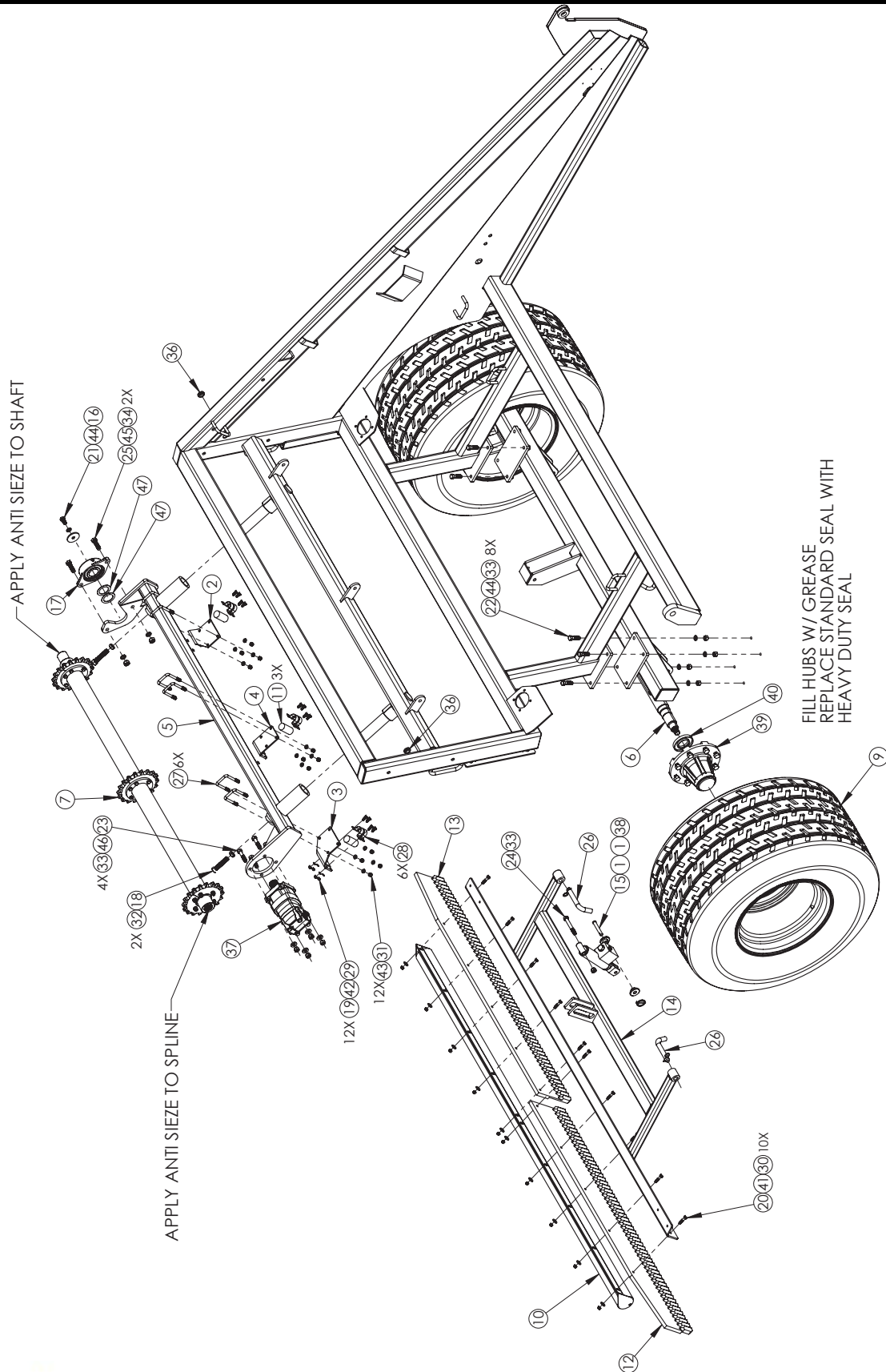


PART LIST SECTION INDEX

Contact and Ordering Information.....	P-3
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REAR AXLE AND GROOMER SCHEMATIC



REAR AXLE AND GROOMER LEGEND

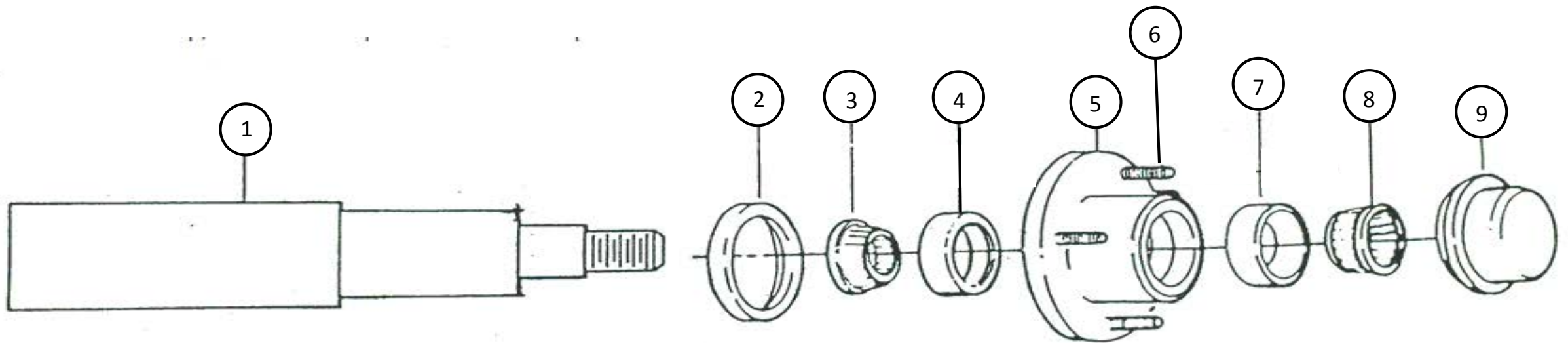
ITEM #	QTY.	PART #	DESCRIPTION
1	2	450183	BUSHING, GROOMER TENSION
2	1	460086	WLD; ROCK DEFLECTOR LH
3	1	460087	WLD: ROCK DEFLECTOR RH
4	1	460088	WLD: ROCK DEFLECTOR CTR
5	1	460096	MT, REAR SHAFT 4600
6	1	460098	AXLE WELDMENT 4600
7	1	460150	ASSY; SHAFT, REAR CONV SPLIT
8	1	460163	MAIN FRAME: 4600
9	2	480070	TIRE & RIM ASM: AW708
10	1	500408	GROOMER BAR ROUND
11	3	500499	ROD; ROCK KNOCKER
12	1	550124	COMB, RIGHT 5500
13	1	550125	COMB, LEFT 5500
14	1	550150	WLD: GROOMER BAR
15	1	CP0013	PIN, CLEVIS MOD 1/2 X 3
16	1	M5462	3/16 X 1/2 ID X 2-1/4 OD WASHER
17*	1	P004175	BEARING: 1-3/4 FLANGE 2 BOLT* SEE NOTE
18	2	P099012	BOLT: HEX 5/8-11 X 3 FULL THD
19	12	P100403	BOLT: HEX, 1/4"NC X 3/4" GR5
20	10	P100506	BOLT: HEX, 5/16" NCX 1 1/2"GR5
21	1	P100804	BOLT: HEX 1/2"-13 X 1"
22	8	P100807	BOLT: HEX 1/2-13 X 1-3/4"
23	4	P100809	BOLT: HEX 1/2-13 X 2-1/4"
24	1	P100815	BOLT: HEX, 1/2-13 NC X 3 3/4" GR.5
25	2	P100908	BOLT: HEX, 9/16-12 NC X 2
26	2	P121200	BENT HITCH PIN 3/4" X 3-1/2"
27	6	P127214	U-BOLT, 3/8 X 2 X 3.75
28	6	P128905	CLAMP, U STRAP 1.31
29	12	P155250	NUT: HEX, 1/4" TOP-LOCK
30	10	P155350	NUT: HEX, 5/16 TOP-LOCK
31	12	P155450	NUT: HEX 3/8"-16NC TOP-LOCK ZP
32	2	P155800	5/8-11 HEX JAM NUT
33	13	P155850	NUT: HEX 1/2"-13NC TOP-LOCK ZP
34	2	P155900	NUT: HEX, 9/16"-12 TOP-LOCK
35	1	P259160	CYLINDER: 1-1/2B X 4S W/CAV CH
36	2	P297625	GROMMET: 5/8 BORE
37*	1	P353600	MOTOR: 4000 COMPACT 169-0133-001
38	1	P622604	PIN, LYNCH 3/16 X 1-1/4
39	2	P764400	HUB ASSY, 8 BOLT
40	2	P764404	SEAL, GREASE 2 ID 3.62 OD
41	10	P850105	WASHER: FLAT 5/16" ZP
42	12	P851104	WASHER: LOCK 1/4"
43	12	P851106	WASHER: LOCK 3/8" ZP
44	9	P851108	WASHER: LOCK 1/2" ZP
45	2	P851109	WASHER: LOCK 9/16"
46	4	P852608	1/2" HARD WASHER
47	2	P855525	BUSHING: MACH 18GA X 1-3/4

*NOTE UNIT FACTORY EQUIPPED WITH BEARING P/N 71.P003115 1-3/4 4 BOLT PILOT BEARING

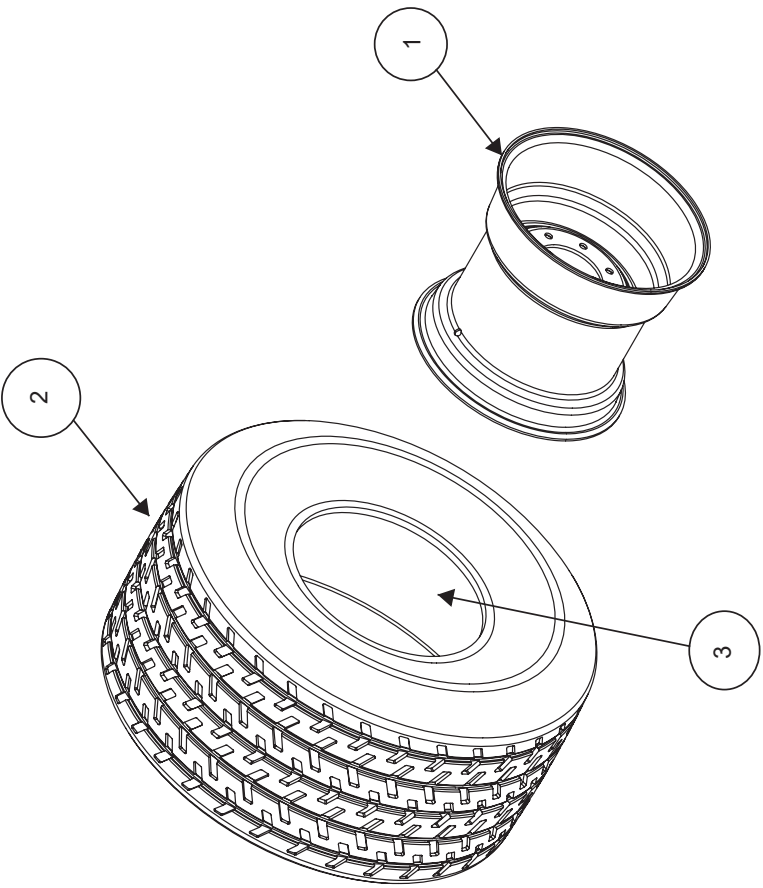
*71.P353610 SEAL KIT USED ON #37 CONVEYOR MOTOR P353600

Rear hub assembly 4600

- 1) 71.P765300 Spindle 2.12
- 2) 71.P764404 Seal
- 3) 71.P764408 Bearing 1.796 ID / bore
- 4) 71.P764403 Race
- 5) 71.P764405 Bare hub only
- * 71.P764400 Complete hub – contains items #3, 4, 5, 7, 8
- 6) 71.P764406 Wheel bolt 9/16 x 1-3/4
- 7) 71.P764402 Race
- 8) 71.P764407 Bearing 1.375 ID / bore
- 9) 71.P764401 Dust cap



PART NO.
480070



COMPLETE TIRE / WHEEL ASSEMBLY P/N: 480070

3	1	P765502	TUBE: INNER
2	1	P765500	TIRE: 500/50-17 AW708
1	1	P765501	RIM: 16 X 17
ITEM	QTY.	PART NUMBER	DESCRIPTION



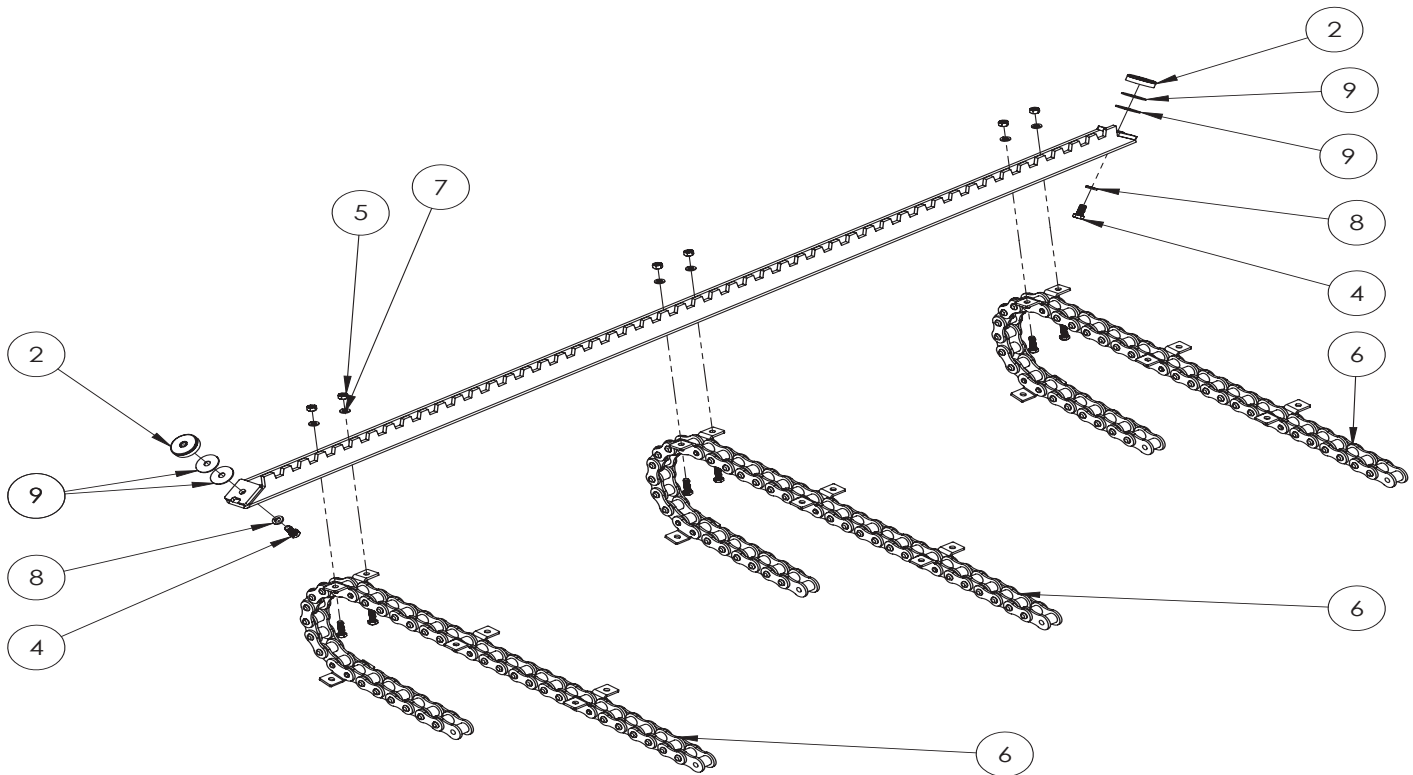
DRAWN BY	LEM
DATE	1-8-09
DO NOT SCALE	

UNLESS OTHERWISE NOTED		
DECIMALS	TOLERANCES ON FRACTIONS	ANGLES
XX±.060	± 1/32	± 1°
.XXX±.030		

TITLE	TIRE & RIM ASM: AW708
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PART NO.	480070
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#100 CONVEYOR CHAIN AND FLIGHT SCHEMATIC



<u>ITEM</u>	<u>QTY</u>	<u>PART NO</u>	<u>DESCRIPTION</u>
1	27	460136	WLDT: FLIGHT BLADE 4600, 2.12
2	54	470130	FLIGHT PUCK
3	162	P100504	BOLT: HEX, 5/16" NC X 1" GR5
4	54	P100603	BOLT: HEX, 3/8"NC X 3/4" GR5
5	162	P155350	NUT: HEX, 5/16 TOP-LOCK
6	3	P632140	CHAIN: 100K1 x 219 P ARMOR*SEE NOTE
6A	REF	P632142	LINK: KI CONNECTOR
7	162	P851105	WASHER: LOCK 5/16"
8	54	P851106	WASHER: LOCK 3/8" ZP
9	108	P852015	WASHER: FLAT 3/8" FENDER

* CHAIN REPLACED WITH UPDATED P/N 71.P632140

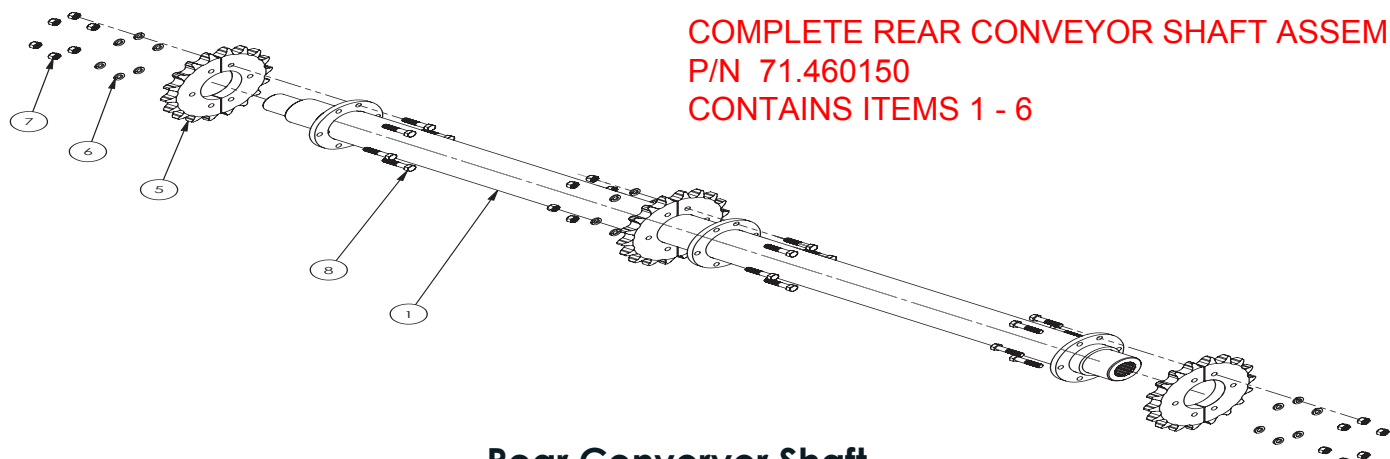
CHAIN REPAIR ITEMS:

71.P632143 #100 K1 REPAIR LINK

71.P632142 MASTER CONNECTING LINK

71.P632141 1/2 LINK (OFFSET)

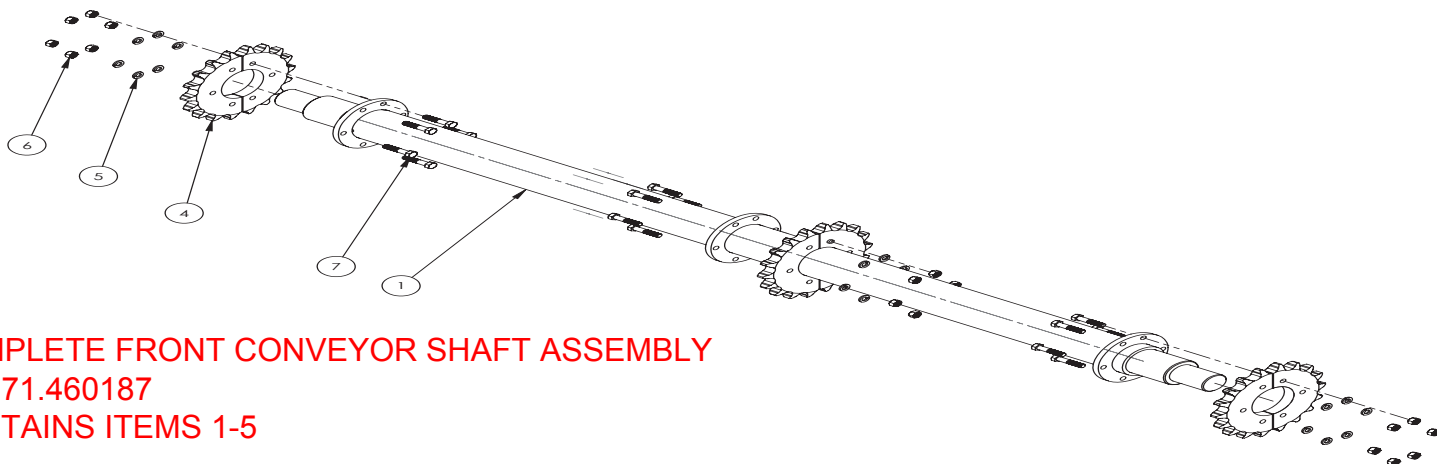
#100 CONVEYOR CHAIN FRONT / REAR SHAFT ASSEMBLY



COMPLETE REAR CONVEYOR SHAFT ASSEMBLY
P/N 71.460150
CONTAINS ITEMS 1 - 6

Rear Convoryor Shaft

ITEM	QTY.	PART NUMBER	DESCRIPTION
1	1	460142	WLDT: SHAFT REAR SPLIT MT 4600
2	18	P100607	BOLT: HEX 3/8-16 X 1-3/4"
3	18	P155450	NUT: HEX 3/8"-16NC TOP-LOCK ZP
4	3	P691218	SPROCKET; #100A18 SPLIT
5	18	P851106	WASHER: LOCK 3/8" ZP

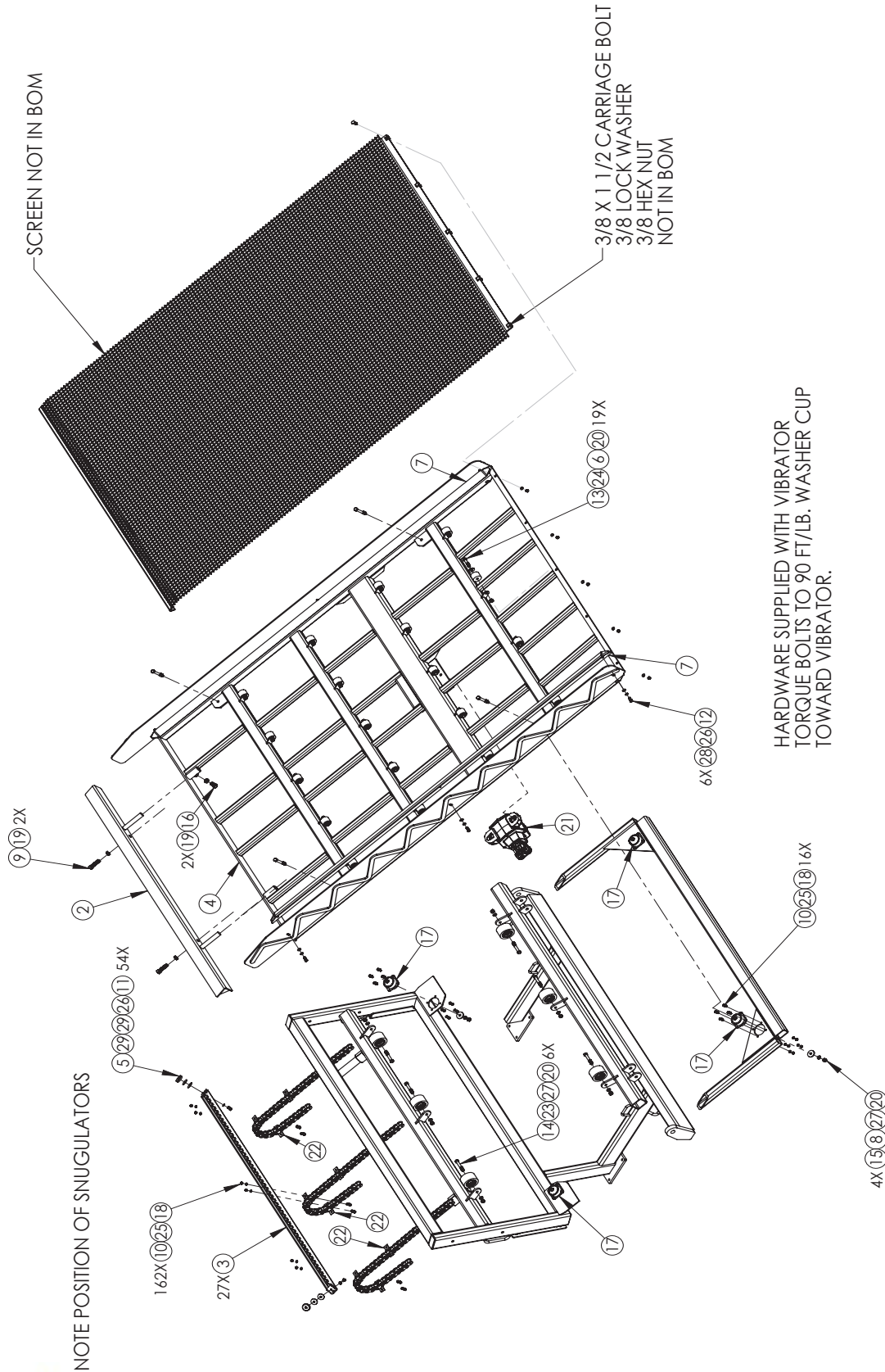


COMPLETE FRONT CONVEYOR SHAFT ASSEMBLY
P/N 71.460187
CONTAINS ITEMS 1-5

Front Convoryor Shaft

ITEM	QTY.	PART NUMBER	DESCRIPTION
1	1	460143	WLDT: SHAFT FRONT SPLIT MT 4600
2	18	P100607	BOLT: HEX 3/8-16 X 1-3/4"
3	18	P155450	NUT: HEX 3/8"-16NC TOP-LOCK ZP
4	3	P691218	SPROCKET; #100A18 SPLIT
5	18	P851106	WASHER: LOCK 3/8" ZP

SCREEN SCHEMATIC



SCREEN LEGEND

<u>ITEM</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>
1	1	460120	SCREEN ASSY; 3/4 HI RISE 4600
2	1	460134	SCREEN TENSIONER 72IN
3	27	460136	WLDT: FLIGHT BLADE 4600, 2.12
4	1	460160	WLDT: SCREEN FRAME 4600
5	54	470130	FLIGHT PUCK
6	19	CP0043	RISER: SCREEN- 90 A Duro (Blue)
7	2	CP0047	WLDT; GLIDE RAIL 45,46, 5500
8	4	M5009-5	3/16" X 1/2" X 1-3/4" WASHER
9	2	P099010	BOLT: HEX 5/8-11 X 2 1/2 FULL THD
10	178	P100504	BOLT: HEX, 5/16" NC X 1" GR5
11	54	P100603	BOLT: HEX, 3/8"NC X 3/4" GR5
12	6	P100604	BOLT: HEX 3/8"-16NC X 1 GR5ZP
13	19	P100810	BOLT: HEX, 1/2" X 2 1/2" GR.5
14	6	P100813	BOLT: HEX 1/2-13 X 3-1/4"
15	4	P100815	BOLT: HEX, 1/2-13 NC X 3 3/4" GR.5
16	2	P101005	BOLT: HEX 5/8-11 X 1-1/4"
17	4	P133065	ISOLATOR: SQ PLATFORM 283P310
18	178	P155350	NUT: HEX, 5/16 TOP-LOCK
19	4	P155800	5/8-11 HEX JAM NUT
20	29	P155850	NUT: HEX 1/2"-13NC TOP-LOCK ZP
21 *	1	P358106	VIBRATOR, HYD HA4-3300
22	3	P632140	CHAIN: 100K1 x 220 P
23	6	P761100	SNUGULATOR 2500BD1X
24	19	P850108	WASHER: FLAT 1/2" ZP
25	178	P851105	WASHER: LOCK 5/16"
26	60	P851106	WASHER: LOCK 3/8" ZP
27	10	P851108	WASHER: LOCK 1/2" ZP
28	6	P851606	WASHER: FLAT 3/8" HEAVY
29	108	P852015	WASHER: FLAT 3/8" FENDER

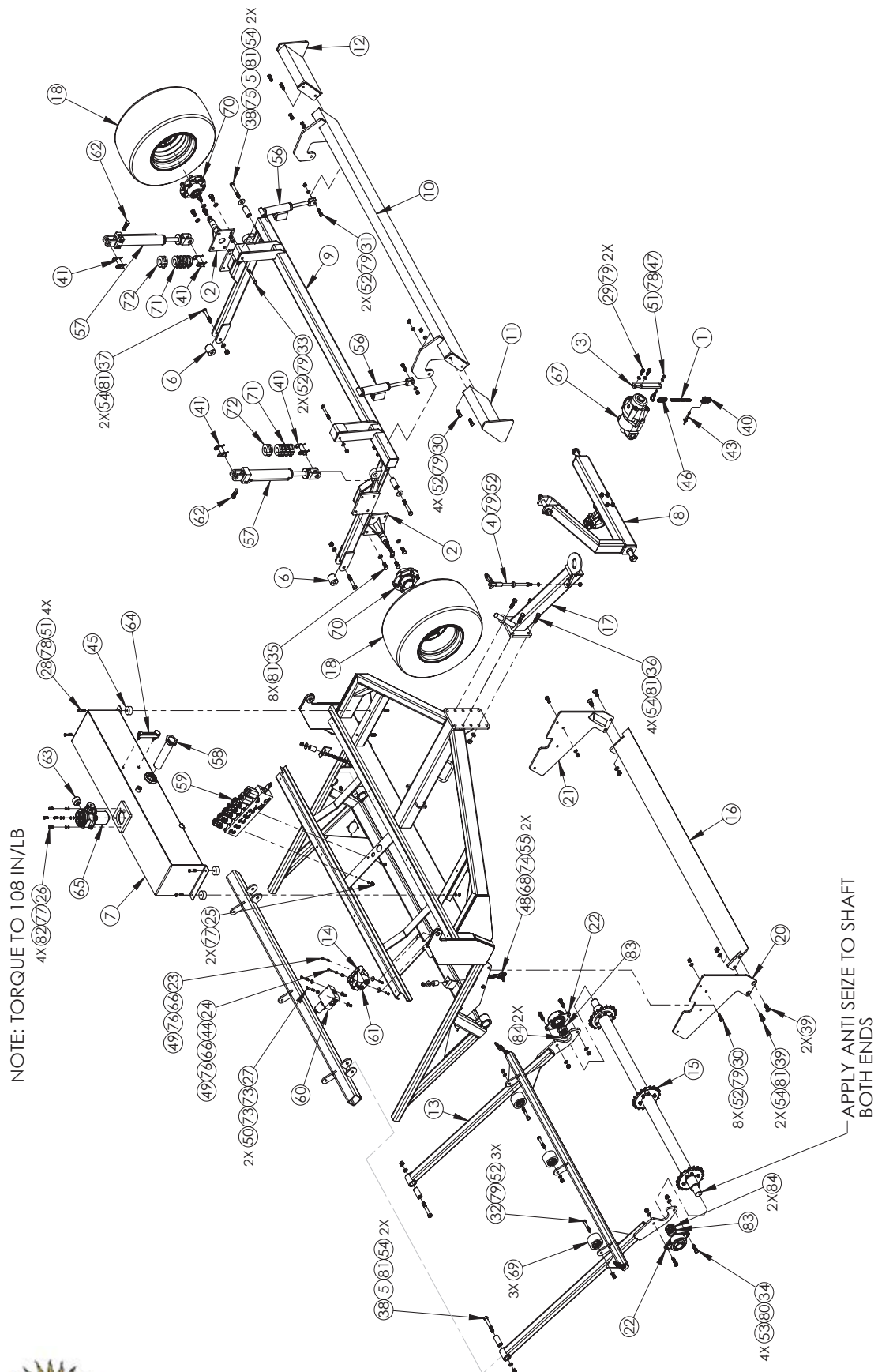
*** #21 SHAKER / VIBRATOR ADDITIONAL ITEMS**

71.P358105 HYDRAULIC MOTOR SHAFT SEAL

71.P358107 HYDRAULIC MOTOR

71.P358108 COMPLETE COUPLER ASSEMBLY

TANK & FRONT END SCHEMATIC



TANK & FRONT END LEGEND

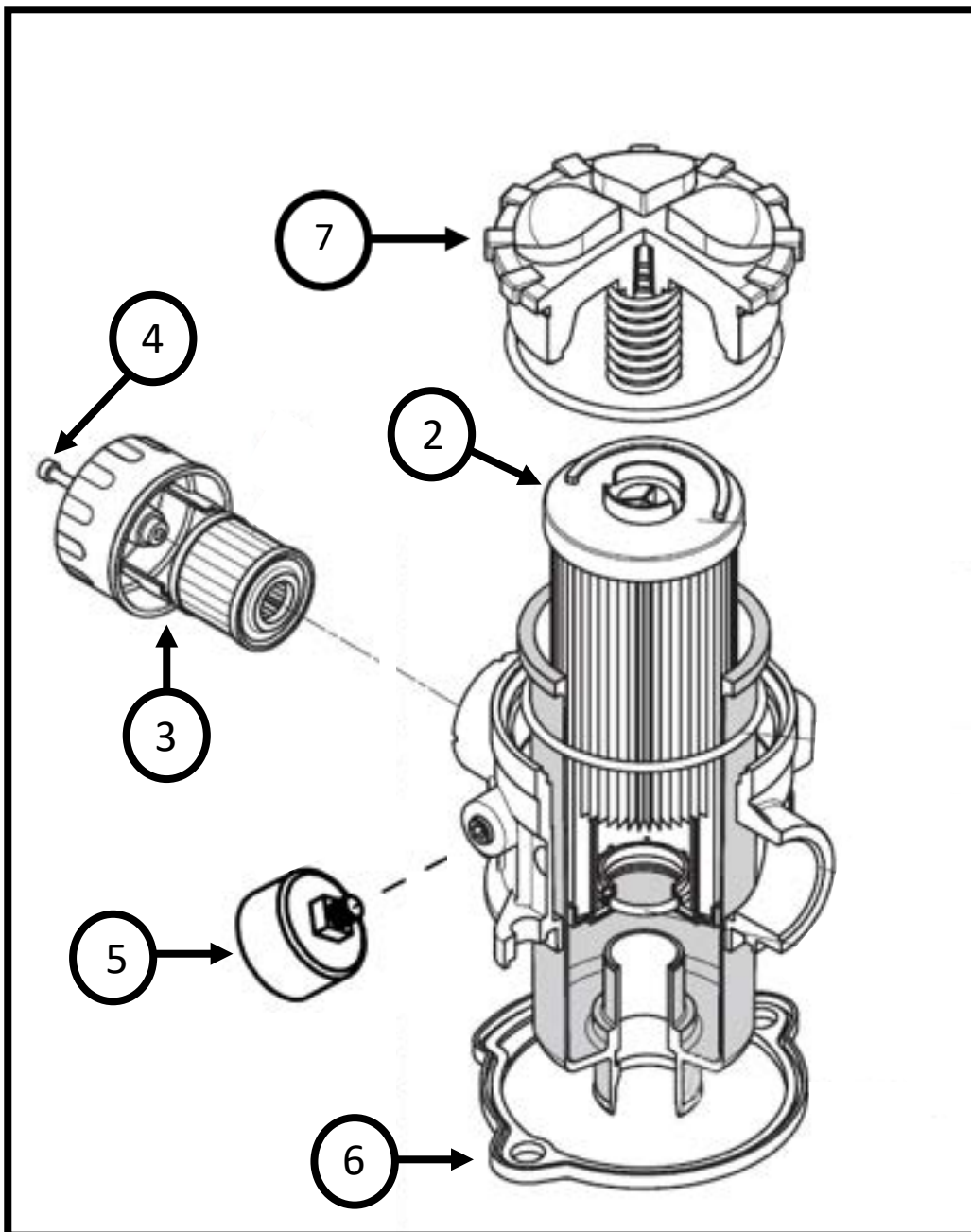
ITEM#	QTY.	PART#	DESCRIPTION	ITEM#	QTY.	PART#	DESCRIPTION
1	1	005123	CHAIN, TORQUE ARM	42	2	P121200	BENT HITCH PIN 3/4" X 3-1/2"
2	2	005201	AXLE WLD, GAUGE WHEEL	43	1	P123005	3/8 SAFETY PIN X 2 1/2
3	1	005231	TORQUE ARM, EATON PTO	44	1	P133033	SPACER: NYLON .62 OD X .25 ID X .62
4	1	005313	HOSE LOOP ASSY, SLIDER	45	4	P133035	RUBBER SPACER 2" X 1"
5	4	450098	BUSHING, NYL 1.25 X .625 X 2.688	46	1	P135005	QUICK LINK, 5/16"
6	2	450112	BUSHING, NYL 2 X .625 X 2	47	1	P135102	3/8-16 X 1-1/4 FORGED EYE BOLT
7	1	450296	HYD RESERVOIR 4500/4600	48	2	P135190	JAW END: 1/2-13 X 9
8	1	460040	ASM: 3 PT ADPT CAT2 OPEN	49	2	P155250	NUT: HEX, 1/4" TOP-LOCK
9	1	460049	GAUGE WHEEL FRAME 4600	50	2	P155350	NUT: HEX, 5/16 TOP-LOCK
10	1	460056	WLDT: LEVELING BLADE 4600	51	5	P155450	NUT: HEX 3/8"-16NC TOP-LOCK ZP
11	1	460060	WLDT: BLADE EXT RH	52	20	P155850	NUT: HEX 1/2"-13NC TOP-LOCK ZP
12	1	460061	WLDT: BLADE EXT LH	53	4	P155900	NUT: HEX, 9/16"-12 TOP-LOCK
13	1	460095	CONVEYOR SUPPORT 4600	54	12	P157500	NUT: HEX, 5/8"-11 TOP-LOCK
14	1	460135	LEVER; FLOW CONTROL	55	2	P158005	1/2-13 NYLOCK NUT
15	1	460151	ASSY; SHAFT, FRONT CONV SPLIT	56	2	P259160	CYLINDER: 1-1/2B X 4S W/CAV CH
16	1	460173	WLDT: DIGGER POINT 4600 FIXED	57	2	P259305	CYL: 2B X 10S W/CAV CH
17	1	470132	HITCH WELD, BOLT ON PINTLE	58	1	P278250	STRAINER, HYD 30 GPM
18	2	470152	WHEEL ASSY, 26 X 12-12	59	1	P292400	VALVE: VA04-0699-1
19	2	480070	TIRE & RIM ASM: AW708	60	1	P292410	VALVE ASM, PV72-30
20	1	460174	WLDT: DIGGER MT RH	61	1	P294150	VALVE: BRAND FC55-10-SAE*37
21	1	460175	WLDT: DIGGER MT LH	62	2	P294250	VALVE, PILOT CHECK
22*	2	P004175	BEARING: 1-3/4 FLANGE 2 BOLT	63	1	P297170	GAUGE, IND LP C1-20
23	1	P100411	BOLT: HEX, 1/4"NC X 2 3/4" GR5 ZN	64	1	P297220	GAUGE: OIL SIGHT
24	1	P100414	1/4-20 X 3-1/2 HEX BOLT	65*	1	P371840	FILTER: MPT1042CAG8A10HBT
25	2	P100503	BOLT: HEX, 5/16"NC X 3/4"GR5	66	2	P500304	WASHER: RUBBER 1/4 X 1
26	4	P100504	BOLT: HEX, 5/16" NC X 1" GR5	67	1	P556600	PUMP, EATON PTO #77022-LAH
27	2	P100511	5/16-18 X 2-3/4 HEX BOLT	68	2	P602420	SPRING, TUBE 1/2 X 1-1/8 X 1-3/4
28	4	P100608	BOLT: HEX 3/8-16 X 2"	69	3	P761100	SNUGULATOR 2500BD1X
29	2	P100805	BOLT: HEX, 1/2" X 1-1/4"	70	2	P764300	HUB ASSEMBLY, 6 BOLT
30	12	P100806	BOLT: HEX, 1/2" X 1 1/2"GR.5Z	71	2	P781000	STROKE CONT SET
31	2	P100807	BOLT: HEX 1/2-13 X 1-3/4"	72	2	P781002	STROKE CONTROL, 1-1/2
32	3	P100813	BOLT: HEX 1/2-13 X 3-1/4"	73	4	P850105	WASHER: FLAT 5/16" ZP
33	2	P100816	BOLT: HEX 1/2"-13NC X 4 GR5ZP	74	2	P850108	WASHER: FLAT 1/2" ZP
34	4	P100908	BOLT: HEX, 9/16-12 NC X 2	75	2	P850110	WASHER: FLAT 5/8" ZP
35	8	P101005	BOLT: HEX 5/8-11 X 1-1/4"	76	2	P851104	WASHER: LOCK 1/4"
36	4	P101009	BOLT; HEX 5/8 X 2 1/4	77	6	P851105	WASHER: LOCK 5/16"
37	2	P101015	BOLT: HEX 5/8-11 X 3-3/4 GR8	78	5	P851106	WASHER: LOCK 3/8" ZP
38	4	P101017	BOLT, HEX 5/8-11 X 4-1/4	79	22	P851108	WASHER: LOCK 1/2" ZP
39	4	P110707	BOLT: FSHCS 5/8-11 NC X 1.75	80	4	P851109	WASHER: LOCK 9/16"
40	1	P118070	PIN CLEVIS, 5/16 X 1	81	20	P851110	WASHER: LOCK 5/8"
41	4	P120850	CLEVIS PIN: 1"	82	4	P852105	WASHER: FLAT 5/16" NARROW
				83	2	P855128	10 GA. X 1-3/4" MACHINE BUSHING
				84	4	P855525	BUSHING: MACH 18GA X 1-3/4

*71.P371841 REPLACEMENT HYDRAULIC FILTER ONLY

*NOTE - UNIT FACTORY EQUIPPED WITH BEARING 71.P003115 1-3/4 4 BOLT PILOT

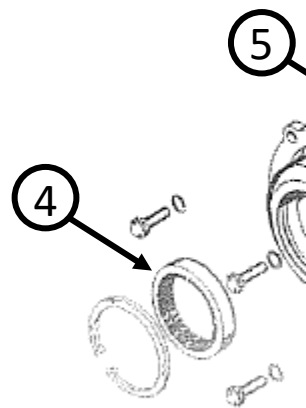
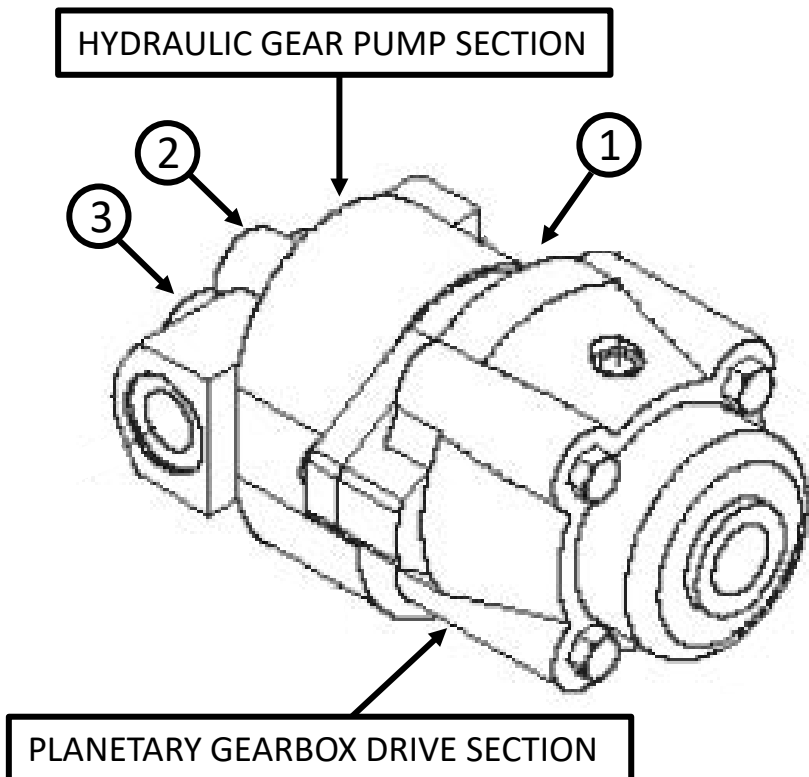
HYDRAULIC FILTER HOUSING

- 1) 71.P371840 Complete filter housing: includes base gasket and 10-micron filter element
- 2) 71.P371841 Filter element 10-micron
- 3) 71.P371842 Breather filter element / housing
- 4) 71.P110160 Mounting screw M4 - .7 X 25 mm socket head cap screw
- 5) 71.P297170 Filter indicator gauge
- 6) 71.P371839 Base gasket
- 7) 71.P371844 Cover with spring



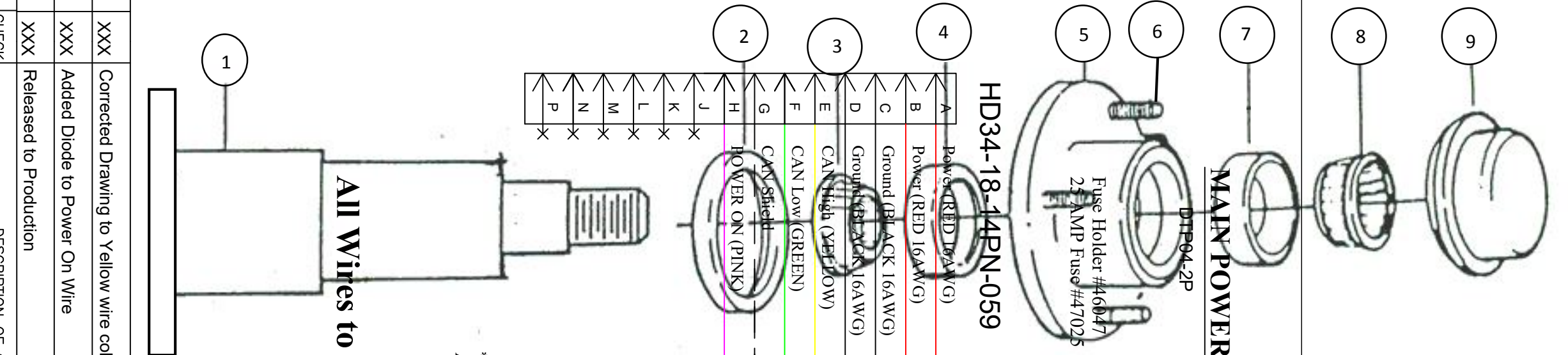
PTO PUMP PLANETARY GEARBOX DRIVE / HYDRAULIC

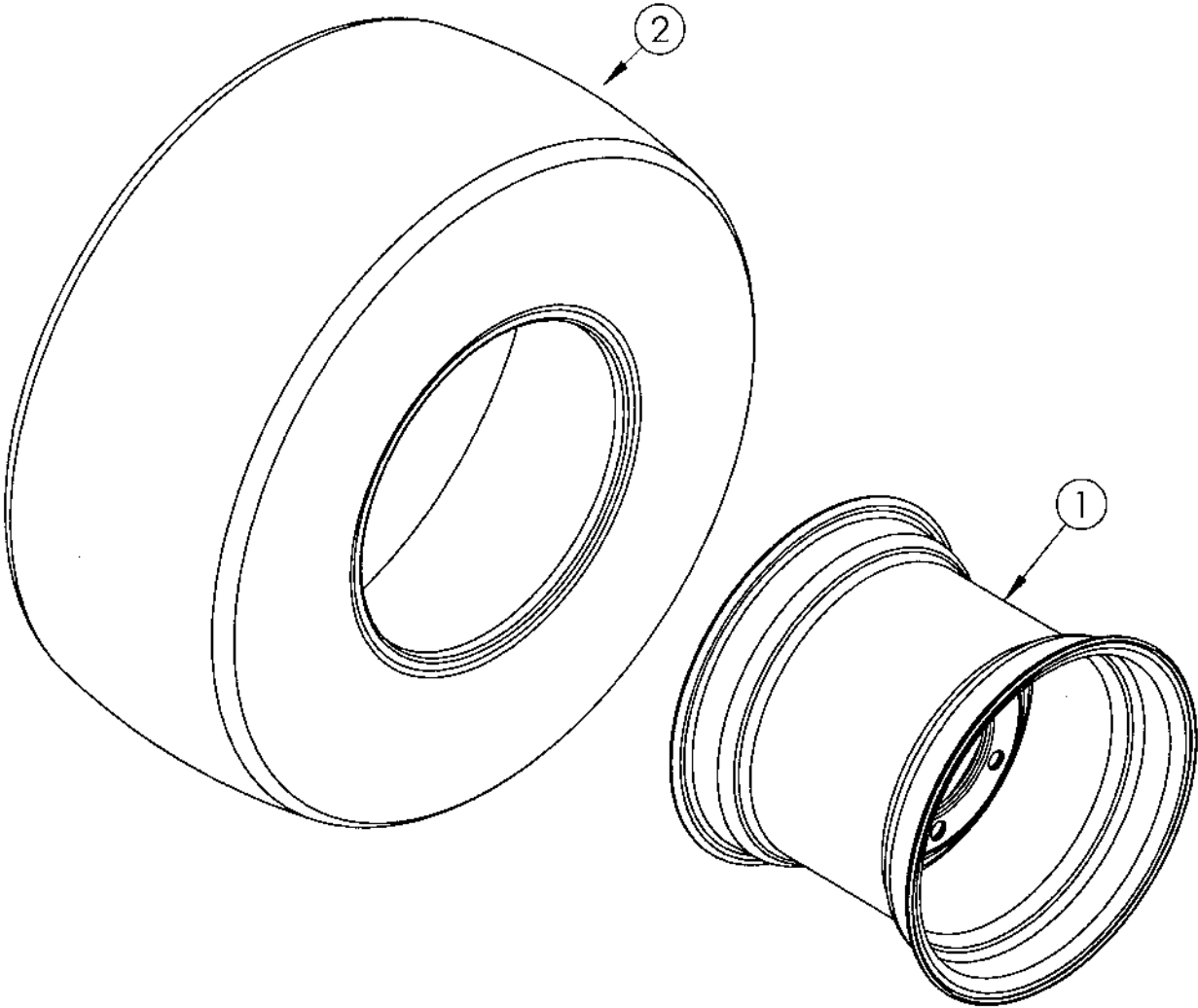
- 1) 71.P556600 COMPLETE PUMP ASSEMBLY (PLANETARY GEARBOX DRIVE / HYDRAULIC GEAR PUMP)
- 2) 71.P556610 HYDRAULIC GEAR PUMP (GEAR PUMP)
- 3) 71.P556611 HYDRAULIC GEAR PUMP SEAL KIT
- 4) 71.V16253-34 PTO / PLANETARY GEARBOX INPUT SHAFT
- 5) 71.V160.15 O RING



FRONT HUB ASSEMBLY MODEL 4600

- 1) 71.005201 AXLE WELD: GAUGE WHEEL
- 2) 71.P764302 HUB SEAL MFG. / SKF P/N: 16284
- 3) 71.P764303 INNER CONE / BEARING PEER P/N: LM29749
- 4) 71.P764304 INNER CUP / RACE PEER P/N: LM29710
- 5) 71.P764300 COMPLETE HUB ASSEMBLY (CONTAINS ITEM# 2 THRU 9 EXCEPT FOR #6)
- 6) 71.P764305 HUB ONLY: 6 BOLT X 6 INCH BOLT CIRCLE X 4-5/8 PILOT
- 7) 71.P764306 WHEEL BOLT 1/2-20 NF X 1-3/4 CONICAL
- 8) 71.P764307 OUTER CUP / RACE PEER P/N: LM67010
- 9) 71.P764308 OUTER CONE / BEARING PEER P/N: LM67048
- 10) 71.P764301 DUST CAP GKN P/N: P502026
- 11) 71.P764310 BEARING KIT: CONTAINS ITEM# 2 THRU 4 AND 7 THRU 9





COMPLETE FRONT TIRE - WHEEL ASSEMBLY P/N: 470152

2	1	P763300	TIRE, 26 X 12-12 TURF TRAC
1	1	P750300	RIM: 12 X 10.50
ITEM	QTY.	PART NUMBER	DESCRIPTION



SHIELDS SCHEMATIC



DRILL "Q" .322 FOR KLIK NUT
INTO TOP OF MAIN FRAME
AFTER PLACING INTO POSITION

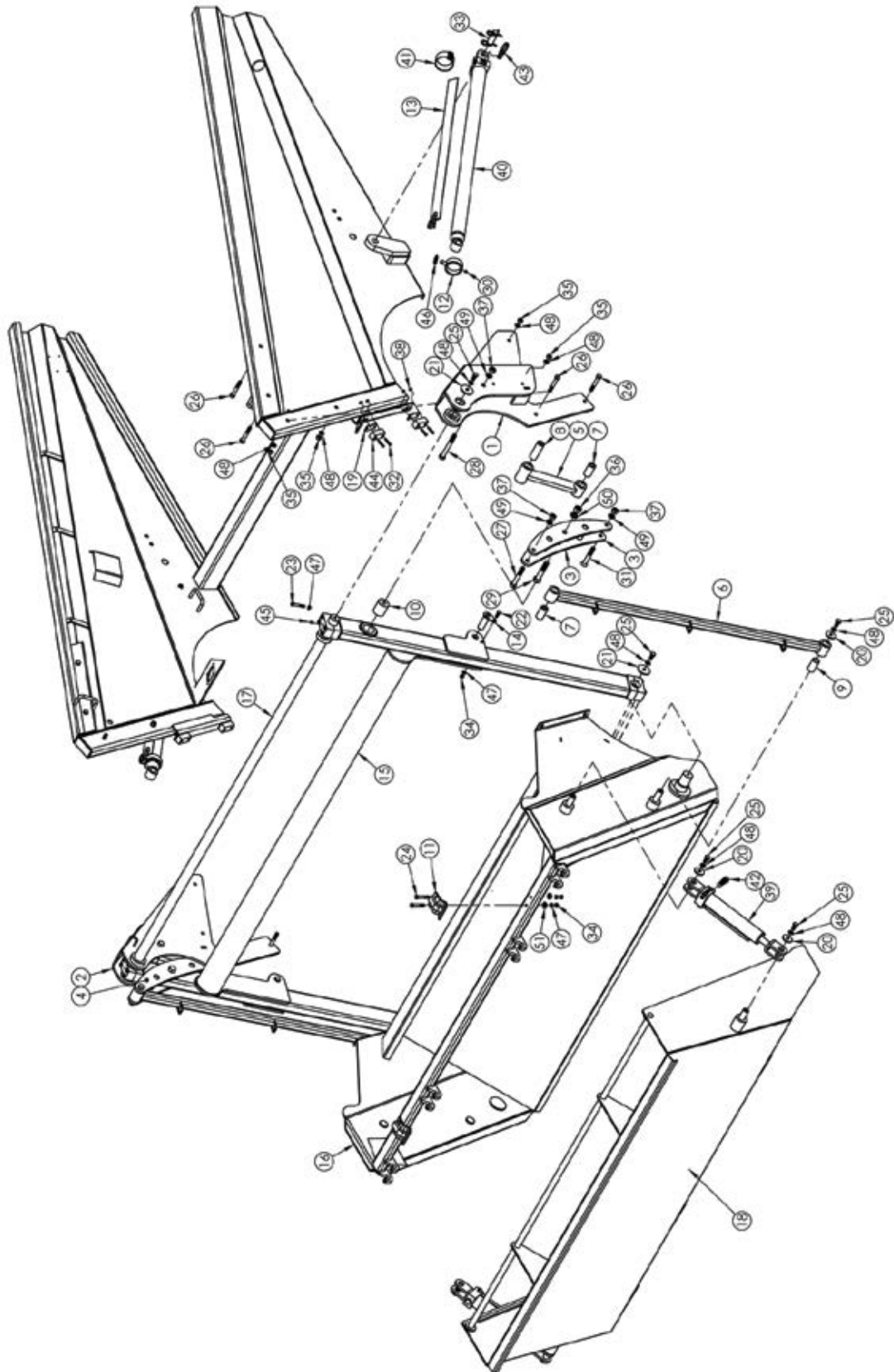
SHIELDS LEGEND

<u>ITEM #</u>	<u>QTY.</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	1	450362	SHIELD: VALVE COVER WELD
2	1	460103	SHIELD: CONVEYOR CONTROL
3	2	470228	SHIELD, CONVEYOR
4	1	480151	FRAME, CONVEYOR COVER
5	1	480153	COOLER MOUNT
6	12	P100403	BOLT: HEX, 1/4"NC X 3/4" GR5
7	20	P100404	BOLT: HEX, 1/4"NC X 1"GR5
8	4	P100504	BOLT: HEX, 5/16" NC X 1" GR5
9	1	P117300	COOLER, HYD OIL AKG DC16-12
10	8	P126900	METAL BRONZE BEARING 1/4 X 3/8
11	4	P155250	NUT: HEX, 1/4" TOP-LOCK
12	4	P155350	NUT: HEX, 5/16 TOP-LOCK
13	20	P160251	NUT: KLIK 1/4-20 X .08-.14
14	36	P850104	WASHER: FLAT 1/4" ZP
15	4	P850105	WASHER: FLAT 5/16" ZP
16	28	P851104	WASHER: LOCK 1/4"
17	4	P851105	WASHER: LOCK 5/16"
18	1	P999000	BOX: OWNERS MANUAL

* NOT PICTURED

71.P117310 HYD COOLING FAN ONLY

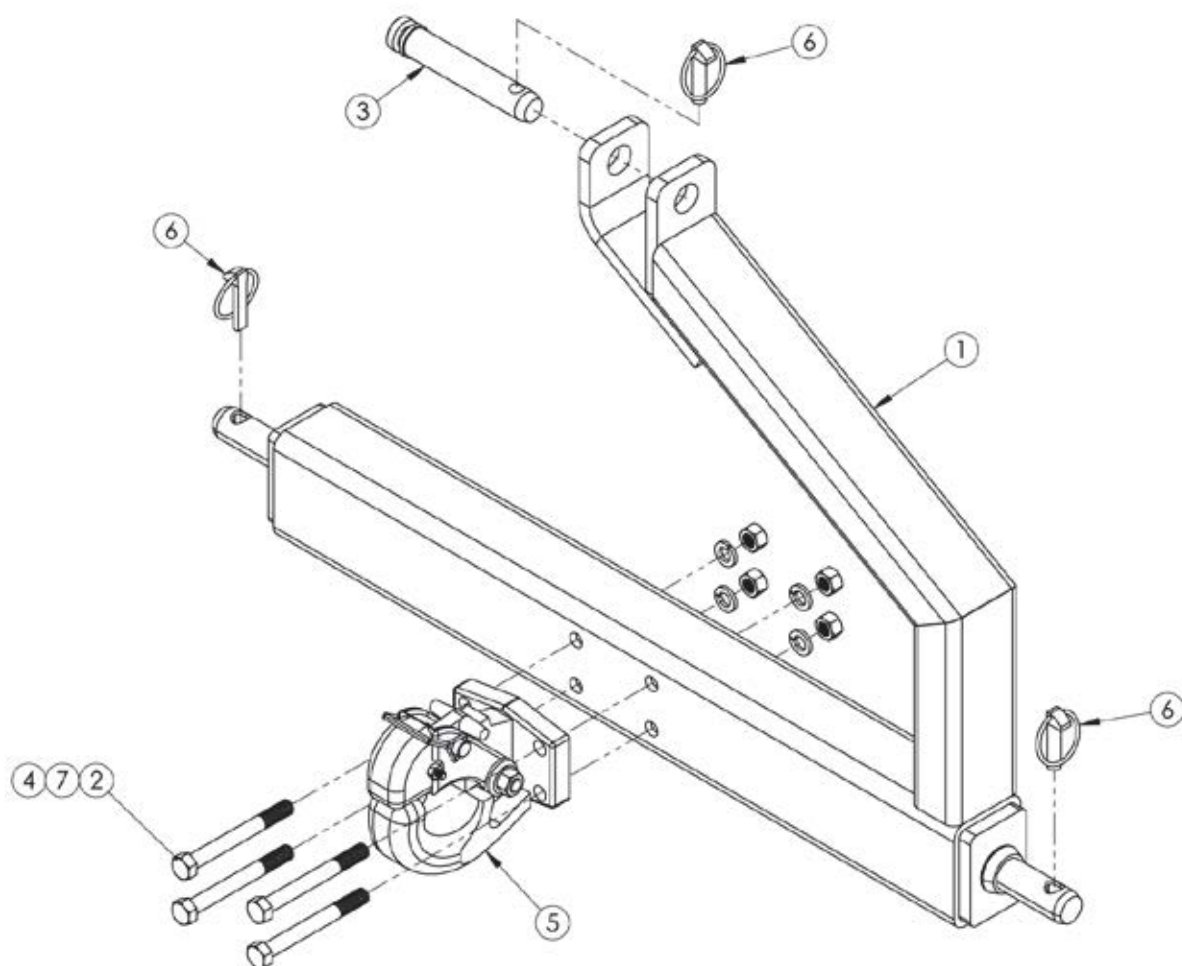
BOOM AND HOPPER SCHEMATIC



BOOM AND HOPPER LEGEND

<u>ITEM NO.</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	450114	MT: HIGH LIFT RH
2	1	450115	MT: HIGH LIFT LH
3	1	450117	SCISSOR ARM WLD RH
4	1	450118	SCISSOR ARM WLD LH
5	2	450120	LINK: SCISSOR ACTION BASE
6	2	450121	LINK: SCISSOR ACTION PARALLEL
7	4	450138	BUSHING: NYL 1.25 X .625 X 2.312
8	2	450139	BUSHING, NYL 1.25 X .625 X 3.5
9	2	450140	BUSHING: NYL 1.25 X 1 X 2.312
10	2	450141	BUSHING: NYL 2 X .75 X 2.312
11	2	450149	HOPPER LOCK, WLD
12	2	450193	RETAINER, PROP BAR
13	2	450194	SAFETY PROP BAR ASM
14	2	480087	PIN, 1" X 3" LOCK
15	1	480166	BOOM WLD 72 SB
16	1	480167	HOPPER BASE WLD 72 SB
17	1	480170	PIVOT, HIGH LIFT STABILIZER
18	1	480174	HOPPER DOOR WELD, 2 YD
19	4	M30079	SPACER: BUMPER
20	6	M5009-5	3/16" X 1/2" X 1-3/4" WASHER
21	4	M5462	3/16 X 1/2 ID X 2-1/4 OD WASHER
22	2	P100604	3/8-16 X 1.0" HEX BOLT
23	16	P100609	3/8-16 X 2-1/4 HEX BOLT
24	4	P100610	3/8-16 X 2-1/2 HEX BOLT
25	10	P100804	1/2-13 X 1" HEX BOLT
26	8	P100813	1/2-13 X 3-1/4" HEX BOLT
27	2	P101016	BOLT: HEX 5/8-11 X 4" GR8
28	2	P101021	BOLT: HEX 5/8-11 X 5-1/4
29	2	P101216	BOLT, HEX 3/4-10 X 4 GR8
30	2	P108606	SET SCREW, 3/8-16 X 3/8
31	2	P110750	BOLT: FLAT HD SOCKET 5/8-11 X 4" Z
32	8	P110912	CAPSCREW, 1/4-20 X 1-1/4 ALLEN HD
33	2	P120850	CLEVIS PIN: 1"
34	6	P155450	3/8-16 TOP LOCK NUT
35	8	P155850	NUT HEX, 1/2-13 TOP LOCK
36	2	P157120	3/4-10 TOP LOCK NUT
37	6	P157500	5/8-11 TOP LOCK NUT
38	8	P158003	NUT, HEX, 1/4 ELASTIC STOP
39	2	P259330	CYL, 2B X 8S W/CAV CH
40	2	P259335	CYL; 2B X 42S W/CAV 1" BARREL END
41	2	P259999	STRAP: 12" STD DUTY CINCH
42	2	P294250	VALVE, PILOT CHECK CKCB-XFN
43	2	P294260	VALVE, COUNTERBALANCE CHECK CBCG-LJN
44	4	P605000	SPRING BUMPER
45	4	P620200	1/4-28 STR GREASE FITTING
46	2	P622604	PIN, LYNCH 3/16 X 1-1/4
47	22	P851106	3/8" LOCK WASHER
48	18	P851108	1/2" LOCK WASHER
49	6	P851110	5/8" LOCK WASHER
50	2	P851112	3/4 LOCK WASHER
51	4	P851606	3/8" HEAVY WASHER

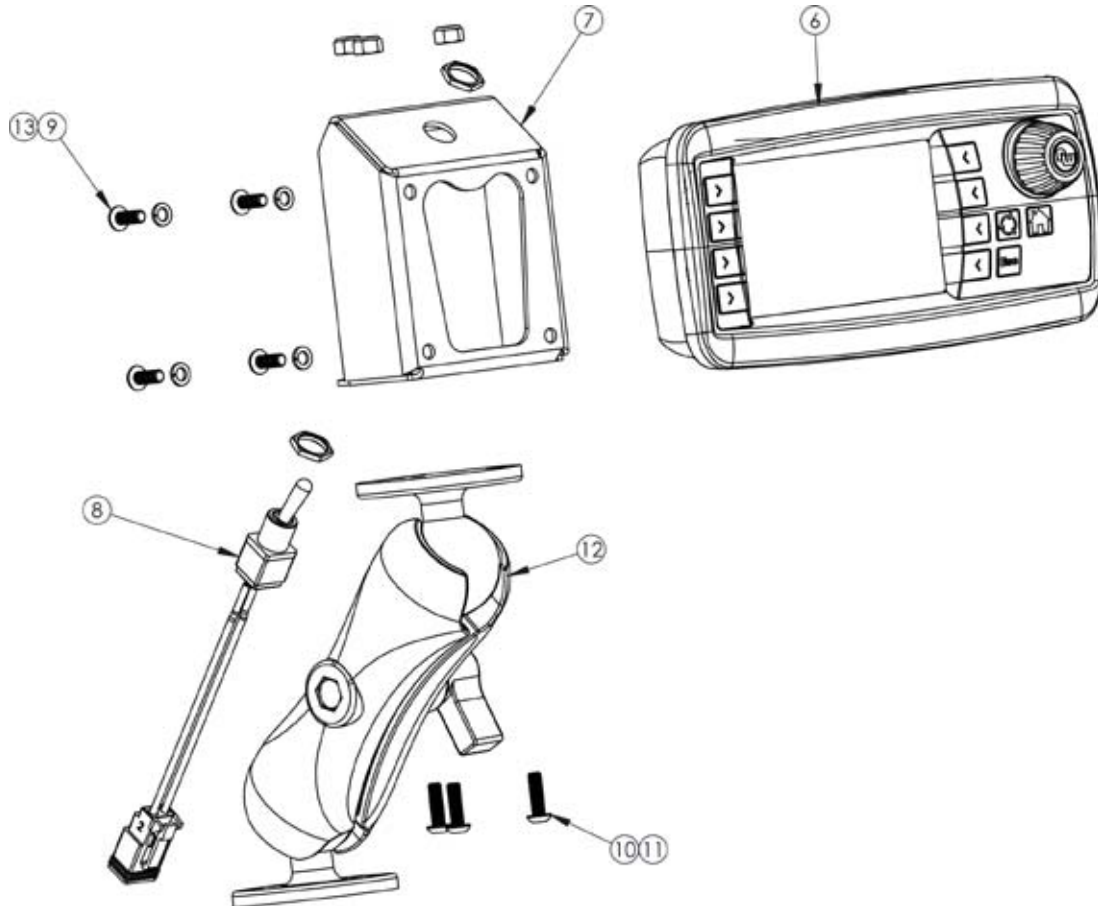
THREE POINT ADAPTER SCHEMATIC



THREE POINT ADAPTER LEGEND

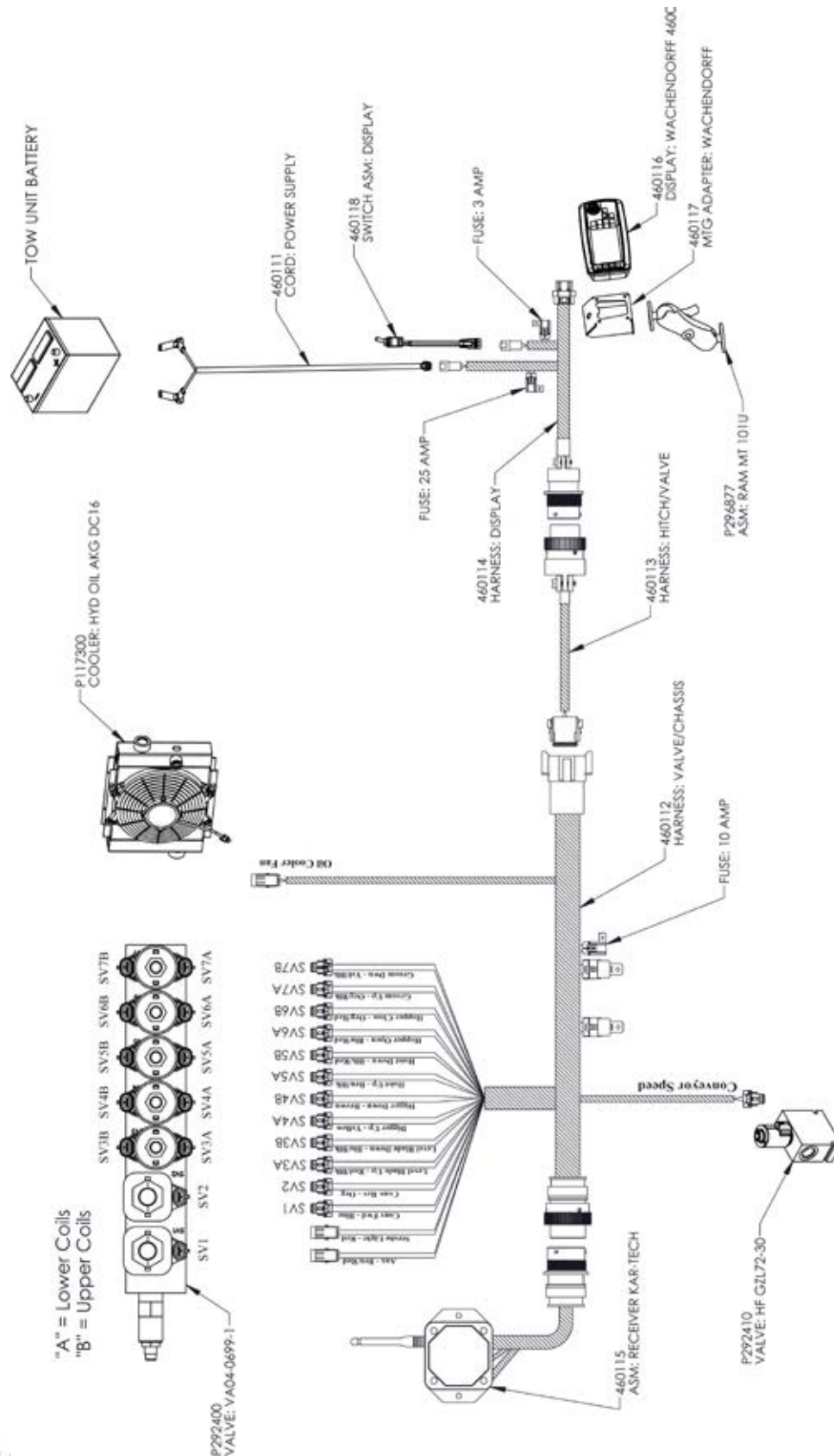
<u>ITEM</u>	<u>QTY</u>	<u>PART#</u>	<u>DESCRIPTION</u>
1	1	460041	PINTLE ADAPTER: 3PT CAT 2 OPEN
2	4	P100818.8	1/2-13 X 4 1/2" HEX BOLT GR 8
3	1	P120410	CAT 2 TOP LINK PIN
4	4	P155850	1/2-13 TOP LOCK HEX NUT
5	1	P466100	PINTLE HOOK 15 TON
6	3	P622603	7/16 X 1 1/4 LYNCH PIN
7	4	P851108	1/2" LOCK WASHER

CONTROL AND ELECTRICAL LEGEND



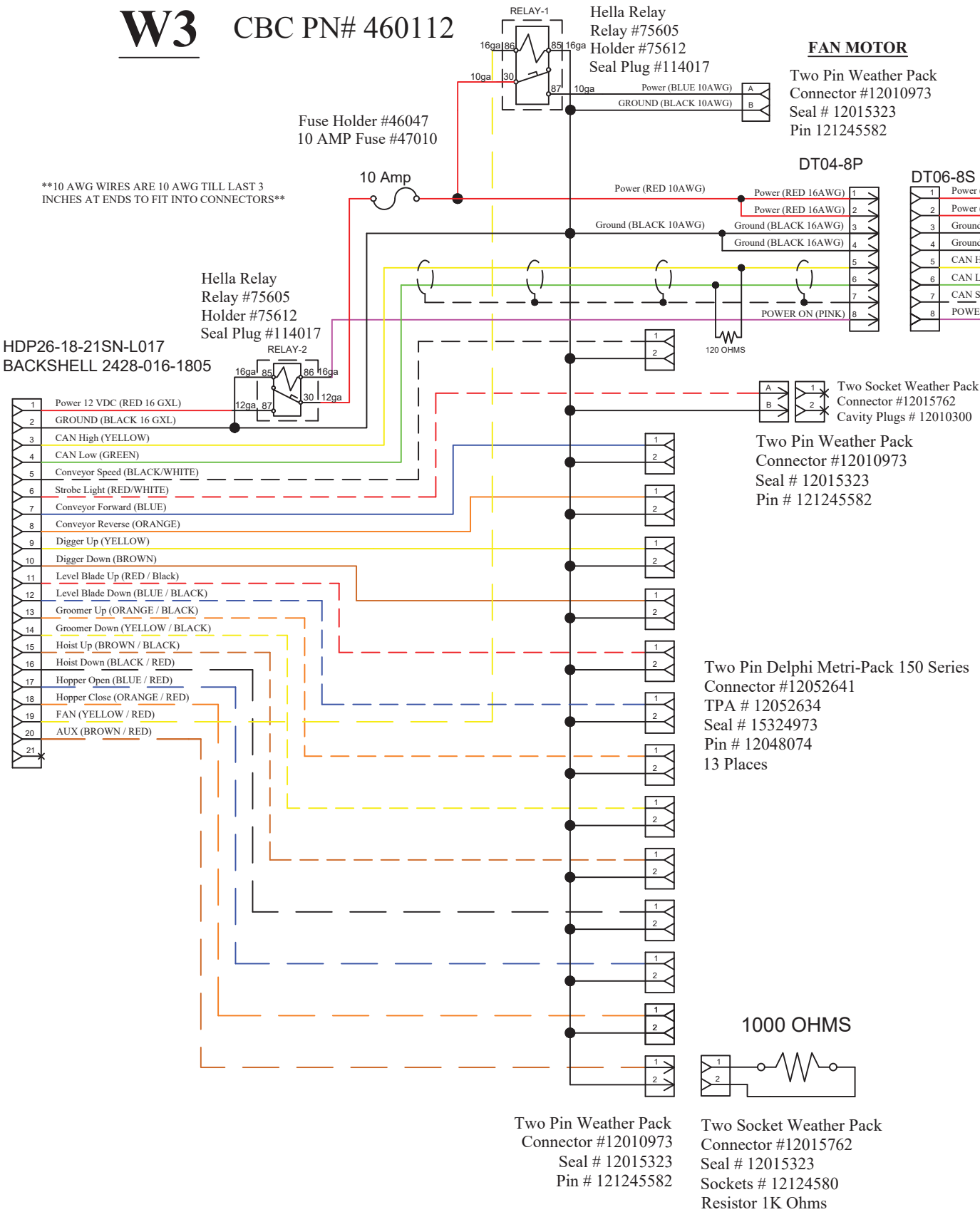
ITEM	QTY	PART#	DESCRIPTION
1	1	460111	CORD: POWER SUPPLY
2	1	460112	HARNESS: VALVE/CHASSIS
3	1	460113	HARNESS: HITCH/VALVE
4	1	460114	HARNESS: DISPLAY
5	1	460115	ASM: RECEIVER KAR-TECH
6	1	460116	DISPLAY: WACHENDORFF 4600
7	1	460117	MTG ADAPTER: WACHENDORFF
8	1	460118	SWITCH ASM: DISPLAY
9	4	P106102	SCREW: BHSCS 10-32 X1/2 SS
10	3	P106105	SCREW: BHSCS 10-32 X 5/8 SS
11	3	P158010	NUT: HEX, #10-32 NYLOCK SS
12	1	P296877	ASM: RAM MT 101U
13	4	P851103	WASHER: LOCK 3/16" GALV

CONTROL AND ELECTRICAL SCHEMATIC



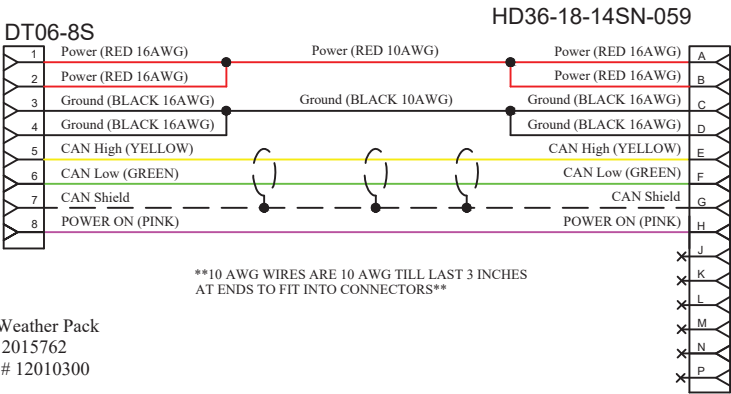
VALVE HARNESS
W3

CBC PN# 460112



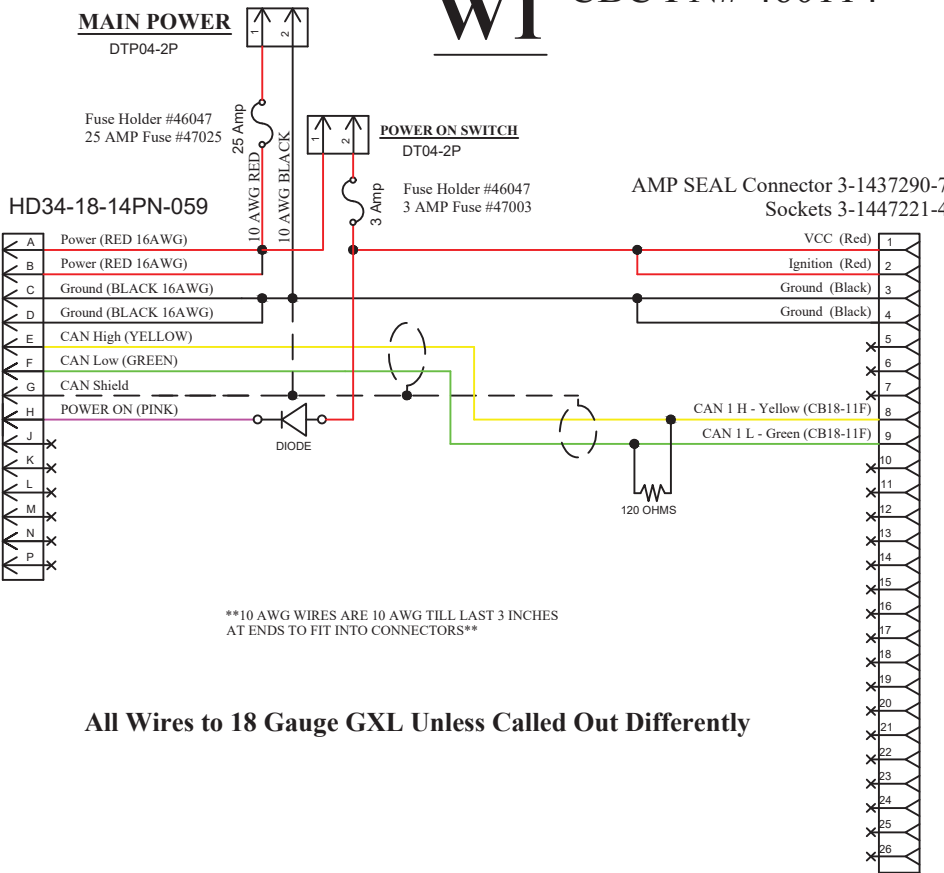
HITCH HARNESS
W2

CBC PN# 460113



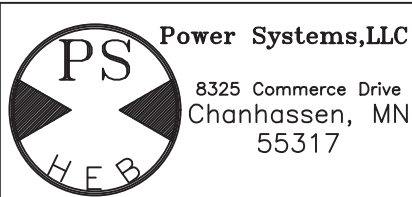
DISPLAY HARNESS
W1

CBC PN# 460114



All Wires to 18 Gauge GXL Unless Called Out Differently

B	CJ	09/01/17		XXX	Corrected Drawing to Yellow wire color for CAN High
B	CJ	05/06/16	ECN5959	XXX	Added Diode to Power On Wire
A	CJ	09/20/13	ECN4755	XXX	Released to Production
REV.	BY	DATE	ECN	CHECK	DESCRIPTION OF CHANGES



DWG	TITLE Harness 1,2,3						
B	DRAWN BY	CHECK BY	DATE	PAGE	DRAWING NO.		REV.
SIZE	CJ	XXX	09/16/13	1 of 2	EA1678-W1,2,3		B

71	P764304	INNER CUP / RACE	PEER P/N: LM29710
71	P764300	COMPLETE HUB ASSEMBLY (CONTAINS ITEM# 2 THRU 9 EXCEPT FOR #6)	
71	P764305	HUB ONLY: 6 BOLT X 6 INCH BOLT CIRCLE X 4-5/8 PILOT	
71	P764306	WHEEL BOLT 1/2-20 NF X 1-3/4 CONICAL	
71	P764307	OUTER CUP / RACE	PEER P/N: LM67010
71	P764308	OUTER CONE / BEARING	PEER P/N: LM67048
71	P764301	DUST CAP	GKN P/N: P502026
71	P764310	BEARING KIT: CONTAINS ITEM# 2 THRU 4 AND 7 THRU 9	
XXX	ECN5959	XXX	Corrected Drawing to Yellow wire color for CAN High
XXX	ECN4755	XXX	Added Diode to Power On Wire
XXX		Released to Production	
		CHECK	DESCRIPTION OF CHANGES

PS

Power Systems,LLC

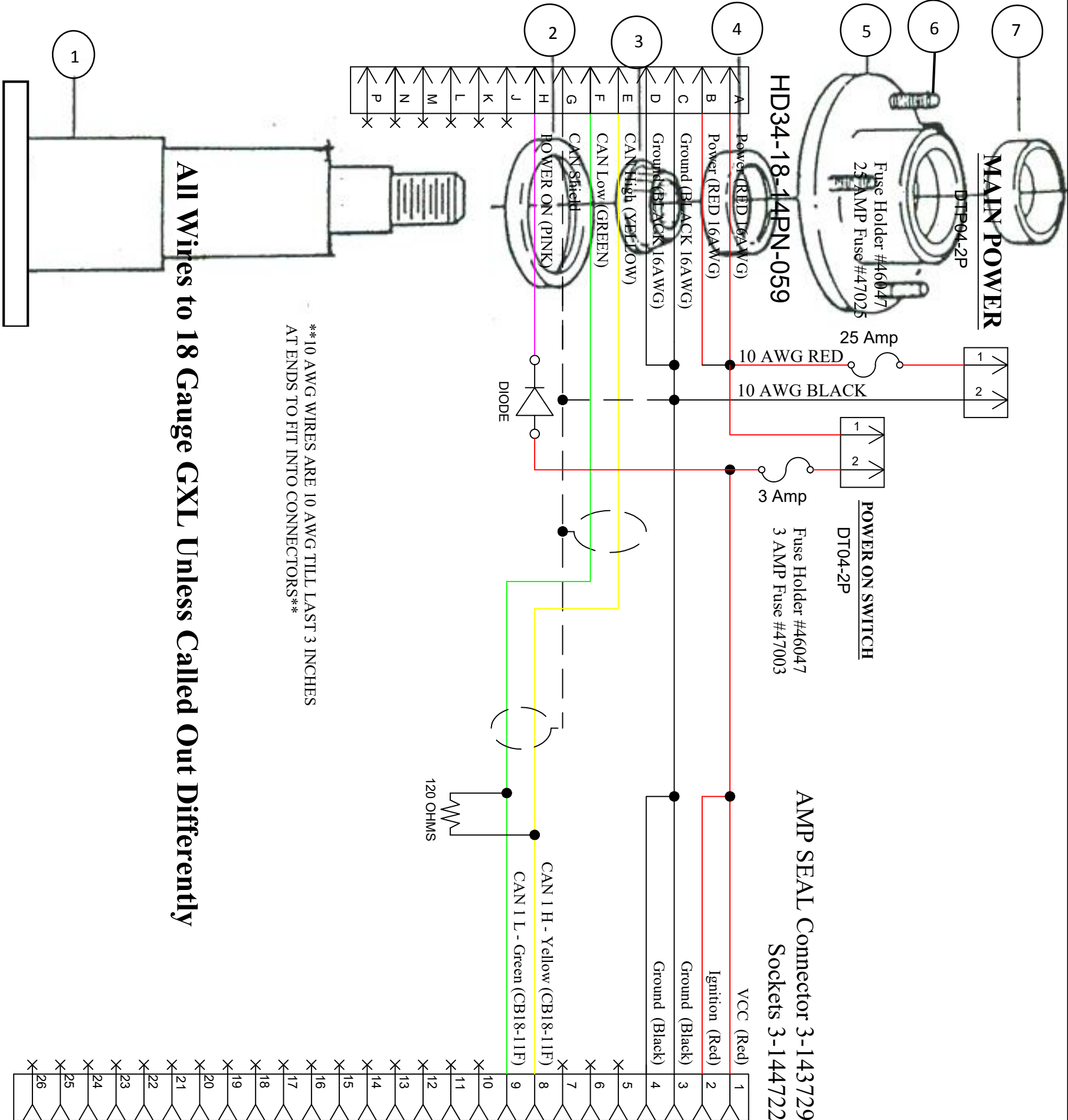
8325 Commerce Drive

Chanhassen, MN

55317

HEB

TITLE				Display Harness		DRAWING NO.		REV.
DWG	SIZE	BY	CJ	CHECK	DATE	PAGE	1 of 2	
				XXX	09/16/13		EA1678-vv1	B

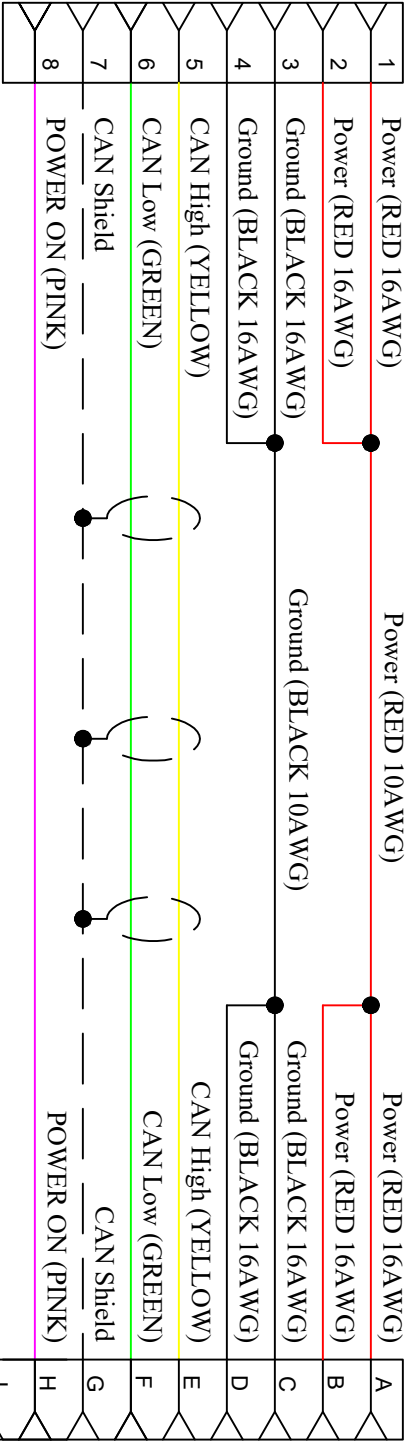


DISPLAY HARNESS

CBC PN# 71.460114

DT06-8S

HD36-18-14SN-059

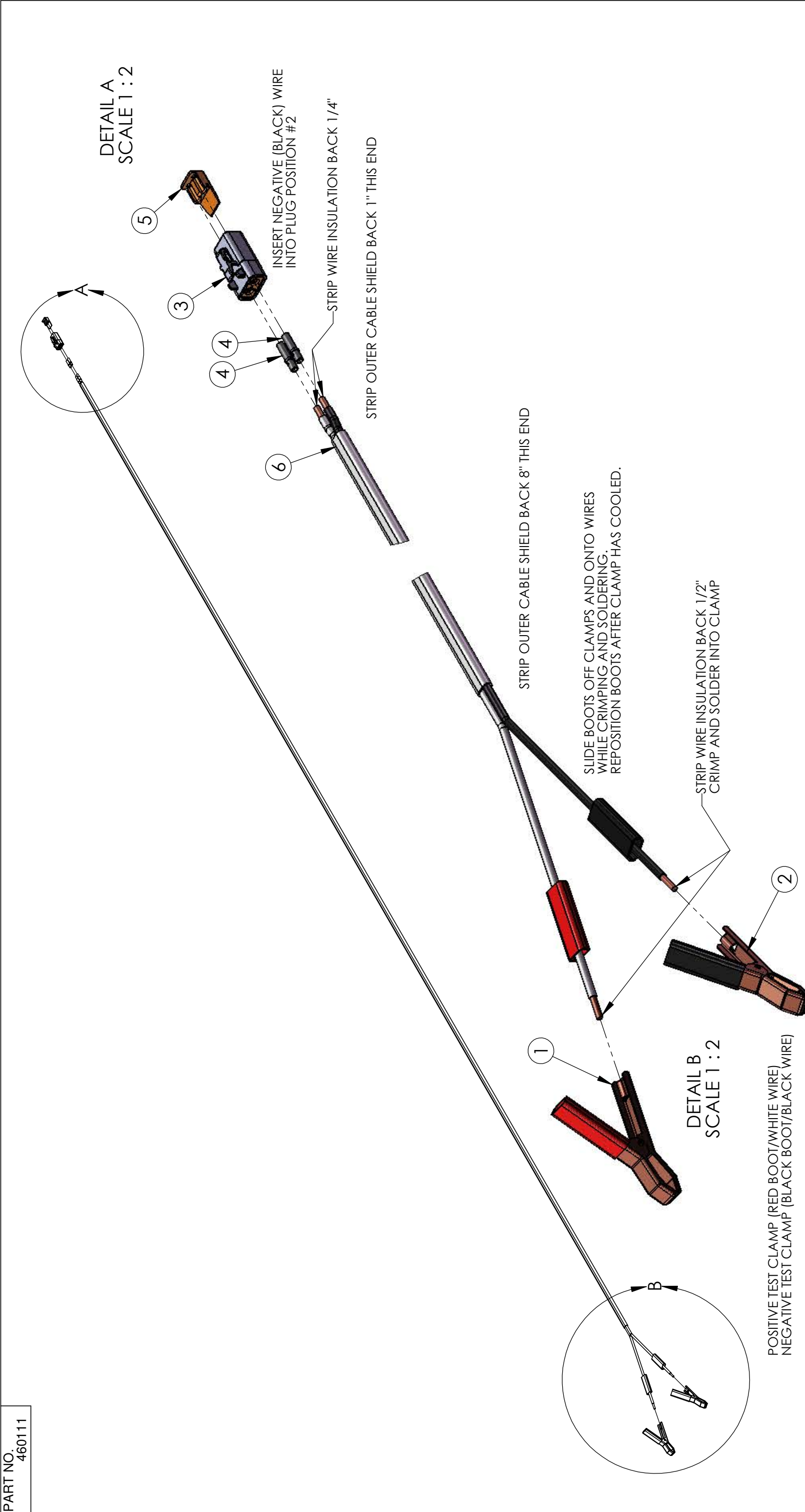


**10 AWG WIRES ARE 10 AWG TILL LAST 3 INCHES
AT ENDS TO FIT INTO CONNECTORS**

All Wires to 18 Gauge GXL Unless Called Out Differently

A		CJ	09/01/17		XXX	Corrected Drawing to Yellow wire color for CAN High										
A		CJ	09/20/13	ECN4756	XXX	Released to Production										
REV.	BY	DATE		ECN	CHECK	DESCRIPTION OF CHANGES										
PS Power Systems,LLC 8325 Commerce Drive Chanhassen, MN 55317 A SIZE				DWG		TITLE Hitch to Valve Harness										
DRAWN BY		CJ	CHECK BY		XXX	DATE		09/16/13	PAGE		1 of 2	DRAWING NO.		EA1678-W2	REV.	A

PART NO.
460111



P.O. BOX 2135 JAMESTOWN, ND 58402		Cherrington		UNLESS OTHERWISE NOTED	
DRAWN BY BJC		DATE 09/18/2013		TOLERANCES ON ANGLES	
DO NOT SCALE		PAGE 1 OF 1		DECIMALS FRACTIONS	
TITLE CORD: POWER SUPPLY		PART NO. 460111		.XX±.060 ± 1/32 ± 1°	
ITEM		QTY.		Pur/Mfg	
6		1		R99000008	
5		1		P295122	
4		2		P295121	
3		1		P295120	
2		1		P295038	
1		1		P295037	
ITEM		PART NUMBER		DESCRIPTION	
6		1		CABLE: 10-2 MARINE X 120"	
5		1		WEDGE: LOCKING WP-2S	
4		2		SOCKET: CONTACT SIZE 12 DEUTSCH	
3		1		PLUG: DTP06-2S	
2		1		BLACK CLAMP	
1		1		RED CLAMP	
ITEM		PART NUMBER		DESCRIPTION	

Model 4600 Live Hydraulics Installation Instructions



04/24/2013

Explanation

The Cherrington 4600 is equipped to run off live tractor hydraulics. There are three hoses that need to be hooked to the tractor to supply pressure, return flow and relieve case drain pressure. This will supply the power needed to operate the hydraulic functions of this machine. The control box mounted on the tractor will allow remote control of these functions from the operator seat.

The purpose of this guide is to show the port locations for connecting case drain and return flow for the Cherrington model 4600. The information obtained for this guide was taken directly from the tractor manufacturer's information that is available on-line and through tractor dealers.

Since tractor equipment and options vary the connections shown in this guide must be verified through the tractor manufacturer or dealer to prevent damage to the tractor and implement hydraulic systems.

Cherrington portable screeners require case drain and flow return lines to protect the machine during use. The case drain line must be connected first, then connect flow return line before connecting the pressure line. Failure to do so can cause damage to the motor seals. When disconnecting, always disconnect pressure, then flow return, and case drain last.

ALWAYS Connect

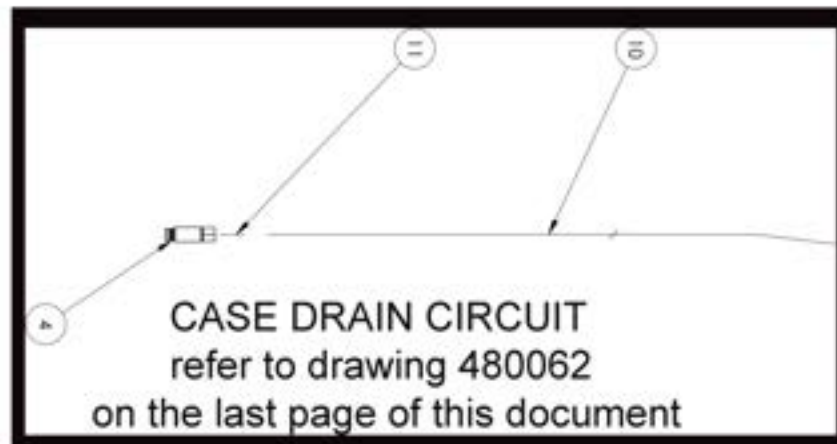
Case Drain First
Return Flow Second
Pressure Last

ALWAYS Disconnect

Pressure First
Return Flow Second
Case Drain Last

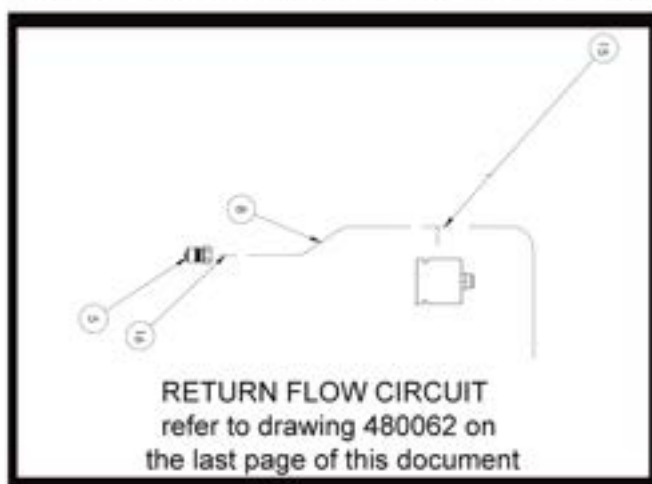
Case Drain

This connection is required to carry the motor case internal leakage directly to the tractor hydraulic reservoir (sump) with *zero pressure*. This oil serves to lubricate and cool motor components not directly exposed to the working oil. Cherrington supplies a #6 body size quick connect coupler on a 3/8" hydraulic hose for the case drain line. It is normal to have seepage from this fitting when disconnected from the tractor to protect the motor seals from thermal expansion.



Motor Return

This connection is required to carry the *low pressure return* oil from the unit to the hydraulic reservoir or charge circuit. Using a motor return port prevents accidental reverse operation and possible flow checking of the return SCV coupling. Cherrington supplies a 3/4" body size coupler with each Model 4600 that is equipped with this option. The male coupler is installed on the 3/4" motor return hose from the factory. The motor return hose and couplers are large to reduce back pressure to the motor.



Terminology

Agricultural manufacturer's use different terminology to describe case drain, motor return, power beyond pressure, and load sense. Below is a list of terms used to describe them:

Case Drain

Zero Pressure Return Motor Drain Motor Seal Drain Return Low Pressure Drain Return Low Flow Low Pressure Drain Free Return	Low Volume Sump Line Low Volume Case Drain Direct Outlet Pressure Sump Tank
---	---

Motor Return

High Flow Low Pressure Return High Volume Hydraulic Motor Return High Volume Low Pressure Return Power Beyond Return	Tank Return Auxiliary Return Sump
---	---

Below is a list of abbreviations used in this guide to describe types of fittings:

FORB	Female O-Ring Boss
FORFS	Female O-Ring Face Seal
MORB	Male O-Ring Boss
FJIC	Female JIC
MJIC	Male JIC
DIN	Deutsch (German) Industrial Norm
BSPP	British Standard Parallel Pipe

Tractor Requirements

Tractors connected to Cherrington Portable screeners must meet the following requirements:

1. LS Closed or PC Closed hydraulic systems with a case drain connection and a motor return connection. Open Center hydraulic systems **MUST NOT** be used.
2. Verify the tractor Hp meets the requirements listed in the Specification section of the Cherrington Operator's Manual before connecting.

Tractors Equipped with Additional Accessories Connected to Case Drain and/or Motor Return

Some tractors may be equipped with additional accessories that connect to power beyond connections on the rear of the tractor (i.e. auto steering). If the case drain and motor return connections are already in use, then tee's can be installed to add connections.

IMPORTANT!

DO NOT tee case drain into motor return. Case drain must have zero pressure return. Great Plains warranty will be voided if case drain has been connected and/or teed to a motor return line. Case drain should only be returned directly to the hydraulic reservoir. The case drain line must utilize an ISO 16028 coupler that will allow seepage due to thermal expansion when disconnected from the tractor.

If tractor case drain circuit is filtered, it is necessary to make sure to have a clean filter to prevent excessive case pressure. High case pressure will cause motor seal failure.

DO NOT connect pressure line to power beyond pressure. Continuous flow through the power beyond will deprive the tractor rear differential and pto drive gears of hydraulic flow and cause damage to the tractor.

Some tractor manufacturer's have chosen to use the same type coupler for power beyond load sense lines as for case drain lines. It is very important that these not be confused to prevent motor seal damage. **DO NOT** connect the case drain hose to a power beyond load sense coupler.

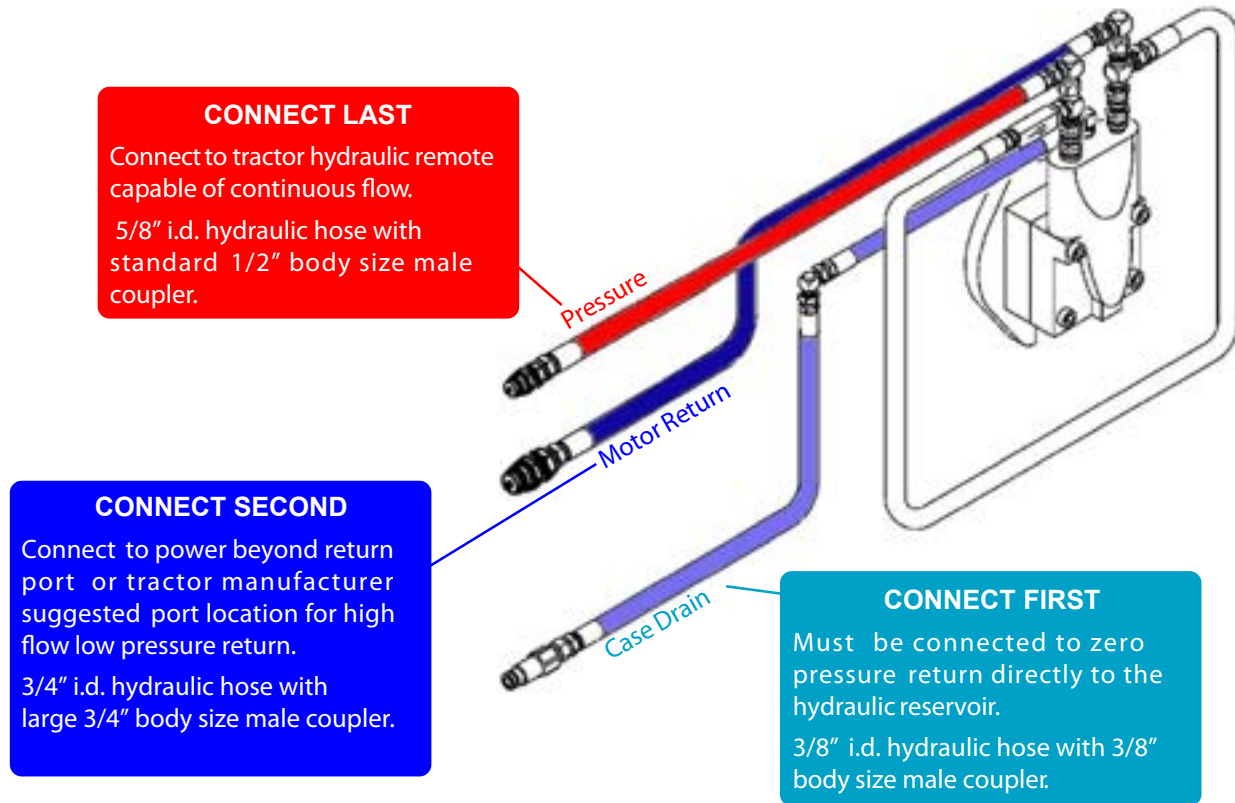
Some tractor manufacturer's recommend running motor return through a tractor SCV return port. **DO NOT** run motor return through a tractor SCV return port. Minimum pressure on most tractor SCV return ports is approximately 250 to 300 psi. Only connect motor return to a motor return port. Motor return ports allow pressures less than 50 psi, which prolongs motor seal life.

Failure to use the correct motor return port can cause oil starvation to the transmission pump and hydraulic charge circuit on some tractors. This is caused when oil is returned into the differential housing rather than the transmission or hydraulic charge circuit.

Make sure all hydraulic couplers and hose ends are clean before connecting.

Connecting Machine to Tractor

Always connect case drain first, motor return second, then pressure line to prevent motor damage. Always disconnect pressure line first, motor return second, then case drain last to prevent motor damage.



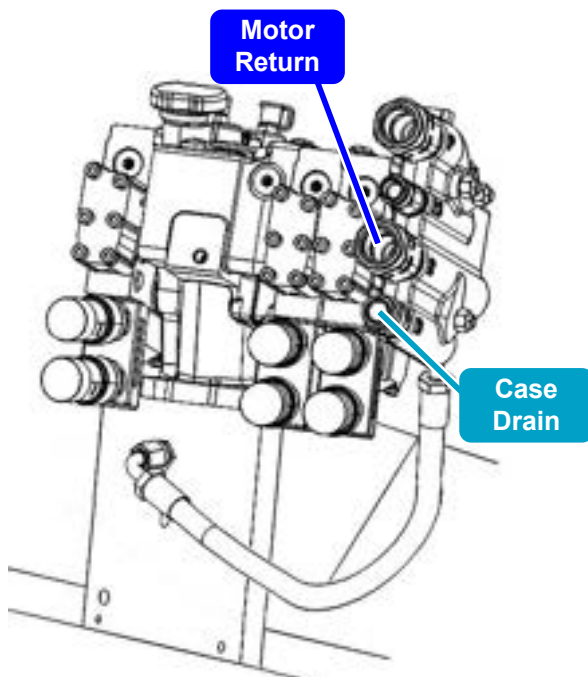
Sourcing Adaptor Fittings

This guide lists part numbers for Eaton-Aeroquip and Parker hydraulic adaptor fittings since these two brands are widely used in North America. There are many other brands of hydraulic high pressure steel adaptor fittings available that can be used as long as the thread combinations match as shown in the illustrations. The part numbers listed can be used to cross reference with other brands if using a local hydraulic distributor or supplier.

Find your nearest **EATON-Aeroquip** hydraulic fittings and couplers distributor on-line at <http://web.fluidpower.eaton.com/public/distributorlocator/>
or
by calling toll free 888-258-0222

Find your nearest **Parker** hydraulic fittings and couplers distributor on-line at www.parker.com
or
by calling toll free 800-272-7537

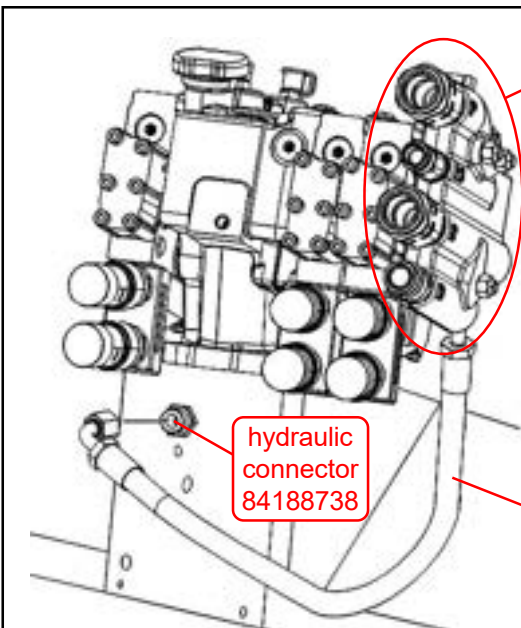
Magnum 180, 190, & 210



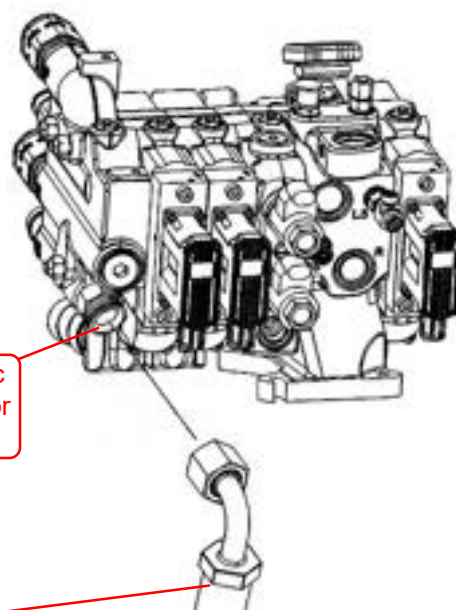
These tractor models must be equipped with optional power beyond to have case drain and motor return connections.

If the tractor is not equipped with power beyond, then order and install the following part numbers through a Case-IH and/or New Holland dealership to equip the tractor with the power beyond assembly:

Qty	P/N	Description
1	84158051	Power Beyond Assembly
1	84188738	Hydraulic Connector
1	84187163	Hydraulic Hose
1	700-162	Hydraulic Connector

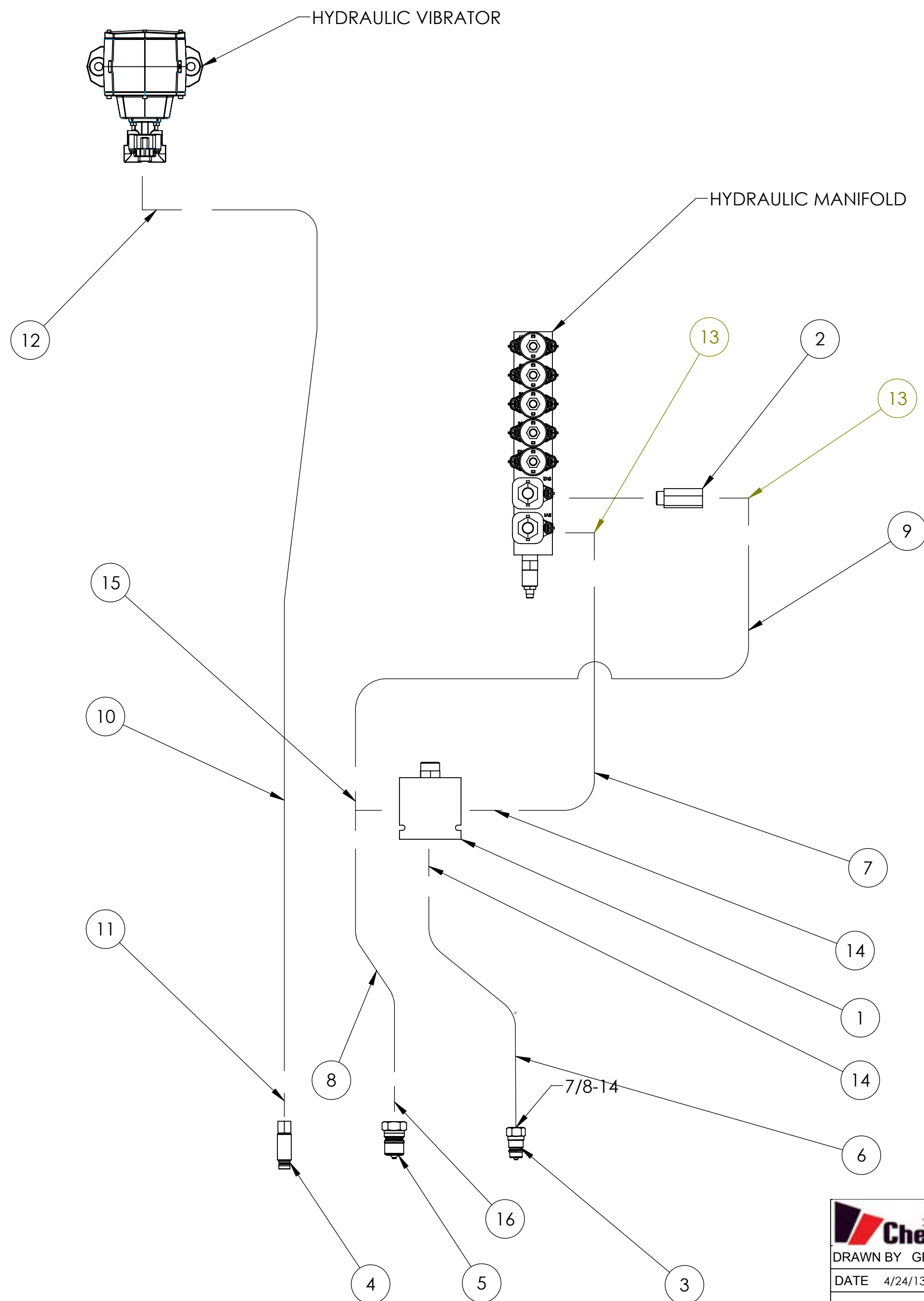


view from rear



view from front

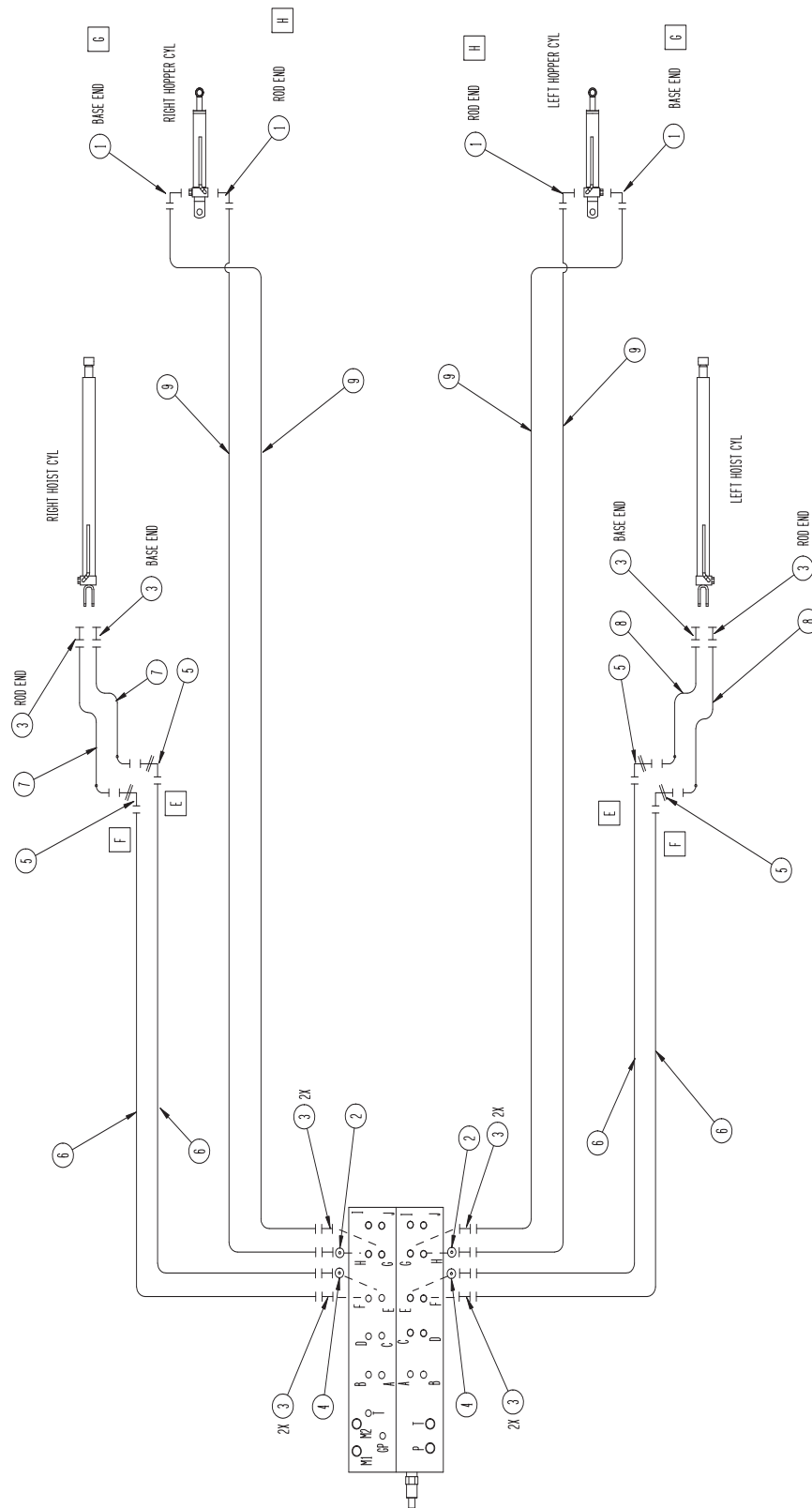
IMPORTANT: ALWAYS connect case drain first, motor return second, then pressure line to prevent motor damage. ALWAYS disconnect pressure line first, motor return second, then case drain last to prevent motor damage.



16	1	P276450	FITTING: 12MJ 12MB
15	1	P265712	FITTING: 12MJ 12MJ 12MB
14	2	P276458	FITTING: 10MJ 12MB
13	2	P276202	FITTING: 10MJ 10MB90
12	1	P261453	FITTING: 6MJ 4MB90
11	1	P276101	FITTING: 6MJ 6MB
10	1	P233280	HOSE: -6AM X 280 6FJX 6FJX
9	1	P236025	HOSE: -12AM X 25 10FJX 12FJX45
8	1	P236108	HOSE: -12AM X 108 12FJX 12FJX
7	1	P235023	HOSE: -10AM X 23 10FJX 10FJX
6	1	P235107	HOSE: -10AM X 106 10MB 10FJX
5	1	P272663	NIPPLE: SIZE -12 POPPET RETURN
4	1	P272662	NIPPLE: SIZE -6 CASE DRAIN
3	1	P272661	NIPPLE: SIZE -8 POPPET PRESSURE
2	1	P294740	VALVE: INLINE CHECK
1	1	P292413	VALVE: FLOW CONTROL 13 GPM
ITEM	QTY.	PART NUMBER	DESCRIPTION

		P.O. BOX 2135 JAMESTOWN, ND 58402											
DRAWN BY	GP	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF CHERRINGTON; ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF CHERRINGTON IS PROHIBITED.	UNLESS OTHERWISE NOTED <table border="1"> <thead> <tr> <th colspan="2">TOLERANCES ON</th> </tr> <tr> <th>DECIMALS</th> <th>FRACTIONS ANGLES</th> </tr> </thead> <tbody> <tr> <td>.XX±.060</td> <td>±1/32</td> <td>±1°</td> </tr> <tr> <td>.XXX±.030</td> <td></td> <td></td> </tr> </tbody> </table>	TOLERANCES ON		DECIMALS	FRACTIONS ANGLES	.XX±.060	±1/32	±1°	.XXX±.030		
TOLERANCES ON													
DECIMALS	FRACTIONS ANGLES												
.XX±.060	±1/32	±1°											
.XXX±.030													
DATE	4/24/13	DO NOT SCALE											
TITLE		PART NO.											
4600 DIRECT HYD DRIVE		460082											

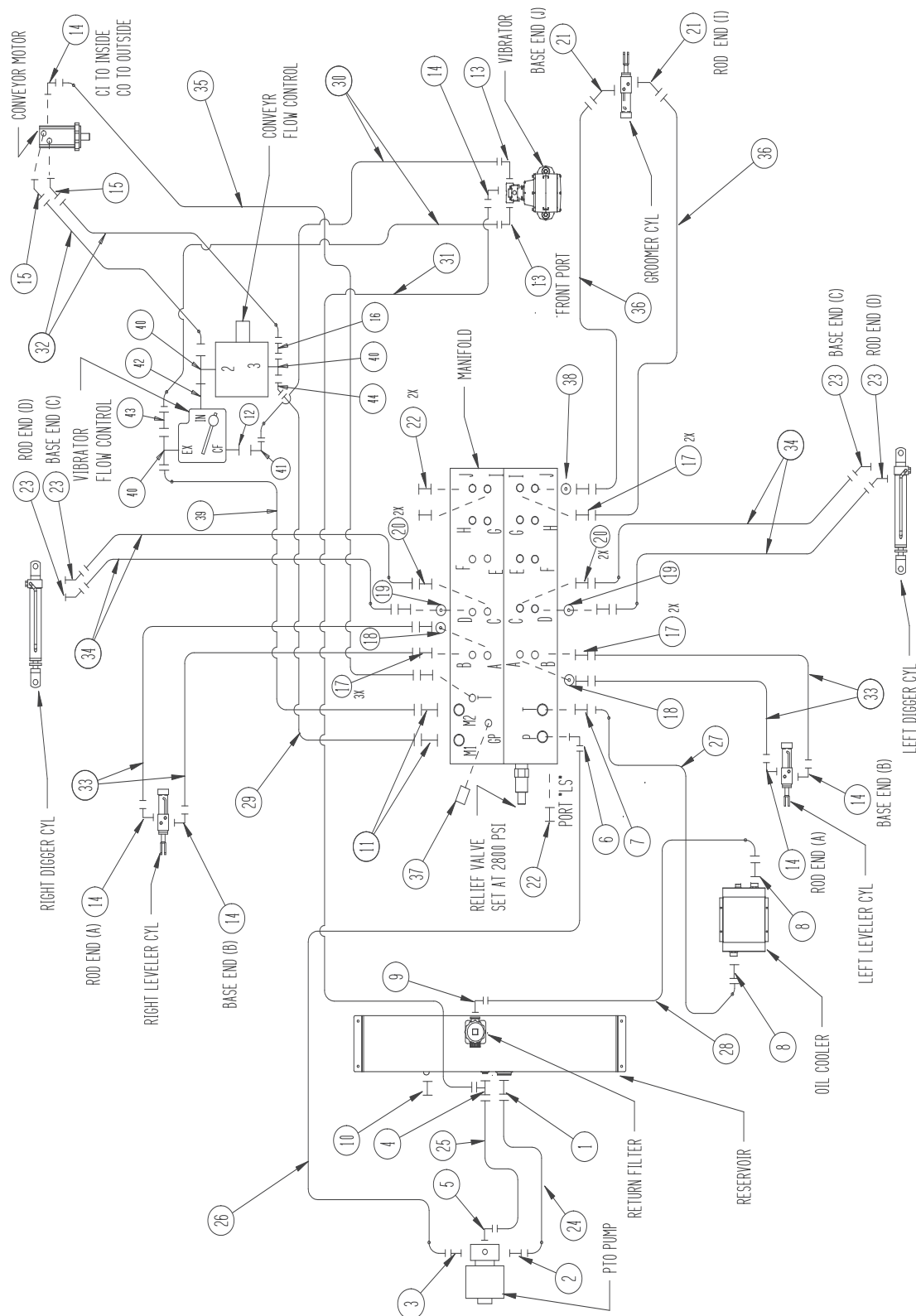
HIGH LIFT CIRCUIT SCHEMATIC



HIGH LIFT CIRCUIT LEGEND

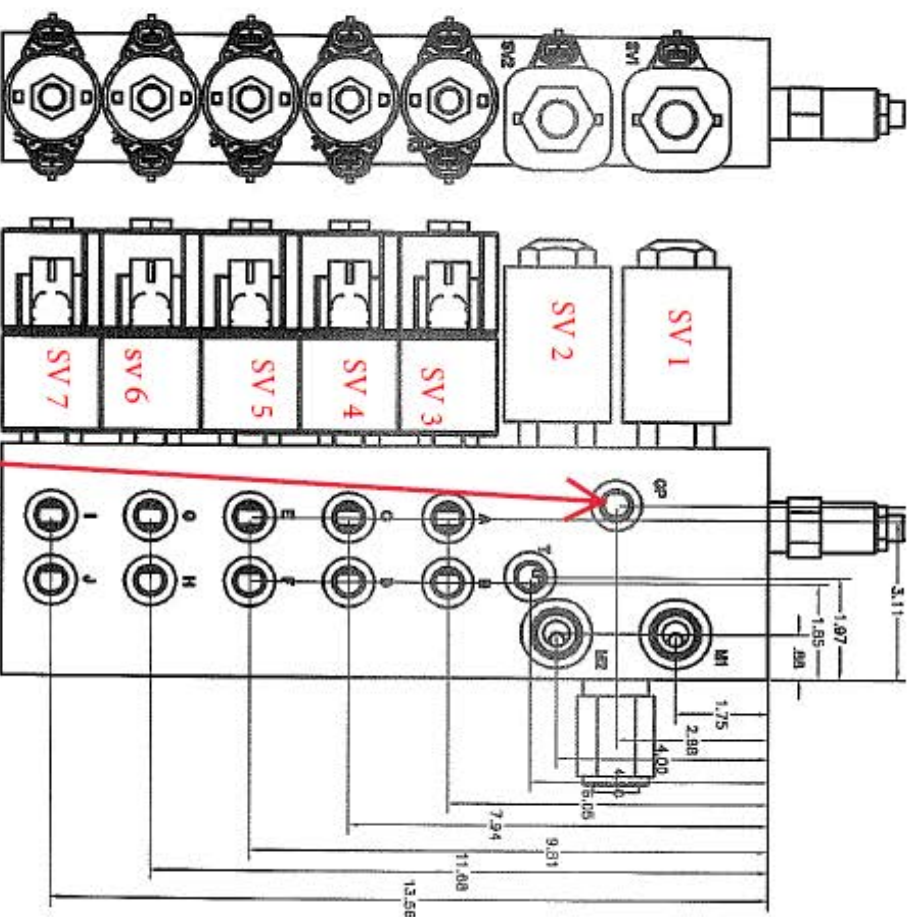
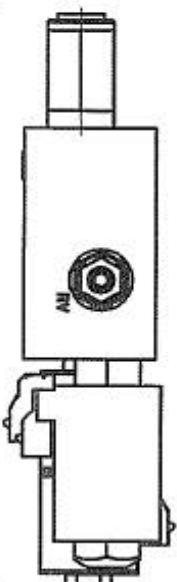
<u>ITEM</u>	<u>QTY</u>	<u>PART#</u>	<u>DESCRIPTION</u>
1	4	P261350	FITTING 6MJ 6MB 90
2	2	P276107	FITTING 6MB DISC W/.062 ORIFACE
3	12	P276101	FITTING 6MJ 6MB
4	2	P276108	FITTING 6MB DISC W/.110 ORIFACE
5	4	P265410	FITTING 6MJ 6MJ BULKHEAD 90
6	4	P233127	HOSE -AM-6 X 127" 6FJ 6FJ
7	2	P233918	HOSE -AM-6 X 18" 6FJ 6FJ 90
8	2	P233926	HOSE -AM-6 X 26" 6FJ 6FJ 90
9	4	P233256	HOSE -AM-6 X 256" 6FJ 6FJ

MAIN HYDRAULIC CIRCUIT SCHEMATIC



MAIN HYDRAULIC CIRCUIT LEGEND

<u>ITEM</u>	<u>QTY</u>	<u>PART NO</u>	<u>DESCRIPTION</u>
1	1	P277192	FITTING 20MJ 24MB
2	1	P277190	FITTING 20MJ 20MB
3	1	P276458	FITTING 10MJ 12MB
4	1	P265654	FITTING 6MJ 8MB 6MJ
5	1	P261350	FITTING 6MJ 6MB90
6	1	P276202	FITTING 10MJ 10MB90
7	1	P276440	FITTING 12MJ 10MB
8	2	P277100	FITTING 12MJ 16MB
9	1	P277106	FITTING 12MJ 16MB90
10	1	P278005	FITTING 8MB PLUG
11	2	P276200	FITTING 10MJ 10MB
12	1	P276430	FITTING 8MJ 10 MB
13	2	P261010	FITTING 8MJ 8MB90
14	6	P261400	FITTING 4MJ 4MB90
15	2	P276201	FITTING 10MJ 10MB45
16	1	P276442	FITTING 10MJ 10 FJX
17	6	P261452	FITTING 4MJ 6MB
18	2	P276105	FITTING 6MB DISC W/.032 ORIFACE
19	2	P276108	FITTING 6MB DISC W/.110 ORIFACE
20	4	P276101	FITTING 6MJ 6MB
21	2	P261420	FITTING 4MJ 4MB45
22	3	P270906	FITTING 6MB PLUG
23	4	P261525	FITTING 6MJ 6MB45
24	1	P289981	HOSE-FX-20 X 81" 20FJ 20FJ90
25	1	P233087	HOSE- AM-6 X 87" 6FJ 6FJ
26	1	P235106	HOSE- AM-10 X 106" 10FJ 10FJ90 W/ CORDURA
27	1	P236031	HOSE-AM-12 X 31" 12FJ45 12FJ90 (180 ROTATION)
28	1	P236947	HOSE-AM-12 X 47" 12FJ 12FJ90
29	1	P235029	HOSE-AM-10 X 29" 10FJ 10FJ
30	2	P234120	HOSE-AM-8 X 120" 8FJ 8FJ45
31	1	P232186	HOSE-AM-4 X 178" 4FJ 6FJ
32	2	P235130	HOSE-AM-10 X 130" 10FJ 10FJ45
33	4	P232964	HOSE-AM-4 X 64" 4FJ 4FJ90
34	4	P233952	HOSE-AM-6 X 52" 6FJ 6FJ90 LONG
35	1	P232166	HOSE-AM-4 X 166" 4FJ 4FJ45
36	2	P232184	HOSE-AM-4 X 184" 4FJ 4FJ
37	1	P276290	NIPPLE, DIAGNOSTIC
38	1	P276107	FITTING: 6MB DISC W/.062 ORIFACE
39	1	P235036	HOSE-AM-10 X 36" 10FJ 10FJ90
40	3	P265703	FITTING 10MJ 10MJ 10MB
41	1	P261554	FITTING 8MJ 8FJX90
42	1	P276444	FITTING 10MB 10FJX
43	1	P276454	FITTING 8MJ 10FJ
44	1	P276212	FITTING 10MJ 10FJX45



MAIN VALVE P/N 71.P292400
USED ON MDL 4500 / 4600

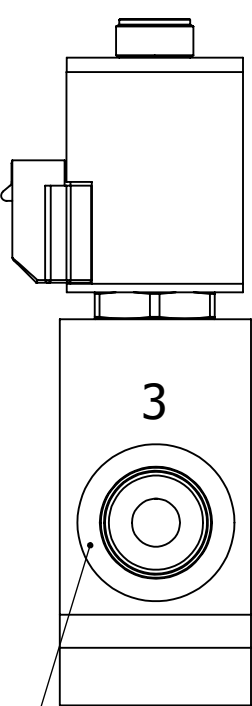
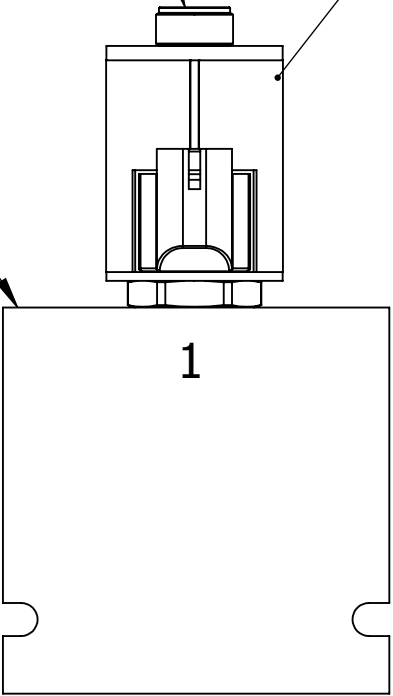
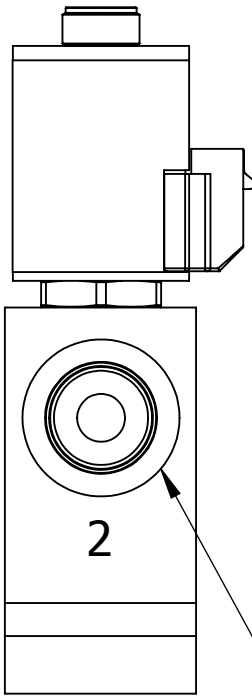
CONVEYOR SPEED PROPORTIONAL VALVE ASSEMBLY

COMPLETE VALVE ASSEMBLY
CBC P/N: 71.P292410

CARTRIDGE SPOOL VALVE
CBC P/N: 71.P292416

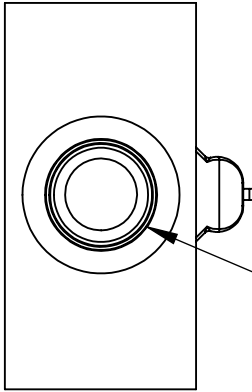
CARTRIDGE SPOOL SEAL KIT
CBC P/N: 71.P291123

12V PROPORTIONAL COIL
CBC P/N: 71.P292415



-10 O RING PORT

-10 ORING PORT
CONTROLLED FLOW



BOTTOM PORT PLUGGED
