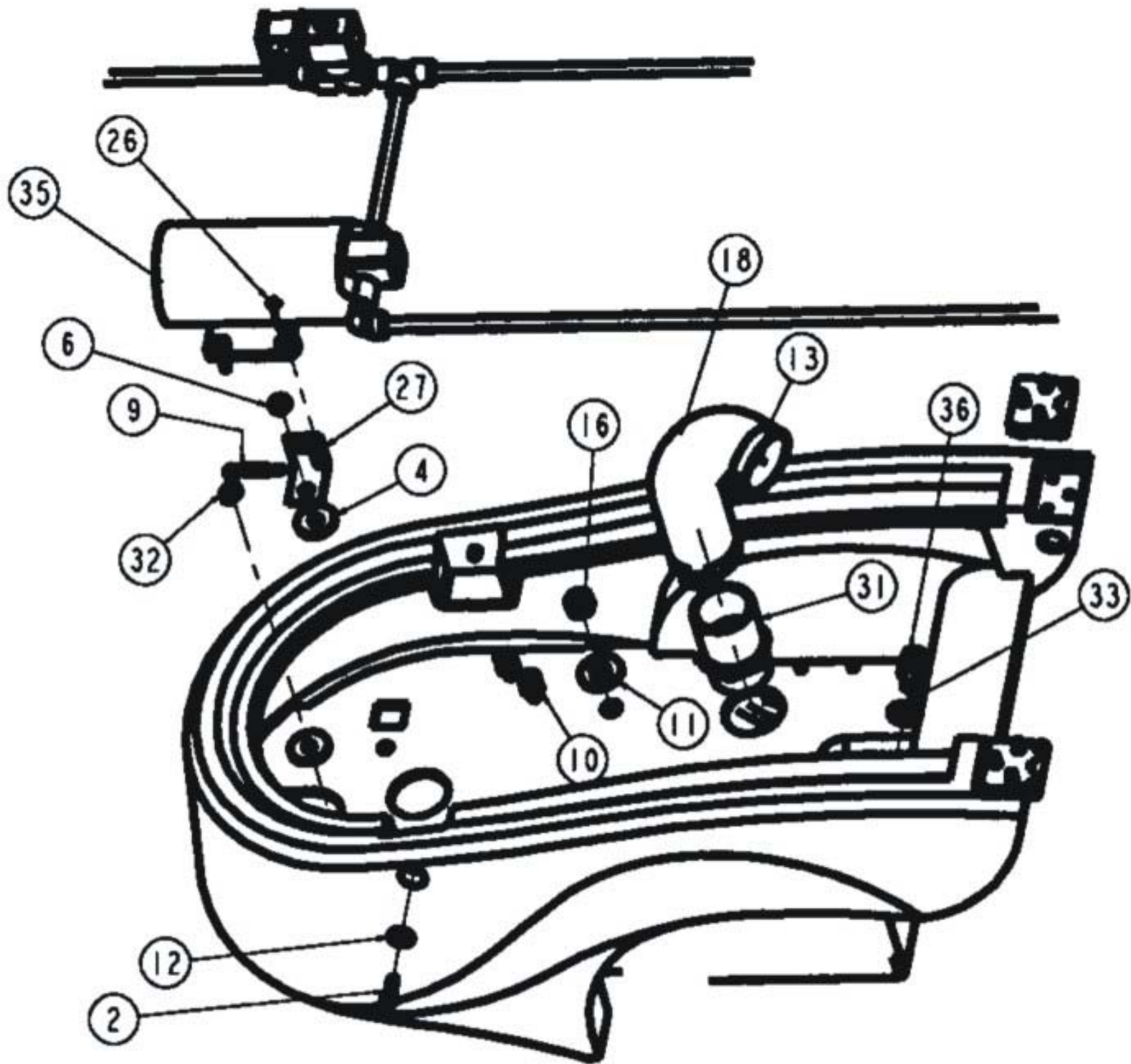


Chassis Assembly (Part 1)

Model :98166 20" Marathon 800 (8 Gallon 115v) - Series F

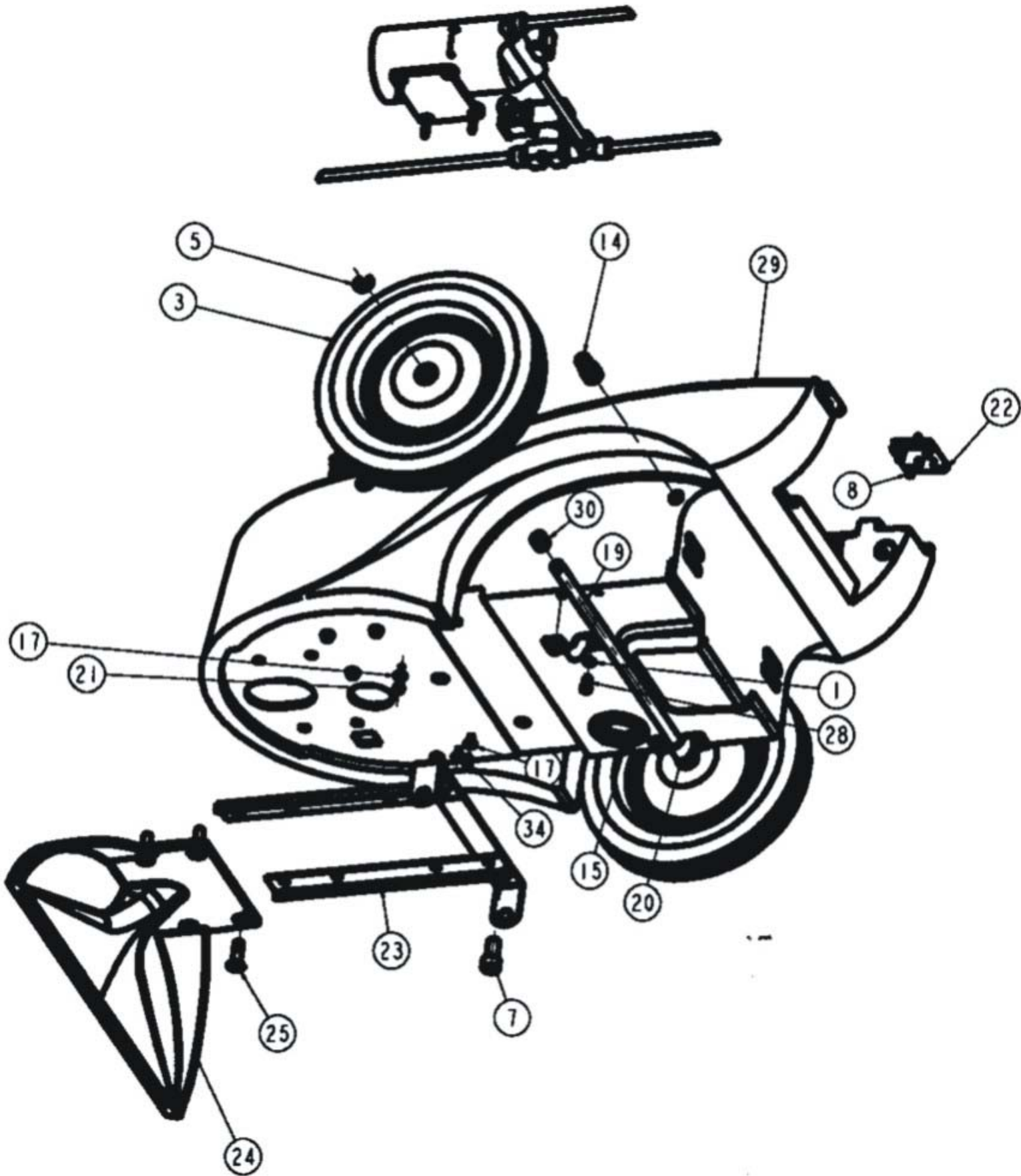
	Number	Description	Qty Req.
2	02053	SCREW-PHIL. RND HD MACH 1/4-20 X 7/8 (NICK)	2
4	03321	WASHER-PLAIN .391 ID (ZP)	4
6	03868	NUT-HEX JAM LOCK (NYL) 3/8-16 (ZP)	3
9	10841	SPRING	1
10	11219	WASHER-PLAIN #10 ID (ZP)	4
11	12957	WASHER-PLAIN 1/2 ID (ZP)	2
12	14142	WASHER-PLAIN .265 ID (ZP)	2
13	14858	CLAMP-HOSE(SCREW) 1-5/16-2-1/4(LINED)	2
16	16673	NUT-FINISHED HEX 1/2-13 (SS)	2
18	18687	HOSE-STEEL SUPPORTED BLK 2 X 36 NO CUFFS	1
26	19205	SCREW-PHIL. PAN HD MACH #10-24 X 1-1/4 (SS)	4
27	19239	BRACKET-SHROUD LATCH	1
31	19260	FITTING-VACUUM MOTOR EXHAUST HOSE(MARATHON)	1
32	19301	NUT-WING 3/8-16 W/HOLES SPRING RETAINING	1
33	19616	WASHER-PLAIN .563 ID (SS)	1
35	31049	ASSY-PUMP (115V) SERVICE USE 32203	1
36	32186	CONNECTOR-MALE Q.D.(NYL) 3/8 TUBE X 1/4 THREAD	1
37	32527	SPONGE-2 VAC MOTOR PROTECTION	1
38	30075	WASHER-PLAIN 3/8 ID (ZP)	1



Chassis Assembly (Part 2)

Model :98166 20" Marathon 800 (8 Gallon 115v) - Series F

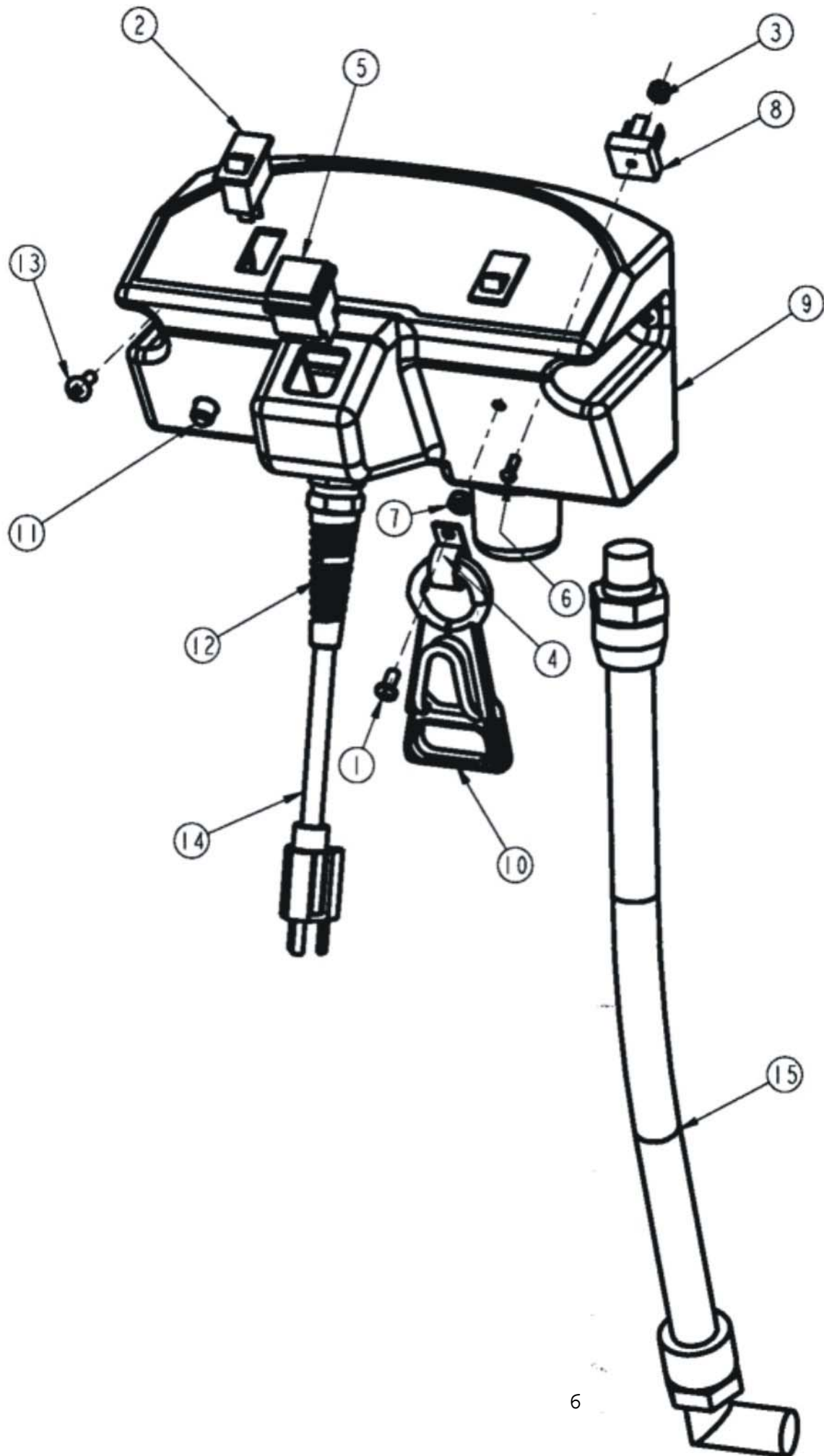
	Number	Description	Qty Req.
1	01574	WASHER-LOCK(H/S)1/4	4
3	02661	WHEEL 10 BLACK HUB	2
5	03470	RING-RETAINING EXT. E 1/2(HEAVY DUTY)	2
7	05441	SCREW-SOCKET HEAD CAP 1/2-13 X 1.00 (SS)	2
8	06192	SCREW-PHIL. TRUSS HD 1/4-20 X 1/2 (ZP)	12
14	14881	FITTING-BRASS NIPPLE 1/4FPT X 1/4Q.C.	1
15	15092	NUT-HEX.FLNGD.LOCK 1-1/2NPT	1
17	17850	WASHER-PLAIN #10 ID (SS)	6
19	19143	AXLE(MARATHON 800/1200)	1
20	19144	CLAMP-AXLE RETAINING (98166-)	2
21	19145	NUT-HEX LOCK (NYL.INS.) #10-24 (SS)	4
22	19148	HINGE-1/4DIA. X 2 (SS)W/SLOTS MARATHON	2
23	19155	WELDMENT-SHROUD/NOZZLE MOUNTING BRACKET	1
24	19168	NOZZLE-20VACUUM (ALUM) (98166-)ORDER W/19197	1
25	19171	SCREW-SLOT. FLAT HD MACH 3/8-16 X 1-1/4 (SS)	4
28	19240	SCREW-HEX HD CAP 1/4-20 X 1/2 (SS)	4
29	19241	CHASSIS BLK (98166-9) ORD W/19212	1
30	19259	SPACER-1/2 REPLACES 03144	2
34	23192	SCREW-SLO. FILLISTER HD M4 X .700 - 16 (ZP)	2



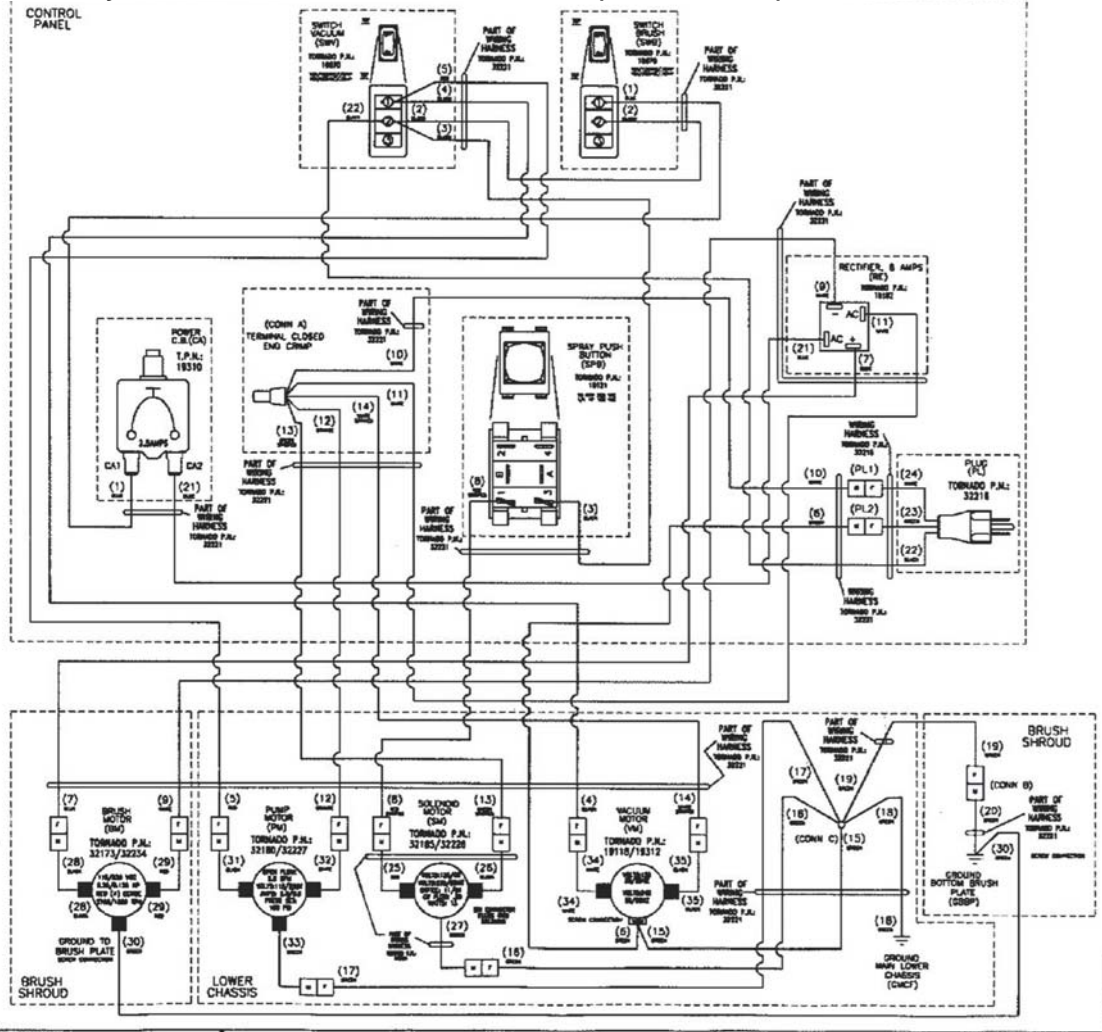
Control Panel

Model :98166 20" Marathon 800 (8 Gallon 115v) - Series F

	Number	Description	Qty Req.
1	03660	SCREW-PHIL. PAN HD MACH #10-24 X 7/16 (ZP)	1
2	10670	SWITCH ROCKER (98164-68)	2
3	17883	NUT-HEX.LOCK # 6-32(NYLON)	1
4	18717	CLAMP-CABLE(5/8DIA.)	1
5	19121	SWITCH-PUSH BUTTON MOM.10A,125/250VAC,1/4HP	1
6	19124	SCREW-SLO. RND HD MACH #6-32 X 3/4 (NYLON)	1
7	19145	NUT-HEX LOCK (NYL.INS.) #10-24 (SS)	1
8	19182	RECTIFIER-AC(8 AMP.)	1
9	19214	CONTROL MODULE-800	1
10	19261	BELT CLIP-CORD CONTROL	1
11	19310	CIRCUIT BREAKER 2.5 AMP-250VAC/50VDC	1
13	19461	STRAIN RELIEF-POWER CORD 1/2 NPT (BLK)	1
13	30436	SCREW-PHIL. TRUSS HD #10-32 X 5/8 (SS)	3
14	32216	CORD-POWER 14GA. X 25 115V/MALE PLUG YELLOW	1
15	32221	WIRING HARNESS MAIN MARATHON 800/1200	1
16	32217	EXTENSION-CORD14/3 X 50' 300V (YELLOW)	1



Electrical System, Model:98166 20" Marathon 800 (8 Gallon 115v) - Series F



WIRE TABLE					
WIRE NO'S	AWG	TYPE	COLOR	FROM	TO
1	18	UL2509	BLUE	SWB1	CA1
2	18	UL2509	BLACK	SWB2	SWV2
3	18	UL2509	BLACK	SPB2	SWV2
4	18	UL2509	BLACK	SWV1	VM1
5	18	UL2509	RED	SWV1	PM+
6	18	UL2509	GREEN	PLG	VMG
7	18	UL2509	BLUE	RE+	BM-
8	18	UL2509	RED STRIPED	SPB1	SOL+
9	18	UL2509	WHITE	RE-	BM+
10	18	UL2509	WHITE	CONN A	PL1
11	18	UL2509	WHITE	CONN A	REAC2
12	18	UL2509	ORANGE	CONN A	PM-
13	18	UL2509	GREEN STRIPED	CONN A	SOL-
14	18	UL2509	WHITE STRIPED	CONN A	SOL-
15	18	UL2509	GREEN	CONN C	VMG
16	18	UL2509	GREEN	CONN C	SOLG
17	18	UL2509	GREEN	CONN C	PMG
18	18	UL2509	GREEN	CONN C	CMCF
19	18	UL2509	GREEN	CONN C	CONN B
20	18	UL2509	GREEN	CONN B	GBSP
21	18	UL2509	ORANGE	REAC1	CA2

WIRING HARNESS
TORNADO PART #: 32216

WIRING HARNESS TORNADO PART #: 32221					
WIRE NO'S	AWG	TYPE	COLOR	FROM	TO
22	18	UL2509	BLACK	PL	SWV2
23	18	UL2509	GREEN	PL	SWV2
24	18	UL2509	WHITE	PL	SWV2

WIRING HARNESS TORNADO PART #: 32173

PART OF: T.P.N.#: 32173					
WIRE NO'S	AWG	TYPE	COLOR	FROM	TO
25	18	UL2509	RED	SOLENOID DM LEAD (SM)	
26	18	UL2509	BLACK	SOLENOID DM LEAD (SM)	
27	18	UL2509	GREEN	SOLENOID DM GROUND (SM)	

WIRING HARNESS TORNADO PART #: 32180

PART OF: T.P.N.#: 32180					
WIRE NO'S	AWG	TYPE	COLOR	FROM	TO
28	18	UL2509	BLACK	BRUSH MOTOR LEAD (BM)	
29	18	UL2509	RED	BRUSH MOTOR LEAD (BM)	
30	18	UL2509	GREEN	BRUSH MOTOR GROUND (BM)	

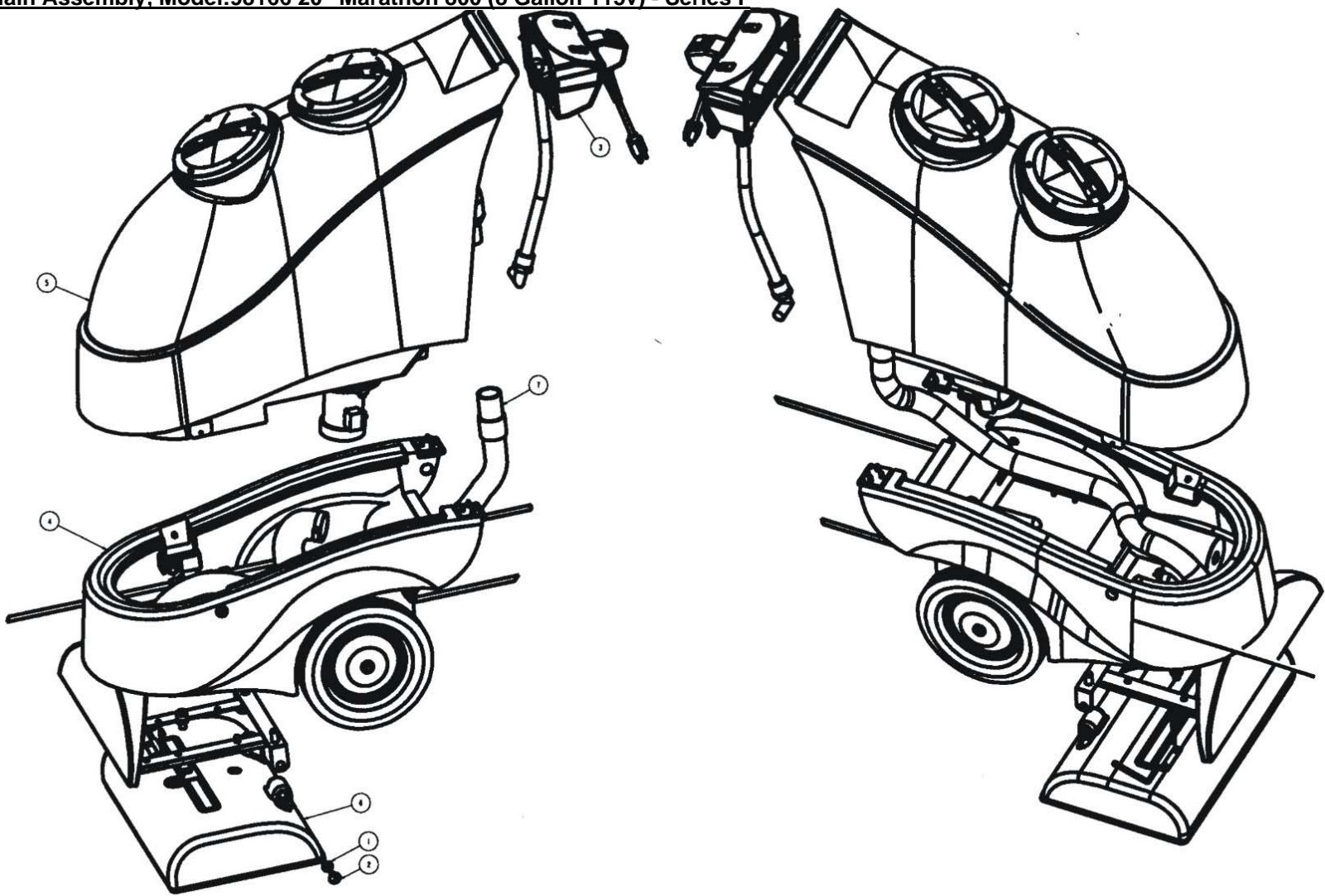
WIRING HARNESS TORNADO PART #: 32221

PART OF: T.P.N.#: 32221					
WIRE NO'S	AWG	TYPE	COLOR	FROM	TO
31	18	UL2509	BLACK	PUMP MOTOR LEAD (PM)	
32	18	UL2509	WHITE	PUMP MOTOR LEAD (PM)	
33	18	UL2509	GREEN	PUMP MOTOR GOUND (PM)	
34	18	UL2509	WHITE	VACUUM MOTOR LEAD (VM)	
35	18	UL2509	BLACK	VACUUM MOTOR LEAD (VM)	

Main Assembly

Model :98166 20" Marathon 800 (8 Gallon 115v) - Series F

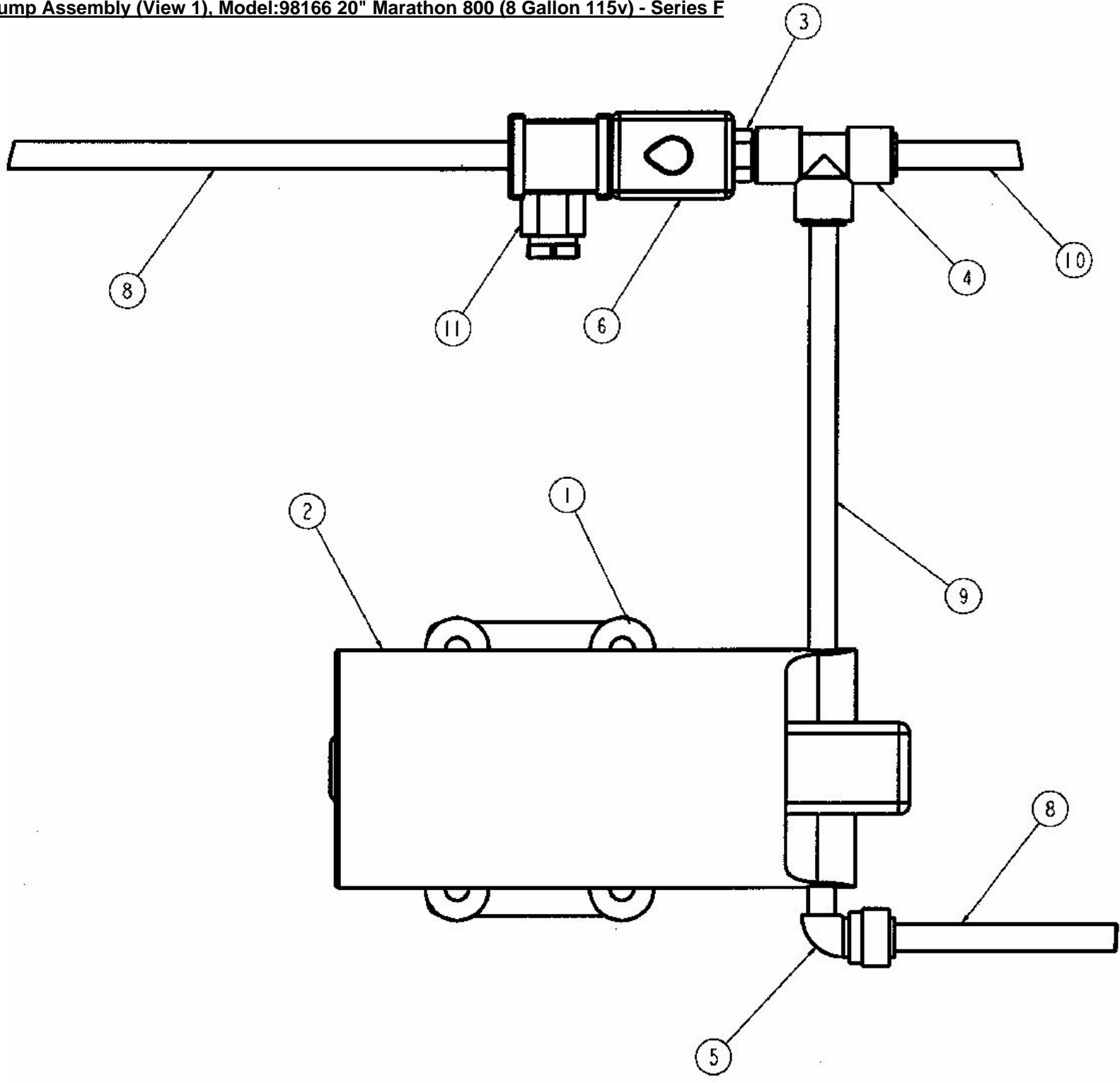
	Number	Description	Qty Req.
1	19153	BUSHING-SHROUD PIVOT (NYLON)	2
2	19207	SCREW-SLOT. TRUSS HD 3/8-16 X 3/4 (SS)	2
3	30972	ASSY-CONTRL PANEL(8GAL) 115V (98166) DWG.	1
4	30975	ASSY-CHASSIS (115V) (98166,-168) DWG	1
5	30976	ASSY-RECOVERY TANK (MULTI)	1
6	30980	ASSY-BRUSH/SPRAY (115V) (98166,-168) DWG.	1
7	31388	HOSE-STEEL SUPPORTED BLK 1-1/2 X 42 W/CUFFS	1
8	03913	SCREW-SLOT. FLAT HD MACH 3/8-16 X 1.00 (BRASS)	1
9	10428	CLIP LEAD RETAINING SELFADHESIVE	4
10	15955	TERMINAL-RING 5/16 X 16/14GA.(INSUL.)	1
11	18967	HOSE-STEEL SUPPORTED BLK 1-1/2 X 64 W/CUFFS	1
12	19197	TUBE-NOZZLE HOSE ADAPTER	1
13	19229	TERMINAL-Q.D.MALE 1/4 X 16/14GA.(F.I.C.)	1
14	30813	DECAL-LOGO SWIRL 2.13DIA. BLACK	1
15	30814	DECAL-TORNADO W/ LOGO 1.75 WIDE X 7.25 LG. BLK	2
16	32259	WIRING DIAGRAM(MARATHON 800/1200)	1



Pump Assembly (View 1)

Model :98166 20" Marathon 800 (8 Gallon 115v) - Series F

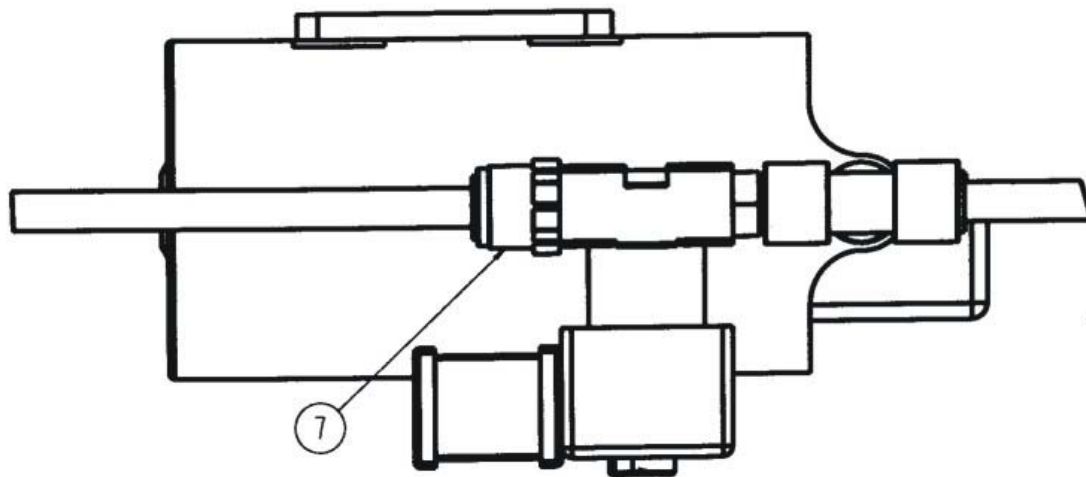
	Number	Description	Qty Req.
1	11219	WASHER-PLAIN #10 ID (ZP)	4
2	32180	PUMP-115V/50/60HZ 100PSI MARATHON	1
3	32181	STEM ADAPTER 3/8 X 1/4 (NYLON) MARATHON	1
4	32182	UNION TEE 3/8 TUBE SIZE (NYLON) MARATHON	1
5	32183	ELBOW-PLUG IN 3/8 O.D. STEM TUBE (NYLON)	1
6	32185	SOLENOID VALVE 1/4PORT 120 PSI 115V/60HZ	1
8	32192	HOSE-3/8OD X 36 LG. (NATURAL TUBE) MARATHON	2
9	32193	HOSE-3/8OD X 7-1/2 LG. (NATURAL TUBE) MARATHON	1
10	32194	HOSE-3/8OD X 24 LG. (NATURAL TUBE) MARATHON	1
11	32207	ASS'Y DIN CONNECTOR W/ WIRES (MARATHON)	1



Pump Assembly (View 2)

Model :98166 20" Marathon 800 (8 Gallon 115v) - Series F

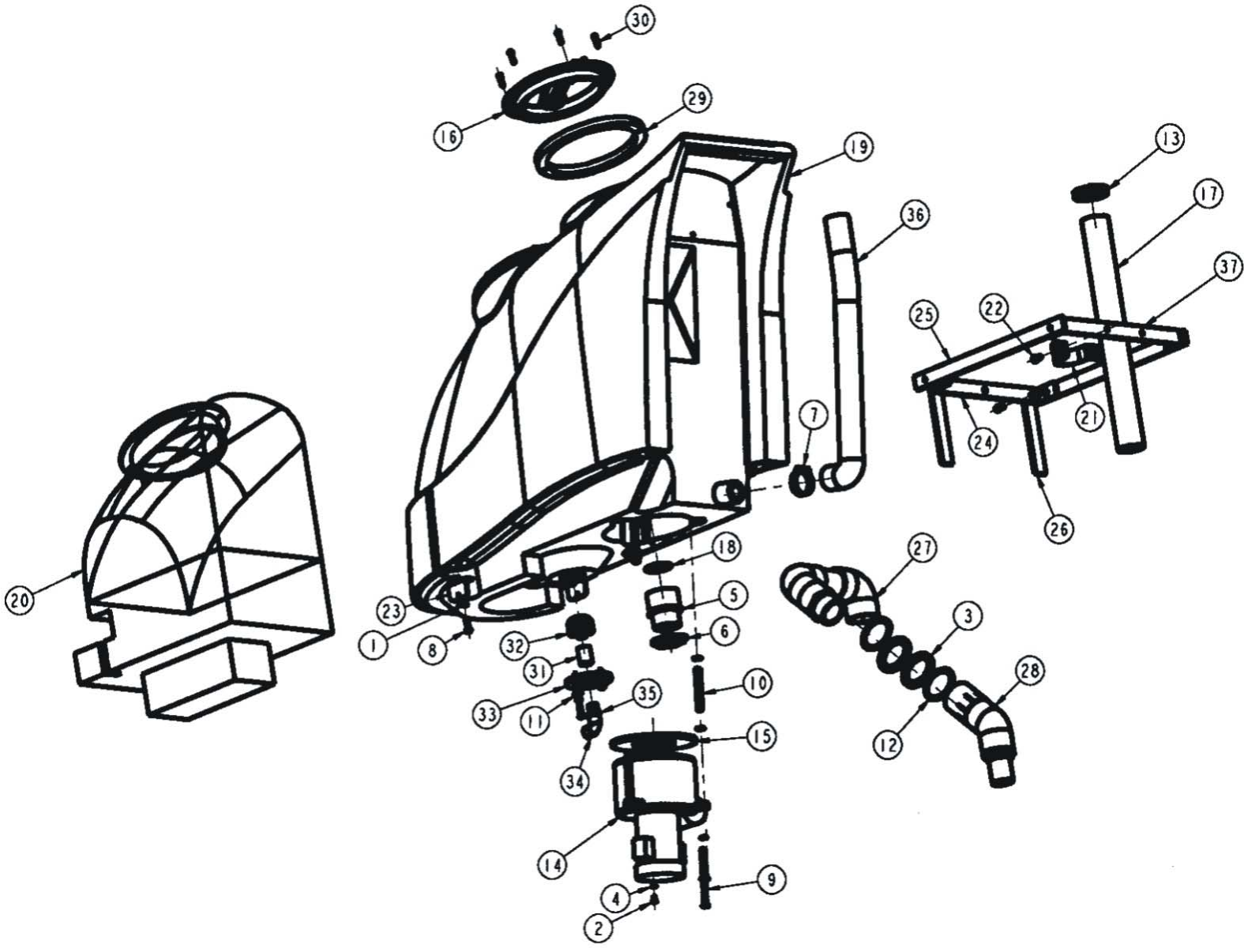
	Number	Description	Qty Req.
7	32186	CONNECTOR-MALE Q.D.(NYL) 3/8 TUBE X 1/4 THREAD	1



Tank Assembly

Model :98166 20" Marathon 800 (8 Gallon 115v) - Series F

	Number	Description	Qty Req.
1	01574	WASHER-LOCK(H/S)1/4	9
2	03261	SCREW-TCT(F)PAN HEAD #10-32 X 3/8	1
3	06825	GASKET	2
4	11077	BUSHING - WHEEL SHAFT	1
5	15088	ADAPTER - MALE PVC 1-1/2 SCH 40	1
6	15092	NUT-HEX.FLNGD.LOCK 1-1/2NPT	1
7	16091	CLAMP-HOSE(SCREW) 1-1/4-2(LINED)	1
8	17160	SCREW-HEX HD CAP 1/4-20 X 3/4 (SS)	6
9	17644	SCREW-HEX HD CAP 1/4-20 X 4.25 (ZP)	3
10	17889	SPACER-MOTOR ENCLOSURE	3
11	18885	WASHER-PLAIN 1/4 ID (SS)	13
12	18886	WASHER-PLAIN 2.00 ID (SS)	1
13	19097	FILTER-VAC.MOTOR INTAKE (STANDPIPE)	1
14	19118	MOTOR-VACUUM 3-STAGE 115V/50HZ	1
15	19119	GASKET-VACUUM MOTOR (MARATHON 800/1200)	2
16	19129	COVER-TANK ACCESS	2
17	19139	STANDPIPE-RECOVERY TANK	1
18	19140	RING-O 1-5/8 DIA. (BLK)	1
19	19212	TANK-RECOVERY (98166-9) ORD W/19241	1
20	19215	BLADDER- 8 GALLON (MARATHON 800)	1
21	19217	CLAMP-STANDPIPE MOUNTING	8
22	19240	SCREW-HEX HD CAP 1/4-20 X 1/2 (SS)	2
23	19272	BRACKET-RECOVERY TANK RETAINING	1
24	19316	FRAME MEMBER-TANK 11 IN. SUPPORT(FRONT)	1
25	19317	FRAME MEMBER-TANK SUPPORT(SIDES)	2
26	19318	FRAME MEMBER-TANK	2
27	31050	ASSY-INTERN.PIP(DRAWING) (98166,-169) RECOVERY	1
28	31051	ASSY-EXT.PIPING(DRAWING) (98166,-)	1
29	31416	GASKET-TANK ACCESS COVER (MARATHON)	2
30	31424	SCREW-PHIL.HD MACH #10-32 X .75 LG. (SS)	12
31	32177	COUPLER (ALUM) 3/8 NPT X 1-5/32 LG.	1
32	32178	INLINE STRAINER 3/8NPT 60 MESH (MARATHON)	1
33	32179	PLATE-BLADDER LOWER MNT MARATHON 800/1200	1
34	32189	ELBOW-SWIVEL 3/8 TUBE (NYLON)	1
35	32308	ADAPTER-STEM 3/8 X 3/8 NPTF (NYLON) MARATHON	1
36	16620	HOSE-BELLOW (EPDM/BLK) 1-1/2 X 23-1/2 LG. CRUSH HOSE	1
37	19220	FRAME MEMBER-TANK 12 IN. SUPPORT	1
38	18706	WIRE TIE-15(BLACK)	2



Brush Assembly

Model :98166 20" Marathon 800 (8 Gallon 115v) - Series F

	Number	Description	Qty Req.
1	01713	WASHER-LOCK(H/S)#10	1
2	02625	NUT-HEX.LOCK(KEPS) #10-32 (ZP)	2
3	05209	BEARING	2
4	05282	NUT-HEX HEAVY JAM 5/16-18 (ZP)	1
5	17160	SCREW-HEX HD CAP 1/4-20 X 3/4 (SS)	4
6	17957	SCREW-HEX HD CAP #10-24 X 1/2 (ZP)	2
7	18885	WASHER-PLAIN 1/4 ID (SS)	1
8	19145	NUT-HEX LOCK (NYL.INS.) #10-24 (SS)	1
9	19149	FITTING-BRASS PLUG 1/8MPT(HEX.SOCKET)	2
10	19152	WELDMENT-MANIFOLD RETAINING BRACKET	1
11	19154	SPRAY NOZZLE-1/8(V-JET) (MARATHONS)	4
12	19156	CLAMP-SHROUD LATCH LEVER	1
13	19157	BEARING BLOCK-BRUSH (MARATHON)	2
14	19158	BEARING SEAL(05209)	2
15	19159	BRUSH-ROLLER 17 CARPET SCRUB(MARATHON)	1
16	19160	SHAFT-BRUSH ROTATION 18 (MARATHON 800/1200)	1
17	19161	PULLEY-TIMING (SHAFT) (ALU) #10-32 SET SCREW	1
18	19164	GASKET-SHROUD BASE PLATE (MARATHON 800/1200)	1
19	19165	SCREW-PHIL. FLAT HD MACH #10-24 X 1/2 (SS)	10
20	19190	SPACER-1/4(DELRIN)	1
21	19191	WASHER-PLAIN .328 ID (SS)	1
22	19192	LEVER-SHROUD LATCH	1
23	19206	SCREW-HEX HD CAP 1/4-20 X 1.00 (SS)	1
24	19226	SHROUD-BRUSH/SPRAY (98166-169)	1
25	19228	GASKET-BEARING BLOCK (98166-169)	3
26	19233	BELT-TIMING 150XL X 3/8	1
27	19275	CAP-SHROUD LATCH LEVER	1
28	30959	WELDMENT-BRUSH PLATE SERVICE USE #31754	1
29	32175	PULLEY-TIMING BRUSH MOTOR (MARATHON)	1
30	32186	CONNECTOR-MALE Q.D.(NYL) 3/8 TUBE X 1/4 THREAD	1
31	32187	MANIFOLD-SPRAYBAR 1/4 MARATHON 800/1200	1
32	32189	ELBOW-SWIVEL 3/8 TUBE (NYLON)	1
33	32245	WASHER-LOCK (I/T) 5/16 Z/P	1
34	32258	HOSE-3/8OD X 2 LG. (NATURAL TUBE) MARATHON	1
35	32495	MOTOR-BRUSH 1860 RPM 115V (MARATHON)	1
36	32512	GASKET - NEOPRENE SPONGE (MARATHON BRUSH MOTOR)	1

Brush Assembly, Model:98166 20" Marathon 800 (8 Gallon 115v) - Series F

