File in Section:

Bulletin No.: PIP5239A

Date: November, 2014

## PRELIMINARY INFORMATION

**Subject: Commercially Available Tool For 1.2L LL0 Piston Installation** 

Models: 2013 - 2015 Chevrolet Spark Equipped with 1.2L LL0

This PI was superseded to update Recommendation/Instructions. Please discard PIP5239.

The following diagnosis might be helpful if the vehicle exhibits the symptom(s) described in this PI.

## **Condition/Concern**

Difficulty or damage to piston, piston rings or cylinder wall when installing 1.2L LL0 pistons.

## Recommendation/Instructions

All piston rings including the oil expander ring must be properly positioned prior to clocking during installation or piston, piston ring or cylinder wall damage will result.

Validating proper ring positioning can be difficult due to the small size.

A commercially available tool for 1.2L LL0 piston installation is now available.

This tool can validate proper piston ring positioning prior to the installation reducing the possibility of damage.

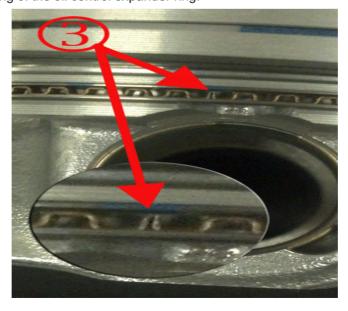
The WISECO RCS07061 ring compressor sleeve is a cone style piston installer that will not allow the piston / ring assembly to pass if the piston rings are not properly positioned.

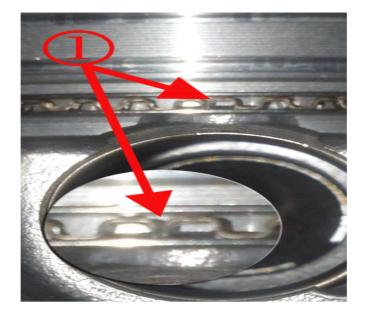
Once proper ring positioning is established, the piston will install in the cylinder bore with very little effort.

The EN-51454 rod guide kit will not be available until mid 2015. Once available, it will aid in the alignment of the piston rod to crankshaft rod journal during installation avoiding any incidental contact damage.

Please review the pictures below for proper piston ring positioning.

Examples of proper positioning of the oil control expander ring.





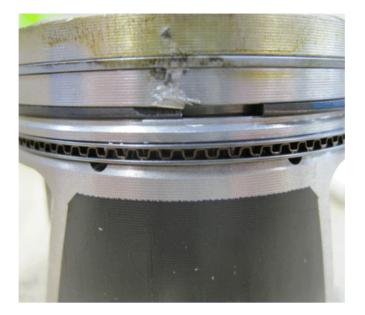
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Example of improperly positioned oil control expander ring. (Overlapped).



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Example of improperly positioned 2nd compression ring with piston damage.



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WISECO RCS07061 ring compressor sleeve.



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EN-51454 rod guide kit.



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Please follow this diagnostic or repair process thoroughly and complete each step. If the condition exhibited is resolved without completing every step, the remaining steps do not need to be performed.