



DATE: 2023/07/21

MODEL: SR1/SR3 PRE-XXR

GEAR POSITION SENSOR SUPERSESSION – LS0239**PRIORITY – LOW (INFORMATION)**

The supply of LS0094 gear position sensor is soon to run out, Radical will be replacing this part with a new sensor LS0239. Below is the information required to fit this new sensor should you need to.

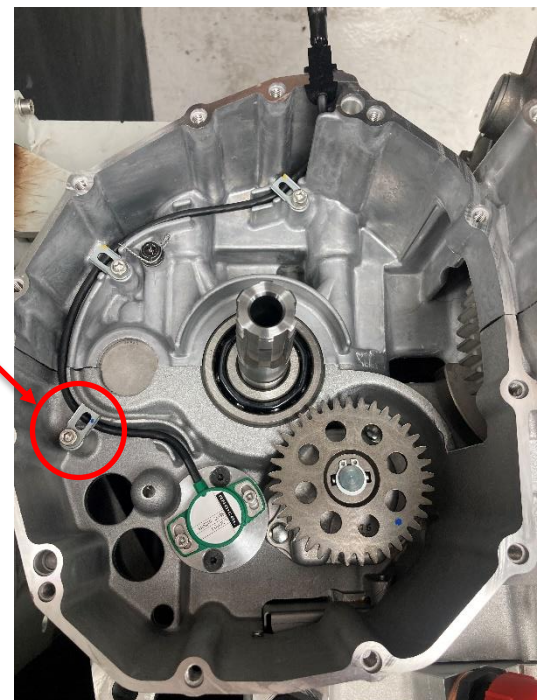
Clutch dismantling and installation process will remain the same as before.

Parts and consumables:

- 1 x LS0239 – Gear Position Sensor
- 2 x 7M04/066 - M4 x 10mm Cap Black bolt - torque to 30 in.-lb
- 1 x 7M05/020 – M5 x 12 Cap bolt - torque to 60 in.-lb
- 1 x ERW0146 – Gear Position Sensor Tabs
- Loctite 648
- RTV Silicone

Process:

1. Fit the Gear position sensor in its place with wiring facing the groove. Use two M4 x 10mm bolts to mount the sensor in place. Sensor can be adjusted on the slot to achieve the target voltage, but the body of the sensor must be concentric with the mounting plate.
2. Plug the sensor into the engine harness and turn the power on. Load PTmon or LifeMon on your computer to see GearV channel.
3. Ensure the engine is physically in neutral and set the sensor to 3.90V.
4. Once the voltage is set and bolts are tight, remove one bolt at a time and use small amount of Loctite 648 to secure it.
5. Re-check the voltage in neutral. To double check the position is correct, shift up and down the gears whilst watching the gear indicator.
6. The baffle plate used with the old sensor is no longer required and it is now being replaced with a new wiring tab and secured in place with M5 x 12mm bolt. All three tab must be secured in place with Loctite 648
7. Continue with clutch installation as per Clutch installation Manual.



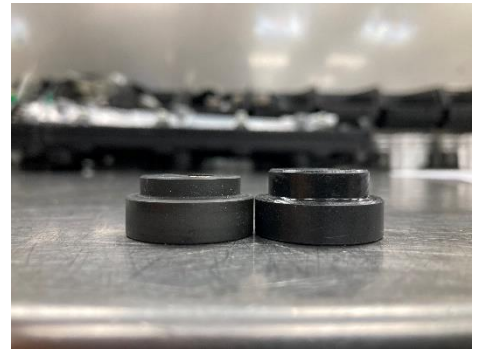
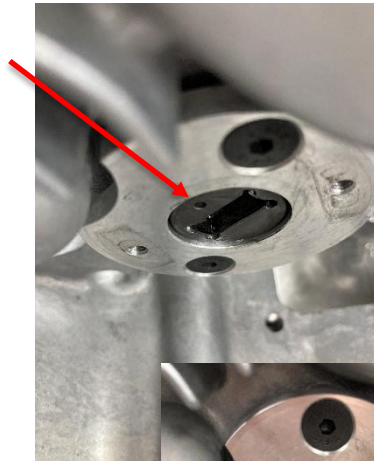
Engines built or last rebuilt in or before January 2021 will be fitted with an old version of gear switch magnet boss which does not work correctly in combination with the latest LS0239 – Gear Position Sensor.

Parts and consumables required for conversion:

- 1 x LS0170 – Gear switch magnet boss
- 2 x 7M05/870 – M5 x 16mm CSK bolt
- Araldite Rapid
- Loctite 648

Process:

1. Identify the old / lower version of magnet boss. The old version will sit low in the recess.
2. Introduce some heat into both bolts to help release Loctite 648 securing these bolts.
3. Use a good quality Allen key bit and extension. Use impact to brake the Loctite away. It's important not to rush this stage as it's extremely easy to shear the hex inside the bolt.
4. Remove both bolts
5. Remove the aluminum cover and old magnet boss
6. It is important to fit the new magnet with Magnetic North facing the little hole in magnet boss. This can be achieved by using Compass or facing the old assembly to new assembly. You should feel magnets parting if fitted correctly.
7. Use Araldite Rapid to secure magnet in position
8. Fit the gear switch magnet boss back in the engine and secure in position with aluminum plate and new supplied bolts with Loctite 648
9. Continue with the sensor fitting procedure



For parts supply please contact: spares@radicalmotorsport.com

For any further questions contact engines@radicalmotorsport.com