3) Using a dial gauge, measure impeller runout in thrust direction while rotating the pulley.

#### "Thrust" runout limit: 0.5 mm (0.020 in)



4) Check clearance between impeller and pump case.

- Clearance between impeller and pump case: Standard
  - 0.5 0.7 mm (0.020 0.028 in) Limit

1.0 mm (0.039 in)



5) After water pump installation, check pulley shaft for engine coolant leaks. If leaks are noted, replace water pump assembly.

# 3. Thermostat

## A: REMOVAL AND INSTALLATION

1) Drain engine coolant.

Set container under the vehicle, and remove drain cock from radiator.

2) Disconnect radiator outlet hose from thermostat cover.

3) Remove thermostat cover and gasket, and pull out the thermostat.



4) Install the thermostat in the intake manifold, and install the thermostat cover together with a gasket.

#### CAUTION:

• When reinstalling the thermostat, use a new gasket.

• The thermostat must be installed with the jiggle pin upward.

• In this time, set the jiggle pin of thermostat for front side.



### **B: INSPECTION**

Replace the thermostat if the valve does not close completely at an ambient temperature or if the following test shows unsatisfactory results.

Immerse the thermostat and a thermometer in water. Raise water temperature gradually, and measure the temperature and valve lift when the valve begins to open and when the valve is fully opened. During the test, agitate the water for even temperature distribution. The measurement should be to the specification.

Starts to open: 76.0 — 80.0°C (169 — 176°F)

Fully opens: 91°C (196°F)



- (A) Thermometer
- (B) Thermostat

- 4. Radiator
- A: REMOVAL
- 1) Disconnect battery ground cable.



- 2) Lift-up the vehicle.
- 3) Remove under cover.



4) Drain engine coolant completely. <Ref. to 2-5 [W1A0].>

