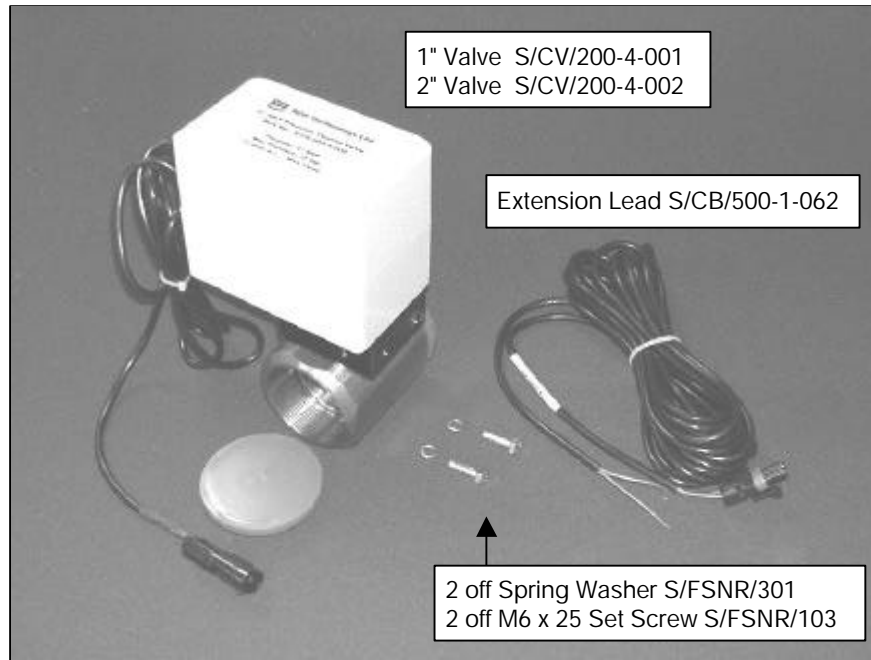


The spraying pressure and therefore the flow rate of the sprayer is controlled by means of an electrically operated butterfly valve.

There are two sizes of valve available. As a general rule the 1" bore valve is adequate for all positive displacement (piston or diaphragm) pumps. The 2" bore valve should be used with high output centrifugal pumps. All wetted parts are corrosion-resistant stainless steel.

Due to the variance in sprayer design and pipework, plumbing fittings are not supplied and should be obtained from your nearest ag. dealer as required.

Figure 1: Kit Contents



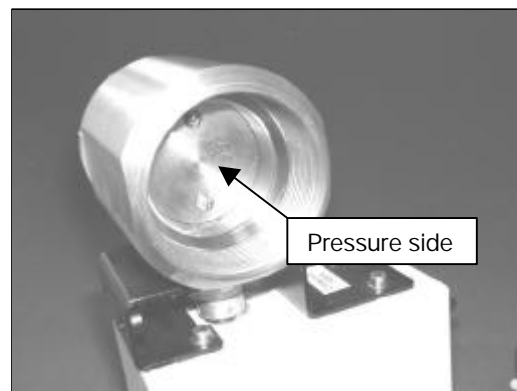
Location of Control Valve in system

The general requirement is for the valve to be fitted between the main spray pressure line and a return line to the tank, by means of a tee fitting inserted in the pressure line at any convenient point between the pump outlet and boom section valve inlet.

NOTE: If the sprayer has a modular manifold system, it may be possible to split the manifold and insert a suitable tee adaptor.

The valve must be installed into the line so that when the valve is fully closed, the butterfly fixing screws are on the pressure) pump side. (fig 2.)

Figure 2: Flow direction



If space is restricted during installation, the motor/gearbox assembly can be detached from the valve body by removing the 2 socket caphead screws from the valve body (fig. 3). A shortened 4mm Hexagon key is required.

Once the valve body is installed, the motor/gearbox assembly can then be reattached.

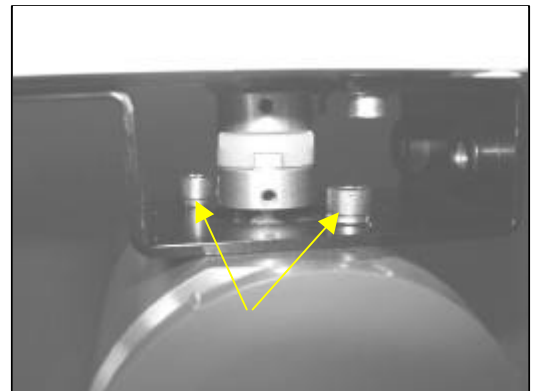


Figure 3 Valve Body attachment screws

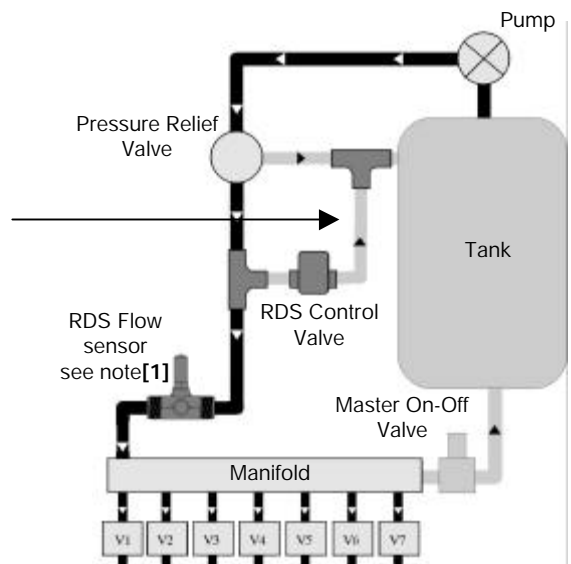
A length of either 1-1/4" or 2" hose must be installed from the butterfly valve back to the tank. This return line must have unrestricted flow into the tank to avoid back pressure, which can cause control problems.

Depending on the particular sprayer, one of the following plumbing arrangements for the return line can be adopted.

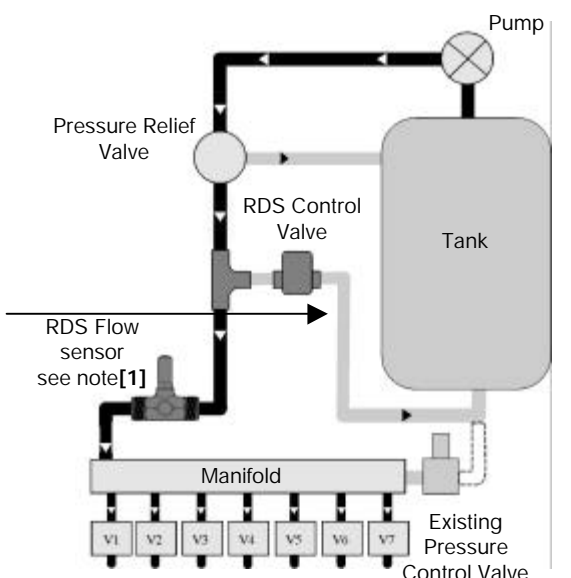
IMPORTANT NOTE:

In all instances the standard pressure regulating device of the sprayer must be left in the system to act as a MAXIMUM pressure regulator

- (i) Connect the return hose from the control valve into the return line from the pressure relief valve, at a convenient point using a suitable hose tee.

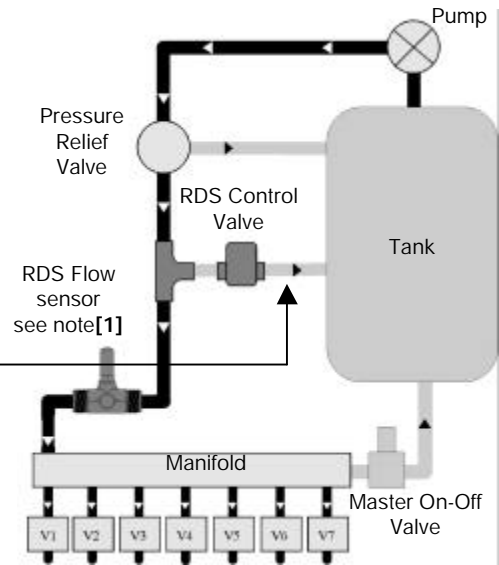


- (ii) If the sprayer utilises an existing electric valve to control pressure, that will be made redundant by the RDS system, then disconnect and close off this valve, and connect the RDS valve to the existing return line.





(iii) If there isn't a convenient existing return line then connect a dedicated return hose from the control valve directly into the tank, using a suitable tank connector. Ideally, the return line should drop into the bottom of the tank to prevent frothing.



NOTE: If as shown for (i) and (iii) above, the sprayer master on-off is operated by means of a two-way valve diverting the flow back to the tank while the boom section valves remain open, then this arrangement is left as is, and does not affect the operation of the RDS Control valve.

[1] On a flow-based control system, the control valve must be connected *upstream* of the flow sensor, so that none of the flow being measured is returned to the tank when spraying.

Electrical Connections

The standard valve has a 2-core cable terminating in a weatherproof connector. Attach the extension cable as required and route the cable back to the junction box.

Sensor Cable Wire colour	Function	Sensor Extension Cable Wire colour	Pro-Series J/Box terminal	Spraymaster 200 J/Box terminal	7-way Connector kit (Pt No. K/7WAY/CONN/MK2)	
					8-core Cable Wire colour	Terminal - (Hirschmann Connector)
Brown	Valve +	Brown	PL2 8	11	White	3
Blue	Valve -	Blue	PL2 9	12	Blue	6