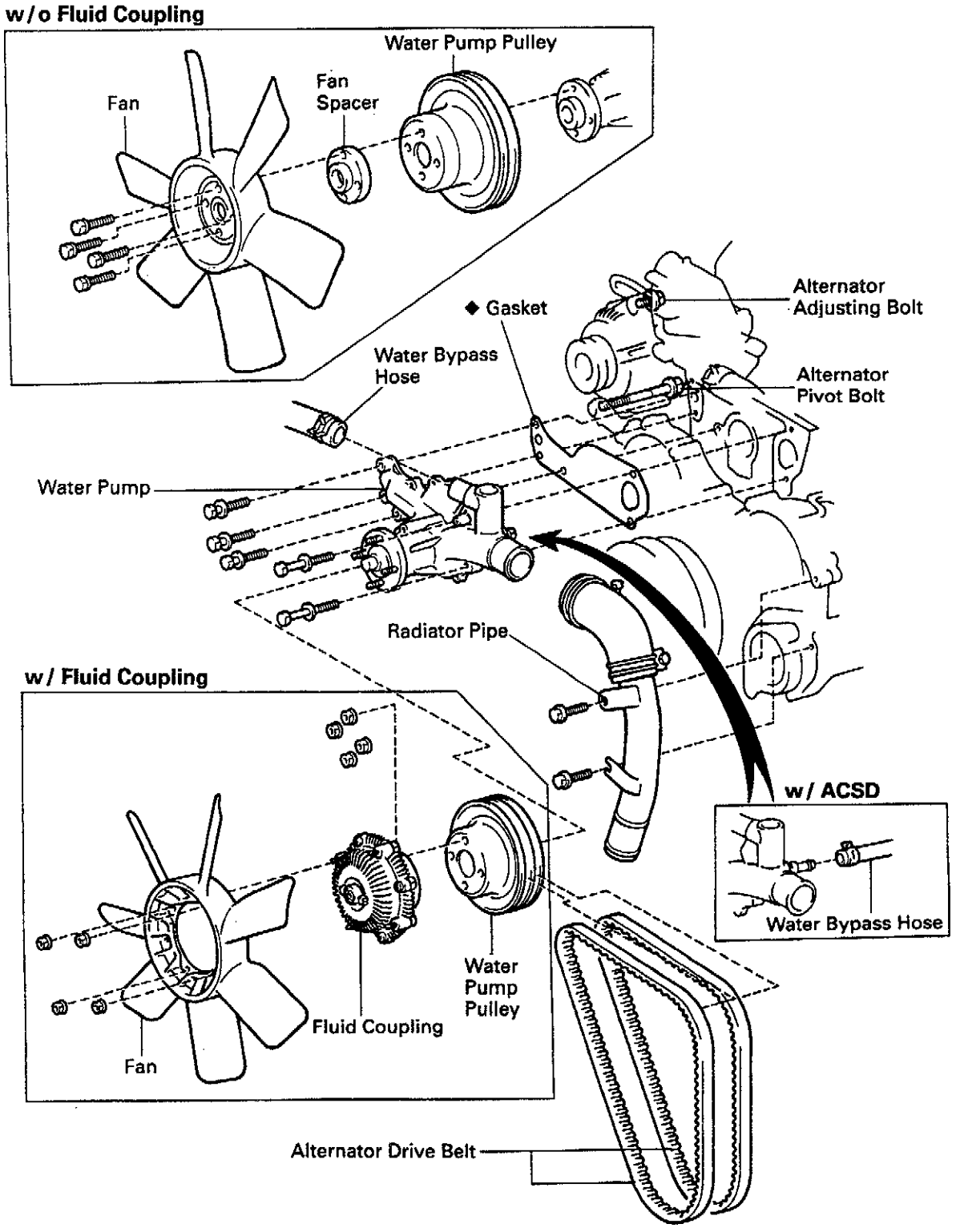
WATER PUMP

COMPONENTS FOR REMOVAL AND INSTALLATION

S0615-01

EG

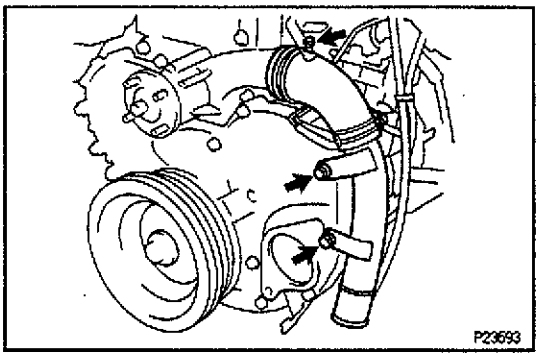


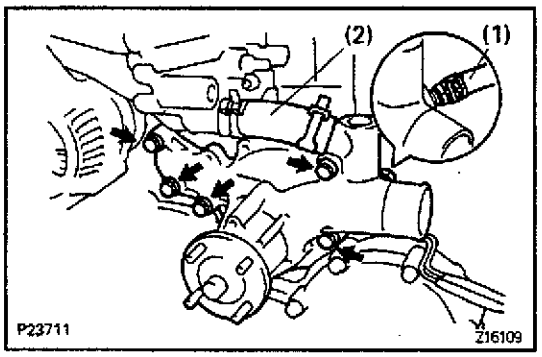
◆ Non-reusable part

P24067

WATER PUMP REMOVAL

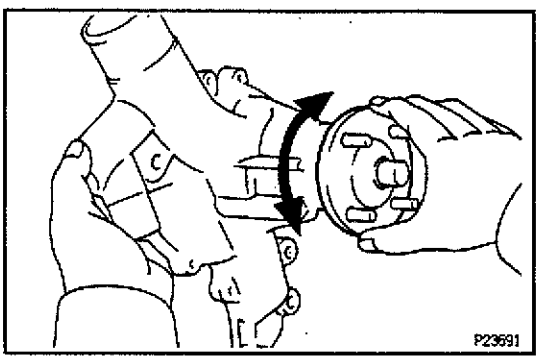
1. **DRAIN ENGINE COOLANT**
2. **w/ Fluid Coupling:**
   REMOVE DRIVE BELT(S), FAN, FLUID COUPLING AND WATER PUMP PULLEY
(a) Loosen the 4 water pump pulley nuts.
(b) Loosen the alternator pivot bolt and adjusting bolt, and remove the drive belt(s).
(c) Remove the 4 nuts, the fan, fluid coupling assembly and pulley.
(d) Remove the 4 nuts and fan from the fluid coupling.
3. **w/o Fluid Coupling:**
   REMOVE DRIVE BELT, FAN, FAN SPACER AND WATER PUMP PULLEY
(a) Loosen the alternator pivot bolt and adjusting bolt, and remove the drive belt.
(b) Remove the 4 bolts, fan, fan spacer and pulley.
4. **REMOVE RADIATOR PIPE**
(a) Remove the 2 bolts.
(b) Disconnect the radiator hose from the water pump, and remove the radiator pipe.
5. **REMOVE WATER PUMP**
(a) w/ ACSD:
Disconnect the water bypass hose (1) from the union on the water pump.
(b) Remove the 5 bolts.
(c) Disconnect the water bypass hose (2) from the water pump, and remove the water pump and gasket.



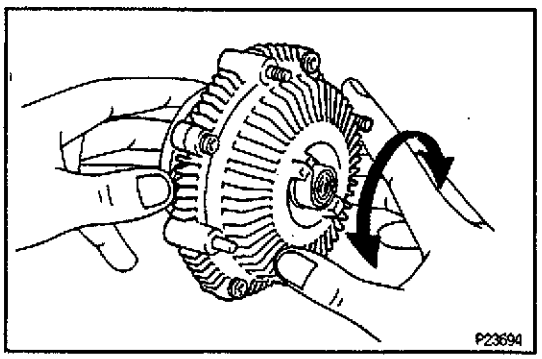


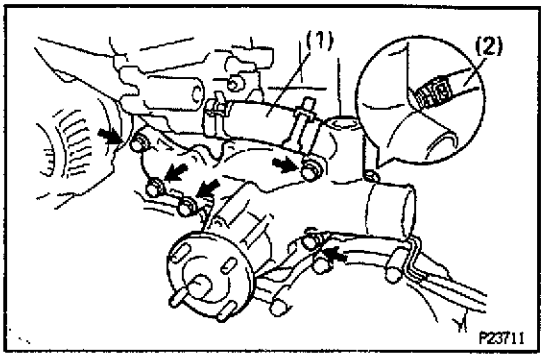
WATER PUMP INSPECTION

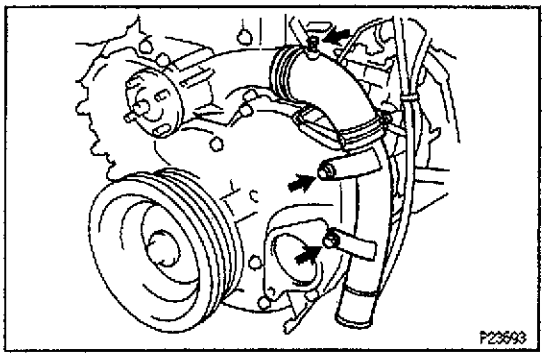
1. **INSPECT WATER PUMP**
Turn the pulley and check that the water pump bearing moves smoothly and quietly.
If necessary, replace the water pump.



2. **INSPECT FLUID COUPLING**
Check the fluid coupling for damage and silicon oil leakage.
If necessary, replace the fiuid coupling.







EG

WATER PUMP INSTALLATION

1. **INSTALL WATER PUMP**

(a) Connect the water bypass hose (1) to the water pump.

(b) Install a new gasket and the water pump with the 5 bolts.

Torque: 25 N·m (255 kgf·cm, 18 ft·lbf)

(c) w/ ACSD:

Connect the water bypass hose (2) to the union on the water pump.

2. **INSTALL RADIATOR PIPE**

(a) Connect the radiator hose to the water pump.

(b) Install the radiator pipe with 2 bolts.

Torque: 21 N·m (214 kgf·cm, 15 ft·lbf)

3. **w/ Fluid Coupling:**
INSTALL WATER PUMP PULLEY, FLUID COUPLING, FAN AND DRIVE BELT(S)

(a) Install the fan to the fluid coupling with 4 new nuts.

Torque: 6.5 N·m (66 kgf·cm, 57 in.·lbf)

(b) Temporarily install the pump pulley, the fluid fan and coupling assembly with the 4 nuts.

(c) Install and adjust the drive belt(s) with the alternator adjusting bolt and pivot bolt.

Drive belt deflection:

See step 3 in on–vehicle inspection in Charging System

Torque:

Adjusting bolt

18.5 N·m (189 kgf·cm, 14 ft·lbf)

Pivot bolt

37.5 N·m (382 kgf·cm, 28 ft·lbf)

(d) Tighten the 4 water pump pulley nuts.

Torque: 18.5 N·m (189 kgf·cm, 14 ft·lbf)

4. **w/o Fluid Coupling:**
INSTALL WATER PUMP PULLEY, FAN SPACER, FAN AND DRIVE BELT

(a) Install the pump pulley, fan spacer and fan with the 4 bolts.

Torque: 18.5 N·m (189 kgf·cm, 14 ft·lbf)

(b) Install and adjust the drive belt with the alternator adjusting bolt and pivot bolt.

Drive belt deflection:

See step 3 in on–vehicle inspection in Charging System

Torque:

Adjusting bolt

18.5 N·m (189 kgf·cm, 14 ft·lbf)

Pivot bolt

37.5 N·m (382 kgf·cm, 28 ft·lbf)

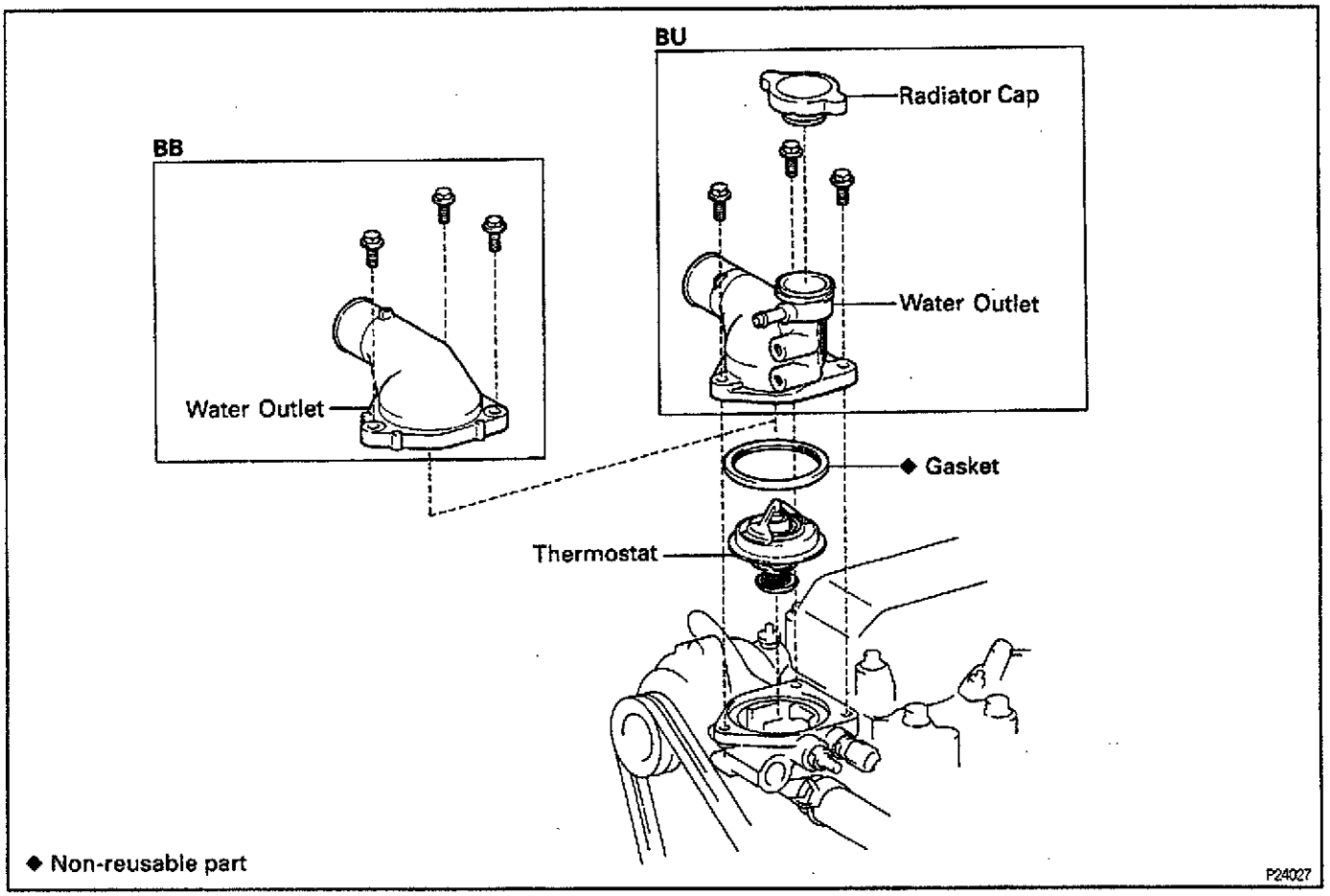
5. FILL WITH ENGINE COOLANT
6. START ENGINE, AND CHECK FOR COOLANT LEAKS

THERMOSTAT

B0180-12

COMPONENTS FOR REMOVAL AND INSTALLATION

EG



B0618-01

THERMOSTAT REMOVAL

HINT: Removal of the thermostat would have an adverse effect, causing a lowering of cooling efficiency. Do not remove the thermostat, even if the engine tends to overheat.

1. DRAIN ENGINE COOLANT
2. REMOVE WATER OUTLET AND THERMOSTAT

(a) Remove the 3 bolts, water outlet and thermostat.
(b) Remove the gasket from the thermostat.