File in Section: -

Bulletin No.: PIT5234A

Date: October, 2013

# PRELIMINARY INFORMATION

**Subject: Ignition Key Cannot Be Turned** 

Models: 2014 Chevrolet Silverado 1500

2014 GMC Sierra 1500

This PI was superseded to add warranty labor op. Please discard PIT5234.

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

## Condition/Concern

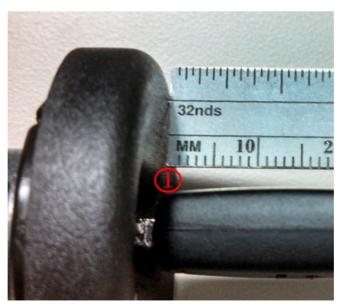
Some customers may comment that the ignition key cannot be turned. This concern could be caused by the following issues:

- The ignition key not fully going into the lock cylinder, only on vehicles built prior to the following break points: Fort Wayne Assembled Vehicles – August 29th, 2013
  Silao, MX Assembled Vehicles – August 17th, 2013
- 2. Pressure being applied to the column lock plate will prevent disengagement of the locking pin.

#### Recommendation/Instructions

#### Condition #1:

- 1. Insert key into ignition and confirm key will not turn.
- 2. With key inserted, measure the key to the cylinder, shown below is the correct (1) and incorrect (2) insertion measurements.





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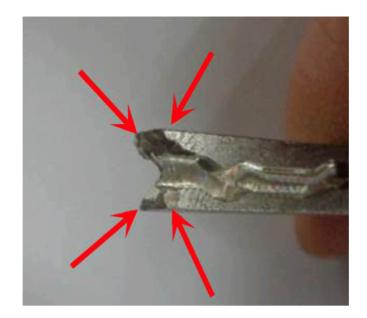
**Important:** If the insertion distance is correct, do not perform the following procedure and proceed to Condition #2.

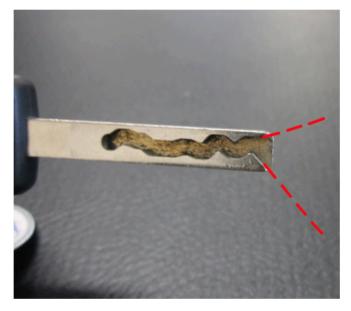
- 3. The ignition lock cylinder will need to be replaced to correct this issue, if the key is not going in fully. To remove and replace the ignition lock cylinder, it must be rotated to the start position so the ignition cylinder retaining tab can be pressed down. Since the lock cylinder will not rotate continue with the following steps.
- 4. Obtain a new key that is cut to the vehicle. Reference the latest version of TSB 09-00-89-029: Key Cutting Procedure for Obtaining Replacement Key. The purpose of ordering a new key is so that the original customer's keys are left intact.
- 5. Shorten the key shank by grinding or cutting 6-7mm (1/4 inch) off the tip of the key.



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6. Then using a file/grinder, bevel the tip of the key in a similar fashion to the way it was from the factory. Also, grind / file the beginning of each groove so the tumblers will be funneled along the groove. Note: If this is not done correctly the key will only go into the lock cylinder part way.





7. Remove steering column upper cover.



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8. Remove the key reminder chime sensor.

**Important:** If you don't remove the sensor, you will shear the sensor off during removal.



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9. Install "short" key into ignition lock cylinder. If head of key bottoms out pull out slightly while applying front pressure to engage the tumblers.

**Note:** If you are still unable to rotate the ignition lock cylinder, the ignition lock cylinder case/housing will need to be removed and replaced along with the lock cylinder.

- 10. Turn the ignition lock cylinder to the START position.
- 11. Insert an Allen wrench or other suitable tool into the access hole on the ignition lock cylinder case and press the lock tab down to remove the cylinder.
- 12. Pull the ignition lock cylinder out of the ignition lock cylinder case and discard the shortened key.
- 13. Obtain a new ignition lock cylinder.
- 14. Remove tumblers and springs from the old cylinder and rebuild new cylinder with the old tumblers.
- 15. Install the new ignition lock cylinder.
- 16. Install the key reminder chime sensor.
- 17. Verify both keys work.
- 18. Install Steering column Upper cover.
- 19. Clear codes.

## Condition #2

Please reference the latest version of PIT5233: Normal Characteristic - Hard or Unable To Rotate Ignition Key From The Off Position.

# **Warranty Information**

For vehicles repaired under warranty use:

Labor Operation	Description	Labor Time
5430040	Ignition Lock Cylinder Replacement	Use Published Labor Operation Time

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.