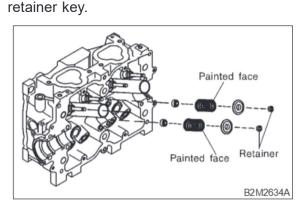
(5) Compress valve spring and fit valve spring



(6) After installing, tap valve spring retainers lightly with wooden hammer for better seating.

# **E: INSTALLATION**

# 1. CYLINDER HEAD

1) Install cylinder head and gaskets on cylinder block.

## **CAUTION:**

Use new cylinder head gaskets.

- 2) Tighten cylinder head bolts.
  - (1) Apply a coat of engine oil to washers and bolt threads.
  - (2) Tighten all bolts to 29 N·m (3.0 kg-m, 22 ft-lb) in alphabetical sequence.

Then tighten all bolts to 69 N·m (7.0 kg-m, 51 ft-lb) in alphabetical sequence.

- (3) Back off all bolts by 180° first; back them off by 180° again.
- (4) Tighten bolts (a) and (b) to 34 N·m (3.5 kg-m, 25 ft-lb).
- (5) Tighten bolts (c), (d), (e) and (f) to 15 N·m (1.5 kg-m, 11 ft-lb).
- (6) Tighten all bolts by 80 to 90° in alphabetical sequence.

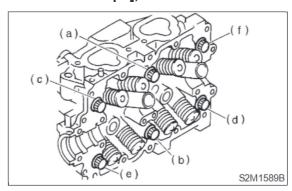
## **CAUTION:**

Do not tighten bolts more than 90°.

(7) Further tighten all bolts by 80 to 90° in alphabetical sequence shown in figure below.

#### **CAUTION:**

Ensure that the total "re-tightening angle" [in the former two steps], do not exceed 180°.



3) Install oil level gauge guide and tighten attaching bolt (left side only).

## 2. RELATED PARTS

#### **CAUTION:**

Be careful not to scratch the mating surface of cylinder block and oil pump.

- 1) Install camshafts. <Ref. to 2-3 [W5C0].>
- 2) Install intake manifold. <Ref. to 2-7 [W3D0].>
- 3) Tighten bolt which installs A/C compressor bracket on cylinder head. (With A/C model)