

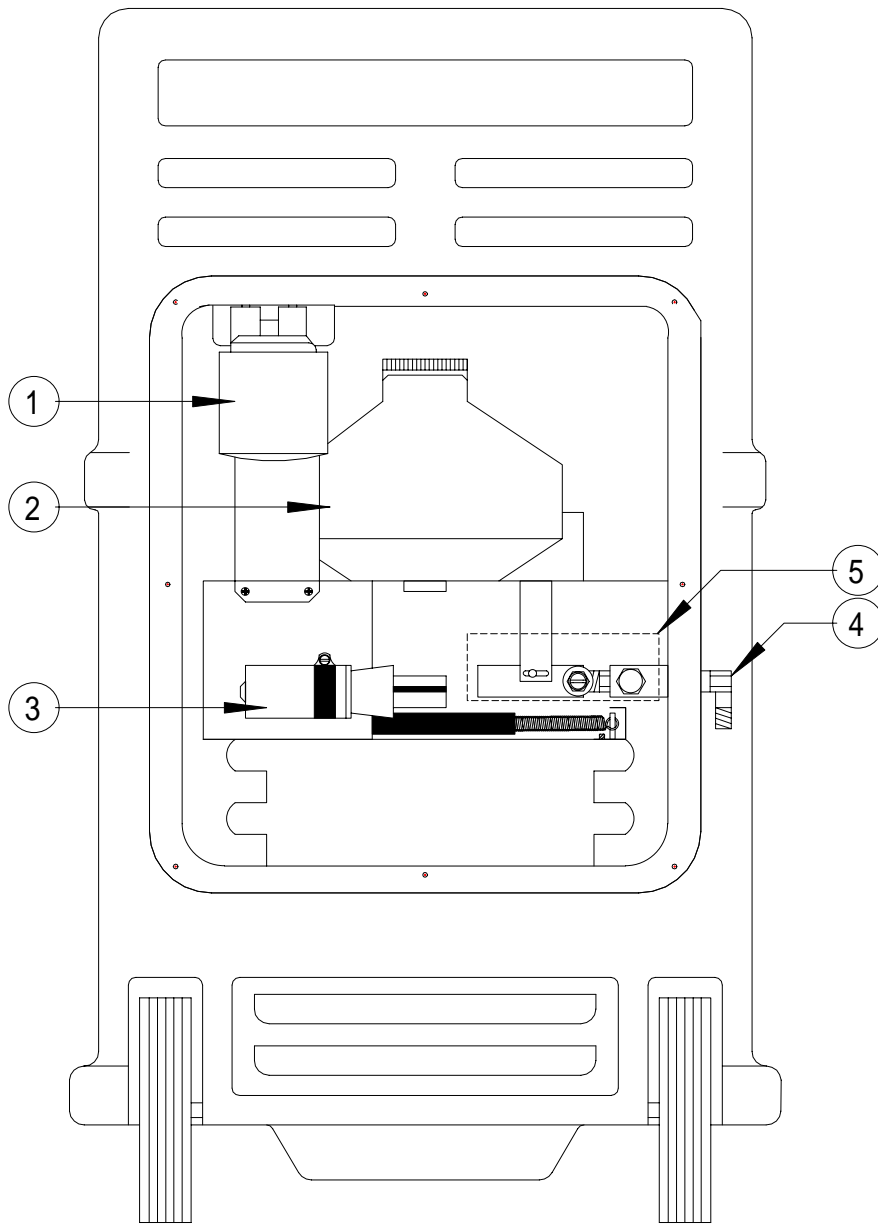
CHAPTER 4 PARTS

FRONT VIEW



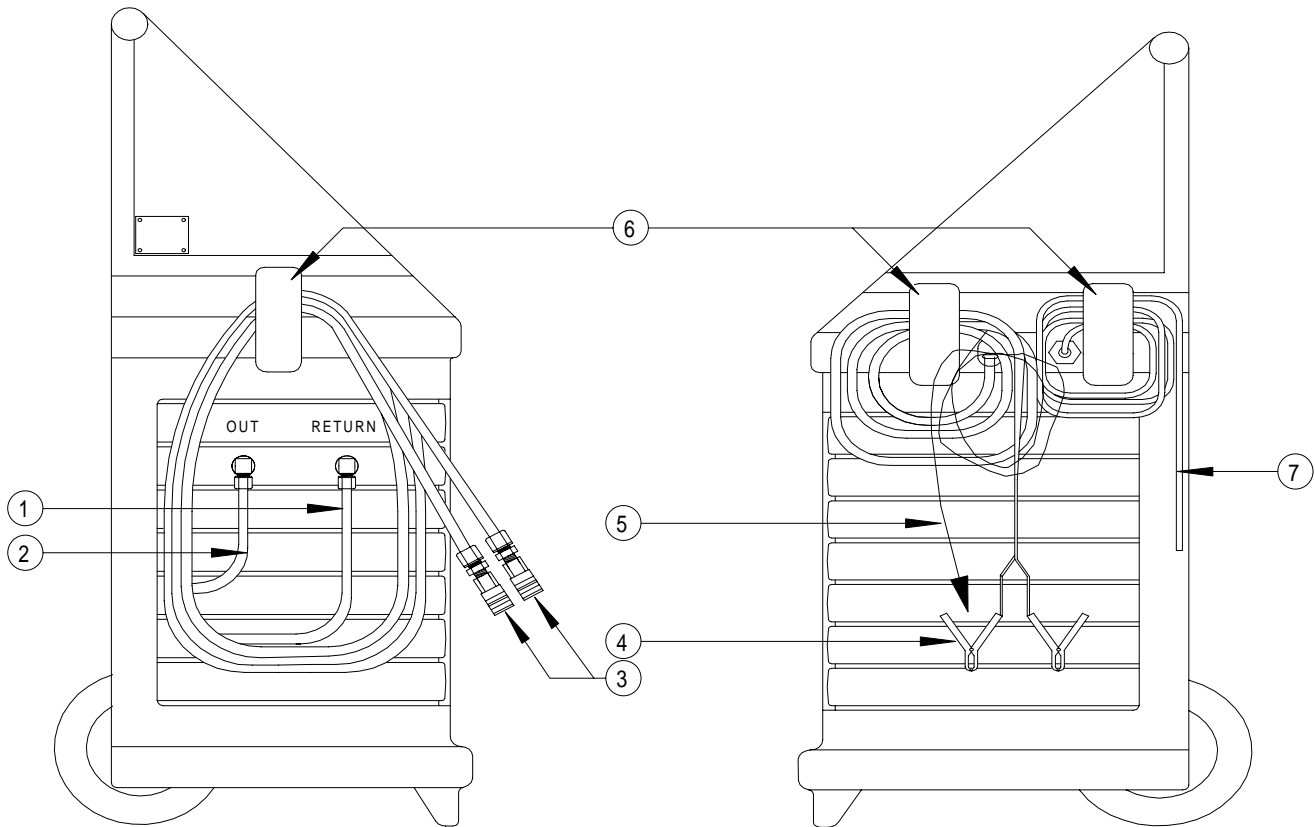
ITEM	DESCRIPTION	SUN PART NUMBER	ITEM	DESCRIPTION	SUN PART NUMBER
1	Gauge, Vacuum Asmb.	MV2008010	6	Drawer, Plastic	MV0105002
1a	Lens, Vacuum Gauge	MV0501910	6a	Plate, Magnet Contact	MV0106052
2	Gauge, Fuel Press.	MV2008012	7	Cap, Reservoir	MV0106060
2a	Lens, Fuel Press. Gauge	MV0500007	NS	Intake Cleaning Sys.(ICS)	MV2008038
			NS	Hose, 36" (used in ICS)	MV1005001
4	Regulator Assembly	MV2007006			
5	Wheel	MV0100027			

REAR VIEW



ITEM	DESCRIPTION	SUN PART NUMBER	ITEM	DESCRIPTION	SUN PART NUMBER
1	Filter, Orange (BT839-10)	MV0500095	3	Pump, Assembly	MV2008031
1	Filter Nipple	MV0303095	4a	Adapter, 90° Bulkhead	MV0300131
			4b	Adapter, Hex Nipple	MV0303092
2	Tank Asmb., Reservoir	MV2008034	5	Manifold Assemblies	See Page 4-4
2a	Float Arm Assembly	MV2008045			

SIDE VIEW

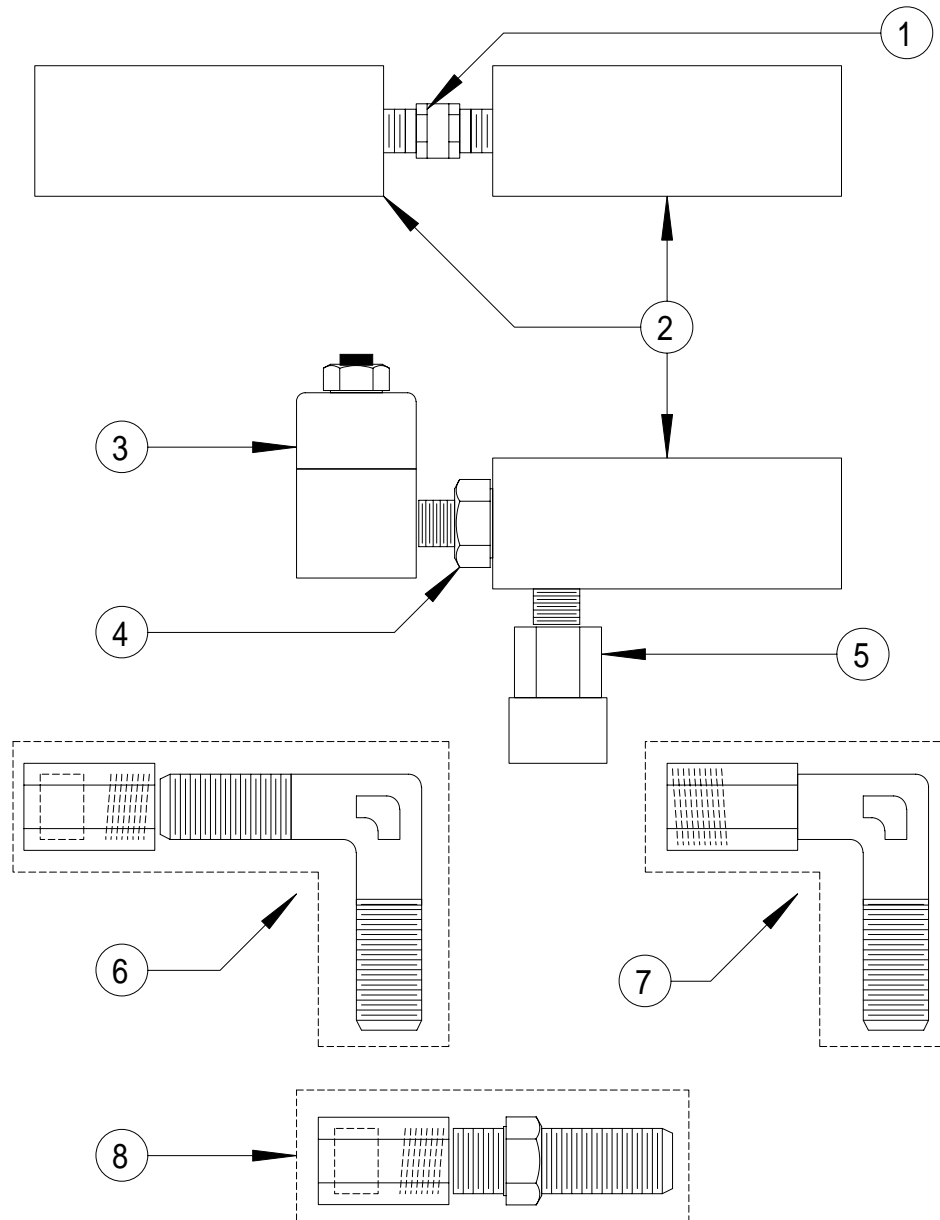


ITEM	DESCRIPTION	SUN PART NUMBER	ITEM	DESCRIPTION	SUN PART NUMBER
1	Hose, Black Return	MV2000300	4	Cables, Battery	MV0208043
2	Hose, Red Out	MV2000400	5	Cable, Ground (also see note 1)	MV0208042
3a	Connector, Quick Disconnect	MV0800230	6	Hanger, Black Metal (also see note 2)	MV0105004
3b	Fitting, 3/8" Cmp x 1/4" MPT	MV0300020	7	Hose, Vacuum	MV0700100

Note 1: part not used on all units.

Note 2: replaces previously used red plastic hangers.

MANIFOLD BLOCK ASSEMBLY



ITEM	DESCRIPTION	SUN PART NUMBER	ITEM	DESCRIPTION	SUN PART NUMBER
1	Valve, Relief	MV0500088	6a	Elbow, 5/16"Nt x 1/8"MPT (pump)	MV0300015
2	Block, Manifold	MV0300110	7	Elbow, 5/16"Nt x 1/4"MPT (block)	MV0300018
3	Valve, Solenoid (NC)	MV0500018	NS	Elbow, 5/16"Nt x 1/4"FPT (regulator)	MV0300011
4	Nipple, 1/4"MPT x 1/4"MPT	MV0300014	8	Union, 5/16"Nt x 1/4"MPT	MV0300017
5	Switch, Pressure	MV0500016			

COMPLETE REPLACEMENT PARTS LISTING:

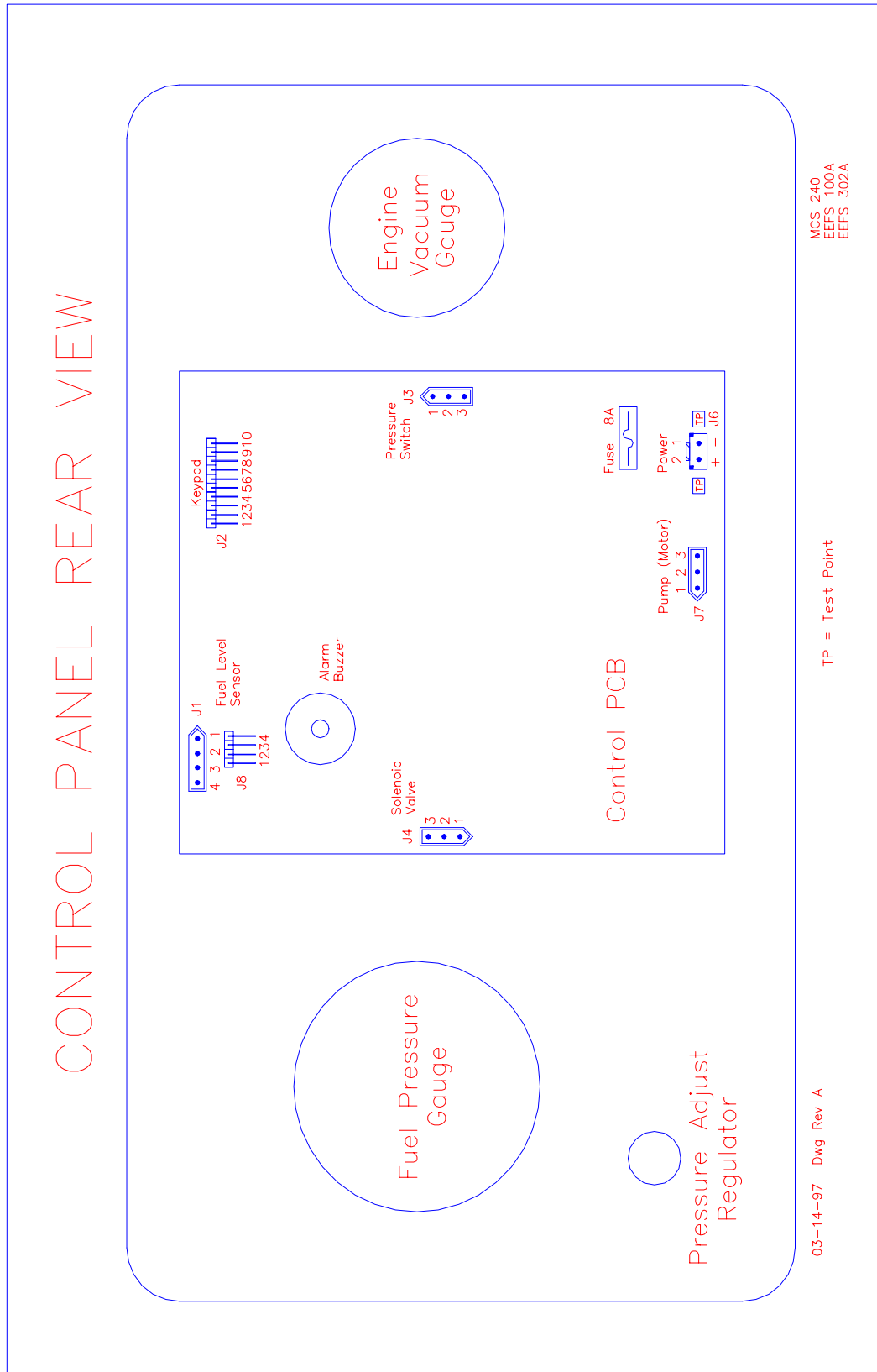
ITEM	LEVELS		MotorVac	Descriptions	Qty	
	ASMB		Part Number			
		SUB ASMB				
1	1		N/A	Cabinet Assembly	1	
2		2	010-0027	Wheel, 8" x 1.75", rubber	2	
3		2	010-5004	Hanger Bracket, Stl, painted black	3	C
4		2	010-6035	Axle Retaining Bracket, Stl	2	
5		2	010-6036	Axle, 0.5" Dia., Zinc Plate	1	
6		2	010-6044	Cabinet, Red Plastic	1	
7		2	010-6052	Drawer Magnet Contact Plate, Stl (2 studs)	1	
8		2	040-0603	Snap Bushing, for Vacuum Hose	1	
9		2	040-0607	Nut, Nylock 1/4"-20, Zp, for hanger	6	C
10		2	040-0610	Screw, PHP 1/4"-20 x 5/8", Zp, for hanger	6	C
11		2	040-0618	Screw, PHP 1/4"-20 x 1/2", Zp, for axle brkt	4	
12		2	040-0619	Starwasher, Internal, 1/4"ID, Zp for axle brkt	4	
13		2	040-6015	Tinnerman Nut, #8, to secure back panel	9	
14		2	040-6016	Kep Nut, 6-32, Zp, for drawer magnet contact plate	2	
15		2	040-6028	Round Spacer, 1-1/8" x 5/8"ID, Ny, for axle	2	
16		2	040-6049	Thumbscrew, 10-32 x 1-1/2", Ny, for drawer retention	8	A
17		2	200-8036	Drawer Assemblies (4)	1	
18		3	010-5002	Drawer, Black plastic	4	A
19		3	040-6024	Magnet, 30lbf pull, 3/16" mount	4	A
20		3	040-6025	Pop Rivet, Blind Head, 3/16", Al, for magnet	4	A
21		3	040-6051	Tinnerman Nut, 10-32, for drawers	8	A
22						
23	1		200-0300	Return Hose Assembly, Black	1	
24		2	030-0020	Un, 3/8"Cmp x 1/4"MPT, Ni	1	
25		2	070-0020	NAB Hose, 3/8"OD, Blk, Ny	10ft	
26		2	080-0230	Female Quick Disconnect, 1/4" x 1/4"FPT, Ni	1	
27						
28	1		200-0400	Output Hose Assembly, Red	1	
29		2	030-0020	Un, 3/8"Cmp x 1/4"MPT, Ni	1	
30		2	070-0010	NAB Hose, 3/8"OD, Red, Ny	10ft	
31		2	080-0230	Female Quick Disconnect, 1/4" x 1/4"FPT, Ni	1	
32						
33	1		200-8030	Pump, Tank, Manifold Block, & Filter Assembly	1	
34		2	010-6032	Mounting Bracket for pump, tank, manifold block	1	
35		2	010-6033	Mounting Bracket for filter asmb.	1	
36		2	020-5320	Ferrite Bead, for solenoid wires	1	
37		2	040-0019	Screw, PHP 10-32 x 3/8", Zp, for filter bracket	4	
38		2	040-0200	Starwasher, Internal, #6, Zp, for manifold block mounting	9	

39		2		040-0400	Starwasher, Internal, #10, Zp, for filter bracket	4	
40		2		040-0603	Snap Bushing, for filter tubing into bracket	2	
41		2		040-0605	Nut, Nylock 8-32, Zp, for pump mounting	4	
42		2		040-0612	Allen Head Screw, 1/4"-20 x 5/8", Ss, for filter mount	3	
43		2		040-0618	Screw, PHP 1/4"-20 x 1/2", Zp, for tank mounting	3	
44		2		040-0619	Starwasher, Internal 1/4", Zp, for tank mounting	3	
45		2		040-0622	Nylon Cable ties 4", for securing wire	3	
46		2		040-1203	Screw, PHP 6-32 x 3/8", Zp, for manifold block mounting	9	
47		2		040-6010	Snap Bushing, 1", for lines into tank and pump brkt	1	
48		2		040-6032	Nylon Cable ties 8", for securing tubing	1	
49		2		040-6037	Cable Tie Mount, 0.75", 4-way, Ny	3	
50		2		070-0085	Tubing, 5/16"OD, Nylon	8.625ft	
51		2		200-7002	Manifold Sub-Assembly #2, towards rear of cabinet	1	
52			3	020-0061	Molex Connector Housing, Male, 3 pin, for solnd & prs sw	2	
53			3	030-0014	Un, 1/4"MPT x 1/4"MPT, Ny, between solnd and block	1	
54			3	030-0017	Un, 5/16"Nt x 1/4"MPT, Ny, at solenoid	1	
55			3	030-0018	90°, 5/16"Nt x 1/4"MPT, Ny, at block to prs. gauge	1	
56			3	030-0110	Manifold Block, 1/4"FPT ports, Al	1	
57			3	050-0016	Pressure Switch, 1/4"MPT mount, Stl, N.O. till 4 PSI	1	
58			3	050-0018	Solenoid, 2-way, 12 VDC, Ss, normally closed	1	
59		2		200-7009	Filter Mount Assembly	1	
60			3	030-0018	90°, 5/16"Nt x 1/4"MPT, Ny, at top of filter mount	2	
61			3	050-1918	Filter Mount, 1/4"FPT ports, Al	1	
62		2		200-8029	Manifold Sub-Assembly #1, towards front of cabinet	1	
63			3	030-0017	Un, 5/16"Nt x 1/4"MPT, Ny, at block	1	
64			3	030-0018	90°, 5/16"Nt x 1/4"MPT, Ny, at block	4	
65			3	030-0110	Manifold Block, 1/4"FPT ports, Al	1	
66			3	050-0088	Pressure Relief Valve, 1/4"MPT, 115 PSI (Nominal), Ss	1	
67		2		200-8031	Fuel Pump Assembly	1	
68			3	020-5320	Ferrite Bead, for pump wires	1	
69			3	030-0015	90°, 5/16"Nt x 1/8"MPT, Ny, at pump	2	
70			3	050-0043	Fuel Pump and Mounting bracket, 1/8"FPT ports, 12 VDC	1	
71		2		200-8034	Fuel Tank Assembly, w/ fuel level sensor	1	
72			3	010-6002BLK	Fuel Tank, Black plastic	1	
73			3	010-6057	Tank Cap, 89mm x 4, Metal, White	1	
74			3	020-8079	Potentiometer Assembly, 4 pin ribbon cable, replacement	1	
75			3	030-0018	90°, 5/16"Nt x 1/4"MPT, Ny, top and bttm fittings	2	
76			3	080-6006	Viton O-Ring, dash size 006, for potentiometer shaft	1	
77			3	200-8045	Float Arm Assembly, cylindrical float, clamp, and arm	1	
78							
79	1			200-8070	Control Panel Assembly complete, with PCB	1	
80		2		010-0244	Control Panel steel backing plate, for ICC PCB	1	D
81		2		010-6070	Control Panel Overlay with integrated Keypad	1	D
82		2		020-5325	Control Circuit Board (PCB) assembly	1	
83		2		040-0433	Round Spacer, #6 x 0.5", Al, for PCB	5	
84		2		040-6035	Kep Nut, 4-40, Zp, for PCB	5	
85		2		200-7006	Pressure Regulator Valve Assembly, needle valve	1	

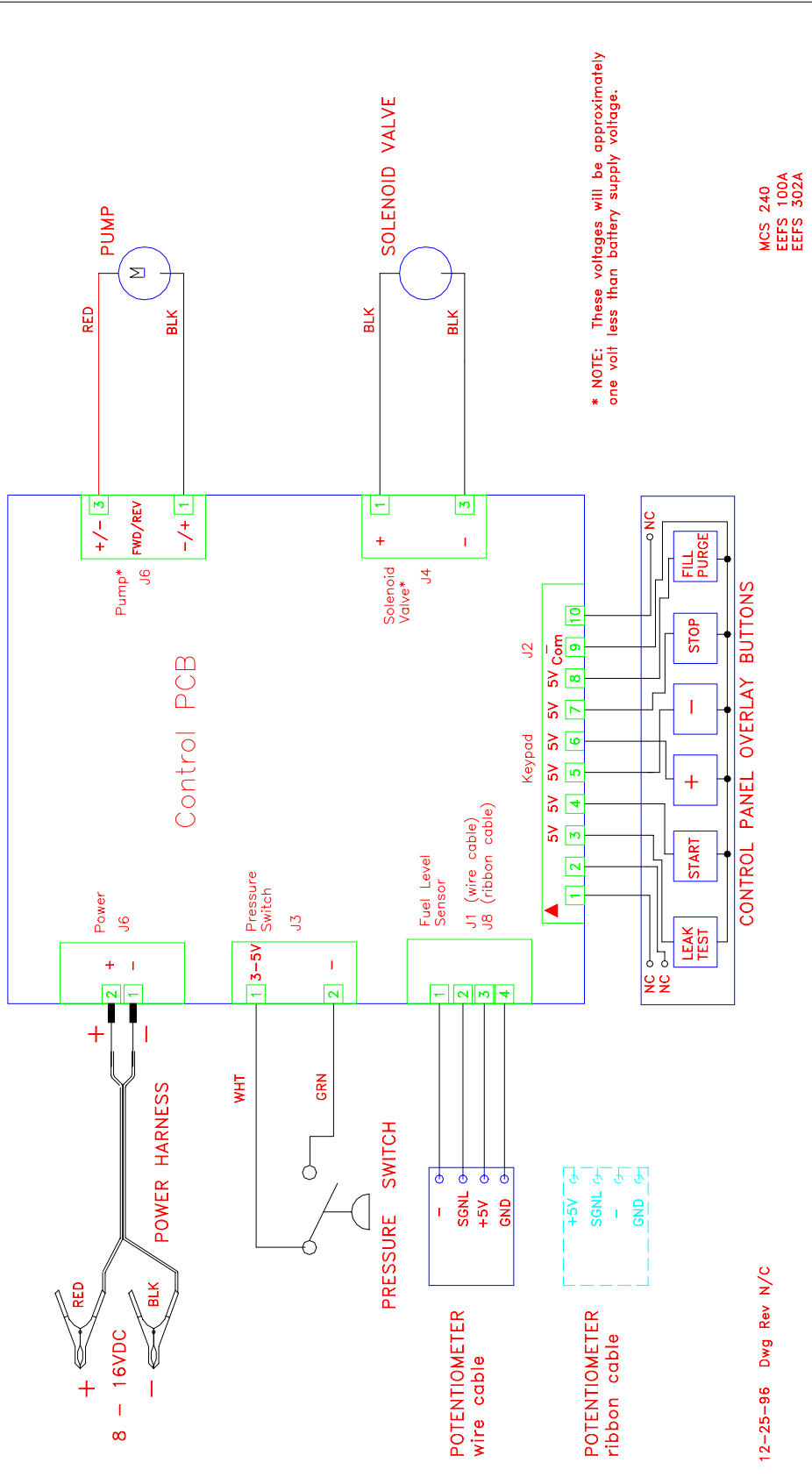
86			3	030-0011	90°, 5/16"Nt x 1/4"FPT, Ny, regulator fittings	2	
87			3	050-0052	Regulator Valve, needle valve, 1/4"MPT ports, Ss	1	
88		2		200-8010	Vacuum Gauge Assembly, 2.5" dial, "MOTORVAC"	1	
89			3	030-0026	Un, 0.170"Barb x 1/4"FPT, Br, for vacuum gauge	1	
90			3	050-0006	Vacuum Gauge, 0-30 in. hg., 2.5" dial, "MOTORVAC"	1	
91		2		200-8012	Pressure Gauge Assembly, 0-160 PSI, 3.5" dial, MotorVac	1	
92			3	030-0033	90°, 5/16"Nt x 1/8"FPT, Ny, pressure gauge fitting	1	
93			3	050-0005	Pressure Gauge, 0-160 PSI, 3.5" dial, MotorVac	1	
94							
95	1			N/A	Final Pull Assembly, for machine assembly	N/A	
96		2		010-5001	Rear Panel, Black plastic, for cabinet	1	
97		2		010-6046	Mounting Plate for filter bracket, Stl, Zp (2.8" x 0.47")	1	
98		2		010-6060	Fuel Tank Cap, black plastic	1	
99		2		020-0375	Strain Relief, for external power harness mount into cabinet	1	
100		2		020-5316	Internal Grounding Cable, between cntrl pnl and tank brkt	1	<i>B</i>
101			3	020-5315	Internal Grounding Plate, connects to pressure regulator	1	<i>B</i>
102		2		020-8043	External Power Harness, 11Ft, with battery clips	1	
103		2		030-0131	90°, 3/8"Comp x 1/4"FPT, Ni, fitting connects to hose asmb	2	
104		2		030-3092	Un, 1/4"MPT x 1/4"MPT, Stl, fitting connects to mnfld block	2	
105		2		040-1203	Screw, PHP 6-32 x 3/8", Zp, for tank brkt mounting to cab	7	
106		2		040-6016	Kep Nut, 6-32, Zp, for control panel mounting to cabinet	12	
107		2		040-6023	Screw, PHP #8 x 3/4", SMS, Zp, for rear panel mounting	9	
108		2		040-6029	Flat Washer, #6, Zp, for tank brkt mounting, front of cabinet	2	
109		2		040-6039	Screw, Truss Head 6-32 x 1/2", Zp, for filter mount. plate	2	
110		2		050-0095	Fuel Filter, spin-on, 10 micron rating, Baldwin BT839-10	1	
111		2		070-0085	Tubing, 5/16"OD, Nylon	7.42ft	
112		2		070-0100	Vacuum Hose 5/32"ID, rubber	11.58ft	
113		2		100-8116	Caution Label, for top of cabinet application	1	
114							
115					<i>Notes: A > for only one drawer order 1 of each and 2 nuts and screws</i>		
116					<i>B & D> these parts only sold together, not separate</i>		
117					<i>C > when replacing a plastic hanger replace with three</i>		
118					<i>metal hangers</i>		
119							
120					Additional Parts		
121	1			200-3025	Standard Adaptor Kit, fuel system connecting adaptors	1	
122	1			200-8071	Packet including Operator manual & Quick Reference Cards	1	
123		2		200-8040	Operator's Manual, Revision C	1	
124		2		100-8101	Quick Reference Cards: Carb, TBI, PFI, & CIS fuel systems	1set	
125	1			200-8038	Intake Cleaning System (ICS) kit, w/ nozzles & spray tubes	1	

126						
127			Replacement Parts			
128	1		020-5329	Fuse, 8 Amperes, 5mm x 20mm, fast-acting, for cntrl PCB	1ea	
129	1		050-0056	Pressure Adjust Regulator Knob, Black plastic	1ea	
130	1		050-0007	Pressure Gauge Replacement Lens, for 3.5" gauge	1ea	
131	1		050-1910	Vacuum Gauge Replacement Lens, for 2.5" gauge	1ea	
132	1		100-5001	ICS, 30" Spray Tube, with multidirectional spray pattern	1ea	
133	1		100-5008	ICS, Bottle Neck, Black plastic, w/o air filler asmb	1ea	
134	1		100-5009	ICS, Air Filler Assembly, includes viton valve core & gasket	1ea	
135	1		100-5010	ICS, Viton Valve Core, for air filler assembly	1ea	
136	1		100-8138	Solenoid Replacement Plunger, viton, Blue	1ea	
137	1		200-3026	Deluxe Adaptor Kit, Sun/Snap-On P/N EEFS-102A	1ea	
138	1		200-8061	ICS Service Kit, includes pickup tube w/valve, nozzle, 6" tube	1ea	
139						
140						
141			Abbreviations:			
142			AL	Aluminum		
143			ASMB	Assembly		
144			BLK	Black		
145			BRKT	Bracket		
146			BTTM	Bottom		
147			CNTRL	Control		
148			DIA	Diameter		
149			FPT	Female National Pipe Thread		
150			ID	Inside Diameter		
151			LBF	Pound of Force		
152			MNFLD	Manifold		
153			MPT	Male National Pipe Thread		
154			N/A	Not Applicable or Not Available		
155			NAB	Nylon Air Brake		
156			Ni	Nickel		
157			N.O.	Normally Open		
158			NY	Nylon		
159			OD	Outside Diameter		
160			PCB	Printed Circuit Board		
161			PHP	Pan Head Phillips		
162			PNL	Panel		
163			PRS	Pressure		
164			PSI	Pound per Square Inch		
165			SMS	Sheet Metal Screw		
166			SOLND	Solenoid		
167			Ss	Stainless Steel		
168			STL	Steel		
169			SW	Switch		
170			UN	Union fitting		
171			VDC	Voltage, Direct Current		
172			W/	With		
173			W/O	With Out		
174			ZP	Zinc Plate		
175			90°	ninety degree angled fitting		

DIAGRAMS AND SCHEMATICS:



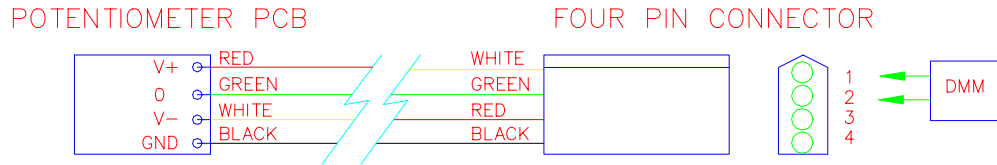
MotorVac CarbonClean System Electrical Schematic



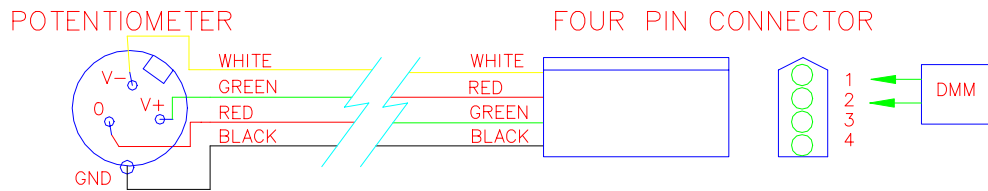
12-25-96 Dwg Rev N/C

MotorVac: Potentiometer Assembly Connections

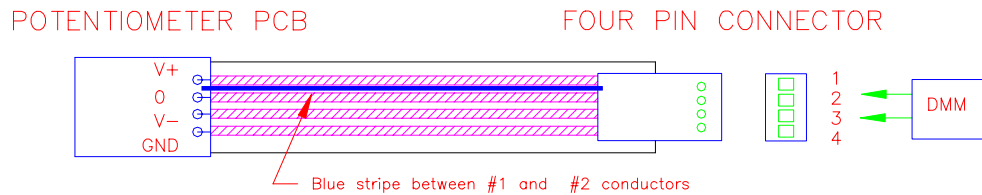
POTENTIOMETER ASSEMBLY: GREY CABLE



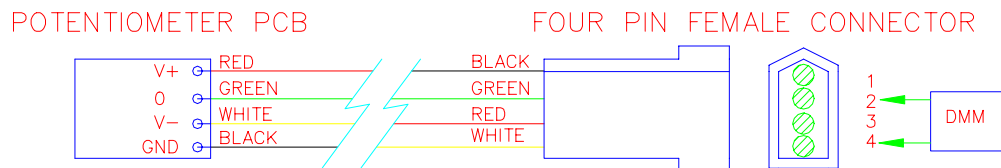
POTENTIOMETER ASSEMBLY: BROWN or BLUE CABLE



POTENTIOMETER ASSEMBLY: RIBBON CABLE



POTENTIOMETER ASSEMBLY: GREY SHORT CABLE



01-29-97 Rev C

