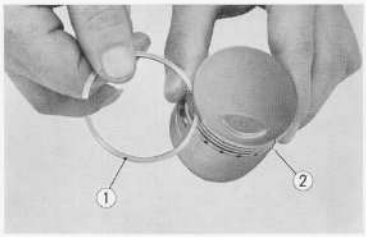

Fig. 3. 56 Checking piston ring contact
① Piston ring
② Piston grooves

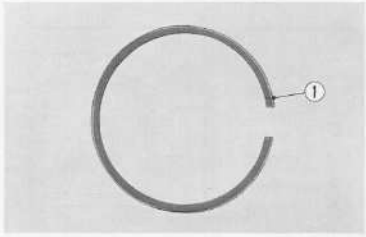

Fig. 3. 57 Piston ring
① Mark

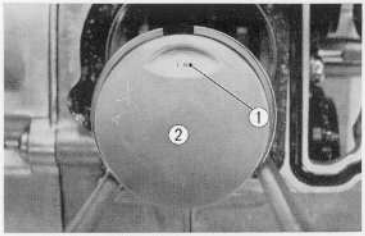

Fig. 3. 58 Assembling the piston
① "IN" mark
② Piston

2. When making piston ring end gap measurement, insert the ring carefully into the cylinder to prevent scratches or gouges to the cylinder wall.

D. Reassembly

1. Install the piston rings on the piston in the same manner as it was removed. The bottom oil ring must be installed first.

CAUTION :

When new piston ring is installed, a check should be made to assure that the ring fits freely in the groove. This can be done by rolling the the piston ring ① externally in the piston groove ②. **(Fig. 3. 56)**

The rings must not be installed upside down ; this will cause oil pumping. The top side of the ring is etched at the end with the initial of the manufacture's name. **(Fig. 3. 57)**

Use of the piston ring tool will facilitate installation and prevent possibility of ring breakage.

2. Assemble the piston ① to the small end of the connecting rod, only a slight hand pressure should be required to insert the piston pin. Always install a new piston pin clips.

CAUTION :

The piston must be assembled so that the "IN" ① stamped on the piston head is toward the top when the engine is in the normal attitude. **(Fig. 3. 58)**

3. Assemble the cam chain and cam chain guide roller to the cylinder.
4. Install the cylinder.

CAUTION :

The ring gap of the three piston rings should be staggered 120° apart.

Use of the piston ring compressor tool (Tool No. 07032~03301) for installing the cylinder will prevent damage to the piston ring and further, it will simplify the work.

Check to make sure that the cam chamber gasket is properly seated.

5. Install the cylinder head in accordance with paragraph 3. 5 D.