

# **COMPLETE A/C FLUSH KIT**

## **PART NO. 219172**

Gun style flush equipment relies on the pressure within the flush tank and an operator to disperse the cleaning agent. This exclusive design uses a continuous supply of regulated shop air as well as a component adapter which allows a busy technician to hook up the component, start the flush process and work on something else while the tool does the work!



#### KIT INCLUDES

- 1) FLUSH TANK
- 2) UNIVERSAL ADAPTER
- 3) REGULATOR
- 4) RUBBER TIP
- 5) 18" RUBBER HOSE
- 6) SHUT-OFF VALVE

### DON'T FORGET THE FLUSH!

- 409889 Dura II Quart.
- 419501 Dura II Gallon
- 419955 Tech Select Quart

#### **FEATURES**

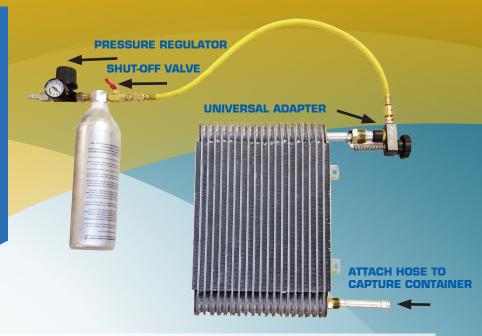
- Cost Effective
- Increase Productivity
- Pressure Regulator System
- Shut-Off Valve
- Universal Adapter

#### BENEFITS

- Considerably Lower Investment Than Conventional Closed Loop Equipment
- Let the Tool Do the Work While You do Another Job
- · Precisely Regulate the Flow of Flush and Air
- Safety Feature That Immediately Interrupts Pressure to a Component
- · No Need to Dig Through a Kit to Find the Right Fitting



# A/C FLUSH INSTRUCTIONS



When the compressor has failed, it is critical that the system be thoroughly flushed to remove debris and contaminated oil. After the repair, every inch of the refrigerant path should be either new or thoroughly flushed. On orifice tube systems, it is recommended to install an inline filter in the liquid line and a suction screen in the hose assembly at the compressor inlet.

#### THREE THINGS ARE ESSENTIAL FOR A SUCCESSFUL FLUSH:

- An effective flushing tool with an air regulator and universal adapter to connect to the component being flushed (as shown here). This prevents contaminated solvent and oil pooling in the evaporator. It also enables continued air purge through the component for at least 30 minutes after the solvent is expelled from the flush can, to dry off any remaining solvent and oil residue.
- 2. A quality, highly evaporative, chemically stable solvent that will not leave a residue or attack the system.
- 3. A good flushing process as outlined below.

#### **NOTE:** After a catastrophic failure:

- · Accumulators, receiver driers, lines and hoses with filters and mufflers CANNOT be flushed and must be replaced.
- Most modern flat-tube multi-pass and flat-tube serpentine condensers have tiny internal passageways and CANNOT be
  flushed. They should be replaced. It may be possible to flush some tube and fin style condensers.
- The evaporator MUST be flushed. As the refrigerant level drops naturally over time, there is not enough liquid refrigerant to carry the oil up and out of the evaporator and back to the compressor. The oil drops out of circulation and pools in the bottom of the evaporator. In the months leading up to the final failure, very fine metal particles slough off the compressor cylinder walls and pistons. These fine particles are carried throughout the system. Some pass through the tiny passage in the orifice tube and are trapped in the pooled oil in the evaporator. The result is a contaminated soup of dirty oil and abrasive particles think grinding compound! If this contaminated oil is not removed, the replacement compressor will not last long.

**NOTE:** If the compressor has not failed, the condenser can be flushed to remove oil only. Some condensers have integral desiccant bags. The desiccant must be removed prior to flushing and replaced when flushing is complete. If it cannot be removed DO NOT flush. Contaminated accumulators, receiver driers, lines and hoses with filters and mufflers can NOT be flushed – they must be replaced.

#### **FLUSH PROCEDURE:**

- 1. Recover all refrigerant from the system using approved equipment and procedures.
- Disconnect and isolate the components to be flushed (condenser, evaporator, hoses, etc).
- 3. Fill flush can with solvent.
- 4. Connect as shown.
- 5. Make sure shut-off valve is closed turned at right angles to the line.
- 6. Connect filtered shop air or dry nitrogen to the flush can air regulator.
- 7. Adjust pressure to 40 psi.
- Open the shut-off valve momentarily to force some solvent into the component.
   Note: At least half the solvent must remain in the flush can to complete the flush in step 10.
- 9. Allow to soak for ten minutes.
- 10. Open shut-off valve to force remainder of solvent through the component.
- 11. When all the solvent is expelled, raise pressure to 80 psi and air/nitrogen purge the component for 30 minutes transition from flush to purge without allowing the air/nitrogen flow through the component to stop.
- 12. Set pressure back to zero, and close the shut-off valve before removing the universal adapter.
- 13. Repeat flush procedure as necessary.
- 14. Reassemble system, evacuate, charge, leak test, and temperature test.
- 15. If diagnosis shows a restriction, replace component.