

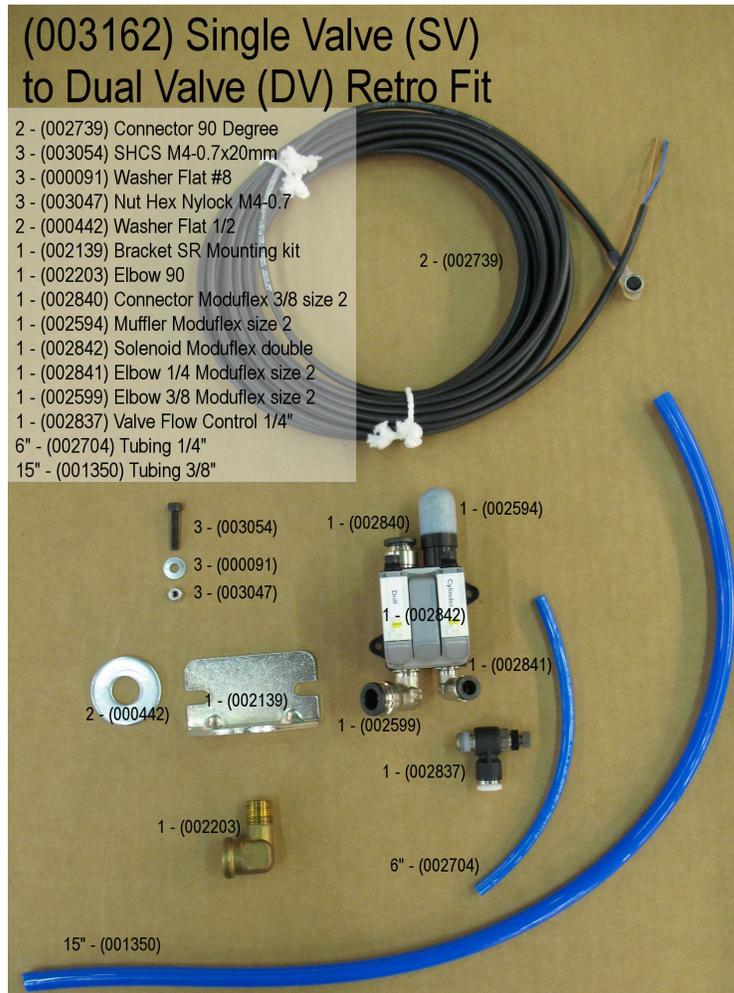


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Retro-Fitting Single Valve (SV) Air Drills to Double Valve (DV) Air Drills



Parts List:

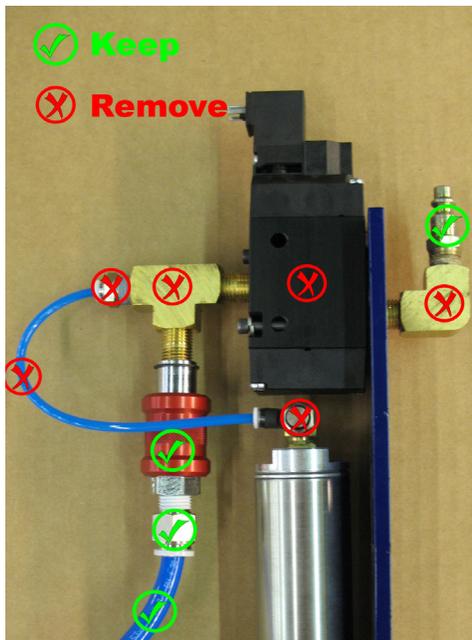


Introduction

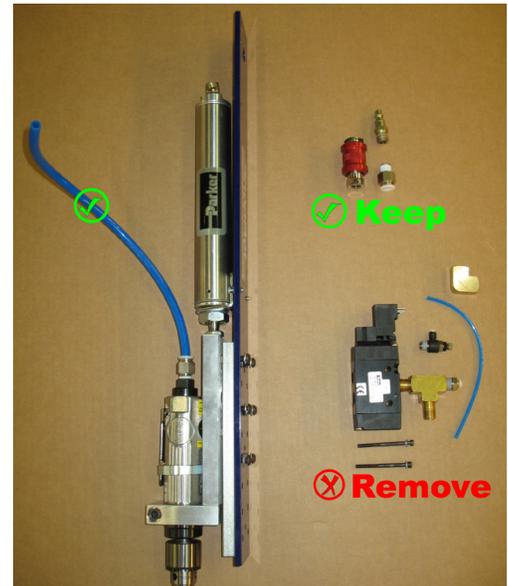
This document is for the upgrade from a Single Valve (SV) Air Drill to a Double Valve (DV). The main benefit of this upgrade is to reduce the duty cycle between when the drill unit is turned on and off. The SV air drill cycles on continuously throughout the drilling process, while the DV air drill cycles on and off during each hole to be drilled, reducing the strain on the air system.

Note: Implementing the DV air drill requires an additional open input on the relay board (two total).

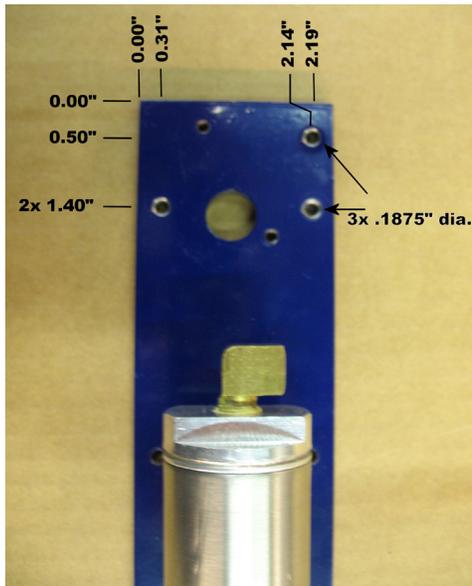
Disassembling the SV Air Drill



Some components will not be used with the new valve. The items with green checks will be re-used and those with red X's will not be used.



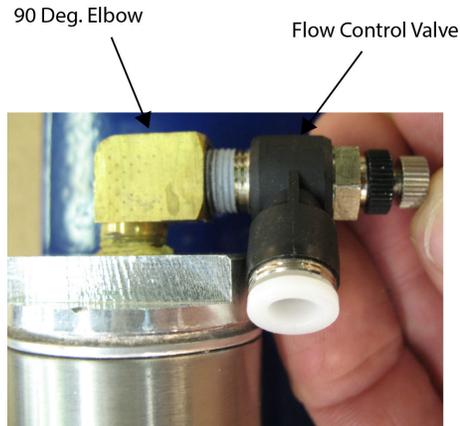
Drilling Holes



Ensure that the layout for back plate hole measurements are made on the side with the cylinder.

Only three 0.1875" (5mm) holes are needed to mount the new valve.

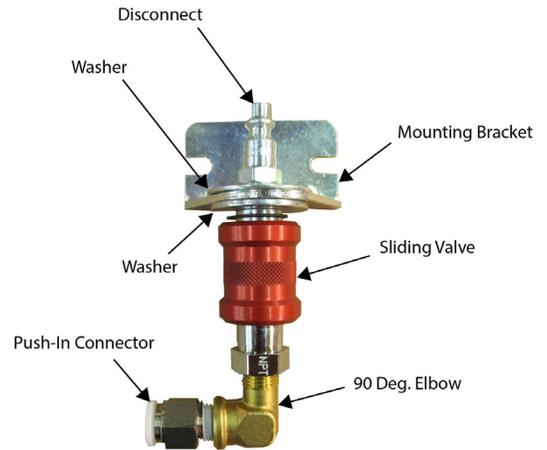
Installing the Double Valve



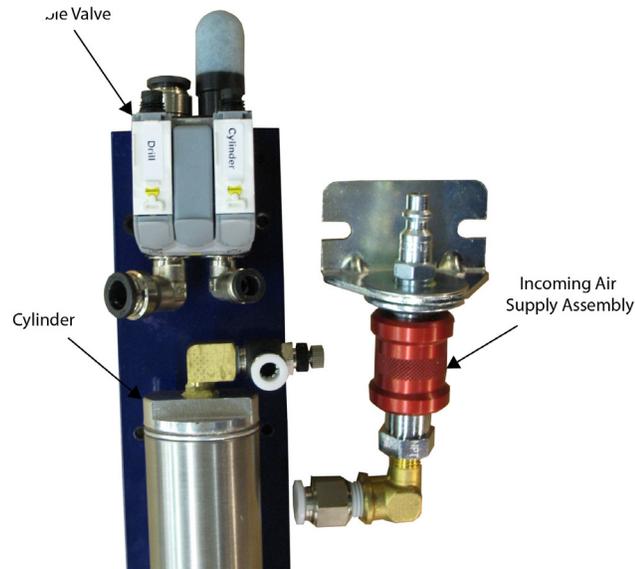
Securely thread the ¼” flow control valve into the 90° elbow at the top of the cylinder.

Note: The hex area of the flow control is used to tighten while the black plastic area will spin allowing for mounting in tight quarters.

Assemble ¼” disconnect, ½” washer, mounting bracket, ½” washer, sliding valve, 90° elbow and 3/8” push-in connector.

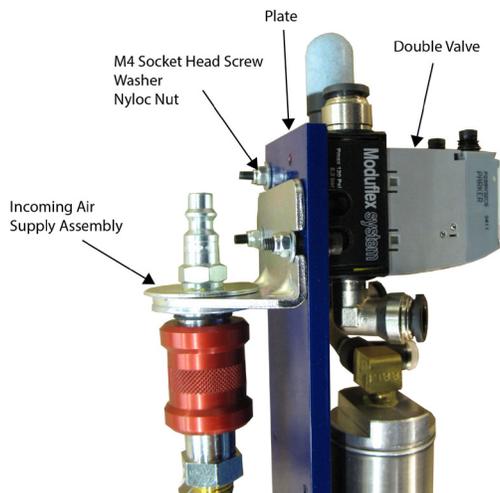


Note: Use Teflon tape or pipe dope for threaded attachment points.



Slide out two mounting tabs from the back side of the double valve and position double valve on the cylinder side of the air drill.

Mount the incoming air supply assembly on the back side of the drill.



Install double valve and incoming air supply assembly onto plate with three M4 screws, washers, and Nyloc nuts.

The upper right mounting position on the dual valve will mount directly to the plate, and the lower left mounting position will share the socket head screw with the bracket of the air supply.

Ensure that all three mounting screws are secured tightly.

Hooking Up the Hoses



Use 1/4" tubing to connect the 1/4" push-in connectors.

Note: If the tube needs to be removed after insertion, depress and hold the outer ring of the push-in connector, this will allow the tube to be pulled out.

Connect the drill and the lower left push-in connector of the dual valve with the length of 1/2" tubing that came with the upgrade kit.





Connect the upper push-in of the dual valve to the 1/2" push-in of the air supply assembly using the length of 1/2" tubing that was originally removed from the SV air drill.

NOTE: The cables that came with the upgrade kit need to be installed as instructed in (SBG00378) PRSAlpha Air Drill DV.

