



Parflange ECO 25 Hydraulic Flanging and Flaring Tool Operation Manual

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Features and Advantages

Easy to Operate

The ECO 25 is capable of flanging or flaring steel and stainless tubing with a few simple operations. And since each die has flanging tooling on one side and flaring tooling on the other, you only need one die to perform both functions. In addition, because of its adjustable tube stop, the ECO 25 does not require a different die for each wall thickness of tubing – just one die for each tube outside diameter.



Portable

The ECO 25 has handles on three sides of the machine, making moving it around the workplace an easy task. It can either be set on its rubber feet or, for a more permanent location, bolted to a work bench or cart.



90° Flanging

The ECO 25 is capable of completing 90° flanges on steel and stainless steel tubing from ¼" through 1½" outside diameters for use with O-ring Face Seal tube fittings, such as Parker Seal-Lok™.



Hydraulic Pump

The ECO 25 is easily operated using a hand hydraulic pump, allowing it to be utilized virtually anywhere.



Hand Pump

37° Flaring

The ECO 25 is capable of completing 37° flares on steel and stainless steel tubing from ¼" through 1½" outside diameters for use with JIC 37° flared tube fittings, such as Parker Triple-Lok®.



ECO 25 Specifications

Height	20.5 in. (520 mm)
Width	15 in. (381 mm)
Depth	20.5 in. (520 mm)
Weight	190 lbs. (86.4 kg)
Electrical Requirements	110 Volt, 1 phase, 60Hz/20A
Motor	1.5 HP
Maximum Pump Flow	20 in. ³ /min.
Max. # Flares/Flanges per day	50

Setup Instructions

Step 1: ECO 25 Adapter

Ensure the ECO 25 Adapter (part number 6 F5OLO-S) is properly installed into the SAE straight thread port in the rear of the ECO 25 cylinder.

Step 2: Hydraulic Pump Tee

Install the Hydraulic Pump Adapter (part number 6-6 FLO-S) into the NPT pipe thread port in the rear of the hand-hydraulic pump with a pipe thread sealant. Assemble the swivel end of the Hydraulic Pump Tee (part number 6 R6LO-S) to the Hydraulic Pump Adapter. Make sure the branch end of the Tee is oriented upward.

Step 3: Pressure Gauge Adapter

Assemble the Pressure Gauge Adapter (part number 6 G6L-S) onto the NPT Pipe Thread end of the pressure gauge (part number 900044) with a pipe thread sealant.

Step 4: Pressure Gauge

Assemble the Pressure Gauge and Adapter assembly onto the branch end of the Hydraulic Pump Tee (part number 6 R6LO-S). Make sure to orient the front of the gauge toward the front of the ECO 25 so it may be seen during operation.

Step 5: Hose Conversion Adapters

Install Hose Conversion Adapter #1 (part number 6 G6L-S) onto the 1/4" male NPT threaded end (smaller end) of the Hose Assembly (part number 910133) using a pipe thread sealant. Then, install Hose Conversion Adapter #2 (part number 6-6 G6L-S) onto the 3/8" male NPT end (larger end) of the Hose Assembly using a pipe thread sealant..

Step 6: Hose to Pump Tee Assembly

Assemble the swivel end of the Hose Conversion Adapter #2 (part number 6-6 G6L-S) to the remaining end of the Hydraulic Pump Tee (part number 6 R6LO-S).

Step 7: Hose to ECO 25 Assembly

Assemble the swivel end of Hose Conversion Adapter #1 (part number 6 G6L-S) to the ECO 25 Adapter (part number 6 F5OLO-S).

Step 8: Check for Leaks

Assuring all connections are properly tightened, operate the hydraulic pump and check for leaks.

Tube End Preparation

Tube end preparation is one of the most critical processes in obtaining an optimum seal of a flanged or flared tube end connection. Regardless of the tube material, similar guidelines for tube cut-off, deburring, and cleanliness can help assure the tube to fitting connection remains leak free.

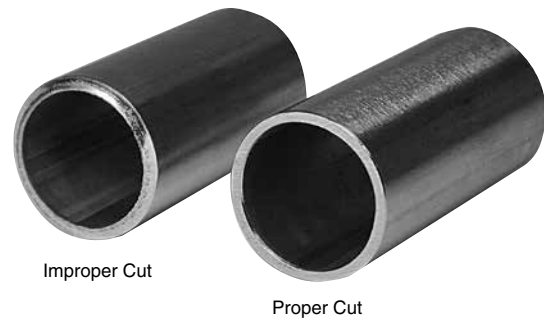
Tube Cutting

- It is critical that the tube be cut squarely within $\pm 1^\circ$ in order to assure the proper tube to fitting connection. A tube end which is not cut squarely may result in a flange or flare which is not circular, potentially causing leakage.
- When cutting tube in preparation for flanging or flaring, a saw which utilizes a toothed blade is recommended. This type of tool will assure that the tube end is not hardened from excessive heat or cold working of material.
 - Recommended
 - Low speed Circular Saw, Hacksaw
 - Not Recommended
 - Rotary Tube Cutter, Abrasive Saw



Tube Deburring

- Deburring the inside and outside diameter of the tube end is necessary to assure the tube fits properly inside the flange or flare sleeve. In addition, proper deburring of the tube end is necessary to form a flanged or flared tube end which is free of imperfections that may create a leak path between the tube and fitting.



Samples of improper and proper cuts on steel tube

90° Flanging Information for Seal-Lok Fittings

Flanging Die Set, Inch Sizes

Tube O.D. (in.)	Die Set Part Number
1/4	M2504
3/8	M2506
1/2	M2508
5/8	M2510
3/4	M2512
1	M2516
1 1/4	M2520
1 1/2	M2524

Flanging Pin, Inch Sizes

Tube O.D. (in.)	Wall Thickness (in.)	Flanging Pin Steel Tube	Flanging Pin Stainless Tube
1/4	0.028	B4004X028180	-
1/4	0.035	B4004X035180	B4004X035180SS
1/4	0.049	B4004X049180	B4004X049180SS
3/8	0.035	B4006X035180	B4006X035180SS
3/8	0.049	B4006X049180	B4006X049180SS
3/8	0.065	B4006X065180	B4006X065180SS
1/2	0.035	B4008X035180	B4008X035180SS
1/2	0.049	B4008X049180	B4008X049180SS
1/2	0.065	B4008X065180	B4008X065180SS
1/2	0.083	B4008X083180	B4008X083180SS
1/2	0.095	B4008X095181	B4008X095180SS
5/8	0.049	B4010X049180	B4010X049180SS
5/8	0.065	B4010X065180	B4010X065180SS
5/8	0.083	B4010X083180	B4010X083180SS
5/8	0.095	B4010X095180	B4010X095180SS
5/8	0.120	B4010X120180	-
3/4	0.049	B4012X049180	B4012X049180SS
3/4	0.065	B4012X065180	B4012X065180SS
3/4	0.083	B4012X083180	B4012X083180SS
3/4	0.095	B4012X095180	B4012X095180SS
3/4	0.104	-	B4012X104180SS
3/4	0.109	B4012X109180	B4012X109180SS
3/4	0.120	B4012X120180	B4012X120180SS
1	0.065	B4016X065180	B4016X065180SS
1	0.083	B4016X083180	B4016X083180SS
1	0.095	B4016X095180	B4016X095180SS
1	0.109	B4016X109180	B4016X109180SS
1	0.120	B4016X120180	B4016X120180SS
1	0.134	B4016X134180	B4016X134180SS
1	0.139	-	B4016X139180SS
1 1/4	0.065	B4020X065180	-
1 1/4	0.083	B4020X083180	B4020X083180SS
1 1/4	0.095	B4020X095180	B4020X095180SS
1 1/4	0.109	B4020X109180	B4020X109180SS
1 1/4	0.120	B4020X120180	B4020X120180SS
1 1/4	0.134	B4020X134180	-
1 1/2	0.065	B4024X065180	-
1 1/2	0.083	B4024X083180	-
1 1/2	0.095	B4024X095180	B4024X095180SS
1 1/2	0.109	B4024X109180	B4024X109180SS
1 1/2	0.120	B4024X120180	B4024X120180SS

90° Flanging Information for Seal-Lok Fittings

Parflange ECO 25 Dial Settings and Pressures for 90° Flanging

Tube O.D. (in.)	Wall Thickness (in.)	Steel Tube			Stainless Steel Tube		
		Tube Stop Setting	Head Stop Setting	Flanging Pressure (psi)	Tube Stop Setting	Head Stop Setting	Flanging Pressure (psi)
1/4	0.028	0088	0199	1000	-	-	-
1/4	0.035	0086	0196	1000	0086	0201	2000
1/4	0.049	0077	0198	1500	0075	0208	3000
3/8	0.035	0095	0200	1000	0082	0205	2500
3/8	0.049	0089	0202	1600	0084	0206	2500
3/8	0.065	0082	0201	2000	0082	0206	3000
1/2	0.035	0099	0203	1000	0098	0202	2000
1/2	0.049	0094	0195	1500	0094	0198	3000
1/2	0.065	0093	0204	1600	0088	0205	3500
1/2	0.083	0088	0204	2000	0078	0201	3600
1/2	0.095	0079	0204	2200	0073	0200	3600
5/8	0.049	0088	0195	1600	0078	0198	3000
5/8	0.065	0083	0200	2000	0078	0201	3000
5/8	0.083	0075	0199	2600	0072	0208	5000
5/8	0.095	0071	0197	2000	0066	0206	5000
5/8	0.120	0068	0208	4800	-	-	-
3/4	0.049	0081	0197	1500	0077	0202	4600
3/4	0.065	0075	0200	2000	0067	0206	5600
3/4	0.083	0075	0202	3000	0064	0200	5000
3/4	0.095	0064	0200	3000	0059	0203	5000
3/4	0.104	0059	0199	3000	0045	0203	6000
3/4	0.109	0059	0199	3000	0045	0203	6000
3/4	0.120	0055	0198	3000	0050	0203	6500
1	0.065	0074	0196	3000	0065	0200	4500
1	0.083	0072	0198	3000	0063	0204	5000
1	0.095	0064	0199	3200	0064	0199	5500
1	0.109	0059	0201	3400	0047	0201	6500
1	0.120	0055	0200	4000	0045	0201	6500
1	0.134	0050	0201	4500	0045	0200	6500
1	0.139	0050	0201	4500	0045	0200	6500
1 1/4	0.065	0081	0194	3600	-	-	-
1 1/4	0.083	0075	0199	4000	0063	0203	6500
1 1/4	0.095	0072	0199	4000	0062	0202	6000
1 1/4	0.109	0067	0196	4000	0058	0201	6000
1 1/4	0.120	0064	0199	4800	0045	0198	6500
1 1/4	0.134	0059	0200	5000	-	-	-
1 1/2	0.065	0070	0192	2000	-	-	-
1 1/2	0.083	0065	0196	3600	-	-	-
1 1/2	0.095	0061	0197	4600	0031	0190	6500
1 1/2	0.109	0056	0194	4600	0044	0192	6500
1 1/2	0.120	0053	0198	5000	0038	0187	6000

90° Flanging Information for Seal-Lok Fittings

Components Required

- Dual-Function Flare/Flange Die Set (contains tooling for both Flanging and Flaring)
 - See chart page 7
- Flanging Pin specific to Tube O.D., Wall Thickness, and Tube Material
 - See chart page 7
- LB-2000 Lubricant for steel
- Pro Form 858 Lubricant for stainless steel (Contact TFD for more information)



Dual Function Die Set



Flanging Pin



LB-2000 Lubricant

ECO 25 Operating Instructions for 90° Flanging for Seal-Lok Fittings

Step 1: Measure the tube O.D. and wall thickness for proper die and pin selection.



Step 2: Select the die set and flanging pin matching the tube O.D., wall thickness and material of your tube from the charts on page 7. The die set is stamped with the tube O.D. and the pin is stamped with both the tube O.D. and wall thickness (and material if flanging stainless steel tube).



Step 3: Open the swing arm to expose die cavity and main spindle head.

90° Flanging Information for Seal-Lok Fittings

Step 4: Raise the tube stop and install the flanging pin into the main spindle head of the machine. Be sure to lower the tube stop to its original position after inserting the pin.



Step 5: Using the LB-2000 lubricant for steel or Pro-Form 858 lubricant for stainless steel, adequately lubricate the flanging pin as well as the inside diameter of the tube end. **It is very important to lubricate the Flanging Pin and Inside Diameter of the tube end prior to each flanging operation.**



Step 6: Insert the bottom half of the die set (either die half can be used) into the die cavity of the machine using the keyways on either side to secure the die. **Ensure that the 90° Flange side of the die half is facing toward the main spindle head of the machine (away from the operator).**



Step 7: Place a Parflange mechanical sleeve (part number TPL) onto the end of the tube with the widest part of the sleeve facing the end of the tube you intend to flange. Place the sleeve and tube assembly into the bottom half of the die set, ensuring the Parflange sleeve is placed into the corresponding cavity in the die half.



Step 8: Insert the top half of the die set into the die cavity on top of the other half, also ensuring that the 90° Flange side of the die half is facing toward the main spindle head of the machine.



Step 9: Set Tube Stop adjustment dial to recommended value for flanging the O.D., wall thickness and material of the tubing you are using (See Chart on page 8). Dial settings are recommendations only and may require adjustment to obtain desired results.



90° Flanging Information for Seal-Lok Fittings

Step 10: Set Head Stop adjustment dial to recommended value for flanging the O.D., wall thickness and material of the tubing you are using (See Chart on page 8). Dial settings are recommendations only and may require adjustment to obtain desired results.



Step 11: Close swing arm against shoulder bolt.



Step 12: While keeping tube end against tube stop, rotate clamp vise arm clockwise and securely clamp tube in die set. Be sure to properly support long tubes during the clamping and flanging process.



Step 13: Note: Look up the recommended flanging pressure for the O.D., wall thickness, and tube material you are using from the chart on page 8.

Step 14: Press and release green start button on front of machine to start rotation of main spindle head. If head does not rotate upon activation of motor, check electrical connections and retry. Be sure to use an electrical outlet with 110V/20A power.



Step 15: Ensure the tube is held in position and slowly actuate the hydraulic hand pump. The flanging pin will come forward and the tube stop will automatically rise up and away from the tube. The pressure gauge will show a rapid rise in pressure as the pin engages the tube end and flanges the tube.



90° Flanging Information for Seal-Lok Fittings

Step 16: When the pressure gauge reaches the recommended flanging pressure from Step 13, de-energize the hydraulic power supply. This will allow the flanging pin and spindle head to retract to their original position.



Step 17: Press the red stop button on the front of the machine to stop rotation of the main spindle head.



Step 18: Rotate clamp vise handle counter-clockwise to loosen clamp from die set and tube and open swing arm to expose die halves.



Step 19: Remove the top half of the die set from the die cavity and set aside.

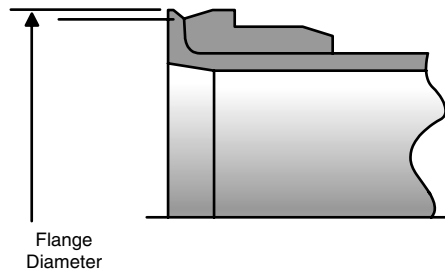


Step 20: Remove flanged tube from bottom half of die.



90° Flanging Information for Seal-Lok Fittings

Step 21: Inspect flange to ensure proper surface finish. Measure the flange diameter and compare to values in chart below.



Adjusting the ECO 25 to compensate for over/undersized flange diameters

If the flange diameter of your ECO 25 tube assembly is not within the diameter specifications listed, please complete the following steps:

- First, check to make sure that the correct flanging pin and die set are being used for the outside diameter, wall thickness, and material tubing you are using. Keep in mind that each Die Set can be used with every wall thickness of that size tubing and also with both carbon and stainless steel tubing. However, the flanging pins are specific to the outside diameter, wall thickness, and material of the tubing.
- Once the tooling and tubing have been verified, the correct method of increasing or decreasing the diameter of the tube flange is to alter the **Head Stop** adjustment dial (do not change the Tube Stop adjustment dial setting).
- To increase the diameter of a tube flange, adjust the Head Stop adjustment dial **Clockwise** (dial setting number will increase) a small amount and repeat the flanging process. If the desired result is not achieved, repeat adjustment process as needed until the proper sized flange is made.
- To decrease the diameter of a tube flange, adjust the Head Stop adjustment dial **Counter Clockwise** (dial setting number will decrease) a small amount and repeat the flanging process. If the desired result is not achieved, repeat adjustment process as needed until the proper sized flange is made.

Inch Tube O.D. (in.)	Metric Tube O.D. (mm)	Flange Diameter (in.)
1/4	6	.478 / .502
3/8	10	.594 / .620
1/2	12	.719 / .745
5/8	14, 15, 16	.875 / .923
3/4	18, 20	1.048 / 1.097
1	22, 25	1.298 / 1.347
1-1/4	28, 30, 32	1.549 / 1.597
1-1/2	38	1.861 / 1.910

90° Flange dimensions

37° Flaring Information for Triple-Lok Fittings

Flaring Die Sets, Inch Sizes

Fitting Dash Size	Tube O.D. (in.)	Die Set Part Number
4	1/4	M2504
6	3/8	M2506
8	1/2	M2508
10	5/8	M2510
12	3/4	M2512
16	1	M2516
20	1 1/4	M2520
24	1 1/2	M2524

Flaring Pins, Inch Sizes

Tube O.D. (in.)	Wall Thickness (in.)	Flaring Pin Part Number
1/4	0.028	B4004X028074
1/4	0.035	B4004X035074
1/4	0.049	B4004X049074
3/8	0.035	B4006X035074
3/8	0.049	B4006X049074
3/8	0.065	B4006X065074
1/2	0.035	B4008X035074
1/2	0.049	B4008X049074
1/2	0.065	B4008X065074
1/2	0.083	B4008X083074
5/8	0.049	B4010X049074
5/8	0.065	B4010X065074
5/8	0.083	B4010X083074
5/8	0.095	B4010X095074
3/4	0.049	B4012X049074
3/4	0.065	B4012X065074
3/4	0.083	B4012X083074
3/4	0.095	B4012X095074
3/4	0.109	B4012X109074
1	0.065	B4016X065074
1	0.083	B4016X083074
1	0.095	B4016X095074
1	0.109	B4016X109074
1	0.120	B4016X120074
1 1/4	0.065	B4020X065074
1 1/4	0.083	B4020X083074
1 1/4	0.095	B4020X095074
1 1/4	0.109	B4020X109074
1 1/4	0.120	B4020X120074
1 1/2	0.065	B4024X065074
1 1/2	0.083	B4024X083074
1 1/2	0.095	B4024X095074
1 1/2	0.109	B4024X109074
1 1/2	0.120	B4024X120074

Note: Tooling suitable for 37° flaring of steel and stainless steel tube materials. One die covers each tube O.D., but a different pin is required for each tube wall thickness.

37° Flaring Information for Triple-Lok Fittings

Parflange ECO 25 Dial Settings and Pressures for 37° Flaring

Tube O.D. (in.)	Wall Thickness (in.)	Steel Tube			Stainless Steel Tube		
		Tube Stop Setting	Head Stop Setting	Flaring Pressure (psi)	Tube Stop Setting	Head Stop Setting	Flaring Pressure (psi)
1/4	0.028	0150	0275	1000	0150	0275	1000
1/4	0.035	0150	0275	1000	0150	0275	1000
1/4	0.049	0150	0275	1000	0150	0275	1500
3/8	0.035	0150	0275	1000	0150	0275	1000
3/8	0.049	0150	0275	1000	0150	0275	1500
3/8	0.065	0150	0275	1000	0150	0275	1500
1/2	0.035	0150	0275	1000	0150	0275	1500
1/2	0.049	0150	0275	1000	0150	0275	1500
1/2	0.065	0150	0275	1000	0150	0275	1500
1/2	0.083	0150	0275	1000	0150	0275	1500
5/8	0.049	0150	0275	1000	0150	0275	1500
5/8	0.065	0150	0275	1500	0150	0275	2000
5/8	0.083	0150	0275	2000	0150	0275	2000
5/8	0.095	0150	0275	2000	0150	0275	2500
3/4	0.049	0150	0275	1000	0150	0275	1500
3/4	0.065	0150	0275	1500	0150	0275	2000
3/4	0.083	0150	0275	2000	0150	0275	2000
3/4	0.095	0150	0275	2000	0150	0275	2500
3/4	0.109	0150	0275	2000	0150	0275	2500
1	0.065	0150	0275	1500	0150	0275	2000
1	0.083	0150	0275	1500	0150	0275	2000
1	0.095	0150	0275	1500	0150	0275	2500
1	0.109	0150	0275	2000	0150	0275	3500
1	0.120	0150	0275	3000	0150	0275	4000
1 1/4	0.065	0150	0275	2500	0150	0275	2500
1 1/4	0.083	0150	0275	2500	0150	0275	3000
1 1/4	0.095	0150	0275	3000	0150	0275	3500
1 1/4	0.109	0150	0275	3000	0150	0275	3500
1 1/4	0.120	0150	0275	3500	0150	0275	3500
1 1/2	0.065	0150	0275	2000	0150	0275	2000
1 1/2	0.083	0150	0275	2000	0150	0275	2000
1 1/2	0.095	0150	0275	2000	0150	0275	2500
1 1/2	0.109	0150	0275	2500	0150	0275	3000
1 1/2	0.120	0150	0275	2500	0150	0275	3000

37° Flaring Information for Triple-Lok Fittings

Components Required

- Dual-Function Flare/Flange Die Set (contains tooling for both Flanging and Flaring)
 - See chart page 14
- Flaring Pin specific to Tube O.D. and Wall Thickness
 - See chart page 14
- LB-2000 Lubricant



Dual Function Die Set



Flaring Pin



LB-2000 Lubricant

ECO 25 Operating Instructions for 37° Flaring for Triple-Lok Fittings

Step 1: Measure the tube O.D. and wall thickness for proper die and pin selection.



Step 2: Select the die set and flaring pin matching the tube O.D. and wall thickness of your tube from the chart on page 7. The die set is stamped with the tube O.D. and the pin is stamped with both the tube O.D. and wall thickness.



Step 3: Open the swing arm to expose die cavity and main spindle head.

37° Flaring Information for Triple-Lok Fittings

Step 4: Raise the tube stop and install the flaring pin into the main spindle head of the machine. Be sure to lower the tube stop to its original position after inserting the pin.



Step 5: Using the LB-2000 lubricant, adequately lubricate the flaring pin as well as the inside diameter of the tube end. **It is very important to lubricate the Flaring Pin and Inside Diameter of the tube end prior to each flaring operation.**



Step 6: Insert the bottom half of the die set (either die half can be used) into the die cavity of the machine using the keyways on either side to secure the die. **Ensure that the 37° Flare side of the die half is facing toward the main spindle head of the machine (away from the operator).**



Step 7: Insert the top half of the die set into the die cavity on top of the other half, also ensuring that the 37° Flare side of the die half is facing toward the main spindle head of the machine.



Step 8: Rotate the Tube Stop adjustment dial clockwise until it cannot be adjusted any further (dial should read approximately 0150). At this point, the tube stop should be in contact with the back side of the die set, but please ensure it is not pressing against the die set too tightly, as this can damage the machine. The aim is to line up the tube end flush with the back side of the die set. This process will be the same for every size and wall thickness of tubing used.



Step 9: Rotate the Head Stop adjustment dial clockwise until it cannot be adjusted any further (dial should read approximately 0275 but it may be slightly higher or lower). The aim is to get the head stop out of the way of the spindle head travel, as it is not necessary for the flaring process. This process will be the same for every size and wall thickness of tubing used.



37° Flaring Information for Triple-Lok Fittings

Step 10: Insert the tube through the die set until it touches the tube stop. You may have to raise the upper die half slightly to allow the tube to fully insert through the die set.



Step 11: Close swing arm against shoulder bolt.



Step 12: While keeping the tube end against the tube stop, rotate clamp vise arm clockwise and securely clamp tube in die set. Be sure to properly support long tubes during the clamping and flaring process.



Step 13: Note: Look up the recommended flaring pressure for the O.D., wall thickness, and tube material you are using from the chart on page 15.

Step 14: Press and release green start button on front of machine to start rotation of main spindle head. If head does not rotate upon activation of motor, check electrical connections and retry. Be sure to use an electrical socket with 110V/20A power.



Step 15: Ensure the tube is held in position and energize the hydraulic power supply. The flaring pin will come forward and the tube stop will automatically rise up and away from the tube end. The pressure gauge will show a rapid rise as the pin engages the tube end and flares the tube.



37° Flaring Information for Triple-Lok Fittings

Step 16: When the pressure gauge reaches the recommended flaring pressure from Step 13, de-energize the hydraulic power supply. This will allow the flaring pin and spindle head to retract to their original position.



Step 17: Press the red stop button on the front of the machine to stop rotation of the main spindle head.



Step 18: Rotate clamp vise handle counter-clockwise to loosen clamp from die set and tube and open swing arm to expose die halves.



Step 19: Remove the top half of the die set from the die cavity and set aside.



Step 20: Remove flared tube from bottom half of die set



37° Flaring Information for Triple-Lok Fittings

Step 21: Inspect the flare to ensure proper surface finish. Measure the flare diameter and compare to values in chart below.

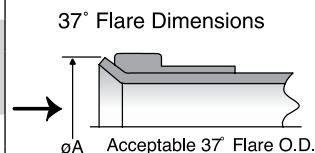


Adjusting the ECO 25 to compensate for over/undersized flare diameters

If the flare diameter of your ECO 25 tube assembly is not within the diameter specifications listed, please complete the following steps:

- First, check to make sure that the correct flaring pin and die set are being used for the outside diameter, wall thickness, and material tubing you are using. Keep in mind that each Die Set can be used with every wall thickness of that size tubing and also with both carbon and stainless steel tubing. However, the flaring pins are specific to the outside diameter and wall thickness of the tubing.
- Once the tooling and tubing have been verified, the correct method of increasing or decreasing the diameter of the tube flare is to alter the flaring pressure used during the flaring process.
- To increase the diameter of a tube flare, repeat the flaring process as before, but utilize a slightly higher flaring pressure than noted in the chart on page 15. Continue this process until the flare diameter is within the specifications listed to the right.
- To decrease the diameter of a tube flare, repeat the flaring process as before, but utilize a slightly lower flaring pressure than noted in the chart on page 15. Continue this process until the flare diameter is within the specifications listed to the right.

Inch Tube O.D. (in.)	Metric Tube O.D. (mm)	37° Flare Diameter ØA (in.)
1/4	6	.340/.360
5/16	8	.400/.430
3/8	10	.460/.490
1/2	12	.630/.660
5/8	15 & 16	.760/.790
3/4	18 & 20	.920/.950
1	25	1.170/1.200
1 1/4	30 & 32	1.480/1.510
1 1/2	38	1.700/1.730



37° Flare Dimensions

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