

Scotch® Oil Valves

Versa Solenoid Retrofit Installation Instructions

(Applicable to all valves supplied up through 1997)

Important:

Make certain proper safety protocol is carried out prior to initiating work. This includes but not limited to; depressurizing pneumatic supply and fuel lines, disconnecting electric and isolating fuel from the valve.



Materials:

Customer Supplied

Pneumatic tubing

Pneumatic fittings

Conduit and fittings - (Conduit and fittings must be to all local codes and suitable for the intended application.)

Versa Solenoid Retrofit Kit

Item No.	Description	Quantity
Adapter plate installation		
37289	Adapter Plate (blue anodized)	1
36-079	Sockethead Capscrew #10-32 x 0.875	4
36062	Lockwasher #10	4
36-109	Nuts 10-32	4

Subbase installation

37355	Versa Subbase (black)	1
37311	Plug .25 NPT	2*
37312	Plug .38 NPT	4*
44644	Muffler .38 NPT	1*
36-168	Button head Capscrew #10-32 x 0.5"	4

* These items shipped installed in Versa Subbase.

Solenoid installation

37229	Lockwasher #8	6
37197	Label for Fire Solenoid	1
37198	Label for Purge Solenoid	1

Tools

37309	Hex Key Wrench .125	1
37310	Hex Key Wrench .156	1
37560	Hex Key Wrench .141	1

WARNING

ITT Corporation valves and related products are designed and manufactured using good workmanship and materials, and they meet all applicable industry standards. These valves are manufactured with various materials, and they should be used only in services recommended by a company engineer.

Misapplication of the product may result in injuries or property damage. A selection of valve and valve components of the proper material and consistent with the particular performance requirement is important for proper application.

Examples of misapplication or misuse of any products include use in an application in which the pressure / temperature rating is exceeded or failure to maintain valve or related product as recommended and use of products to handle caustic and / or hazardous substances when not designed for that purpose.

If valve exhibits any indication of leakage, do not operate. Isolate valve and either repair or replace.

Removal of existing solenoids:

- Disconnect the air supply from the existing solenoid assembly.
- Remove the pneumatic tubing from the actuator.
- Disconnect the solenoid electrical connections inside the junction box and remove the conduit.
- Remove the existing solenoid assembly from the oil valve yoke.

Installation of Versa solenoids:

- There are several possible options in mounting the blue anodized adapter plate to the oil valve yoke. Any of the three options can be used.

Option # 1

If the four (4) tapped holes are available in the yoke box, the adapter can be mounted using the supplied screws (36-079) and lock washers (36062).

Option #2

If the appropriate holes are not in the Yoke Box, the inner four holes of the adapter block should be used. Simply hold the adapter in place and drill four (4) through holes. Attach using screws (36-079), lock washers (36062) and nuts (36-109). The hole pattern is 2.50" wide by 1.25" high. Drill size should be suitable for #10-32 screw. For reference the adapter plate through hole is \varnothing 0.219".

Option #3

Using the adapter as a template drill four holes and tap to 10-32. Attach with supplied screws (36-079) and lock washers (36062).



Installation of Versa solenoids (cont):

- Mount the Versa Subbase to the adapter block using four (4) button head screws (36-168). Position the Versa Subbase with the cylinder ports (Marked as A2 on the manifold base) facing upward toward the actuator.
- Attach solenoids to the Versa Subbase with screws and supplied lockwashers (37229) . Take care that solenoid to subbase gaskets are properly seated before tightening screws.
- Apply labels to identify "Fire" and "Purge", solenoids. Looking at the solenoids as mounted (as shown above) the "Purge" solenoid is on the left.
- Attach pneumatic tubing and fittings as required. The actuator port closest to the top of the actuator is for "Purge". The lower actuator port (closest to the valve body) is the "Fire" port.



Important:

- 1 - Use thread sealant paste, not PTFE tape on all threads.
 - 2 - Tubing ends must be deburred and free of other obstructions.
 - 3 - Any type of tubing obstructions can have a significant impact on closure speed.
- Connect electrical runs as required.
 - Purge air supply lines prior to attaching to solenoid. If original solenoid valves had a check valve on the inlet side, attach to the new solenoid. Port marked "IN" or 1 is the inlet.
 - Test the valve to ensure it opens and closes correctly.
 - Place the valve back online.

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