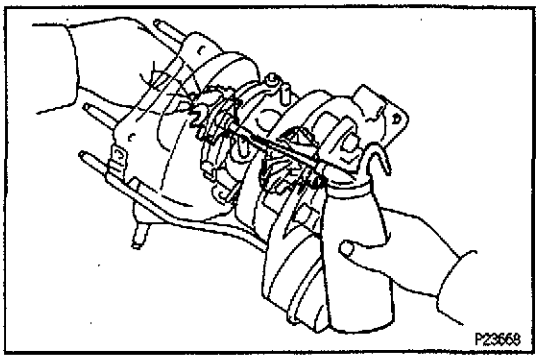
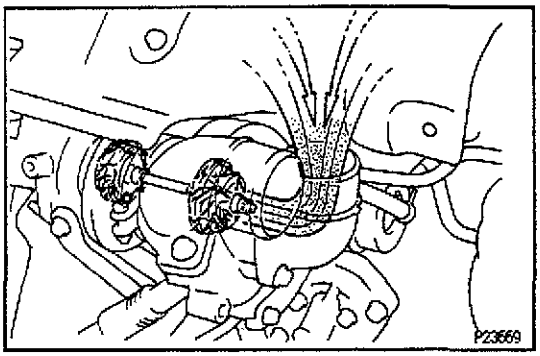


9. **If replacing the turbocharger, put approx. 20 cm³ (1.2 cu in.) of fresh oil into the turbocharger oil inlet hole and turn the turbine wheel by hand to spread oil to the bearing.**
10. **If overhauling or replacing the engine, cut the fuel supply after reassembly and crank the engine for 30 seconds to distribute oil throughout the engine. Then allow the engine to idle for 60 seconds.**



11. **If the engine is running without the air cleaner, case cover and hose, entry of foreign particles will damage the wheels which run at extremely high speed.**

TROUBLESHOOTING

EG00F–01

HINT: Before troubleshooting the turbocharger, first check the engine itself. (valve clearance, engine compression, injection timing etc.)

INSUFFICIENT ACCELERATION, LACK OF POWER OR EXCESSIVE FUEL CONSUMPTION

Possible Cause	Check Procedure and Correction Method
1. TURBOCHARGING PRESSURE TOO LOW	Check turbocharging pressure. (Se page EG-125) **Turbocharging pressure:** **29.4 – 53.2 kPa** **(0.30 – 0.54 kgf/cm², 4.6 – 7.7 psi)** If pressure is below specifications, begin diagnosis from item 2.
2. RESTRICTED INTAKE SYSTEM	Check intake air system, and repair or replace parts as necessary. (See page EG-125)
3. LEAK IN INTAKE AIR SYSTEM	Check intake air system, and repair or replace parts as necessary. (See page EG-125)
4. RESTRICTED EXHAUST SYSTEM	Check exhaust system, and repair or replace parts as necessary. (See page EG-125)
5. LEAK IN EXHAUST SYSTEM	Check exhaust system, and repair or replace parts as necessary. (See page EG-125)

6. ERRATIC TURBOCHARGER OPERATION	Check rotation of impeller wheel. If it does not turn or turns with heavy drag, replace turbocharger. Check axial and radial plays of turbine shaft. (See page EG-128) **Maximum axial play:** **0.13 mm (0.0051 in.) or less** **Maximum radial play:** **0.18 mm (0.0071 in.) or less** If play is greater than maximum, replace turbocharger.

EG

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ABNORMAL NOISE

Possible Cuause	Check Procedure and Correction Method
1. TURBOCHARGING HEAT INSULATOR RESONANCE	Check for loose, improerly installed or deformed insulator nuts and bolts, and repair or replace as necessary.
2. EXHAUST PIPE LEAKING OR VIBRATING	Check for deformed exhaust pipe, loose bolts or damaged gasket, and repair or replace as necessary.
3. ERRATIC TURBOCHARGER OPERATION	Refer to item 6 of INSUFFICIENT ACCELERATION, LACK OF POWER OR EXCESSIVE FUEL CONSUMPTION.

V06876

EXCESSIVE OIL CONSUMPTION OR WHITE EXHAUST

Possible Cuause	Check Procedure and Correction Method
FAULTY TURBOCHARGER OIL SEAL	Check for oil leakage in exhaust system. • Remove turbine elbow from turbocharger, and check for excessive carbon deposits on turbine wheel. Excessive carbon deposits indicate a faulty turbocharger. Check for oil leakage in intake air system. • Check for axial and radial plays of turbine shaft, and replace turbocharger if necessary. (See page EG-128) **Maximum axial play:** **0.13 mm (0.0051 in.) or less** **Maximum radial play:** **0.18 mm (0.0071 in.) or less** **NOTICE: Some oil mist in blowby from PCV is normal. Do not mistake it for oil leak from turbocharger.**

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