

Power Steering Pumps

FORD C-II

Bronco, "F" Models

DESCRIPTION

C-II power steering pump is a belt driven, slipper type integral pump with a fiber glass nylon reservoir. Reservoir is attached to rear side of pump housing front plate. Pump body is encased within housing and reservoir.

Hoses are attached with quick disconnect fittings, located below filler neck at outboard side of reservoir. A pressure sensitive identification tag is attached to reservoir, indicating basic model number.

LUBRICATION, TROUBLE SHOOTING & TESTING

See *Power Steering General Servicing* in this section.

REMOVAL & INSTALLATION

Removal

Disconnect fluid return hose at reservoir and drain fluid. Remove pressure hose from pump. Remove bolts from pump adjustment bracket and loosen pump enough to remove drive belt. Remove pump and adjustment bracket from support bracket. Remove pulley from pump with appropriate pulley puller and remove adjustment bracket attaching bolts. Remove pump.

Installation

1) Install adjustment bracket on pump and tighten bolts. Install pulley on pump with appropriate pulley installer. Place pump with adjustment bracket and pulley on support bracket. Install and tighten adjustment bracket-to-support bracket bolts.

2) Install and adjust belt on pulley, then tighten adjustment bracket bolts. Install hoses to pump, fill reservoir and start engine, turning wheel from side to side to remove air from system.

OVERHAUL

Disassembly

1) Remove pulley from pump. Remove outlet fitting, flow control valve, spring and reservoir. Place a "C" clamp in vise. See Fig. 2.

2) Install lower support plate tool (T78P-3733-A1) over pump rotor shaft. See Fig. 1. Install upper compressor plate tool (T78P-3733-A2) into upper portion of "C" clamp. Holding the upper tool, place the pump assembly into "C" clamp with rotor shaft facing down. See Fig. 2.

3) Tighten "C" clamp until slight bottoming of valve cover is felt. Insert small drift through hole in side of pump housing plate and push inward on valve cover retaining ring. Place screwdriver under edge of retaining ring and remove ring.

4) Remove pump from clamp. Remove valve cover and "O" ring seal. Push on rotor shaft and remove. Remove upper plate, rotor and slippers. Remove cam insert and two dowel pins.

5) Remove lower plate and Belleville spring by lightly tapping housing on flat surface, remove "O" ring.

Remove rotor shaft seal and seal retainer with a screwdriver.

Fig. 1: Installing Lower Support Plate Tool

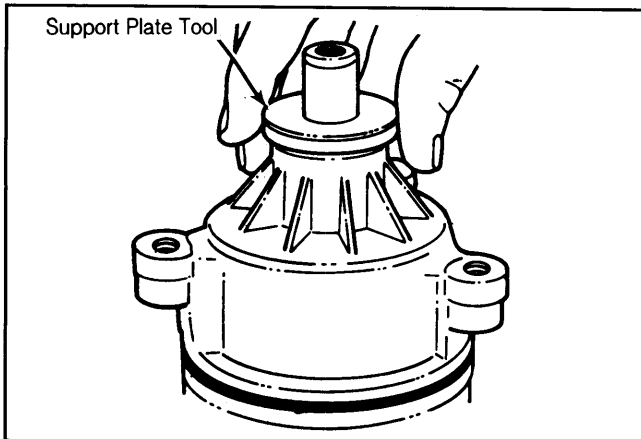
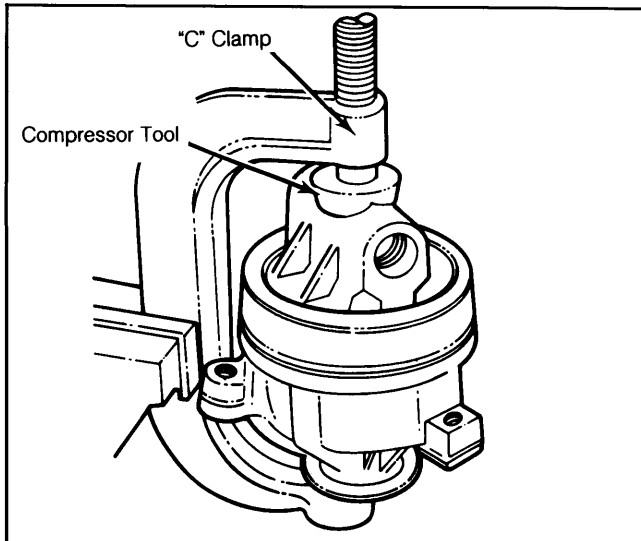


Fig. 2: Installing Compressor Plate Tool



Reassembly

1) Place the rotor on rotor shaft splines, with triangle detent in rotor counterbore facing upward. Install retaining ring in groove in end of rotor shaft. Place the insert cam over the rotor with recessed flat toward reservoir.

2) With rotor extended half way out of cam, insert a spring into a rotor spring pocket. Work in the rotor cavity directly below recessed flat on the cam. Use one of the slippers to compress the spring and install slipper with groove facing upward.

3) Hold cam stationary and turn rotor either direction one space at a time and install another spring and slipper until all 10 rotor cavities have been filled. Be careful when turning rotor that springs and slipper do not fall out.

4) Install a new rotor shaft seal using seal driver tool (T78P-3733-A3). Using a plastic mallet, drive the seal into the bore until bottomed. Install seal retainer in a similar manner. Place pump housing plate on a flat surface with pulley side down.

5) Insert 2 dowel pins and Belleville spring into the housing plate. Lubricate the inner and outer "O" ring

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seals with power steering fluid and install seals on lower pressure plate. Insert pressure plate with seals toward the front of pump into pump housing plate and over dowel pins.

NOTE: Belleville spring must be installed with dished surface upward.

6) Place entire assembly into "C" clamp. Use driver tool (T78P-3733-A3) in rotor shaft hole and press lower plate lightly until bottomed in pump housing. This will seat "O" ring. Install cam, rotor and slippers, and rotor shaft assembly into pump housing plate over dowel pins.

NOTE: When installing this assembly, stepped holes must be used for dowel pins, and recessed notch in cam insert must face reservoir and be approximately 180° opposite square pump mounting boss.

7) Place upper pressure plate over dowel pins. Side of plate with square recessed notch must face toward reservoir and be positioned 180° opposite square pump mounting boss. Place a new "O" ring seal on valve cover and lubricate with power steering fluid.

8) Insert valve cover over dowel pins. Be sure outlet fitting hole in valve cover is directly in line with

square mounting boss of pump housing plate. Place the entire assembly in "C" clamp tool and compress valve cover into pump housing plate, until retaining ring groove is exposed in pump housing plate.

NOTE: Be sure plastic baffle is securely in place in valve cover. If not, apply petroleum jelly to baffle and install.

9) Install valve cover retaining ring with ends near access hole in pump housing plate. Remove pump assembly from "C" clamp. Place a new "O" ring seal on pump housing plate. Lubricate seal with power steering fluid. Install power steering reservoir.

10) Install flow control spring and flow control valve in valve cover. Place new "O" ring seals on outlet fitting and lubricate with power steering fluid. Install outlet fitting into valve cover and tighten. Install pulley.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (N.m)
Pump-to Adjusting Bracket	30-45 (41-61)
Pressure Hose-to-Rear Fitting	14-29 (19-39)
Return Hose-to-Gear Fitting	17-32 (23-44)
Return Line-to-Frame	11-16 (15-22)
Pump Outlet to Pump Valve Cover	25-34 (34-46)
Adjustment Bracket to Support Bracket .	30-45(41-61)

Fig. 3: Disassembled View of C-II Power Steering Pump

