FORD MODEL C-II

All Models

DESCRIPTION

The C-II pump is belt driven and has an integral fiberglass nylon reservoir. Spring loaded slippers within cam and rotor create pumping action. A flow control/relief valve maintains pump volume and pressure. The pump design incorporates a pump pressure fitting which allows the pump pressure line to swivel; this is normal and does not indicate an undertightened fitting. An identification tag attached to the reservoir body indicates the pump model. Use model code when requesting service parts in case of differences in internal components.

LUBRICATION, TROUBLE SHOOTING & TESTING

See Power Steering General Servicing in this section.

REMOVAL & INSTALLATION

POWER STEERING PUMP

Removal & Installation (Rear Wheel Drive Models) – Drain reservoir by disconnecting fluid return line at reservoir. Disconnect pressure hose at pump and remove bolts from mounting bracket. To install, reverse removal procedure. Adjust belt tension. Refill and bleed pump. *See Power Steering General Servicing in this Section.*

Removal & Installation (Front Wheel Drive Models) – Remove air cleaner, thermactor pump and belt. Remove reservoir filler extension. Cover dipstick opening. From under vehicle, loosen 1 pump adjusting bolt. Remove 1 pump-to-bracket mounting bolt and disconnect return line. Loosen remaining bolts and remove belt. Remove pump-to-bracket bolts. Remove pump by passing pulley through adjusting bracket opening. To install, reverse removal procedure.

NOTE – *Do not pry against the reservoir to tighten belt. Pressure on the fiberglass may crack the reservoir.*

POWER STEERING PUMP PULLEY

Removal & Installation – With pump removed from vehicle, drain as much fluid as possible through filler pipe. Install suitable pulley remover tool on pulley hub and remove pulley. To install, reverse removal procedure.

NOTE – *When removing pulley, do not apply in and out pressure on pump shaft. Damage to internal thrust areas could result.*

OVERHAUL

POWER STEERING PUMP

Disassembly – 1) Remove pulley, outlet fitting, flow control valve and spring. Remove reservoir from pump. Mount large "C" clamp vertically in vise with screw at top.

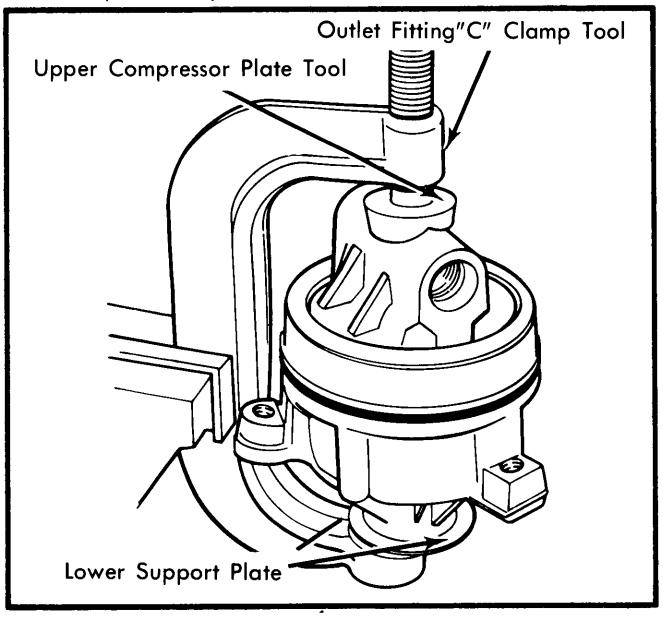

Fig. 2 Pump Positioned in "C" Clamp

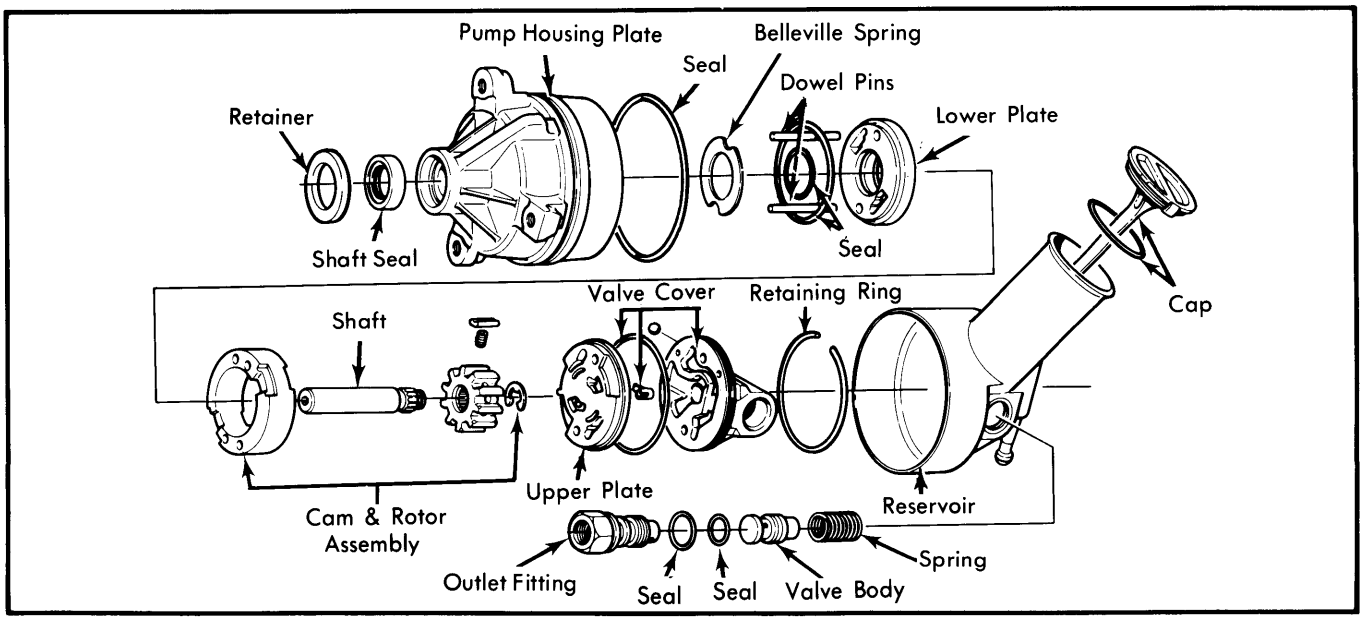

Fig. 1 Exploded View of Ford Motor Co. C-II Power Steering Pump

FORD MODEL C-II (Cont.)

2) Place rotor shaft in lower support plate tool (T78P-3733-A2) and compressor plate tool (T78P-3733-A1) into upper portion of "C" clamp. Insert pump, shaft down, into clamp and tighten until a slight bottoming of valve cover is felt.

3) Push inward on retaining ring through hole in side of pump housing to lift and remove retaining ring. Remove pump from clamp and lift cover off.

4) Push on rotor shaft to remove shaft, upper plate, rotating group assembly and 2 dowel pins. To remove cover plate and Belleville spring, slam pump housing on flat surface. Pry rotor shaft seal from housing.

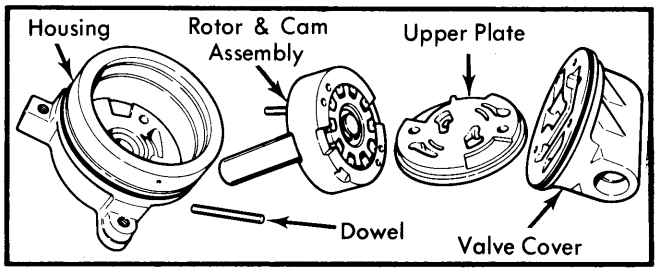

Fig. 3 Disassembled Pump

Reassembly – 1) If rotating group was disassembled, place rotor on shaft with triangular detent facing upward. See *Fig. 4*. Install retaining ring at end of shaft. Place insert cam over rotor with recessed notch on cam facing up.

2) With rotor extended approximately half way out of cam, insert springs and slippers (groove facing outward) into rotor cavities beneath recessed cam flats. Index cam either one space right or left at a time about rotor and insert remaining springs and slippers until all 10 cavities are filled. Use care when turning rotor that previously installed springs and slippers do not fall out.

3) Install rotor shaft seal with driver tool (T78P-3733-A3). Using plastic hammer, drive seal into bore until it bottoms. Install seal retainer in same manner. With pulley side of housing facing down, insert 2 dowel pins and Belleville spring (dished surface upward) into housing.

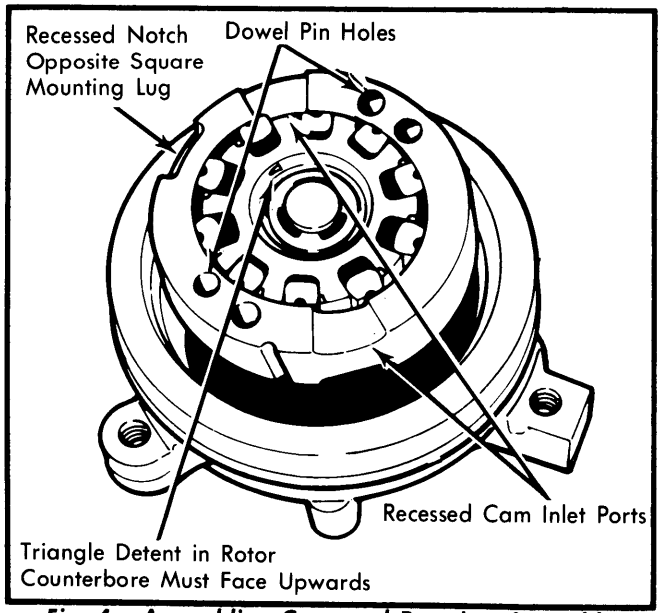

Fig. 4 Assembling Cam and Rotating Assembly

4) Lubricate inner and outer "O" rings with power steering fluid and install on lower pressure plate. Insert lower pressure plate over dowels and into housing with seals facing front of pump. Use driver tool (T78P-3733-A3) and "C" clamp to press lower plate into housing until it is felt to bottom.

5) Install rotating assembly over dowel pins and into housing as shown in *Fig. 4*. Place upper pressure plate over dowel pins with recess directly over recessed notch on cam insert as shown in *Fig. 5*.

NOTE – *Stepped holes must be used for dowel pins and the recessed notch in cam insert must face toward the reservoir approximately 180° opposite the square mounting lug on housing.*

6) Lubricate and place new "O" ring on valve cover. If plastic baffle is loose in valve cover, apply petroleum jelly to baffle and install into position on valve cover. Insert valve cover over dowel pins with outlet fitting hole directly in line with square mounting lug on housing. Place assembly in "C" clamp and compress valve cover into pump housing. Install retaining ring with ends near access hole in housing.

7) Lubricate and install "O" ring on pump housing and install reservoir. Install flow control valve and spring into valve cover. Use new "O" ring seals on outlet fitting and install into valve cover to specified torque.

NOTE – *If flow control valve is cocked, it may become stuck in valve cover. Do not force valve forward since chips may shear off and carry into valve bore.*

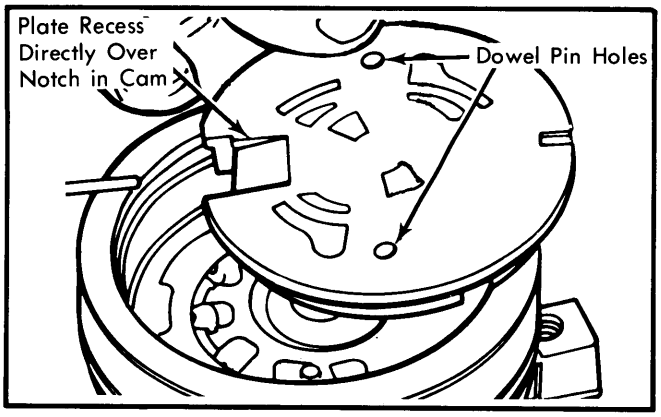

Fig. 5 Upper Pressure Plate Installation

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (N·m)
Pivot Bolt	30-45 (41-61)
Pump-to-Bracket	30-45 (41-61)
Bracket-to-Engine	30-45 (41-61)
Pressure Hose Nut-to-Pump	12-15 (16-20)