

1D

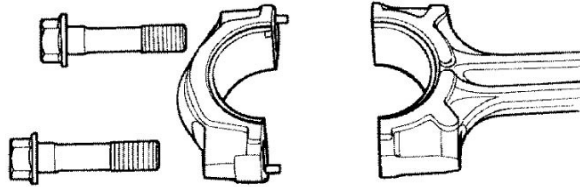


## Conrod Crank Pin Bearing Inspection and Selection

Refer to [Conrod Removal and Installation](#).

### Inspection

- 1) Inspect the bearing surfaces for any signs of fusion, pitting, burn or flaws. If any, replace them with a specified set of bearings.



- 2) Place the plastigage axially along the crank pin, avoiding the oil hole, as shown.

#### **Special Tool**

**(A): [09900-22301](#)**



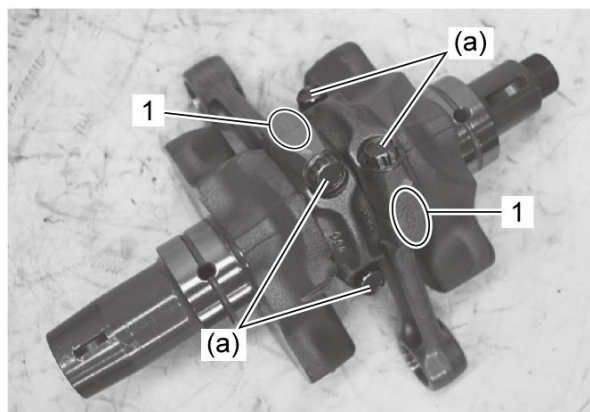
- 3) Tighten the conrod cap bolts to the specified torque, in two stages.

#### **NOTE:**

- When installing the conrod cap to the crank pin, make sure that I.D code (1) on the conrod faces towards the intake side.
- Never rotate the crankshaft or conrod when a piece of plastigage is installed.

#### **Tightening torque**

**Conrod cap bolt (a): 35 N·m (3.5 kgf-m, 25.5 lbf-ft) → turn clockwise 90°**



- 4)** Remove the conrod caps and measure the width of the compressed plastigage using the envelope scale. This measurement should be taken at the widest part of the compressed plastigage.  
If the oil clearance exceeds the service limit, select the specified bearings from the bearing selection table.

**Conrod big end oil clearance**

**Standard: 0.032 – 0.056 mm (0.0013 – 0.0022 in)**

**Conrod big end oil clearance**

**Service limit: 0.080 mm (0.0031 in)**



## Selection

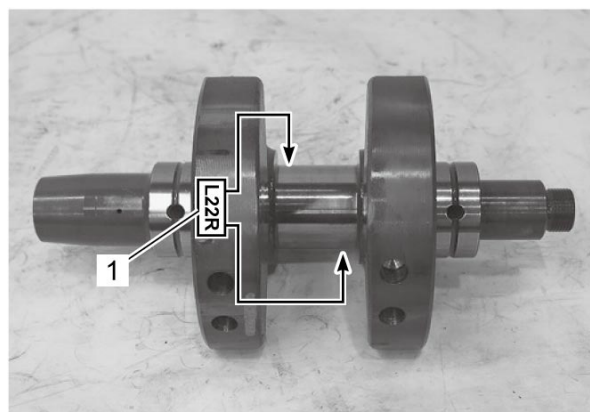
- 1)** Check the corresponding conrod I.D. code numbers ([1] or [2]) (1).



### Conrod I.D. specification

Code (1)	I.D. specification
1	48.000 – 48.008 mm (1.8898 – 1.8901 in)
2	48.008 – 48.016 mm (1.8901 – 1.8904 in)

- 2) Check the corresponding crank pin O.D. code numbers ([1], [2] or [3]) (1).



- 3) Measure the conrod crank pin O.D. with the special tool. If any of the measurements are out of specification, replace the crankshaft.

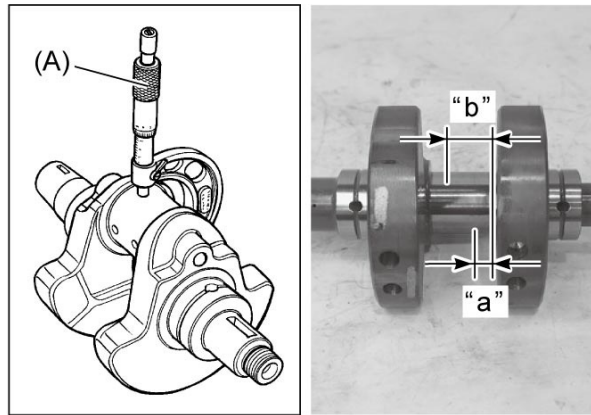
#### **NOTE:**

The crank pin O.D. measurement should be taken at 11 mm (0.4 in) and 33 mm (1.3 in) positions from the crank pin end.

### Crank pin O.D. specification

Code (2)	O.D. specification
1	44.992 – 45.000 mm (1.7713 – 1.7717 in)
2	44.984 – 44.992 mm (1.7710 – 1.7713 in)

3	44.976 – 44.984 mm (1.7707 – 1.7710 in)
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**Special Tool****(A): 09900-20202**

"a":	11 mm (0.4 in)	"b":	33 mm (1.3 in)
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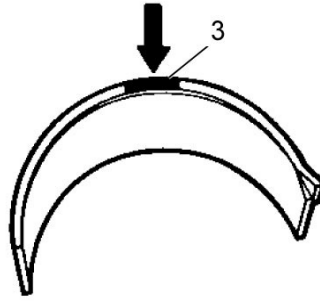
- 4) Select the specified bearings from the bearing selection table.

**NOTICE:****The bearings should be replaced as a set.****Bearing selection table**

	Code	Crank pin O.D. (2)		
		1	2	3
Conrod I.D. (1)	1	Green	Black	Brown
	2	Black	Brown	Yellow

**Bearing thickness specification**

Color (3) (Part No.)	Thickness
Green (12164-31J00-0A0)	1.480 – 1.484 mm (0.0583 – 0.0584 in)
Black (12164-31J00-0B0)	1.484 – 1.488 mm (0.0584 – 0.0586 in)
Brown (12164-31J00-0C0)	1.488 – 1.492 mm (0.0586 – 0.0587 in)
Yellow (12164-31J00-0D0)	1.492 – 1.496 mm (0.0587 – 0.0589 in)



3.	Color code
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