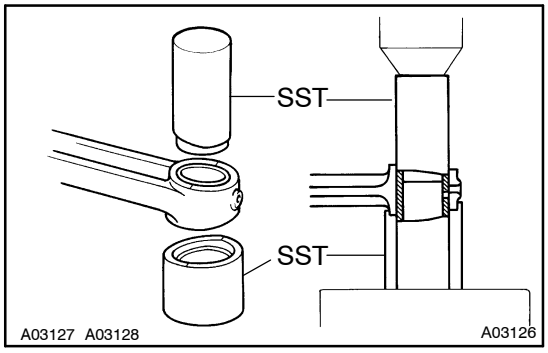
EM14P–02

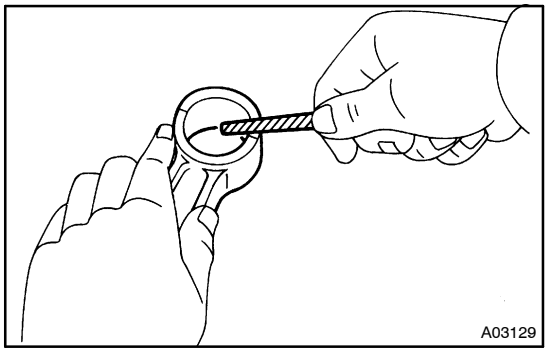
REPLACEMENT

1. REPLACE CONNECTING ROD BUSHINGS

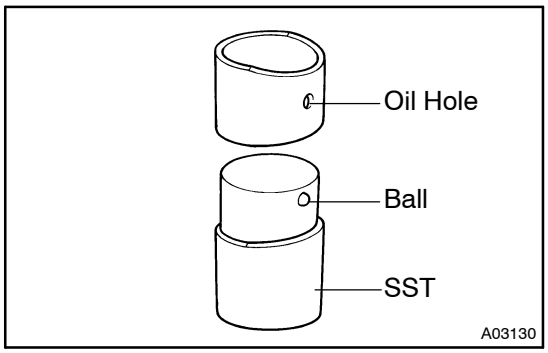
(a) Using SST and a press, press out the bushing.



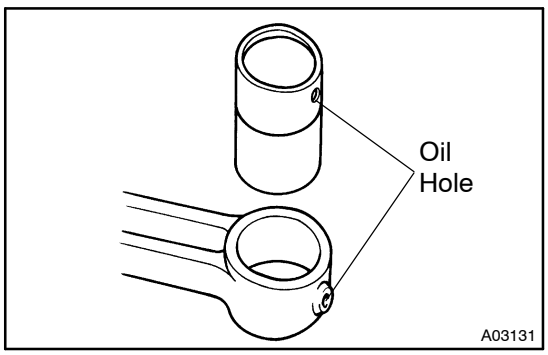
(b) Using a round file, lightly file off any roughness from the small end of the connecting rod.



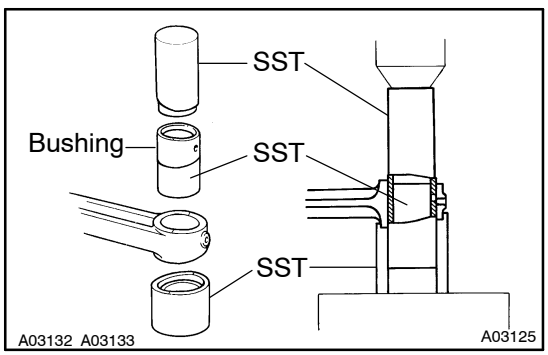
(c) Attach the bushing to SST with the ball of SST inside the oil hole of the bushing.

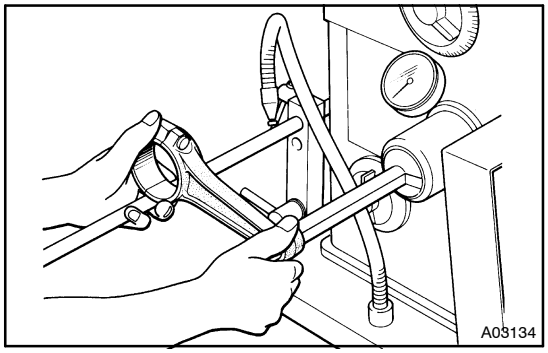


(d) Align the oil holes of a new bushing and the connecting rod.



(e) Using SST and a press, press in the bushing.

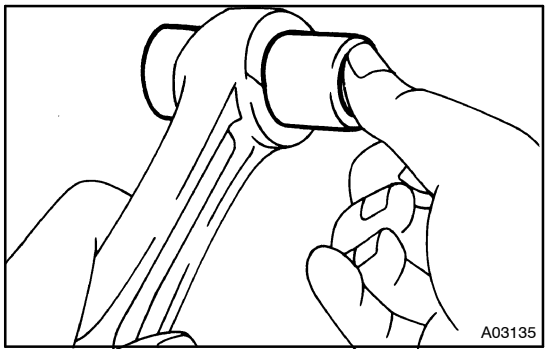




(f) Using a pin hole grinder, hone the bushing to obtain the standard specified clearance between the bushing and piston pin.

Standerd diameter:

37.009 – 37.019 mm (1.4570 – 1.4574 in.)



(g) Check the piston pin fit at normal room temperature.
Coat the piston pin with engine oil, and push it into the connecting rod with your thumb.

2. REPLACE OVERSIZED (O/S) PISTONS

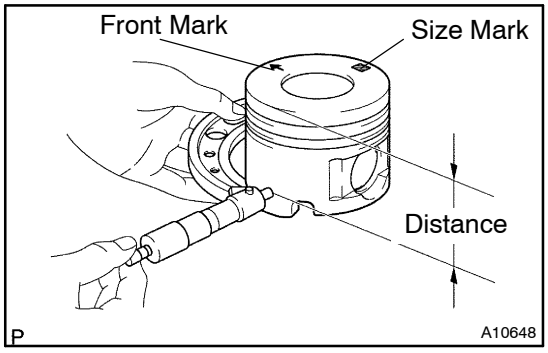
HINT:

- Bore all the 4 cylinders to the O/S piston outside diameter.
- Replace all the piston rings with ones to match the O/S pistons.

(a) Keep 4 new O/S pistons.

O/S piston diameter:

O/S 0.50	108.380 – 108.410 mm (4.2669 – 4.2681 in.)
O/S 0.75	108.630 – 108.660 mm (4.2768 – 4.2779 in.)
O/S 1.00	108.880 – 108.910 mm (4.2866 – 4.2878 in.)



(b) Using a micrometer, measure the piston diameter at right angles to the piston pin center line, the indicated distance from the piston head.

Distance: 76.55 mm (3.018 in.)

(c) Calculate the amount each cylinder is to be rebored as follows:

Size to be rebored = P + C – H

P = Piston diameter

C = Piston clearance:

0.110 – 0.130 mm (0.0043 – 0.0051 in.)

H = Allowance for honing: 0.02 mm (0.0008 in.) or less

(d) Bore and hone the cylinders to calculated dimensions.

Maximum honing: 0.02 mm (0.0008 in.)

NOTICE:

Excess honing will destroy the finished roundness.