



9500 SERIES SPRAYER PARTS MANUAL – 2022







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 Applicator 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.



Fast Sprayer

Warranty Registration Form & Inspection Report

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
Applicator Model				
Serial Number				
Delivery Date				

DEALER INSPECTION REPORT

SAFETY

- 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 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 9500 SPRAYER

APPLICATOR SERIAL NUMBER _____

DATE PURCHASED _____ / _____ / _____

TANK SIZE _____

BOOM LENGTH _____

PUMP MANUFACTURER:

(CIRCLE ONE)

ACE 150-206

ACE 205-304

HYPRO 9306C



ILLUSTRATED PARTS LIST

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:

The parts lists are broken down into sub-assemblies and listed in 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 AS REQUIRED for the location.
- **PART NO.**- These are the part numbers associated to the ITEM.
- **DESCRIPTION** - This is the description of the part.



ILLUSTRATED PARTS LIST

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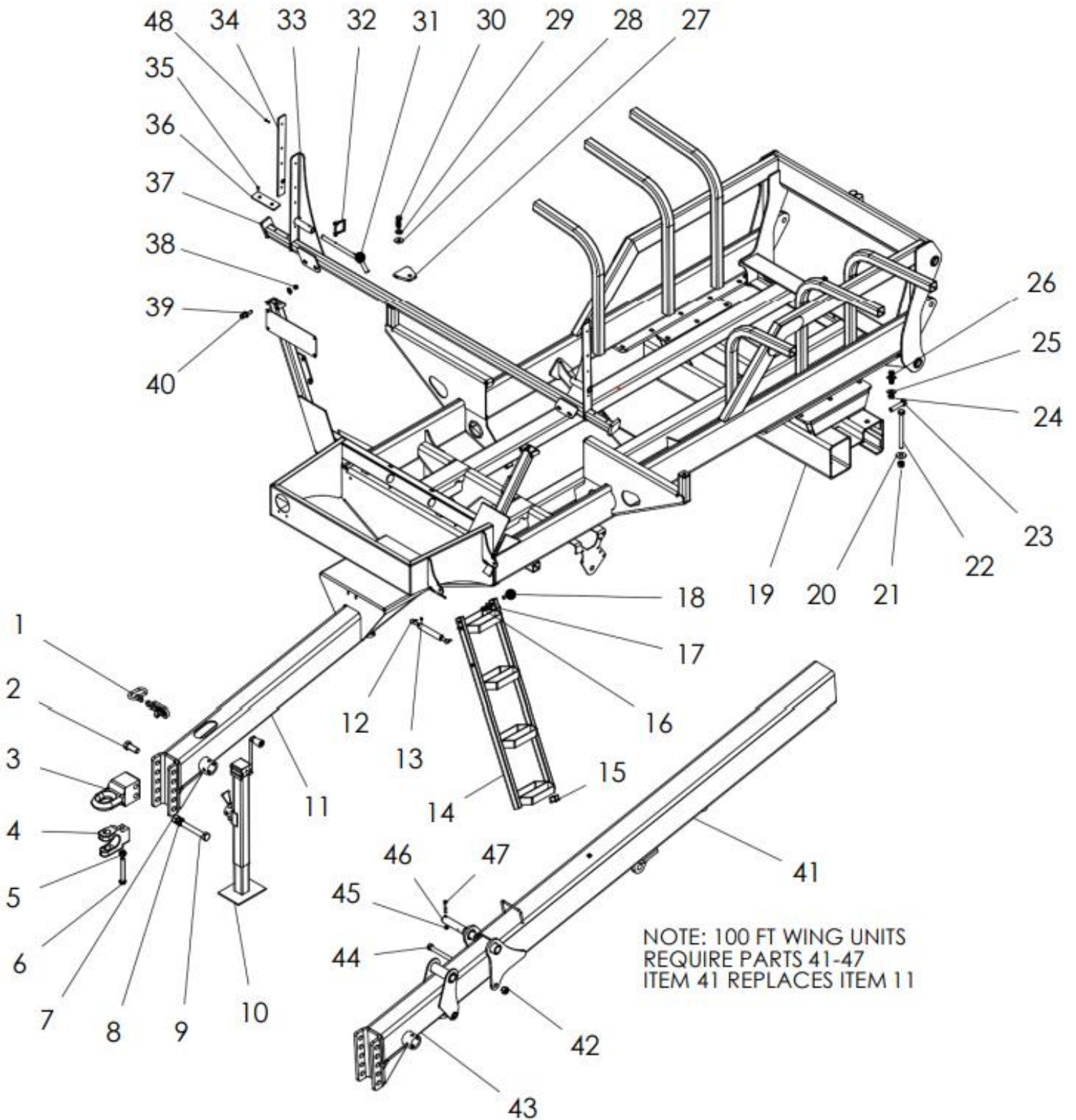
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Trailer



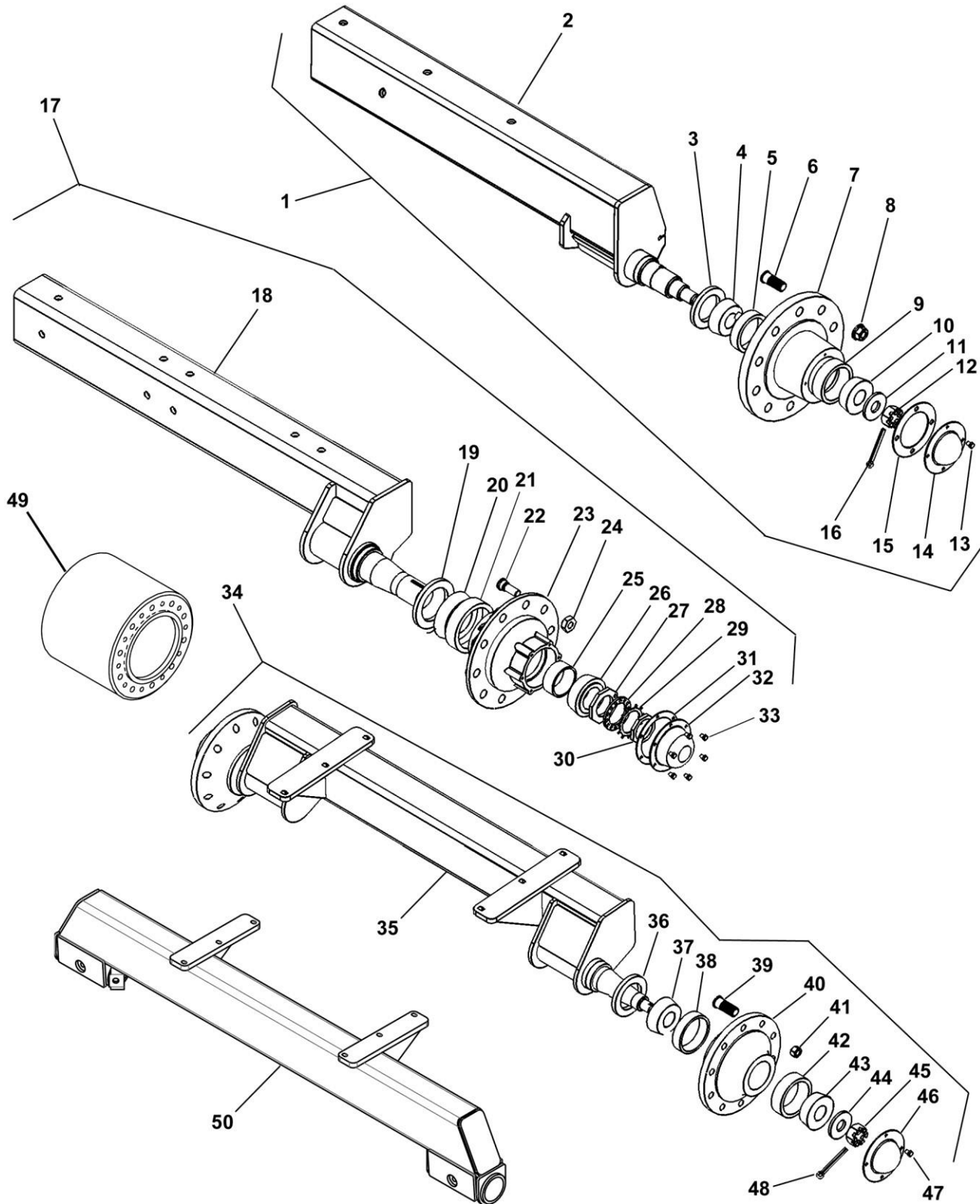


ILLUSTRATED PARTS LIST

Parts List: Trailer

ITEM	VENDOR PART	PART NO.	DESCRIPTION	QTY	60-90 FT.	100 FT
1	PPSC21A	790015	SAFTEY CHAIN 20,200#	1		
2		199	BOLT, HH 1 X 2-1/2 FR5 ZP	1		
3	PPI-301V3-10	790003	HITCH CAT 3	1		
4	PPI-208-VR-10	790002	CLEVIS FOR HITCH	1		
5		233	NUT, HH 3/4" NYLOCK ZP	1		
6		390	BOLT, HH 3/4 X 5-1/2 GR8 ZP	1		
7		218	HUT, HH 1" ZP	5		
8		255	WASHER 1" LOCK	5		
9		564	BOLT, HH SPECIAL 1 X 6-1/2 GR5 ZP	2		
10	FASTD800	790005	JACK 8000# SIDE WIND	1		
11		10575	FAST TRAILER 9500 SERIES 60-90'		1	
12	22011A3	590010	EASYLIFT CYLINDER (FOR USE WITH LADDER 10620 ITEM 11)	1		
13		855	NUT, HH M8 ZP (FOR USE WITH LADDER 10620 ITEM 11)	1		
14		10620	LADDER 3 STEP S/N 9430-3026-77 TO CURRENT	1		
15		4192	PLASTIC PLUG 1.5 TUBE	4		
16		231	NUT, HH 1/2" CENTERLOCK ZP	2		
17		260	WASHER FLAT 1/2"	2		
18		155	BOLT, HH 1/2 X 2-1/2" GR5 ZP	2		
19		13512	AXLE HOUSING RECIEVER	1		
20		262	WASHER FLAT 3/4 ZP	4		
21		241	NUT, HH 3/4 CENTERLOCK ZP	4		
22		488	BOLT, HH 3/4 X 8.5 GR5 ZP	4		
23		187	BOLT, HH 3/4 X 3-1/2" GR5 ZP	2		
24		240	NUT HH 5/8 CENTERLOCK ZP	6		
25		261	WASHER FLAT 5/8 ZP	12		
26		170	BOLT, HH 5/8 X 2.5 GR5 ZP	6		
27		10244	POLY HOLDDOWN TAB	2		
28			WASHER FLAT 5/8" ZP	2		
29			WASHER LOCK 5/8" ZP	2		
30			BOLT, HH 5/8 X 2 GR5 ZP	2		
31			SAFTEY LATCH PIN	2		
32	715300927	270001	KWIK CLIP PIN	2		
33			BOLT, HH 1/4 X 5/8" BLACK	8		
NS			VERTICAL STOP CHAMFERED PLASTIC RIGHT	1		
34			VERTICAL STOP CHAMFERED PLASTIC LEFT	1		
35			RIVET 1/4" DRIVE IN	12		
36			WEAR PAD PLASTIC TRANSPORT SADDLE BASE	2		
37			BOLT-ON TRANSPORT SUPPORT	1		
38			NUT 1/2" CENTERLOCK	2		
39			WASHER FLAT 1/2"	4		
40			BOLT HEX HEAD 1/2 X 2-1/2"	2		
41			TRAILER 9518 EXTENDABLE (TOUNGE SECTION ONLY SHOWN)			1
42		241	NUT, HEX HEAD 3/4" ZP			1
43		13504	TONGUE FIXED 60'			1
44		487	BOLT HEX HEAD 3/4 X 8 GR5 ZP			1
45		237	NUT HEX HEEAD 3/8" CENTERLOCK ZP			1
46		8933	PIN ROLLER EXTERNAL			1
47		131	BOLT HEX HEAD 3/8 X 2-1/2 GR5 ZP			1
48		235	NUT HEX HEAD 1/4" CENTER LOCK ZP	8		
NS		800208	DECAL, HYDRAULIC HOSE KEY			

Axles



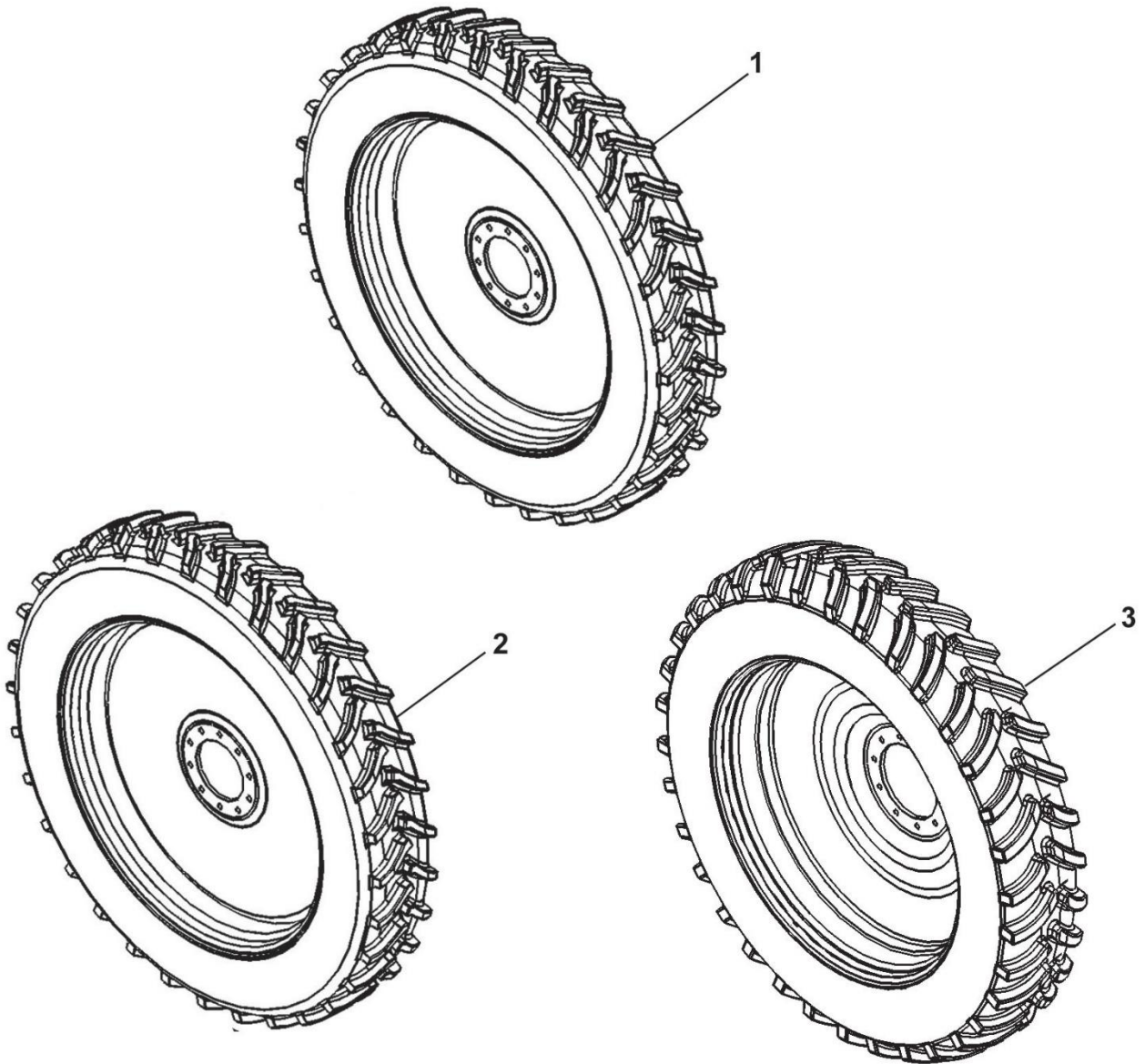


ILLUSTRATED PARTS LIST

Parts List: Axles

ITEM	VENDOR PART NO.	PART NO.	DESCRIPTION	QTY.
1		13586	AXLE ASSEMBLY 10 BOLT (INC 2 - 16)15,000#	2
2		13518	TRAILER NARROW AXLE SUB WELD 3-3/8"SPINDLE	2
3	946275	730013	SEAL 873 SERIES HUB 15,000#	2
4	NI-910398/332752	730011	CONE INNER 873 SERIES HUB	2
5	NI-910397/133462		CUP INNER 873 SERIES HUB	2
6	NI-953033	1683	STUDWHEEL	20
7	NI-289121	730002	HUB 10 BOLT W/CUPS 873 SERIES HUBS 15,000#	2
8	NI-913571	730051	NUTWHEEL	20
9	NI-910332/453A	1679	CUPOUTER	2
10	NI-910334/460	1681	CONEOUTER	2
11	NI-913632	1688	WASHER SPINDLE	2
12	NI-912969	730014	NUT SPINDLE 1.25-12TPI	2
13	NI-9052148	113	BOLT HH 5/16 X 1/2 GR5ZP	8
14	1682	730072	HUB CAP Q-871 HUB	2
15	1686	730016	GASKET HUBCAP	2
16	NI-905944	1690	COTTERPIN	2
17		10900	AXLE ASSEMBLY 2400 GALLON TANK (INC 18 - 33)19,000#	2
18		10901	AXLE, SINGLE 2400 GALLON TANK	2
19	513-0541	730050	SEAL GREASE CR40108	2
20	501-0663	730047	BEARING, INNER663	2
21	511-0653		CUP, INNER653	2
22	54101216		WHEELSTUD	20
23	51001900	730071	HUB 10 BOLT 19,000 LB	2
24	55001216	730049	WHEELNUT	20
25	511-2011		CUP, OUTERHM212011	2
26	512-2049	730064	BEARING, OUTER HM212049	2
27	515-1918	730063	INNER LOCKNUT	2
28	514-1900	730062	INNER LOCKWASHER	2
29	514-1884		OUTER LOCKWASHER	2
30	515-1892		OUTER LOCKNUT	2
31	563-3600-HG		GASKET, HUB CAP	2
32		113	BOLT HH 5/16 X 1/2 GR5ZP	12
33	563-3600	730046	HUB CAP	2
34		10913	AXLE ASSEMBLY 10 BOLT DUALS 60"-120" TW (INC 33 - 45)20,000#	1
34	NS	10907	AXLE ASSEMBLY 10 BOLT DUALS 80"-132" TW (INC 33 - 45)20,000#	1
34	NS	10910	AXLE ASSEMBLY 10 BOLT DUALS 80"-120" TW (INC 33 - 45)20,000#	1
35		10917	TRAILER AXLE 30"ROW	1
35	NS	10908	TRAILER AXLE 22"ROW	1
35	NS	10911	TRAILER AXLE 20"ROW	1
36	NI-906979	730041	SEAL	2
37	NI-910346	730043	CONEINNER	2
38	NI-910334	730012	CUPINNER	2
39	NI-953035		STUDWHEEL	20
40	NI-281171	730060	HUB 10 BOLT 20,0003	2
41	NI-913571	730051	NUTWHEEL	20
42	NI-910384	1679	CUPOUTER	2
43	NI-910347	730037	CONEOUTER	2
44	NI-913632	730040	WASHER SPINDLE	2
45	NI-913571	730051	NUT	2
-	NS	730061	HUB CAP SEAL	
46	NI-909921	730039	HUB CAP	2
47	NI-9052148	113	BOLT HH 5/16 X 1/2 GR5ZP	8
48	NI-905944	730042	COTTERPIN	2
49		710030	SPACER 30" ROW 13.75" OAL	2
49	NS	710032	SPACER 22" ROW 7"OAL	2
49	NS	710031	SPACER 20" ROW 5"OAL	2
50		21370	AXLE,TRACKS	1

Tire & Rim



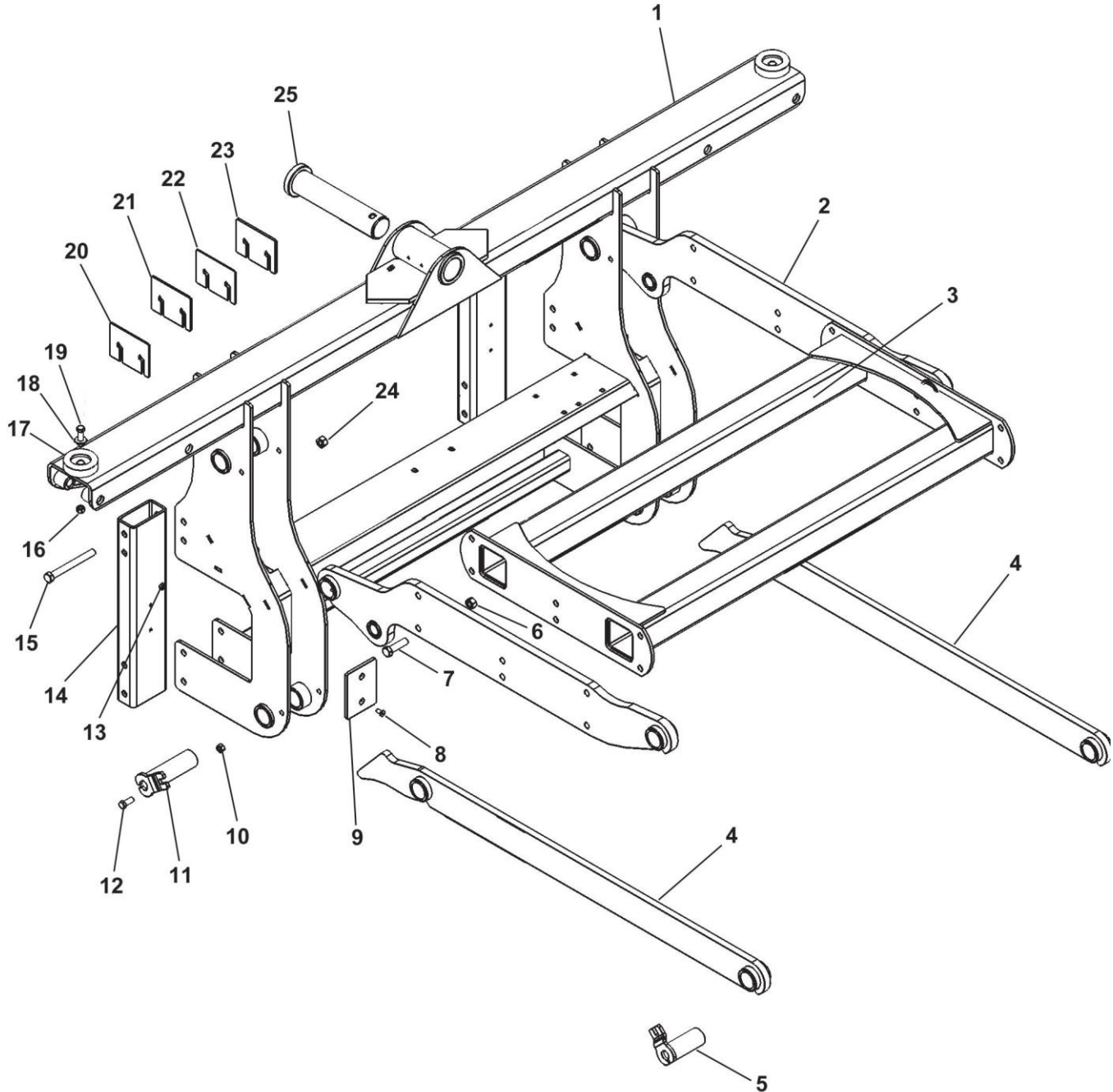


ILLUSTRATED PARTS LIST

Parts List: Tire & Rim

ITEM	VENTOR PART NO.	PART NO.	DESCRIPTION	9518	9524
1	TT-512318057201R	700002	380/90R46 YELLOW RH	1	
1	TT-512318057201L	700003	380/90R46 YELLOW LH	1	
1	TT-5123180040701L	700001	380/90R46 SILVER LH	1OPT/RED	
1	TT-5123180040701R	700000	380/90R46 SILVER RH	1OPT/RED	
2	TT-05190210057201L	700018	W/480/80R42 162A8 R1		1
2	TT-05190210057201R	700019	W/480/80R42 162A8 R1		1
2	TT-05190210040701L	700016	480/80R42 LOAD R A162		1OPT/RED
2	TT-05190210040701R	700017	480/80R42 LOAD R A162		1OPT/RED
3	TT05197700040701L	700040	TIRE L 320/90R46 148 SILVER DUAL	2OPT/RED	2OPT/RED
3	TT05197700040701R	700041	TIRE R 320/90R46 148 SILVER DUAL	2OPT/RED	2OPT/RED
3	TT05197700057201R	700032	TIRE R 320/90R46 148 YELLOW DUAL	2OPT.	2OPT.
3	TT05197700057201L	700033	TIRE L 320/90R46 148 YELLOW DUAL	2OPT.	2OPT.
3	TT-5193450057201L	700020	380/90R46 YELLOW LH DUAL	2OPT.	2OPT.
3	TT-5193450057201R	700021	380/90R46 YELLOW RH DUAL	2OPT.	2OPT.
3	TT-5193450040701L	700034	380/90R46 SILVER LH DUAL	2OPT/RED	2OPT/RED
3	TT-5193450040701R	700035	380/90R46 SILVER RH DUAL	2OPT/RED	2OPT/RED

Parallel Link & Interior Pivot (H-LINK)



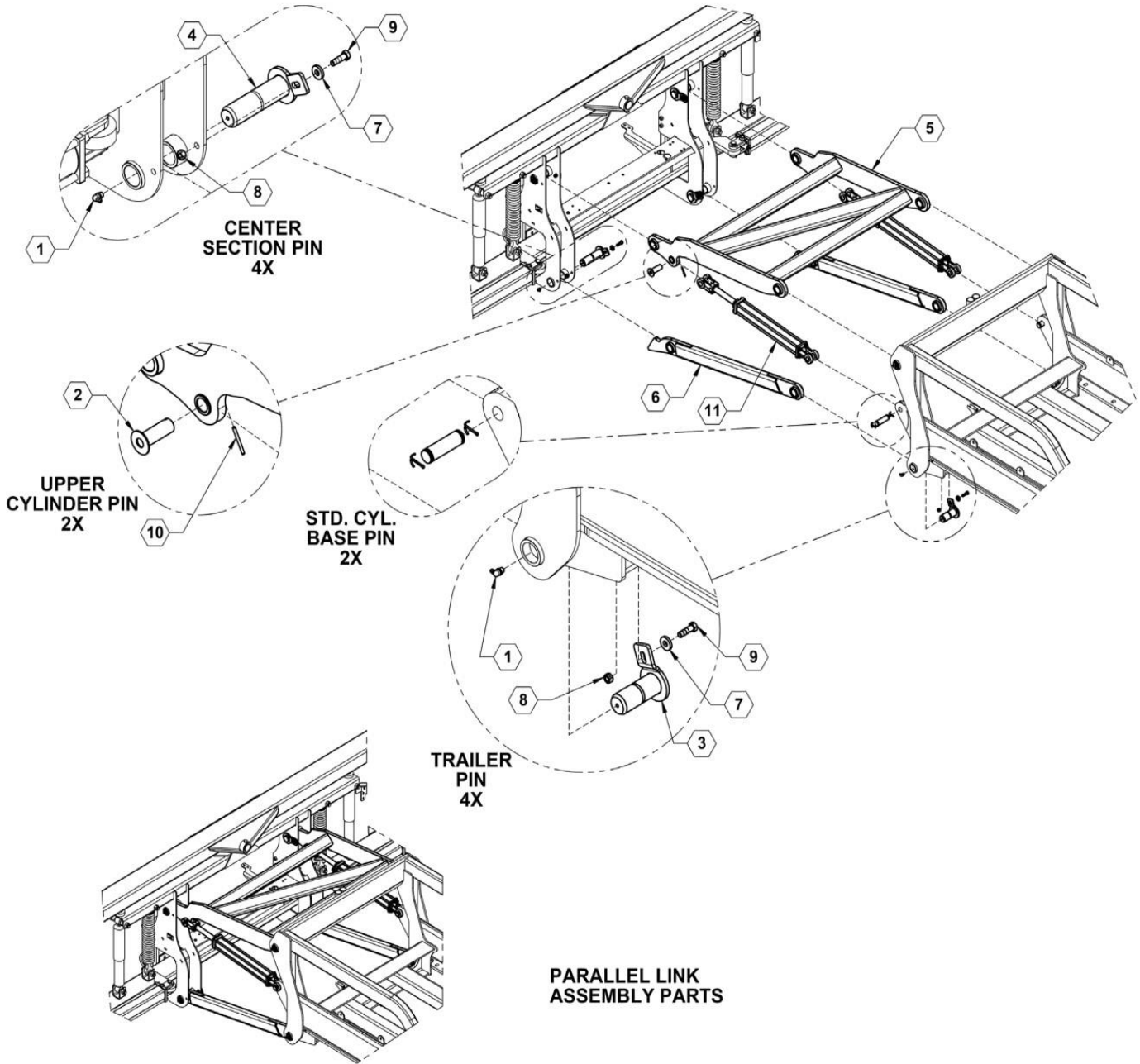


ILLUSTRATED PARTS LIST

Parts List: Parallel Link & Interior Pivot (H-LINK)

ITEM	VENTOR PART NO.	PART NO.	DESCRIPTION	QTY.
1		13806	INTERIORPIVOT	1
2		13803	UPPER LINK WELDMENT	2
3		14790	HBRACE	1
4		14795	LOWER LINK WELDMENT	2
5		13871	PIN TRAILERPIVOT	1
6		239	NUT HEX 1/2"CENTERLOCK	12
7		154	BOLT HEX HEAD 1/2 X 2 GR5 ZP	12
8		671	BOLT FLAT HEAD 1/4 X 5/8BLACK	8
9		590097	RUBPLATE	4
10		237	NUT HEX HEAD 3/8" CENTERLOCK	6
11		13872	CRADLE PIN	4
12		129	BOLT HH 3/8 1-1/2 GR5ZP	8
13		235	NUT HEX 1/4" CENTERLOCKZP	8
14		13883	TUBE INTERIOR PIVOTLOCK	2
15		160	BOLT HEX HEAD 1/2 X 5 GR5 ZP	8
16		237	NUT HEX HEAD 3/8" CENTERLOCK	10
17	B1	59026	RUBBER BUMPER	2
18		258	WASHER FLAT 3/8" ZP	2
19		129	BOLT HH 3/8 1-1/2 GR5ZP	2
20		11265	SHIM RUB PLATE 12GA	AR
21		11266	SHIM RUB PLATE 10GA	AR
22		11267	SHIM RUB PLATE 7GA	AR
23		11942	SHIM RUB PLATE 14GA	AR
24		239	NUT HEX 1/2"CENTERLOCK	8
25		13870	PIN CENTER INTERIORPIVOT	1
NS		759	GREASE ZERK 1/4-28 TPIZP	10

Parallel Link Assembly (MACHO LINK)



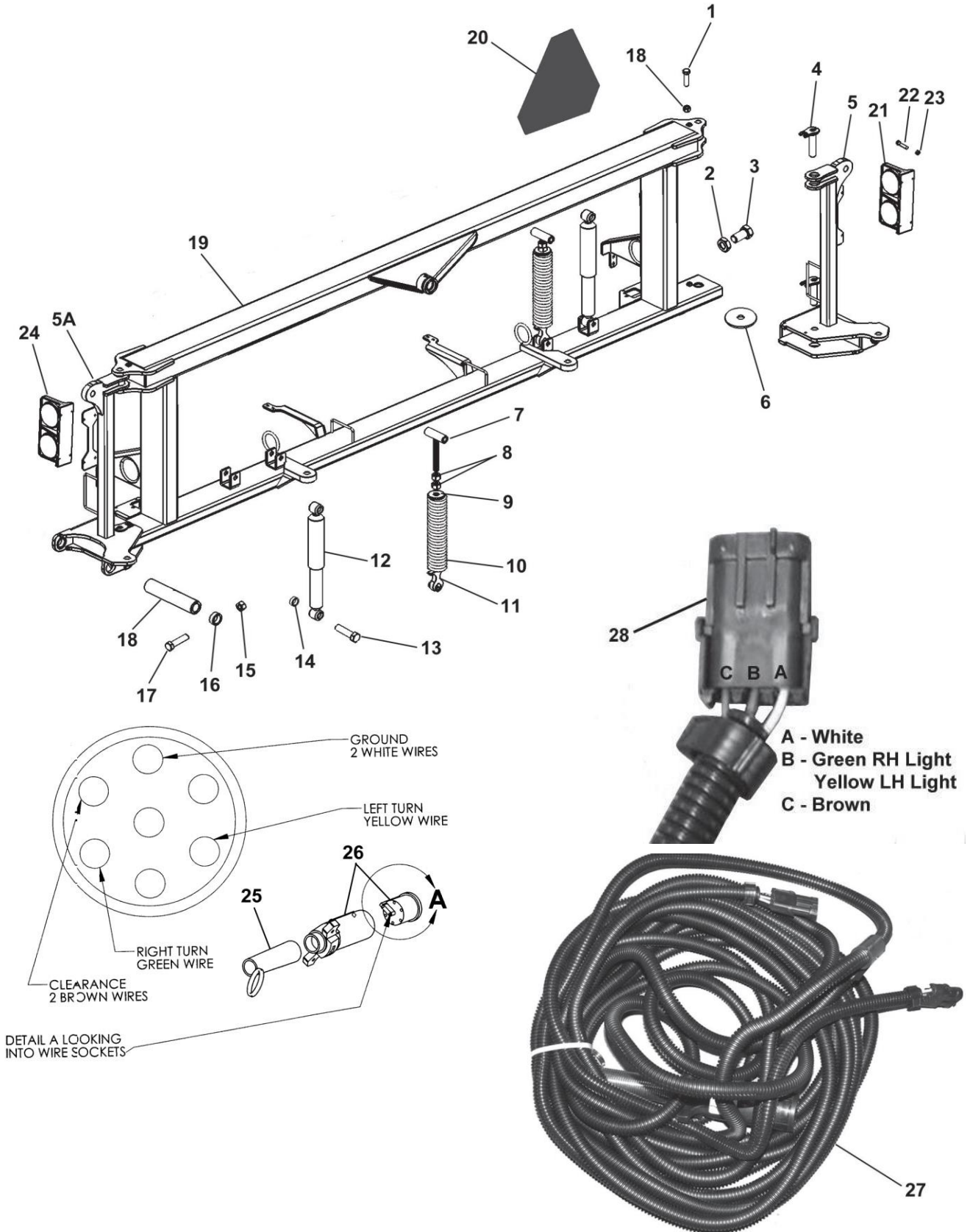


ILLUSTRATED PARTS LIST

Parts List: Parallel Link Assembly (MACHO LINK)

ITEM	VENDOR PART NO.	PART NO.	DESCRIPTION	QTY.
1		761	ZERK, 90, 1/4" STRAIGHT PIPE	8
2		11629	CRADLE CYLINDER PIN	2
3		13871	PIN	4
4		13872	PIN	4
5		14790	LITE MACHO UPPER LINK	1
6		14795	LITE LINK, LOWER	2
7		530309	WASHER, FLAT HEADY 13/32 X 1	8
8		596237M	NUT, CENTERLOCK 3/8 MAGNI	8
9		596635M	BOLT, HH 3/8-16 X 1-1/4 MAGNI	8
10		596746M	SPRING IN 5X50MM MAGNI	2
11		620019	CYLINDER 20TD 16-11 2 MAIN LIFT	2

Center Section



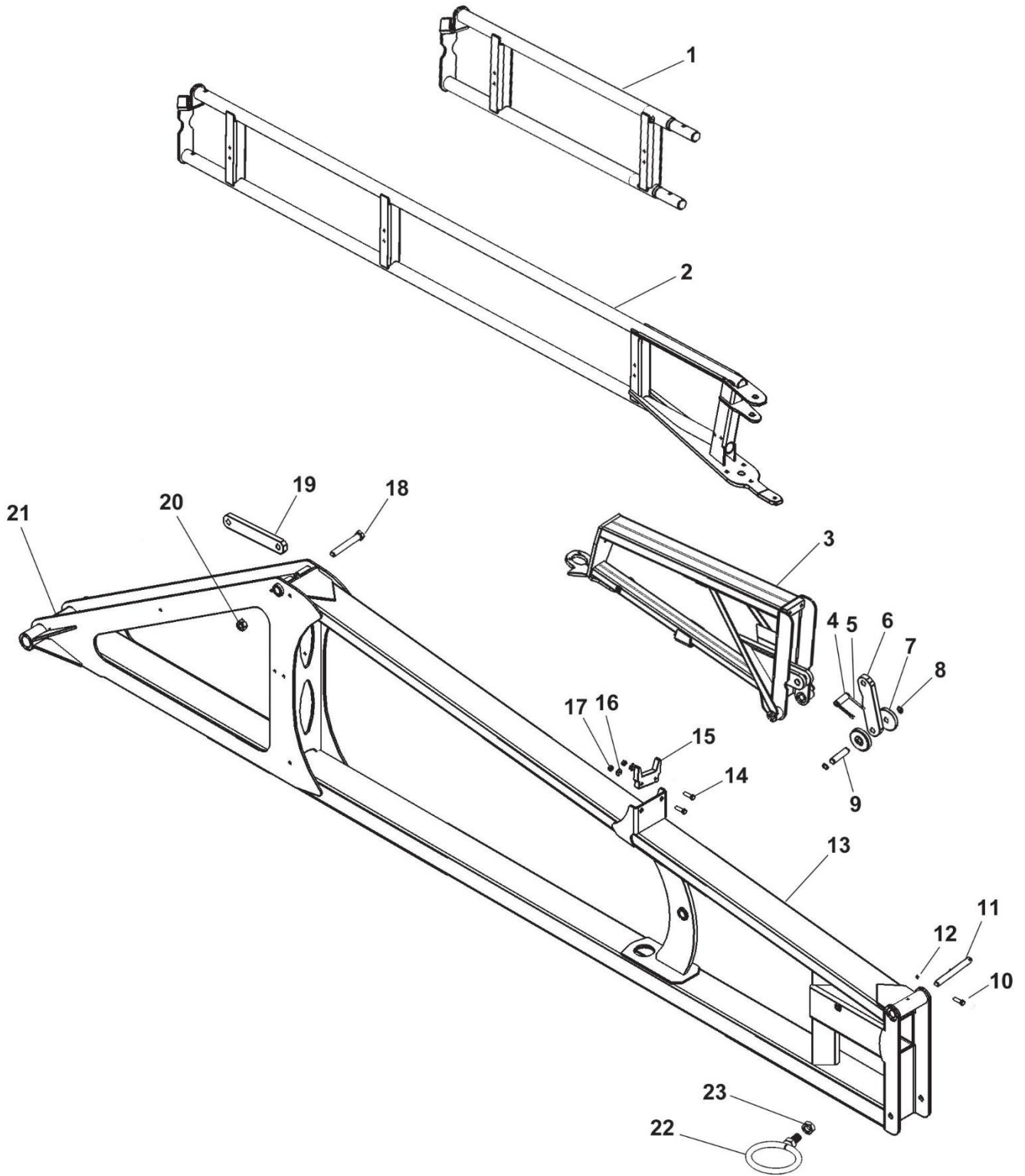


ILLUSTRATED PARTS LIST

Parts List: Center Section

ITEM	VENTOR PART NO.	PART NO.	DESCRIPTION	QTY.
1		128	BOLT HH 3/8 X 1 GR5ZP	4
2		226	NUT HEX HEAD JAM 1" ZP	2
3		198	BOLT HEX HEAD 1 X 2 GR5 ZP	2
4		13886	WING PIVOTPIN	4
5		21353L	WING PIVOTLEFT	1
5A		21353R	WING PIVOTRIGHT	1
6		13891	WASHER UHMW POLY	2
7		13875	SPRING ADJUSTMENTEYEBOLT	2
8		217	NUT HH 3/4"ZP	4
9		7442	OUTER SPRINGMOUNT	2
10	FX-FV0006656	590011	SPRING CENTERSECTION	2
11		13876	INNER SPRINGMOUNT	2
12	66833	790011	SHOCK CENTERSECTION	2
13		187	BOLT HH 3/4 X 3-1/2" GR5ZP	8
14		241	NUT HH 3/4" CENTERLOCKZP	8
15		237	NUT 3/8 CENTER LOCKZP	2
16		14296	COLLAR, PIN RETAINER	2
17		131	BOLT HH 3/8 X 2-1/2" GR5ZP	2
18		14300	MAIN WING PIVOT PIN	2
19		13801	CENTERSECTION	1
20		790017	SMV	1
21		740001	LIGHTS LEFTSIDE	1
22		102	BOLT HH 1/4 X 1" GR5ZP	8
23		767	NUT HH 1/4"WHIZLOCK	8
24		740002	LIGHTS RIGHTSIDE	1
NS		256	1/4" FLAT WASHER USED ON #22	8
25	WA-37678		SPRING CABLE GUIDE	1
26	WA-37673		7-PIN ELECTRICALCONNECTOR	1
27	DA-1528	740007	WARNING LIGHTHARNNESS	1
28	WA-38044		WEATHER PACK 3-PINSHROUD	2

Wings – 60 & 66 Ft. Boom



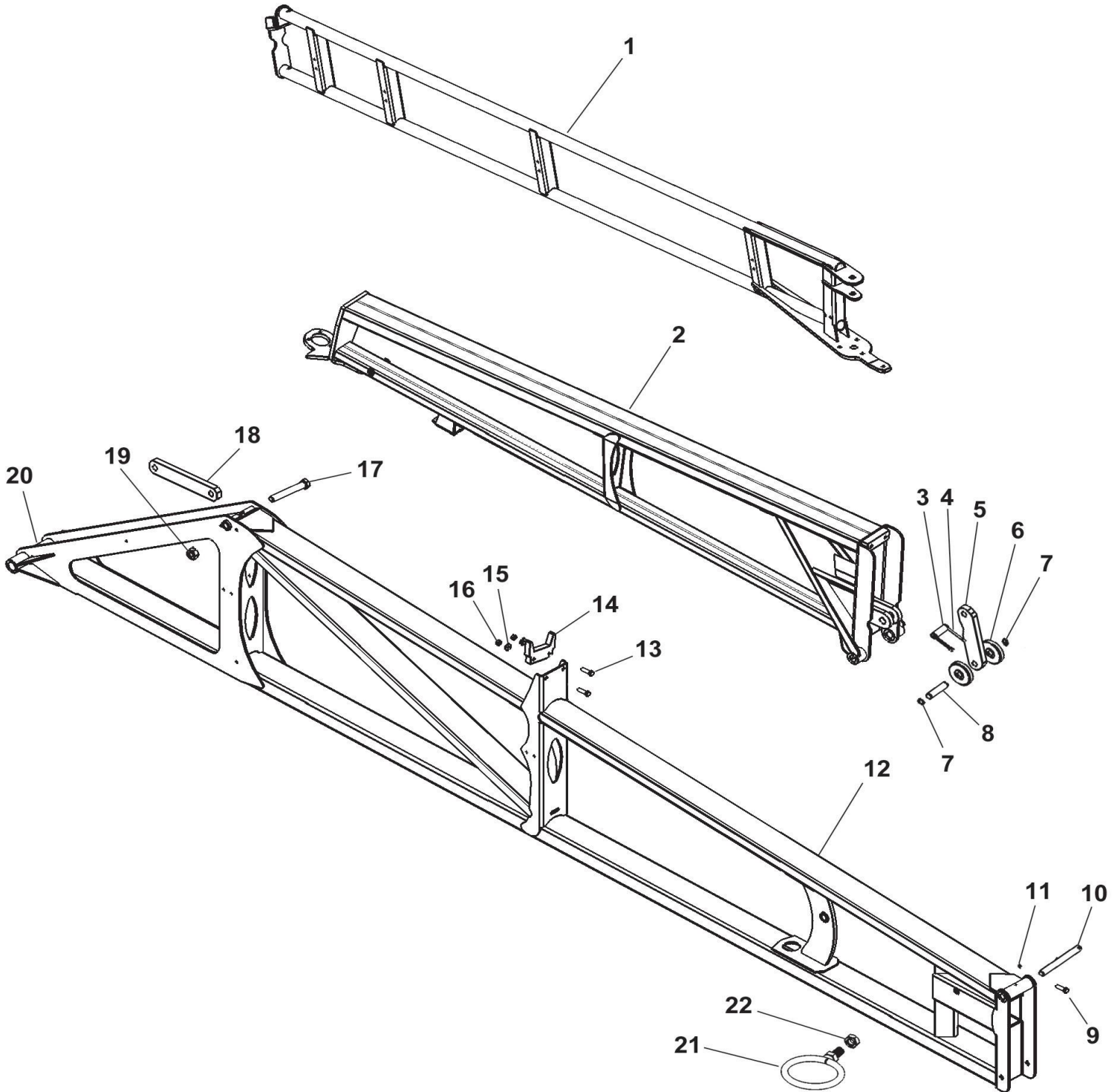


ILLUSTRATED PARTS LIST

Parts List: Wings – 60 & 66 Ft. Boom

ITEM	VENDOR PART NO.	PART NO.	DESCRIPTION	60 & 66 FT.	66 FT.
1		14627	BREAKAWAY EXTENSION 3'ALUMINUM		2
2		18300	BREAKAWAY WING93"	2	
3		14215	FLIPWING	2	
4		11127	PIN	2	
5		135995	COTTER PIN 3/16 X 2ZP	4	
6		9514	FLIP WINGARM	2	
7		7668	WING ROLLER MACHINED	4	
8		534	SNAP RING EXTERNAL 1"	4	
9		7669	ROLLER PIN 1"	2	
10		117	BOLT HH 5/16 X 2" GR5ZP	2	
11		9468	FLIP WINGPIN	2	
12		236	NUT HH 5/16" CENTERLOCK ZP	2	
13		14205	MAINWING	2	
14		154	BOLT HH 1/2 X 2 GR5ZP	4	
15		9674	WING REST 1"UHMW	2	
16		260	WASHER FLAT 1/2" ZP	4	
17		231	NUT HH 1/2" CENTERLOCKZP	4	
18		209	BOLT HH 1 X 7-1/2" GR5ZP	2	
19		14149	LINK LEVEL BOOM	2	
20		242	NUT HH 1" CENTERLOCKZP	2	
21		759	ZERK1/4-28	2	
22		14146	RING HOSE HOLDER	2	
23		223	NUTJAM	2	

Wings – 80, 90, & 100 Ft. Boom



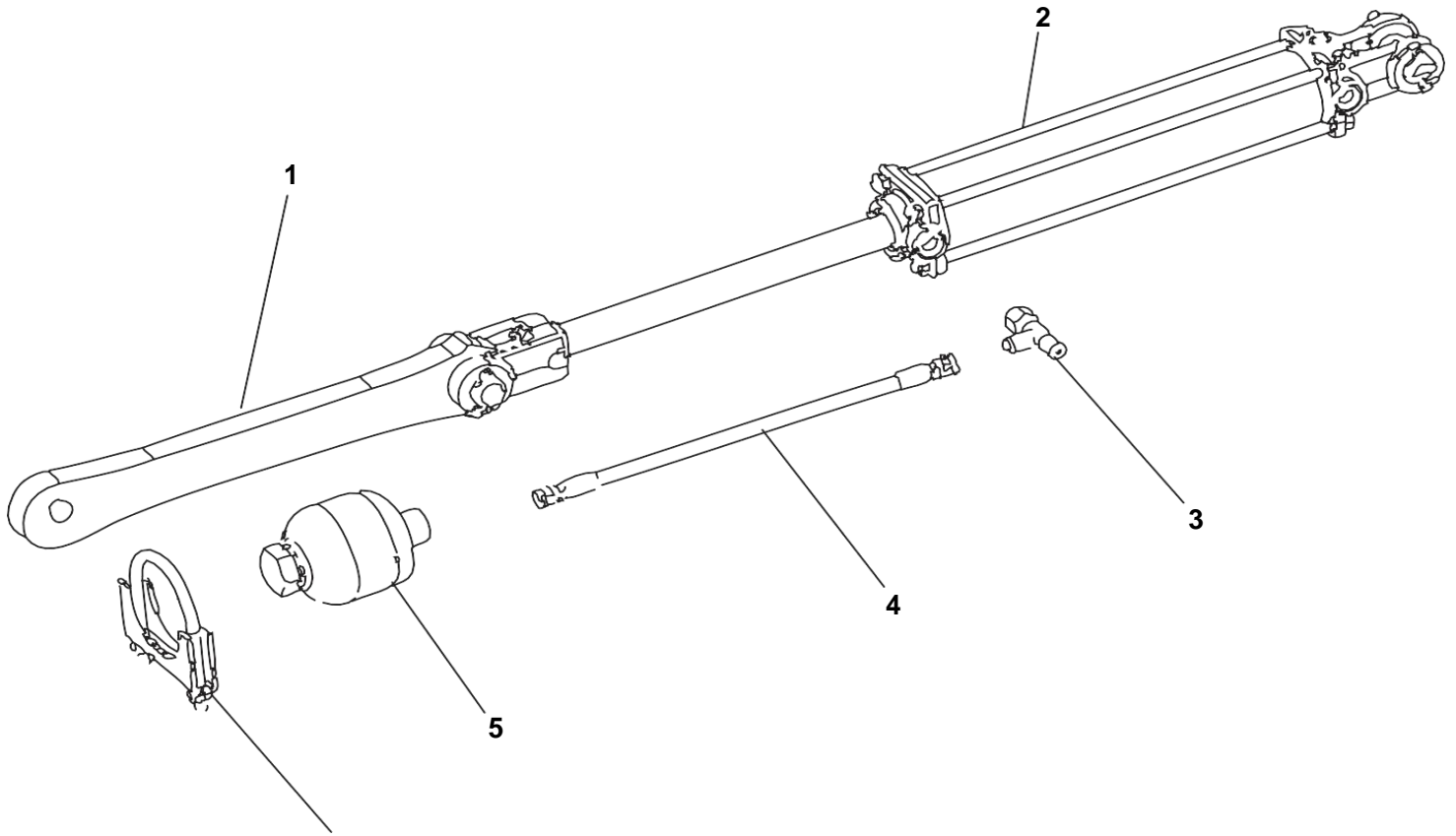


ILLUSTRATED PARTS LIST

Parts Lists: Wings – 80, 90, & 100 Ft. Boom

ITEM	PART NO.	DESCRIPTION	80, 90 & 100	80FT	90FT	100FT
1	18300	BREAKAWAY WING93"				2
	18320	BREAKAWAY WING111"		2	2	
2	14150	FLIP WING80'		2		
	14160	FLIP WING90'			2	
	14175	FLIP WING100'				2
3	11127	PIN	2			
4	135995	COTTER PIN 3/16 X 2ZP	4			
5	9514	FLIP WINGARM	2			
6	7668	WING ROLLER MACHINED	4			
7	534	SNAP RING EXTERNAL 1"	4			
8	7669	ROLLER PIN 1"	2			
9	117	BOLT HH 5/16 X 2" GR5ZP	2			
10	9468	FLIP WINGPIN	2			
11	236	NUT HH 5/16" CENTERLOCK ZP	2			
12	14130	MAIN WING 80'-90'		2	2	
	14165	MAIN WING 100'				2
13	154	BOLT HH 1/2 X 2 GR5ZP	4			
14	9674	WING REST 1"UHMW	2			
15	260	WASHER FLAT 1/2" ZP	4			
16	231	NUT HH 1/2" CENTERLOCKZP	4			
17	209	BOLT HH 1 X 7-1/2" GR5ZP	2			
18	14149	LINK LEVEL BOOM	2			
19	242	NUT HH 1" CENTERLOCKZP	2			
20	759	ZERK1/4-28	2			
21	14146	RING HOSE HOLDER	2			
22	223	NUTJAM	2			

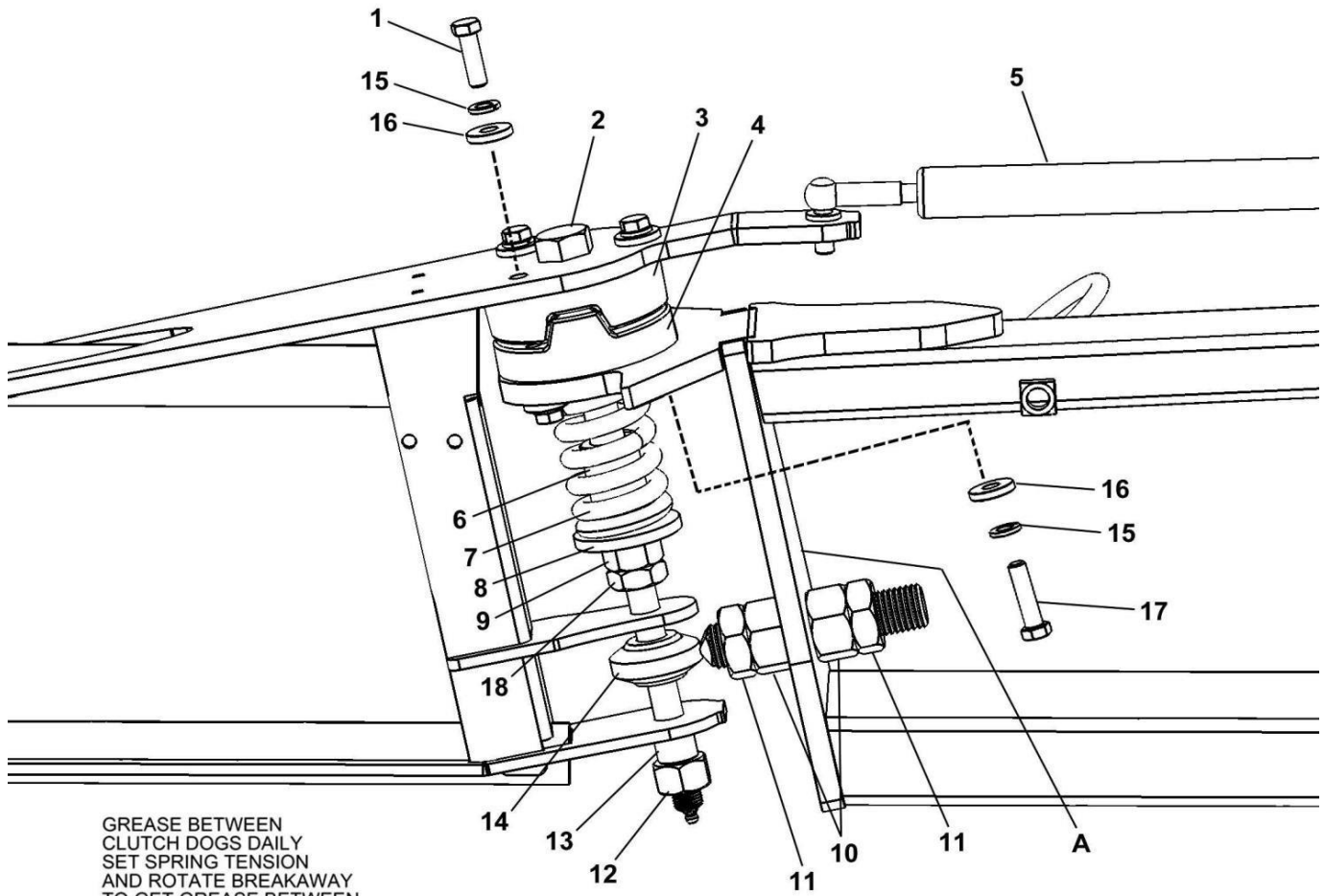
Wing Tilt Options



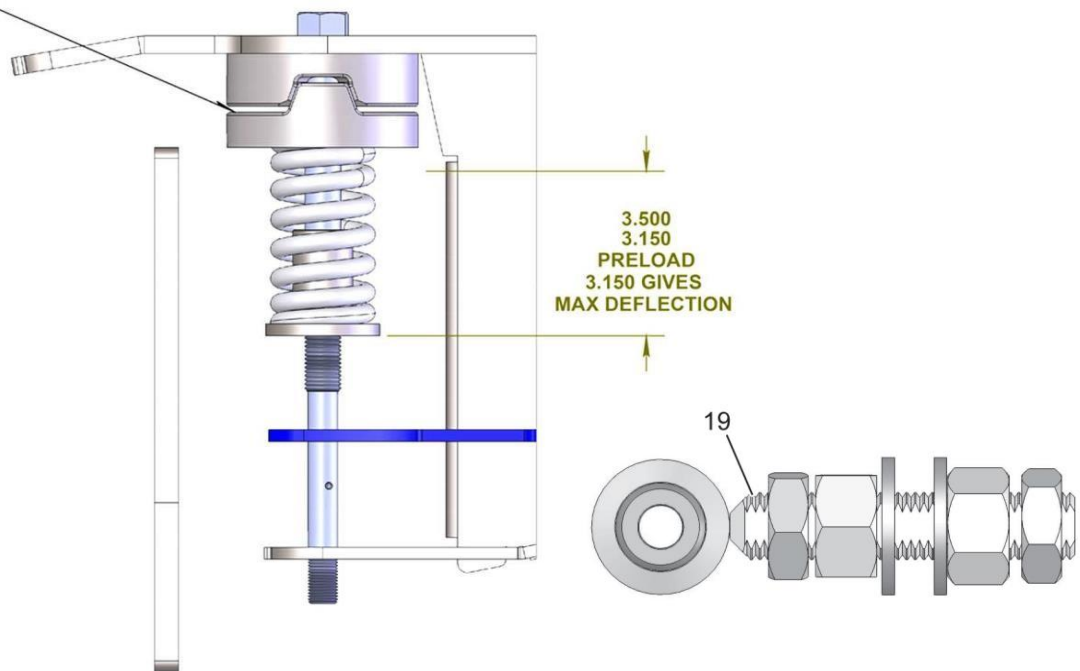
Parts List: Wing Tilt Options

ITEM	PART NO.	DESCRIPTION	QTY.	60FT.	80-90	100
CUSHIONED TILT						
1	14088	LINK, NORAC	1			
2	620022	CYLINDER 25TD10-112 60-90'	1	1	1	
2	620020	CYLINDER 30TD10-125 100'				1
3	610027	TEE JIC #6	1			
4	600018	HOSE HYDRAULIC 3/8 X #6 JIC	1			
5	630002	ACCUMULATOR 21 CU"	1			
6	540033	CLAMP 3.5 ACCUMULATOR	1			
NON-CUSHIONED TILT						
1	14088	LINK, NORAC	1			
2	620022	CYLINDER 25TD10-112 60-90' WINGS		1	1	
2	620020	CYLINDER 30TD10-125 100' WINGS				1

Breakaway Pivot



GREASE BETWEEN CLUTCH DOGS DAILY SET SPRING TENSION AND ROTATE BREAKAWAY TO GET GREASE BETWEEN SURFACES



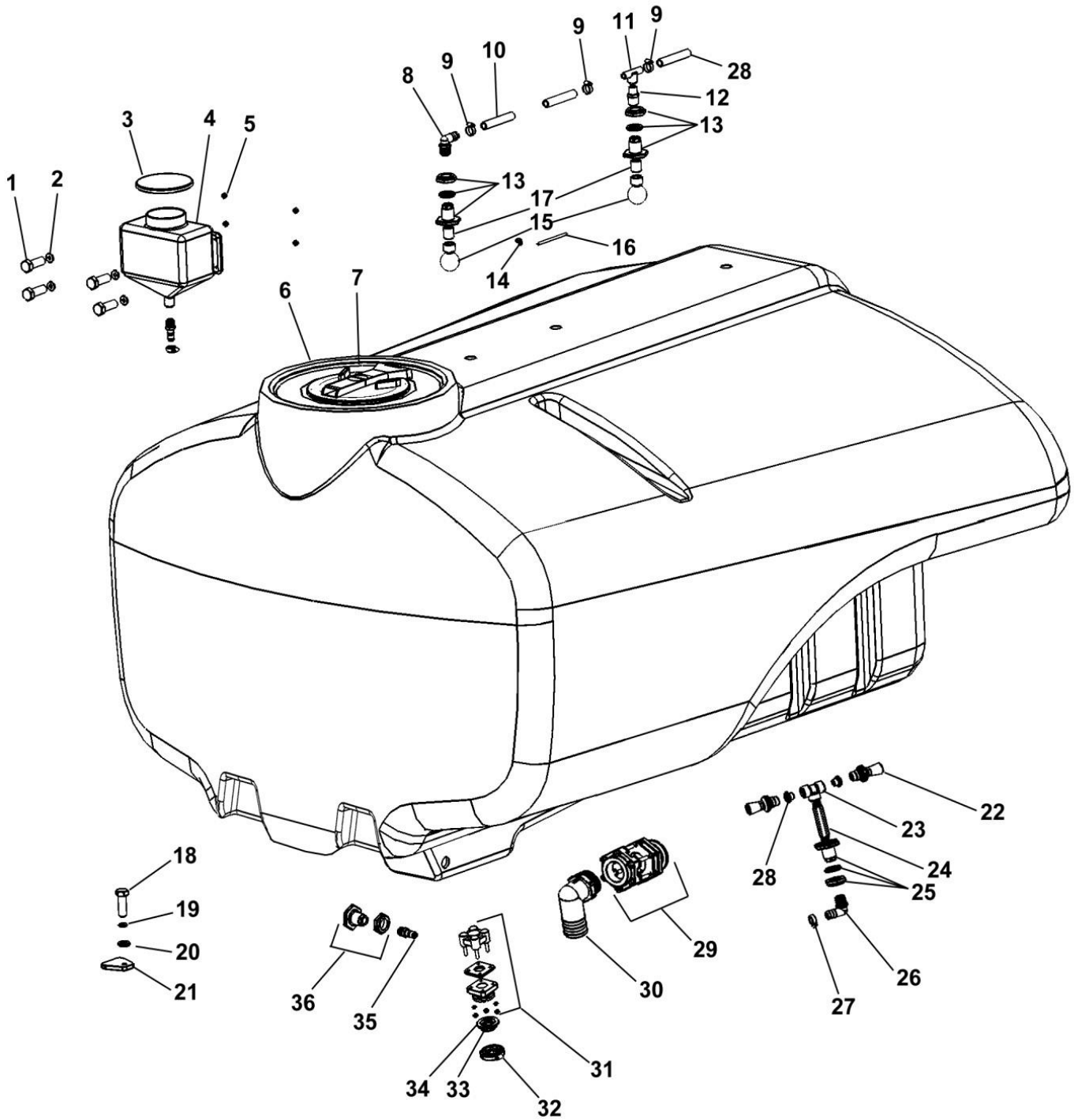


ILLUSTRATED PARTS LIST

Parts List: Breakaway Pivot

ITEM	VENDOR PART NO.	PART NO.	DESCRIPTION	QTY.
1		596633M	BOLT HEX HEAD 3/8 X 1-1/4 GR8ZP	3
2		590112	BOLT HEX HEAD BREAKAWAY PIVOT	1
3	14457	590074	20° CLUTCH MALEHALF	1
4	14458	590073	20° CLUTCH FEMALEHALF	1
5	EL-2X3X2-046	790028	SHOCK BREAKAWAY, HEAVY	1
6		14013	SPRING GUIDETUBE	1
7		590006	SPRING,BREAKAWAY	1
8		14013	WASHER SPRING GUIDE	1
9		217	NUT HEX HEAD 3/4"ZP	1
10		799	NUT HEX HEAD 1"ZP	2
11		226	NUT HEX HEAD JAM 1"ZP	2
12		216	NUT HEX HEAD 5/8ZP	1
13		14268	COLLAR	1
14		14575	BREAKAWAY ADJUSTMENTBOLT	1
15		250	LOCK WASHER 3/8 ZP	6
16		530309	FLAT WASHER HEAVY 3/8	6
17		368	BOLT HEX HEAD 3/8 X 1-1/2 GR8ZP	3
18		225	NUT HEX HEAD JAM 3/4" ZP	1
19		12388	EARLY UNIT UPDATE - REPLACES 3/4" #14 WHEN PLATE (A) HAS A 3/4 X 1-1/2" SLOT	1

Tank Assembly



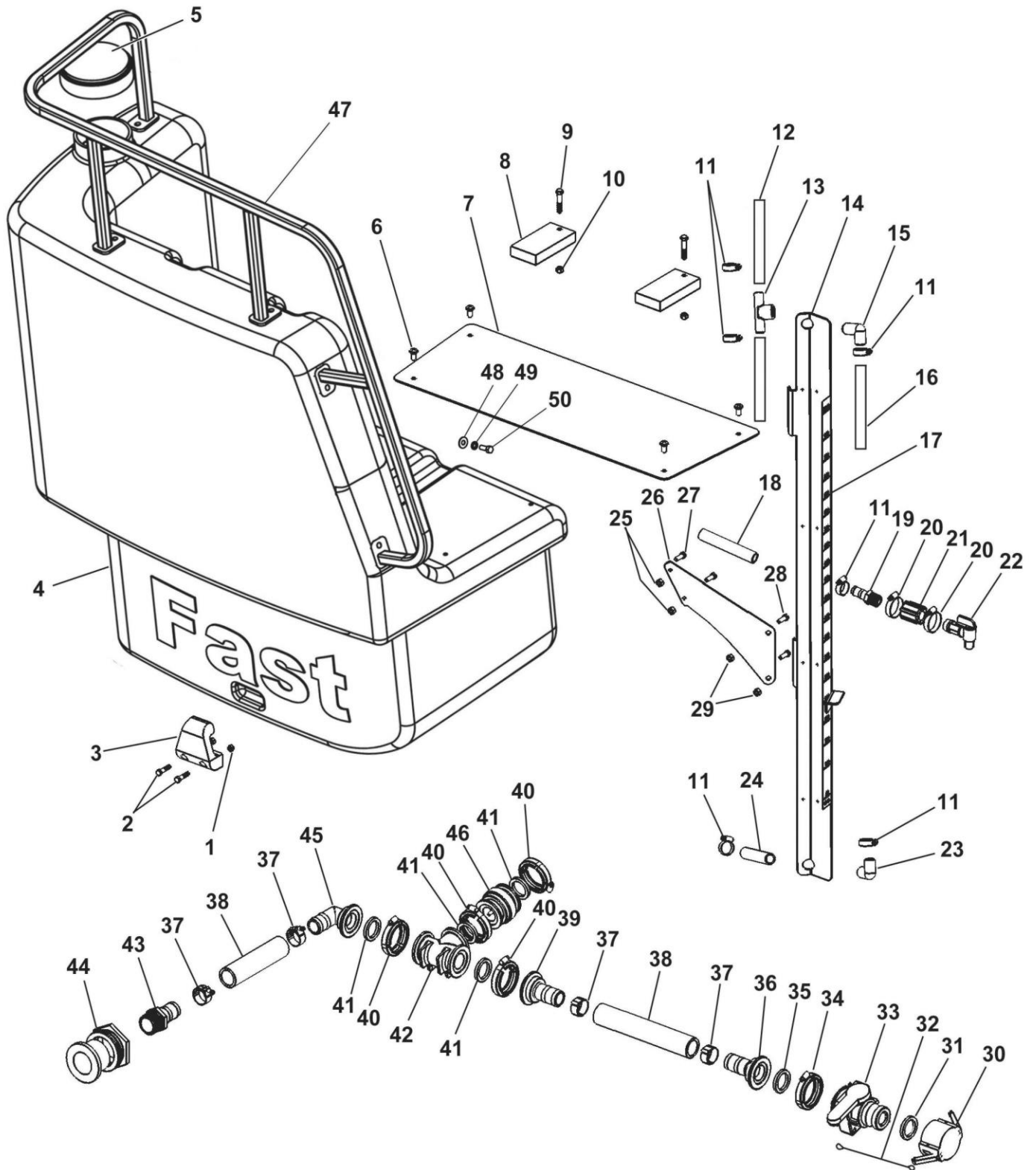


ILLUSTRATED PARTS LIST

Parts List: Tank Assembly

ITEM	VENDOR PART NO.	PART NO.	DESCRIPTION	QTY.
1		129	BOLT HH 3/8 X 1-1/2 GR5ZP	4
2		258	WASHER FLAT 3/8 ZP	4
3		10522	5" VENTED LID	1
4	SP002-5SYLS	570044	RINSE TANK 2.5 GALLON	1
5		169	NUT HH 3/8 WHIZLOCKZP	4
6	AR-10226W	570000	1800 GALLON TANKWHITE	1
	AR-10226Y	570001	1800 GALLON TANKYELLOW	1
	AR-10605W	570005	2400 GALLON TANKWHITE	1
	AR-10605Y	570006	2400 GALLON TANKYELLOW	1
7	-	570157	LID, VENTED	1
8	HB10075-90	530042	HOSE BARB 1" MPT X 3/4" HB X90°	1
9	64012H	540013	CLAMP, HOSE 3/4" SS	4
10	3/4BH200	510012	HOSE 3/4"EDPM	36"
11	3T34F	530220	3/4" TEE HB X 3/4"FPT	1
12	RN100075	530148	NIPPLE REDUCER 1" X 3/4"	1
13	67172	530160	BULKHEAD FITTING 3/4"	2
14	44103211	530004	CONNECTOR 90° 1/4 TUBE X 1/4NPT	2
15	TJ-55270-3.4-18-POM	520012	TANK RINSE BALL	2
16	2T20-604	510024	LLDP 1/4" OD POLYTUBING	240"
17	BJ-NIP075-6	530130	NIPPLE 3/4 X 6"	2
18		170	BOLT HH 5/8 X 2 GR5ZP	2
19		253	WASHER LOCK 5/8" ZP	2
20		261	WASHER FLAT 5/8" ZP	2
21	10244	590023	HOLDDOWN TABPOLY	2
22	Y9270-PP/BNTM137	520029	AGITATIONNOZZLE	2
23	HBT075	530054	TEE 3/4" HOSE BARB	1
24	NIP075-6	530130	NIPPLE 3/4" X 6"	1
25	TF075	530160	BULKHEAD FITTING 3/4" BANJO	1
26	HB075-90	530040	HOSE BARB 3/4" X90°	1
27	64012H	540013	CLAMP HOSE 3/4" SS	1
28	3/4BH200	510012	HOSE 3/4" EDPM	13
29	BJMF300	530120	BOTTOM DRAIN3"	1
30	HB300-90	530053	HOSE BARB ELBOW 3" 90°	1
31	MBF200BD	530118	BOTTOM DRAIN 2" STD PORT	1
32	FC200	540001	FLANGE CLAMP 2" STD PORT	1
33	M200PLG	530093	PLUG 2" STDPORT	1
34	150G	530014	GASKET 2" STDPORT	1
35	HB075	530230	HOSE BARB3/4"	1
36	TF075	530160	BULKHEAD FITTING 3/4" BANJO	
THE TANKS LISTED ABOVE ARE COVERED BY "UNITED STATES PATENT NUMBER 7,585,000"				

Rinse Tank, Plumbing & Sight Gauge





ILLUSTRATED PARTS LIST

Parts List: Rinse Tank, Plumbing & Sight Gauge

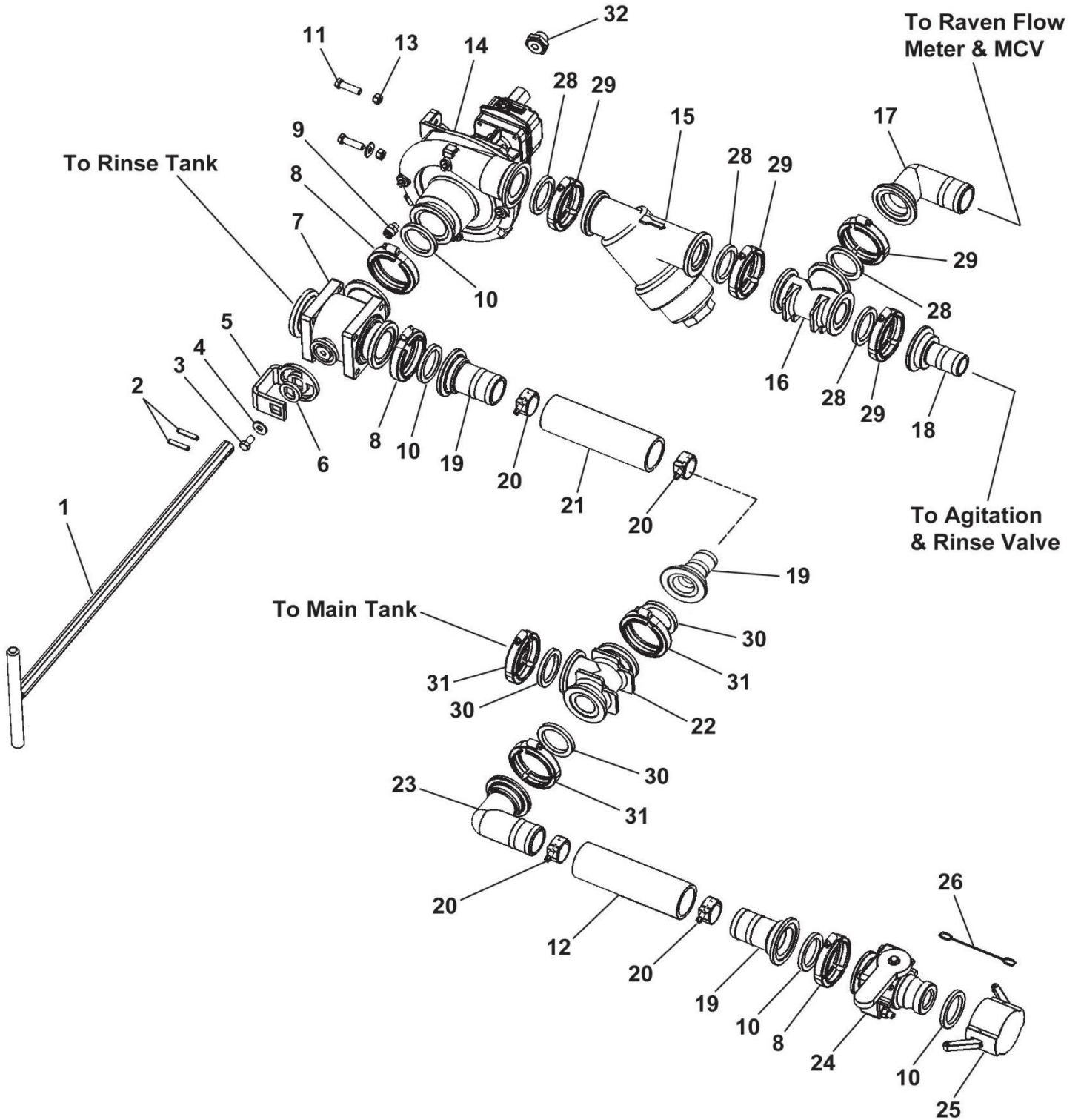
ITEM	VENDOR PART NO.	PART NO.	DESCRIPTION	QTY.
1		228	NUT HH 5/16" NYLOCK ZP	2
2		116	BOLT HH 5/16 X 1-1/2 GR5ZP	2
3	10643	590022	POLY RINSE TANKHOLDDOWN	2
4	10602W	570003	TANK RINSE 100 GALLON WHITE	1
	10602Y	570004	TANK RINSE 100 GALLON YELLOW	1
5	AR-10522	570181	5" VENTED LID	1
6		607	BOLT TRUSS HEAD 3/8 X 3/4 ZP	4
7		10612	PLATFORM TOP SAFETYPLATE	1
8		10669	POLY RINSE TANKHOLDDOWN	2
9		130	BOLT HH 3/8 X 2 GR5ZP	2
10		769	NUT HH 3/8" WHIZLOCKZP	2
11	64012	540013	CLAMP HOSE 3/4"	5
12	15017503	510008	HOSE EVA3/4"	6"
13	3T34F	530220	TEE HOSE BARB X 3/4 NPTF	1
14		10921	FORMED SIGHT GAUGE SUPPORT 1000GALLON	1
		10919	FORMED SIGHT GAUGE SUPPORT 1250GALLON	1
15	3EL34	530210	HOSE BARB ELBOW 3/4"HB X 3/4"NPTM	1
16	15007008	510006	HOSE VINYL CLEAR 3/4" 1000 GALLON	66.5"
17	10820	800038	DECAL GALLON 1800 GALLON TANK	1
NS	10821	800039	DECAL GALLON 2400 GALLON TANK	1
18	15007008	510006	HOSE VINYL CLEAR 3/4"	40"
19	HB075	530230	HOSE BARB3/4"	1
20	64020H	540015	CLAMP HOSE 1-1/2"	2
21	CPLG075	530235	COUPLING 3/4" NPT	1
22	DF-103	510022	FLO-RITEFAUCET	1
23	3EL34HB	530214	HOSE BARB90°	1
24	15007008	510006	HOSE VINYL CLEAR 3/4"	58"
25		768	NUT HH 5/16 WHIZLOCKZP	2
26		10818	SIGHT GAUGE SUPPORTBRACKET	1
27		115	BOLT HH 5/16 X 1 GR5ZP	2
28		152	BOLT HH 1/2 X 1 GR5ZP	2
29		771	NUT HH 1/2"WHIZLOCK	2
30	200CAP	530017	2" CAM LOCK CAP W/530019GASKET	1
31	200G	530019	GASKET 2" STANDARDTHICKNESS	7
	200GXT		GASKET 2" EXTRATHICK	SP
32	HN-79.12	530179	LANYARD12"	1
33	VSF200CF	500037	VALVE MANIFOLD X 2" MALEADAPTER	1
34	FC200	540001	CLAMP MANIFOLD 2" STANDARD PORT	6
35	150G	530014	GASKET2"	1
36	M150BRB	530079	MANIFOLD 1-1/2" HOSEBARB	2
37	TC-181	540006	CLAMP T-BOLT1-1/2"	4
38	12012800	510002	FERTILIZER SOLUTION HOSE1-1/2"	27"
39	M220150BRB	530100	MANIFOLD 2" FULL PORT X 1-1/2 HOSEBARB	1
40	FC220	540002	CLAMP MANIFOLD 2" FULLPORT	4
41	200G	530019	GASKET 2" FULLPORT	4
42	M220TEE	530097	MANIFOLD TEE 2" FULLPORT	1



ILLUSTRATED PARTS LIST

43	HB125-125	530045	HOSE BARB 1-1/2 NPT X 1-1/2 HOSEBARB	1
44	AR10918	570071	BULKHEAD 1/14"	1
45	M220150BRB90	530100	MANIFOLD HOSE BARB ELBOW 90°	1
46	CV220	500003	MANIFOLD CHECKVALVE	1
47		10638	HANDRAIL RISE TANK	1
48		258	WASHER FLAT 3/8"	5
49		250	WASHER LOCK 3.8"	5
50		128	BOLT HH 3/8 X1"	5

Quick Fill & Pump Feed – 60-66 Ft. Boom w/ ACE 150-206 Pump



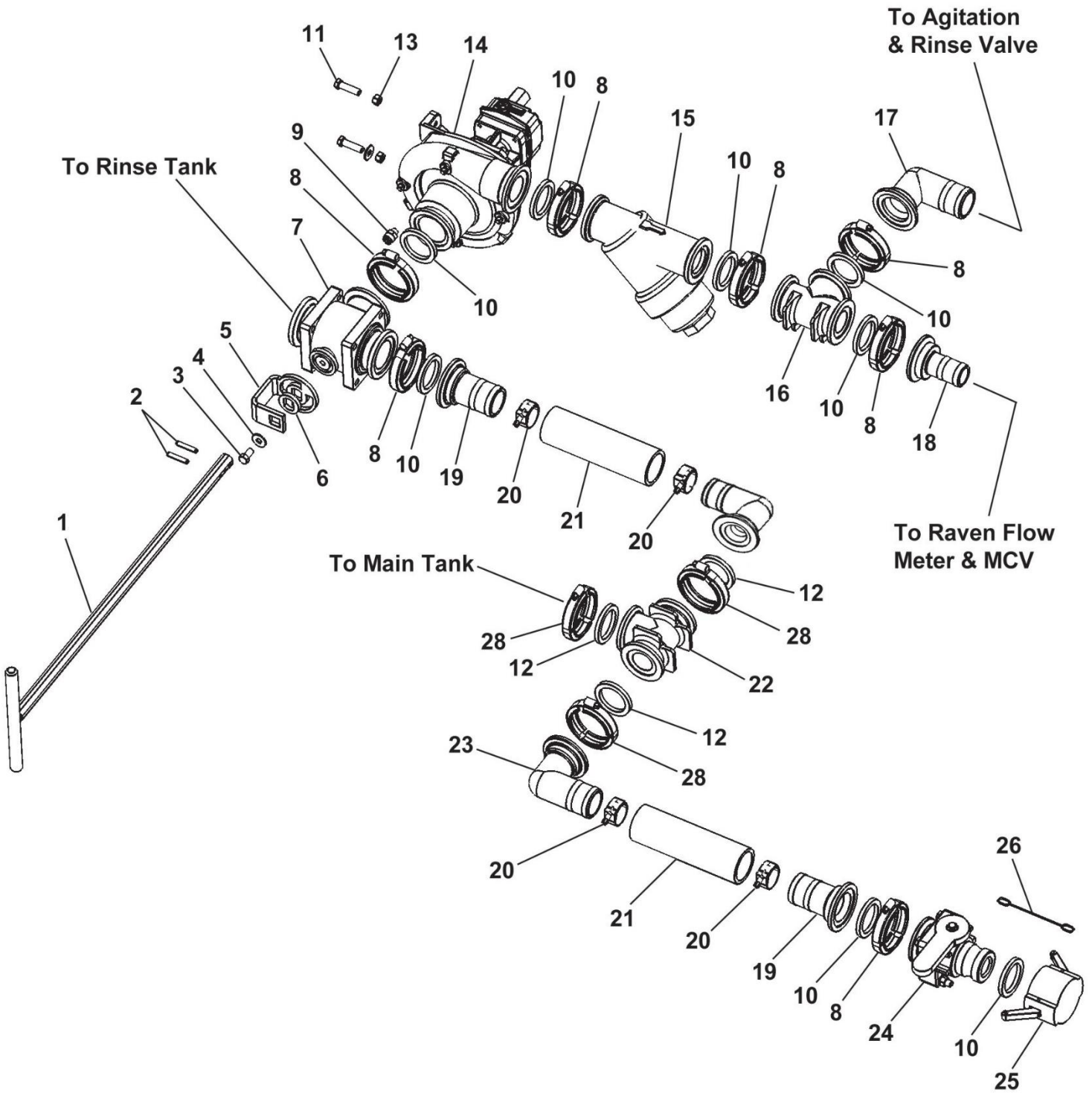


ILLUSTRATED PARTS LIST

Parts List: Quick Fill & Pump Feed – 60-66 Ft/ Boom w/ ACE 150-206 Pump

ITEM	VENDOR PART NO.	PART NO.	DESCRIPTION	QTY.
1		7236	VALVE HANDLE EXTENSION	1
2		683	PIN, SPRING 1/4 X2	2
3		127	BOLT HH 3/8 X 3/4 GR5ZP	1
4		258	WASHER, FLAT 3/8" ZP	1
5		7232	VALVE HANDLEADAPTER	1
6		7233	VALVE HANDLE COLLAR	1
7	MV220BL	500034	MANIFOLD VALVE 2" FULL PORT BOTTOM LOAD	1
8	FC220	530002	MANIFOLD CLAMP 2" FULL PORT	3
9	44103220	530005	ADAPTER 1/8 MPT X 1/4 QUICKLOCK	1
10	200G	530019	GASKET 2" FULLPORT	4
11		129	BOLT HH 3/8 X 1-1/2 GR5ZP	2
12	12012800	510002	FERTILIZER SOLUTIONHOSE	1
13		769	NUT HH 3/8" WHIZLOCKZP	2
14	AC-FMC-150F-HYD-206	550000	PUMP, ACE150-260F	1
15	MLS200-30	530123	MANIFOLD Y STRAINER 30 MESHSCREEN	1
16	M200TEE	530097	MANIFOLD TEE 2"PORT	1
17	M200150BRB90	530080	MANIFOLD ELBOW 2" PORT X 1-1/2 HOSE BARB	1
18	M200150BRB	530100	MANIFOLD HOSE BARB 2 X 1-1/2 HOSE BARB	1
19	M220200BRB	530103	MANIFOLD 2" FULL PORT X 2" HOSEBARB	2
20	TC-231	540007	T-BOLT CLAMP 2" HOSE	4
21	12012800	510002	FERTILIZER SOLUTIONHOSE	1
22	M300TEE	530115	MANIFOLD TEE3"	1
23	M300200BRB90	530112	MANIFOLD 3 X 2 HOSE BARB 90°	1
24	MVSF220FP	530128	MANIFOLD VALVE 2" FULL PORT X MALEADAPTER	1
25	200CAP	530017	CAP 2" QUICKCAM	1
26	HN-79-12	530179	LANYARD	1
27	200GXT		GASKET 2" EXTRATHICK	AR
28	150G	530014	GASKET2"	4
29	FC200	540001	CLAMP 2" STD	4
30	300G	530024	GASKET3"	3
31	FC300	540003	CLAMP 3" STD	3
32	6404-10-08	610019	ADAPTER 1/2 NPT X 10ORD	1

Quick Fill & Pump Feed – 80-90-100 Ft. Boom w/ HYPRO Pump



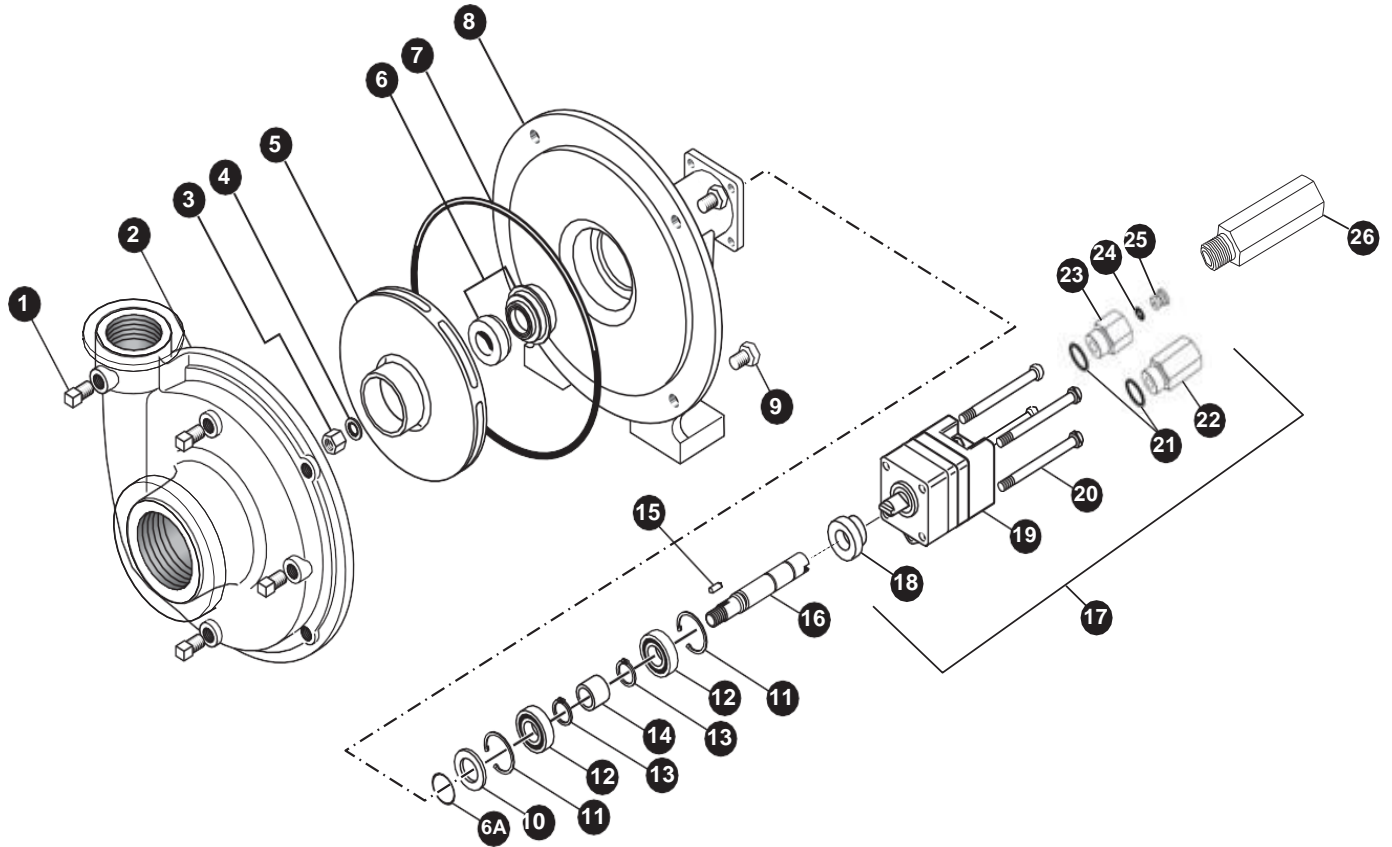


ILLUSTRATED PARTS LIST

Parts List: Quick Fill & Pump Feed – 80-90-100 Ft. Boom w/ HYPRO Pump

ITEM	VENDOR PART NO.	PART NO.	DESCRIPTION	QTY.
1		7236	VALVE HANDLE EXTENSION	1
2		683	PIN, SPRING 1/4 X2	2
3		127	BOLT HH 3/8 X 3/4 GR5ZP	1
4		258	WASHER, FLAT 3/8" ZP	1
5		7232	VALVE HANDLEADAPTER	1
6		7233	VALVE HANDLE COLLAR	1
7	MV220BL	500034	MANIFOLD VALVE 2" FULL PORT BOTTOM LOAD	1
8	FC220	530002	MANIFOLD CLAMP 2" FULL PORT	7
9	44103220	530005	ADAPTER 1/8 MPT X 1/4 QUICKLOCK	1
10	200G	530019	GASKET 2" FULLPORT	8
11		129	BOLT HH 3/8 X 1-1/2 GR5ZP	2
12	300G	530024	GASKET3"	3
13		769	NUT HH 3/8" WHIZLOCKZP	2
14	93079	550011	PUMP, HYPRO 9306C-HM1C-UB	1
15	MLS220-30	530125	MANIFOLD Y STRAINER 30 MESH SCREEN 2" FULLPORT	1
16	M220TEE	530097	MANIFOLD TEE 2"PORT	1
17	M220150BRB90	530080	MANIFOLD ELBOW 2" PORT X 1-1/2 HOSE BARB	1
18	M220150BRB	530100	MANIFOLD HOSE BARB 2 X 1-1/2 HOSE BARB	1
19	M220200BRB	530103	MANIFOLD 2" FULL PORT X 2" HOSEBARB	2
20	TC-231	540007	T-BOLT CLAMP 2" HOSE	4
21	12012800	510002	FERTILIZER SOLUTIONHOSE	1
22	M300TEE	530115	MANIFOLD TEE3"	1
23	M300200BRB90	530112	MANIFOLD 3 X 2 HOSE BARB 90°	2
24	MVSF220FP	530128	MANIFOLD VALVE 2" FULL PORT X MALEADAPTER	1
25	200CAP	530017	CAP 2" QUICKCAM	1
26	HN-79-12	530179	LANYARD	1
27	200GXT		GASKET 2" EXTRATHICK	AR
28	FC300	540003	MANIFOLD CLAMP 3"	3

Breakdown – ACE 150-206 Pump, 60-66 Ft. Boom



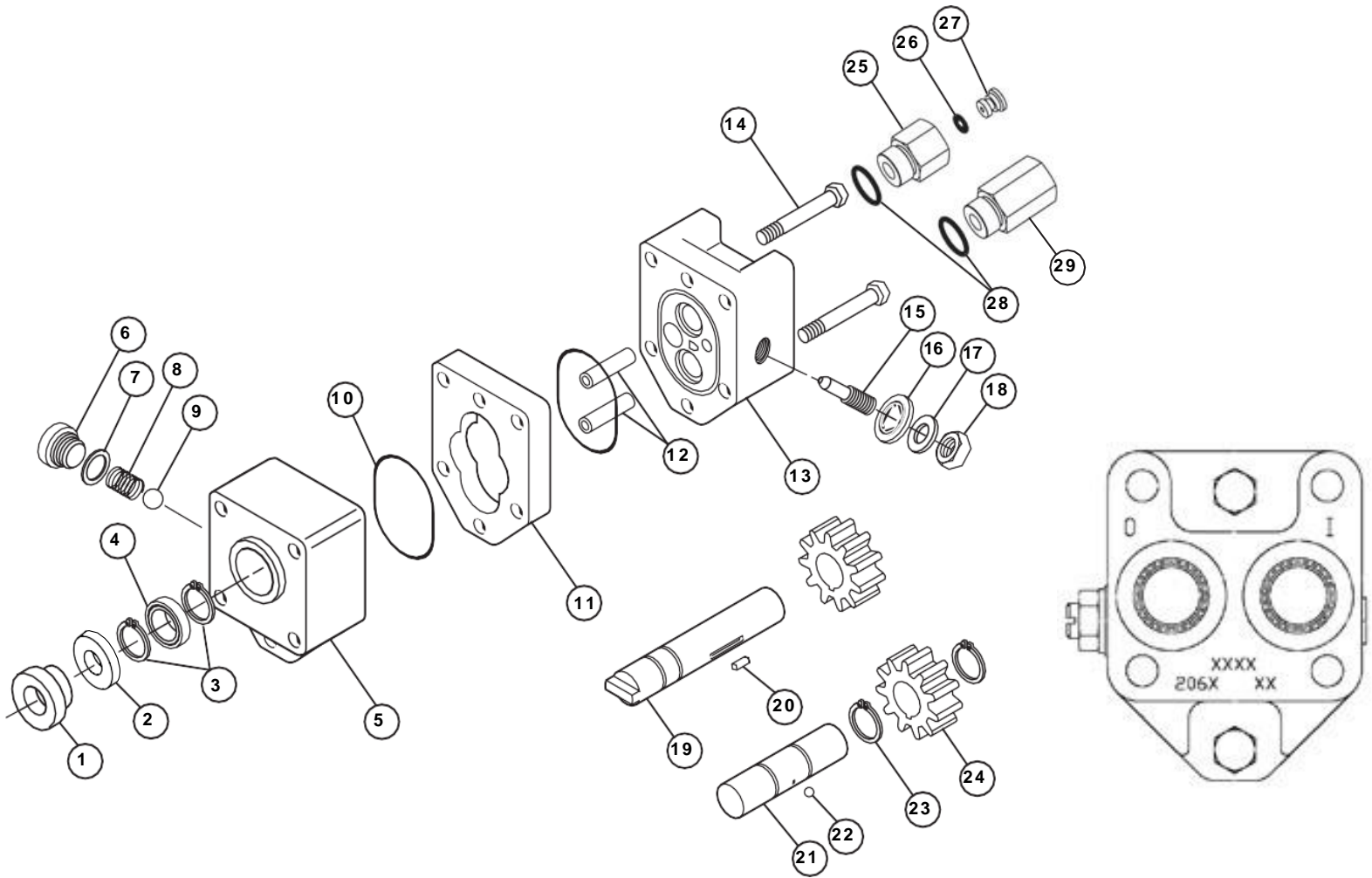


ILLUSTRATED PARTS LIST

Parts List 550000: Breakdown – ACE 150-206 Pump, 60-66 Ft. Boom

ITEM	PART NO.	EDP#	DESCRIPTION	REQ.
1	BAC-53	41110	PIPE PLUG	4
1	41120	41120	PIPE PLUG, STAINLESS STEEL(OPTIONAL)	4
2	BAC-12-150-FLG	40257	VOLUTE, CAST IRON, NPT & FLANGED (FOR 150F MODELS)	1
2	BAC-12-150-SS	40249	VOLUTE, 316 STAINLESS STEEL , NPT & FLANGED (FOR 150FS MODELS)	1
3	BAC-23-A	40391	NUT, 3/8" NF, CAD PLATED	1
3	BAC-23-A-SS	40392	NUT, 3/8" NF, STAINLESS STEEL (OPTIONAL)	1
4①②	BAC-24-HYD-SS	40400	WASHER, 3/8" STAR, STAINLESS STEEL	1
5	BAC-26-150-P	40446	IMPELLER, VALOX, KEYWAY	1
5	BAC-26-150-CI	40445	IMPELLER, CAST IRON, KEYWAY (OPTIONAL)	1
6①	BAC-7V	40151	SEAL, CARBON/CERAMIC/VITON (INCLUDES 40160 O-RING)	1
6②	BAC-7SC	40152	SEAL, SILICON CARBIDE/VITON (INCLUDES 40160 O-RING) (OPTIONAL)	1
6A①②	40160	40160	O-RING, SHAFTSEAL	1
7①②	BAC-4-150	40015	O-RING, BODY SEAL	1
8	BAC-14-150-HYD	40305	MOUNTING FRAME, CAST IRON (FOR 150FMODELS)	1
8	BAC-14-150-HYD-SS	40319	MOUNTING FRAME, 316 STAINLESS STEEL (FOR 150FS MODELS)	1
9	40950	40950	CAP SCREW, 3/8" NC X 3/4" HEX HEAD	4
9	40930	40930	CAP SCREW, 3/8" NC X 3/4" HEX HEAD, STAINLESS STEEL (OPTIONAL)	4
10	BAC-54	41130	SLINGER	1
11	BAC-33	40810	SNAP RING, INTERNAL, BAC-14 MOUNTING FRAME	2
12	BAC-37	40870	BALL BEARING, SEALED, BAC-6SHAFT	2
13	BAC-32	40790	SNAP RING, EXTERNAL, BAC-6SHAFT	2
14	BAC-32-S	40795	SPACER FOR BAC-6SHAFT	1
15	BACH-25	40420	KEY, 1/8" X 1/8" X 1/2"	1
16	BAC-6-HYD-SS	40061	SHAFT, 5/8" DIAMETER, KEYWAY AND TANG SLOT, STAINLESS STEEL	1
17	BAC-75-HYD-206	41372	HYDRAULIC MOTOR, 7 GPM (INCLUDES PARTS 18 - 25)	1
18	S200	40161	SEAL SUPPORT SPACER FOR 200 SERIES HYD MOTOR	1
19	BAC-75-HYD-206N	41397	HYDRAULIC MOTOR, 7 GPM (MOTOR ONLY - NO EXTERNAL FITTINGS)	1
20	41255	41255	CAP SCREW, 5/16" N. C. X 3-3/4" SOCKET HEAD (FOR 206N MOTOR)	4
21	41875	41875	O-RING, #8 SAEFITTING	2
22	BAC-78-8SAE	41441	REVERSE CHECK VALVE, #8 SAE MALE X 1/2" NPT FEMALE	1
23	BAC-80-8SAE	41455	ADAPTER, RESTRICTOR BODY, #8 SAE MALE X 1/2" NPT FEMALE	1
24	41448	41448	O-RING, ORIFICEINSERT	1
25	BAC-79-7	41456	ORIFICE, RESTRICTOR INSERT, .109(206N)	1
26	LS-206N	41418	FLOW LIMITING VALVE (206N), #8 SAE MALE X 1/2" NPTFEMALE	1
①	RK-FMC-150	52710	REPAIR KIT FOR FMC-150 SERIES PUMP	-
②	RK-FMCSC-150	52711	REPAIR KIT FOR FMC-150 SERIES WITH SILICON CARBIDE SHAFT SEAL	-
#	RK-BAC-75-HYD-L	41374	REPAIR KIT FOR 200-L SERIES MOTOR	-

Breakdown – ACE 150-206 Pump Hyd. Motor, 60-66 Ft. Boom





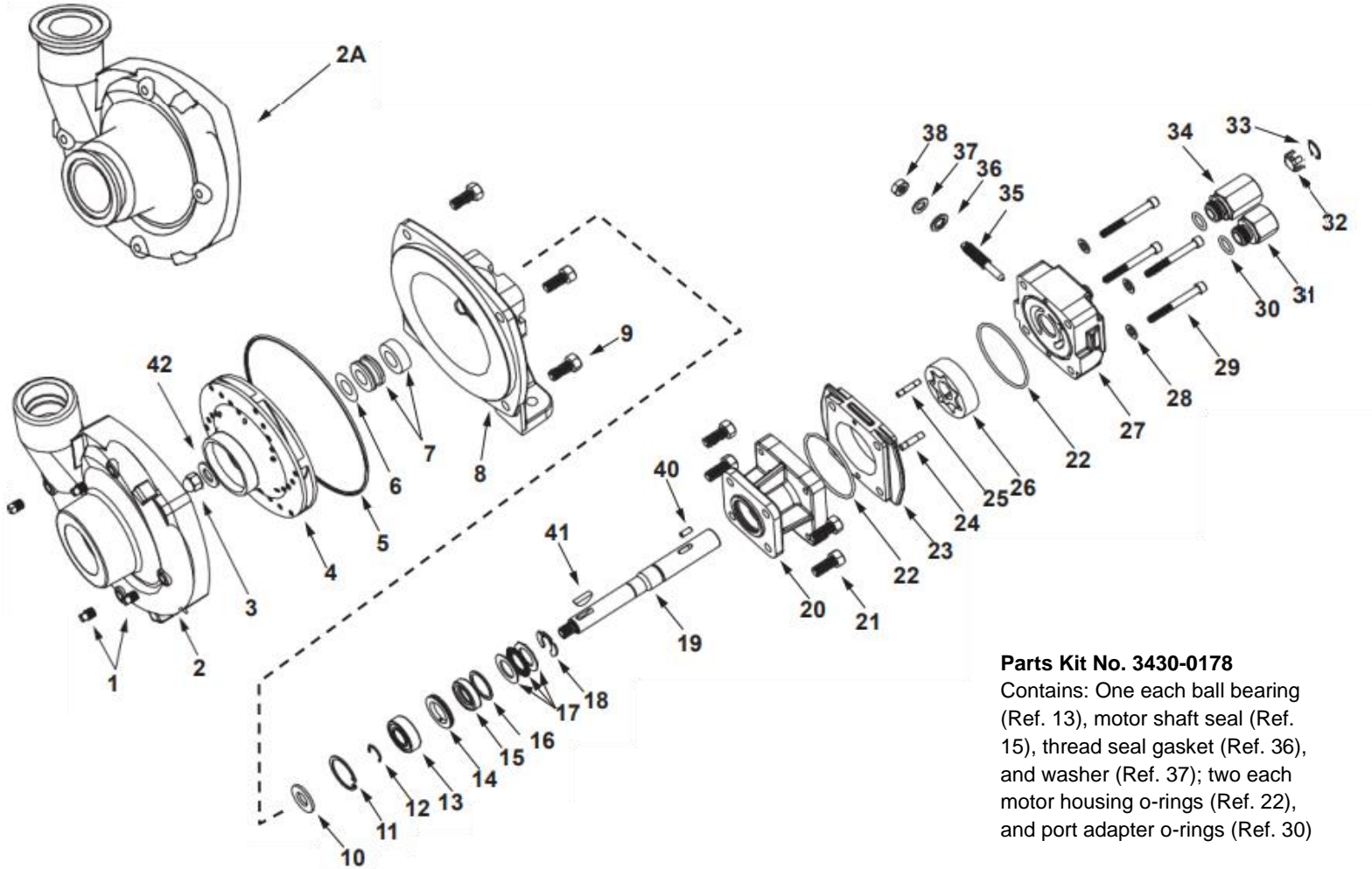
ILLUSTRATED PARTS LIST

Parts List 550000: Breakdown – ACE 150-206 Pump Hyd. Motor, 60-66 Ft.

REF. #	MODEL 204N	MODEL 206N	MODEL 210N	DESCRIPTION	REQUIRED
1*	S200	S200	S200	SEAL SUPPORT SPACER	1
2*	40153	40153	40153	SEAL CARTRIDGE	1
3	41941	41941	41941	SNAP RING, BEARING	2
4	41961	41961	41961	BALL BEARING, 7/16" I.D.	1
5	41731	41731	41731	DRIVE PLATE	1
6	42041	42041	42041	VALVE CAP, COASTING CHECK	1
7*	42044	42044	42044	"O" RING, COASTING CHECK	1
8	42042	42042	42042	SPRING, COASTING CHECK	1
9	42043	42043	42043	BALL, COASTING CHECK	1
10*	41850	41850	41850	"O" RING, HOUSING SEAL	2
11	41720	41721	41725	GEAR HOUSING	1
12	41800	41801	41805	DOWEL PIN, HOUSING	2
13	41742	41742	41742	END PLATE	1
14	41900	41900	41905	CAP SCREW, 1/4" N.C. HEX HEAD	2
15	42010	42010	42010	ADJUSTING SCREW, NEEDLE VALVE	1
16*	42030	42030	42030	THREAD SEAL, 3/8", NEEDLE VALVE	1
17	42040	42040	42040	WASHER, FLAT STEEL, NEEDLE VALVE	1
18	40960	40960	40960	NUT, 3/8" N.C. JAM, NEEDLE VALVE	1
19	41761	41764	41766	DRIVE SHAFT	1
20	41920	41921	41925	DOWEL PIN, DRIVE SHAFT	1
21	41970	41971	41975	IDLER SHAFT	1
22	41990	41990	41990	BALL, IDLER SHAFT	1
23	41980	41980	41980	RETAINING RING, IDLER GEAR	2
24	41750	41751	41755	GEAR	2
25	41455	41455	41455	ADAPTER BODY, #8 SAE MALE X 1/2" NPT	1
26	41448	41448	41448	"O" RING, ORIFICE INSERT (USE WITH 41456 INSERT)	1
27	41457	41456	41456	INSERT, RESTRICTOR ORIFICE (USE WITH 41455 BODY)	1
28	41875	41875	41875	"O" RING, #8 SAE MALE FITTING	2
29	41441	41441	41441	REVERSE CHECK, #8 SAE MALE X 1/2" NPT	1
#	41374	41374	41374	REPAIR KIT, RK-BAC-75-HYD-L	--

Boom

Breakdown – HYPRO Pump, 80-100 Ft. Boom



Parts Kit No. 3430-0178

Contains: One each ball bearing (Ref. 13), motor shaft seal (Ref. 15), thread seal gasket (Ref. 36), and washer (Ref. 37); two each motor housing o-rings (Ref. 22), and port adapter o-rings (Ref. 30)

Repair Parts Kit No. 3430-0332

Contains: one mechanical seal (Ref. 7), one o-ring (Ref. 5) and one rubber gasket (Ref. 6).

Silicon Carbide Seal Kit No. 3430-0589

Contains one each: Mechanical seal (Ref. 7) and o-ring(Ref. 5).

Hydraulic Motor Part Nos.

- 2500-0009C (HM1C Models)
- 2500-0011C (HM3C Models)
- 2500-0018C (HM5C Models)



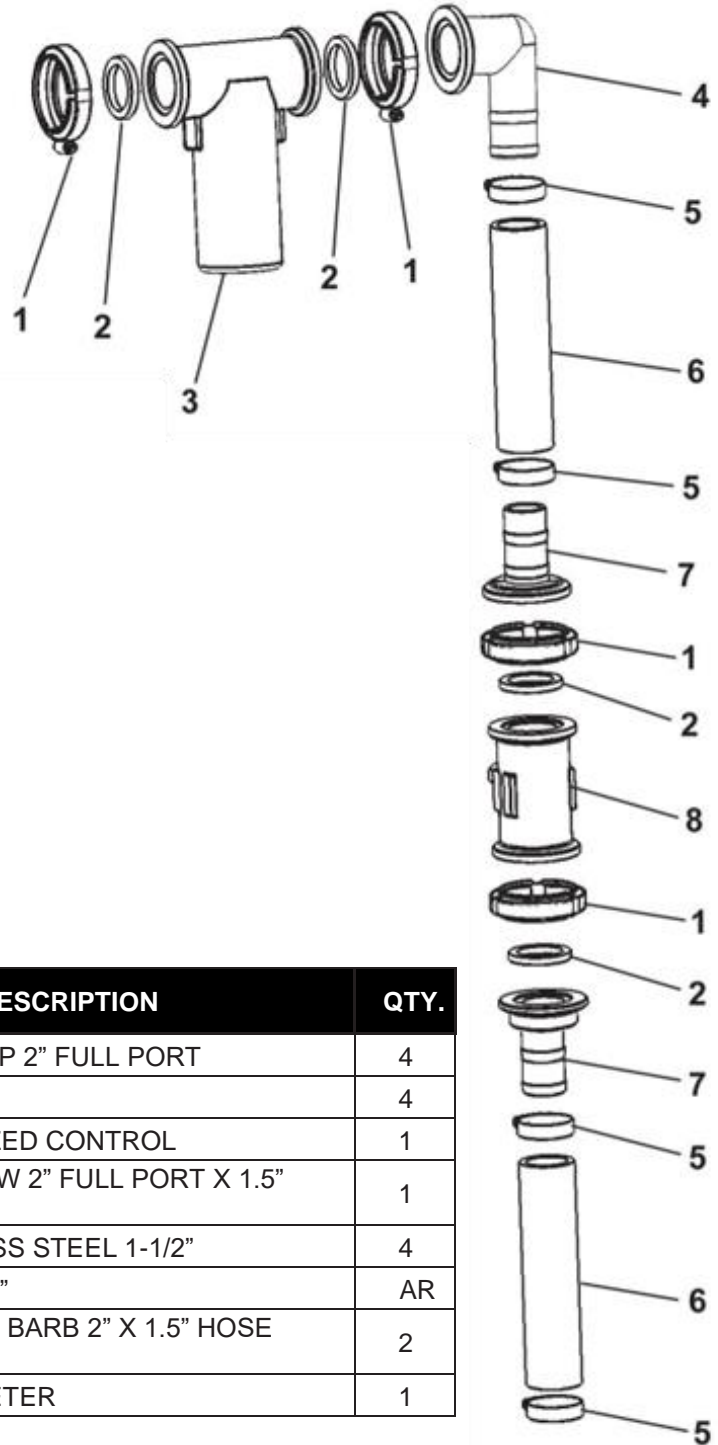
ILLUSTRATED PARTS LIST

Parts List: Breakdown – HYPRO Pump, 80-100 Ft. Boom

Ref. No.	Qty. Req'd.	Part No.	Description
1	4	2406-0007	Drain/Vent Plug
2	1	0154-9200C1	Pump Casing (Volute) (Includes stainless steel wearing)
2	1	0151-9200C	Pump Casing (Volute) (Includes stainless steel wear ring) (9304C)
2A	1	0157-9200C	Pump Casing (Universal Flange)
3	1	2253-0002	Impeller Nut
4	1	0401-9200P2	Impeller (Nylon)
5	1	1720-0083	O-ring
6	1	1700-0100	Rubber Gasket
7	1	2120-0009	Mechanical Seal (Viton/Ceramic)(Std)
7	1	3430-0589	Mechanical Seal (Silicon Carbide) (Optional)
8	1	0750-9300C2	Mounting Flange
8	1	0750-9300C	Mounting Flange (9304C)
9	4	2210-0020	Hex Head Cap Screw
10	1	1410-0056	Slinger Ring
11	1	1820-0013	Retaining Ring
12	1	1810-0014	Snap Ring
13	1	2000-0010	Ball Bearing
14	1	1410-0073	Spacer
15	1	2104-0005	Shaft Seal
16	1	1410-0074	Seal Spacer
17	1	2029-0014	Thrust Bearing Assembly - Consists of: (1) Thrust Bearing & (2) Thrust Brg. Races
18	1	1810-0026	Snap Ring
19	1	0510-2500	Shaft (HM3C Model) 7-1/2" long
19	1	0511-2501	Shaft (HM1C & HM5C Models) 7" long
20	1	0151-2500C	Motor Body (Includes Main Bearing)
21	4	2210-0005	Hex Head Cap Screw

Ref. No.	Qty. Req'd.	Part No.	Description
22	2	1720-0110	O-ring
23	1	0700-2500C1	Gerotor Housing (HM1C Model) 1/2" wide
23	1	0702-2500C1	Gerotor Housing (HM3C Model) 1" wide
23	1	0704-2500C1	Gerotor Housing (HM5C Model) 5/8" wide
24	1	1600-0052	Dowel Pin (HM3C Models)
24	1	1600-0044	Dowel Pin (HM1C and HM5C Models)
25	1	1600-0068	Dowel Pin (HM3C Model)
25	1	1600-0037	Dowel Pin (HM1C and HM5C Models)
26	1	3900-0022	Gerotor (HM1C Model)
26	1	3900-0024	Gerotor (HM3C Model)
26	1	3900-0048	Gerotor (HM5C Model)
27	1	0251-2500C2	Motor End Plate (Includes Main Bearing)
28	4	2270-0039	Washer
29	4	2220-0044	Cap Screw (HM3C)
29	4	2220-0021	Cap Screw (HM1C)
29	4	2220-0032	Cap Screw (HM5C)
30	2	1720-0108	O-ring
31	1	3360-0021	Pressure Port Adapter
32	1	3260-0068	Poppet
33	1	1820-0038	Retaining Ring
34	1	3320-0049	Tank Port Adapter
35	1	3220-0029	Bypass Adjusting Screw
36	1	1700-0047	Gasket
37	1	2270-0027	Washer
38	1	2250-0038	Lock Nut
40	1	1610-0055	Roll Pin (HM3C Models)
40	1	1610-0031	Roll Pin (HM1C and HM5C Models)
41	1	1610-0012	Woodruff Key
42	1	2270-0071	Washer

Raven Flow Controls



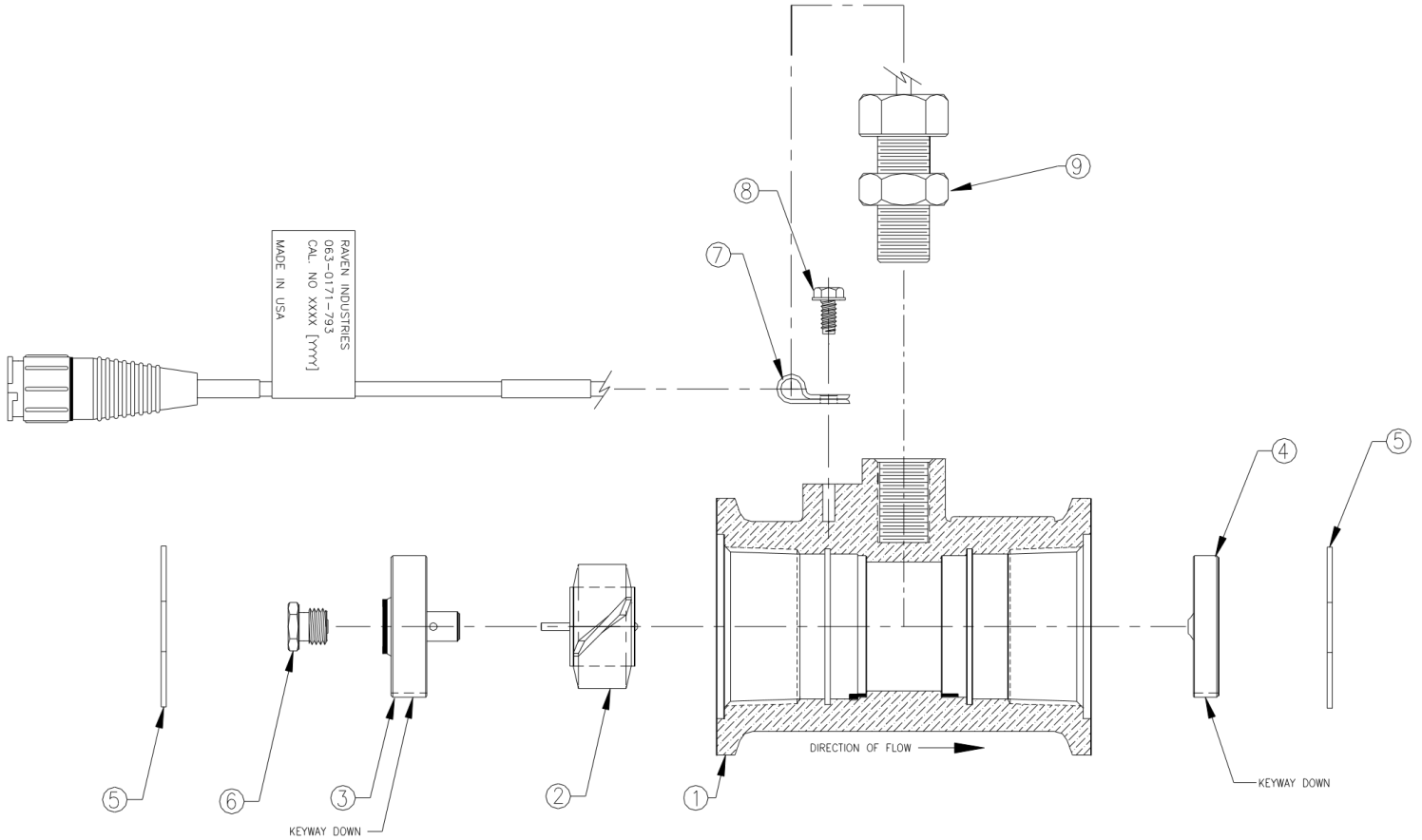
Parts List: Raven Flow Controls

ITEM	VENDOR PART NO.	PART NO.	DESCRIPTION	QTY.
1	FC200	530002	MANIFOLD CLAMP 2" FULL PORT	4
2	150G	530014	GASKET 2"PORT	4
3	063-0171-894	631805	RAVEN MOTORIZED CONTROL	1
4	M200150BRB90	530080	MANIFOLD ELBOW 2" FULL PORT X 1.5" HOSE BARB	1
5	64024H	540016	CLAMP STAINLESS STEEL 1-1/2"	4
6	BS-1-1/2BH200	510014	HOSE EDPM1-1/2"	AR
7	M200150BRB	530100	MANIFOLD HOSE BARB 2" X 1.5" HOSE BARB	2
8	063-0171-0793	631804	RAVEN FLOW METER	1

Raven Flow Meter

RFM 60 FLOWMETER REPLACEMENT PARTS

063-0171-793



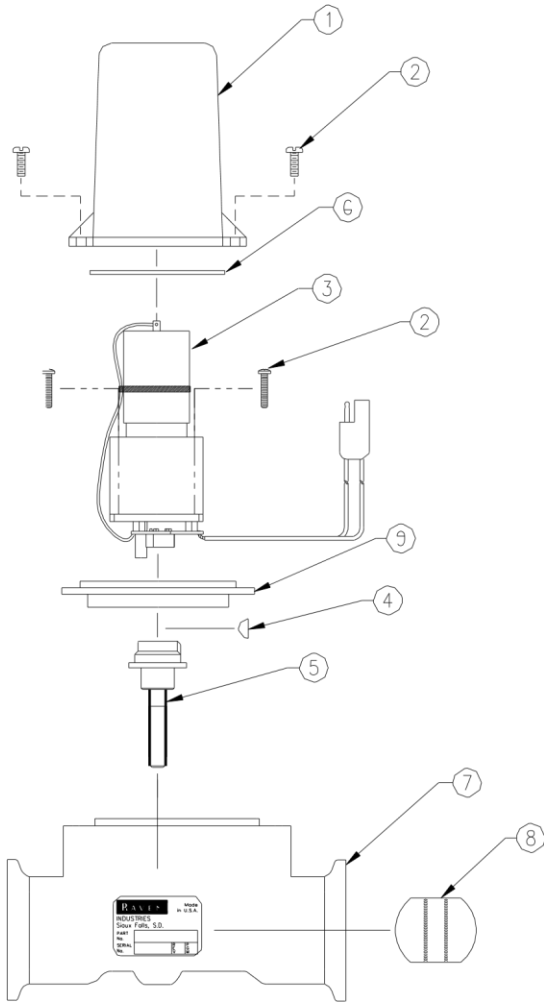
Parts List: Raven Flow Meter

ITEM	DESCRIPTION	RAVEN PART NO.
1	BODY, RFM 60 P FLOWMETER	106-0159-514
2	ROTOR/MAGNET ASSEMBLY	063-0171-673
3	HUB/BEARING ASSY, UPSTREAM	063-0171-674
4	HUB ASSEMBLY, DOWNSTREAM	063-0171-769
5	RING, RETAINING, INTERNAL	335-0000-278
6	STUD BEARING	063-0159-570
7	CLAMP, CABLE	435-3002-017
8	SCREW, THREAD FORMING	310-0002-137
9	SENSOR, ASSEMBLY, EXTERNAL	063-0171-669

Raven Control Valve

1 1/2" POLY CONTROL VALVE REPLACEMENT PARTS

063-0171-894



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.

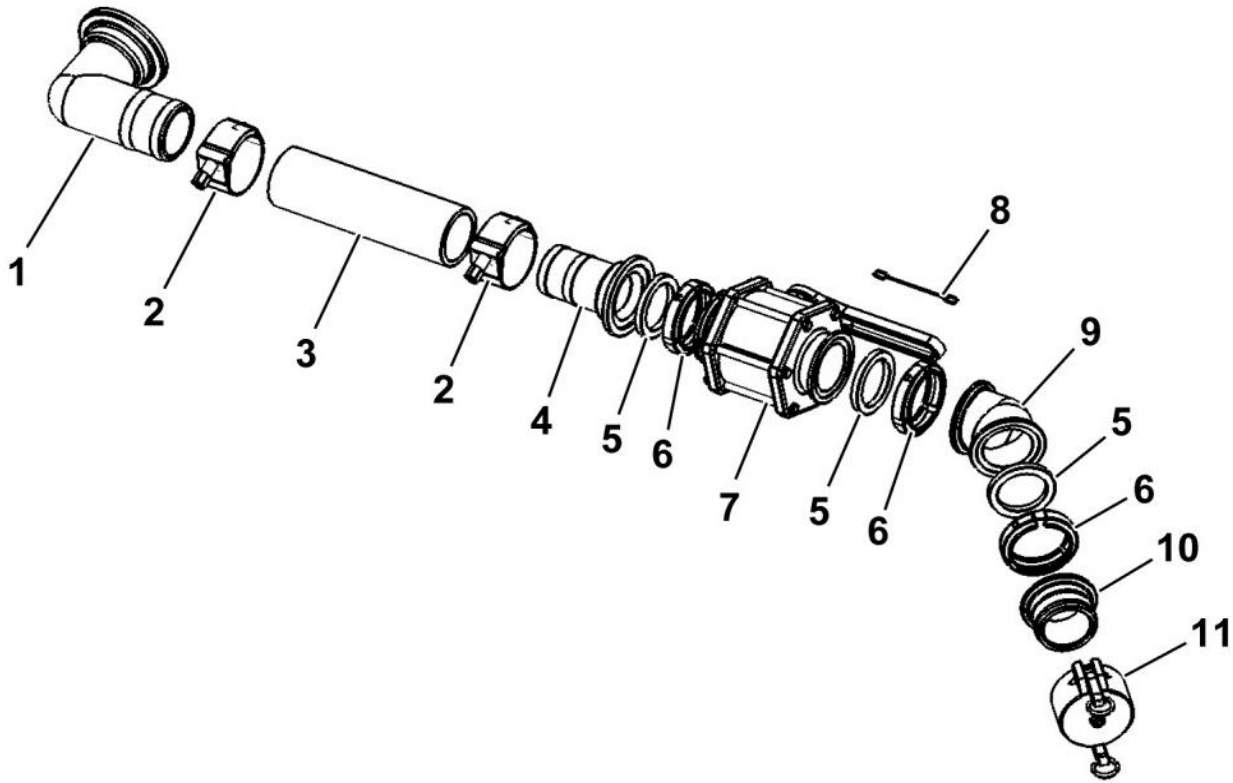
When reassembling valve, grease both sealing surfaces of coupler shaft. Insert coupler shaft into iso-flange and be sure seal properly seats on shaft. Install motor on valve body and apply silicon sealant to mounting holes. Reassemble remaining items as shown in parts diagram.

RAVEN INDUSTRIES, INC.

Parts List: Raven Control Valve

ITEM	DESCRIPTION	RAVEN PART NO.
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 TETRA SEAL	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		

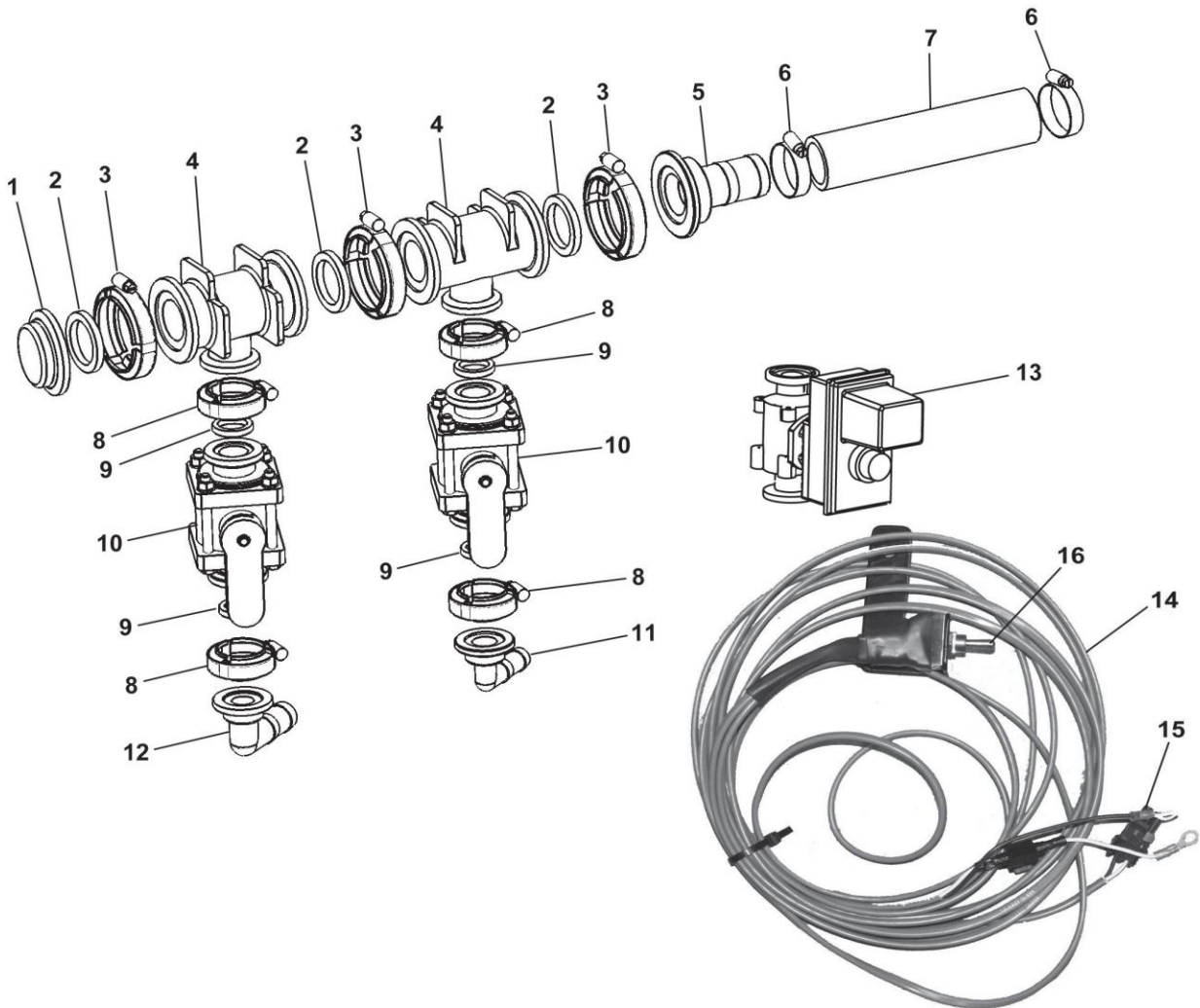
Quick Fill – Optional 3 Inch



Parts List: Quick Fill – Optional 3 Inch

ITEM	VENDOR PART NO.	PART NO.	DESCRIPTION	QTY.
1	M300BRB90	530114	3" FLANGE X 3" HB-90DEG	1
2	TC-343	540009	CLAMP 3" T-BOLT HOSE 3.43 MM	2
3	12012810	510004	HOSE 3" FERTILIZER	1
4	M300BRR	530113	3" FLANGE X 3" HOSEBARB	1
5	300G	530024	3" EPDMGASKET	3
6	FC300	540003	CLAMP 3" WORMSCREW	3
7	M300FP	500012	VALVE 3" FPT X 3" PORTPOLY	1
8	79-12	530179	CABLE LANYARD	1
9	M300CPG45	530234	3" MANIFOLD CPIG X 45DEG	1
10	M300A	530233	ADAPTER, 3" MALE X 3" MALE THD	1
11	300CAP	530023	3"CAP	1

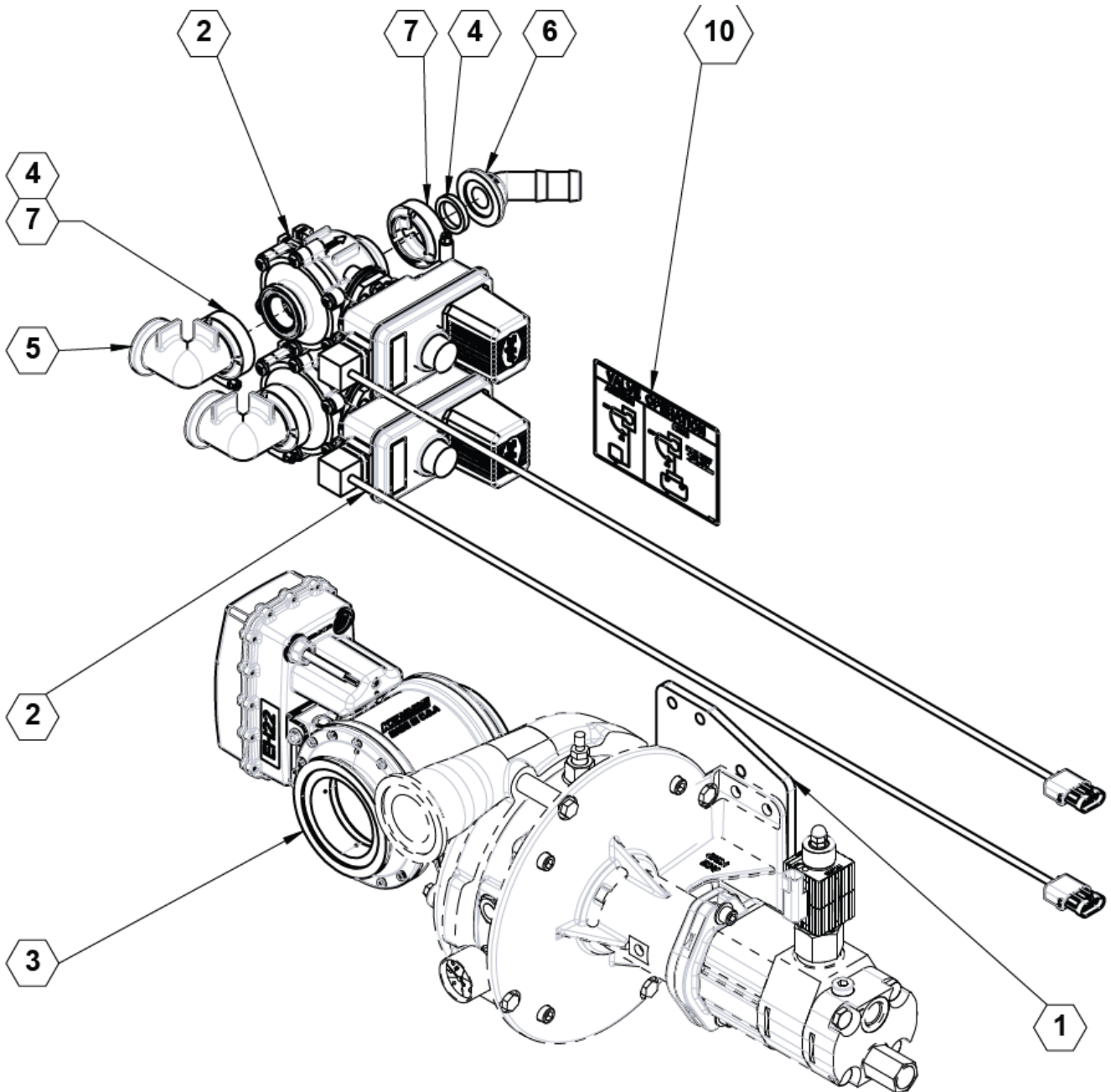
Agitation & Rinse Control



Parts List: Agitation & Rinse Control

ITEM	VENDOR PART#	FAST PART#	DESCRIPTION	QTY.
1	M200PLG	530093	MANIFOLD PLUG2"	1
2	150G	530014	GASKET	3
3	FC200	540001	MANIFOLD CLAMP	3
4	M200100TEE	530075	MANIFOLD TEE 2 X 1"	2
5	M200150BRB	530079	MANIFOLD HOSE BARB1-1/2"	1
6	64024H	540016	CLAMP HOSE 1-1/2	2
7	1-1/2EDPM	510014	HOSE SPRAY 1-1/2GOODYEAR	4'
8	FC100	540000	MANIFOLD CLAMP 1"	4
9	M100G	530068	GASKET1"	4
10	MV100CF	500005	MANIFOLD VALVE1"	2
11	M100075BRB90	530060	MANIFOLD ELBOW 1" X 3/4" HB TO RINSE BALLS	1
12	M100BRB90	530061	MANIFOLD ELBOW 1" HB TO AGITATION	1
13	PL344BR-24-CEC	500001	VALVE BALL ELECTRIC AGITATION(OPTIONAL)	2
14		90SAEASA	CONTROL HARNESS ELECTRICAGITATION	1
15		560021	FUSE 15AMP	1
16		560043	SWITCH	1

Electrical Valving Option





ILLUSTRATED PARTS LIST

Electrical Valving Option 99FSEVO Parts List

ITEM	PART NO.	QTY.	DESCRIPTION
1	18305	1	PLATE, ADAPTER, ACE OASIS PUMP
2	500064	2	VALVE, 356 SERIES ON/OFF ELEC. AGITATION
3	500080	1	VALVE, 3" 3-WAY ACTUATED
4	530068	4	GASKET, 1.00 EPDM
5	530362	2	FITTING, 1" MANIFOLD 90 ELBOW
6	530426	2	ELBOW 45, 1.00 FLANGE X 1.00 HB
7	540000	4	CLAMP, WORM SCREW, 1.00
N.S.	632155	1	CAB BOX, ELECTRIC RINSE & AGITATE
N.S.	632156	1	HARNESS, ELECTRIC RINSE & AGITATE
10	800016	1	DECAL, MAIN TANK VALVE OPERATION

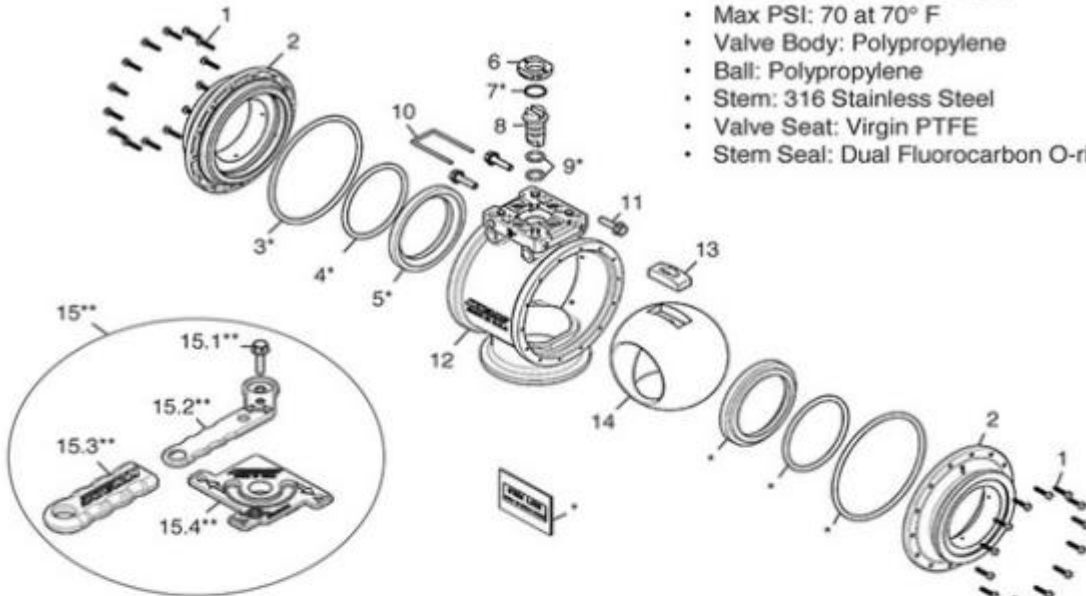
Pump Electric Valve Option

Electric Valve 500080

MX12 3-way

Design Features:

- 3" Full port 3-Way ball valve
- Max PSI: 70 at 70° F
- Valve Body: Polypropylene
- Ball: Polypropylene
- Stem: 316 Stainless Steel
- Valve Seat: Virgin PTFE
- Stem Seal: Dual Fluorocarbon O-rings



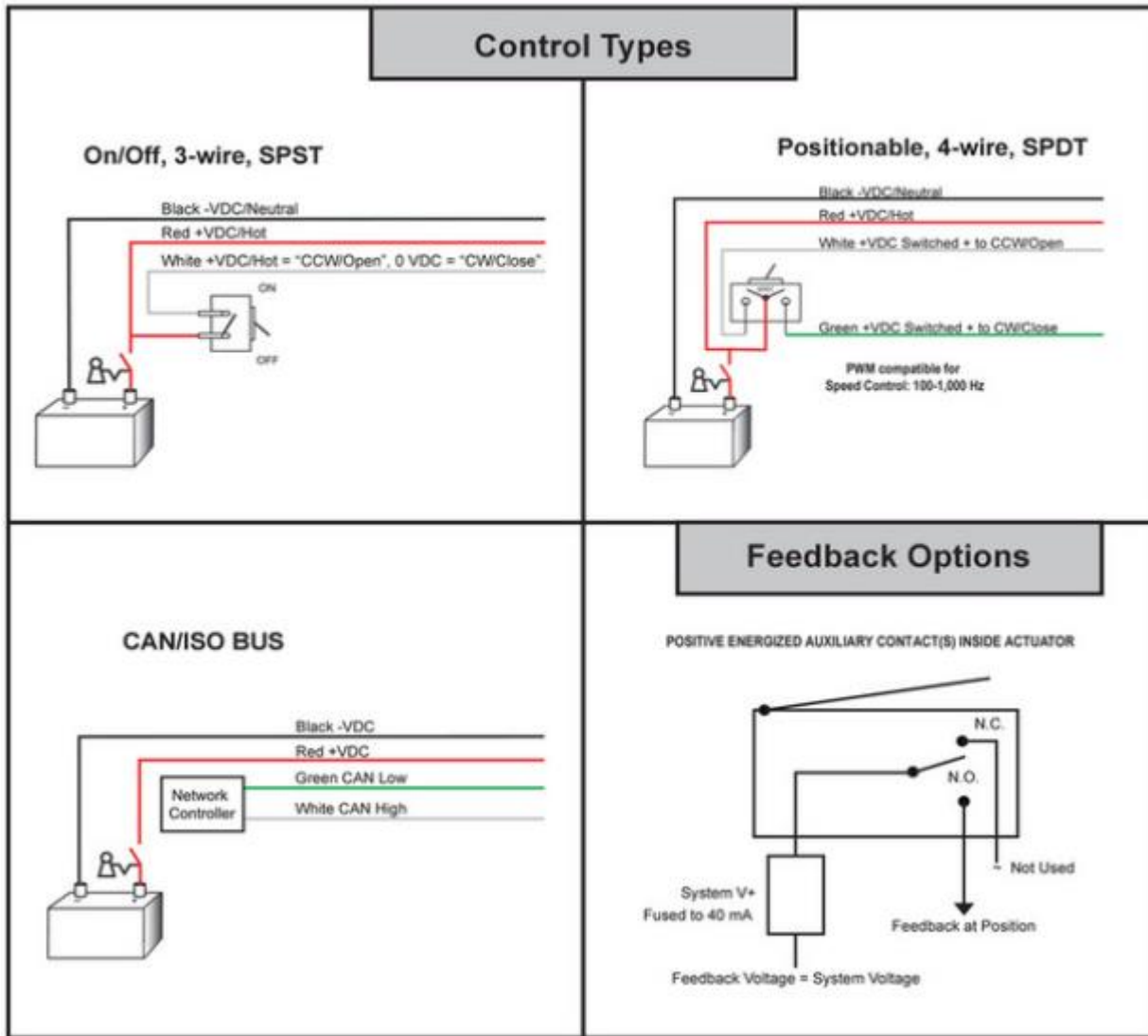
No.	Part Number	Description	Qty
1	100-0002	screw, #8, 3/4, stainless steel, 18-8	28
2	202-0080	endcap, M300, 3" full port flange	2
3*	205-0030	o-ring, EPDM	2
4*	205-0040	o-ring, EPDM	2
5*	206-0025	seat, 3" full port	2
6	QX4-121-3	stem retainer bushing, polypropylene	1
7*	QC3-170	thrust washer, PTFE	1
8	207-0001 207-0009**	stem, stainless steel inline stem, stainless steel inline, tapped for manual valve	1
9*	QC3-130	o-ring, #113, VITON	2
10	QX-103	hairpin, stainless steel	1
11	100340	bolt, serrated flange, 1/4 - 20 x 1	3
12	201-0115	valve body, 3-way, bottom load, M300, 3" polypropylene full port	1
13	250-0050	shoe, ball/stem engagement	1
14	204-0030 204-0057	valve ball, 3-way, 2" diverter valve ball, 3" polypropylene full port	1
15**		Manual Valve	
15.1**	100340	bolt, serrated flange, 1/4 - 20 x 1	1
15.2**	212-0010	handle	1
15.3**	212-0015	handle cover	1
15.4**	250-0040-P	retainer, stop plate	1
*	210-0026	valve repair kit, MX - 3" (M4K)	

*Items included in valve repair kits

**Manual valve only

See https://view.publitas.com/kzvalve/kzvalve_catalog

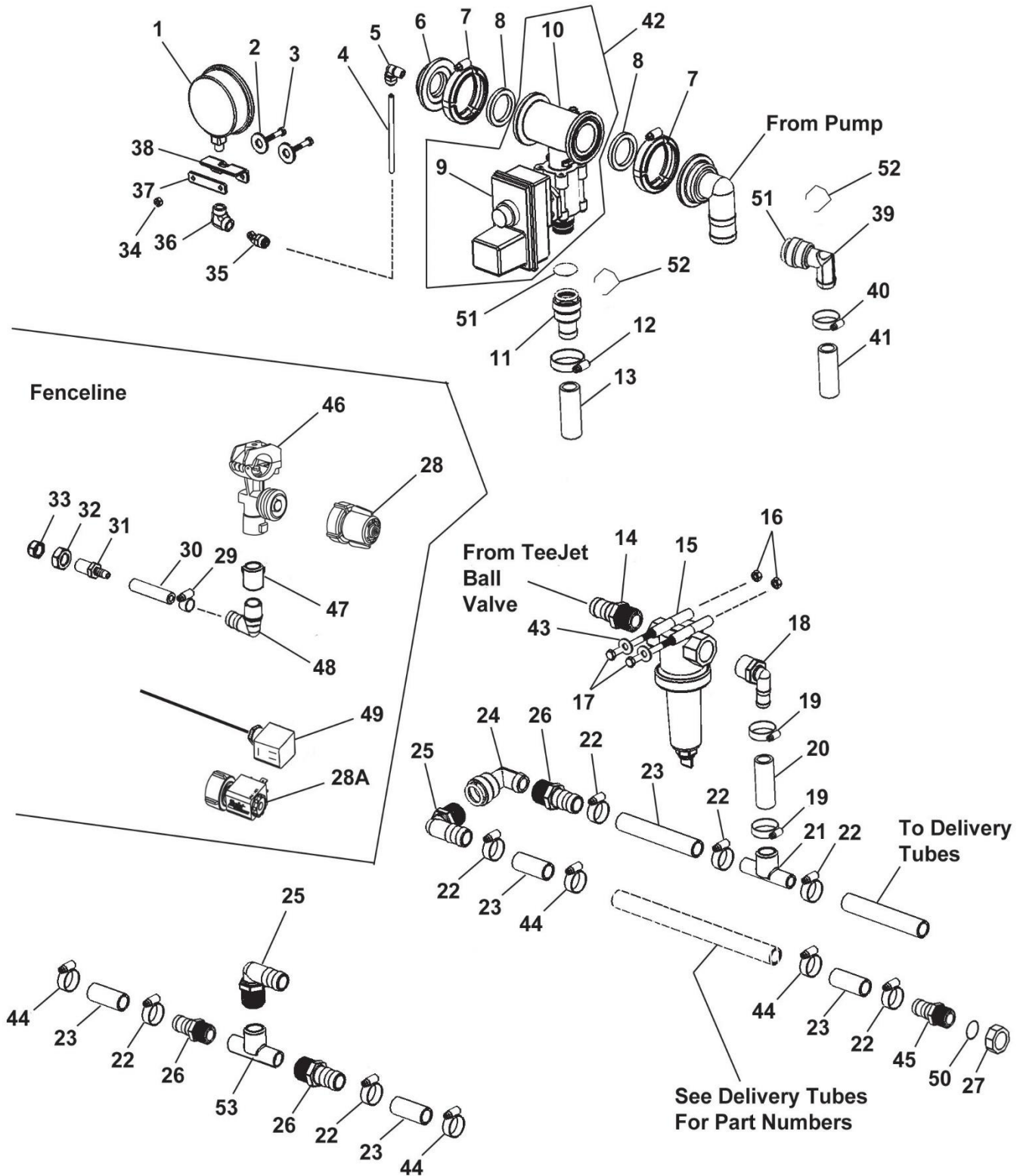
Pump Electric Valve Option

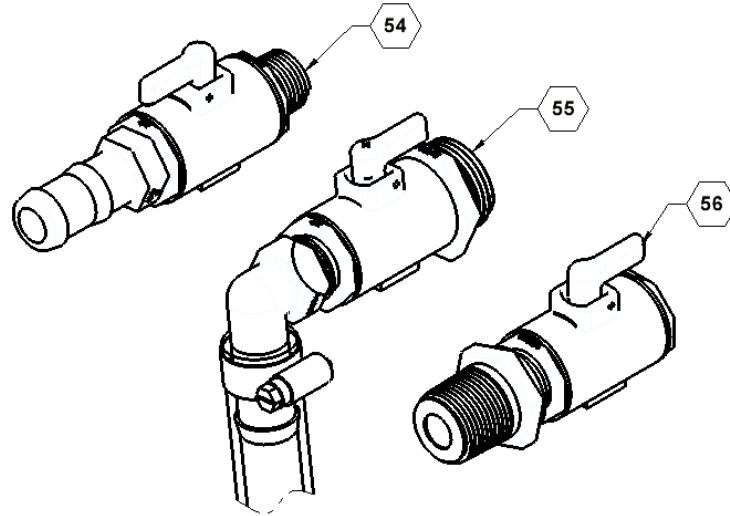


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Boom Plumbing





Parts List: Boom Plumbing

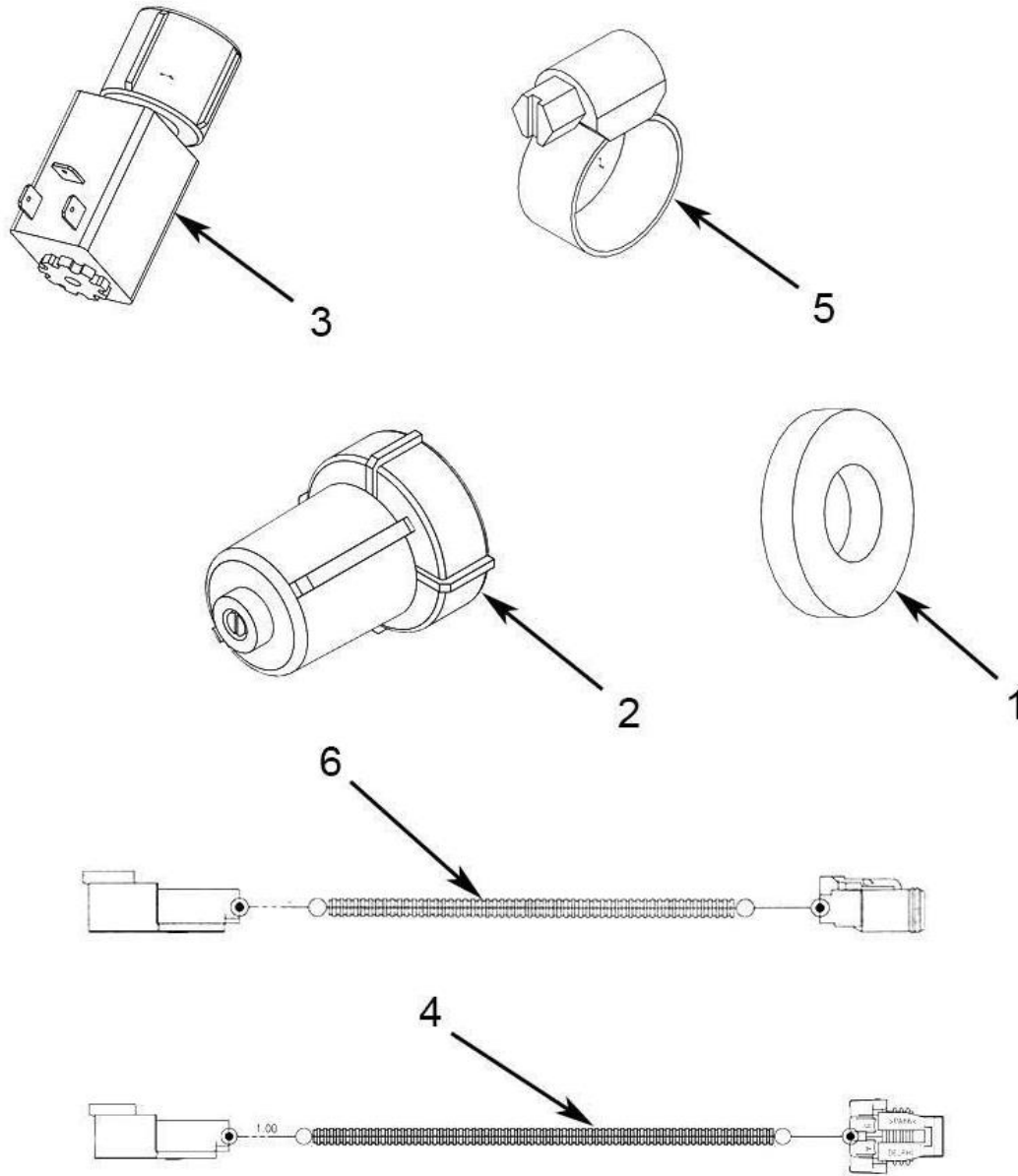
ITEM	VENDOR PART NO.	PART NO.	DESCRIPTION	QTY.
1	4154-GXX-160	790020	PRESSURE GAUGE 0-160 PSI	1
2		256	WASHER FLAT 1/4" ZP	2
3		103	BOLT HH 1/4 X 1-1/2 GR5ZP	2
4	2T20-003	510023	TUBING POLY 1/4" OD	AR
5	44103211	530004	Q-LOCK CONNECTOR ELBOW 1/4" MPT X 1/4" HOSE	1
6	M200PLG025	530094	MANIFOLD PLUG 2" X 1/4" PORT	1
7	FC200	540001	MANIFOLD CLAMP 2" STD	AR
8	150G	530014	MANIFOLD GASKET2"	AR
9		500027	VALVE 450BEC MANIFOLD (NARROW) (NON-FLOWBACK)	AR
9	50516-6	500029	VALVE 450BEC MANIFOLD (WIDE) (FLOWBACK)	AR
10	56609-2-F		VALVESUB-ASSEMBLY	AR
11	45529-1"	530190	QUICK CONNECTORSUB/ASB	AR
12	64016H	540014	HOSE CLAMP 1"	AR
13	1BH200	510016	HOSE SPRAY EDPM 1" ID	AR
14	HB100	530041	HOSE BARB 1" MPT X 1"HB	AR
15	LST100-80	530474	STRAINER LINE 80 MESH SCREEN	AR
16		236	NUT HH 5/16" CLZP	AR
17		120	BOLT HH 5/16 X 3-1/2 GR5ZP	AR
18	HB100-90	530044	HOSE BARB ELBOW 1" MPT X 1" HOSE	AR
19	64016H	540014	HOSE CLAMP 1"	AR
20	1BH100	510016	HOSE SPRAY EDPM 1" ID	AR
21	HB100	530056	HOSE BARB 1" X 1"TEE	AR
22	64016H	540014	HOSE CLAMP 1"	AR



ILLUSTRATED PARTS LIST

23	1BH200	510016	HOSE SPRAY EDPM 1" ID	AR
24	EL100-90	530310	ELBOW 1" FPT	AR
25	HB100-90	530044	HOSE BARB ELBOW 1" MPT X 1" HOSE	AR
26	HB100	530041	HOSE BARB 1" MPT X 1"HB	AR
27	V13N34	530245	CAP 1" FPT	AR
28	58140	520037	FENCELINE NOZZLE BODY, MANUALLY CONTROLLED	AR
28A	55280-1	520038	FENCELINE NOZZLE BODY, ELECTRICALLY CONTROLLED	AR
29	345-005	540032	HOSE CLAMP 3/8"	2
30	3/8BH200	510020	HOSE SPRAY EDPM3/8"	AR
31	1338D	530306	FENCELINE NOZZLEBODY	2
32	3B12		NOZZLE BODYNUT	2
33	CP8027-NYB	520019	NOZZLE TIPNUT	2
34		227	NUT HH 1/4" NYLOCK ZP	2
35	44103206	530001	Q-LOCK CONNECTOR 1/4" MPT X 1/4"HOSE	1
36	5504-04-04-SS	610006	ELBOW 1/4" NPT STAINLESS STEEL	1
37		11758	GAUGE BRACKET	1
38		11786	GAUGE STRAP	1
39	45529-90-1	530190	ELBOW 3/4" RETURN TOTANK	1
40	64012H	540013	CLAMP 3/4"	1
41	BS-3/4BH200	510019	HOSE 3/4"	1
42		520027	VALVE 450BEC MANIFOLD (NARROW) (NON-FLOWBACK) (ITEMS 9 & 10)	AR
42	54608-15-450BEC3	500029	VALVE 450BEC MANIFOLD (WIDE) (FLOWBACK) (ITEMS 9 & 10)	AR
43		257	5/16" WASHER	AR
44	TC-130	540037	T-BOLT CLAMP	AR
45	D34100	530225	HOSE BARB	AR
46	QJ17560A-25M	520030	BODY SINGLE	AR
47	Q54676-1/4-NYR	530248	ADAPTER	AR
48	3EL14628	530209	1/4 X 3/8" BARB 90°	AR
49	58480-2	520038	CABLE CHEM SAVER ELECTRIC OPTION	AR
50	W806V	530227	CAP GASKET	AR
51	CP7717-3-912-VI	530198	O-RING	AR
52	CP37166-1-302SS	530193	RETAINING CLIP	AR
53	BJTEE100FP	530147	TEE 1" NPT	AR
54	-	90SASC1	ASSEMBLY, STRAINER DRAIN 1"	AR
55	-	90SASC2	ASSEMBLY, STRAINER DRAIN 2"	AR
56	-	90SASC3	ASSEMBLY, STRAINER DRAIN 3"	AR

Fence Row Option



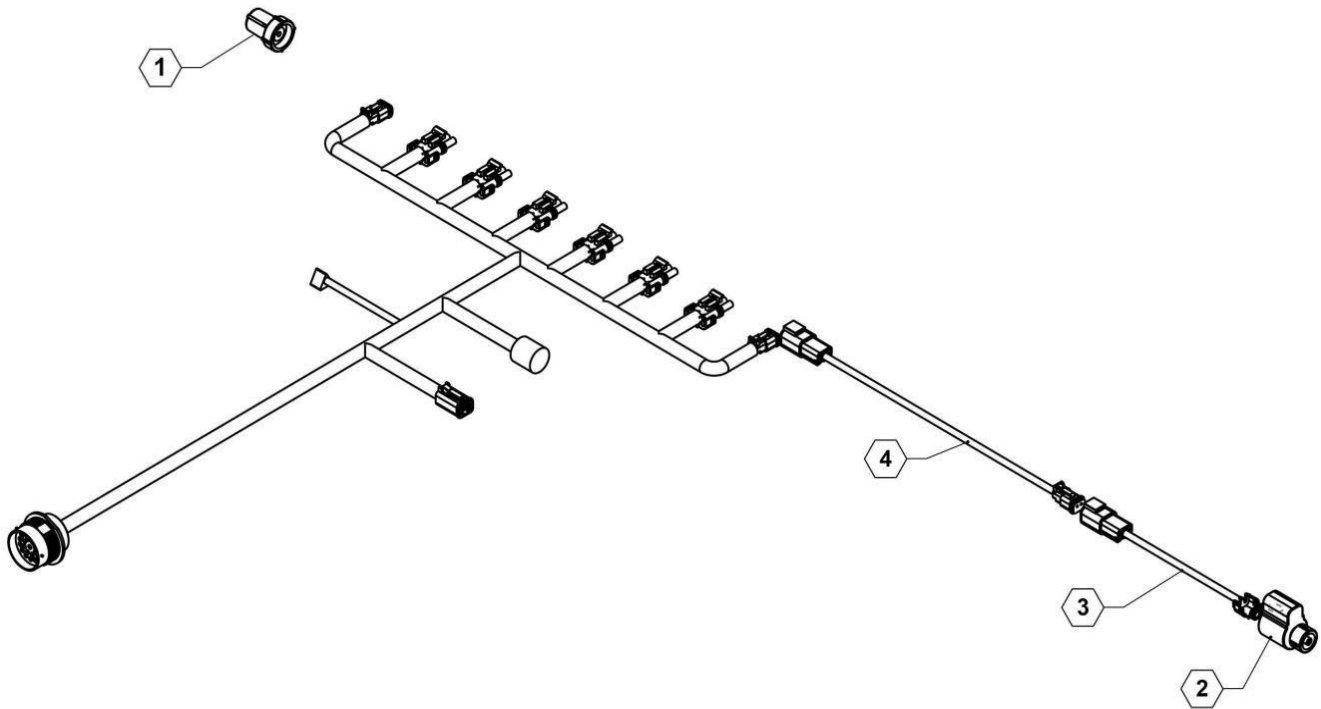
Parts List : Fence Row Option

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

Single Fence Line, Display Control

NOTE:

1. FOR USE WITH RAVEN RCM AND JD RC2000



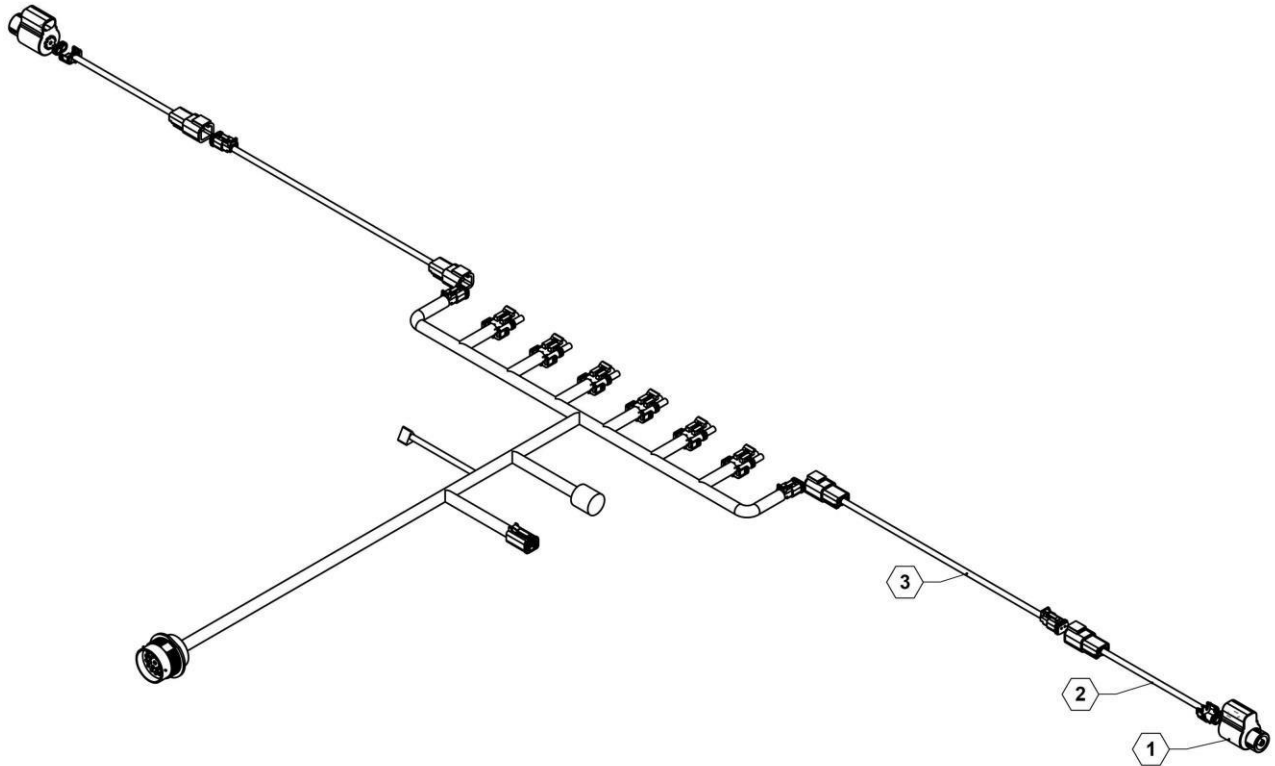
Parts List 27360: Single Fence Line, Display Control

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

Dual Fence Line, Display Control

NOTE:

1. FOR USE WITH RAVEN RCM AND JD RC2000

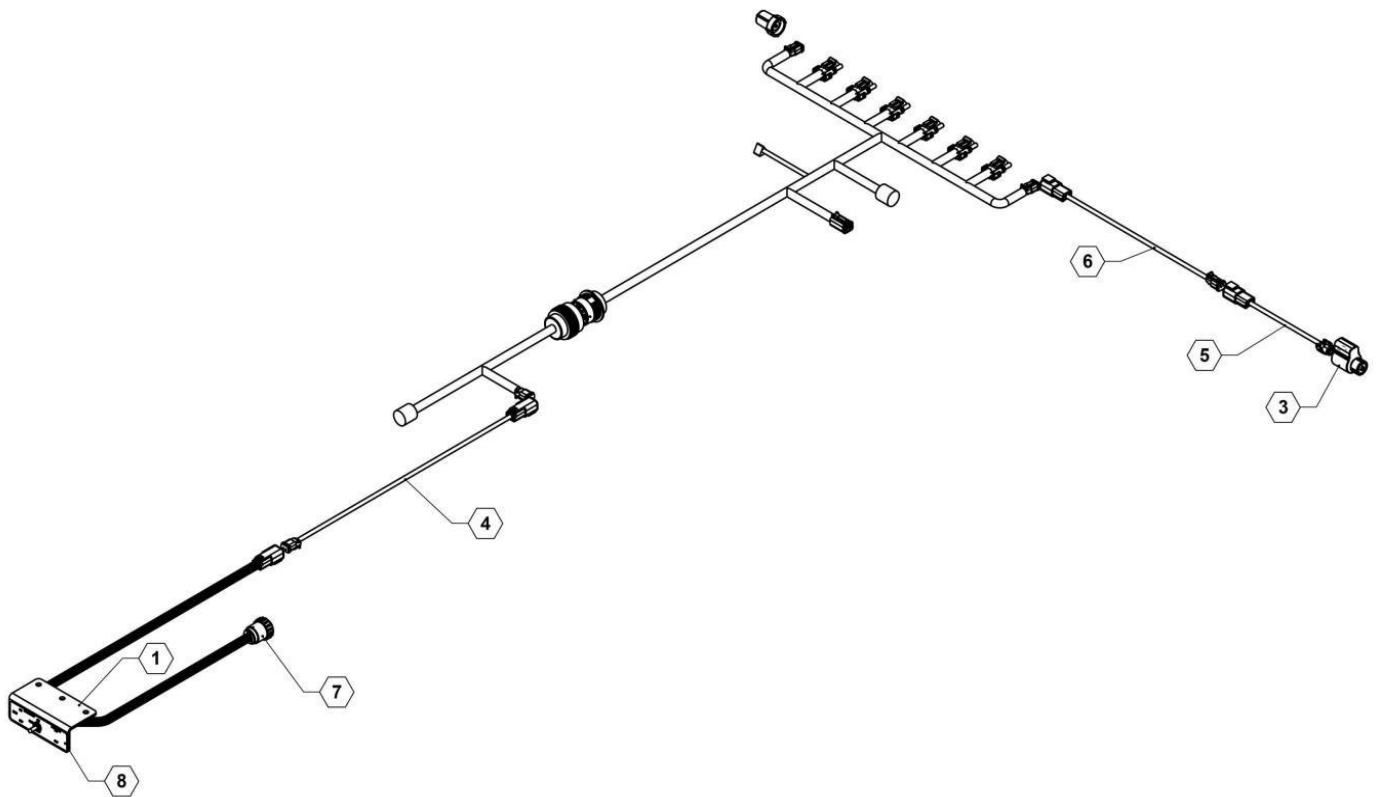


Parts List 27361: Dual Fence Line, Display Control

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

Single Fence Line, Toggle Switch Control

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



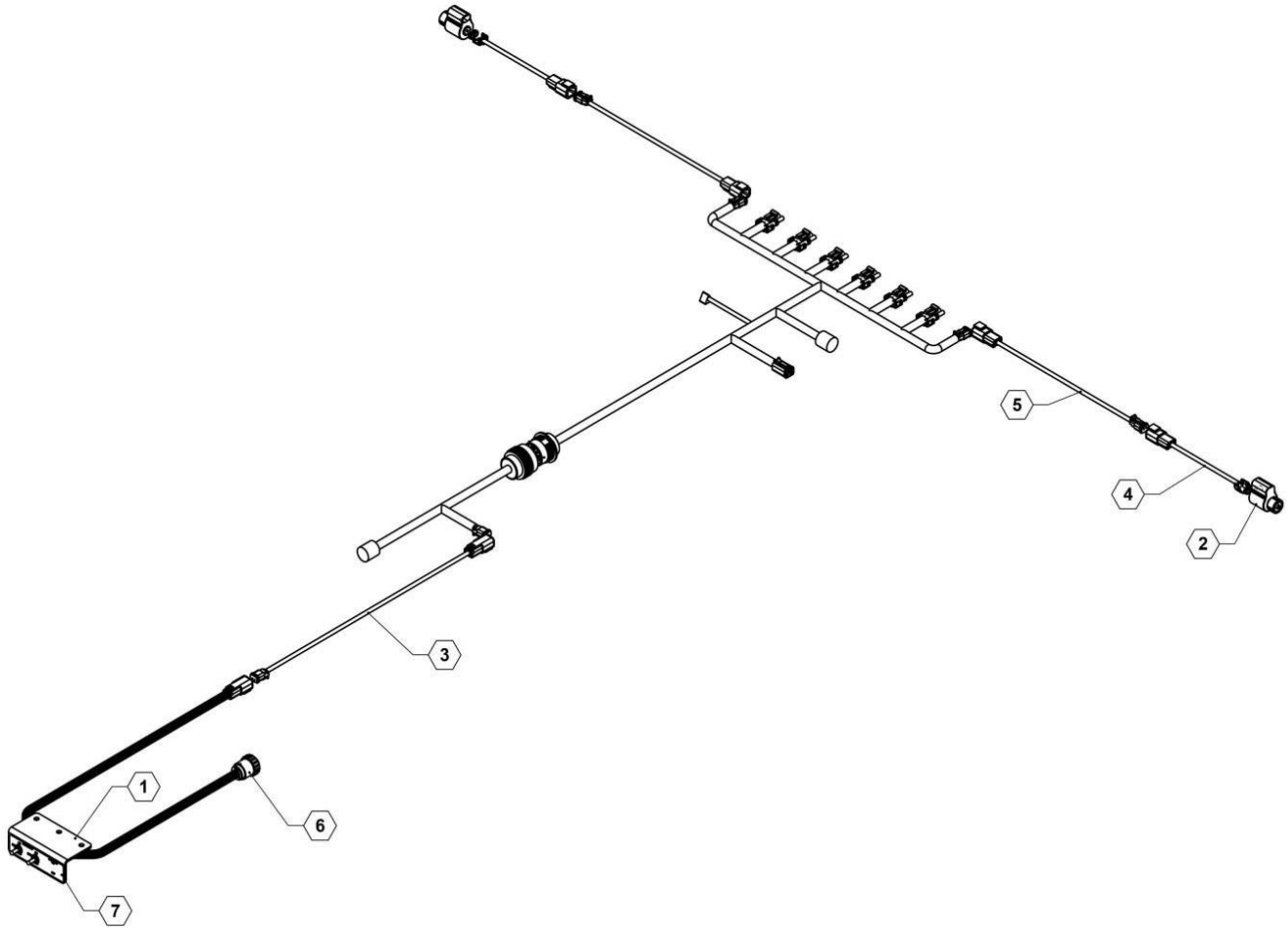
Parts List 27362: Single Fence Line, Toggle Switch Control

ITEM	PART NO.	DESCRIPTION	QTY.
1	184737	PLATE, MOUNT	1
2	520037	VALVE, MANUAL CHEMSAVER	1
3	520038	VALVE, ELECTRIC CHEMSAVER	1
4	632042	2 PIN DT 40' CABLE EXTENSION	1
5	632044	FENCEROW ADAPTER CABLE, 6"	1
6	632054	FENCEROW CABLE, 55'	1
7	632089	CABLE SINGLE ELECTRIC FENCELINE NOZZLE	1
8	800261	DECAL, FENCELINE & AGITATION	1

Dual Fence Line, Toggle Switch Control

NOTE:

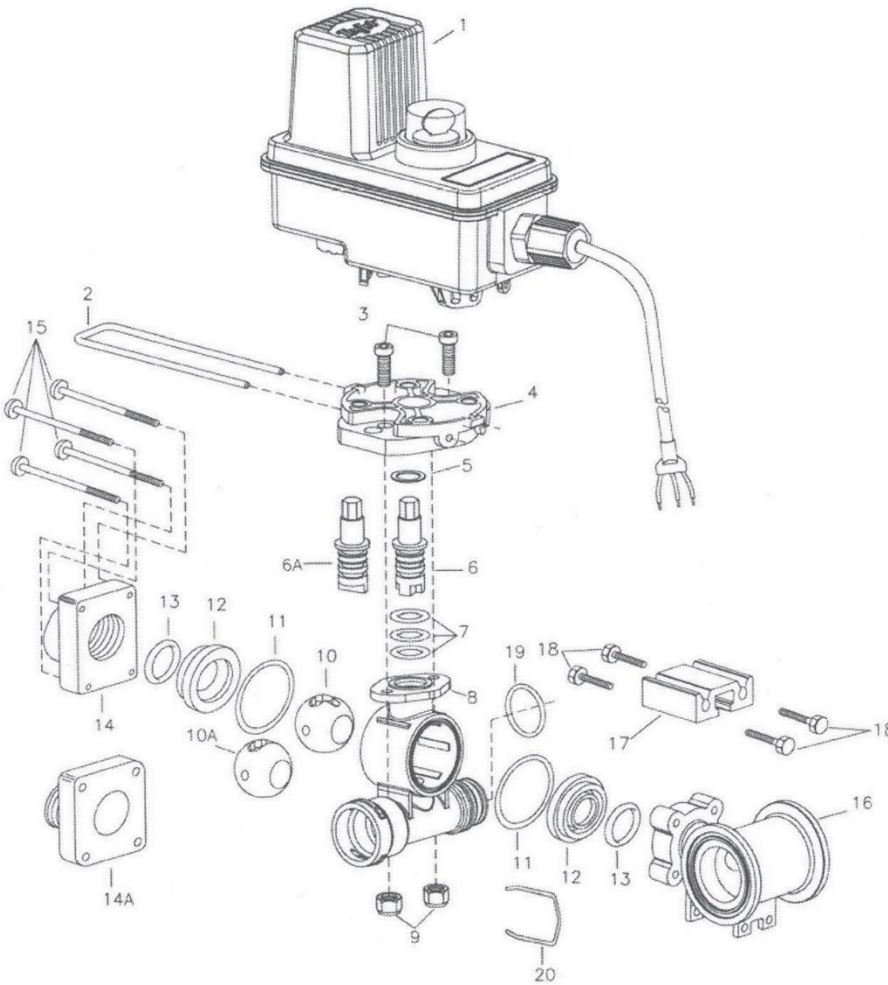
1. FOR USE WITH RAVEN 450, JD GREENSTAR & OTHER 16 & 37 PIN CABLING CONTROLLERS



Parts List 27363: Dual Fence Line, Toggle Switch Control

ITEM	PART NO.	DESCRIPTION	QTY.
1	18437	PLATE, MOUNT	1
2	520038	VALVE, ELECTRIC CHEMSAVER	2
3	632042	2 PIN T 40' CABLE EXTENSION	1
4	632044	FENCEROW ADAPTER CABLE 6"	2
5	632054	FENCEROW CABLE, 55'	2
6	632088	CABLE, DUAL ELECTRIC FENCELINE NOZZLES	1
7	800261	DECAL, FENCELINE & AGITATION	1

Plumbing Valves



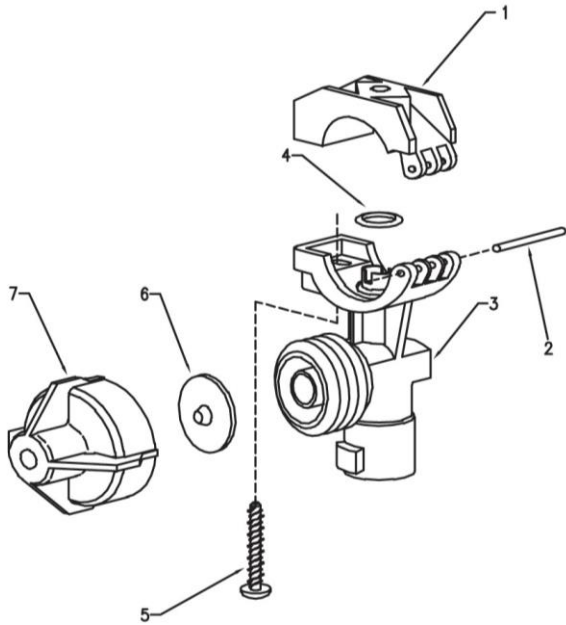
ITEM	PART NO.	DESCRIPTION
1	50515-22CP05 *	BEC MOTOR, 22-RPM (0.7-SEC), 0.5-METER CABLE, POSITIVELY SWITCHED
1C		
2	CP50517-SSPV	RETAINING CLIP, 304 STAINLESS STEEL
3	CP26197-7/8-SS	SOCKET HEAD CAP SCREW, 1/4"-20 X 7/8", STAINLESS STEEL (2 REQ'D)
4	CP50514-PP	MOTOR ADAPTER, POLYPROPYLENE (BLACK)
5	CP20125-TEF	THRUST WASHER, TEFLON
6	CP56613-SS	STEM, 303 STAINLESS STEEL (FOR POLYPROPYLENE BALL)
7	CP7717-M12X2.5-VI	O-RING, VITON (3 REQ'D)
8	CP55223-NYB	FLOW BACK BODY, NYLON (BLACK)
9	CP38435-1/4-SSNY	ELASTIC LOCKNUT, 1/4"-20, STAINLESS STEEL (2 REQ'D)
10	CP20106-2-PP	FLOW BACK BALL, POLYPROPYLENE (WHITE)
10A	CP19926-2-SS	FLOW BACK BALL, 303 STAINLESS STEEL
11	CP20564-VI	GASKET, VITON (2 REQ'D)
12	CP20103-TEF	SEAL, TEFLON (2 REQ'D)
13	CP7717-2-213-VI	O-RING, VITON (2 REQ'D)
14A	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 16MM HEX, STAINLESS STEEL (4 REQ'D)
19	CP7717-3-912-VI	O-RING, VITON
20	CP37166-1-302SS	QUICK CONNECT RETAINING CLIP, 302 STAINLESS STEEL
	56609-3FB-_-_-	VALVE BODY SUB-ASSY, SPECIFY OUTLET SIZE & BALL MATERIAL (INCLUDES ITEMS 3-19)
AB3444E-KIT, SPARE PARTS KIT (INCLUDES ALL ITEMS MARKED WITH *)		

NOTE: (B) IN PART NUMBER INDICATES B.S.P.T INLET AND OUTLET CONNECTIONS
 NOTE: FOR NEGATIVELY SWITCHED MOTORS SPECIFY "N" RATHER THAN "P" IN MOTOR PART NUMBER
 EXAMPLE: 50515-22CN05
 NOTE: FOR QUICK CONNECT FITTING PART NUMBERS SEE PARTS LIST PL45529

TEFLON® IS A TRADEMARK OF DUPONT COMPANY
 VITON® IS A TRADEMARK OF DUPONT DOW ELASTOMERS

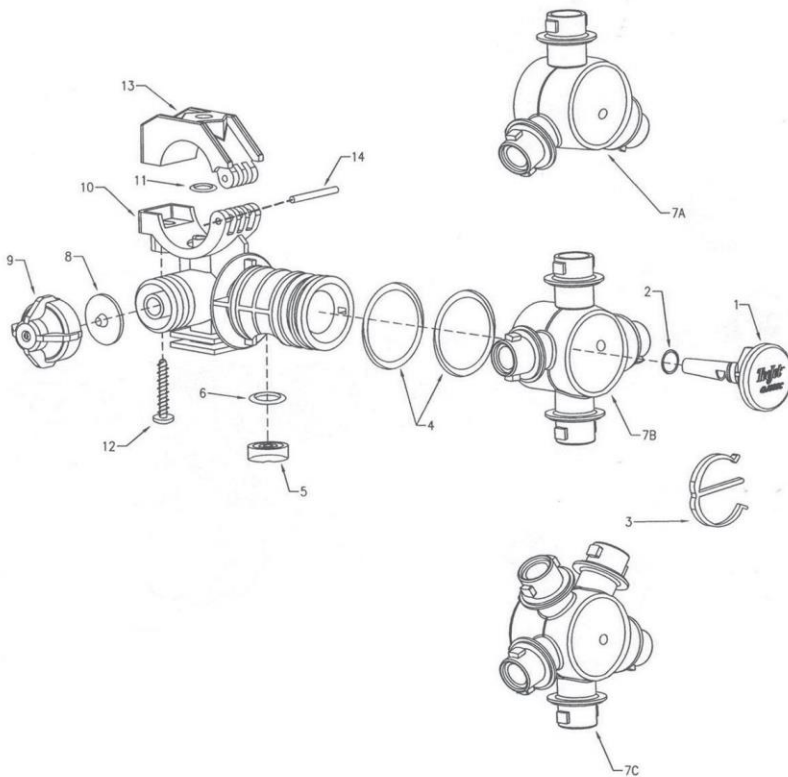
DESCRIPTION: 450BEC-FB DIRECTVALVE® ELECTRIC SHUT-OFF FLOW BACK BALL VALVE MANIFOLD PRODUCT COVERED BY US PATENT #6189807	Spraying Systems Co.® Spray Nozzles and Accessories P.O. Box 7900 - Wheaton, IL 60189-7900	
	Rev. No. Ref.	PARTS LIST PL450BEC-FB SHEET OF

Nozzle Bodies



ITEM	PART NO.	DESCRIPTION
1	CP48224-NYB	Upper Clamp, 25mm, Nylon (Black)
2	CP48256-SS	Pivot Pin, Stainless Steel
3	CP48498-NYB	Body, 3/4", Nylon (Black) (for 3/4" and 25mm versions)
4	CP7717-2/110-BU	O-Ring, Buna-N
	CP7717-2/110-VI	O-Ring, Viton (Optional)
5	CP48255-1 1/4-302SS	Screw, Stainless Steel
6	CP21953-EPR	Diaphragm, EPDM
	CP21953-VI	Diaphragm, Viton (Optional)
7	21950-10-NYB	End Cap Sub-Ass'y, Nylon (Black)

No. QJ17560A-25mm-NYB(-VI) - Hinged Nozzle Body Assembly



ITEM	PART NO.	DESCRIPTION
1	CP38930-8-NYB	Plug, Nylon (Black)
2	CP7717-2-13-EPR	O-Ring, EPDM
	CP7717-2-13-VI	O-Ring, Viton (Optional)
3	CP38931-NYB	E-Clip, Nylon (Black)
4	CP7717-M28x3-EPRTFE	O-Ring, EPR-Teflon Filled (2 Req'd.)
	CP7717-M28x3-VITFE	O-Ring, Viton-Teflon Filled (2 Req'd.) (Optional)
5	CP56726-VITFE	Seal, Viton-Teflon Filled
6	CP7717-2-111-VI	O-Ring, Viton
7A	CP38921-2-NYB	Turret, Nylon (Black) (3 Outlet)
7B	CP38922-2-NYB	Turret, Nylon (Black) (4 Outlet)
7C	CP38923-2-NYB	Turret, Nylon (Black) (5 Outlet)
8	CP21953-EPR	Diaphragm, EPDM
	CP21953-VI	Diaphragm, Viton (Optional)
9	21950-10-NYB	End Cap Sub-assembly, Nylon (Black)
10	CP38925-2-NYB	3/4" & 25mm Body, Nylon (Black)
11	CP7717-2-110-BU	O-Ring, Buna-N
	CP7717-2-110-VI	O-Ring, Viton (Optional)
12	CP48255-1-1/4-302SS	Screw, Stainless Steel
13	CP48224-NYB	25mm Upper Clamp, Nylon (Black)
14	CP48256-SS	Pivot Pin, Stainless Steel

No. QJ36_C-25MM-NYB(-VI) - 25mm Wet Boom Nozzle Body*

*Notes: Specify Either 3, 4, or 5 in Part Number for Number of Outlets Desired, -VI in Part Number Specifies Viton O-Ring Option

DESCRIPTION:

QJ360C WET BOOM
DIAPHRAGM CHECK VALVE
QUICK TEEJET® HINGED
NOZZLE BODY ASSEMBLY



Spraying Systems Co.

Spray Nozzles and Accessories
P.O. Box 7900 - Wheaton, IL 60189-7900

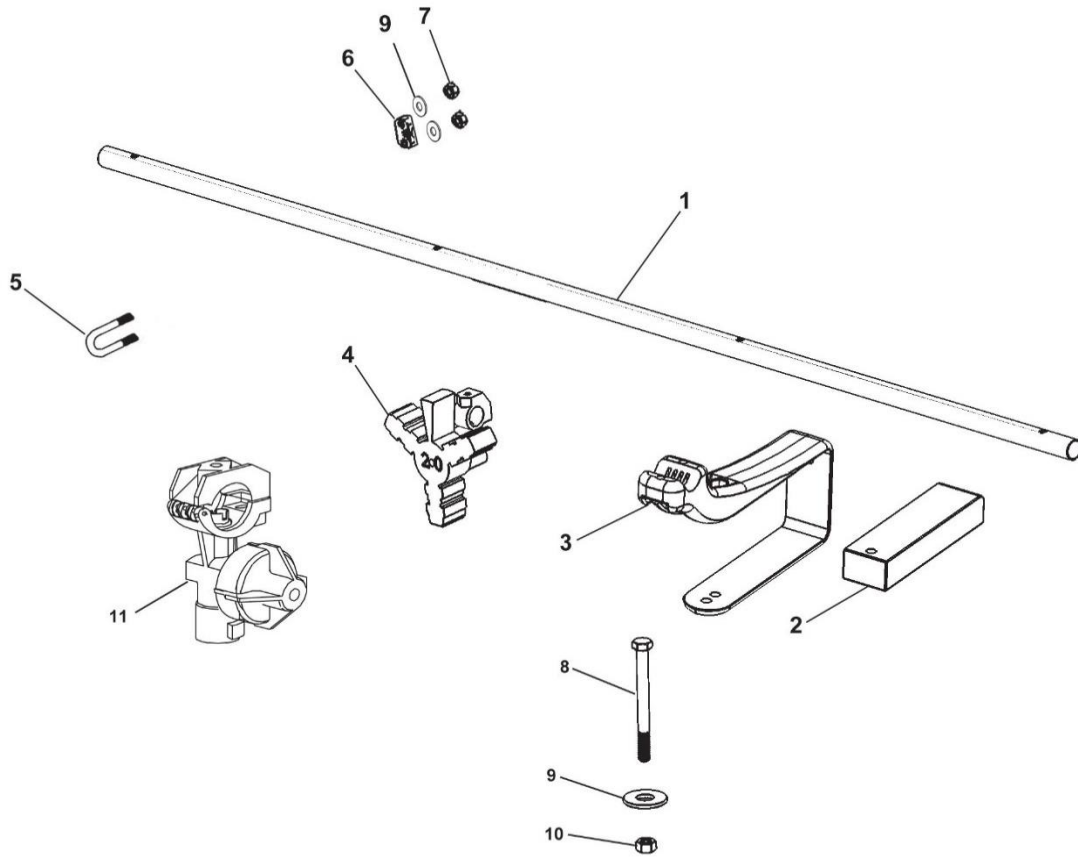
Rev. No. 1

Ref.

PARTS LIST

PL QJ360C-WB
SHEET OF

Delivery Tubes



Parts List: Delivery Tubes

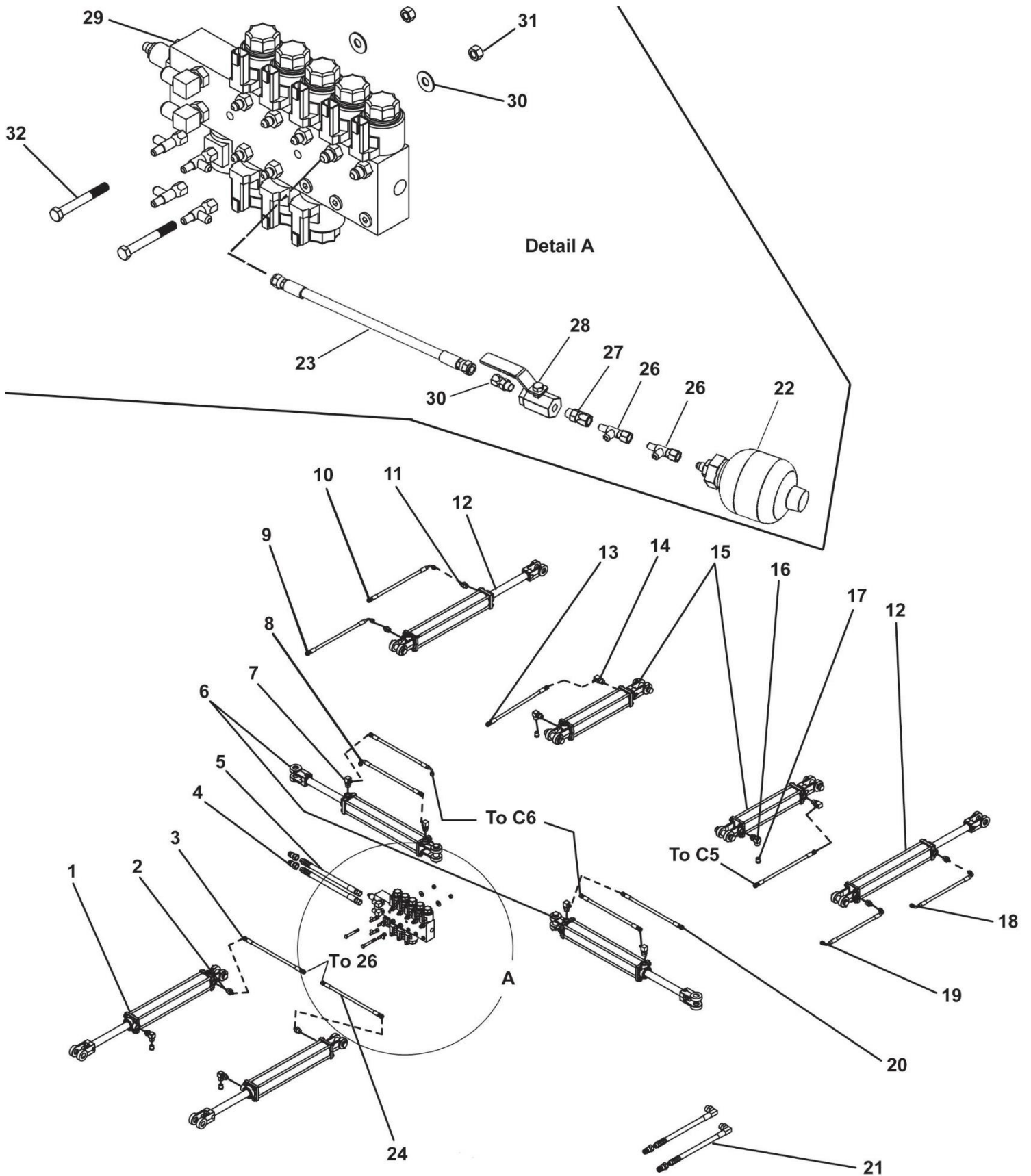
ITEM	VENDOR PART NO.	FAST PART NO.	DESCRIPTION	QTY.
1		14301	TUBE, 6 PORT 15 INCH SPACING + FENCELINE VALVE	AR
		14302	TUBE, 2 PORT 15 INCH SPACING	AR
		14303	TUBE, 3 PORT 15 INCH SPACING	AR
		14304	TUBE, 4 PORT 15 INCH SPACING	AR
		14305	TUBE, 5 PORT 15 INCH SPACING	AR
		14306	TUBE, 6 PORT 15 INCH SPACING	AR
		14307	TUBE, 7 PORT 15 INCH SPACING	AR
		14308	TUBE, 8 PORT 15 INCH SPACING	AR
		14310	TUBE, 10 PORT 15 INCH SPACING	AR
		14311	TUBE, 7 PORT 20 INCH SPACING + FENCELINE VALVE	AR
		14312	TUBE, 2 PORT 20 INCH SPACING	AR
		14313	TUBE, 3 PORT 20 INCH SPACING	AR
		14314	TUBE, 4 PORT 20 INCH SPACING	AR
		14315	TUBE, 5 PORT 20 INCH SPACING	AR



ILLUSTRATED PARTS LIST

		14316	TUBE, 6 PORT 20 INCH SPACING	AR
		14317	TUBE, 7 PORT 20 INCH SPACING	AR
		14318	TUBE, 8 PORT 20 INCH SPACING	AR
		14319	TUBE, 9 PORT 20 INCH SPACING	AR
		14320	TUBE, 5 PORT 20 INCH SPACING + FENCELINE VALVE	AR
		14321	TUBE, 6 PORT 20 INCH SPACING + FENCELINE VALVE	AR
		14322	TUBE, 2 PORT 22 INCH SPACING	AR
		14323	TUBE, 3 PORT 22 INCH SPACING	AR
		14324	TUBE, 4 PORT 22 INCH SPACING	AR
		14325	TUBE, 5 PORT 22 INCH SPACING	AR
		14326	TUBE, 6 PORT 22 INCH SPACING	AR
		14327	TUBE, 7 PORT 22 INCH SPACING	AR
		14330	TUBE, 5 PORT 22 INCH SPACING + FENCELINE VALVE	AR
		14333	TUBE ASSEMBLY, 3 PORT 15 INCH SPACING, INCNOZZLES	AR
		14334	TUBE ASSEMBLY, 4 PORT 15 INCH SPACING, INCNOZZLES	AR
		14335	TUBE ASSEMBLY, 5 PORT 15 INCH SPACING, INCNOZZLES	AR
		14336	TUBE ASSEMBLY, 6 PORT 15 INCH SPACING, INCNOZZLES	AR
		14337	TUBE ASSEMBLY, 7 PORT 15 INCH SPACING, INCNOZZLES	AR
		14338	TUBE ASSEMBLY, 8 PORT 15 INCH SPACING, INCNOZZLES	AR
		14339	TUBE ASSEMBLY, 9 PORT 15 INCH SPACING, INCNOZZLES	AR
		14340	TUBE ASSEMBLY, 10 PORT 15 INCH SPACING, INCNOZZLES	AR
2	AR-14085	590054	SPACER, WET BOOM	AR
3	AR-14083	540040	CLAMP, WETBOOM	AR
4	QJ363C-25MM-NYB	520039	NOZZLE	AR
5	ZM1473140	590048	U-BOLT STAINLESSSTEEL	AR
6		540029	TUBE CLAMP BASE	AR
7		655	NUTHH	AR
8	YC XL5750-PS	590078	BOLT HH 1/4 X 4-1/2 GR5 STAINLESSSTEEL	AR
9		685	WASHER 1/4" STAINLESS STEEL	AR
10		655	NUT 1/4" NYLOCK STAINLESSSTEEL	AR
11	QJ17560A-25MM	520030	NOZZLE BODY SINGLE WET BOOM	AR

Hydraulic System



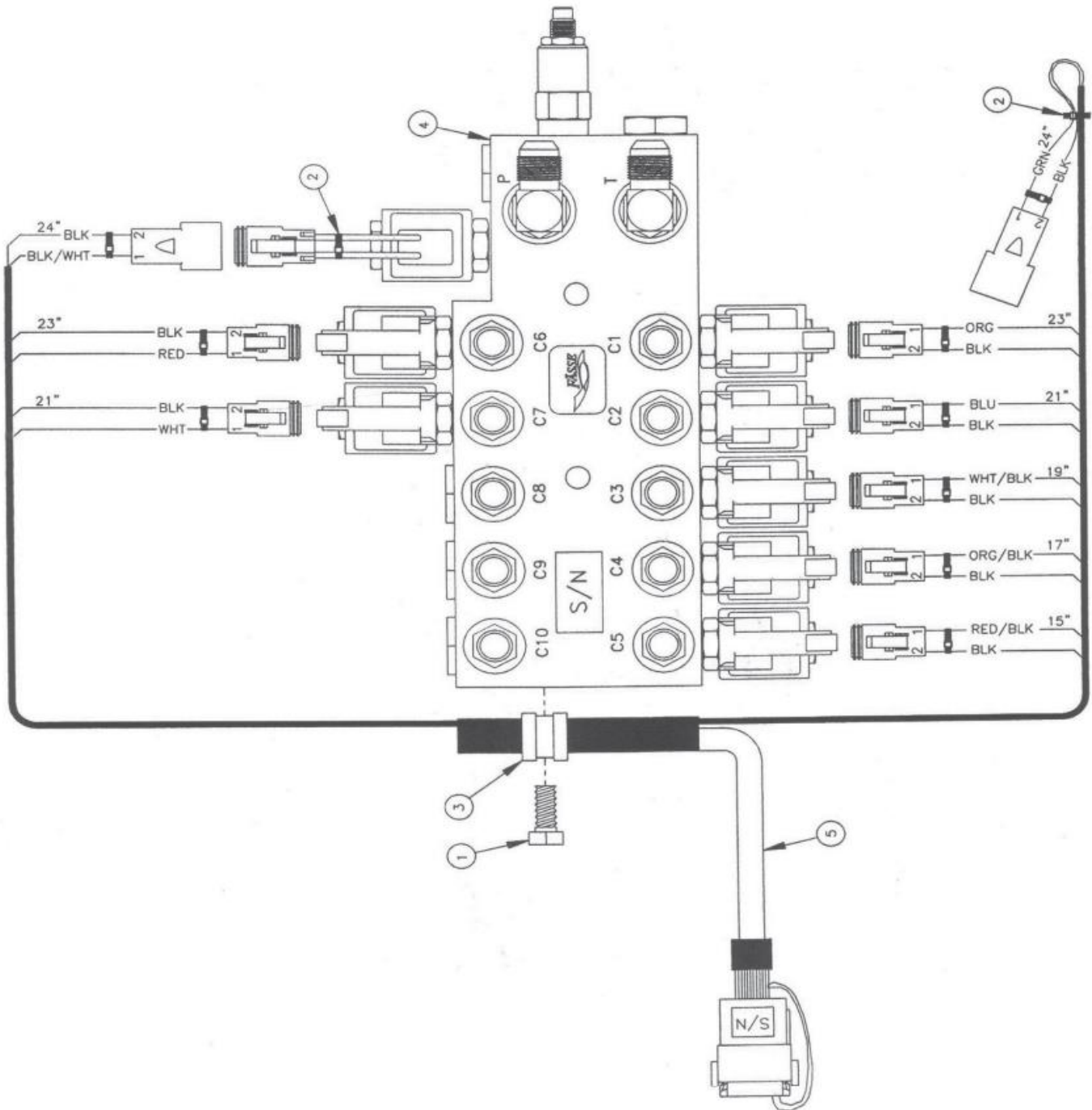


ILLUSTRATED PARTS LIST

Parts List: Hydraulic System

ITEM	VENDOR PART NO.	PART NO.	DESCRIPTION	QTY.	60FT.
1	648124	620019	20TD16-150 SAPUSH	2	
2	6400-4-8-047	610038	8ORB X 4JIX RESTRICTEDADAPTER	2	
3	FDM4R17-4FJX	600008	HOSE 4JICSTRAIGHT	1	
4	2-NV12-12SAE-M	530182	HYDRAULIC TIP X8ORB	4	
5	FDM8R17-8FJX-8MBO-288		HOSE HYDRAULIC BLOCK FEED	2	
6	645710	620006	30TD16-150 DOUBLEACTING	2	
7	6801-4-8-R.045	610040	8ORB X 4JIX 90° RESTRICTEDADAPTER	4	
8	FDM4R17-4FJX-4FJX-104		HOSE 4JICSTRAIGHT	2	
9	FDM4R17-4FJX90M-4FJX-302		HOSE 4JIC STRAIGHT X 4JIC90°	1	
10	FDM4R17-4FJX90M-4FJX-302		HOSE 4JIC STRAIGHT X 4JIC90°	1	
11	6801-4-8-R.045	610040	8ORB X 4JIX RESTRICTEDADAPTER	4	
12	645710	620006	30TD16-150 DOUBLEACTING	2	
13	FDM6R17-6FJX-156		HOSE 6JICSTRAIGHT	2	
14	6801-6-8	610030	8ORB X 6JIXADAPTER	2	
15	648422	620023	25TD08-112 SA PULL WINGTILT	2	
15			FOR NORAC/RAVEN BOOM HEIGHTCONTROL SYSTEMS		OPT.
15	648402 OPT. NORAC/RAVEN	620022	25TD10-112 SA PULL WINGTILT		OPT.
16	6805-6-8	610035	8ORB X 3/8" FPT 90°ADAPTER	4	
17	BV3	610036	BREATHER 3/8"MPT	4	
18	FDM4R17-4FJX90M-SAME-302		HOSE HYDRAULIC 4JIC 90° X 4JIC90°	1	
19	FDM4R17-4FJX90M-4FJX-322		HOSE HYDRAULIC 4JIC 90° X 4JIC90°	1	
20	FDM4R17-4FJX-4FJX-104		HOSE HYDRAULIC 4JICSTRAIGHT	2	
21	FDM8R17-8MBO-10MBX090-204		HOSE HYDRAULIC PUMPFEED	2	
22	0531-601-500/100	630002	ACCUMULATOR	1	
23	FDM4R17-4FJX-4FJX90M-15		HOSE HYDRAULIC 4JICSTRAIGHT	1	
24	FDM4R17-4FJX-4FJX-25.3		HOSE HYDRAULIC 4JICSTRAIGHT	1	
25	N/A				
26	6602-4	610028	RUN TEE ADAPTER4JIC	6	
27	6402-04-04	610018	ADAPTER SWIVEL 4JIC X4ORB	1	
28	MPV-14-SAE	500000	VALVE 1/4 TURNHYDRAULIC	1	
29	700-0805-4103	630008	HYDRAULIC BLOCK - 5STATION		1
30	6400-04	610007	4 ORB X 4JIC	1	
31	237	237	NUT HH 3/8" NYLOCK ZPCENTERLOCK	2	
32	132	132	BOLT HH 3/8 X 3" GR5ZP	2	
	SEALKITS				
	648126		648124 20TD16-150 SAPUSH		
	645752		648422 25TD-08-112 SA PULL		
	645752		648402 25TD10-112 SA PULL		
	639559		645710 30TD16-150 DA		

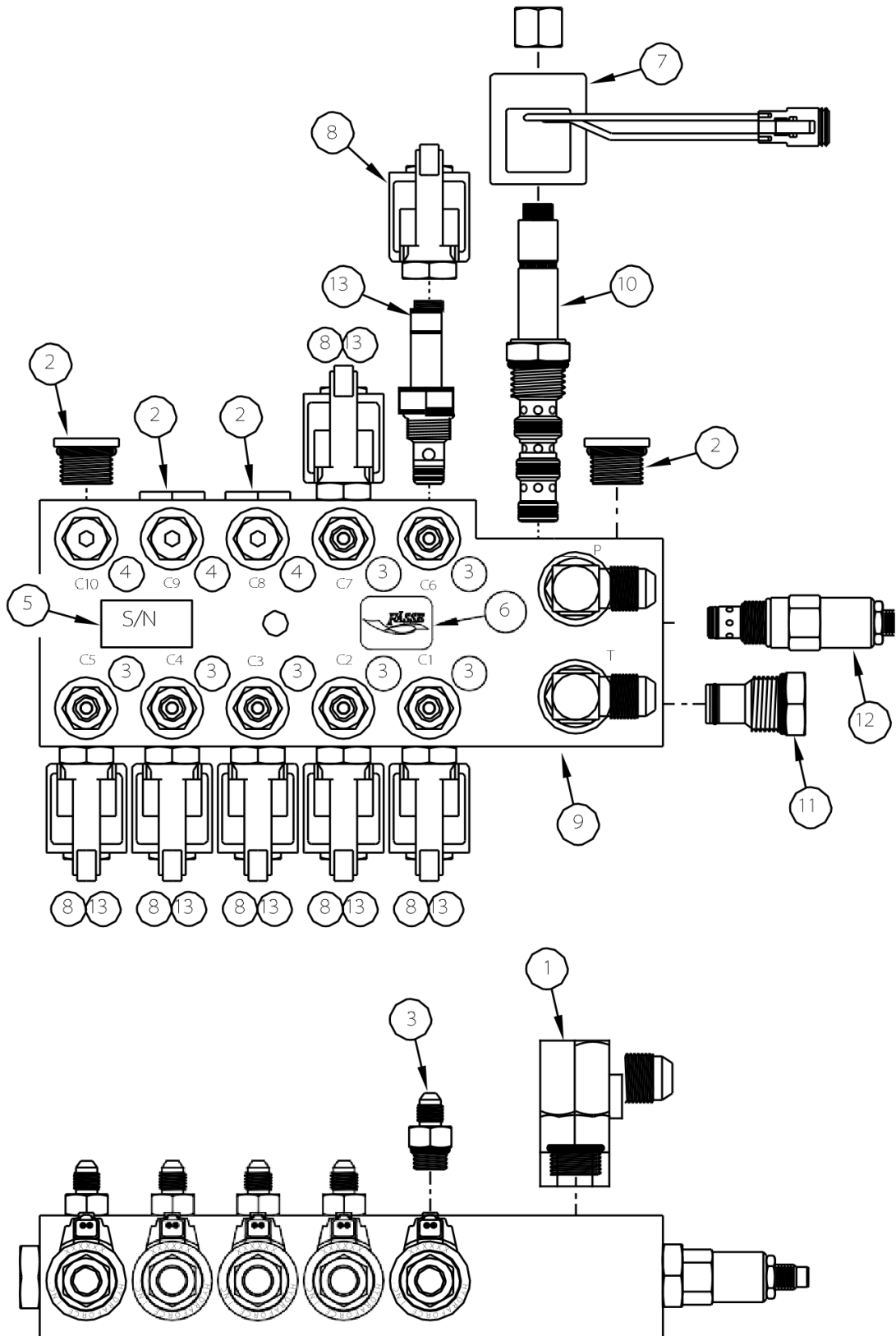
Hydraulic Control Valve Harness – 60-66 Ft. Boom



Parts List: Hydraulic Control Valve Harness – 60-66 Ft. Boom

ITEM	PART NO.	DESCRIPTION	QTY.
1	212-025	BOLT 5/16-18 X 0.75	1
2	214-002	CABLE TIE BLACK 7"	14
3	255-026	LOOM CLAMP .5" ID METAL/RUBR	1
4	302-374	MANI ASSY 0805 2DA 3SA CLSD INT DTR 12V WP6400	1
5	319-668	HRN ASSY 12CON 18GA DTR KEY A 33'	1

Hydraulic Control Valve – 60-66 Ft. Boom



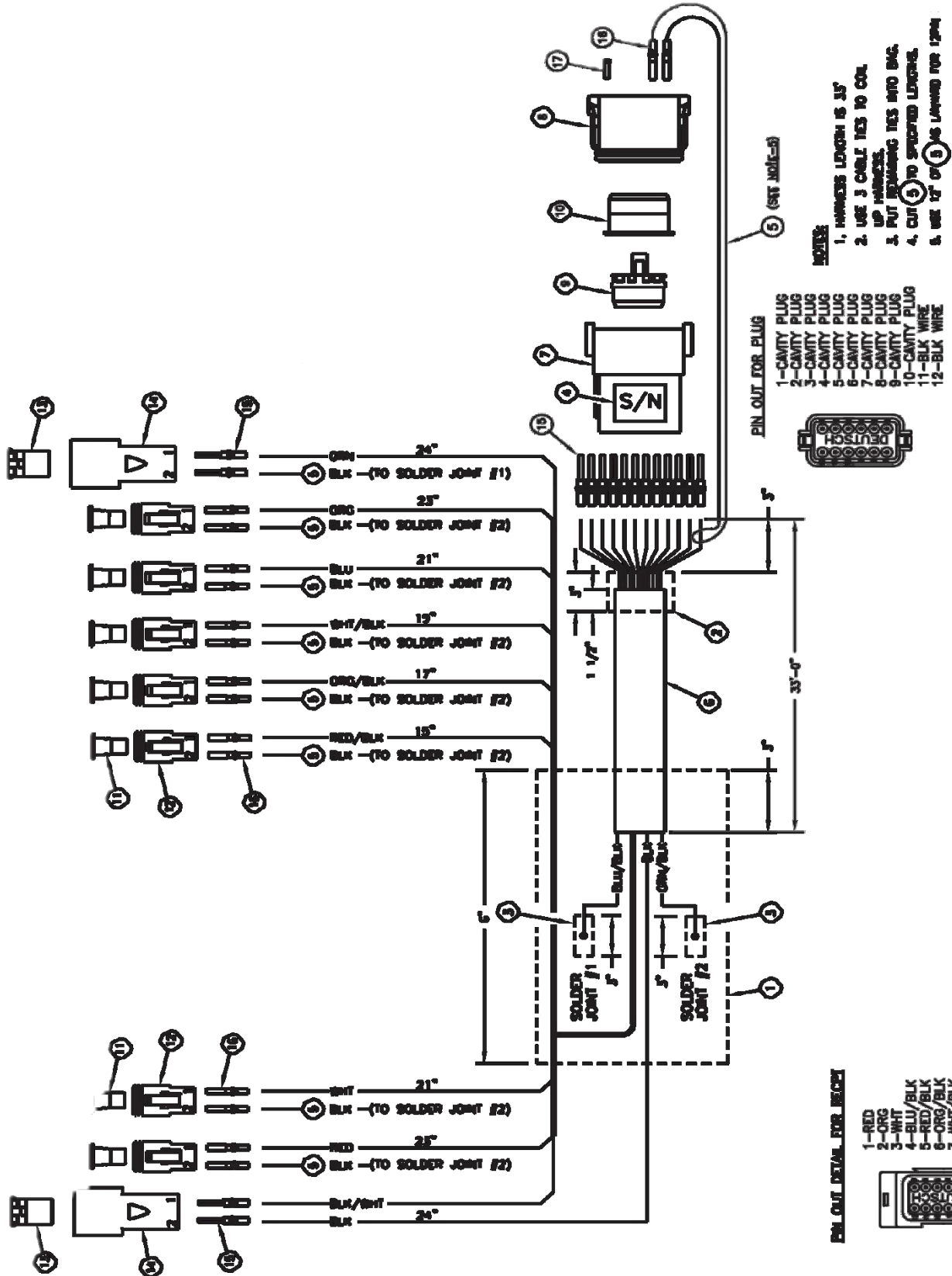


ILLUSTRATED PARTS LIST

Parts List: Hydraulic Control Valve – 60-66 Ft. Boom

ITEM	PART NO.	QTY.	DESCRIPTION
1	210-017	2	FTG6801-8-8/E-MJ-MO
2	210-038	4	FTG6408-HHP-8/ HOLEHEXPLUGMO
3	210-113	7	FTG6400-4-6/S-MJ-MO
4	210-127	3	FTG6408-HHP-6/ HOLEHEXPLUGMO
5	232-050	2	DECALS/ N (SILVER)
6	232-058	1	DECAL FASSE BLK/ GOLD 1" X .75" RND CRNR
7	252-037	1	COILH/F6359774DT
8	253-046	7	COIL HYD AC0312600 DL DSTCH RECPT.
9	270-093	1	MANI S14153-45 CIRAL RV
10	273-008	1	CART SV10-40-0-N-00 (SEAL KIT PART # 274-001)
11	237-012	1	CART CP10-20 (SEAL KIT PART # 274-019)
12	237-058	1	CARTHFRV10-22A-0-N-NC-35-30 (SEAL KIT PART # 274-009)
13	273-077	7	CARTHYACWS 08W-01-C-N-0 (SEAL KIT PART # 274-028)

Hydraulic Control Valve Wiring Harness – 60-66 Ft. Boom



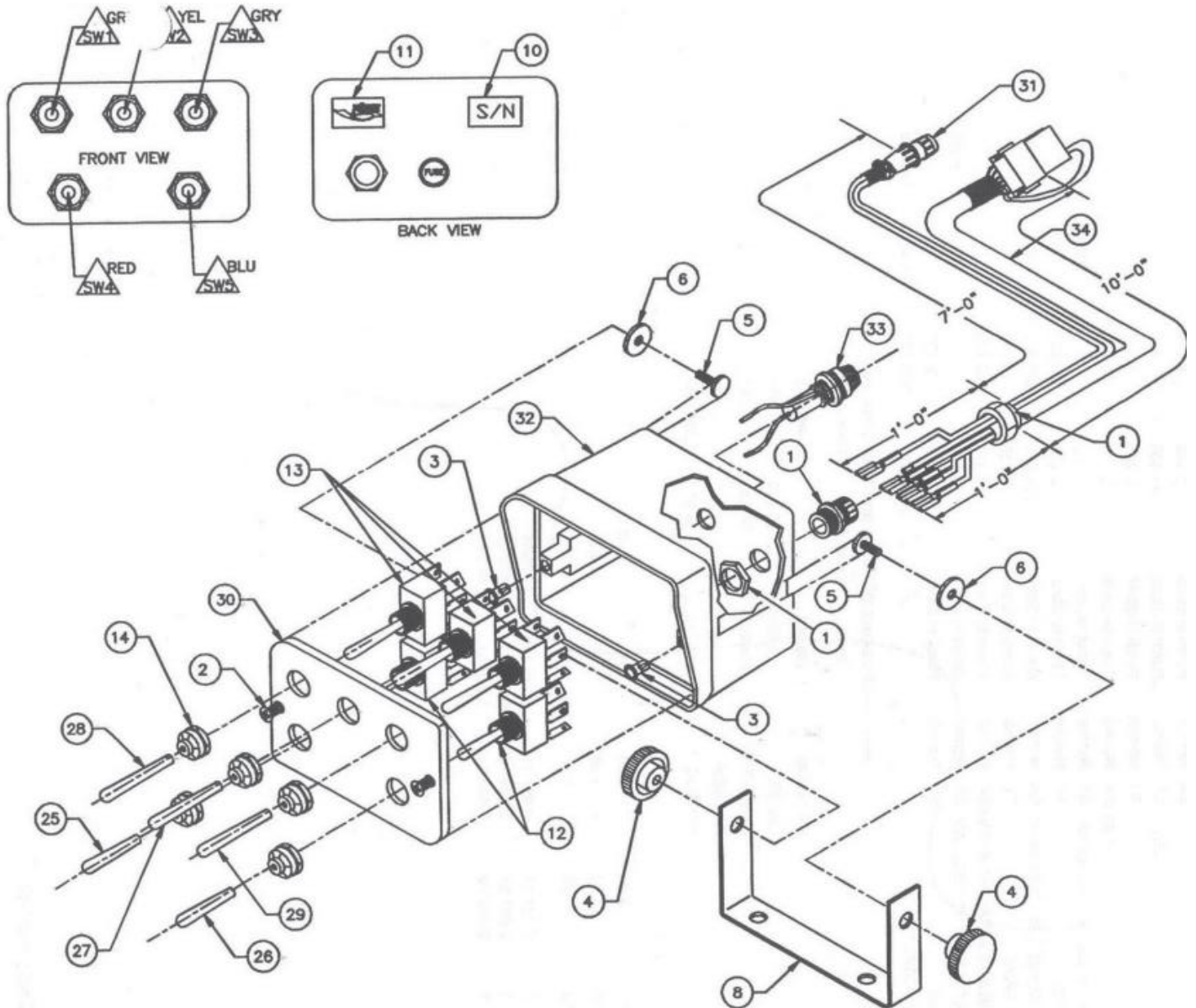


ILLUSTRATED PARTS LIST

Parts List: Hydraulic Control Valve Wiring Harness – 60-66 Ft. Boom

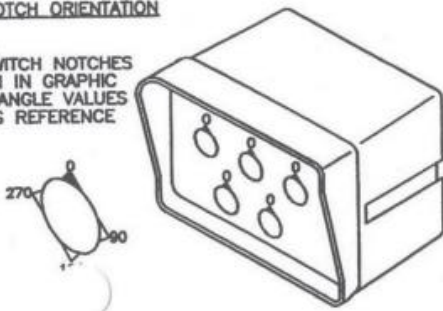
ITEM	PART NO.	QTY.	DESCRIPTION
1	231-008	6"	SHRINKTUBING 0.750
2	231-009	3"	SHRINKTUBING 0.5
3	231-250	6"	SHRINKTUBING 0.250" BLK
4	232-050	2	DCL S/N (SILVER)
5	252-058	159"	WIRE 18GA BLK
6	252-064	35"	CABLE 12CON GRY 18GA
7	255-212	1	CNTR DEUTSCH 12PIN RECEPT DT
8	255-213	1	CONN DEUT DT PLUG 12PIN
9	255-214	1	CNTR DEUTSCH LOCK WEDGE 12PIN DTR
10	255-215	1	CONN DEUT LOCK WEDGE 12PIN DTP
11	255-505	7	CNTR DEUTSCH LOCK WEDGE 2PIN DTP
12	255-801	7	CNTR DEUTSCH 2PIN PLUG DT
13	255-969	2	CNTR DEUTSCH LOCK WEDGE 2PINI DTR
14	255-971	2	CNTR DEUTSCH 2PIN RECEPT DT
15	255-977	16	TRM PIN DEUTSCH 16/18GA
16	255-978	16	TRM SOCKET DEUTSCH 16/18GA
17	255-979	10	CONT DEUT CAVITY PLUG

Control Console – 60-66 Ft. Boom



SWITCH NOTCH ORIENTATION

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





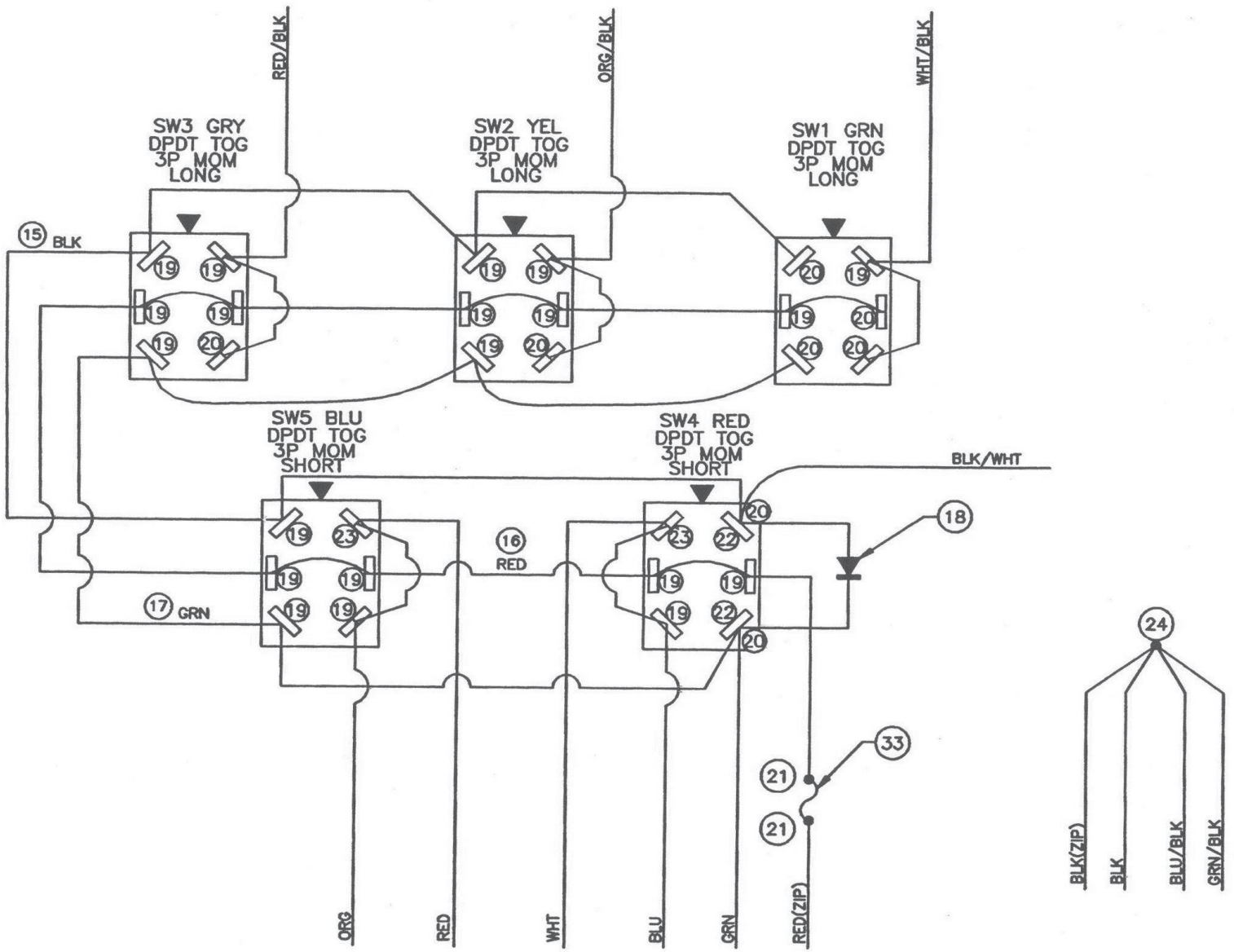
ILLUSTRATED PARTS LIST

Parts List: Control Console – 60-66 Ft. Boom

ITEM	PART NO.	QTY.	DESCRIPTION
1	210-710	1	STR RLF HEYCO .23"-.53" ID, HOLE DIA .886"
2	212-184	2	SCREW 6-32 X 3/8 OVAL HD BLK
3	212-202	2	INSERT 6-32 X 3/8 BRASS
4	212-215	2	KNOB 1/4-20 FEMALE
5	212-231	2	SCREW WELDED 1/4-20 X .500
6	213-335	2	WASHER NYLON .257 X .875 X .060
7	214-002	3	CABLE TIE BLACK 7"
8	219-300	1	BRKT HSNG MONITOR
9	230-057	1	BAG POLY CLR 14 X 18 2MIL W/LOGO
10	232-050	2	DECL S/N (SILVER)
11	232-059	1	DECL GOLD/BLK 1.5 X .5
12	250-007	2	SW TOG DPDT 3P MOM SHORT
13	250-013	3	SW TOG DPDT 3P MOM LONG
14	250-023	5	SW TOG BOOT OPN GRY
15	252-058	18"	WIRE 18GA BLK
16	252-059	24"	WIRE 18GA RED
17	252-060	18"	WIRE 18GA GRN
18	254-001	1	DIOD D116A2
19	255-002	20	TRM T-TAP F PO BLU
20	255-006	8	TRM PO F NON ISN 20/18GA
21	255-030	2	TRM SPLICE CLOSED END 16-18GA
22	255-070	2	TRM PO M/F 14-16GA
23	255-119	2	TRM PO F INS 16-14GA
24	255-285	1	TRM SPLICE CLOSED END LRG
25	259-005	1	SW TOG GRIP VNYL RED .187
26	259-015	1	SW TOG GRIP VNYL BLU .187
27	259-002	1	SW TOG GRIP VNYL YEL .187
28	259-023	1	SW TOG GRIP VNYL GRN .187
29	259-027	1	SW TOG GRIP VNYL GRY .187
30	311-083	1	ENCL FP DRL MNTR/FD DECL-5X15/32 3SA
31	314-217	1	HARNESS R/B WIRE SERIES 3 P/8'
32	319-725	1	ENCL DRILL MNTRBX FH-7/8" STR RLF
33	319-769	1	FUSEHOLDER PM ASSY 10A /.5'
34	320-184	1	HRN 12CON 18GA DTP KEY A 12P(12) 11' END CAP

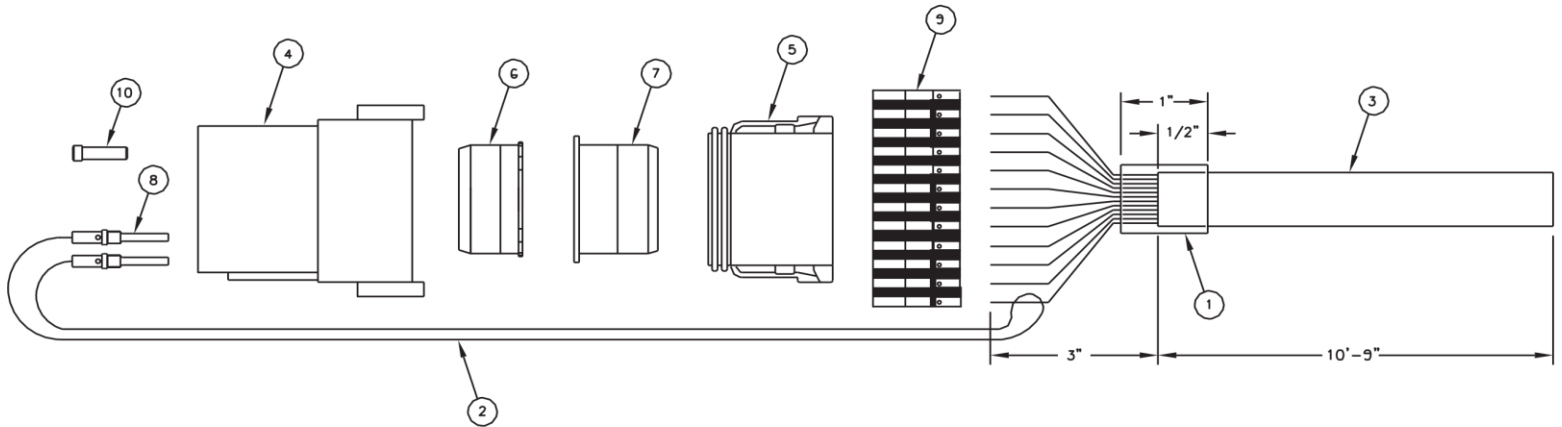
Control Console Switch Diagram – 60-66 Ft. Boom

SWITCH WIRING DIAGRAM

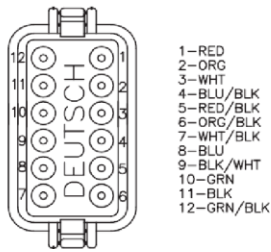


▲ = NOTCH LOCATION

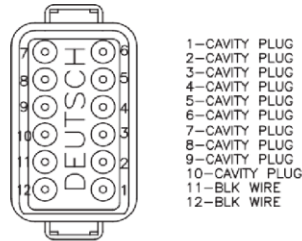
Wiring Harness – 60-66 Ft. Boom



PIN OUT DETAIL FOR PLUG



PIN OUT DETAIL FOR RECEPT



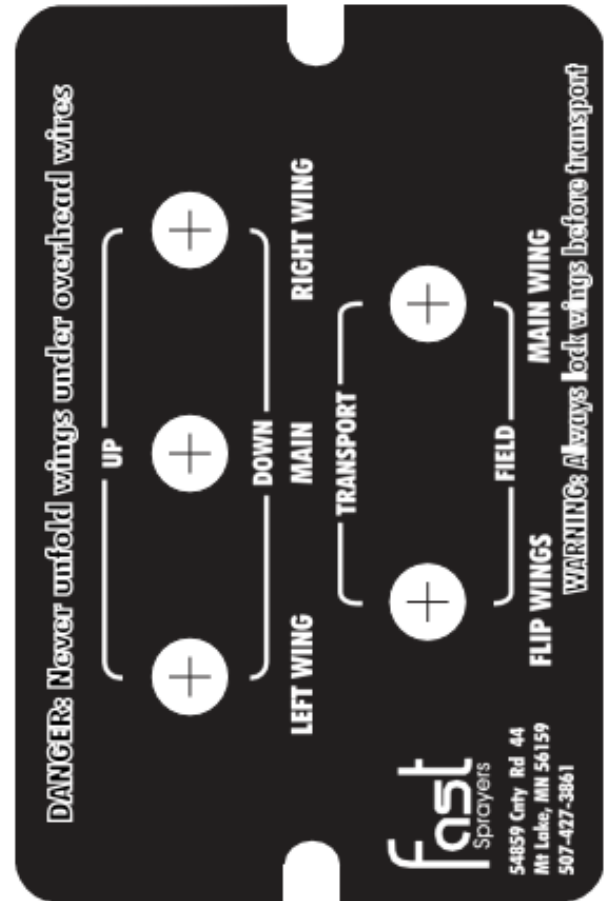
Parts List: Wiring Harness – 60-66 Ft. Boom

ITEM	PART NO.	QTY.	DESPRIPTION
1	231-009	1"	SHRINKTUBING .500" BLK
2	252-058	12"	WIRE 18GA BLK
3	252-064	11'	CABLE 12CON 18GA PVC GRY
4	255-212	1	CONN DEUT DT RECPT 12PIN
5	255-213	1	CNTR DEUTSCH 12PIN PLUG DT
6	255-214	1	CONN DEUT LOCKWEDGE 12PIN DTP
7	255-215	1	CNTR LOCK WEDGE 12PIN DTP
8	255-977	2	CONT DEUT PIN 16-18GA
9	255-978	12	CNTR DEUTSCH SOCKET 16/18GA
10	255-979	10	CONT DEUT CAVITY PLUG

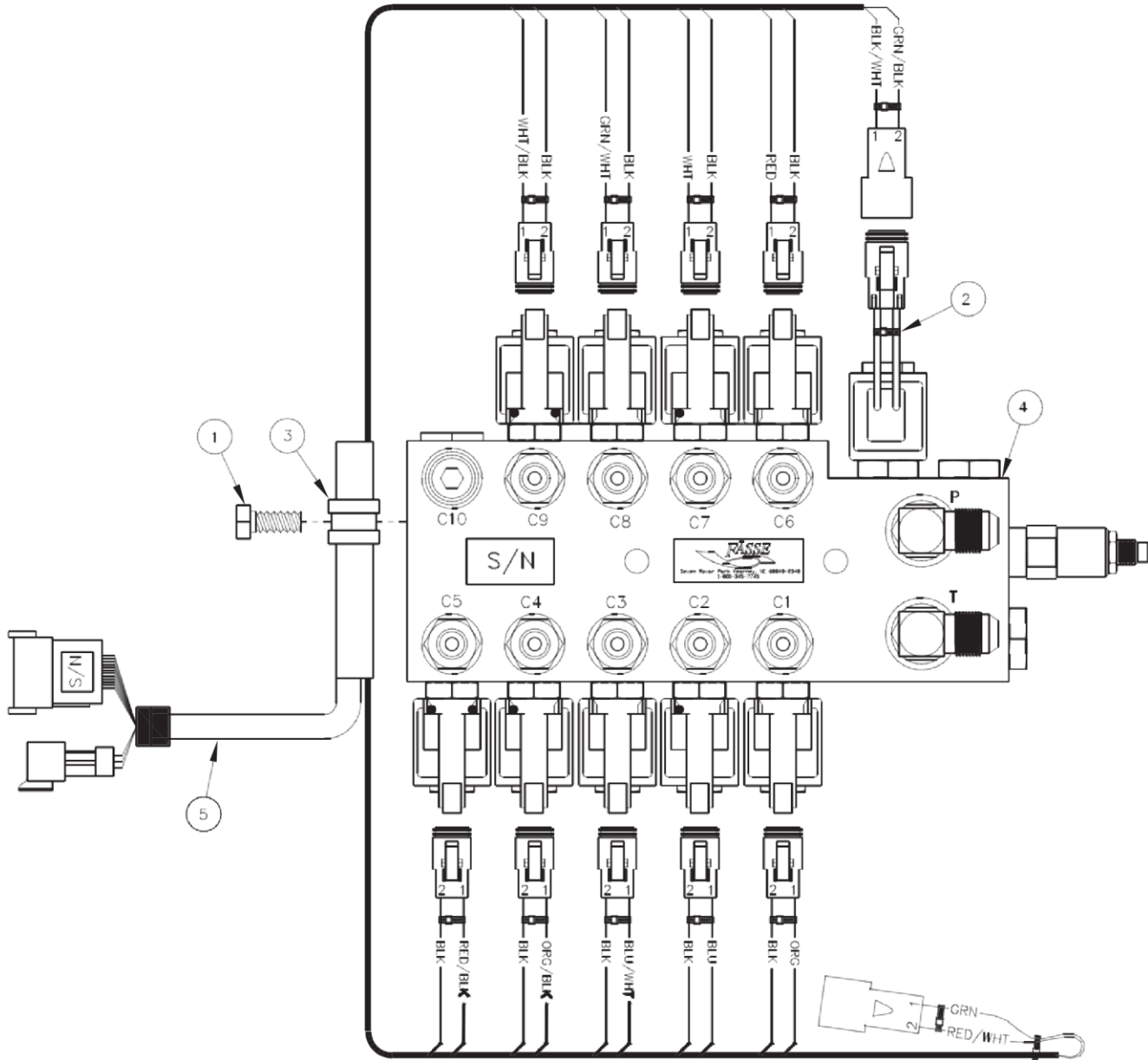
Control Console Decal – 60-66 Ft. Boom

700-0805-4103 & 700-0805-4104

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



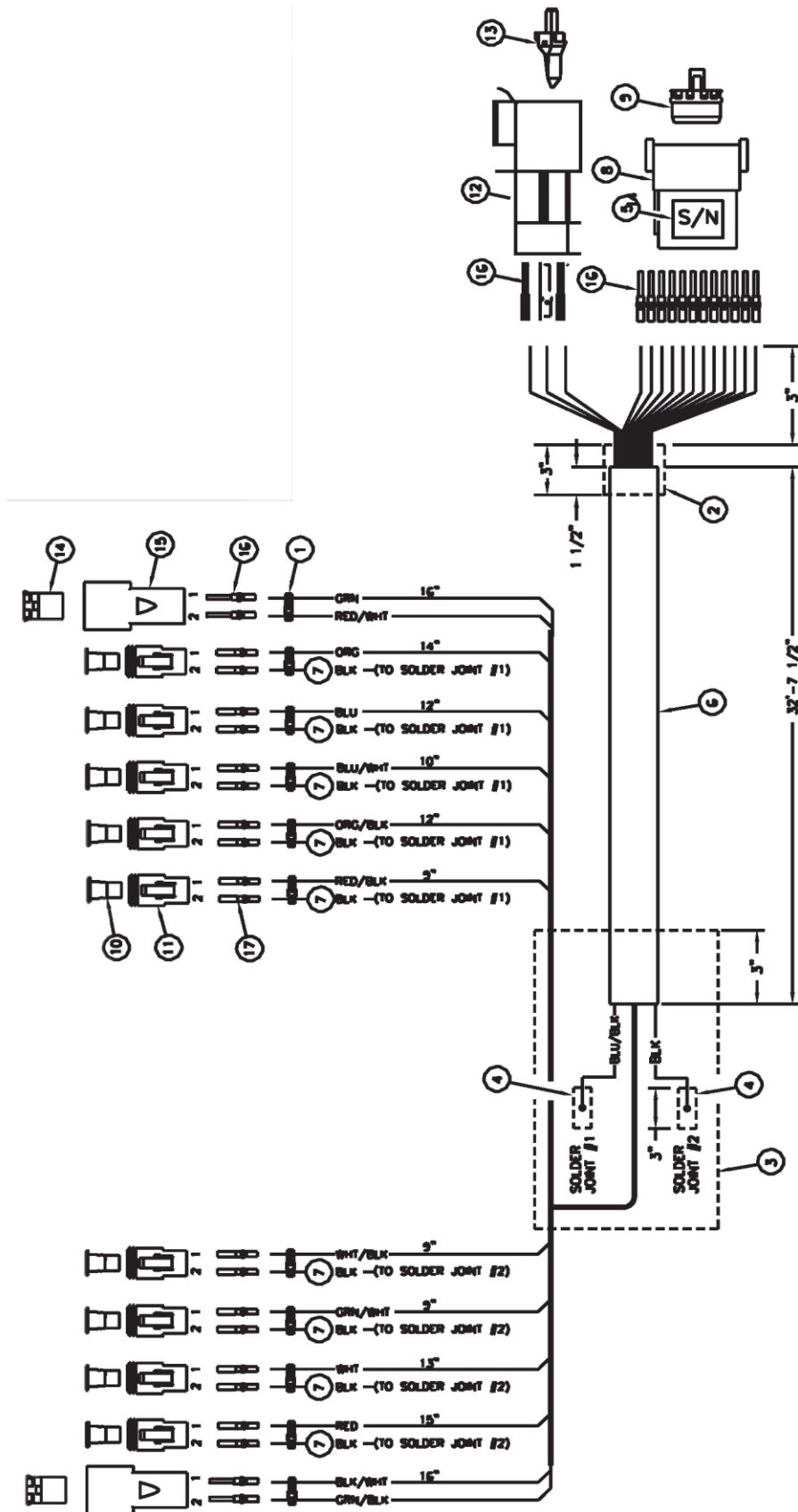
Hydraulic Control Valve Wiring Harness – 80-90-100 Ft. Boom



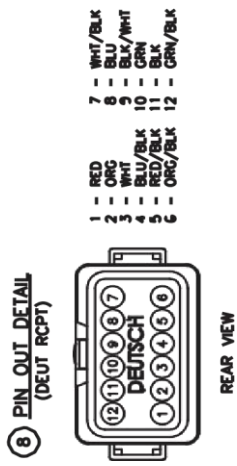
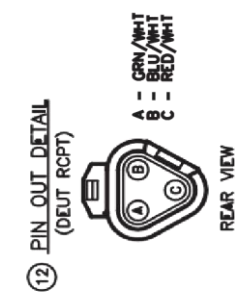
Parts List: Hydraulic Control Valve Wiring Harness – 80-90-100 Ft. Boom

ITEM	PART NO.	QTY.	DESCRIPTION
1	212-025	1	BOLT 5/16-18 X .75
2	214-002	13	CABLE TIE BLACK 7"
3	255-026	1	LOOM CLAMP .5" ID METAL/RUBB
4	302-780	1	MANI ASSY 0806 4DA 1SA CLSD DTR 12V WP6400-4(7)+6(2)R.047 P6801-8
5	319-724	1	HRN ASSY 15CON 18GA DTR KEY A 12P(12)-DTR3P(3)-9DTP2P(2) DTR2P(2)) 33'

Hydraulic Control Valve Wiring Harness



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



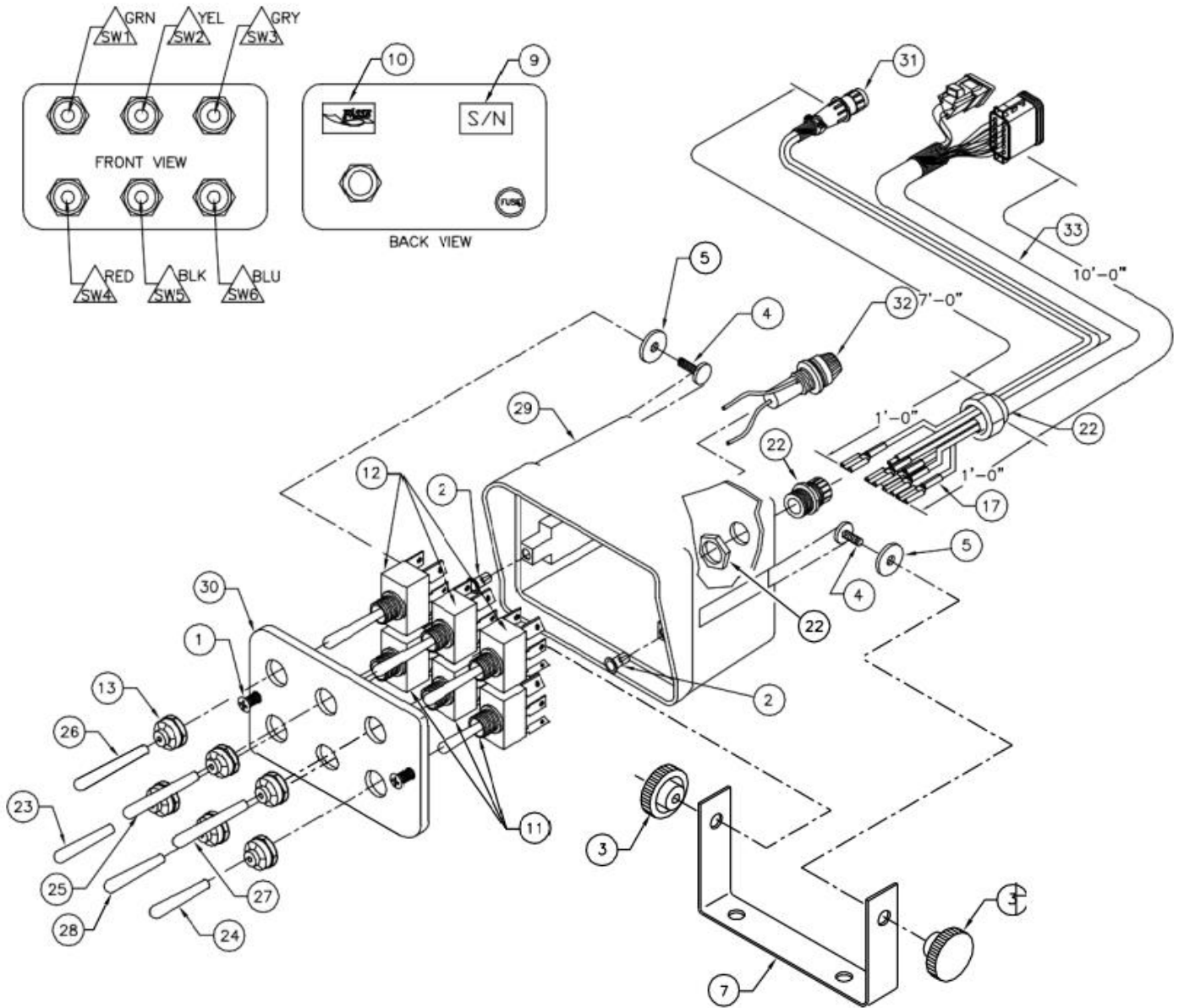


ILLUSTRATED PARTS LIST

Parts List: Hydraulic Control Valve Wiring Harness

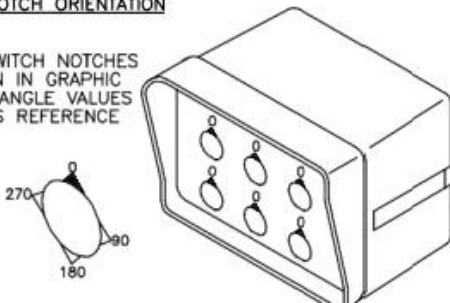
ITEM	PART NO.	QTY.	DESCRIPTION
1	214-002	11	CABLE TIE BLACK 7"
2	231-007	3"	SHRINKTUBING .625
3	231-008	6"	SHRINKTUBING .750
4	231-313	6"	SHRINKTUBING .313
5	232-050	2	DECAL S/N (SILVER)
6	252-020	35'	CABLE 15CON 18GA
7	252-058	13'	WIRE 18GA BLK
8	255-212	1	CNTR DEUTSCH 12PIN RECEPT DT
9	255-214	1	CNTR DEUTSCH LOCK WEDGE 12PIN DTR
10	255-505	9	CNTR DEUTSCH LOCK WEDGE 2PIN DTP
11	255-801	9	CNTR DEUTSCH 2PIN PLUG DT
12	255-811	1	CNTR DEUTSCH 3PIN RECPT DT
13	255-812	1	CNTR CEUTSCH LOCK WEDGE 3PIN DTR
14	255-969	2	CNTR DEUTSCH LOCK WEDGE 2PIN DTR
15	255-971	2	CNTR DEUTSCH 2PIN RECEPT DT
16	255-977	19	TRM PIN DEUTSCH 16/18GA
17	255-978	18	TRM SOCKET DEUTSCH 16/18GA

Control Console – 80-90-100 Ft. Boom



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.



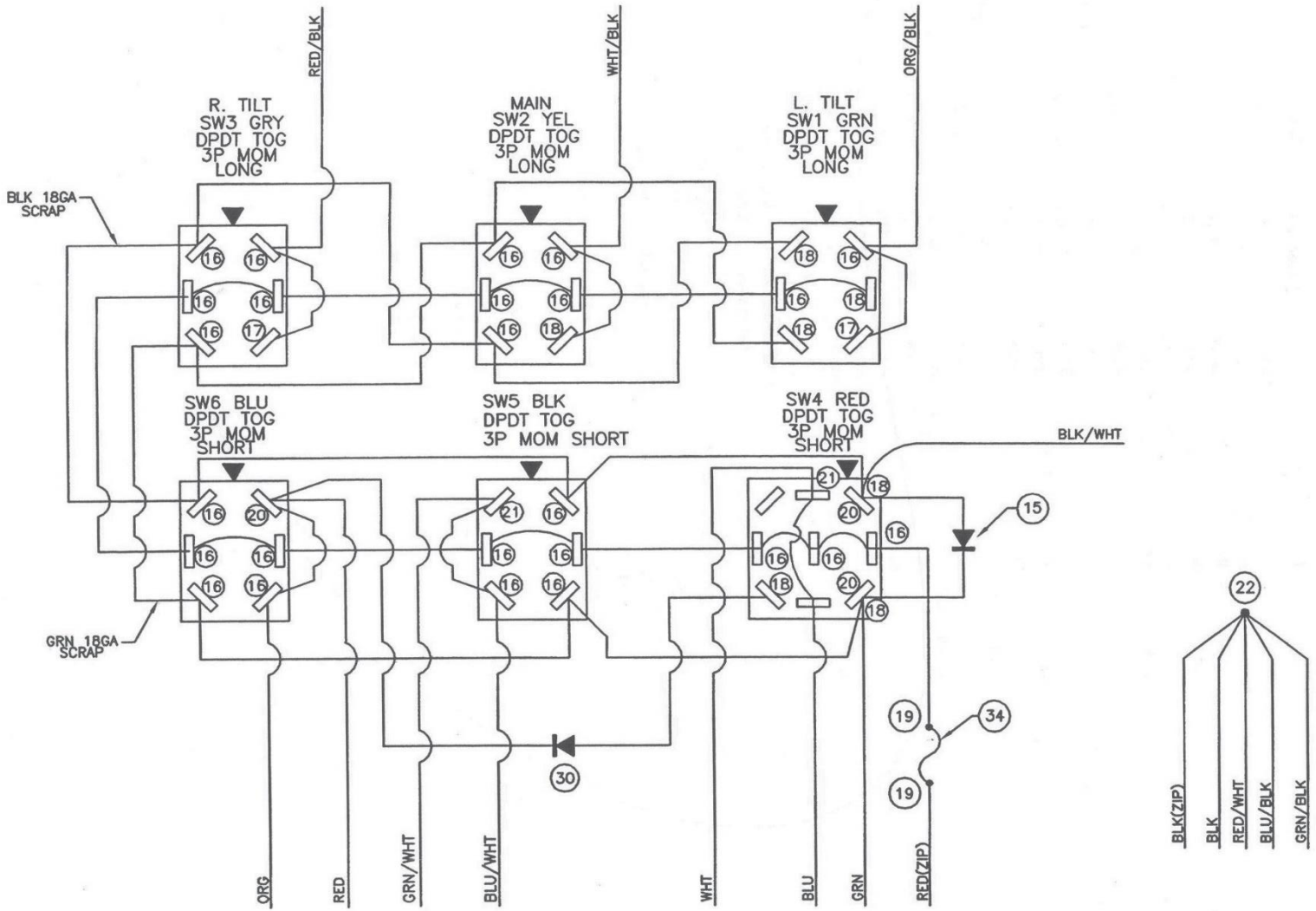
ILLUSTRATED PARTS LIST

Parts List: Control Console – 80-90-100 Ft. Boom

ITEM	PART NO.	QTY.	DESCRIPTION
1	212-184	2	SCREW 6-32 X 3/8 OVA HD BLK
2	212-202	2	INSERT 6-32 X 3/8 BRASS
3	212-215	2	KNOB 1/4-20
4	212-231	2	SCREW WELDED 1/4-20 X .500
5	213-335	2	WASHER NYLON .257 X .875 X .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	255-00	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"- .75" ID, HOLE DIA 1.115"
23	259-005	1	SW TOG GRIP VNYL RED .187
24	259-015	1	SW TOG GRIP VNYL BLU .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 BLK .187"
29	???	1	???
30	304-751	1	ENCL DRILL FP MNTR SW6 F00204
31	314-217	1	HARNESS R B WIRE SERIES 3P8
32	319-769	1	FUSE HOLDER PM ASSY10A / .5'
33	320-760	1	IRN 15CON 18GA DTP KEY A 12P(12) DTP3P(3) 11'

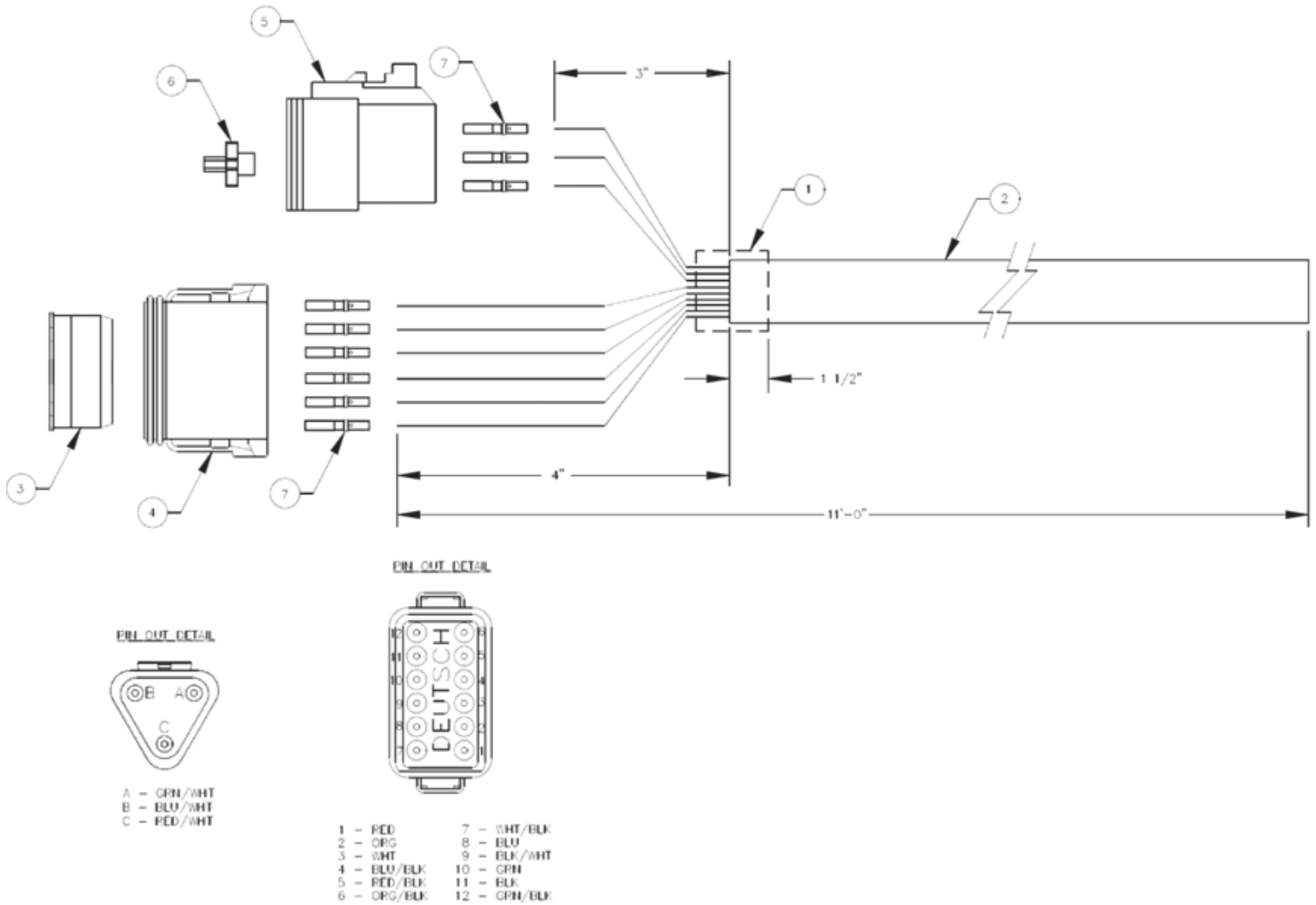
Control Console Switch Diagram

SWITCH WIRING DIAGRAM



▲ = NOTCH LOCATION

Wiring Harness



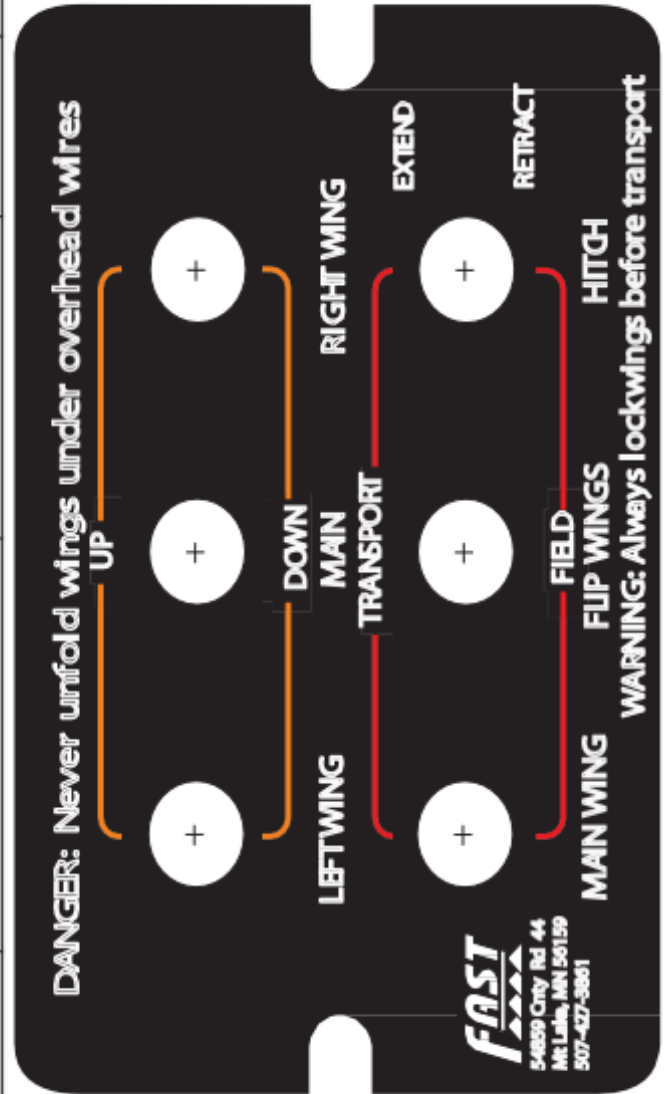
Parts List: Wiring Harness

ITEM	PART NO.	QTY.	DESCRIPTION
1	231-007	3"	SHRINKTUBEING .625
2	252-020	11'	CABLE 15CON 18GA
3	255-215	1	CNTR LOCK WEDGE 12PIN DTP
4	255-756	2	CON DEUTSCH PLUG 12P KEY A
5	255-813	1	CNTR DEUTSCH 3PIN PLUG DT
6	255-817	1	CNTR DEUTSCH LOCK WEDGE 3PIN DTP
7	255-978	15	CNTR DEUTSCH DOCKET 16/18GA

Control Console Wiring Harness

700-0806-4105 120' Fixed Tongue

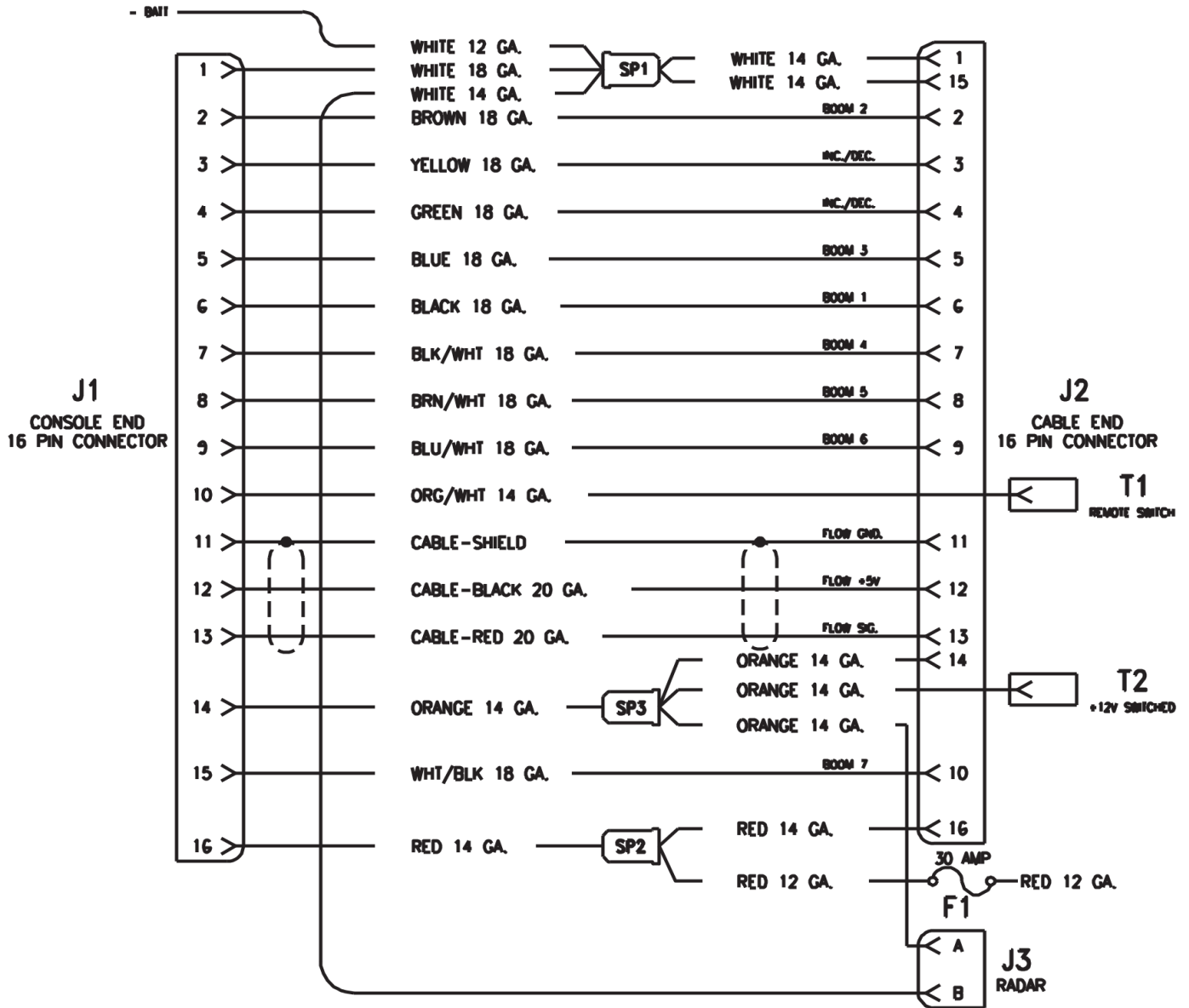
Switch No.	Boot Color	Switch Position	Hot Wires	Pin Out Location	Pressure Ports	Tank Ports	Function
1 Long	Green	Up (mom)	Org/Blk & Grn	6-12P, 10-12P	C4		Lt. Wing Up
		Center (stat)					Off
		Down (mom)	Org/Blk & Grn & Blk/Wht	6-12P, 10-12P, 9-12P		C4	Lt. Wing Down
2 Long	Yellow	Up (mom)	Wht/Blk & Grn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



Control Console Wiring Harness

CABLE, CONSOLE, SCS 460, 6 BOOM, 10'

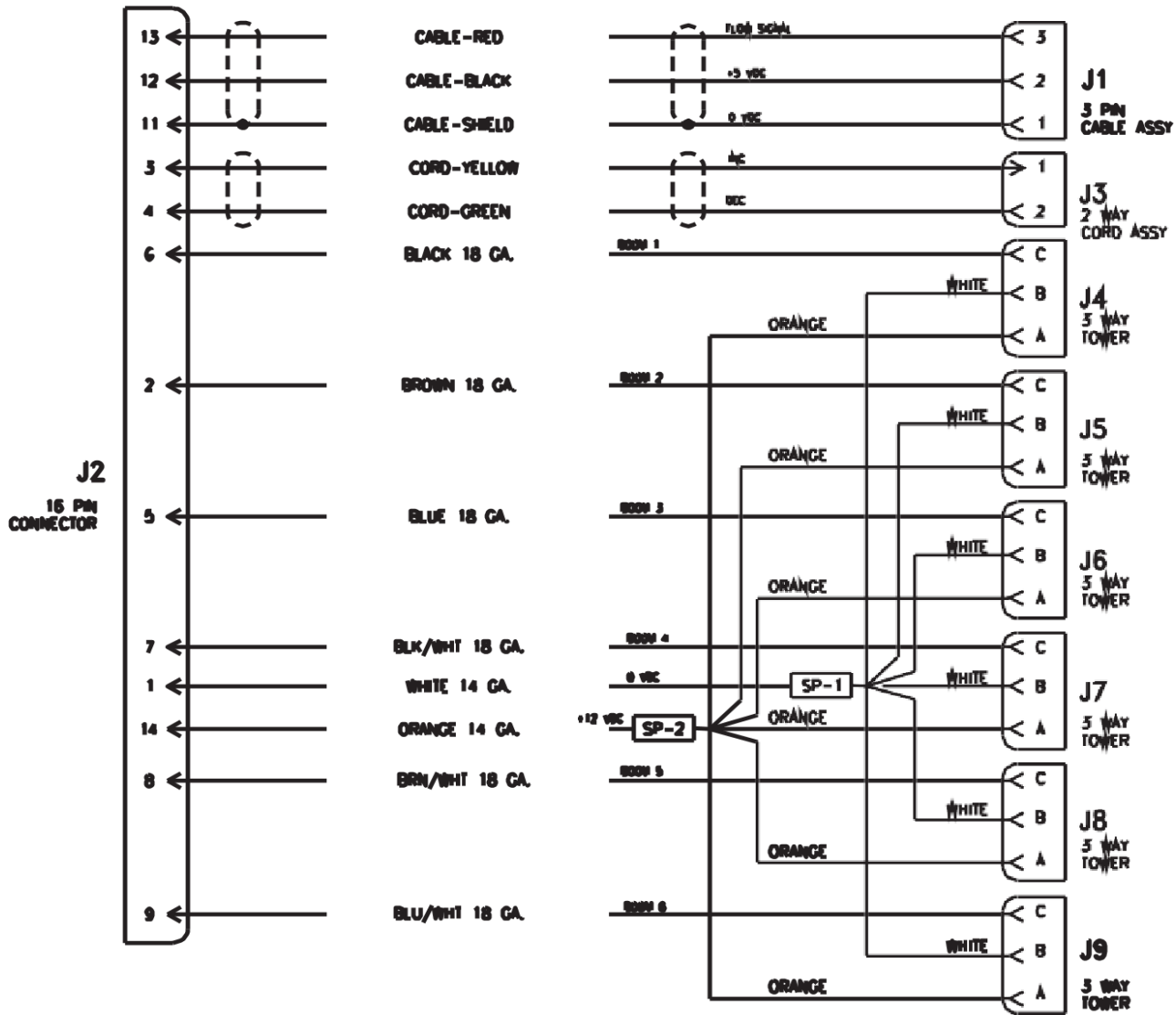
115-0171-0850



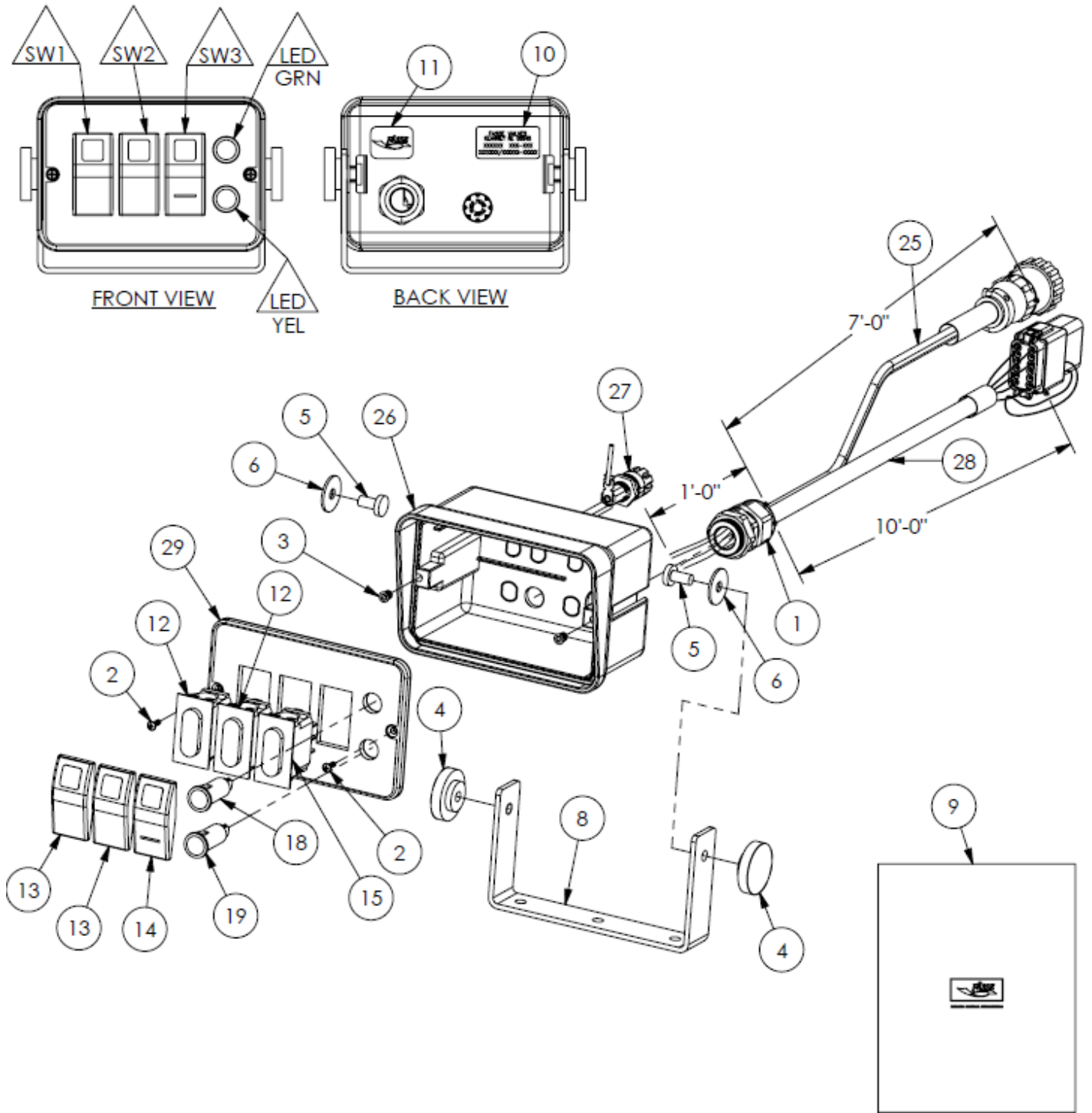
Control Console Wiring Harness

CABLE, 12' PRODUCT, 6 BOOM WITH 3 PIN TOWERS

115-0171-129



Cab Box for Electric Valving Option





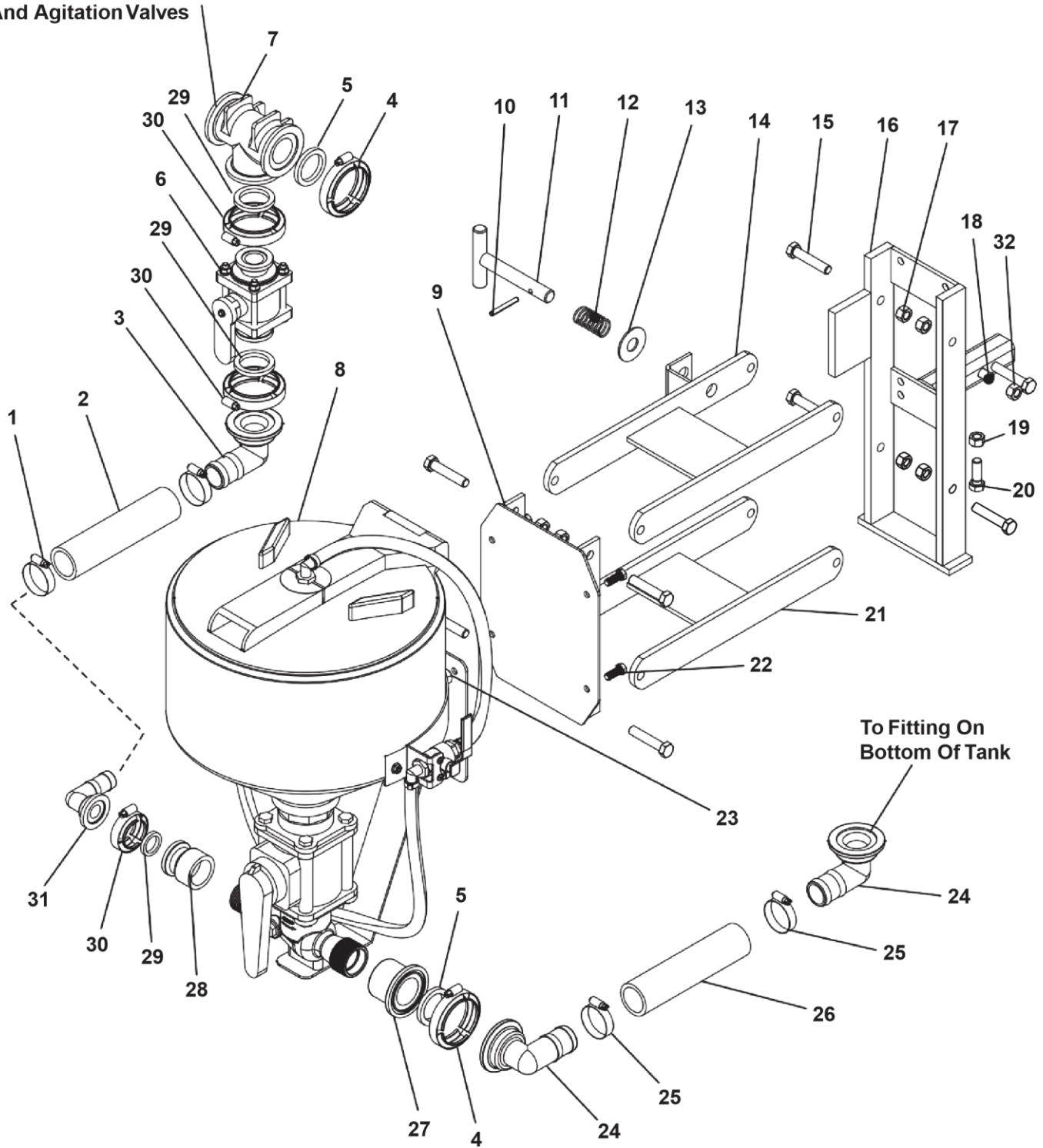
ILLUSTRATED PARTS LIST

Parts List 632155: Cab Box for Electric Valving Option

ITEM	PART NO.	QTY.	DESCRIPTION
1	210-710	1	STR RLF HEYCO .23"-.54"ID, HOLE DIA .886"
2	212-184	2	SCREW PHIL PAN #6-32X3/8" BLK
3	212-202	2	SCREW INSERT BRASS #6-32X3/8"
4	212-215	2	KNOB FEMALE 1/4"-20
5	212-231	2	SCREW WELDED 1/4"-20X.625"
6	213-335	2	WASHER NYLON FLAT 1/4"-20
7	214-002	3	CABLE TIE BLK 8.5"
8	219-300	1	BRKT MNTR BLK AL
9	230-057	1	BAG POLY 14X 18 2MIL LOGO
10	232-050	1	DECL S/N SILVER
11	232-058	1	DECAL FASSE BLK/GOLD 1"X.75" RND CRNR
12	250-242	2	SW RCK CONTURA BODY ONLY SPST 2P STAT CLEAR LED 12V
13	250-243	2	SW RCK CONTURA II ACTUATOR ONLY RED LENS BLK
14	250-244	1	SW RCK CONTURA II ACTUATOR ONLY RED/RED LENS BLK
15	250-245	1	SW RCK CONTURA BODY ONLY SPST 3P STAT CLEAR/CLEAR LEDS 12V
16	252-058	14"	WIRE 18GA BLK
17	252-059	14"	WIRE 18GA RED
18	254-179	1	LED GRN 12V 5/8"DIA SNAP FLUSH 1/4" MALE TRM
19	254-182	1	LED YEL 12V 5/8"DIA SNAP FLUSH 1/4" MALE TRM
20	255-002	6	TRM PO T-TAP F 18-14GA
21	255-006	7	TRM PO F INS 22-18GA
22	255-030	3	TRM SPLICE CLOSED END 16-18GA
23	255-119	1	TRM PO FINS 16-14GA
24	255-285	1	TRM SPLICE CLOSED END LRG 14-16GA
25	314-001	1	HRN 2CON 14GA AMP PLUG 3P(2) 8"
26	319-725	1	ENCL MNTR BOX 4.75"X3"X2"
27	320-529	1	FUSE HOLDER PM ASSY 7.5A .5'
28	320-607	1	HRN 12CON 18GA DTP KEY B 12P(12) 11' END CAP
29	320-609	1	ENCL DRILL FP MNTR RCK3 LED2 500204

HYPRO Cleanload Eductor & Mounting

Installs In Line With Rinse
And Agitation Valves



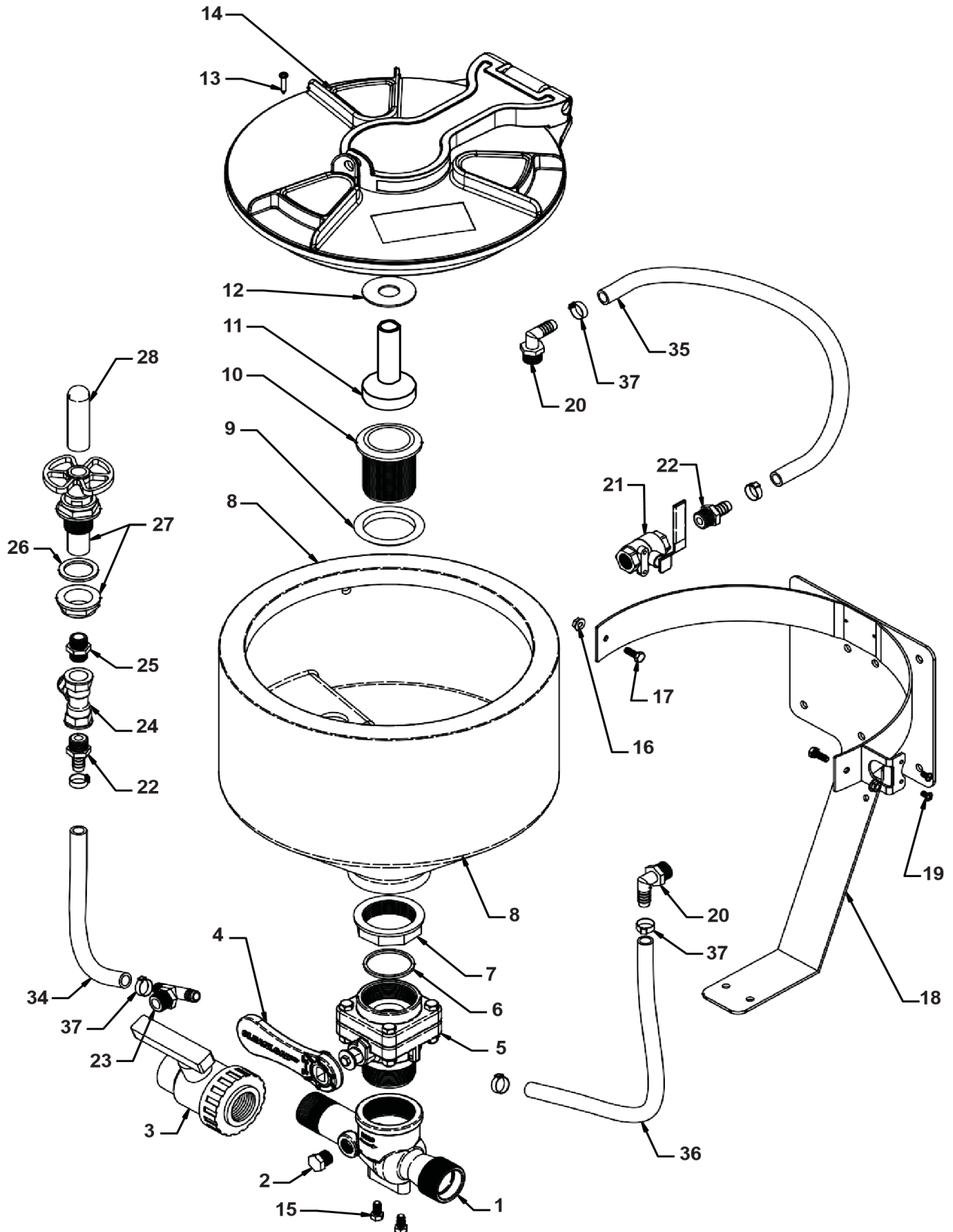


ILLUSTRATED PARTS LIST

Parts List: HYPRO Cleanload Eductor & Mounting

ITEM	VENDOR PART NO.	PART NO.	DESCRIPTION	QTY.
1	64020H	540015	CLAMP, HOSE 1.25"	2
2	1-1/4BH200	510013	HOSE, SPRAY 1.25 EDPM	6.5
3	M100125BRB90	530065	MANIFOLD ELBOW 1 X 1.25 HB	2
4	FC200	540001	MANIFOLD CLAMP 1" STANDARD PORT	3
5	150G	530014	GASKET 1" STANDARD PORT	3
6	MV100CF	500005	MANIFOLD VALVE STANDARD PORT	1
7	M200100TEE	530075	MANIFOLD TEE	1
8	3375P-05T5-05	570039	HYPRO CLEADLOAD EDUCTOR	1
9		9250	PLATE ADAPTER	1
10		687	PIN, SPRING 1.25 X 2" ZP	1
11		7981	HANDLETEE	1
12	67	790001	SPRING, CENTURY 2" FREE LENGTH	1
13		262	WASHER, FLAT 3/4" ZP	1
14		7928	LINK, UPPER	1
15		153	BOLT, HH 1/2 X 1.5 GR5 ZP	8
16		11632	BACK PLATE	1
17		231	NUT, HH 1/2" NYLOCK ZP	8
18		154	BOLT, HH 1/2 X 2.5 GR5 ZP	1
19		223	NUT, HH 1/2" JAM ZP	1
20		152	BOLT, HH 1/2 X 1" GR5 ZP	1
21		7925	LINK, LOWER	1
22		128	BOLT, HH 3/8 X 1" GR5 ZP	4
23		769	NUT, HH 3/8 " WHIZLOCK ZP	4
24	M200150BRB90	530080	MANIFOLD ELBOW 2 X 1.5" HB	2
25	64024H	540016	CLAMP, HOSE 1.5"	2
26	1-1/2BH200	510014	HOSE, SPRAY 1.5 EDPM	5
27	CP46066-PP	530196	MANIFOLD ADAPTER 2 X 1.5 FPT	1
28	CPC45512-PP	530194	MANIFOLD ADAPTER 2 X 1.25 FPT	1
29	100G	530008	GASKET 1"	3
30	FC100	540000	MANIFOLD CLAMP 1"	3
31	M100125BRB90	530065	MANIFOLD ELBOW 1 X 1.25" HB	1
32		771	1/2" WIZLOCK NUT	8

HYPRO Cleanload Eductor



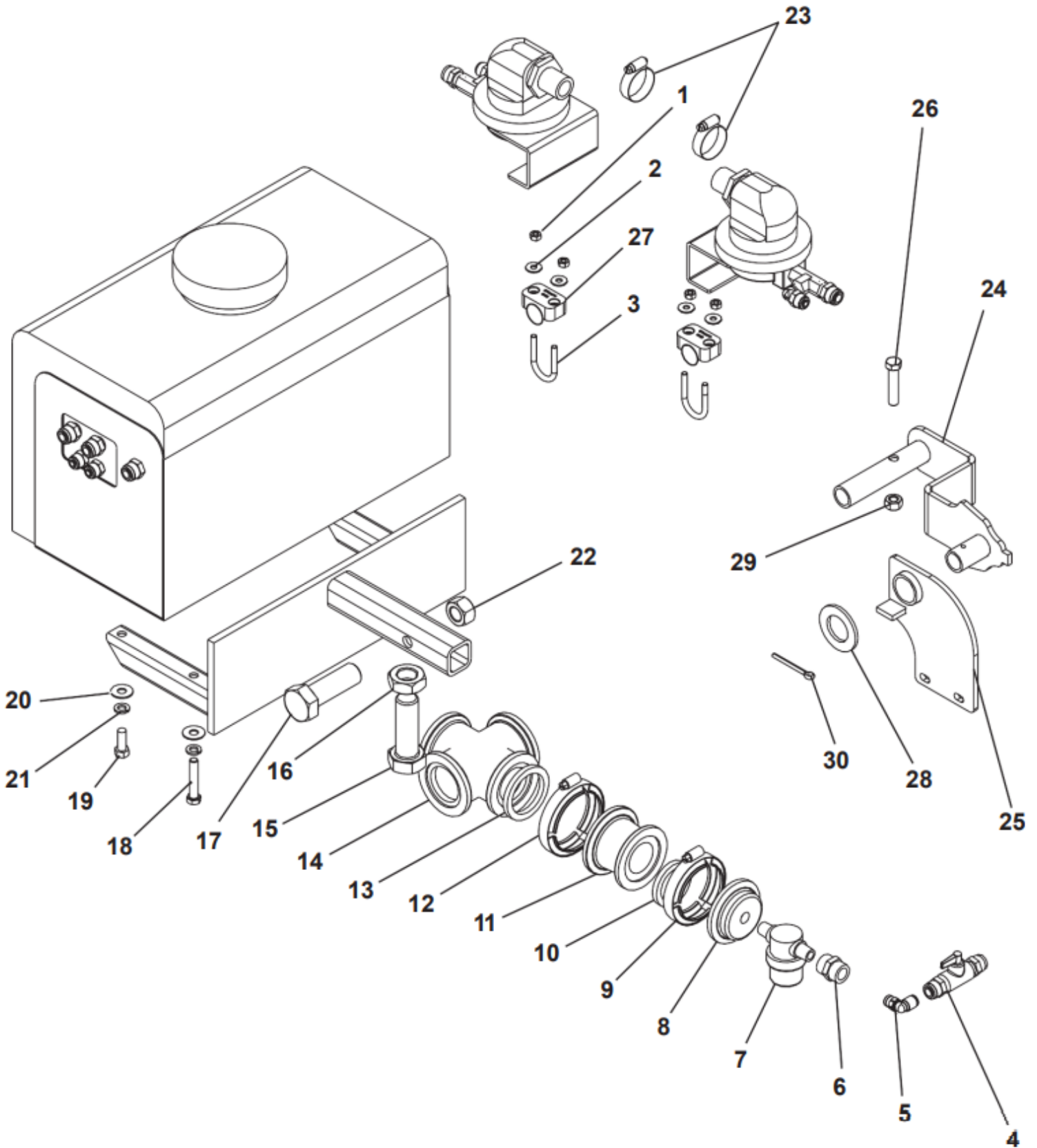


ILLUSTRATED PARTS LIST

Parts List 570039: HYPRO Cleanload Eductor

ITEM	VENDOR PART NO.	PART NO.	DESCRIPTION	QTY.
1	3371-0034S		CLEANLOAD EDUCTOR	1
2	3F12		PLUG, 1/2"	11
3	4541135N		BALL VALVE, 1-1/4 SINGLE UNION	1
4	2800-0027		HANDLE, CLEANLOAD	1
5	9950-0043		BALLVALVE	1
6	1700-0045		GASKET: 2" BSP	1
7	205070		LOCKING RING, 2"	1
8	1530-0016		TANK, 5.8 GALLON	1
9	2270-0119		GASKET: 2", TAPERED	1
10	220070		DRAIN HEAD, 2"	1
11	510120		TANK RINSE	1
12	1410-0112		SLINGER RING	1
13	2210-0133		SCREW, #6 X 1"	8
14	TL12-0006		TANK LID	1
15	2210-0003		BOLT, 5/16-18 X 5/8	2
16	2250-0077		NUT, FLANGED 1/4-20	2
17	2210-0134		BOLT, 1/4-20 X 3/4 SS	2
18	1510-0103		FRAME, BACK MOUNT (SHOWN)	1
19	2210-0132		SCREW, 10-24 X .375	2
20	3EL12		HB ELBOW 1/2"	2
21	78-12		VALVE, SS TANK RINSE	1
22	3A12		HB, 1/2 MNPT	2
23	3T12T		HB TEE, 1/2 MNPT TO 1/2 HB	1
24	3TT12		TEE, 1/2 FNPT	1
25	3M12		NIPPLE, 1/2"	1
26	G40004		GASKET, 1"	1
27	C-510100		VALVE, BOTTLE RINSE BASE ASSY.	1
28	510110		BOTTLE RINSE HEAD	1
34	2900-0072		HOSE, BOTTLE RINSE, 1/2" EPDM	1
35	2900-0073		HOSE, TANK RINSE, 1/2" EPDM	1
36	2900-0074		HOSE, VALVE FEEDER, 1/2" EPDM	1
37	10500013		HOSE CLAMP, 1/2"	6
N/S	6031-0378		LABEL/INSTRUCTIONS	1

Richway Direct Injection Foamer & Mounting



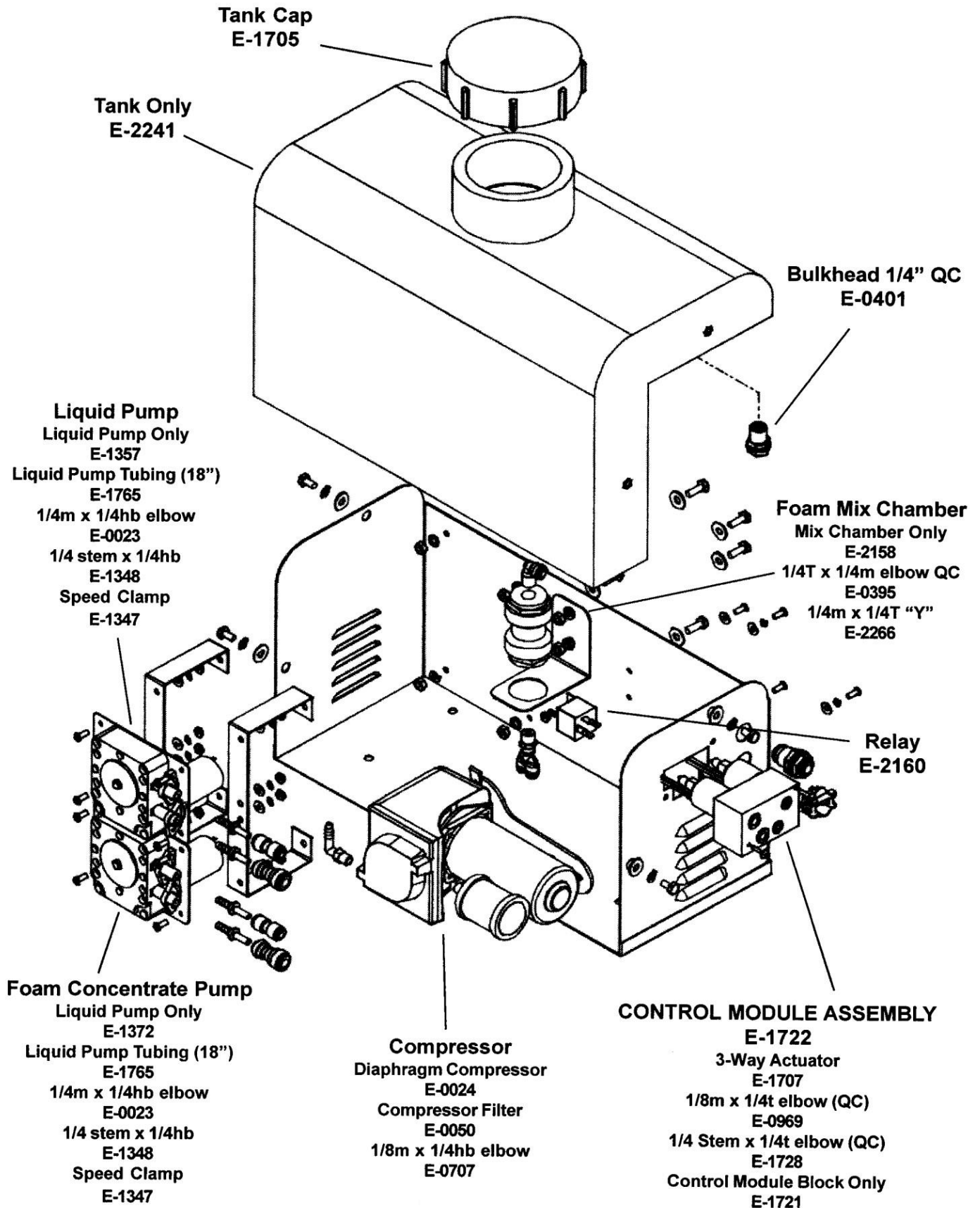


ILLUSTRATED PARTS LIST

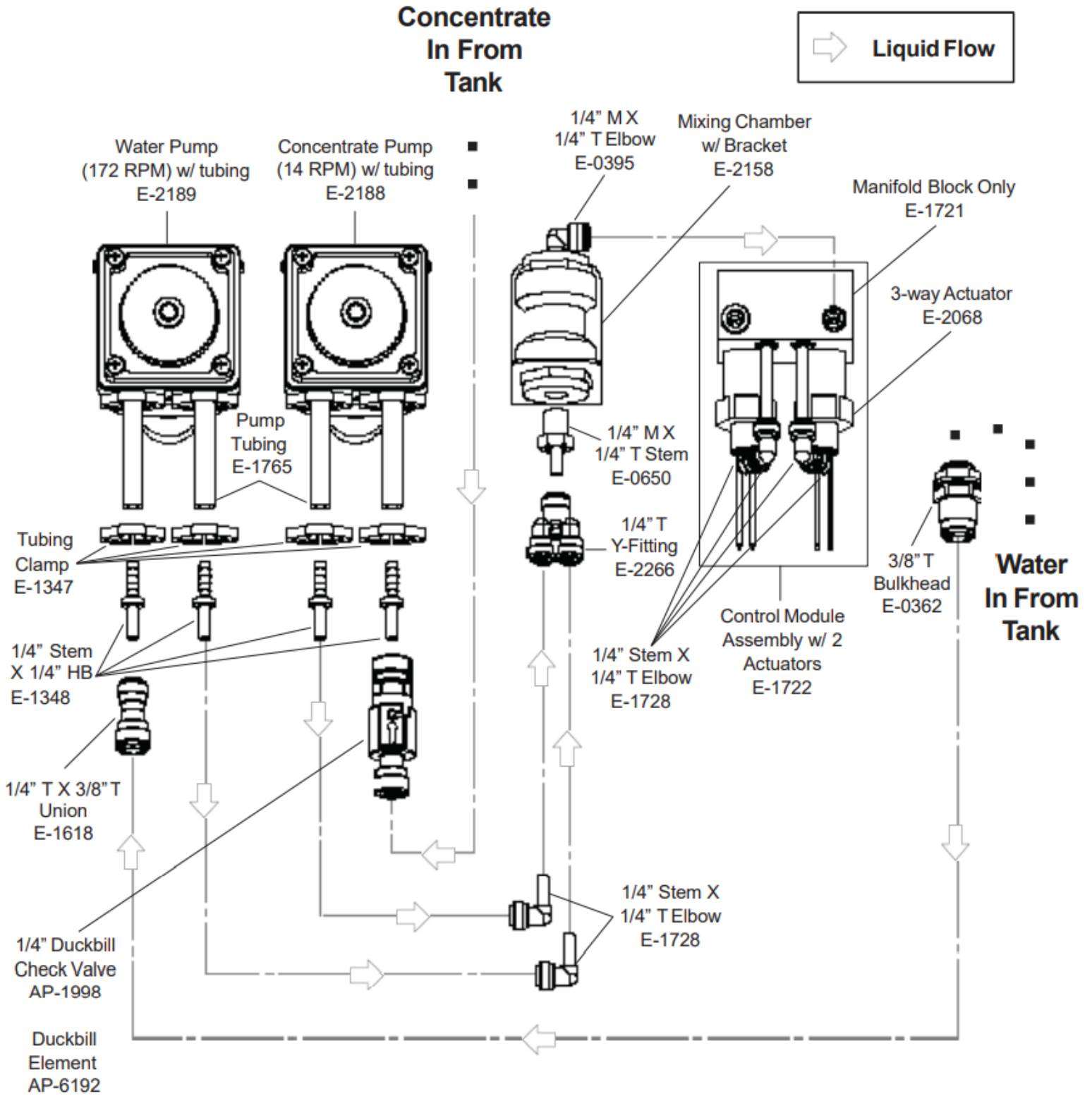
Parts List: Richway Direct Injection Foamer & Mounting

ITEM	VENDOR PART NO.	FAST PART NO.	DESCRIPTION	QTY.
1		647	NUT, HH 1/4" NYLOCKSS	8
2		663	WASHER, FLAT 1/4" SS	8
3	2M1473140	590048	U-BOLT 1/4 X 1.5SS	4
4	44103289	530007	VALVE, SHUT OFF 3/8 Q-LOCK	1
5	44103231	530006	Q-LOCK ADAPTER FITTING 3/8"90°	1
6	3FC38	530217	COUPLER, 3/8" FPT	1
7	RVM66NE40C	530000	STRAINER 40 MESH 3/8"MPT	1
8	M200PLG038	530095	MANIFOLD PLUG X 3/8"FPT	1
9	FC200	540001	MANIFOLD CLAMP 2" STANDARD PORT	1
10	150G	530014	GASKET 2" STANDARDPORT	1
11	M220200CPG	530102	MANIFOLD COUPLING 2" FULL PORT X 2" STANDARD PORT	1
12	FC220	540002	MANIFOLD CLAMP 2" FULL PORT	1
13	200G	530019	GASKET 2" FULLPORT	1
14	M220CR	530090	MANIFOLD CROSS, 2" FULLPORT	1
15		152	BOLT, HH 1/2 X 1 GR5ZP	1
16		223	NUT, HH 1/2" JAMZP	1
17		156	NUT, HH 1/2 X 3" GR5ZP	1
18		130	BOLT, HH 3/8 X 2" GR5ZP	2
19		128	BOLT, HH 3/8 X 1" GR5ZP	2
20		250	WASHER, LOCK 3/8 ZP	4
21		258	WASHER, FLAT 3/8 ZP	4
22		771	NUT, HH 1/2" WHIZLOCKZP	1
23	64016A	540014	CLAMP, HOSE1"	2
24		14275	FOAMERINSERT	2
25		14279	FOAMERFLIPPER	2
26		142	BOLT HH 7/16 X 2" GR5ZP	2
27	3254PP	540029	TUBECLAMP	2
28		789	WASHER, NR 1-1/4 X 14 CP	AR
29		597	NUT, HH 7/16"TOPLOCK	2
30		576	COTTER PIN, 3/16 X 2ZP	2
NS		790	WASHER, NP 1-1/4 X 10CP	AR
NS	2T20-003	510023	1/4" LINEAR LOW DENSITY POLY TUBING	AR
NS	2T20-604	510024	3/8" LINEAR LOW DENSITY POLY TUBING	AR
NS	12015003	510005	PVC WATER SUCTION HOSE 1"	20'

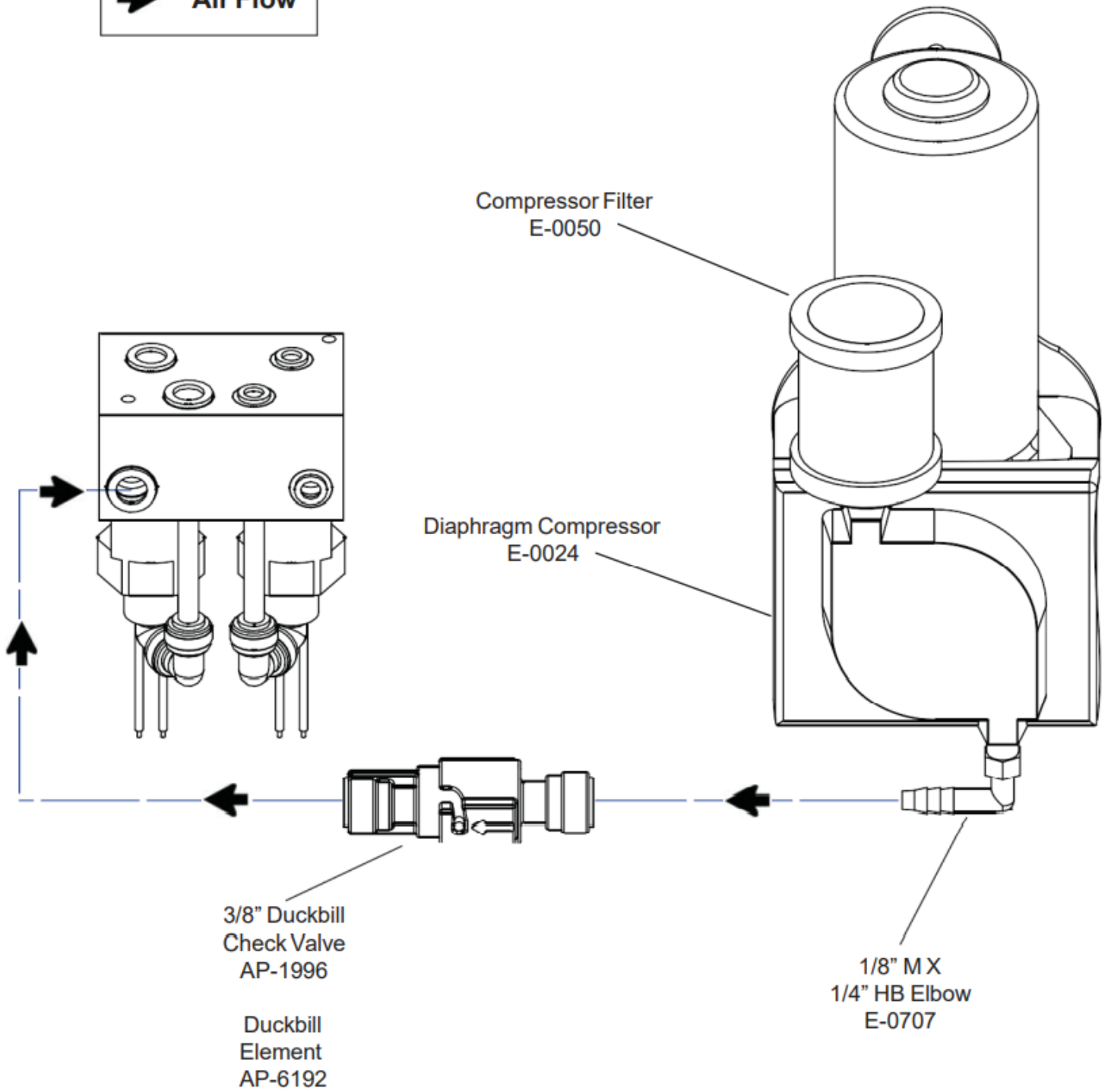
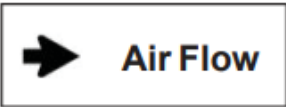
Richway Foam Marker – 3 Gallon Tank



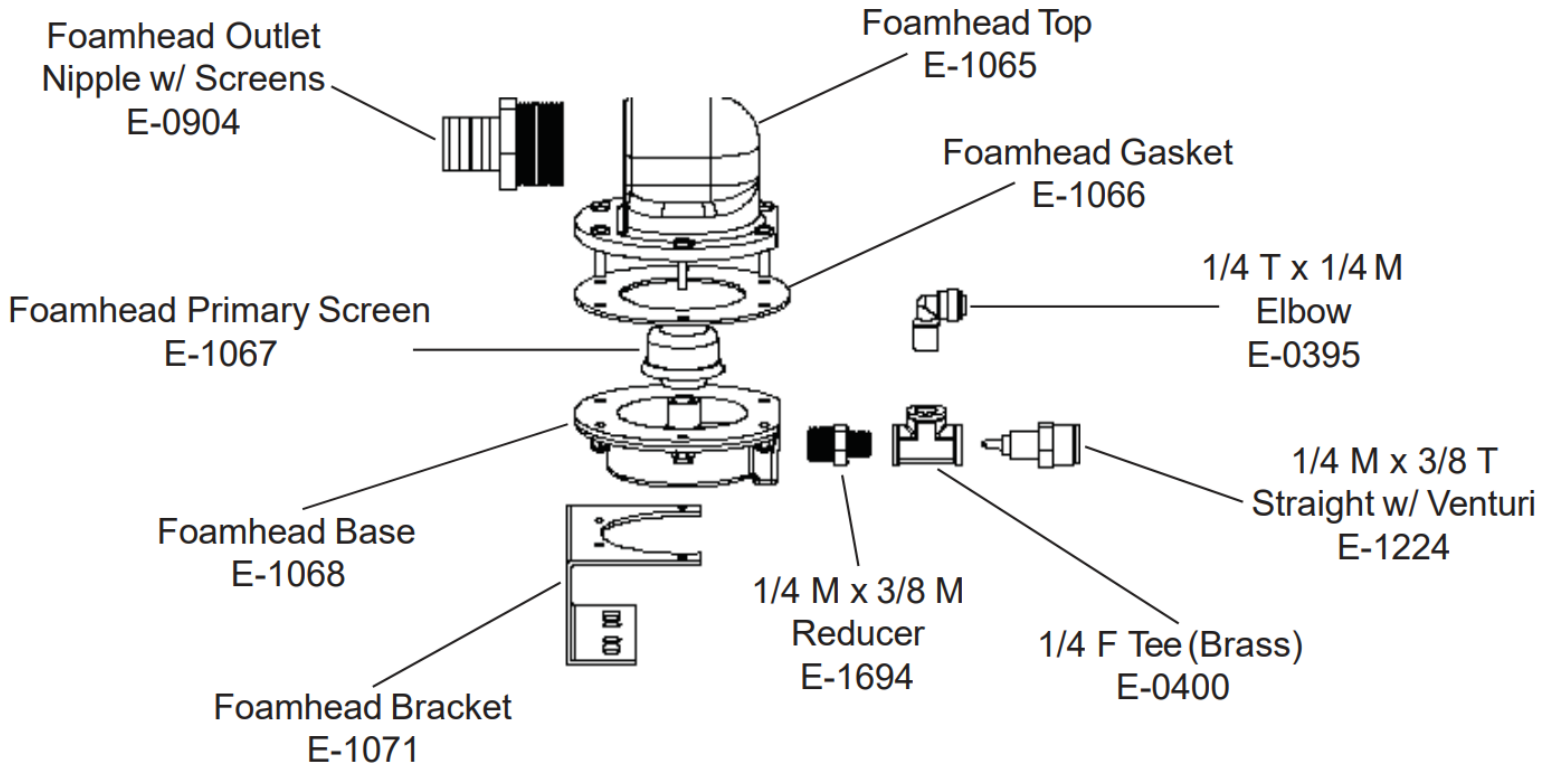
Richway Foam Marker – Liquid Flow



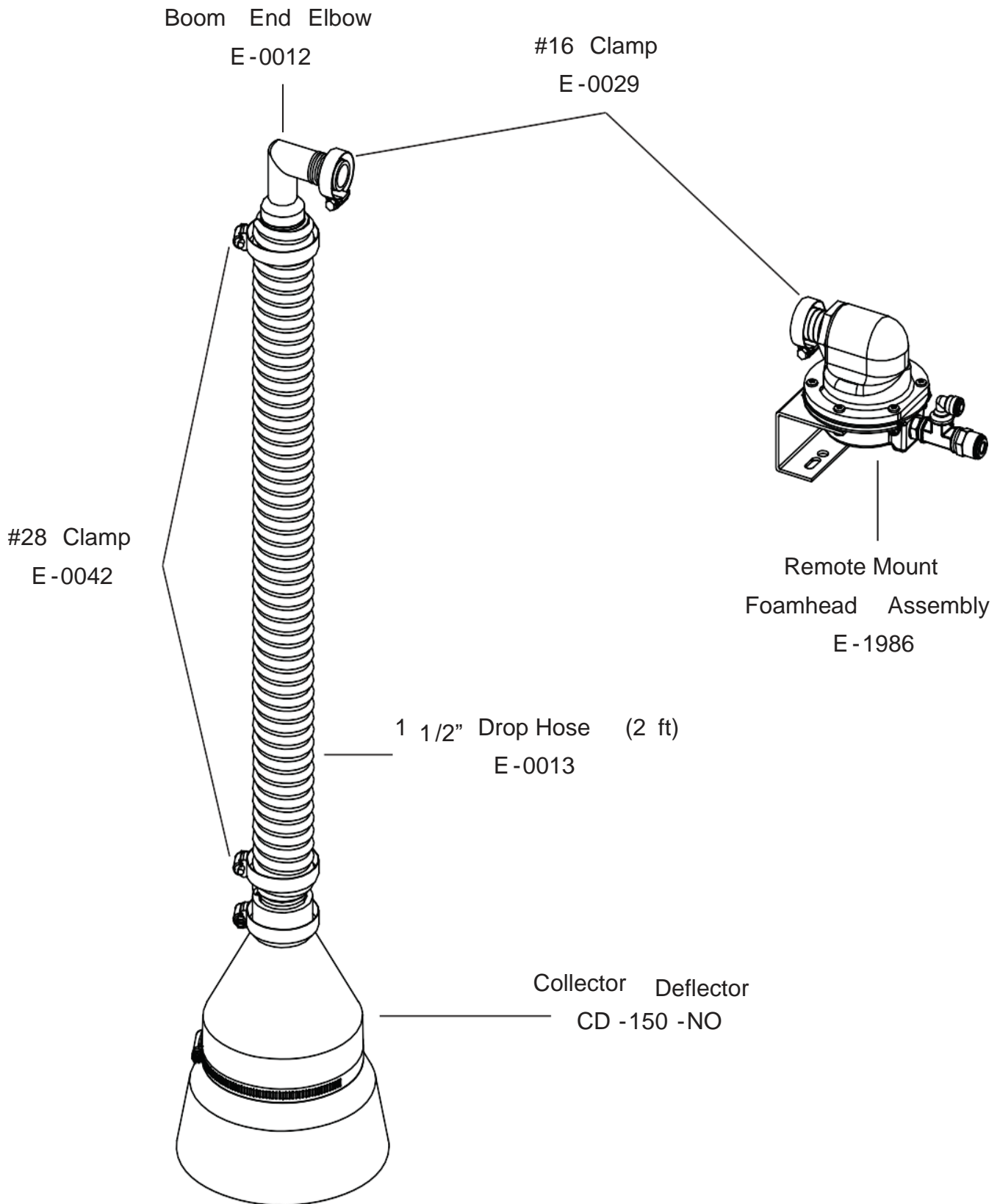
Richway Foam Marker – Compressor



Richway Foam Marker – Foamhead



Richway Foam Marker – Boom End



Richway Foam Marker – Wiring Harness

Concentrate To Power unit

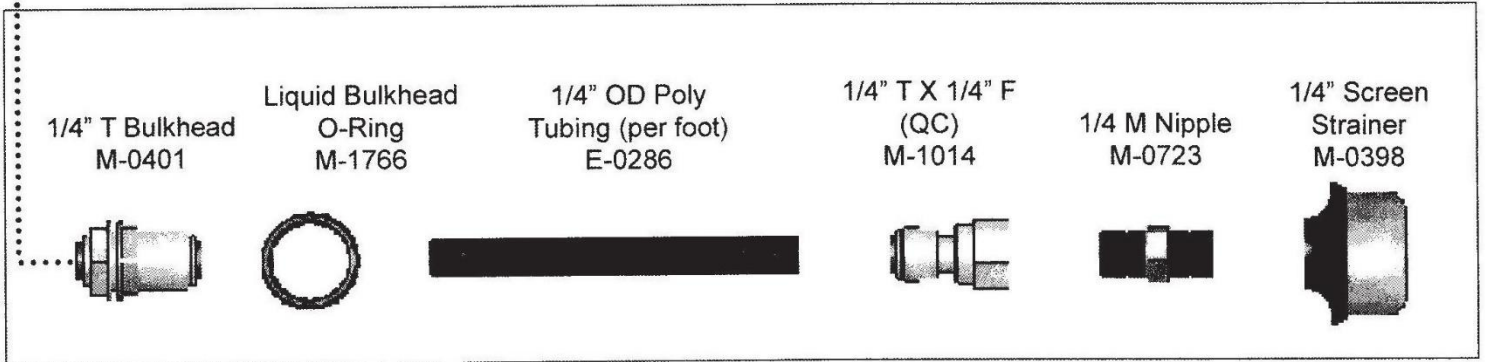
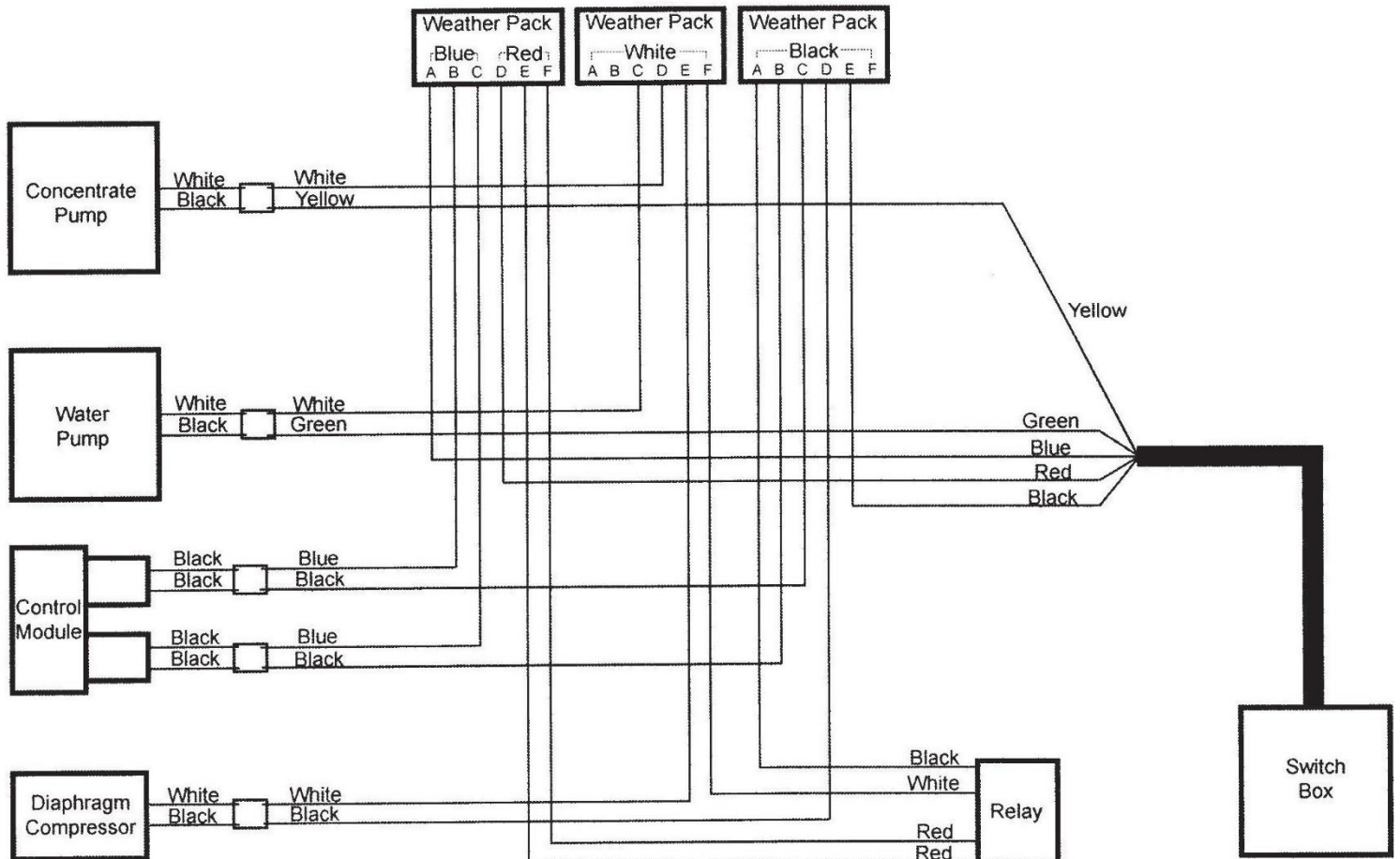
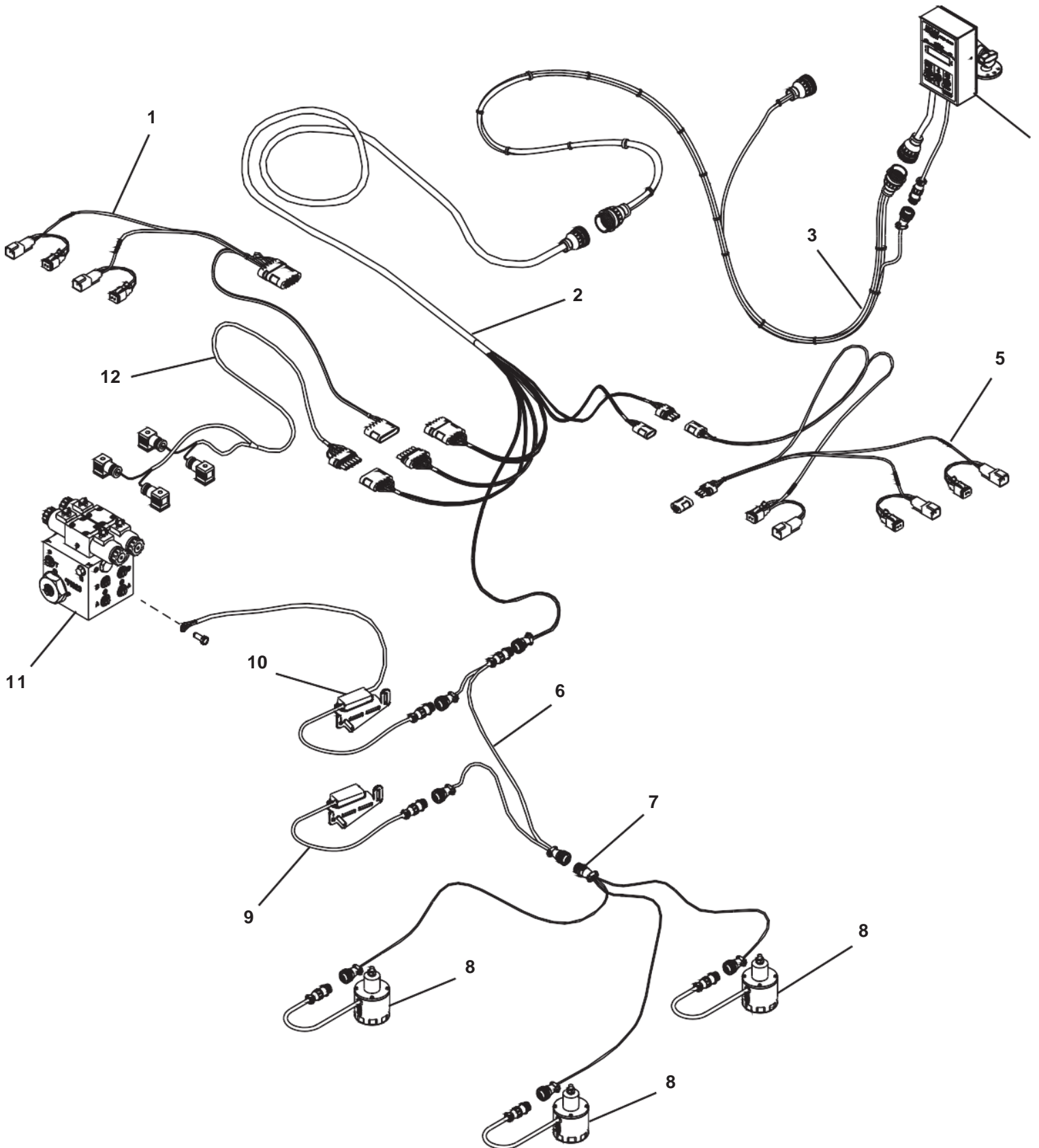


FIGURE 10 - Versa Trac Tank Components

APPENDIX 4



NORAC Auto Height Boom Control UC4+ Kit Layout



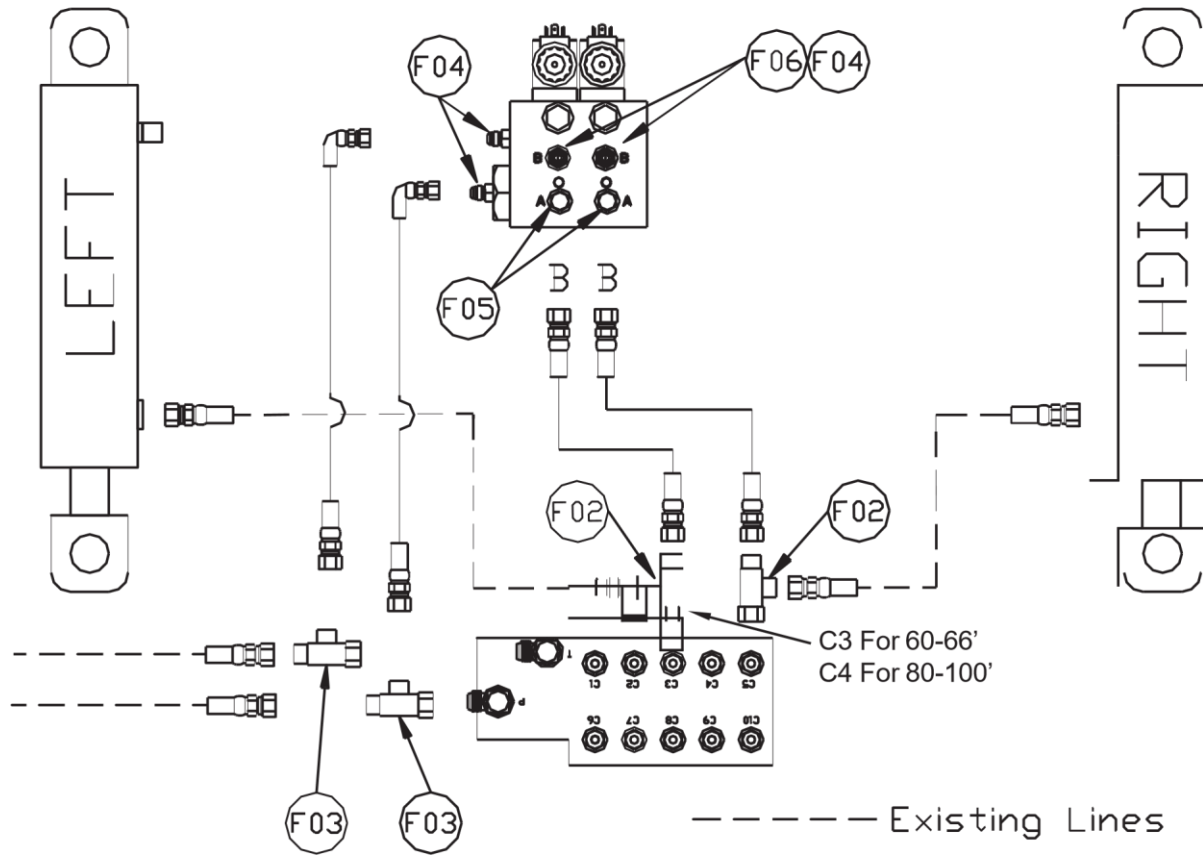


ILLUSTRATED PARTS LIST

Parts List: NORAC Auto Height Boom Control UC4+ Kit Layout

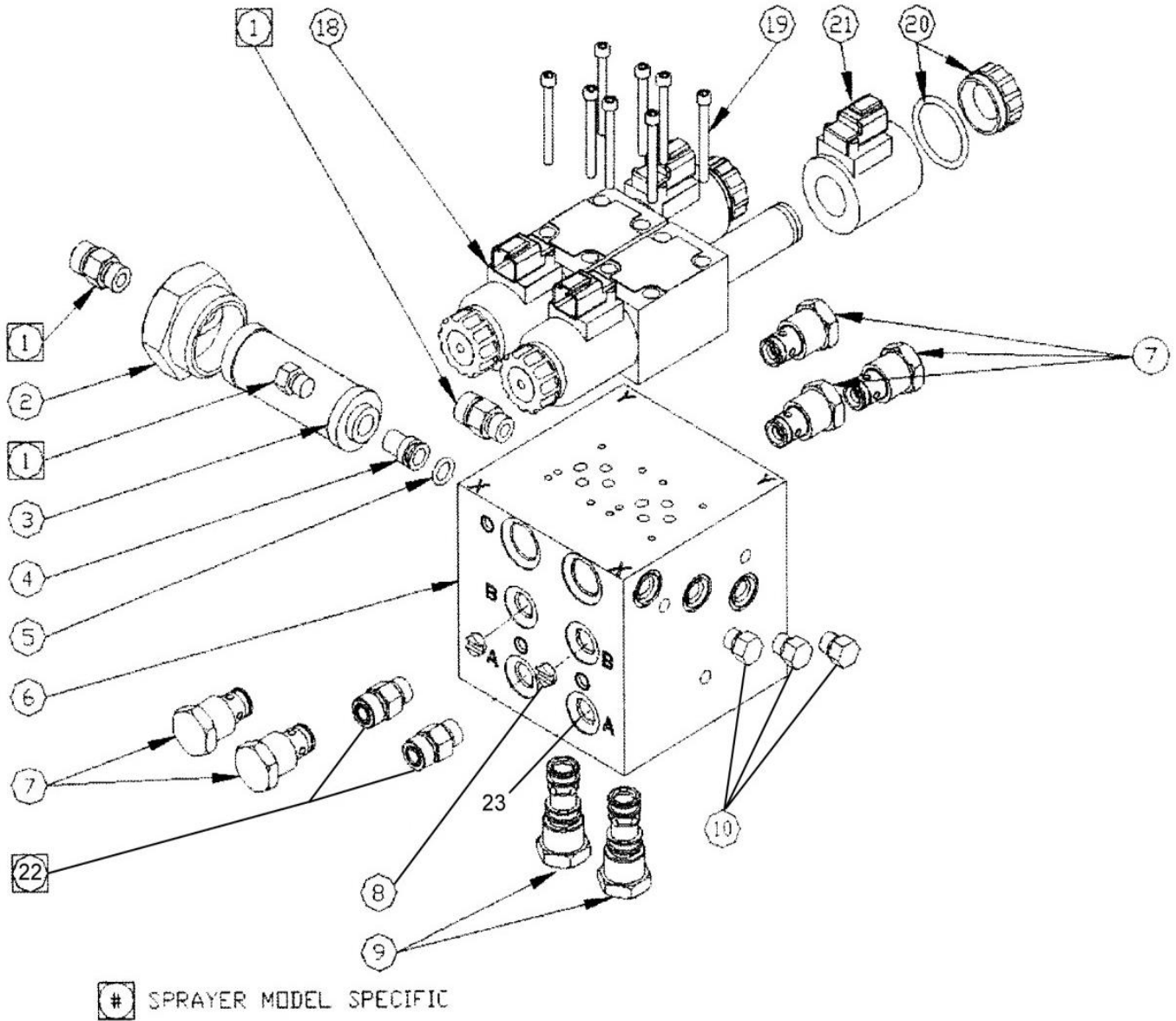
ITEM	VENDOR PART NO.	PART NO.	DESCRIPTION	QTY.
1	44658-19		CABLE INTERFACE UC4 BC C13 FT1 MAIN	1
2	44651-03		CABLE EXTENSION VALVE GENERIC	1
3	44650-35		CABLE POWER GENERIC PULL-TYPE	1
4	4461BC+		UC4 PLUS BOOM CONTROL PANEL	1
5	44658-20		CABLE INTERFACE UC4 BC C12 FT1 WINGS	1
6	44664		CABLE UC4 CAN NODE DUAL	1
7	44668		CABLE UC3 SENSOR BRANCH 1 AMP RECEPT 3 AMP PLUGBC	1
8	44631		UC4 ULTRASOUND SENSOR	3
9	44642		UC4 PLUS ROLL SENSOR	1
NS	104409		FOAM DISCINSERT	AR
NS	102812		TRANSDUCER	AR
NS	1010142		VIBRATION MOUNT	AR
10	44641		UC4 PLUS ROLL SENSOR W TEMPERATURE PROBE	1
11	44933D		VALVE BLOCK UC4-BC 2-STATION CC/LS VARIABLE RATE DUETSCH	1
12	44656D		CABLE VALVE VARIABLE RATE DUETSCH	1
NS	44656		CABLE VALVE VARIABLE RATE DIN TERMINAL	NS

NORAC Auto Height Boom Control Hydraulic Schematic UC4+ & UCS



ITEM	PART NUMBER	NAME	QUANTITY	PICTURE
F02	105588	TEE ADAPTER - 4FJXR 4MJT	2	
F03	104632	TEE ADAPTER 8FJXR 8MJT	2	
F04	103312	MALE ADAPTER - 6MB 6MJ	4	
F05	104369	PLUG -6MBP	2	
F06	44928	ORIFICE INSERT .047 IN ONE WAY	2	

NORAC Hydraulic Valve Block



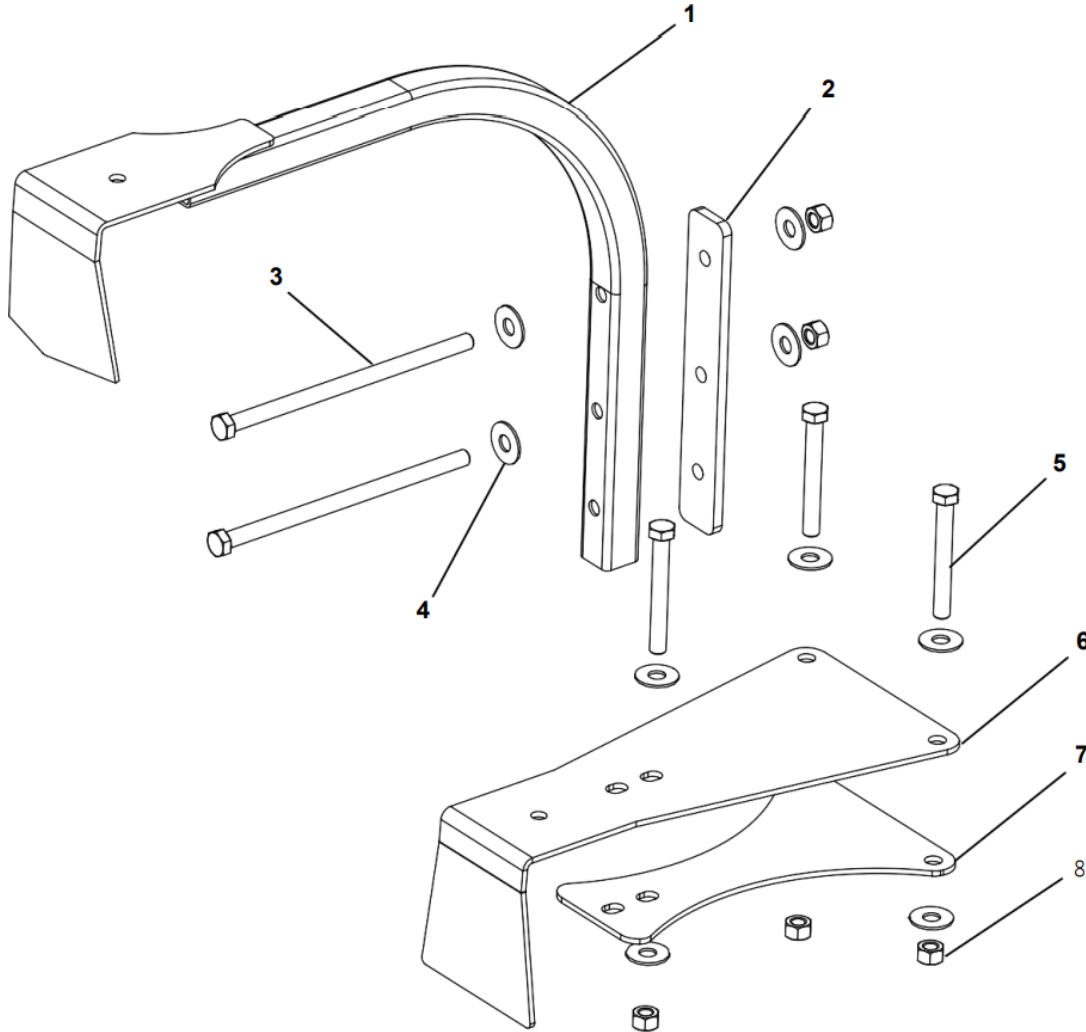


ILLUSTRATED PARTS LIST

Parts List: NORAC Hydraulic Valve Block

ITEM	VENDOR PART NO.	QTY.	DESCRIPTION
1	W400-6-6	2	HYDRAULIC COUPLING – MODEL SPECIFIC
2	44897	1	FILLER CAP WITH 60RB PORT
3	104827	1	HYDRAULIC FILTER ELEMENT, 3000 PSI IN-LINE 10 MICRON
4	44896	1	FILTER INSERT
5	104998	1	O-RING 5/8 X 0.420 ID X .103
6	44923	1	VALVE BLOCK2 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
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

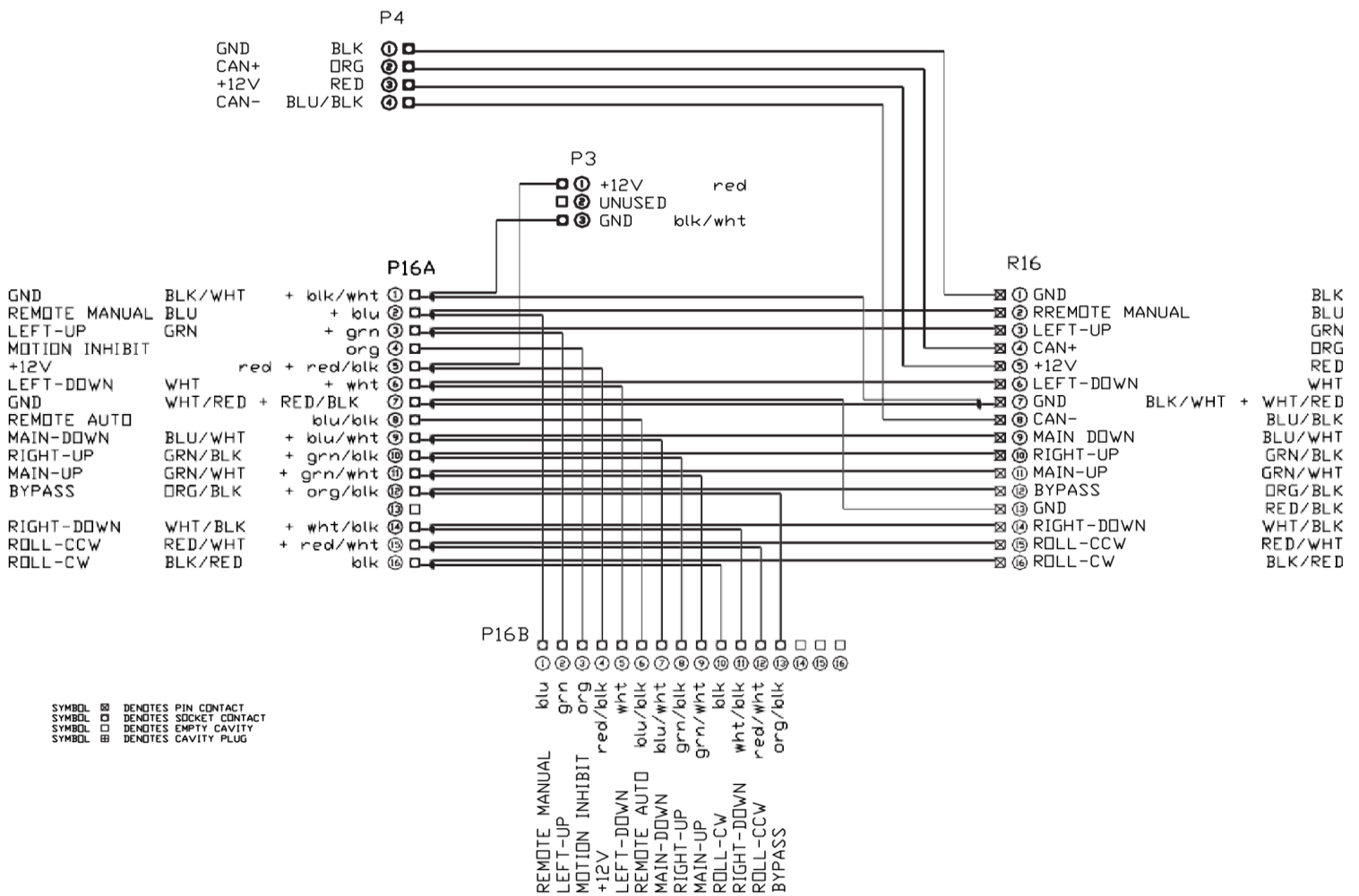
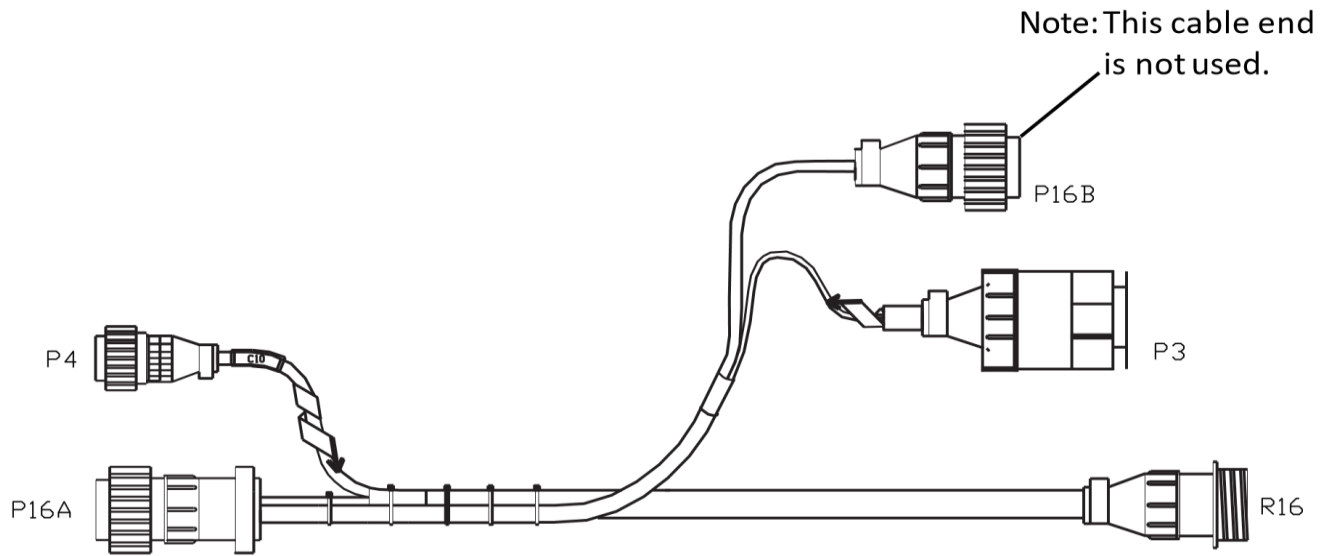
NORAC Auto Height Boom Control Brackets



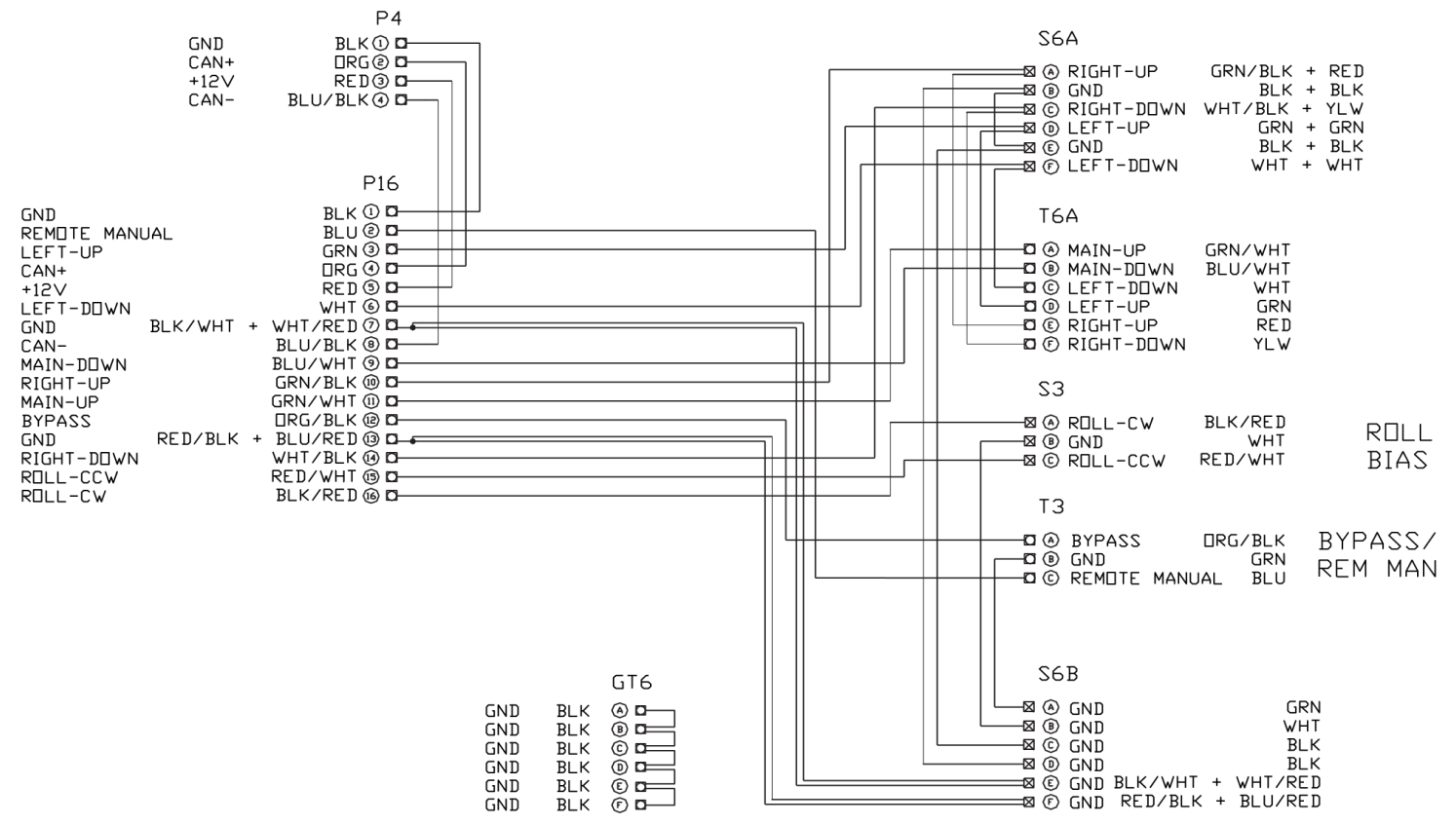
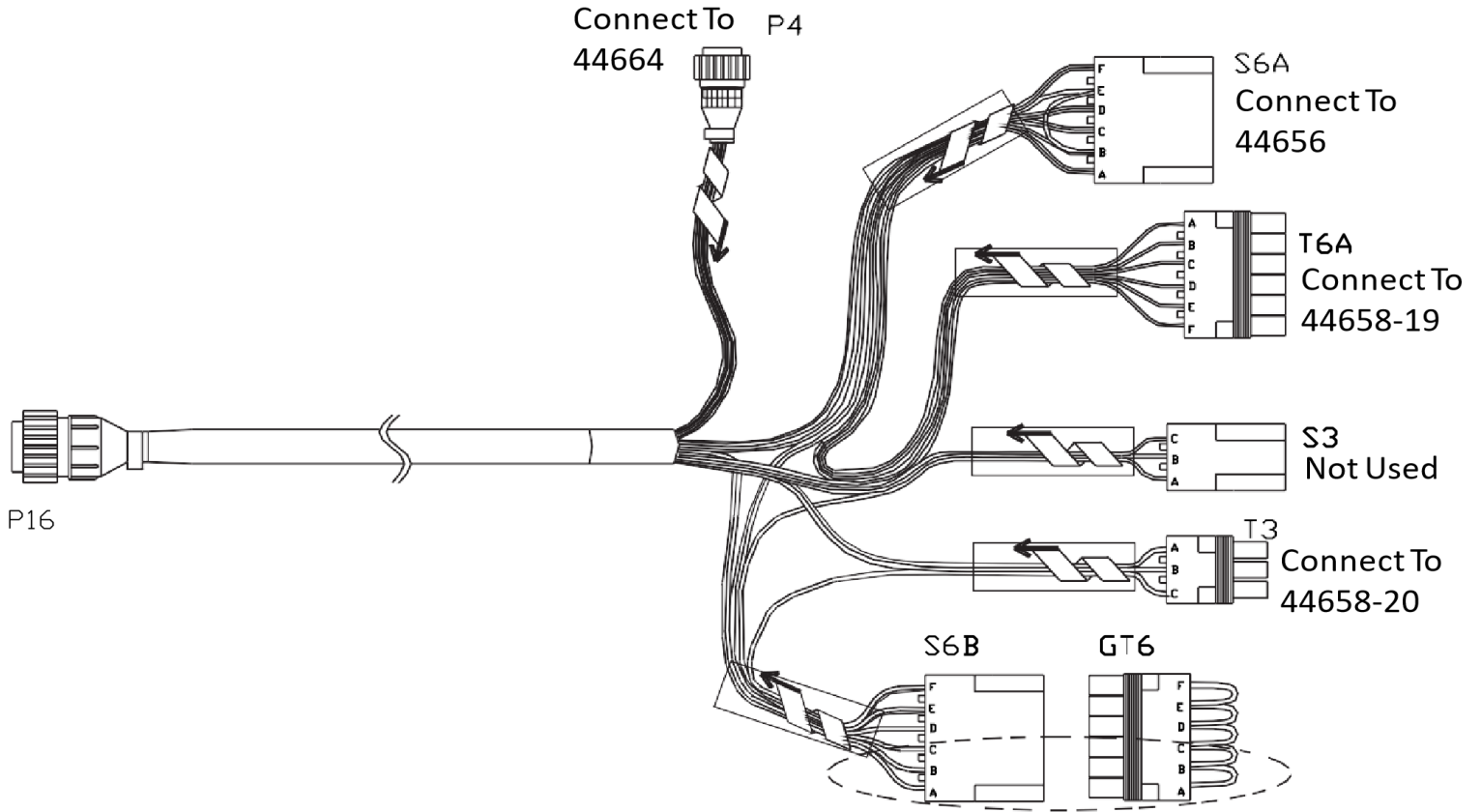
Parts List: NORAC Auto Height Boom Control Brackets

ITEM	PART NO.	DESCRIPTION	QTY.
1	11958	BRACKET	1
2	11952	BACKSTRAP	1
3	437	HEX HEAD BOLT 3/8 X7"	2
4	258	FLAT WASHER 3/8"	10
5	132	HEX HEAD BOLT 3/8 X3"	3
6	14460	BRACKET, SENSOR	1
7	14459	PLATE, LOCK	1
8	237	NUT 3/8" CENTERLOCK ZP	10

NORAC Auto Height Boom Control Harness

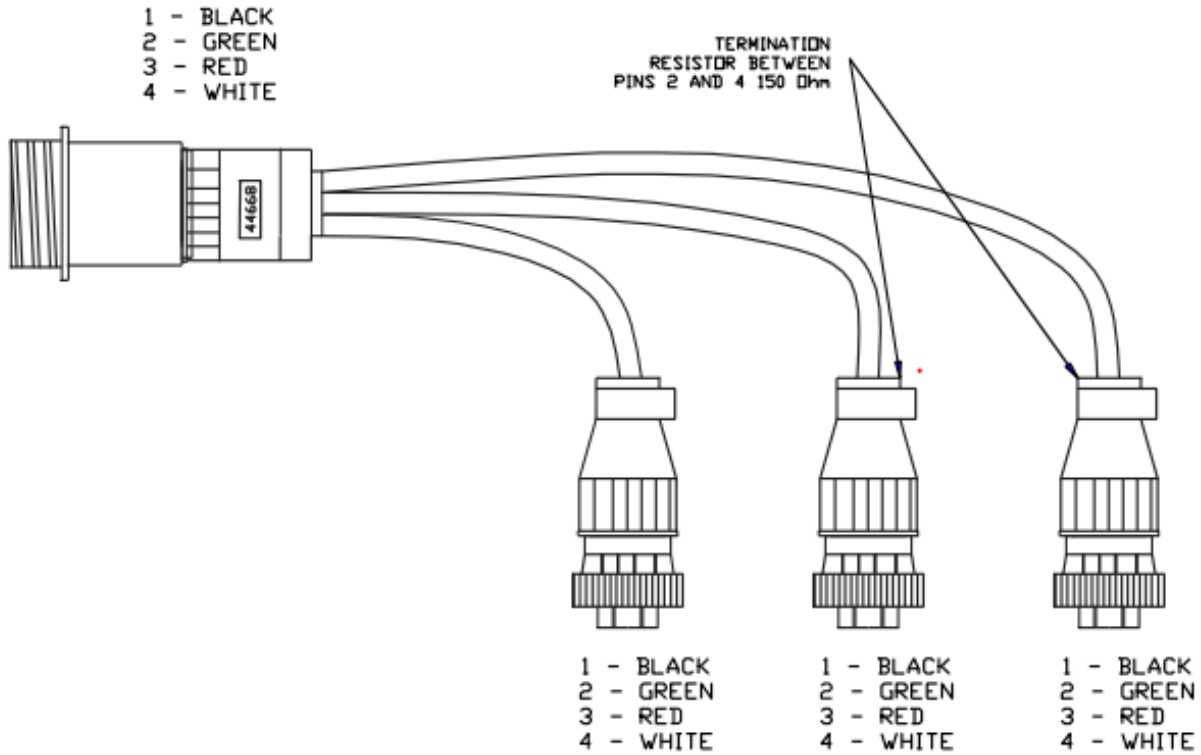


NORAC Auto Height Boom Control Extension Harness

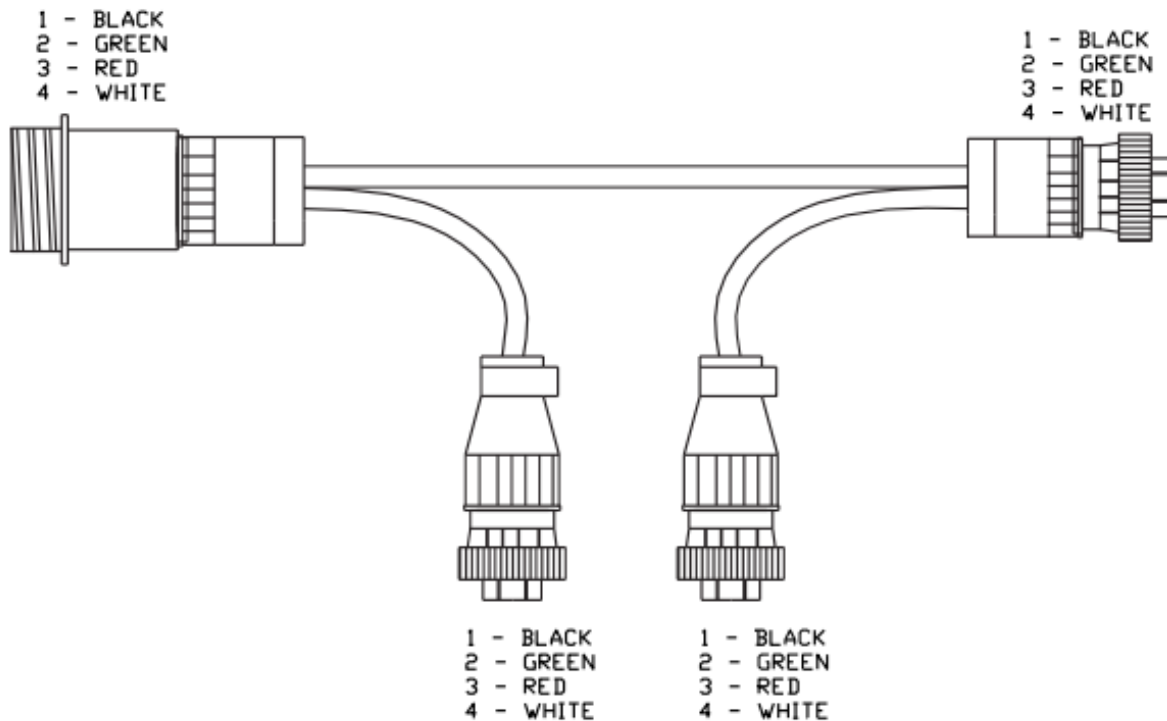


NORAC Auto Height Boom Control Sensor Cables

ITEM C02: 44668 – SENSOR BRANCH CABLE



ITEM C02B: 44664 – CABLE UC4 CAN NODE DUAL



NORAC Auto Height Boom Control Valve Cable

ITEM C03: 44656 – VALVE CABLE (VARIABLE RATE) DIN Terminal

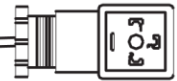
PIN	WIRE COLOR	FUNCTION
A	GREEN	RIGHT-UP
B	BLACK	GND
C	WHITE	RIGHT-DOWN
D	GREEN	LEFT-UP
E	BLACK	GND
F	WHITE	LEFT-DOWN



PIN	WIRE COLOR	FUNCTION
1	GREEN	LEFT-UP
2	BLACK	GROUND
3	NOT USED	NOT USED



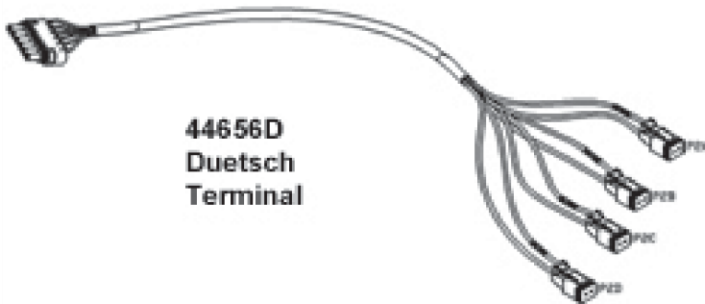
PIN	WIRE COLOR	FUNCTION
1	GREEN	RIGHT-UP
2	BLACK	GROUND
3	NOT USED	NOT USED



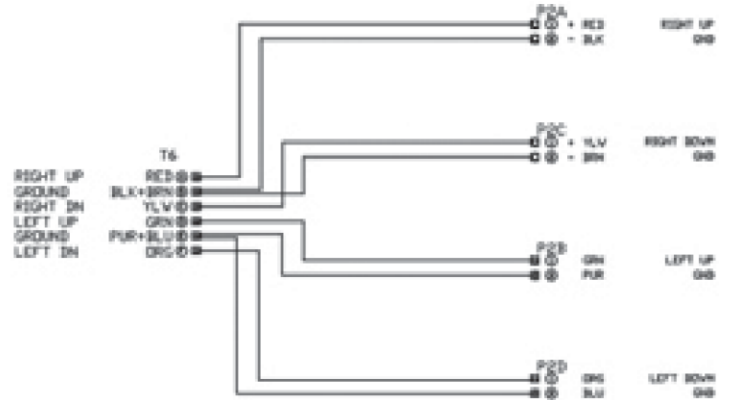
PIN	WIRE COLOR	FUNCTION
1	WHITE	LEFT-DOWN
2	BLACK	GROUND
3	NOT USED	NOT USED



PIN	WIRE COLOR	FUNCTION
1	WHITE	RIGHT-DOWN
2	BLACK	GROUND
3	NOT USED	NOT USED



**44656D
Duetsch
Terminal**

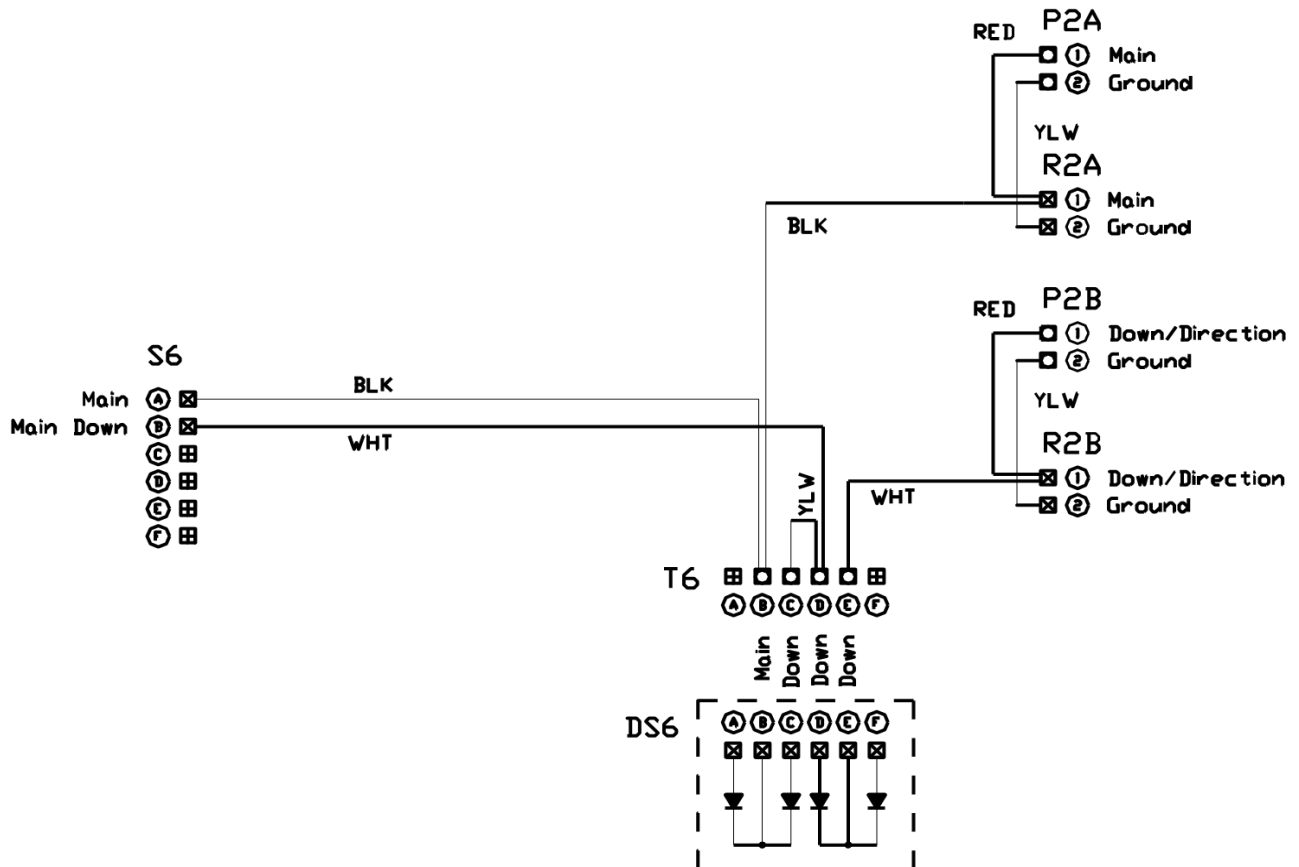
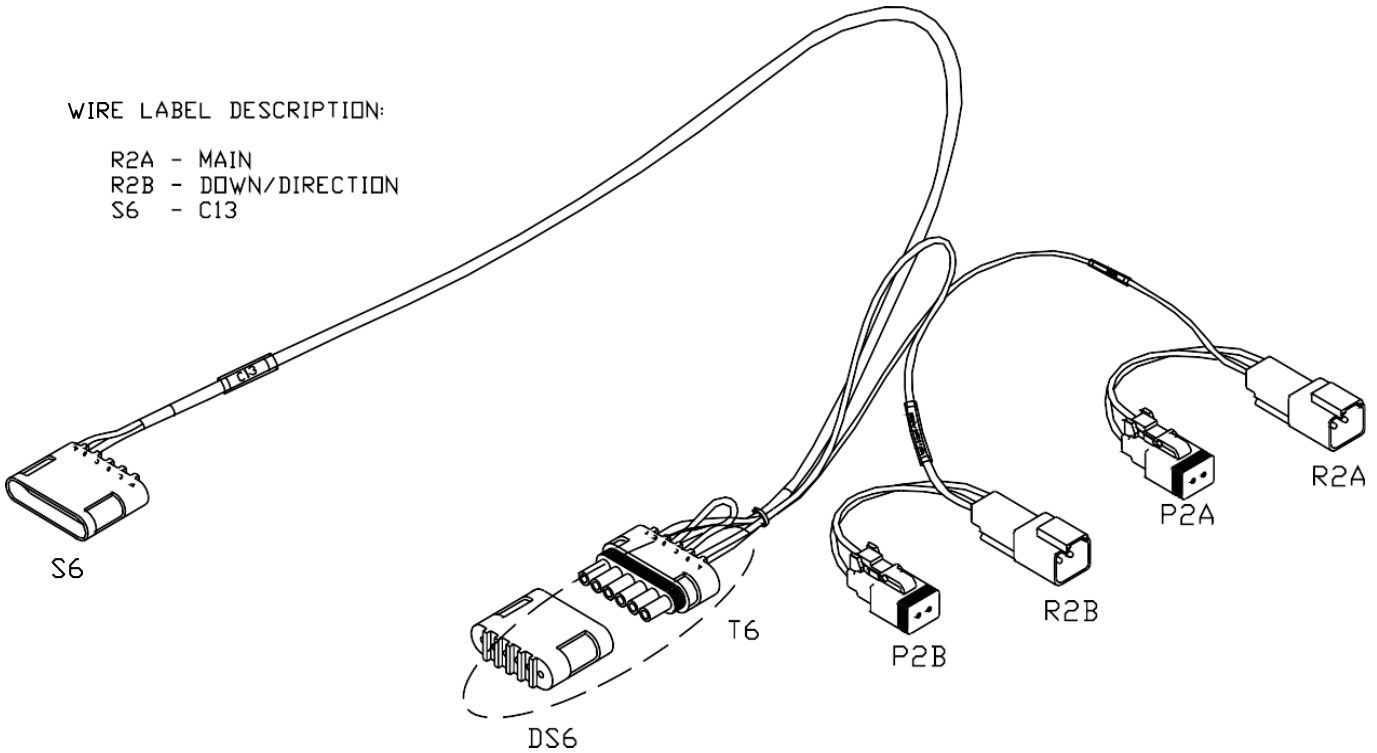


NORAC Auto Height Boom Control Main Interface Cable

ITEM C13: 44658-19 – MAIN INTERFACE CABLE

WIRE LABEL DESCRIPTION:

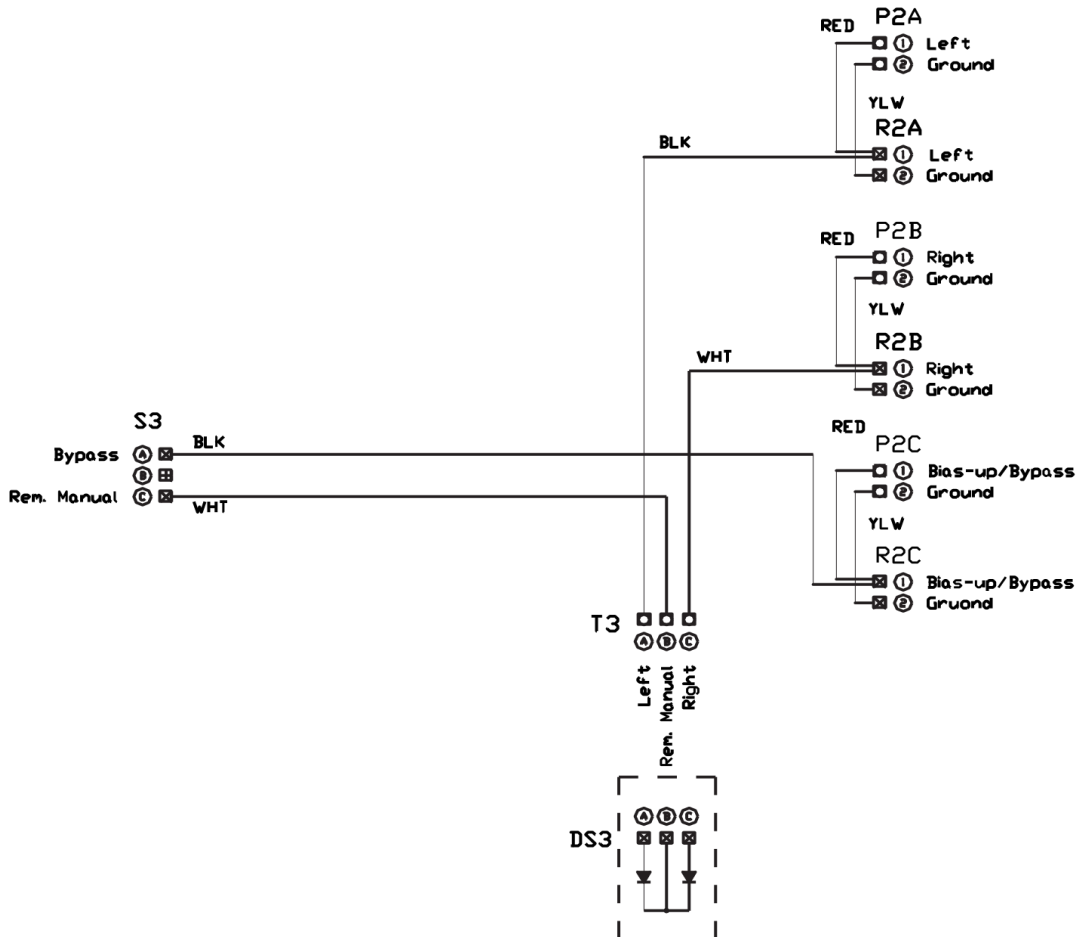
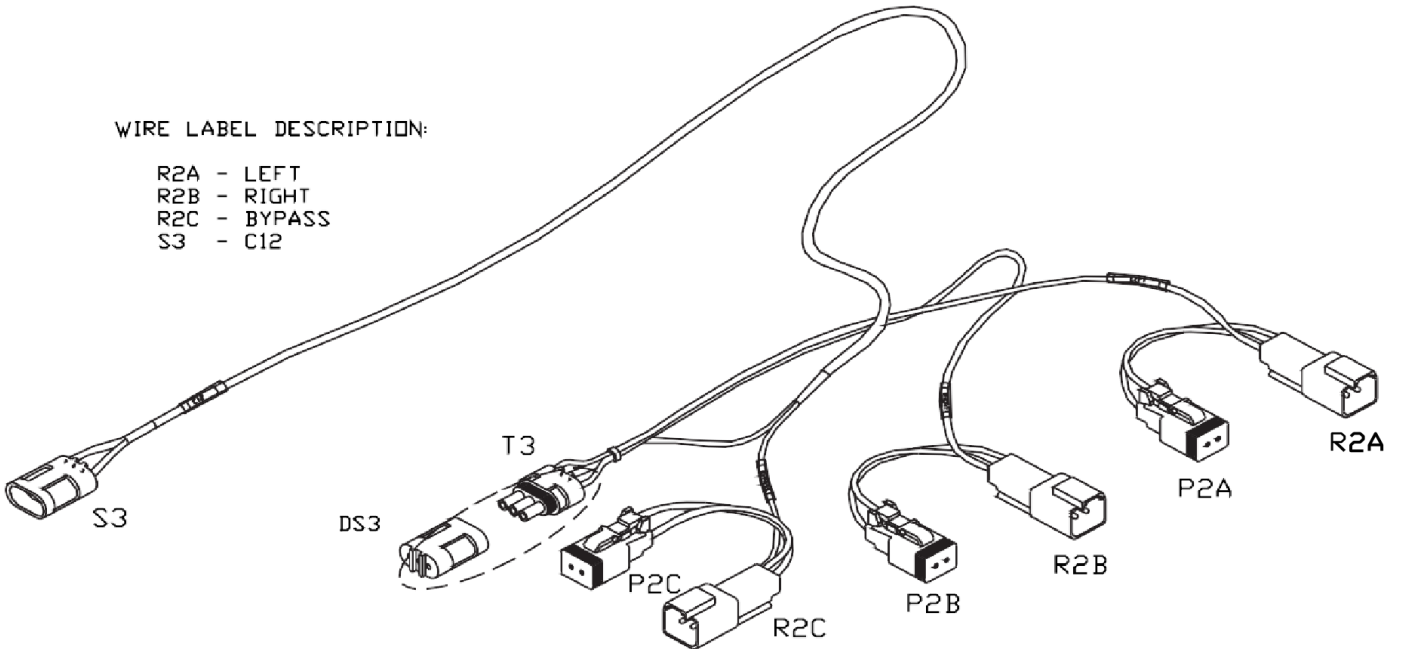
- R2A - MAIN
- R2B - DOWN/DIRECTION
- S6 - C13



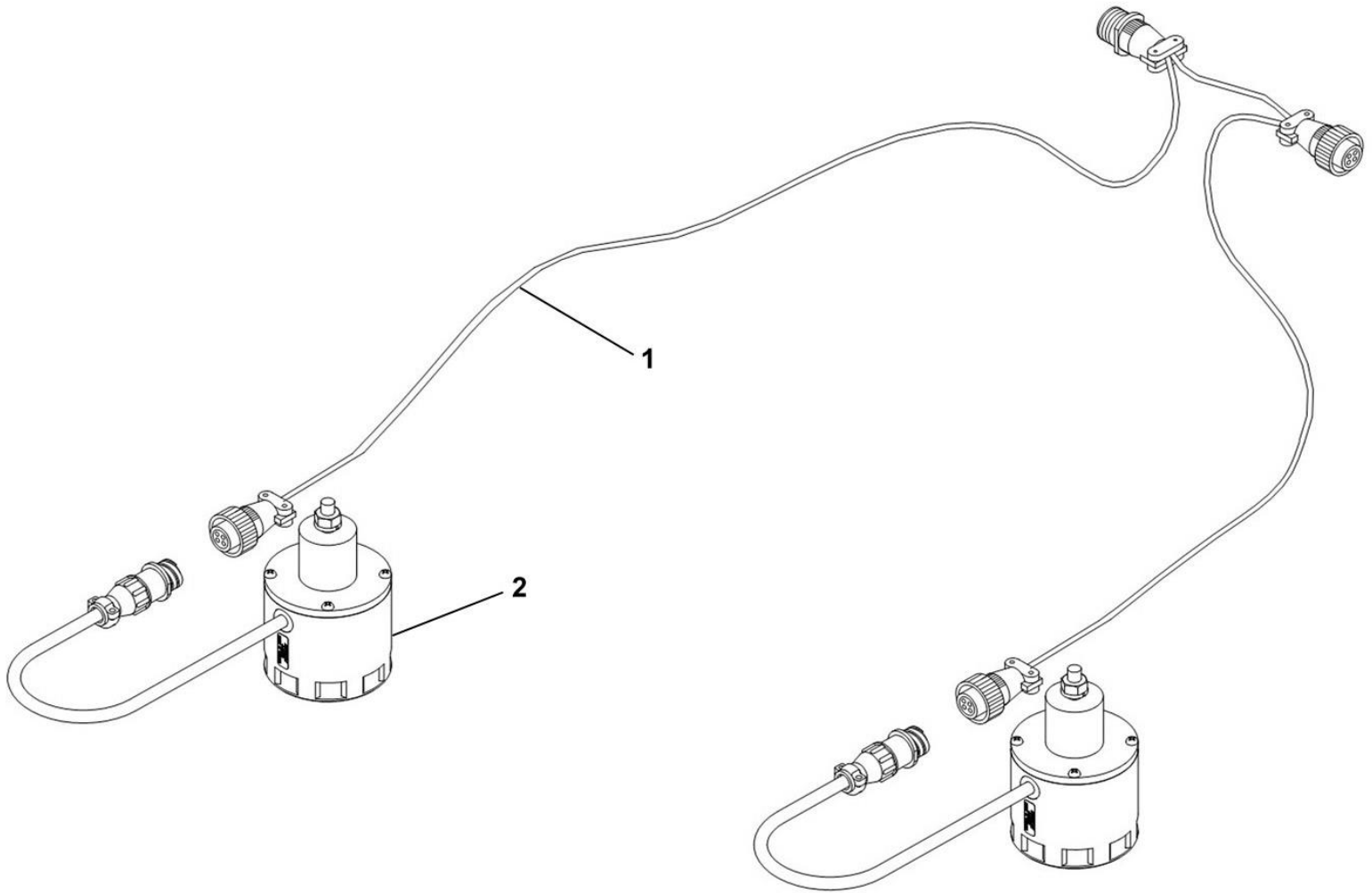
NORAC Auto Height Boom Control Wing Interface Cable

WIRE LABEL DESCRIPTION:

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



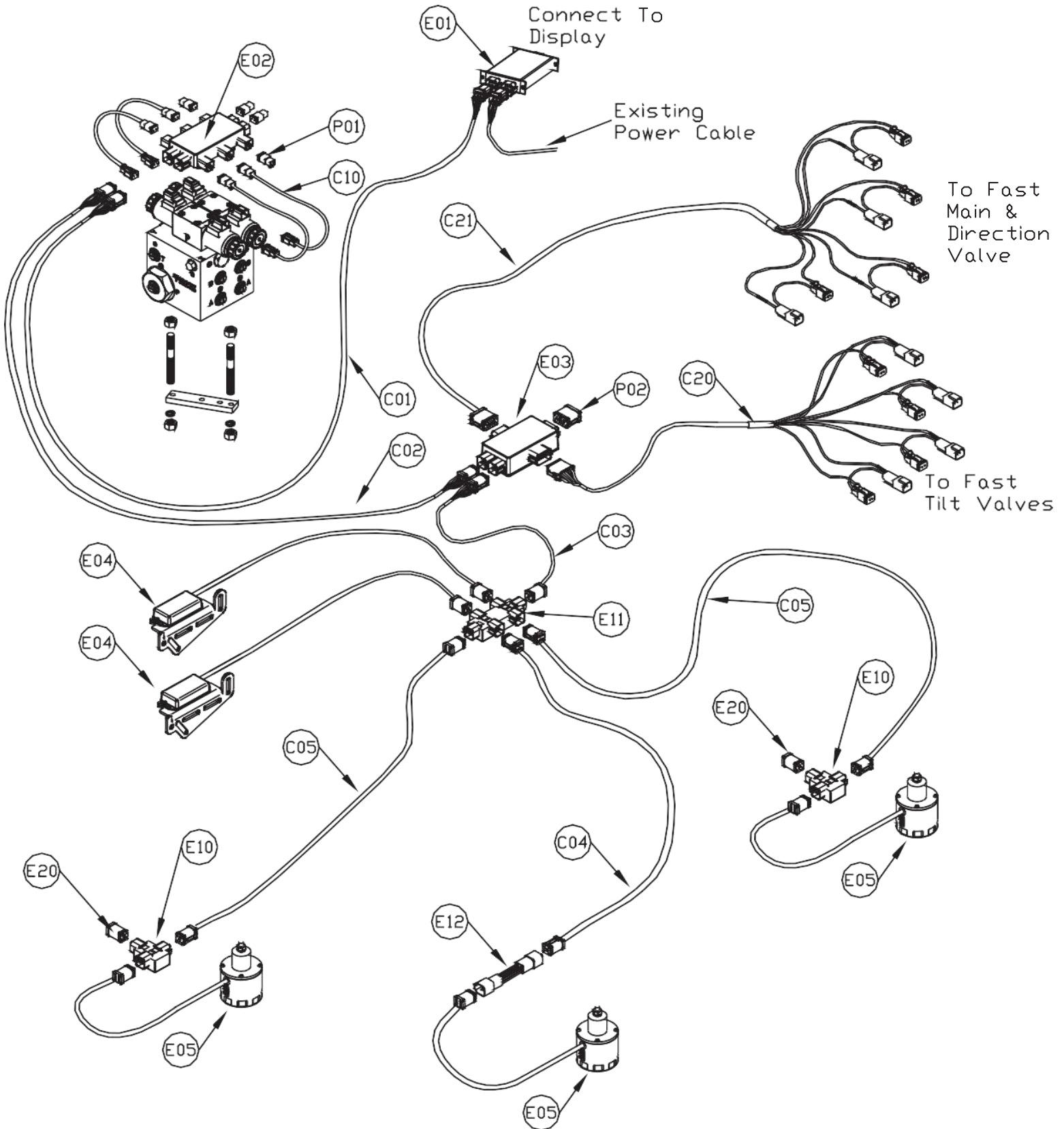
NORAC Severe Terrain Cable UC4+



Parts List: NORAC Severe Terrain Cable UC4+

ITEM	VENDOR PART NO.	DESCRIPTION	QTY.
1	44669	CABLE SEVERE TERRAIN	1
2	44631	SENSOR UC4	2

NORAC Auto Height Boom Control UC5 Kit Layout



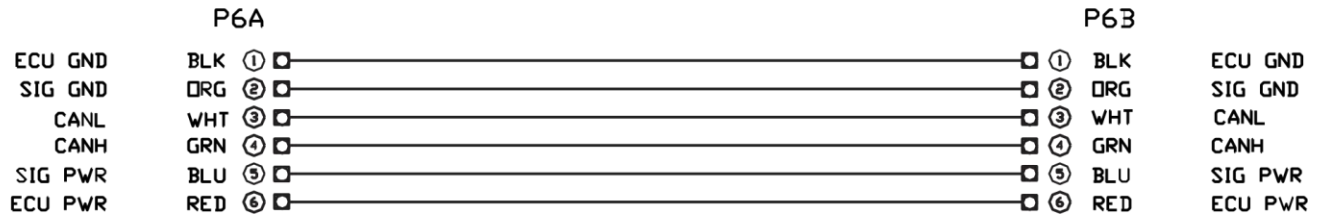
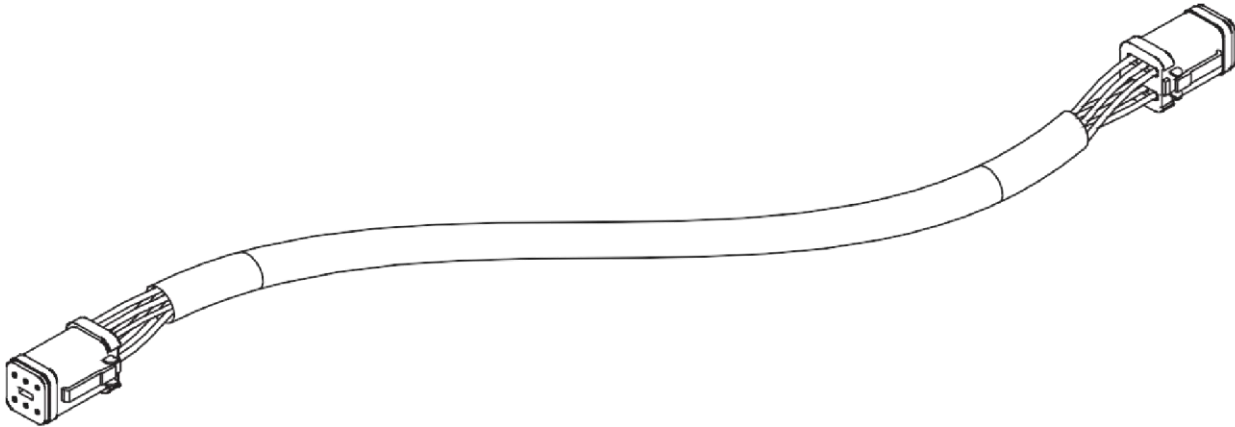


ILLUSTRATED PARTS LIST

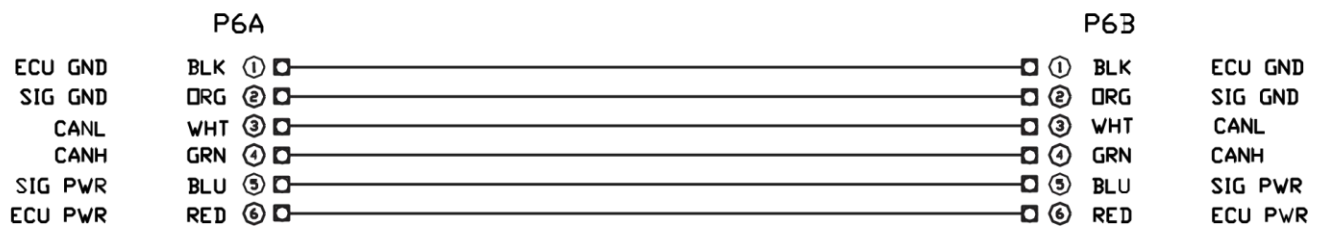
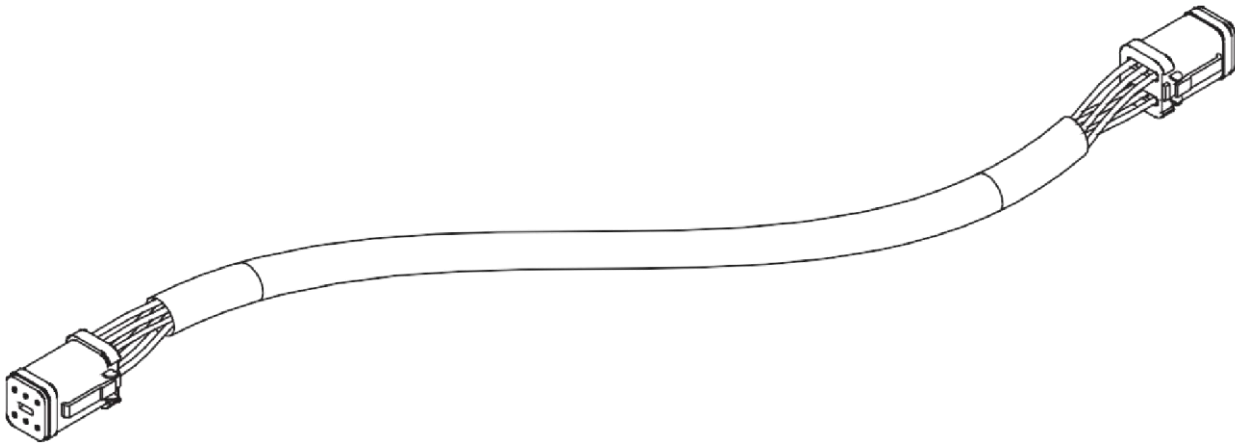
Parts List: NORAC Auto Height Boom Control UC5 Kit Layout

ITEM	PART NO.	DESCRIPTION
PO1	106034	CONNECTOR DEUTSCH DT06 2 CAVITY PLUG w/PLUGGED REAR SEAL
PO2	106035	CONNECTOR DEUTSCH DT06 12 CAVITY PLUG (A-KEY)w/PLUGGED REAR SEAL
C01	43220-01	CABLE,UC5 NETWORK 14 AWG 1M (3')
C01	43220-03	CABLE,UC5 NETWORK 14 AWG 3M (10')
C01	43220-05	CABLE,UC5 NETWORK 14 AWG 5M (16')
C01	43220-10	CABLE,UC5 NETWORK 14 AWG 10M (33')
C01	43220-15	CABLE,UC5 NETWORK 14 AWG 15M (50')
C01	43220-20	CABLE,UC5 NETWORK 14 AWG 20M (65')
C02	43210-01	CABLE,UC5 NETWORK 18 AWG 1M (3')
C02	43210-01	CABLE,UC5 NETWORK 18 AWG 3M (10')
C02	43210-01	CABLE,UC5 NETWORK 18 AWG 5M (16')
C02	43210-01	CABLE,UC5 NETWORK 18 AWG 10M (33')
C02	43210-01	CABLE,UC5 NETWORK 18 AWG 15M (50')
C02	43210-01	CABLE,UC5 NETWORK 18 AWG 20M (65')
C10	43230-01	CABLE,UC5 VALVE 2PIN DEUTSCH TO BLACK DIN
C10	43230-04	CABLE,UC5 VALVE 2PIN DEUTSCH TO 2PIN DEUTSCH
C20	43240-17	CABLE,UC5 INTERFACE TILT PIGTAIL VERSION
C21	43240-18	CABLE,UC5 INTERFACE MAIN PIGTAIL VERSION
C30	43250-04	CABLE,UC5 BATTERY PIGTAIL VERSION
E01	43710	UC5 CONTROLLERMODULE
E02	43720	UC5 VALVEMODULE
E03	42732	UC5 INPUT MODULE PASS THRU
E04	43740	UC5 ROLLSENSOR
E05	43750	UC5 ULTRASONICSENSOR
E10	43760	UC5 NETWORK COUPLER3-WAY
E11	43762	UC5 NETWORK COUPLER6-WAY
E12	43764	UC5 NETWORK COUPLER2-WAY
E20	43780	UC5 NETWORK TERMINATOR PLUG
AL4100562	631909	AGLEADER UNLOCK CODE 4100562
54VTGS22600	631910	JOHN DEERE 2600 UNLOCK CODE 54VTGS22600
ECHO-DT1		NORAC ECHO UC5 CONSOLE

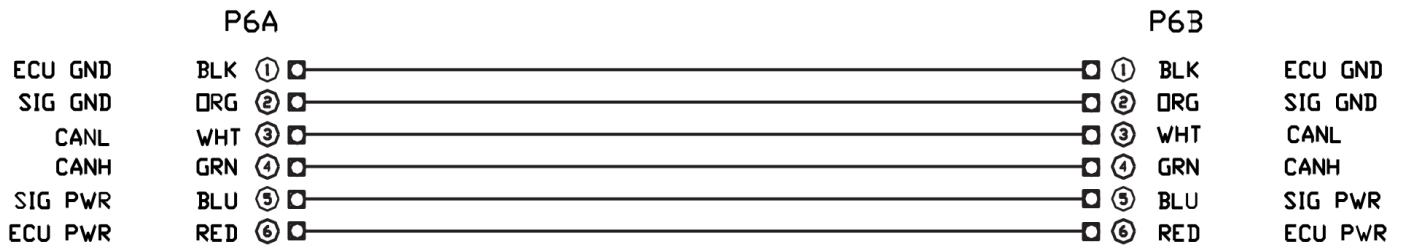
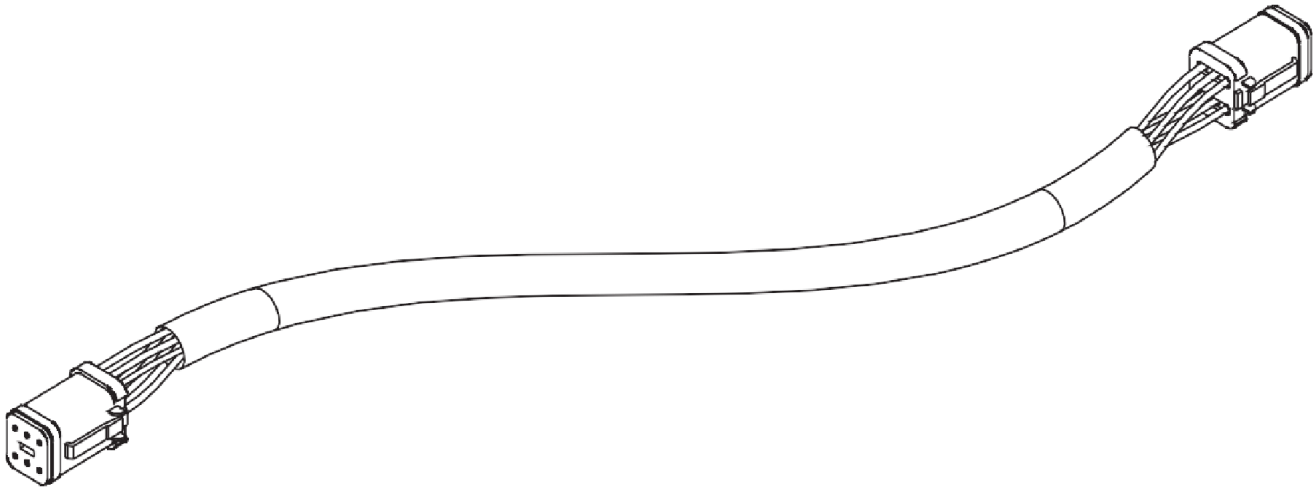
Item C01: 43220-10a – Cable UC5 Network 14 AWG – 10M



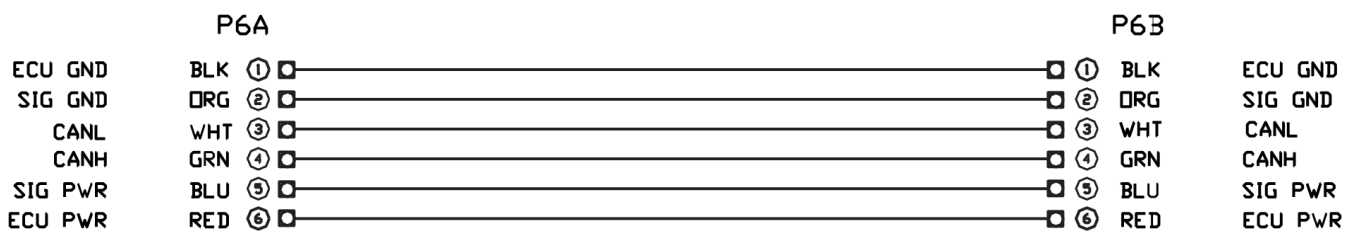
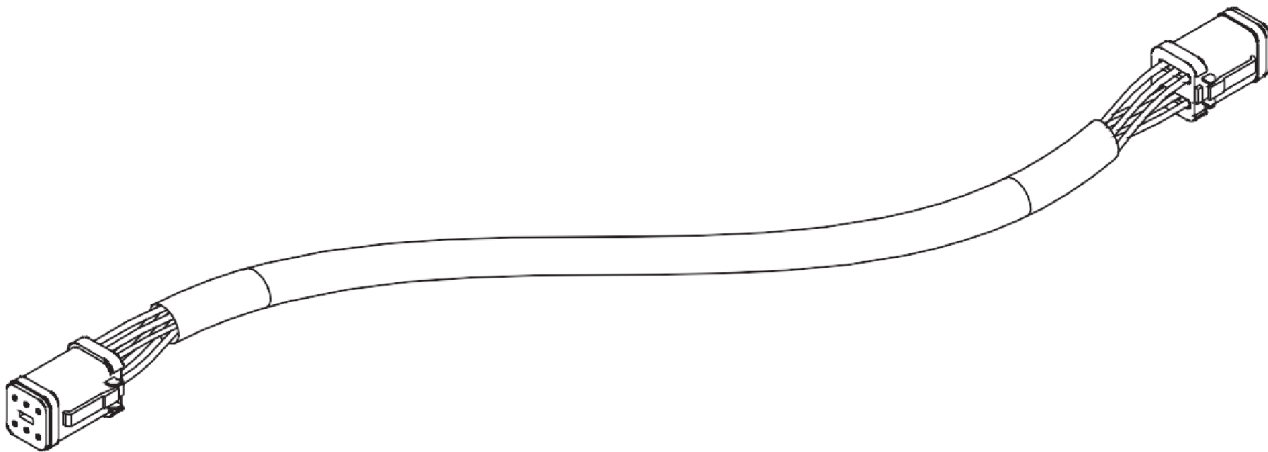
Item C02: 43220-01a – Cable UC5 Network 14 AWG – 1M



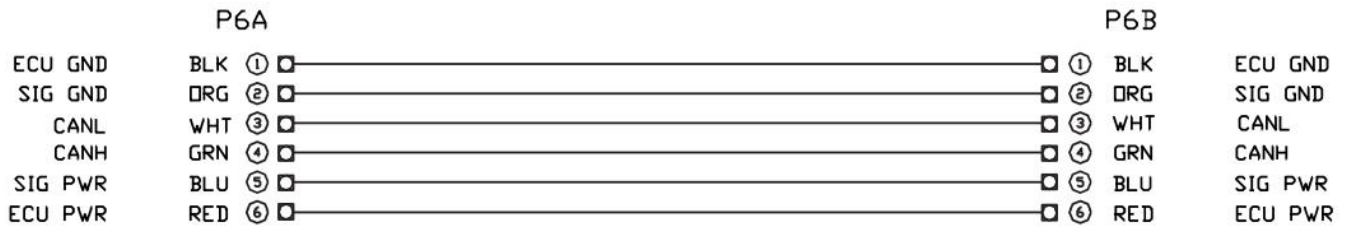
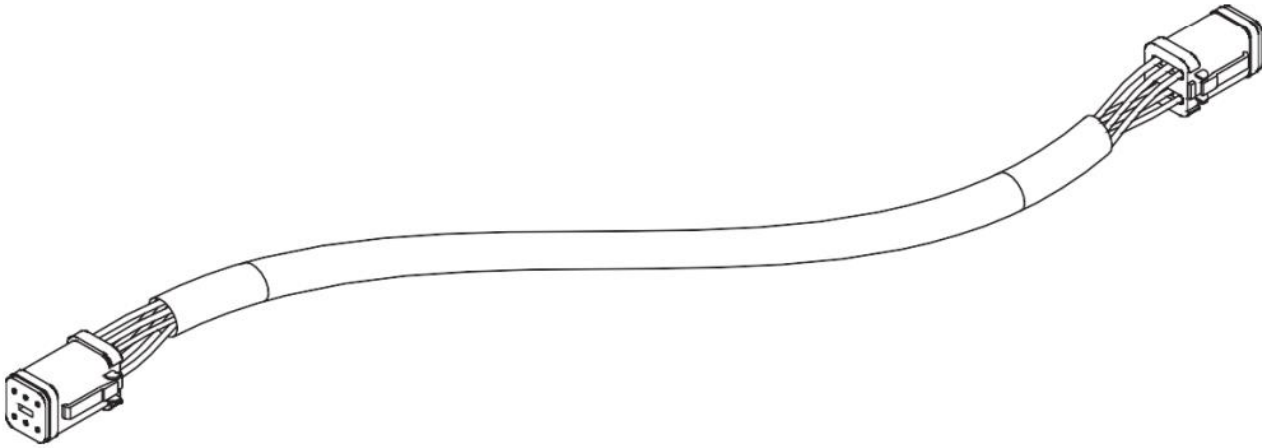
Item C03: 43210-03a – Cable UC5 Network 18 AWG – 3m



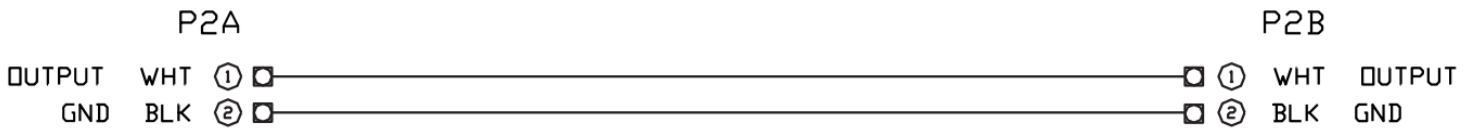
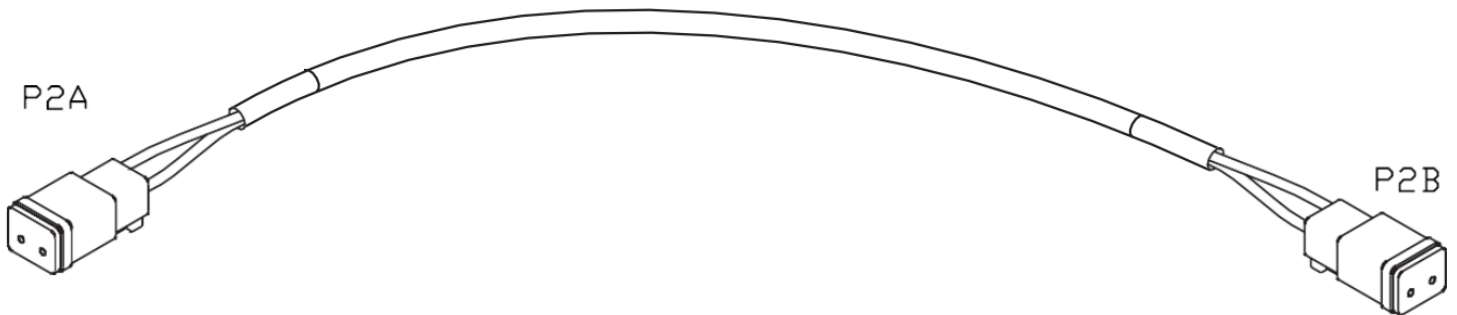
Item C04: 43210-01a – Cable UC5 Network 18 AWG – 3m



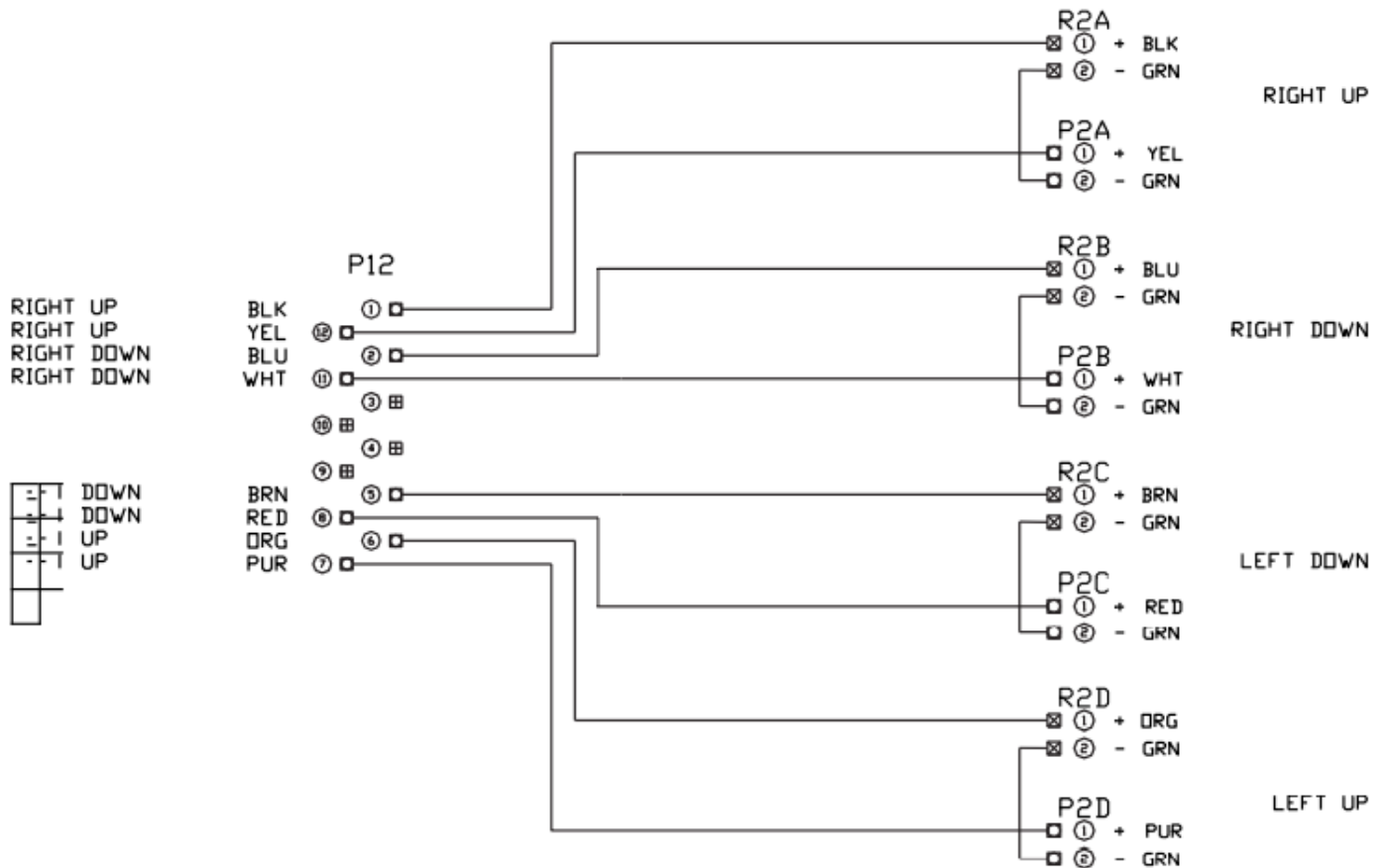
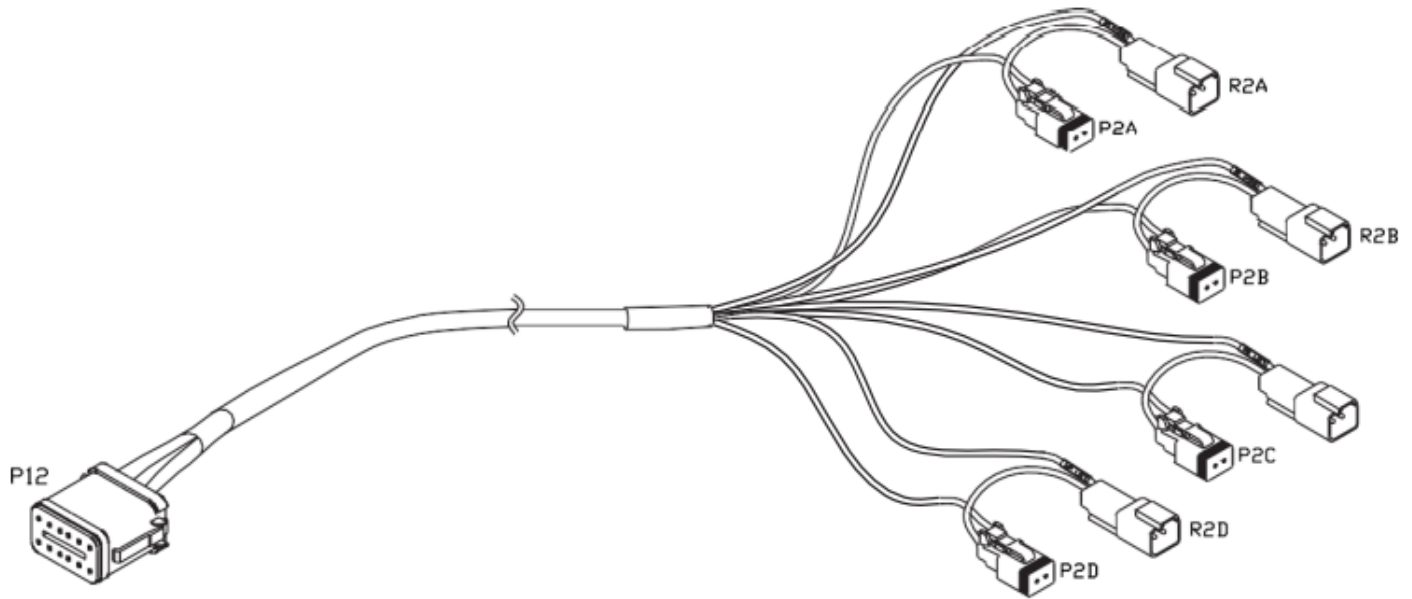
Item C05: 43210-02a – Cable UC5 Network 18AWG – 20m



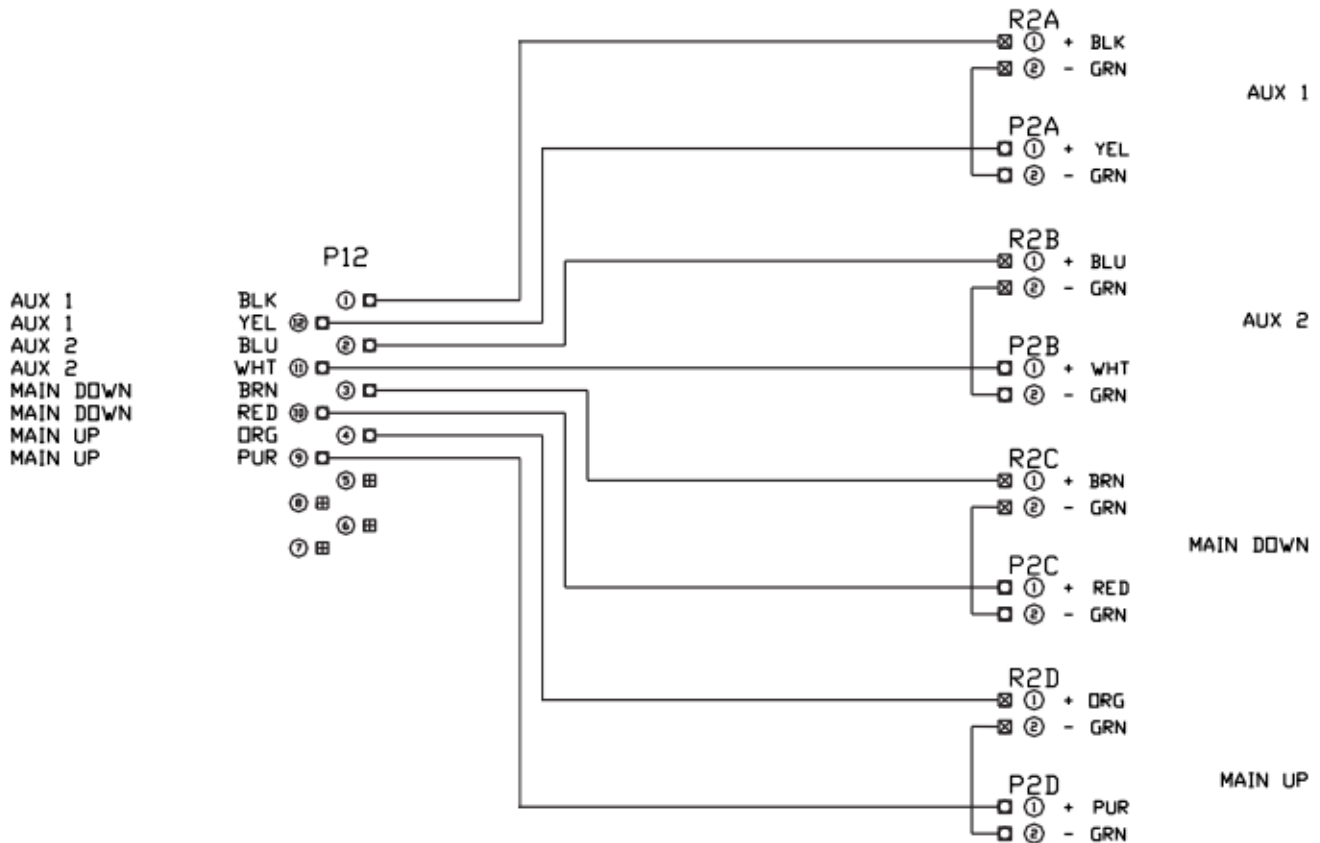
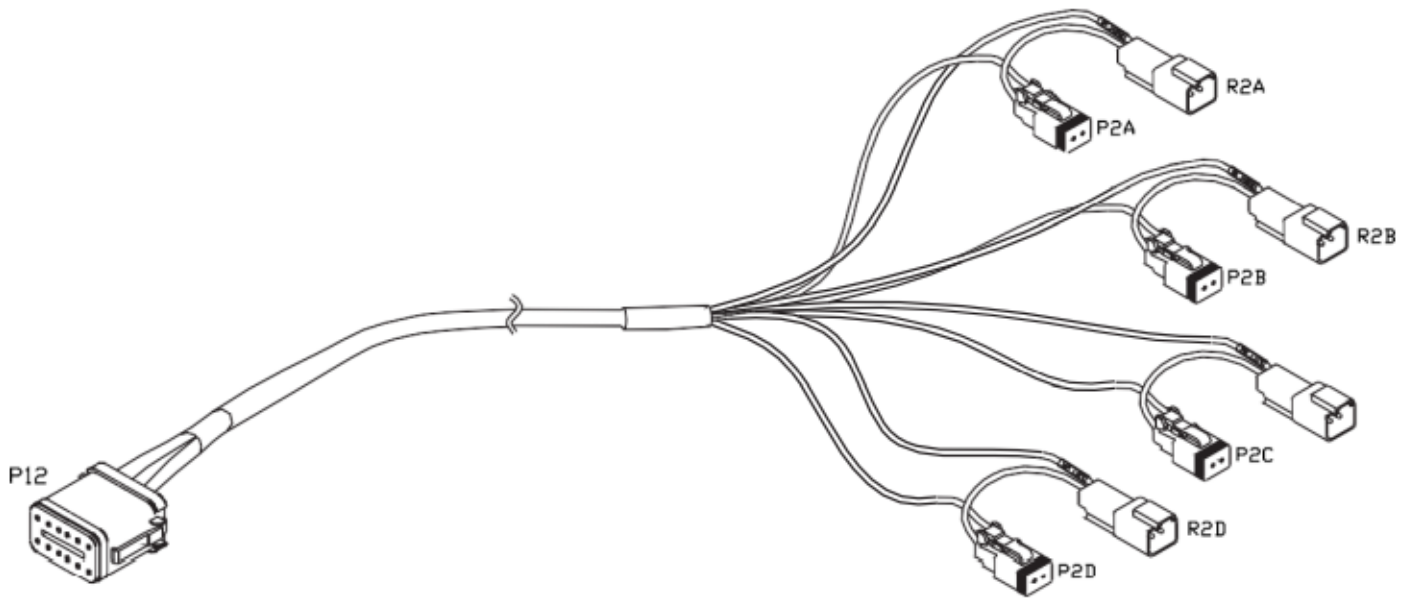
Item c10: 43230-04a – Cable UC5 Valve DT to DT



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

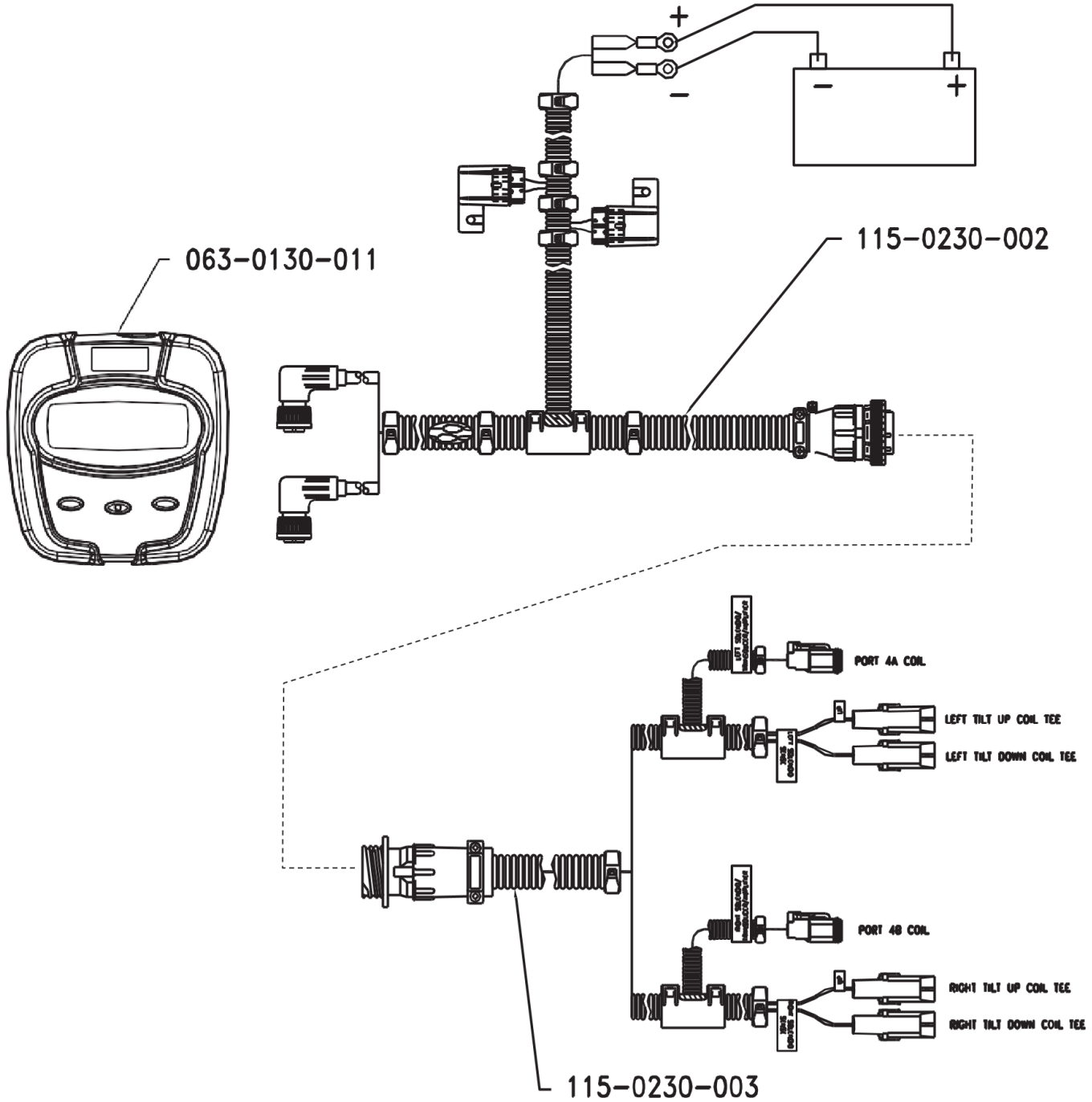


Item C21: 43240-07b – Cable UC5 interface Main DT (with Aux 1 & 2)

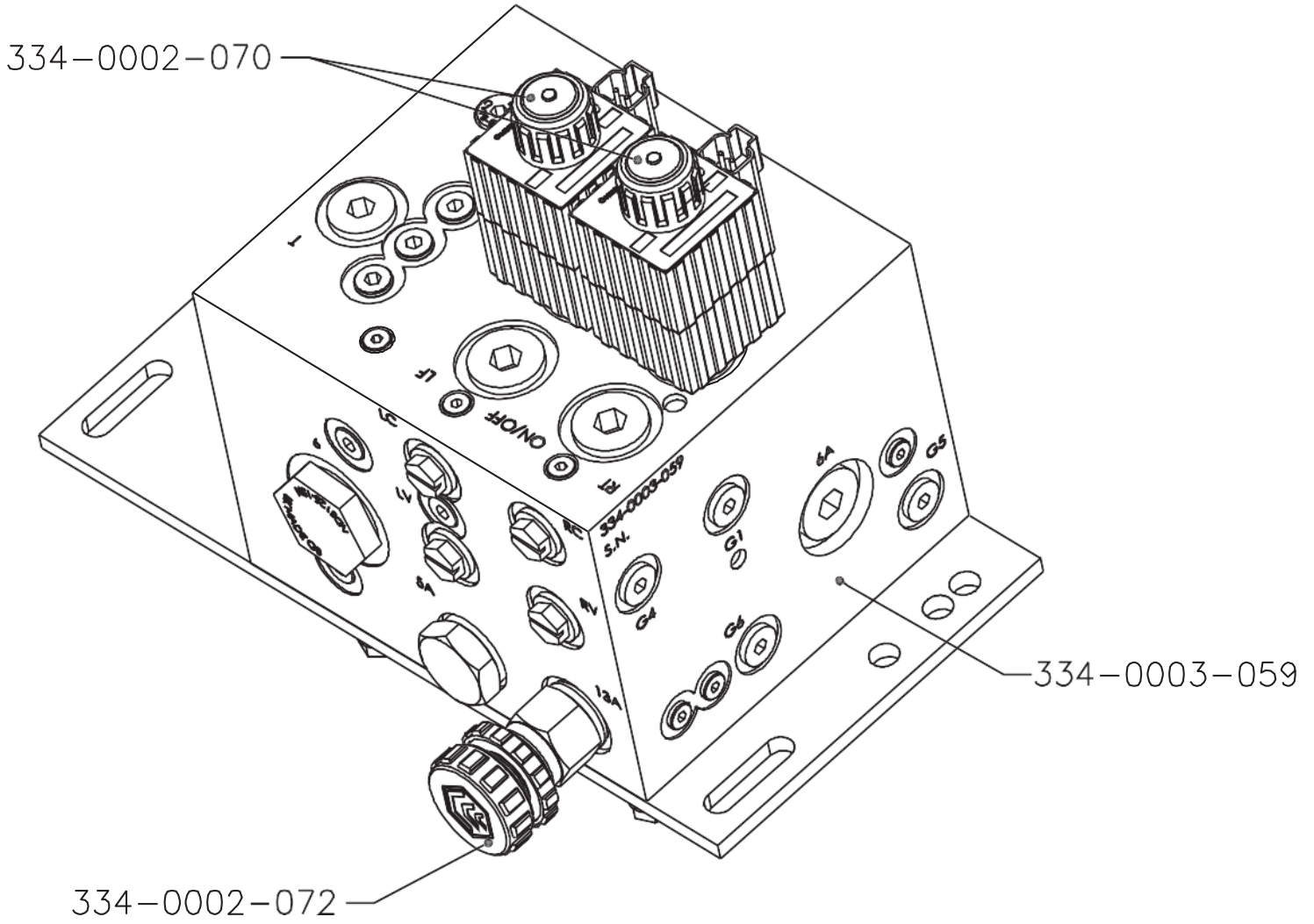


Power Glide – Wiring Schematic

CONNECT LEADS TO BATTERY OR LIVE POWER SOURCE

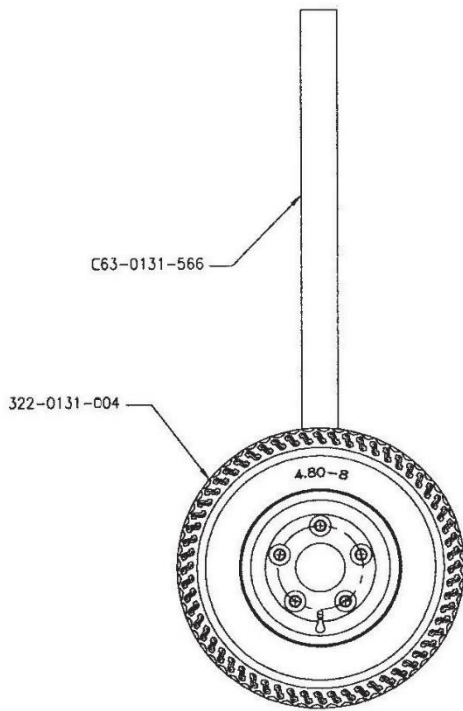


Power Glide – Hydraulic Block

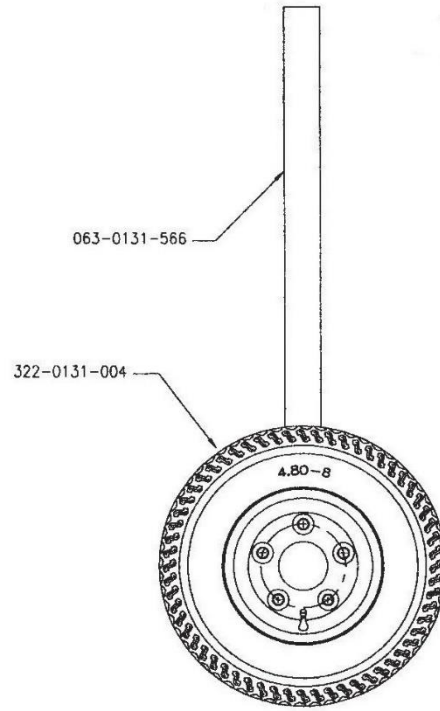


Power Glide – Solid Axle

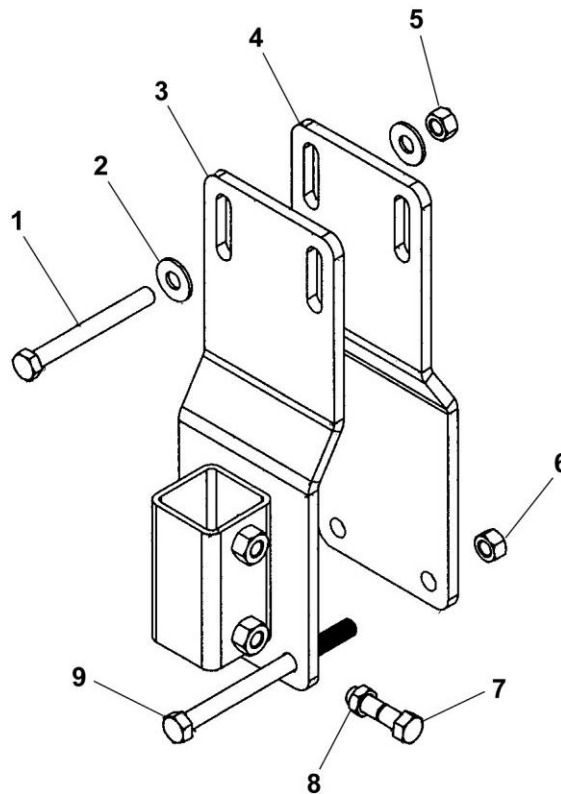
LEFT SIDE
WHEEL ASSEMBLY



RIGHT SIDE
WHEEL ASSEMBLY



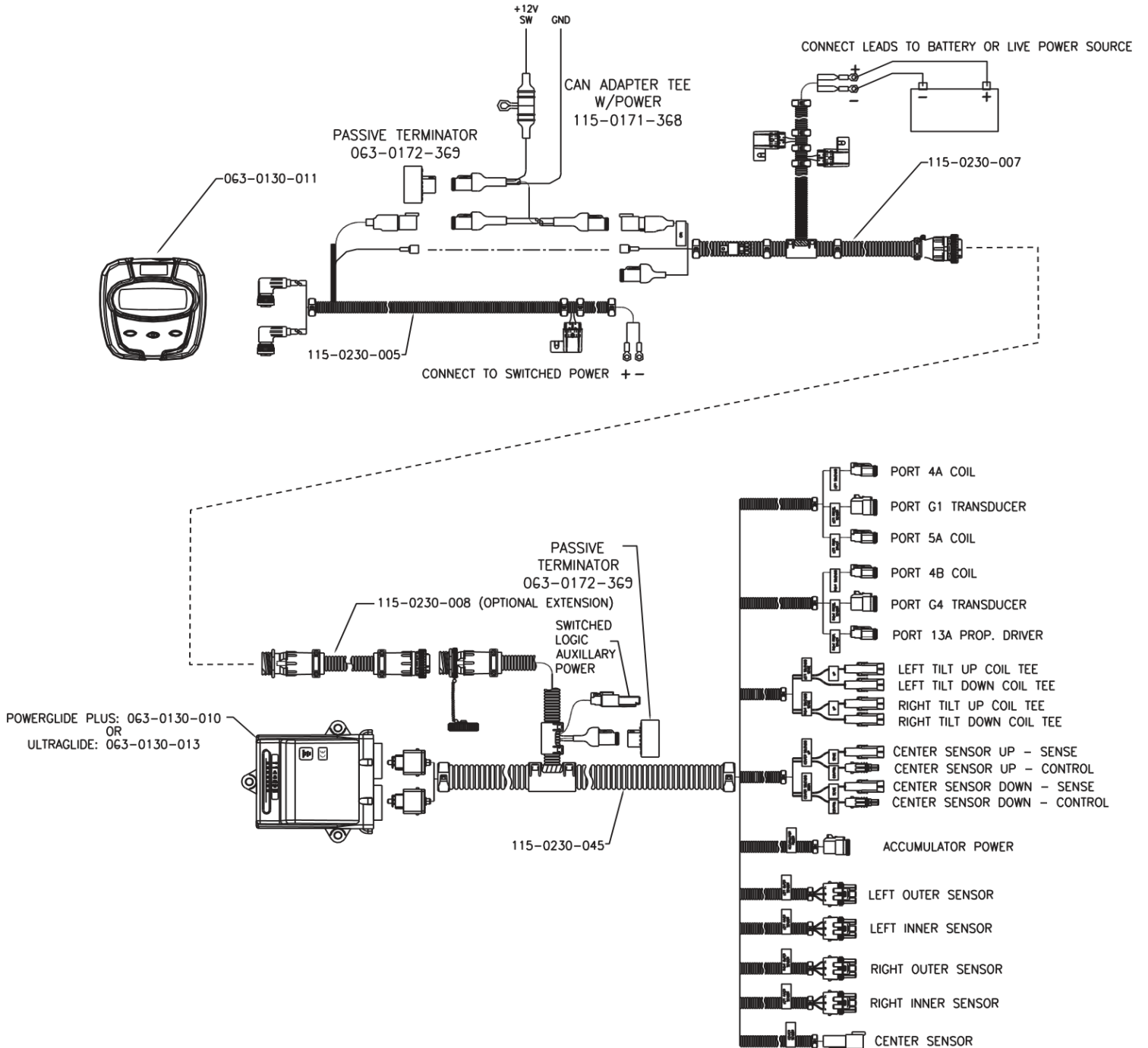
Power Glide & Power Glide Plus – Mounting Brackets



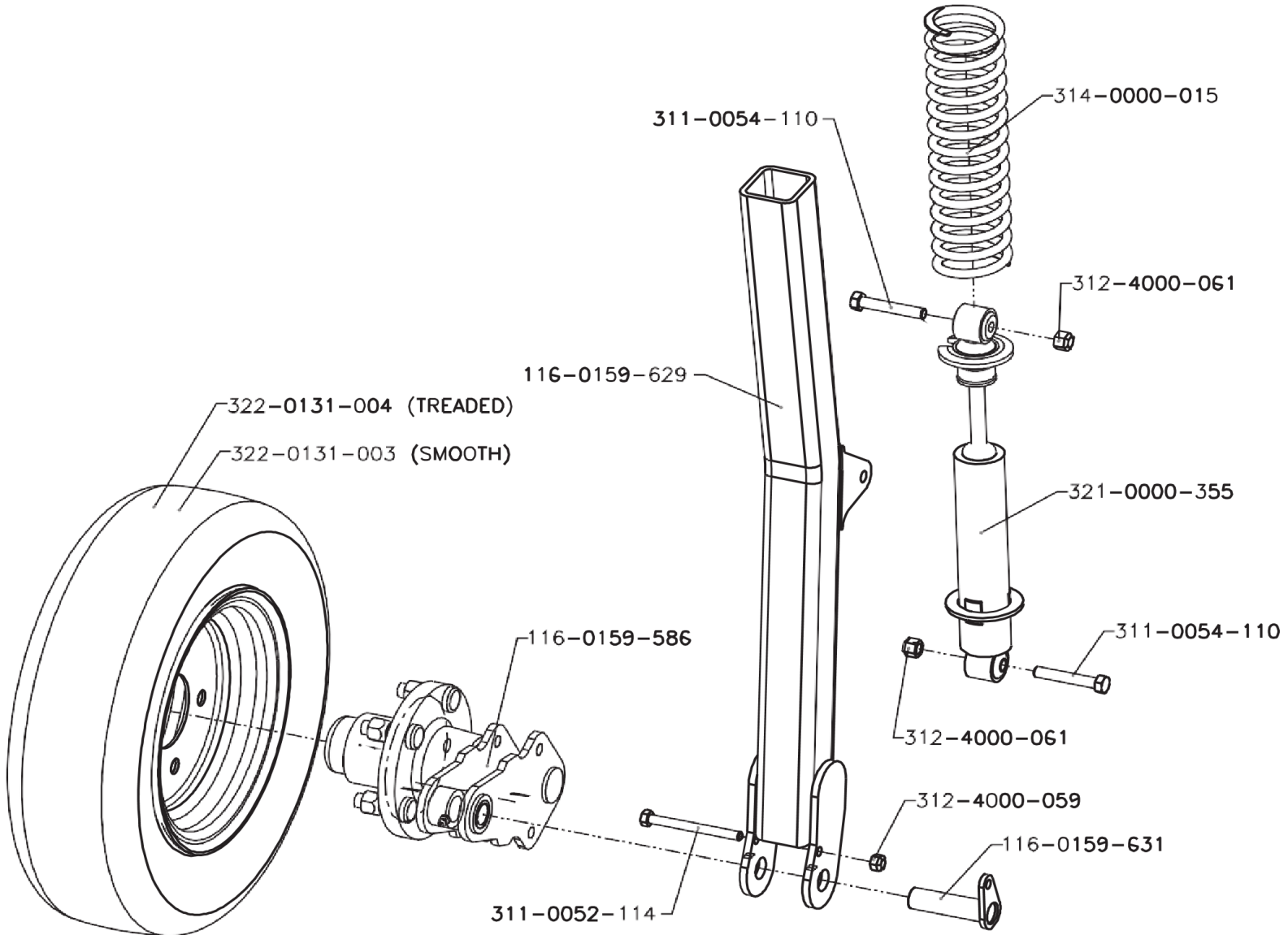
Parts List: Power Glide & Power Glide Plus – Mounting Brackets

ITEM	PART NO.	DESCRIPTION	QTY.
1	159	BOLT HEX, 1/2 X 4-1/2" GR5ZP	2
2	260	WASHER FLAT 1/2"ZP	2
3	8899	TUBEAUTOBOOM	1
4	13991	BRACKET WHEELMOUNTING	1
5	215	NUT HEX HEAVY1/2"	2
6	239	NUT NUT 1/2"CENTERLOCK	2
7	154	BOLT HEX, 1/2 X 2" GR5ZP	1
8	223	NUT HEX JAM1/2"	1
9		BOLT HEX, 1/2 X 6-1/2" GR5ZP	2

Power Glide Plus – Wiring Schematic

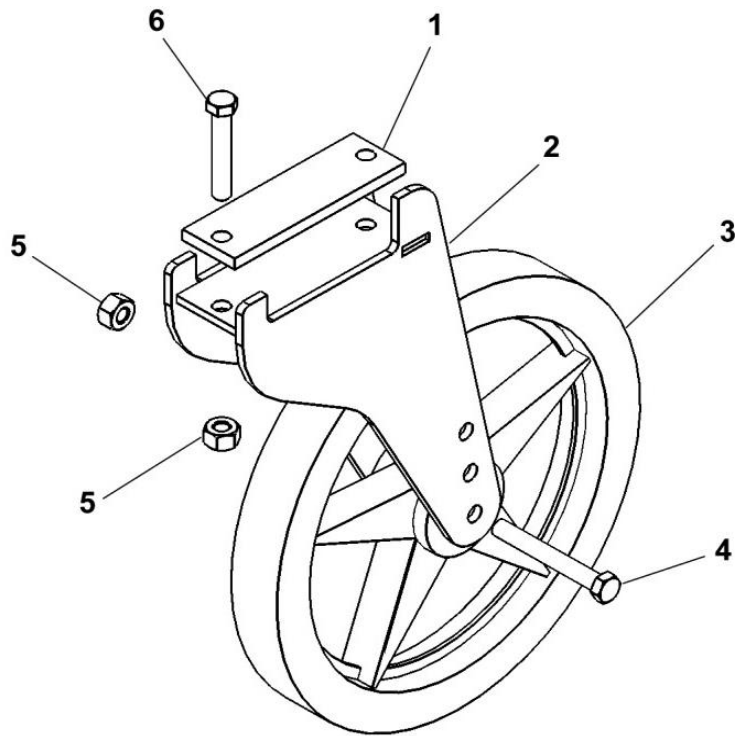


Power Glide Plus – Cushioned Axle



Arm Assembly With Out Tire:
063-0131-585 RH Cushioned Axle (Shown)

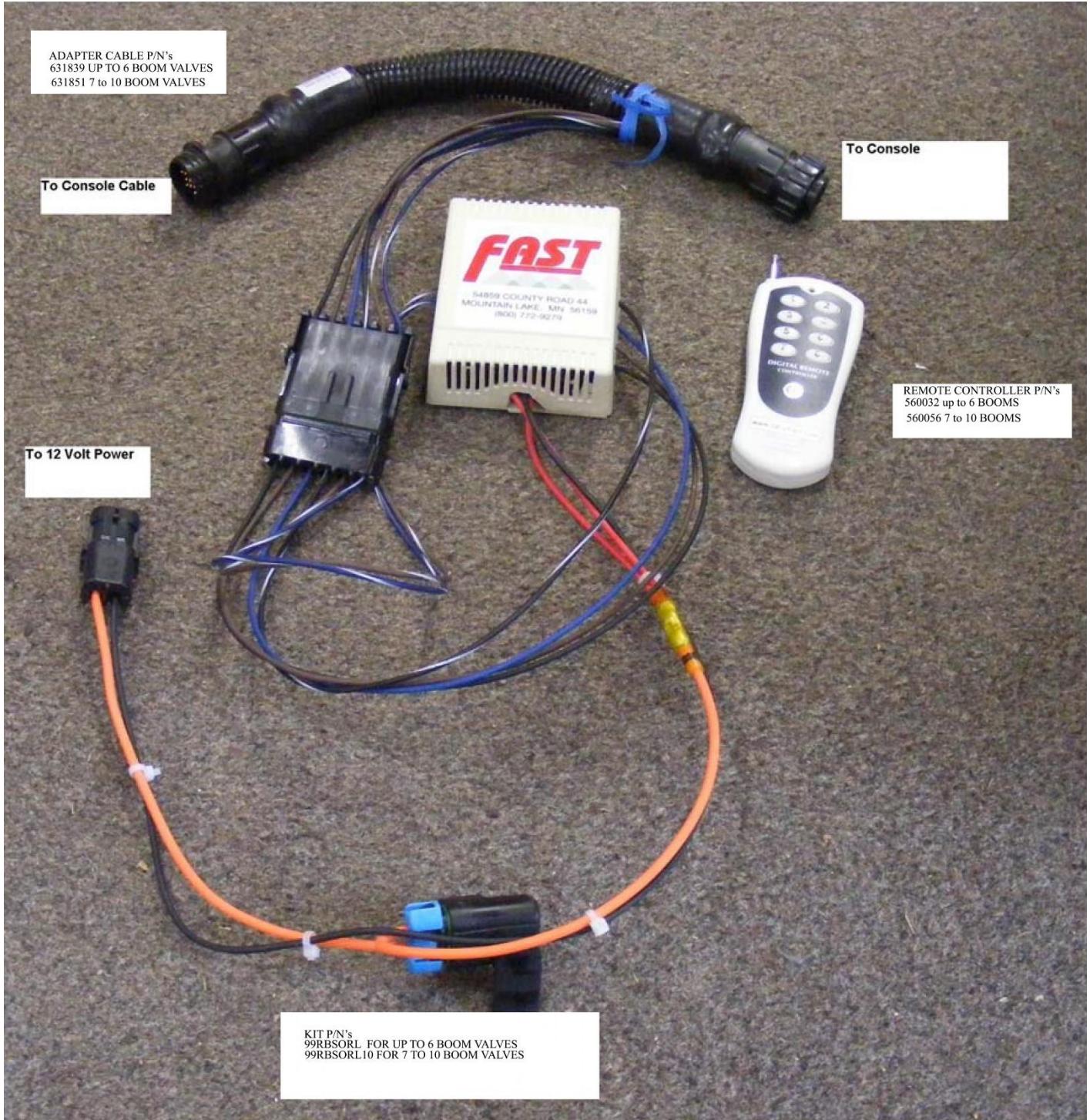
Gauge Wheel Assembly



Parts List 16501: Gauge Wheel Assembly

ITEM	PART NO.	DESCRIPTION	QTY.
1	16504	MOUNTINGPLATE	1
2	16500	GAUGE WHEELBRACKET	1
3	700031	GAUGE WHEEL 14 X1.34"	1
4	158	BOLT HH 1/2 X4"	1
5	215	NUT HH1/2"	2
6	156	BOLT HH 1/2 X3"	1

Remote Boom Shut Off, 6-Section



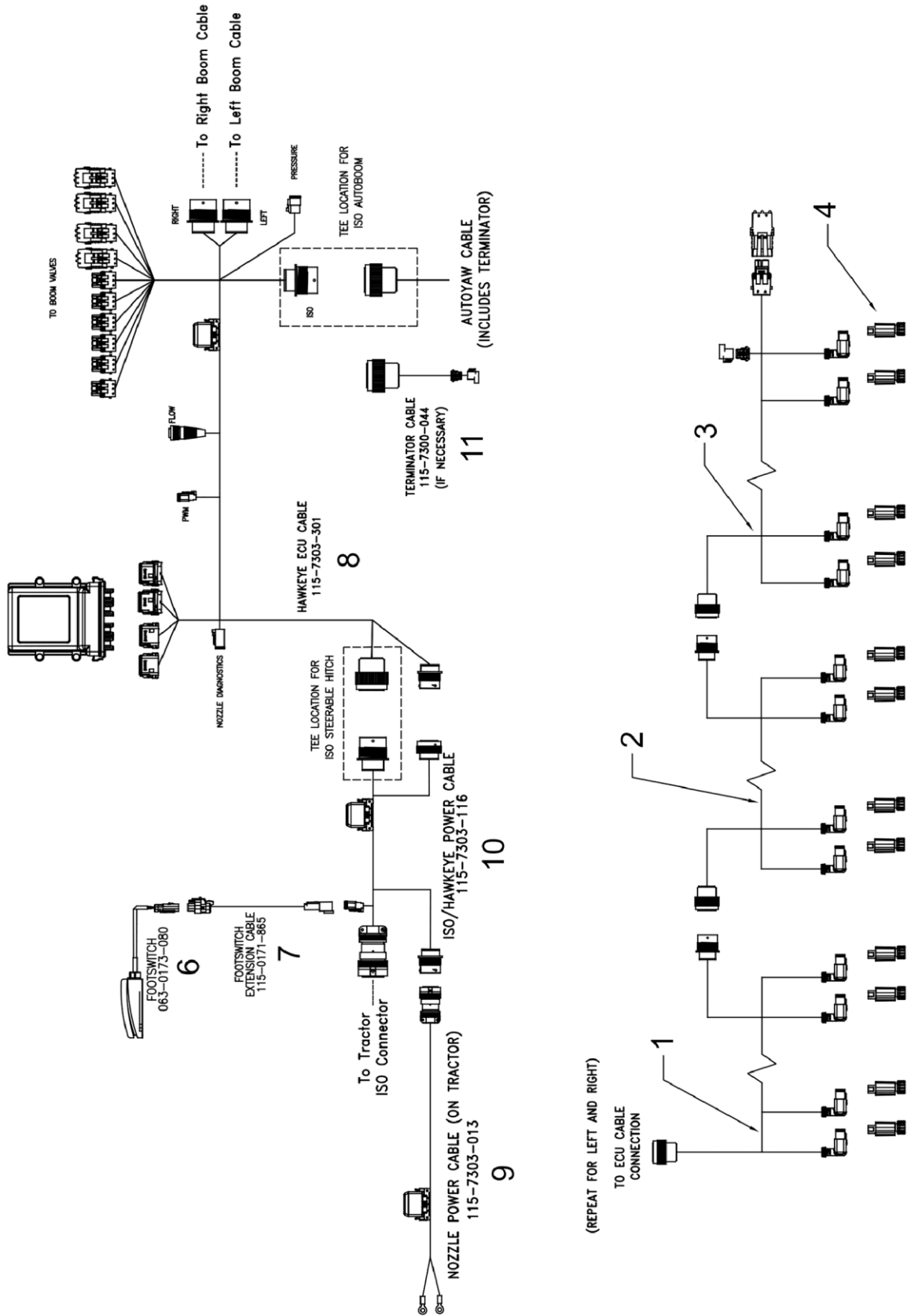
Parts List 99RBSORL: Remote Boom Shut Off, 6-Section

ITEM	QTY.	DESCRIPTION	ITEM	QTY.	DESCRIPTION
560053	1	WEATHERPACK MALE 16-14 GA	560029	1	ELEC. 2 PIN SHROUD
560017	2	ELEC SEAL WEATHER PACK-GREEN	560032	1	ELEC 8 SEC REMOTE BOOM SHUTOFF
560025	1.5	ELEC WIRE, BLACK 18 GA			
560030	1	ELEC 2 WIRE MINI FUSE HOLDER	560026	3.5	ELEC WIRE, RED 18 GA

RAVEN Hawkeye

HAWKEYE ON FAST SPRAYERS

HAWKEYE ECU
063-0173-704





ILLUSTRATED PARTS LIST

Parts List: RAVEN Hawkeye

ITEM	VENDOR PART NO.	PART NO.	QTY.	DESCRIPTION
1	RA115-7303-105	RA1157303105	2	CABLE, PRIMARY BOOM, 90' BOOM, 20" SPACING & 120' BOOM, 20" SPACING
1	RA115-7303-336	632002	2	CABLE, PRIMARY BOOM, 120' BOOM, 15" SPACING
1	RA115-7303-333	RA1157303333	2	CABLE, PRIMARY BOOM, 132' BOOM, 22" SPACING
2	RA115-7303-340	RA1157303340	2	CABLE, MID BOOM, 90' BOOM, 20" SPACING
2	RA115-7303-337	632003	2	CABLE, MID BOOM, 120' BOOM, 15" SPACING
2	RA115-7303-106	RA1157303106	2	CABLE, MID BOOM, 120' BOOM, 20" SPACING
2	RA115-7303-334	RA1157303334	2	CABLE, MID BOOM, 132' BOOM, 22" SPACING
3	RA115-7303-338	632004	2	CABLE, OUTER BOOM, 120' BOOM, 15" SPACING
3	RA115-7303-341	RA1157303341	2	CABLE, OUTER BOOM, 90' BOOM, 20" SPACING
3	RA115-7303-122	RA1157303122	2	CABLE, OUTER BOOM, 120' BOOM, 20" SPACING
3	RA115-7303-335	RA1157303335	2	CABLE, OUTER BOOM, 132' BOOM, 22" SPACING
4	RA06-30173-673	RA0630173673	*	VALVE, HAWKEYE NOZZLE, ARAG/HYPRO
4	RA06-30173-672	631984	*	VALVE, HAWKEYE NOZZLE, TEE JET
4	RA063-0173-674	RA0630173674	*	VALVE, HAWKEYE NOZZLE, WILGER
4			*	90' 20" (QTY 54), 120' 15" (QTY 96), 120' 20" (QTY 72), 132' 22" (QTY 72)
5	RA063-0173-704	631983	1	ISO PRODUCT CONTROLLER II ECU
6	RA063-0173-080	631856	1	SWITCH ASSEMBY FOOT ISO PRODUCT CONTROL
7	RA115-0171-865	631857	1	CABLE, FOOT SWITCH ISO PRODUCT CONTROL
8	RA115-7303-301	632001	1	CABLE, HAWKEYE ECU
9	RA115-7303-013	632000	1	CABLE, NOZZLE POWER
10	RA115-7303-116	631992	1	CABLE, 17' ISO/HAWKEYE POWER
11	RA115-7300-044	631996	1	CABLE, GEN 3 TO ACTIVE TERMINAL, TERMINATOR INCLUDED
11	RA063-0172-964	RA0630172964	1	TERMINATOR, FOR 631996 (RA1157300044)
N/S	RA115-7303-168	RA1157303168	1	CABLE, 2' ECU POWER
N/S	RA115-7303-148	RA1157303148	4	CABLE, 6' EXTENSION
N/S	RA115-0171-810	632047	1	CABLE, 10' 2P EXTENSION
N/S	RA115-7303-260	RA1157303260	1	CABLE, 15' ECU NOZZLE
N/S	RA115-7303-159	RA1157303159	1	CABLE, 4 NOZZLE HAWKEYE
N/S	RA115-7305-160	RA1157305160	1	CABLE, 5 NOZZLE HAWKEYE
N/S	RA115-7305-161	RA1157305161	4	CABLE, 10 NOZZLE HAWKEYE
N/S	RA115-7303-156	RA1157303156	2	CABLE, FENCE ROW
N/S	RA117-6020-005	631962	1	KIT, FOLD SWITCH BOX, ISO, 132' TRUSS BOOM, 22" SPACING
N/S	RA117-1005-114	632014	1	KIT, HAWKEYE FAST 9500T, 120' TRUSS BOOM, 20" SPACING
N/S	RA117-1005-056	631985	1	KIT, HAWKEYE SYSTEM SERVICE TEE JET
N/S	RA117-1005-112	632081	1	KIT, HAWKEYE, 90' BOOM, 20" SPACING
N/S	RA117-1005-113	RA1171005113	1	KIT, HAWKEYE, 120' TRUSS BOOM, 15" SPACING
N/S	RA117-1005-115	632108	1	KIT, HAWKEYE, 132' TRUSS BOOM, 22" SPACING
N/S	RA117-0138-066	631955	1	KIT, INSTALLATION, ISO ULTRAGLIDE
N/S		530401	1	NIPPLE, 1/4 X 1/4" MPT, POLY
N/S	RA115-7305-139	RA1157305139	1	NOZZLE JUMPER
N/S	RA422-0000-119P	632036	1	PRESSURE TRANSDUCER, 1-5V 0-250
N/S		530400	1	TEE, 1/4" FPT, POLY



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