# **Set-Up Instructions**

# **SDI Motorized Valves**

for the following:

**EC-VMAFS** 

and

4119052

**All Function Control** 

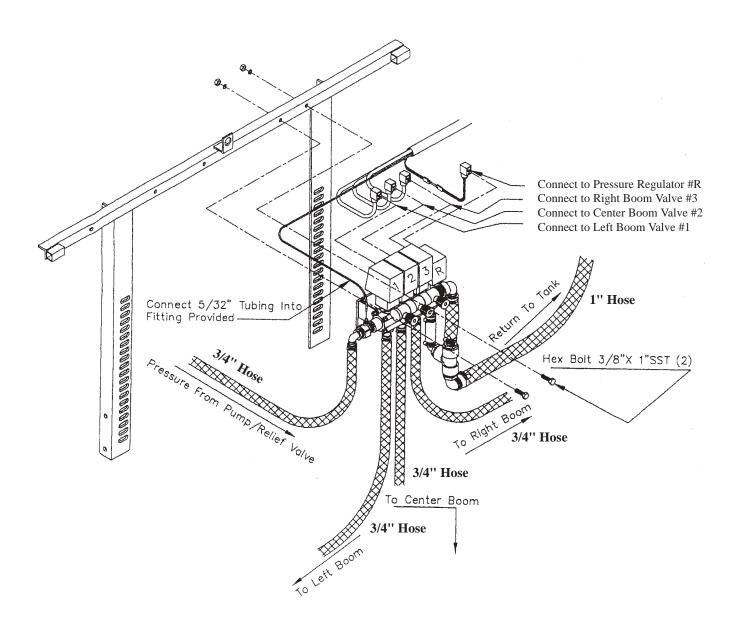
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## SDISet-Up Diagram



### 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:** If harness is supplied on the Service **Vehicle.** D.I.N. connector with 2-prong plus 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" plus 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, 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 <u>clockwise</u> direction as far as they will go (Figure 1).
- 5. Open <u>all three</u> (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 <u>one</u> 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 <u>off left</u> boom section on **Control Panel.**
- B. Pressure will read more than 40 PSI.
- C. Using <u>left</u> **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**

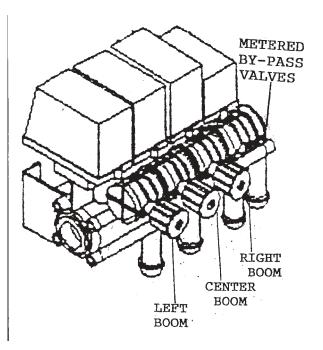
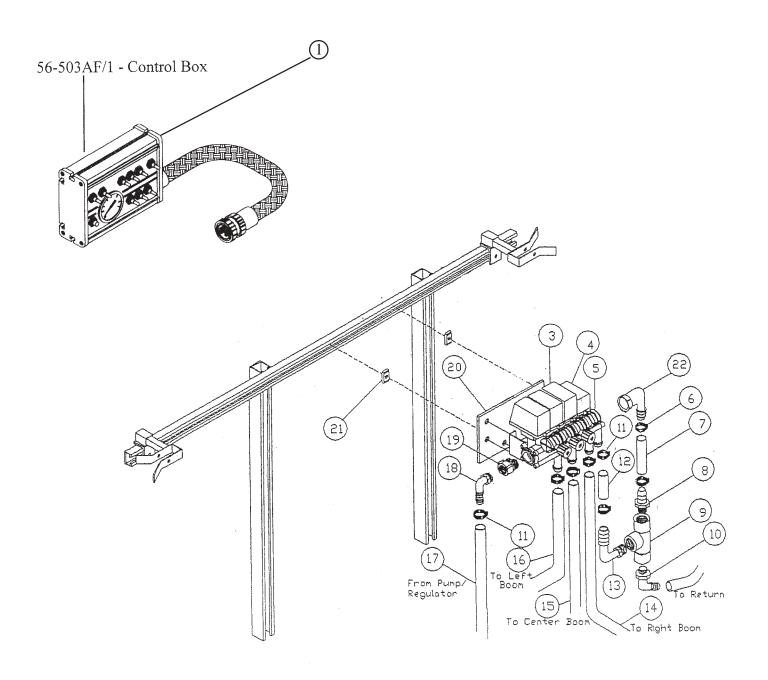
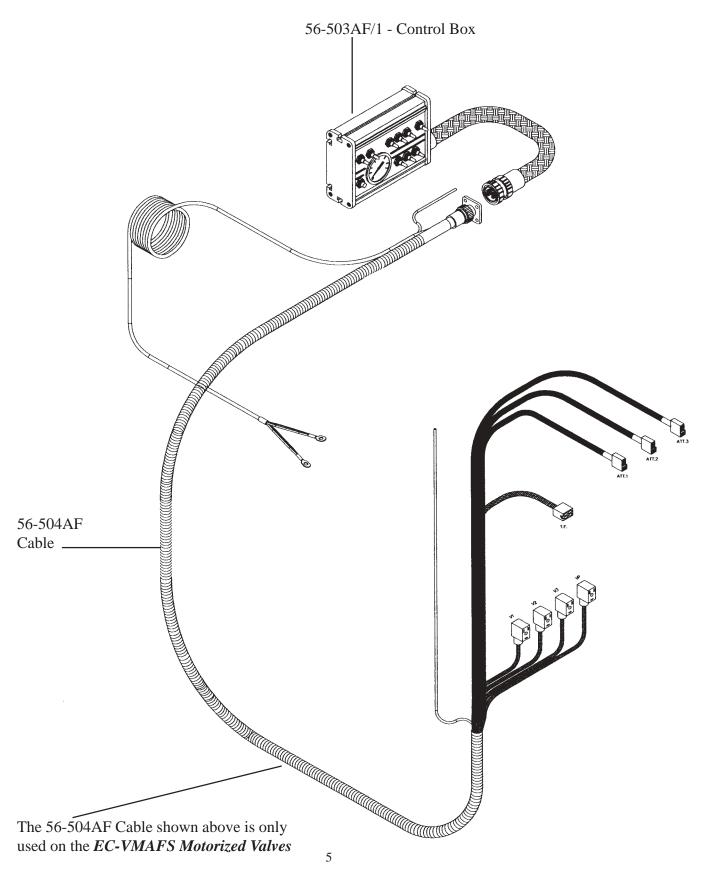


Figure 1

## **SDI Motorized Boom Valve Controls**



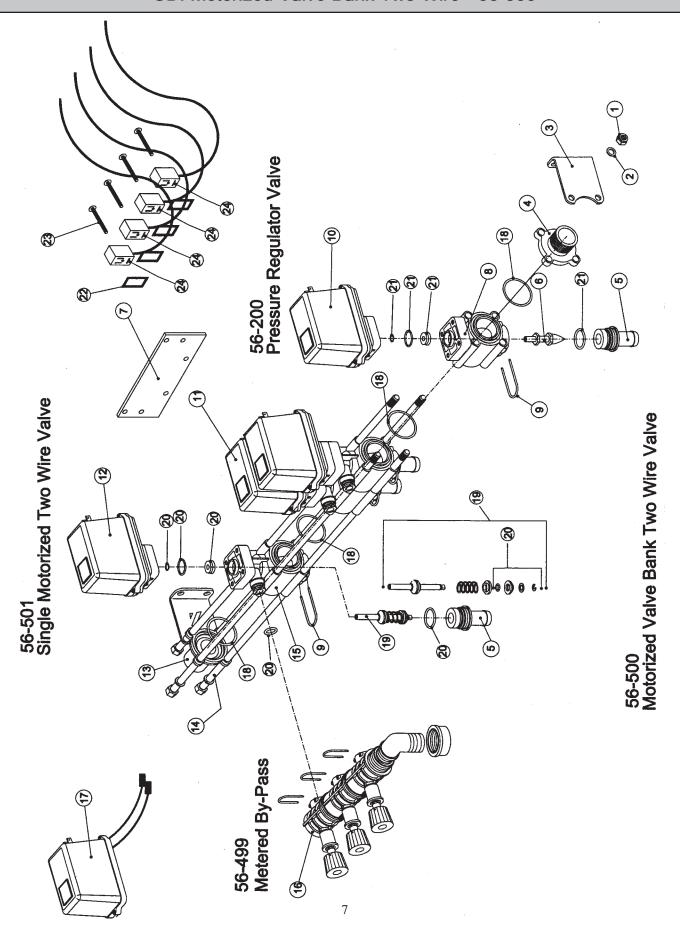
## **SDI Motorized Boom Valve Controls**



## SDI Motorized Boom Valve Controls

Item	Part		
Number	Number	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 15	21-930 21-930	Hose 3/4" ID, Right Boom	**
16	21-930	Hose 3/4" ID, Center Boom 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
	11-021	Control Stand	1
	11-023	Control Stand Clamp	1
	21-938	Hose 1" ID, Per Foot	Specify
	*Note	Contact Jacobsen, a Textron Company for this harness.	
	**Note:	25' of 21-930 3/4" ID hose included - cut to length required.	
		6	
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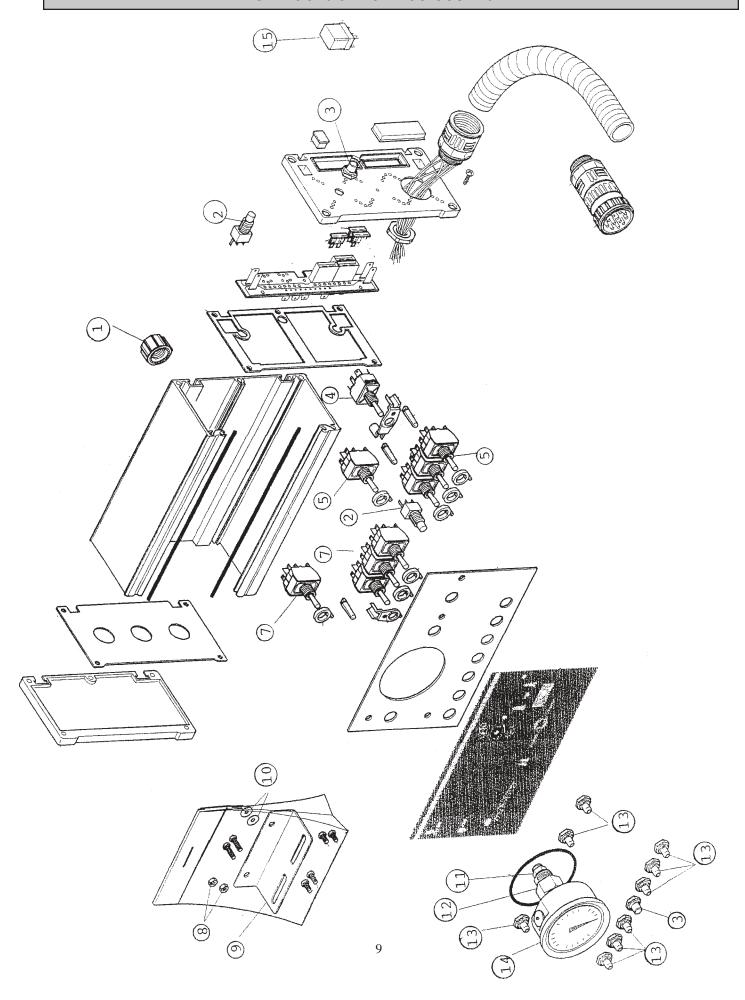
## SDI Motorized Valve Bank Two Wire - 56-500



## SDI Motorized Two Wire Valve Bank #56-500

Item	Part	Denovinskian	04
Number	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	
9	56-106	Locking Pin	4
10	56-201	Regulator Motor Assembly	1
11 12	56-501	Motorized Two Wire Valve	3 3
13	56-100A 56-513	Motor Assembly 56-501 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
		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
		8	
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## SDI Control Box #56-503AF/1



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

Item#	Part #	Description	Qty.
1 2 3 4 5 7 8 9 10 11 12 13 14 15	61-527 61-531 61-517 61-260 61-515 61-500 61-606 61-525 61-118 61-528 61-535 61-516 56-509 61-530	Reducer 1/4 x 1/2" Main Power Switch/Dual Foamer Switch Main Power Boot On/Off Switch Boom Lift Pressure Switch On/Off Boom Switch Nut Mounting Bracket Washer Tubing Connector 1/8" Long Pressure Gauge Adapter Switch Boot Toggle Switch Liquid Pressure Gauge 0-100 PSI Relay 12V 3 AMP	1 2 2 1 4 4 2 1 2 1 1 9 1 1
		10	