

# Set-Up Instructions

*for*

**EC-VMAFS and 4119052**

**All Function Control**

**Motorized Valves**

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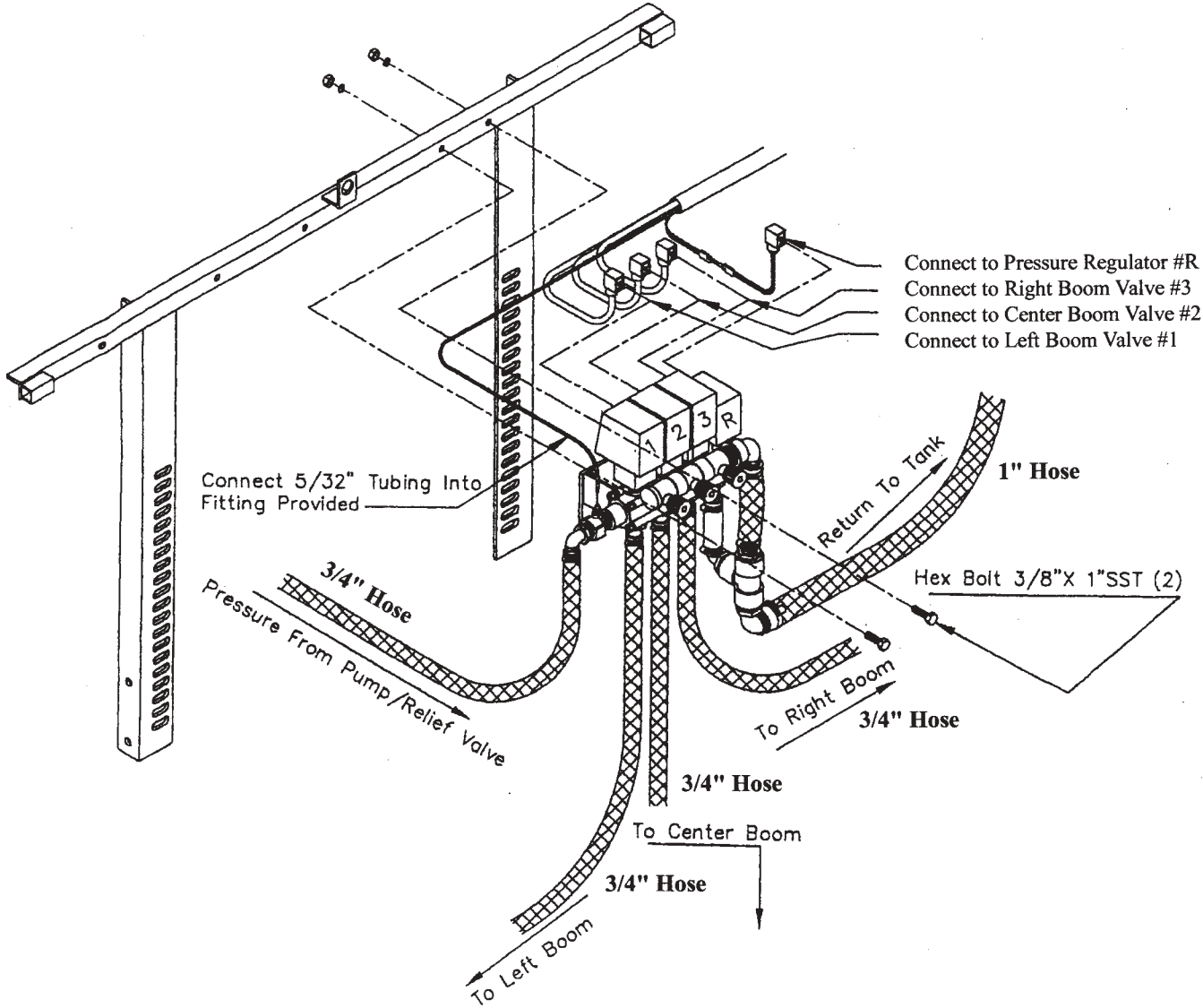
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# SDI Set-Up Diagram



# SDI Set-Up Instructions

## 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 has 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: If harness is supplied on the Service Vehicle, D.I.N. connector with 2-prong plug, Part # 18-321, is included in the 18-320 kit.*

## 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" plug from return fitting on tank. Install 1" hose barb 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 All Function Control Box, plug into socket located near glove box.

## Step 9:

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

# Setting Pressure for Motorized Controls

The following instructions are designed to assist you 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.

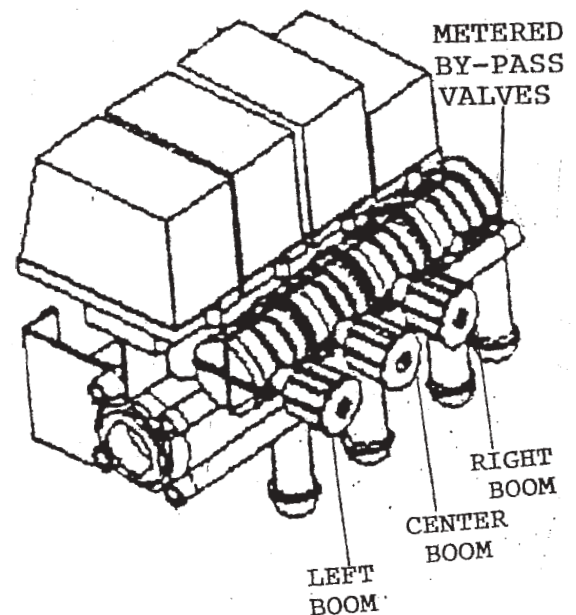
## For all models (*for centrifugal pump models, the first three steps are not required*):

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 (1) 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 the 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.

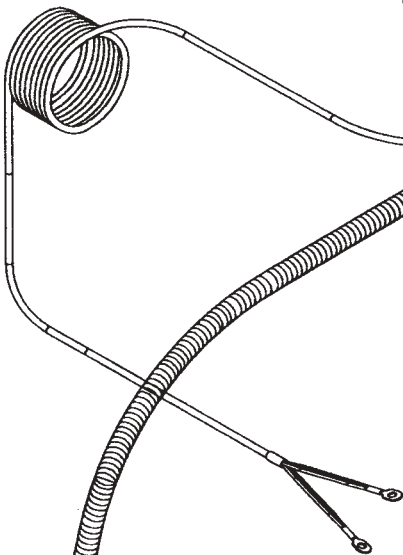
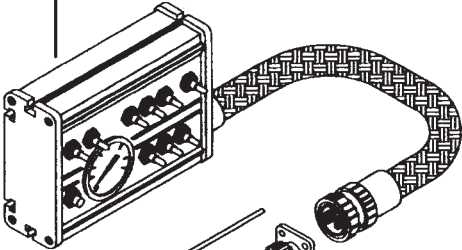
## Motorized Control Valves:



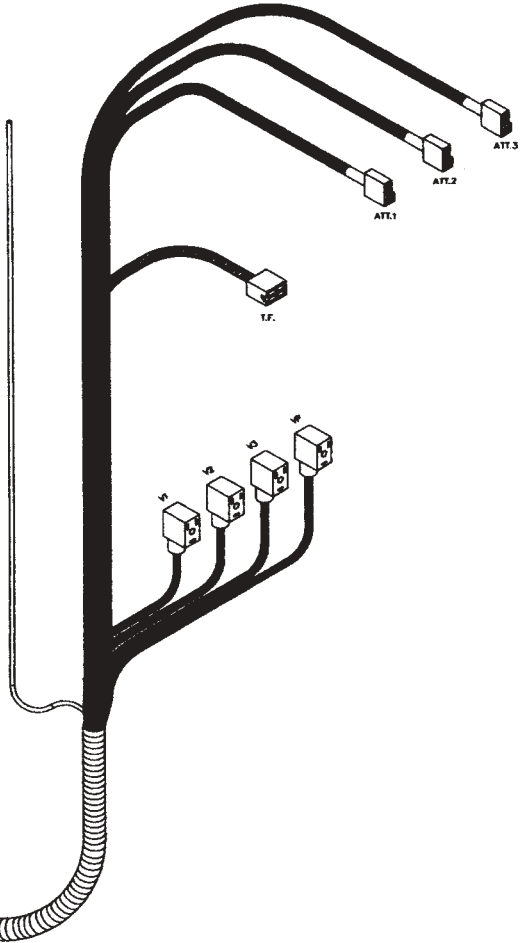
*Figure 1*

# SDI Motorized Boom Valve Controls

56-503AF/1 - Control Box

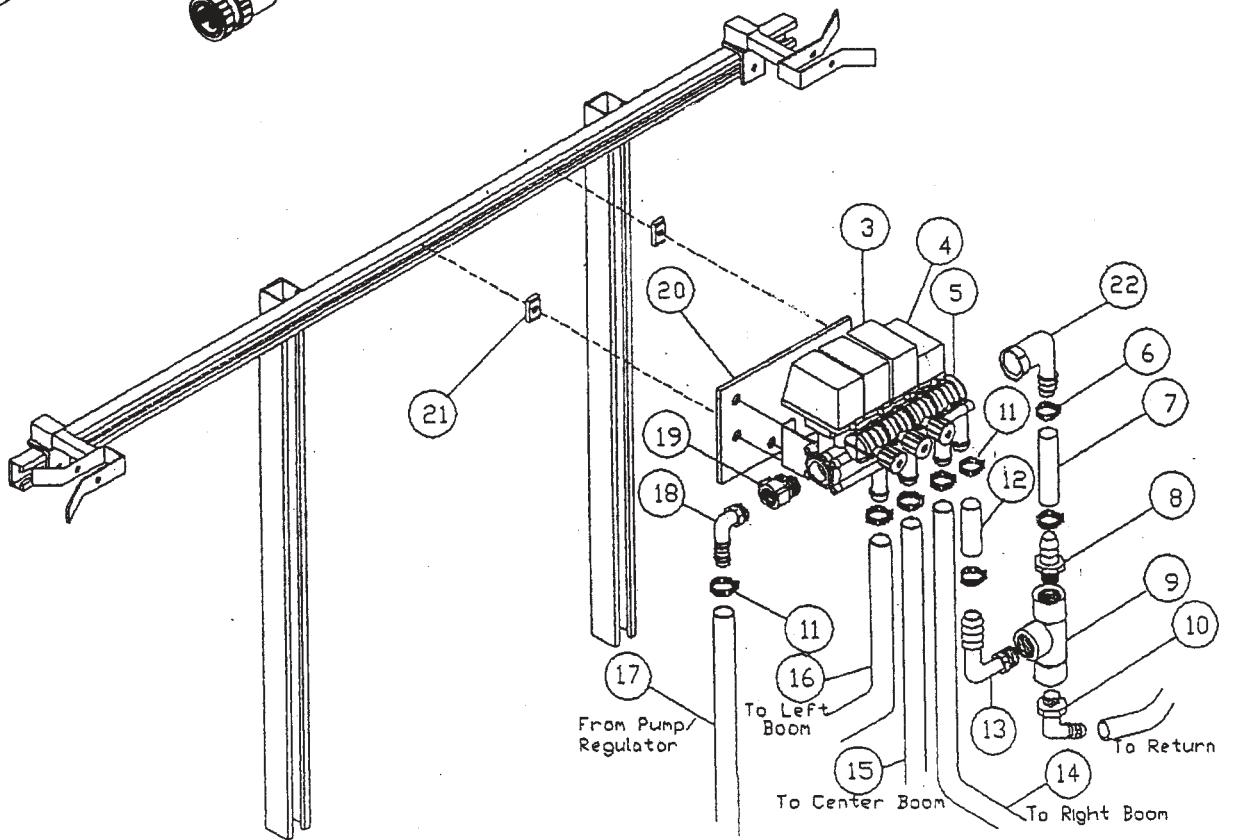
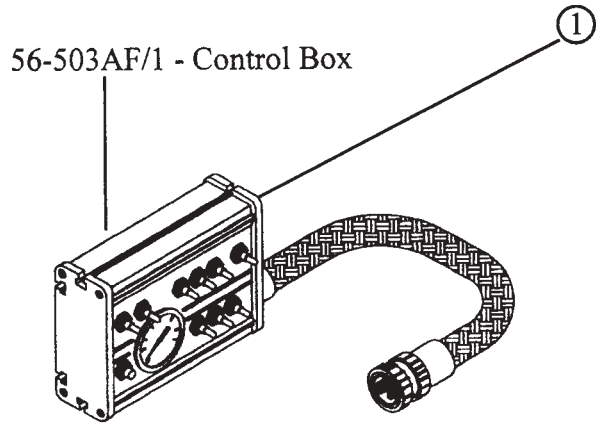


56-504AF  
Cable



The 56-504AF Cable shown above is only used on the *EC-VMAFS Motorized Valves*

# SDI Motorized Boom Valve Controls



# SDI Motorized Boom Valve Controls

Item No.	Part No.	Description	Qty
1	56-503AF/1	Control Box	1
3	56-500	Three Motorized Valves	1
4	56-200	Pressure 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 MTP 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**      **Contact Jacobsen, a Textron Company for harness**

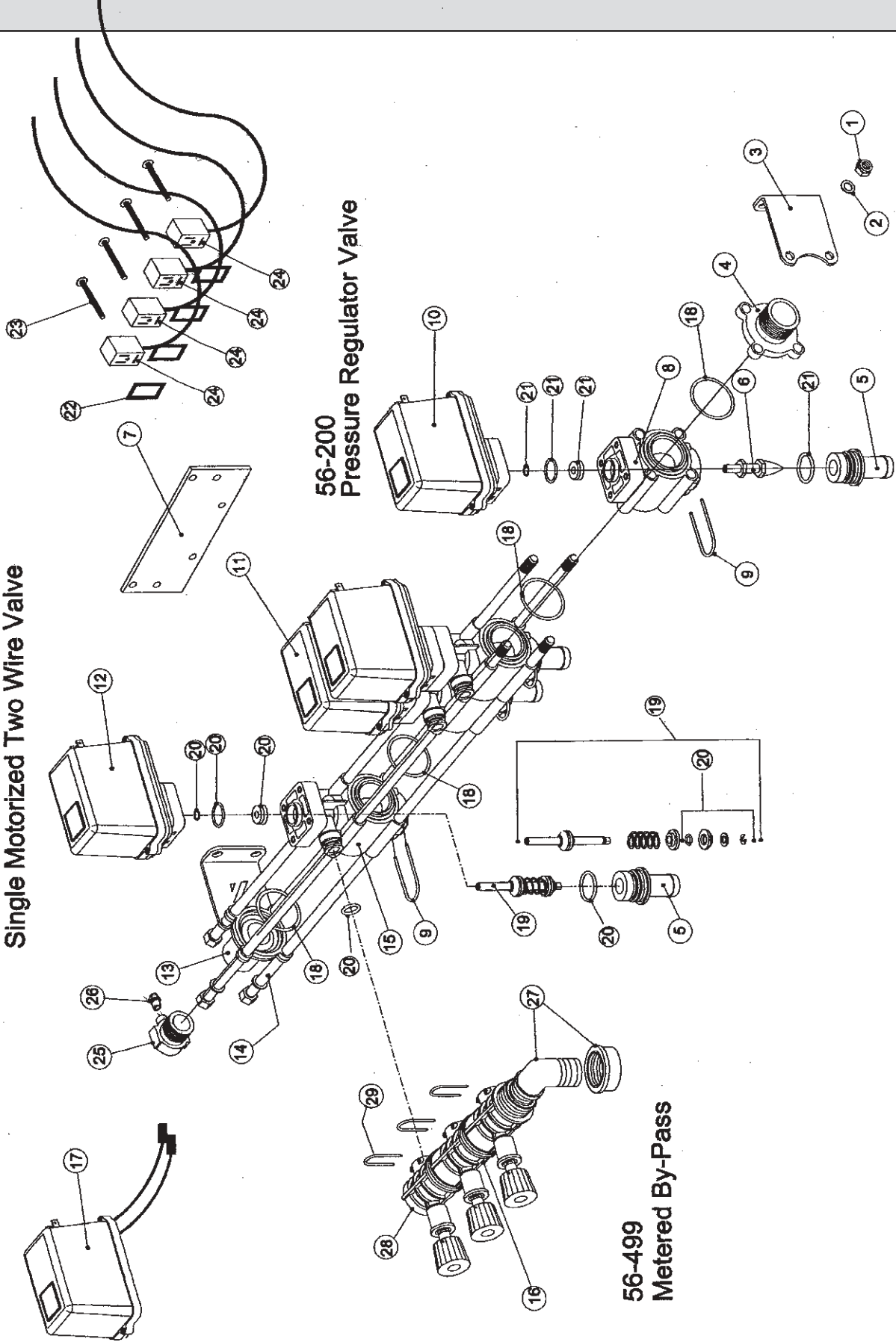
**\*\*Note**      25' of 21-930 3/4" ID hose included - cut to length required.

# SDI Motorized Valve Bank Two Wire #56-500

56-501  
Single Motorized Two Wire Valve

56-200  
Pressure Regulator Valve

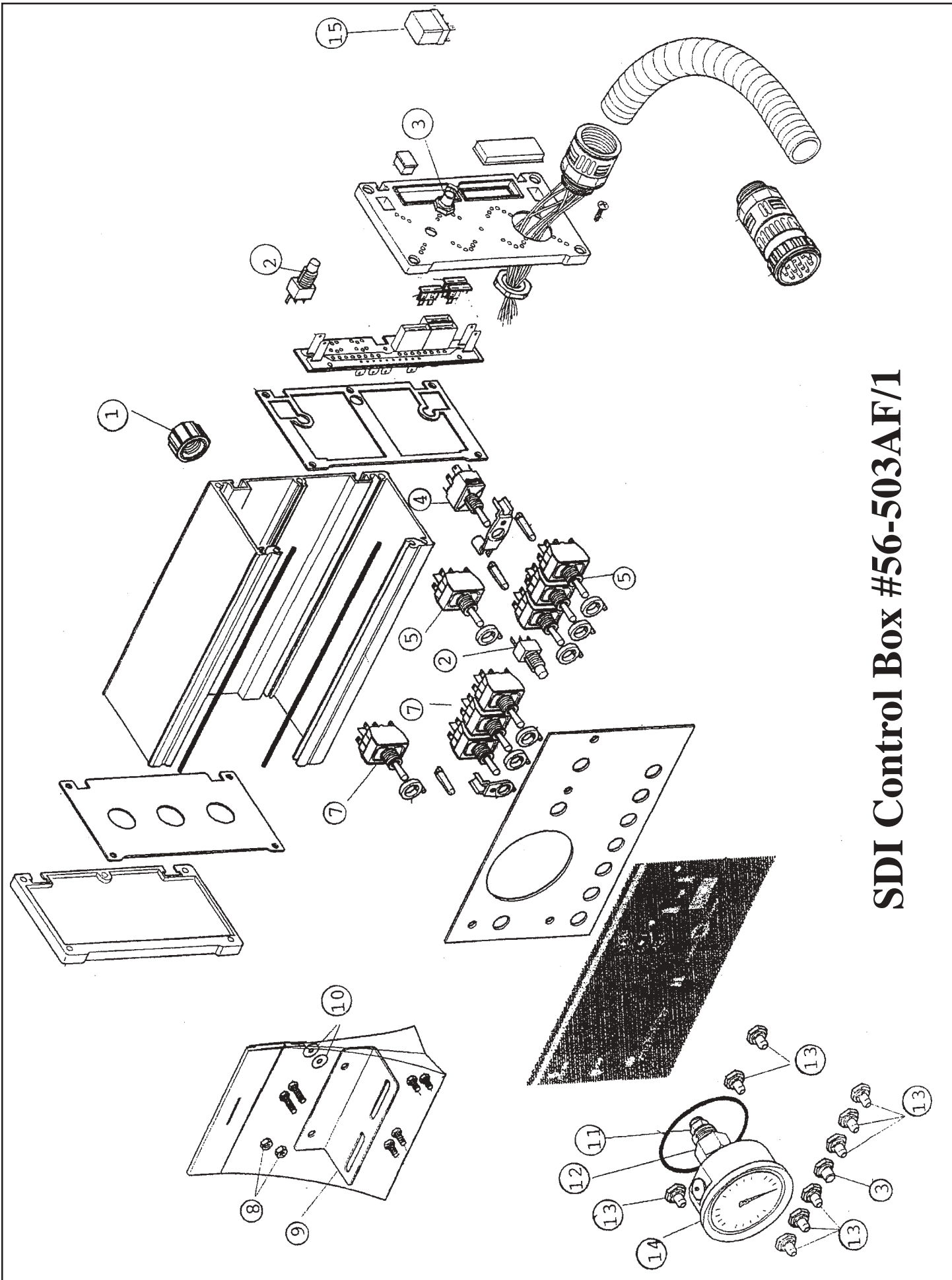
56-499  
Metered By-Pass





# SDI Motorized Valve Bank Two Wire #56-500

Item No.	Part No.	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		Regulator Valve/No Longer Available Separately	
9	56-106	Locking Pin	4
10	56-201	Regulator Motor Assembly	1
11	56-501	Two Wire Motorized Valve	3
12	56-100A	Motor Assembly	3
13	56-513	Inlet Adapter 3/4" FPT	1
14	56-528	Hex Bolt 10" Lg.	4
15	56-101	Valve Body	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
27	56-511	Fly Nut Assembly	1
28	56-600	End Cap Metered By Pass	1
29	56-517	By Pass Locking Pin	3
<b><u>Repair Kits:</u></b>			
19	56-538	Plunger Kit	3
20	56-539	Seal Kit	3
21	56-540	Seal Kit for Regulator Valve	1



**SDI Control Box #56-503AF/1**

# SDI Complete Box Assembly #56-503AF/1

Item No.	Part No.	Description	Qty
1	61-527	Reducer 1/4 x 1/2"	1
2	61-531	Main Power Switch/Dual Foamer Switch	2
3	61-517	Main Power Boot	2
4	61-260	On/Off Switch	1
5	61-515	Boom Lift Pressure Switch	4
7	61-500	On/Off Boom Switch	4
8	61-606	Nut	2
9	61-525	Mounting Bracket	1
10	61-118	Washer	2
11	61-528	Tubing Connector 1/8"	1
12	61-535	Long Pressure Gauge Adapter	1
13	61-516	Switch Boot Toggle Switch	9
14	56-509	Liquid Pressure Gauge 0-100 PSI	1
15	61-530	Reley 12V 3AMP	1

