customer manual

ORIGINAL INSTRUCTIONS

SAFETY PRECAUTIONS AVOID INJURY

Safeguards are designed into this application equipment to protect operators and maintenance personnel from most hazards during equipment operation. However, certain safety precautions must be taken by the operator and repair personnel to avoid personal injury, as well as damage to the equipment. For best results, application equipment must be operated in a dry, dust-free environment. Do not operate equipment in a gaseous or hazardous environment.

- Carefully observe the following safety precautions before and during operation of the equipment:
- ALWAYS wear appropriate ear protection.
- ALWAYS wear approved eye protection when operating powered equipment.
- ALWAYS keep guard(s) in place during normal operation.
- ALWAYS insert power plug into a properly grounded receptacle to avoid electrical shock.
- ALWAYS turn off the main power switch and disconnect electrical cord from the power source when performing maintenance on the equipment.
- NEVER wear loose clothing or jewelry that may catch in moving parts of the application equipment.
- NEVER insert hands into installed application equipment.
- NEVER alter, modify, or misuse the application equipment.

TOOLING ASSISTANCE CENTER

CALL TOLL FREE 1-800-722-1111 (CONTINENTAL UNITED STATES AND PUERTO RICO ONLY)

The **Tooling Assistance Center** offers a means of providing technical assistance when required.

In addition, Field Service Specialists are available to provide assistance in the adjustment or repair of the application equipment when problems arise which your maintenance personnel are unable to correct.

INFORMATION REQUIRED WHEN CONTACTING THE TOOLING ASSISTANCE CENTER

When calling the Tooling Assistance Center regarding service to equipment, it is suggested that a person familiar with the device be present with a copy of the manual (and drawings) to receive instructions. Many difficulties can be avoided in this manner.

When calling the Tooling Assistance Center, be ready with the following information:

1. Customer name
2. Customer address
3. Person to contact (name, title, telephone number, and extension)
4. Person calling
5. Equipment number (and serial number if applicable)
6. Product part number (and serial number if applicable)
7. Urgency of request
8. Nature of problem
9. Description of inoperative component(s)
10. Additional information/comments that may be helpful

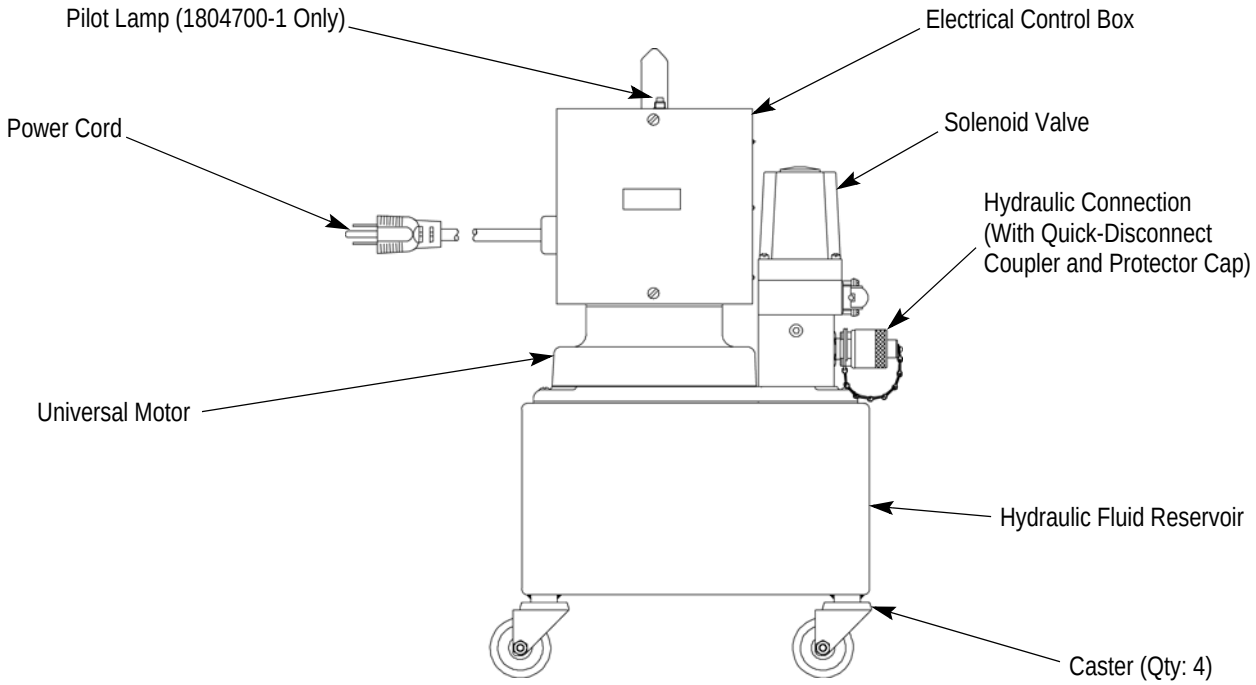


Figure 1

1. INTRODUCTION

Each heavy-duty electric hydraulic pump (shown in Figure 1) is a portable power source which uses a handle control or foot control to activate the unit. The unit combines the convenience of a hand tool with the power of a large machine used for the application of terminals and splices onto large wire sizes. Quick-disconnect couplers are used to install a hydraulic hose and crimping head (available separately) to the pump to form a complete unit.

Read the following instructions carefully before operating the unit. The performance of the unit will depend largely upon information contained in this customer manual and operator training and skill.

When reading this manual, pay particular attention to **DANGER**, **CAUTION**, and **NOTE** statements.

DANGER

Denotes an imminent hazard which may result in moderate or severe injury.

CAUTION

Denotes a condition which may result in product or equipment damage.

NOTE

Highlights special or important information.

DANGER

This unit should only be operated by trained, competent personnel.

NOTE

Dimensions in this manual are in metric units [with U.S. customary units in brackets].

Read and understand the entire manual before using the tool.

Always wear appropriate eye protection when using the tool.

Always wear appropriate hearing protection when using the tool.

Two people are required to lift the pump.

NOTE

Dimensions in this manual are in metric units [with U.S. customary units in brackets].

2. DESCRIPTION

2.1. Physical

The pump is a two-stage hydraulic pumping unit. It is driven by a universal motor connected to a gear pump for the low-pressure stage; and a five-cylinder axial piston pump (supercharged by the gear pump) for the high-pressure stage. The pump features a hydraulic fluid reservoir and pressure regulation and control devices.

The hydraulic connection is fitted with a thread protector cap to prevent the threads of the quick-disconnect coupler from being damaged and to prevent contaminants from getting on the quick-disconnect coupler.

The pump features a pilot lamp (1804700-1 only) which when lit indicates that the pump is activated.

The pump includes casters (one for each corner) that can be installed onto the pump for portable applications.

Pump specifications are given in Figure 2.

The date code is marked on the body of the pump on a metal tag. The date code is in the format YYWW, where YY represents the year of the manufacture, and WW represents the week of manufacture. For example, if the date code marked on a tool is 0533, the tool was made in the 33rd week of 2005.

2.2. Functional

Before each cycle can be started, the RESET switch (of the handle control or foot control) must be depressed. When the RESET switch is depressed, the pilot lamp (1804700-1 only) of the pump will light.

When the RUN switch is depressed and held, the pump will complete a cycle. When the RUN switch is depressed momentarily, the cylinder of the crimping head(s) will partially advance and the dies will partially close momentarily.

When the DUMP switch is depressed, the cylinder(s) will retract, the dies will fully open, and the pressure is released from the system.

When maximum hydraulic pressure is reached, the motor shuts OFF, and all pressure is automatically released from the system.

This pump is not for use in applications other than crimping. Examples of improper use include, but are not limited to, work holding, cutting, bending, and lifting applications.

Dimensions (Approx)

Height . . . . . 464 mm [18.25 in.]
Width . . . . . 241 mm [9.50 in.]
Length . . . . . 292 mm [11.50 in.]
Net Weight (With Oil to Capacity) . . . . . 28 kg [62 lbs] without hydraulic fluid, 35 kg [78 lbs] with two gallons of hydraulic fluid

Electrical Requirements

Pump 1804700-1 . . . . . 115 V
Pump 1804700-2 . . . . . 220 V

Motor . . . . . 839 W [11/8 hp], 50-60 Hz, Single Phase, 8400 rpm
Current Draw (Max) . . . . . 14 A (15 A Circuit Breaker)
Noise (At Idle and Max Pressure Output) . . . . . 90-95 dBA
Pressure Output . . . . . 703 bar [10200 psi] Max
Reservoir Capacity . . . . . 7.57 L [2 gal]
Oil Delivery (L [cu in.] Per Min) . . . . .

Oil Pressure (bar [psi])			
7 [100]	69 [1000]	345 [5000]	579 [8400]
10.7 [650]	1.3 [80]	1.1 [70]	0.9 [55]

Pressure Switch Setting . . . . . 676-703 bar [9800-10200 psi]
Relief Valve Setting . . . . . 689-738 bar [10000-10700 psi]
Voltage Drop . . . . . .2 V for a 3 M [10 ft] power cord
Temperature Range for Operation . . . . . -20 to 50 C [-4 to 122 F]
Hydraulic Hose Life . . . . . 5 years (replace earlier if there are signs of excessive wear or damage)
Interrupting Capability . . . . . 5000 A

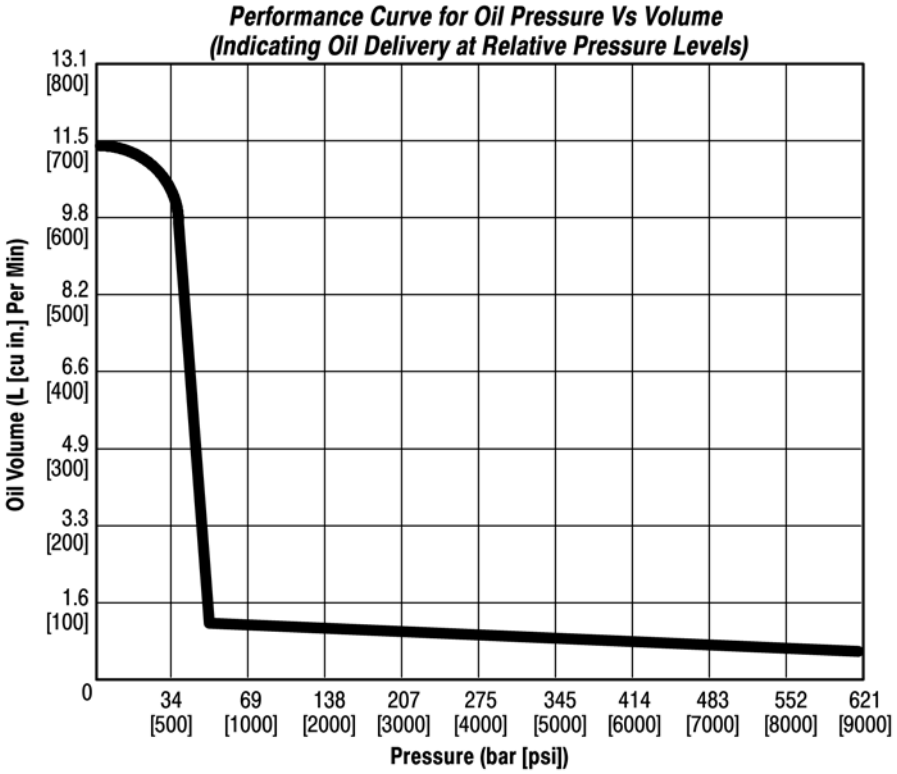


Figure 2

2.3. Accessories

The accessories for the pump shown in Figure 3 are available separately.

The pump accepts interchangeable crimping heads, and the crimping heads accept interchangeable die assemblies, except Crimping Head 1673672-1 (which has self-contained dies). Use of a latch pin kit eliminates the possibility of misplacing the standard latch pin supplied with the crimping head.

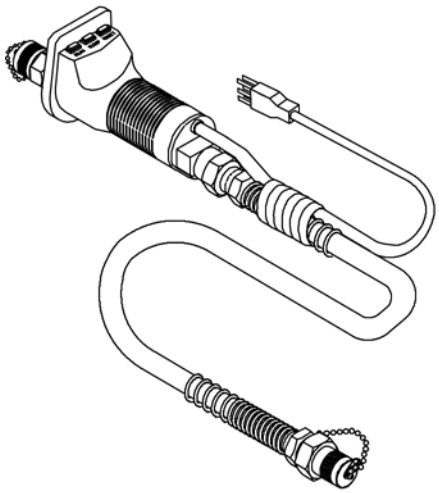
The handle control and foot control are available to operate the crimping head. If the pump is used in portable applications, the handle control may be preferable. The handle control is connected to the pump hydraulically (by the hose) and electrically (by the cordset), and the crimping head is connected to the handle control. If the pump is used in stationary applications, the foot control may be preferable. The foot control is connected to the pump electrically, and the crimping head is connected to the pump hydraulically (by use of the hose assembly).

The multi-directional valve allows more than one crimping head (a maximum of three) to be operated from the pump. A separate hose assembly is needed to connect each crimping head to the multi-directional valve and to connect the multi-directional valve to the pump. The multi-directional valve can only be operated by the foot control.

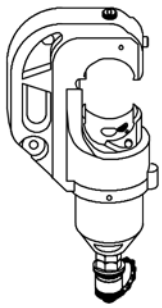
Refer to the following paragraphs for part numbers and descriptions.

Accessories

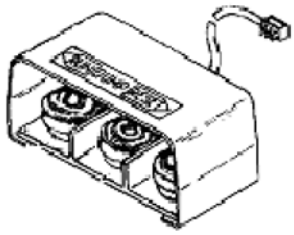
Hydraulic Handle Control Assembly



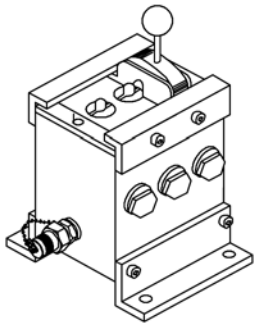
Crimping Head (Ref)



Foot Control



Multi-Directional Valve



Crimping Head Accessories

Die Assembly (Ref)

Latch Pin Kit

Hydraulic Hose Assembly

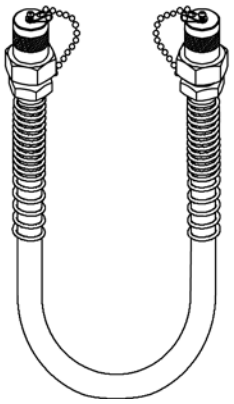


Figure 3

A. Hydraulic Handle Control Assembly

The handle control assembly consists of a handle grip, cordset, and hose assembly. The handle control is operated by three switches (marked RUN, DUMP, and RESET).

HYDRAULIC HANDLE CONTROL ASSEMBLY	LENGTH (M [ft])
1901775-1	2.1 [7]
1901776-1	4.6 [15]
1901777-1	6.4 [21]

B. Hydraulic Hose Assembly

The hose assembly is a hose with a female quick-disconnect coupler and protector cap on each end.

HYDRAULIC HOSE ASSEMBLY	LENGTH (M [ft])
1583662-1	1.8 [6]
1583662-2	3.0 [10]
1583662-3	6.1 [20]

NOTE

The date of manufacture of the hose is marked on the hose in the format MM-YYYY. MM represents the month of manufacture and YYYY represents the year. The hose should be replaced after five years.

C. Foot Control

The foot control consists of a base with a guard and a cordset. The foot control is operated by three pedals (marked RUN, DUMP, and RESET).

FOOT CONTROL	CODESET LENGTH (M [ft])
68284-1	4.6 [15]

D. Multi-Directional Valve

The multi-directional valve features a manual handle control and outlets to connect more than one head to the pump (up to three). The valve can only be operated by the foot control. Installation and operating procedures are provided in the instruction sheet packaged with the valve.

MULTI-DIRECTIONAL VALVE	DESCRIPTION	INSTRUCTION SHEET
1901782-1	3-Way	408-1206

E. Crimping Head

Acceptable crimping heads and applicable products and wire size range are listed below. Applicable die assembly part numbers and installation instructions are provided in the instruction sheet packaged with the crimping head.

CRIMPING HEAD	INSTRUCTION SHEET	PRODUCT	WIRE SIZE RANGE
1490747-1	408-8715	AMPOWER*, SOLISTRAND*, and TERMINYL* Terminals and Splices	8-4/0 AWG
1673672-1	408-8910	SOLISTRAND Terminals and Splices	8-2 AWG
1752786-1	408-8958	AMPOWER Terminals and Splices	4/0 AWG-1000 MCM
1752787-1	408-8914	AMPLI-BOND*, PLASTI-GRIP*, AMPOWER Pre-Insulated, and Heavy-Duty Pre-Insulated Nylon Terminals, and COPALUM* Sealed and TERMINYL Terminals and Splices	8-4/0 AWG
1752788-1	408-8915	AMPOWER and SOLISTRAND Terminals and Splices	250-600 MCM
1752868-1	408-8959	AMPOWER, SOLISTRAND, COPALUM, Open Barrel, and Stamped-and-Cast Battery Terminals, and COPALUM Sealed and Insulated Piercing and Post-Insulated and Uninsulated STRATO-THERM* Terminals and Splices	12 AWG-350 MCM
		TERMI-FOIL* End and Center Tap Terminals	0.508-1.524 [.020-.060] Thick Foil
1752877-1	408-8956	AMPLI-BOND, PLASTI-GRIP, AMPOWER Pre-Insulated, and Pre-Insulated Nylon Heavy-Duty Terminals, and TERMINYL and COPALUM Sealed Terminals and Splices	10-4/0 AWG
1901820-1	408-10111	AMPOWER, SOLISTRAND, and TERMINYL Terminals and Splices	6-4/0 AWG
1901821-1	408-10112	AMPOWER, AMPLI-BOND, SOLISTRAND, and TERMINYL Terminals and Splices	6-4/0 AWG

The latch pin kit consists of a latch pin, pivot pin, and coupling assembly. Assembly instructions are provided in the instruction sheet packaged with the kit.

LATCH PIN KIT	FOR CRIMPING HEAD	INSTRUCTION SHEET
69709-3	1752877-1	408-2096

3. RECEIVING INSPECTION

1. Carefully inspect the pump upon arrival for evidence of damage that may have occurred in transit. If damage is evident, file a claim against the carrier, and notify TE Connectivity.
2. Check all components to make sure that they are secure.
3. Check all wiring for loose connections, cuts, or other possible causes of electrical short circuits.
4. Inspect all air lines for evidence of loose connections and cuts that may cause leakage.

4. SET-UP

IMPORTANT: Keep the pump in an upright position at all times.

4.1. Install the Casters

Install the casters into the sockets in the bottom corners of the pump. The casters are not required unless the pump is used in portable applications.

Use the castors whenever possible while moving the pump. Two people are needed to lift the pump.

4.2. Fill the Hydraulic Fluid Reservoir

The pump is shipped without oil in the hydraulic fluid reservoir. The proper oil to be used is included with the pump in a separate container. Fill the reservoir as follows:

Always use proper eye protection and oil-resistant gloves when handling hydraulic fluid.

1. Make sure that the pump is NOT CONNECTED to the power supply.
2. Ensure that the entire area around the oil filler hole is clean. Any dirt or dust caught in the oil could damage the polished surfaces and precision-fit components of the pump.
3. Remove the oil filler cap, and pour the oil into the reservoir using a clean funnel with a clean filter. The proper level is 12.7 mm [.50 in.] from the top of the oil filler hole.

   It is essential that an approved type hydraulic oil be used. Refer to Figure 4.

HYDRAULIC OIL SPECIFICATIONS

Viscosity Grade	Viscosity @ 38°C [100°F]	Pour Point	Flash Point	Fire	Specific Gravity	Neutral Number	Condrason Carbon
46	194-236 SSU	-29°C [-20°F]	181°C [357°F]	221°C [430°F]	28	.1 Max	.05%

Approved brands of hydraulic oil:
- Hydro-Drive HP 200 (EF Houghton and Co.)
- DTE 25 (Mobil Oil Co.)
- Tellus 46 (Shell Oil Co.)
- Rando Oil HD 46 (Texaco Inc.)

Figure 4

4. Re-install the oil filler cap.

To check the oil level and refill the reservoir after initial set-up, refer to Paragraph 6.2.

4.3. Prepare the Hydraulic Connections

1. Clean the areas around the hydraulic connection (oil port) of the pump and the crimping head(s).

2. Clean the areas around all of the hose ends and quick-disconnect couplers.

3. Remove the protector cap from the quick-disconnect coupler of each accessory. Remove the protector cap from the hydraulic connection of the pump.

4. Inspect the threads and fittings for signs of wear or damage, and replace them as needed.

5. If desired, seal the hydraulic connections by coating the threads of the quick-disconnect couplers with a high-grade, non-hardening sealant. Although a sealant is preferred, PTFE tape may be used if only one layer of the tape is applied. If using the tape, apply it carefully to prevent it from being pinched by the quick-disconnect coupler and breaking off inside of the hose. Any loose pieces of tape could travel through the system and obstruct the flow of oil.

4.4. Connect the Accessories

Before installing any accessories, make sure that the pump is DISCONNECTED from the power supply.

Make sure that all coupling areas of the accessories being used are thoroughly clean.

A. If Using the Handle Control

Refer to Figure 5, Detail A.

1. Attach the hose assembly to the pump. Mate the quick-disconnect couplers, and tighten the collar. Attach the crimping head to the handle control according to the instructions included with the crimping head.

2. Plug the handle control into the pump.

3. If the crimping head does not contain dies, install a die assembly onto the crimping head according to the instructions included with the crimping head.

B. If Using the Foot Control

Refer to Figure 5, Detail B.

1. Attach one end of the hose assembly to the pump. Mate the quick-disconnect couplers, and tighten the collar. Attach the other end of the hose assembly to the crimping head according to the instructions included with the crimping head.

2. Plug the foot control into the pump.

3. If the crimping head does not contain dies, install a die assembly onto the crimping head according to the instructions included with the crimping head.

C. If Using the Multi-Directional Valve (Foot Control Must Be Used)

Refer to Figure 5, Detail C.

1. Attach one end of a hose assembly to the pump and the other end to the multi-directional valve.

2. Attach one end of each hose assembly to the multi-directional valve and the other end of each hose assembly to a crimping head according to 408-1206.

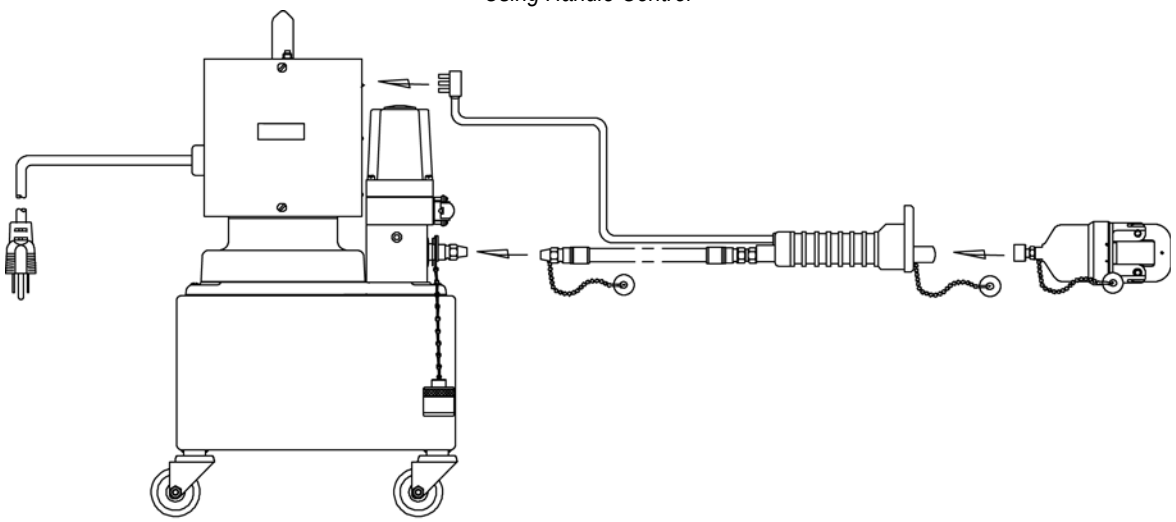
3. Plug the foot control into the pump.

4. If any crimping head does not contain dies, install a die assembly onto the crimping head according to the instructions included with the crimping head.

Connecting Accessories

Detail A

Using Handle Control



Detail B

Using Foot Control

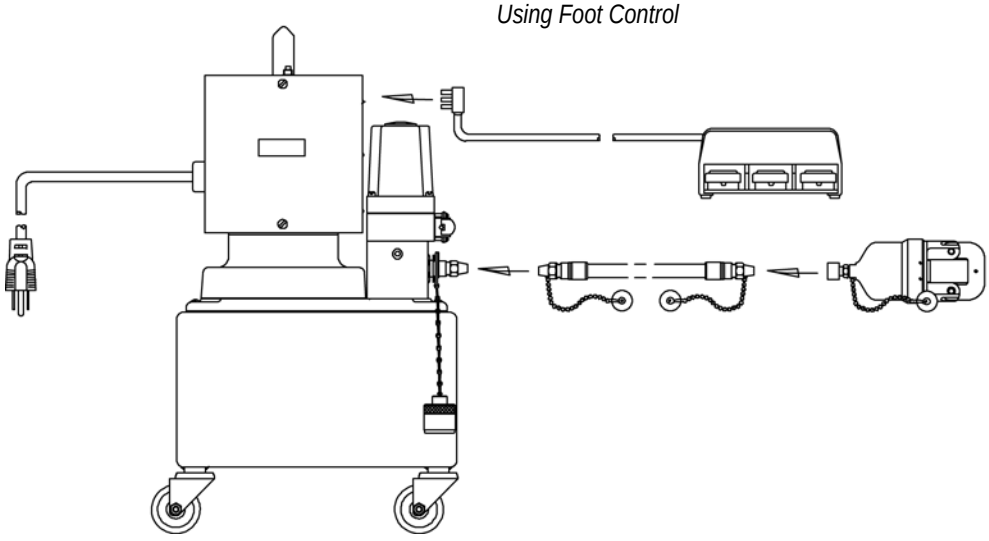


Figure 5 (Cont'd)

Detail C

Using Multi-Directional Valve

(Foot Control Must Be Used)

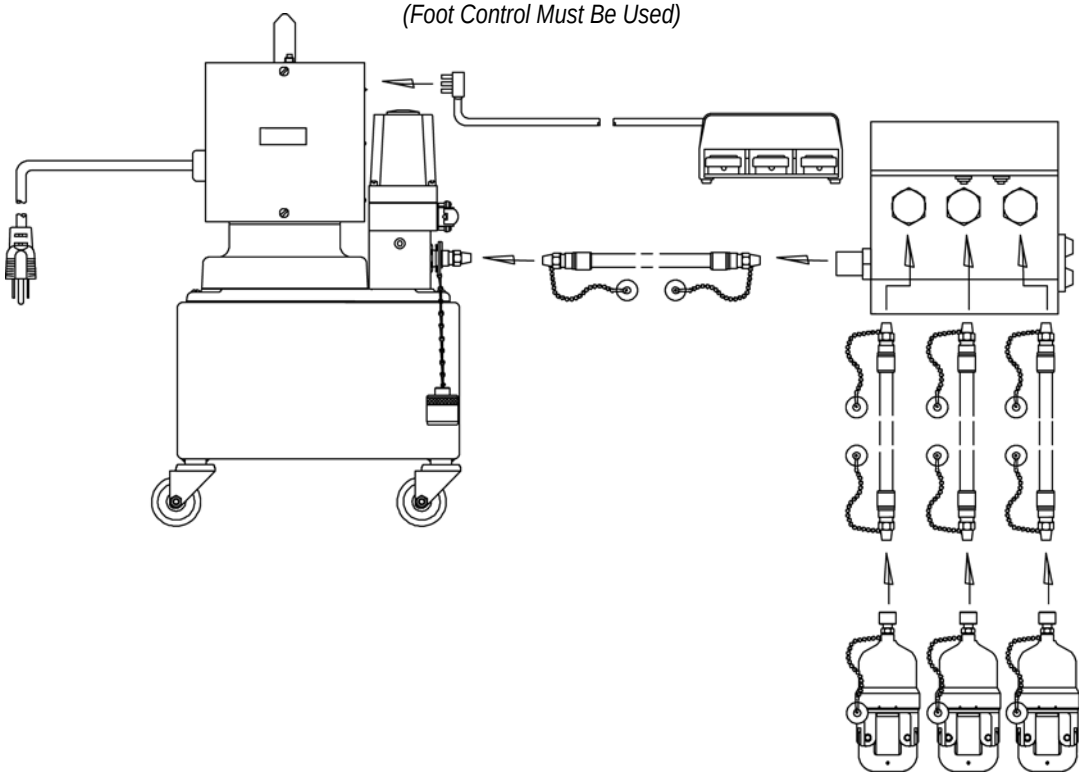


Figure 5 (End)

4.5. Disconnecting Accessories

Before removing any accessory from the pump or a hose assembly, ALWAYS depress the DUMP switch to release the pressure from the system, then DISCONNECT the pump from the power supply.

CAUTION

To avoid personal injury, ALWAYS release the pressure from the system, then DISCONNECT the pump from the power supply before disconnecting an accessory from the pump or a hose assembly.

Protector caps are assembled onto crimping heads and hose fittings to prevent dirt from entering the hydraulic system. Ensure that protector caps are placed on quick-disconnect couplers when accessories are disconnected.

5. OPERATING PROCEDURE

To avoid personal injury or damage to the pump or accessories, carefully observe the following precautions before, during, and after operation of the pump.

For the power supply:

— Ensure that the total current of the pump(s) being used matches the amperage of the electrical circuit being used.

— To avoid the possibility of fire, DO NOT attempt to increase the power line capacity by replacing a fuse with a fuse of higher value.

— BEFORE operating the pump, ensure that the pump is properly grounded.

— Make sure all hose connections are tightened, but not over-tightened. Connections should be secure and leak-free. Over-tightening can cause permanent thread failure or high-pressure fittings to split at pressures lower than their rated capacities.

Oil flow must be unobstructed between the pump and the crimping head. Make sure that all couplers are fully mated and tightened.

For the pump:

— NEVER operate the pump without a hose assembly and crimping head attached to the pump.

— ALWAYS exercise caution when holding a terminal or splice near the crimping area.

— ALWAYS depress the DUMP switch to release the pressure from the system, then DISCONNECT the pump from the power supply before changing the crimping head or die assembly or before disconnecting any connections from the pump.

— Ensure that protector caps are placed on the crimping head and hose fittings when they are disconnected.

For the hydraulic hose:

— If the hydraulic hose ruptures or bursts, immediately depress the DUMP switch to release the pressure from the system, then DISCONNECT the pump from the power supply. NEVER grab a leaking, pressurized hose (the force of escaping hydraulic fluid could cause serious injury).

— To avoid damage to the hydraulic hose, DO NOT subject the hydraulic hose to potential hazards such as fire, sharp surfaces, extreme heat or cold, or heavy impact. DO NOT let the hose kink, twist, curl, or bend so tightly that oil flow within the hose is blocked or reduced.

— DO NOT allow the hydraulic hose to contact corrosive materials such as creosote-impregnated objects and some paints. Consult TE before painting a hose. NEVER paint the quick-disconnect couplers. Hose deterioration due to corrosive materials can result in personal injury.

— DO NOT use the hydraulic hose to move attached accessories. Stress can damage the hose, causing personal injury.

To crimp a terminal or splice, proceed as follows:

1. Plug the power cord of the pump into a properly grounded outlet. Refer to Figure 2 for power source requirements.

NEVER use an ungrounded power supply for the pump.

Stay clear of the crimping dies during the crimping process.

2. Strip the wire(s) according to the instructions included with the crimping head or die assembly.

3. Depress the RESET switch (the pilot lamp on the pump will light) (1804700-1 only), then depress the RUN switch momentarily to partially extend the cylinder of the crimping head (the dies will partially close). The switches are marked on the handle control and on the foot control.

4. Place the terminal or splice in the dies according to the instructions included with the crimping head or die assembly.

5. Depress the RUN switch again to close the dies just enough to hold the terminal or splice in place. Then release the switch. The dies will only remain partially closed long enough for the wire(s) to be inserted into the wire barrel of the terminal or splice.

If the RUN switch is depressed too long, the dies will fully close and crush the terminal or splice before the wire(s) can be inserted.

If the dies fully close before the wire(s) is inserted, depress the DUMP switch. The dies will return to a neutral position (partially open) without completing a cycle.

6. Insert the stripped wire(s) into the wire barrel of the terminal or splice.

NOTE

If possible, insert the wires into both ends of a splice for the first crimp. If the first crimp is made with only the first wire inserted, the wire for the second crimp may be more difficult to insert due to partial deformation of the wire barrel.

Wire with rectangular conductors should be oriented so that the crimping pressure is applied to the flat side of the conductors.

7. Depress the RUN switch until a cycle completes - fully extend (dies close) and retract (dies open) the cylinder.

8. Remove the crimped terminal or splice from the dies. Note that the trigger or pedal may be depressed, but the pump will not start. Before the next crimp can be made, the RESET switch must be depressed.

6. MAINTENANCE AND INSPECTION

It is important that a preventive maintenance and inspection program be established and that maintenance be performed at regular intervals to ensure efficient, dependable performance of the pump.

Maintenance should be performed in a dust-free area by a qualified technician. Any electrical work MUST be performed by a qualified electrician.

DANGER

To prevent personal injury, ALWAYS depress the DUMP switch to release the pressure from the system, then DISCONNECT the pump from the power supply before performing any maintenance or inspection procedure.

1. Keep the outer surfaces of the pump as free from dirt as possible.
2. Keep all hose connections free of dirt and grime.
3. Keep the breather hole of the oil filler cap clean and unobstructed at all times.
4. Keep all accessories that are connected to the pump clean.
5. Make sure that all unused quick-disconnect couplers are sealed with a protector cap.

NOTE

If applicable, check that the seals of the quick-disconnect couplers are not broken or worn. If seals are broken or worn, replace them according to Paragraph 4.3.

6. Inspect the hydraulic hose and power cord for signs of wear after every eight hours of use. If necessary, replace the hose.
7. If the power cord is damaged or wiring is exposed, replace or repair the power cord immediately.
8. Make sure that all voltages are wired for clockwise rotation.

A preventive maintenance and inspection program should include the following:

6.1. Storage

NEVER store the pump without having the protector cap installed or a hydraulic hose and crimping head(s) attached to the hydraulic connection. The pump should be stored in a clean, dry area with low humidity (non-condensing). Check for proper pump function after storage.

6.2. Hydraulic Fluid Reservoir

A. Check Oil Level and Refilling the Reservoir

CAUTION

Air can accumulate in the hydraulic system if the oil level is too low. This accumulation causes the cylinder(s) to respond in an unstable or slow manner.

Check the hydraulic oil level in the hydraulic fluid reservoir of the pump after each 10 hours of operating the pump. Proceed as follows:

1. Depress the DUMP switch to fully retract the cylinder(s) of the crimping head(s).

2. Clean the entire area around the oil filler cap. Any dirt or dust caught in the oil could damage the polished surfaces and precision-fit components of the pump.

3. Remove the oil filler cap. Check that the oil level is 12.7 mm [.50 in.] from the top of the oil filler hole.

NOTE

For 1804700-2, inspect the fluid level in the sight gauge.

If additional oil is needed, proceed as follows:

a. Depress the DUMP switch to release the pressure from the system, then DISCONNECT the pump from the power supply. Make sure that the cylinder(s) are retracted.

DANGER

The cylinder(s) must be fully retracted before replenishing the oil. Overfills can cause personal injury due to excess reservoir pressure created if the cylinder(s) are not retracted.

b. Pour oil into the hydraulic fluid reservoir using a clean funnel with a filter. DO NOT exceed the maximum capacity.

CAUTION

It is essential that the proper grade of oil be used. Refer to Figure 4.

c. Re-install the oil filler cap.

4. Connect the pump to the power supply, and cycle the pump - fully extend and retract the cylinder(s) - several times, ending with the cylinder(s) retracted.

B. Drain, Flush, and Re-Fill the Hydraulic Fluid Reservoir

The frequency of oil changes will depend upon the general working conditions, severity of use, and overall cleanliness and care of the pump. It is recommended to drain, flush, and refill the reservoir of the pump with an approved hydraulic oil after approximately every 300 hours of operating the pump as follows:

1. Depress the DUMP switch to release the pressure from the system, then DISCONNECT the pump from the power supply.

2. Clean the pump exterior. It is important that the pump exterior be clean before the motor and pump assembly is removed from the hydraulic fluid reservoir.

3. Remove the 10 screws securing the motor and pump assembly to the hydraulic fluid reservoir. Remove the motor and pump assembly.

CAUTION

BE CAREFUL not to damage the filter or any of the valves when lifting the motor and pump assembly off of the hydraulic fluid reservoir. Refer to Figure 6.

NOTE

For 1804700-2, drain the reservoir using the drain plug at the bottom of the reservoir.

Motor and Pump Assembly

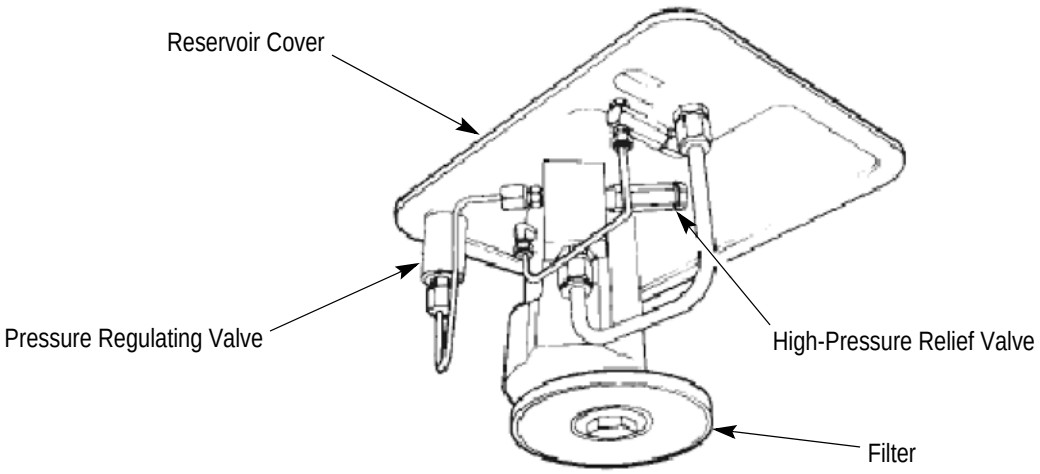


Figure 6

4. Clean the inside of the reservoir, and rinse the filter until it is clean.

5. Fill the reservoir with approved, high-grade hydraulic oil (refer to Figure 4).

6. Place the pump and motor assembly (with the gasket) on the reservoir, then install and evenly tighten the 10 screws.

7. Connect the pump to the power supply, and cycle the pump - fully extend and retract the cylinder(s) - several times, ending with the cylinder(s) retracted.

6.3. Bleed Air from Hydraulic System

Air can accumulate in the system when the oil level becomes too low. The accumulation causes the cylinder(s) to respond in an unstable or slow manner. If this becomes evident, release the air from the system as follows:

1. Position the crimping head(s) so that the quick-disconnect coupler is facing UPWARD.

2. Depress the DUMP switch to release the pressure from the system. Make sure that the cylinder(s) is fully retracted. Then DISCONNECT the pump from the power supply.

3. Re-connect the pump to the power supply, then cycle the pump - fully extend and retract the cylinder(s) - several times, ending with the cylinder(s) retracted.

6.4. Check Hydraulic Pressure

Check that the pump is functioning properly and is reaching the proper pressure after every eight hours of use and, if necessary, adjust the pressure as follows:

1. Depress the DUMP switch to release the pressure from the system, then DISCONNECT the pump from the power supply.

2. Remove the accessory from the hydraulic hose. Install a hydraulic pressure gage onto the end of the hose.

3. Re-connect the pump to the power supply, and partially cycle the pump two or three times to bleed air from the system.

4. Jog the pump through a cycle, then read the pressure level on the gage. If the gage reading is between 576 and 703 bar [9800 and 10200 psi], and the pump cycles properly, no adjustment of the pressure switch is necessary.

If the reading is out of the required range, loosen the locknut on the pressure switch, and turn the adjusting screw clockwise to increase the pressure, and turn the adjusting screw counter-clockwise to decrease the pressure. Turning the screw half a rotation adjusts the pressure by one increment. Refer to Figure 7.

NOTE

The pressure switch should only be adjusted if the pump is not producing the desired pressure during crimping.

5. Holding the adjustment screw in place, tighten the locknut.

6. Actuate the pump to check the pressure setting. If might be necessary to make a second adjustment.

7. Depress the DUMP switch to release the pressure from the system, then DISCONNECT the pump from the power supply. Remove the hydraulic pressure gage, and reconnect the hose.

Adjusting Hydraulic Pressure

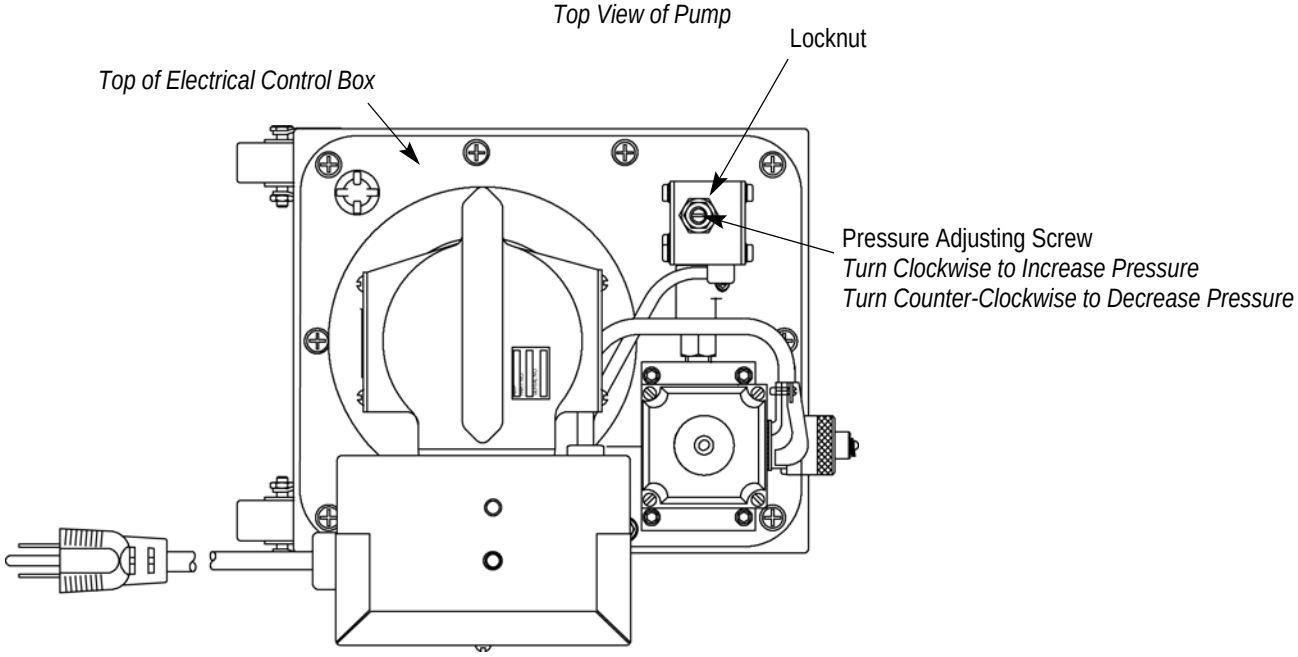


Figure 7

6.5. Check and Replace Brush Assembly on Universal Motor

To prevent premature failure of the armature, periodically check the brushes for wear as follows:

1. Depress the DUMP switch to release the pressure from the system, then DISCONNECT the pump from the power supply.

2. Remove the four screws and brush assembly cover plate from each side of the motor.

3. Remove the two brush holder caps and brush assemblies.

4. If either brush is 3.17 mm [.125 in.] or less in length, replace the brush assembly. Refer to Figure 8.

5. Re-install the brush holder caps and brush assembly cover plates.

Checking Brush Assembly of Universal Motor

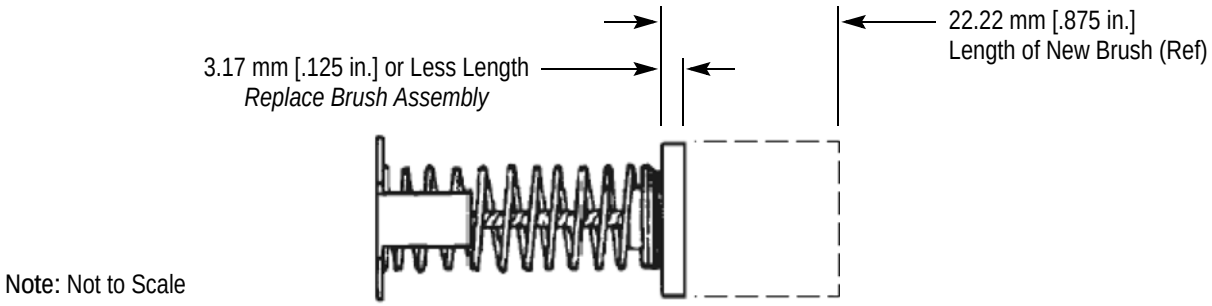


Figure 8

7. DISPOSAL

The pump should be returned to TE for proper disposal. Contact the Customer Service number at the bottom of page 1 to make disposal arrangements.

8. REPLACEMENT AND REPAIR

Customer-replaceable parts are listed in Figure 9. A complete inventory should be stocked and controlled to prevent lost time when replacement of parts is necessary. Parts other than those listed should be replaced by TE Connectivity to ensure quality and reliability. Order replacement parts through your representative, or call 1-800-526-5142, or send a facsimile of your purchase order to 717-986-7605, or write to:

CUSTOMER SERVICE (038-035)
TYCO ELECTRONICS CORPORATION
PO BOX 3608
HARRISBURG PA 17105-3608

For customer repair service, call 1-800-526-5136.

CUSTOMER-REPLACEABLE PARTS		
PART NUMBER	DESCRIPTION	QTY PER PART NUMBER
3-306171-4	BRUSH ASSEMBLY	1
Customer-Supplied	POWER CORD, 115 V, Pump 1804700-1	- -
Customer-Supplied	POWER CORD, 220 V, Pump 1804700-2	- -

Figure 9

RoHS Information:

Information on the presence and location of any substances subject to RoHS (Restriction on Hazardous Substances) can be found at the following website:

http://www.te.com/customersupport/productcompliance/

Click on “Check Compliance Status” and enter equipment part number.

9. REVISION SUMMARY

- Changed pump part numbers on page 5 and Figure 9