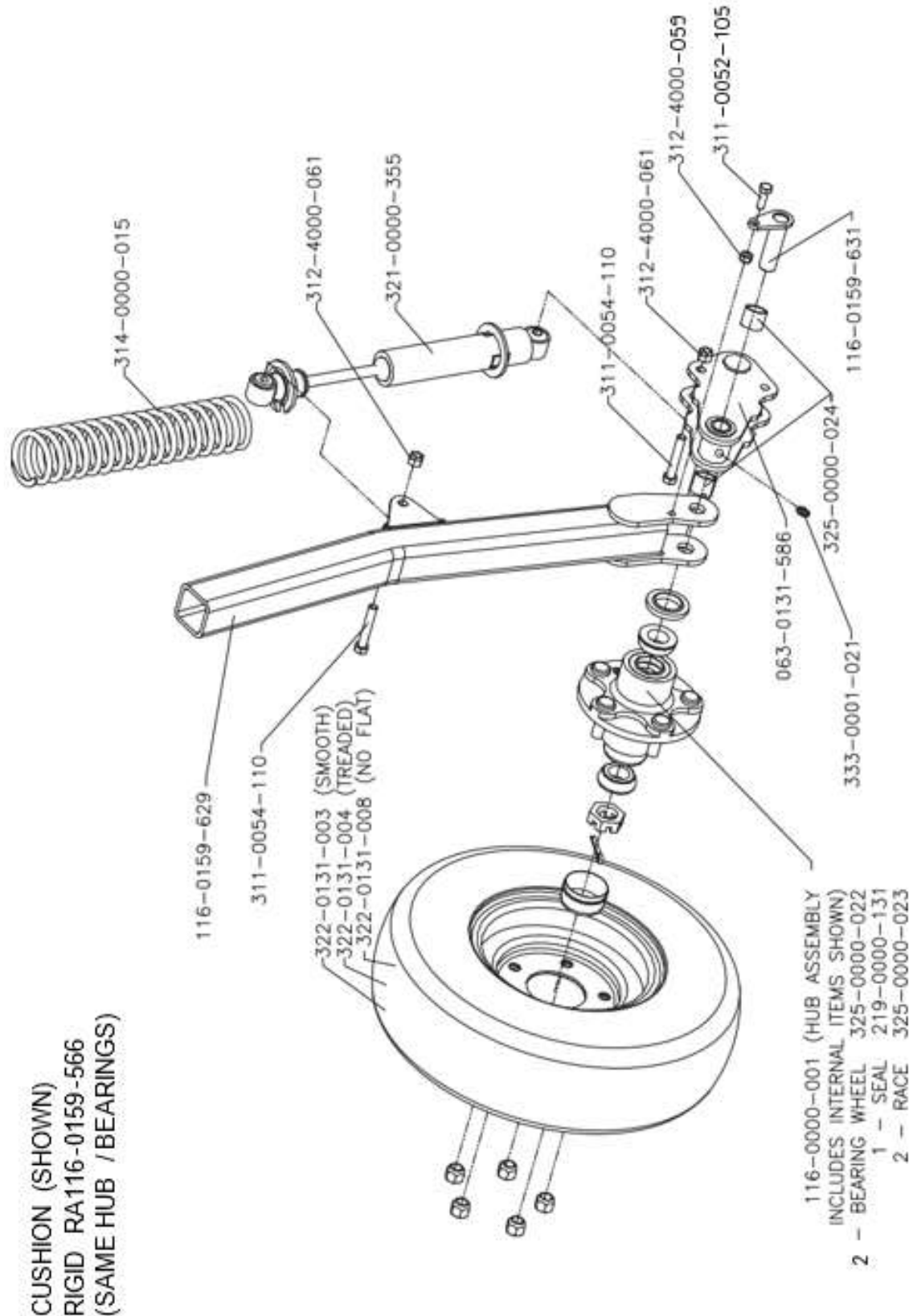
PowerGlide Wiring Schematic



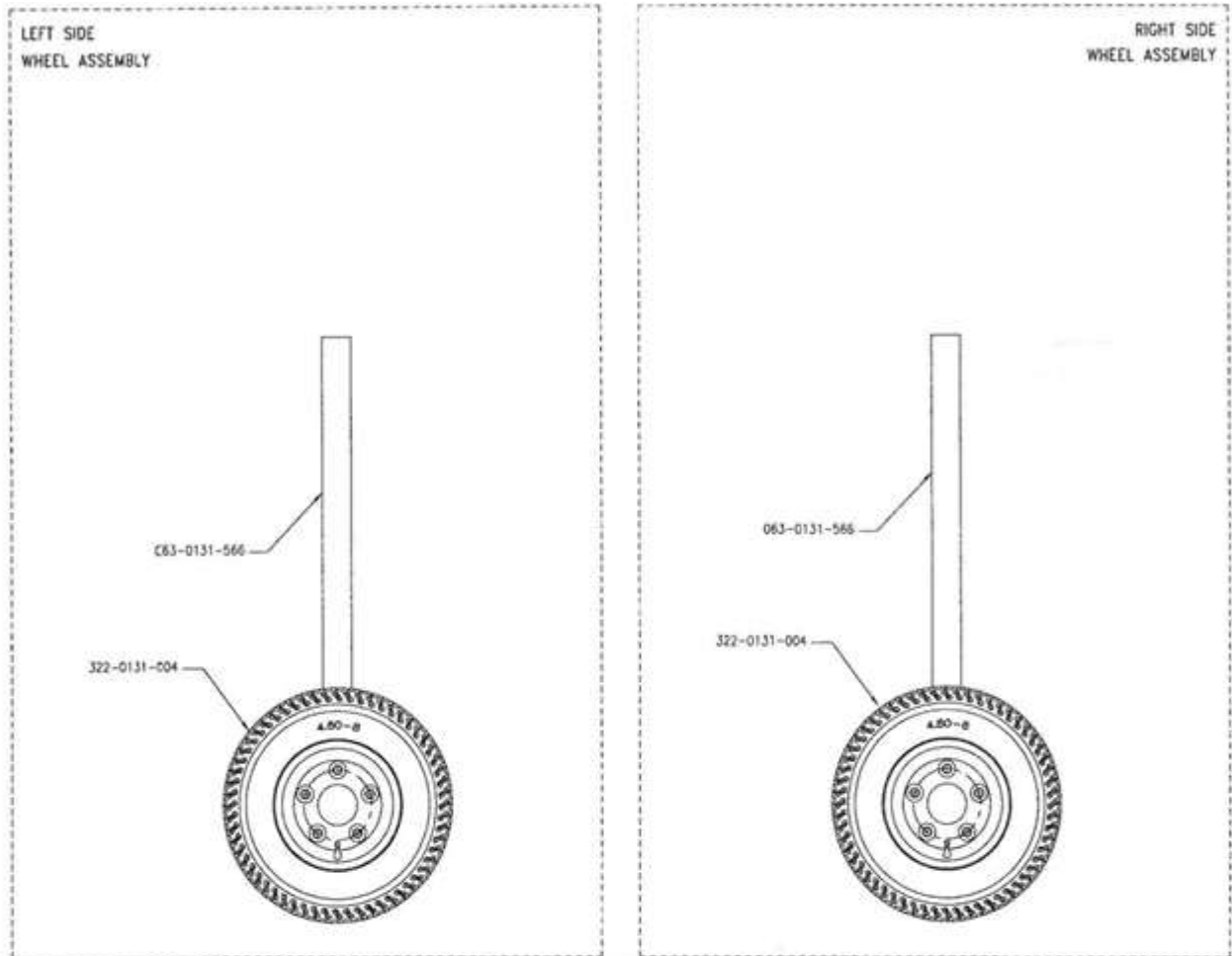
PowerGlide Hydraulic Block



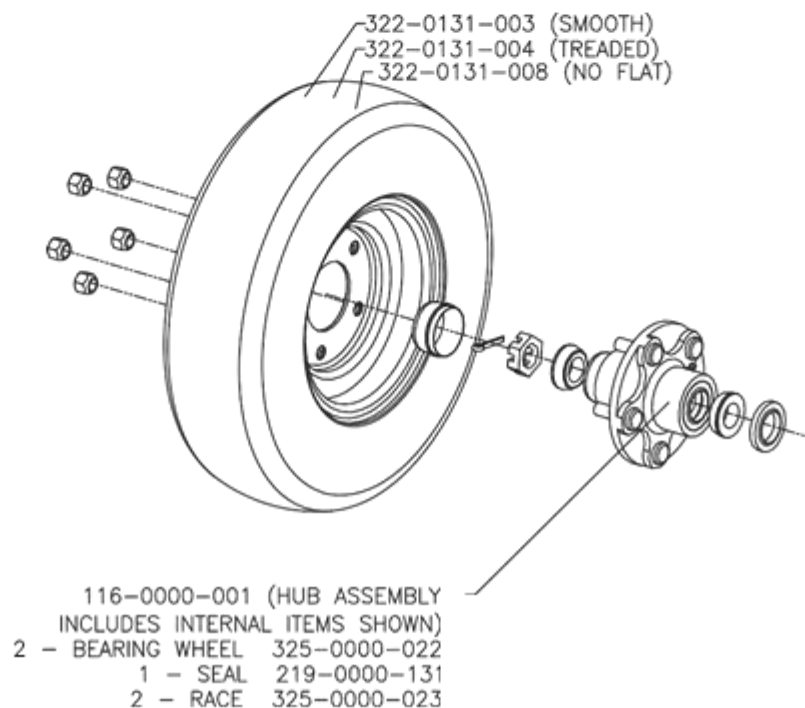
PowerGlide Wheels



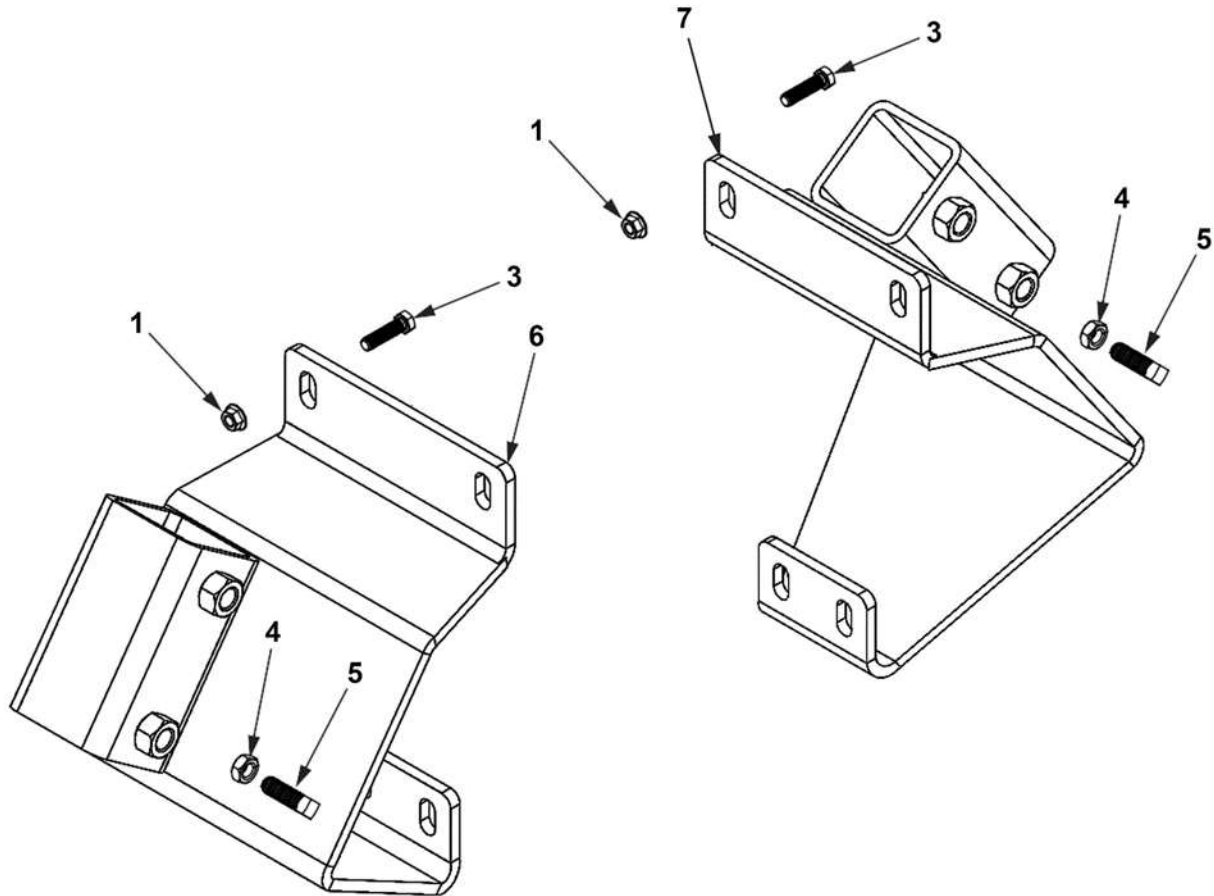
PowerGlide Solid Axle



HUB BREAKOUT



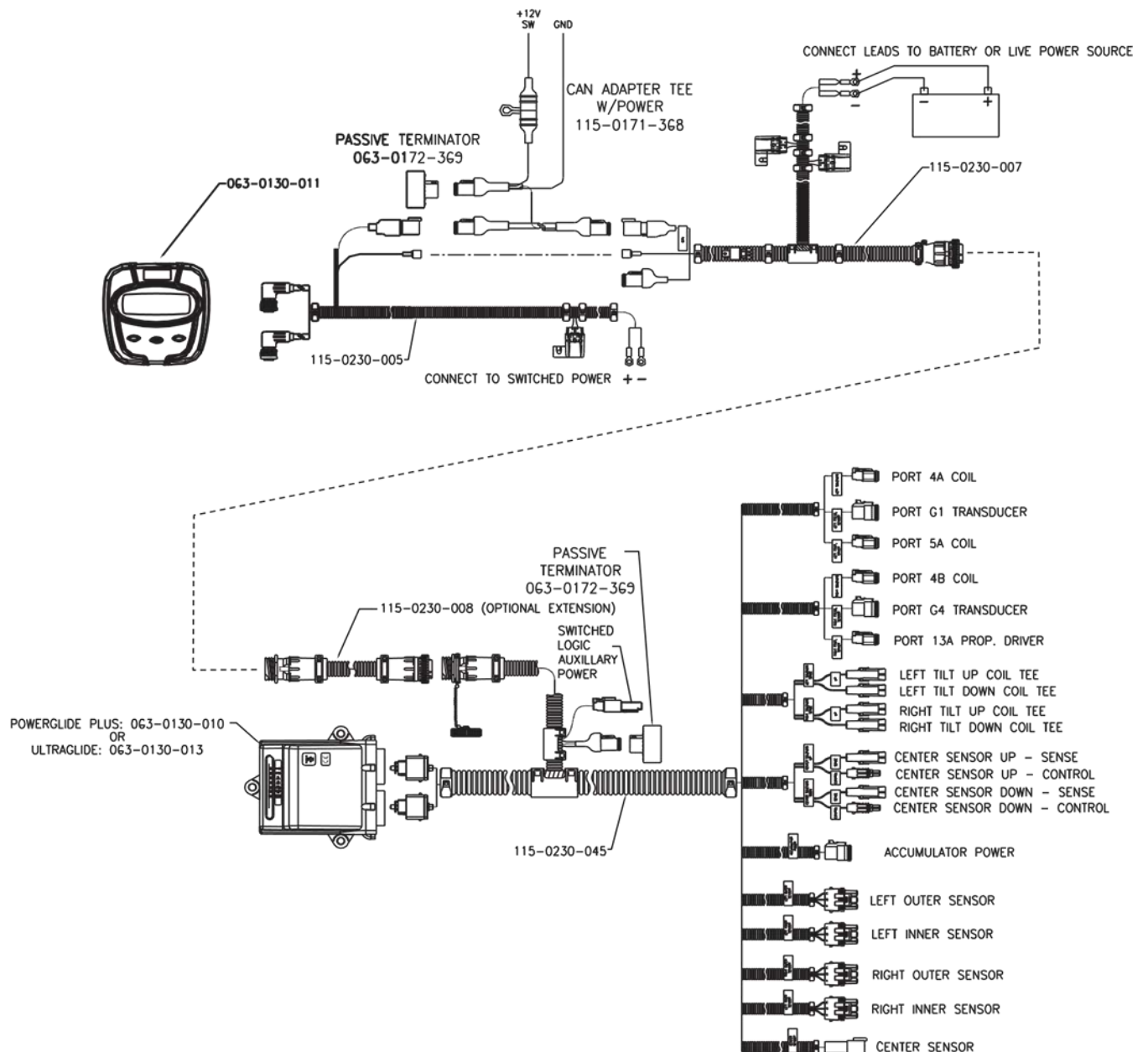
PowerGlide, PowerGlide Plus, or UltraGlide Touch Down Bracket



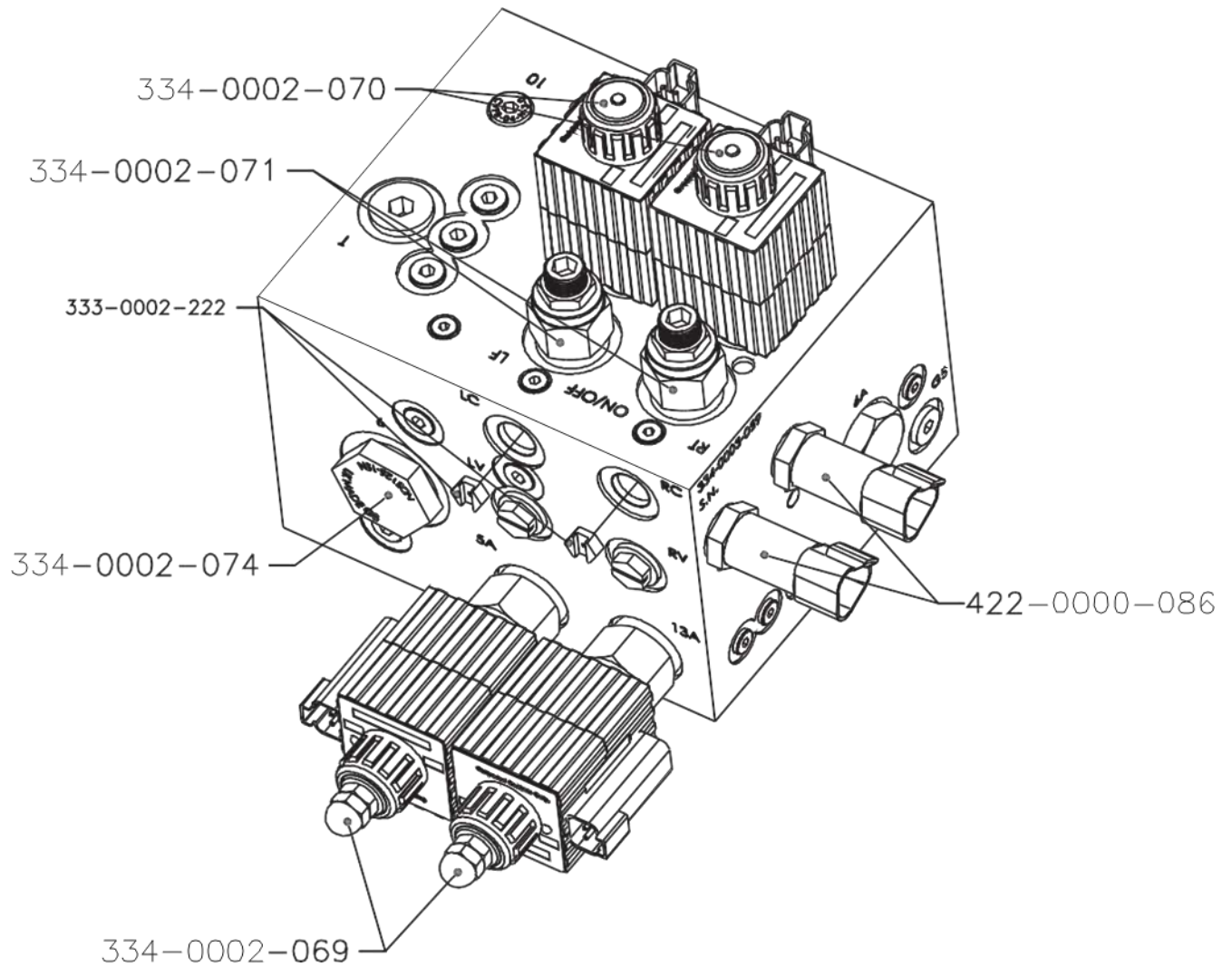
Parts List 34922: PowerGlide, PowerGlide Plus, or UltraGlide Touch Down Bracket

ITEM	PART NO.	QTY.	DESCRIPTION
1	596769M	8	NUT, FLANGE 3/8" MAGNI
3	596129M	8	BOLT HH 3/8 X 1-1/2 GR5 MAGNI
4	596223M	4	NUT JAM 1/2" MAGNI
5	596725M	4	SETSCREW SQUARE HEAD MAGNI
6	16648R	1	BRACKET WHEEL 22" ROW RH
7	16648L	1	BRACKET WHEEL 22" ROW LH
NS	631878	1	RAVEN ULTRAGLIDE WHEEL KIT

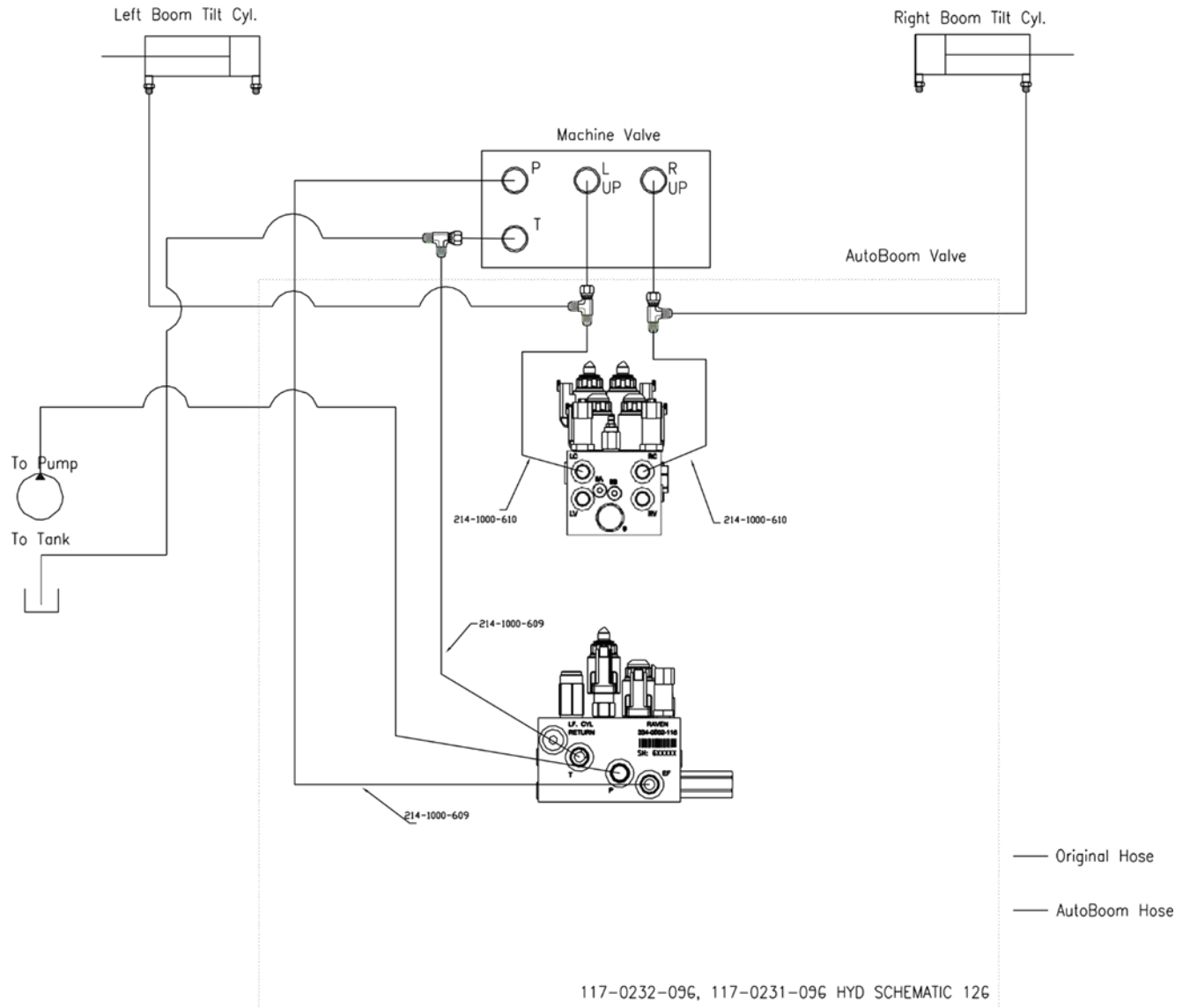
PowerGlide Plus Wiring Schematic



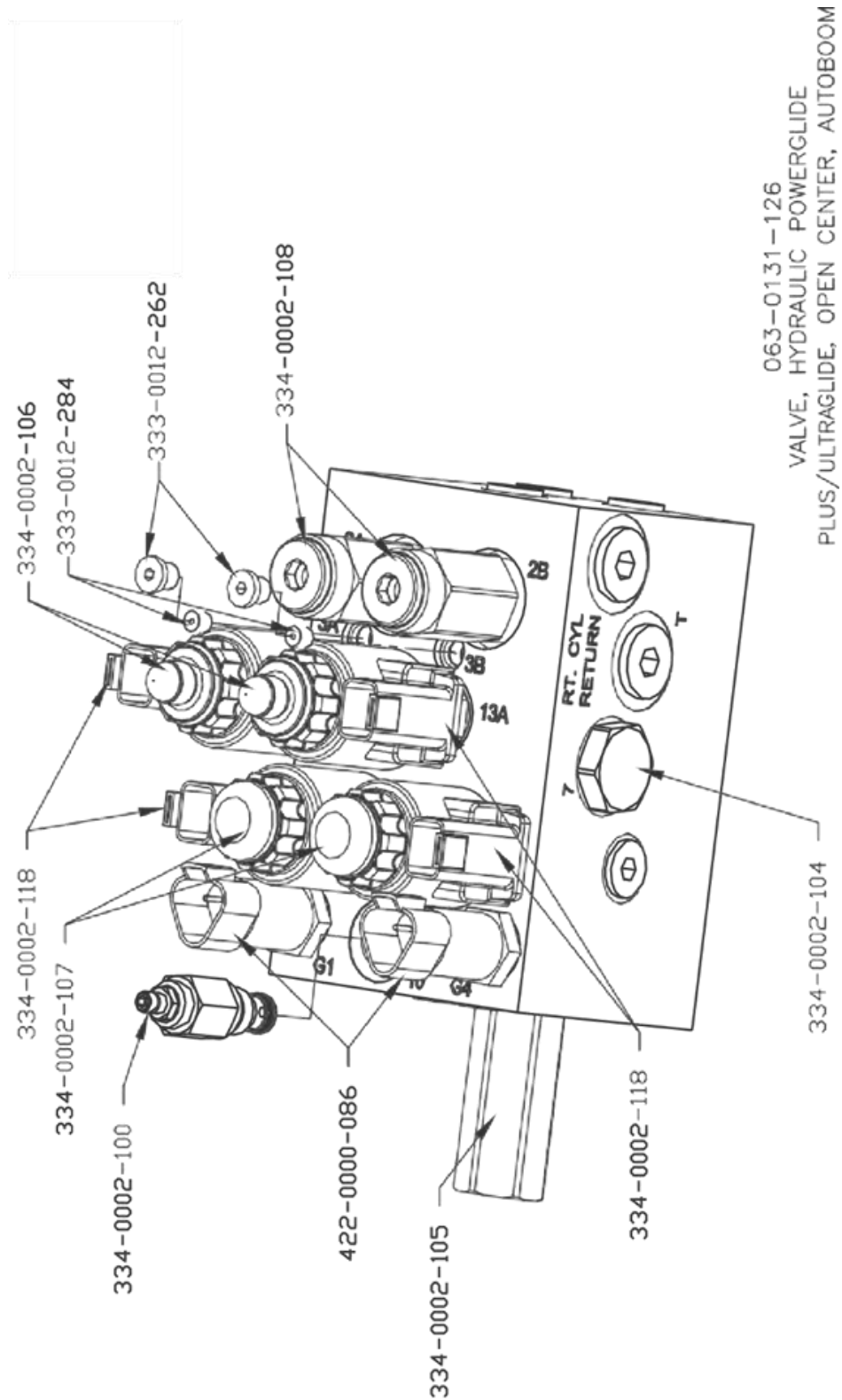
PowerGlide Plus Hydraulic Block



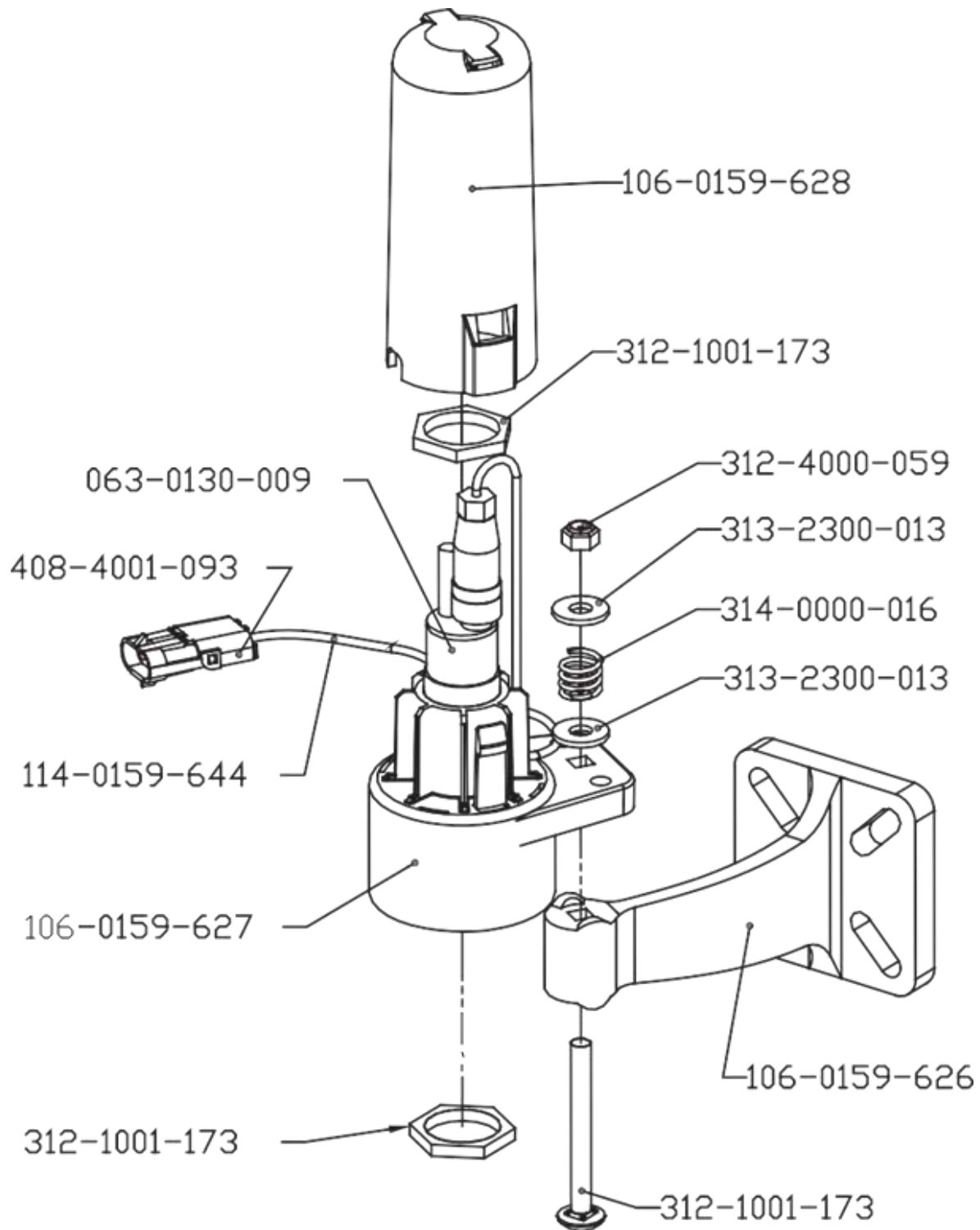
UltraGlide Hydraulic Schematic



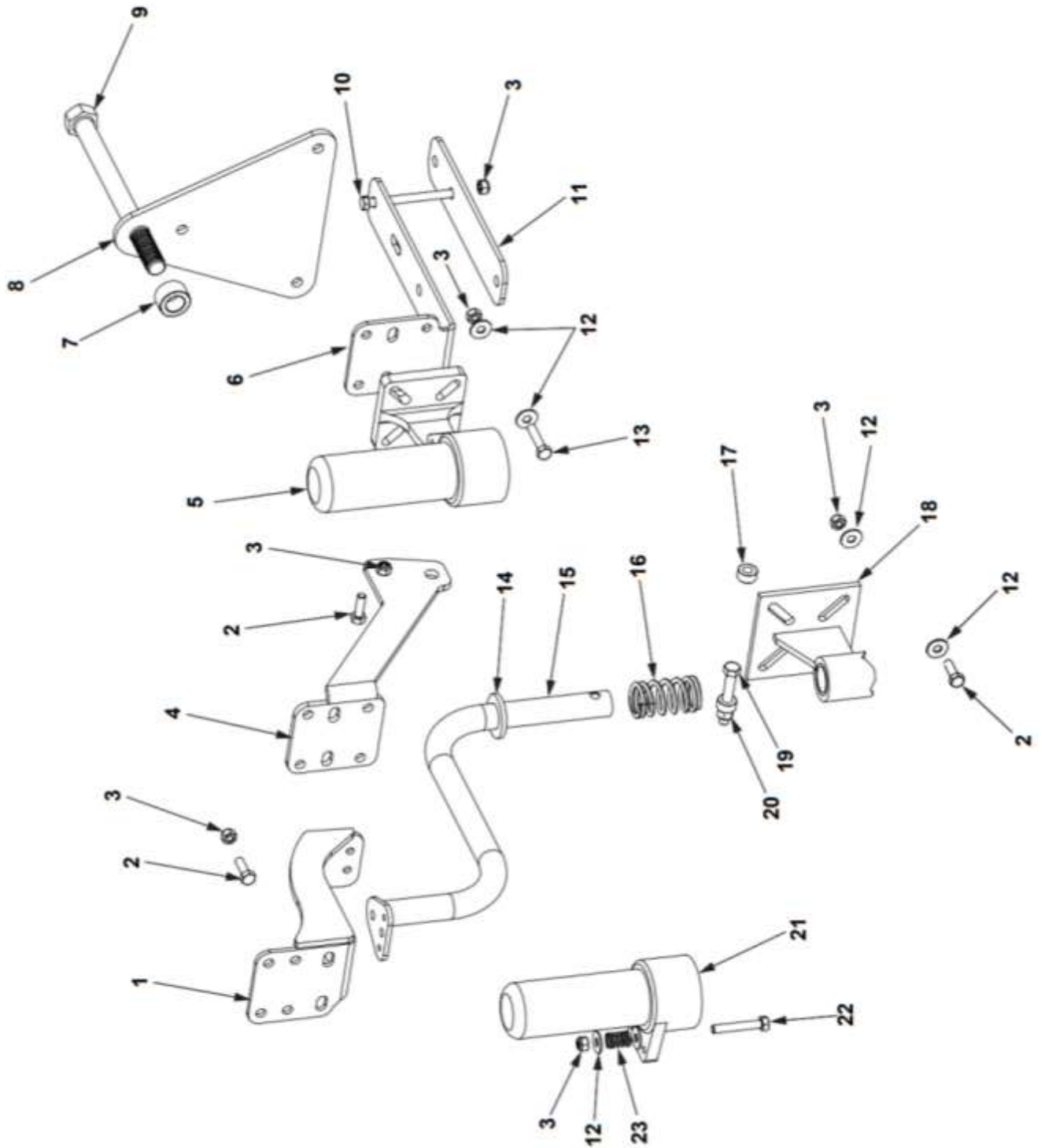
PowerGlide Plus & UltraGlide Valve Replacement Parts



Sensors



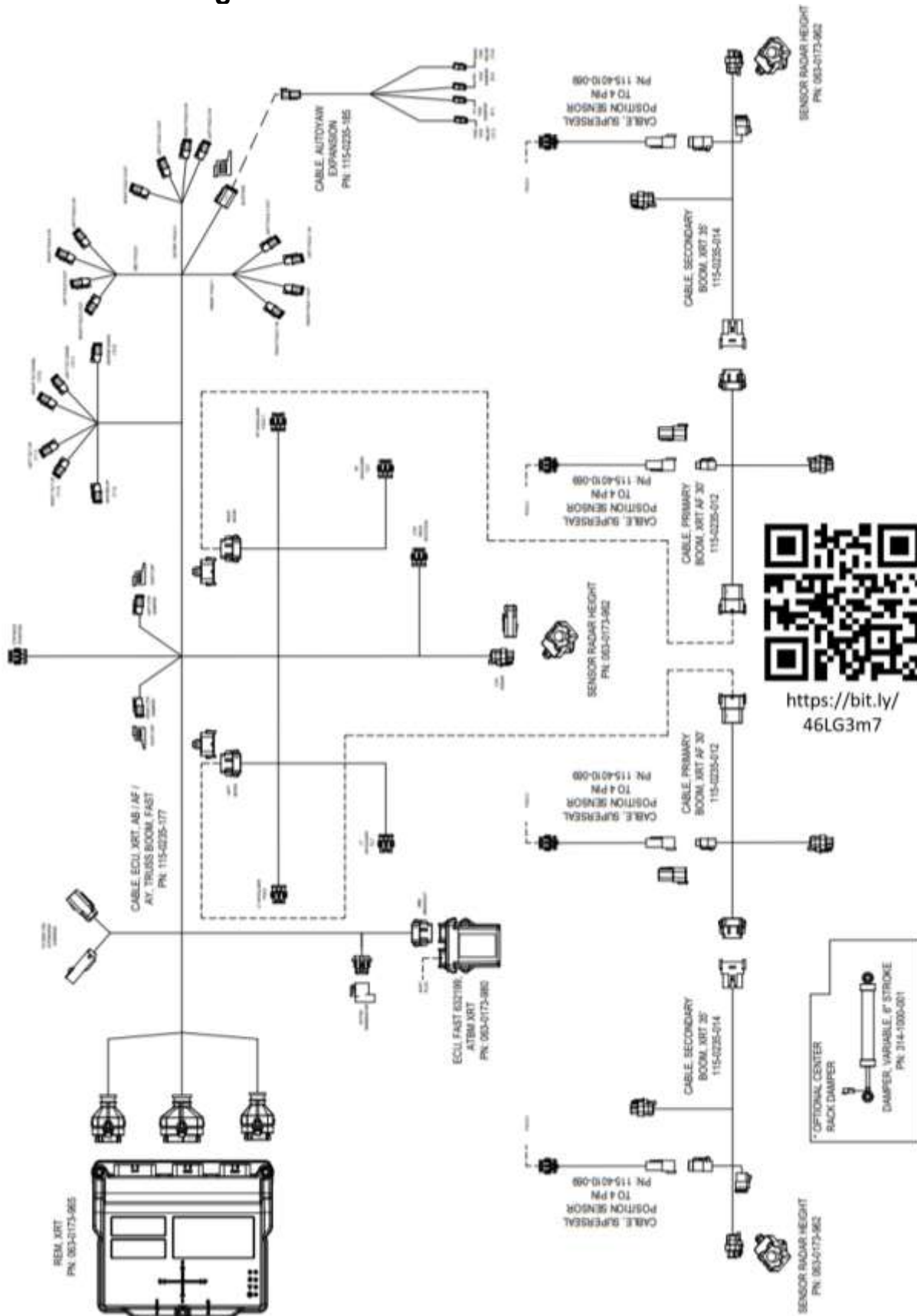
UltraGlide Mounting Parts

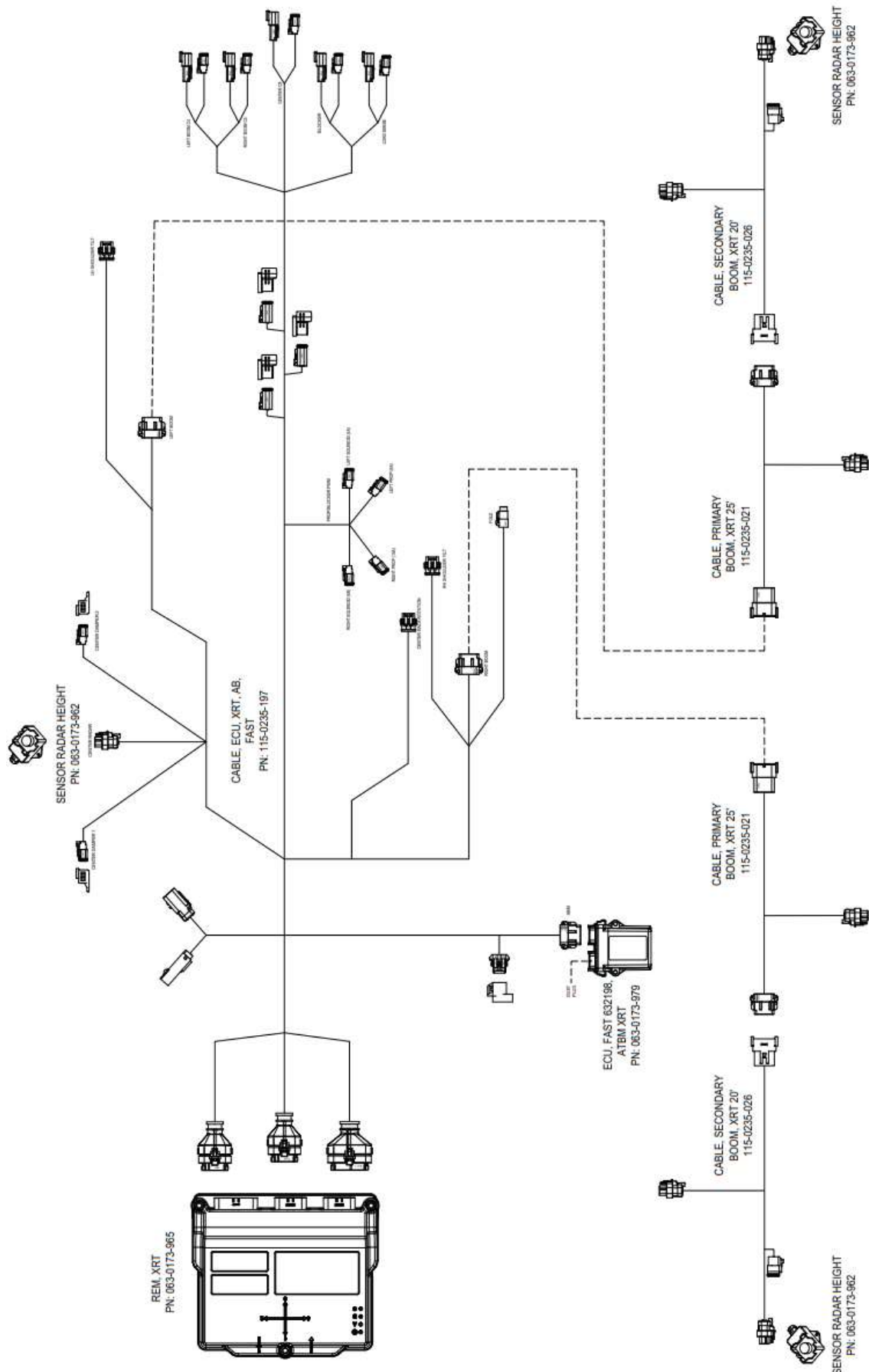


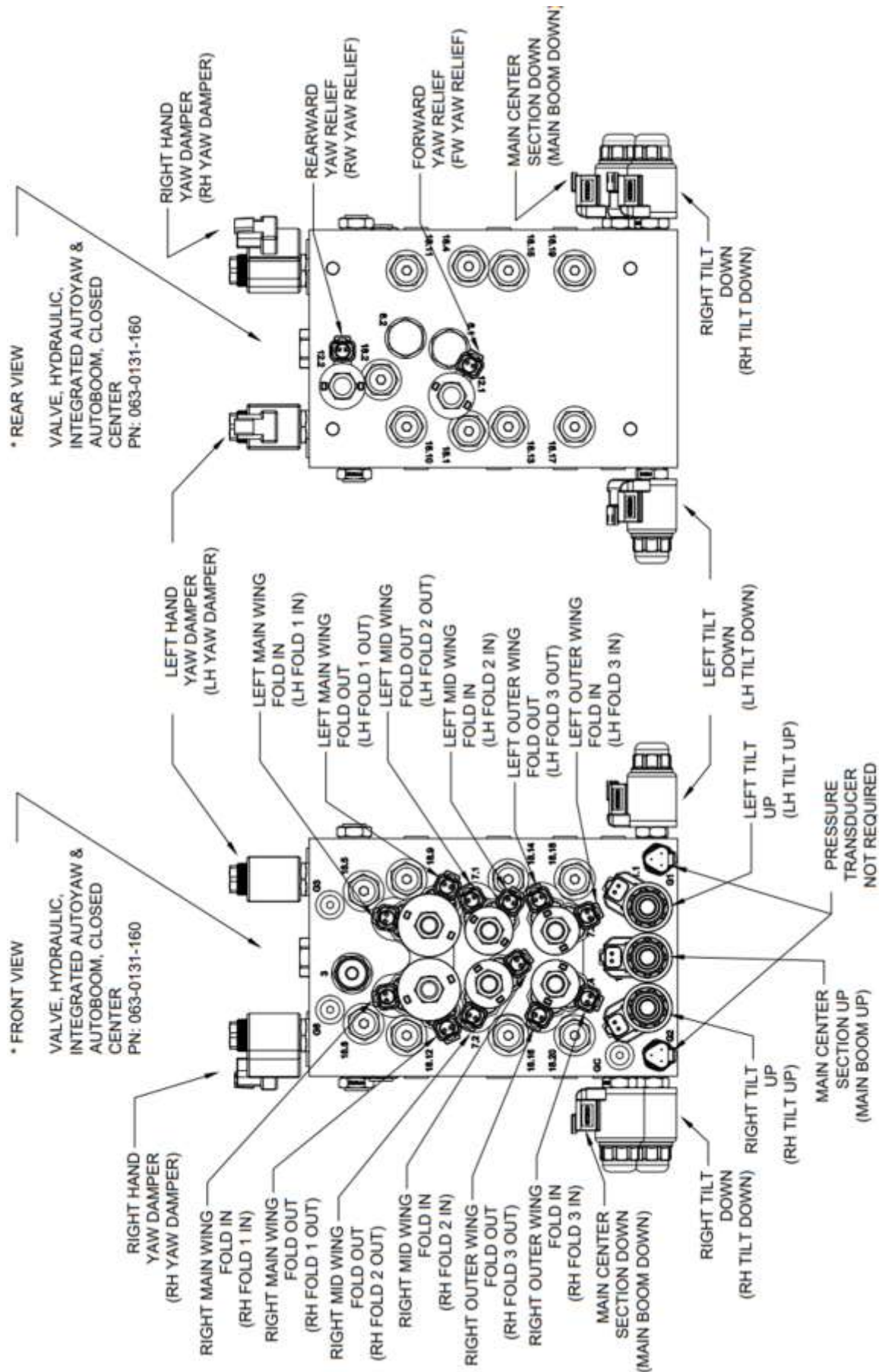
Parts List: UltraGlide Mounting Parts

ITEM	VENDOR NO.	PART NO.	QTY.	DESCRIPTION
1		16464	2	MOUNTING BRACKET BREAKAWAY
2		596115M	AR	BOLT HEX HEAD 5/16 X 1 GR5 MAGNI
3		596228M	AR	NUT HEX 5/16 NYLOCK MAGNI
4		16468R	1OPT	MOUNTING BRACKET SEVERE TERRAIN RH
NS		16468L	1OPT	MOUNTING BRACKET SEVERE TERRAIN RH
5	RA0630130014		1	SENSOR CENTER SECTION
6		16471	1	MOUNTING BRACKET CENTER SECTION
7		14461	1	SPACER DOM
8		18439	1	PLATE NODE MOUNT
9		490	1	BOLT HEX HEAD 3/4 X 9 GR5 ZP
10		121	2	BOLT HEX HEAD 5/16 X 4 GR5 ZP
11		16470	1	STRAP, MOUNTING BRACKET CENTER SECTION
12		596257M	AR	WASHER FLAT 5/16 MAGNI
13		596116M	AR	BOLT HEX HEAD 5/16 X 1-1/2 GR5 MAGNI
14	RA3132202463			SPRING STOP
15	RA1160159704	631881	2 STD/2OPT	BRACKET MOUNT
16	RA3140000025			SPRING BREAKAWAY PROTECTION
17	RA1070171948			ROLLER BREAKAWAY PROTECTION
18	RA1160159705			BASE BREAKAWAY PROTECTION
19	RA3110054001			BOLT BREAKAWAY PROTECTION 3/8
20	229			NUT HEX NYLOCK 3/8"ZP
21	RA0630130026		2 STD/2OPT	SENSOR WING
22		596117M	2 STD/2OPT	BOLT HEX HEAD 5/16 X 2 GR5 MAGNI
23	RA3140000016		AR	SPRING

Raven XRT Wiring



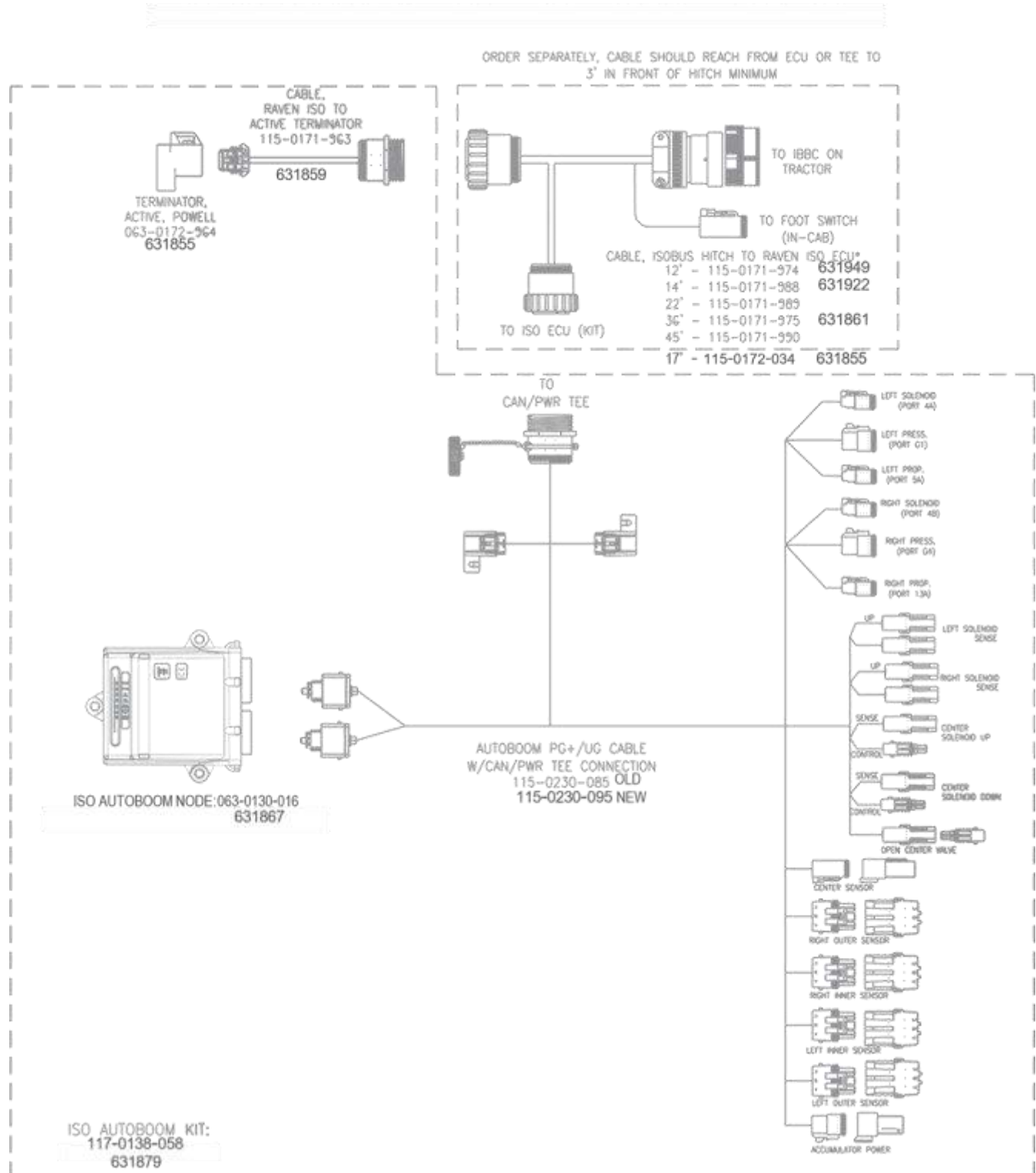




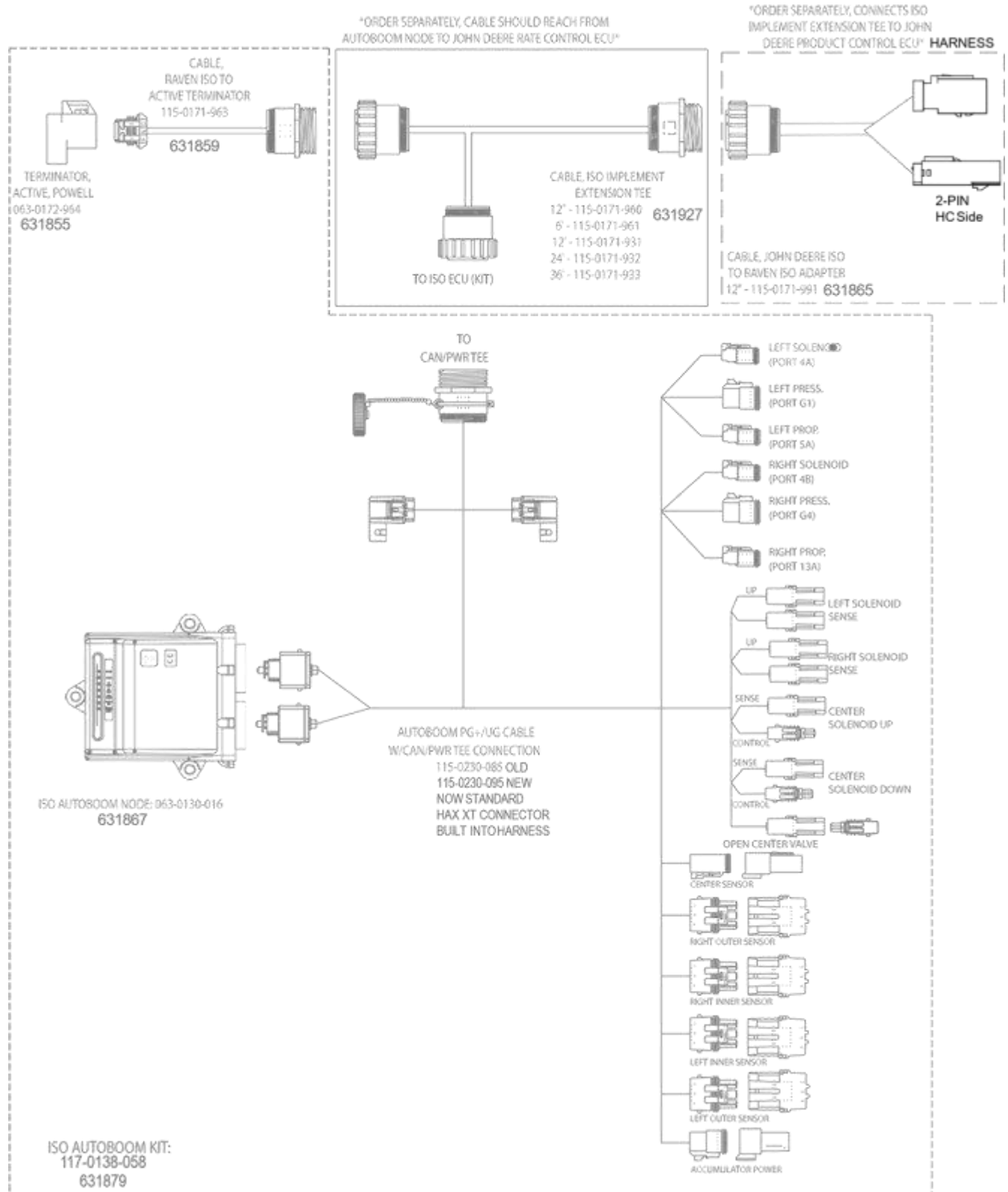


ISO AUTOBOOM

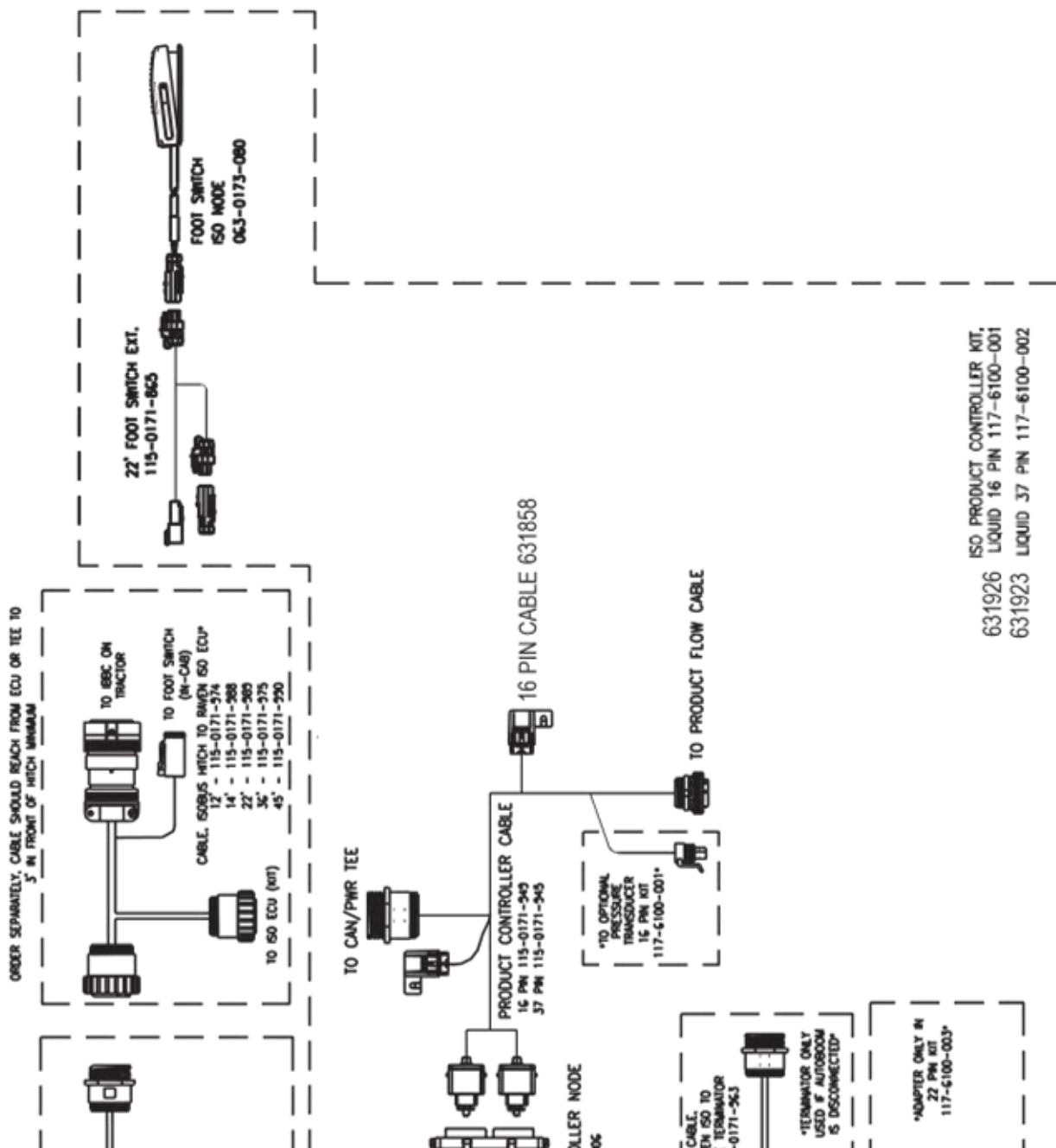
ISO AutoBoom Without ISO Product Control

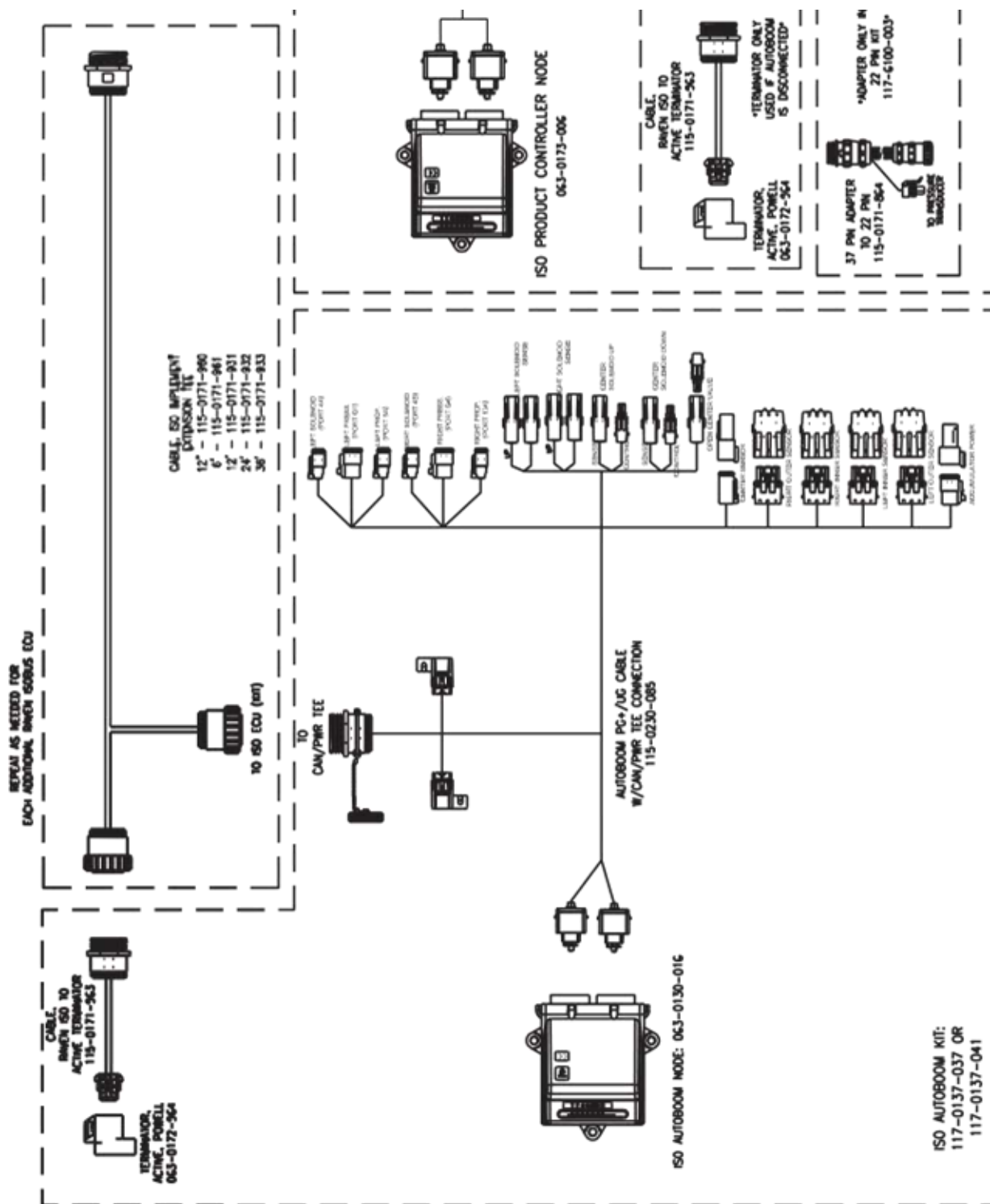


Raven ISO AutoBoom With John Deere Product Control

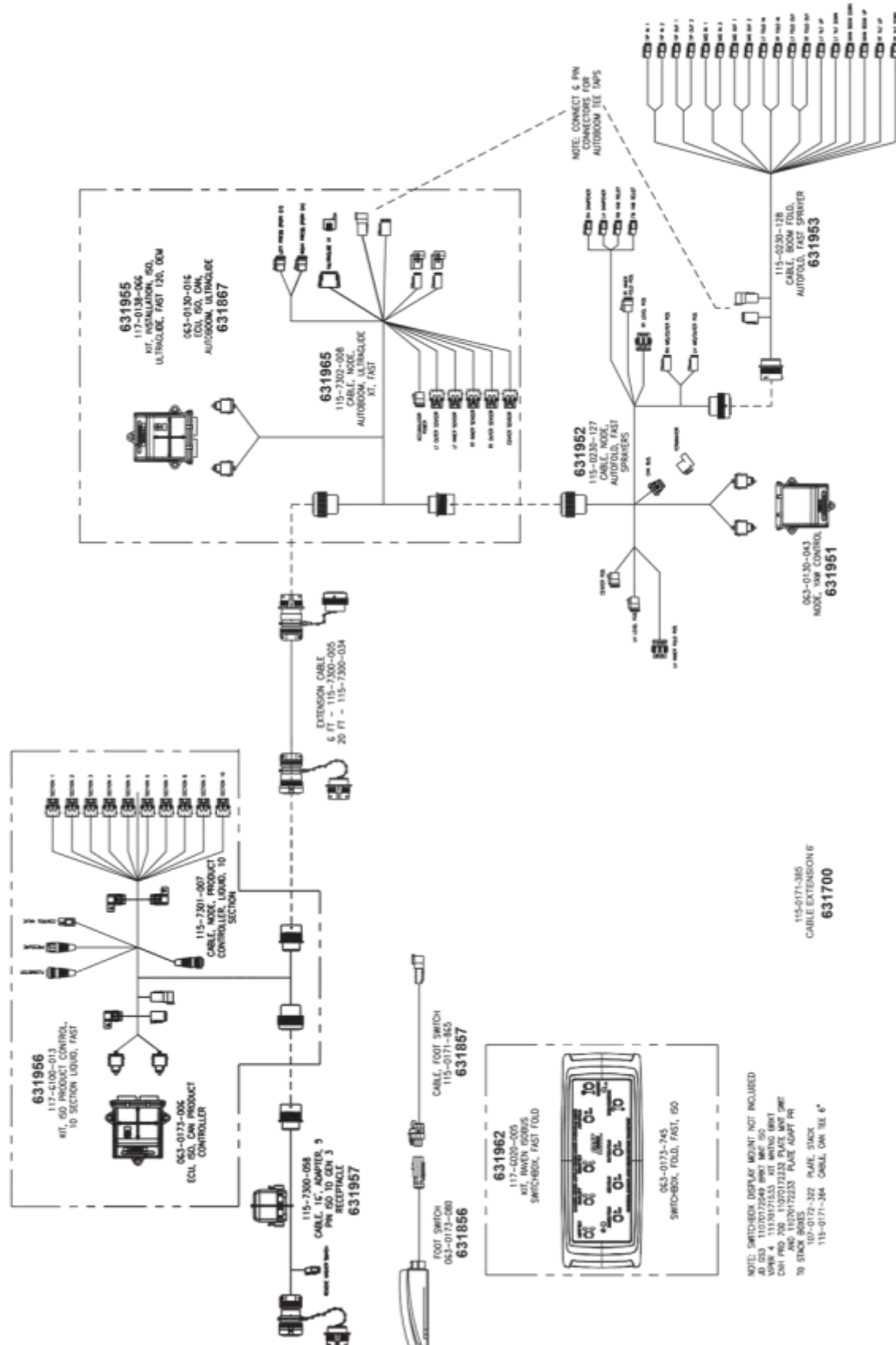


Raven ISO AutoBoom With Raven ISO Rate Control

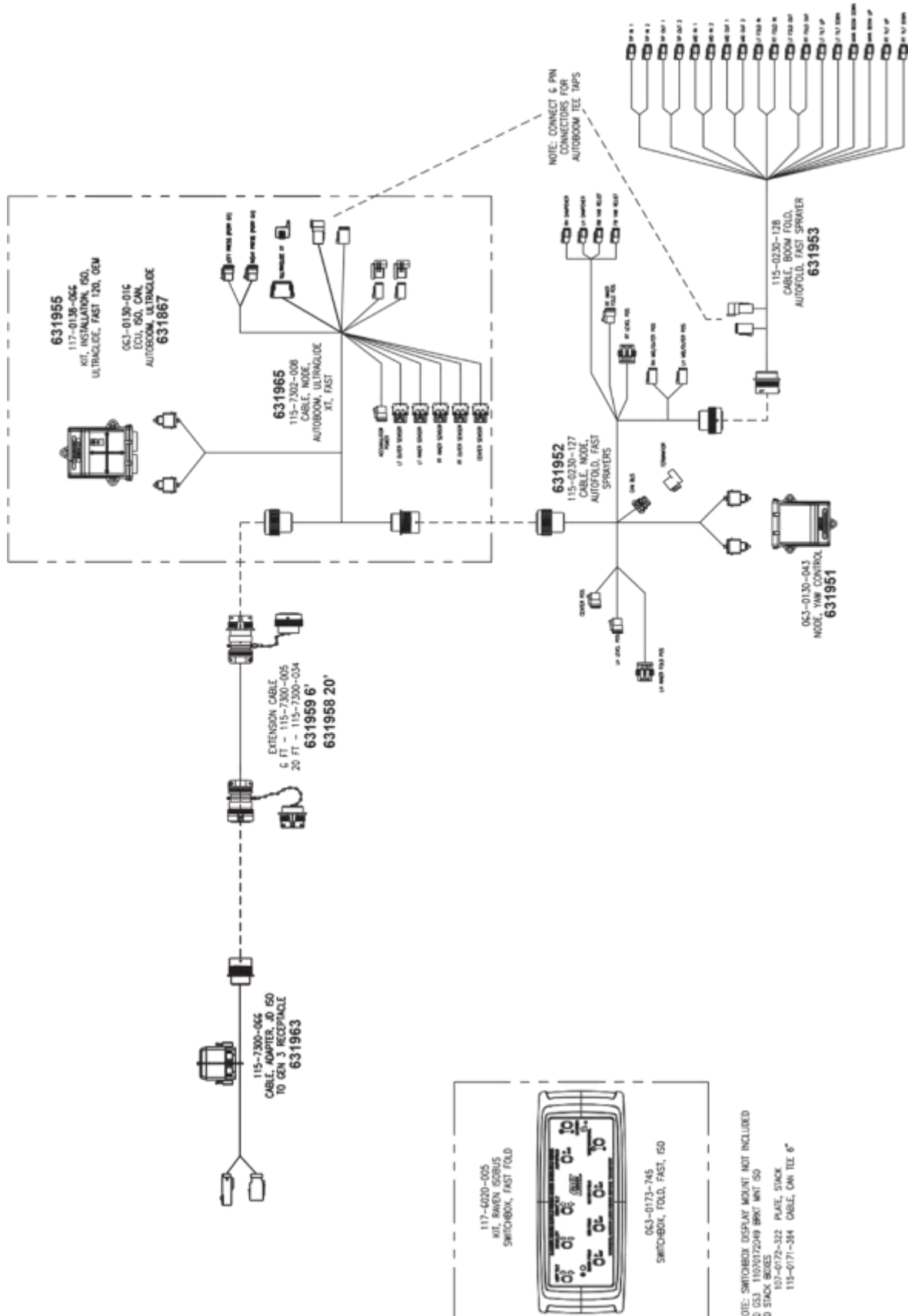




ISO AutoYAW / Fold, AutoBoom, and Raven Rate Control

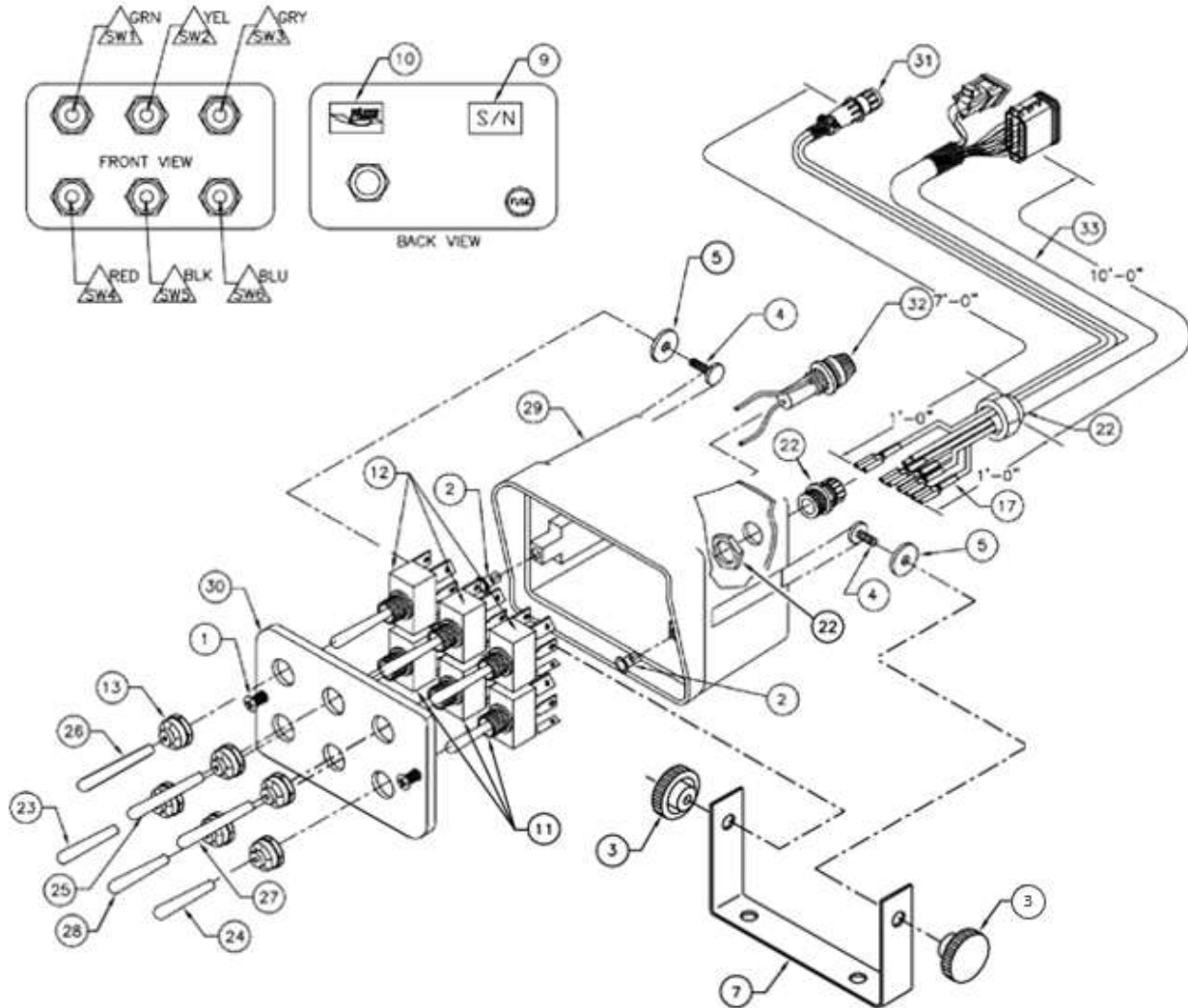


ISO AutoYAW / Fold, AutoBoom, and JD Rate Control



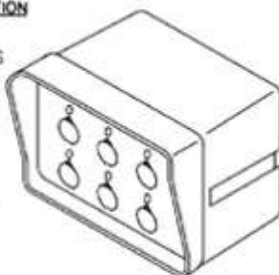
FOLD BOX ELECTRICAL

Control Console



SWITCH NOTCH ORIENTATION

- ORIENT SWITCH NOTCHES AS SHOWN IN GRAPHIC
- USE THE ANGLE VALUES SHOWN AS REFERENCE



NOTES:

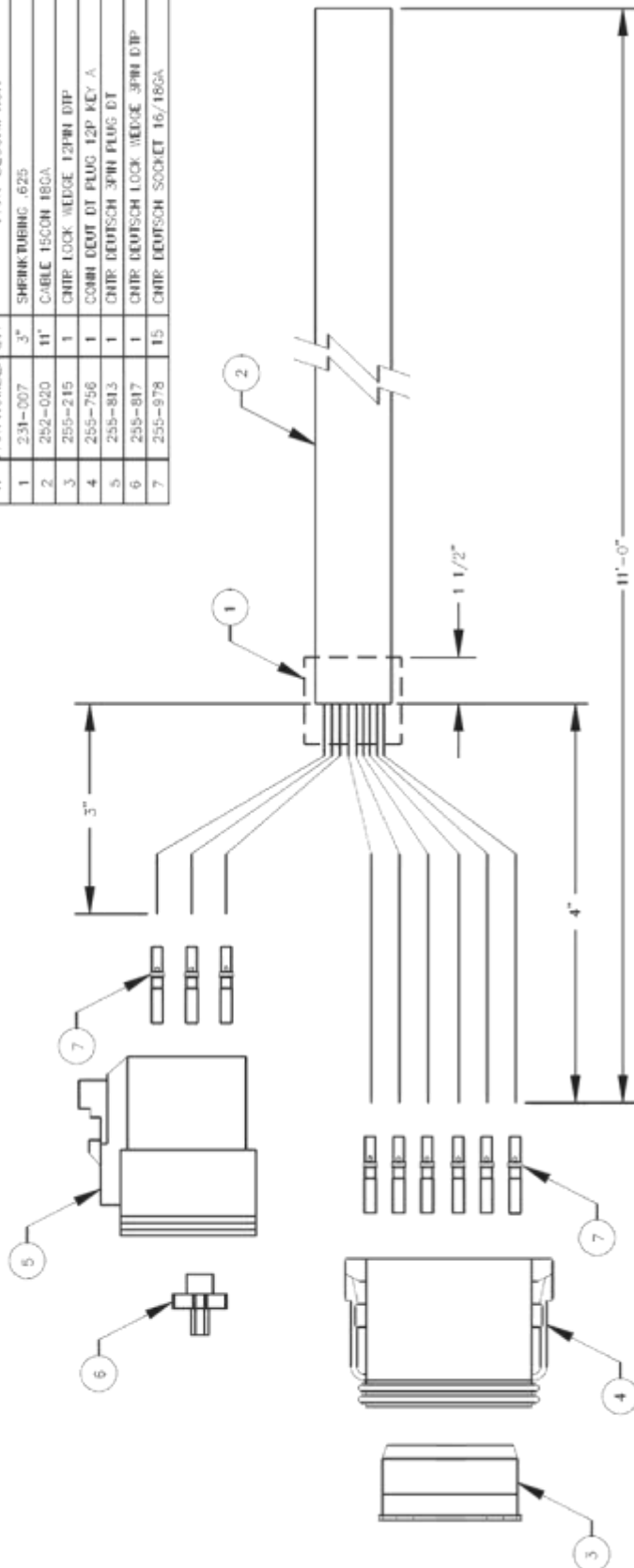
1. USE 1-CABLE TIE TO COIL UP HARNESS
2. NOT SHOWN: (6) (8)
3. CUT (23) (24) & (28) TO FIT ON SW BAT.

Parts List: Control Console

Nº	PART NUMBER	QTY	PART DESCRIPTION
1	212-184	2	SCREW 6-32 X 3/8 OVA HD B K
2	212-202	2	INSERT 6-32X3/8 BRASS
3	212-215	2	KNOB 1/4-20 FEMA F
4	212-231	2	SCREW WELDED 1/4-20 X .500
5	213-335	2	WASHER NYLON .257X.875X.060
6	214-002	3	CABLE TIE BLACK 7"
7	219-300	1	BRKT HSNG MONITOR
8	230-057	1	BAG POLY CLR 14 X 18 2MIL W/LOGO
9	232-050	2	DECL S/N (SILVER)
10	232-059	1	DECL GOLD/BLK 1.5 X .5
11	250-007	3	SW TOG DPDT 3P MOM SHORT
12	250-013	3	SW TOG DPDT 3P MOM LONG
13	250-023	6	SW TOG BOOT OPN GRY
14	254-001	1	DIODE D116A2 6AMP
15	255-002	25	TRM T-TAP F PO BLU
16	255-005	2	TRM PO F FULL INS 22-18GA
17	255-006	6	TRM PO F NON INS 20/18GA
18	255-030	2	TRM SPLICE CLOSED END 16-18GA
19	255-070	2	TRM PO M/F 14-16GA
20	255-119	3	TRM PO F INS 16-14GA
21	255-285	1	TRM SPLICE CLOSED END LRG
22	255-710	1	STRAIN RLF HEYCO .45"-.705"ID, HOLE DIA 1.115"
23	259-005	1	SW TOG GRIP VNYL RED .187
24	259-015	1	SW TOG GRIP VNY B U .187
25	259-022	1	SW TOG GRIP VNYL YEL .187
26	259-023	1	SW TOG GRIP VNYL GRN .187
27	259-027	1	SW TOG GRIP VNYL GRY .187
28	259-031	1	GRIP TOG VNY B K .187"
29	304-00	1	ENCL DRILL MNTRBX -H-1 1/8"G
30	304-751	1	ENCL DRILL FP MNTR SW6 F00204
31	314-217	1	HARNESS R B WIRE SERIFS 3 P 8
32	319-769	1	FUSEHO DER PM ASSY 10A /.5'
33	320-760	1	IRN 15CON 18GA DTP KEY A 12P(12)D P3P(3) 11'

Control Console Wiring Harness

PARTS LIST		
NO	PART NUMBER	QTY
1	231-007	3"
2	252-020	11"
3	255-215	1
4	255-756	1
5	255-813	1
6	255-817	1
7	255-878	15



PREL. OUT. DETAIL



- 1 - RED
- 2 - ORG
- 3 - WHT
- 4 - BLU/BLK
- 5 - RED/BLK
- 6 - ORG/BLK
- 7 - WHT/BLK
- 8 - BLU
- 9 - BLK/WHT
- 10 - GRN
- 11 - BLK
- 12 - GRN/BLK

PREL. OUT. DETAIL

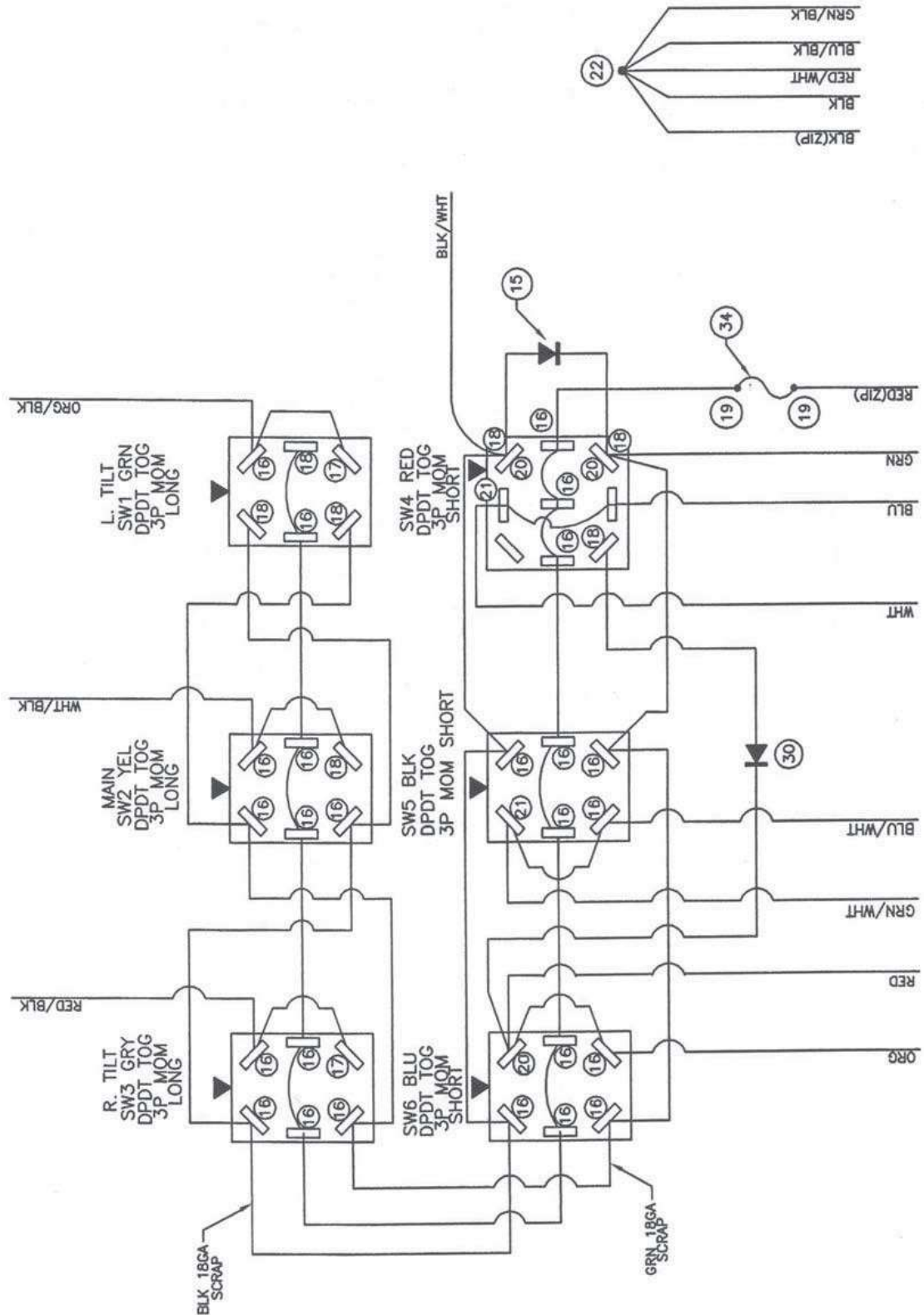


- A - GRN/WHT
- B - BLU/WHT
- C - RED/WHT

Control Console Switch Diagram

▲ = NOTCH LOCATION

SWITCH WIRING DIAGRAM



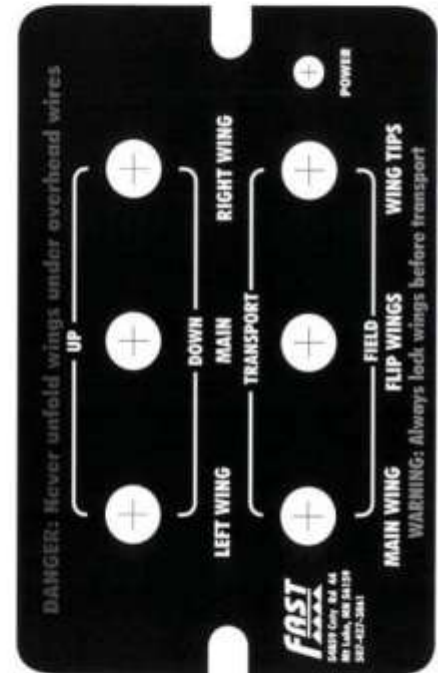
Parts List: Control Console Switch Diagram

Nº	PART NUMBER	QTY	PART DESCRIPTION
1	212-184	2	SCREW 6-32 X 3/8 OVA HD B K
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4	212-231	2	SCREW WELDED 1/4-20 X .500
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6	214-002	3	CABLE TIE BLACK 7"
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15	255-002	25	TRM T-TAP F PO BLU
16	255-00	2	TRM PO F FULL INS 22-18GA
17	255-006	6	TRM PO F NON INS 20/18GA
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19	255-070	2	TRM PO M/F 14-16GA
20	255-119	3	TRM PO F INS 16-14GA
21	255-285	1	TRM SPLICE CLOSED END LRG
22	255-710	1	STRAIN RLF HEYCO .45"-.705"ID, HOLE DIA 1.115"
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27	259-027	1	SW TOG GRIP VNYL GRY .187
28	259-031	1	GRIP TOG VNY B K .187"
29	30 - 00	1	ENCL DRILL MNTRBX -H-1 1/8"G
30	304-751	1	ENCL DRILL FP MNTR SW6 F00204
31	314-217	1	HARNESS R B WIRE SERIFS 3 P 8
32	319-769	1	FUSEHO DER PM ASSY 10A /.5'
33	320-760	1	IRN 15CON 18GA DTP KEY A 12P(12)D P3P(3) 11'

Control Console Operation & Pinout

700-0806-4103 & 700-0806-4104 REV D

Switch No.	Boot Color	Switch Position	Hot Wires	Pin Out Location	Pressure Ports	Tank Ports	Function
1 Long	Green	Up (mom)	Org/Blk & Grn	6-12P, 10-12P	C4		Lt. Wing Up
		Center (stat)					Off
		Down (mom)	Org/Blk & Grn & Blk/Wht	6-12P, 10-12P, 9-12P		C4	Lt. Wing Down
2 Long	Yellow	Up (mom)	Wht/Blk & Grn & Blk/Wht	7-12P, 10-12P, 9-12P	C9		Main Up
		Center (stat)					Off
		Down (mom)	Wht/Blk & Grn	7-12P, 10-12P		C9	Main Down
3 Long	Gray	Up (mom)	Red/Blk & Grn	5-12P, 10-12P	C5		Rt. Wing Up
		Center (stat)					Off
		Down (mom)	Red/Blk & Grn & Blk/Wht	5-12P, 10-12P, 9-12P		C5	Rt. Wing Down
4 Short	Red	Up (mom)	Wht & Blu & Grn	3-12P, 8-12P, 10-12P	C2	C7	Main Wing Transport
		Center (stat)					Off
		Down (mom)	Wht & Blu & Grn & Blk/Wht	3-12P, 8-12P, 10-12P, 9-12P	C7	C2	Main Wing Field
5 Short	Black	Up (mom)	Grn/Wht & Blu/Wht & Grn	1-3P, 2-3P, 10-12P	C3	C8	Flip Wings Transport
		Center (stat)					Off
		Down (mom)	Grn/Wht & Blu/Wht & Grn & Blk/Wht	1-3P, 2-3P, 10-12P, 9-12P	C8	C3	Flip Wings Field
6 Short	Blue	Up (mom)	Red & Org & Grn	1-12P, 2-12P, 10-12P	C1	C6	Wing Tips Transport
		Center (stat)					Off
		Down (mom)	Red & Org & Grn & Blk/Wht	1-12P, 2-12P, 10-12P, 9-12P	C6	C1	Wing Tips Field
			Blk	11-12P			Ground
			Red/Wht	3-3P			Ground
			Blu/Blk	4-12P			Ground
			Grn/Blk	12-12P			Ground



HYDRAULICS

Hose Assembly Descriptions

PART#	DESCRIPTION	HOSE SIZE	1 ST END	2 ND END	CUT LEN	QTY. REQ.	FUNCTION OF HOSE
520048	2-NV12-12SAE-M					4	HYDRAULIC TIPS
610102	6801-10-10-NWO-TCT					1	
610060	6400-8-10-0-TCT					1	
FDM600039-13-ZN	FDM4R17-4FJX-4FJX90M	1/4"	FST.	F90	87	1	BLOCK TO MAIN LIFT
FDM 600039-11-ZN	FDM8R17-8FJX-8FJX45M	1/2"	FST.	F45	30	2	TEE TO MAIN LIFT RIGHT/LEFT
	STAUFFAG-2					52	TUBE CLAMPS
FDM600039-7-ZN	FDM4R17-4FJX-4FJX	1/4"	FST.	FST	100	2	MAIN WING FOLD ROD
FDM600039-8-ZN	FDM4R17-4FJX-4FJX90M	1/4"	FST.	F90	100	2	MAIN WING FOLD BUTT
FDM600039-1A-ZN	FDM4R17-6MJX-4FJX	1/4"	MST.	FST.	132	4	BLOCK TO HARDLINES
FDM600039-2A-ZN	FDM4R17-6MJX-4FJX90M	1/4"	MST.	F901	132	4	BLOCK TO HARDLINES
FDMP603	FDMP603				124	4	FLIP WING CYLINDERS
FDMP604	FDMP604				162	4	BREAKAWAY WING CYLINDER FEED ON MAIN WING
FDM600039-3A-ZN	FDM4R17-6MJX-6MJX	1/4"	MST.	MST	27.5	2	HARDLINE HINGE HOSE
FDM600039-4A-ZN	FDM4R17-6MJX-6MJX	1/4"	MST.	MST	31	2	HARDLINE HINGE HOSE

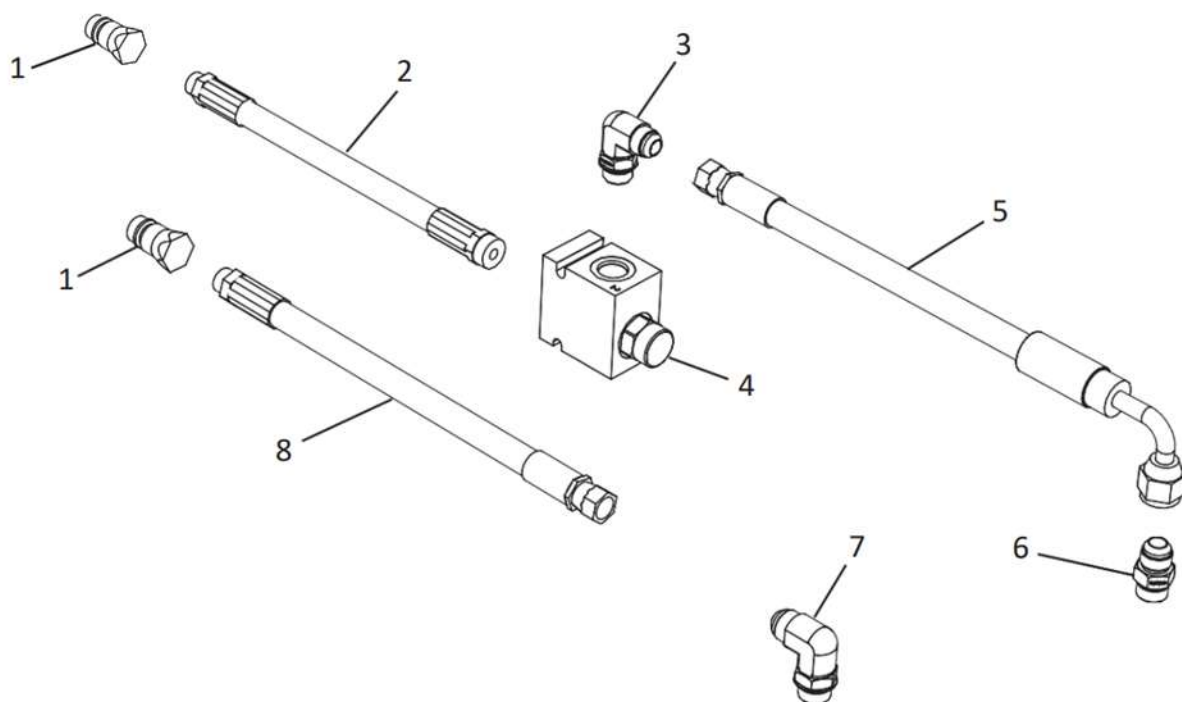
PART#	DESCRIPTION	HOSE SIZE	1 ST END	2 ND END	CUT LEN	QTY. REQ.	FUNCTION OF HOSE
FDM600039-14-ZN	FDM6R17-6FJX-6FJX	3/8"	FST.	FST.	112	1	TILT CYLINDER RIGHT
FDM600039-12-ZN	FDM6R17-6FJX-6FJX	3/8"	FST.	FST.	118	1	TILT CYLINDER LEFT
FDMP605	FDMP605				203	4	BREAKAWAY WING CYLINDER
FDM600039-5A-ZN	FDM4R17-6MJX-4FJX	1/4"	MST.	FST.	24	2	HARDLINE TO CYLINDER FEEDBUTT
FDM600039-21A-ZN	FDM4R17-6MJX-4FJX	1/4"	MST.	FST.	26	2	HARDLINE TO CYLINDER FEEDBUTT
FDM600039-6A-ZN	FDM4R17-6MJX-4FJX	1/4"	MST.	FST.	32	4	HARDLINE TO CYLINDER FEED ROD
FDM600039-15-ZN	FDM8R17-8FJX-8MBO	1/2"	FST.	#8O-RING	340	1	BLOCK FEED
FDM600039-16-ZN	FDM8R17-8FJXZ-8MBOZ	1/2"	FST.	#8O-RING	350	1	BLOCK RETURN
FDM600039-17-ZN	FDM8R17-8MBO-10MBX90	1/2"	#8O-RING	#10O-RING	200	1	PC VALVE FEED
FDM600039-18-ZN	FDM10R17-8MBO-10FJXF	5/8"	#8O-RING	FST.	216	1	PUMP RETURN
FDM600040-20B-ZN	FDM8R17-8FJX90MZ-10MBOZ	1/2"	F90	#10O-RING	25	1	PC TOPUMP

Hydraulics, Decals, and Brackets

ITEM	PART NO.	QTY.	DESCRIPTION
1	610136	4	#4 JIC CAP NUT (RAVEN HYD YAW ONLY)
2	610104	1	#6 JIC TO #4 FEMALE JIC (RAVEN HYD YAW ONLY)
3	610072	1	#8 JIC - #6 JIC REDUCER
4	610071	1	#8 JIC UNION CROSS
5	530001	1	1/4" X 1/4" MALE CONNECTOR
6	530004	1	1/4"X1/4" MALE ELBOW
7	530014	7	1-1/2" EPDM GASKET

ITEM	PART NO.	QTY.	DESCRIPTION
8	530143	1	1-1/4" MPTX3/4" FPT REDUCER BUSHING (RAVEN HYD YAW ONLY)
9	530019	4	2" EPDM GASKET (RAVEN HYD YAW ONLY)
10	530100	2	2" FP FLANGE X 1-1/2" HOSE BARB (RAVEN HYD YAW ONLY)
11	530105	1	2" FP X 2" FP MANIFOLD COUPLING, 45° (RAVEN HYD YAW ONLY)
12	530102	1	2" FULL PORT-2" SP REDUCER FLANGE (RAVEN HYD YAW ONLY)
13	530076	2	2" MANIFOLD X 1-1/4" HOSE BARB
14	570125	1	5 GALLON SQUARE TANK YELLOW
15	630020	1	ACCUMULATOR, 85 CU IN
16	610002	1	ADAPTER JIC #4 X JIC #6 FEMALE
17	590248	1	BEARING 1" ID, 1-1/4 OD X 1" (RAVEN HYD YAW ONLY)
18	530281	4	BUSHING 1.25OD X 1ID X 1"L (RAVEN HYD YAW ONLY)
19	631701	1	CABLE ADAPTER YAW CTR C REVERSE
20	540002	2	CLAMP, 2" FULL WORM SCREW (RAVEN HYD YAW ONLY)
21	540001	1	CLAMP, 2" STD WORM SCREW (RAVEN HYD YAW ONLY)
22	540016	4	CLAMP, STAINLESS 1-1/2" #24
23	590017	3	CLIP, HAIR PIN
24	610079	1	CONNECTOR #4ORB X #6JIC (RAVEN HYD YAW ONLY)
25	620079	2	CYLINDER 3.0 X 16.0 HD
26	620077	2	CYLINDER 40THC18-175 (RAVEN HYD YAW ONLY)
27	800135	2	DECAL 973P SILVER
28	800006	1	DECAL DANGER ELECTROCUTION HAZARD
29	800106	4	DECAL DANGER-STAND CLEAR
30	800021	3	DECAL FAST SPRAYERS LOGO BLK/GRN
31	800024	1	DECAL REAR LIFT CYLINDER VALVE
32	800002	1	DECAL, CAUTION W/ YELLOW STRIP
33	800007	1	DECAL, DANGER CHEMICAL HAZARD
34	800013	2	DECAL, DANGER CRUSHING HAZARD
35	800005	5	DECAL, UPENDING HAZARD
36	800009	1	DECAL, WARNING OVERHEAD HAZARD
37	90SAFCHWF	1	FC HAND WASH FAUCET ASSY

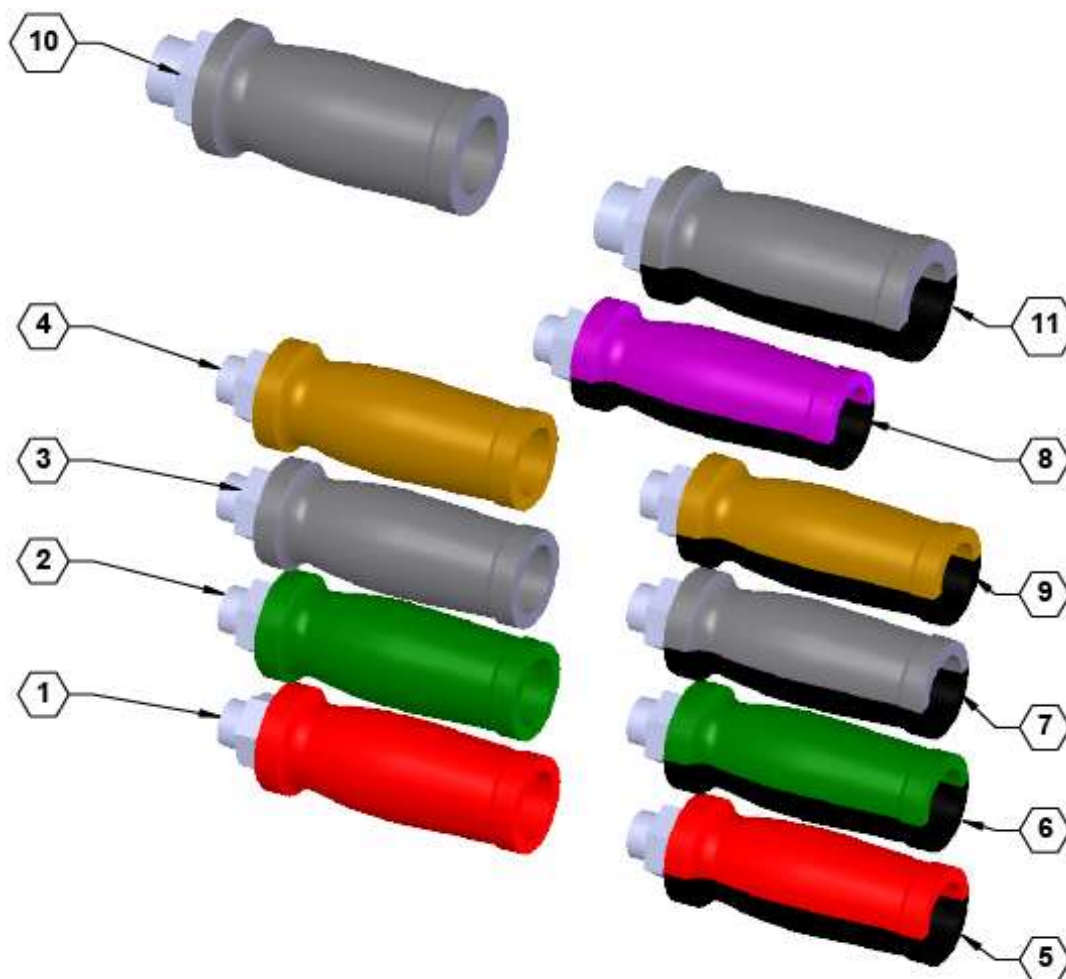
Hydraulic System for Product Pump



Parts List: Hydraulic System for Product Pump

ITEM	PART NO.	QTY.	DESCRIPTION
1	2-NV12-12SAE	2	HOSE TIP
2	PA600040-20B	1	HOSE PRESSURE TO VALVE
3	610086	1	HYDRAULIC FITTING 6801-8-10
4	610099		PC VALVE 13GPM
5	PA600039-17	1	HOSE PRESSURE TO PUMP
6	610106	1	HYDRAULIC FITTING 6400-10-10
7	610102	1	HYDRAULIC FITTING 6801-10-10
8	PA600039-18	1	HOSE PUMP RETURN

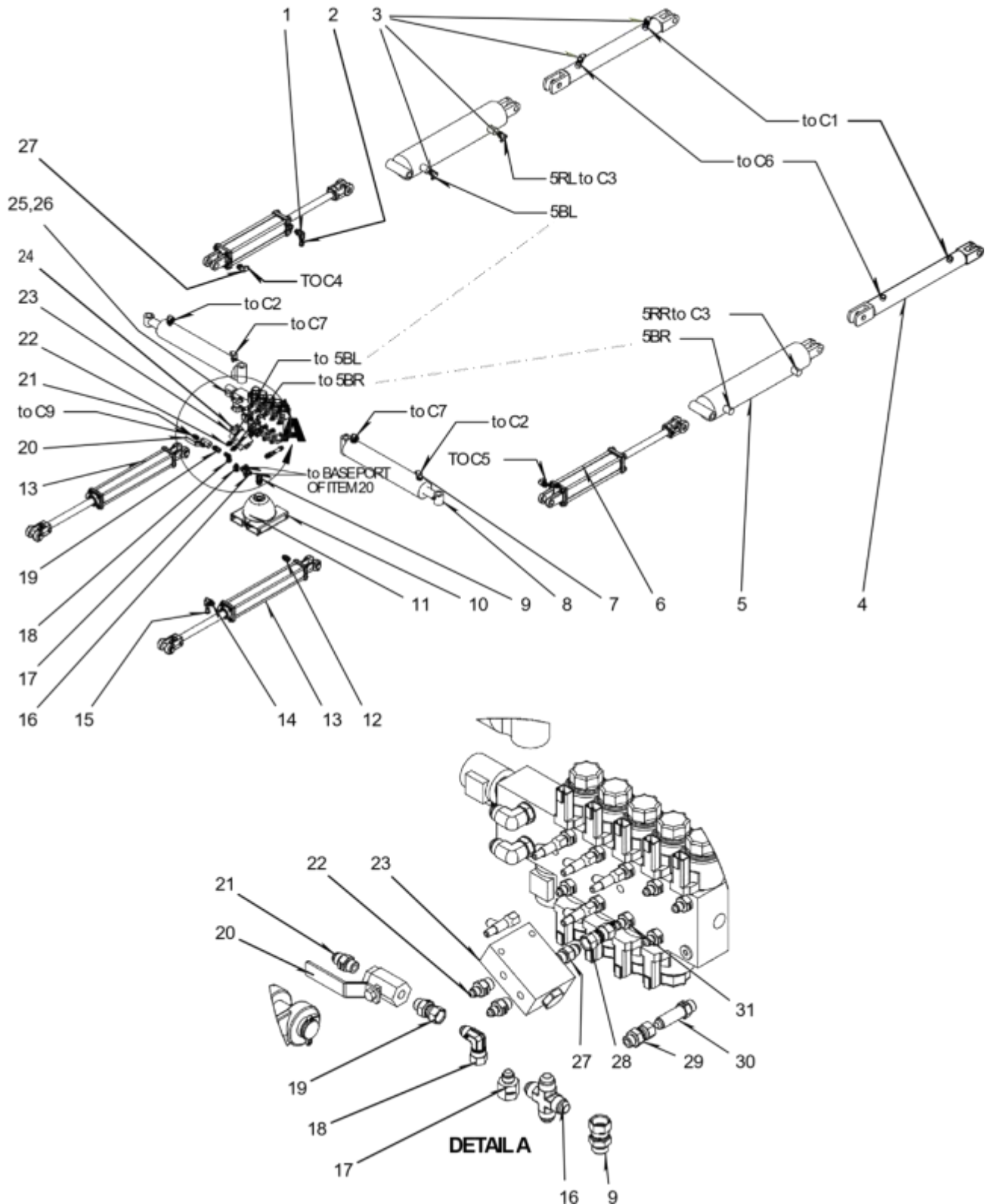
Hydraulic Hose Grips



Parts List 6210PM: Hydraulic Hose Grips

ITEM	PART NO.	QTY.	DESCRIPTION
1	621000	1	HOSE GRIP, #8ORB, RED/RED
2	621001	1	HOSE GRIP, #8ORB, GREEN/GREEN
3	621002	1	HOSE GRIP, #8ORB, GREY/GREY
4	621004	1	HOSE GRIP, #8ORB, TAN/TAN
5	621005	1	HOSE GRIP, #8ORB, RED/BLACK
6	621006	1	HOSE GRIP, #8ORB, GREEN/BLACK
7	621007	1	HOSE GRIP, #8ORB, GREY/BLACK
8	621008	1	HOSE GRIP, #8ORB, PURPLE/BLACK
9	621009	1	HOSE GRIP, #8ORB, TAN/BLACK
10	621010	1	HOSE GRIP, #10ORB, GREY/GREY
11	621011	1	HOSE GRIP, #10ORB, GREY/BLACK

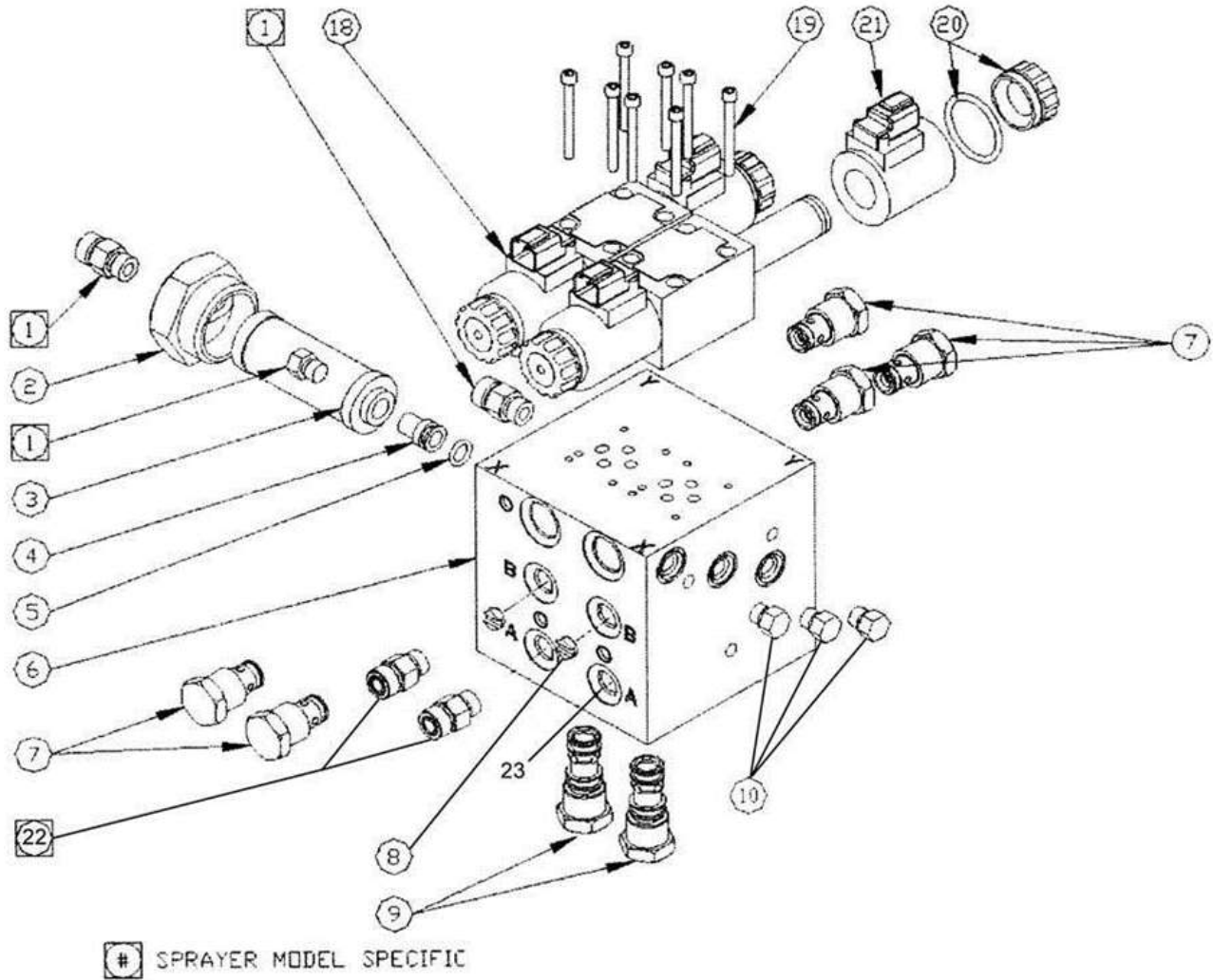
Cylinders & Flow Divider, Puck Yaw



Parts List: Cylinders & Flow Divider, Puck Yaw

ITEM	VENDOR NO.	PART NO.	QTY.	DESCRIPTION
1	TO6805-08-06	610035	2	ADAPTER 8ORB X 3/8" FPT90°
2	TOBV3	610036	2	BREATHER 3/8"MPT
3	TO6801-04-08	610029	8	ADAPTER 8ORB X4JIC
5	MI647953	620043	2	CYLINDER 5 X 16 WELDED, PRIMARY FLIP WING
NS	MI649096			SEAL KIT
6		620056	2	CYLINDER 3 X 12, TILT
NS		620276		SEAL KIT
7	6801	610030	4	ADAPTER 8ORB X6JIC
8	MI675418	620079	2	CYLINDER 3 X 16 WELDED 1.75 ROD (2014 -), SWING WING
NS	649209(RK30WR-175TSS)			KITSEAL
9	TO6402-08-08	610083	1	ADAPTER 8ORB X8JIC
10		16654	2	TUBE ACCUMULATOR MOUNT
11		630020	1	ACCUMULATOR 80 CU.IN.
12	TO64000808	610013	2	ADAPTER 8ORB X8JIC
13	MI645710	620031	2	CYLINDER 3 X 16
14	TO6805-08-06	610035	2	ADAPTER 8ORB X 3/8" FPT90°
15	TOBV3	610036	2	BREATHER 3/8"MPT
16	TO2650-08-08-08	610071	1	CROSS 8JIC
17	TO2406-08-06	610072	1	ADAPTER 8JIC TO 6JIC REDUCER
18	TO6500-06-06	610023	1	ADAPTER 6JIC X 6JIC90°
19	TO6402-04-06	610079	1	ADAPTER 6ORB X6JIC
20	AFMPV14SAE	500000	1	VALVE 1/4 TURN X 4ORB
21	TO64000604	610007	1	ADAPTER 4ORB TO 6JIC
22	TO64000406	610008	2	ADAPTER 6ORB TO 4JIC
23	AFFD50458DN22	630022	1	BLOCK HYDRAULIC FLOW SPLITTER
24	TO6602040404	610026	5	ADAPTER RUNTEE
25	FV273-017	630036	OPT	CARTRIDGE OPEN CENTER CONVERSION
26	FV305-023	630037	OPT	COIL OPEN CENTER CONVERSION
27	TO64000406	610008		ADAPTER 4JIC X 6ORB IS REPLACED BY ITEM 29 IN CURRENT PRODUCTION
28	TO65100404			JIC SWIVEL UNION IS REPLACED BY ITEM 30 IN CURRENT PRODUCTION
29	TO64020606	610113	1	ADAPTER 6JIC X 6ORB REPLACES ITEM 27
30	TO64000606L	610103	1	ADAPTER 6JIC X 6ORB LONG STEM REPLACES ITEM 28 & 31
31	TO64000404	610035	2	ADAPTER 4JIC X 6ORB

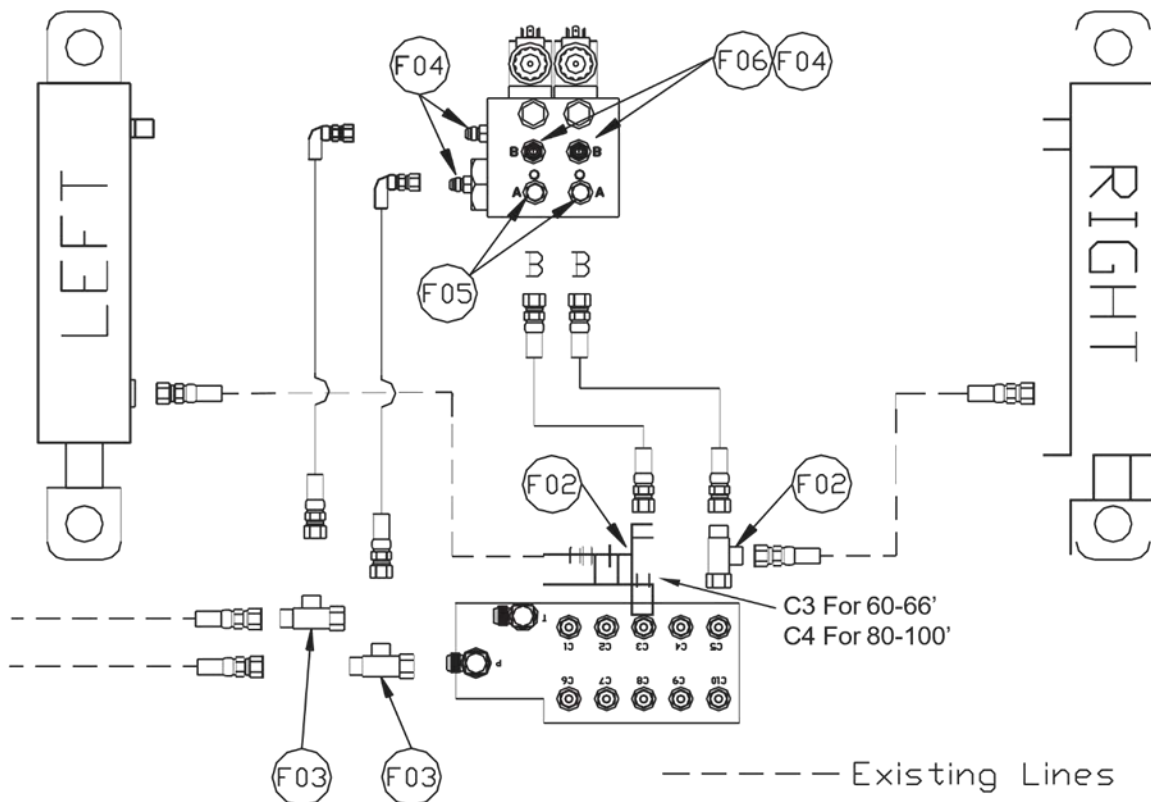
NORAC Hydraulic Valve Block



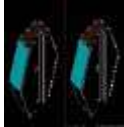
Parts List: NORAC Hydraulic Valve Block

ITEM	PART NO.	QTY.	DESCRIPTION
1	W400-6-6	2	HYDRAULIC COUPLING - MODEL SPECIFIC
2	44897	1	FILLER CAP WITH 6 ORB PORT
3	104827	1	HYDRAULIC FILTER ELEMENT, 3000 PSI IN-LINE 10 MICRON
4	44896	1	FILTERINSERT
5	104998	1	O-RING 5/8 X 0.420 ID X0.103
6	44923	1	VALVE BLOCK 2 STATION CLOSED CENTER
7	104943	3	HYDRAULIC CHECK VALVE C-10-2
8	44928	2	ORIFICE INSERT 0.047
9	104944	2	CHECK VALVE CARTRIDGE C-10-3S
10	103381	5	PLUG 4MBP
18	105723	1	HYDRAULIC VALVE 12V
19	100739	8	HEX SOCKET CAP SCREW 10-24 X 2"
20	105948	4	COIL NUT & O-RING FOR NORAC #10599 & 105723
21	105926D	4	COIL 12V FOR NORAC #10599 & 105723
21	105927	4	COIL 12V FOR NORAC DIN
22	103312	2	MALE ADAPTER 6MB-6MJ
23	104369	2	PLUG 6MBP

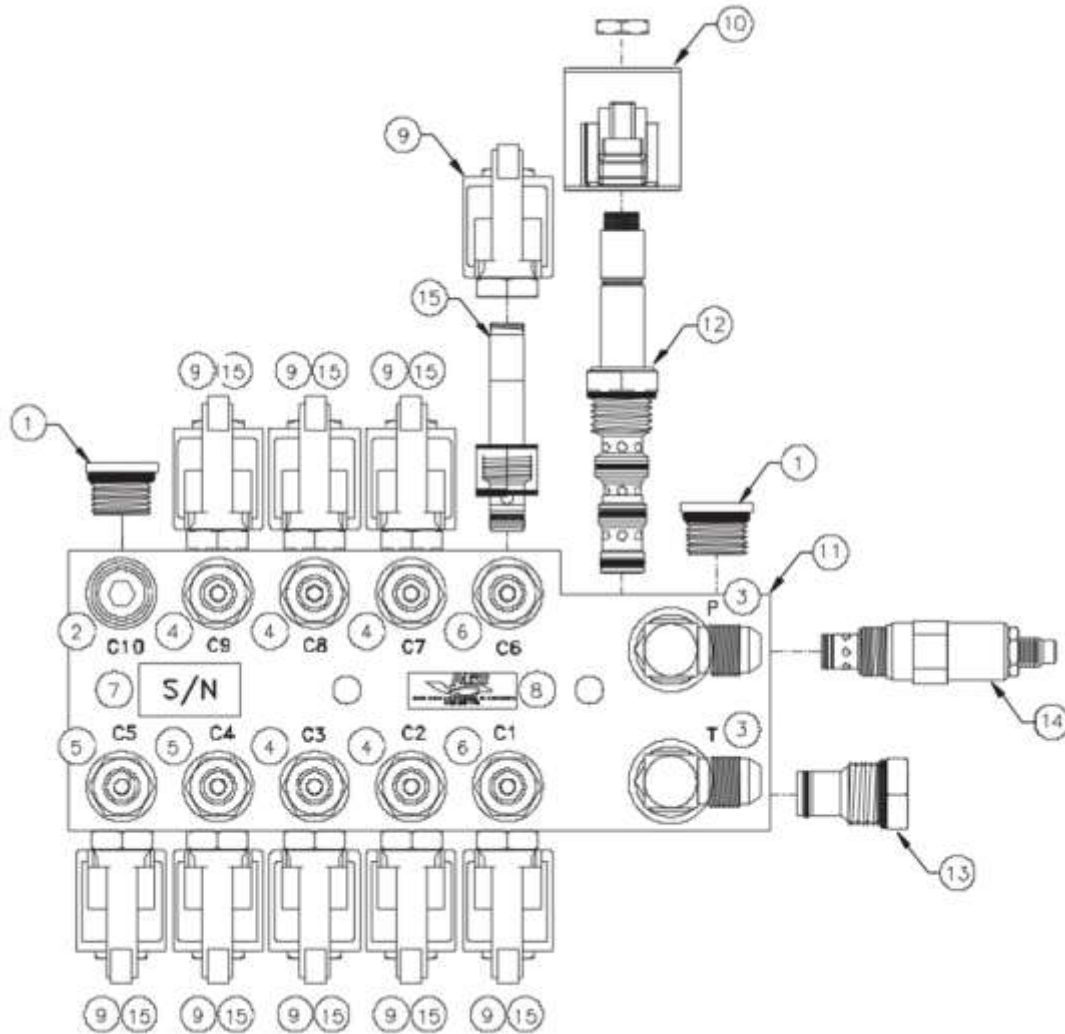
NORAC Auto Height Boom Control Hydraulic Schematic UC4+ & UCS



Parts List: NORAC Auto Height Boom Control Hydraulic Schematic UC4+ & UCS

ITEM	PART NO.	QTY.	DESCRIPTION	
F02	105588	2	TEE ADAPTER - 4FJXR 4MJT	
F03	104632	2	TEE ADAPTER 8FJXR 8MJT	
F04	103312	4	MALE ADAPTER - 6MB 6MJ	
F05	104369	2	PLUG -6MBP	
F06	44928	2	ORIFICE INSERT .047 IN ONE WAY	

Hydraulic Control Valve

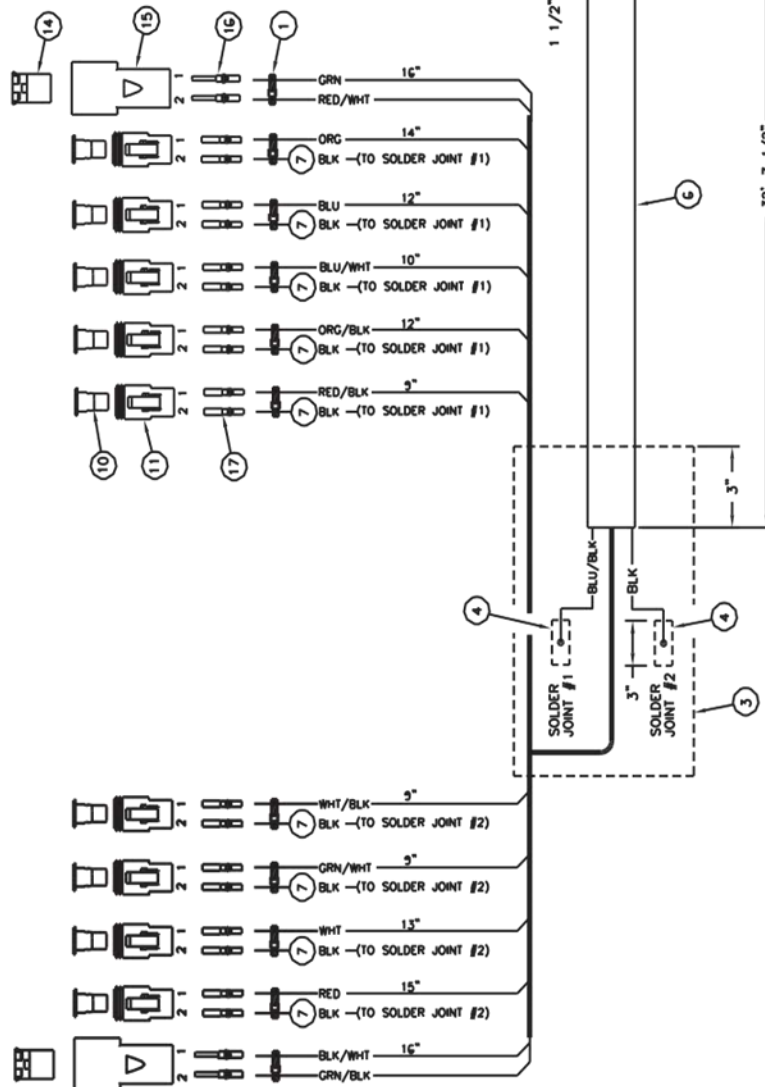


PARTS LIST

Nº	PART NUMBER	QTY	PART DESCRIPTION
1	210-D38	2	FTG 640B-HHP-8/HOLL HEX PLUG MO
2	210-127	1	FTG 640B-HHP-6/HOLL HEX PLUG MO
3	210-390	2	FTG 6801-B-8/E-MJ-MO ZINC NICKEL PLATED
4	210-391	5	FTG 6400-4-6/S-MJ-MO ZINC NICKEL PLATED
5	210-392	2	FTG 6400-6-6 R.D47/S-MJ-MO ZINC NICKEL PLATED
6	210-393	2	FTG 6400-6-6/S-MJ-MO ZINC NIC PLATED
7	232-050	2	DECL S/N (SILVER)
8	232-058	1	DECAL FASSE BLK/GOLD 1"X 75"RND CRNR
9	253-046	9	COIL HYDAC 0312600 DL DSTCH RECPT.
10	253-593	1	COIL H/F 4304112E-10 INTG DEUT DTR 12V ZENER DIODE
11	270-D93	1	MANI S14153-4 5CIR AL RV
12	273-008	1	CART SV10-40-0-N-00
13	273-D12	1	CART CP10-20
14	273-058	1	CART H/F RV10-22A-0-N-NC-35-30
15	273-D77	9	CART HYDAC WSD8W-01-C-N-0

Hydraulic Control Valve Wiring Harness

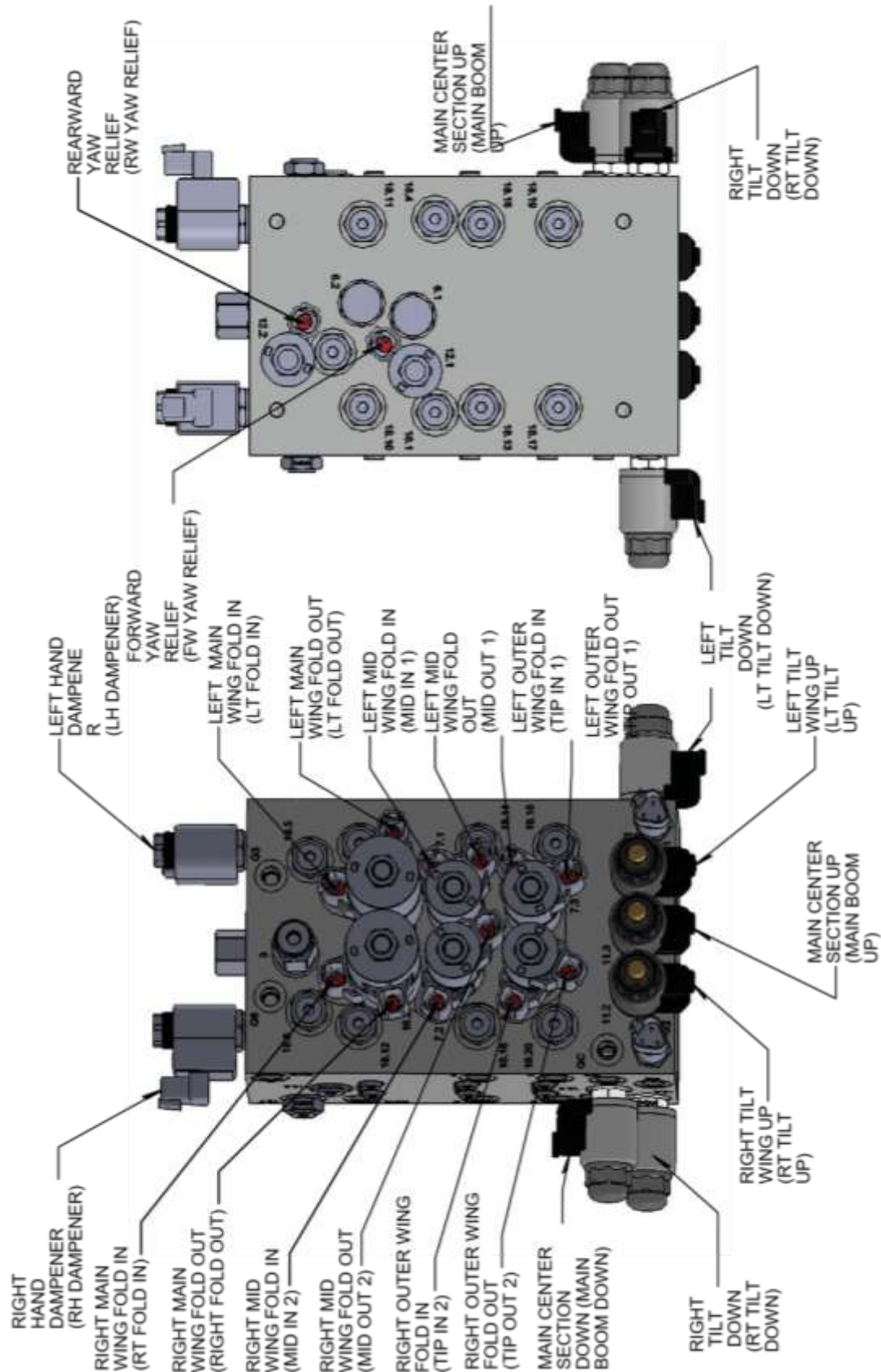
PARTS LIST		
NO	PART NUMBER	QTY
1	214-002	11
2	231-007	3
3	231-008	6
4	231-313	6
5	232-050	2
6	252-020	35
7	252-058	13
8	255-212	1
9	255-214	1
10	255-505	3
11	255-801	3
12	255-811	1
13	255-812	1
14	255-969	2
15	255-971	2
16	255-977	19
17	255-978	18



- NOTES:**
1. HARNESS LENGTH IS 33"
 2. USE 3 CABLE TIES TO COIL UP HARNESS.
 3. PUT REMAINING TIES INTO BAG.

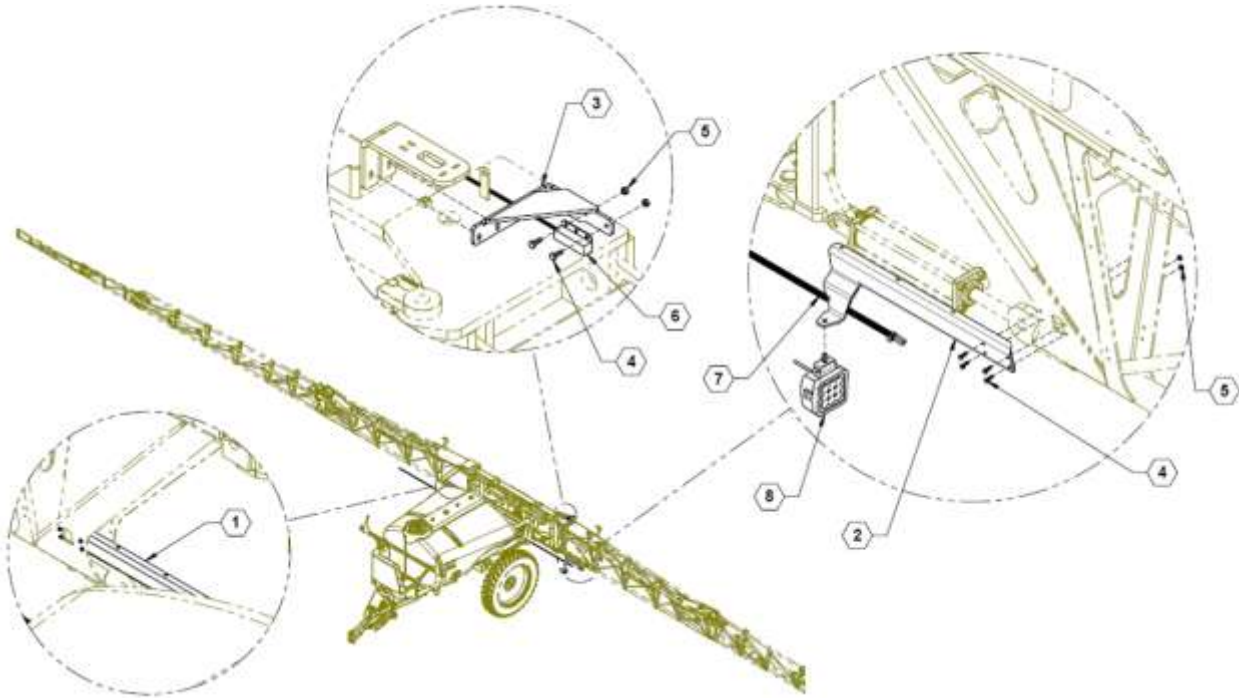


Trailer Manifold Connections – ISO YAW



LIGHTS

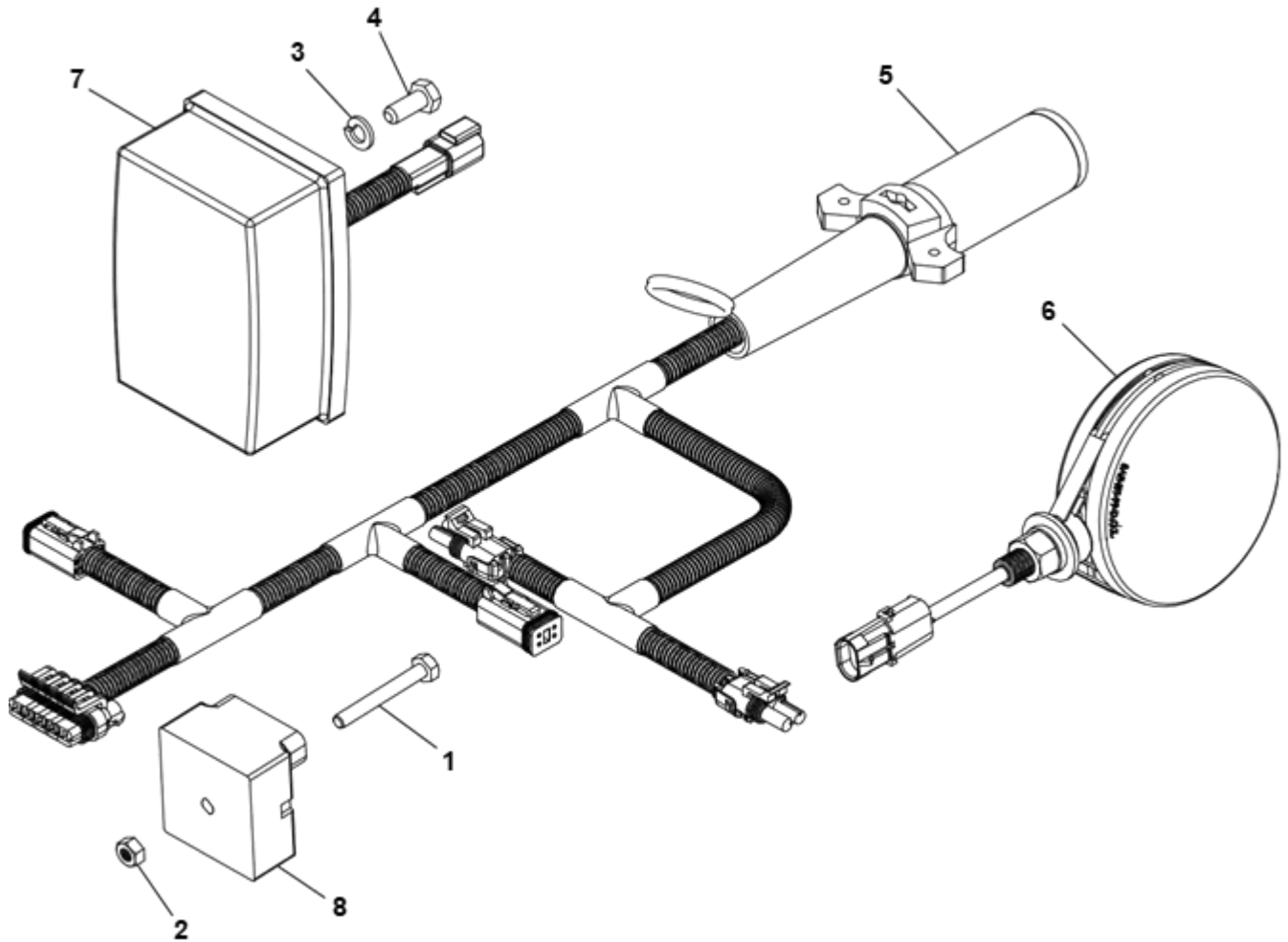
Blue Lights



Parts List 28750: Blue Lights

ITEM	PART NO.	QTY.	DESCRIPTION
1	28940	1	PLATE, RH SPRAY LIGHT BRACKET
2	28942	1	PLATE, LH BLUE SPRAY LIGHT MOUNT
3	28949	1	PLATE, PROX SWITCH MOUNT
4	596101M	10	BOLT, HH 1/4-20X3/4 GR5 MAGNI
5	596235M	12	NUT, CENTERLOCK, 1/4-20 MAGNI
6	632121	1	PROX SWITCH, PARKER
7	740057	1	HARNESS, BLUE SPRAY LIGHTS
8	740058	2	LARSEN BLUE LED SPRAY LIGHT

Lighting



Parts List: Lighting

ITEM	PART NO.	QTY.	DESCRIPTION
1	596848M	1	BOLT, 1/4 X 2" GR5 MAGNI
2	596235M	1	NUT, CENTERLOCK, 1/4" MAGNI
3	596249M	4	WASHER, LOCK, 5/16" MAGNI
4	590229	4	BOLT, 8 X 20 MM 8.8ZP
5	740073	1	SAFETY LIGHT WIRING HARNESS
6	740024	2	AMBER WARNING LIGHT
7	740025	2	RED TAILLIGHT
8	740031	1	LIGHT MODULE



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