

Conrod fitting

Floating pin



1. Removal

- Remove the circlips on the piston pin using an appropriate tool.
- Then press the pin out of the pin bore—without damaging the piston.
- Do not reuse old circlips.

Fixed-pin connecting rod



1. Removal

- The piston pin must be pressed out.
- When heated, the shrink fit between the conrod and the pin cannot be loosened because the two parts expand in equal measure.
- With the piston placed on an adjusted form base, press the pin and stop mandrel out.
- The piston can become distorted when the pin is pressed out—therefore replace the piston afterwards.



2. Inspection

- Check the piston pin and conrod for damage and distortion.
- If pins are reused, check for dimensional accuracy.
- Check the big and small end bores for roundness.
- Worn or damaged conrod bushings must be replaced—refer to the “Bearing fitting” poster for details.



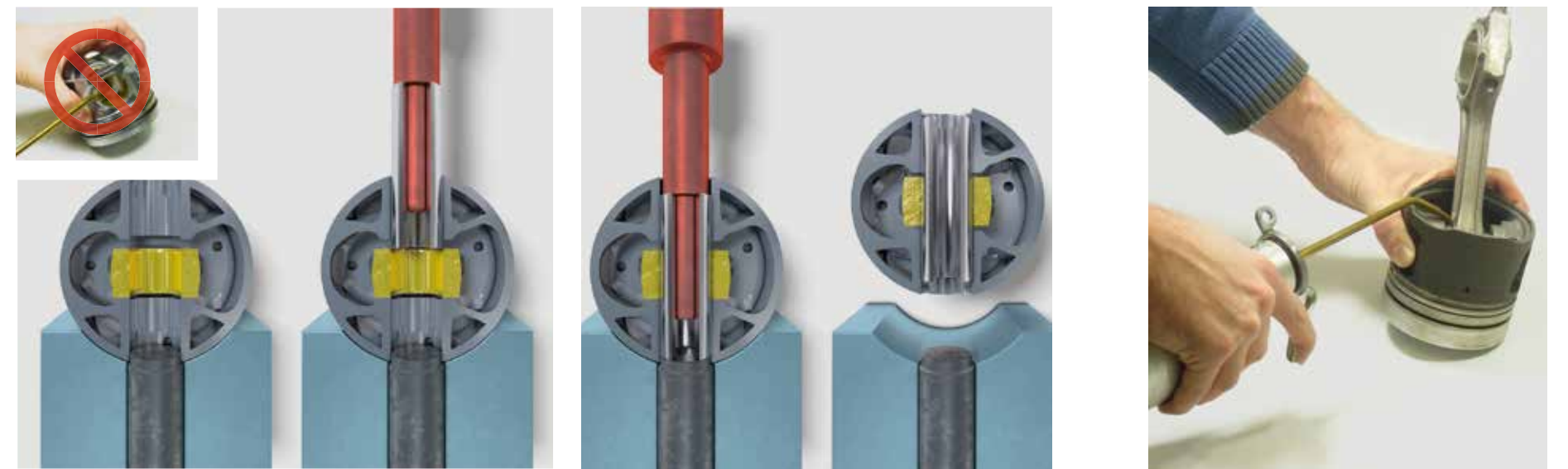
2. Inspection

- Damage can occur when the pin is pressed out—therefore always use new piston pins.
- Compare the old pin against the new one.
- Check the conrod for damage and distortion.
- Check the big and small end bores for roundness.



3. Fitting

- If new pistons are to be fitted, always replace the pins as well.
- Note the installation markings prior to assembly.
- Thoroughly clean all parts and lubricate generously—coat the pin, pin bore, and small end bore with clean oil.
- Always use new pin circlips and fit them using a suitable tool.
- Avoid excessive deformation of the circlips.
- Check to ensure the circlips are fully seated in the grooves.
- The gap must be located in the stroke direction of the piston—in the 12- or 6-o’clock position.
- The pin should have noticeable axial clearance.



3. Fitting

- Note the installation markings prior to assembly.
- Thoroughly clean all parts, but do not yet lubricate them due to the risk of oil carbon buildup.
- Heat the conrod in a furnace between 250°C and 300°C.
- Caution: Heating with an open flame can lead to loss of integrity due to annealing.
- Cool the piston pin longer if necessary.
- Use an appropriate form base and stop mandrel to insert the pin.
- Pay close attention to the length of the stop mandrel!
- Promptly press the pin into its final position in a single stroke.
- Do not move the conrod or pin while they are cooling off! Moving the individual parts while warm can result in wear.
- Thoroughly lubricate all parts after they have cooled off.
- Finally, check the piston and pin to ensure adequate freedom of movement.