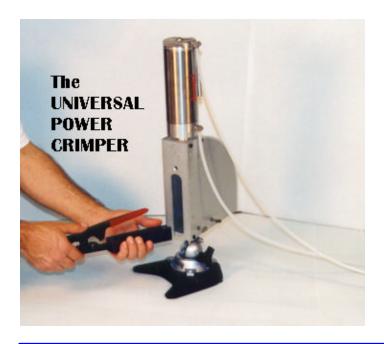
# UNIVER SAL

Operations Manual



Utilizing pneumatic power for automatic operation of hand crimping tools. Fast and quiet, it accommodates a wide variety of both short and long handled tools . . .and opens automatically for the next crimp. Foot operated, with both hands free, the operator can now concentrate on accurate and delicate crimping.

Here is a device that eliminates slow, costly and fatiguing hand crimping. By giving the operator a "third hand" through the use of foot control, easier and faster production is accomplished. The Universal Power Crimper not only reduces operator stress and strain, it reduces time and production losses. The Universal Power Crimper was designed by Actron, a division of McDonnell Douglas Corp., to provide foot-controlled pneumatic power assistance for operation of hand crimping tools.

The following manufacturer's tools will work in the Universal Power Crimper:

AMP, Buchanan, Burndy, Bendix, Berg, Clark, Daniels, Deutsch, Molex-ETC, Hollingsworth, ITT Cannon, Molex, Thomas & Betts and many more.

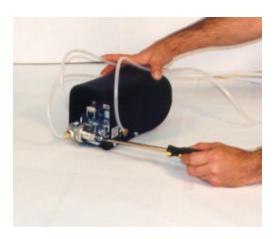
At 70 to 120 psi this device can exert up to 600 lbs of force, with or without adapters, to operate over 90% of existing hand-held crimp tools today. This device performs in the same manner as an operator's hand, thereby conforming to the MIL-STD requirement, which governs the use of ratchet action tools. Therefore, the need to rewrite the crimping instructions is eliminated.

The optional swivel-mounting base is recommended; it positions the crimp loop in virtually any orientation.



## **INSTALLATION**

- 1. Inspect air hoses for any evidence of damage (soldering iron burns, etc.). Replace all damaged hoses.
- 2. Connect input air hose to an air source with a working pressure of 70 to 120 psi. We recommend the air source have a filter. A lubricator is recommended but not required.



3. With no tool installed, turn pressure regulator knob on foot pedal assembly counterclockwise to lowest possible setting. This will allow the Universal Power Crimper to cycle when foot pedal is pressed. Operate the foot pedal to get a feel of the unit in Operation.

Many different styles and makes of tools will operate in the Power Crimper. Some tools require an adapter, available from the factory. Refer to step 9 for tools requiring an adapter. The following steps are applicable to insertion of a hand tool not requiring an adapter.

4. Check that air pressure is turned down to its minimum (Step 3).



5. Position the hand tool into the bottom center channel of the Power Crimper with the moving half of the crimp tool handle facing up towards the roller above it. Make sure you insert the hand tool far enough into the channel so the ratchet of the hand tool goes through its complete re-opening cycle and allows the crimp jaws to fully open.

# **WARNING**



If the hand tool does not return to a fully open position, you can break the ratchet of the tool when applying air pressure.

Your hand tool should be inserted into the holder only far enough to allow a crimp lug to be inserted and removed from the tool. This will allow the tool-opening ratchet to operate.



6. Equally tighten the thumbscrews provided on both sides of the channel to securely seat the tool. Do not over tighten as excessive thumbscrew pressure may distort the tool frame, preventing the tool from functioning properly.

WHEN USING PINCH-TYPE CRIMP
TOOLS IN THE UNIVERSAL POWER



7. Some tools have excessively heavy handles or weak return springs which do not fully reopen the tool and its ratchet. To compensate for this we have provided a return spring attached to the top of the air cylinder. This spring must be hooked by a cable tie or other means to the end of tool handle to insure full reopening of the tool and release of the ratchet.

# INSERTION OF HAND TOOL REQUIRING ADAPTER

8. With a sample of the item to be crimped positioned in crimp tool, and while pressing the foot pedal, turn pressure regulator knob clockwise until the Power Crimper operates crimp tool through a complete ratchet cycle and a full crimp has been accomplished. Release foot pedal and turn pressure regulator knob an additional ¼ turn clockwise. The crimper is now ready for operation.



9. Insert the hand tool into its adapter, which is polarized to accept the tool.



10. Tighten the Allen set screws evenly from both sides of adapter against the tool handle to hold tool securely. Over tightening set screws may distort the adapter, making it difficult to slide into tool channel. Upon completion of this step, follow

instruction (steps 4, 5, 6, 7 and 8) as applicable to tools without adapters.

# ALMOST MAINTENANCE FREE

The Universal Power Crimper is practically maintenance free. The only special or anticipated maintenance operations required are as follows: A film of automotive chassis grease should be applied to guide slots in side plates every four months if device is in daily operation.

On rare occasions, an imbalance of input and output air pressures will cause intensive oscillation of the Universal Power Crisper, producing an undesirable sound. To stop oscillation, disconnect input air hose, turn pressure regulator knob on foot pedal assembly 1/8 turn clockwise and then reconnect input air hose.

Universal Power Crimper: Part # 689F Swivel Base: Part # 689F-37

### Adapters:

Part # 689F-40; Molex, Hollingsworth, E.T.C.

689F-41; AMP

689F-44; Berg, Burndy, T&B

689F-45; Daniels & Buchanan MS Type,

Balmar

689F-46; T&B Curved-handle