Set-Up Instructions

SDI Motorized Valves

for the following:

EC-VM400

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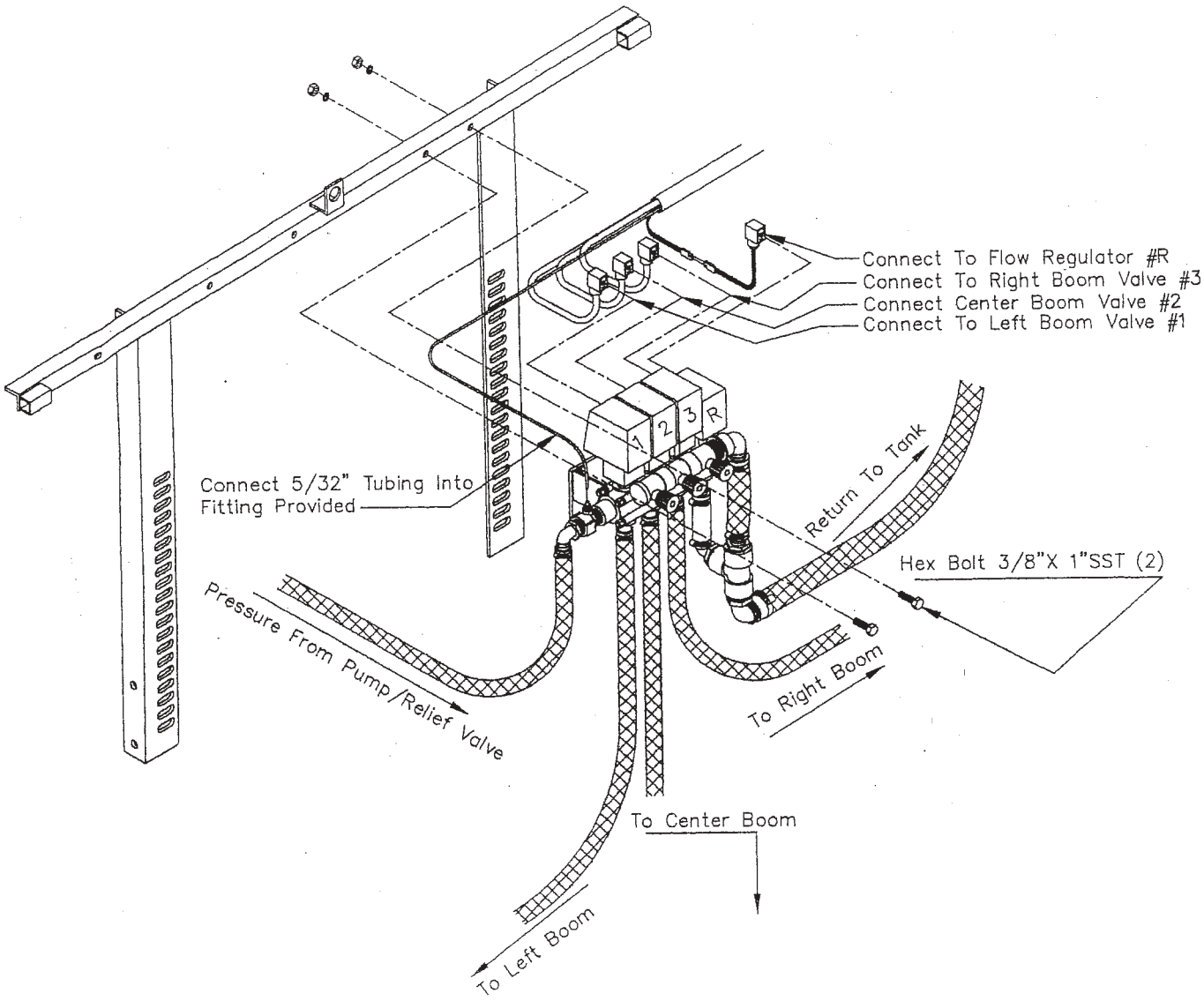
SDISet-Up Diagram



Step 1:

Bolt Valve Assembly, Part #18-300, onto cross member of boom using 3/8 x 1" bolts, lock washers and nuts (supplied).

Note: *If boom had adjustable channel cross angle, use 3/8" adjustable channel nuts (supplied).*

Step 2:

Install D.I.N. connectors from wiring loom using water resistant D.I.N. connector gasket and screws included in the 18-200 kit, to Motorized Valves and Pressure Regulator.

Note: *I*

Using EC-VM400, use wiring harness included in the 18-300 kit and route to desired control mounting location.

Step 3:

Plug 5/32" tubing into tubing adapter located next to valve #1.

Step 4:

Install ball valve and 3/4" hose barb adapter elbow (included in 18-300 kit) to pump outlet. Run 3/4" hose (cut to desired length), from pump to inlet on the Motorized Valve.

Step 5:

Remove 1" plus from return fitting on tank. Install 1" hose brb elbow to return fitting.

Step 6:

Install bypass return hose from 1" hose barb elbow on Motorized Valves to 1" elbow on tank.

Step 7:

Cut 3/4" hose to length and install from valves to boom inlet adapters (allow extra length on outer wing sections to allow for breakaway capabilities.

Step 8:

Install Control Box to Control Mount.

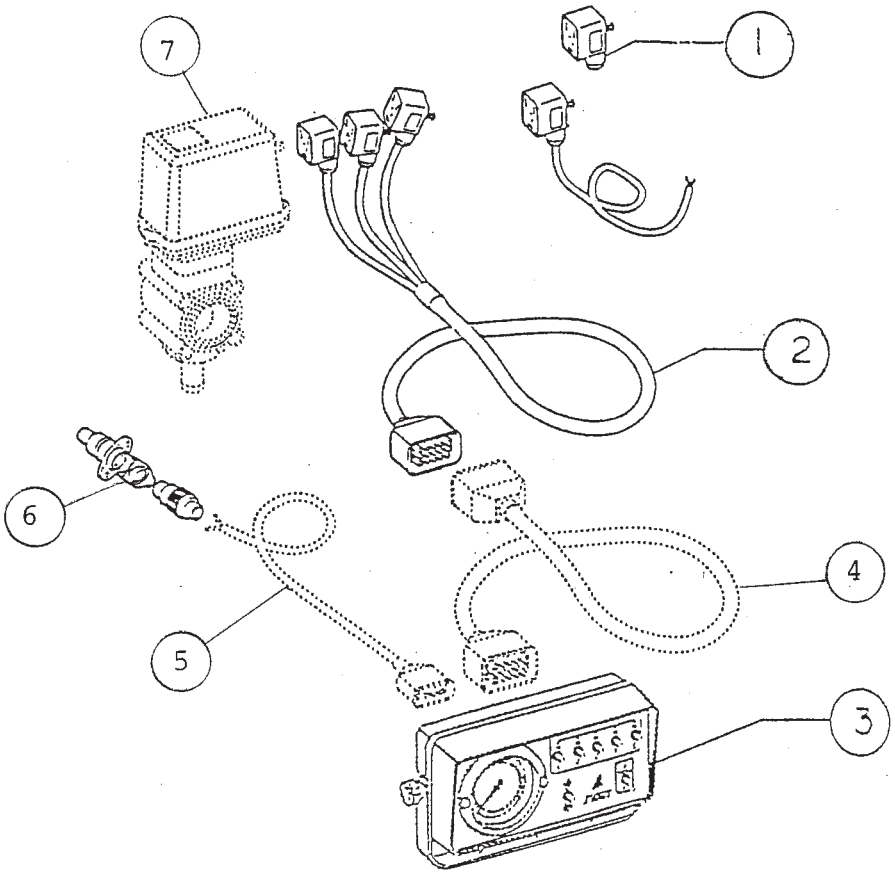
Using Control Box for 18-310, plug harness into back of Control Box, install power lead and connect to battery, brown wire (+) positive, blue wire (-)ground.

Step 9:

Install 5/32" tubing into adapter on Control Box.

SDI Control Box Accessories

Item #	Part #	Description	Qty.
1	56-536	D.I.N. Connector	1
2	56-504	Harness Assembly 16'	1
3	56-503	Motorized Valves Control Box	1
4	56-508	Control Box Extension	1
5	56-507	Power Cable	1
6	72-117	Cigarette Lighter Adapter	1
7	56-501	Motorized Valve One Two Wire	1



Setting Pressure for Motorized Controls

The following instructions are designed to assist you, the customer, with the proper setting and testing of your **Motorized Control Unit.**

For models with a diaphragm pump:

1. Shut off ball valve to boom.
2. Set **manual relief valve to 70-80 PSI -** *(this is used mainly as a safety valve and will not operate below that pressure).*
3. Open ball valve to booms.

For all models *(for centrifugal pump models, the first three steps* ***are not required):***

4. Close all three (3) **Metered Bypass Valves** (red knobs), by turning knobs in a clockwise direction as far as they will go (Figure 1).

5. Open all three (3) sections of the boom from the **Control Panel.** Set desired operating pressure using electric **Control Switch** on the **Control Panel.** To set the **Metered Bypass Valve,** close one boom section at a time. Then, open the **Metered Bypass Valve** for that boom section until the desired operating pressure is achieved.

Example: Desired pressure is 40 PSI, to set **Metered Bypass Valve:**

   A. Shut left boom section off on **Control Panel.**
   B. Pressure will read more than 40 PSI.
   C. Using left **Metered Bypass Valve,** open valve until operating pressure returns to **40 PSI.**

6. **Repeat** the above procedure for the **center and right boom sections,** making sure the other two (2) boom sections are open.

Motorized Control Valves

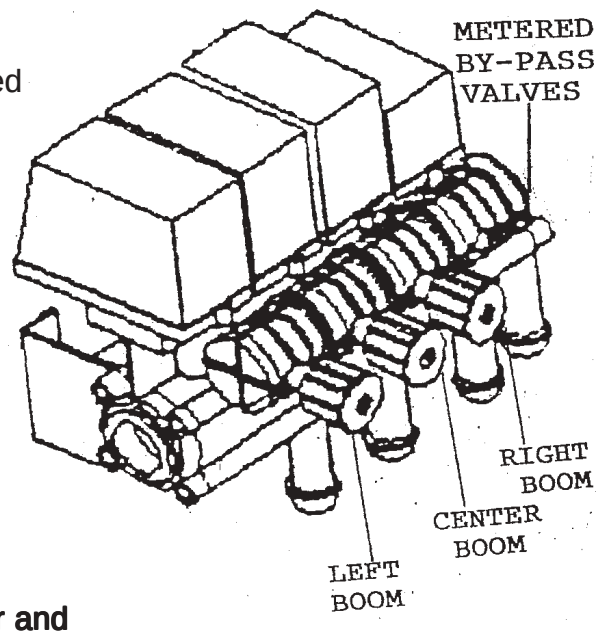
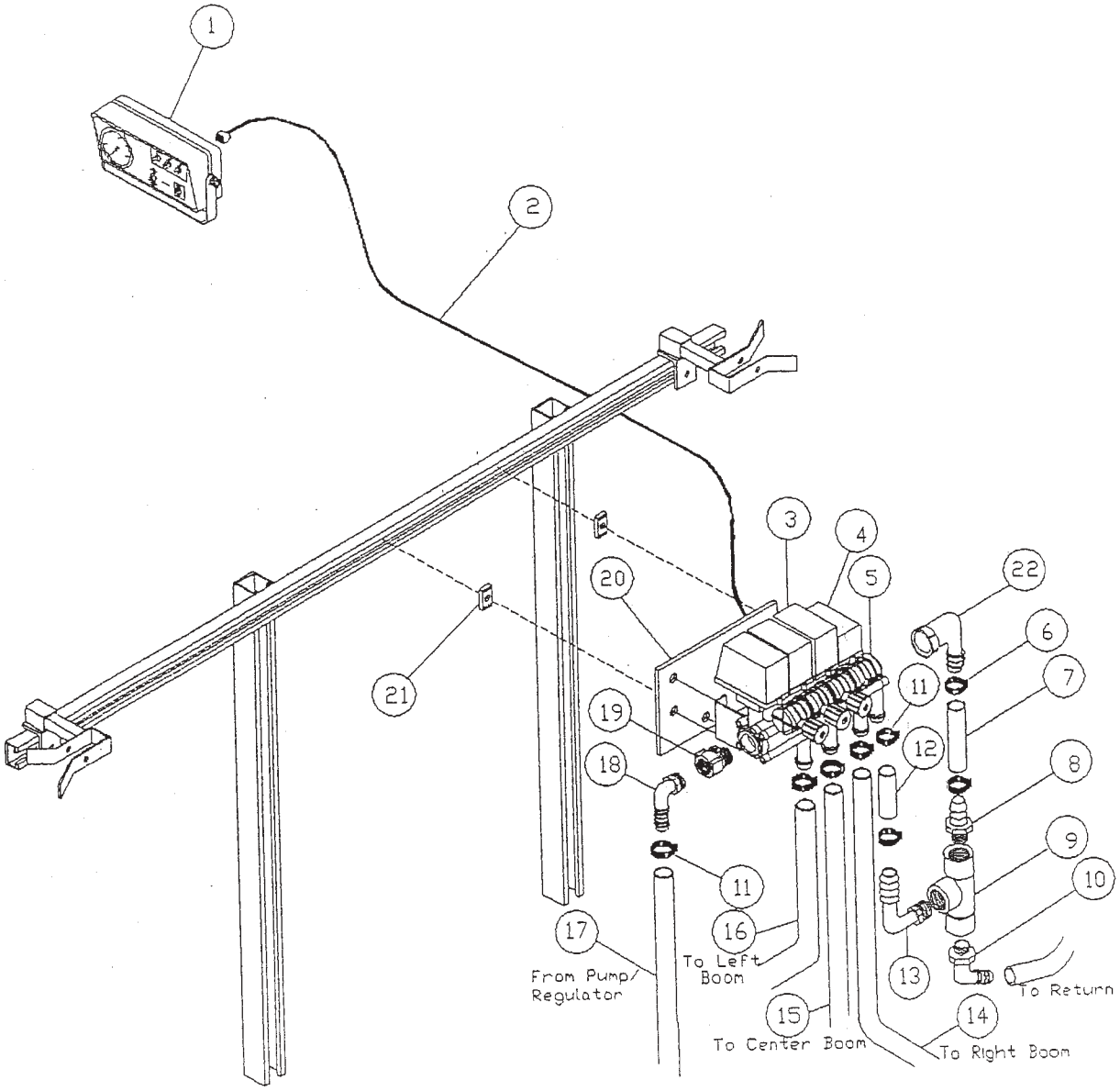


Figure 1

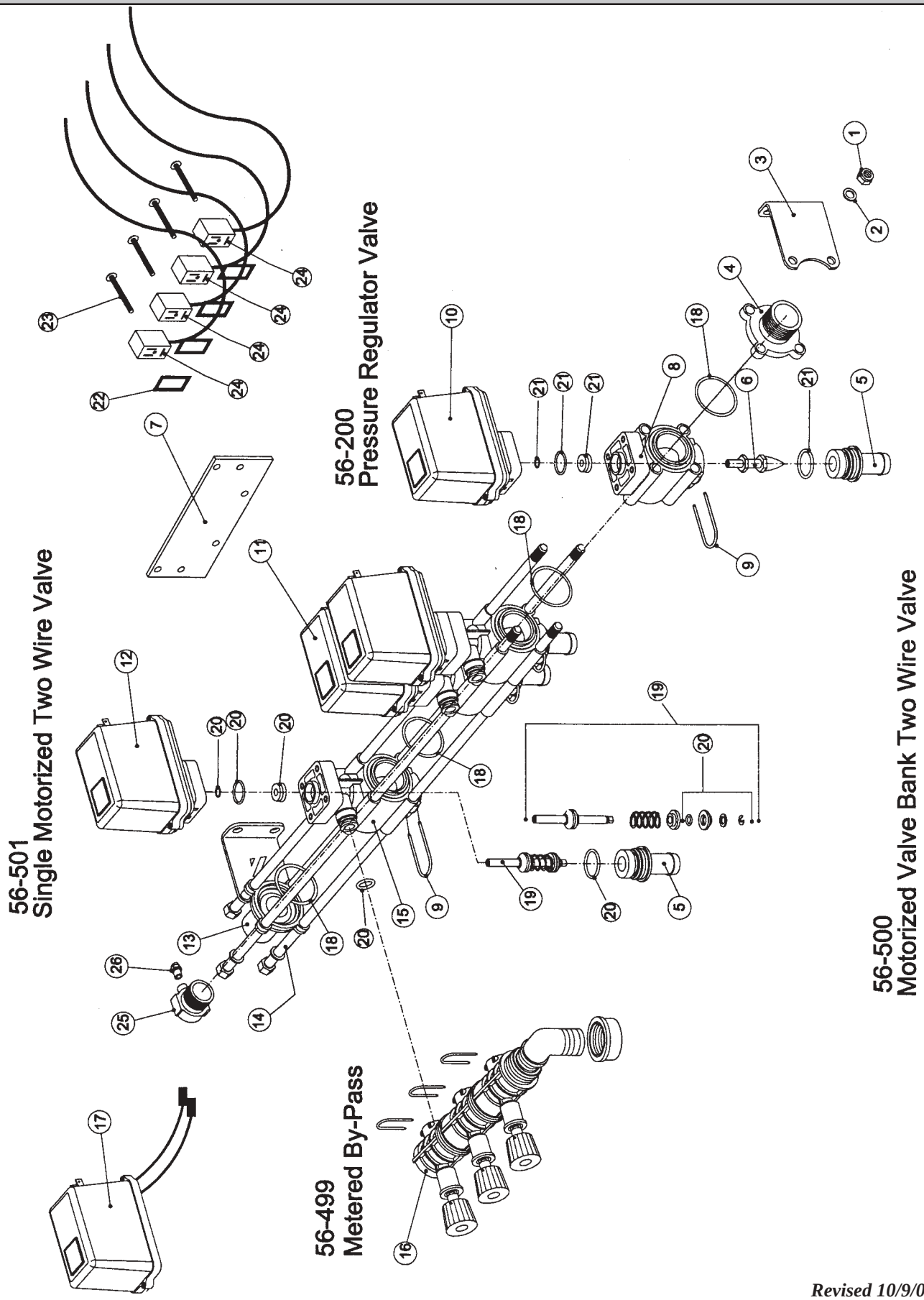
SDI Motorized Boom Valve Controls

Item Number	Part Number	Description	Qty
1	56-503	Control Box	1
2	56-504	Wire Harness	1
3	56-500	Three Motorized Valves	1
4	56-200	Regulating Valve	1
5	56-499	Metered Bypass	1
6	24-116	Clamp	6
7	21-938	Hose 1" ID, Per Foot	Specify
8	53-435	Adapter 1 MPT x 1" HB, Poly	1
9	53-826	Tee 1" NPT, Poly	1
10	52-120	Elbow 1 MPT x 1" HB, Poly	2
11	24-112	Hose Clamp #12	10
12	21-930	Hose 3/4" ID, Per Foot	Specify
13	52-119	Elbow 1 MPT x 3/4" HB, Poly	1
14	21-930	Hose 3/4" ID, Right Boom	**
15	21-930	Hose 3/4" ID, Center Boom	**
16	21-930	Hose 3/4" ID, Left Boom	**
17	21-930	Hose 3/4" ID, Pump	**
18	52-112	Elbow 3/4 MPT x 3/4" HB, Poly	1
19	56-2152	Adapter 3/4 MPT x 3/4 MPT x 1/8" Port	1
20	11-639	Mounting Plate	1
21	41-106	Strut Nut 3/8"	2
22	56-511	Fly Nut Assembly	1
		The following items are not illustrated:	
	11-021	Control Arm	1
	11-022	Control Stand	1
	11-023	Control Stand Clamp	1
	21-938	Hose 1" ID, Per Foot	Specify
	**Note:	25' of 21-930 3/4" ID hose included - cut to length required.	

SDI Motorized Boom Valve Controls



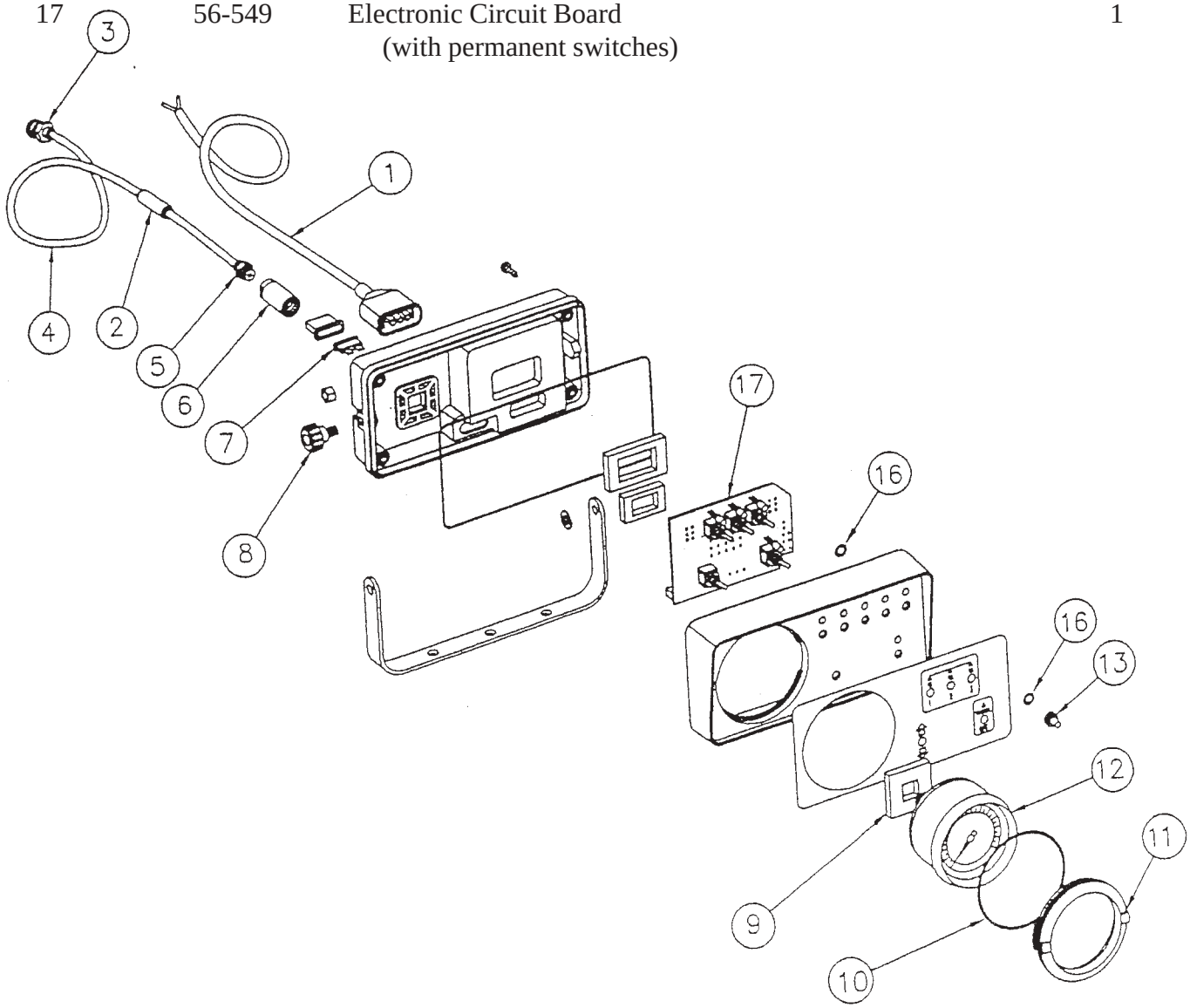
SDI Motorized Valve Bank Two Wire - 56-500



Revised 10/9/09jj

SDI Motorized Two Wire Valve Bank #56-500

Item Number	Part Number	Description	Qty
1	56-530	Hex Nut	4
2	56-529	Washer	8
3	56-505	End Mounting Plate	2
4	56-514	Outlet Adapter 3/4" MPT	1
5	56-105	Slip Hose Barb Fitting 3/4"	4
6	56-203	Regulator Stem	1
7	11-639	SDI Mounting Plate	1
8		No Longer Available/Regulator (Valve Body)	
9	56-106	Locking Pin	4
10	56-201	Regulator Motor Assembly	1
11	56-501	Motorized Two Wire Valve	3
12	56-100A	Motor Assembly 56-501	3
13	56-513	Inlet Adapter 3/4" FPT	1
14	56-528	Hex Bolt 10" Lg.	4
15	56-101	Valve Body 56-501	3
16	56-499	Metered Bypass after 1/07	1
17	56-525	Valve Cover Only	4
18	56-107	O-ring Between Valves	5
22	56-490	DIN Connector Gasket	4
23	56-491	DIN Connector Screw	4
24	56-541	DIN Connector Cable	4
25	56-2152	Adapter 3/4 MPT x 3/4" FPT x 1/8" Port	1
26	56-510	Adapter 1/8 MPT x 5/32" Tube Slip	1
		Repair Kits:	
19	56-538	Plunger Kit for 56-501 Two Wire Valve	3
20	56-539	Seal Kit for 56-501 Two Wire Valve	3
21	56-540	Seal Kit for 56-200 Regulator Valve	1

SDI Complete Box Assembly #56-503

Item #	Part #	Description	Qty.
1	56-507	Power Cable	1
2	56-516	Union Fitting	1
3	56-510	Fitting 1/8 MPT x 5/32"	1
4	49-532	Nylon Tubing 5/32" OD, Per Foot	Specify
5	56-204	Fitting 1/4 MPT x 5/32" Tube	1
6	50-250B	Coupling 1/4" FPT Brass	1
7	56-70079	Fuse AGC10	1
8	56-537	Knob	1
9	56-531	Cushion	1
10	56-532	O-ring	1
11	56-535	Locking Ring	1
12	56-509	Pressure Gauge 0-100 PSI	1
13	56-533	Rubber Cap	1
16	56-534	O-ring (2 per switch)	2
17	56-549	Electronic Circuit Board (with permanent switches)	1