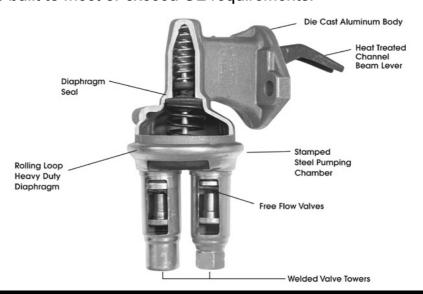
## **Mechanical Fuel Pumps**

Carter® mechanical fuel pumps are available for most domestic and imported passenger cars, trucks, marine and industrial engines. Many of these pumps were original equipment, others are built to meet or exceed OE requirements.



# Mechanical Fuel Pump Key Features & Benefits:

## Stamped Steel Pumping Chamber (crimped to Aluminum Die Cast Body)

- Eliminates diaphragm screws
- Eliminates fuel leakage due to screws losing torque from diaphragm set
- Conforms to shape of diaphragm loop to improve fuel vapor handling
- · Allows for better heat dissipation

## Stamped Steel Valve Towers (furnace welded to Stamped Steel Chamber)

- Less parts, eliminates the need for pulsator diaphragm and air chamber casting
- Allows for better heat dissipation
- Eliminates machining operations

## Stamped Steel Channel Beam Lever

- Improves pump life
- · Reduces weight
- Reduces cost

#### Staked Internal Lever Pivot

- Eliminates drilling, which can be a source of oil leaks
- Improves pump life

## Sealed Fuel Chamber (on some models)

- Improves safety by reducing chance of fuel spills during a crash
- Complete unit
- Breakaway crimp band simplifies assembly

## **Deterioration-Resistant Diaphragm Material**

- Improves life of pump by functioning in the presence of alcohol, stale gasoline and ozone
- Special blend of rubber and fiber allows for longer life
- "Rolling Loop" feature eliminates the need for a molded diaphragm and distributes flex fatigue

#### Improved Valve Seal Elements

- Allows free flow of fuel (only one valve needed to match flow of competitor's multi-valve pump)
- · Improves fuel system safety

## **Quality Product**

- Pumps are built to OE specifications
- Largest OE supplier of mechanical fuel pumps
- All units tested after assembly

## Mechanical Pump Installation Instructions

## GM Push Rod Design

## A. Before new pump installation

- 1. Note the position of the old pump before removing it; determine if it is an up or down pump.
- Check fuel lines and hoses for splits or cracks and the push rod for wear. If necessary, replace worn parts.
- Remove old gasket and clean mounting surface. Also, make sure that the oil recirculation hole is completely open and free of sludge (see Figure 1). If the hole is not completely open, excess wear may occur.

#### **B.** Installation

 To ensure proper installation, the push rod should be as fully retracted as possible. It may be necessary to rotate the crankshaft to retract the push rod. Put a small amount of heavy grease or petroleum jelly on the push rod to hold it in the retracted position during pump installation.

- 2. Install push rod, new gasket, mounting plate and new fuel pump. Make sure the pump lever contacts the end of the push rod and remains in that position during installation as shown in Figure 2. If the push rod is positioned incorrectly, tightening the mounting bolts could bend the push rod or damage the pump lever so the pump will not function.
- Install two mounting bolts; tighten them alternately and evenly.
- Connect and tighten outlet and inlet lines to the new pump. Install return hose, if so equipped.
- 5. Start engine and check for oil and/or fuel leaks. If leaks occur, stop engine immediately and repair leaks.

NOTE: ALL STREET/STRIP MECHANICAL PUMPS ARE UNIVERSAL IN DESIGN. IF THE INLET/OUTLET PORTS DO NOT ALIGN WITH THE FUEL LINES, SIMPLY LOOSEN SCREWS ON BODY OF PUMP, ROTATE TO THE PROPER LOCATION AND TIGHTEN. INSTALL PUMP AND CHECK FOR LEAKS.

