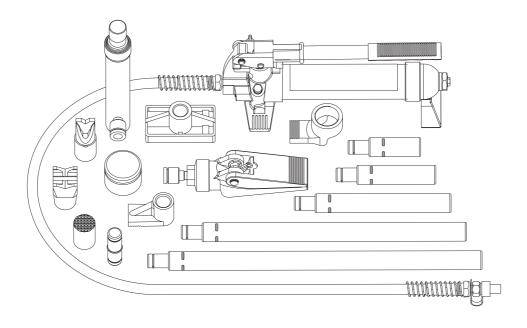


# **Portable Power Kit**

MODEL# TCE70401





This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

#### **▲ SAFETY INFORMATION**

Save these instructions. For your safety, read, understand, and follow the information provided with and on this product before using. The owner and/or operator of this equipment shall have an understanding of safe use/operating procedures before attempting to use. The owner and/or operator shall be aware that the use of this product may require special skills and knowledge. Instructions and safety information shall be conveyed in the operator's native language before use of this device is authorized. If any doubt exists as to the safe and proper use of this product as outlined in this factory authorized manual, remove from service immediately.

Inspect before each use. Do not use if broken, bent, cracked, or damaged parts (including labels) are noted. If the product appears damaged in any way, operates abnormally or is missing parts, it should be removed from service immediately and the manufacturer notified. If you suspect that the product was subjected to a shock load (a load suddenly dropped unexpectedly upon it), immediately discontinue use until product has been checked by a factory authorized service center (contact distributor or manufacturer for list of Authorized Service Centers). It is recommended that an annual inspection be done by qualified personnel. Labels and owner's manuals are available from manufacturer.

# **WARNING!**

- 1. READ, STUDY AND UNDERSTAND ALL WARNING AND OPERATING INSTRUCTIONS PRIOR TO USE.
- 2. STEEL AND OTHER MATERIALS CAN FAIL OR SHATTER UNDER STRONG PRESSURE, ALWAYS WEAR PROTECTIVE EYE WEAR (GLASSES, GOGGLES OR / AND FACE SHELL) THAT COMPLIES WITH THE APPROPRIATE ANSI CODE.
- 3. IF YOU DETECT OR EVEN SUSPECT ANYTHING THAT MAY INDICATE IMMINENT STRUCTURAL FAILURE, STOP! DON'T USE THE PUMP. INSPECT BEFORE EACH USE.
- 4. WHEN COUPLER VALVES ARE DISCONNECTED, ALWAYS INSERT DUST CAP TO KEEP THE OIL LINES CLEAN.
- 5. DO NOT DROP ANY HEAVY OBJECTS ONTO THE HOSE, AND DO NOT ALLOW THE HOSE TO KINK,
- 6. ALWAYS ALLOW CLEARANCE FOR THE HOSE TO AVOID DAMAGE TO THE HOSE AND COUPLERS.
- 7. KEEP THE EQUIPMENT AWAY FROM HEAT OR FIRE, AS THIS MAY DAMAGE OR WEAKEN THE EQUIPMENT,
- 8. FAILURE TO HEED THESE WARNINGS MAY RESULT IN DAMAGE TO EQUIPMENT AND / OR FAILURE RESULTING IN PERSONAL INJURY OR PROPERTY DAMAGE.
- 9. INSPECT BEFORE EACH USE.



Do not use this device for any purpose other than that for which it is expressly intended.

## PRODUCT DESCRIPTION

Portable Power Kits are designed to be used for pushing, spreading, and pressing of vehicle body panels as well as various component parts and assemblies. Rams are rated from 4 to 10 tons respectively.



<u>WARNING:</u> To reduce the risk of personal injury and/or property damage, ensure that the rated working pressure of each pressurized attachment be equal to or greater than the rated working pressure developed by the hydraulic pump



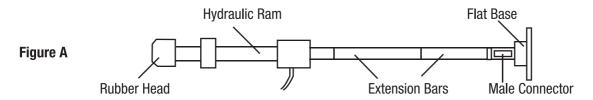
Always check connections before using. Alteration of these products is strictly prohibited. Use only those adapters and attachments provided and approved by the manufacturer.

Note: when extension tubes and/or offset attachments are used, the rated capacity is always reduced by 50% for each tube or offset attachment connected.

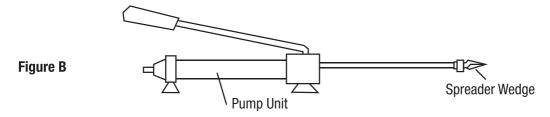
# **ASSEMBLY INSTRUCTIONS**

#### To assemble Hydraulic Ram, Pump Unit, and Attachments

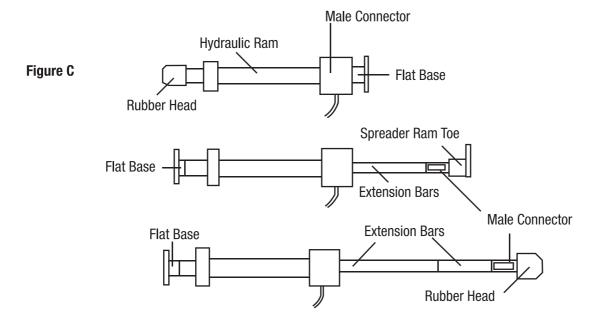
- 1. Unscrew and save the End Plugs located on the ends of the Hose and Hydraulic Ram.
- 2. Securely screw the Hose into the Hydraulic Ram, (See Figure A)



- 3. Insert the Pump Handle into the receptacle located at the top of the Pump Unit.
- 4. To attach the Rubber Head, the Extension Bars, the Male Connector, and the Flat Base to the Hydraulic Ram, see Figure A
- 5. To attach the Spreader Wedge to the Pump Unit, see Figure B.



6. For other attachment combinations see Figure C.



### **OPERATING INSTRUCTIONS**

#### To Operate the Hydraulic Pump Unit

- 1. Position the Pump Unit on a stable, flat and level surface close to the damaged area.
- 2. Firmly close the Release Valve Stem by turning it clockwise and pump the Pump Handle to apply pressure.
- 3. Turn the Release Valve Stem counterclockwise to release the pressure.
- 4. The Pump Unit may be positioned horizontally or vertically. When using the Hydraulic Unit in a vertical position, always keep the Hose end of the Hydraulic Unit downward.

#### **OPERATING INSTRUCTIONS**

#### **To Repair Frame Damage**

- 1. Determine which direction the frame needs to be bent.
- 2. Remove any obstructions that could be damaged or are in the way.
- 3. Connect the Flat Base to the stationary side of the Hydraulic Ram and connect the appropriate attachment to the pushing end of the Stroke Ram.
- 4. Position the Hydraulic Ram so that the Flat Base is resting against a frame member opposite the damaged area. It must also be in line with the direction in which the damaged area needs to be pushed.
- 5. Aim the pushing end towards the area that needs to be repaired and slowly apply pressure with the Pump Unit.
- 6. Once contact on either end has been made, step away as far as possible and continue to slowly apply pressure to the damaged area until the desired bend has been made.



**CAUTION:** Keep hands away from contact areas and tight spaces. The Portable Power Kit may slip and cause injury.

7. When the damaged area has been bent to the desired position, slowly turn the Release Valve Stem on the Pump Unit in a counterclockwise direction to release the hydraulic pressure and remove the Hydraulic Ram.

#### **To Repair Body Damage**

- 1. Determine which direction the body panel should be moved.
- 2. Remove any obstructions that could be damaged or are in the way.
- 3. Connect the appropriate attachments to the Hydraulic Ram.
  - Note: When repairing larger body panel dents such as a dented door, fender or quarter-panel, the proper pushing attachment will be the Rubber Head.
- 4. Position the Hydraulic Ram so that the Flat Base is resting against a frame or a sturdy body part opposite the damaged area. It must also be in line with the direction in which the damaged area needs to be pushed. Make sure the body part is stronger than the area to be bent or it may be damaged. A block of wood or a towel may be used to protect the body part.
- 5. Aim the pushing end towards the area that needs to be repaired and slowly apply pressure with the Pump Unit.
- 6. Once contact on either end has been made, step away as far as possible and continue to slowly apply pressure to the damaged area until the desired bend has been made.
- 7. When the damaged area has been bent to the desired position, slowly turn the Release Valve Stem on the Pump Unit in a counterclockwise direction to release the hydraulic pressure and remove the Hydraulic Ram.

#### To Use the Spreader Wedge

- 1. Determine which direction the frame needs to be bent.
- 2. Remove any obstructions that could be damaged or are in the way.
- 3. Place Spreader Wedge so that the hinged arm is resting against the part to be moved and the stationary arm is resting against a non-movable base. Hold the Spreader Ram in position and apply the Pump Unit pressure.
- 4. Once contact on either end has been made, step away as far as possible and continued to slowly apply pressure to the damaged area until the desired bend has been made.
- 5. When the damaged area has been bent to the desired position, slowly turn the Release Valve Stem on the Pump Unit in a counterclockwise direction to release the hydraulic pressure and remove the Hydraulic Ram.

#### CARE AND MAINTENANCE

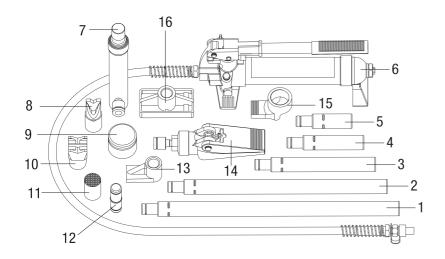
- 1. Determine which direction the frame needs to be bent.
- Before each use, examine the general condition of the tool. Inspect the tool and its accessories for damage. Check for loose bolts, misalignment, binding of moving parts, broken parts and any other condition that may affect its safe operation.
  Do not use a damaged tool or its damaged accessories.
- 3. When the Portable Puller Set is not in use, the Pump Unit should be stored with the Release Valve Stem open.
- 4. After extensive use, the hydraulic oil supply should be replaced to ensure longer equipment life.
- 5. To check the oil level:
  - a. Set Pump Unit flat on a level surface.
  - b. Remove the Screw with its attached dipstick.
  - c. The oil level should be near the bottom of the opening, If required, add high grade hydraulic oil,
  - d. Replace the Screw.

## **CARE AND MAINTENANCE**

- 6. To bleed the pump:
  - a. Check the oil level and fill if necessary, following procedures for checking the oil level.
  - b. Firmly close the Release Valve Stem by turning it clockwise.
  - c. To bleed the pump, press the tip of the Coupling against a hard surface and pump the pump handle.
  - d. Continue pumping until the hydraulic fluid coming out from the end of the coupler tip is free of air bubbles.
  - e. Recheck the oil level and add oil if necessary.
  - f. Turn the Release Valve Stem counterclockwise to release the pressure in the pump and hose.

# **REPLACEMENT PARTS LIST**

Not all components of the jack are replacement items but are illustrated as a convenient reference of location and position in the assembly sequence. When ordering parts, give model number, serial number and description below.



Part	Description	Qty
1.	Extension Tube 19-1/2"	1
2.	Extension Tube 16-1/2"	1
3.	Extension Tube 8-1/2"	1
4.	Extension Tube 4-9/10"	1
5.	Extension Tube 3"	1
6.	Pump Unit	1
7.	Ram assembly	1
8.	Wedge Head (offset)	1
9.	Rubber Head	1
10.	Combination Head	1
11.	Serrated Saddle	1
12.	Male Connector	1
13.	Plunger Toe (offset)	1
14.	Spreader (1000 lb. Capacity)	1
15.	Ram Toe (offset)	1
16.	Flat Base	1

# **TROUBLESHOOTING**

Symptom	Possible Causes	Corrective Action
Ram won't lift load.	Releases valve not tightly closed. Overload condition air trapped in system.	Firmly close release valve. Remedy overload condition Purge away air from system.
Ram won't maintain hold.	Release valve not tightly close. Hydraulic unit malfunction.	Firmly close release valve. Replace ram and / or pump.
Ram won't lower after unloading.	Reservoir overfilled Linkage binding.	Drain oil to proper level. Clean and lubricate moving parts.
Ram won't extend to full stroke.	Oil level low.	Add hydraulic oil.
Poor performance.	Oil level low. Air trapped in system.	Add hydraulic oil. Purge away air from system.