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Figure 1

## Replacement Parts

Item No.	Part Number	Description	Quantity
1	Commercial Item	1/4-20 x 1" FHCS	1
2	FT1204-3-35	Detent Plunger	1
3	FT1380-3-44	Base Ring Adapter	1
4	FT1380-3-45	Pusher Adapter	1
5	FT1380-3-46	Pusher Spacer	1
6	FF16423	Complete Kit	1



## General Information

The Synflex swage adapter kit was designed with the specific intent to allow swaging of Eaton Synflex fittings to Eaton Synflex thermoplastic hose using existing Synflex pushers and dies and an Eaton Aeroquip® FT1380 or Eaton Weatherhead® ET4020 crimp machine.

The purpose of this manual is to present critical safety information, basic installation, and operating instructions for the Synflex sage adapterkit.

## Safety Instructions



Thoroughly read the operator's manual for the appropriate Eaton crimp machine (FT1380 or ET4020) that will be used with the Synflex swage kit part # FF16423 before attempting to swage hose and fittings. Operator manuals for the FT1380 and ET4020 are FT1380-500A and W-EQCR-TM0020-E1 respectively.

Electronic manuals can be found on Eaton Power Source or print versions can be ordered via Standard Register. Failure to follow operating instructions could result in serious injury or properly damage.



Prevent unauthorized operation: Do not permit anyone to operate any Eaton crimp machine unless they have thoroughly read and understand the aforementioned manuals.



Wear safety glasses: Risk of eye injury! Eye protection is required at all times during the installation, operation and maintenance of any Eaton crimp machine. Failure to wear safety glasses could result in personal injury.



Avoid pinch points: Keep your hands clear of all moving parts. Only one trained operator should be in close proximity of the equipment while it is in operation.



Maintain swage tooling with care: Dies used in the swaging process are hardened steel, offering the best combination of strength and wear resistance for long life. Hardened dies are generally brittle and care should be taken to avoid any sharp impact. Never strike a die with a hardened instrument.



Die change: Never insert or remove dies while power is supplied to the crimp machine.



Keep work area clean: cluttered areas and benches invite accidents.



Secure the equipment to a stable work surface: Prior to operation, secure the crimp machine to a stable work surface to prevent the equipment from tipping. Follow machine installation instructions found in Eaton's FT1380-500A and W-EQCR-TM020-E1 manuals.



Unplug the power supply when the crimp machine is not in use.

## Synflex Swage Adapter Kit Installation

### Step 1: Machine Prep

With the power on, retract the crimp ring on the crimp machine by depressing the retract switch until the crimp ring is fully retracted. Turn the power off and remove any tooling if present. (See Figure 2 & 3).



Figure 2



Figure 3

# Synflex Swage Adapter Kit Installation

## Step 2: Swage Adapter Bowl Installation

With the power off, clean the crimp ring of any excessive debris or grease. Insert the swage adapter bowl into the crimp ring ensuring it is seated evenly. (See Figure 4).



Swage Adapter Bowl

Figure 4

## Step 3: Magnetic Tooling Pusher Installation

Install the magnetic pusher adapter into the upper portion of the crimp machine with the detent pin facing forward. Make sure the magnet is clean prior to installation to prevent any misalignment. (See Figure 5).



Figure 5

**Note:** The pusher adapter is designed to accommodate existing 2.38" long pushers. For 2.88" long pushers the 0.500 long spacer on the magnetic pusher adapter will need to be removed. To remove, loosen the allen bolt and separate the spacer from the main body of the magnetic pusher adapter. (See Figure 6).

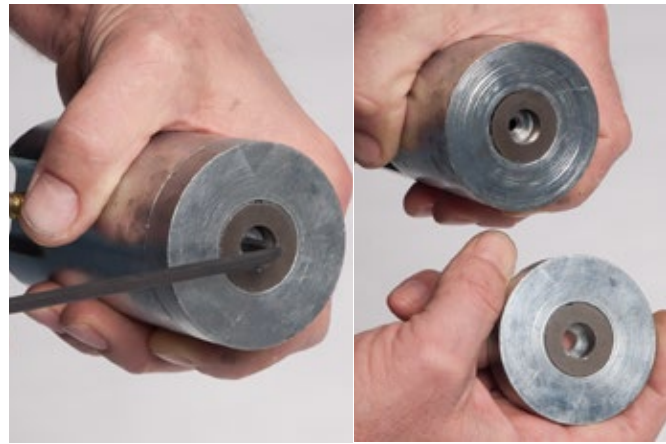


Figure 6

## Step 4: Installation of Synflex Pusher Tooling

To install the standard pusher tooling into the magnetic pusher adapter, pull the ball detent pin outward to allow the pusher tooling to fully insert. Release ball detent pin to retain the tooling. (See Figure 7).

**Note:** Refer to Product Advisor Synflex catalog for the correct pusher and swage dies for the desired fitting and hose to be swaged.



Figure 7

## Step 5: Setting the Machine Stroke

The stroke of the machine must be set so the swage dies stop at the correct position.

To set the stroke, press the "Enter" button until the indicator light next to the button illuminates, then enter "090" using the keypad. (See Figure 8).

**Note:** To save this setting, press the "Store" button until the indicator light next to the button illuminates, then press and hold desired preset number until the light next to the preset illuminates. (See Figure 9).

# Synflex Swage Instructions



Figure 8



Figure 9

**Step 1:**

Place fitting on hose and verify proper insertion depth.

**Step 2:**

Insert the hose and fitting up through the die and into the pusher. Hold the fitting in this position while installing the dies in step 3. (See Figure 10).



Figure 10

**Step 3:**

Apply SAE 90 lubricant or Anchor Lube (part# 4545-01001) to the inside of the swage dies when swaging stainless steel fittings. Then place the swage dies into the crimp machine adapter bowl so they are securely seated. (See Figure 11 & 12).



Figure 11

**Step 4:**

Depress the “Crimp” button while holding the fitting firmly against the pusher until the swage is completed. (See Figure 12).

**Note:** Upon reaching the proper stroke the machine will automatically retract.



Figure 12

**Step 5:**

Push the completed assembly up to remove the swage dies from the fitting, then remove the assembly through the bottom of the crimper. Check the swage dimensions using a dial or digital caliper to verify the fitting meets required swage diameter specifications.

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