

Piston

Materials

Name	Specification
Motorcraft® SAE 5W-20 Synthetic Blend Motor Oil XO-5W20-QSP	WSS-M2C945-A

DISASSEMBLY

1. Remove and discard the piston rings.



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



E184459

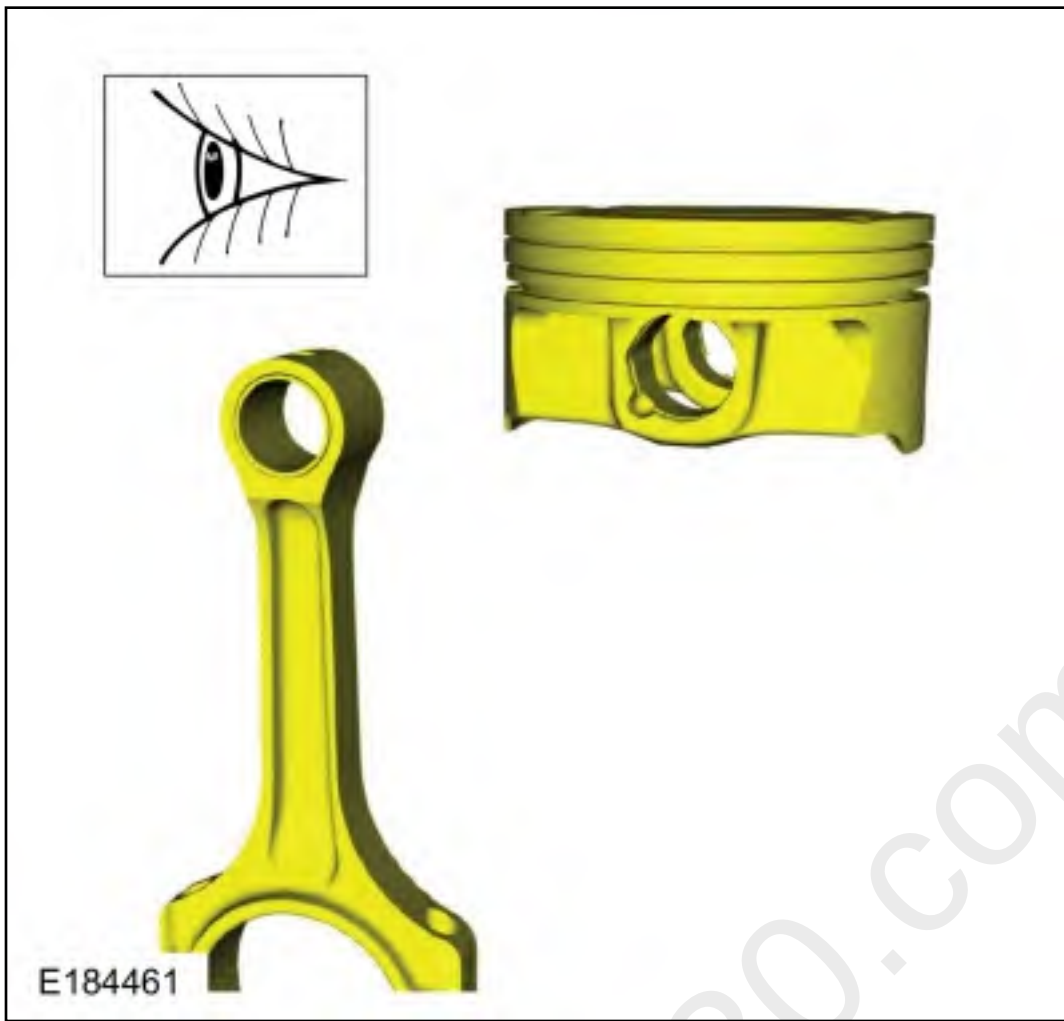
3. **NOTE:** *If the piston and connecting rod are to be reinstalled, they must be assembled in the same orientation. Mark the piston orientation to the connecting rod for reassembly.*

Separate the piston from the connecting rod.



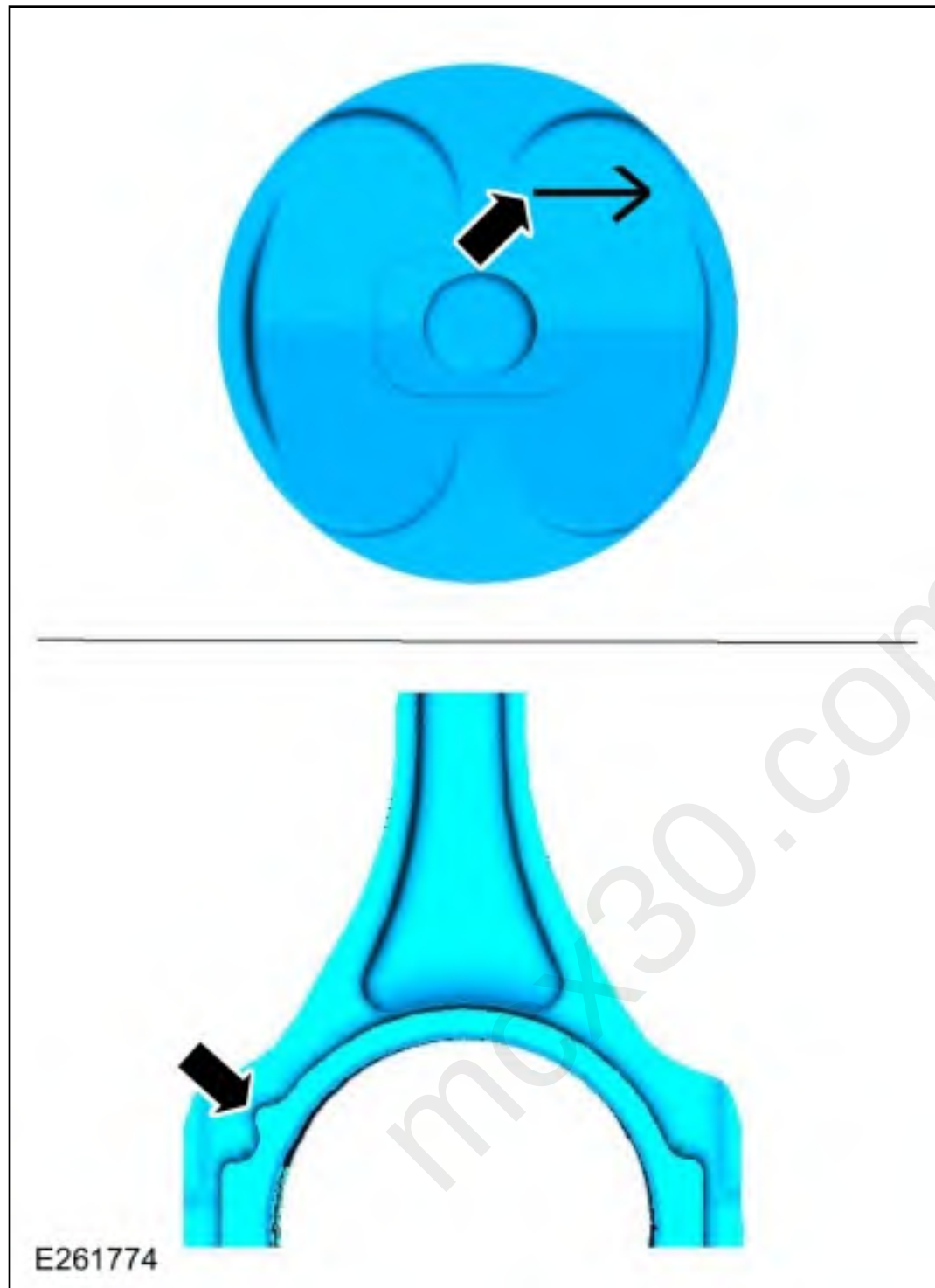
4. Clean and inspect the piston and connecting rod.

Refer to: [Piston Inspection](#) (303-00 Engine System - General Information, General Procedures).



ASSEMBLY

1. If the piston and/or connecting rod are being installed new, the connecting rod orientation marks and the arrow on the top of the dome of the piston should be facing toward the front of the engine block.



2. Position the piston on the connecting rod.



3. Lubricate and install the piston pin.

Material: Motorcraft® SAE 5W-20 Synthetic Blend Motor Oil / XO-5W20-QSP (WSS-M2C945-A)



4. **NOTE:** *The piston pin retainer gap orientation must be toward the top of the piston.*

Install the piston pin retainers.



5. Lubricate and install the oil control rings.

1. Upper oil control ring.
2. Oil control expander ring.
3. Lower oil control ring.

Material: Motorcraft® SAE 5W-20 Synthetic Blend Motor Oil / XO-5W20-QSP (WSS-M2C945-A)



6. Install the lower compression ring.

1. The "O" mark on the ring pointing up toward the top of the piston.
2. Hook feature will point down toward the bottom of piston.

Material: Motorcraft® SAE 5W-20 Synthetic Blend Motor Oil / XO-5W20-QSP (WSS-M2C945-A)



7. Install the upper compression ring.

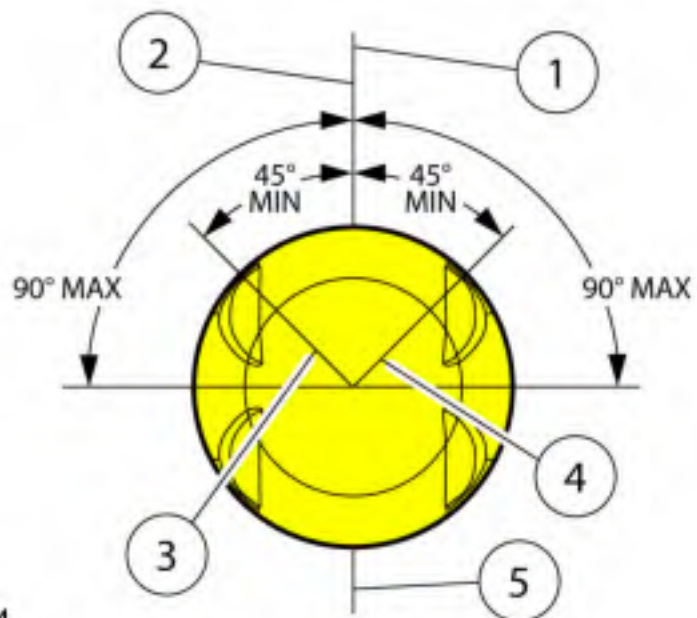
1. The "O" mark on the ring pointing up toward the top of the piston.

Material: Motorcraft® SAE 5W-20 Synthetic Blend Motor Oil / XO-5W20-QSP (WSS-M2C945-A)



8. Position the piston ring gaps.

1. Center line of the piston parallel to the wrist pin bore.
2. Upper compression ring gap.
3. Upper oil control ring gap.
4. Lower oil control ring gap.
5. Oil control expander ring and lower compression ring gap.



E153734



Copyright © 2018 Ford Motor Company