Installation Instructions

KIT PC. No. 106676

JKC POWER STEERING PUMP MAINTENANCE KIT

IMPORTANT! PLEASE READ AND FOLLOW THESE INSTRUCTIONS TO AVOID PERSONAL INJURY OR DEATH:

When working on or around a vehicle, the following general precautions should be observed at all times.

1. **Park the vehicle on a level surface, apply the parking brakes, and always block the wheels.**
2. **Stop the engine when working around the vehicle.**
3. **If the vehicle is equipped with air brakes, make certain to drain the air pressure from all reservoirs before beginning ANY work on the vehicle.**
4. **Following the vehicle manufacturer's recommended procedures, deactivate the electrical system in manner that removes all electrical power from the vehicle.**
5. **When working in the engine compartment the engine should be shut off. Where circumstances require that the engine be in operation, EXTREME CAUTION should be used to prevent personal injury resulting from contact with moving, rotating, leaking, heated, or electrically charged components.**
6. **Never connect or disconnect a hose or line containing pressure; it may whip. Never remove a component or plug unless you are certain all system pressure has been depleted.**
7. **Never exceed recommended pressures and always wear safety glasses.**
8. **Do not attempt to install, remove, disassemble or assemble a component until you have read and thoroughly understand the recommended procedures. Use only the proper tools and observe all precautions pertaining to use of those tools.**
9. **Use only genuine Bendix replacement parts, components, and kits. Replacement hardware, tubing, hose, fittings, etc. should be of equivalent size, type, and strength as original equipment and be designed specifically for such applications and systems.**
10. **Components with stripped threads or damaged parts should be replaced rather than repaired. Repairs requiring machining or welding should not be attempted unless specifically approved and stated by the vehicle or component manufacturer.**
11. **Prior to returning the vehicle to service, make certain all components and systems are restored to their proper operating condition.**

Figure 1 (below) shows the exploded view of the power steering pumps and part names used in the disassembly and reassembly sequence.

For disassembly and inspection of the unit, simply follow the written description of the disassembly steps in sequence. Reassembly is accomplished by following the written reassembly steps in sequence observing all applicable comments.

EXPLODED VIEW ITEM NO.	PARTS IN KIT	EXPLODED VIEW ITEM NO.	PARTS IN KIT
1. Plug		14. Cartridge assembly	
2. O-ring	X	15. Screw	
3. Inlet control valve		16. Rotor	
4. Spring		17. Vane	
5. Inlet connector		18. Cam	
6. O-ring	X	19. Straight pin	
7. Rear body		20. Snap ring	
8. Inlet		21. Shaft	
9. O-ring	X	22. Snap ring	
10. O-ring	X	23. Ball bearing	X
11. O-ring	X	24. Oil seal	X
12. O-ring	X	25. Front body	
13. Pressure plate		26. Key	

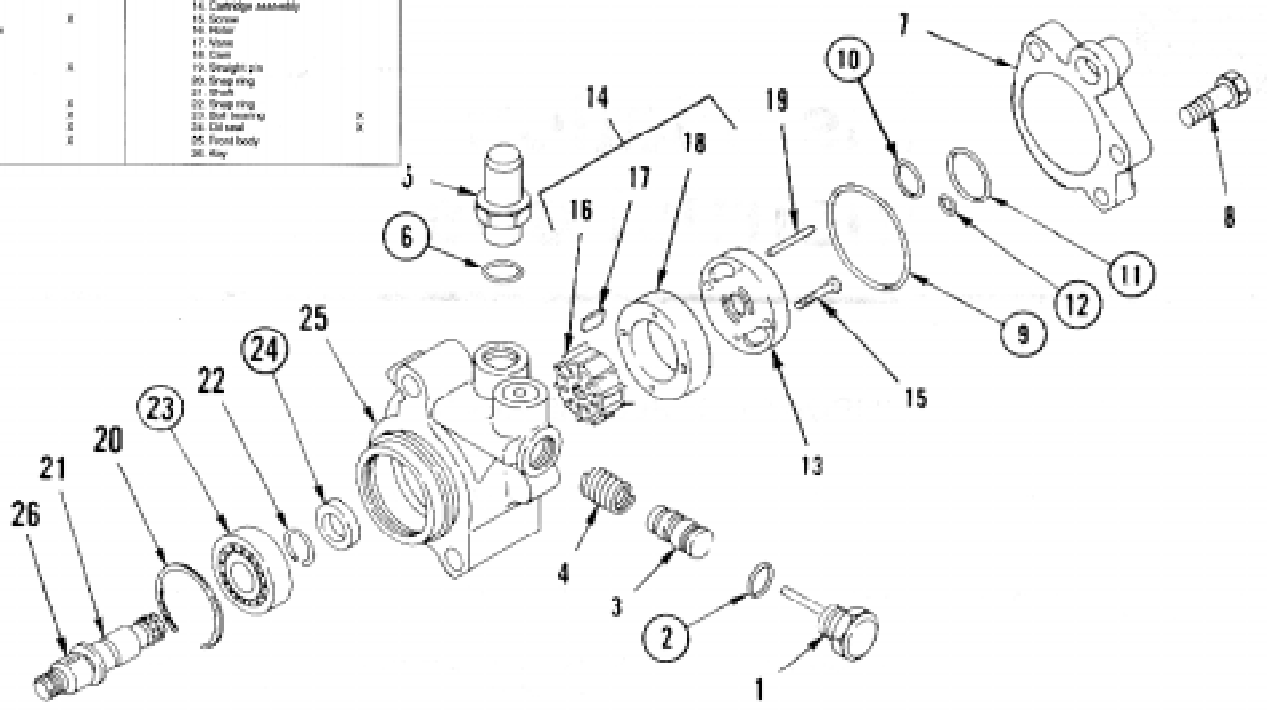

Figure 1.

IMPORTANT

This kit was designed for use in power steering pumps manufactured by JKC (Jidosha Kiki Company). This kit cannot be installed in other steering pumps. Power steering pumps manufactured by JKC can be identified by the symbol cast into the nameplate.

DISASSEMBLY STEPS

1. Remove plug (1), O-ring (2), flow control valve (3), and spring (4) from front body (25).

NOTE: Disassemble flow control valve (3) only if the discharge pressure is not within the standard.

2. Remove inlet connector (5) and O-ring (6).
3. Secure the power steering pump assembly in a vise.
4. Remove rear body (7) and O-rings (9, 10, 11 and 12) by removing bolts (8).
5. Remove pressure plate (13) and cartridge assembly (14) by removing screws (15) as shown in Figure 2.
6. Remove straight pins (19).

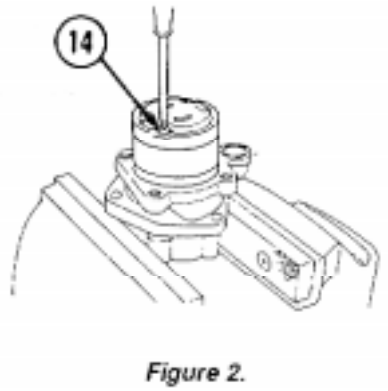

Figure 2.

7. Remove rotor (16) and vanes (17) from cam (18).
8. Remove snap ring (20) with snap ring pliers as shown in Figure 3.
9. Remove front body (25) from vise.

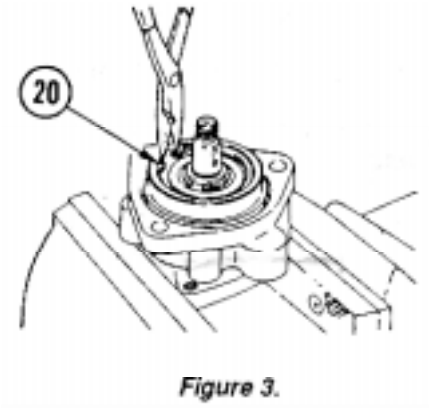

Figure 3.

10. Remove shaft (21) with ball bearing (23) and snap ring (22) from front body (25) by striking splined end of shaft lightly with a brass hammer.
11. Remove snap ring (22) with snap ring pliers as shown in Figure 4.

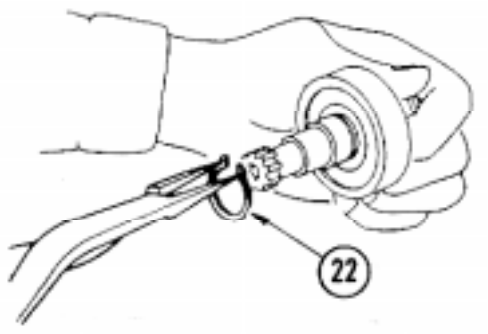

Figure 4.

12. Using a puller, remove ball bearing (23) from shaft (21).
13. Remove oil seal (24) from front body (25) with a hammer and a suitable bar as shown in Figure 5.

Figure 5.

14. Wash all disassembled parts in cleaning solvent and inspect carefully for scratches, cracks, or damage. Replace all parts which are furnished in repair kit. Replace any others which are faulty.

INSPECTION AND REPAIR

15. Make necessary correction or parts replacement if wear, damage or any other abnormal conditions are found through inspection.
16. Visually inspect the splines on shaft (21).
17. Visually inspect rotor (16), vanes (17), and cam (18) for excessive wear.

REASSEMBLY STEPS

Important Operations

Apply silicone grease to all O-rings prior to reassembly.

18. Using an arbor press, press-fit oil seal (24) in front body (25).
19. Using a press, press-fit ball bearing (23) onto shaft (21).

20. Install snap ring (22) on shaft (21)with snap ring pliers as shown in Figure 4.

CAUTION: When inserting shaft (21), be careful not to damage the oil seal (24).

21. Install shaft (21) with ball bearing (23) and snap ring (22) into front body (25).
22. Install snap ring (20) into front body (25).

NOTE: If snap ring groove is not exposed, tap on shaft with copper hammer.

23. Install straight pin (19) into front body (25).
24. Install rotor (16) onto shaft (21).
25. Install vanes (17) into grooves cut in rotor (16).

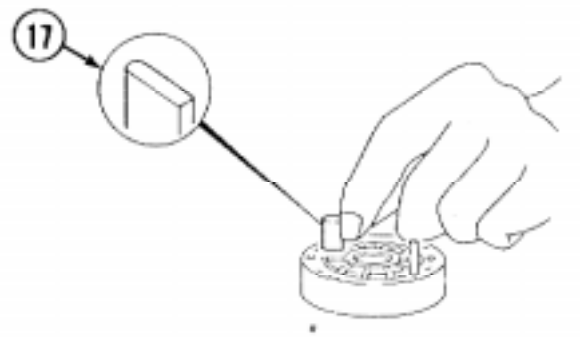

Figure 6.

NOTE: Install the vanes with their rounded ends facing outward as shown in Figure 6.

26. Install cam (18) using straight pin (19) for alignment.
27. Install pressure plate (13) and secure with screws (15).
28. Torque screws (15) to 4.3-6.5 ft. lbs. (6-9 nm) (0.6-0.9 Kg).
29. Install O-rings (9, 10, 11 and 12) into front body (25).
30. Install rear body (7) and secure with bolts (8).
31. Torque bolts (8) to 36-43 ft-lbs (49-59 N.m) (5-6 Kg-m).
32. Insert spring (4), flow control valve (3), O-ring (2), and plug (1) into front body (25).
33. Torque plug (1) to 36-43 ft-lbs (49-59 N.m) (5-6 Kg-m).