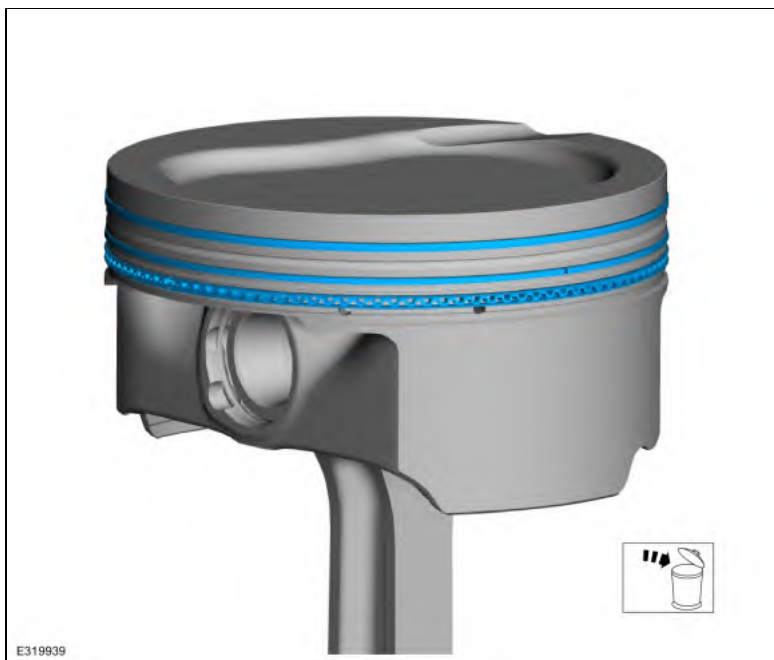


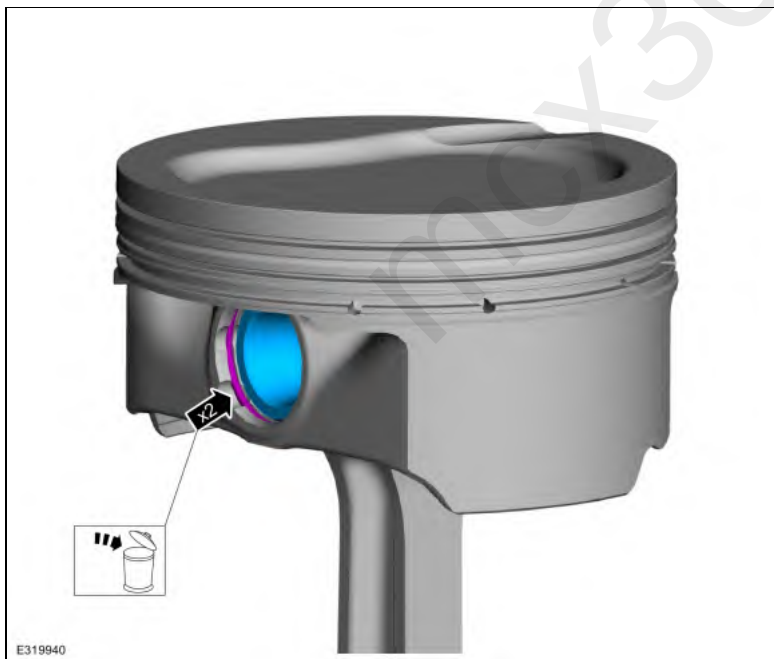
Piston

DISASSEMBLY

1. Remove and discard the piston rings.

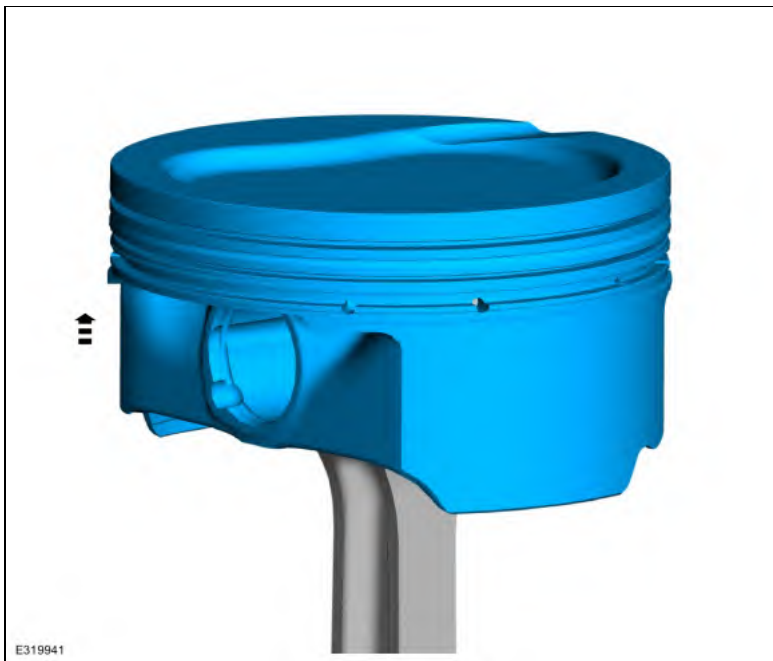


2. Remove and discard the piston pin retainers.
 - Remove the piston pin.



3. **NOTE:** If the piston and connecting rod are to be reinstalled, they must be assembled in the same orientation. Mark the piston orientation to the connecting rod for reassembly.

Separate the piston from the connecting rod.

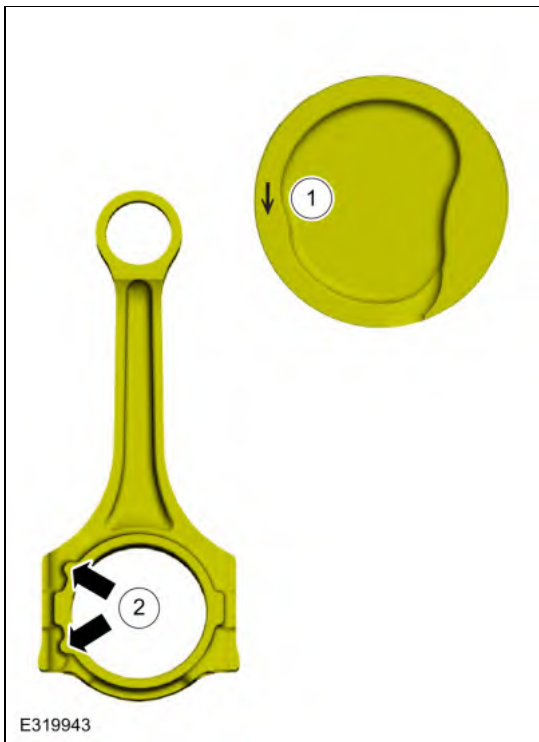


4. Clean and inspect the piston and connecting rod.
Refer to: Piston Inspection (303-00 Engine System - General Information, General Procedures).



ASSEMBLY

1. **NOTE:** *RH piston only.*
 1. Arrow on the top of the dome of the piston should be facing toward the front of the engine block.
 2. Bump on connecting rod should be facing toward the front of the engine block.

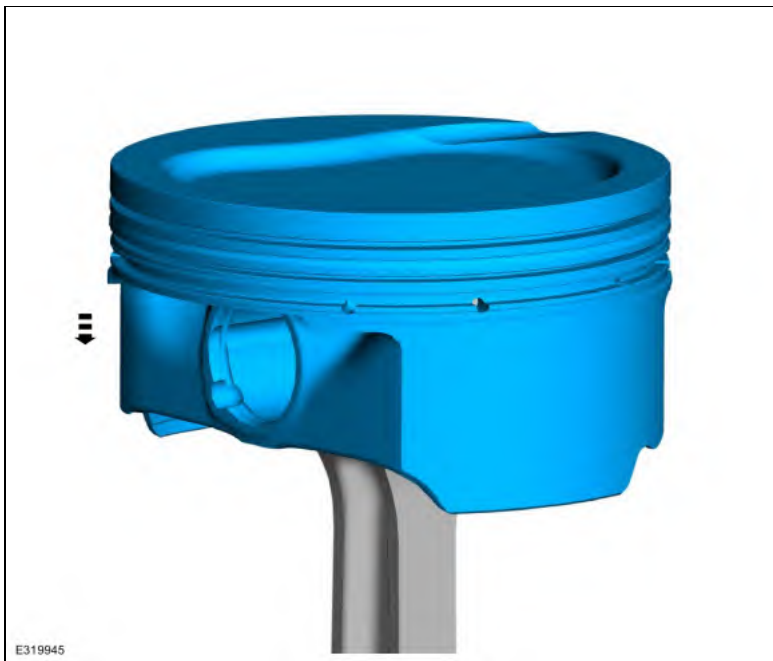


2. **NOTE:** *LH piston only.*

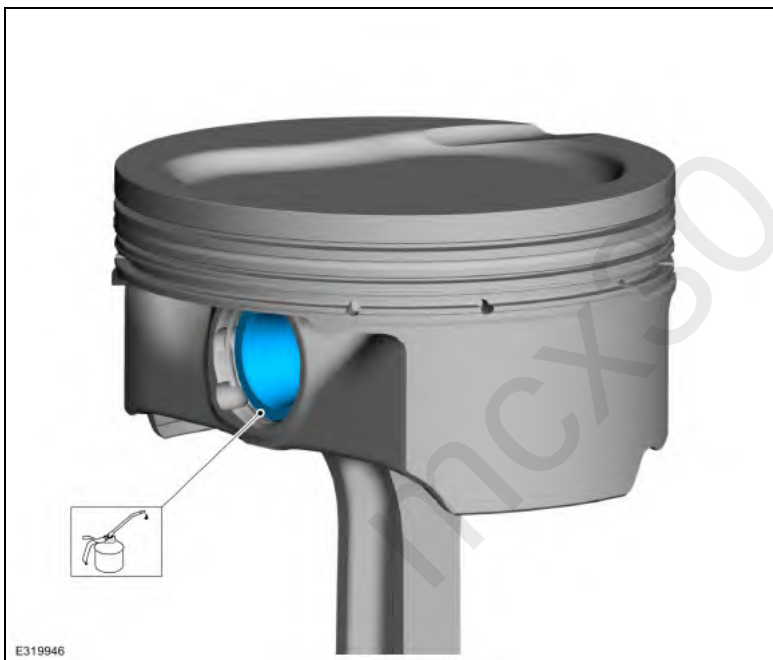
1. Arrow on the top of the dome of the piston should be facing toward the front of the engine block.
2. Bump on connecting rod should be facing toward the front of the engine block.



3. Position the piston on the connecting rod.



- 4.
- Lubricate the piston pin with clean engine oil.
 - Install the piston pin.

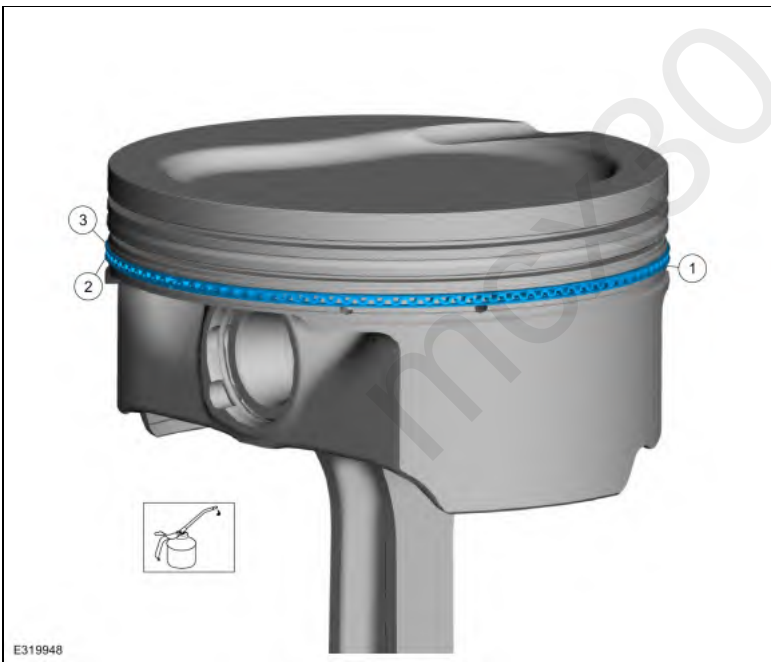


5. **NOTE:** The piston pin retainer gap orientation must be toward the bottom of the piston.

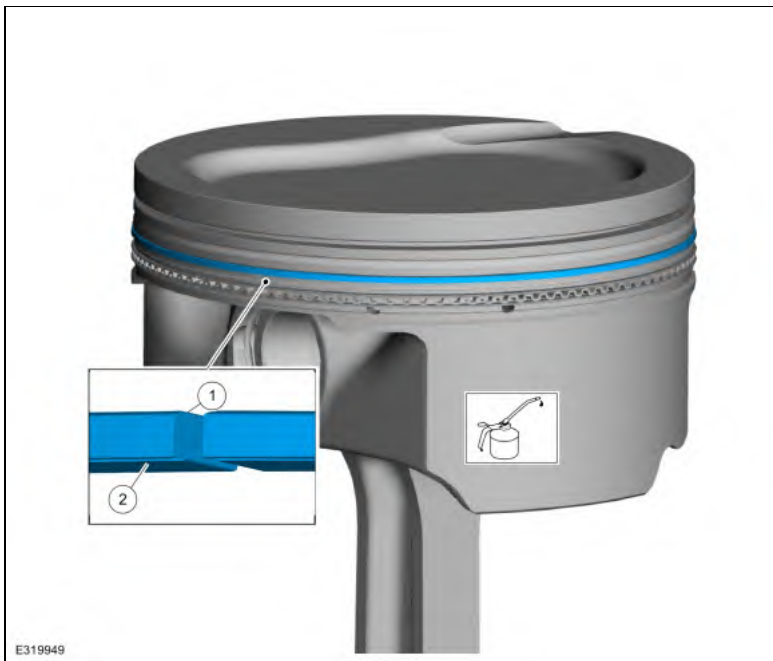
Install the piston pin retainers.



6. Lubricate the oil control rings.
1. Install the oil control expander ring.
 2. Install the lower oil control ring.
 3. Install the upper oil control ring.



7. Lubricate the lower compression ring with clean engine oil and install the ring.
1. The identification mark on the ring should be pointing up toward the top of the piston.
 2. Hook feature will point down toward the bottom of piston.



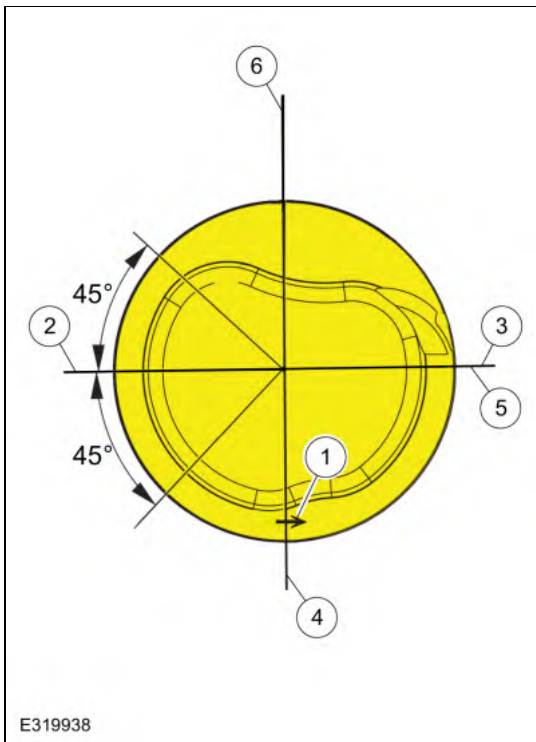
8. Lubricate the upper compression ring with clean engine oil and install the ring.
1. The identification mark on the ring should be pointing up toward the top of the piston.



9. **NOTE: RH (right-hand) pistons only.**

Position the piston ring gaps on the RH pistons.

1. Denotes front of engine.
2. Upper compression ring gap.
3. Lower compression ring gap.
4. Upper oil control ring gap (minimum of 45 degrees and maximum of 90 degrees from the centerline of piston parallel to piston pin bore).
5. Oil control expander ring gap (Center line of the piston parallel to the wrist pin bore).
6. Lower oil control ring gap (minimum of 45 degrees and maximum of 90 degrees from the centerline of piston parallel to piston pin bore).



10. **NOTE:** *LH (left-hand) pistons only.*

Position the piston ring gaps on the LH pistons.

1. Denotes front of engine.
2. Upper compression ring gap.
3. Lower compression ring gap.
4. Upper oil control ring gap (minimum of 45 degrees and maximum of 90 degrees from the centerline of piston parallel to piston pin bore).
5. Oil control expander ring gap (Center line of the piston parallel to the wrist pin bore).
6. Lower oil control ring gap (minimum of 45 degrees and maximum of 90 degrees from the centerline of piston parallel to piston pin bore).

