

GEARMORE®

TWINSTAR

GENERATION 2 BASKET RAKES



PART'S MANUAL

For

Models 2027G2-7 & 2030G2-7

7 Bar Series

Serial # 00001 - 13999

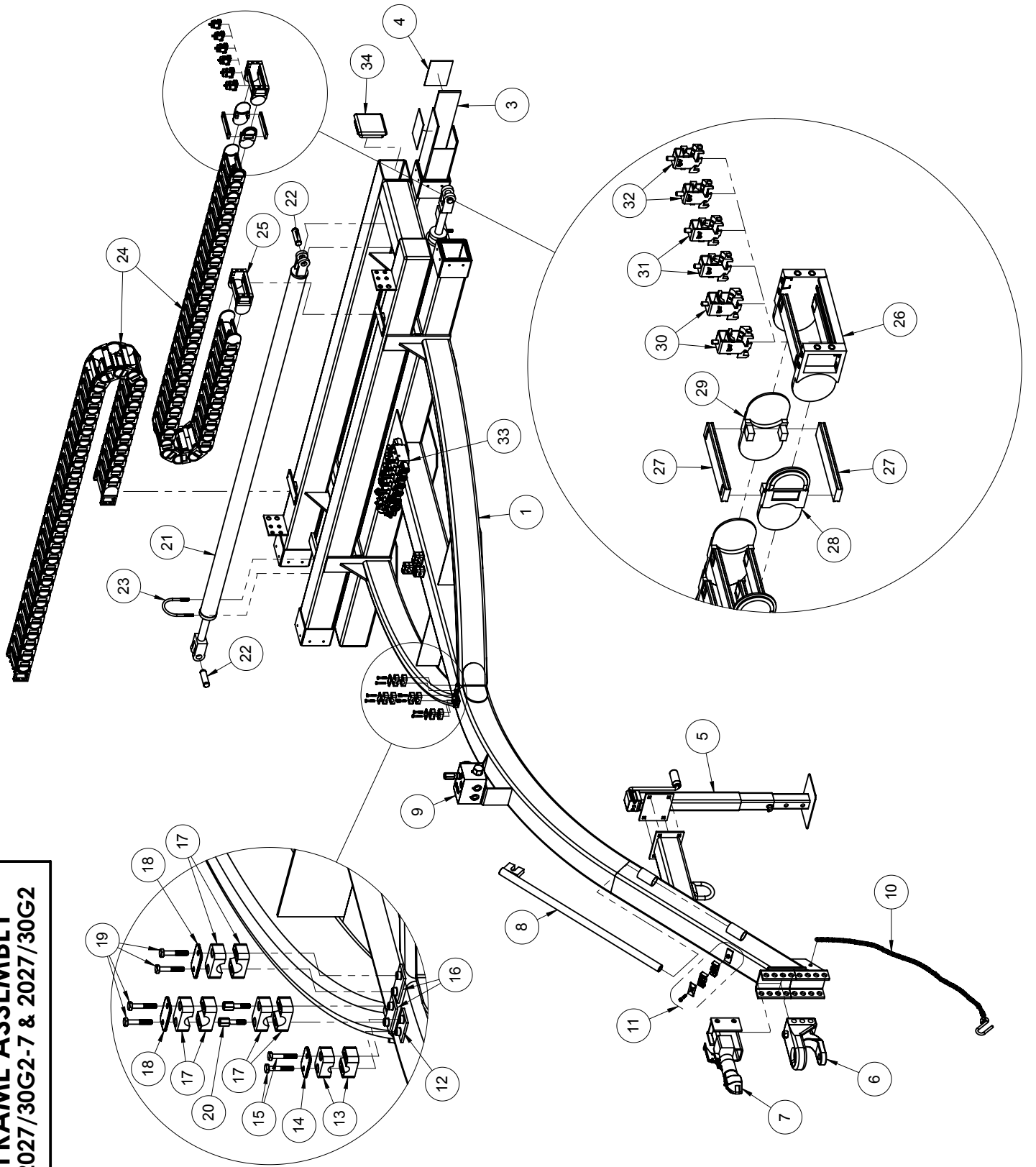


TWINSTAR

GENERATION 2 PARTS MANUAL

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



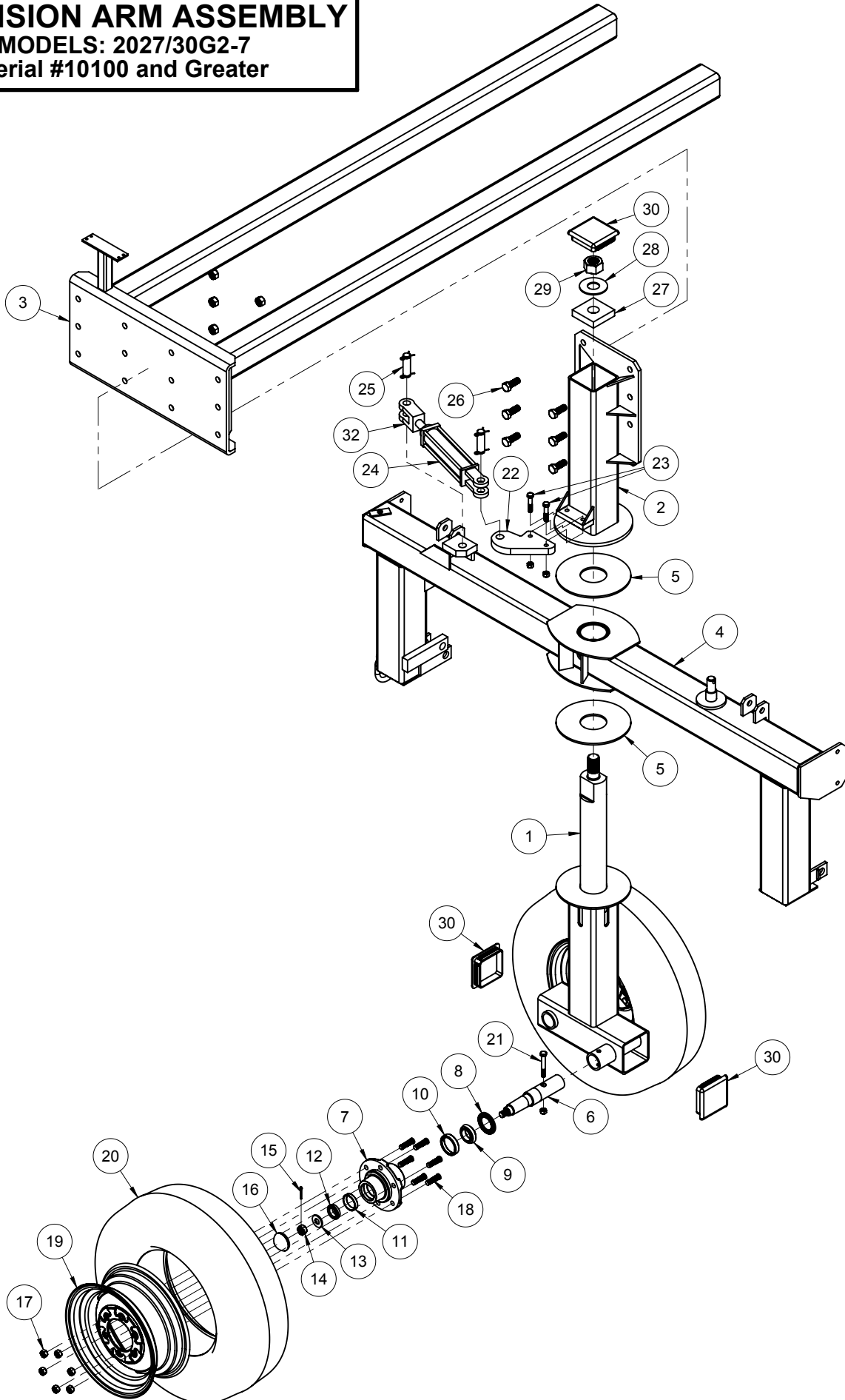
MAINFRAME ASSEMBLY
MODELS: 2027/30G2-7

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 Seperator (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



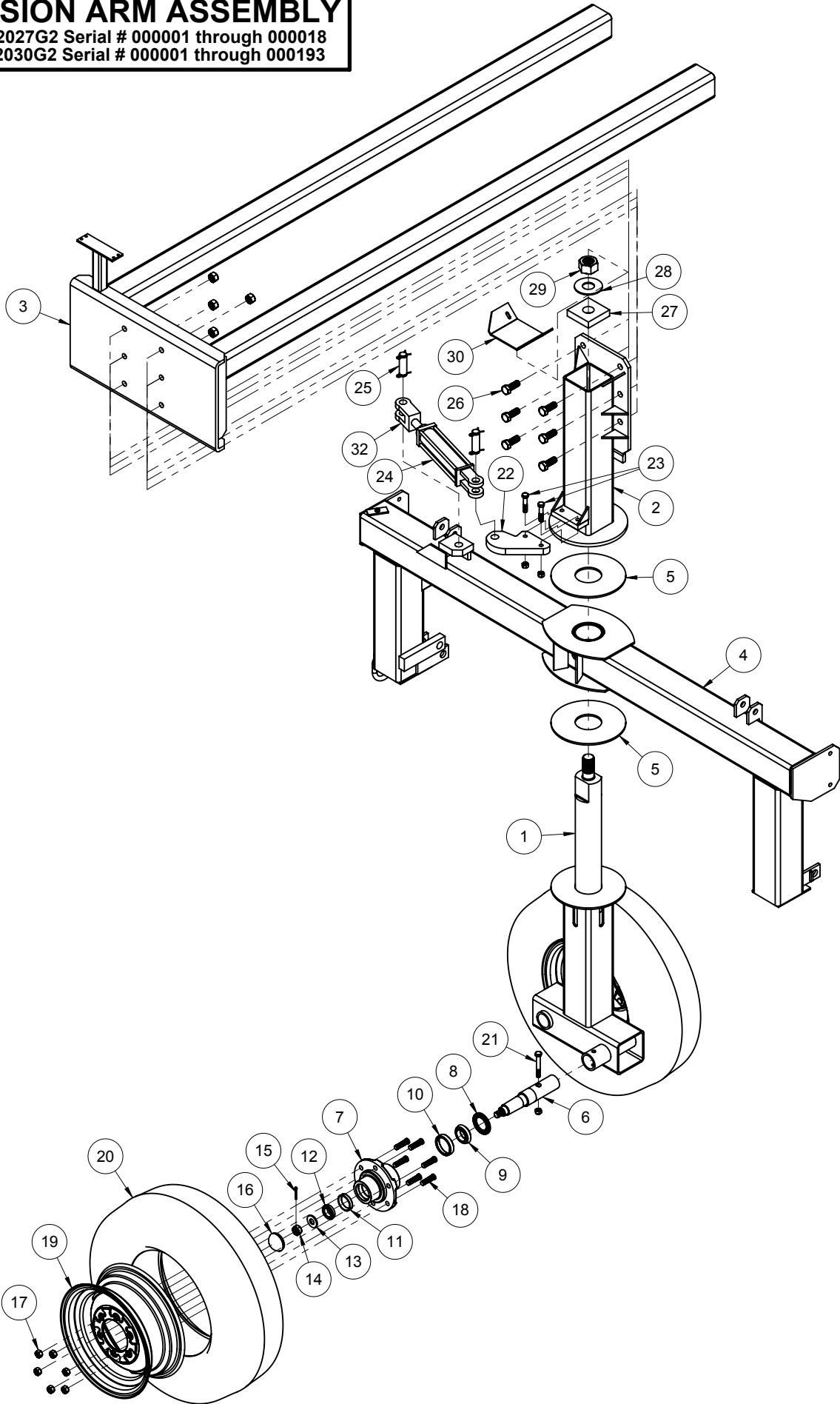
EXTENSION ARM ASSEMBLY

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

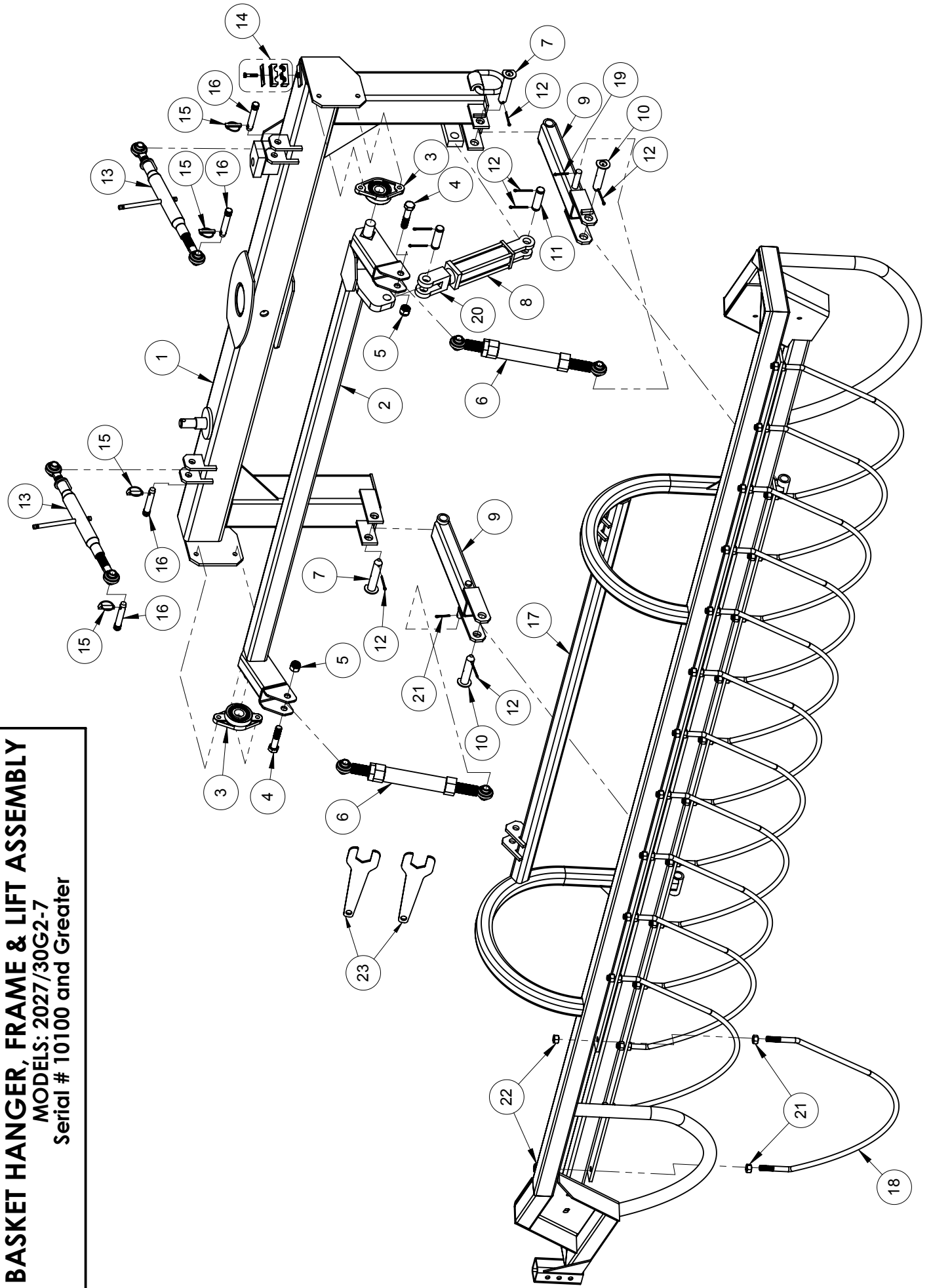
MODELS: 2027G2-7 Serial # 000001 through 000018
2030G2-7 Serial # 000001 through 000193

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



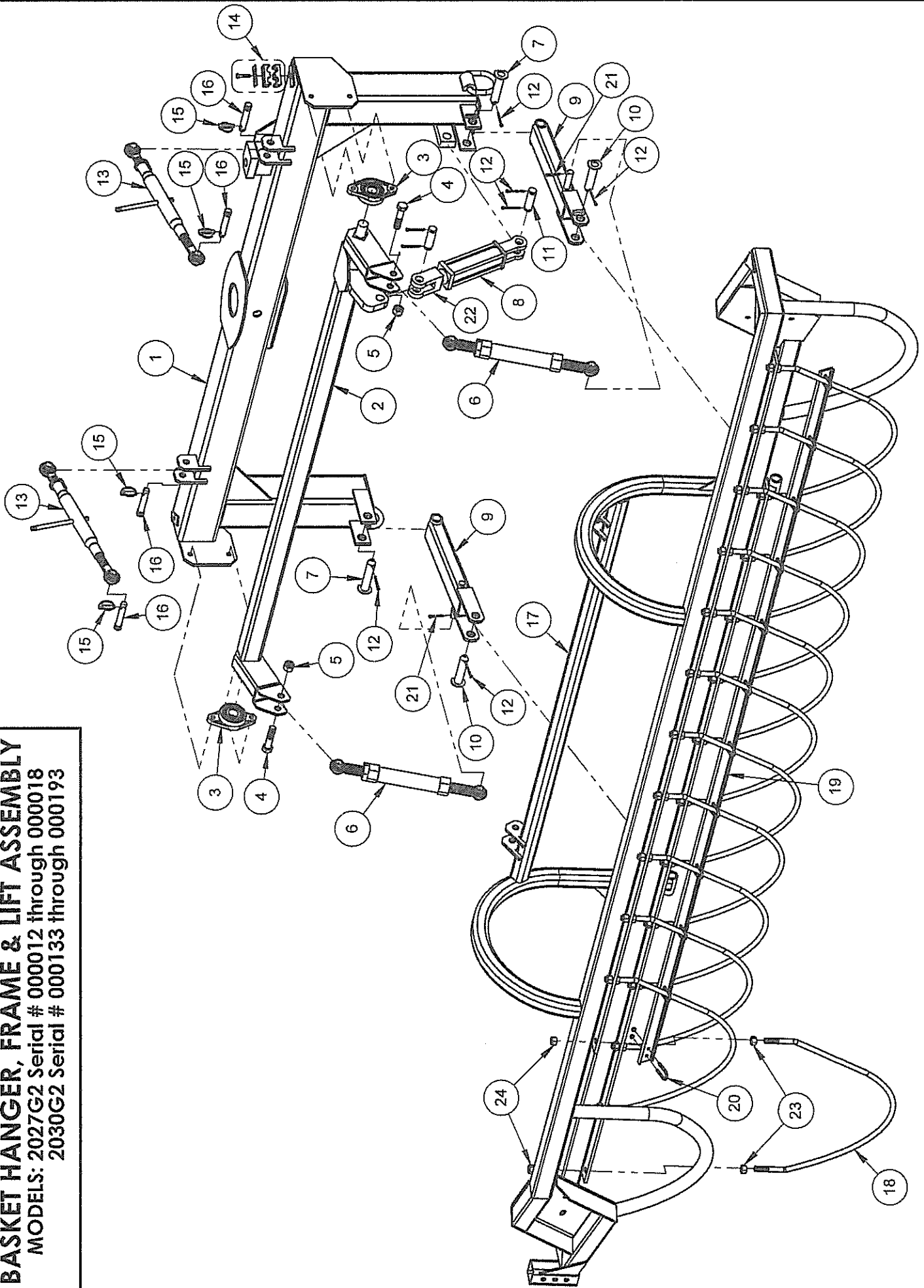
BASKET HANGER, FRAME AND LIFT ASSEMBLY

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

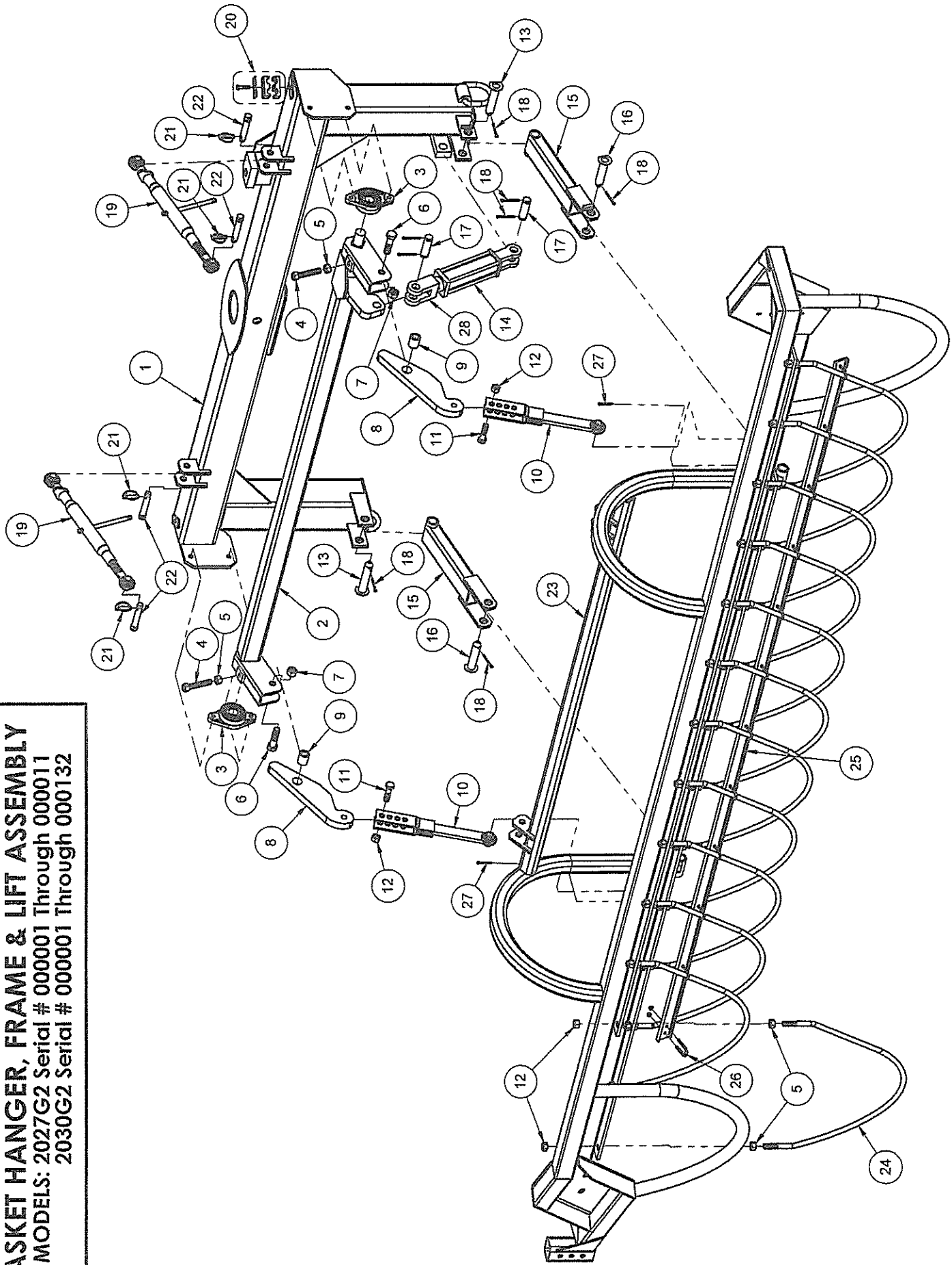


BASKET HANGER, FRAME AND LIFT ASSEMBLY

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 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	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



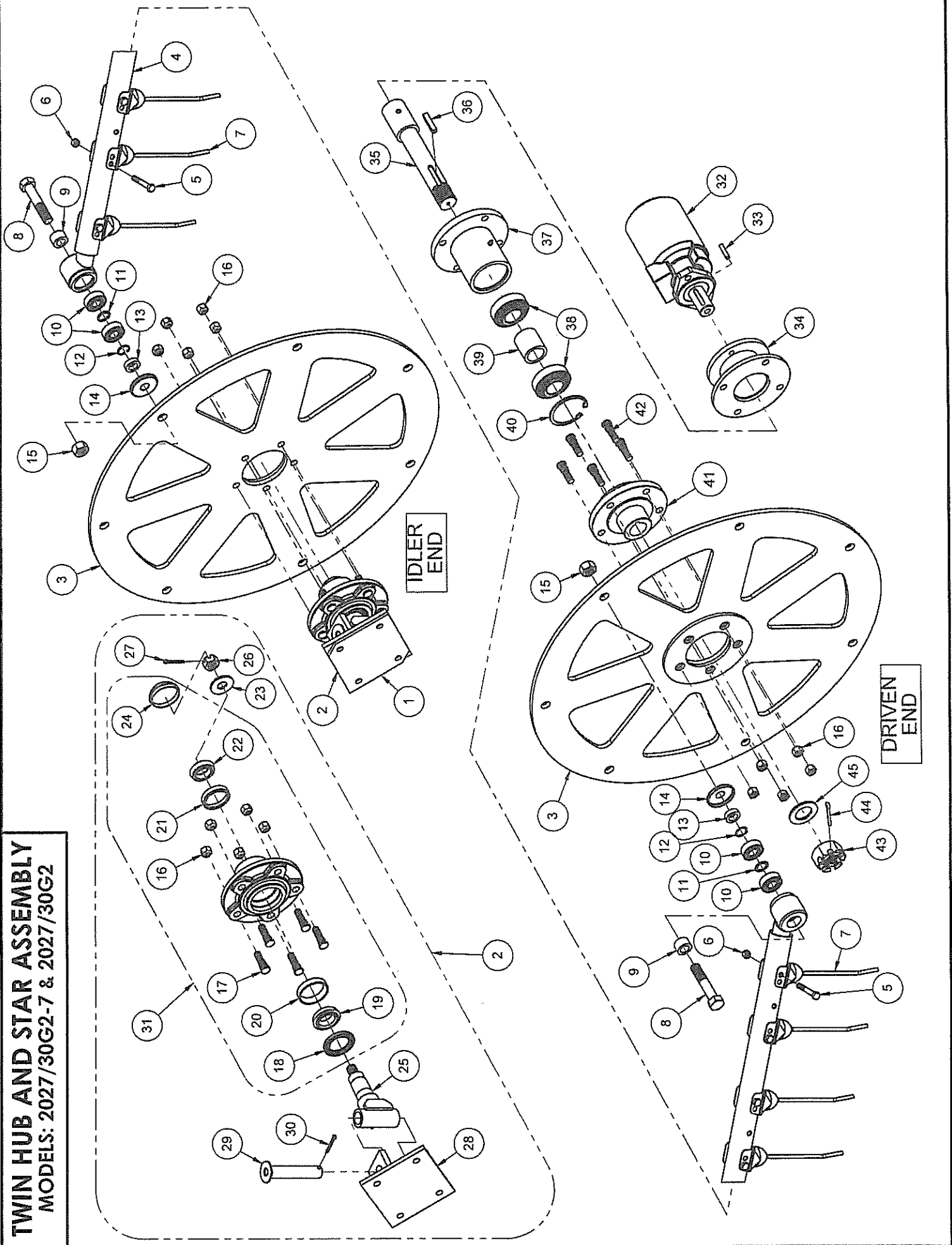
BASKET HANGER, FRAME AND LIFT ASSEMBLY

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 Axel - RH
2	1	HR-2451	Suspension Axel - 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

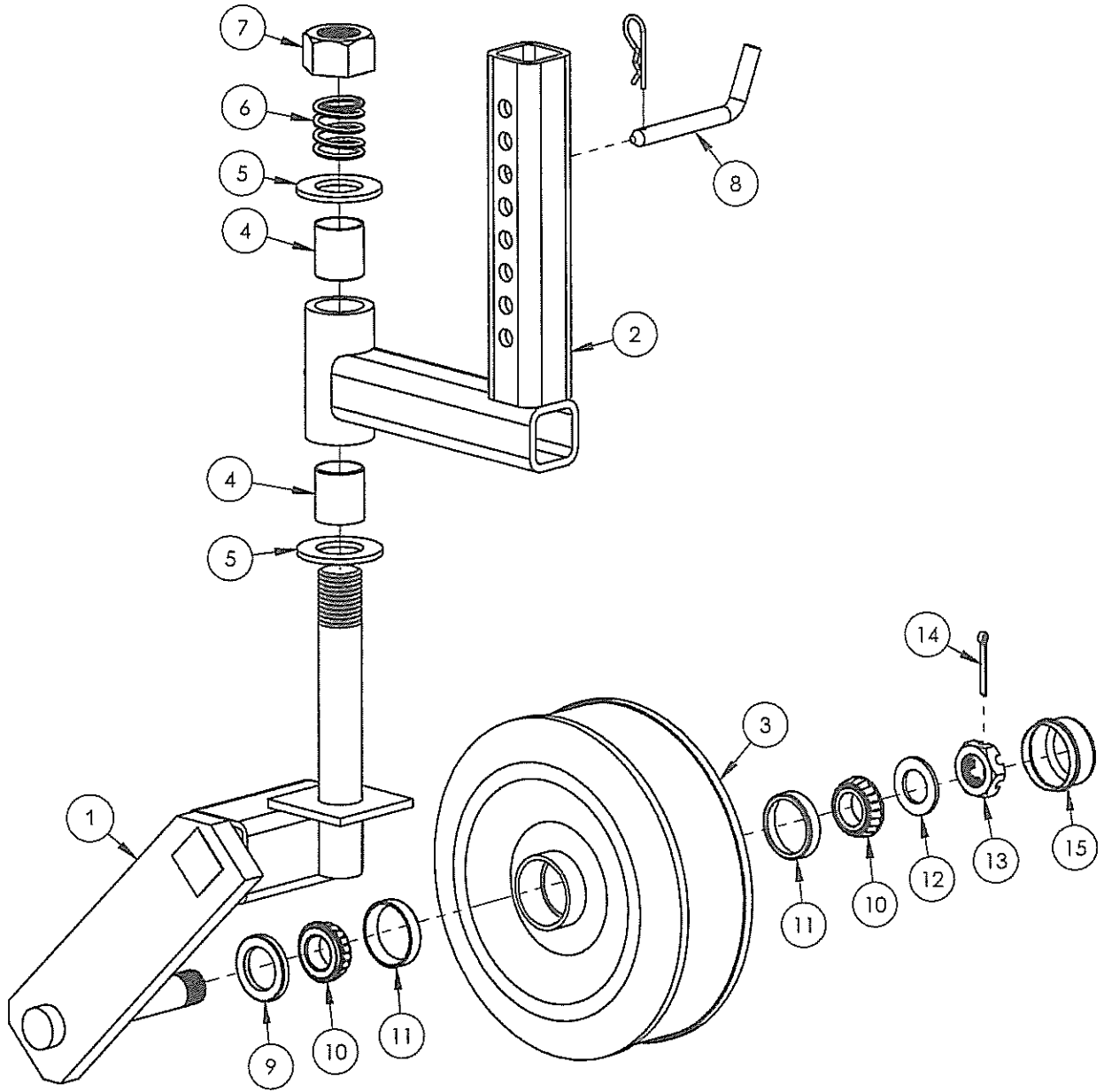


TWIN HUB AND STAR ASSEMBLY

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)

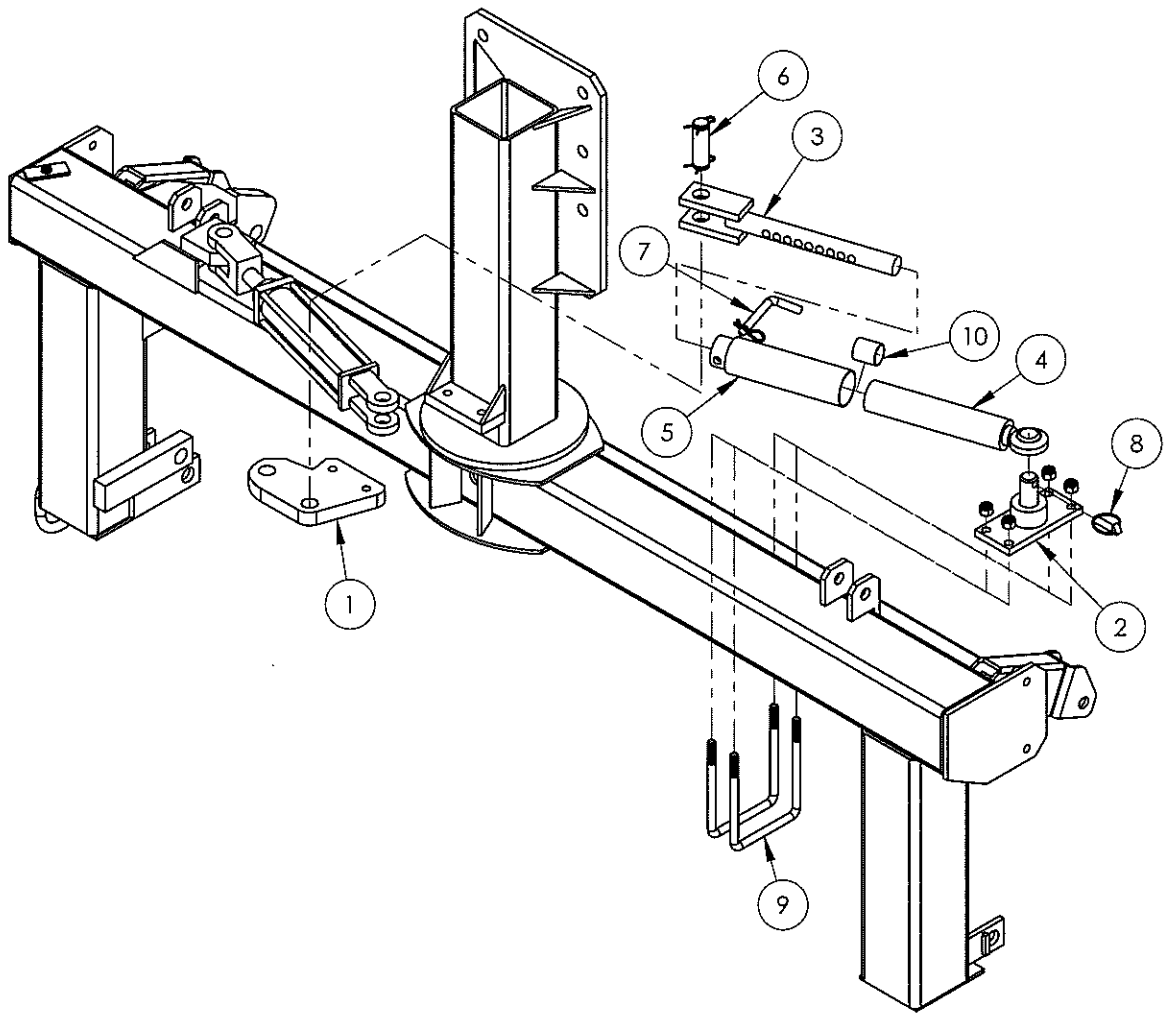


GAUGE WHEEL ASSEMBLY 08' (optional)

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

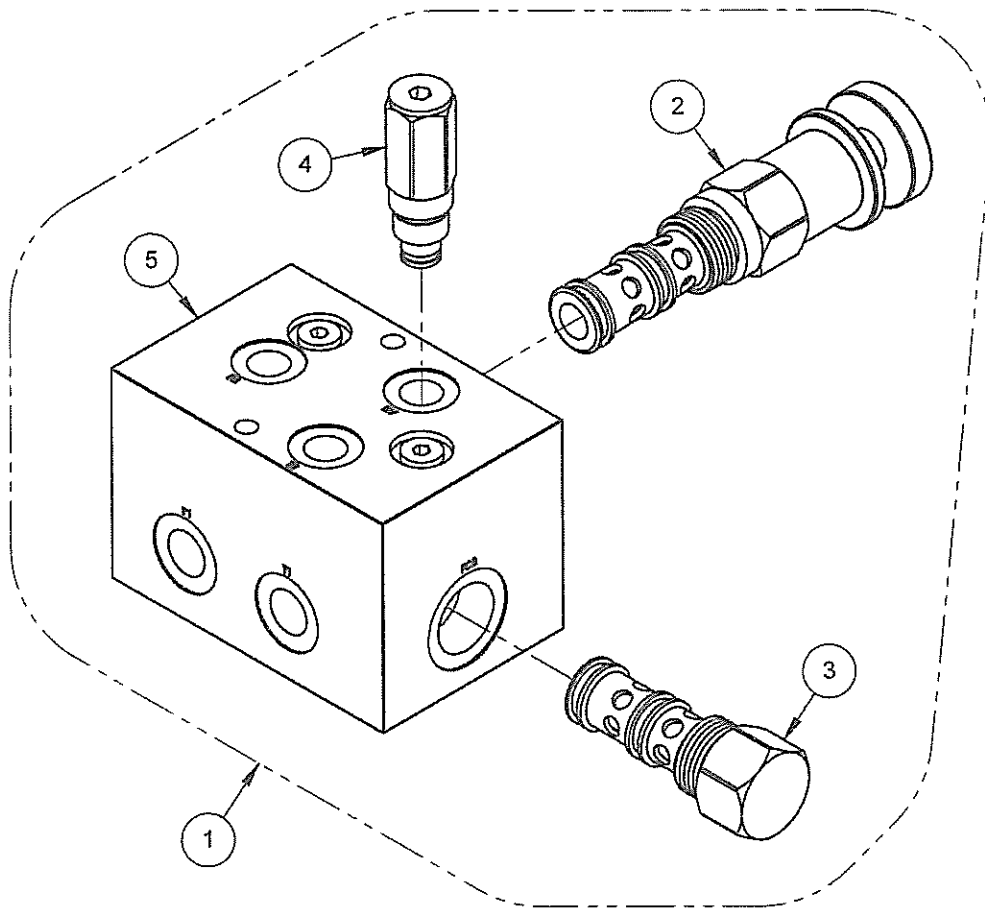
HR-5800 ANGLE STOP ASSEMBLY



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)

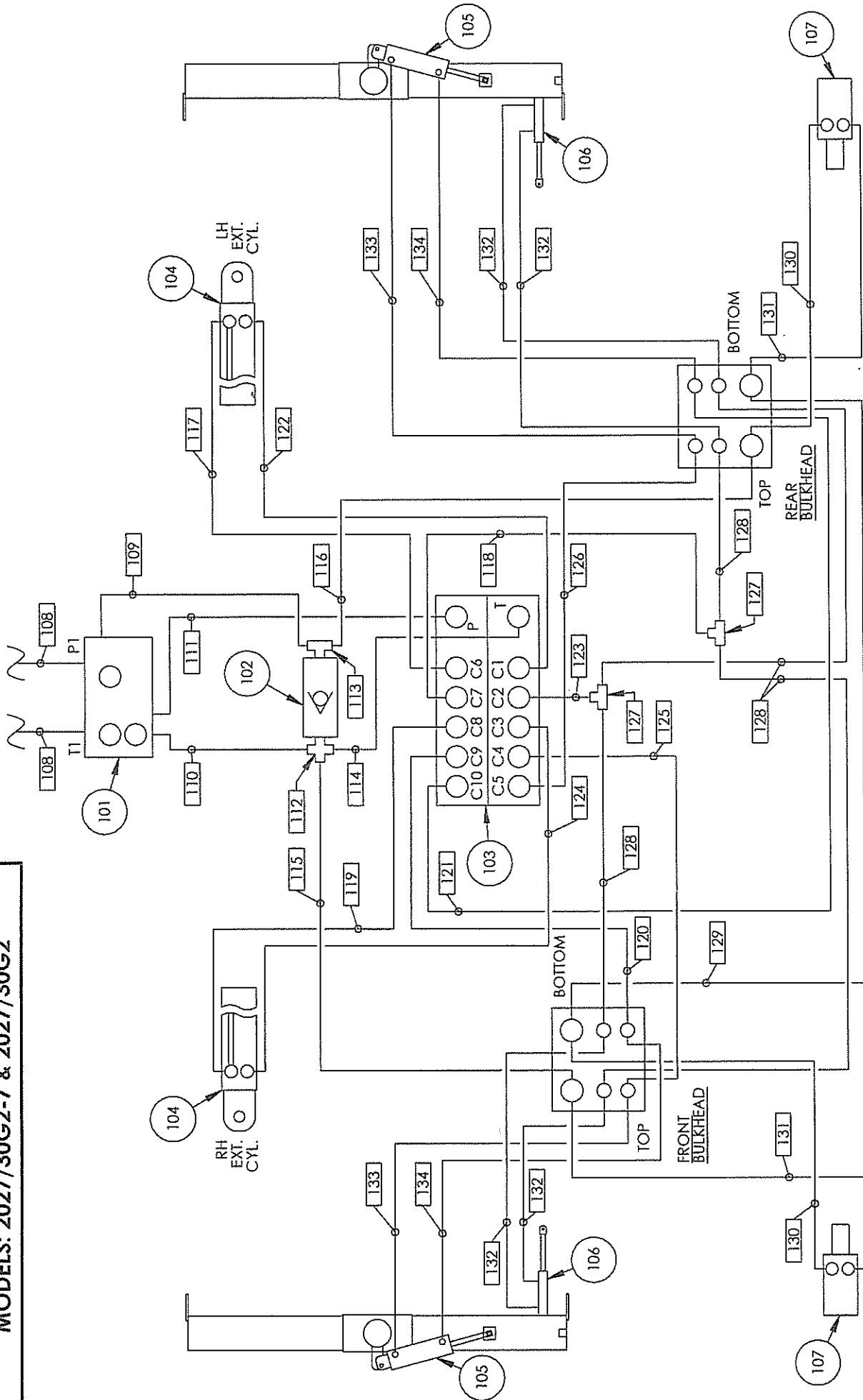
HYDRAULIC FLOW CONTROL
MODELS: 2027/30G2-7 & 2027/30G2



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



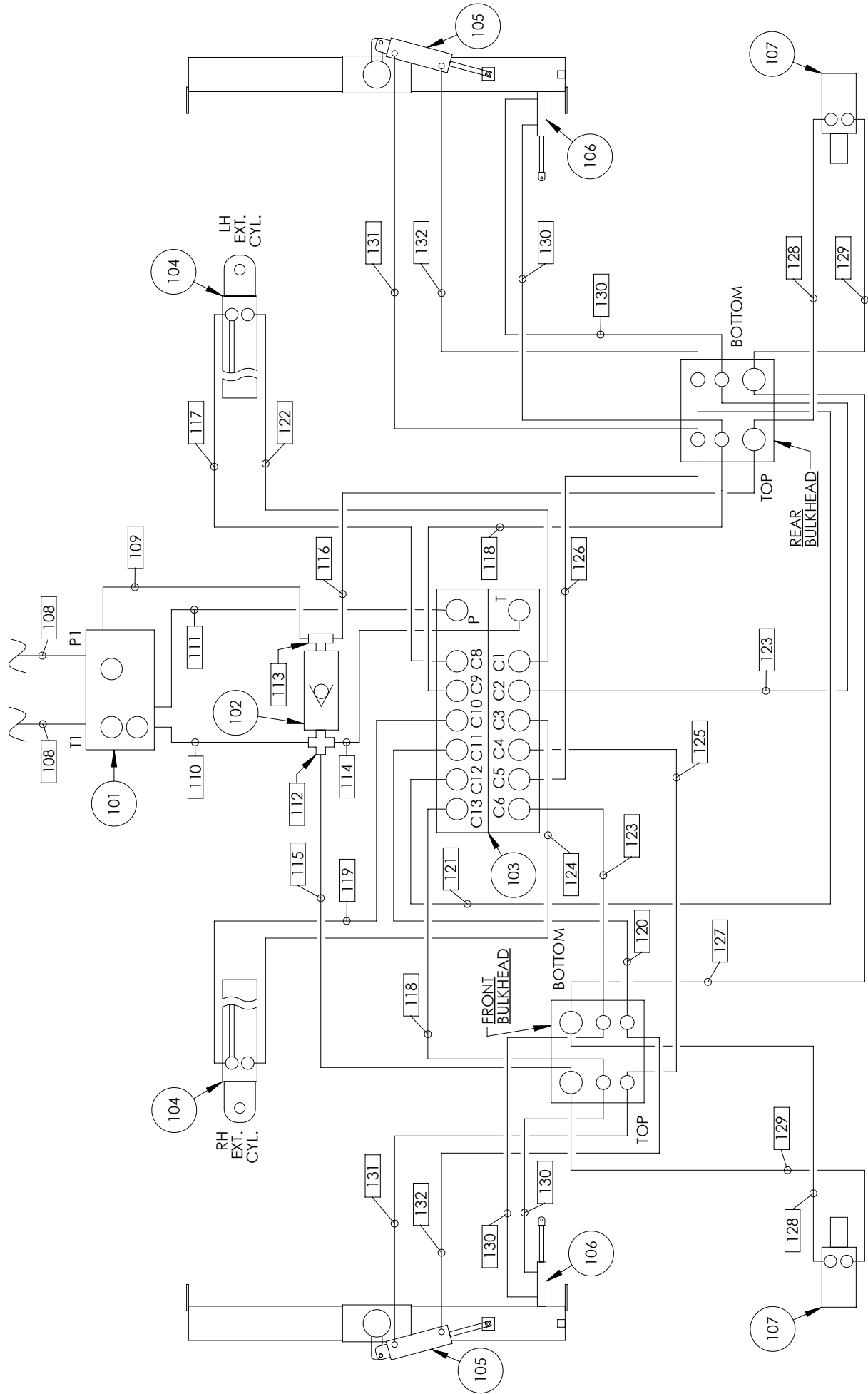
ATTACHMENTS
 YAKIMA WA

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: 2027/2030G2-5, 6 & 7



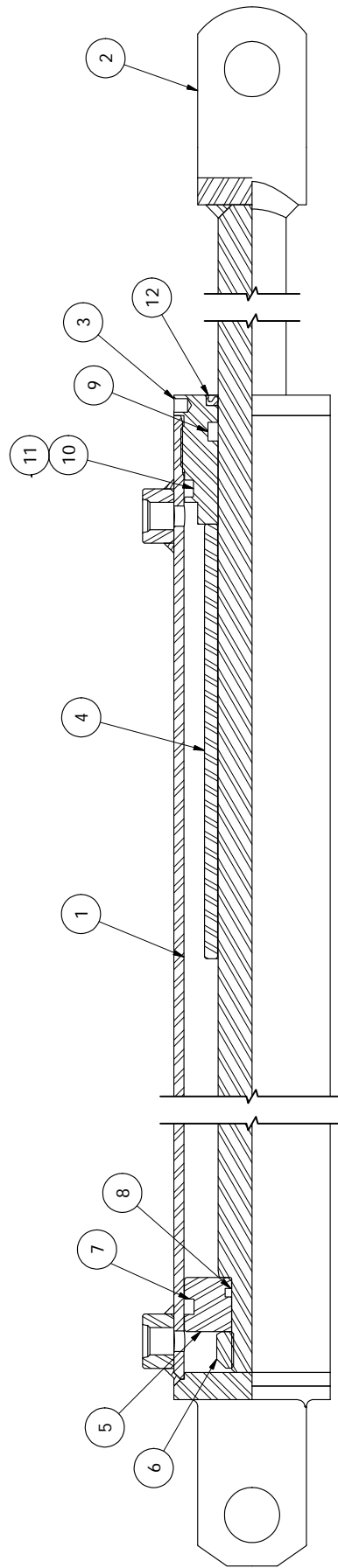
HYDRAULIC SCHEMATIC - 6 FUNCTION (optional)

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** 1/3/2013
 CHECKED BY: **D Lammerts** 1/3/2013
 APPROVED BY: **D Lammerts** 1/3/2013

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**
 PART NO: **R4507907 - PARTS**
 REV: **0**
 SHEET 1 of 1

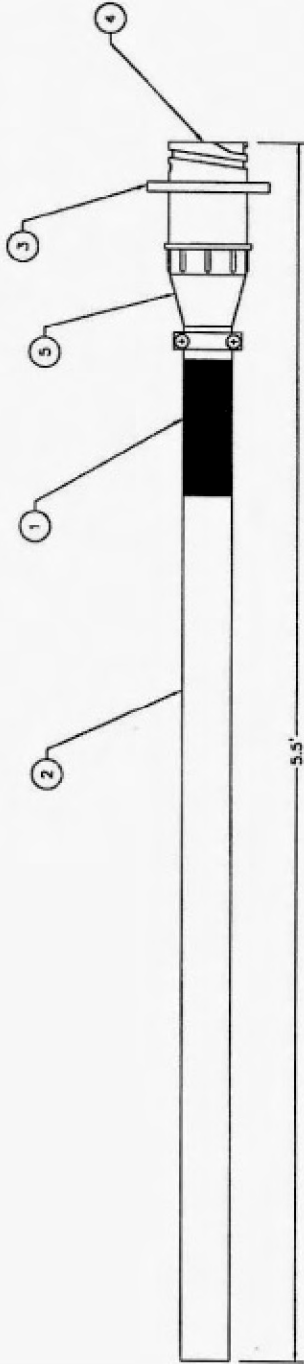
SCALE: **1:1**

CREATED IN AUTOCAD INVENTOR 2010

Five Function Control Box Harness

PARTS LIST

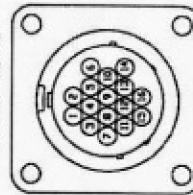
NA	PART NUMBER	QTY	PART DESCRIPTION
1	231-007	2.07	SHRINKTUBING .625
2	252-020	5.5'	CABLE 15COND 18GA
3	255-013	1	CNTR 16 PIN RECEPT FLANGE
4	255-023	13	CNTR PIN (GOLD) 16/18GA
5	255-043	1	CNTR 16 PIN SHELL #17



NOTE:

1. CUT OFF RED/WHT AND GRN/BLK WIRES AT EDGE OF JACKET

PIN OUT DETAIL



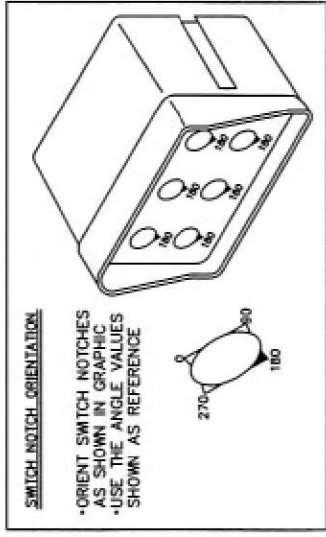
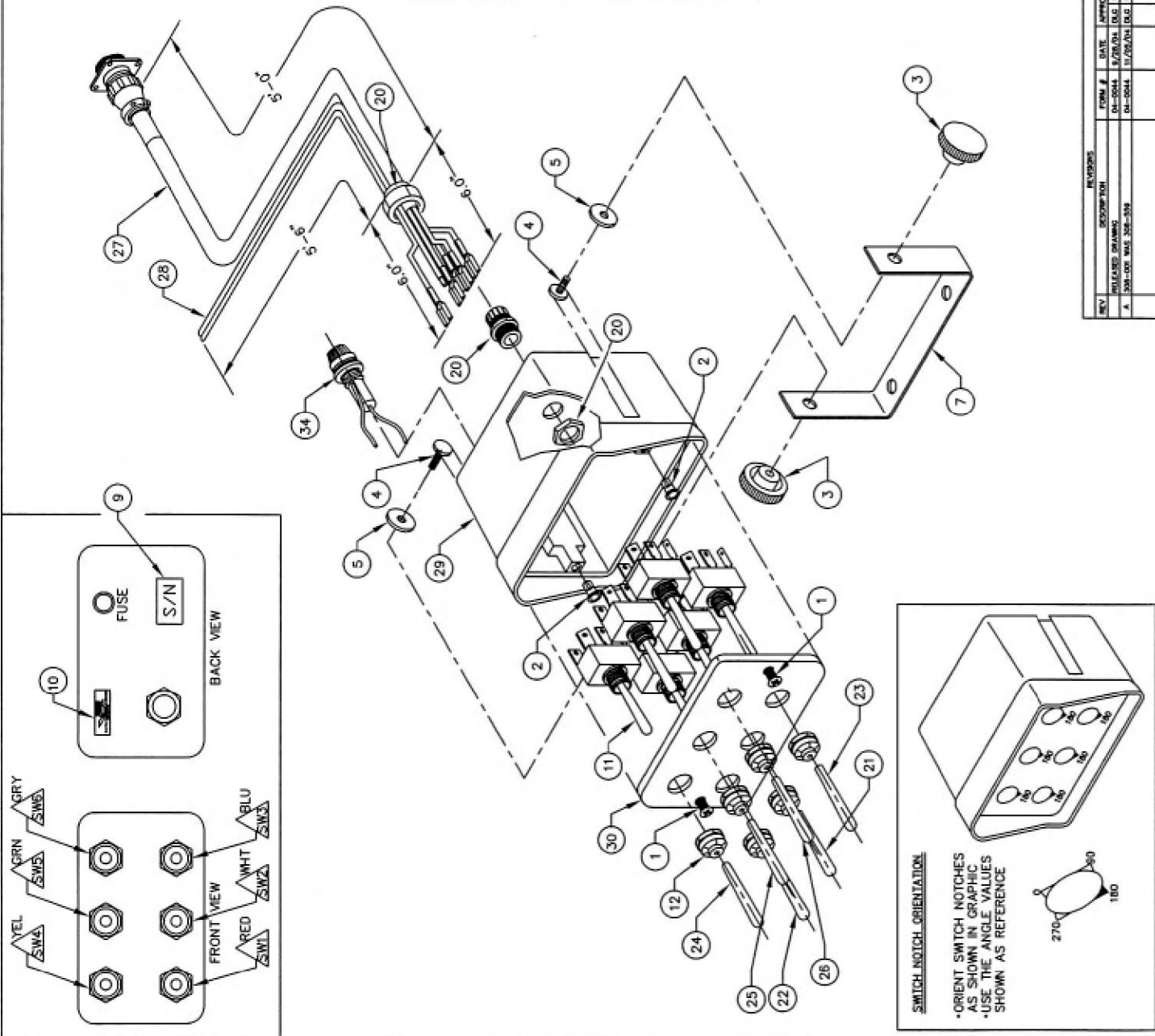
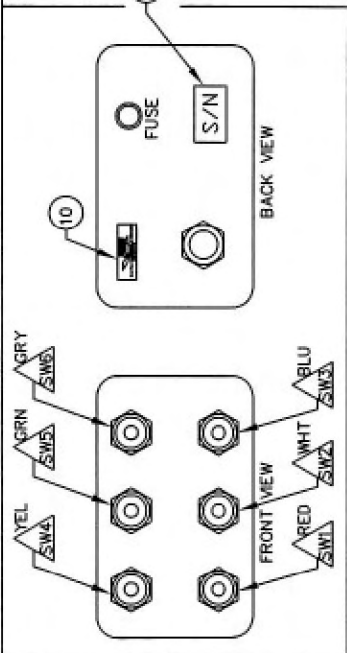
- 1 --- RED WIRE
- 2 --- ORANGE WIRE
- 3 --- WHITE WIRE
- 4 --- BLUE/BLACK WIRE
- 5 --- RED/BLACK WIRE
- 6 --- ORANGE/BLACK WIRE
- 7 --- WHITE/BLACK WIRE
- 8 --- BLUE WIRE
- 9 --- BLACK/WHITE WIRE
- 10 --- GREEN WIRE
- 11 --- BLACK WIRE
- 12 --- BLUE/WHITE WIRE
- 13 --- GREEN/WHITE WIRE
- 14 --- NOT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

REV	DESCRIPTION	DATE	BY	APPROVED	DATE	BY
1	RELEASED DRAWING	07/16/97	JAM/JEN		07/07/97	JAM/JEN
					07/07/97	JAM/JEN
					07/07/97	JAM/JEN
					07/15/97	JAM/JEN

FOR USE IN THE FOLLOWING PRODUCTS:	FOR USE IN THE FOLLOWING PRODUCTS:
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16.	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16.

		FASSE VALVES 1500 W. 10TH ST. ROCKY HILL, CT 06865-2348
HARNESSES FOR VALVES AND ACTUATORS VALVE & ACTUATOR WIRING DIAGRAMS AND WIRING HARNESS ASSEMBLY ARE AVAILABLE FROM FASSE VALVES		HARNESSES FOR VALVES AND ACTUATORS VALVE & ACTUATOR WIRING DIAGRAMS AND WIRING HARNESS ASSEMBLY ARE AVAILABLE FROM FASSE VALVES
PART NO. 311-097 SCALE:	REV. NO. 1 DATE:	REV. NO. 311-097 SCALE:

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 .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	232-059	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	REVISED DRAWING	01-2014	12/03/14	DJC	DJC	10/04/04		
2	ISSUED FOR MANUFACTURE	01-2014	12/03/14	DJC	DJC	10/04/04		

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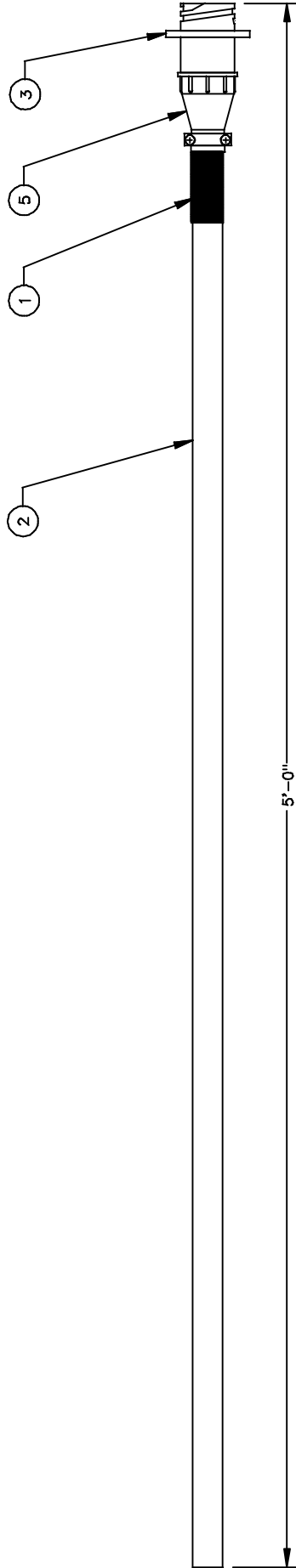
FASSE VALVES
 10000 W. 24TH AVE. #100
 DENVER, CO 80231

MANTR TOG6-5'-SOFLRPT16P(15)
 FROM NO 320-245
 SCALE

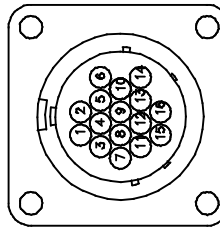
SHEET 1 OF 2

PARTS LIST

Nº	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	SIGNATURES	DATE
1	RELEASED DRAWING		DT-0004	06/12/01	ESB/BNL	DRWNR ENGR	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
FRACTIONS ARE TO NEAREST
2 PL. DECIMALS
3 PL. DECIMALS
INDICATED

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FASSE VALVES
 SEVEN STAR PARK
 SEABOARD, N.E. 88848-2948

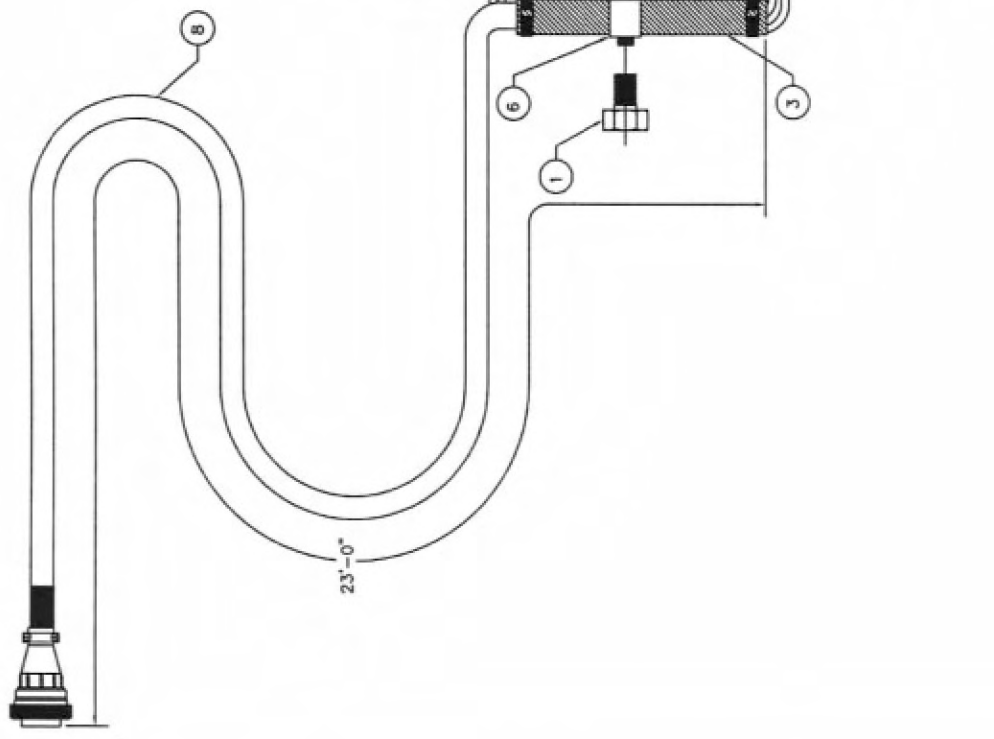
HARNISS 15CON 16PIN(15) F /5'

SIZE FROM NO. A DWG NO. 300-072 SHEET

Five Function Control Valve

PARTS LIST

N/A	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	BY	DATE	BY	SCALE	SHEET
1	ISSUED DRAWING	07-11-15								
2	REVISIONS									

MADE TO ORDER SPECIFIC	SIZES/VALUES	DATE
INDICATE IN INCHES	DRAWER	/ /
3 P. DECIMALS	DRWG	/ /
FRACASIONS		/ /

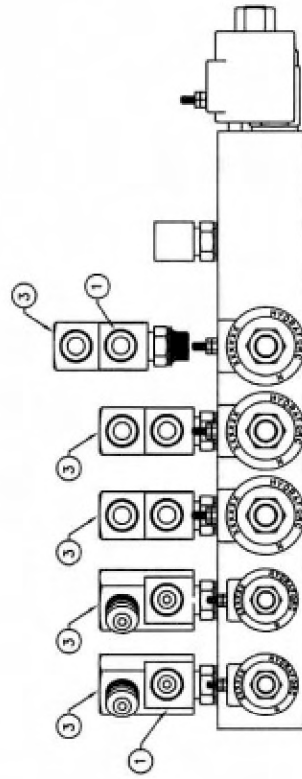
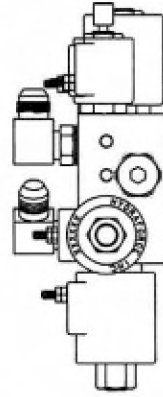
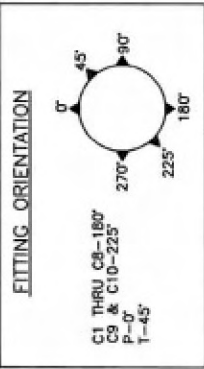
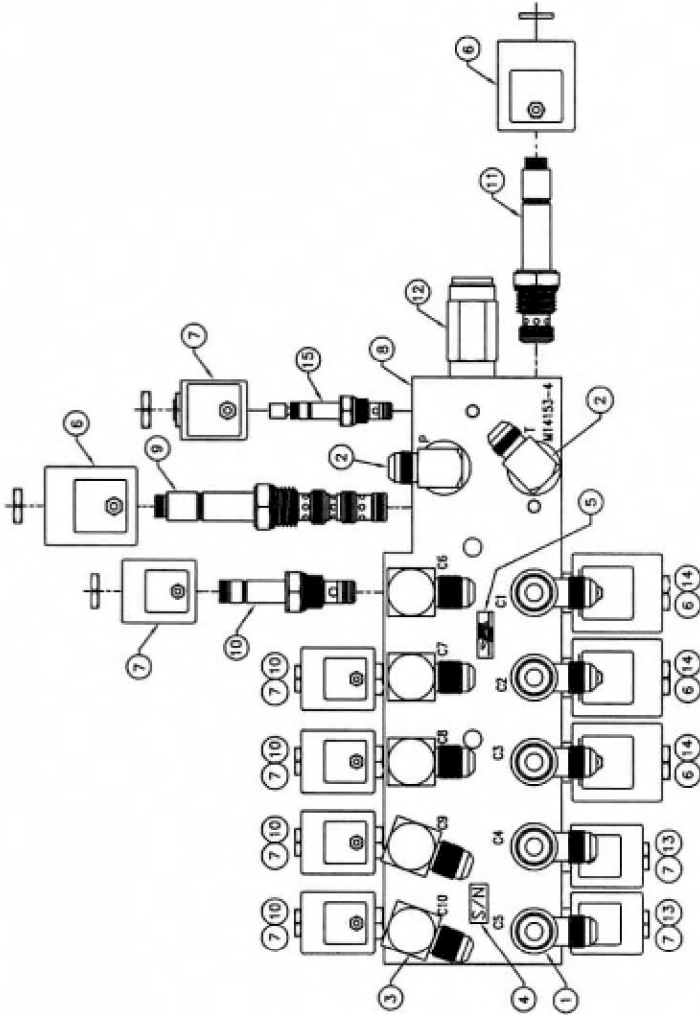
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FASSE VALVES SEVEN POND PARK REARCT, SC 88828-2348	MAN/IRN ASSY 0805 50A OPN SS 12V RV WP6801-6 PTFE801-8 15CON PLUG 16P(13) 23"
REV/ISSA NO	DRW NO
A	303-05B
SCALE	SHEET

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

REV	DESCRIPTION	REVISION	FORM #	DATE	APPROVED	DATE	INITIALS	DATE	INITIALS	DATE	INITIALS
1	RELEASED DRAWING		01-210	12/24/01	DLG						

MADE	DRIVING	INTEGRATED	SEALURES	DATE
2	P. ORIGINALS			
3	FRACIONS			

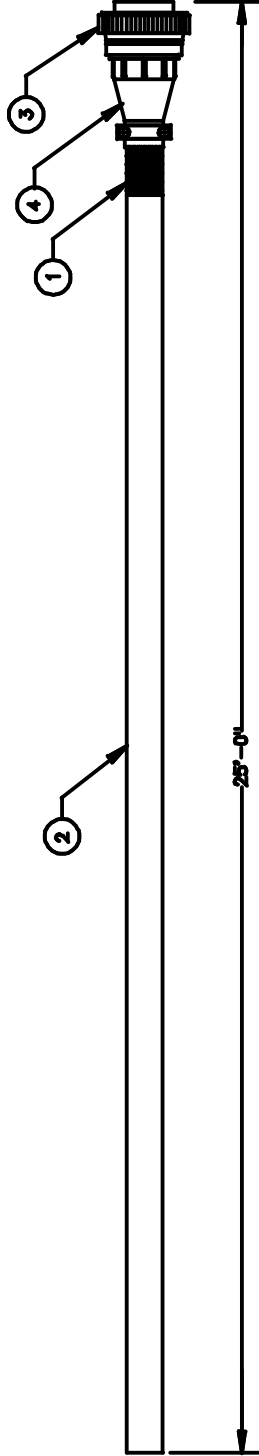
MANUFACTURER	DATE	INITIALS
MANI	5/10/01	DLG

DATE	FIGURE NO	DWG NO	SCALE
12/24/01	1	302-881	1:1

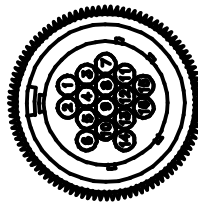
FASSÉ VALVES
MANI ASSY 0805 50A OPN SS 12V
RV WF6801-6 PT 6801-8

PARTS LIST

NO	PART NUMBER	QTY	PART DESCRIPTION
1	231-007	2"	SHRINKTUBING .025
2	202-020	20'	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.

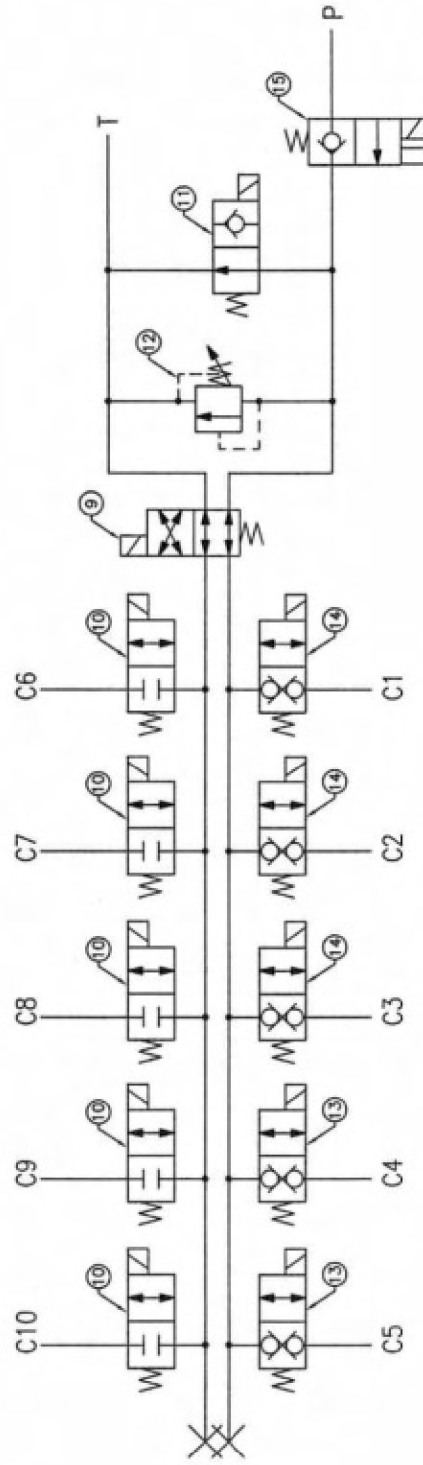
2. NOT SHOWN: (6)

REV	DESCRIPTION	DATE	BY	CHKD	APP'D	QTY	UNIT	PRICE	TOTAL	REMARKS
1	ISSUED FOR FAB	11/24/09	INT							
2	REVISED PER 320-034	02-20-10	INT							
3	REVISED PER 320-034	02-20-10	INT							
4	REVISED PER 320-034	02-20-10	INT							
5	REVISED PER 320-034	02-20-10	INT							
6	REVISED PER 320-034	02-20-10	INT							
7	REVISED PER 320-034	02-20-10	INT							
8	REVISED PER 320-034	02-20-10	INT							
9	REVISED PER 320-034	02-20-10	INT							
10	REVISED PER 320-034	02-20-10	INT							
11	REVISED PER 320-034	02-20-10	INT							
12	REVISED PER 320-034	02-20-10	INT							
13	REVISED PER 320-034	02-20-10	INT							
14	REVISED PER 320-034	02-20-10	INT							
15	REVISED PER 320-034	02-20-10	INT							
16	REVISED PER 320-034	02-20-10	INT							

HARNESS 15CON 16PIN(13)P /25'	
PART NUMBER A	PART PRICE 320-034

Five Function Control Valve

HYDRAULIC SCHEMATIC



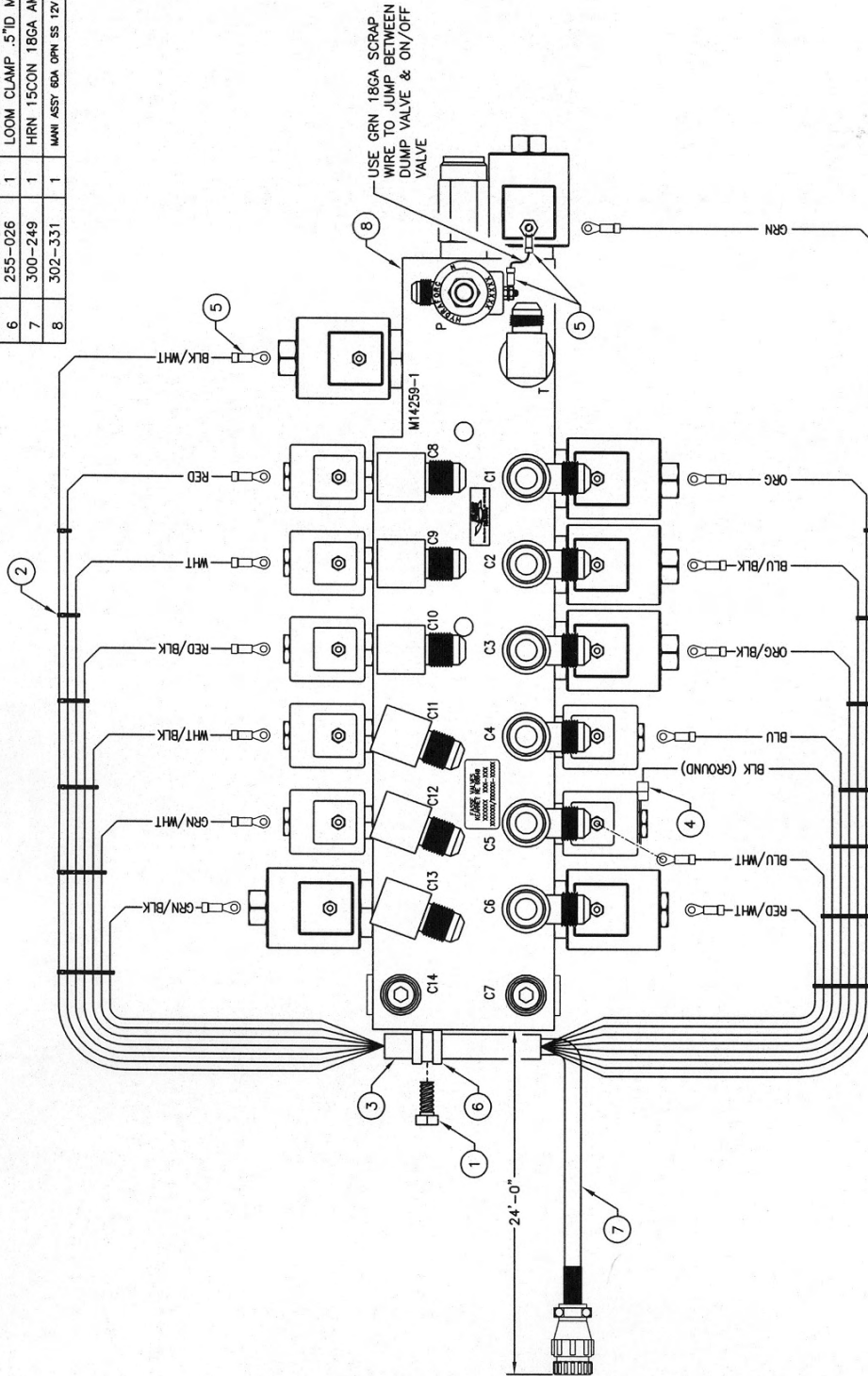
UNITS DIMENSIONS SYMBOLS	DATE	REVISIONS
UNLESS OTHERWISE SPECIFIED	///	///
DIMENSIONS ARE IN INCHES		
FRACTIONS ARE TO BE SHOWN		
3 PL. DECIMALS		
DECIMALS		
INCHES		
FUNCTIONS		

MANUFACTURED BY FASSE VALVES 5000 S. 10TH AVENUE BARABEE, WI 53006-2048	
MAIN ASSY D800 50A DFN SS 12V RV WF6801-6 PT 6801-B	
SIZE / DIM. NO. A	DWG. NO. 302-681
SCALE A	SHEET 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:

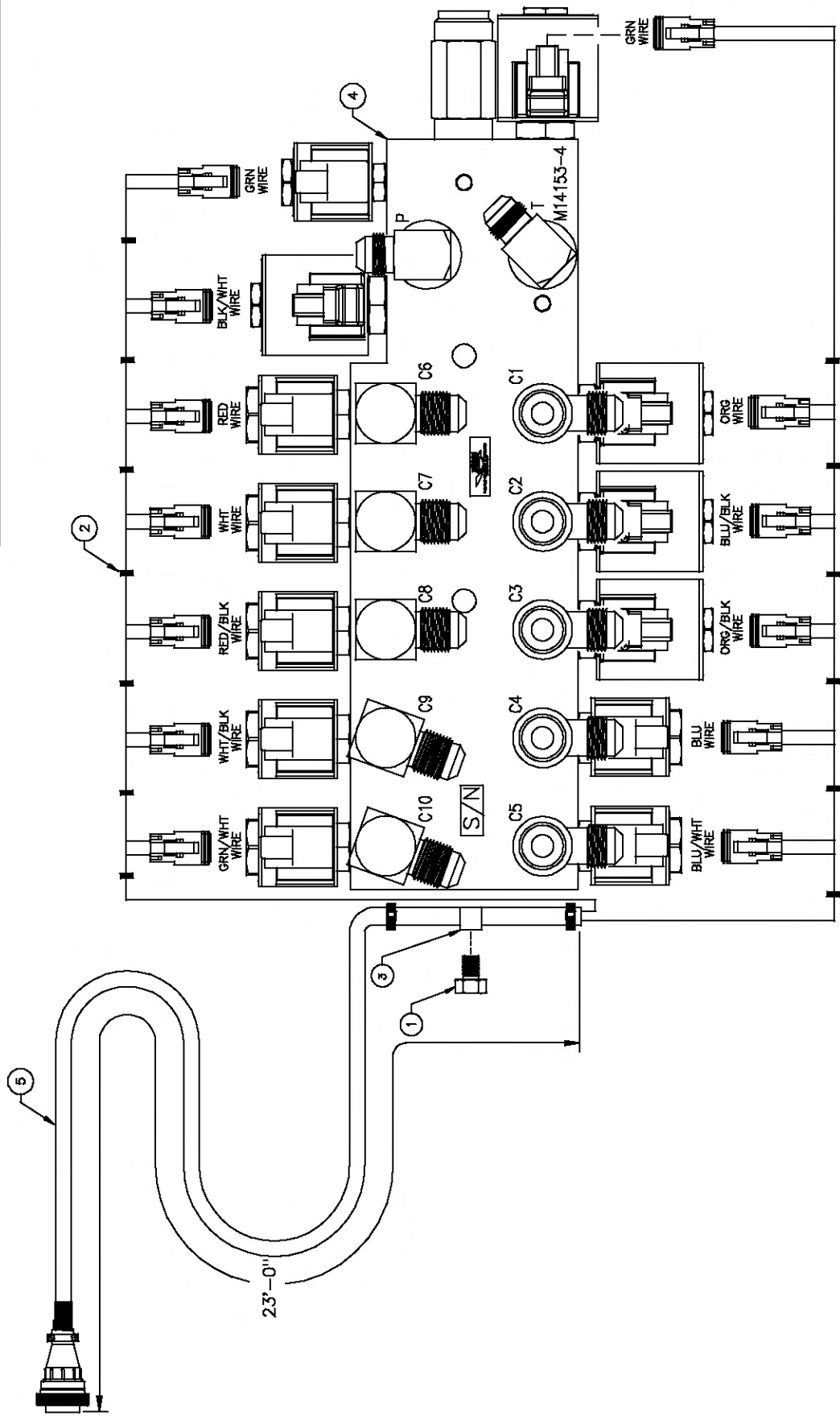
1. USE 3-CABLE TIES TO COIL HARNESS.
2. RETORQUE GROUND COIL NUT TO 5 FT. LBS.

REV	DESCRIPTION	DATE	APPROVED	FORM #	DATE	APPROVED	UNLESS OTHERWISE SPECIFIED	SIGNATURES	DATE
1	RELEASED DRAWING	01-04-04	[Signature]	01-04-04	01/29/04	[Signature]	TOLERANCES UNLESS OTHERWISE SPECIFIED: 2 PL DECIMALS ANGLES IN DEGREES FRACTIONS	DMITRY [Signature]	10/04/04
								ENGR [Signature]	10/04/04

MANI/HRN ASSY 6DA OPN SS 12V RV WP6801-8	PT6801-8 ON/OFF 15CON
PLUG 16P(15) 24'	
FORM NO	303-074
SCALE	SHEET

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.

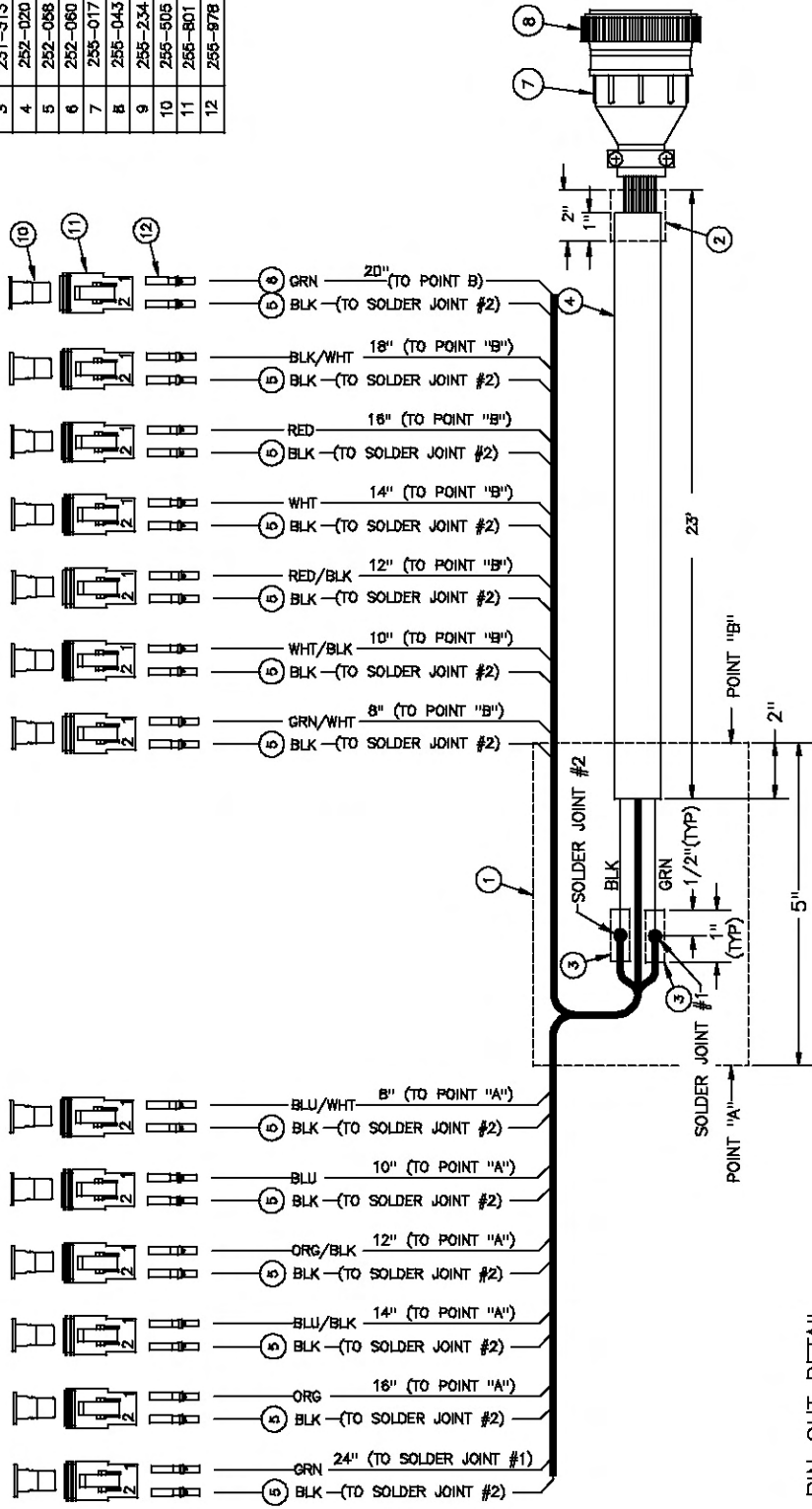
REV	DESCRIPTION	REVISIONS	NO	DATE	APPROVED	DESIGNED BY	DATE	DESIGNED BY	DATE	DATE	SIGNATURES	DATE
A	RELEASED DRAWING		02-0125	12/09/02	DLB	DLB	12/04/02	DLB	12/04/02	12/04/02	DLB	12/04/02
B	UPDATED DRAWING		08-0027	04/15/08	DLB	DLB	08/04/08	DLB	08/04/08	08/04/08	DLB	08/04/08
C	UPDATED DRAWING		08-0027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

UNLESS OTHERWISE SPECIFIED	DATE	SIGNATURES
DESIGNED BY	12/04/02	DLB
APPROVED BY	12/04/02	DLB
DATE	12/04/02	DLB

FASSE VALVES
SERIES 0805
MANI ASSY 0805 5DA OPN E-INTG DTR 12V RV WP6801-6
HRN 15CON 16GA AMP PLUG 16P(15)3DTP 2P(2) 23'
FORM NO 303-058
SCALE SHEET

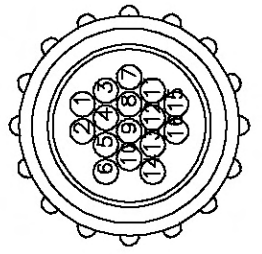
PARTS LIST

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	20'	CABLE 15CON 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 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



- 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

- 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



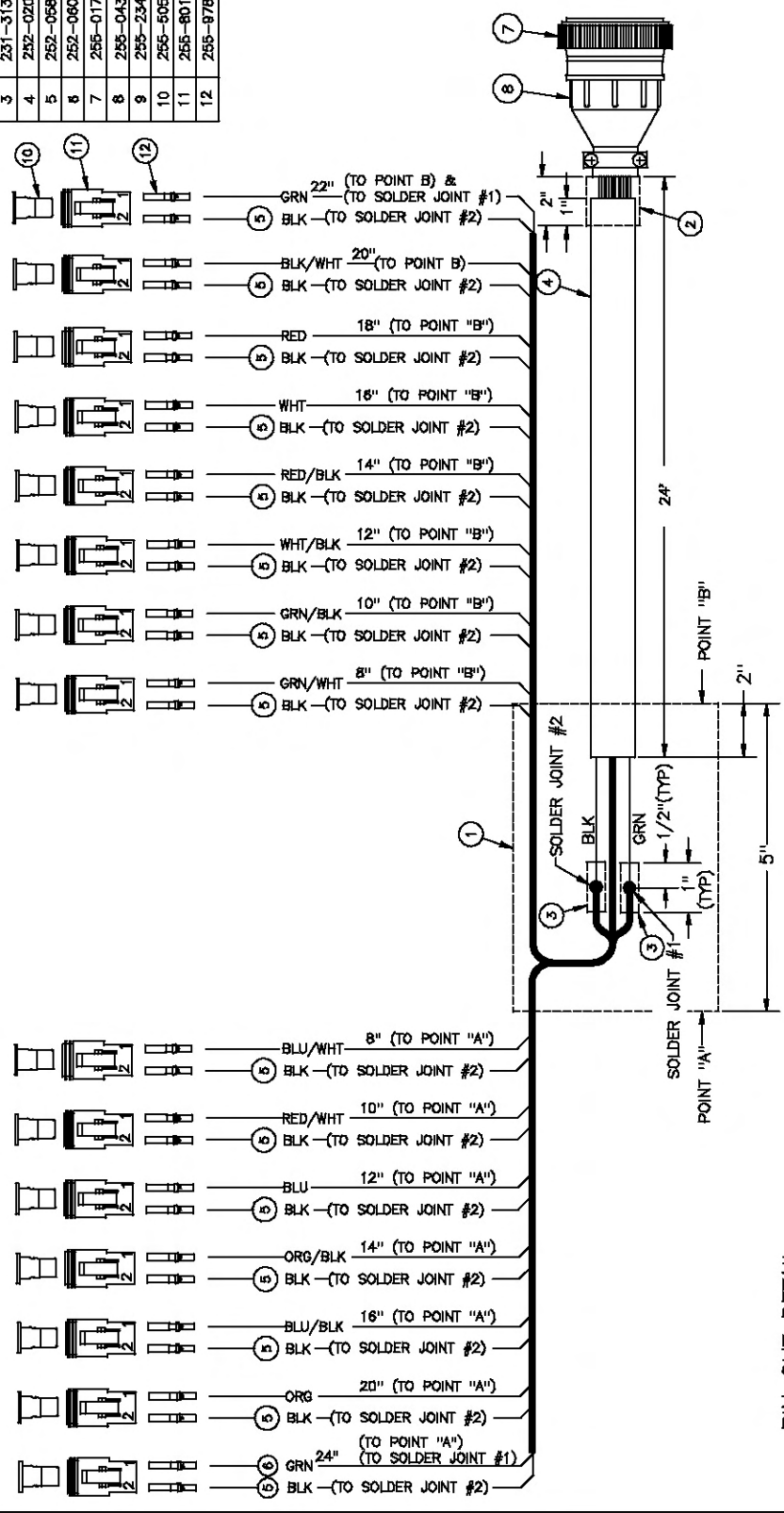
NOTES:
 1. HARNESS LENGTH IS 25'
 2. REMOVE 26" OF OUTER CABLE
 3. JACKET FOR SPLICING.
 3. NOT SHOWN: (8)

REV	DESCRIPTION	DATE	APPROVED	DESIGNER	DATE	APPROVED	DATE	APPROVED
1	RELEASED DRAWING	08-007	DP/PS/D	ELG	08/04/09	DP/PS/D	ELG	08/04/09
2	REVISIONS							
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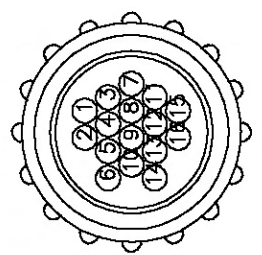
DATE: 08/04/09
 DRAWN BY: DP/PS/D
 CHECKED BY: ELG
 APPROVED BY: DP/PS/D
 DATE: 08/04/09
 TITLE: HARNESS ASSEMBLY FOR FASSE VALVES
 PART NO: 304-813
 REV: A
 SCALE: 1:1
 SHEET NO: 304-813
 SHEET

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



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 27'
2. REMOVE 28" OF OUTER CABLE JACKET FOR SPLICING.
3. NOT SHOWN (3)

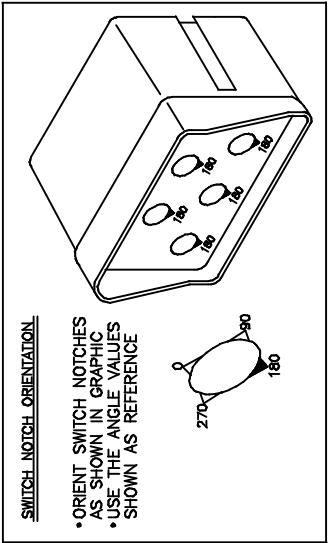
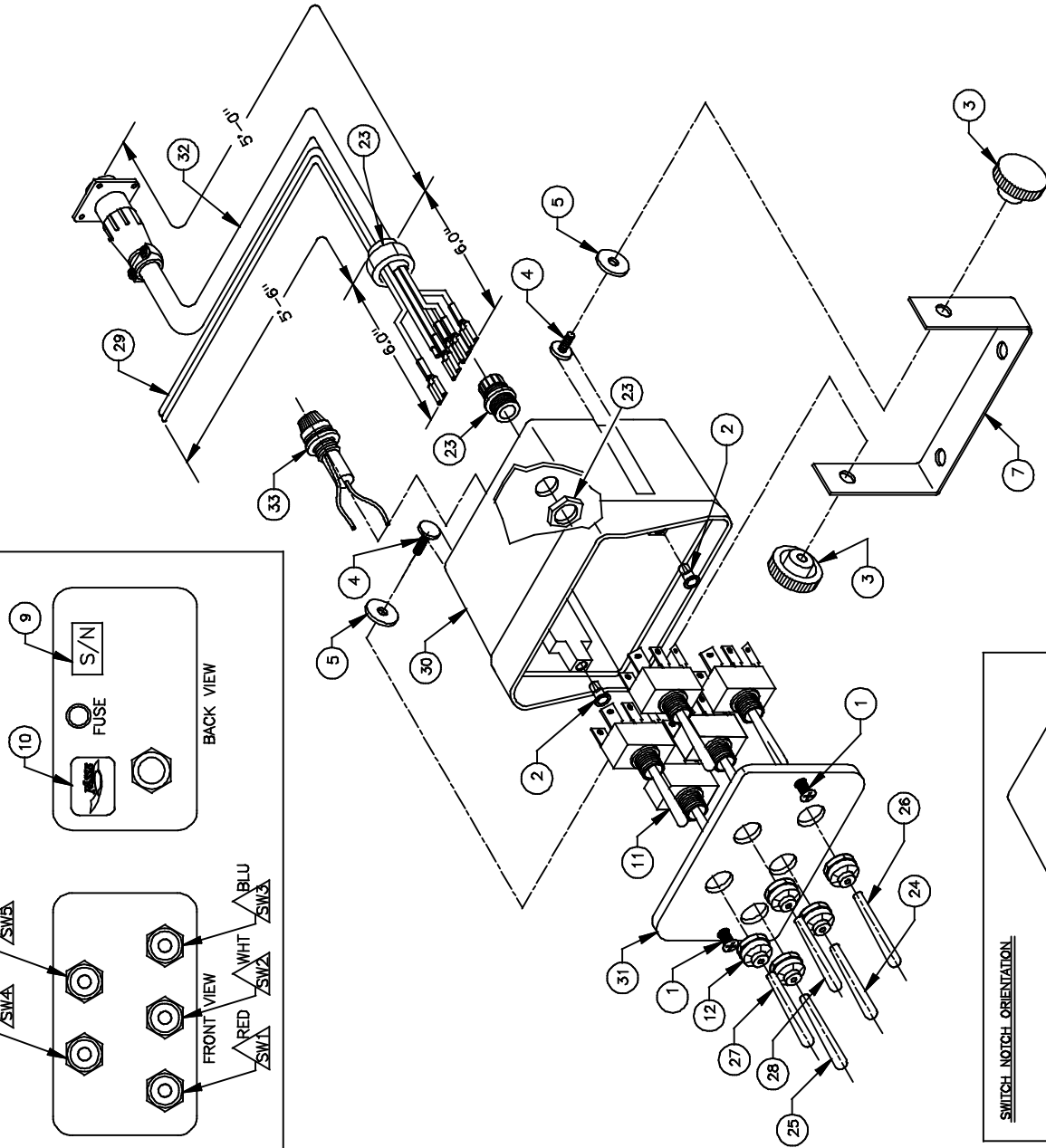
REV	RELEASED DRAWING	DESCRIPTION	REVISIONS	FORM #	DATE	APPROVED	DESIGNED BY	DATE	SIGNATURES	DATE
01	08-2008				07/08/08				INTEGRITY SYSTEMS DRAWN BY: [Signature] CHECKED BY: [Signature] DESIGNED BY: [Signature]	07/08/08
02					07/08/08				HRN ASSY 18CON 18GA AMP PLUG 16P(15) 16DTP 2P(2) 24'	07/08/08

	FASSE VALVES SEVEN POWER SYSTEMS, INC. 2500 S. 24th St. PHOENIX, AZ 85034-2848
HRN ASSY 18CON 18GA AMP PLUG 16P(15) 16DTP 2P(2) 24'	HRN NO 312-740
SEE FORM NO 16	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	1	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	HARNESS 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	HARNESS 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 HARNESS
 2. PUT REMAINING CABLE TIES IN BAG
 3. NOT SHOWN: (6) (8)
 4. CUT OFF RED/WHT WIRE AT HARNESS.



REV	DESCRIPTION	FORM #	DATE	APPROVED	DESIGNED BY	DATE	APPROVED	SIGNATURES	DATE
A	REVISED DRAWING	08-0001	08/01/08	[Signature]	[Signature]	08/01/08	[Signature]	DESIGNER	08/29/08
B	REVISED DRAWING	08-0002	08/01/08	[Signature]	[Signature]	08/01/08	[Signature]	ENGINEER	08/29/08
C	REVISED DRAWING	08-0007	08/05/08	[Signature]	[Signature]	08/05/08	[Signature]	INSPECTOR	08/29/08

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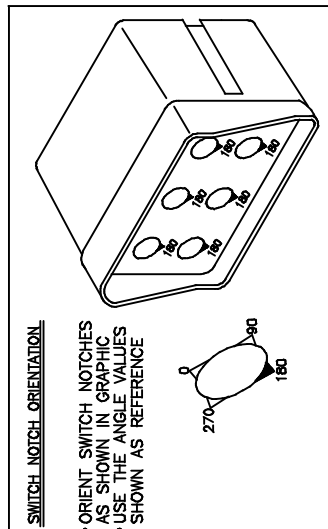
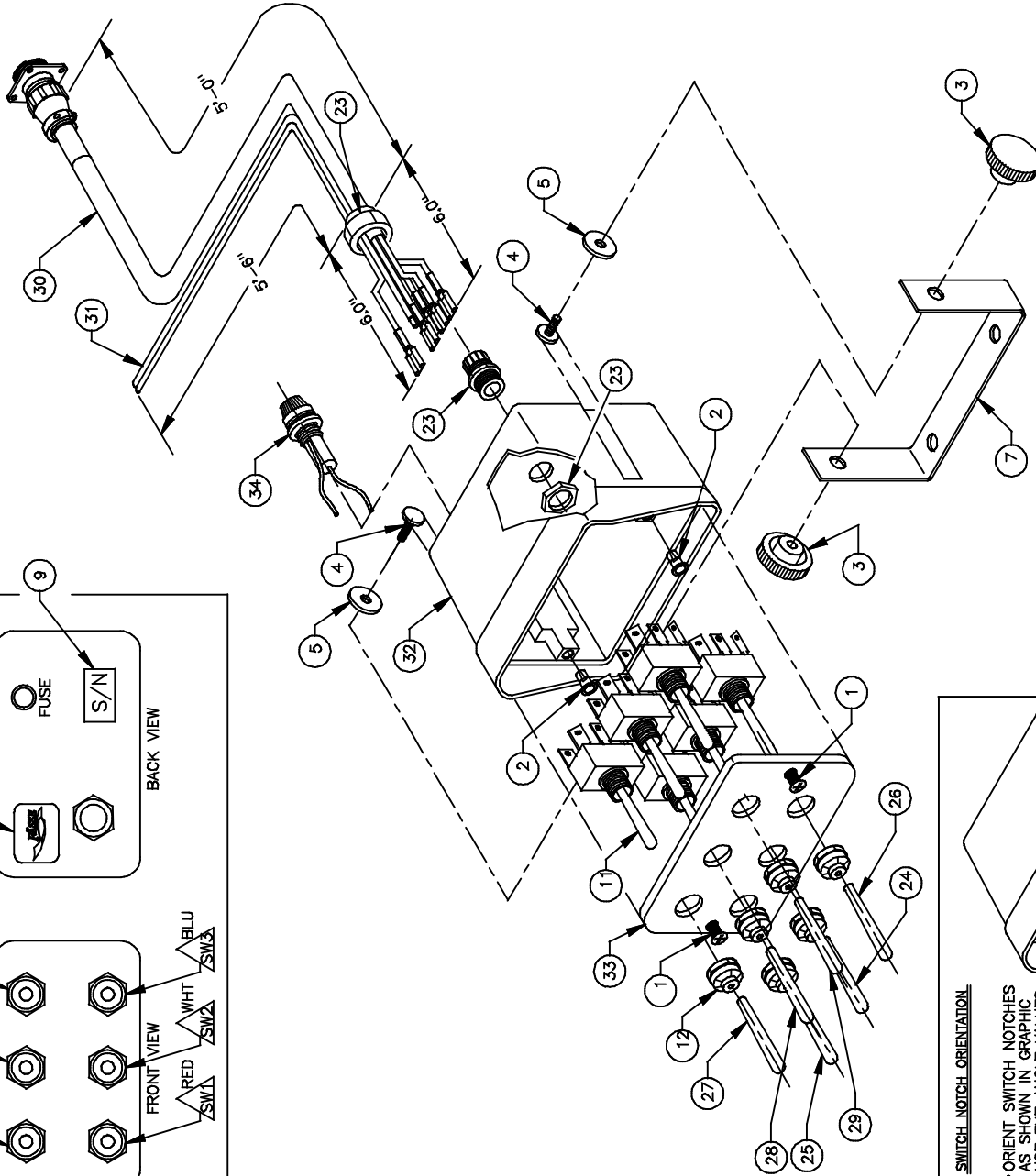
SCALE	DWG NO	SHEET	OF
	320-180	1	2

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 MNTBRX 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	APPROVED	SIGNATURES	DATE
A	RELEASED DRAWING	01-01-04	01/01/04	DRP	DRP	10/04/04
B	REVISED DRAWING	01-01-04	01/01/04	DRP	DRP	10/04/04
C	REVISED DRAWING	01-01-04	01/01/04	DRP	DRP	10/04/04

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MNTBR TOG6-5'-SQFLRCP16P(15)
 FROM NO 320-245
 SCALE SHEET 1 OF 2



**13477 Benson Avenue
Chino, CA 91710**

Phone: (909) 548-4848

Fax: (909) 548-4747

sales@gearmore.com

www.gearmore.com