

# SMOG PUMP Step-By-Step Instructions

## BEFORE YOU BEGIN, READ THIS:

You are urged to refer to a suitable service manual when attempting to make repairs. If you do not have such a manual or lack the experience to make such repairs, you should use the services of a qualified technician.

This is an original equipment replacement unit. Although it may look different, it is guaranteed to fit and perform like the original smog pump.

### (FIGURE 1)

It is easy to replace a smog pump. However, you must take proper precautions to assure a safe, trouble-free installation. Park the vehicle in a level area and set the parking brake to avoid inadvertent movement.

## REMOVE ORIGINAL PUMP

1. Disconnect the ground cable from the battery. This disables electric cooling fans that may come on during installation.

**NOTE:** Disconnecting the battery ground cable erases preprogrammed electronic memories.

2. Remove the hose(s) and/or combination valve from the original pump.

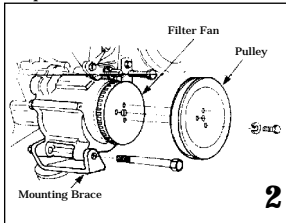
**NOTE:** If the original pump used an air intake tube, clean or replace the old filter before installing on the replacement pump.

3. Loosen the adjustment and pivot bolts and remove the old belt.
4. Remove the old pump.

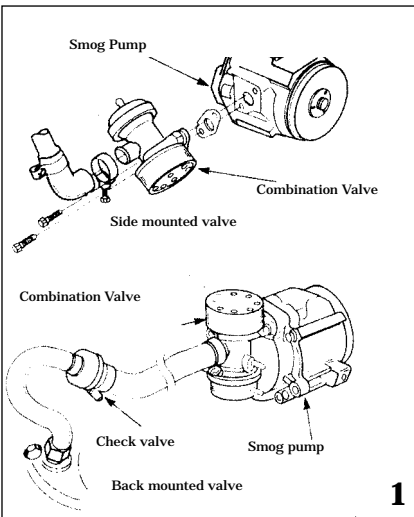
**NOTE:** If a pulley and mounting bolts are not provided with the replacement unit, remove and save these items for reuse on the replacement pump. (FIGURE 2).

## TRANSFER PUMP PULLEY

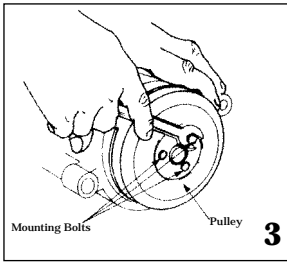
If the replacement pump is supplied with a new pulley, go to Step 5 below.



1. Hold pulley firmly and loosen pulley mounting bolts. If the pulley is pressed on, remove the pulley retaining nut from the pump shaft. **NOTE:** NEVER clamp the pump in a vise or insert anything into the filter fan to keep the pulley from moving during removal! You will damage the pump voiding its core value. If necessary, hold the pulley in place with the drive belt when loosening the pulley bolts. (FIGURE 3)
2. Remove the pulley from the pump shaft. If the pulley is pressed on, "wiggle" it off the shaft.
3. Position pulley on replacement pump shaft. If the pulley is pressed on, line up the Woodruff key in the shaft with the key slot in the pulley. **NOTE:** Use the new shaft key and pulley retaining nut included with the replacement pump to install pressed on pulley. Draw the pulley onto the shaft with the pulley attaching bolts or retaining nut. Use only hand tools to install the pulley (FIGURE 4.)
4. Torque the pulley mounting bolts or retaining nut to manufacturer specifications.



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5. Put old smog pump into carton to assure full core value upon return.
6. You may have to reuse the outlet tube from the original pump. To remove it, twist the tube to break the glue seal and tap it out with a rubber mallet. Transfer tube to the replacement pump. If necessary, secure it with a small amount of thread-locking type adhesive.
7. Before installing the replacement pump, test the check valve(s) for correct operation by blowing air through the valve. If the valve is good, air flow should be in only one direction (toward the air manifold). DO NOT install the replacement pump without replacing a defective check valve. Failure to repair or replace a defective check valve will destroy the replacement pump and VOID THE WARRANTY. (See FIGURE 5)

### INSTALLING REPLACEMENT SMOG PUMP

1. Position the new pump on the mounting brace. Install mounting and pivot bolts finger tight only. (FIGURE 2)
2. Inspect the pump drive belt for wear, cracks or deterioration. Install a new belt if necessary.
3. Position drive belt over the pulley.
4. Adjust belt tension to manufacturer's specification.  
Do not over-tighten the belt as this will void the warranty.
5. Tighten pump mounting and adjustment bolts to manufacturer's specifications. Do not over-tighten - 20 ft./lb. typical.

**NOTE: NEVER PRY ON THE HOUSING** when adjusting belt tension or mounting to unit.

6. Reconnect the hose(s) and/or combination valve to the pump.

**NOTE: Squeaking noise is possible when turning the pump shaft by hand or when the pump is newly installed. Allow at least a 500 mile break-in period to rid the replacement pump of excess noise. DO NOT OIL OR ATTEMPT TO OPEN THE REPLACEMENT PUMP OR THE WARRANTY IS VOID.**

### TROUBLESHOOTING CHART

PROBLEM	CAUSE AND POSSIBLE SOLUTION			
No air supply from pump	<b>X</b>	Leaking or inoperative. Check valve inoperative. Leaking supply hose.		
Rumbling, knocking noise from pump			<b>X</b>	
Excessive drive belt noise			<b>X</b>	
Chirping noise from pump				<b>X</b>

REMANUFACTURED