

# **TWINSTAR**

## ***GENERATION 2 BASKET RAKE***



**MODELS 2027G2-7 & 2030G2-7**  
**7-BAR SERIES**

# **PARTS MANUAL**



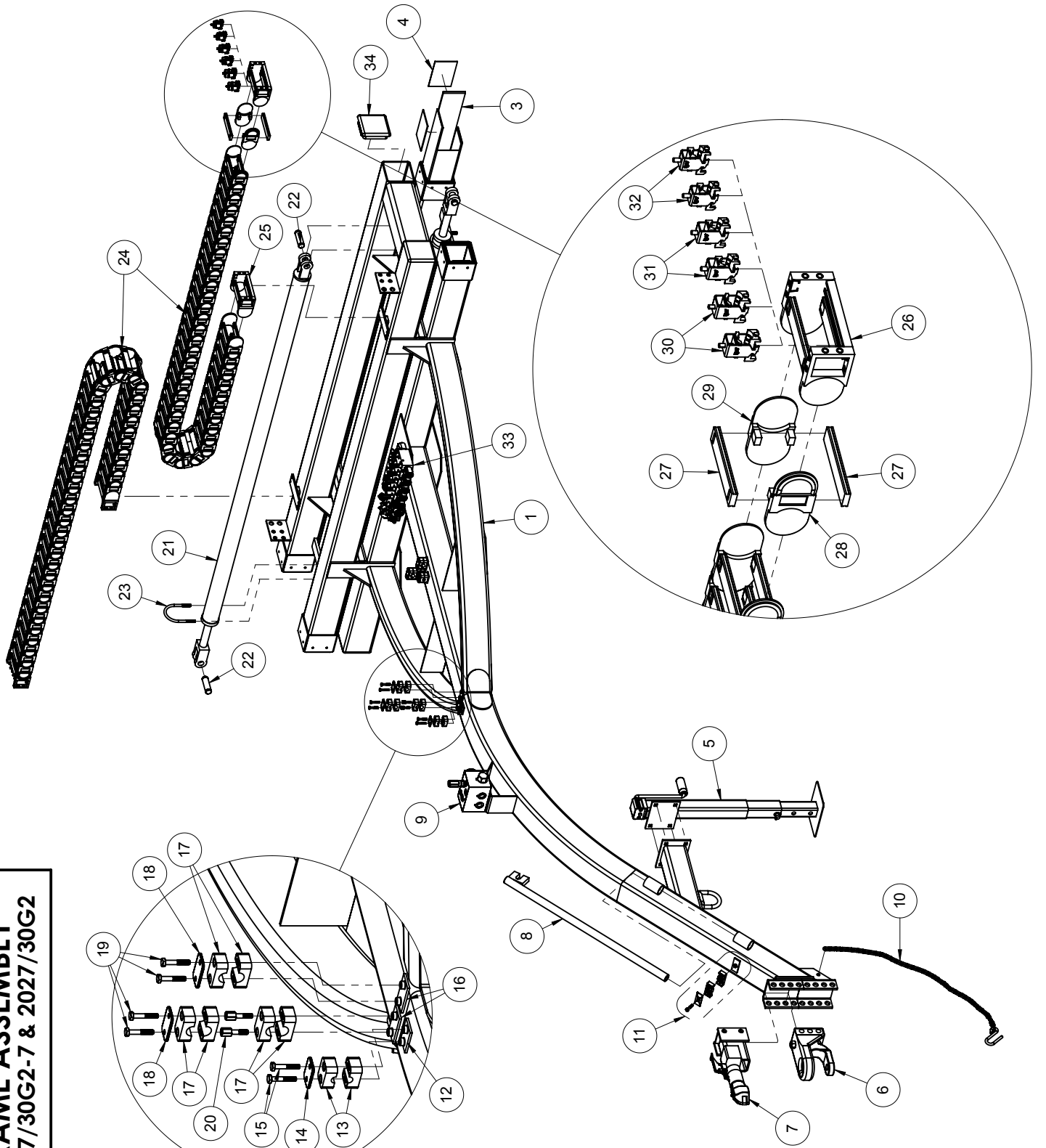


# **TWINSTAR**

## **GENERATION 2 PARTS MANUAL**

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**MAIN FRAME ASSEMBLY**  
**MODELS: 2027/30G2-7 & 2027/30G2**





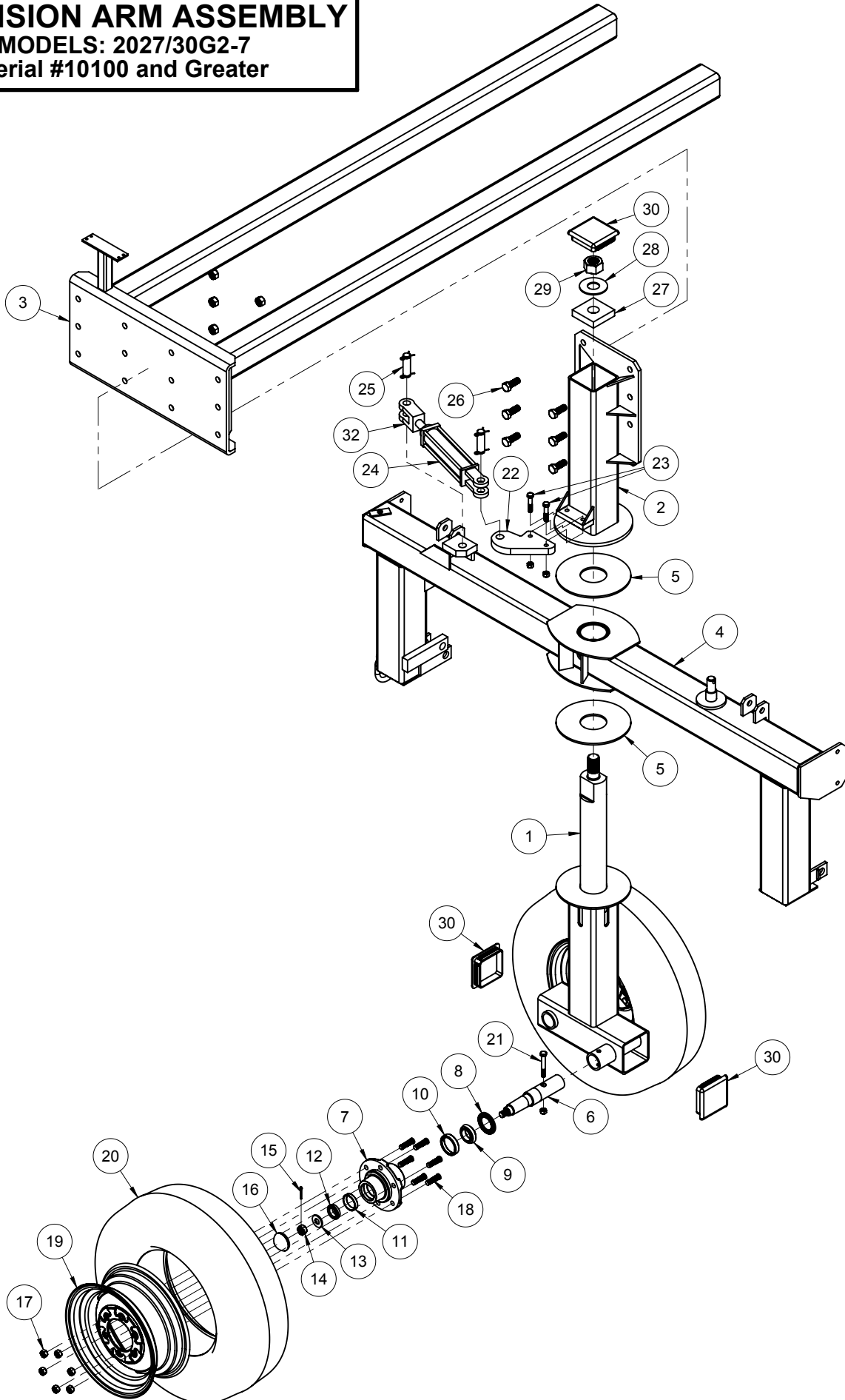
**MAINFRAME ASSEMBLY**  
**MODELS: 2027/30G2-7**

ITEM	QTY	PART NO	DESCRIPTION
1	1	HR-2030-G2	Main Frame
3	16	HR-0051-G2	Slide Tube Wear Strip 1/4" x 3 7/8"
4	8	HR-0055-G2	12 Gauge Shim
#	16	G-25-1.25-SFHMS	1/4" x 1 1/4" Slot Flat Head Machine Screw w/ 1/4" Nylock Nut (Shim Side) (not shown)
#	16	G-25-1-SFHMS	1/4" x 1" Slot Flat Head Machine Screw w/ 1/4" Nylock Nut (not shown)
	Ref	HR-0051HK	Slide Tube Wear Strip Hardware Kit, Includes 16 ea. of the above 2 items
5	1	HR-2052	Tongue Jack
6	1	HR-0490	Clevis Hitch Assembly
7	Ref	HR-2410P	2-5/16" Ball Hitch - optional for clevis hitch
8	1	HR-2001	Stripper Bar Adjustment Tool
9	1	HR-0391	Hydraulic Manifold w/ Cartridges
10	1	HR-0341	Safety Chain - 37"
11	1	HR-0404	1/2" Clamp - Double Hose (w/ Mounting Plate & Top Plate)
12	2	HR-0700	Base Plate (1/2" Clamp - Single Hose)
13	2	HR-0417	1/2" Clamp - Single Hose
14	2	HR-0415	Top Plate (1/2" Clamp - Single Hose)
15	4	HR-0419	1/4" x 1-1/2" HHCS
16	4	HR-0701	Base Plate (3/4" Clamp - Single Hose)
17	6	HR-0407	3/4" Clamp - Single Hose
18	4	HR-0408	Top Plate (3/4" Clamp - Single Hose)
19	8	HR-0419	1/4" x 1-1/2" HHCS
20	4	HR-0406	Stack Bolt 3/4" Clamp
21	2	HR-0318-1	Spread Cylinder Without External Hydraulic Line, Ram
22	4	HR-0317	Hyd Cyl Pin
23	2	G-375-3.5-NCU	3/8" x 3 1/2" U-Bolt
24	1	HR-3110	Energy Chain - Set of 2, 6-5/8" Width Assembled Chains
25	2	HR-3111	Energy Chain - Female KMA Bracket For 6-5/8" Width Chain
26	2	HR-3112	Energy Chain - Male KMA Bracket For 6-5/8" Width Chain
27	168	HR-3113	Energy Chain - Crossbar For 6-5/8" Width Chain
28	80	HR-3104	Energy Chain - Side Plate LH For 5-1/4" & 6 5/8" Width Chain
29	80	HR-3105	Energy Chain - Side Plate RH For 5-1/4" & 6 5/8" Width Chain
30	4	HR-3106	Energy Chain - Chain Fix 1/2" Single For 5-1/4" & 6-5/8" Width Chain
31	4	HR-3115	Energy Chain - Chain Fix 3/8" Single For 6-5/8" Width Chain
32	4	HR-3114	Energy Chain - Chain Fix 1/4" Single For 6-5/8" Width Chain
	1	HR-3100	Energy Chain - Set of 2, 5-1/4" Width Assembled Chains (not shown)
	2	HR-3101	Energy Chain - Female KMA Bracket For 5-1/4" Width Chain (not shown)
	2	HR-3102	Energy Chain - Male KMA Bracket For 5-1/4" Width Chain (not shown)
	168	HR-3103	Energy Chain - Crossbar For 5-1/4" Width Chain (not shown)
	4	HR-3107	Energy Chain - Chain Fix 1/4" Double For 5-1/4" Width Chain (not shown)
#	REF	HR-3117	Energy Chain - Hose Separator (not shown)
33	1	700-0805-4022	Hydraulic Control Valve (5 Function) Serial #10128 & Over
33	1	HR-0810	Hydraulic Control Valve (5 Function) Serial #10127 & Under
33	Ref	700-0806-4022	Hydraulic Control Valve (6 Function) *option Serial #10128 & Over
33	Ref	700-0806-4021	Hydraulic Control Valve (6 Function) *option Serial #10127 & Under
34	4	HSR-0023	5" Plastic Cap (not used prior to 2009)
#	Ref	HR-R3605437	Spread Cylinder Seal Kit (not Shown)
#	1	HR-0343	SMV Sign (not shown)
#	1	HR-2006	Tool Box (not shown) (not used prior to 2012)
#	Ref	HR-2008	Width Marker Decal Set
#	1	HR-0433	Parts Manual Canister (not shown) (used prior to 2012)

**Note:** When ordering parts for Energy Chain, please refer to the part number stamped on each part for accuracy

# EXTENSION ARM ASSEMBLY

MODELS: 2027/30G2-7  
Serial #10100 and Greater



# EXTENSION ARM ASSEMBLY

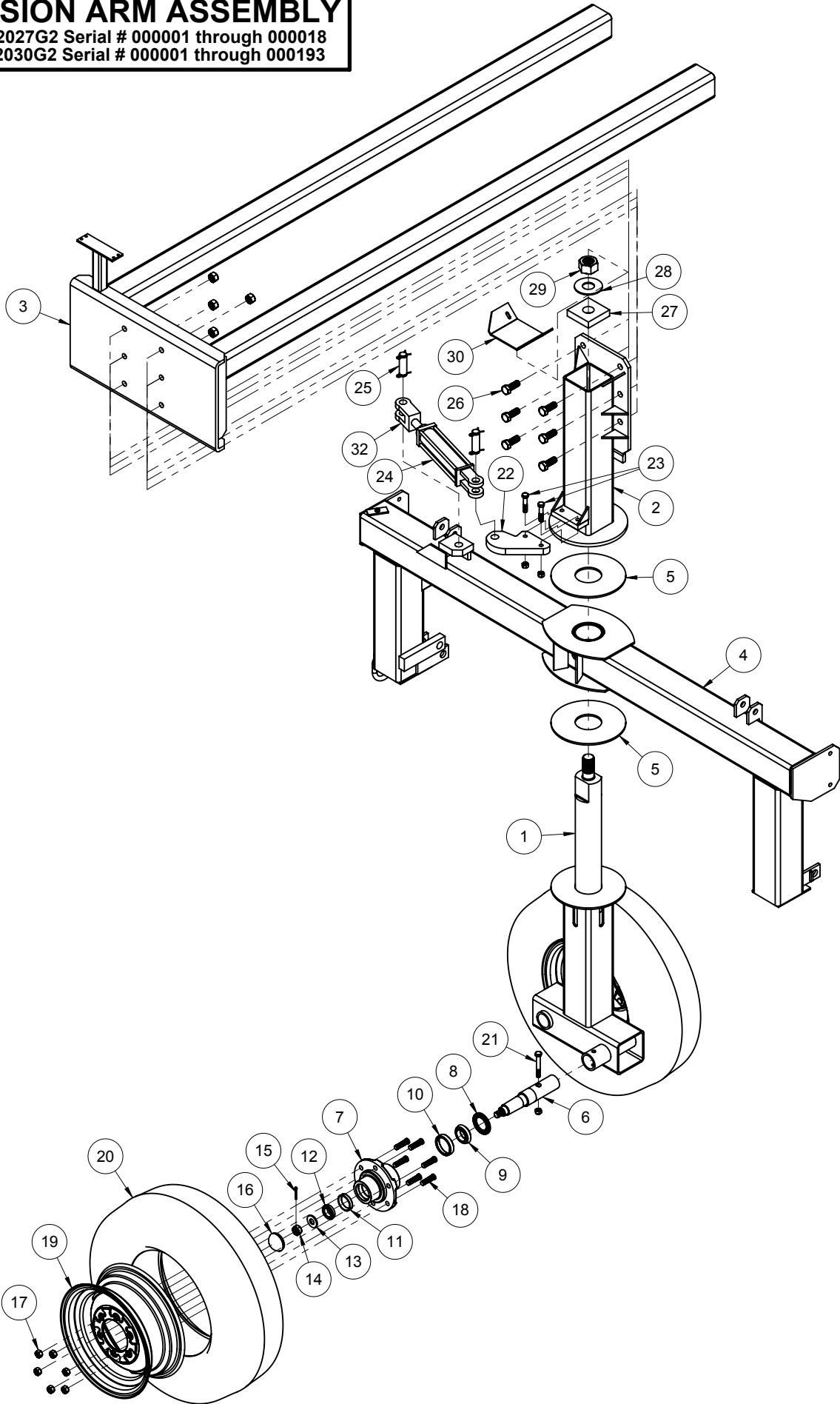
**MODELS: 2027/30G2-7**

**Serial # 10100 and Greater**

ITEM	QTY	PART NO	DESCRIPTION
1	1	HSR-2470	Wheel Tower Weldment - RH
1	1	HSR-2471	Wheel Tower Weldment - LH
2	2	HR-2510-1	Wheel Tower Receiver (with 8 13/16" wide hole spacing)
3	1	HSR-2100-1	Double Slide Weldment - RH
3	1	HSR-2101-1	Double Slide Weldment - LH
4	1	HR-2478	Basket Pivot Weldment - RH
4	1	HR-2479	Basket Pivot Weldment - LH
5	4	HR-0481	UHMW Pivot Plate
6	4	HR-0083	Spindle RTM SA3500F
7	4	HR-0082	Wheel Hub w/ Bearings & Seal RTM 2-3566F-C2-00
8	4	HR-0383	Spindle Seal National 473463
9	4	HR-0378	Inner Bearing LM501349
10	4	HR-0379	Inner Race LM501310
11	4	HR-0377	Outer Race LM67010
12	4	HR-0376	Outer Bearing LM67048
13	4	HR-0382	Spindle Washer
14	4	HR-0381	Spindle Nut 3/4" NF Slotted
15	4	HR-0384	Cotter Pin 1/8" x 2"
16	4	HR-0375	Grease Cap
17	24	HR-0380	Lug Nut 9/16" NF
18	24	ST562	9/16" NF - 2 1/4" Stud
19	4	HR-0085	Wheel
20	4	HR-0086	7.50 x 15 Smooth Tire
20	4	HR-0707	LT235/75R15 Road Tire (not shown)
21	4	HR-0704	1/2" x 3 1/2" NC Gr.5 Cap Screw w/ 1/2" Grip Nut
22	2	HR-0066A	Break Away Cylinder Mount
23	4	HR-0705	1/2" x 2 1/2" NC Gr.8 Cap Screw w/ 1/2" Grip Nut
24	2	HR-0106	2" x 8" ASAE Hydraulic Cylinder
25	4	HR-0317	Hydraulic Cylinder Pin
26	12	HR-0706	3/4" x 2 1/2" NC Gr.8 Cap Screw w/ 3/4" Grip Nut
27	2	HR-0472	Washer Plate
28	2	G-1.5SAEFW	1 1/2" SAE Flat Washer
29	2	HR-0473	1 1/2" SAE Nylock
30	2	HSR-0015	5" Plastic Cap (Modified)
32	2	HR-0314	Hydraulic Cylinder Rod Clevis
**	4	HR-0082	Wheel Hub w/ Bearings & Seal RTM 2-3566F-C2-00
**		HR-0313	Hydraulic Cylinder Seal Kit, (Not Shown) Spencer #639572

# EXTENSION ARM ASSEMBLY

MODELS: 2027G2 Serial # 000001 through 000018  
2030G2 Serial # 000001 through 000193



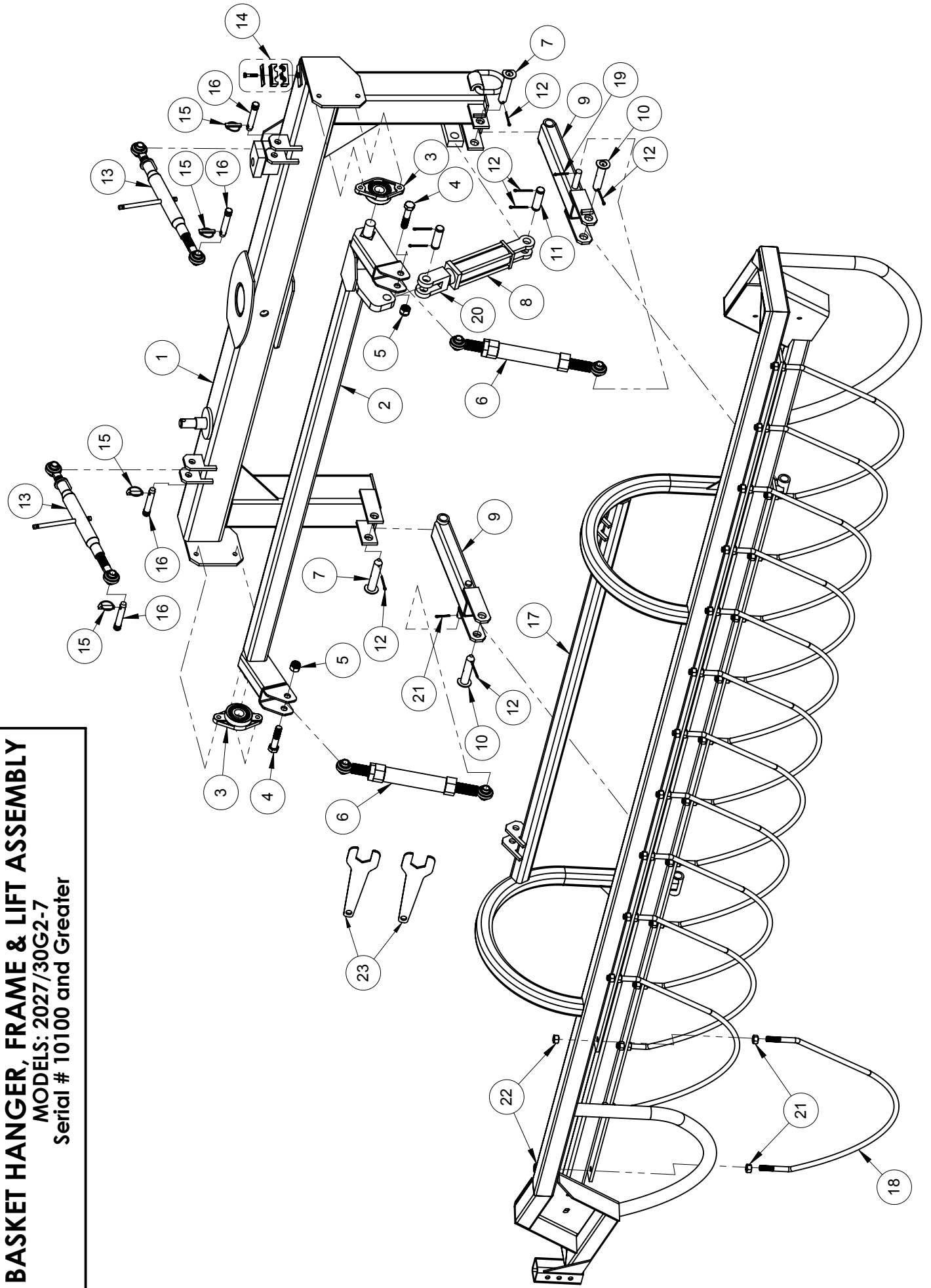


## EXTENSION ARM ASSEMBLY

**MODELS: 2027G2-7 Serial # 000001 through 000018**  
**2030G2-7 Serial # 000001 through 000193**

ITEM	QTY	PART NO	DESCRIPTION
1	1	HSR-2470	Wheel Tower Weldment - RH
1	1	HSR-2471	Wheel Tower Weldment - LH
2	2	HR-2510	Wheel Tower Receiver (with 7" wide hole spacing)
3	1	HSR-2100	Double Slide Weldment - RH
3	1	HSR-2101	Double Slide Weldment - LH
4	1	HR-2478	Basket Pivot Weldment - RH
4	1	HR-2479	Basket Pivot Weldment - LH
5	4	HR-0481	UHMW Pivot Plate
6	4	HR-0083	Spindle RTM SA3500F
7	4	HR-0082	Wheel Hub w/ Bearings & Seal RTM 2-3566F-C2-00
8	4	HR-0383	Spindle Seal National 473463
9	4	HR-0378	Inner Bearing LM501349
10	4	HR-0379	Inner Race LM501310
11	4	HR-0377	Outer Race LM67010
12	4	HR-0376	Outer Bearing LM67048
13	4	HR-0382	Spindle Washer
14	4	HR-0381	Spindle Nut 3/4" NF Slotted
15	4	HR-0384	Cotter Pin 1/8" x 2"
16	4	HR-0375	Grease Cap
17	24	HR-0380	Lug Nut 9/16" NF
18	24	ST562	9/16" NF - 2 1/4" Stud
19	4	HR-0085	Wheel
20	4	HR-0086	7.50 x 15 Smooth Tire
20	4	HR-0707	LT235/75R15 Road Tire (not shown)
21	4	HR-0704	1/2" x 3 1/2" NC Gr.5 Cap Screw w/ 1/2" Grip Nut
22	2	HR-0066A	Break Away Cylinder Mount
23	4	HR-0705	1/2" x 2 1/2" NC Gr.8 Cap Screw w/ 1/2" Grip Nut
24	2	HR-0106	2" x 8" ASAE Hydraulic Cylinder
25	4	HR-0317	Hydraulic Cylinder Pin
26	12	HR-0706	3/4" x 2 1/2" NC Gr.8 Cap Screw w/ 3/4" Grip Nut
27	2	HR-0472	Washer Plate
28	2	G-1.5SAEFW	1 1/2" SAE Flat Washer
29	2	HR-0473	1 1/2" SAE Nylock
30	2	HR-0513	Cover Plate
32	2	HR-0314	Hydraulic Cylinder Rod Clevis
**	4	HR-0082	Wheel Hub w/ Bearings & Seal RTM 2-3566F-C2-00
**		HR-0313	Hydraulic Cylinder Seal Kit, (Not Shown) Spencer #639572

**BASKET HANGER, FRAME & LIFT ASSEMBLY**  
**MODELS: 2027/30G2-7**  
**Serial # 10100 and Greater**



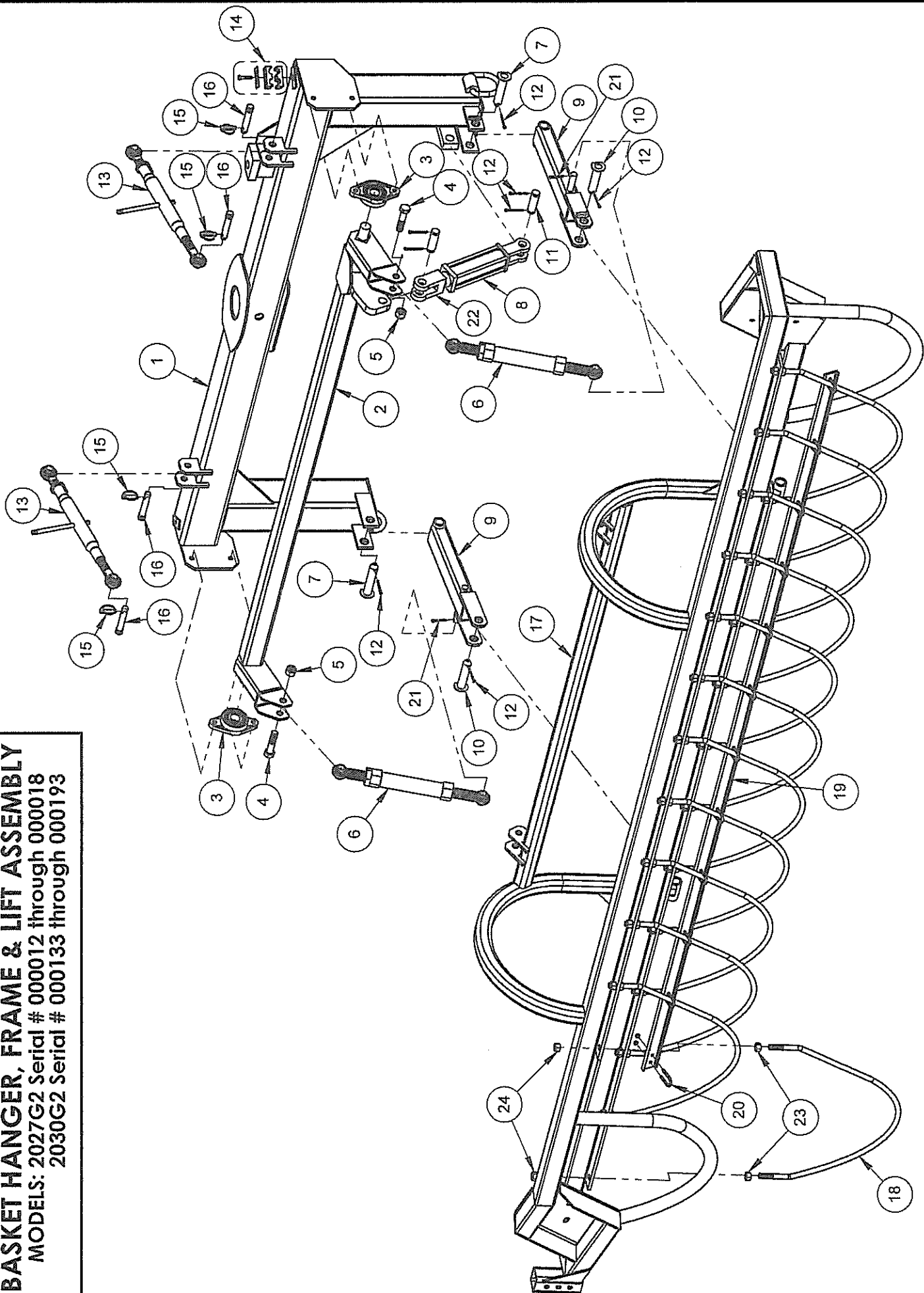
## BASKET HANGER, FRAME AND LIFT ASSEMBLY

MODELS: 2027/30G2-7

Serial # 10100 and Greater

ITEM	QTY	PART NO	DESCRIPTION
1	1	HR-2478	Basket Pivot Weldment - RH
1	1	HR-2479	Basket Pivot Weldment - LH (Not Shown)
2	1	HR-2450-1	Suspension Axle - RH
2	1	HR-2451-1	Suspension Axle - LH (Not Shown)
3	4	HR-0232	Flange Bearing
4	4	G-75-3.5NCCS	3/4" x 3 1/2" HHCS
5	4	G-75NCHGN	3/4" Hex Grip Nut
6	4	HR-2003-A	Adjustable Link
7	4	HR-2117	Clevis Pin, Bottom 4-3/4" (Serial #12102 or less)
7	4	HR-11117	Clevis Pin, Bottom 4-3/4" (Greaseable) (Serial #12103 or greater)
8	2	HR-0107	2" x 6" Hydraulic Cylinder
9	4	HR-2113-1	Parallel Arm (Serial #12102 or less)
9	4	HR-2113-2	Parallel Arm (Serial #12103 or greater)
10	4	HR-2116	Clevis Pin, Top 4-1/2" (Serial #12102 or less)
10	4	HR-11116	Clevis Pin, Top 4-1/2" (Greaseable) (Serial #12103 or greater)
11	4	HR-0317	Hydraulic Cylinder Pin
12	16	HR-0159	Cotter Pin 3/16" x 1-1/2"
13	4	HR-0200	Top Link
14	2	HR-0404	1/2" Double Hose Clamp w/ Mounting Plate
15	8	HR-0198	Lynch Pin - 7/16"
16	8	HR-0105	Pin
17	1	HR-2623-1	Basket Frame - 7-Tine Bar, 12' - RH (Serial #12102 or less)
17	1	HR-2623-2	Basket Frame - 7-Tine Bar, 12' - RH (Serial #12103 or greater)
17	1	HR-2624-1	Basket Frame - 7-Tine Bar, 12' - LH (Not Shown) (Serial #12102 or less)
17	1	HR-2624-2	Basket Frame - 7-Tine Bar, 12' - LH (Not Shown) (Serial #12103 or greater)
17	Ref	HR-2621-1	Basket Frame - 7-Tine Bar, 10 1/2' - RH (Not Shown) (Serial #12102 or less)
17	Ref	HR-2621-2	Basket Frame - 7-Tine Bar, 10 1/2' - RH (Not Shown) (Serial #12103 or greater)
17	Ref	HR-2622-1	Basket Frame - 7-Tine Bar, 10 1/2' - LH (Not Shown) (Serial #12102 or less)
17	Ref	HR-2622-2	Basket Frame - 7-Tine Bar, 10 1/2' - LH (Not Shown) (Serial #12103 or greater)
18	24	HR-2630	Stripper Bar (7-Tine Bar, RH & LH, 10 1/2' & 12' Basket)
19	4	HR-0703	Cotter Pin 1/4" x 1-1/2"
20	2	HR-0314	Hydraulic Cylinder Rod Clevis
21	48	G-625NCHN	5/8" NC Hex Nut
22	48	G-625NCHGN	5/8" Hex Grip Nut
23	2	HR-2004-A	Basket Adjustment Wrench
#	2	HR-2007	Tooth Tool
#		HR-0313	Hydraulic Cylinder Seal Kit, (Not Shown) Spencer #639572

**BASKET HANGER, FRAME & LIFT ASSEMBLY**  
 MODELS: 2027G2 Serial # 000012 through 000018  
 2030G2 Serial # 000133 through 000193



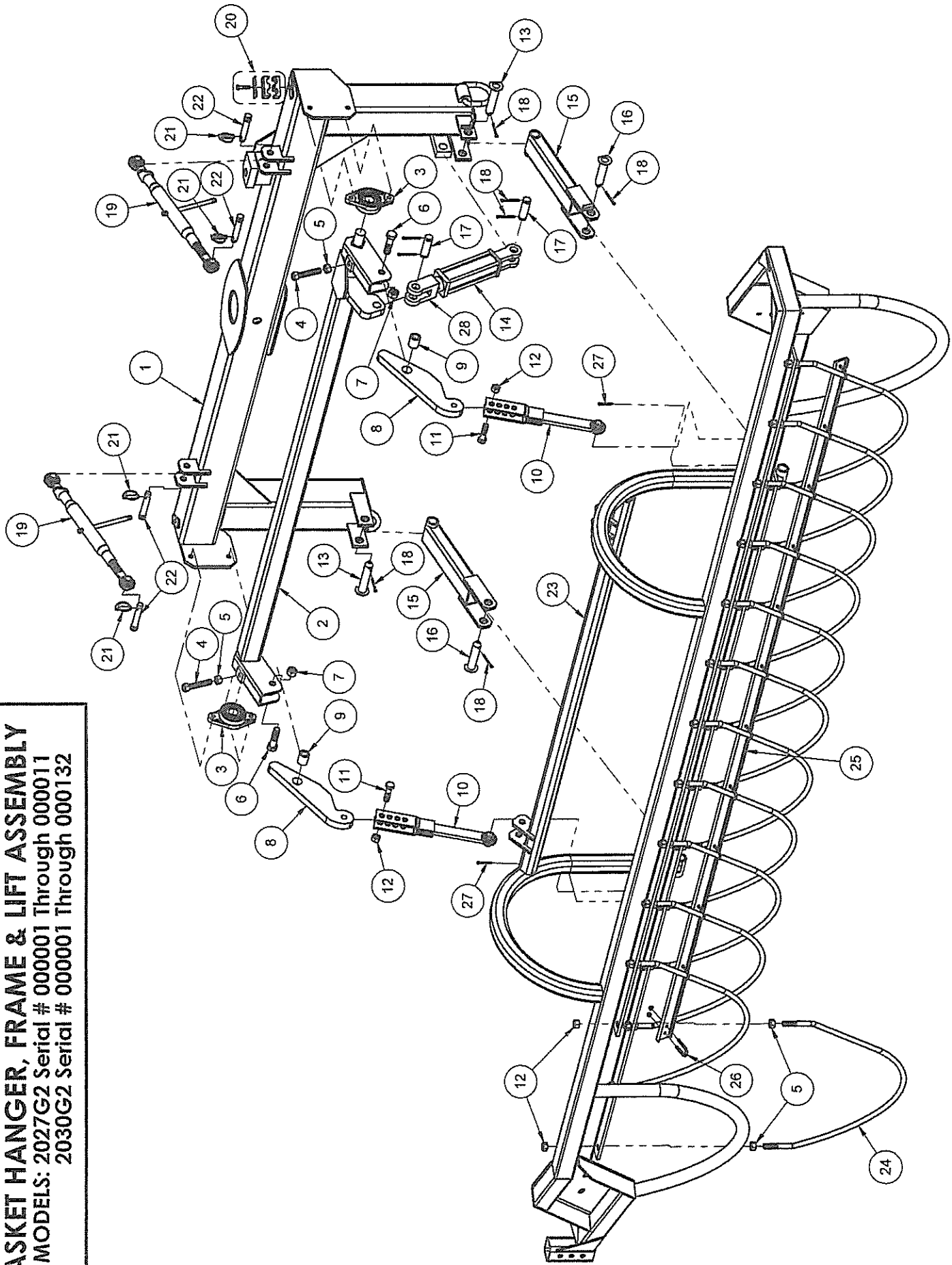


## BASKET HANGER, FRAME AND LIFT ASSEMBLY

MODELS: 2027G2-7 Serial # 000012 through 000018  
2030G2-7 Serial # 000133 through 000193

ITEM	QTY	PART NO	DESCRIPTION
1	1	HR-2478	Basket Pivot Weldment - RH
1	1	HR-2479	Basket Pivot Weldment - LH (Not Shown)
2	1	HR-2450-1	Suspension Axel - RH
2	1	HR-2451-1	Suspension Axel - LH (Not Shown)
3	4	HR-0232	Flange Bearing
4	4	G-75-3.5NCCS	3/4" x 3 1/2" HHCS
5	4	G-75NCHGN	3/4" Hex Grip Nut
6	4	HR-2003	Adjustable Link
7	4	HR-2117	Clevis Pin, Bottom 4-3/4"
8	2	HR-0107	2" x 6" Hydraulic Cylinder
9	4	HR-2113-1	Parallel Arm
10	4	HR-2116	Clevis Pin, Top 4-1/2"
11	4	HR-0317	Hydraulic Cylinder Pin
12	16	HR-0159	Cotter Pin 3/16" x 1-1/2"
13	4	HR-0200	Top Link
14	2	HR-0404	1/2" Double Hose Clamp w/ Mounting Plate
15	8	HR-0198	Lynch Pin - 7/16"
16	8	HR-0105	Pin
17	1	HR-2623-1	Basket Frame - 7-Tine Bar, 12' - RH
17	1	HR-2624-1	Basket Frame - 7-Tine Bar, 12' - LH (Not Shown)
17	Ref	HR-2621-1	Basket Frame - 7-Tine Bar, 10 1/2' - RH (Not Shown)
17	Ref	HR-2622-1	Basket Frame - 7-Tine Bar, 10 1/2' - LH (Not Shown)
18	24	HR-2630	Stripper Bar (7-Tine Bar, RH & LH, 10 1/2' & 12' Basket)
19	2	HR-0671	Support Channel 12'
19	Ref	HR-0670	Support Channel 10 1/2' (Not Shown)
20	24	HR-0222	1/4" U-Bolt w/1/4" Hex Grip Nuts
21	4	HR-0703	Cotter Pin 1/4" x 1-1/2"
22	2	HR-0314	Hydraulic Cylinder Rod Clevis
23	48	G-625NCHN	5/8" NC Hex Nut
24	48	G-625NCHGN	5/8" Hex Grip Nut
	2	HR-2004	Basket Adjustment Wrench
#		HR-0313	Hydraulic Cylinder Seal Kit, (Not Shown) Spencer #639572

**BASKET HANGER, FRAME & LIFT ASSEMBLY**  
 MODELS: 2027G2 Serial # 000001 Through 000011  
 2030G2 Serial # 000001 Through 000132



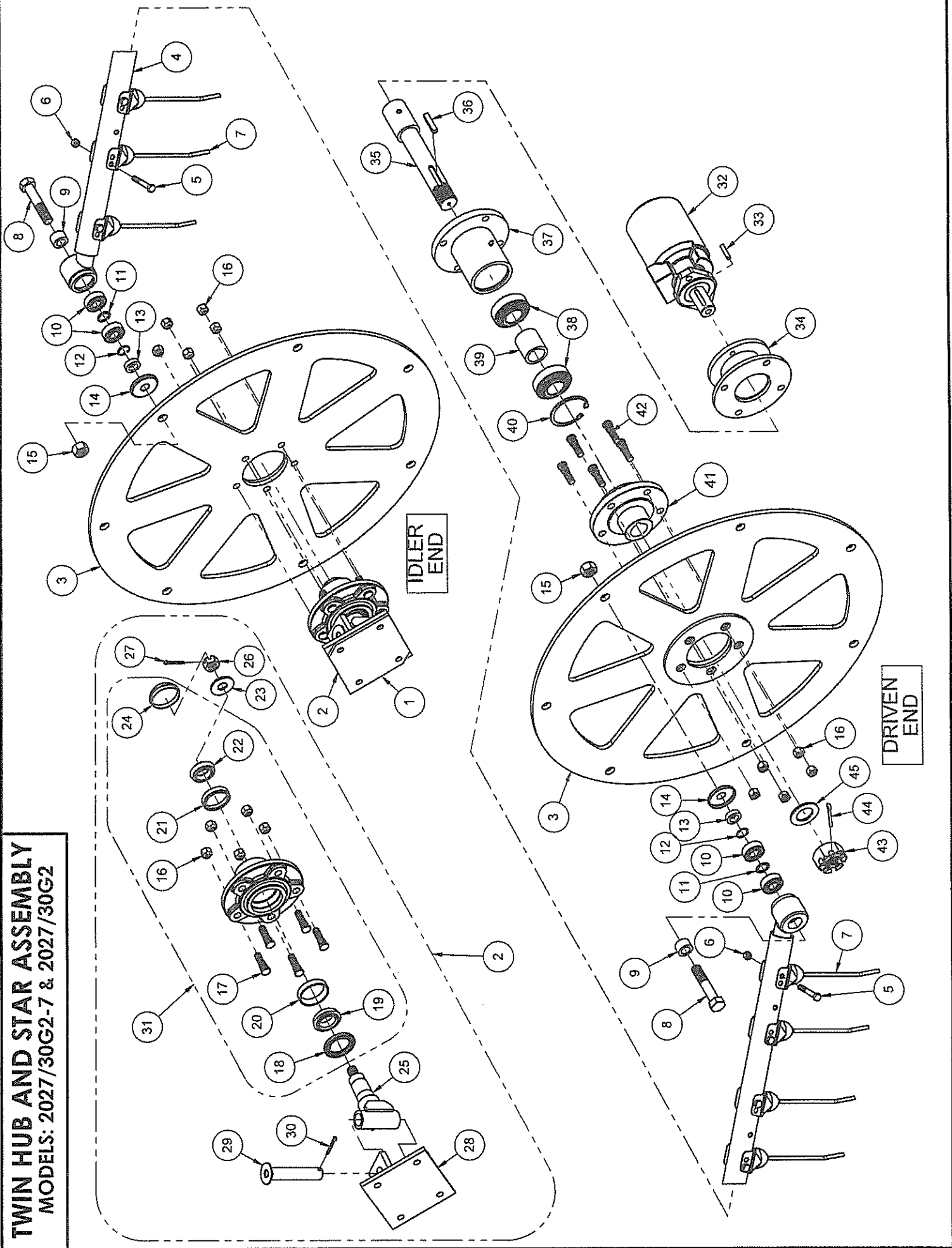
# BASKET HANGER, FRAME AND LIFT ASSEMBLY

MODELS: 2027G2-7 Serial # 000001 Through 000011

2030G2-7 Serial # 000001 Through 000132

ITEM	QTY	PART NO	DESCRIPTION
1	1	HR-2478	Basket Pivot Weldment - RH
1	1	HR-2479	Basket Pivot Weldment - LH (Not Shown)
2	1	HR-2450	Suspension Axle - RH
2	1	HR-2451	Suspension Axle - LH (Not Shown)
3	4	HR-0232	Flange Bearing
4	4	HR-0224	5/8" x 3" NC Special Bolt
5	52	G-625NCHN	5/8" NC Hex Nut
6	4	G-75-3NCCS	3/4" x 3" HHCS
7	4	G-75NCHGN	3/4" Hex Grip Nut
8	4	HR-0428	Adjuster Arm
9	4	HR-0431	Bushing
10	4	HR-2429-S	Link
11	4	HR-0028	5/8" x 2-1/2" HHCS
12	52	G-625NCHGN	5/8" Hex Grip Nut
13	4	HR-2117	Clevis Pin, Bottom 4-3/4"
14	2	HR-0107	2" x 6" Hydraulic Cylinder
15	4	HR-2113	Parallel Arm
16	4	HR-2116	Clevis Pin, Top 4-1/2"
17	4	HR-0317	Hydraulic Cylinder Pin
18	16	HR-0159	Cotter Pin 3/16" x 1-1/2"
19	4	HR-0200	Top Link
20	2	HR-0404	1/2" Double Hose Clamp w/ Mounting Plate
21	8	HR-0198	Lynch Pin - 7/16"
22	8	HR-0105	Pin
23	1	HR-2623	Basket Frame - 7-Tine Bar, 12' - RH
23	1	HR-2624	Basket Frame - 7-Tine Bar, 12' - LH (Not Shown)
23	Ref	HR-2621	Basket Frame - 7-Tine Bar, 10 1/2' - RH (Not Shown)
23	Ref	HR-2622	Basket Frame - 7-Tine Bar, 10 1/2' - LH (Not Shown)
24	24	HR-2630	Stripper Bar (7-Tine Bar, RH & LH, 10 1/2' & 12' Basket)
25	2	HR-0671	Support Channel 12'
25	Ref	HR-0670	Support Channel 10 1/2' (Not Shown)
26	24	HR-0222	1/4" U-Bolt w/1/4" Hex Grip Nuts
27	4	HR-0703	Cotter Pin 1/4" x 1-1/2"
28	2	HR-0314	Hydraulic Cylinder Rod Clevis
#		HR-0313	Hydraulic Cylinder Seal Kit, (Not Shown) Spencer #639572

**TWIN HUB AND STAR ASSEMBLY**  
**MODELS: 2027/30G2-7 & 2027/30G2**

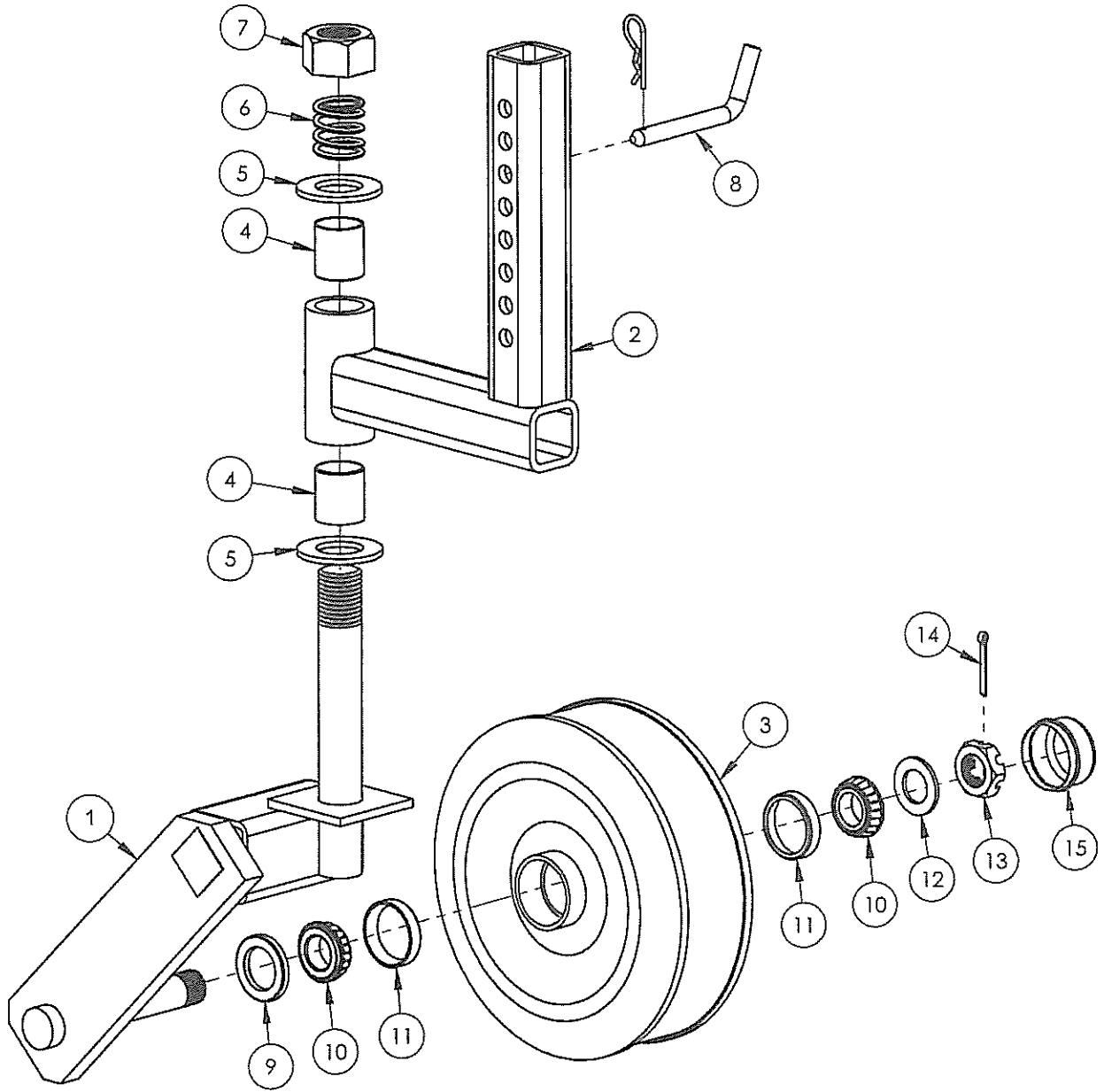




**TWIN HUB AND STAR ASSEMBLY**  
**MODELS: 2027/30G2-7**

ITEM	QTY	PART NO	DESCRIPTION
1	2	HR-0647	Reinforcing Plate
2	1	HR-4162	Knuckle Assembly w/Hub - RH
2	1	HR-4163	Knuckle Assembly w/Hub - LH
3	4	HR-2640	G2 Star Wheel
4	14	HR-4130	Tine Bar - 12 ft w/Bearings
4	Ref	HR-4120	Tine Bar - 10-1/2 ft w/Bearings (Not Shown)
5	350	HR-0181	3/8" x 2-1/2" HHCS
6	350	HR-0182	3/8" Lock Nut
7	175	HR-0168	Right Hand Rake Tooth
7	175	HR-0169	Left Hand Rake Tooth (Not Shown)
8*	28	HR-0176	3/4" NC x 4" HHCS
9*	28	HR-0174	Tine Bar Long Spacer
10*	56	HR-0172	Tine Bar Bearing Z9504
11*	28	HR-0184	Tine Bar Shim Washer
12*	28	HR-0173	Snap Ring
13*	28	HR-0177	Tine Bar Small Spacer
14*	28	HR-0175	Dust Shield
15*	28	HR-0178	3/4" NC Lock Nut
16	20	G-STN-509	1/2"-20 NF Lug Nut
17	10	G-ST-504	1/2"-20 NF - 2 1/4" Stud
18	2	G-SL-175	Bearing Seal (RTM SL-175)
19	2	G-LM48548	Inner Spindle Bearing LM48548
20	2	G-LM48510	Inner Bearing Race LM48510
21	2	HR-0377	Outer Bearing Race LM67010
22	2	HR-0376	Outer Spindle Bearing LM67048
23	2	HR-0382	3/4" Spindle Washer (RTM SW-750)
24	2	HR-0375	Grease Cap
25	2	HR-2652	Knuckle Spindle Weldment
26	2	HR-381	Spindle Nut 3/4" NF Slotted (RTM SN-750)
27	2	HR-0384	Cotter Pin 5/32" x 1 1/2"
28	1	HR-2650	Knuckle Base Plate - RH
28	1	HR-2651	Knuckle Base Plate - LH (Not Shown)
29	2	HR-2653	Knuckle Pin
30	2	HR-0159	Cotter Pin 3/16" x 1-1/2"
31	2	HR-2654	Hub w/Studs, Bearings and Seal
32	2	HR-0165	Hydraulic Motor, Heavy Duty, Parker #TF0360ASO30AAAB
32	2	HR-0165-12	Hydraulic Motor, Heavy Duty, White #500375A5120AAAAA (Serial #12101 or greater)
32	Ref	HR-0709	Hydraulic Motor, Extra HD, Parker #TF0475ASO30AAAB - Option
32	Ref	HR-0709-12	Hydraulic Motor, Extra HD, White #500470A5120AAAAA - Option (Serial #12101 or greater)
33	2	HR-0357-12	5/16" x 1/4" Key Stock 1 1/2" Long
34	2	HR-2369	Adapter Housing
35**	2	HR-2351	Jack Shaft 1-1/4"
36**	2	HR-0356	3/8" Key Stock - 2"
37**	2	HR-2352	Bearing Housing
38**	4	HR-0355	Bearing CSA208-24
39**	2	HR-0363	Spacer
40**	2	HR-0354	Snap Ring
41**	2	HR-2361	Drive Hub Assembly w/Studs
42**	10	G-7-122	1/2"-20 NF - 2" Stud
43	2	HR-0367	1-1/2" Slotted Nut
44**	2	HR-0367-1	Cotter Pin 1/4" x 2"
45**	2	HR-0368	Machined Washer 2-1/2" OD x 1-1/2" ID X 3/16"
*	Ref	HR-4125	Tine Bar Bearing Assembly
**	2	HR-4361	Bearing Housing Assembly
	Ref	HR-0165-1	Seal Kit For HD & Extra HD Hydraulic Motor, Parker #SK000092
	Ref	HR-0165-2	Seal Kit For all White Motors #500444001 (Serial #12101 or greater)

# GAUGE WHEEL ASSEMBLY 08' (optional)

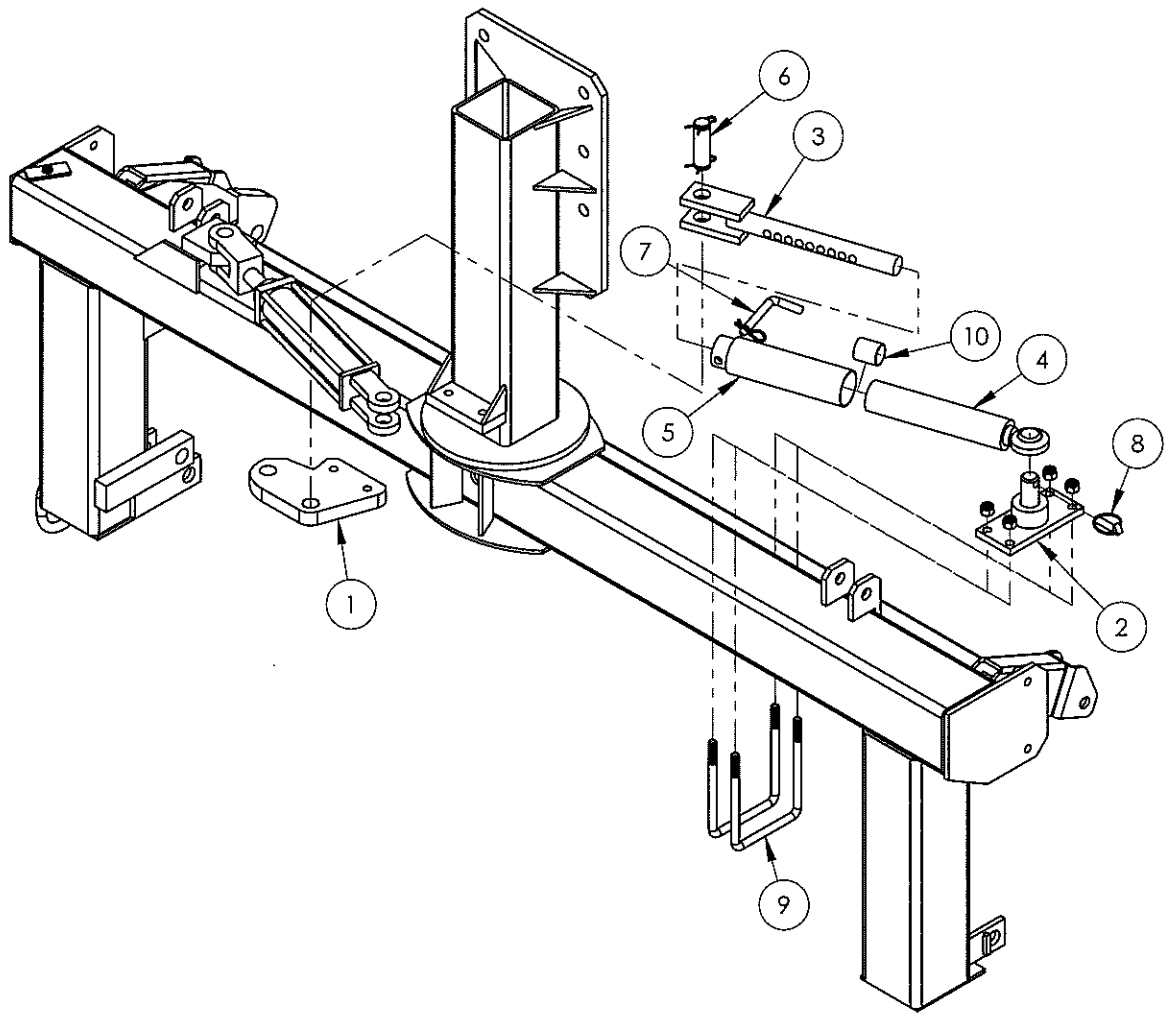


## GAUGE WHEEL ASSEMBLY 08' (optional)

HR-5612 & HR-5712

ITEM	QTY	PART NO	DESCRIPTION
1	1	HR-2458	Pivot Bracket Assembly - RH
1	1	HR-2457	Pivot Bracket Assembly - LH (not shown)
2	2	HR-2660	Pivot Arm Weldment
3	2	HR-2486	12" Steel Wheel
4	4	HR-0487	Plastic Bearing Insert
5	2	HR-0488	1-1/4" SAE Flat Washer
6	2	HR-0486	Spring
7	2	HR-0489	1-1/4" NC Nylock Nut
8	2	G-P71111	Pin
9	2	HR-0385	Seal - National 471750
10	4	HR-0386	Bearing - L44643
11	4	HR-0387	Race - L44610
12	2	HR-0402	Washer
13	2	HR-0403	Slotted Nut
14	2	HR-0159	Cotter Pin
15	2	HR-0388	Cap - 21-3

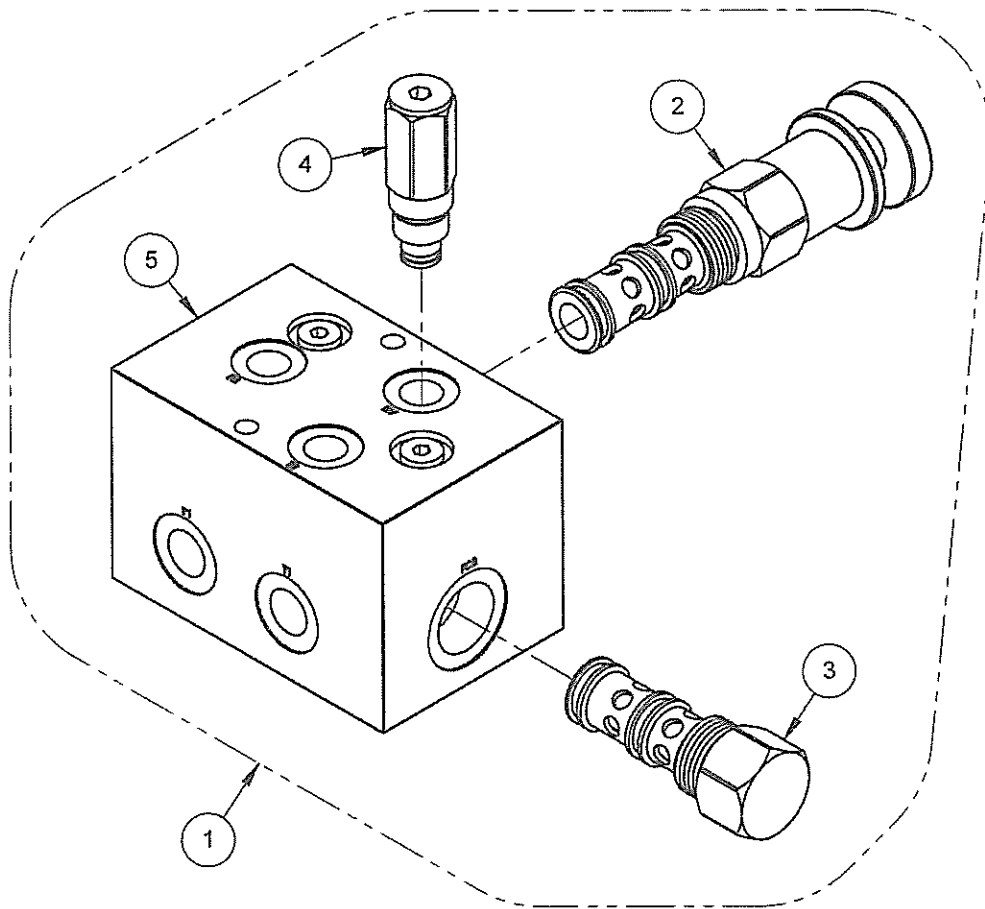
# HR-5800 ANGLE STOP ASSEMBLY



**HR-5800 ANGLE STOP ASSEMBLY**  
**FOR MODELS: 2027/30-G25 & 2027/30-G27**

ITEM	QTY	PART NO	DESCRIPTION
1	2	HR-0066B	Angle Stop Mount
2	2	HR-0850	Bolt On Pivot Base
3	2	HR-0851	Inner Slide Shaft
4	2	HR-0852	Outer Slide
5	2	HR-0853	Stop Collar Sleeve
6	2	HR-0317	1" Pin
7	2	P71111	1/2" Pin w/Keeper
8	2	HR-0198	7/16" Lynch Pin
9	4	HR-0860	1/2" x 5" x 7" NC U-Bolt w/Nylock Nuts
10	2	HR-0487	Plastic Bearing Insert
#	2	HR-0850A	7/16" Keystock 3" Long (not shown)

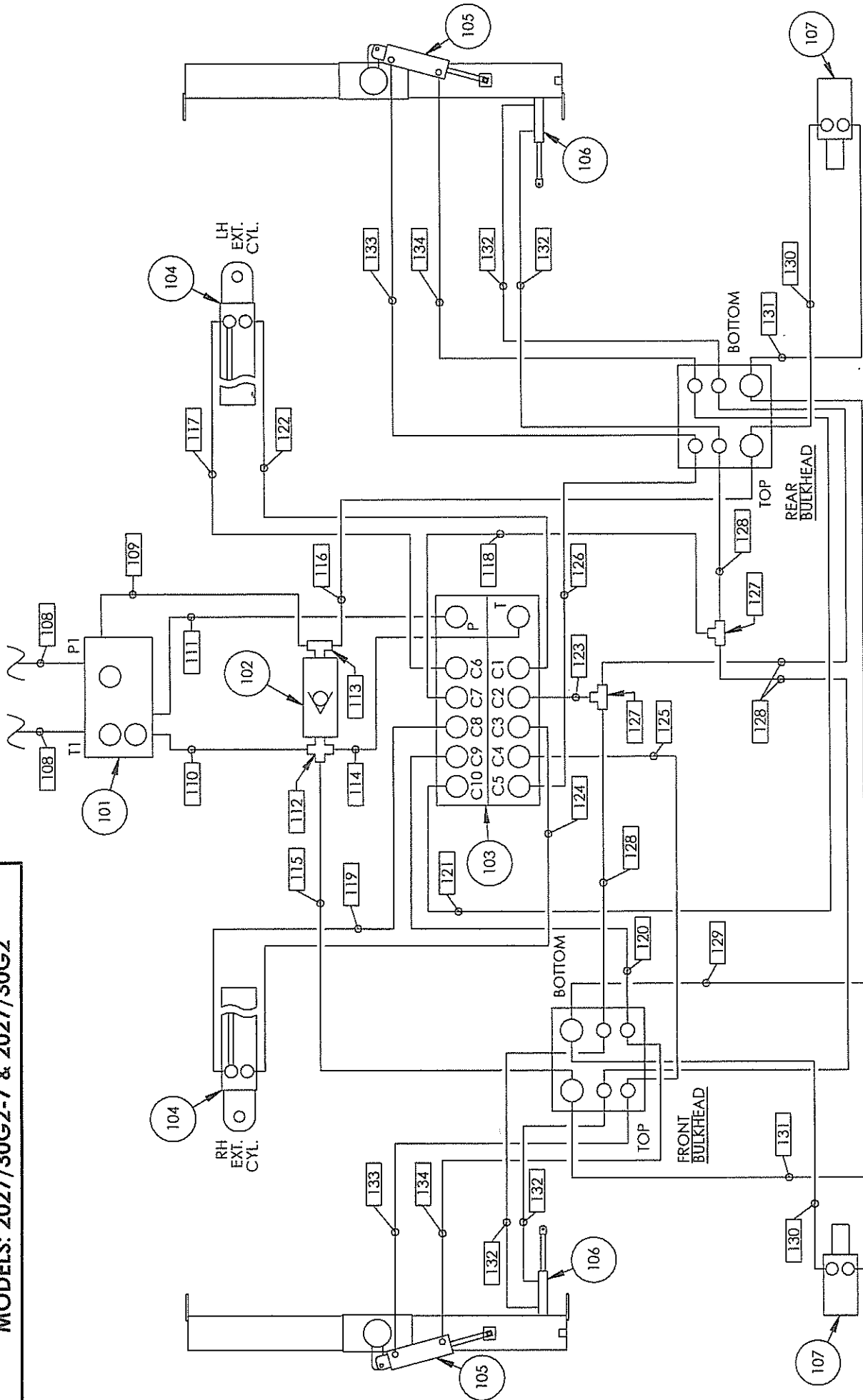
**HYDRAULIC FLOW CONTROL**  
MODELS: 2027/30G2-7 & 2027/30G2



**HYDRAULIC FLOW CONTROL**  
**MODELS: 2027/30G2-7**

ITEM	QTY	PART NO	DESCRIPTION
1	1	HR-0391	Hyd Flow Control Manifold w/Cartridges
2	1	HR-0392	Flow Control Cartridge, Adjustable 4 - 8GPM
3	1	HR-0393	Flow Control Cartridge, Fixed 4GPM
4	1	HR-0395	Motor Relief Valve - 2000 PSI
5	1	HR-0396	Hyd Flow Control Manifold

**HYDRAULIC SCHEMATIC-5 FUNCTION**  
**MODELS: 2027/30G2-7 & 2027/30G2**



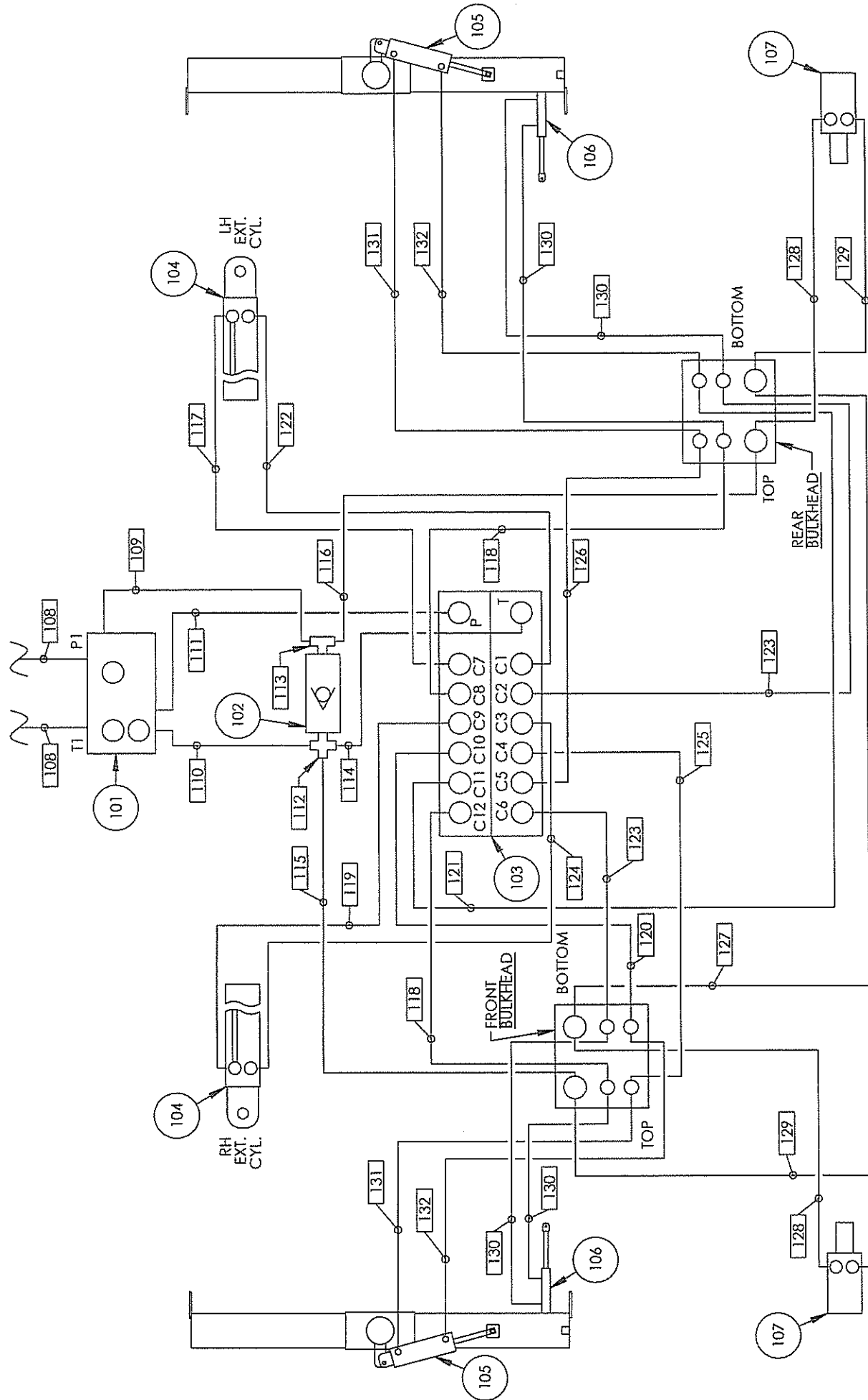
**ATTACHMENTS**  
 YAKIMA WA



**HYDRAULIC SCHEMATIC - 5 FUNCTION**  
**MODELS: 2027/30G2-7**

ITEM	QTY	PART NO	DESCRIPTION
101	1	HR-0391	Hydraulic Manifold
	1	HR-0392	Adjustable Flow Cartridge 4-8 GPM (not shown)
	1	HR-0393	Fixed Flow Cartridge 4 GPM (not shown)
	1	HR-0395	Motor Relief Valve - 2000 PSI (not shown)
102	1	HR-0284	Check Valve
103	1	700-0805-4022	Hydraulic Control Valve (5 Function) Serial #10128 & Over
103	1	HR-0810	Hydraulic Control Valve (5 Function) Serial #10127 & Under
104	2	HR-0318-1	Spread Cylinder Without External Hydraulic Line, Ram
104	Ref	HR-0318	Spread Cylinder With External Hydraulic Line, Ram
105	2	HR-0106	2" x 8" Hydraulic Cylinder
106	2	HR-0107	2" x 6" Hydraulic Cylinder
107	2	HR-0165	Hydraulic Motor, Heavy Duty, Parker #TF0360ASO30AAAB
	2	HR-0709	Hydraulic Motor, Extra Heavy Duty, Parker#TF0475ASO30AAAB - (optional)
108	2	HR-3144	1/2" Hydraulic Hose - 113"
	2	HR-0276	8010-4 Pioneer Tips (not shown)
109	1	HR-3120	1/2" Hydraulic Hose - 64"
	1	HR-0306	1/2" Adapter (not shown) 6802x8x8
110	1	HR-3121	1/2" Hydraulic Hose - 58 1/2"
	1	HR-0301	1/2" Adapter (not shown) 6801x8x10
111	1	HR-3122	1/2" Hydraulic Hose - 73"
	1	HR-0305	1/2" Adapter (not shown) 6802x8x10
112	1	HR-0272	1/2" Cross Adapter - 2650-08-08-08
113	1	HR-0708	1/2" Tee Adapter - 2601-8-8
114	1	HR-3123	1/2" Hydraulic Hose - 11"
115	1	HR-3124	1/2" Hydraulic Hose - 73"
116	1	HR-3125	1/2" Hydraulic Hose - 70"
117	1	HR-3126	1/4" Hydraulic Hose - 64" For use with HR-0318 Spread Cylinder
	1	HR-3126-1	1/4" Hydraulic Hose - 64" For use with HR-0318-1 Spread Cylinder
	1	HR-0300	1/4" Adapter (not shown) 6400-L-06-06-0
118	1	HR-3127	3/8" Hydraulic Hose - 23 7/8"
119	1	HR-3128	1/4" Hydraulic Hose - 62" For use with HR-0318 Spread Cylinder
	1	HR-3128-1	1/4" Hydraulic Hose - 62" For use with HR-0318-1 Spread Cylinder
	1	HR-0300	1/4" Adapter (not shown) 6400-L-06-06-0
120	1	HR-3129	1/4" Hydraulic Hose - 57"
121	1	HR-3130	1/4" Hydraulic Hose - 69"
122	1	HR-3131	1/4" Hydraulic Hose - 43 1/2"
	1	HR-0300	1/4" Adapter (not shown) 6400-L-06-06-0
123	1	HR-3132	3/8" Hydraulic Hose - 20 7/8"
124	1	HR-3133	1/4" Hydraulic Hose - 63 1/2"
	1	HR-0300	1/4" Adapter (not shown) 6400-L-06-06-0
125	1	HR-3134	1/4" Hydraulic Hose - 55"
126	1	HR-3135	1/4" Hydraulic Hose - 67"
127	2	HR-0328	3/8" Tee Adapter - 2603-06-06-06-FG
128	4	HR-3136	3/8" Hydraulic Hose - 51"
129	1	HR-3137	1/2" Hydraulic Hose - 118"
130	2	HR-3138	1/2" Hydraulic Hose - 240"
131	2	HR-3139	1/2" Hydraulic Hose - 242"
132	4	HR-3140	3/8" Hydraulic Hose - 206"
133	2	HR-3141	1/4" Hydraulic Hose - 160"
134	2	HR-3142	1/4" Hydraulic Hose - 171 1/2"

**HYDRAULIC SCHEMATIC-6 FUNCTION**  
**MODELS: 2027/30G2-7 & 2027/30G2**



**ATTACHMENTS**  
 YAKIMA WA

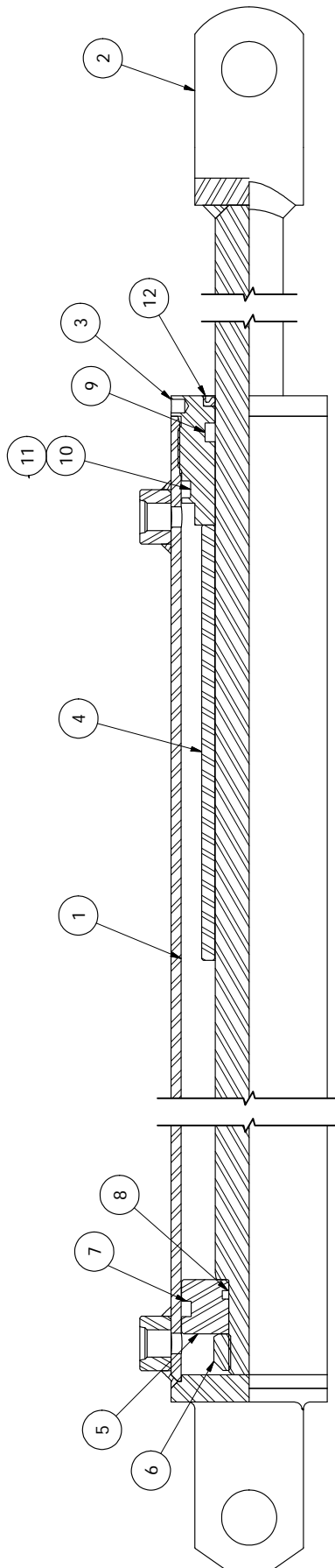
## HYDRAULIC SCHEMATIC - 6 FUNCTION (optional)

MODELS: 2027/30G2-7

ITEM	QTY	PART NO	DESCRIPTION
101	1	HR-0391	Hydraulic Manifold
	1	HR-0392	Adjustable Flow Cartridge 4-8 GPM (not shown)
	1	HR-0393	Fixed Flow Cartridge 4 GPM (not shown)
	1	HR-0395	Motor Relief Valve - 2000 PSI (not shown)
102	1	HR-0284	Check Valve
103	1	700-0806-4022	Hydraulic Control Valve (6 Function) *option Serial #10128 & Over
103	1	700-0806-4021	Hydraulic Control Valve (6 Function) *option Serial #10127 & Under
104	2	HR-0318-1	Spread Cylinder Without External Hydraulic Line, Ram
104	Ref	HR-0318	Spread Cylinder With External Hydraulic Line, Ram
105	2	HR-0106	2" x 8" Hydraulic Cylinder
106	2	HR-0107	2" x 6" Hydraulic Cylinder
107	2	HR-0165	Hydraulic Motor, Heavy Duty, Parker #TF0360ASO30AAAB
	2	HR-0709	Hydraulic Motor, Extra Heavy Duty, Parker#TF0475ASO30AAAB - (optional)
108	2	HR-3144	1/2" Hydraulic Hose - 113"
	2	HR-0276	8010-4 Pioneer Tips (not shown)
109	1	HR-3120	1/2" Hydraulic Hose - 64"
	1	HR-0306	1/2" Adapter (not shown) 6802x8x8
110	1	HR-3121	1/2" Hydraulic Hose - 58 1/2"
	1	HR-0301	1/2" Adapter (not shown) 6801x8x10
111	1	HR-3122	1/2" Hydraulic Hose - 73"
	1	HR-0305	1/2" Adapter (not shown) 6802x8x10
112	1	HR-0272	1/2" Cross Adapter - 2650-08-08-08
113	1	HR-0708	1/2" Tee Adapter - 2601-8-8
114	1	HR-3123	1/2" Hydraulic Hose - 11"
115	1	HR-3124	1/2" Hydraulic Hose - 73"
116	1	HR-3125	1/2" Hydraulic Hose - 70"
117	1	HR-3126	1/4" Hydraulic Hose - 45 1/2" For use with HR-0318 Spread Cylinder
	1	HR-3126-1	1/4" Hydraulic Hose - 64" For use with HR-0318-1 Spread Cylinder
	1	HR-0300	1/4" Adapter (not shown) 6400-L-06-06-0
118	1	HR-3145	3/8" Hydraulic Hose - 78"
119	1	HR-3128	1/4" Hydraulic Hose - 66 1/2" For use with HR-0318 Spread Cylinder
	1	HR-3128-1	1/4" Hydraulic Hose - 62" For use with HR-0318-1 Spread Cylinder
	1	HR-0300	1/4" Adapter (not shown) 6400-L-06-06-0
120	1	HR-3129	1/4" Hydraulic Hose - 57"
121	1	HR-3130	1/4" Hydraulic Hose - 69"
122	1	HR-3131	1/4" Hydraulic Hose - 43 1/2"
	1	HR-0300	1/4" Adapter (not shown) 6400-L-06-06-0
123	1	HR-3146	3/8" Hydraulic Hose - 77"
124	1	HR-3133	1/4" Hydraulic Hose - 63 1/2"
	1	HR-0300	1/4" Adapter (not shown) 6400-L-06-06-0
125	1	HR-3134	1/4" Hydraulic Hose - 55"
126	1	HR-3135	1/4" Hydraulic Hose - 67"
127	1	HR-3137	1/2" Hydraulic Hose - 118"
128	2	HR-3138	1/2" Hydraulic Hose - 240"
129	2	HR-3139	1/2" Hydraulic Hose - 242"
130	4	HR-3140	3/8" Hydraulic Hose - 206"
131	2	HR-3141	1/4" Hydraulic Hose - 160"
132	2	HR-3142	1/4" Hydraulic Hose - 171 1/2"

BILL OF MATERIALS

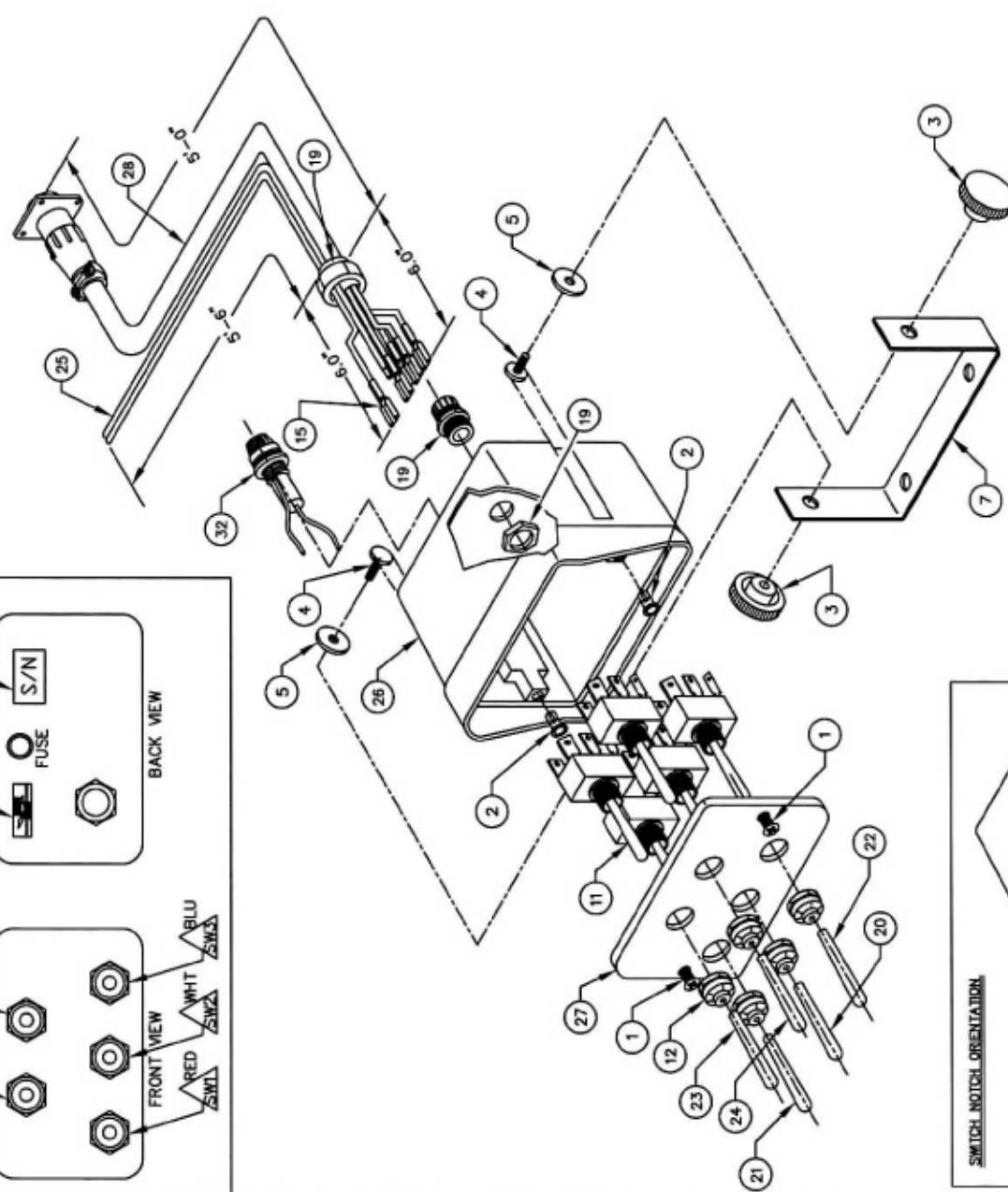
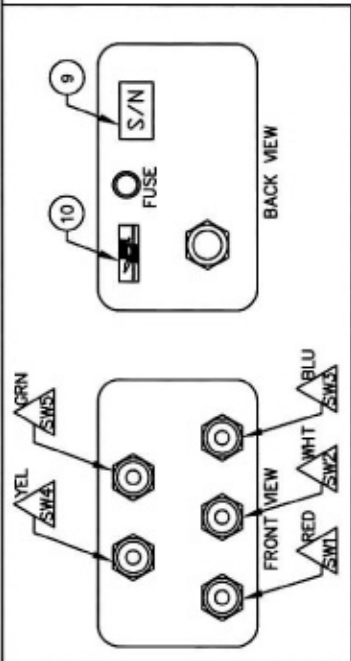
ITEM	QTY	DESCRIPTION	PART NO.
1	1	BARREL WELDMENT	R5507907
2	1	SHAFT WELDMENT	R4207907
3	1	GLAND	R6500013
4	1	STOP TUBE	R4805437
5	1	PISTON	R6400045
6	1	LOCKNUT, 3/4-16 UNF, GRADE C	R3005005
7	1	SEAL, PISTON, PSP-A, #330, 2.500	R3500066
8	1	SEAL, O-RING, NBR70A, #210, 0.750 x 1.000 x 0.125	R3503210
9	1	ROD SEAL, U-CUP, 1.250 x 1.625 x 0.313	R3501011
10	1	SEAL, O-RING, NBR70A, #330, 2.125 X 2.500 X 0.188	R3503330
11	1	SEAL, BACK-UP, URETHANE, #330, 2.125 x 2.500 x 0.055	R3508330
12	1	SEAL, WIPER, CASED, 1.250 x 1.688 x 0.188, NITRILE	R3506016



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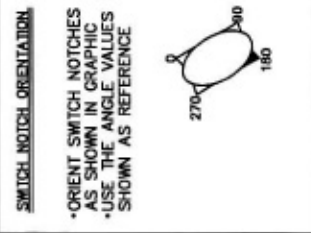
DRAWN BY K Strelloff	DATE 1/3/2013	SCALE 1:1
CHECKED BY D Lammerts	DATE 1/3/2013	SCALE 1:1
APPROVED BY D Lammerts	DATE 1/3/2013	SCALE 1:1
TOLERANCES UNLESS OTHERWISE SPECIFIED: DECIMAL XX ±0.000 STRAIGHTNESS ±.000 IN F FRACTIONS ±.010 CONCENTRICITY ±.000 IN F ANGLES ±.5° SURFACE FINISH 125µin Ra FILLETS & RADIUS ROUNDS UNLESS SPECIFIED		
RAM INDUSTRIES INC. YORKTON, SASKATCHEWAN, CANADA www.ramindustries.com		
TITLE PARTS		
SIZE B	PROJ IR4507907 - PARTS	REV 0
SHEET 1 of 1		CREATED IN AUTOCAD INVENTOR 2010

# Five Function Control Box



### PARTS LIST

N.P.	PARTNUMBER	QTY	PART DESCRIPTION
1	212-184	2	SCREW 6-32 X 3/8 OVAL HD BLK
2	212-202	2	INSERT 6-32X3/8 BRASS
3	212-215	2	KNOB 1/4-20 FEMALE
4	212-231	2	SCREW WELDED 1/4-20 X .500
5	213-335	2	WASHER NYLON .257X.875X.080
6	214-002	14	CABLE TIE BLACK 7"
7	219-300	1	BRKT HSKG 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	250-013	5	SW TOG DPDT 3P MOM LONG
12	250-023	5	SW TOG BOOT OPN GRN
13	254-001	1	DIODE D116A2 6AMP
14	255-002	19	TRM T-TAP F PO BLU
15	255-006	5	TRM PO F INS 22-18GA
16	255-030	2	TRM SPLICE CLOSED END
17	255-070	2	TRM PO M/F
18	255-119	6	TRM PO F INS 16-14GA
19	255-710	1	STRAIN RLF HEYCO .45"-.705"ID, HOLE DIA 1.115"
20	259-004	1	SW TOG GRIP VNYL WHT .187
21	259-005	1	SW TOG GRIP VNYL RED .187
22	259-015	1	SW TOG GRIP VNYL BLU .187
23	259-022	1	SW TOG GRIP VNYL YEL .187
24	259-023	1	SW TOG GRIP VNYL GRN .187
25	300-271	1	HARNSS R/B WIRE /6"
26	304-401	1	ENCL DRL MNTN W/FUSEHOLDER CNTR 1 1/8"Ø
27	311-082	1	ENCL FP DRL MNTN-5X15/32SW
28	311-097	1	HARNSS 15 CON 16PN(13) F /5.5'
29	319-575	1	HARNSS 1CON 18GA BLK /1'
30	319-608	1	HARNSS 1CON 18GA RED /1.5'
31	319-623	1	HARNSS 1CON 18GA GRN /1'
32	319-769	1	FUSEHOLDER PANEL MOUNT ASSY 10A /.5"



- NOTES:**
1. USE 2-CABLE TIES TO COIL UP HARNSS
  2. PUT REMAINING CABLE TIES IN BAG
  3. NOT SHOWN: (6) (8)
  4. CUT OFF GRN/BLK AND RED/WHT WIRES AT HARNSS.

REV	DESCRIPTION	DATE	APPROVED	DESIGNED BY	DATE	REVISIONS
A	RELEASED DRAWING	05-09-07	[Signature]	J. P. DENNIS	05-29-03	
	1. REVISED 3D EXPLODED VIEW	05-09-07		J. P. DENNIS	05-29-03	
	2. REVISED 3D EXPLODED VIEW	05-09-07		J. P. DENNIS	05-29-03	
	3. REVISED 3D EXPLODED VIEW	05-09-07		J. P. DENNIS	05-29-03	
	4. REVISED 3D EXPLODED VIEW	05-09-07		J. P. DENNIS	05-29-03	

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FASSE VALVES  
25 NEW BOWEN PARK  
SARASOTA, FL 34238-2448

DATE FROM NO: 320-180  
DRAWN BY: A



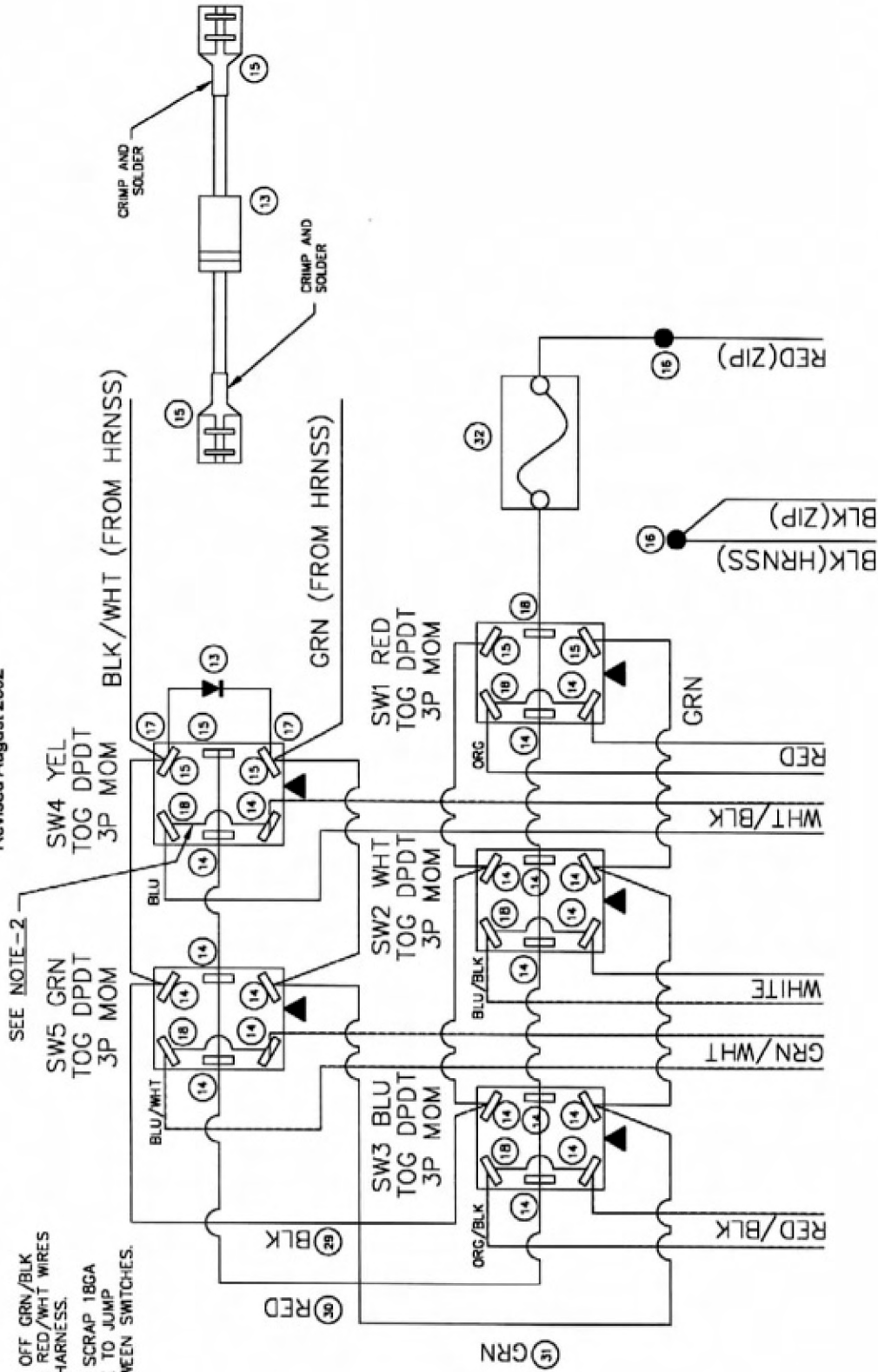
# Five Function Control Box

## SWITCH WIRING DIAGRAM

Revised August 2002

**NOTES:**

1. CUT OFF GRN/BLK AND RED/WHT WIRES AT HARNESS.
2. USE SCRAP 18GA WIRE TO JUMP BETWEEN SWITCHES.



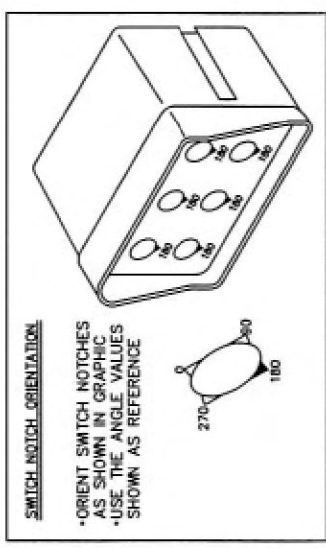
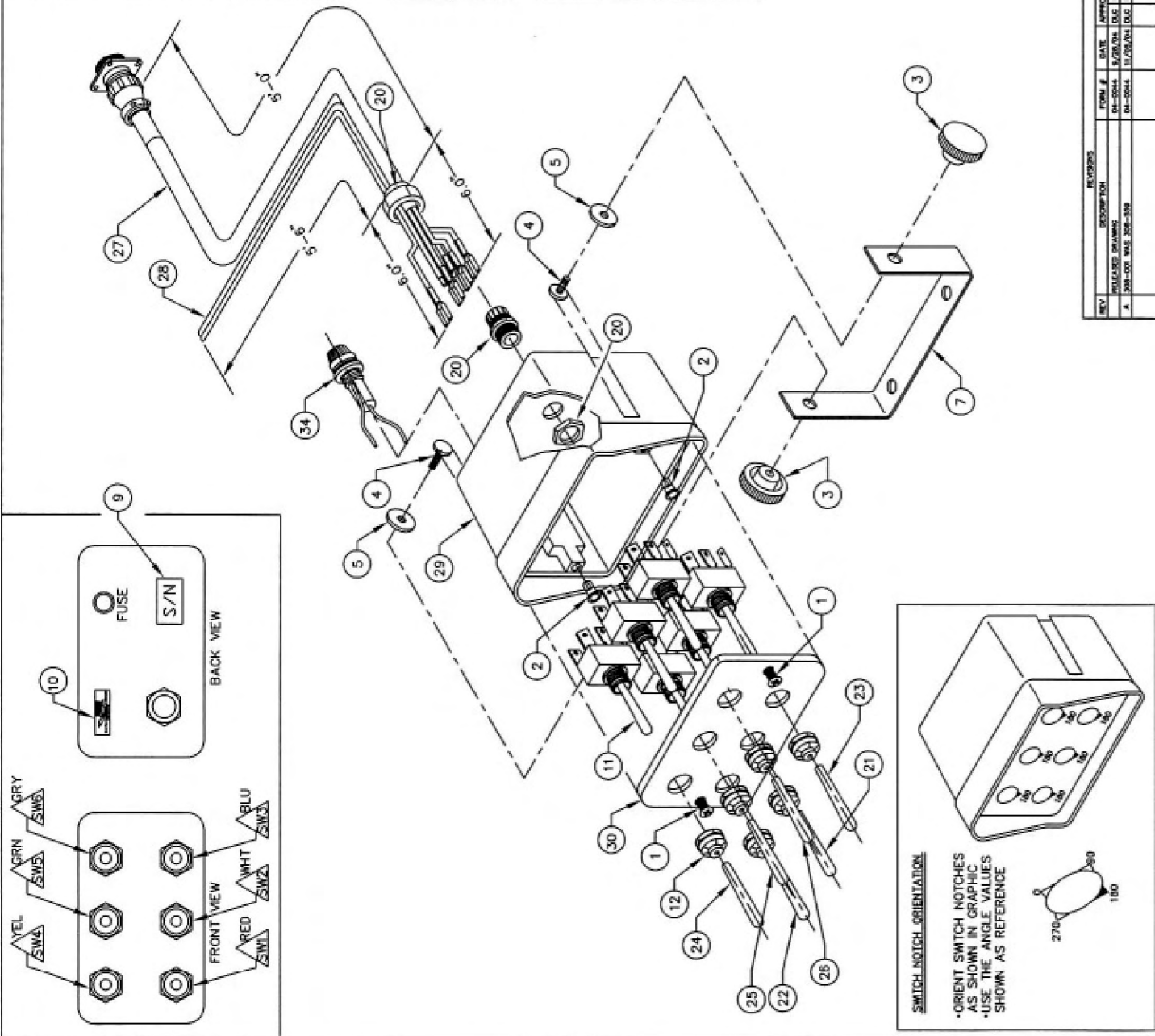
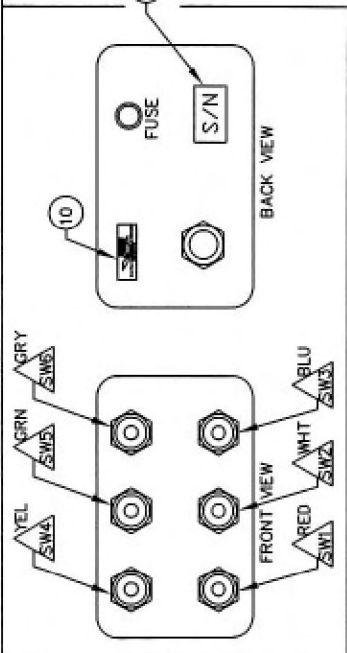
▲ = NOTCH LOCATION

DATE	BY	REVISION	DESCRIPTION
11/11/01	J.P. DEWALD	1	REVISED TO ADD SW5
11/11/01	J.P. DEWALD	2	REVISED TO ADD SW4
11/11/01	J.P. DEWALD	3	REVISED TO ADD SW3
11/11/01	J.P. DEWALD	4	REVISED TO ADD SW2
11/11/01	J.P. DEWALD	5	REVISED TO ADD SW1

**FAISSE VALVES**  
 1000 W. 10TH ST. SUITE 100  
 STANLEY, NC 28081-2348  
 PHONE: 704.336.1111  
 FAX: 704.336.1112  
 WWW: WWW.FAISSE.COM

MNTN ASSY 805/RIAN-C15LSPN16F  
 PART NO 320-180  
 SHEET 3 OF 3

# Six Function Control Box (Optional)



## PARTS LIST

N.P.	PARTNUMBER	QTY	PART DESCRIPTION
1	212-184	2	SCREW 6-32 X 3/8 OVAL HD BLK
2	212-202	2	INSERT 6-32X3/8 BRASS
3	212-215	2	KNOB 1/4-20 FEMALE
4	212-231	2	SCREW WELDED 1/4-20 X .500
5	213-335	2	WASHER NYLON .25X.875X.060
6	214-002	14	CABLE TIE BLACK 7"
7	219-300	1	BRKT HSG 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	250-013	6	SW TOG DPDT 3P MOM LONG
12	250-023	6	SW TOG BOOT OPN GRY
13	254-001	1	DIODE D116A2 6AMP
14	255-002	25	TRM T-TAP F PO BLU
15	255-006	5	TRM PO F INS 22/18GA
16	255-030	2	TRM SPLICE CLOSED END
17	255-070	2	TRM PO M/F 16-14GA
18	255-119	6	TRM PO F INS 16-14GA
19	255-285	1	TRM SPLICE CLOSED END LRG 14-16GA
20	255-710	1	STRAIN RLF HEYCO .45"-705"ID, HOLE DIA 1.115"
21	259-004	1	SW TOG GRIP VNYL WHT .187
22	259-005	1	SW TOG GRIP VNYL RED .187
23	259-015	1	SW TOG GRIP VNYL BLU .187
24	259-022	1	SW TOG GRIP VNYL YEL .187
25	259-023	1	SW TOG GRIP VNYL GRN .187
26	259-027	1	SW TOG GRIP VNYL GRN .187
27	300-072	1	HRN 15CON 18GA AMP SOFLRPT 16P(15) 5'
28	300-271	1	HARNSS R/B WIRE /6'
29	304-400	1	ENCL DRILL MNTBRX FH-1 1/8"C
30	308-001	1	ENCL DRILL FP MNTR SW6 L00261
31	319-575	1	HARNSS ICON 18GA BLK /1'
32	319-608	1	HARNSS ICON 18GA RED /1.5'
33	319-623	1	HARNSS ICON 18GA GRN /1'
34	319-769	1	FUSEHOLDER PANEL MOUNT ASSY 10A /5'

- NOTES:**
1. USE 2-CABLE TIES TO COIL UP HARNSS
  2. PUT REMAINING CABLE TIES IN BAG
  3. NOT SHOWN: (6) (8)

REV		DESCRIPTION	DATE	APPROVED	DESIGNED BY	DATE	SIGNATURES	DATE
1	A	ISSUED DRAWING	01-2014	02/20/14	DJC	10/04/04	DJC	10/04/04
REV		DESCRIPTION	DATE	APPROVED	DESIGNED BY	DATE	SIGNATURES	DATE
1	A	ISSUED DRAWING	01-2014	02/20/14	DJC	10/04/04	DJC	10/04/04

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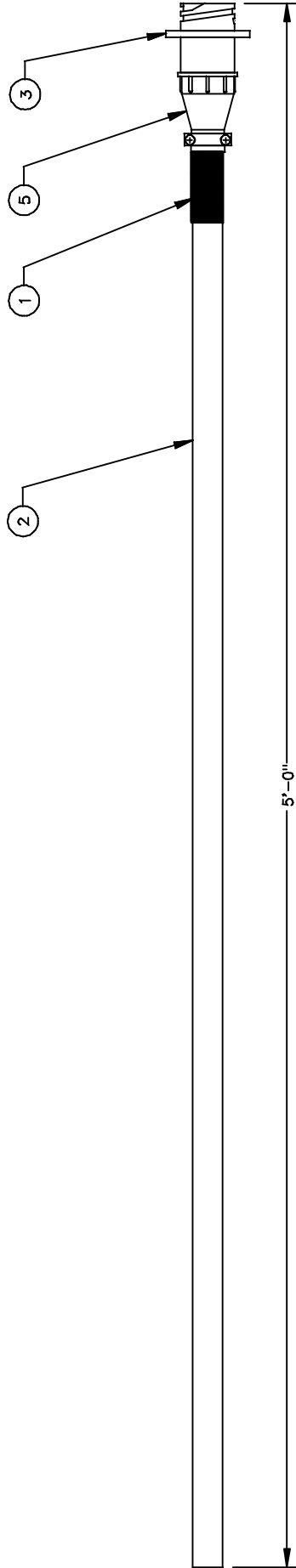
MNTR TOG6-5'-SOFLRPT16P(15)  
FORM NO 320-245  
SCALE

SHEET 1 OF 2

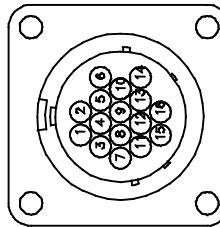


PARTS LIST

N <sup>o</sup>	PART NUMBER	QTY	PART DESCRIPTION
1	231-007	2.0"	SHRINKTUBING .625
2	252-020	5'	CABLE 15COND 18GA
3	255-013	1	CNTR 16 PIN RECPT FLANGE
4	255-023	15	CNTR PIN (GOLD) 16/18GA
5	255-043	1	CNTR 16 PIN SHELL #17



PIN OUT DETAIL




- 1 --- RED WIRE
- 2 --- ORANGE WIRE
- 3 --- WHITE WIRE
- 4 --- BLUE/BLACK WIRE
- 5 --- RED/BLACK WIRE
- 6 --- ORANGE/BLACK WIRE
- 7 --- WHITE/BLACK WIRE
- 8 --- BLUE WIRE
- 9 --- BLACK/WHITE WIRE
- 10 --- GREEN WIRE
- 11 --- BLACK WIRE
- 12 --- BLUE/WHITE WIRE
- 13 --- GREEN/WHITE WIRE
- 14 --- RED/WHITE WIRE
- 15 --- GREEN/BLACK WIRE
- 16 --- NOT USED

NOT SHOWN: 4

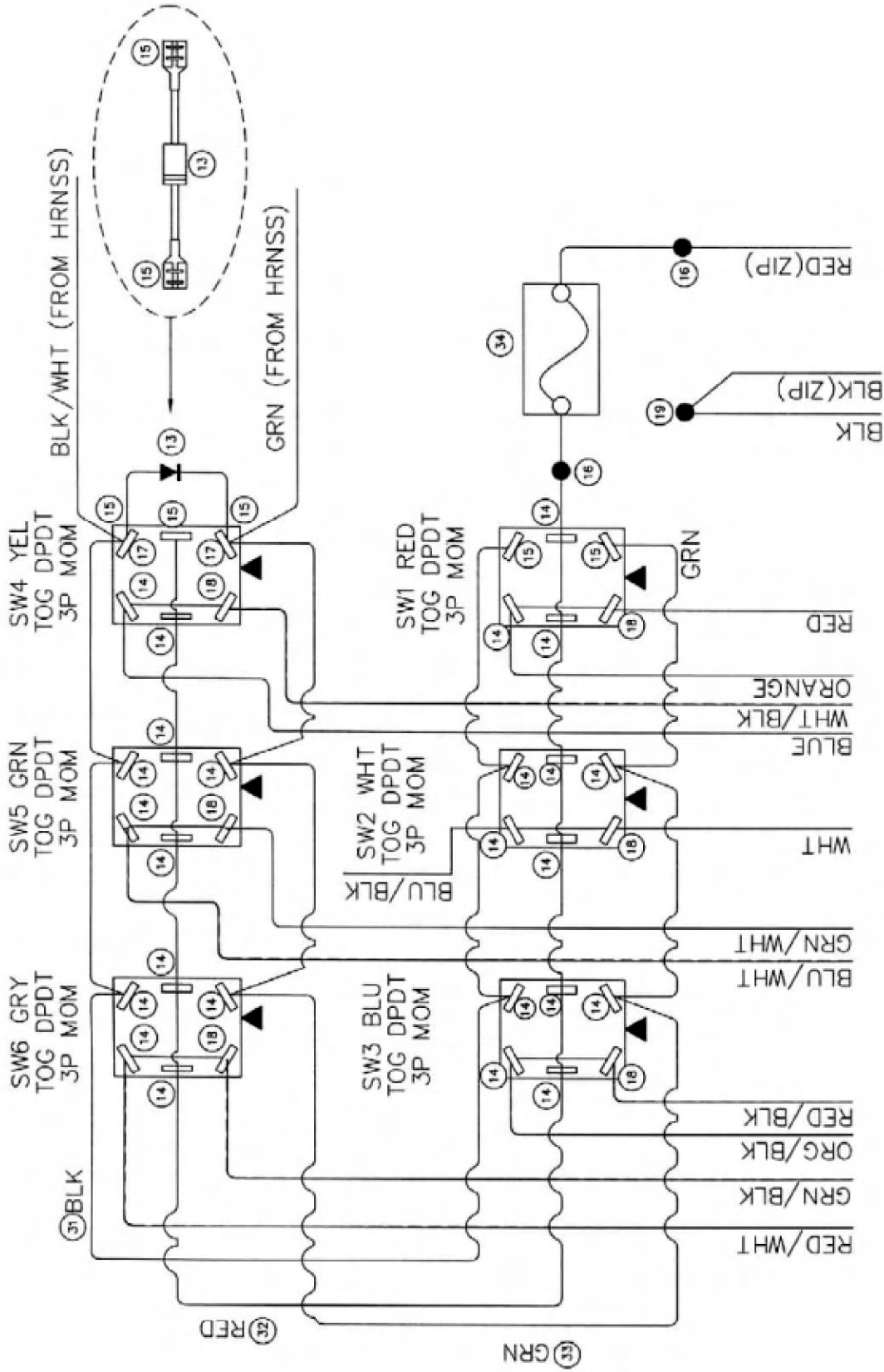
REV	DESCRIPTION	REVISIONS	FORM #	DATE	APPROVED	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES 2 P. DECIMALS 3 P. FRACTIONS	SIGNATURES	DATE
	RELEASED DRAWING		DT-0004	06/12/01	BES/BNL		DRNWN ENRPS	

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	<b>FASSE VALVES</b> SEVEN STAR PARK SEABOARD, NE 88848-2948
<b>HARNESS 15CON 16PIN(15) F /5'</b>	DWG NO 300-072 SCALE

# Six Function Control Box (Optional)

## SWITCH WIRING DIAGRAM



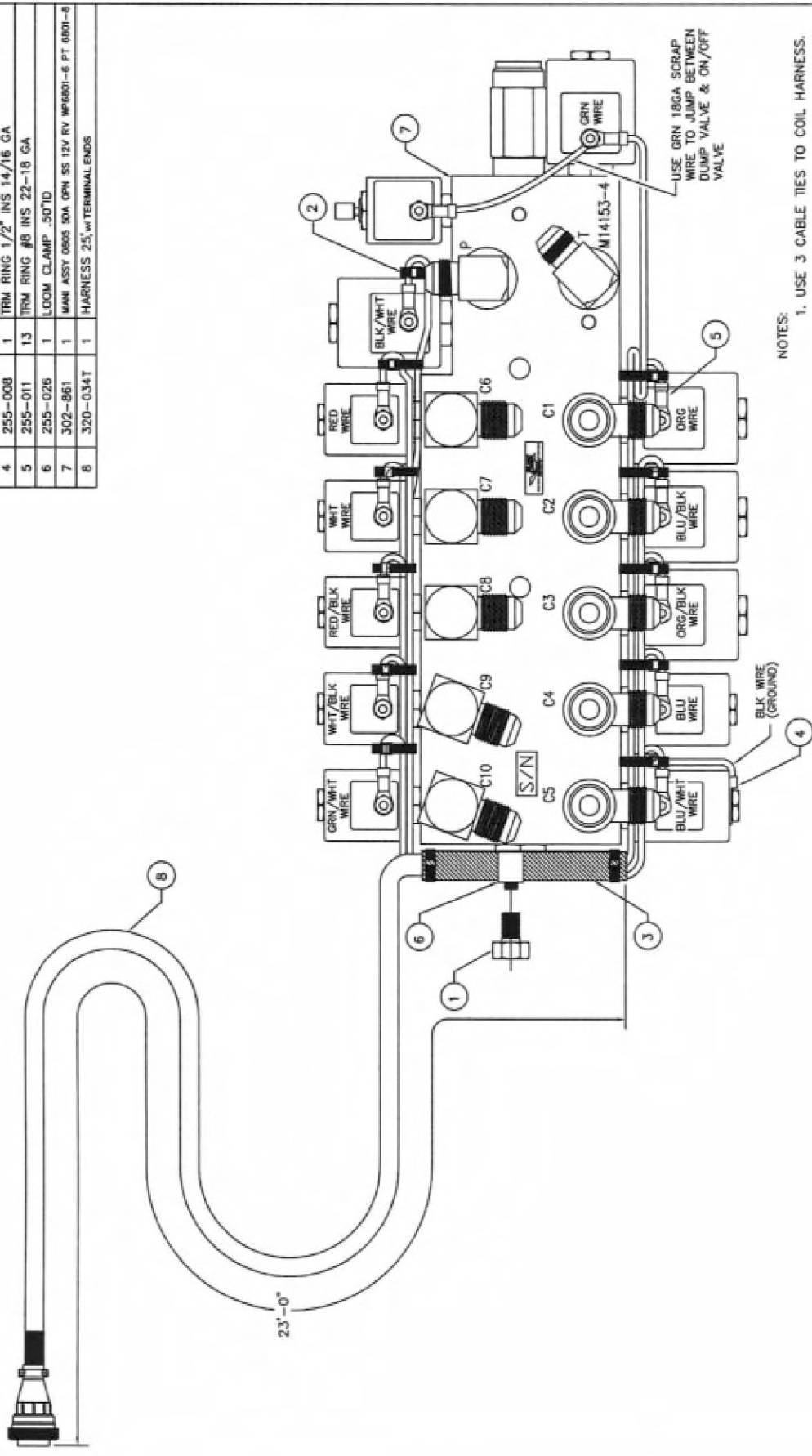
DATE	DESCRIPTION	BY	DATE
10/04/04	REVISED TO ADD SW6	BLK	10/04/04
10/04/04	REVISED TO ADD SW5	BLK	10/04/04
10/04/04	REVISED TO ADD SW4	BLK	10/04/04
10/04/04	REVISED TO ADD SW3	BLK	10/04/04
10/04/04	REVISED TO ADD SW2	BLK	10/04/04
10/04/04	REVISED TO ADD SW1	BLK	10/04/04
10/04/04	REVISED TO ADD SW0	BLK	10/04/04

MTR TOG-5-SOFLRCP1BP(15)  
 FIG NO 320-245  
 SCALE

# Five Function Control Valve

## PARTS LIST

N#	PARTNUMBER	QTY	PART DESCRIPTION
1	212-025	1	BOLT 5/16-18X0.75
2	214-002	16	CABLE TIE BLK 8.5"
3	231-007	4"	SHRINKTUBING .625" BLK
4	255-008	1	TRM RING 1/2" INS 14/16 GA
5	255-011	13	TRM RING #8 INS 22-18 GA
6	255-026	1	LOOM CLAMP .50"ID
7	302-B61	1	MANI ASSY 0805 50A OPN SS 12V RV WP6801-6 PT 6801-8
8	320-034T	1	HARNES 25', w/TERMINAL ENDS



- NOTES:
1. USE 3 CABLE TIES TO COIL HARNESS.
  2. CUT OFF GRN/BLK AND RED/WHT WIRES AT EDGE OF HARNESS JACKET.
  3. RETORQUE GROUND COIL NUT TO 5 FT. LBS.

REV	DESCRIPTION	DATE	APPROVED	DESIGNED	DATE	ISSUED	BY	DATE	BY	SCALE	SHEET
1	REVISED DRAWING	12/01/02	DLJ	DLJ	12/01/02	01-012					
2	REVISED										

MADE TO ORDER SPECIFIC	SOURCE	DATE
MANUFACTURED IN THE USA	DAWTR	/ /
3 P. DECIMALS	DPWG	/ /
TRACES		/ /

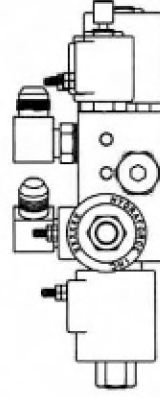
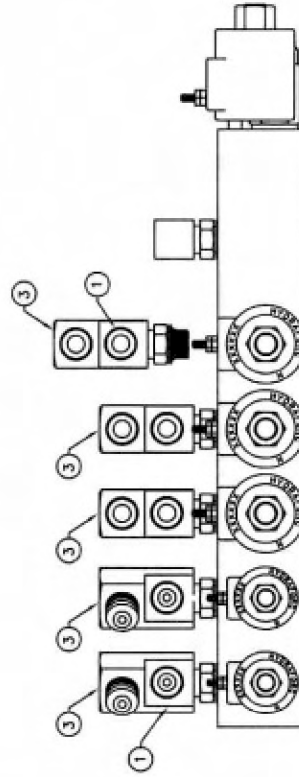
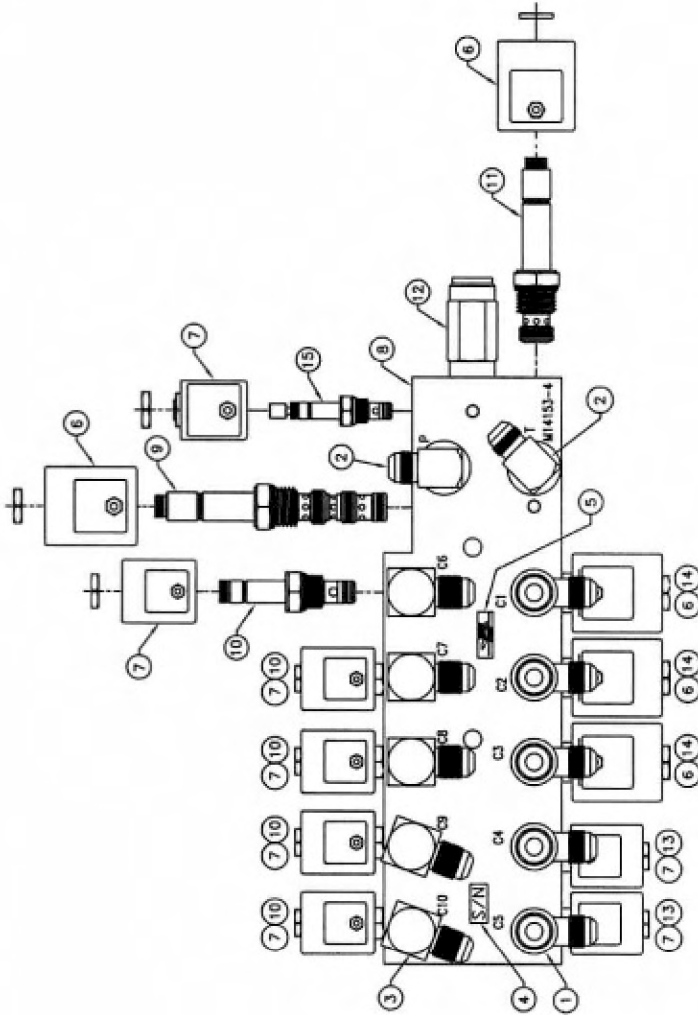
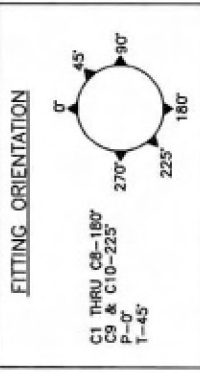
THIS DRAWING IS A PROPERTY OF ORNOR BY THE COMPANY. ALL RIGHTS ARE RESERVED. USES CORRECTLY QUANTIFIED IN METRIC. ALL INCHES ARE REFERRED BY FASSE VALVE.

FASSE VALVES	REVOLVING PARK
RESEARCH, INC.	888-2348
MAN/IRN ASSY 0805 50A OPN SS 12V RV	
WP6801-6 PTF6801-8 18CON PLUG 16P(13) 23"	
REV/ISSA NO	REV NO
A	303-05B
SCALE	SHEET

# Five Function Control Valve

## PARTS LIST

NO	PART NUMBER	QTY	PART DESCRIPTION
1	210-015	5	FTG 6801-6-6/E-MJ-MO
2	210-017	2	FTG 6801-8-8/E-MJ-MO
3	210-228	5	FTG 6801LL-6-6/E-MJ-MO
4	232-050	2	DECL S/N (SILVER)
5	232-058	1	DECAL FASSE BLK/GOLD 1" X .75" R
6	253-003	5	COIL H/F 6354012 8-32 SS 12V 1.67A ING DIODE
7	253-005	8	COIL H/F 6304012 8-32 SS 12V 1.22A ING DIODE
8	270-093	1	MANI 514153-4 5CIR AL RV
9	273-008	1	CART H/F SV10-40-0-N-00 SPL 4W
10	273-016	5	CART H/F SV08-24-0-N-00 SPL 2W
11	273-017	1	CART H/F SV10-21-0-N-00 POP 2W
12	273-090	1	CART H/F RV10-22H-0-N-35 RLF D
13	273-867	2	CART H/F SV08-26-0-N-00
14	273-890	3	CART H/F SV38-28-0-N-00 POP 2W
15	273-979	1	CART H/F SV08-20M-0-N-00 POP 2



### SPECIFICATIONS:

- MAXIMUM PRESSURE 3000 PSI
- MAXIMUM FLOW 8 GPM
- PORT SIZE (P, T) -8 SAE O-RING
- PORT SIZE (ALL C) -6 SAE O-RING
- MOUNTING HOLES (2) .406 DIA
- MOUNTING HOLES (1) 5/16-18 TAPPED

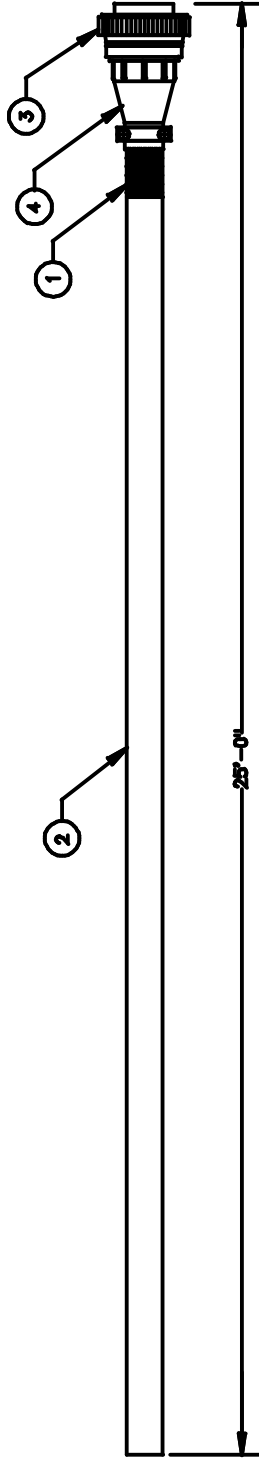
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1	RELEASED DRAWING		01-210	12/24/01	JCE	1/1		1/1		1/1	

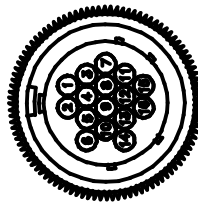
	<b>FASSE VALVES</b> FASSE VALVE 2000 W. MAIN ST. SEASIDE, N.C. 28582-2248
MANI ASSY DB005 50A OPN SS 12V RV WF6801-6 PT 6801-8	DATE FROM NO. 302-881 SCALE 1 OF 2

PARTS LIST

NO	PART NUMBER	QTY	PART DESCRIPTION
1	231-007	2"	SHRINKTUBING .025
2	202-020	25'	CABLE 15CON 18GA PVC GRN
3	255-017	1	CNTR 16 PIN PLUG
4	255-043	1	CNTR 16 PIN SHELL #17
5	255-234	13	CONT AMP SOCKET 16-18GA



PIN OUT DETAIL



- 1 RED WIRE
- 2 ORG WIRE
- 3 WHT WIRE
- 4 BLU/BLK WIRE
- 5 RED/BLK WIRE
- 6 ORG/BLK WIRE
- 7 WHT/BLK WIRE
- 8 BLU WIRE
- 9 BLK/WHT WIRE
- 10 GRN WIRE
- 11 BLK WIRE
- 12 BLU/WHT WIRE
- 13 GRN/WHT WIRE
- 14 NOT USED
- 15 NOT USED
- 16 NOT USED

NOTES:

1. CUT OFF GRN/BLK & RED/WHT WIRES AT EDGE OF HARNESS.

2. NOT SHOWN: (6)

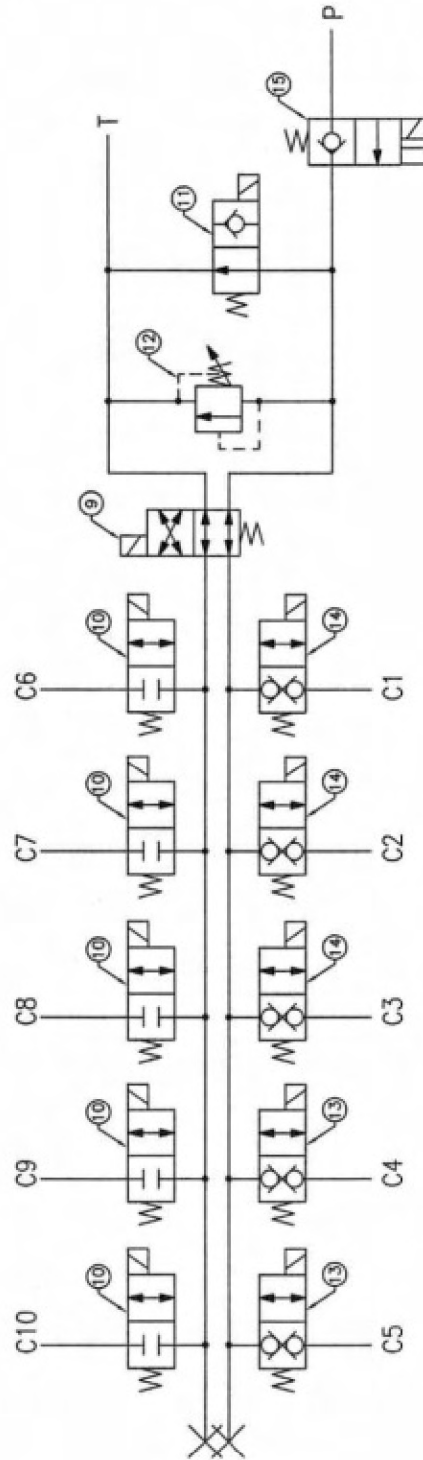
REV	DESCRIPTION	DATE	BY	CHKD	APP'D	QTY	UNIT	PRICE	TOTAL
1	ISSUED FOR PRODUCTION	11/24/09	INT						
2	REVISED PER 320-034	02/16/10	INT						
3	REVISED PER 320-034	02/16/10	INT						

		HARNESS 15CON 16PIN(13)P /25'	
REV	DATE	BY	CHKD
A	11/24/09	INT	
PART NUMBER 320-034		REV 001	

Five Function Control Valve

HYDRAULIC SCHEMATIC

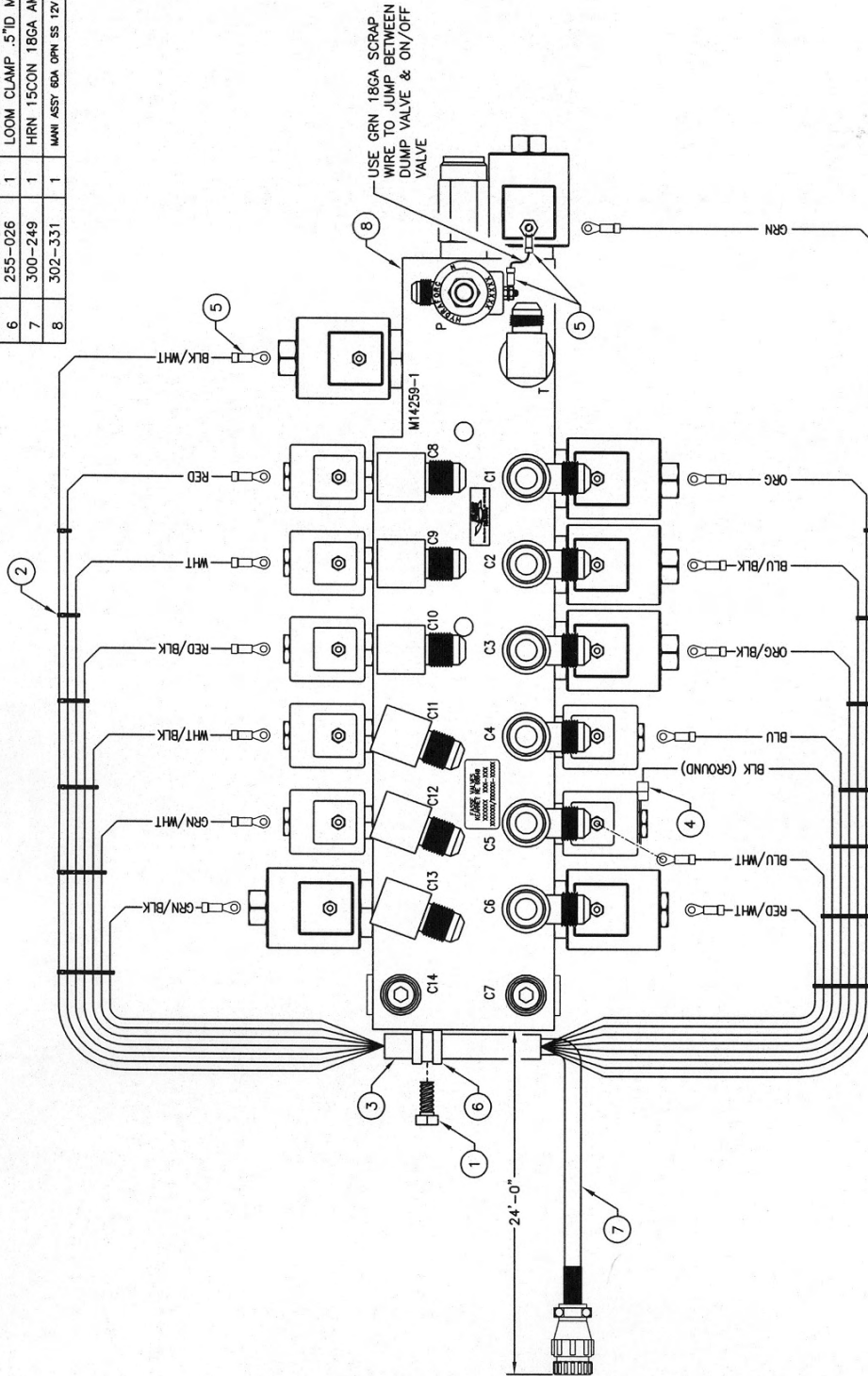


UNITS: DIMENSIONS: SYMBOLS: DATE:	FAISSE VALVES
NUMBERS: ARE IN FIGURES	SEAL: O-RING PART: 6888C-248L
1. P. DECIMALS	MANI ASSY: D803 5DA DFN SS 12V
2. P. DECIMALS	RV: WF6801-6 PT 6801-B
3. P. DECIMALS	
FUNCTIONS:	
THIS DRAWING IS A PRELIMINARY DESIGN. IT IS SUBJECT TO CHANGE WITHOUT NOTICE. ANY CHANGES WILL BE INDICATED BY A REVISION SYMBOL AND A DESCRIPTION OF THE CHANGE.	
SCALE:	302-881
SHEET NO:	2 OF 2

# Six Function Control Valve (Optional)

## PARTS LIST

NO	PART NUMBER	QTY	PART DESCRIPTION
1	212-025	1	BOLT 5/16-18X0.75
2	214-002	16	CABLE TIE BLACK 7"
3	231-007	4"	SHRINKTUBING .625
4	255-008	1	TRM RING 1/2" NON INS 22/18GA
5	255-011	16	TRM RING #8 INS BLUE FNL ENT
6	255-026	1	LOOM CLAMP .5"ID METAL/RUBR
7	300-249	1	HRN 15CON 18GA AMP PLUG 16P(15) 27'
8	302-331	1	MANI ASSY 6DA OPN SS 12V RV WP6801-6 PE400-8 T6801-8 ON/OFF



NOTES:  
 1. USE 3-CABLE TIES TO COIL HARNESS.  
 2. RETORQUE GROUND COIL NUT TO 5 FT. LBS.

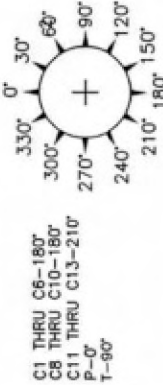
REV	DESCRIPTION	DATE	APPROVED	FORM #	DATE	APPROVED	UNLESS OTHERWISE SPECIFIED	SIGNATURES	DATE
1	RELEASED DRAWING	01-04-04	1/25/04	01-004	1/25/04	1/25/04	TOLERANCES UNLESS OTHERWISE SPECIFIED: 2 PL DECIMALS FRACTIONS	DRWFR DDC ENGR B/W	10/04/04 10/04/04

		FASSE VALVES RESEARCH WE 68843-2348
MAN/HRN ASSY 6DA OPN SS 12V RV	WP6801-8	PT6801-8 ON/OFF 15CON
PLUG 16P(15) 24'	FORM NO	303-074
SCALE	SHEET	

# Six Function Control Valve (Optional)

## FITTING ORIENTATION

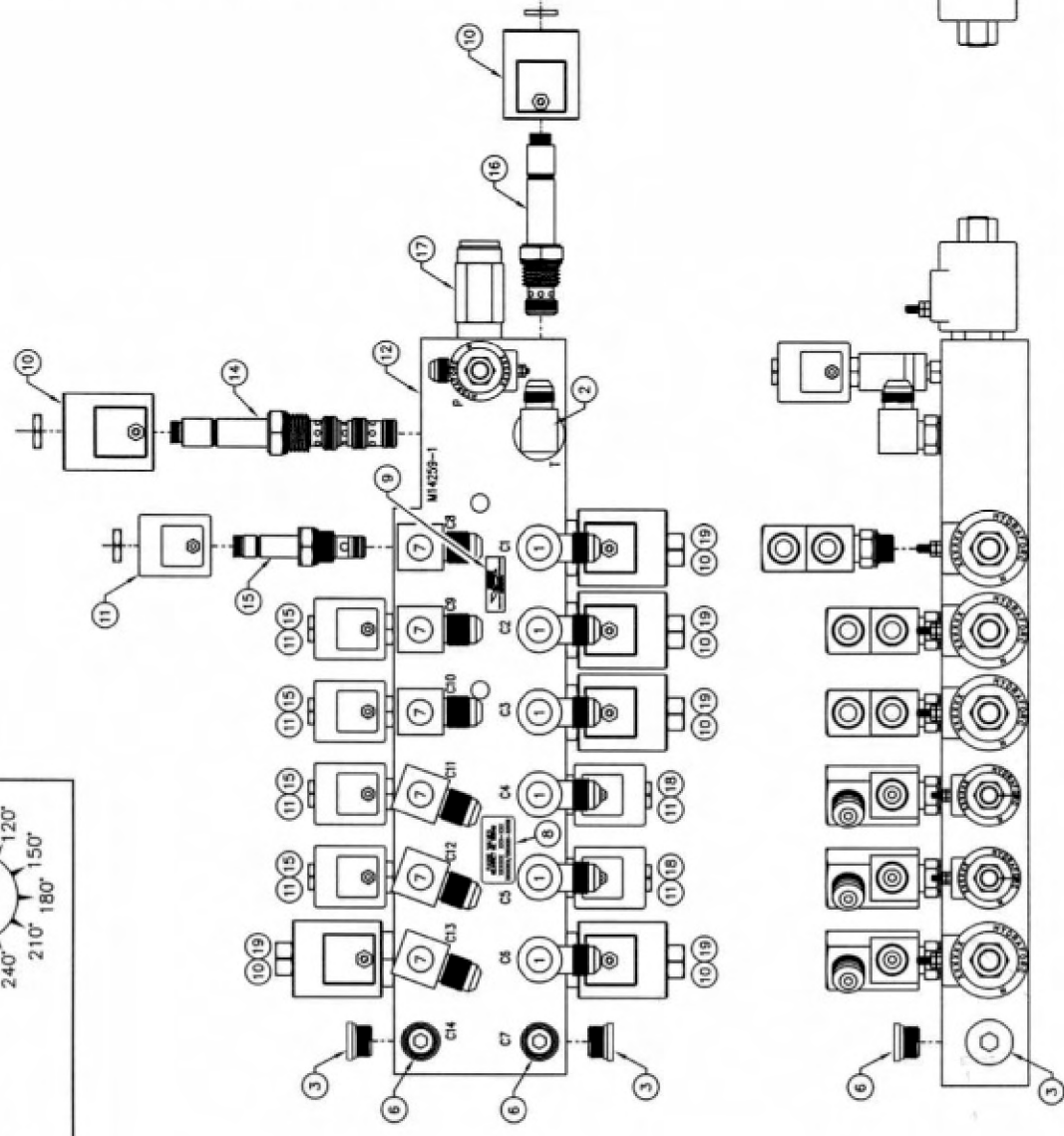


**NOTES:**

- 1. TORQUE COIL NUTS TO 5 FT. LBS.

## PARTS LIST

NO	PART NUMBER	QTY	PART DESCRIPTION
1	210-015	6	FTG 6801-6-6/E-MJ-MO
2	210-017	1	FTG 6801-8-8/E-MJ-MO
3	210-038	2	FTG 6408-8/MO HHP
4	210-117	1	FTG 6400-8-8/S-MJ-MO
5	210-121	1	FTG 6403-NW0-8/ADJ S-MO-MO
6	210-127	2	FTG 6408-6/MO HHP
7	210-228	6	FTG 6801-L-6
8	232-050	2	DECL S/N (SILVER)
9	232-059	1	DECL GOLD/BLK 1.5 X .5
10	253-003	7	COIL 6354012 DD
11	253-005	8	COIL 6304012 DD
12	270-011	1	MANI S14259-1 7CIR AL
13	270-051	1	BLOCK M7024680 ON/OFF-8
14	273-008	1	CART SV10-40-0-N-00
15	273-016	5	CART H/F SV08-24-0-N-00
16	273-017	1	CART SV10-21-0-N-00
17	273-090	1	CART H/F RVID-22H-0-N-35/16
18	273-887	2	CART H/F SV08-26-0-N-00
19	273-890	5	CART H/F SV38-28-0-N-00
20	273-979	1	CART H/F SV08-20M-0-N-00



REV	DESCRIPTION	BY	DATE	APPROVED	DATE
1	RELEASED DRAWING		6/1/04		6/1/04

DESIGN	ENGINEER	DATE	10/04/04
DRAWN	DATE	10/04/04	

FASE VALVES	DATE	302-331
MANU ASSY BDA QPN SS 12V RV WP6801-6	SCALE	SHEET 1 OF 2
PE4400-8 T6801-8 ON/OFF		



# Six Function Control Valve Harness (Optional)

## PARTS LIST

Nº	PART NUMBER	QTY	PART DESCRIPTION
1	231-007	2"	SHRINK TUBING .625
2	252-020	27'	CABLE 15CON 18GA
3	255-017	1	CNTR 16 PIN PLUG
4	255-024	15	CNTR SOCKET (GOLD) 16/18GA
5	255-043	1	CNTR 16 PIN SHELL #17



- 1 --- RED WIRE
- 2 --- ORANGE WIRE
- 3 --- WHITE WIRE
- 4 --- BLUE/BLACK WIRE
- 5 --- RED/BLACK WIRE
- 6 --- ORANGE/BLACK WIRE
- 7 --- WHITE/BLACK WIRE
- 8 --- BLUE WIRE
- 9 --- BLACK/WHITE WIRE
- 10 --- GREEN WIRE
- 11 --- BLACK WIRE
- 12 --- BLUE/WHITE WIRE
- 13 --- GREEN/WHITE WIRE
- 14 --- RED/WHITE WIRE
- 15 --- GREEN/BLACK WIRE
- 16 --- NOT USED

PIN OUT DETAIL



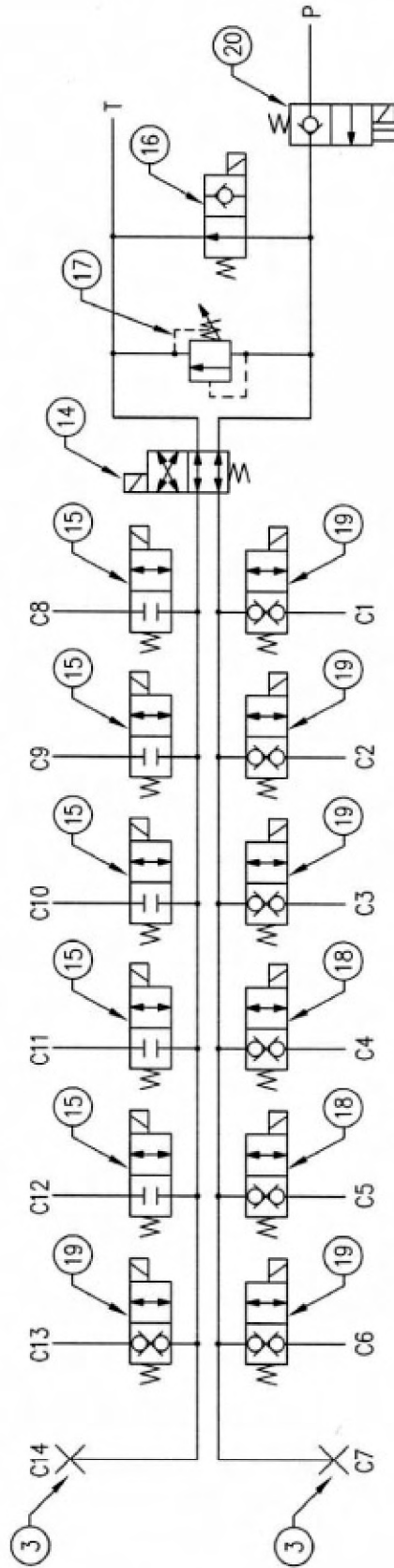
NOT SHOWN: (4)

REV.	DESCRIPTION	REVISIONS	FORM #	DATE	APPROVED	VALUES ENGINEERED	DESIGN/ISSUES	DATE
	RELATED DRAWING			07/26/93		VALUES IN INCHES	UNITS	07/26/93
						1. ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED		
						2. ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED		
						3. ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED		
						ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED		
						THE DRAWING IS A PRELIMINARY DESIGN. IT IS SUBJECT TO CHANGE WITHOUT NOTICE. IT IS THE RESPONSIBILITY OF THE USER TO VERIFY THE DIMENSIONS OF ALL PARTS AND ASSEMBLIES BEFORE USE. THIS DRAWING IS NOT TO BE USED FOR MANUFACTURE OF PARTS OR ASSEMBLIES WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER.		

FASSE VALVES	
5200 RICHMOND PARK	
SOUTHFIELD, MI 48034-2148	
HARNESS 15CON 18PIN(15) P /27'	
FORM NO	DWG NO
	300-249
SCALE	SHEET

**Six Function Control Valve (Optional)**

HYDRAULIC SCHEMATIC

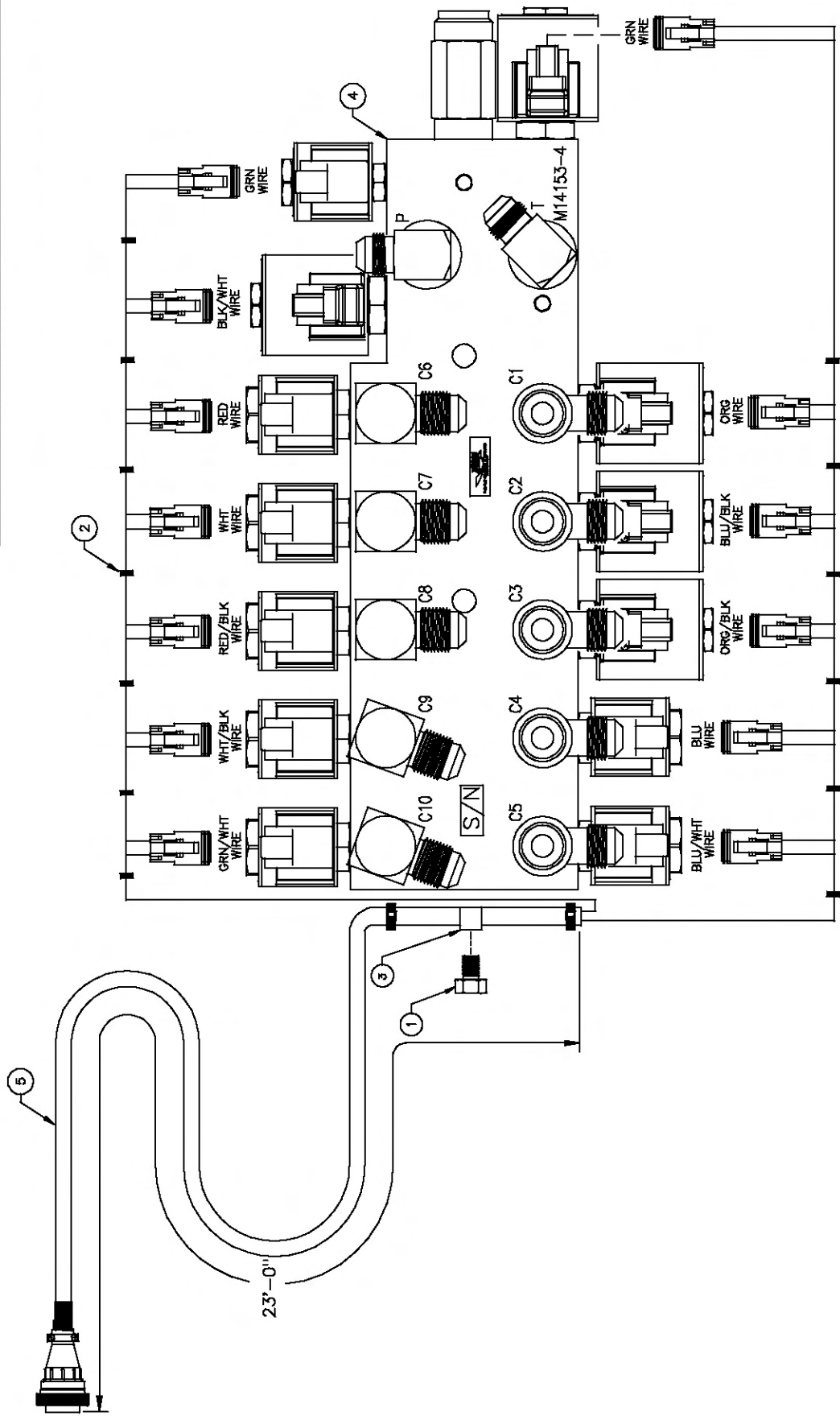


DATE	DATE	DATE	DATE
10/04/04	10/04/04	10/04/04	10/04/04
10/04/04	10/04/04	10/04/04	10/04/04
10/04/04	10/04/04	10/04/04	10/04/04

**FASSE VALVES**  
 MAN. ASSY 6DA DPN SE 17V RV WP6801-6  
 P6400-8 18601-8 ON/OFF  
 FROM NO 302-331  
 SCALE SHEET 2 OF 2

# PARTS LIST

NO	PART NUMBER	QTY	PART DESCRIPTION
1	212-025	1	BOLT 5/16-18X0.75
2	214-002	16	CABLE TIE BLK 8.5"
3	255-026	1	LOOM CLAMP .50"ID
4	302-861	1	MANI ASSY 0805 5DA OPN E-INTG DTR 12V RV WP6801-6
5	304-813	1	HRN 15CON 16GA AMP PLUG 16P(15)3DTP 2P(2) 23'



NOTE:  
1. USE 3 CABLE TIES TO COIL HARNESS.

REV	DESCRIPTION	REVISIONS	NO	DATE	APPROVED	DESIGNED BY	DATE	DESIGNED BY	DATE	APPROVED	DESIGNED BY	DATE	APPROVED	DESIGNED BY	DATE
A	RELEASED DRAWING		02-0125	12/09/02	DLB	DLB	12/09/02	DLB	12/09/02	DLB	DLB	12/09/02	DLB	DLB	12/09/02
B	UPDATED DRAWING		08-0027	04/15/08	DLB	DLB	04/15/08	DLB	04/15/08	DLB	DLB	04/15/08	DLB	DLB	04/15/08
C	UPDATED DRAWING		08-0027	08/09/08	DLB	DLB	08/09/08	DLB	08/09/08	DLB	DLB	08/09/08	DLB	DLB	08/09/08

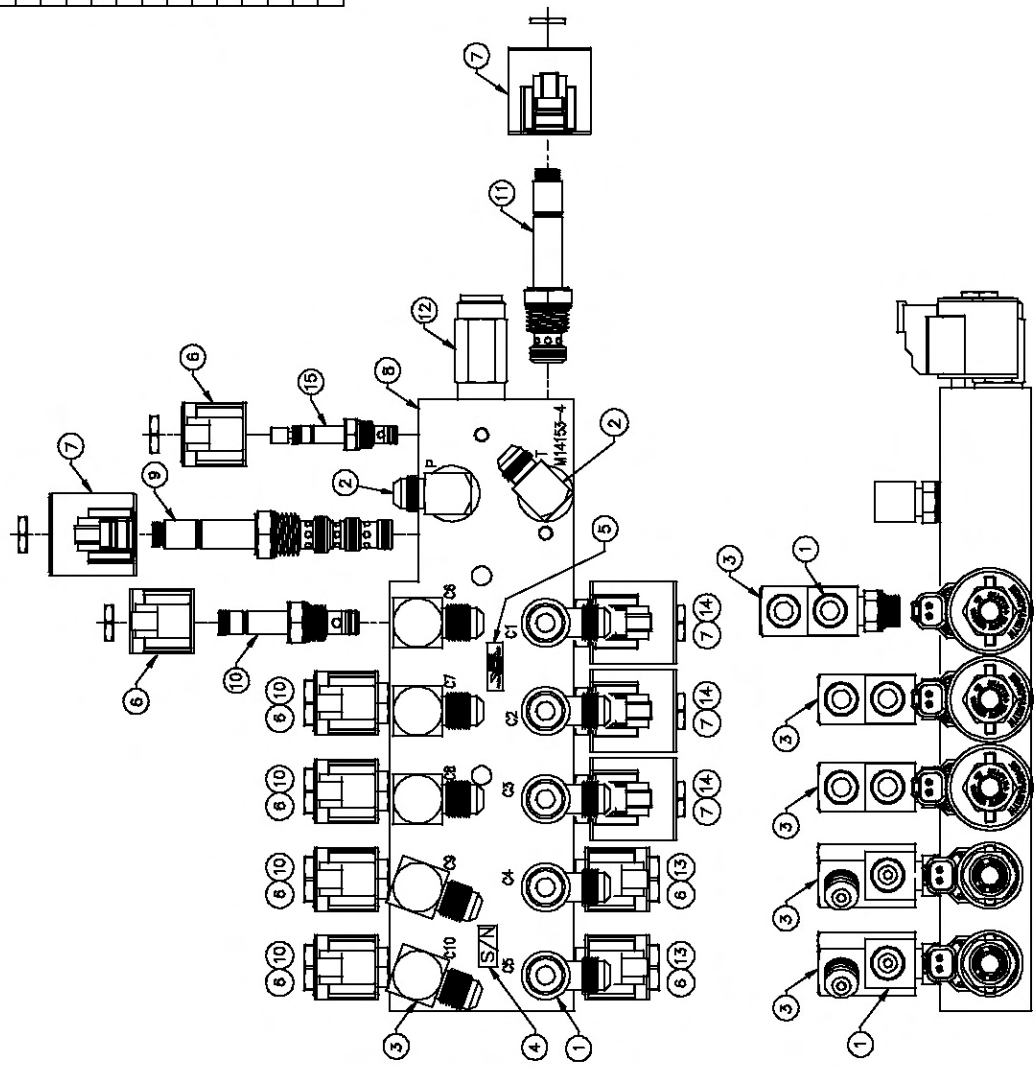
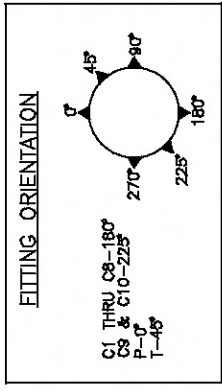
UNLESS OTHERWISE SPECIFIED	SIGNATURES	DATE
DESIGNED BY	DLB	12/09/02
CHECKED BY	DLB	12/09/02
APPROVED BY	DLB	12/09/02

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FORM NO 303-058  
SCALE SHEET

# PARTS LIST

NO	PART NUMBER	QTY	PART DESCRIPTION
1	210-015	5	FTG 6801-6-6/E-MJ-MO
2	210-017	2	FTG 6801-8-B/E-MJ-MO
3	210-228	5	FTG 6801LL-6-6/E-MJ-MO
4	232-050	2	DECL S/N (SILVER)
5	232-058	1	DECAL FASSE BLK/GOLD 1" X .75" R
6	253-590	8	COIL H/F 4304012 E-8 INTG DEUT DTR 12V ZENER DIODE
7	253-593	5	COIL H/F 4304112E-10 INTG DEUT DTR 12V ZENER DIODE
8	270-083	1	MANI S14153-4 5CIR AL RV
9	273-008	1	CART H/F SV10-40-0-N-00 SPL 4W
10	273-016	5	CART H/F SV08-24-0-N-00 SPL 2W
11	273-017	1	CART H/F SV10-21-0-N-00 POP 2W
12	273-527	1	CART H/F RV10-22H-0-N-35/20 RLF DIFF A
13	273-867	2	CART H/F SV08-28-0-N-00
14	273-890	3	CART H/F SV08-28-0-N-00 POP 2W
15	273-979	1	CART H/F SV08-20M-0-N-00 POP 2



### SPECIFICATIONS:

- MAXIMUM PRESSURE 3000 PSI
- MAXIMUM FLOW 8 GPM
- PORT SIZE (P, T) -8 SAE O-RING
- PORT SIZE (ALL C) -6 SAE O-RING
- MOUNTING HOLES (2) .406 DIA
- MOUNTING HOLES (1) 5/16-18 TAPPED

REV	DESCRIPTION	FORM #	DATE	APPROVED	DESIGNED	SIGNATURES	DATE
A	REWORKED DRAWING	08-2008	10/04/08	DLS ENL	DLS ENL	DAVID	10/04/08
B	REWORKED DRAWING	08-2008	10/17/08	DLS ENL	DLS ENL	DAVID	10/17/08
C	REWORKED DRAWING	08-2007	08/04/08	DLS ENL	DLS ENL	DAVID	08/04/08

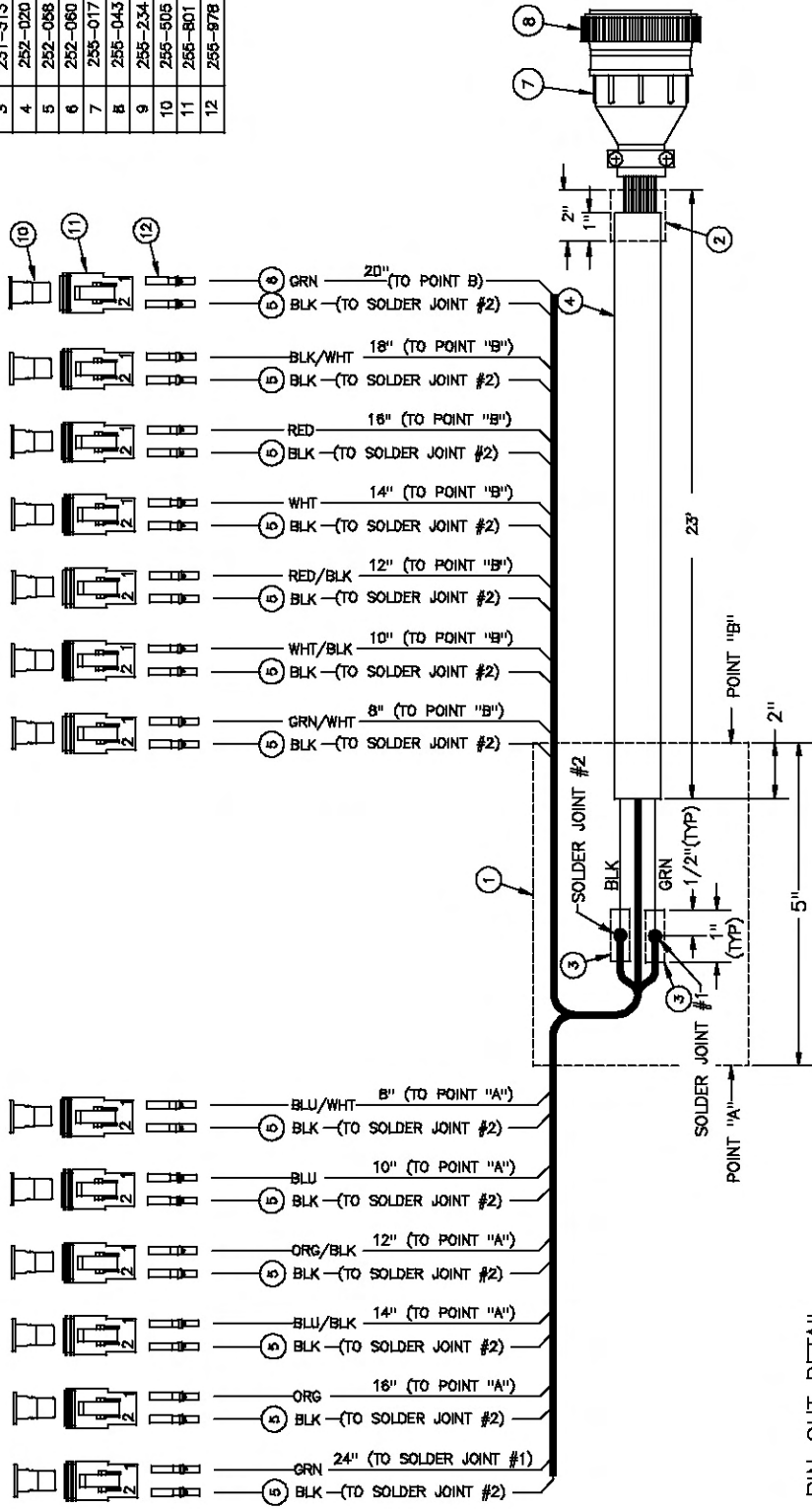
VALUES CONTAINED HEREIN UNLESS OTHERWISE SPECIFIED ARE IN INCHES	VALUES CONTAINED HEREIN UNLESS OTHERWISE SPECIFIED ARE IN MILLIMETERS
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE TO BE MAINTAINED TO THE CLOSEST TOLERANCE PER ASME Y14.5	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE TO BE MAINTAINED TO THE CLOSEST TOLERANCE PER ISO 2768
ALL DIMENSIONS ARE TO BE MAINTAINED TO THE CLOSEST TOLERANCE PER ASME Y14.5	ALL DIMENSIONS ARE TO BE MAINTAINED TO THE CLOSEST TOLERANCE PER ISO 2768
ALL DIMENSIONS ARE TO BE MAINTAINED TO THE CLOSEST TOLERANCE PER ASME Y14.5	ALL DIMENSIONS ARE TO BE MAINTAINED TO THE CLOSEST TOLERANCE PER ISO 2768

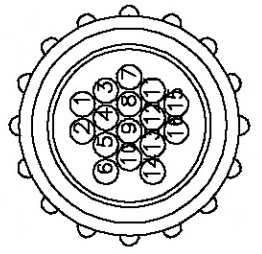
MANUFACTURED BY	FASSÉ VALVES
12V RV WIP6801-6	RENNY, NE 68013-2048
MANI ASSY 0805 5DA OPN E-INTG DTR	
12V RV WIP6801-6	
REVISED NO	REVISED NO
A	A
302-681	302-681
1 OF 2	1 OF 2

**PARTS LIST**

NO	PART NUMBER	QTY	PART DESCRIPTION
1	231-008	5'	SHRINKTUBING .750
2	231-009	2"	SHRINKTUBING .500" BLK
3	231-313	2"	SHRINKTUBING .313
4	252-020	23'	CABLE 16CON 18GA
5	252-068	18'-6"	WIRE 18GA BLK
6	252-080	2'	WIRE 18GA GRN
7	255-017	1	CNTR 16 PIN PLUG
8	255-043	1	CNTR 16 PIN SHELL #17
9	255-234	15	CNTR SOCKET (GOLD) 16/18GA
10	255-505	13	CNTR DEUTSCH LOCKWEDGE 2PIN DTP
11	255-B01	13	CNTR DEUTSCH 2PIN PLUG DT
12	255-978	26	CNTR DEUTSCH SOCKET 16/18GA



**PIN OUT DETAIL PLUG**



- 1-RED WIRE
- 2-ORG WIRE
- 3-WHT WIRE
- 4-BLU/BLK WIRE
- 5-RED/BLK WIRE
- 6-ORG/BLK WIRE
- 7-WHT/BLK WIRE
- 8-BLU WIRE
- 9-BLK/WHT WIRE
- 10-GRN WIRE
- 11-BLK WIRE
- 12-BLU/WHT WIRE
- 13-GRN/WHT WIRE
- 14-RED/WHT WIRE
- 15-GRN/BLK WIRE
- 16-NOT USED

- NOTES:**
1. HARNESS LENGTH IS 23'
  2. REMOVE 26" OF OUTER CABLE
  3. JACKET FOR SPLICING.
  3. NOT SHOWN: (8)

REV	RELEASED DRAWING	REVISIONS	DATE	APPROVED	DESIGNER	DATE	DATE	SIGNATURES	DATE
			08-007			09/04/09		IMPORTER	09/04/09
								ENGINEER	

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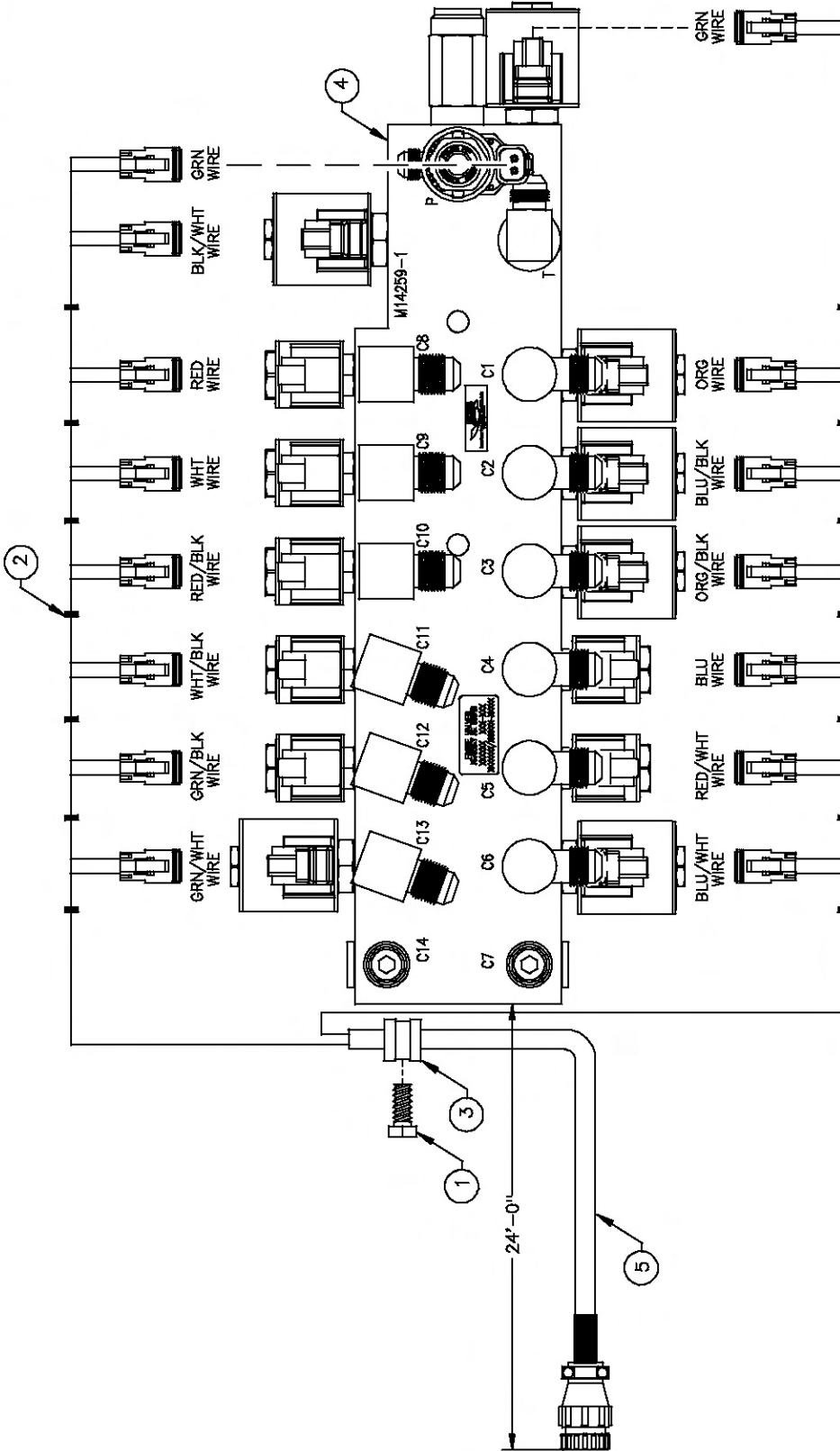
**FASSE VALVES**  
 16500 N. 186th Ave. #200  
 Edina, MN 55425-4425  
 Phone: 763-835-2848  
 Fax: 763-835-2848

HRN 16CON 18GA AMP PLUG 16P(16)  
 130DTP 2P(2) 23'

DWG NO 304-813  
 SHEET FROM NO A  
 SCALE

# PARTS LIST

NO	PART NUMBER	QTY	PART DESCRIPTION
1	212-025	1	BOLT 5/16-18X0.75
2	214-002	16	CABLE TIE BLACK 7"
3	255-026	1	LOOM CLAMP .5"ID METAL/RUBR
4	302-351	1	MAN ASSY 6DA OPN 25 12V RV WFR801-B P6400-B 180A1-B ON/OFF
5	312-740	1	HRN ASSY 1500N 18GA AMP PLUG 16P(15) 1SDTP 2P(2) 2A'



NOTES:  
1. USE 3-CABLE TIES TO COIL HARNESS.

REV	DESCRIPTION	REVISED DRAWING	DATE	APPROVED BY	DESIGNED BY	DATE	REVISIONS	REVISIONS	DATE	SIGNAL USER	DATE
1	RELEASED DRAWING	08-0004	02/26/04	DLG	DLG	10/04/04					
2	UPDATED DRAWING	08-0007	02/26/04	DLG	DLG	10/04/04					

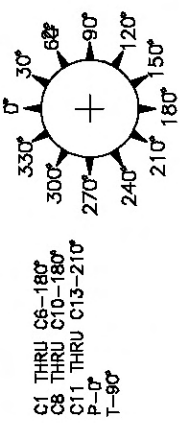
  

USE 3-DIMENSIONAL DIMENSIONS FOR ALL DIMENSIONS. 1. DIMENSIONS IN PARENTHESIS ARE FOR INFORMATION ONLY. 2. DIMENSIONS IN PARENTHESIS ARE FOR INFORMATION ONLY. 3. DIMENSIONS IN PARENTHESIS ARE FOR INFORMATION ONLY. 4. DIMENSIONS IN PARENTHESIS ARE FOR INFORMATION ONLY. 5. DIMENSIONS IN PARENTHESIS ARE FOR INFORMATION ONLY.	THIS DRAWING IS A PRELIMINARY DESIGN AND IS SUBJECT TO CHANGE WITHOUT NOTICE. IT IS THE USER'S RESPONSIBILITY TO VERIFY THE DIMENSIONS AND MATERIALS OF ALL PARTS. THE USER EXPRESSLY WAIVES ALL RIGHTS IN THIS DRAWING.
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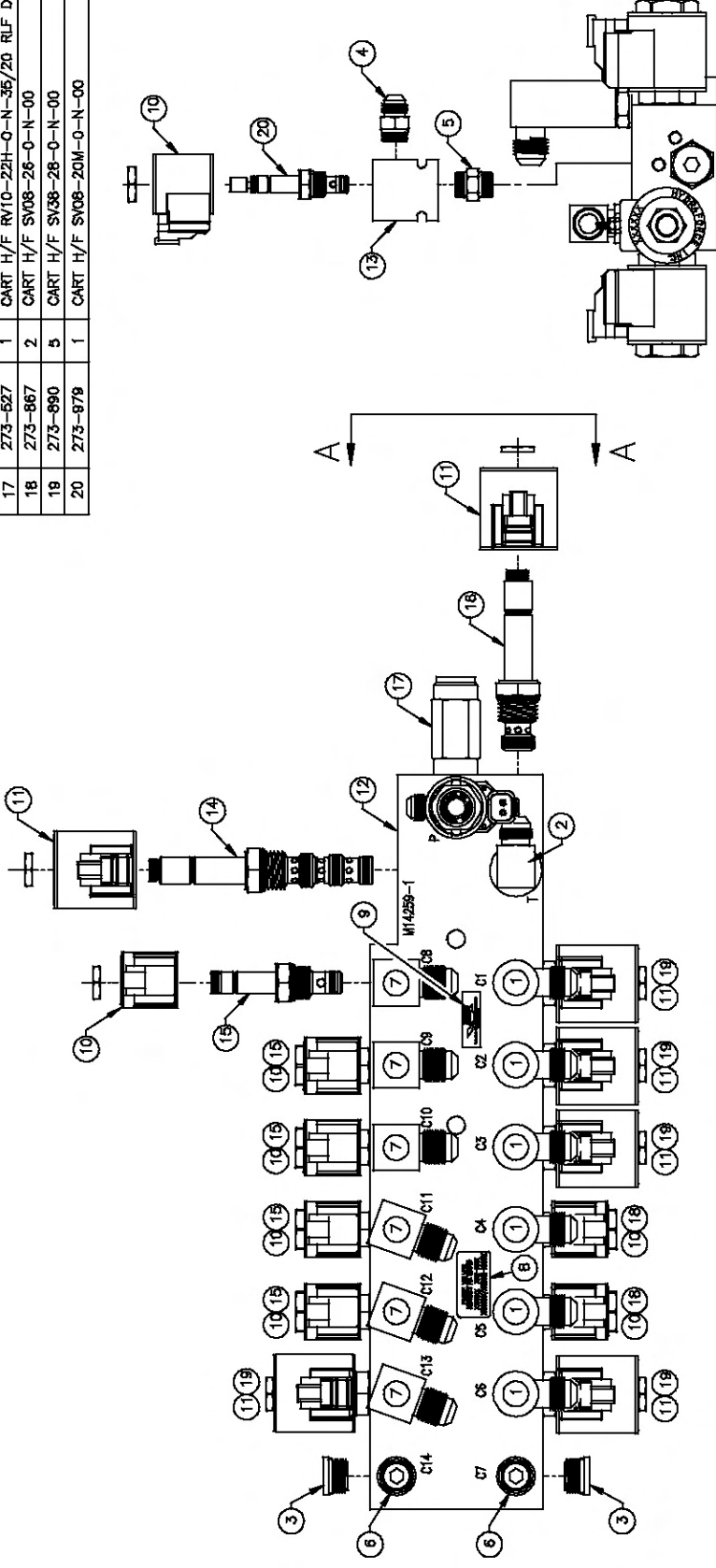
FASSE VALVES GENERAL LINE 6200-2848 MAN/HRN ASSY 6DA OPN E-INTS DTR 12V RV WFR801-B P6400-B ON/OFF 1500N 18GA AMP PLUG16P(15) DTP 2P(2) 2A'	FROM NO 303-074
---	--------------------

**FITTING ORIENTATION**



**PARTS LIST**

NA	PART NUMBER	QTY	PART DESCRIPTION
1	210-015	6	FTG 8801-6-6/E-MJ-MO
2	210-017	1	FTG 8801-8-8/E-MJ-MO
3	210-038	2	FTG 8408-8/MO HHP
4	210-117	1	FTG 8400-8-8/S-MJ-MO
5	210-121	1	FTG 8403-NMO-8/ADJ S-MO-MO
6	210-127	2	FTG 8408-6/MO HHP
7	210-228	8	FTG 8801-LI-8
8	232-050	2	DECL S/N (SILVER)
9	232-088	1	DECL GOLD/BLK 1.5 X .5
10	253-590	6	COIL H/F 4304012 E-8 INTG DEUT DTR 12V ZENER DIODE
11	253-593	7	COIL H/F 4304112E-10 INTG DEUT DTR 12V ZENER DIODE
12	270-011	1	MANI S14259-1 7GR AL
13	270-051	1	BLOCK M7024880 ON/OFF-8
14	273-008	1	CART SV10-40-0-N-00
15	273-016	5	CART H/F SV08-24-0-N-00
16	273-017	1	CART SV10-21-0-N-00
17	273-627	1	CART H/F RV10-22H-0-N-35/20 RLF DIFF A
18	273-867	2	CART H/F SV08-26-0-N-00
18	273-890	5	CART H/F SV38-28-0-N-00
20	273-879	1	CART H/F SV08-20M-0-N-00



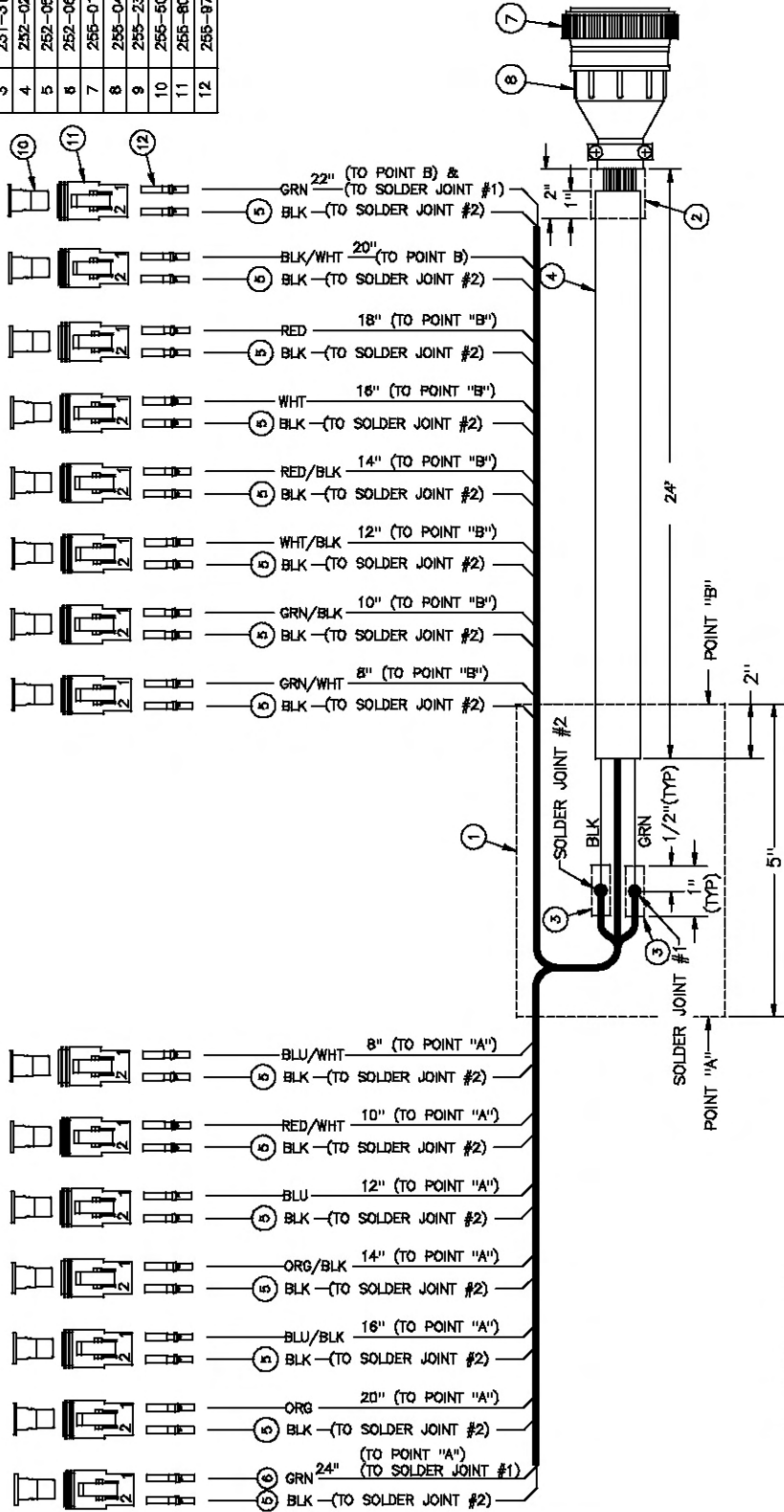
**VIEW A-A**

REV	DESCRIPTION	DATE	APPROVED	DESIGNER	DATE	REVISIONS	DATE	BY	REASON	DATE	BY	REASON
1	RELEASED DRAWING	05/20/04	DJH	19/04/04	19/04/04	1	19/04/04	19/04/04	19/04/04	19/04/04	19/04/04	19/04/04
A	273-890	07/27/06	DJH	19/04/04	19/04/04	2	19/04/04	19/04/04	19/04/04	19/04/04	19/04/04	19/04/04
B	UPDATED DRAWING	05/20/04	DJH	19/04/04	19/04/04	3	19/04/04	19/04/04	19/04/04	19/04/04	19/04/04	19/04/04

**FASE VALVES**  
 MANU ASSY 604 604 E-INTG DTR 12V RV W8801-8  
 19040-8 6V/0FT  
 FORM NO. 302-331  
 REV. 1 OF 2

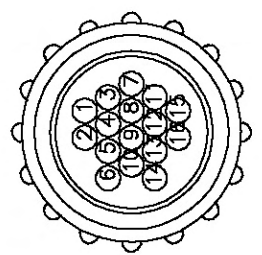
PARTS LIST

NA	PART NUMBER	QTY	PART DESCRIPTION
1	231-008	B"	SHRINKTUBING .750
2	231-009	2"	SHRINKTUBING .500" BLK
3	231-313	2"	SHRINKTUBING .313
4	252-020	28'	CABLE 1500N 18GA
5	252-058	18'-6"	WIRE 18GA BLK
6	252-060	2'	WIRE 18GA GRN
7	255-017	1	CNTR 16 PIN PLUG
8	255-043	1	CNTR 16 PIN SHELL #17
9	255-234	15	CNTR AMP SOCKET TYPE III + 16-18GA
10	255-505	15	CNTR DEUTSCH LOCKWEDGE 2PIN DTP
11	255-601	15	CNTR DEUTSCH 2PIN PLUG DT
12	255-878	30	CNTR DEUTSCH SOCKET 16/18GA



- NOTES:
1. HARNESS LENGTH IS 27'
  2. REMOVE 28" OF OUTER CABLE JACKET FOR SPLICING.
  3. NOT SHOWN (3)

- 1-RED WIRE
- 2-ORG WIRE
- 3-WHT WIRE
- 4-BLU/BLK WIRE
- 5-RED/BLK WIRE
- 6-ORG/BLK WIRE
- 7-WHT/BLK WIRE
- 8-BLU WIRE
- 9-BLK/WHT WIRE
- 10-GRN WIRE
- 11-BLK WIRE
- 12-BLU/WHT WIRE
- 13-GRN/WHT WIRE
- 14-RED/WHT WIRE
- 15-GRN/BLK WIRE
- 16-NOT USED



PIN OUT DETAIL  
PLUG

REV	RELEASED DRAWING	DESCRIPTION	REVISIONS	FORM #	DATE	APPROVED	DESIGNED BY	DATE	SIGNATURES	DATE
01	08-2008	07/08/09								

THIS DRAWING IS A PROPRIETARY POWER CABLE HARNESS ASSEMBLY. IT IS THE PROPERTY OF THE COMPANY AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM. ALL RIGHTS ARE RESERVED BY THESE VALVES.

FASSE VALVES  
 SERIAL POWER CABLE  
 SERIAL NO. 08582-22448  
 HRN ASSY 1500N 18GA AMP PLUG 16P(15)  
 16DTP 2P(2) 24"  
 SEE FORM NO. 312-740  
 SCALE



PARTS LIST

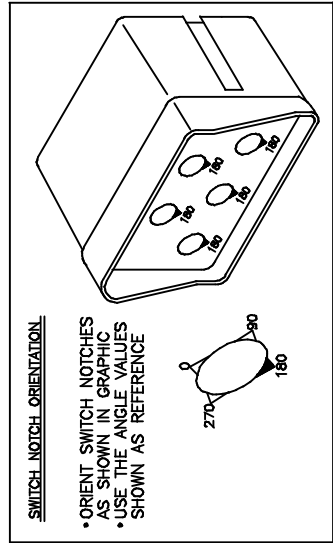
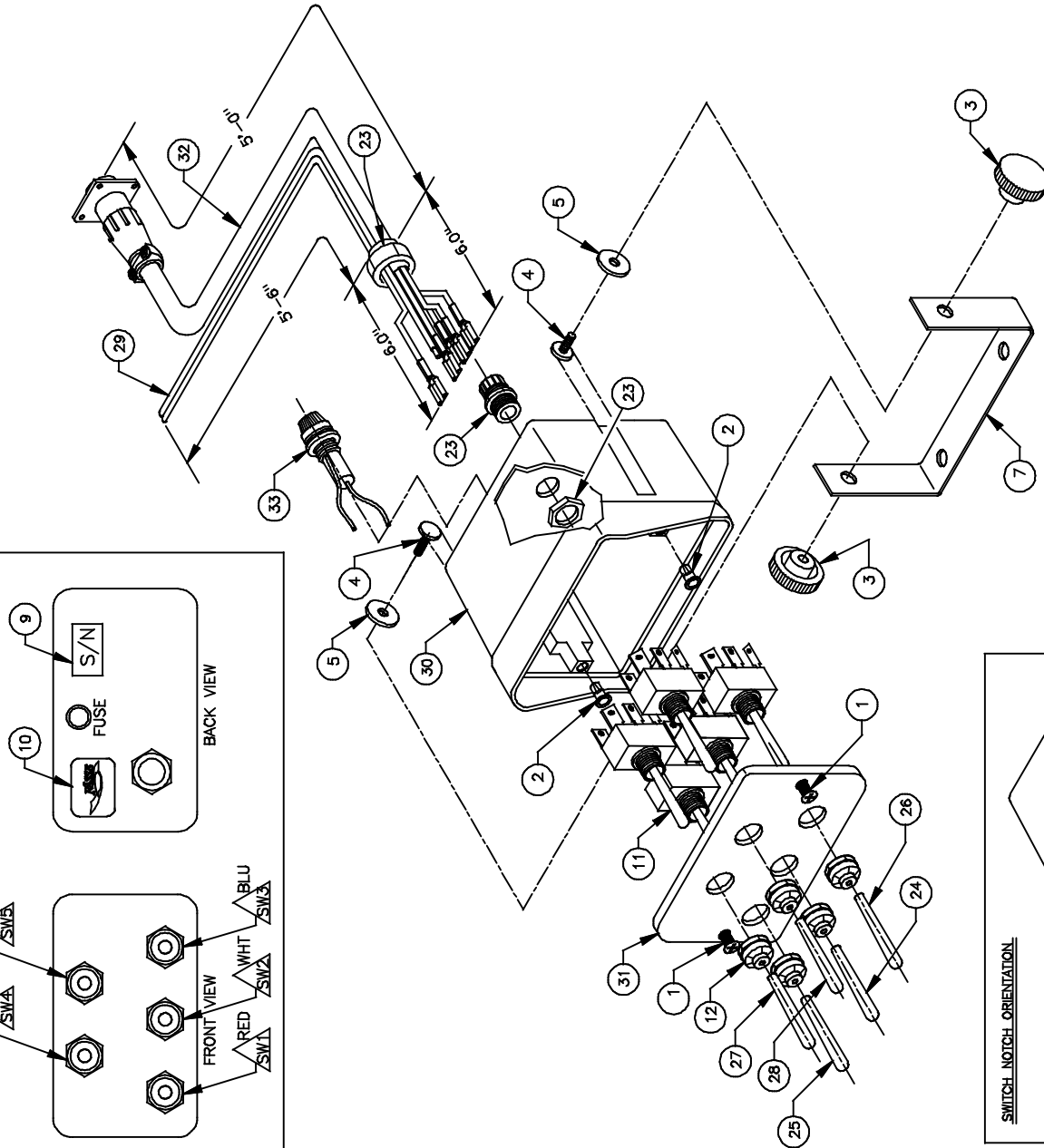
№	PART NUMBER	QTY	PART DESCRIPTION
1	212-184	2	SCREW 6-32 X 3/8 OVAL HD BLK
2	212-202	2	INSERT 6-32X3/8 BRASS
3	212-215	2	KNOB 1/4-20 FEMALE
4	212-231	2	SCREW WELDED 1/4-20 X .500
5	213-335	2	WASHER NYLON .257X.875X.060
6	214-002	14	CABLE TIE BLACK 7"
7	219-300	1	BRKT HSG MONITOR
8	230-057	1	BAG POLY CLR 14 X 18 2MIL W/LOGO
9	232-050	2	DECAL S/N (SILVER)
10	232-058	2	DECAL FASSE BLK/GOLD 1"X.75" RND CRNR
11	250-013	5	SW TOG DPDT 3P MOM LONG
12	250-023	5	SW TOG BOOT OPN GRY
13	252-058	1'	WIRE 18GA BLK
14	252-059	1.5'	WIRE 18GA RED
15	252-060	1'	WIRE 18GA GRN
16	254-001	1	DIODE D116A2 6AMP
17	255-002	20	TRM T-TAP F PO BLU
18	255-006	5	TRM PO F INS 22-18GA
19	255-030	2	TRM SPLICE CLOSED END
20	255-070	2	TRM PO M/F
21	255-119	5	TRM PO F INS 16-14GA
22	255-285	1	TRM SPLICE CLOSED END LRG 12-10GA
23	255-710	1	STRAIN RLF HEYCO .45"-.705"ID, HOLE DIA 1.115"
24	259-004	1	SW TOG GRIP VNYL WHT .187
25	259-005	1	SW TOG GRIP VNYL RED .187
26	259-015	1	SW TOG GRIP VNYL BLU .187
27	259-022	1	SW TOG GRIP VNYL YEL .187
28	259-023	1	SW TOG GRIP VNYL GRN .187
29	300-271	1	HARNES R/B WIRE /8"
30	304-401	1	ENCL DRL MNTR W/FUSEHOLDER CNTR 1 1/8"X
31	311-082	1	ENCL FP DRL MNTR-5X15/32SW
32	311-801	1	HARNES 15CON 16PN(15) F /5.5"
33	319-769	1	FUSEHOLDER PANEL MOUNT ASSY 10A /5"

- NOTES:
1. USE 2-CABLE TIES TO COIL UP HARNES
  2. PUT REMAINING CABLE TIES IN BAG
  3. NOT SHOWN: (6) (8)
  4. CUT OFF RED/WHT WIRE AT HARNES.

REV	DESCRIPTION	FORM #	DATE	APPROVED	SIGNATURES	DATE
A	RELEASED DRAWING	08-210	08/29/02	DWG	DWGFR	08/29/02
B	ISSUED DRAWING	08-2023	08/01/08	DWG	ENGR	08/29/02
C	UNPIPED DRAWING	08-0005	08/05/08	DWG		

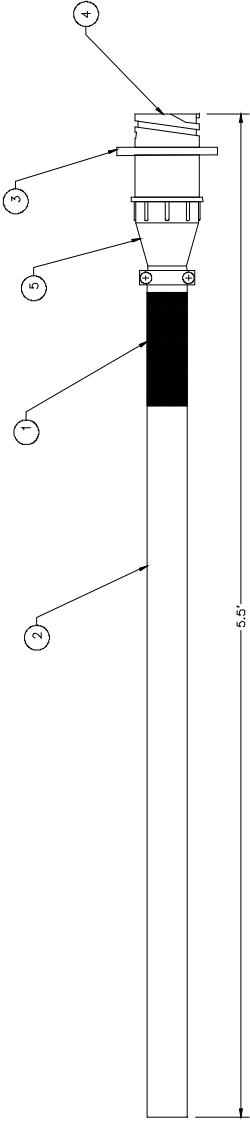
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DATE FROM NO: 320-180  
SCALE: SHEET 1 OF 2

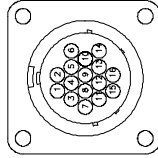


PARTS LIST

Nº	PART NUMBER	QTY	PART DESCRIPTION
1	231-009	2"	SHRINKTUBING .500" BLK
2	252-020	5.5'	CABLE 15COND.18GA.
3	255-013	1	CNTR. 16 PIN. RECP. FLANGE
4	255-023	15	CNTR. PIN (GOLD) 16/18GA.
5	255-043	1	CNTR. 16 PIN SHELL #17



PIN OUT DETAIL



- 1 --- RED WIRE
- 2 --- ORANGE WIRE
- 3 --- WHITE WIRE
- 4 --- BLUE/BLACK WIRE
- 5 --- BLUE/BLACK WIRE
- 6 --- ORANGE/BLACK WIRE
- 7 --- WHITE/BLACK WIRE
- 8 --- BLUE WIRE
- 9 --- BLACK/WHITE WIRE
- 10 --- BLACK WIRE
- 11 --- BLUE/WHITE WIRE
- 12 --- GREEN/WHITE WIRE
- 13 --- RED/WHT WIRE
- 14 --- GRN/BLK WIRE
- 15 --- NOT USED
- 16 --- NOT USED

REV	DESCRIPTION	APPROVED	DATE	DESIGNED	DATE	SIGNATURES	DATE
1	RELEASED DRAWING	DP-0027	09/26/09	DLG/BNL	09/26/09	DLG/BNL	09/26/09

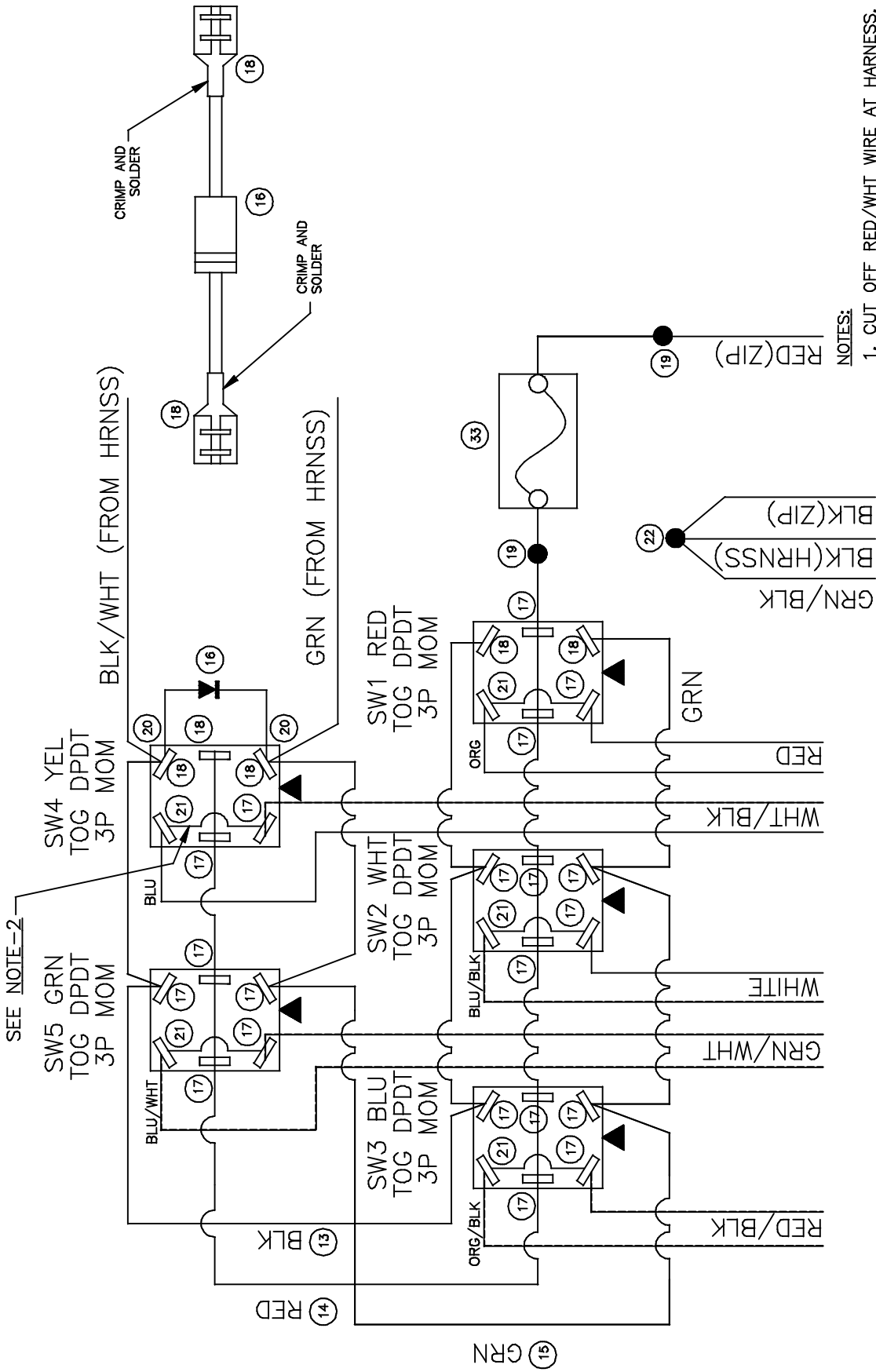
  

UNLESS SHOWN OTHERWISE	INDICATED IN DIMENSIONS	DRUMMER	DATE
ALL DIMENSIONS ARE IN INCHES	UNLESS OTHERWISE SPECIFIED	EXHIBIT	09/26/09
ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED	UNLESS OTHERWISE SPECIFIED	DATE	09/26/09
ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED	UNLESS OTHERWISE SPECIFIED	DATE	09/26/09

FASSÉ VALUES	SCALE
SERIAL NUMBER	311-801
DATE	09/26/09
SIZE	A
SIZE FROM NO.	16PN(16) F /5.5'
DATE	09/26/09
SCALE	1:1
SHEET	311-801

SWITCH WIRING DIAGRAM



- NOTES:
- CUT OFF RED/WHT WIRE AT HARNESS.
  - USE SCRAP 18GA WIRE TO JUMP BETWEEN SWITCHES.

USER	DATE	SIGNATURE	FUNCTION
JLB	05/29/02		DRW
BWL	06/28/02		ENGR

THIS DRAWING IS A PRELIMINARY DESIGN. OWNERS AND CONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING NECESSARY PERMITS AND UNDERSTANDING LOCAL REGULATORY REQUIREMENTS. USER EXPRESSLY WAIVES ANY CLAIMS FOR INFRINGEMENT OF PATENT RIGHTS IN THIS DRAWING.	<b>FASSÉ VALVES</b> 16400 VALVE DRIVE FARMINGTON, CT 06031-2348
MTR ASSY 805/RAN-C15L5P16F SIZE FROM NO. 1 SCALE: A DWG NO. 320-180 SHEET 2 OF 2	

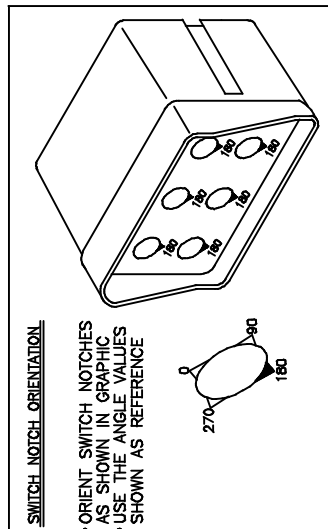
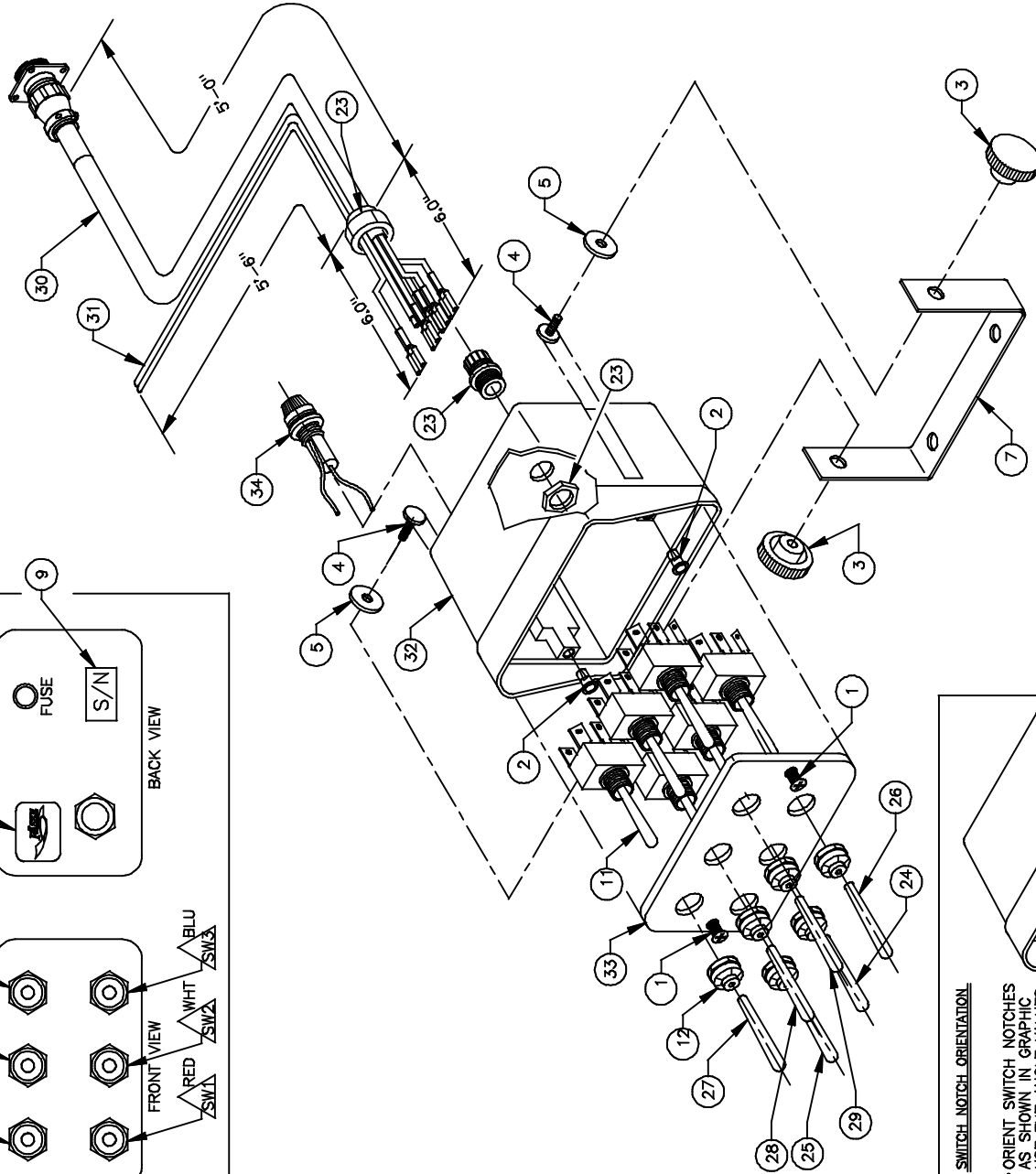
▲ = NOTCH LOCATION

PARTS LIST

NO	PART NUMBER	QTY	PART DESCRIPTION
1	212-184	2	SCREW 6-32 X 3/8 OVAL HD BLK
2	212-202	2	INSERT 6-32X3/8 BRASS
3	212-215	2	KNOB 1/4-20 FEMALE
4	212-231	2	SCREW WELDED 1/4-20 X .500
5	213-335	2	WASHER NYLON .257X.875X.060
6	214-002	14	CABLE TIE BLACK 7"
7	219-300	1	BRKT HSG MONITOR
8	230-057	1	BAG POLY CLR 14 X 18 2MIL W/LOGO
9	232-050	2	DECL S/N (SILVER)
10	232-058	1	DECAL FASSE BLK/GOLD 1"X.75" RND CRNR
11	250-013	6	SW TOG DPDT 3P MOM LONG
12	250-023	6	SW TOG BOOT OPN GRY
13	252-058	1'	WIRE 18GA BLK
14	252-059	1.5'	WIRE 18GA RED
15	252-060	1'	WIRE 18GA GRN
16	254-001	1	DIODE D116A2 6AMP
17	255-002	25	TRM T-TAP F PO BLU
18	255-006	5	TRM PO F INS 22/18GA
19	255-030	2	TRM SPLICE CLOSED END
20	255-070	2	TRM PO M/F 16-14GA
21	255-119	6	TRM PO F INS 16-14GA
22	255-285	1	TRM SPLICE CLOSED END LRG 14-16GA
23	255-710	1	STRAIN RLF HEYCO .45"-705"ID, HOLE DIA 1.115"
24	259-004	1	SW TOG GRIP VNYL WHT .187
25	259-005	1	SW TOG GRIP VNYL RED .187
26	259-015	1	SW TOG GRIP VNYL BLU .187
27	259-022	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	300-072	1	HRN 150CN 18GA AMP SQFLRCP 16P(15) 5'
31	300-271	1	HARNSS R/B WIRE /6'
32	304-400	1	ENCL DRILL MNTRBX FH-1 1/8"IG
33	308-001	1	ENCL DRILL FP MNTR SW6 L00261
34	319-768	1	FUSEHOLDER PANEL MOUNT ASSY 10A /5'

NOTES:

1. USE 2-CABLE TIES TO COIL UP HARNESS
2. PUT REMAINING CABLE TIES IN BAG
3. NOT SHOWN: (6) (8)



REV	DESCRIPTION	REVISED	DATE	UNLESS OTHERWISE SPECIFIED	SIGNATURES	DATE
A	RELEASED DRAWING	01-01-04	01/01/04	DESIGNED BY	DMPTER	10/04/04
B	REVISED DRAWING	01-01-04	01/01/04	CHECKED BY	DMPTER	10/04/04
C	REVISED DRAWING	01-01-04	01/01/04	APPROVED BY	DMPTER	10/04/04

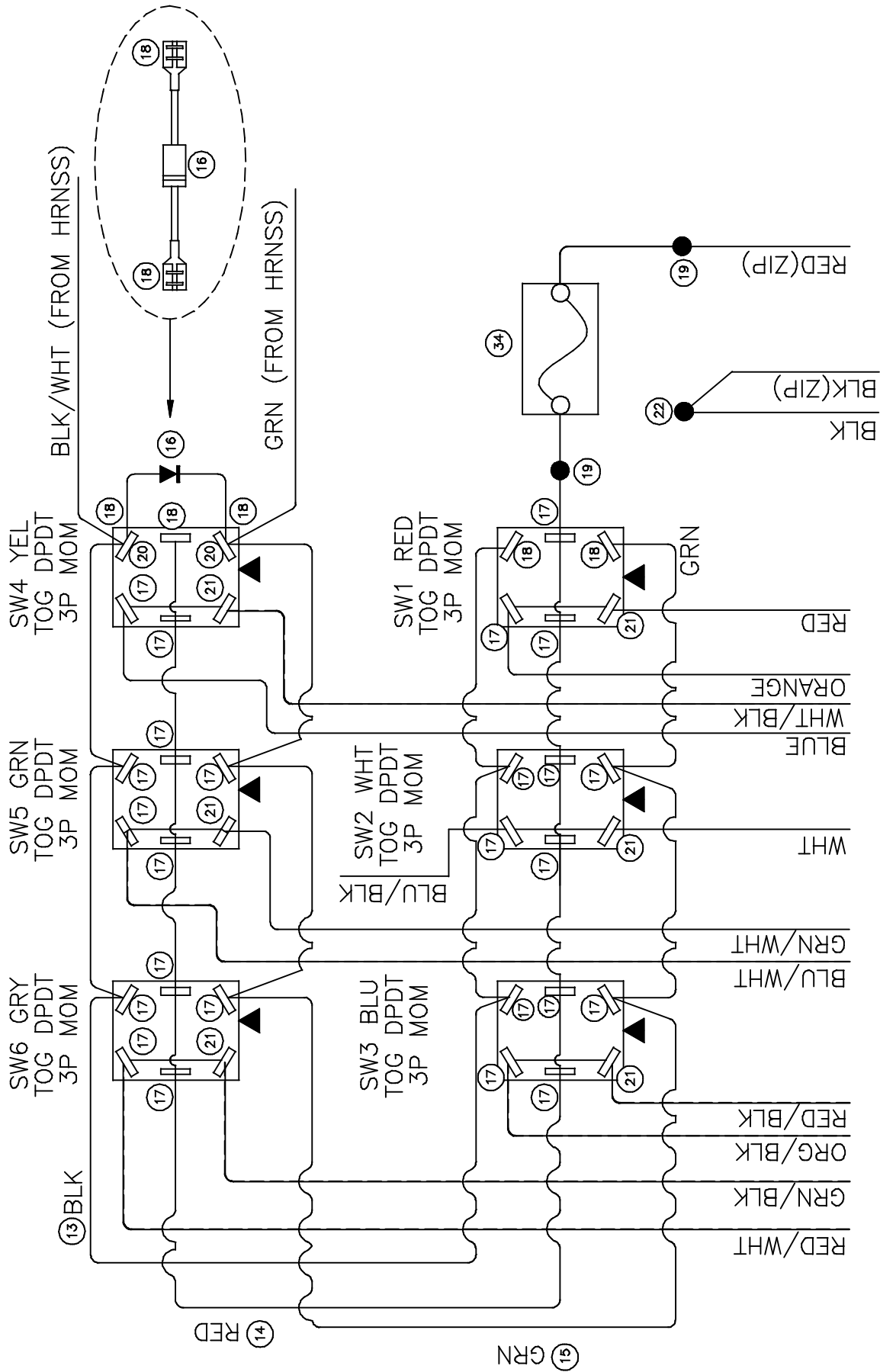
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SCALE: 1" = 1"

FORM NO: 320-245

SHEET 1 OF 2

SWITCH WIRING DIAGRAM



▲ = NOTCH LOCATION

DATE	DATE	SIGNATURES	SIGNATURES
10/04/04	10/04/04	DWG	CHK
DATE 10/04/04 DATE 10/04/04		DRAWN DLS CHECKED BJK APPROVED BJK	DESIGNED BJK IN CHARGE BJK
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FASSE VALVES SOUTH BEND, IN KEENEY, NE 68904-2348	MNR 1066-5'-SQFLRCPT16P(15)	DWG NO 320-245	SHEET 2 OF 2
FROM NO			
SOLE			



**3205 Bay Street  
Union Gap, WA  
98903**

**P.O. Box 1937  
Yakima, WA  
98907-1937**

**Phone: (509) 452-1651**

**Fax: (509) 457-6601**