# "THIS ARTICLE IS INTENDED FOR YOUR REFERENCE ONLY.

ACTUAL PARTS, YEARS AND BODY STYLES CONTAINED

IN THIS ARTICLE MAY DIFFER SLIGHTLY FROM YOUR APPLICATION. "

# INSTALLATION INSTRUCTIONS

To assure your installation will go safely and smoothly, have the following items on hand to assist you:

JACK & JACK STANDS LUG WRENCH TORQUE WRENCH SOCKET SET BRAKE CLEANER

WRENCH SET TUBE WRENCHES MALLET WHEEL BEARING GREASE BRAKE FLUID

#### REMOVE VALVE

- Raise vehicle and support it on stands so that front wheel can be turned from a full left to a full right turn.
- b) Disconnect the two hydraulic hoses from the ends of the power steering control valve. Allow fluid to drain into a container.

IMPORTANT: Identify location so that the hoses are installed in the correct location later. Also remember that the hoses enter the valve at a slight angle so that the ports will not be "cross-threaded" when the hoses are reinstalled.

- Disconnect the two remaining hydraulic hoses from the top of the valve.
- d) Remove the valve clamp cap screw at the relay rod.
- Remove pitman arm nut and separate pitman arm from tapered stud of valve. We strongly recommend the use of a "pickle fork" for this operation.
- f) Unscrew valve body from relay rod and discard.

### 2. INSTALLATION

a) Install new control valve in revers order of removal:

torque pitman arm nut to 45 ft-lbs torque valve adapter clamp screw to 20 ft-lbs valve is pre-greased at our factory - do not grease valve

- b) Fill system with new, good grade power steering fluid.
- c) Check for leaks and repair if needed.

#### 3. ADJUSTING VALVE AND BLEEDING THE SYSTEM

- With power steering reservoir full, start engine momentarily and then shut off. Refill pump reservoir.
- b) Repeat previous step until pump reservoir level remains constant.
  - CAUTION: Keep arms away from steering wheel wheel may start to turn by itself. If it does, valve centering is required. (Every vehicle is slightly different and it is not possible to exactly preset the valves at the factory.)
- c) To center the control valve, the piston rod of the slave cylinder must first be disconnected from the frame rail bracket. Then remove the dust cover marked "C" from the end of the control valve to gain access to the adjusting nut.
- d) Start the engine and observe the piston rod movement. If the rod RETRACTS when the engine is started, it will be necessary to turn the adjusting nut CLOCKWISE. If the rod EXTENDS when the engine is started, it will be necessary to turn the adjusting nut COUNTER-CLOCKWISE. Turn the adjusting nut until the piston rod begins to move in the opposite direction.
- e) Now turn the adjusting nut in the opposite direction of step (d), counting the turns until the piston rod begins to move back in the original direction it did when the engine was first started. Now turn the adjusting nut back in the opposite direction ½ the total number of turns you counted.
- f) If the control valve is properly centered, you should be able to manually push and pull the piston rod in and out of the slave cylinder by hand with the engine running.
- g) Turn off engine and reconnect the piston rod to the frame bracket.
- h) With the front wheels still off the ground, start the engine and observe the steering wheel. If the valve is centered, the wheel should not move when the engine is started. If the wheel does move, a further fine adjustment may be needed.
- i) When all adjustment is complete, be sure to re-install the metal dust cap.
- j) Turn steering wheel to a full left and then to a full right turn and hold momentarily; this bleeds the system.
- e) Refill reservoir if oil level has dropped.

## 4. FINAL INSPECTION

- a) Check drive belts and readjust tension if required. Replace frayed or glazed belts at this time. (A high pitched noise at the extreme end of steering wheel travel indicates a slipping belt.)
- b) Make sure that the hydraulic hoses do not twist or interfere with adjoining hoses or adjacent chassis parts.

