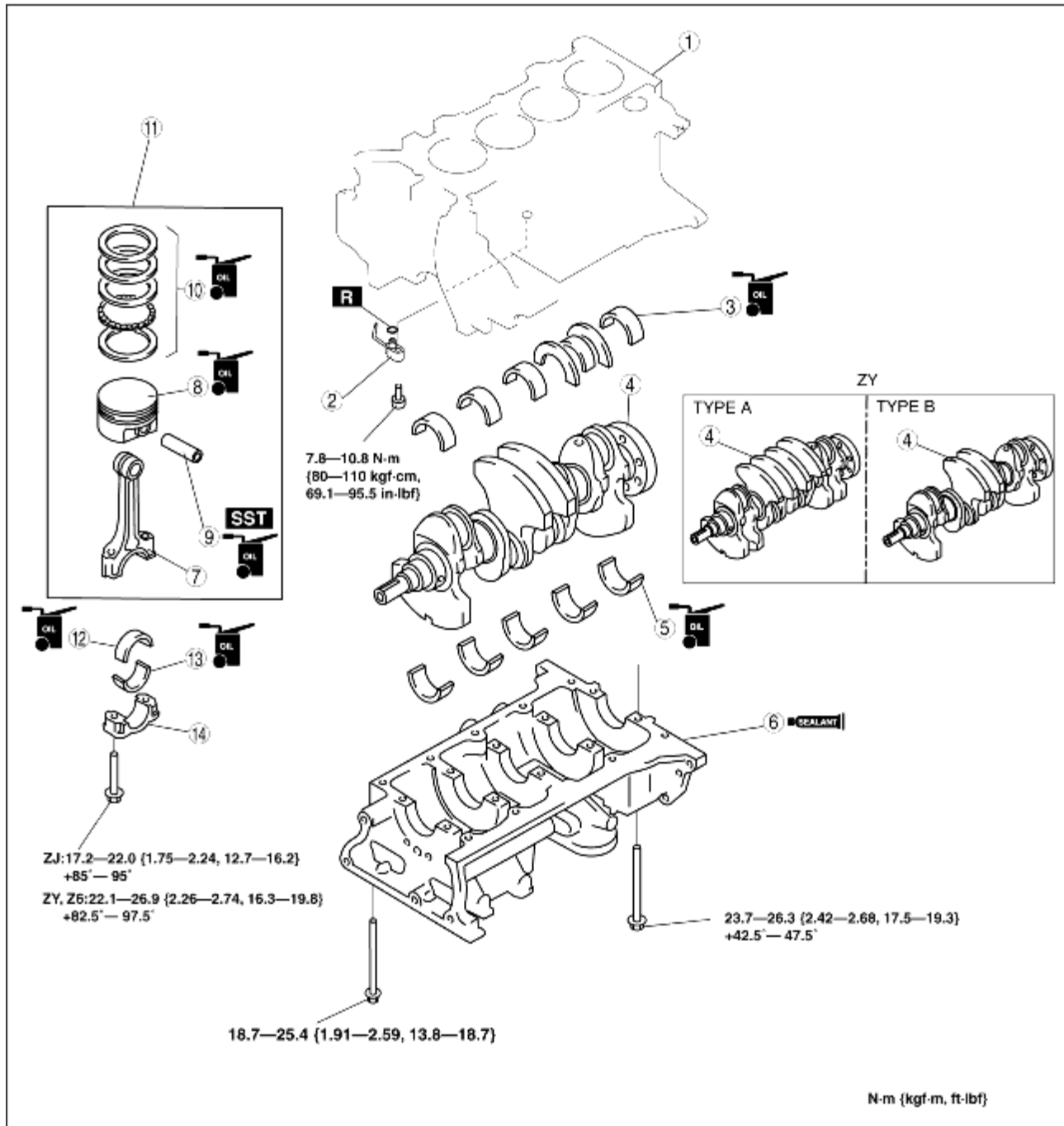


CYLINDER BLOCK (I) ASSEMBLY

B3E011010300E04

1. Assemble in the order indicated in the table.



B3E0110E005

1	Upper cylinder block
2	Oil jet valve
3	Upper main bearing (See Main Bearing Assembly Note)
4	Crankshaft

5	Lower main bearing (See Main Bearing Assembly Note)
6	Lower cylinder block (See Lower Cylinder Block Assembly Note)
7	Connecting rod
8	Piston (See Piston Assembly Note)
9	Piston pin (See Piston Pin Assembly Note)
10	Piston ring (See Piston Ring Assembly Note)
11	Piston, connecting rod
12	Upper connecting rod bearing (See Connecting Rod Bearing Assembly Note)
13	Lower connecting rod bearing (See Connecting Rod Bearing Assembly Note)
14	Connecting rod cap (See Connecting Rod Cap Assembly Note)

Main Bearing Assembly Note

Caution

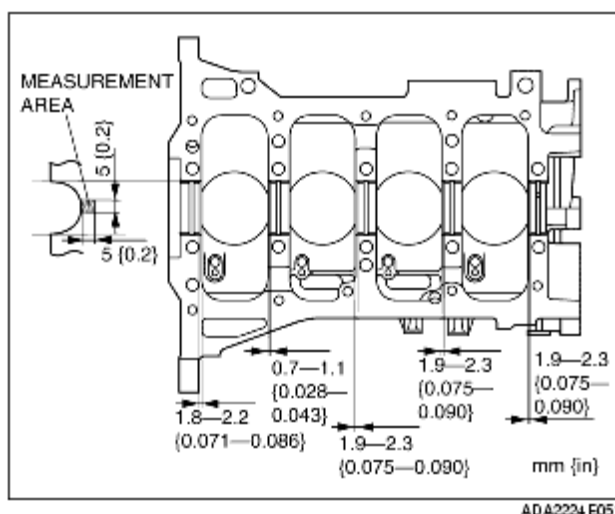
- If a main bearing is reused, mistaking the position and direction of the bearing could result in engine damage due to seizure or burning of the bearing. Using the identifier paint marks employed during removal, assemble the main bearings at the positions numbered when the journal was removed, and so that the painted areas are on the front sides.

1. Assemble the upper and lower main bearing as specified shown in the figure.

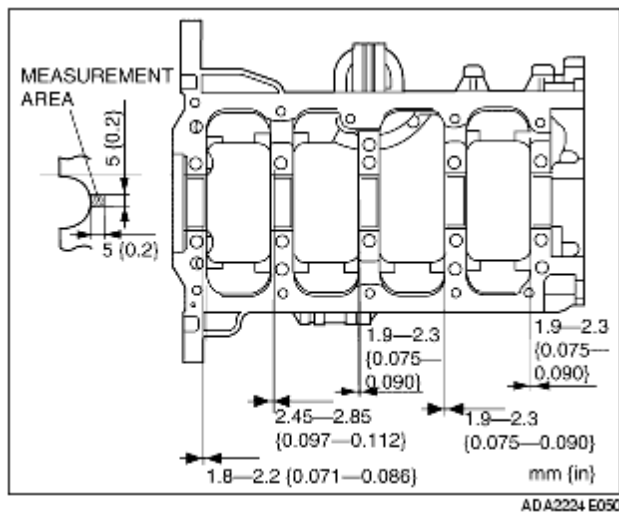
Caution

- If the lower main bearing is not assembled according to the specification it could result in engine damage from seizure or burning of the bearing. Measure the bearing using a vernier caliper and assemble it within the specification.

Upper main bearing

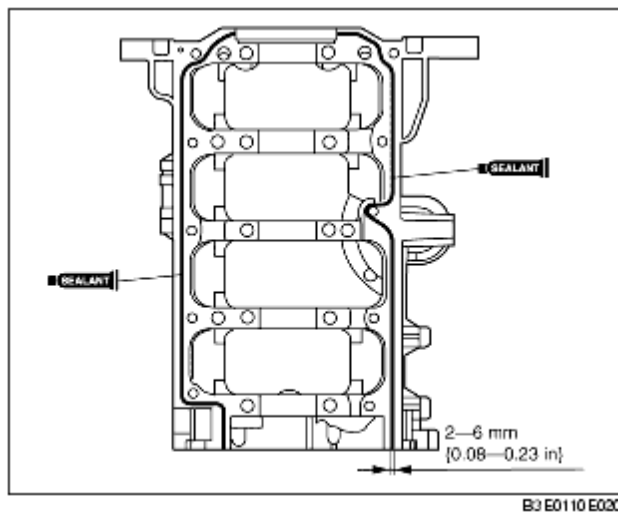


Lower main bearing

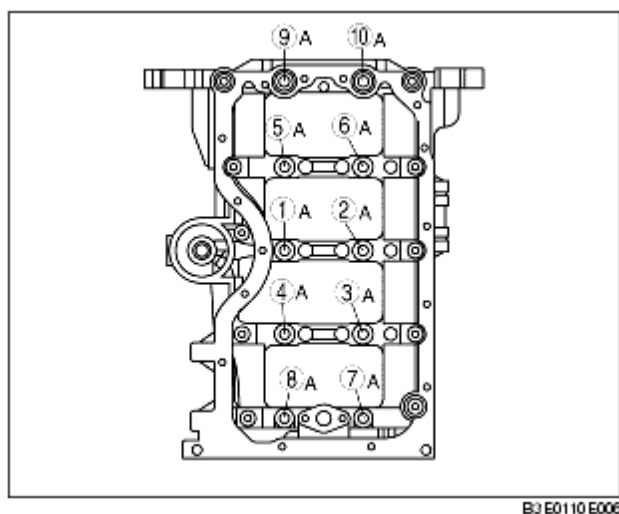


Lower Cylinder Block Assembly Note

1. Apply silicone sealant to the lower cylinder block attachment side as shown in the figure.



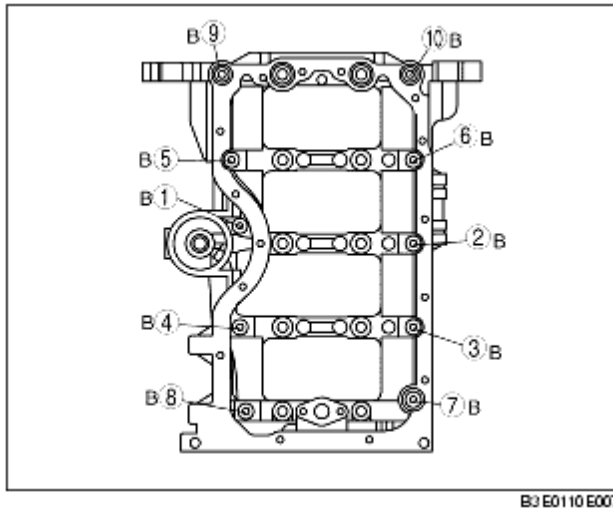
2. Tighten the lower cylinder block installation bolts A in two steps in the order shown in the figure.



(1) Tightening torque

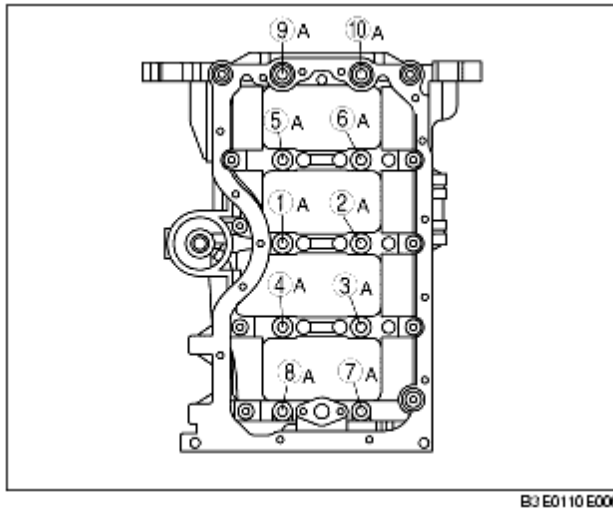
23.7-26.3 N·m
{2.42-2.68 kgf·m, 17.5-19.3 ft·lbf}
(2)Tightening angle
42.5°-47.5°

3. Tighten the lower cylinder block installation bolts B in the order shown in the figure.



Tightening torque
18.7-25.4 N·m {1.91-2.59 kgf·m, 13.8-18.7 ft·lbf}

4. Loosen bolts A and tighten the lower cylinder block installation bolts in two steps in the order shown a second time.

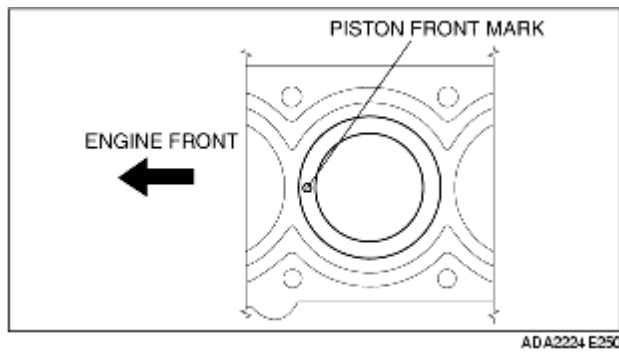


(1)Tightening torque
23.7-26.3 N·m
{2.42-2.68 kgf·m, 17.5-19.3 ft·lbf}
(2)Tightening angle
42.5°-47.5°

Piston Assembly Note

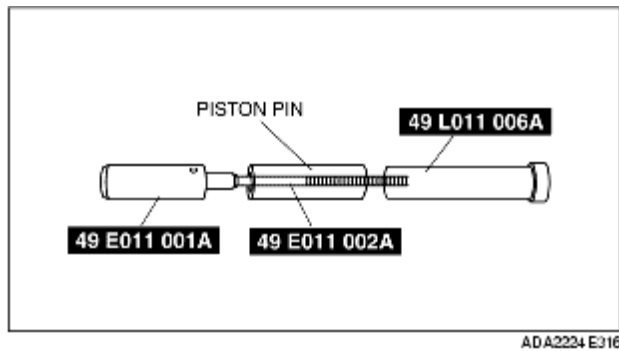
1. Position the end gap of each oil ring as shown in the figure.

2. Insert the piston into the cylinder with the mark on top of the piston facing the front of the engine.

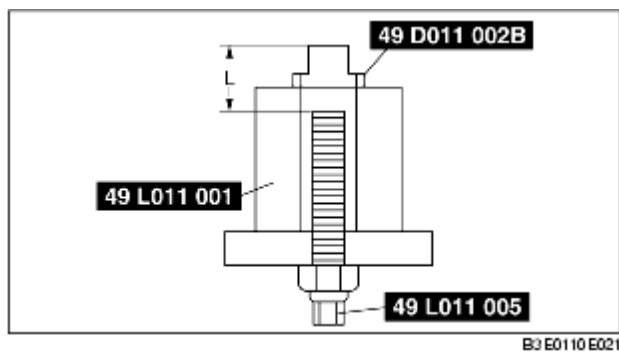


Piston Pin Assembly Note

1. Assemble the **SSTs** as shown in the figure.



2. Adjust the **SSTs** (stopper bolt) to the L length.



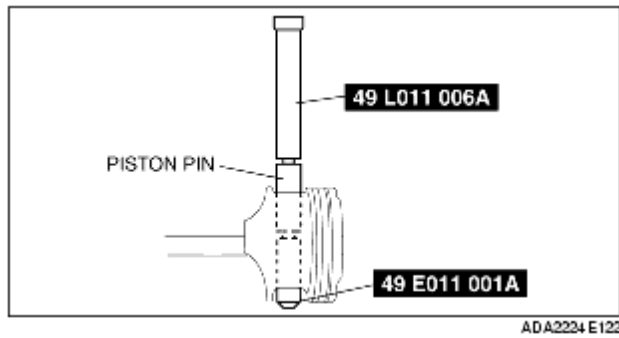
Standard L length

ZJ: 61.35 mm {2.415 in}

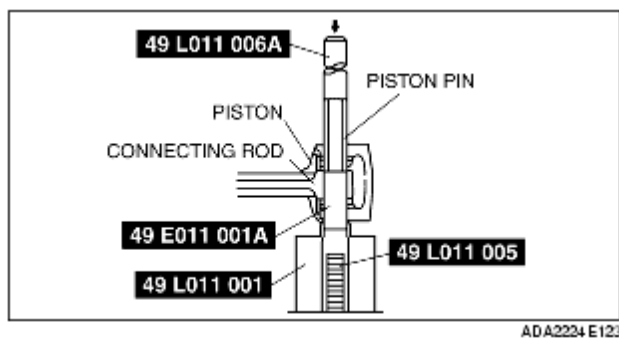
ZY, Z6: 60.85 mm {2.396 in}

3. Point the end mark on the connecting rod and F- mark on the piston in the same direction as shown in the figure.

4. Insert the assembled piston pin and the **SSTs** into the piston and the connecting rod.



5. Set the **SSTs** as shown in the figure.

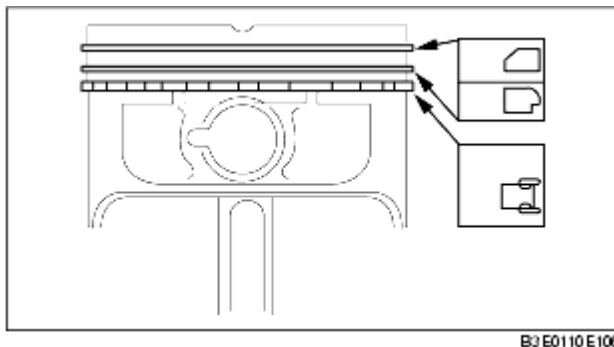


6. Press the piston pin into the piston and connecting rod until the **SST** (guide) contacts the **SST** (stopper bolt) using the hydraulic press. If it is less than the specification, replace the piston pin or the connecting rod.

Pressure force
 2940-14700 N {300-1498 kg, 660-3297 lbf}

Piston Ring Assembly Note

1. Assemble the oil ring.



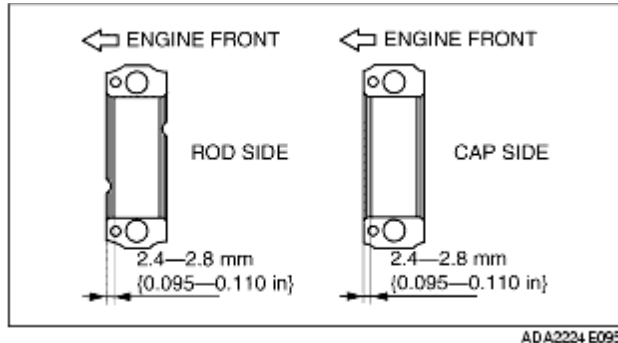
2. Install the second ring with the notch facing downward.
 3. Install the top ring with scraper face side upward.

Connecting Rod Bearing Assembly Note

Caution

- If a connecting rod bearing is reused, mistaking the position and direction of the bearing could result in engine damage due to seizure or burning of the bearing.
- Using the identifier paint marks employed during removal, assemble the main bearings at the positions numbered when the journal was removed, and so that the painted areas are on the front sides.

1. Install the connecting rod bearing to the connecting rod and the connecting rod cap as specified shown in the figure.



Caution

- If the connecting rod bearing is not assembled according to the specification it could result in engine damage from seizure or burning of the bearing. Measure the bearing using a vernier caliper and install it within the specification.

Connecting Rod Cap Assembly Note

1. Install the connecting rod cap with the knock pins and the alignment marks aligned.
2. Tighten the connecting rod cap installation bolt in two steps.

(1) Tightening torque

ZJ: 17.2-22.0 N·m

{1.75-2.24 kgf·m, 12.7-16.2 ft·lbf}

ZY, Z6: 22.1-26.9 N·m

{2.26-2.74 kgf·m, 16.3-19.8 ft·lbf}

(2) Tightening angle

ZJ: 85°-95°

ZY, Z6: 82.5°-97.5°