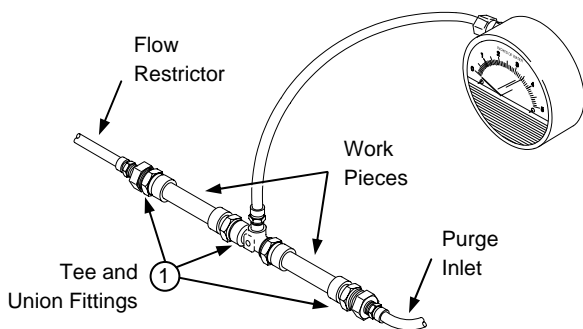


Quick Reference Guide Installation Procedure



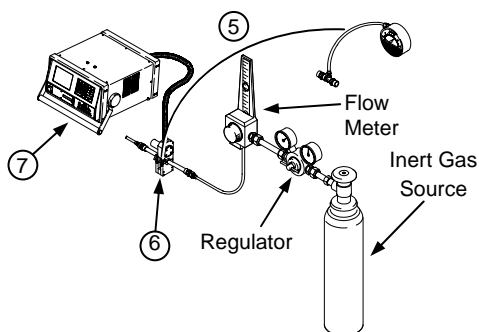
Note: This kit must be used by a trained operator.

- ① Select and install tee and Union Fittings for tube size.
- ② Select flow rate per Purge Rate and Pressure Table for the chosen tube size.

Swagelok

Magnehelic—TM Dwyer Instruments
Swagelok—TM Swagelok Company
©2002 Swagelok Company
February 2002, R0
MS-INS-PURGE-KIT

Installation Procedure (cont.)



- ⑤ Remove Tee Fitting and Magnehelic® gauge.
- ⑥ Fixture the work pieces and install the weld head according to the user's manual for the welder being used.
- ⑦ Make weld.

Swagelok

Magnehelic—TM Dwyer Instruments
Swagelok—TM Swagelok Company
©2002 Swagelok Company
February 2002, R0
MS-INS-PURGE-KIT

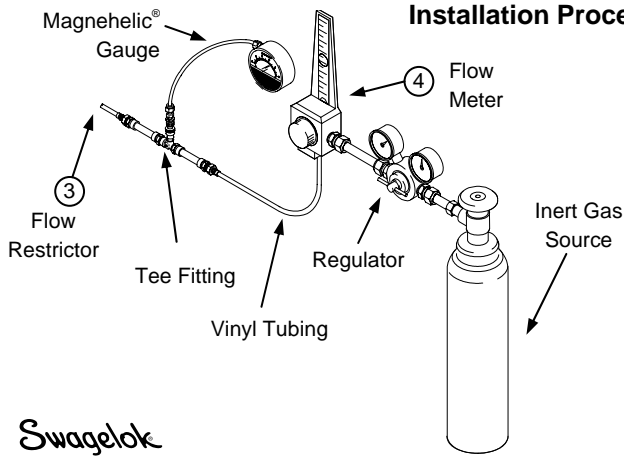
Purge Rate and Pressure Table

Tube Size in. (mm)	Wall Thickness ^① in. (mm)	Minimum ID Purge Rate std ft ³ /h (std L/min)	Recommended Starting Pressure in. H ₂ O (mm Hg)	Shield Gas Flow Rate std ft ³ /h (std L/min)	Restrictor Size in. (mm)
1/16 (1,6)	0.020 (0,8)	3 (1,5)	7 to 9 (13 to 17)	10 to 20 (5 to 10)	n/a
1/8 (3)	0.028 (0,8)	5 (2,3)	5 to 9 (9 to 17)	10 to 20 (5 to 10)	1/16 (1,6)
1/4 (6,4)	0.035 (1)	7 (2,5)	2.8 to 3.4 (5 to 6)	10 to 20 (5 to 10)	1/8 (3)
3/8 (9,5)	0.035 (1)	7 (2,5)	1.5 to 2.5 (3 to 5)	10 to 20 (5 to 10)	1/8 (3)
1/2 (12,7)	0.049 (1)	15 (7)	1.0 to 1.5 (2 to 3)	10 to 40 (5 to 18)	1/4 (6)
1/2 (12,7)	0.065 (1,5)	15 (7)	1.8 to 2.8 (3 to 5)	10 to 40 (5 to 18)	1/4 (6)
3/4 (19,1)	0.065 (1,5)	20 (10)	0.5 to 1.1 (1 to 2)	15 to 40 (7 to 18)	1/4 (6)

① Contact your independent sales and service representatives for information on additional wall thicknesses.

Swagelok

Swagelok—TM Swagelok Company
©2002 Swagelok Company
February 2002, R0
MS-INS-PURGE-KIT

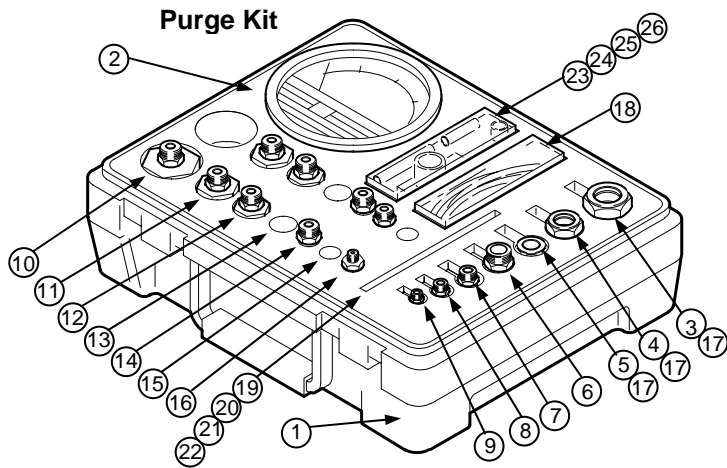


- ③ Select and install the flow restrictor that is listed in the Purge Rate and Pressure Table for the tube size, flow and pressure desired.
- ④ Adjust the flow meter until the outlet pressure reading on the Magnehelic gauge matches the pressure listed in the Purge Rate and Pressure Table for the chosen tube size. If desired flow cannot be reached, install a larger or smaller restrictor.

Swagelok

⚠ Caution:
Make sure system gases are compatible.

⚠ WARNING:
DO NOT USE WITH HYDROGEN GAS; GAUGE CONTAINS A RARE-EARTH MAGNET THAT MAY REACT WITH HYDROGEN GAS TO FORM A TOXIC AND EXPLOSIVE GAS.



Swagelok

Purge Rate and Pressure Table (cont.)

Tube Size in. (mm)	Wall Thickness in. (mm)	Minimum ID Purge Rate std ft ³ /h (std L/min)	Pressure Gauge Pressure in. H ₂ O (mm Hg)	Shield Gas Flow Rate std ft ³ /h (std L/min)	Restrictor Size in. (mm)
1 (25,4)	0.065 (1,5)	40 (20)	0.5 to 0.7 (1 to 1,5)	15 to 40 (7 to 18)	1/4 (6)
1 1/2 (38,1)	0.065 (1,5)	80 (40)	0.5 to 0.7 (1 to 1,5)	15 to 50 (7 to 24)	1/4 (6)
2 (50,4)	0.065 (1,5)	150 (70)	0.4 to 0.7 (0,8 to 1,5)	15 to 50 (7 to 24)	3/8 (10)
3 (76,2)	0.065 (1,5)	320 (150)	0.2 to 0.5 (0,4 to 0,8)	30 to 50 (14 to 24)	1/2 (12)
4 (101,6)	0.083 (2)	600 (275)	0.2 to 0.4 (0,4 to 0,8)	30 to 50 (14 to 24)	3/4 (20)

Swagelok



**Kit Identification
Table – Standard Kit**

Item #	Part Number	Description
1	SWS-CASE-3	Purge Kit Case
2	21313	0-5 IWC Pressure Gauge
5	SS-810-6-0043	1/2 in. Tee Fitting with 1/4 in. Branch
6	SS-600-3-6-4KX	3/8 in. Tee Fitting with 1/4 in. Branch
7	SS-400-3-KX	1/4 in. Tee Fitting with 1/4 in. Branch
12	SS-810-6-4-KX	1/2 in. to 1/4 in. Union
13	SS-600-6-4KX	3/8 in. to 1/4 in. Union
14	SS-400-6KX	1/4 in. to 1/4 in. Union
17	SS-400-1-0256KX	1/4 in. Male Connector
18	LT-2-4	Vinyl Tubing
19	MS-INS-PURGE KIT	Installation Procedure Card
20	MS-INS-PURGE KIT	Installation Procedure/Purge Kit Card
21	MS-INS-PURGE KIT	Purge Pressure Rate Card
22	MS-INS-PURGE KIT	Part Number Card
23	NY-XXX3-1	1/16 – 1 in. Nylon Ferrules
24	316L-4TB-TS	1/4 in. x 0.035 in. Restrictor
25	316L-4TB-TS-049	1/4 in. x 0.049 in. Restrictor
26	316L-4TB-TS-065	1/4 in. x 0.065 in. Restrictor

Swagelok—TM Swagelok Company
 ©2002 Swagelok Company
 February 2002, R0
 MS-INS-PURGE-KIT



**Kit Identification
Table – Optional Kit
Ordering Information**

Kit Number	Item #	Description
SWS-PURGE-KIT-01 (1/16 in. Kit)	9	1/16 in. Tee Fitting with 1/4 in. Branch
	16	1/16 in. to 1/4 in. Union
	23	Nylon Ferrule
SWS-PURGE-KIT-02 (1/8 in. Kit)	8	1/8 in. Tee Fitting with 1/4 in. Branch
	15	1/8 in. to 1/4 in. Union
	23	Nylon Ferrule
SWS-PURGE-KIT-12 (3/4 in. Kit)	4	3/4 in. Tee Fitting with 1/4 in. Branch
	11	3/4 in. to 1/4 in. Union
	17	1/4 in. Male Connector
SWS-PURGE-KIT-16 (1 in. Kit)	23	Nylon Ferrule
	3	1 in. Tee Fitting with 1/4 in. Branch
	10	1 in. to 1/4 in. Union
	17	1/4 in. Male Connector
	23	Nylon Ferrule