



# SPARTAN TOOL

FOR TOUGH CUSTOMERS. SINCE 1943.



Standard Warrior

# SERVICE MANUAL

# Standard, Hi-Flow &

# Ultimate Warrior

## Trailer Jetter

**Spartan Tool LLC** | 1618 Terminal Road | Niles, MI 49120  
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# How To Use Parts & Accessories Manual

Spartan Tool will supply all parts or accessories you require as quickly as possible. In order to do so, we must have information from you, including machine serial number and part numbers.

Please record the serial number of your machine in the space provided below:

Spartan Warrior

Serial No. \_\_\_\_\_

Using the part numbers, please contact your Spartan Territory Manager, the home office at (800) 435-3866, or online at [www.spartantool.com](http://www.spartantool.com).

Thank You.



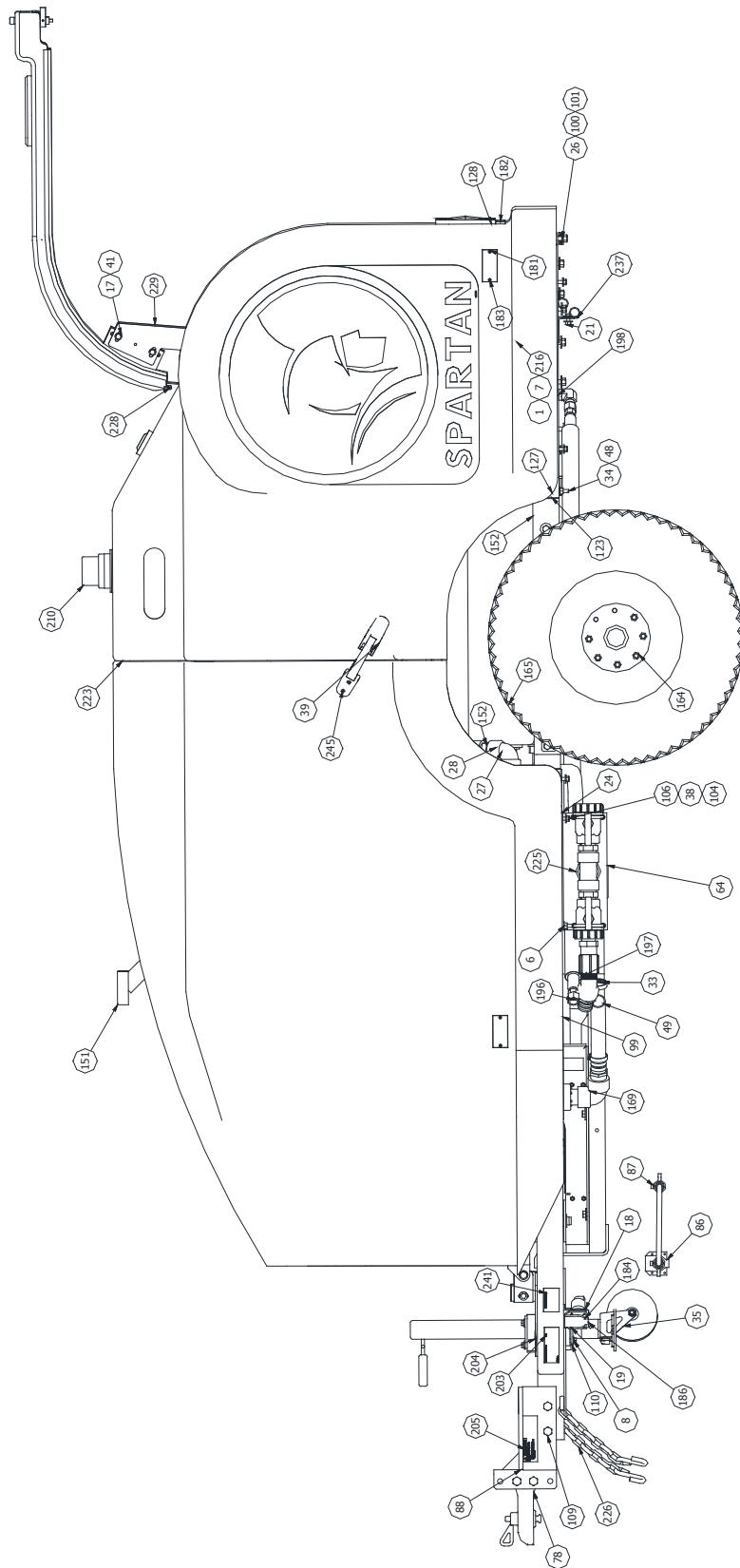
## Special Note

We at Spartan wish to help you maintain the safety, performance and appearance of your new Spartan Warrior. This manual is provided to aid in ordering replacement parts. It is not intended to be used as an operating guide. See your operating manual for important safety precautions, operating instructions and troubleshooting aids.

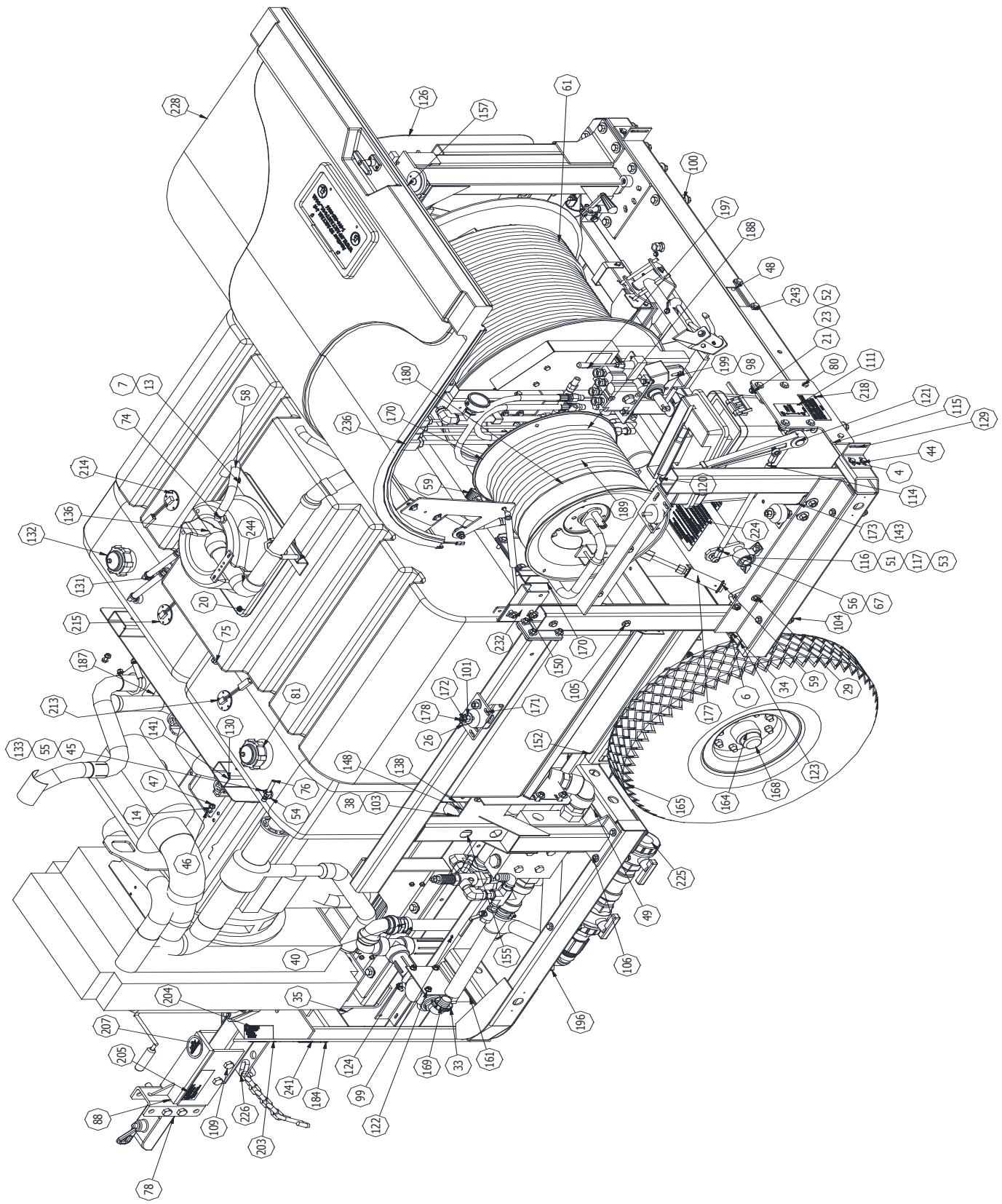
Though much of your Warrior Jet is user serviceable, trained professional mechanics may be needed with pump, plumbing, engine, lights, hitch and axle experience.

- Contact Spartan Tool for all engine repair or troubleshooting.
- Contact Spartan Tool or consult the Pump Repair Manual for all pump repair or troubleshooting.
- All plumbing repairs should use Spartan parts. The high pressure plumbing has been designed for pressures greater than 4000 PSI. Substituting parts is dangerous and voids Spartan warranties. Use standard pipe sealing compound or "Teflon"® tape to seal all joints except swivel joints and hose nozzles (o-rings, seals, and tapered seat designs do not require sealing materials).

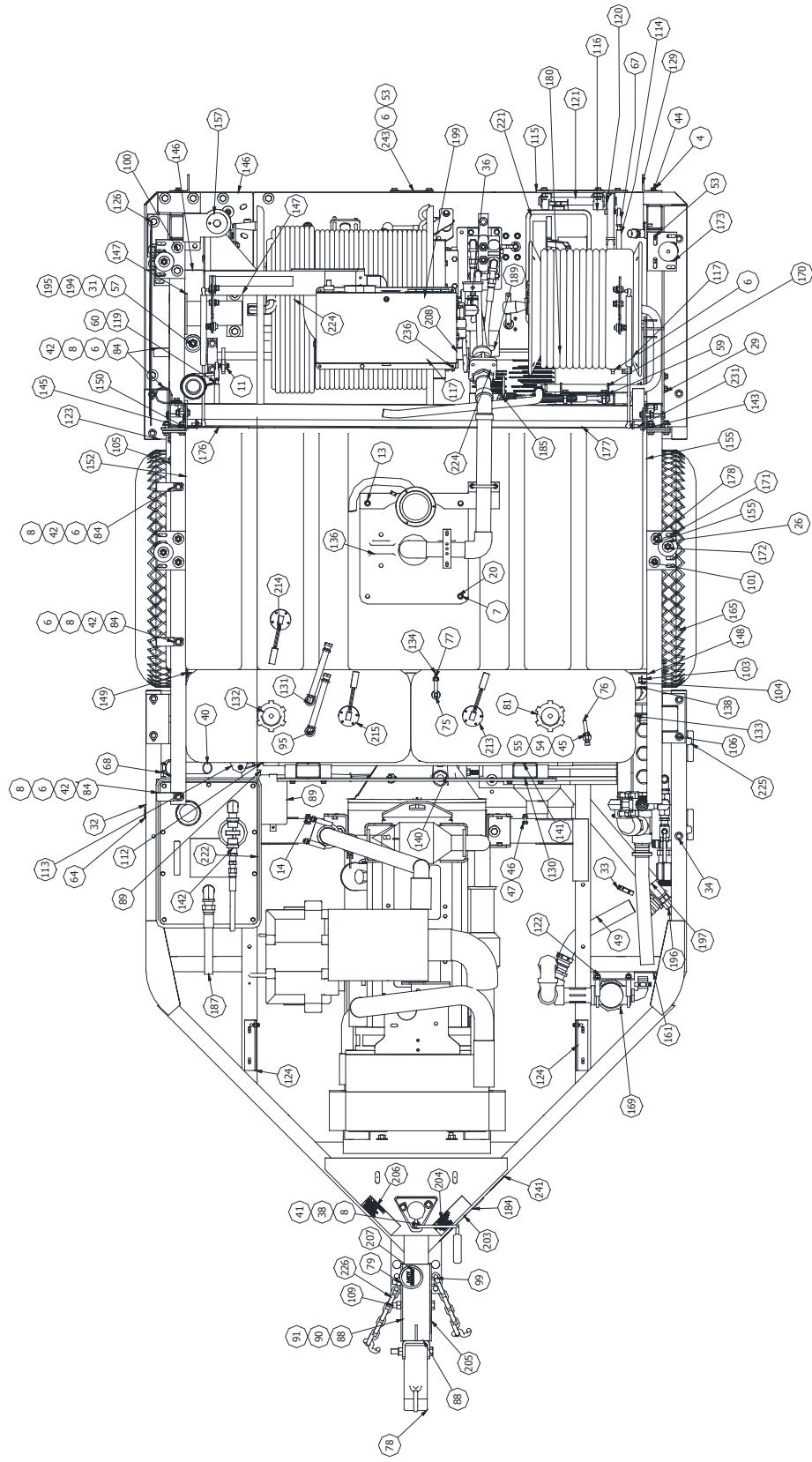
# Warrior Final Assembly - 799200T4



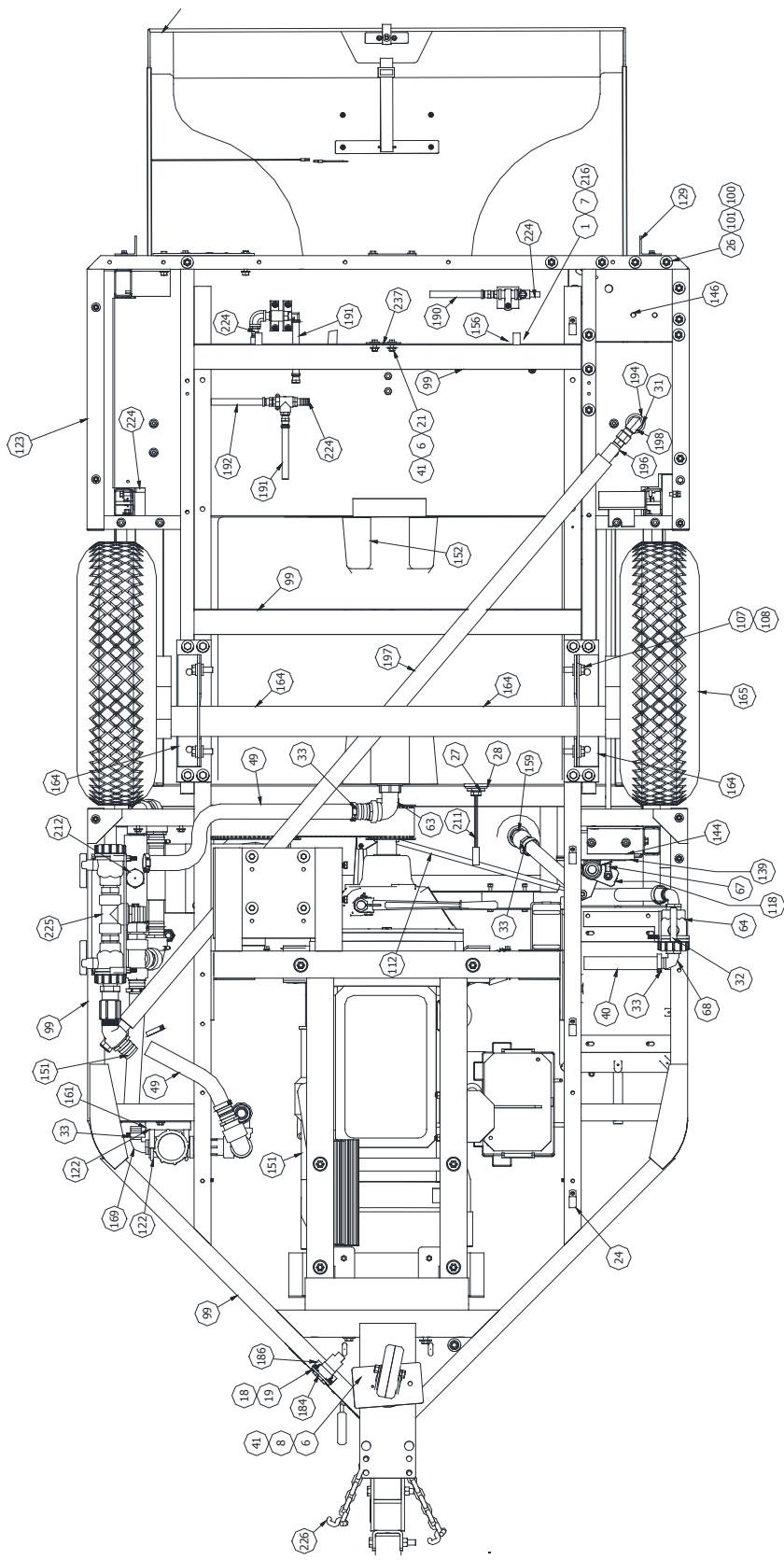
# *Warrior Final Assembly - 799200T4*



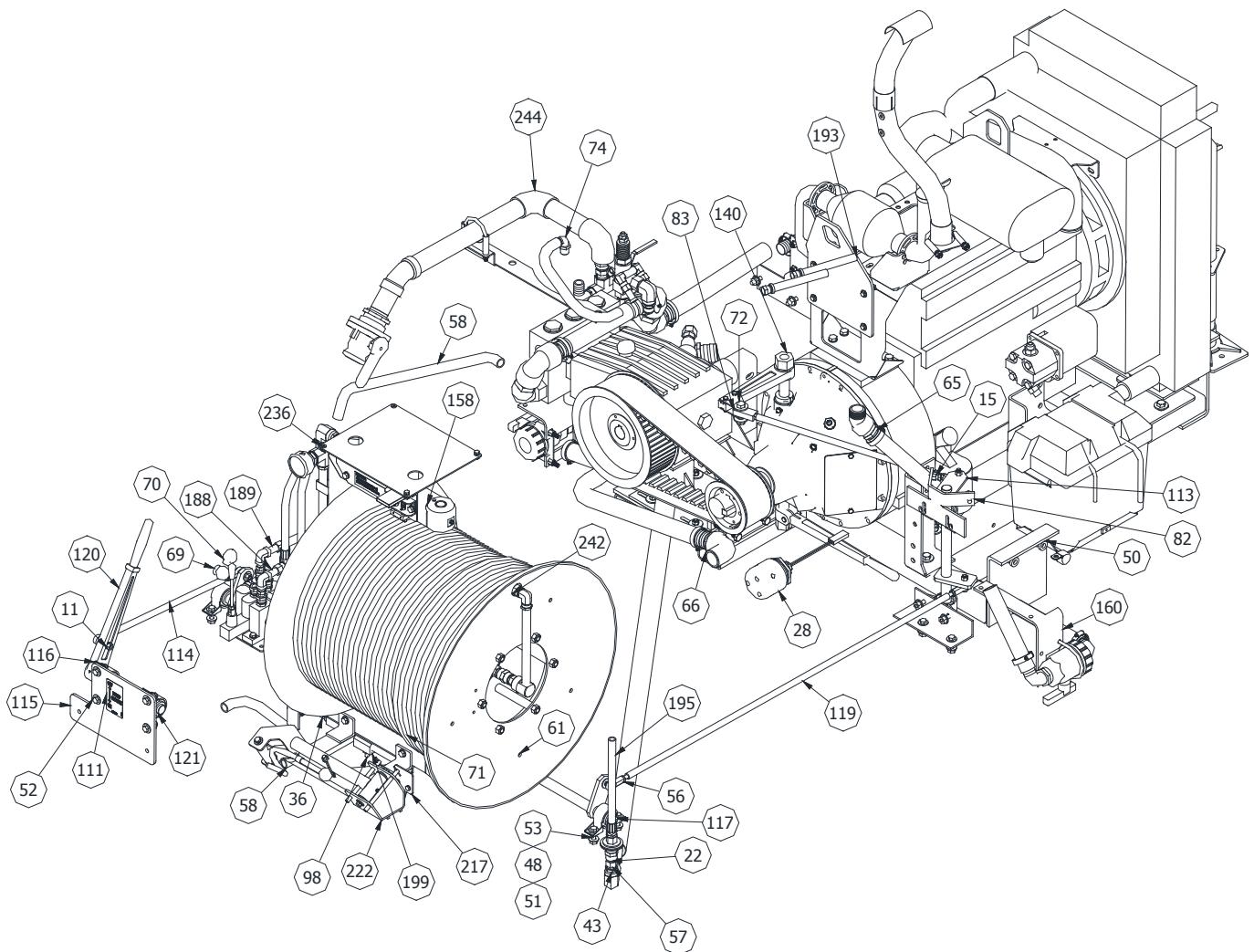
# Warrior Final Assembly - 799200T4



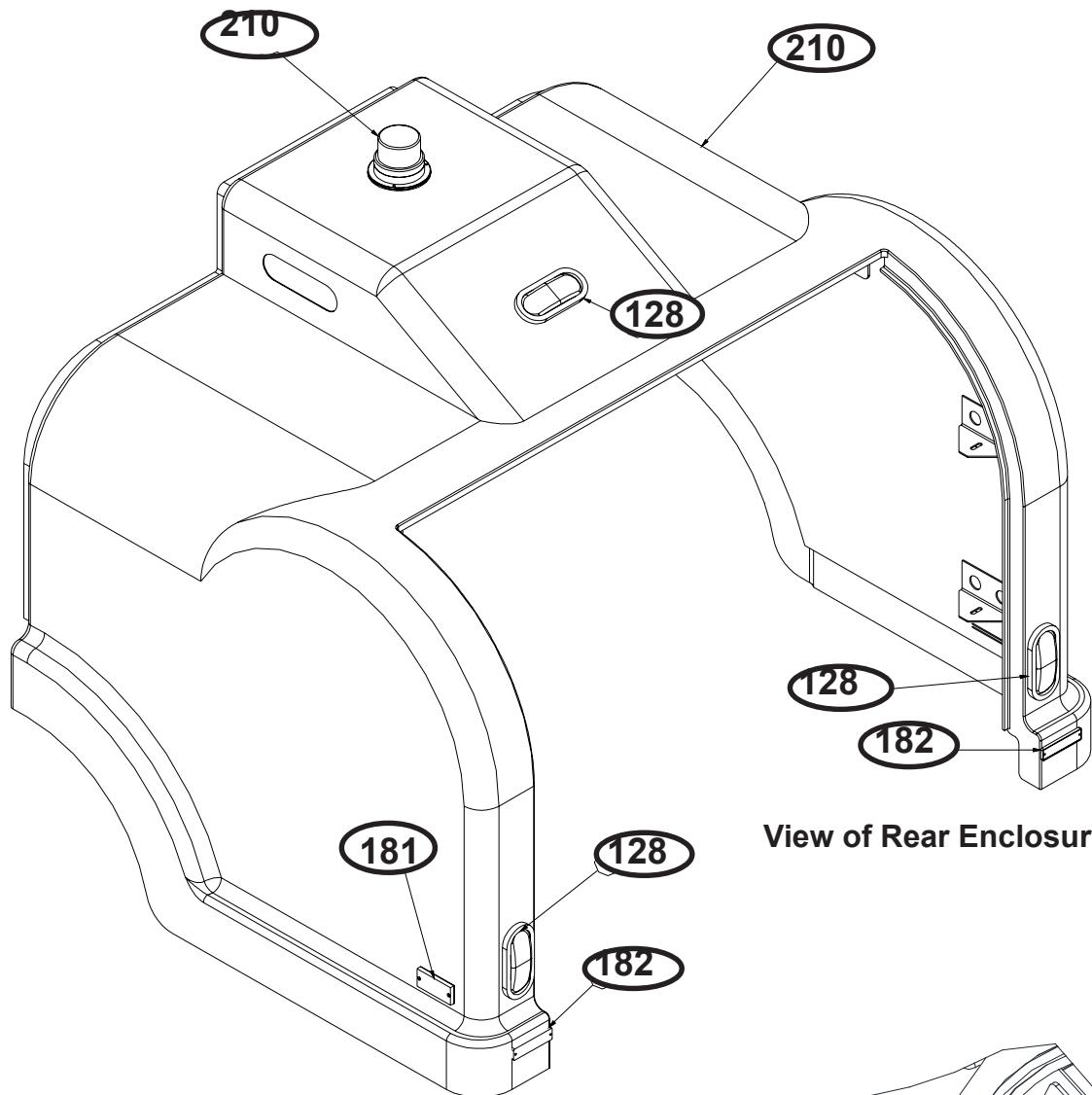
# Warrior Final Assembly - 799200T4



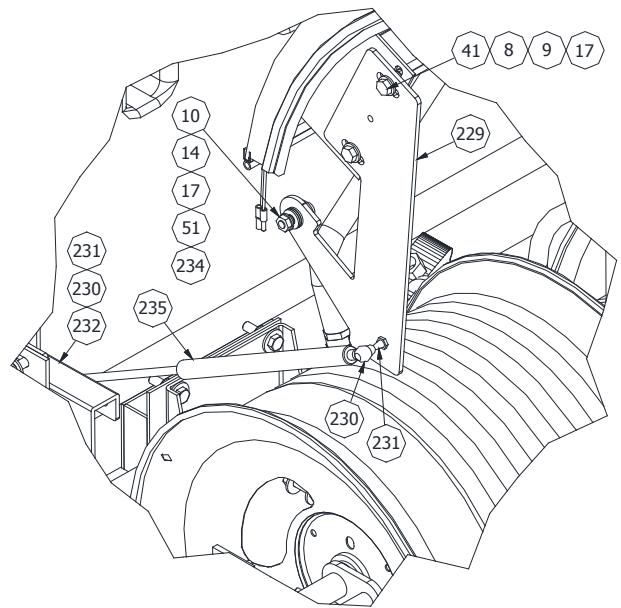
# Warrior Final Assembly - 799200T4



# Warrior Final Assembly - 799200T4



View of Rear Enclosure



# Warrior Final Assembly - 799200T4

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	00113500	Screw, Hex Head Cap 1/4-20 x 1/2	4	35	75845700	Caster, Jack	1
2	00113600	Screw, Hex Hd Cap 1/4-20 x 5/8	2	36	75851406	Striker Plate, Transit Lock	1
3	00113901	Screw, Hex Hd Cap 1/4-20 x 1 ZN	2	37	75852401	Washer, .281 ID x 1.5 OD Black	8
4	00115100	Screw, Hex Hd Cap 5/16-18 x 1"	4	38	75852700	Washer, 3/8" ID USS GRD 9	89
5	00115300	Screw, Hex Hd Cap 5/16-18 x 1-1/4"	1	39	75860900	Soldier Enclosure Aerolatch	2
6	00162700	Washer, Flat 3/8	70	40	77710200	Hose 1-1/4 x 4 Spiral SM	4
7	00165400	Washer, Lock Split 1/4	12	41	77738100	Screw, Cap Hex Hd 3/8-16 x 1	17
8	00165800	Washer, Lock Split 3/8	24	42	77738300	Screw, Cap Hex Hd 3/8-16 x 3/4	6
9	01733900	Nut, Hex 3/8-16	4	43	77742600	Bushing, Reducer 3/4 x 1/2	1
10	02820700	Nut, Heavy Hex Jam 5/16-18	2	44	77743400	Washer, Lock Split 5/16	6
11	02821100	Nut, Hex 3/8-24	5	45	77746000	Clamp, Hose 7/32 - 5/8 S.S.	2
12	02821200	Nut, Nylcok Jam 1/4-20	12	46	77747700	Screw, Cap Hex Hd 5/16-18X1	20
13	02825100	Washer, Flat 1/4 USS	22	47	77747800	Nut, Hex 5/16-18	12
14	02899200	Washer, Flat 5/16 USS	25	48	77748000	Nut, Stover Lock 3/8-16 UNC	26
15	02934100	Nut, Hex 3/8-16	2	49	77748200	Hose 1-1/2 ID x 4 Spiral	2
16	03004100	Nut, Std Hex 5/16-18	3	50	77754900	Washer, Robo 1/2"	4
17	03366300	Washer, Flat 3/8 SAE	18	51	77755000	Washer, Robo 3/8"	6
18	03850100	Nut, Hex Kep 10-32	4	52	77759900	Screw, Cap Hx 3/8-16 x 1-1/4	6
19	04723100	Screw, Machine 10-32 x 5/8"	4	53	77760000	Screw Hex Hd Cap 3/8-16 x 1-1/2	18
20	521012-04	Screw, Hex Hd 1/4-20 x 1-1/2	8	54	77765803	Grommet, Gas Tank	2
21	522132-00	Nut, Nylon Locking 3/8-16	6	55	77765804	Valve, Gas Tank	1
22	542106-04	Coupling, 1/2 Steel	1	56	77766000	Nut, Jam 3/8-24	6
23	71705500	Screw, Hx Hd 1/4-20 x 1-1/4	4	57	77770800	Nipple, Hex 1/2 NPT	1
24	72715100	Clamp, Hose 1 1/8 I.D. Rubber Coated	8	58	77785900	Hose, Push Lok 3/4	12 ft
25	73821200	Nut, Nylon Locking 1/4-20	5	59	77799800	Spraygun Assembly	1
26	73826900	Washer, Flat 1/2 USS High Strength	118	60	77800600	Assy, Hose Guard 2"	1
27	73827600	Bushing, Reducer (Modified)	1	61	79803400	HP Hose Assy 1/2" x 500ft 4000 PSI	1
28	73827800	Bulkhead Fitting w/PVC Cap	1	62	79807300	Jack Stand-Foot	1
29	73829700	U-Bolt, Square 2" x 2-5/8" (3/8-16)	1	63	79811400	Elbow, 90 Degree Street 1-1/2 Poly	1
30	73830200	Bearing, Flanged Bronze 7/8 Shaft	2	64	79811500	Valve, Ball 1-1/4FNPT x 1-1/4F	1
31	73830400	Washer, Flat 7/8 SAE	2	65	79812000	Hose Barb, 1-1/4 Polypropylene	1
32	73831000	U-Bolt, 3" Tube OD w/Nuts	1	66	79812100	Barb, Hose 1-1/2 MPT x 1-1/2 PO	1
33	73831200	Clamp, Hose 1-1/16" - 2" #24	9	67	79815700	Rod End, Ball Joint 3/8-24	5
34	73832400	Screw, Hex Hd 3/8-16 x 4-3/4	5	68	79818600	Hose Barb, 1-1/4 Polypropylene	2

# Warrior Final Assembly - 799200T4

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
69	79824600	Nozzle, 798 Closed	1	103	79920150	Hex Hd Bolt 3/8-16 x 1-1/2 GR8	31
70	79824700	Nozzle, 798 Open	1	104	79920151	Nex Nut, 3/8-16 Grade 8	43
71	79824900	Hose, Leader 1/2" x 15' Red	1	105	79920152	Hex Hd Bolt 3/8-16 x 3 GR8	6
72	79829900	Screw, Hx Hd Cap 1/2-13 x 2	1	106	79920153	Hex Hd Bolt 3/8-16 x 4-1/2 GR8	8
73	79831400	Screw, Socket Hd 1/4-20 x 2	1	107	79920160	Screw, Hex GR8 5/8-18 x 2	4
74	79843900	3/4" Hose Barb x 1/2" MNPT Elbow	1	108	79920161	Washer, Flat 5/8 GR8	8
75	79849200	Elbow, 90 Deg Bushed	1	109	79920170	Screw, Hex GR8 5/8-18 x 5	4
76	79849800	Hose Fuel 5/16 ID	2	110	79920191	Plate, Jackstand Brace	1
77	79849900	Hose Fuel 3/16 ID	1	111	79920236	Decal, Clutch On-Off	1
78	79853500	Adjustable, Coupler-2" Ball	1	112	79920238	Cross Tie, Clutch Link	1
79	79854500	Nut, Hex Lock 5/8-11	4	113	79920239	Weldment, Top Clutch Pivot	1
80	79858200	Screw, Hex Hd 3/8-16 x 2-1/2	2	114	79920271	Tie Rod, Short	1
81	79864300	Cap, Fuel Tank	1	115	79920273	Plate, Bearing Mount	1
82	79864400	Stop Link Arm 798	1	116	79920274	Pillow Block 1" Steel	6
83	79865900	Rod End, Front Clutch Lever	1	117	79920282	Weldment, Rear Clutch Shaft	1
84	79868500	Clamp, Hose 2" Vinyl Coated	6	118	79920283	Weldment, Front Clutch Shaft	1
85	79873500	Assy, Hose Anti-Turn Around	1	119	79920288	Weldment, Diesel Clutch Linkage	1
86	79900300	Connector, 7 Pole - Trailer End	1	120	79920289	Handle, Clutch Lever	1
87	79900600	Assembly, 7 Pole Quick Release 6'	1	121	79920298	Shaft, Short Clutch	1
88	79901800	Weldment, Hitch	1	122	79920330	Clamp, Exhaust 2-1/2	2
89	79904200	Breakaway Kit, with Charger	1	123	79920500	Weldment, Rear Transformer	1
90	79904210	Switch, Breakaway Replacement	1	124	79920625	Bracket, Lower Gas Strut	2
91	79904220	Pin & Cable Replacement	1	125	79920628	Ball Stud, Gas Strut	2
92	79904462	ST ELB 45D 1/2 NPT Brass	1	126	79920630	Spartan Logo	2
93	79904464	ST EI 90D 1/2 NPT Brass	1	127	79920700	Assy, Rear Enclosure	1
94	79904477	Adapter, 1/2 NPT - Barb Brass	1	128	79920720	Breaklight, Oval Lamp	3
95	79904478	EL 90D 1/2 NPT - Barb Brass	2	129	79920770	Angle, Rear Encls Frame Mounts	2
96	79904491	Plate, Hose Swivel Mount	1	130	79921330	Heat Shield	1
97	79904492	Adapter, Garden Hose 3/4M - 1/2FM	1	131	79921400	Tank, Anti-Freeze (2008)	1
98	79909900	Screw, Socket HD 3/8-16 x 1-3/4	2	132	79921410	Cap, Anti-Freeze Tank	1
99	79920100	Weldment, Frame 1 o 2 Axle	1	133	79921500	Tank, Diesel Fuel 2008	1
100	79920140	Hex Hd Bolt 1/2-13 x 4-1/2 GR8	26	134	79921510	Reducing Coupling 3/8 x 1/4	1
101	79920141	Nut, Hx GR8 1/2-13 STOVER	47	135	79921530	Grommet, Fuel Tank	1
102	79920145	Hex Hd Bolt 1/2-13 x 1-1/2 GR8	6	136	79921700	Baffle - Insert	1

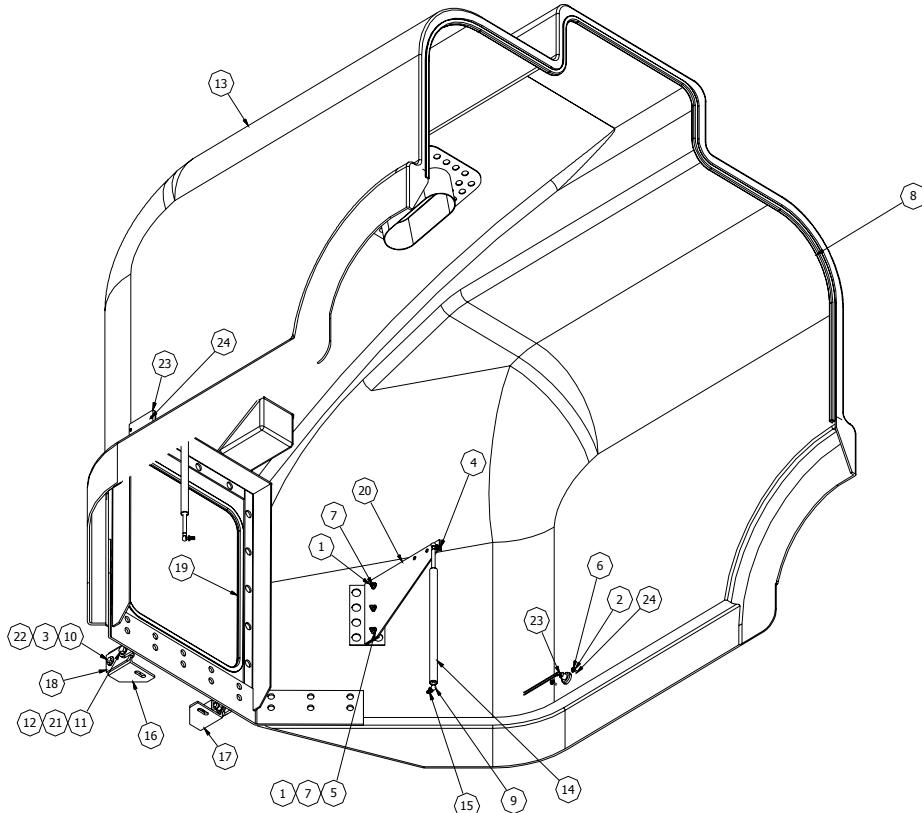
# Warrior Final Assembly - 799200T4

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
137	79921710	Clamp, Tank Fill Pipe	1	171	79942300	Plate, Fiberglass Frame Mount	5
138	79921800	Weldment, Front Cross Brace	1	172	79942400	Bumper, Vibration Dampener	6
139	79921827	Angle, Lower Bearing	1	173	79942540	Formed Angle Lower St Side	1
140	79921829	Arm Assy, Clutch	1	174	79942600	Washer, Flat SAE 1/2" -.074 Thck	1
141	79922000	Weldment, Heat Shield	2	175	79942700	Nut, Hex Jam 1/2-20	1
142	79922200	Assy-Hyd Reservoir	1	176	79942970	Curbside Rear Cover T4	1
143	79922400	Weldment, Rear Tank Hold Down	1	177	79942980	Streetside Rear Cover T4	1
144	79922500	Weldment, Curb Side Front	1	178	79943000	Weldment, Bolt Pair	2
145	79922600	Weldment, Rear Curb Side Hold Down	1	179	79943100	Washer, 17/32 ID x 2 OD	1
146	79922710	Plate, HP Reel Support Base	1	180	79944100	Hose, Garden 5/8 x 100'	1
147	79922800	Weldment, HP Reel Cross Support	1	181	79945810	Light, Side Marker Red	2
148	79923820	Angle, Street Side T4	1	182	79945830	Reflector, Red	2
149	79923830	Weldment, Upper Bearing Bracket T4	1	183	79945860	Screw, 8-32x1-1/4 FLT HD ZNC	4
150	79924900	Weldment, Rear Cross Member T4	1	184	79946250	Wire Harness Warrior Lights	1
151	79925000	Assy, Power Pack Warrior Tier 4	1	185	79947400	Spring Hanger - Black	1
152	79927200	Tank, 300 Gal Water Warrior	1	186	79947640	Bracket, 7pin recepticle	1
153	79928450	Weldment, Tank Guard Street	1	187	79948060	Hose Assy, Hyd Suction Warrior	1
154	79928550	Weldment, Tank Guard Curb	1	188	79948070	Hose Assy, Hyd Valve Out (War)	2
155	79928700	Weldment, Street Side Front tier 4	1	189	79948090	Hose Assy, Hyd Pressure (War)	1
156	79931100	Weldment, 90 Degree Pivot Frame	1	190	79948700	Recirc Hose Assy Fill Reel	1
157	79931300	Weldment, Pivot Pin 90 Degree	1	191	79948800	Recirc Hose Assy Fill Shutoff	2
158	79931330	Weldment, Pivot Pin 180 Degrees	2	192	79949000	Recirc Hose Assy Water Tank	1
159	79931380	1-1/4" Poly Street Elbow 45 Deg	1	193	79949100	Recirc Hose Assy Antifreeze	2
160	79931400	Bracket, Anti-Freeze Valve	1	194	79949300	Flange Gasket 3/4" Pipe	2
161	79931700	Bracket Water Filter	1	195	79950000	Hose, HP Reel Inlet Hose (VIS)	1
162	79932035	Chain, HP Reel w/Link	1	196	79950200	Hose, Water Supply Pump-Reel	1
163	79932038	Sprocket, Hand Crank	1	197	79950410	Clear View PVC Hose	1
164	79936000	Axle, Torqflex 12 w/Elect Brake	1	198	79950500	Elbow, 12 Male 37Deg 3/4 NPT	1
165	79936100	Wheel & Tire, ST235-80R16E	2	199	79950700	Block HP Resting w/Step	1
166	79936405	Weldment, Str-Side Bolt-On Axle Mount	1	200	79950800	Block, HP Reel Stopper	1
167	79936505	Weldment, Curb-Side Bolt-On Axle Mount	1	201	79950810	Bumper, 1-1/2" Dia x 3/4" HG	1
168	79936800	Bearing Buddy Grease Cap	1	202	79950820	Screw, 5/16-18X1 Sck Cap	1
169	79940100	Assy, Water Supply/Antifreeze	1	203	79952100	Decal, VIN Number	1
170	79940470	Assy, Fill Reel Warrior T4	1	204	79952400	Decal, Wheel & Lug Nuts	1

# Warrior Final Assembly - 799200T4

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
205	79952400	Decal, Safety Chains	1	226	79960000	Chain, Safety	2
206	79952600	Decal, Electric Brakes	1	227	79960500	Jack, Stand Large Jet	1
207	79952700	Decal, NATM Compliance	1	228	79961000	Door, Lift Up FBRGLS Assembly	1
208	79953600	Assy, Control Box War T4	1	229	79961030	Plate, Hinge Lift Up FBRGLS	2
209	79953800	Harness Bundle, 2016 Warrior T4	1	230	79961060	Ball Socket 10mm-M6 THRD	4
210	79953820	Strobe Beacon Assy - 2016	1	231	79961070	Ball Stud 10 mm w/ 5/16-18 THD	4
211	79953830	Switch Assy, Liquid Level 2016	1	232	79961100	Bracket, Strut Support - Door	3
212	79953840	Electric Pulsator Assy - 2016	1	233	79961130	Flange Bearing 3/8" Shaft BRN	2
213	79953850	Sender, Fuel Level Assy - 2016	1	234	79961140	Screw, SHLDR 3/8" Dia x 3/4 LG	2
214	79953860	Sender, Water Level Assy - 2016	1	235	79961190	Gas Strut #130 18.75" Extend	2
215	79953890	Sender, Antifreeze Level Assy - 2016	1	236	79961200	Washer, Neoprene .23ID x .50 OD	4
216	79953900	Clamp, T4 Wiring - Reel 2016	1	237	79962020	Brace, Oil Pan Preventer	1
217	79953910	Plate, Warrior Reel Cable Keep	1	238	79962300	Clamp, Insulated 7/8 ID	2
218	79954620	Decal, Clutch On-Off	1	239	79962310	Clamp, Insulated 1-1/4 ID	1
219	79956900	Angle Fill Reel Shutoff MNT	2	240	79962320	Hose, HP Reel Protective Cover	2
220	79957000	Latch Assembly 90 D Lower Index	1	241	79963100	Decal, Warrior Tire & Load Print	1
221	79957800	Assy, Medium Field Box	1	242	79966200	Flex Heat Shrink Tubing	1
222	79958300	HP Reel Assembly (Warrior)	1	243	79966330	Striker Plate, Rear Door Latch	1
223	79958400	Assy, Front Enclosure	1	244	79985850	Hydrant Fill Assy (2010)	1
224	79958600	Baseplate Assembly T4 (Warrior)	1	245	82020100	Screw, 1/4-20 x 1 Button Head	8
225	79959000	Drain Valve Assembly (Warrior)	1				

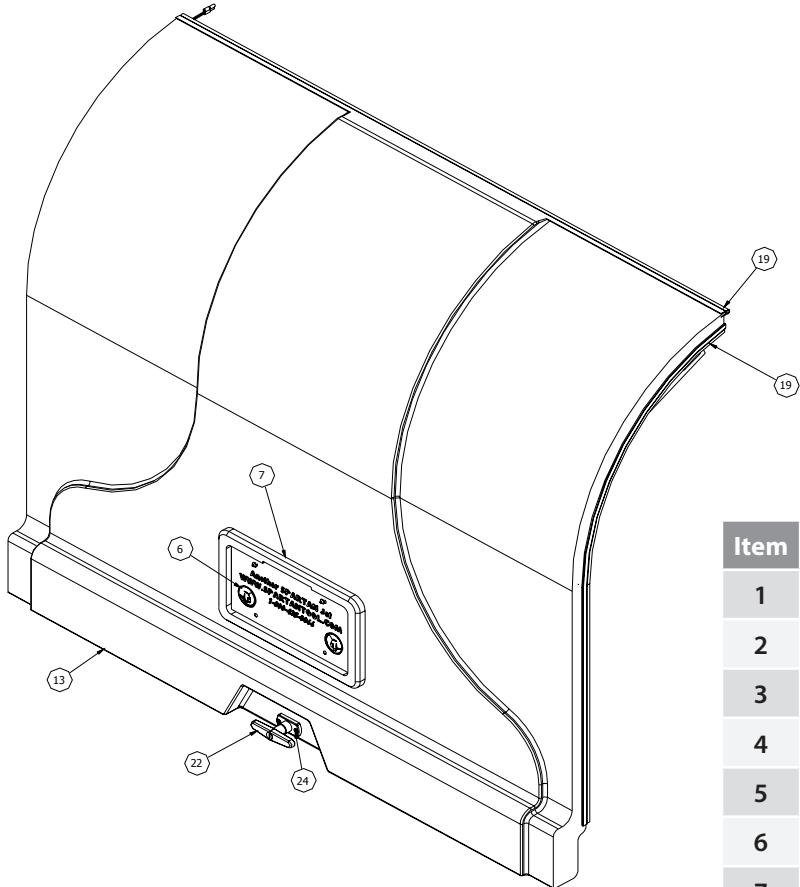
# Front Enclosure Assembly - 79958400



Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	00113901	Screw, Hx Hd Cap 1/4-20 x 1 ZN	6	13	79920600	Assy, Front Enclosure	1
2	00162400	Washer, Flat 3/16	4	14	79920623	Gas Spring, M8 Thrd 125#	2
3	00162700	Washer, Flat 3/8	4	15	79920628	Ball Stud, Gas Strut	4
4	02820700	Nut, Heavy Hex Jam 5/16-18	2	16	79920658	Hinge Base Front Street	1
5	02825100	Washer, Flat 1/4 USS	12	17	79920659	Hinge Base Front Curb	1
6	03312001	Nut, Hex Kep 8-32 Zinc Plated	4	18	79920669	Hinge Vertical Tab	2
7	73821200	Nut, Nylon Locking 1/4-20	6	19	79920750	Edge Trim, Black Rubber 1/4"	7FT
8	75841010	Vinyl Edge Trim Black	10FT	20	79941620	Plate, Upper Gas Strut Angled	2
9	75853710	10mm Gas Strut Socket	4	21	79942600	Washer, Flat SAE 1/2" - .074	6
10	77760000	Screw Hex Hd Cap 3/8-16 x 1-1/2	2	22	79943300	Nut, Hex Jam 3/8-16 ZNC Plt	2
11	79858000	Screw, Hex Hd Cap 1/2-13 x 1-1/2	2	23	79945850	Light, Side Marker Amber	2
12	79920141	Nut, 1/2-13 Hx GR8 Center Lock	2	24	79945860	Screw, 8-32x1-1/4 Flt Hd ZNC	4

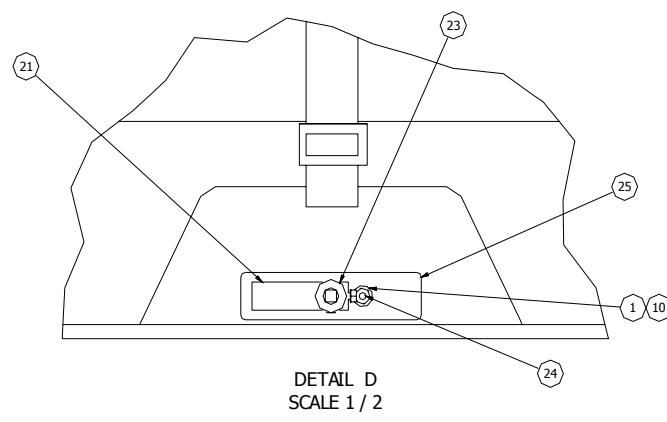
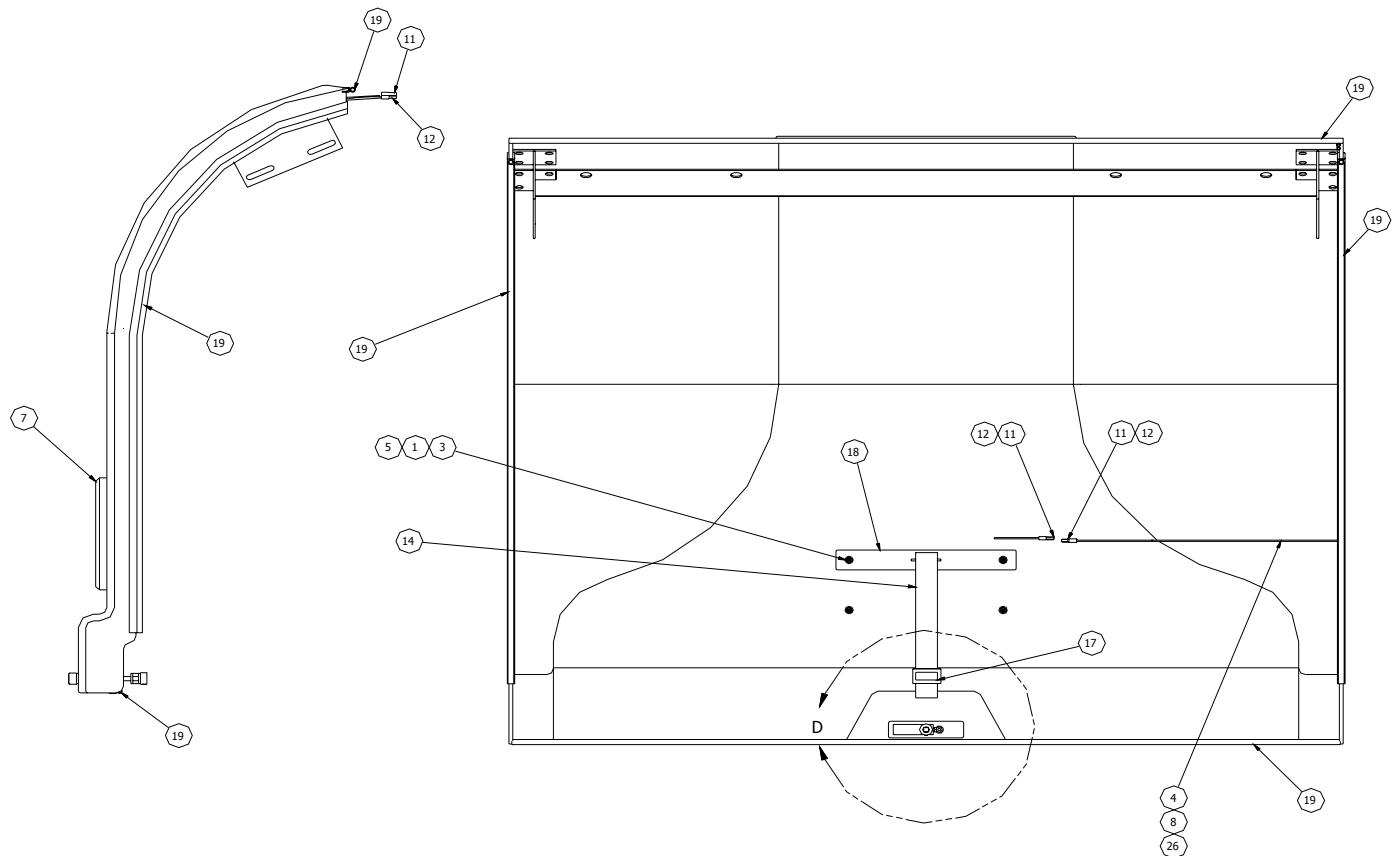


# Lift Up Door Assembly - 79961000



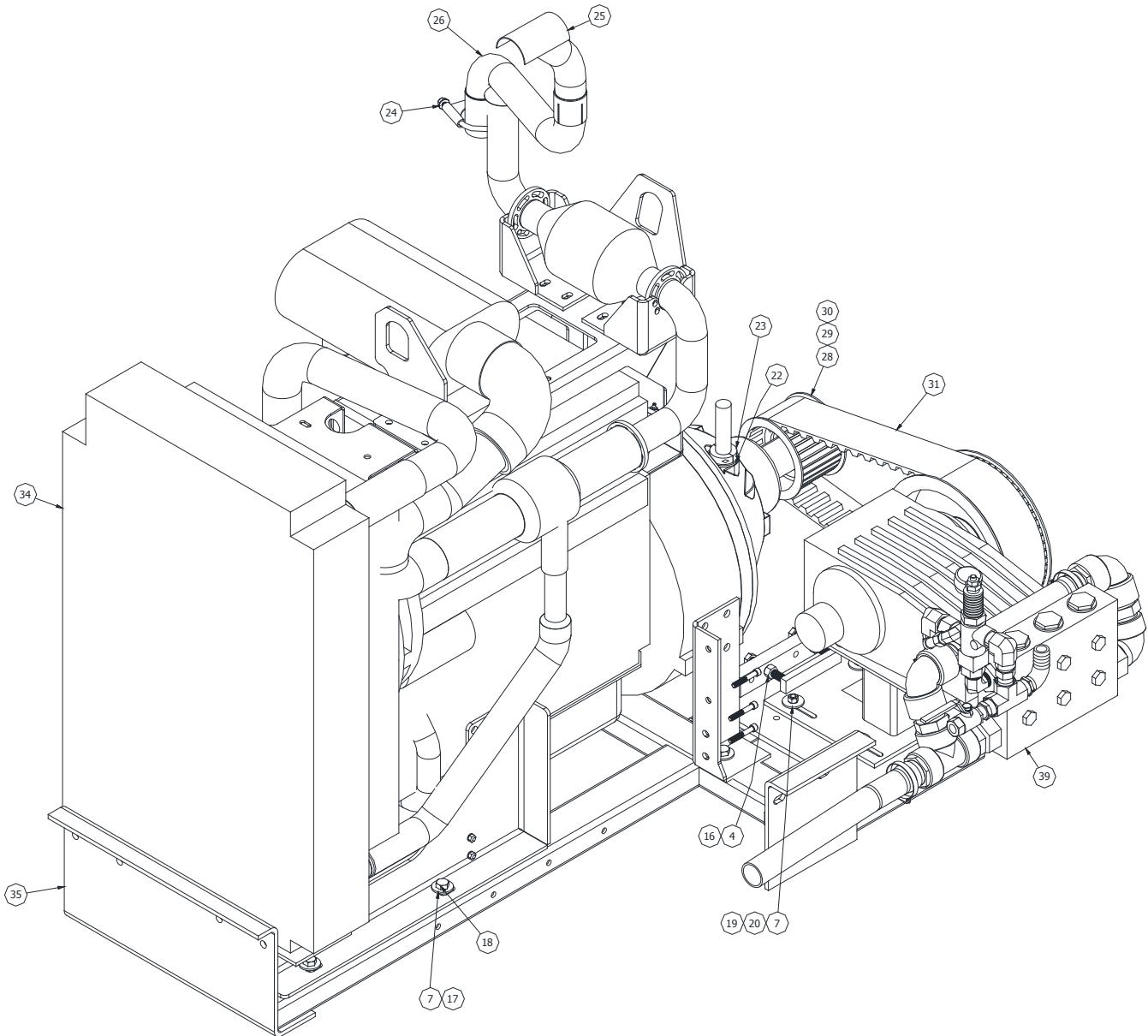
Item	Part No.	Description	Qty.
1	00162400	Washer, Flat 3/16	6
2	00165300	Split Lockwasher #10 Zinc Pltd	6
3	03850100	Nut, Hex Kep 10-32 Zinc Plated	4
4	44222400	Wire, Hook-Up 16 AWG - Black	10 ft
5	44294600	Screw, Machine 10-32X 1-1/4	4
6	44298500	Jetter License Plate Insert	1
7	77722100	Frame, Lighted License	1
8	77733100	Wire, 16 AWG - Red Stranded Cu	10 ft
10	77742400	Nylock Lock Nut 10-24	2
11	77751600	Disconnect, Female Bullet	3
12	77751700	Disconnect, Male Bullet	3
13	79961010	Fiberglass Door, Lift Up (BRKTS)	1
14	79961080	Nylon Webbing, 1-1/2" Wide	1
17	79961120	Webbing Feed Thru Plate, 1-1/2	1
18	79961300	Weldment, Pull Down Strap	1
19	79961150	Edge Trim, RBBR Seal-Top 3/8	17.6 ft
21	77735301	Adjustable Latch 2-1/2"	1
22	79961110	T-Handle, Key Latch-CCW CHRM	1
23	79966340	Shaft Collar, 7/16" Bore	1
24	79961180	Screw, FLT HD 10-24 x 1-1/4"	2
25	79970100	Weldment, Door Latch Support	1
26	73826800	Wire-Loom, Black Plastic 3/8"	8 ft

# Lift Up Door Assembly - 79961000

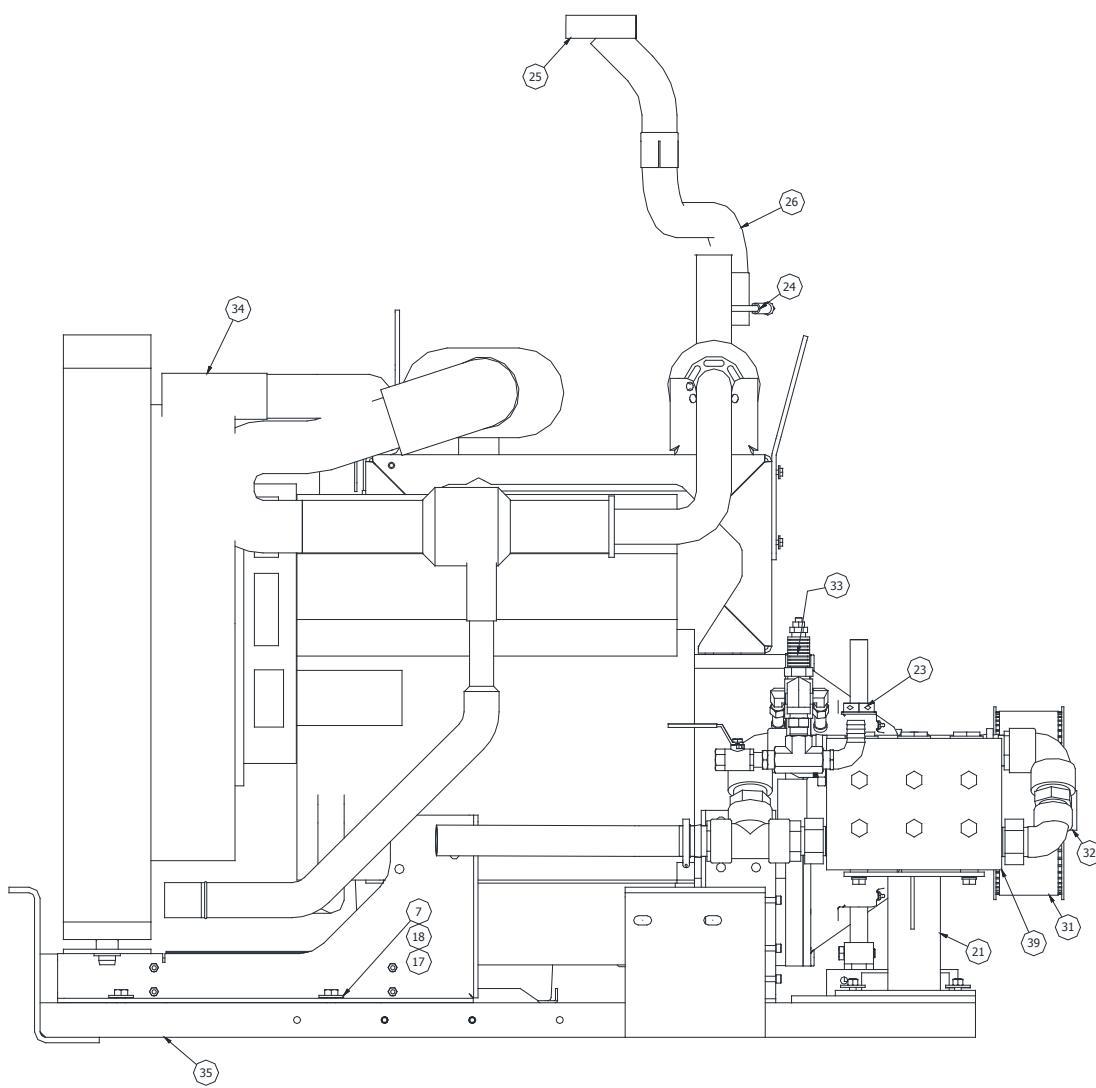




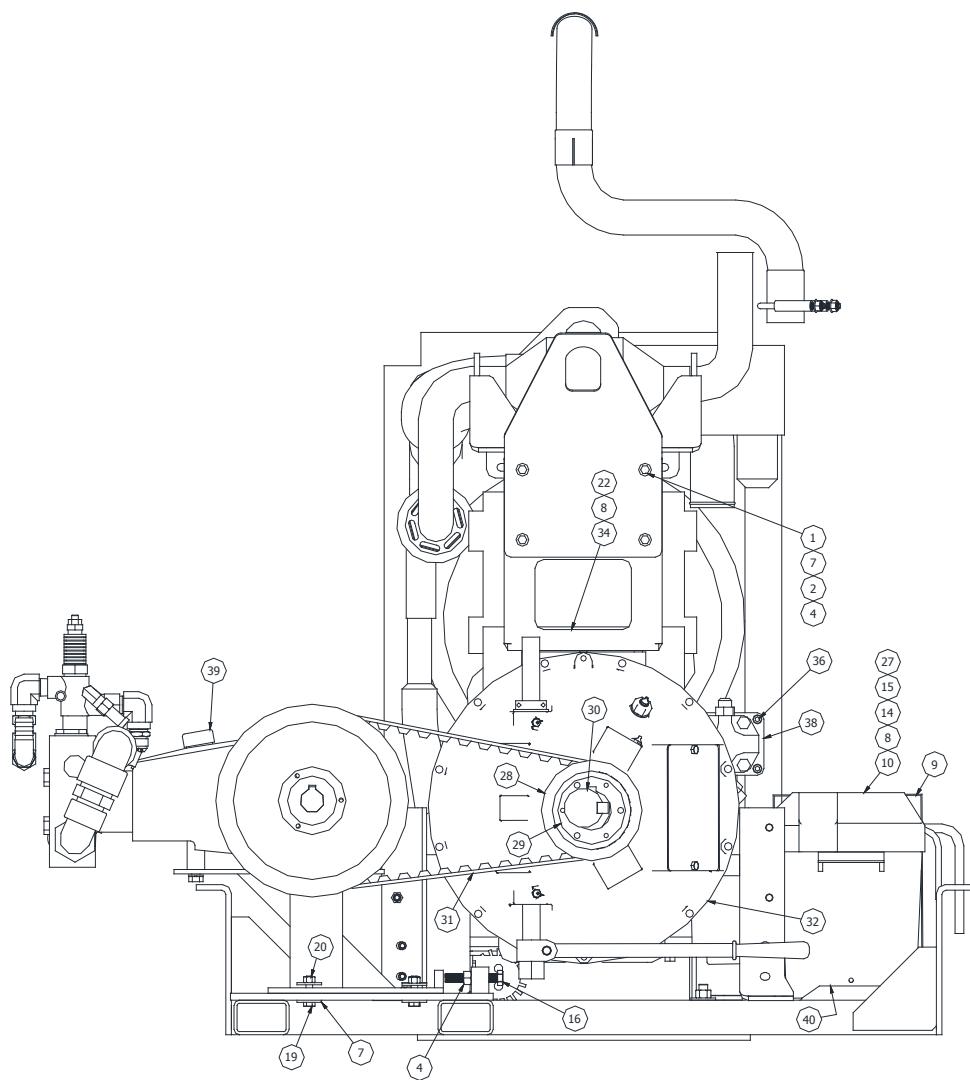
# Power Pack Assembly - 79925000



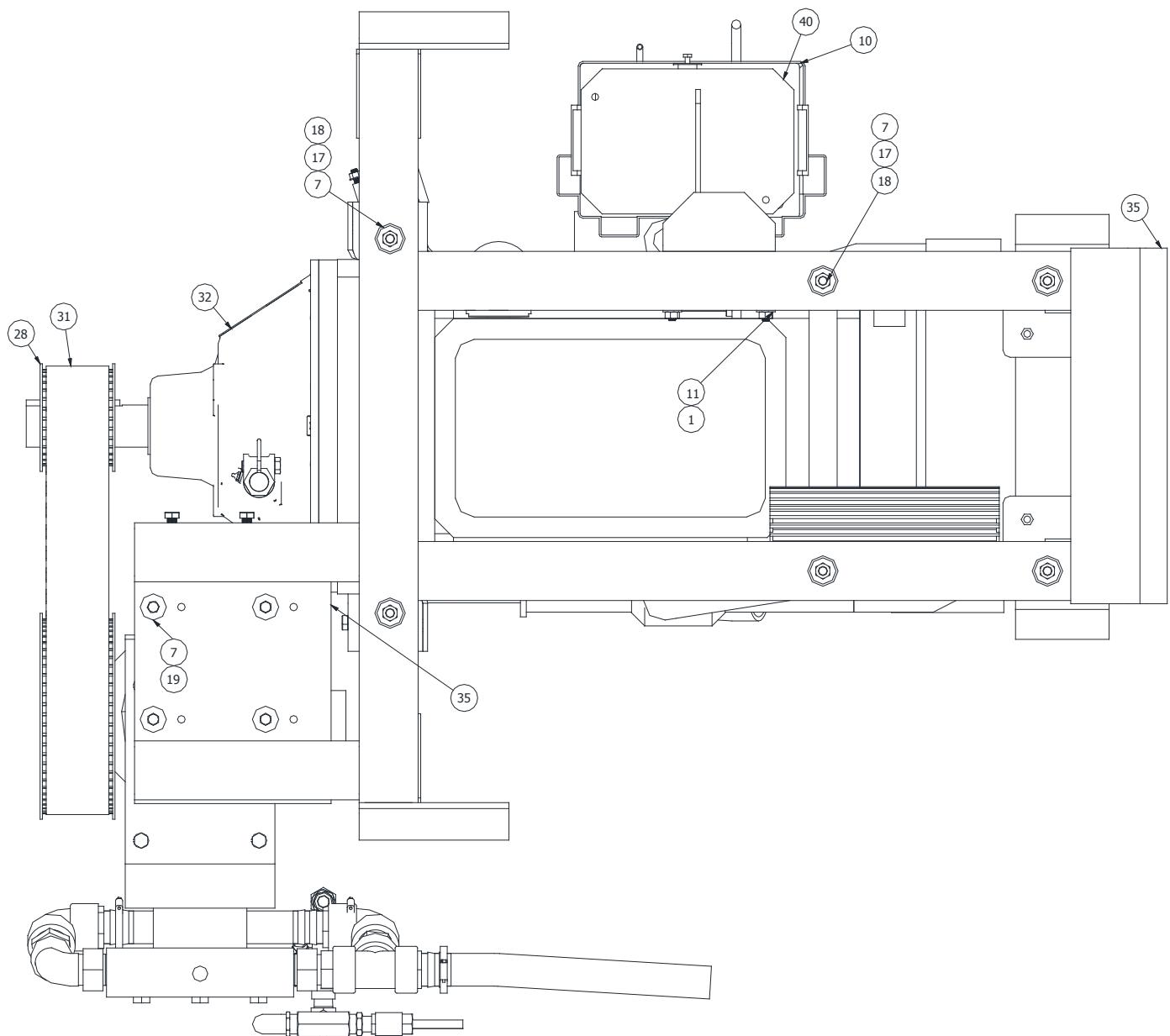
# *Power Pack Assembly - 79925000*



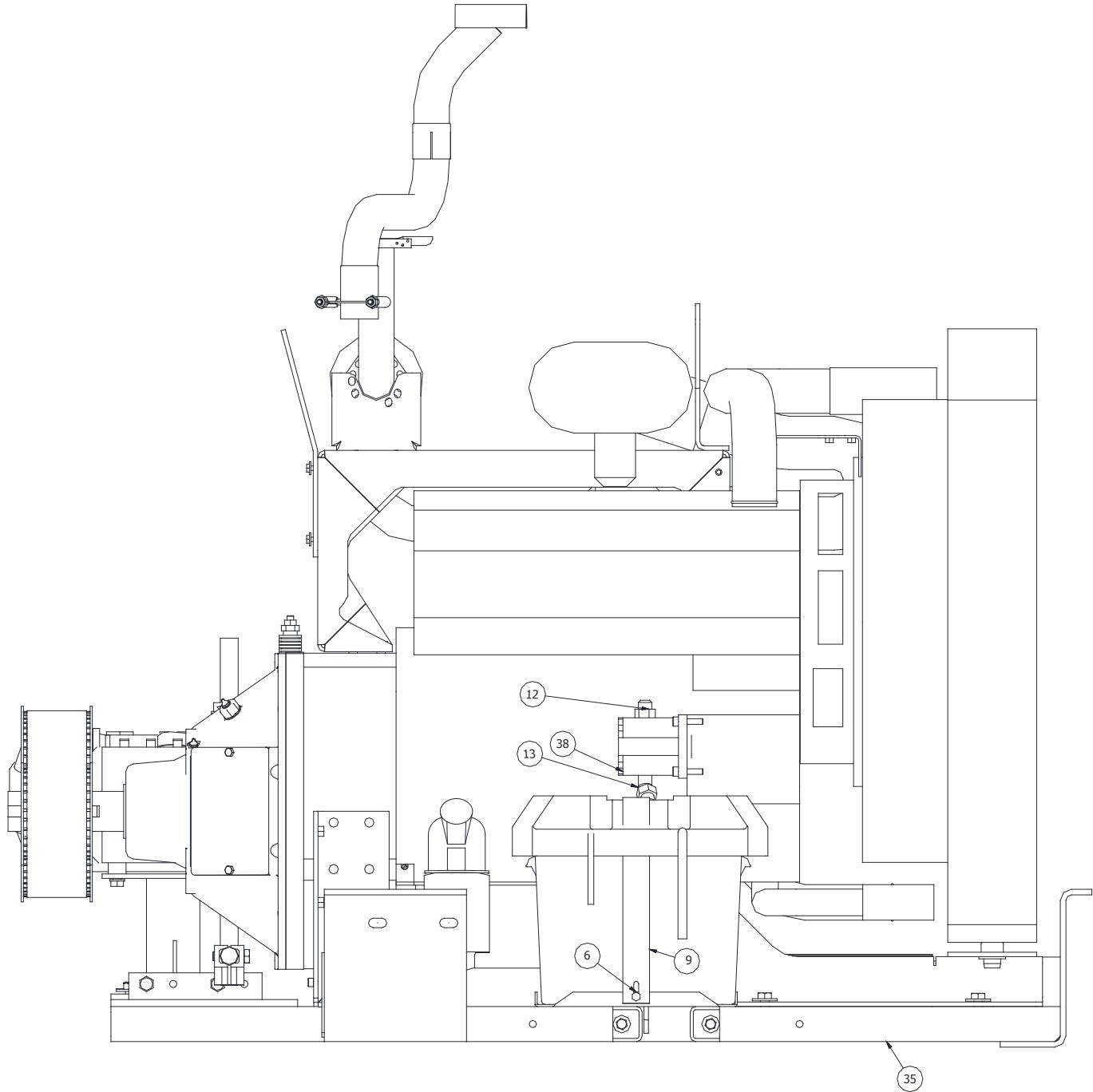
# Power Pack Assembly - 79925000



# *Power Pack Assembly - 79925000*



# Power Pack Assembly - 79925000



# Power Pack Assembly - 79925000

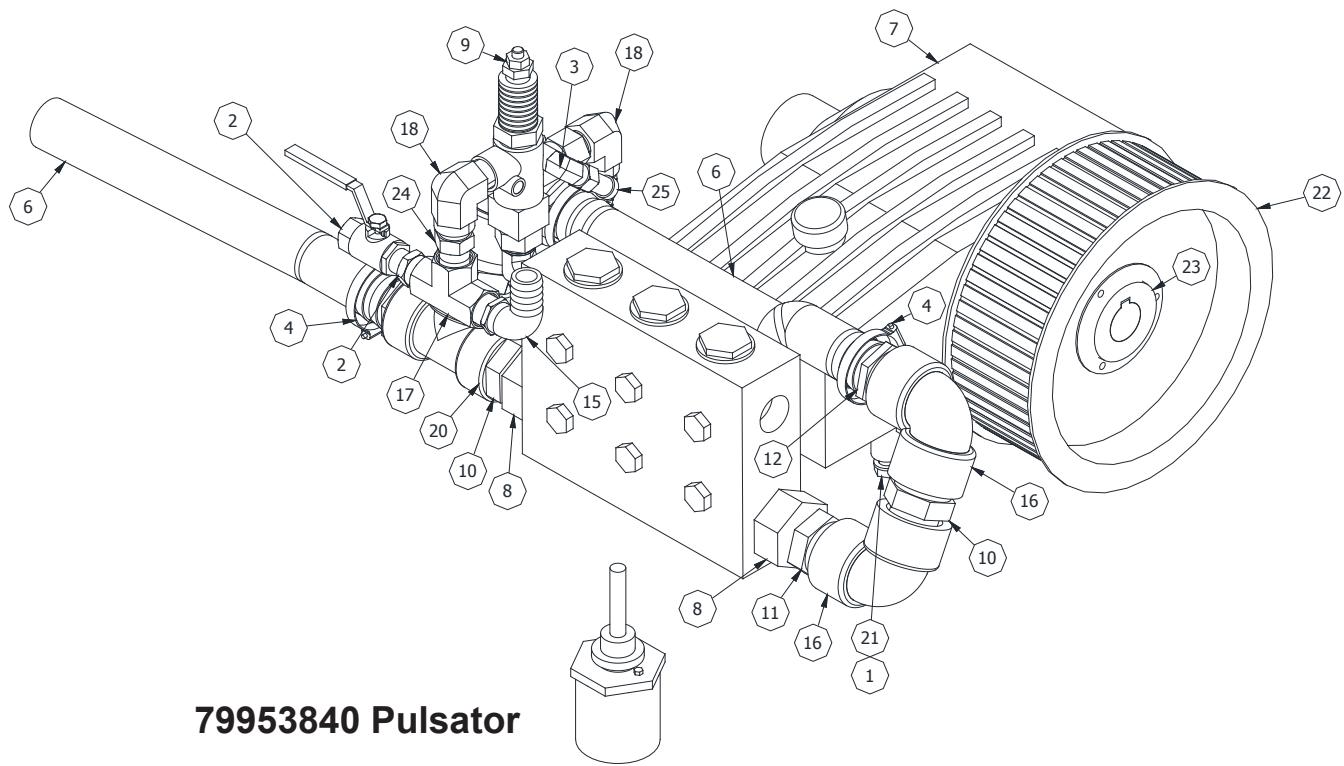
Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	00117500	Screw, Hex Hd 3/8-16 x 4	2	22	79920261	Bearing, 1"IDx2"ODX1/8 DELRIN	1
2	00137300	Nut, Hex 1/4-20	4	23	79920262	Collar, 1" Shaft 2 Piece	1
3	00162700	Washer, Flat 3/8	4	24	79920330	Clamp, Exhaust 2-1/2	1
4	00778000	Nut, Hex 1/2-13	2	25	79920384	Weldment, 2" Exhaust 45 Degree	1
5	02821200	Nut, Nylock Jam 1/4-20	4	26	79920388	Elbow, Exhaust T4	1
6	04728200	Screw, Hex Hd 1/4-20 x 3/8	2	27	79922290	Protector Set, Bat Terminals	1
7	73826900	Washer, Flat 1/2 USS High Strength	22	28	79922330	Sprocket, Drive 30 Tooth 14mm x 85mm	1
8	73830900	Cable, Negative Battery 60" LG	1	29	79922350	Bushing, QD-SK 2-1/4 Bore	1
9	75814700	Strap, Battery Hold Down	1	30	79922355	Key, Step 1/2 x 5/8 SQ	1
10	75815300	Box, Battery (Modified)	1	31	79922370	Belt, Drive 1400 PTH 14M42	1
11	77748000	Nut, Stover Lock 2/8-16 UNC	2	32	79925200	Clutch, Warrior (Furnished w/79925300)	1
12	79846500	Adapter-10 O-Ring/-8JIC	1	33	79925210	Spacer WPT to Kohler (Furnished w/79925300)	1
13	79846600	Adapter-12 O-Ring/JIC45 Deg	1	34	79925300	Engine, Diesel Tier 4	1
14	79847800	Battery, Diesel 875 CCA	1	35	79925400	Weldment, Tier 4 Power Pack	1
15	79847900	Cable, Positive Battery 798	1	36	79925470	Screw, SOC HD Cap M8-1.25 x 35	4
16	79908500	Screw, Hex HD 1/2-13 x 3	2	37	79925480	Screw, SOC HD Cap 5/16-18 x 2	3
17	79920141	Nut, Hx GR8 1/2-13 Stover	7	38	79926400	Pump, Hyd Gear-Tier 4 Engine	1
18	79920145	Hex Hd Bolt 1/2-13 x 1-1/2 GR8	7	39	79940200	Pump Assembly 798	1
19	79920150	Hex Hd Bolt 3/8-16 x 1-1/2 GR8	4	40	79969100	Weldment, Battery Tray T4	1
20	79920151	Hex Nut, 3/8-16 Grade 8	4				
21	79920232	Weldment, Pump Pedestal T4	1				



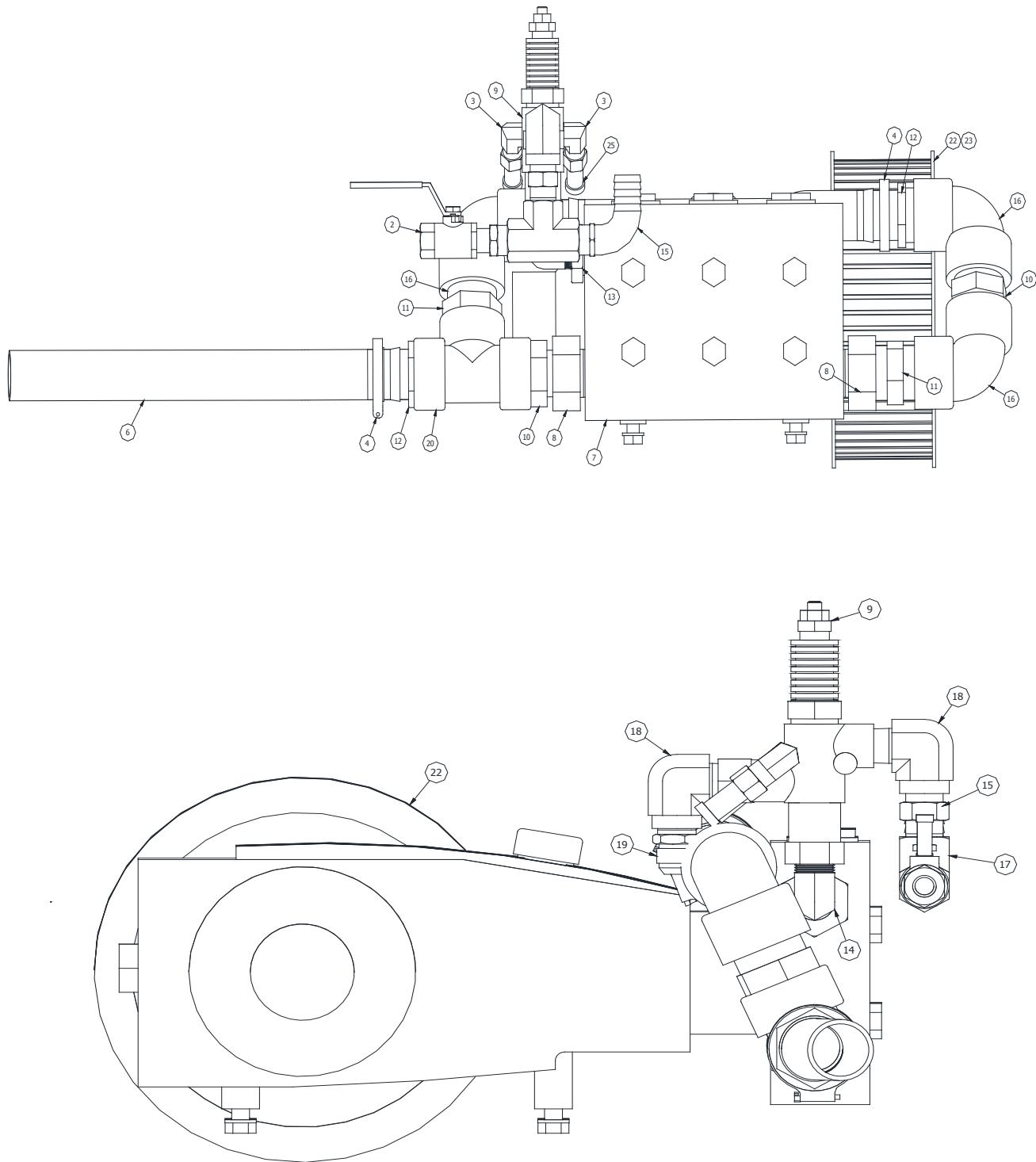
# Assy, Pump Warrior - 79940200

Item	Part No.	Description	Qty.
1	44181400	Washer, Lock-Split M12	4
2	72704800	Valve, Ball 1/2M x 1/2F	1
3	77724300	Elbow, 90 Deg. Street 1/4 Steel	2
4	77736900	Clamp, Hose 1-9/16 - 2-1/2 #32	3
5	77742600	Bushing, Reducer 3/4 x 1/2	1
6	77748200	Hose 1-1/2 ID x 4 Spiral	3.5 ft
7	79802500	Pump, Giant Model LP301A	1
8	79802510	Adapter, 1-1/4 BSP-1-1/4 NPT	2
9	79803700	Unloader, Giant Model 22973C	1
10	79811600	Nipple, 1-1/2 x 1-1/4 MPT Polyp	2
11	79811800	Nipple, 1-1/2 x 1-1/2 MPT Polyp	2
12	79812100	Barb, Hose 1-1/2 MPT x 1-1/2 PO	3
13	79812300	Bushing, Reducer 1" MBSPP x 3/4" NPTF	1

Item	Part No.	Description	Qty.
14	79812400	Elbow 90, Male 3/4 Steel	1
15	79812500	Barb, Hose Elbow 90, 3/4(MPT)x 3/4 PL	1
16	79812600	Elbow, 90 Deg. 1-1/2 NPT Female	3
17	79816100	Tee, Female 3/4 NPT Steel	1
18	79816200	Elbow, 90 Deg Street 3/4 Steel	2
19	19821500	Adapter, 3/4" MNPT/ - 12 JIC	1
20	79871900	Tee, 1-1/2 FNPT Polypro	1
21	79920158	Screw, Hex Hd M12x25mm CL8.8	4
22	79922340	Sprocket, Drive 60 Tooth 14mm x 85mm	1
23	79922360	Bushing, QD-SK 35mm Bore w/10mm Keyway	1
24	79948130	Nipple 3/4 NPT Zinc Plt. Steel	1
25	79974000	Valve, Pop Off	2



# Assy, Pump Warrior - 79940200





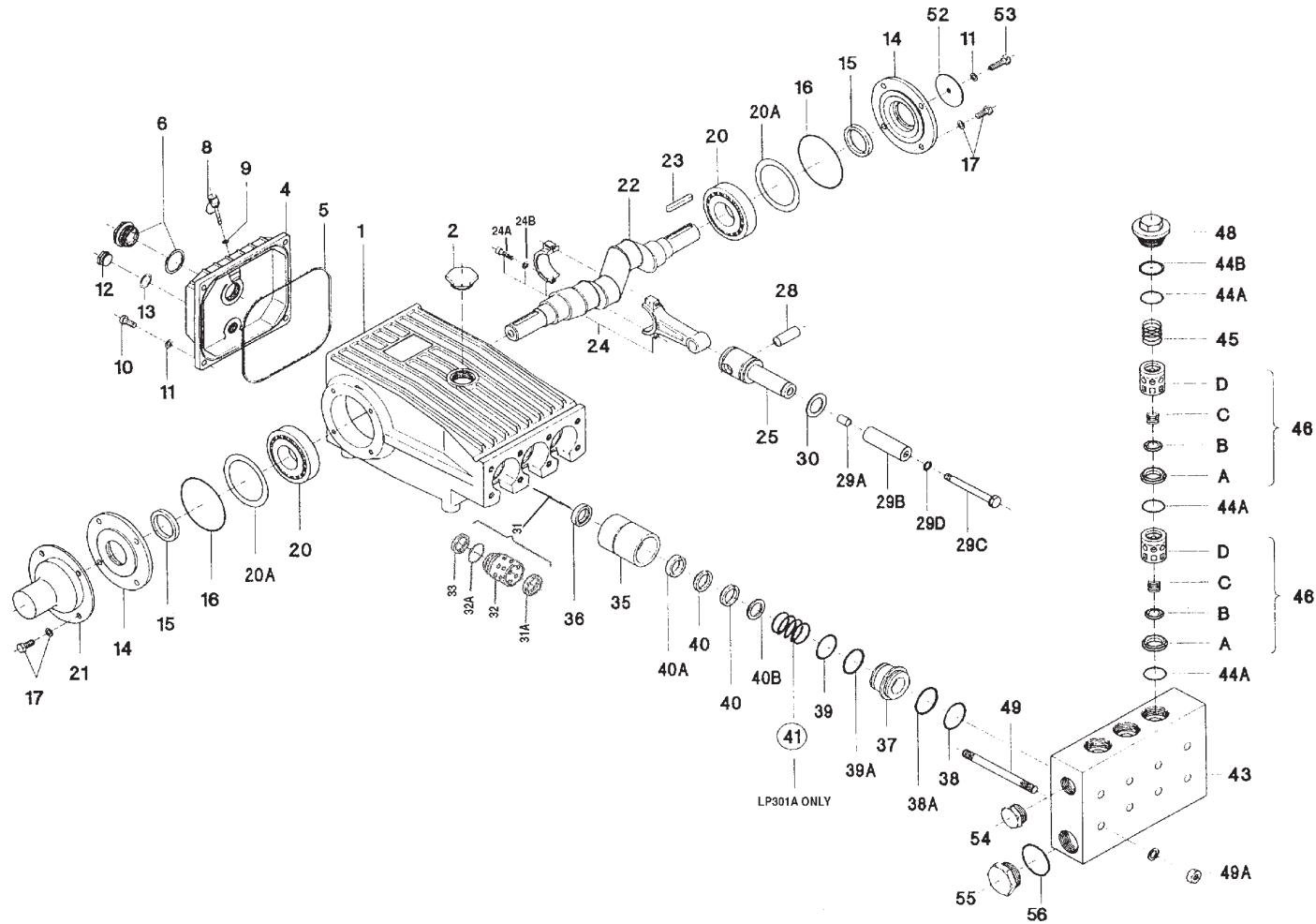
# Pump Parts List - 79802500

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	79832000	Crankcase	1	31A	79835300	Oil Seal	3
2	79832100	Oil Filler Plug Assy	1	32	79835400	Retainer, Oil Seal	3
4	79832200	Crankcase Cover	1	32A	79835500	O-Ring	3
5	79832300	O-Ring, Crankcase Cover	1	33	79835600	Seal	3
6	79832400	Oil Sight Glass w/Gasket	1	35	79835700	Seal Sleave	3
7	79832500	Gasket (For Sight Glass)	1	36	79835800	Leakage Seal *	3
8	79832600	Oil Dipstick Assy	1	37	79835900	Seal Case	3
9	79832700	O-Ring, (For Dipstick)	1	38	79836000	O-Ring, Seal Case *	3
10	79832800	Cylinder Screw	4	38A	79836100	Support Ring *	3
11	79832900	Spring Ring	5	39	79836200	O-Ring *	3
12	79833000	Plug	1	39A	79836300	Support Ring *	3
13	79833100	Gasket	1	40	79836400	V-Sleeve *	6
14	79833200	Bearing Cover	2	40A	79836500	Support Ring *	3
15	79833300	Radial Shaft Seal	2	40B	79836600	Guide Ring	3
16	79833400	O-Ring	2	41	79836700	Pressure Spring	3
17	79833500	Hexagon Screw	8	43	79836800	Valve Casing	1
20	79833600	Taper Roller Bearing	2	44A	79836900	O-Ring **	9
20A	79833700	Fitting Disc 798 Pump	1	44B	79837000	Support Ring *	3
20B	79833800	Fitting Disc	1	45	79837100	Tension Spring	6
21	79833900	Shaft Protector	1	46	79837200	Valve Assy, Complete	6
22	79834000	Crankshaft	1	46A	79837300	Valve Seat **	6
23	79834100	Woodruff Key	1	46B	79837400	Valve Plate **	6
24	79834200	Connecting Rod Assy	3	46C	79837500	Valve Spring **	6
24A	79834300	Inner Hex Screw	6	46D	79837600	Spacer, Pipe	6
24B	79834400	Spring Washer	6	48	79837700	Plug, Valve	3
25	79834500	Crosshead Assy	3	49	79837800	Stud Bolt	8
28	79834600	Crosshead Pin	3	49A	79837900	Nut, Hexagon	8
29A	79834700	Centering Sleeve	3	52	79838100	Disc for Crankshaft	1
29B	79834800	Plunger Pipe	3	53	79838200	Hexagon Screw	1
29C	79834900	Tensioning Screw	3	54	79838300	Plug, G 1	2
29D	79835000	Copper Ring	3	55	79838400	Plug, G 1-1/4	2
30	79835100	O-Ring	3	56	79835300	Washer, Crush w/O-Ring	1
31	79835200	Retainer, Complete	3				

\* Included with Plunger Packing Kit 79838500

\*\*Included in Valve Kit 79838600

# Pump - Exploded View - 79802500



## PLUNGER PACKING KIT 79838500

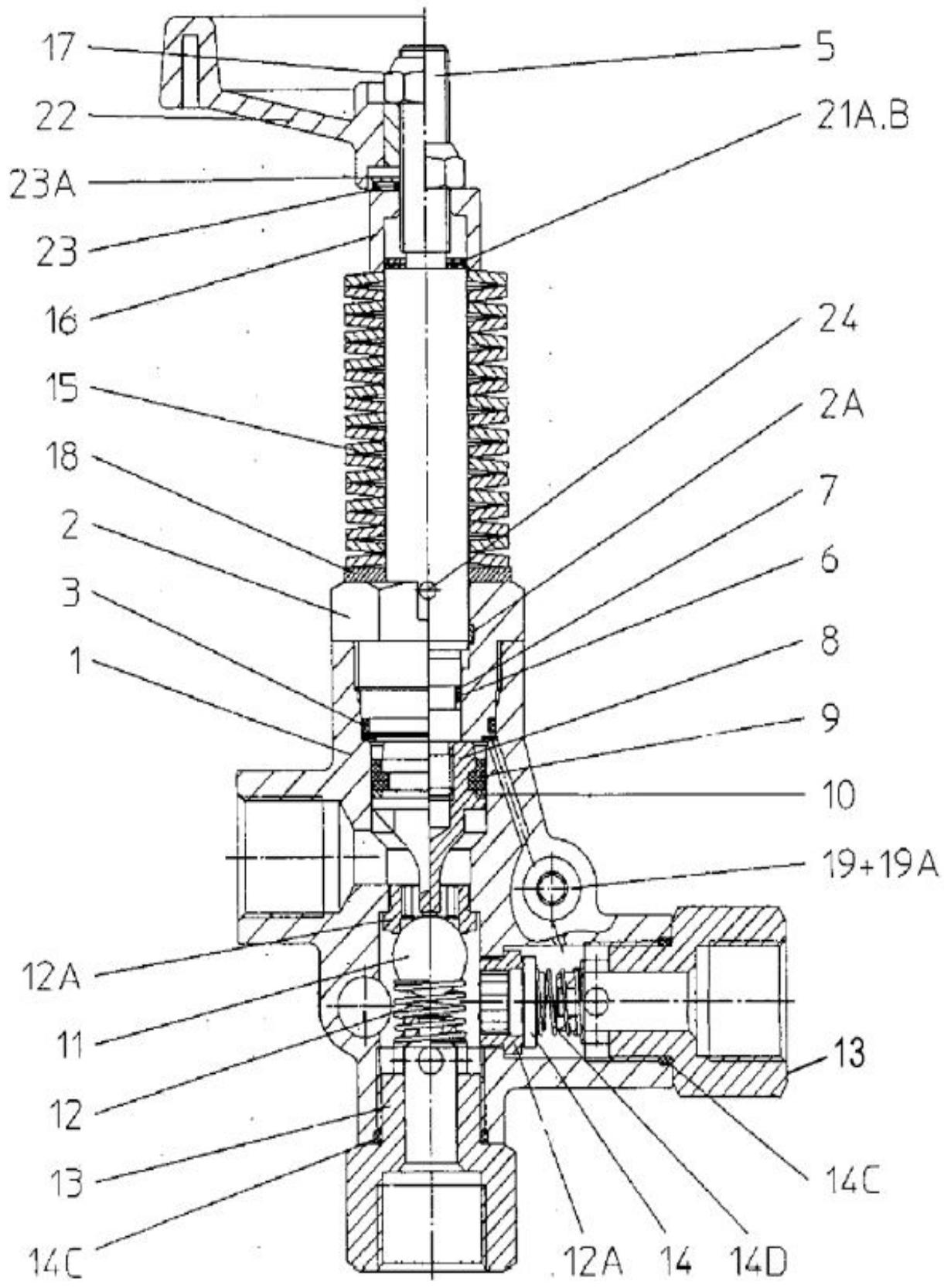
Item	Part No.	Description	Qty.
36	79835800	Leakage Seal	3
38	79836000	O-Ring, Seal Case	3
38A	79836100	Support Ring	3
39	79836200	O-Ring	3
39A	79836300	Support Ring	3
40	79836400	V-Sleeve (Packing)	6
40A	79836500	Support Ring	3

## VALVE KIT 79838600

Item	Part No.	Description	Qty.
46A	79837300	Valve Seat	6
46B	79837400	Valve Plate	6
46C	79837500	Valve Spring	6
44A	79836900	O-Ring	9
44B	79837000	Support Ring	3



# Unloader Giant 22973C - 79803700



# Unloader Giant 22973C - 79803700

Item	Part No.	Description	Qty.
1	79803701	Valve Body (Giant 12232)	1
2	79803702	Guide Plug (Giant 12240)	1
2A	79803704	Guide Ring (Giant 12241)	1
3	79803703	O-Ring (Giant 12057)	1
5	79803705	Piston Ring (Giant 12242)	1
6	79803706	O-Ring, Valve Stem (Giant 12204)	1
7	79803707	Backup Ring, Valve Stem (Giant 12205)	1
8	79803710	Piston, Giant #12206	1
9	79803720	Cup, 28 MM - Giant 05005	1
10	79803730	Back Up O-Ring, Giant 05015	1
11	79803708	Ball (Giant 12207)	1
12	79803709	Valve Spring (Giant 12216)	1
12A	79803711	Seat, Inlet (Giant 12208)	2
13	79803712	Valve Plug (Giant 12243)	2
14	79803713	Valve Plate (Giant 12244)	1
14C	79803716	O-Ring (Giant 07035)	2
14D	79803717	Spring, Outlet Valve	1
15	79803715	Spring, Orange (Giant 12220)	19
16	79803714	Spacer Sleeve (Giant 12245)	1
17	79803718	Self-Locking Hex Nut (Giant 12246)	1
18	79803719	Washer, Spring (Giant 12223)	1
19	79803721	Plug (Giant 12098)	4
19A	79803722	O-Ring, Plug (Giant 12017)	4
21A	79803723	Spacer Disc, .5MM (Giant 06821)	1
21B	79803724	Spacer Disc, 1.0 MM (Giant 06822)	3
24	79803725	Serrated Pin (Giant 12247)	1

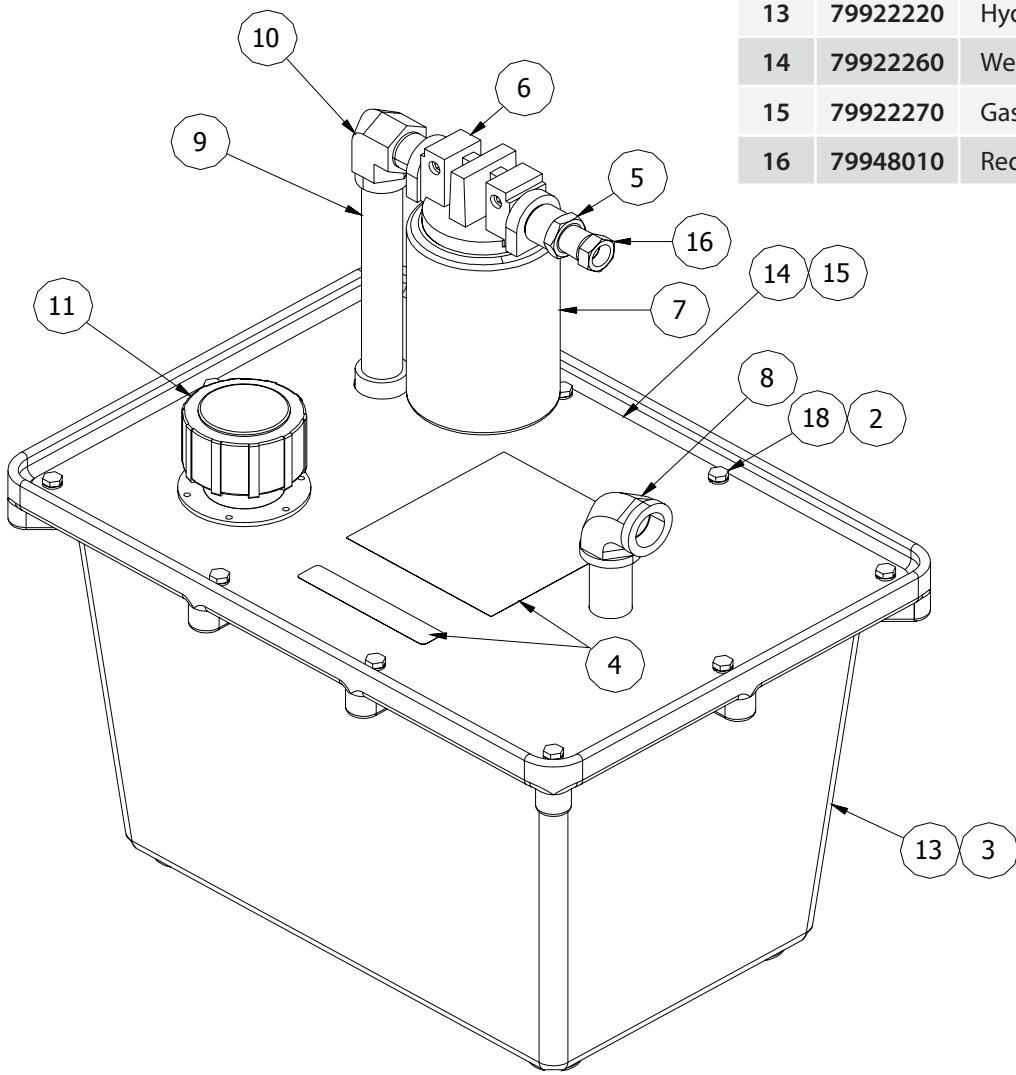
## UNLOADER REPAIR KIT 79803726

Item	Part No.	Description	Qty.
2A	79803704	Guide Ring (Giant 12241)	1
3	79803703	O-Ring (Giant 12057)	1
6	79803706	O-Ring, Valve Stem (Giant 12204)	1
7	79803707	Backup Ring, Valve Stem (Giant 12205)	1
9	79803720	Cup, 28 MM - Giant 05005	1
10	79803730	Back Up O-Ring, Giant 05015	1
11	79803708	Ball (Giant 12207)	1
12	79803709	Valve Spring (Giant 12216)	1
14	79803713	Valve Plate (Giant 12244)	1
14C	79803716	O-Ring (Giant 07035)	2
14D	79803717	Spring, Outlet Valve	1
19A	79803722	O-Ring, Plug (Giant 12017)	4



# Hydraulic Tank Assembly - 79922200

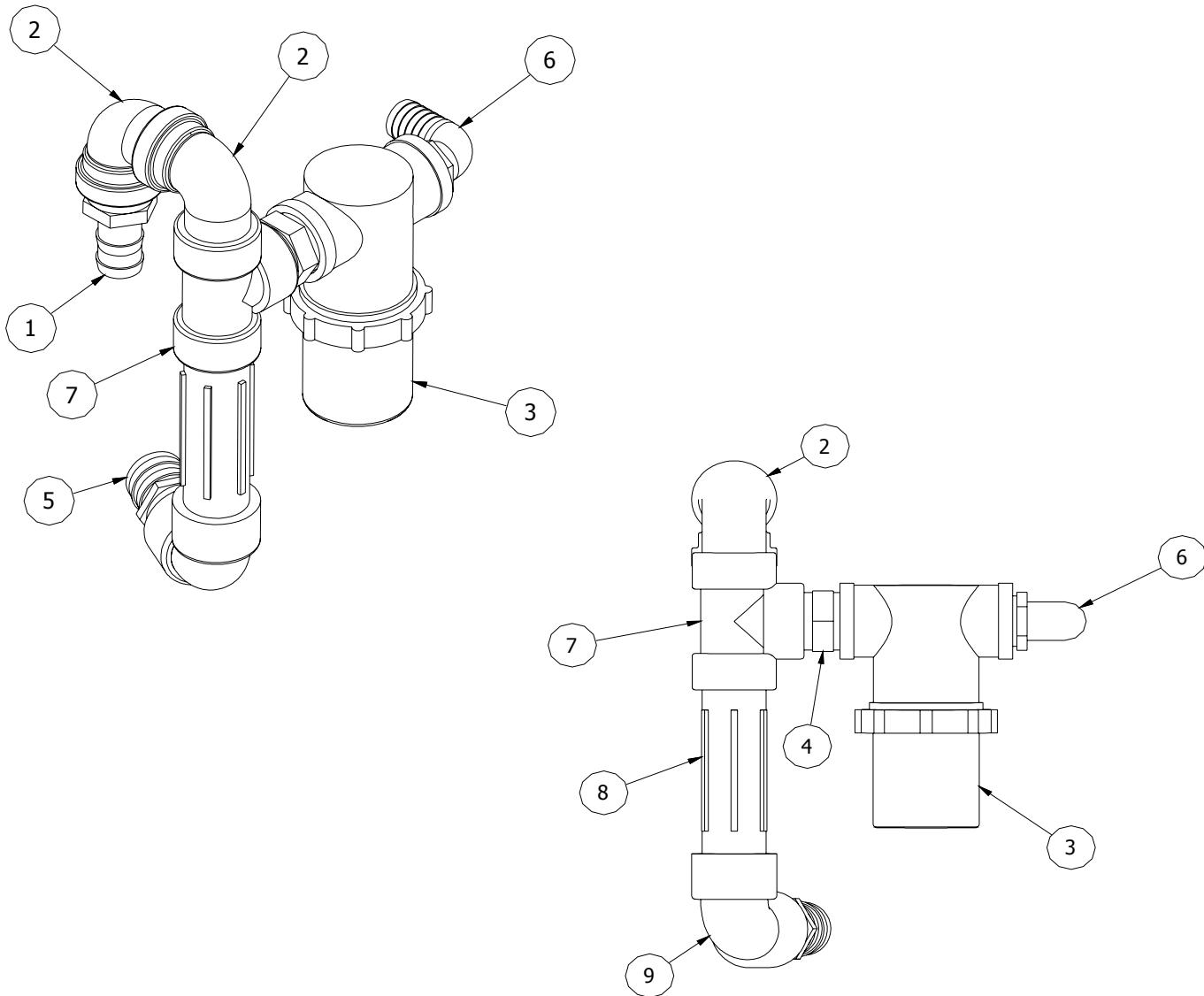
Item	Part No.	Description	Qty.
1	00113700	Screw, Hex Hd 1/4-20 x 3/4	10
2	00165400	Washer, Lock Split 1/4	10
3	71101200	Plug, Internal Hex 1/2 NPT	2
4	72763000	Decal, Master Sheet	1
5	77742600	Bushing, Reducer 3/4 x 1/2	1
6	79807000	Filter Head	1
7	79807100	Filter, Element	1
8	79821600	Elbow, 90 Deg Female 2/4 Black	1
9	79826000	3/4 x 6" Nipple BLK Pipe Steel	1
10	79827000	Elbow, 90 Deg Street 3/4 Black	1
11	79842700	Cap, Hydraulic Tank	1
13	79922220	Hyd Reservoir, Machined	1
14	79922260	Weldment, Cover Hyd Reservoir	1
15	79922270	Gasket, Hyd Reservoir	1
16	79948010	Reducer, Pipe 1/2 x 3/8 NPT	1



# Water/Antifreeze Supply Assembly - 79940100



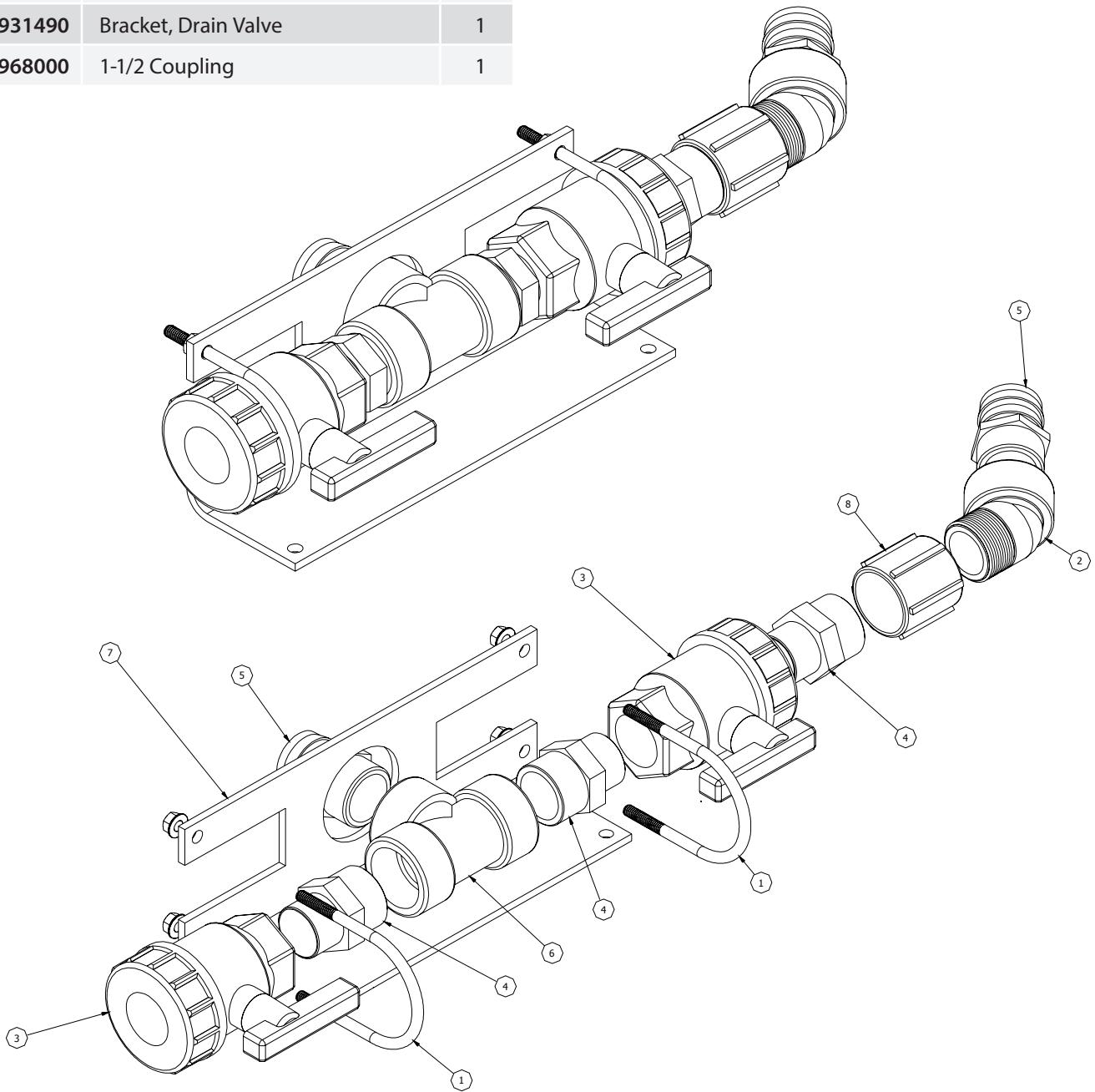
Item	Part No.	Description	Qty.
1	75824700	Hose Barb, 1-1/2 MPT x 1-1/4	1
2	79811400	Elbow, 90 Deg St 1-1/2 MPT x 1-1/2 F	2
3	79811700	Filter, 1-1/2 FPT Polypropyle	1
4	79811800	Nipple, 1-1/2 x 1-1/2 M P T Poly P	1
5	79812100	Barb, Hose 1-1/2 MPT x 1-1/2 PO	1
6	79821200	EI 1-1/2M PT x 1-1/2 Hose Barb	1
7	79871900	Tee, 1-1/2 FNPT Poly Pro	1
8	75853650	Nipple, 1-1/2" x 6" PP (Black)	1
9	79812600	EI, 90 Deg. 1-1/2 x 1-1/2 Poly P	1





# Drain Valve Assembly - 79959000

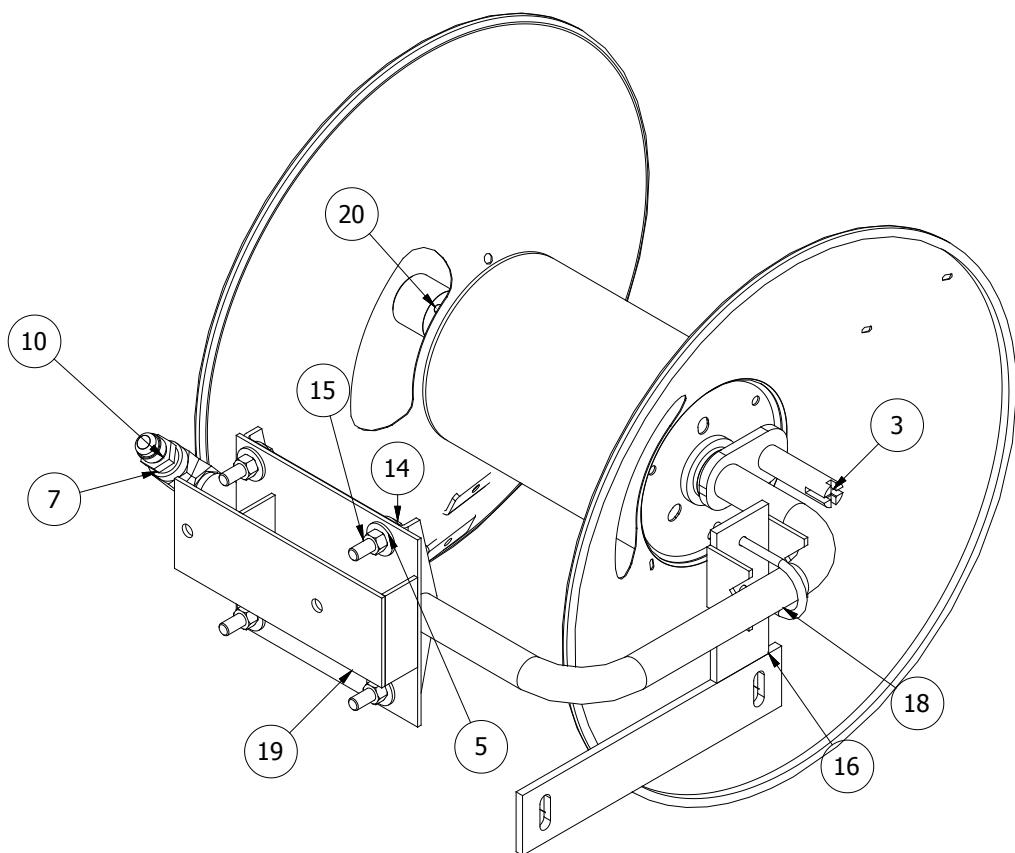
Item	Part No.	Description	Qty.
1	73831000	U-Bolt, 3" Tube OD w/Nuts	2
2	75853620	1-1/2" Poly Street Elbow 45 Deg	1
3	79811500	Valve, Ball 1-1/4FNPT x 1-1/4F	2
4	79811600	Nipple, 1-1/2 x 1-1/4 MPT Polyp	3
5	79812100	Barb, Hose 1-1/2 MPT x 1-1/2 PO	2
6	79871900	Tee, 1-1/2 FNPT Polypro	1
7	79931490	Bracket, Drain Valve	1
8	79968000	1-1/2 Coupling	1



# Fill Reel Assembly - 79940470



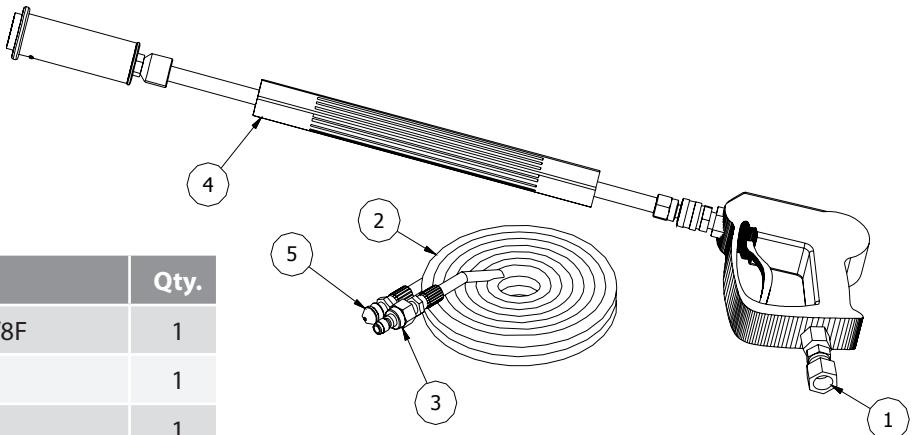
Item	Part No.	Description	Qty.
3	72727500	Reel, HP Hose	1
5	75852700	Washer, 3/8" ID USS Grd 9	8
6	75867030	Adapter, 3/4 GHT Swivel - 1/2 NPT	1
7	77705101	Elbow, 90 Deg. Street 1/2"	2
10	79904476	Adapter, 1/2NPT-8JIC 45D Brass	1
14	79920150	Hex Hd Bolt 3/8-16 x 1-1/2 GR8	4
15	79920151	Hex Nut, 3/8-16 Grade 8	4
16	79935900	Weldment, Legacy Side T4	1
18	79940480	U-Bolt 1x1-3/4 1/4-20	1
19	79940495	Weldment, Reel Base	1
20	79962100	Swivel, HP Reel 1/2"	1





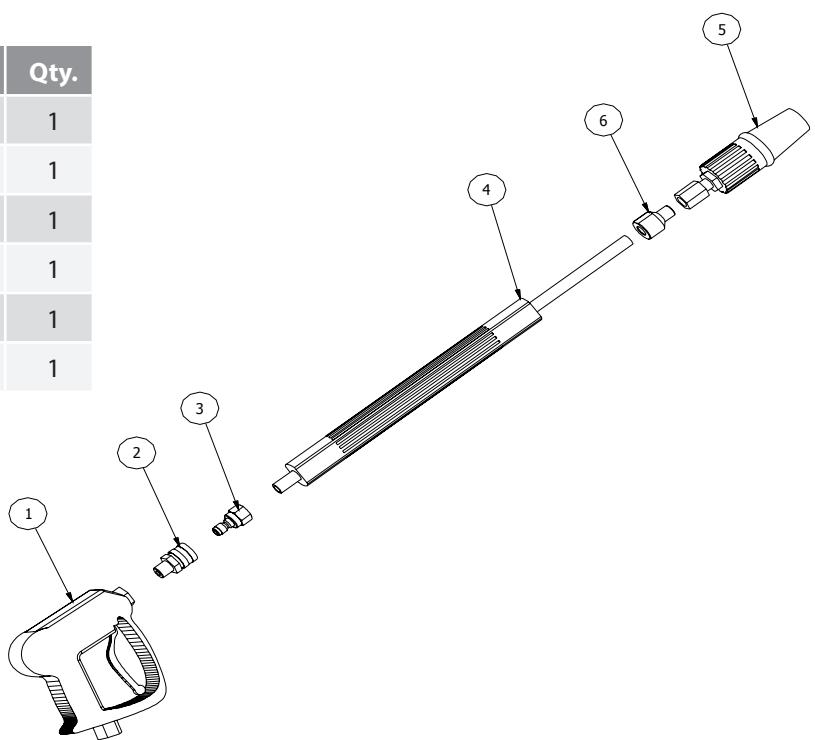
# Wash Down Accessory Package - 73817300

Item	Part No.	Description	Qty.
1	73816500	Adapter, Swivel 3/8M x 3/8F	1
2	77719500	Hose, 1/4" x 75'	1
3	77721400	Coupler, Quick Gun Male	1
4	77799800	Handgun Lance V-Nozzle Assembly	1
5	77815800	Nozzle, 1/4" Domed (6)	1

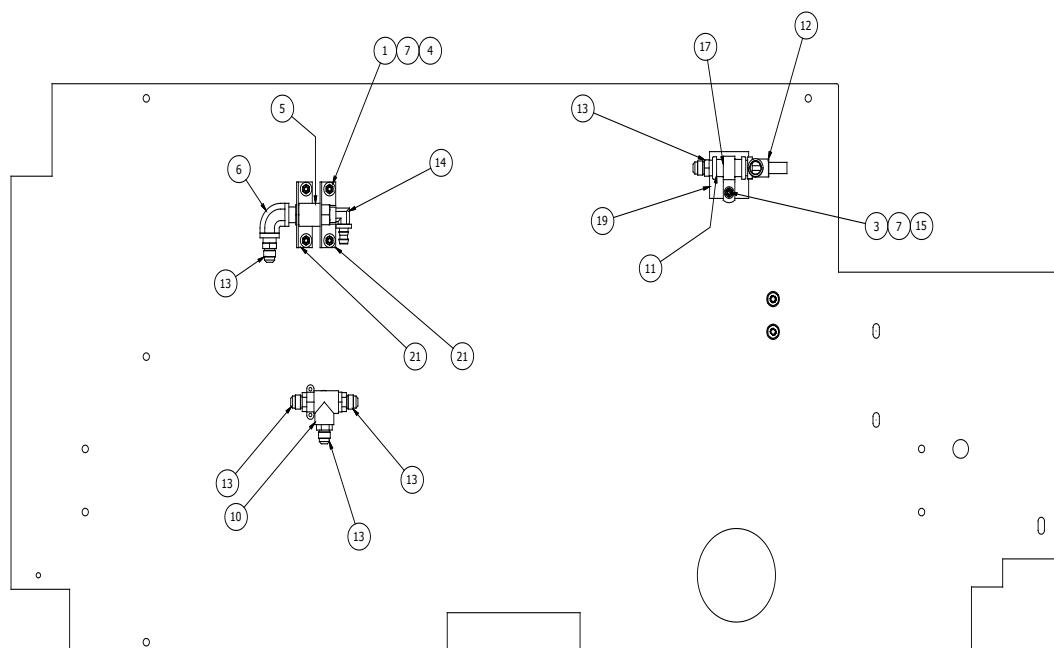
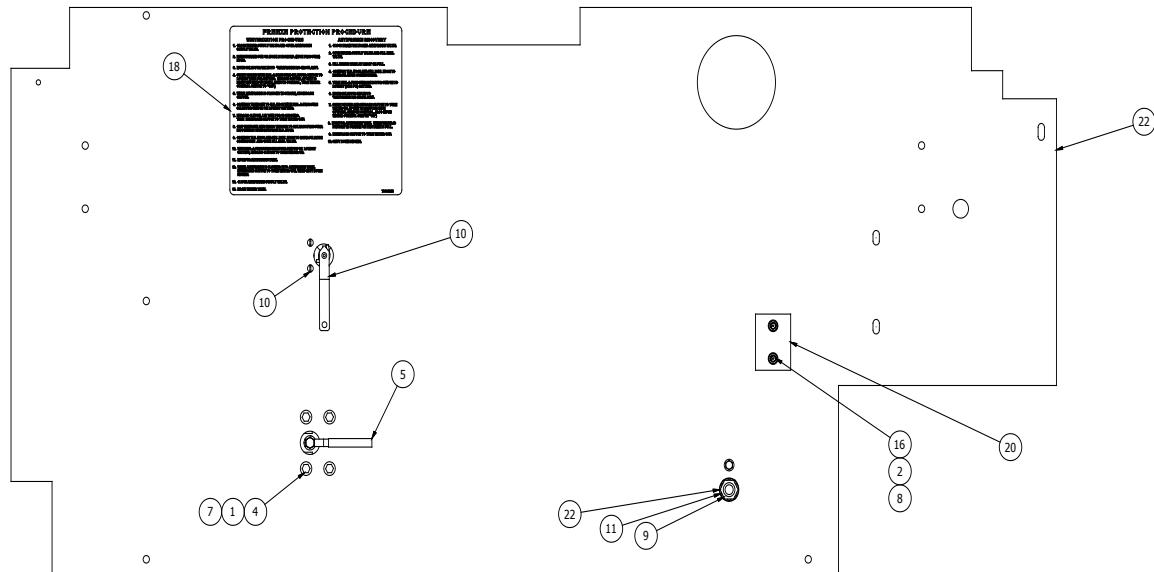


# HandGun Lance V-nozzle Assembly - 77799800

Item	Part No.	Description	Qty.
1	77720100	Gun, Hand	1
2	77721300	Coupler, Quick Gun, 1/4" NPT Male	1
3	77721400	Coupler, Quick Gun, Male	1
4	553006-01	Lance, Insulated Grip, 18"	1
5	71126100	Nozzle - Variable .080	1
6	7987440	Fitting, Wand Anti-Kickback	1

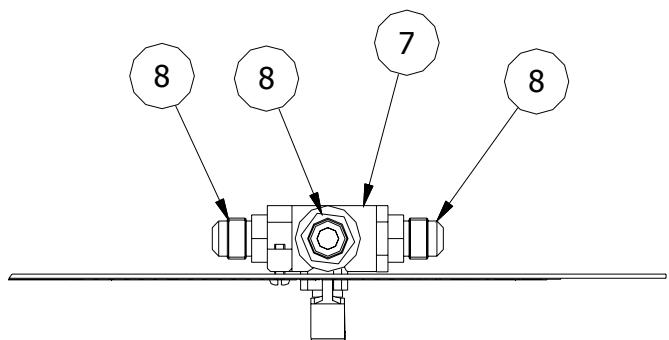


# Baseplate Assembly T4 - 79958600

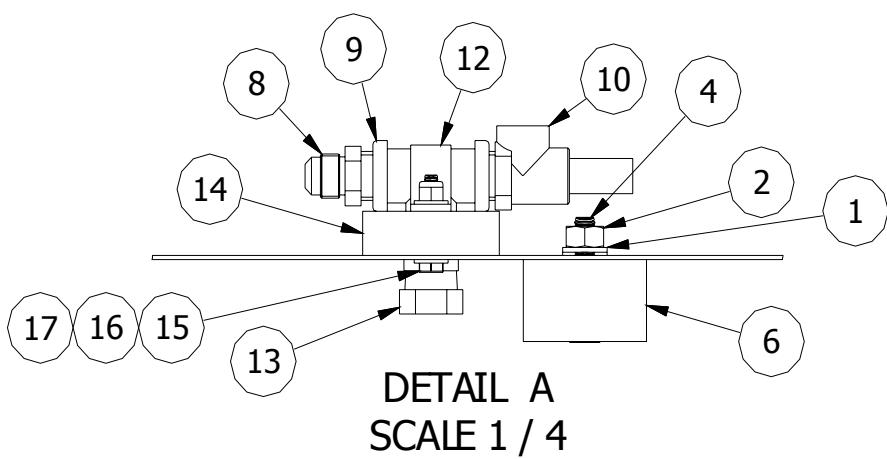


# Baseplate Assembly T4 - 79958600

Item	Part No.	Description	Qty.
1	02825100	Washer, Flat 1/4 USS	8
2	03366300	Washer, Flat 3/8 SAE	2
3	521012-04	Screw, Hex Hd 1/4-20 x 1-1/2	1
4	71705500	Screw, Hex Hd 1/4-20 x 1-1/4	4
5	72704800	Valve, Ball 1/2M x 1/2F	1
6	72714600	Elbow, 90 Deg. Female 1/2	1
7	73821200	Nut, Nylon Locking 1/4-20	5
8	77748000	Nut, Stover Lock 2/8-16 UNC	2
9	77752800	Adapter, Swivel 1/2 NPT Steel	1
10	79904410	Valve, 1/2 Brass 3 Way	1
11	79904466	Tee, 1/2" NPT Brass	1
12	79904475	Valve, Relief	1
13	79904476	Adapter, 1/2NPT -8JIC 45D Brass	5
14	79904478	EI 90D 1/2NPT-Barb Brass	1
15	79908200	Washer, Flat 1/4 SEA	2
16	79909900	Screw, Socket HD 3/8-16 x 1-3/4	2
17	79934100	Clamp 3/4 Conduit 1 Hole	1
18	79934200	Decal, Freeze Procedure- Warrior	1
19	79934300	Spacer-Relief Valve	1
20	79950600	Block HP Resting Warrior	1
21	79956900	Angle Fill Reel Shutoff MNT	2
22	79958610	Plate, Backend T4	1



**DETAIL B  
SCALE 1 / 4**

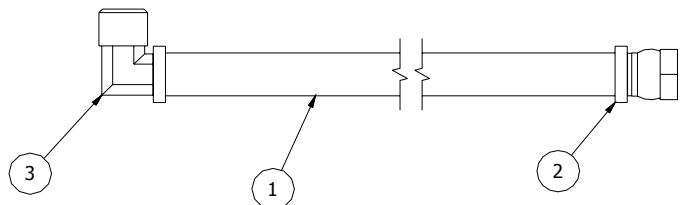


**DETAIL A  
SCALE 1 / 4**

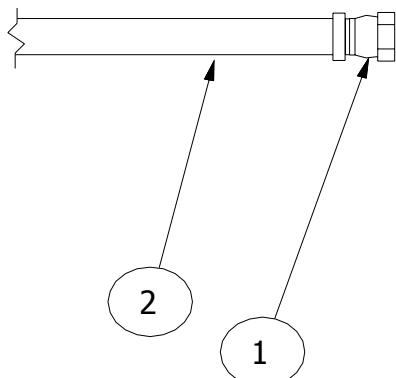
# Recirc Hose Assy, Water Tank - 79949000



Item	Part No.	Description	Qty.
1	79904483	Hose, 1/2 Push-On 300 PSI	8.6 ft
2	79904479	Swivel, 8JIC 45D-Barb Brass	1
3	79904478	EI, 90D 1/2NPT-Barb Brass	1



## RECIRC HOSE ASSEMBLY, FILL REEL 79948700



Item	Part No.	Description	Qty.
1	79904479	Swivel, 8JIC 45D-Barb Brass	1
2	79904483	Hose, 1/2 Push-On 300 PSI	6.3 ft

## RECIRC HOSE ASSEMBLY, FILL REEL 79948700

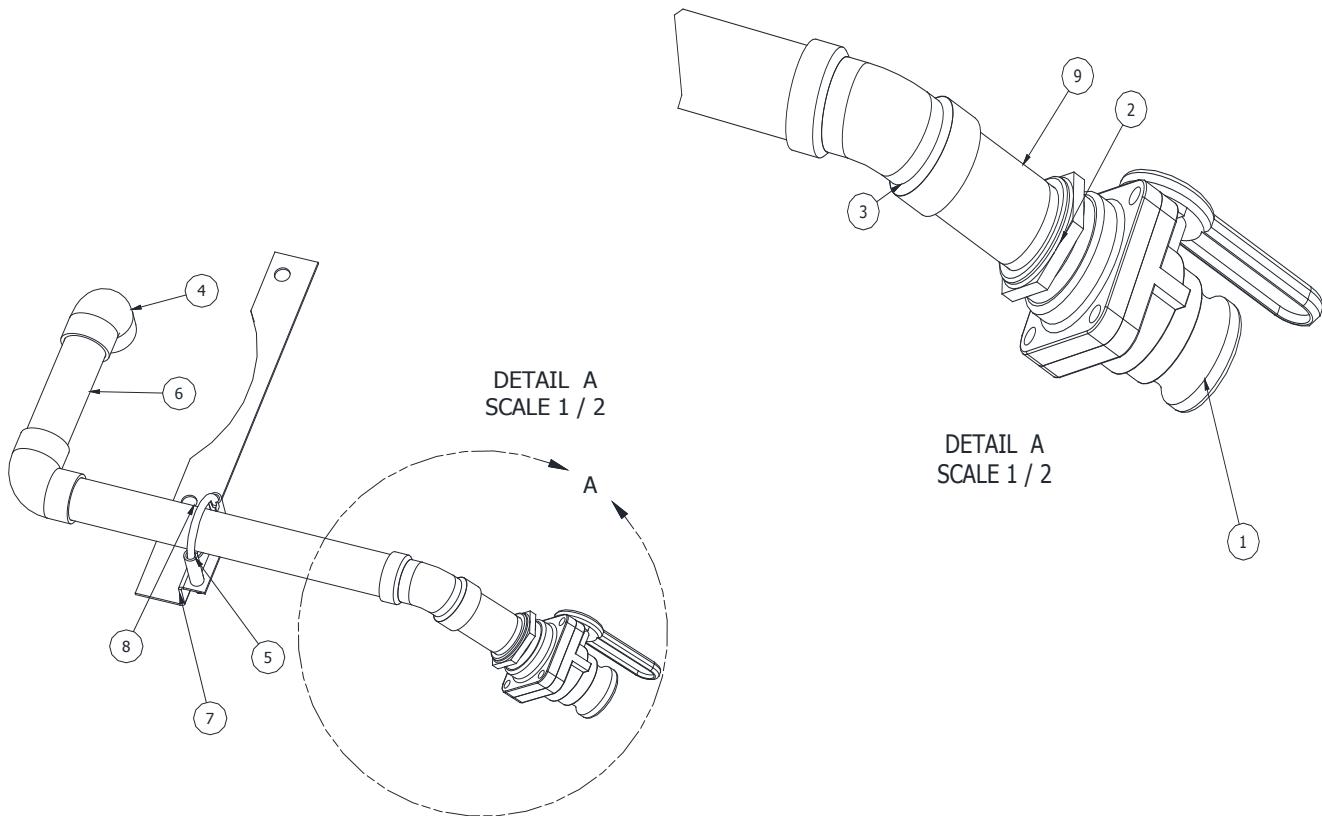
Item	Part No.	Description	Qty.
1	79904479	Swivel, 8JIC 45D-Barb Brass	1
2	79904483	Hose, 1/2 Push-On 300 PSI	2.3 ft

## RECIRC HOSE ASSEMBLY, ANTIFREEZE REEL 79948700

Item	Part No.	Description	Qty.
1	79904479	Swivel, 8JIC 45D-Barb Brass	1
2	79904483	Hose, 1/2 Push-On 300 PSI	9 ft

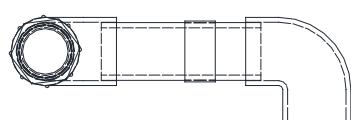
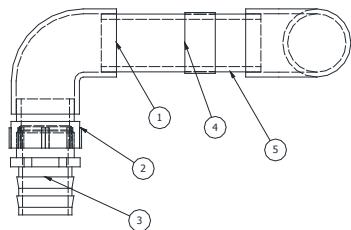


# Hydrant Fill Water Tank Assy - 79985850



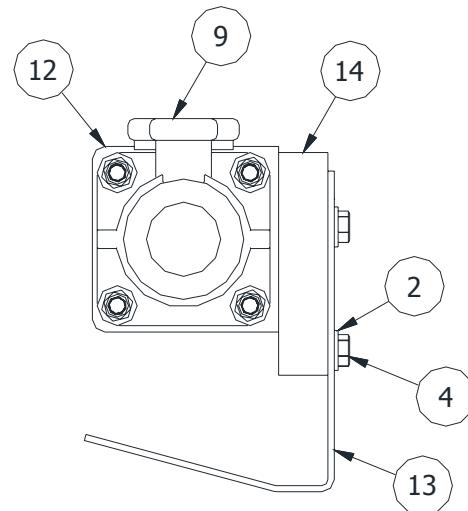
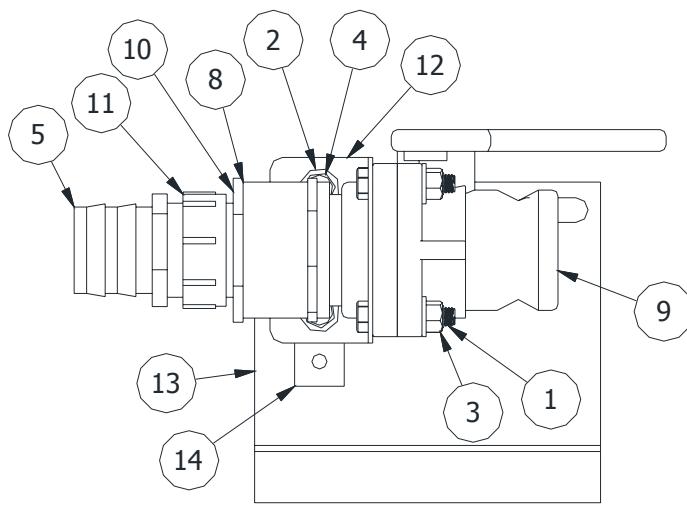
Item	Part No.	Description	Qty.
1	79842800	Ball Valve 2" w/Quick Coupler	1
2	75853630	2" MPT x 1-1/2" FPT Reducer Bushing	1
3	79921370	Elbow, 1-1/2" 45D SCH 40 PVC	1
4	79921360	Elbow 1-1/2" 90D SCH 40 PVC	2
5	77770400	Clamp, Muffler 2-1/4" Zinc Pl	1
6	79985853	Pipe, 1-1/2" x 6" - SCH 40 PVC	1
7	79985854	Bracket, Hydro Fill 2016	1
8	79985852	Pipe, 1-1/2" x 15.5" - SCH 40 PVC	1
9	79985855	Nipple, 3-1/2" PVC/NPT SCH 40	1

# Assy, Tank Fill - 79928600



Item	Part No.	Description	Qty.
1	79921360	Elbow 1-1/2" 90D SCH 40 PVC	2
2	79921322	Adapter, 1-1/2 PVC to 1-1/2 NPT	1
3	79812100	Barb, Hose 1-1/2 MPT x 1-1/2 PO	1
4	79950410	Clear View PVC Hose	1
5	79921350	Pipe, 1-1/2" SCH 40 PVC	1

# Hydrant Fill Assy, Warrior - 79958000

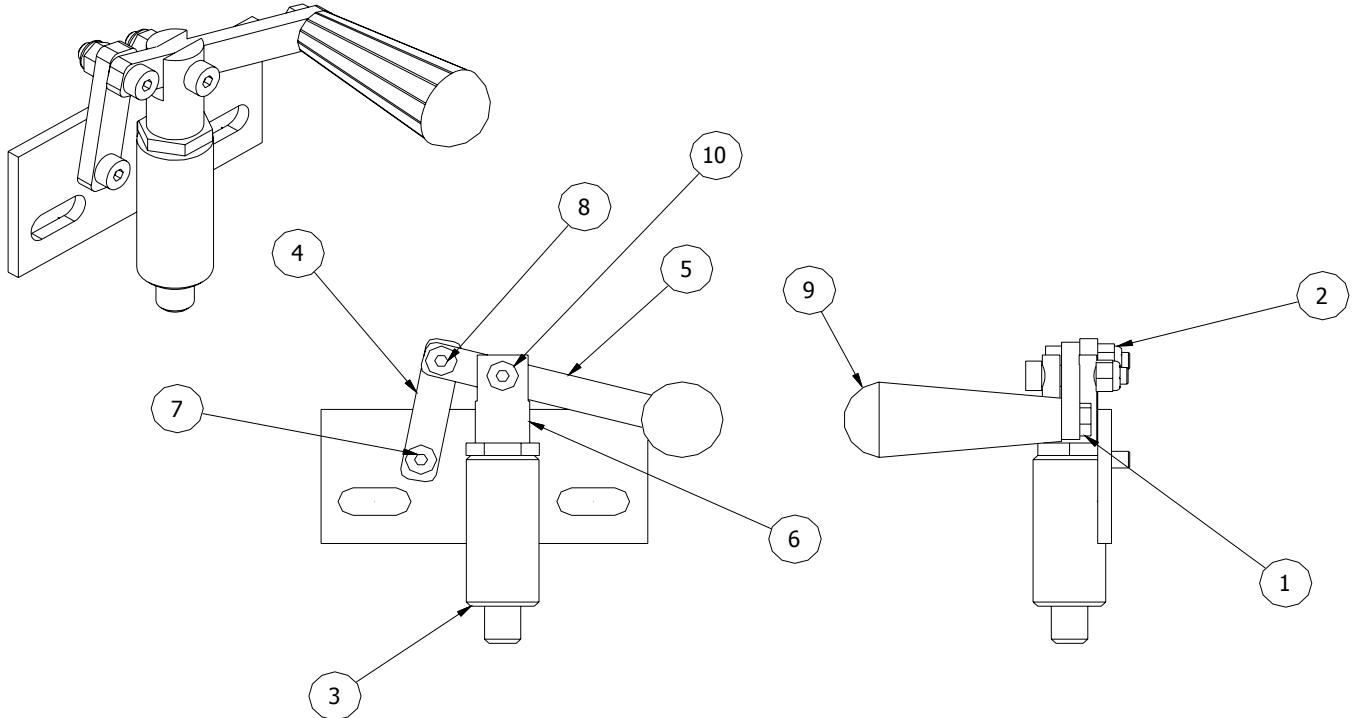


Item	Part No.	Description	Qty.
1	00116900	Screw, Hex Hd 3/8-16 x 1-3/4	4
2	03366300	Washer, Flat 3/8 SAE	6
3	522132-00	Nut, Nylon Locking 3/8-16	6
4	77738100	Screw, Hex Hd 3/8-16 x 1	2
5	79812100	Barb, Hose 1-1/2 MPT x 1-1/2 PO	1
8	79830200	Adapter, 2" Male SCHED 80 PVC	1

Item	Part No.	Description	Qty.
9	79842800	Ball Valve 2" w/Quick Coupler	1
10	79921321	Reducer, 2" to 1-1/2 SCH 40 PVC	1
11	79921322	Adapter, 1-1/2 PVC to 1-1/2 NPT	1
12	79935100	Plate, Ball Valve MNT Bracket	1
13	79950400	Plate, Hydrant Fill Mount	1
14	79950420	Spacer, Hydrant Fill	1



# Latch Assembly, 90 Deg Lower - 79957000



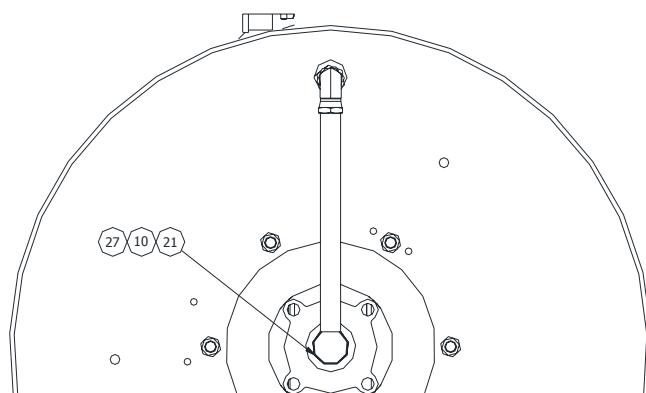
Item	Part No.	Description	Qty.
1	00113700	Screw, Hex Hd Cap 1/4-20 x 3/4	1
2	73821200	Nut, Nylock Lock 1/4-20	2
4	79957010	Weldment, Spring Pin-MNT Bracket	1
5	79957020	Plate, Pivot Lever Arm	1
6	79957030	Plate, Handle Lever Arm	1
7	79957040	Coupler, Lever Arm-Spring Pin	1
8	79957050	Screw, Shoulder 5/16 x 1/4 SS	1
9	79957060	Screw, Shoulder 5/16 x 1/2 SS	1
10	79957070	Handle, Blk Plst 3" Lng 1/4-20	1
11	79957080	Screw, Shoulder 5/16 x 3/4 SS	1

# High Pressure Reel Assembly - 79958300



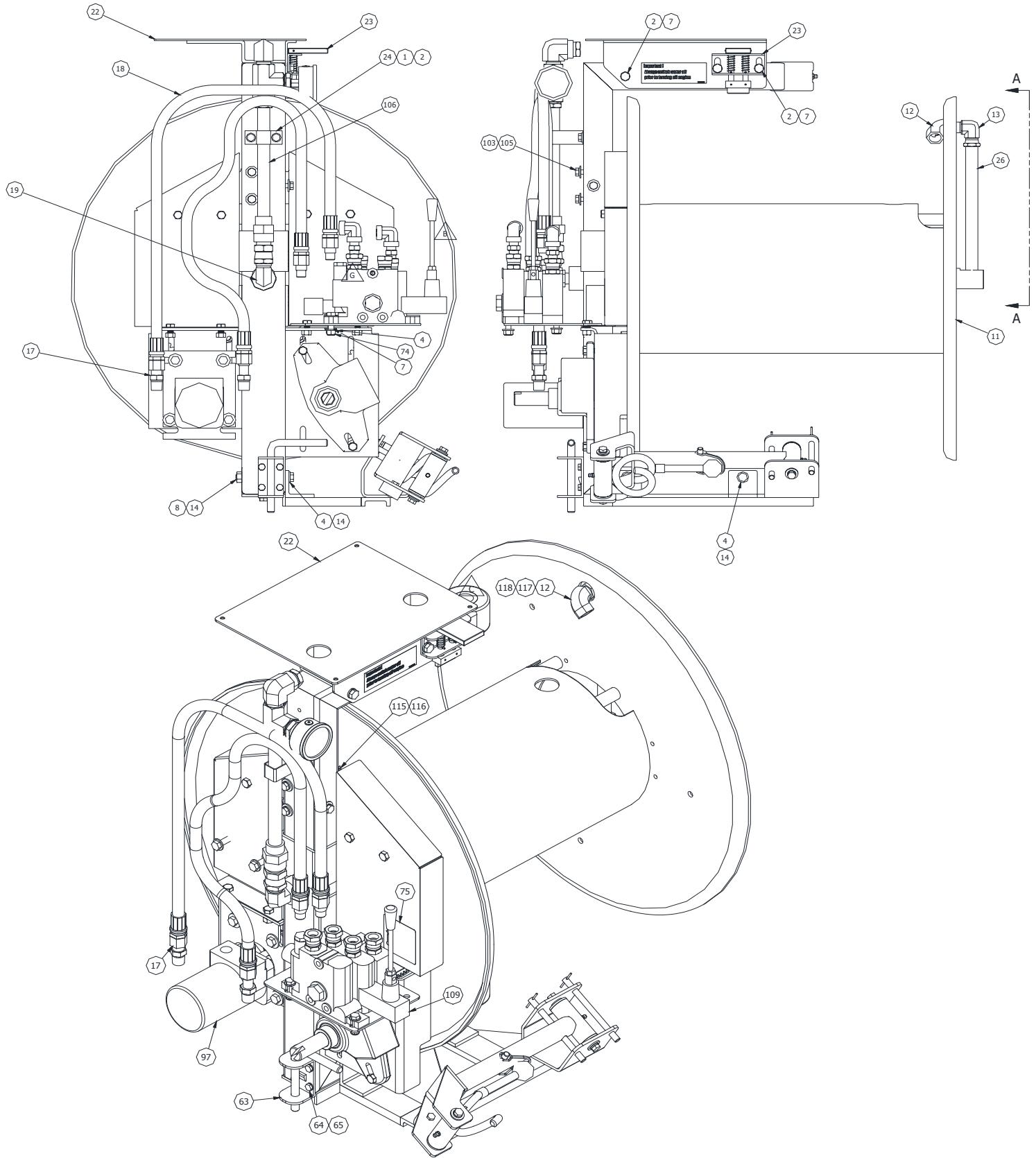
Item	Part No.	Description	Qty.
1	00115100	Screw, Hex Hd Cap 5/16-18 x 1"	4
2	00165800	Washer, Lock Split 3/8	11
4	03366300	Washer, Flat 3/8 SAE	6
7	77738100	Screw, Cap Hex Hd 3/8-16 x 1	9
8	77748000	Nut, Stover Lock 2/8-16 x 1	2
10	79904930	Coupling, Hex 1/2NPT Steel	1
11	79932000	Reel, HP Warrior	1
12	79932055	Elbow, Female Pipe 1/2NPSM x 1/2 NPT	1
13	79932060	Swivel, 1/2-14 NPT-NPSM Elbow	1
17	79948010	Reducer, Pipe 1/2 x 3/8NPT	2
18	79948080	Hose, Hyd Bypass Warrior	2
19	79948110	Elbow, 12 Male Street 37 Degree	1
21	79962100	Swivel, 5000 PSI 1/2 Super-Swivel (Supplied w/Reel)	1
22	79962200	Weldment, Control Panel Mount (09)	1
23	79962500	Upper Reel Lock, Soldier	1
24	79962500	Bracket, HP Reel Nipple Support	1
26	79962630	Pipe SS, 1/2" NPT - 10" Long	1
27	77770800	Nipple, Hex 1/2 NPT	1
63	79966320	Latch, Spring Bolt Zn Plt	1

Item	Part No.	Description	Qty.
64	71705800	Screw, Hex Hd 1/4-20 x 1-1/4	4
65	00165400	Washer, Lock Split 1/4	4
67	79947870	Decal-Water Off Before Engine	1
74	522132-00	Nut, Nylon Locking 3/8-16	2
75	79970200	Decal, Hose-In-Out-Spin	1
82	79962700	Assy, Hose Guide Pivot War 09	1
97	79932180	Assy, High Torque Motor w/ Sprocket	1
98	00162700	Washer, Flat 3/8	8
99	01733900	Nut, Hex 3/8-16	4
103	00162600	Washer, Flat 5/16 USS	3
104	523911-02	Washer, Lock Split 5/16	3
105	02939000	Screw, Cap Hex Hd 5/16-18 x 3/4	3
106	79962600	Assy, HP Nipple - Gauge- Warrior 09	1
109	79948170	Assy, Hyd Valve Single Section	1
114	79947360	Screw, 3/8-16 x 3-3/4 Hex Hd	2
115	79932035	Chain, HP Reel Drive (Not Shown)	1
116	79932183	Links, #35 Chain Extension (Not Shown)	1
117	79962320	Hose, HP Reel Protective Cover (Not Shown)	2
118	79966200	Flex Heat Shrink Tubing	2 ft.



View A-A

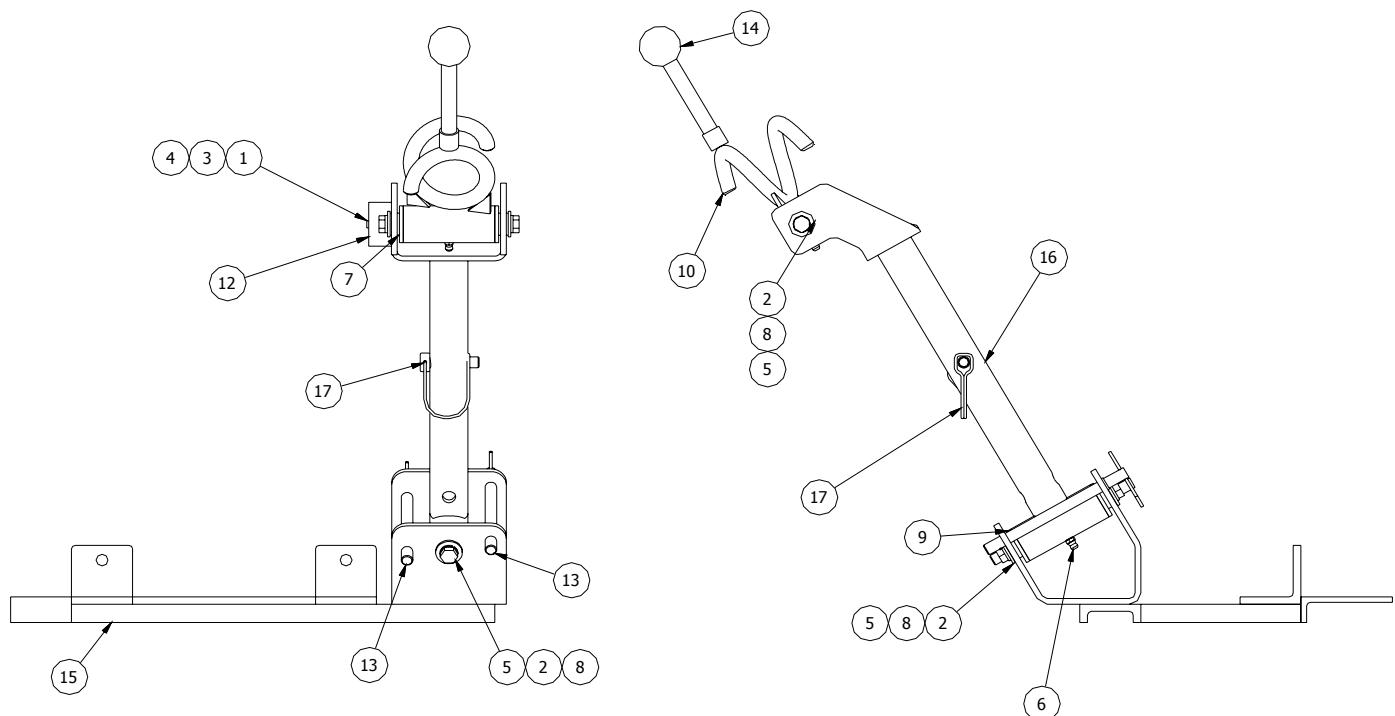
# High Pressure Reel Assembly - 79958300



# Hose Guide Assembly - 79962700



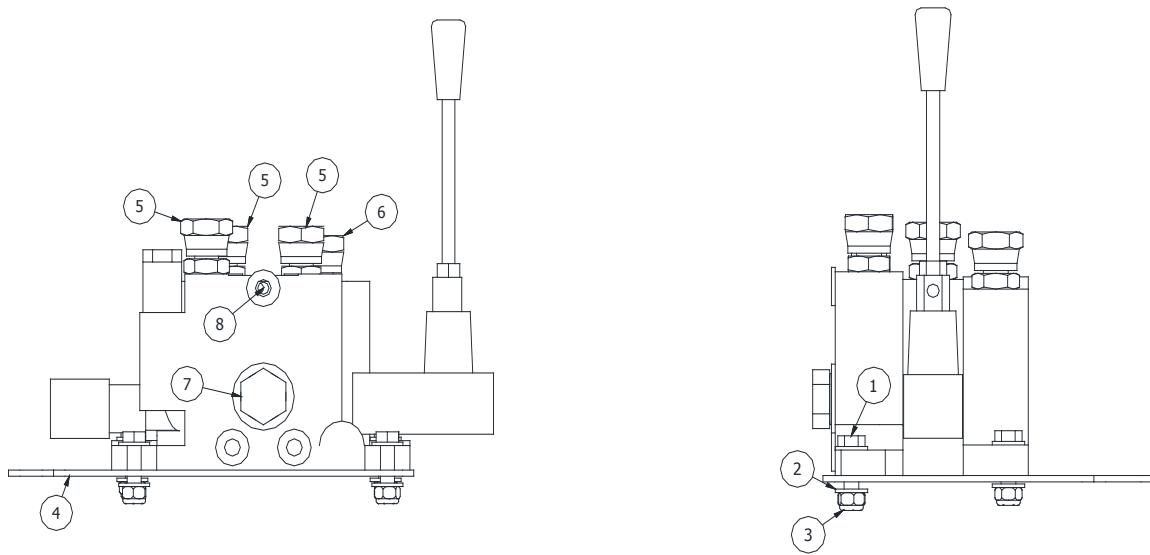
Item	Part No.	Description	Qty.
1	00113901	Screw, Hex Hd Cap 1/4-20 x 1 Zn	1
2	00162600	Washer, Flat 5/16 USS	4
3	02821200	Nut, Nylock Jam 1/4-20	1
4	02825100	Washer, Flat 1/4 USS	1
5	02939000	Screw, Cap Hex Hd 5/16-18 x 3/4	4
6	44218300	Fitting Standard Drive	2
7	75845090	Shaft, SS .75 O.D.	2
8	77743400	Washer, Lock Split 5/16	4
9	79911500	Bearing, Flanged 3/4 ID x 1/2	2
10	79911600	Coiled Hose Guide w/Bearings	1
12	79950810	Bumper, 1-1/2" Dia x 3/4" HG	1
13	79962710	Pin, 3/8" Dia - 4" Usable - T-HNDL	2
14	79962720	Lever, Steel Ball Handle 4"	1
15	79962800	Weldment, HG Cantilever Support	1
16	79962900	Weldment, Pivot HG 90Deg Arm	1
17	79966310	Pin, Locking 3/8" Dia - 1-3/8" Usable	1



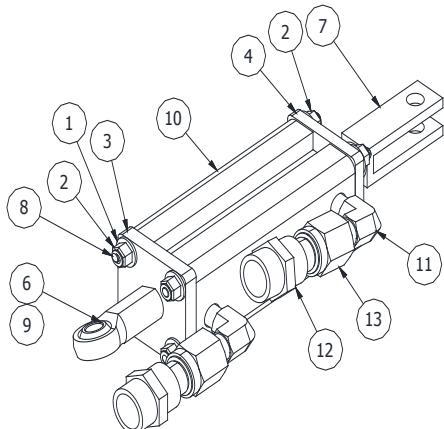


# Assy, Hyd Valve Single Section - 79948170

Item	Part No.	Description	Qty.
1	00115300	Screw, Hex Hd Cap 5/16-18 x 1-1/4	4
2	02899200	Washer, Flat 5/16 USS	8
3	522122-00	Nut, Lock 5/16-18	4
4	79947560	Plate, Hyd Valve 4 Hole	1
5	79948020	Adapter, 3/4-16 O-Ring - 3/8 NPT Swivel	3
6	79948230	Adapter, #10 SAE O-Ring 3/8 NPT	1
7	79948240	Plug, #10 SAE O-Ring	1
8	79948270	Valve, Hyd Single Section	1

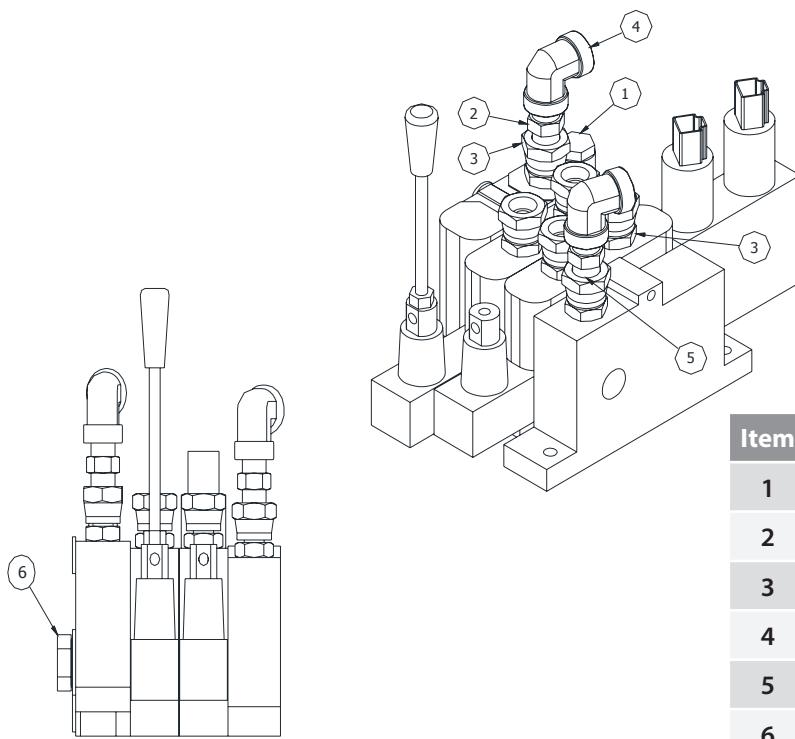


# Assy, Hyd Valve Operator - 79915600



Item	Part No.	Description	Qty.
1	00162400	Washer, Flat 3/16 USS	8
2	79915700	Nut, Nylock #10-32 SS	8
3	79915571	Plate 571	1
4	79915573	Plate 571	1
6	79915620	Rod End 3/8-24 Female Shank	1
7	79915630	Clevis, 3/8-24 x 3/8 Pin	1
8	79915640	Tie Rod #10-32 SS x 5-3/4	4
9	79915650	Screw, 3/8-16 x 3/4 Fl Hd Hex Soc	1
10	79915660	Cylinder, Hyd 1" Bore x 3" Stroke	1
11	71707300	Elbow, 90 Deg. Male 1/4 x 1/8	2
12	73818400	Coupler, Female 3/8 Hose	2
13	542104-03	Bushing Red 3/8M x 1/4F Stl	2

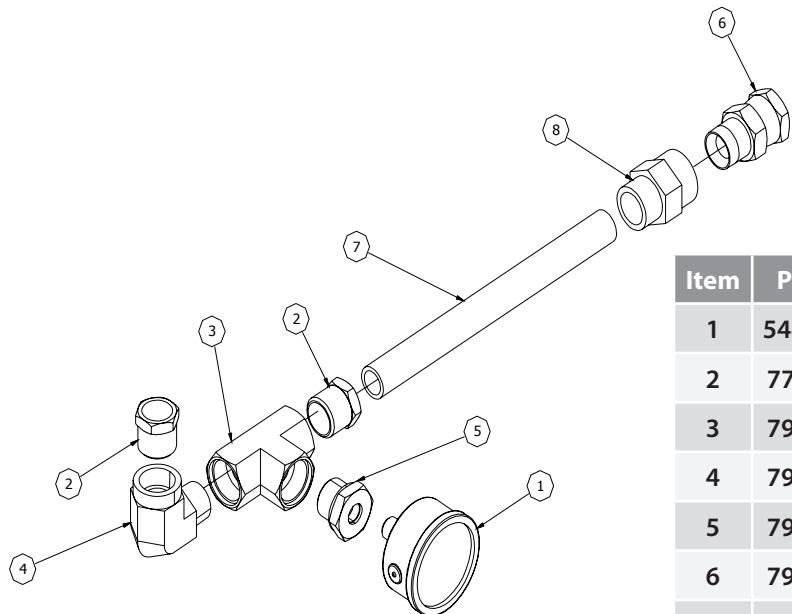
# Assy, Tandem Solenoid Valve - 79948220



Item	Part No.	Description	Qty.
1	79948210	Valve, Hyd Tandem Solenoid	1
2	79948030	Nipple Hex 3/8 NPT Steel	2
3	79948020	Adapter, 3/4-16 O-Ring, 3/8 NPT Steel	5
4	72710000	Elbow, 90 Deg. Female 3/8 Steel	2
5	79948230	Adapter, #10 SAE O-Ring 3/8 NPT	1
6	79948240	Plug, #10 SAE O-Ring	1



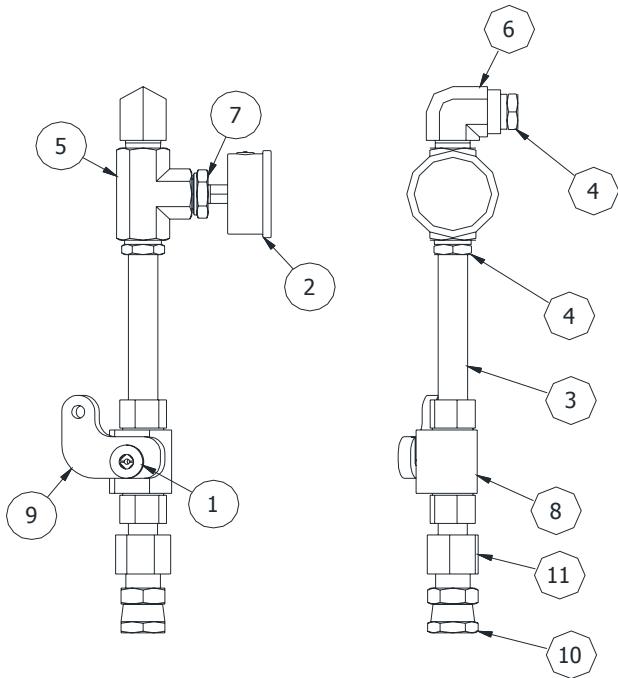
# Assy, HP Nipple/Gauge Warrior - 79962600



Item	Part No.	Description	Qty.
1	544000-01	Gauge 5000 PSI 1/4 NPT	1
2	77742600	Bushing, Reducer 3/4 x 1/2	2
3	79816100	Tee, 3/4 NPT Steel	1
4	79816200	Elbow, 90 Deg Street 3/4 Steel	1
5	79816300	Reducer Bushing 3/4 x 1/4	1
6	79948120	Swivel Adapter, 12ML 37 Deg-3/4 MNPT	1
7	79962610	Pipe Nipple, 1/2" NPT-9" Long	1
8	79962620	Pipe Coupling, 1/2" - 3/4" NPT	1

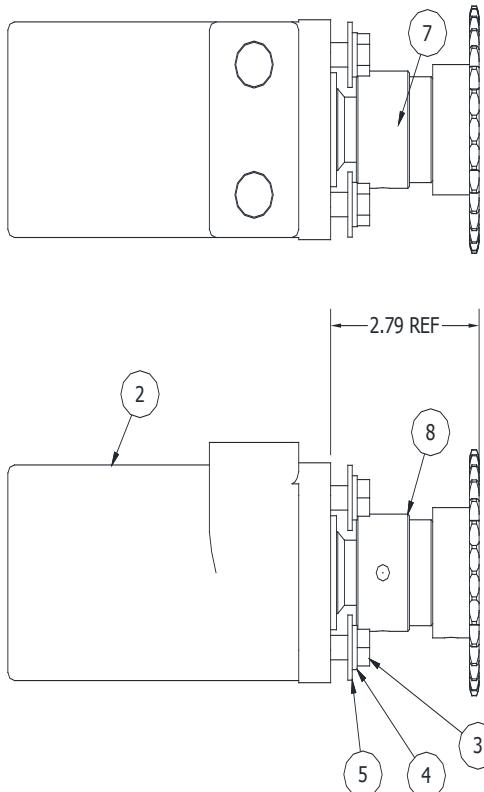


# Assy, HP Nipple-Gauge & Valve - 79960300



Item	Part No.	Description	Qty.
1	00162700	Washer, Flat 3/8	1
2	544000-01	Gauge 5000 PSI 1/4 NPT	2
3	72730100	Nipple, 1/2 NPT x 5	1
4	77742600	Bushing, Reducer 3/4 x 1/2	2
5	79816100	Tee, 3/4 NPT Steel	1
6	79816200	Elbow, 90 Deg Street 3/4 Steel	1
7	79816300	Reducer Bushing 3/4 x 1/2	1
8	79914600	Valve, 1/2" SS 5880 PSI	1
9	79915560	Handle, 1/2" SS Valve	1
10	79948120	Swivel Adapter, 12ML 37Deg-3/4MNPT	1
11	79915690	Adapter, 1/2 NPT Male x 3/4 NPT Female	1

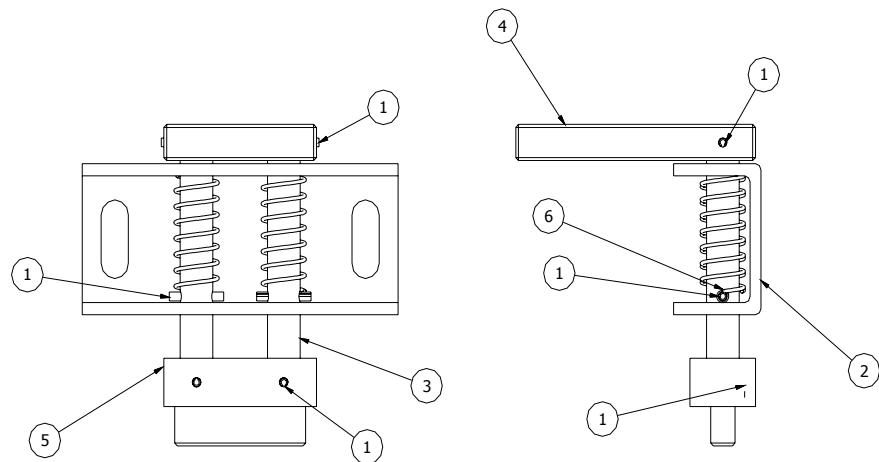
# Assy, Hi-Torque Motor w/Sprocket - 79932180



Item	Part No.	Description	Qty.
2	41294500	Motor, Hydraulic	1
3	77738300	Screw, Cap Hex Hd 3/8-16 x 3/4	4
4	00165800	Washer, Lock Split 3/8	4
5	00162700	Washer, Flat 3/8	4
7	79932173	Screw, Set 5/16-18 x 3/8	2
8	79932182	Sprocket, Hi-Torque	1
9	79932183	Links, #35 Chain Extension (Not Shown)	1
10	77737000	Link #35 Roller Chain Connecting	1

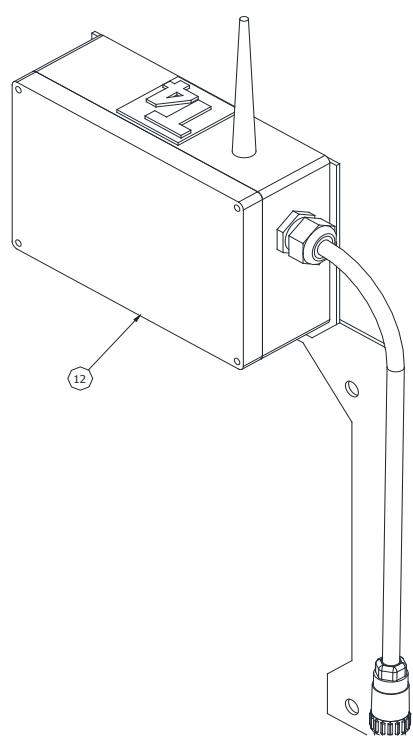
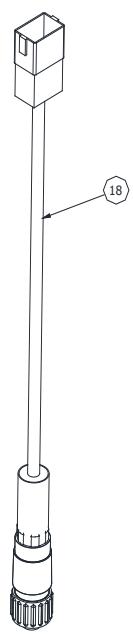
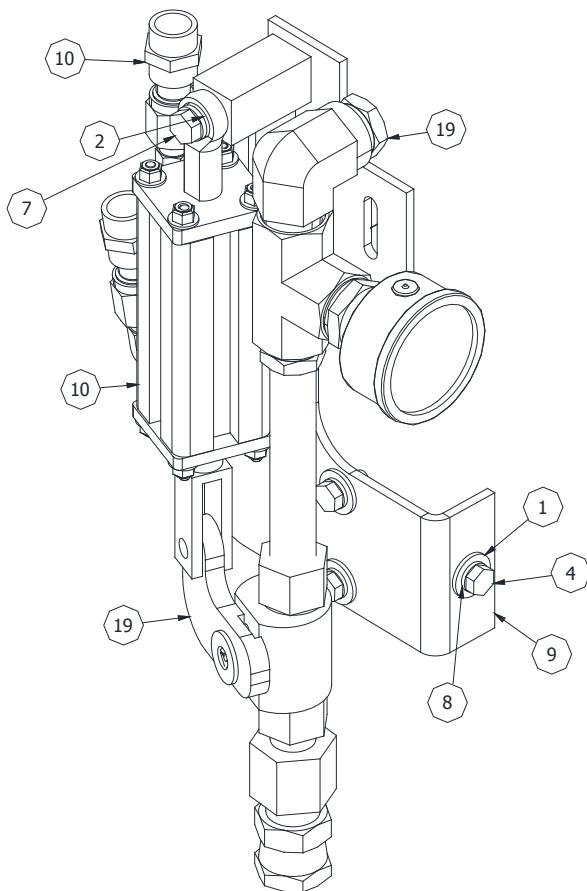
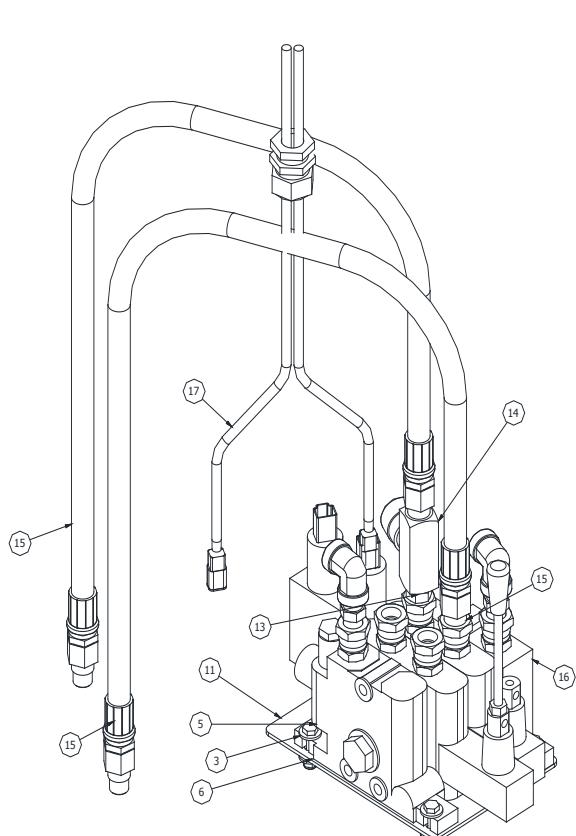


# Latch Assy, 180 Pivot Dbl Pin - 79962400



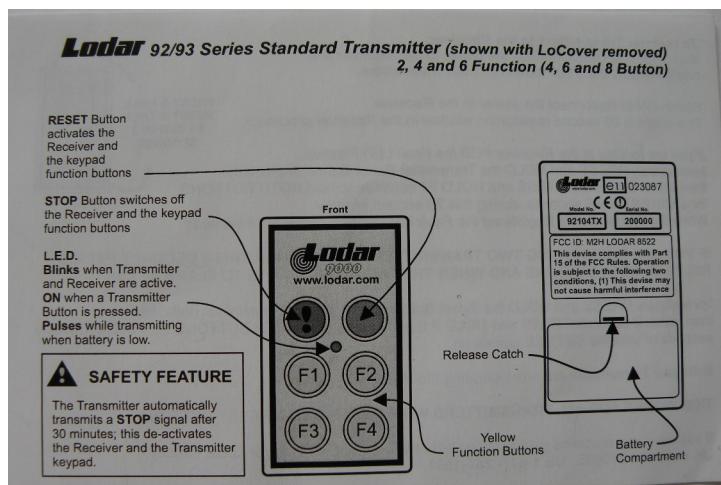
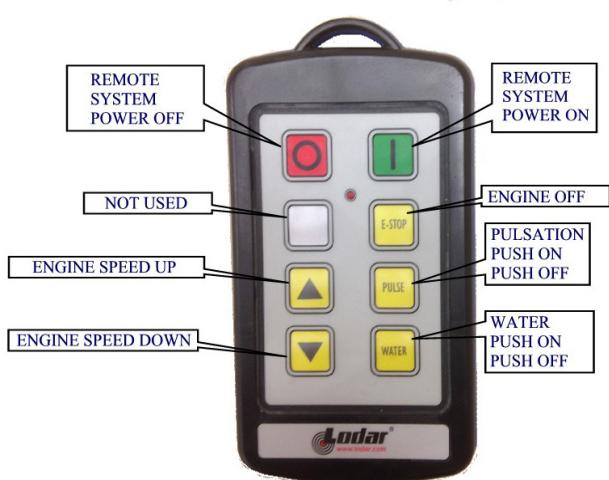
Item	Part No.	Description	Qty.
1	75851503	Spring Pin, 3/32" OD x 5/8"	6
2	79962410	Bracket, 180 Pivot-DBL Pin	1
3	79962420	Pin, 180 Pivot Latch-DBL Pin	2
4	79962430	Grab, 180 Pivot Latch-DBL Pin	1
5	79962440	Stricker- 180 Pivot Latch	1
6	79962450	Spring .5" OD - 1/5" Free Lng	2

# Optional Wireless Remote Control - 79947900



# Optional Wireless Remote Control - 79947900

Item	Part No.	Description	Qty.
1	00162600	Washer, Flat 5/16 USS	3
2	00165800	Washer, Lock Split 3/8	1
3	02825100	Washer, Flat 1/4 USS	8
4	02939000	Screw, Cap Hex Hd 5/16-18 x 3/4	3
5	71705500	Screw, Hex Hd 1/4-20 x 1-1/4	4
6	73821200	Nut, Nylon Locking 1/4-20	4
7	77738100	Screw, Cap Hex Hd 3/8-16 x 1	1
8	77743400	Washer, Lock Split 5/16	3
9	79915580	Weldment, Cyl Bracket	1
10	79915600	Assy, Hyd Valve Operator	1
11	79947560	Plate, Hyd Valve 4 Hole	1
12	79947901	Assy, Remote Control System	1
13	79948030	Nipple, Hex 3/8 NPT Steel	1
14	79948040	Valve, Flow Control 3/8	1
15	79948080	Hose, 1/2" NPT x 36 - 1/2	2
16	79948220	Assy, Tandem Solenoid Valve	1
17	79948260	Cord Assy, Tandem Solenoid	1
18	79953400	Wiring Harness, T4 Remote - 2016	1
19	79960300	Assy, HP Nipple - Gauge & Valve	1



# *Optional Remote Control - 79947900*



**Fig. 78.1**

Original hydraulic valve and  
HP water connections on Units  
without Remote Control



**Fig. 78.2**

Single section hydraulic valve is replaced by  
2 section hydraulic valve assembly

One section is manually operated to  
control reel rewind, the other is electrically  
operated by remote control system to  
control water ON/OFF



**Fig. 78.3**

View of hydraulic cylinder  
attached to HP water valve

# Optional Remote Control - 79947900



Wireless Remote Control  
Receiver Unit

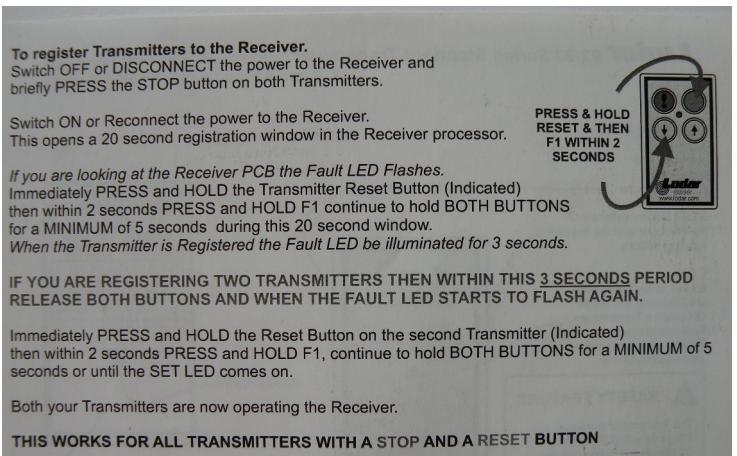
Fig. 79.1



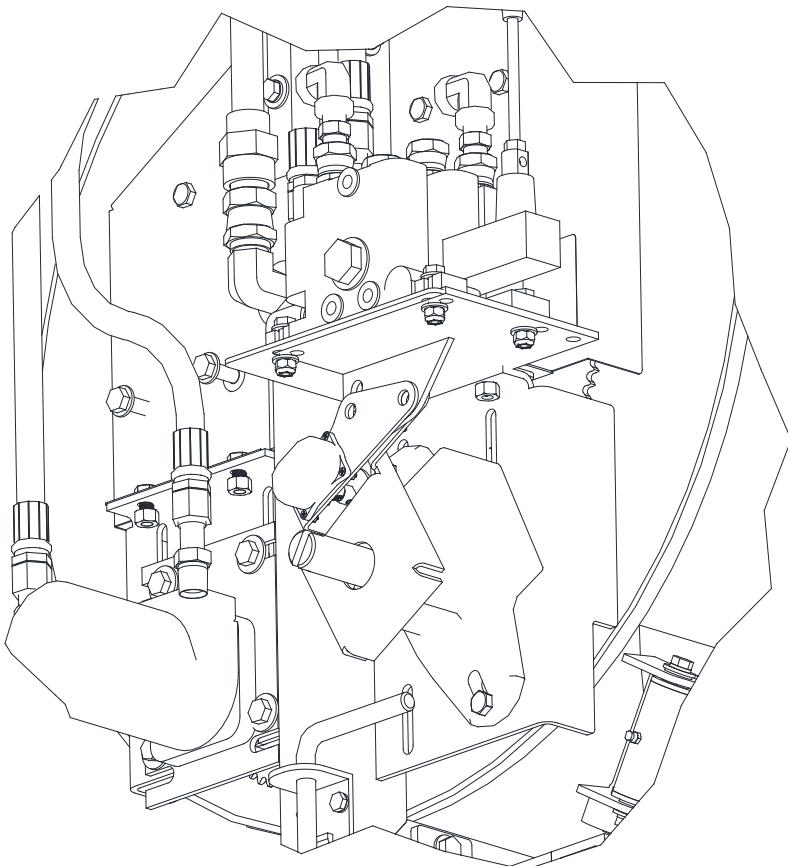
Fig. 79.2

Complete water control with 2 section  
hydraulic valve, hydraulic cylinder and high  
pressure water valve

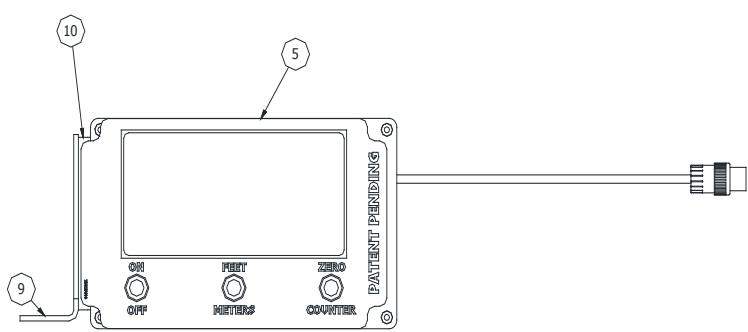
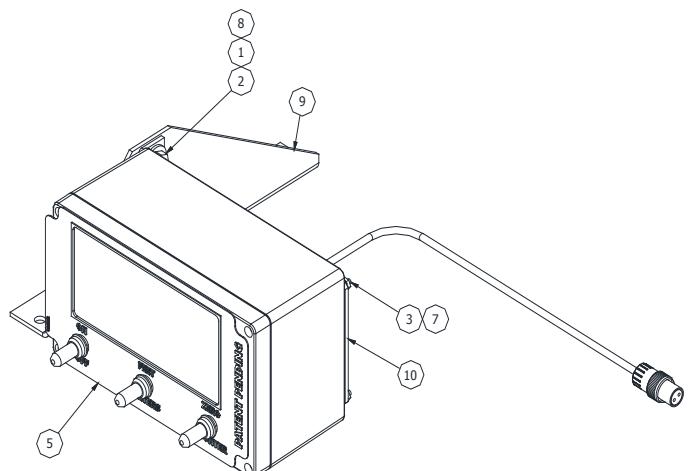
## How to Link Hand Held Wireless Remote to Remote Control Receiver Unit



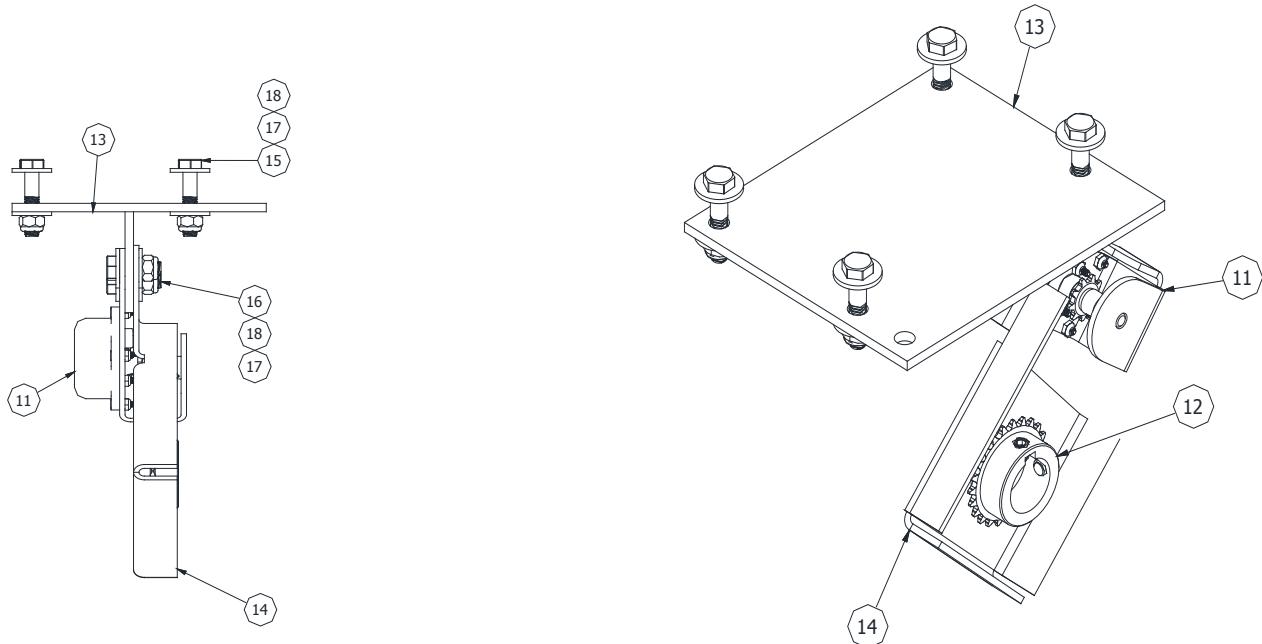
# Optional Footage Counter - 79975000



Footage Counter Sensor  
Mounted to Reel  
(Guard Removed to Show Mounting)



# Optional Footage Counter - 79975000



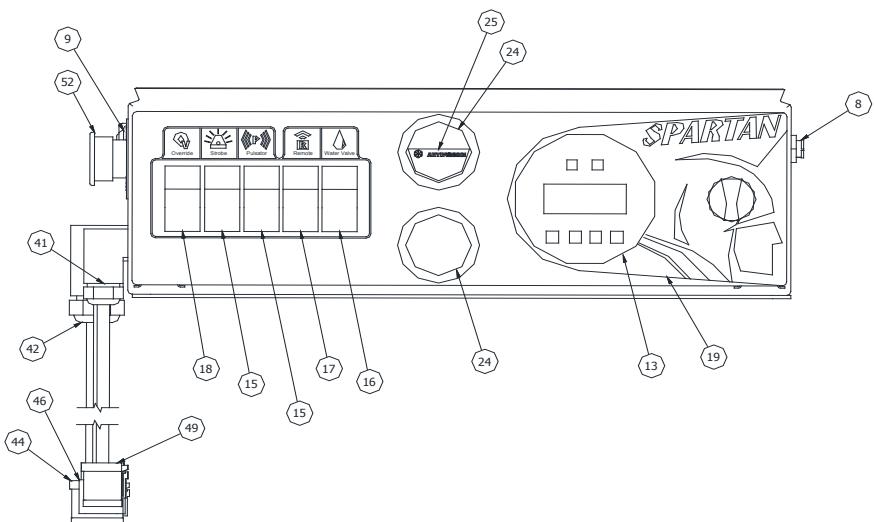
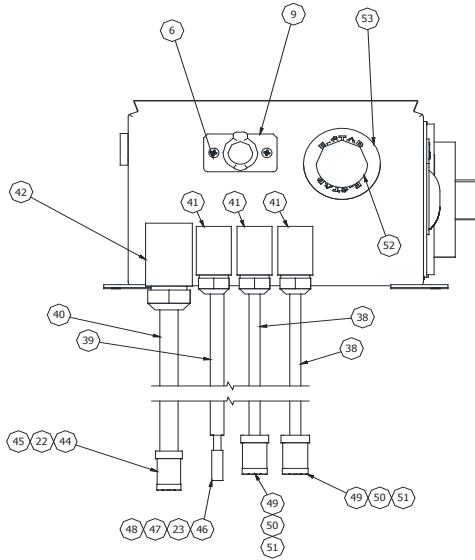
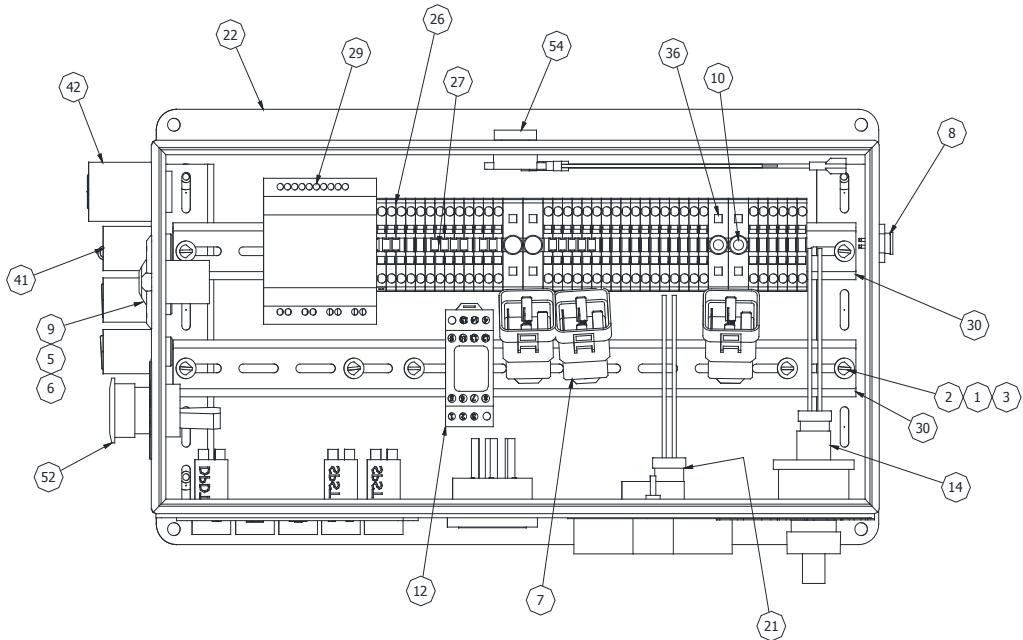
Item	Part No.	Description	Qty.
1	02821200	Nut, Nylock Jam 1/4-20	2
2	02825100	Washer, Flat 1/4 USS	2
3	61026000	Screw, 6-32 x 1/2 Pan Hd Phil	4
4	75879180	Roller Chain #25	10in
5	75875300	LED Enclosure Assembly - Hose Counter	1
6	75879185	Master Link Roller Chain #25	1
7	77789100	Nut, Kep 6-32 Zn Plt	4
8	79975200	Screw, Phil Flat HD 1/4-20 x 1 SS	2
9	79975300	Plate, Jetter Cnt Control Box Mount	1
10	79975400	Plate, Jetter Control Box Mount	1
11	75879100	Assembly, Counter Carriage	1
12	75879150	Sprocket, 1 Bore 23 Tooth	1
13	75879200	Weldment, Warrior Swing Counter	1
14	75879210	Bracket, Warrior Counter Chain	1
15	44225000	Screw, Hex Hd 5/16-18 x 1-1/2	4
16	00115100	Screw, Hex Hd 5/16-18 x 1	2
17	00162600	Washer, Flat 5/16 USS	12
18	522122-00	Nut, Lock 5/16-18	6

# Control Box Assembly - 79953600



Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	01588200	Washer, Flat #10 SAE	10	29	79945550	Relay, IDEC Smart	1
2	02823800	Screw, Machine 10-32 X 3/8	10	30	79945610	Din Rail - 17 inches	2
3	03850100	Nut, Hex Kep 10-32	10	31	79945620	Din Rail - 8.5 inches	2
4	44294100	Jumper Wire Piggyback	4	32	79945710	O-Ring, Buna 3/8ID - 1/2OD	6
5	61021600	Nut, 8-32	2	33	79945720	O-Ring, Buna 1/2ID - 5/8 OD	2
6	62017800	Screw, Flat Hd 8-32 x 3/8	2	34	79945730	O-Ring, Buna 1-7/8 - 2" OD	2
7	75823600	Relay	3	35	79945740	O-Ring, Buna 3-1/4ID - 3-3/8	2
8	75875850	Harness, Main Power Counter	1	36	79946700	Fuse Holder, Din Rail Screwless	4
9	79804500	Plug, 12V DC	1	37	79946900	Set, Warrior Control Jumpers	1
10	79850400	Fuse, 15 Amp	2	38	79953320	Trailer Cable, PVC 18/7	2
11	79903540	Relay, 4-Pole 5 amp	1	39	79953540	Trailer Cable, PVC 16/6	1
12	79903541	Socket, 5A Relay	1	40	79953550	Trailer Cable, PVC 14-12-10 GA	1
13	79925310	Display-Control, T4 Engine	1	41	79953610	Strain Relief, Blk 1/2 NPT x .24-.47"	3
14	79925320	Key Switch, Ignition 3POS Sealed Deutsch	1	42	79953620	Strain Relief, Blk 3/4 NPT x .35-.63"	1
15	79944620	Rocker, Black SPST 20A, 12 VDC	2	43	79953630	Enclosure, Warrior Mod 2016	1
16	79944630	Rocker, Blue Illum SPST 20A, 12 VDC	1	44	79953640	Connector, Deutsch 12 Way Grey Plug	1
17	79944640	Rocker, Green Illum SPST 20A, 12 VDC	1	45	79953650	Wedge, Plug 12 Way Deutsch	1
18	79944650	Rocker, Black DPDT 20A, 12VDC	1	46	79953660	Terminal Delphi Female 12-10	1
19	79944660	Decal, Warrior Enclosure Face	1	47	79953670	TPA Clip, 3Pos Female Connect Delphi	1
20	79944710	Harness, Keyswitch Box-Int	1	48	79953680	Terminal Delphi Female 12-10	3
21	79944720		1	49	79953690	Connector, Deutsch 8 Way Grey Plug	2
22	79944812		10	50	79953700	Wedge, Plug 8Way Deutsch	2
23	79944854	Seal, Delphi 4.3-3.45 Blue	3	51	79953710	Contact, Socket 16-18 Deutsch	14
24	79945400	Gauge, Tank Level 2008	2	52	79954400	Switch, E-Stop	1
25	79945410	Decal, Anti-Freeze	1	53	79954500	Legend Plate, E-Stop	1
26	79945500	Terminal Block, Din Rail Screwless	36	54	79955100	Buzzer with Wires	1
27	79945510	Jumper-Terminal Block	15	55	79957500	Desiccant Bag, Indicating	5
28	79945540	Tag, Term Block Marking 1-100	1				

# Control Box Assembly - 79953600



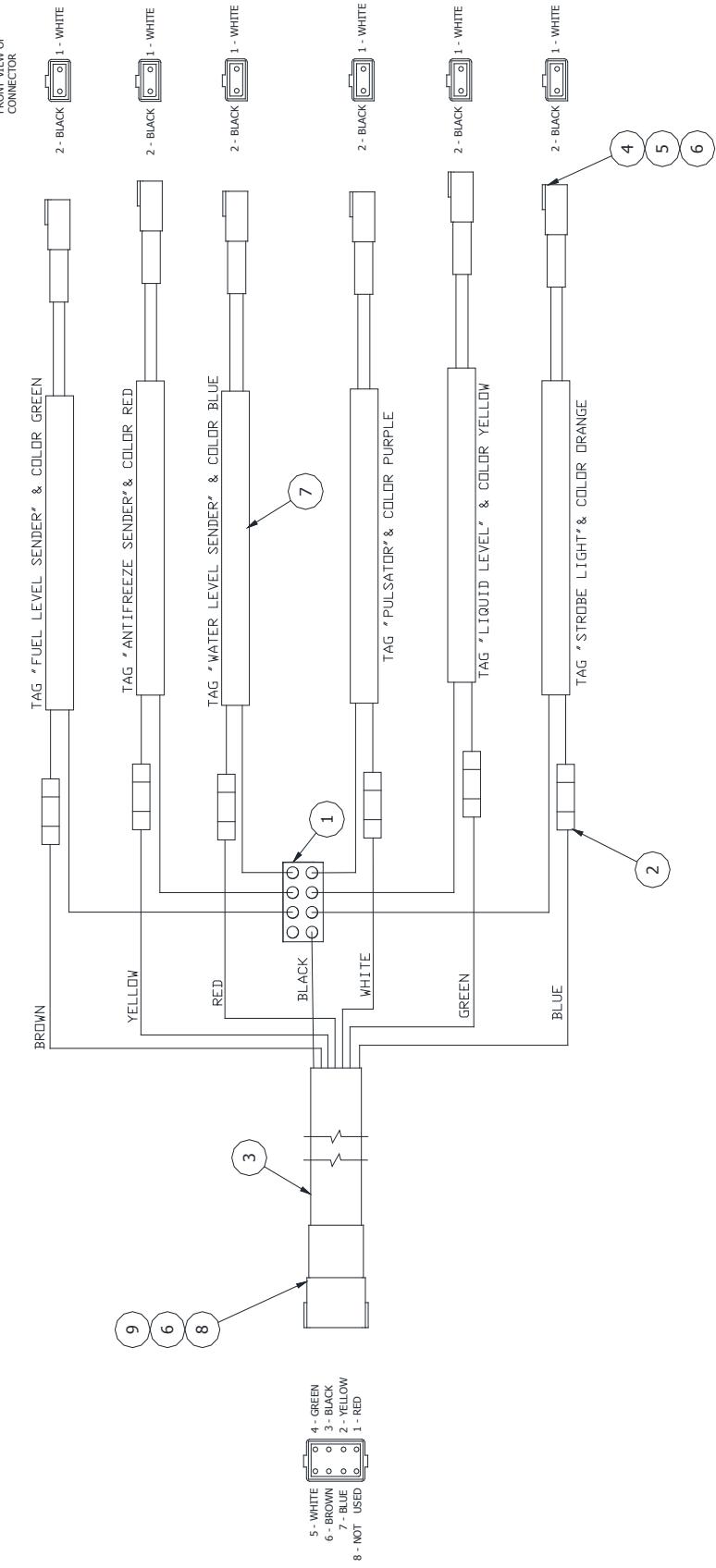
# Final Wiring Schematic Terminal Block - 79944700



ENGINE CONNECTIONS	E-STOP CONNECTOR	A - FUSED KILL SWITCHED POWER B - SWITCHED POWER C - FUSED UNSWITCHED POWER	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46	51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96	TERM 30 - RELAY #2 (WATER LEVEL) NOT USED ENGINE KILLSWITCH PIN 1 ENGINE KEYSWITCH PIN 1 ENGINE KEYSWITCH PIN 2 ENGINE KEYSWITCH PIN 3 JUMPER TO TERMINAL 25 (SWT POW) JUMPER TO TERMINAL 75 (SWT POW) ENGINE KEYSWITCH PIN 6 ENG DISPLAY CNCT A - PIN 1 ENG DISPLAY CNCT A - PIN 2 ENG DISPLAY CNCT A - PIN 3 ENG DISPLAY CNCT A - PIN 6 NOT USED
	KEYSWITCH CONNECTOR	S1-FUSED KILL SWITCHED POWER S2-STARTER RELAY SOLENOID S3-ALTERNATOR IGNITION 	16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96	ENGINE KEYSWITCH PIN 1 ENGINE KEYSWITCH PIN 2 ENGINE KEYSWITCH PIN 3 JUMPER TO TERMINAL 25 (SWT POW) JUMPER TO TERMINAL 75 (SWT POW)
	DISPLAY CONNECTOR	S4-SWITCHED POWER S5-SWITCHED POWER S6-FUSED KILL SWITCHED POWER D1-SWITCHED POWER D2-CAN HIGH (J1939) D3-CAN LOW (J1939) D6-SINGLE POINT GROUND NOT USED	14 13 12 11 10 9 8 7 6 5 4 3 2 1	51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96	ENGINE KEYSWITCH PIN 6 ENG DISPLAY CNCT A - PIN 1 ENG DISPLAY CNCT A - PIN 2 ENG DISPLAY CNCT A - PIN 3 ENG DISPLAY CNCT A - PIN 6 NOT USED
SENSOR BLOCK		WATER LEVEL SENDER (+) ANTIFREEZE LEVEL SENDER (+) FUEL LEVEL SENSOR (+) LIQ LEVEL SENSOR (+) PULSATATOR POWER (+)	19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96	WATER LEVEL GAUGE "S" TERMINAL ANTIFREEZE GAUGE "S" TERMINAL DISPLAY CNCT A - PIN 5 TERM 86, RELAY #2 (WATER LEVEL) TERM 87, RELAY #3 (PULSATATOR)
SWITCHED POWER		ENGINE KEYSWITCH PIN 4 TERM 86, RELAY #1 (REMOTE WATER) SMART RELAY (L1/Q1/Q2) NOT USED 4PDT RELAY (PIN 12) JUMPER TO 57 (FUSE)	25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96	ENGINE KEYSWITCH PIN 5 NOT USED TERM 85, RELAY #3 (PULSATATOR) WATER LEVEL GAUGE - "I" TERMINAL JUMPER TO TERMINAL 58 (FUSE)
BATTERY POWER		JUMPER TO 29 JUMPER TO 28 JUMPER TO 27 JUMPER TO 26 TO BATTERY POSITIVE	30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96	CIGAR LIGHTER (+) ROCKER #2 - STROBE (SPST) JETTER COUNTER (PIN 1) ROCKER #3 - REMOTE (GREEN SPST) ROCKER #1 - OVERRIDE LW (COM)
GROUND BLOCK 2		TO BATTERY GROUND CIGAR LIGHTER ANTIFREEZE GAUGE "G" TERMINAL 4PDT RELAY "NC" TERMINAL TO GND CONNECTOR (79944820)	35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96	NOT USED NOT USED WATER LEVEL GAUGE (G) REMOTE CONNECTOR (PIN 7) NOT USED
GROUND BLOCK 1		TO BATTERY GROUND SMART RELAY PIN M MANUAL CLUTCH Q1-2 (GND) NOT USED NOT USED	40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96	JETTER COUNTER (PIN 2) SMART RELAY PIN Q4, PIN 1 MANUAL CLUTCH Q2-2 (GND) NOT USED NOT USED
REMOTE CONNECTOR		7-PIN CONN (PIN 4) 7-PIN CONN (PIN 3) 7-PIN CONN (PIN 2) 7-PIN CONN (PIN 1) 7-PIN CONN (PIN 6) 7-PIN CONN (PIN 5)	46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96	DISP CONN B - PIN 5 DISP CONN B - PIN 2 TERM 85, RELAY #1 (REMOTE WATER) 4PDT RELAY PIN 13 TERM 86, RELAY #2 (WATER LEVEL) TERM 86, RELAY 3 (PULSATATOR)
		ROCKER #5 - WATER (BLUE SPST) TERM 87, RELAY #1 (REMOTE WATER) JUMPER TO TERMINAL 37 (GND) JUMPER TO TERMINAL 22 (SWT POW)	37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96	GND PIEZO NEGATIVE TERMINAL JUMPER TO TERMINAL 87 (GND) JUMPER TO Q3, PIN 1 JUMPER TO Q4, PIN 1 IDEQ Q2-2, MAN CLUTCH (OPT) JUMPER TO Q1, PIN 1 IDEQ Q1-2, MAN CLUTCH (OPT) JUMPER TO Q2, PIN 1 JUMP TO TERM 22 (SWT POW)

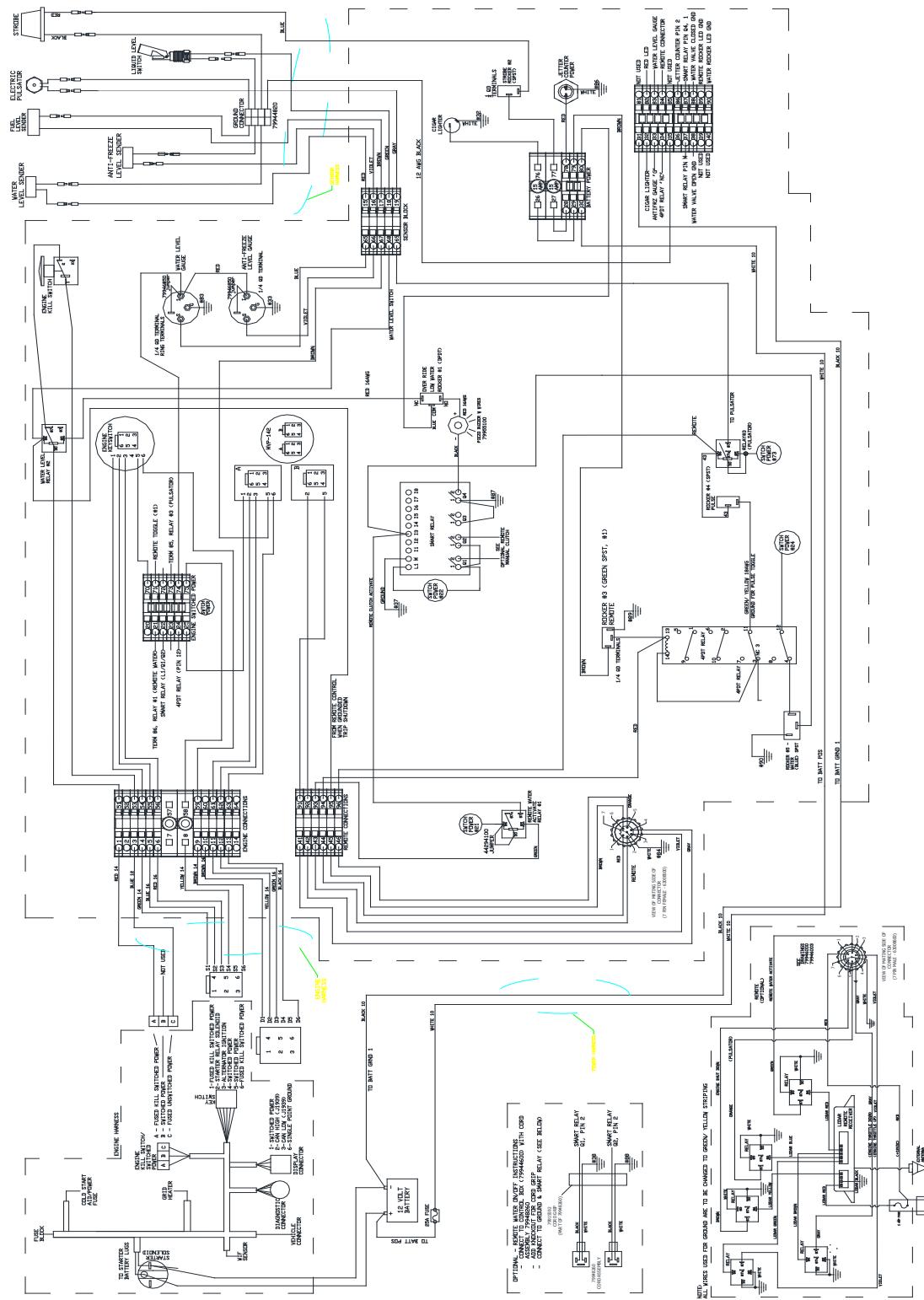


# Wiring Harness - 79953300



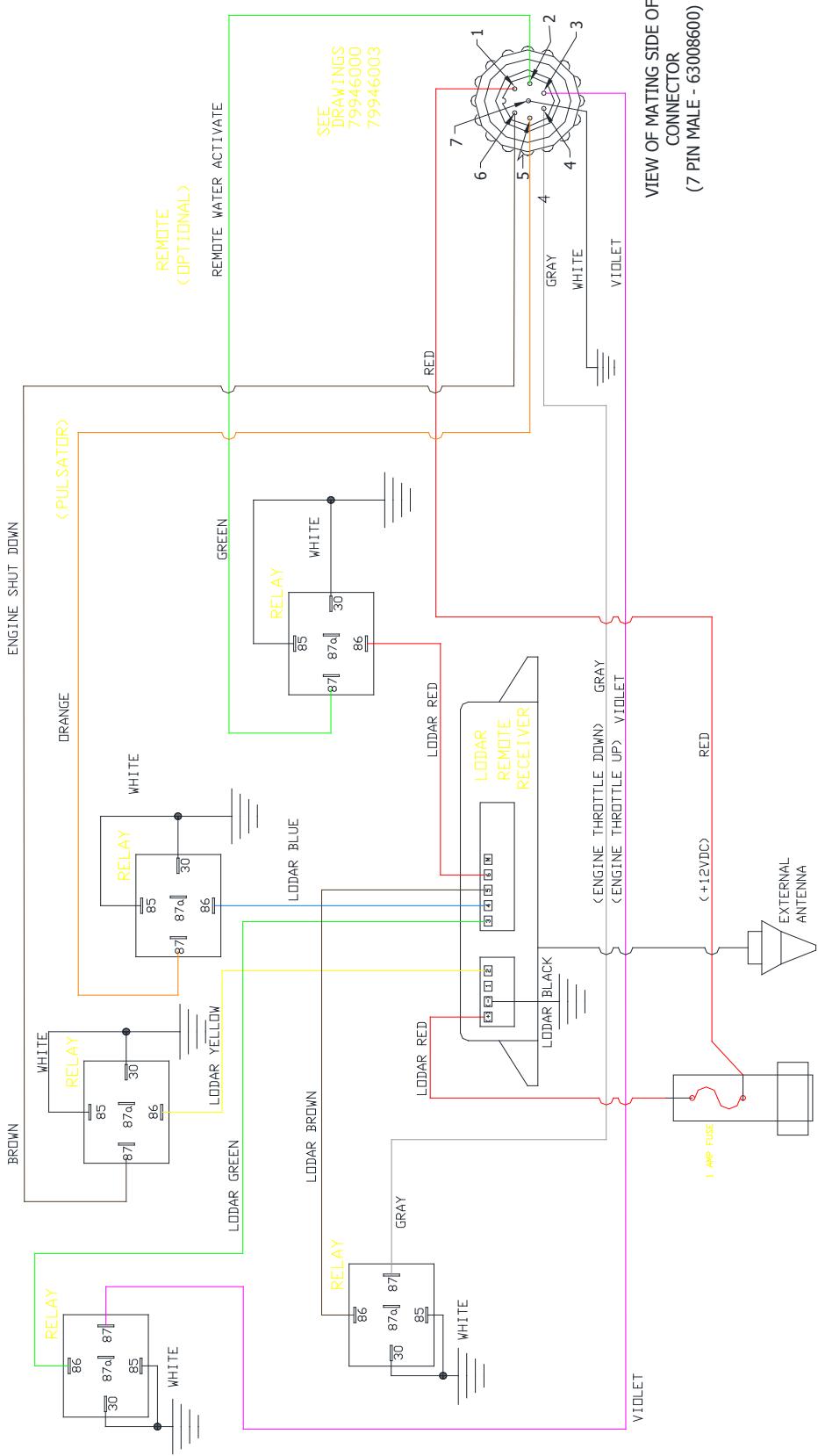
Item	Part No.	Description	Qty.
1	79944820	Connector-Push-On 6 Wire	1
2	79953310	Connector, Butt 20-18 GA Red	6
3	79953320	Trailer Cable, PVC 18/7	204"
4	79953330	Connector, 2 Way Grey Receptacle	6
5	79953340	Wedge, Receptacle 2 Way	6
6	79953350	Contact, Pin 16-18	19
7	79953360	Service Cord, EP 300V 18/2	576"
8	79953410	Connector, 8 Way Grey Receptacle	1
9	79953420	Wedge, Receptacle 8 Way	1

# Warrior Wiring Schematic Control System 79944700

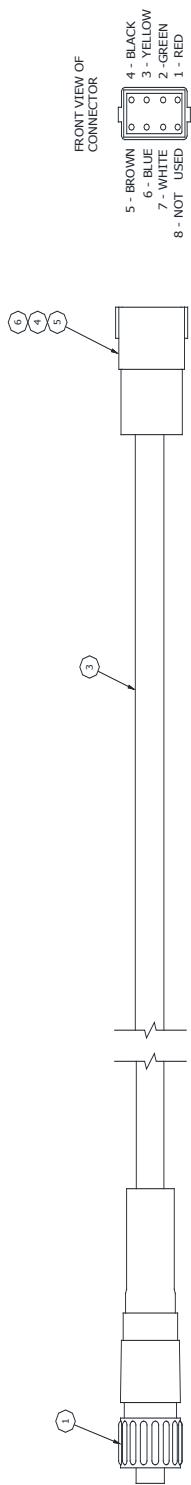




# Wiring Schematic Remote Control - 79944700



# Wiring Harness T4 Remote - 79953400

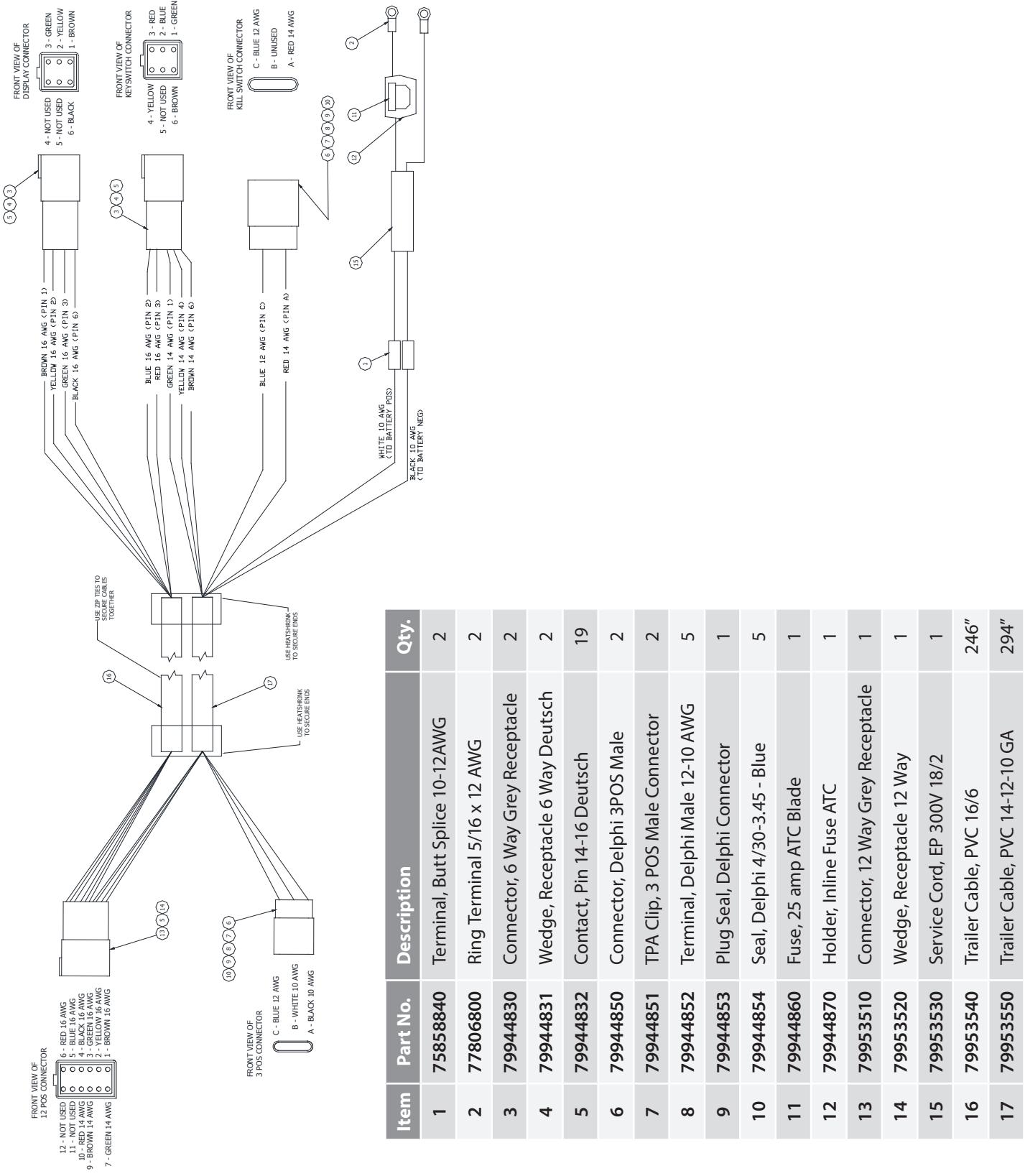


Item	Part No.	Description	Qty.
1	63008500	Connector, Female 7 Pin	1
2	79944400	Heat Shrink Tubing 1/2" ID Black	1
3	79953320	Trailer Cable, PVC 18/7	216'
4	79953350	Contact, Pin 16-18 Deutsch	7
5	79953410	Connector, 8 Way Grey Receptacle	1
6	79953420	Wedge, Receptacle 8 Way Deutsch	1



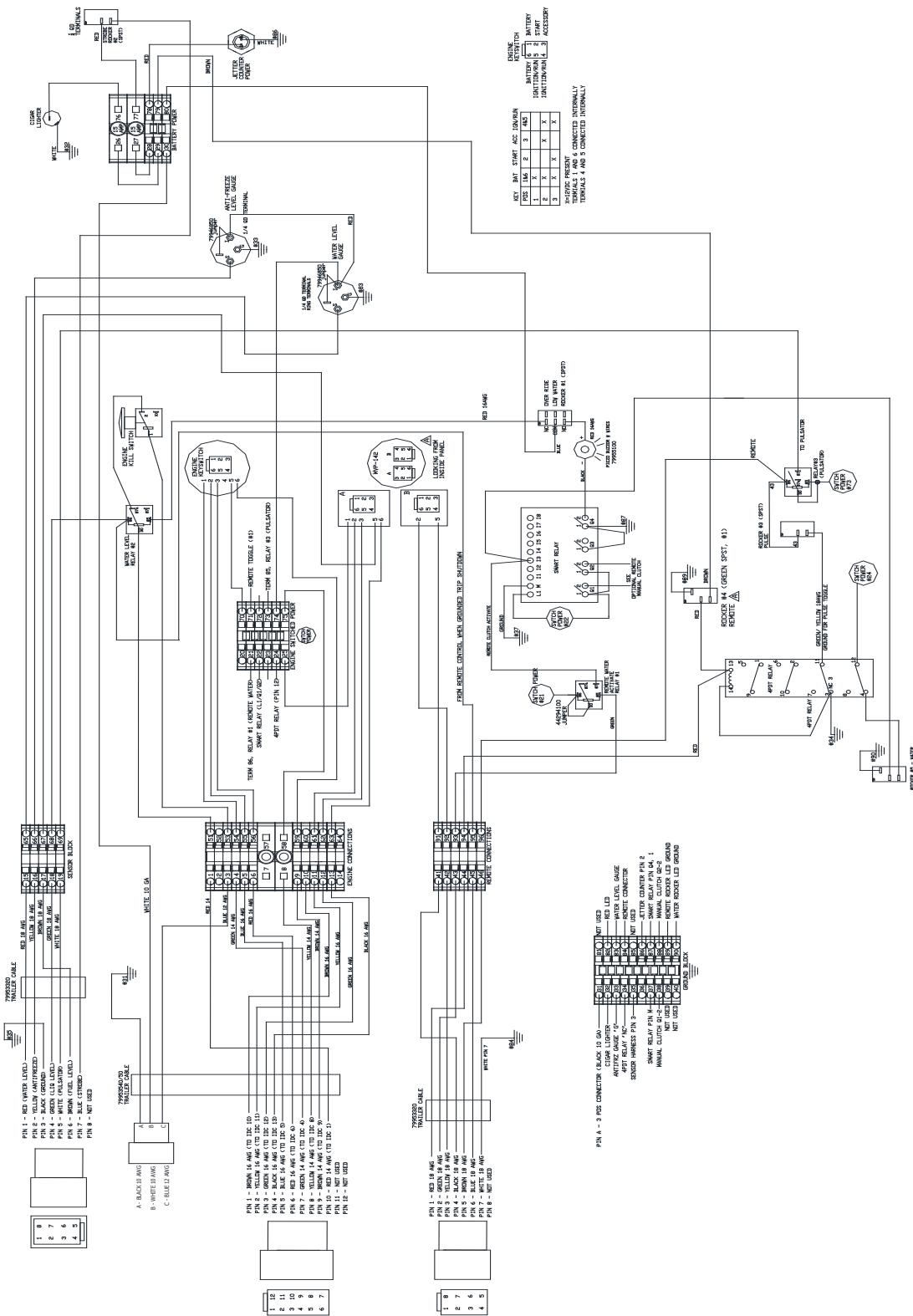
# Wiring Harness T4 Engine Control

## 79953500



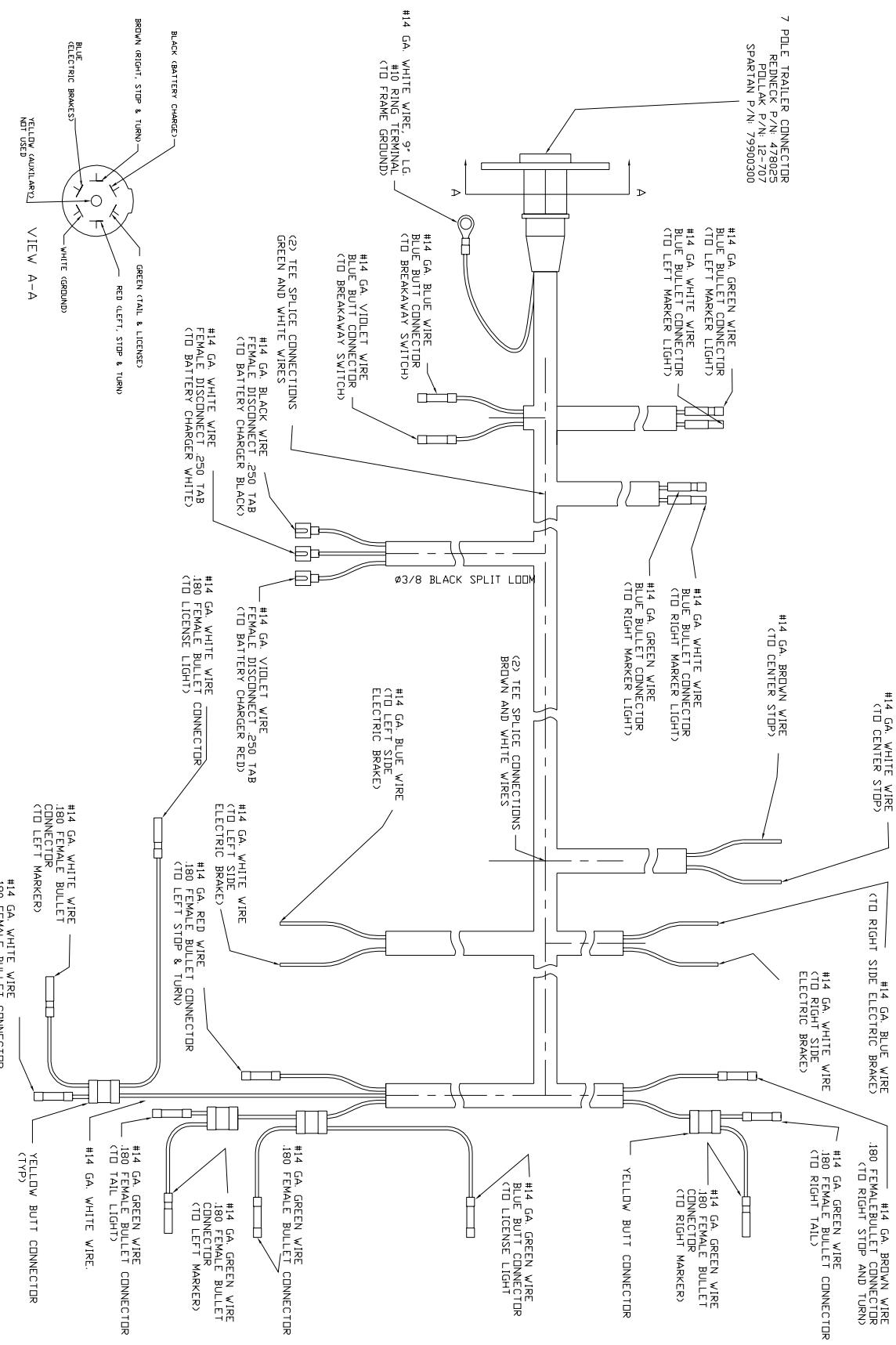
# Wiring Harness Control Box

## 79953600

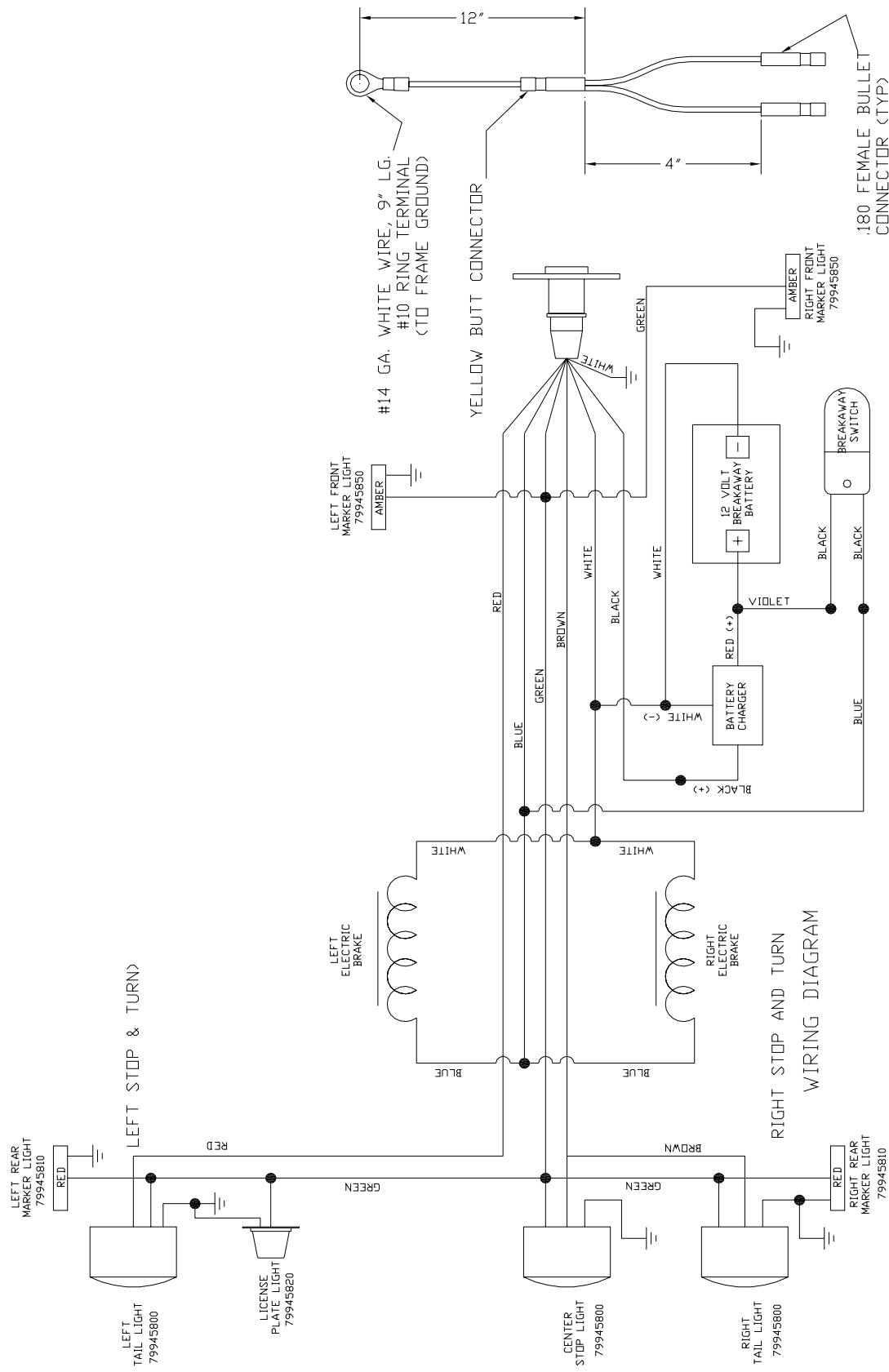




# Trailer Wiring Harness - 79946300



# Optional Footage Counter - 79975000





# Standard & Optional Accessories

Part No.	Description
73817300	Wash Down Accessory Kit
77816000	1/4" x 75' Thermoplastic Hose
73808602	3/8" x 150' Thermoplastic Hose
73808600	3/8" x 250' Thermoplastic Hose
73808603	3/8" x 350' Thermoplastic Hose
77771100	1/2" x 150' Thermoplastic Hose
77771200	1/2" x 250' Thermoplastic Hose
79871600	1/2" x 500' Thermoplastic Hose
79944100	5/8" x 100' Tank Fill Hose
77799800	Handgun - Lance Assembly
77800600	Hose Guard (Tiger Tail)
79873500	Hose, Anti-Turnaround Device
44256200	Jetting Safety Gloves
77752600	Mobile Hose Reel
71109900	Tip Cleaner
77763700	Venturi Pump
79824600	Regular Nozzle - Closed
79824700	Regular Nozzle - Open
79864500	Grenade Nozzle
78752100	Q Nozzle
78752000	Rocket Nozzle
78752200	Rotating Nozzle
79921101	Warthog Nozzle (3" - 4" lines)
79921200	Warthog Nozzle (4" - 8" lines)
79922900	Warthog Nozzle (6" - 18" lines)
75831010	Warthog Nozzle Service Kit (3-4")
79921210	Warthog Nozzle Service Kit (4-8")
79922910	Warthog Nozzle Service Kit (6-18")
79923400	Warthog Skid (6" - 18" lines)
77701401	1/4" Trap Hose Nozzle
79921000	4000 PSI Performance Nozzle Kit

# Tire Safety Information



This portion of the User's Manual contains tire safety information as required by 49 CFR 575.6.

The National Traffic Safety Administration (NHTSA) has published a brochure (DOT HS 809 361) that discusses all aspects of Tire Safety, as required by CFR 575.6. It can be obtained and downloaded, free of charge, from the NHTSA website.

## Tire Safety Terminology Glossary

- **Cold tire inflation pressure** - the pressure in the tire before you drive
- **Gross Axle Weight Rating (GAWR)** - The maximum weight that any axle can support, as published on the Certification / VIN label on the front left side of the trailer. Actual weight determined by weighing each axle on a public scale, with the trailer attached to the towing vehicle.
- **Gross Vehicle Weight Rating (GVWR)** - The maximum weight of the fully loaded trailer, as published on the Certification / VIN label. Actual weight determined by weighing trailer on a public scale, without being attached to the towing vehicle.
- **Load rating** - The maximum load that a tire is rated to carry for a given inflation pressure.
- **Maximum load rating** - The load rating for a tire at the maximum permissible inflation pressure for that tire.
- **Maximum permissible inflation pressure** - The maximum cold inflation pressure to which a tire may be inflated.
- **Outer diameter** - The overall diameter of an inflated new tire.
- **Recommended inflation pressure** - The inflation pressure provided by the vehicle manufacturer on the Tire Information label and the Certification/VIN tag.
- **Rim** - a metal support for a tire or a tire and tube assembly upon which the tire beads are seated.
- **Vehicle maximum load on the tire** - The load on an individual tire that is determined by distributing to each axle its share of the maximum loaded vehicle weight and dividing by two.

## Tire Information Placard

The Spartan Warrior's Federal Certification/VIN label is located on the forward half of the left (road) side of the unit. The VIN label will identify the units GVWR and GAWR.

The Spartan Warrior's Tire Information Placard can be located adjacent to the trailer's VIN (Certification) label at the left front of the trailer. The placard includes the Warrior's tire size, cold tire inflation pressure, and load limitations. The load limitation statement will give an indication of the maximum cargo capacity. Any items (cargo) added to the Warrior must not cause the total weight of the Warrior to exceed the stated GVWR.

## Ultimate and High Flow Warrior Tire Information

TIRE AND LOADING INFORMATION		
The weight of cargo should never exceed kg. or lbs.		
TIRE	SIZE	COLD TIRE PRESSURE
FRONT	ST225-75-R15 D	5(D) 448 KPA (65 PSI)
REAR	ST225-75-R15D	5(D) 448 KPA (65 PSI)
SPARE	NONE	
SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION		

Fig. 34-1

# Tire Safety Information

## Steps for Determining Correct Load Limit

1. Locate the statement "The weight of cargo should never exceed 1157 kg or 2550 lbs" on your tire information placard.
2. This figure equals the available amount of cargo and luggage load capacity.
3. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity.

## General Tire Information

- Tire inflation pressure is the level of air in the tire that provides the load-carrying capacity and affects the overall performance of the vehicle. The tire inflation pressure is a number that indicates the amount of air pressure a tire requires to be properly inflated. Since tires are designed to be used on more than one type of vehicle, tire manufacturers list the "maximum permissible inflation pressure" on the tire sidewall. This number is the greatest amount of air pressure that should ever be put in the tire under normal driving conditions.
- Improper inflation is the main cause of tire failure. Excessive loads and/or under inflation cause tire overloading, which leads to abnormal tire flexing. Check the cold tire inflation pressures at least once a week for proper inflation levels.
- The proper air pressure may be found on the Certification/VIN label and/or the Tire Information placard.  
High speed towing in hot conditions degrades the life of the Warrior's tires. The internal heat generated from high speeds breaks down the tire's internal structure. It is recommended to drive at moderate speeds.
- If the trailer is stored for an extended period of time, the tires should be fully inflated to the maximum rated pressure. The Warrior should be stored in a cool, dry place. Use tire covers to protect the trailer tires from the harsh effects of the sun.

## Tire Maintenance

### Checking Tire Pressure

- The recommended tire inflation pressure that vehicle manufacturers provide reflects the proper PSI when a tire is cold. A cold tire is one that has not been driven on for at least three hours. Since driving raises the tire's temperature, the internal air pressure also increases. To prevent inflated tire readings, the tire must be measured when cold.

### Maintaining Proper Tire Pressure

- a. Locate the recommended tire pressure on the vehicle's tire information placard, certification label, or in the Owner's Manual.
- b. Record the tire pressure of all tires.
- c. If the tire pressure is too high in any tires, slowly release air by gently pressing on the tire valve stem with the edge of your tire gauge until the correct pressure is reached.
- d. If the tire pressure is too low, note the difference between the measured tire pressure and the correct tire pressure. Add the missing pounds of air pressure to each tire that is under inflated.
- e. Check all the tires to make sure they have the same air pressure.



**NOTE:** If the tires are warm due to driving, but testing confirms under inflation, fill the tire to the recommended cold inflation pressure. While the tire may be slightly under inflated due to extra pressure in the warm tire, it is safer to drive a slightly under inflated tire than to drive a significantly under inflated tire. Since this is a temporary fix, the tire must be re-checked and adjusted once a cold reading can be obtained.

## Tire Size and Tread

- Tires should be replaced when the tread is worn down 1/16 of an inch.
- Treadwear indicators on the bottom of the tire can be used as a guide. The indicators are raised sections spaced intermittently in the bottom of the tread grooves. If they appear even with the outside of the tread, the tire should be replaced.
- Replacement tires should be the same size as the Warrior's original tires. To prevent error and maintain safety, it is recommended that all replacement parts be purchased through Spartan Tool LLC.

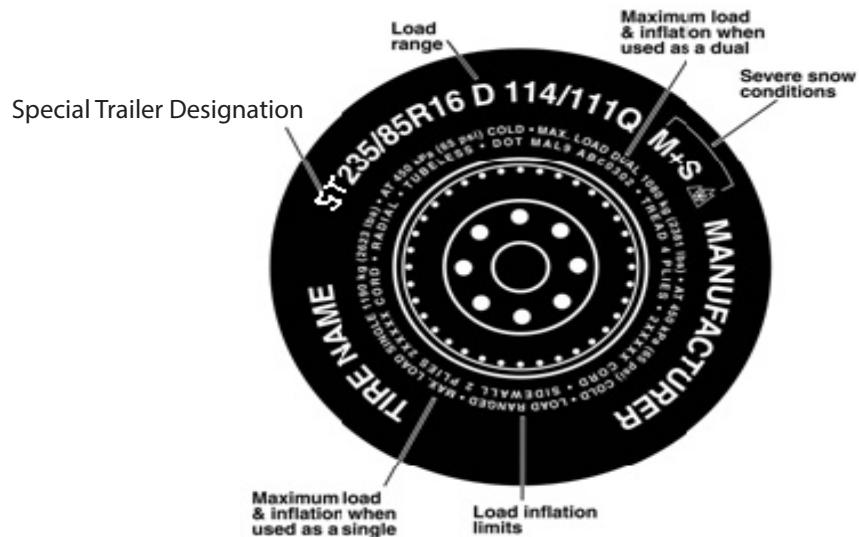
# Tire Safety Information

## Tire Balance and Wheel Alignment

- Tires must be properly balanced to avoid vibrations and shaking of the trailer. A wheel alignment adjusts the angles of the wheels to position them correctly relative to the trailer's frame. Such adjustments can maximize the life of the tires, but should be performed by a qualified technician.

## Tire Repair

- A punctured tire can be repaired by plugging the hole and patching the area that surrounds the puncture hole. A small puncture in the tire tread can be repaired, but punctures to the sidewall should not. Tires should be removed from the rim to be properly inspected before plugging.



**Fig. 36-1**

## Tire Fundamentals

- Federal law requires tire manufacturers to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire. It also provides a tire identification number for safety standard certification and in case of a recall.

## Tire Safety Tips

### Preventing Tire Damage

- Slow down before driving over a pothole or other object in the road.
- Do not run over curbs or other foreign objects in the roadway.

### Tire Safety Checklist

- Check tire pressure regularly (at least once a month).
- Inspect tires for uneven wear patterns on the tread, cracks, foreign objects, or other signs of wear or trauma.
- Remove bits of glass and foreign objects wedged in the tread.
- Make sure tire valves have valve caps.
- Check tire pressure before any long trips.
- Do not overload trailer. Check the Tire Information Placard for the maximum recommended trailer load.



# Safety Information

Confirm that:

- The coupler is secured to the hitch and is locked.
- Electrical connections are made.
- There is appropriate slack in the safety chains.
- There is appropriate slack in the breakaway switch pull-pin cable.
- The tires are not visibly low on pressure, and the cargo is secure and in good condition.

## **Reporting Safety Defects**

If you believe that your vehicle has a defect that could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Spartan Tool LLC.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Spartan Tool LLC.

To contact NHTSA, you may either call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153), go to <http://www.safercar.gov>; or write to

Administrator  
NHTSA  
1200 New Jersey Avenue S.E.  
Washington, DC 20590

You can also obtain other information about motor vehicle safety from  
<http://www.safercar.gov>.

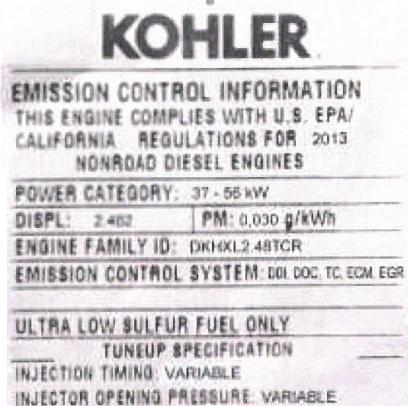
Spartan Tool LLC  
1618 Terminal Road  
Niles, MI 49120

# Diesel & Gas Engine Emissions



All Kohler Diesel engines are tested to meet emissions standards.

See below for the emissions authentication label.



**Fig. 83-2**

All Kubota Gas engines are tested to meet emissions standards.

See below for the emissions authentication label.



**Fig. 83-3**

## SAMPLE EMISSIONS LABELS



# Diesel Engine Filters and Capacities

Item	Identity
Oil Filter	ED 0021753090-S
Oil Suggestion	Shell Rotella T6 Full Syn
Oil Capacity	3.25 Gallons
Fuel Filter Primary	ED 0021753180-S
Air Filter Elements PSD080020	Main: P600975 2nd: P608533
Air Filter Screen	500-02499
Coolant Suggestion	John Deere Cool-Gard II
Coolant Capacity	3.5 gallons
Fan V-Belt	ED 0024001450-S
Fan Belt Serpentine	ED 0024404860-S

# Warranty Information



For our terms and conditions, including warranty, please visit <https://spartantool.com/pages/terms-and-conditions>. For warranty assistance, please contact us at (800) 435-3866 or customerservice@spartantool.com.

## CONTACT US

Spartan Tool LLC  
1618 Terminal Road  
Niles, MI 49120  
800.435.3866  
SpartanTool.com

# Notes

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# SPARTAN TOOL

FOR TOUGH CUSTOMERS. SINCE 1943.

## CONTACT US

**Spartan Tool LLC**  
1618 Terminal Road  
Niles, MI 49120

800.435.3866  
**SpartanTool.com**