5-0 IGNITE SR20DET – LS 140A ALTERNATOR INSTALLATION GUIDE

This installation guide is applicable to the following vehicle make and models;

- Nissan Silvia (S13 S14 S15) – SKU# 50IGNSRLSALT

  Engine: SR20DET RWD VARIANTS

Please read this installation guide carefully prior to installing the product.

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If in doubt, seek professional help.

For further information, visit www.50ignite.com/terms-and-conditions/

INTRODUCTION

Thank you for purchasing 5-0 Ignite SR20 to LS 140A alternator conversion kit. We have done all the hard work to ensure that your installation is a breeze and clean. Your kit should include the following items;

- 1x Billet aluminium upper mounting adapter
- 1x Billet aluminium bottom mounting adapter
- 1x Adjuster block
- 1x Upper alternator mounting 'captured' bolt
- 1x Pulley spacer ring (keep as spare if not required for install)
- Assorted fasteners
- 1x Underdrive pulley (add-on purchasable option for SR20 revving 8000+ rpm)

Installation time is typically 40 mins, depending on your engine setup, requiring basic set of mechanical skills and hand tools.

INFORMATION AND LIMITATIONS

- This installation guide covers the aspects of adapting the early generation LS 140A alternator onto your SR20 engine utilising the 5-0 Ignite conversion kit. **Refer to FSM on how to remove/replace your alternator or seek a qualified mechanic.**

- **Alternator is NOT supplied – Mounting Kit Only**. We use and recommend genuine GM early generation LS alternator (part no. 92058857) or the following aftermarket alternator to ensure correct fitment without further modifications and can be easily purchased elsewhere at a better deal;

  Brand: OEX

  Part No.: MXA306 (brand new aftermarket unit, not refurbished)

  OEM Part No.: 92058857 (Early generation LS alternator)

- Belt to use – below is a guideline and may vary slightly if you're using aftermarket crank pulley and/or water pump pulley.

  OEM Alt Pulley - OEM Water Pump Pulley - OEM Crank Pulley - 5PK970

  12% U/D Alt Pulley - OEM Water Pump Pulley - OEM Crank Pulley - 5PK980

  OEM Alt Pulley - OEM Water Pump Pulley - ATI Crank Pulley - 5PK950

  12% UD Alt Pulley - OEM Water Pump Pulley - ATI Crank Pulley - 5PK960

PROCEDURE

1. Disconnect/remove battery.

2. Disconnect wiring harness, remove belt and remove your existing alternator.

Figure 1 - Remove existing alternator

3. From the alternator wiring, there are three connections: The big rectangle 2 pin connector plug, the small ground ring and the main B+ ring. On S13, the alternator main B+ ring terminal is required to be replaced to 8mm diameter, otherwise, it is ideal that you upgrade this wiring to larger gauge if you are going to fully utilise the alternator's full output.

   S14 and S15 ring terminal should have 8mm hole from factory.

4. Remove intake manifold support bracket and the bottom 'L' bracket as shown. Bypassing/deleting the throttle body coolant line also aids installation for better fastener access.

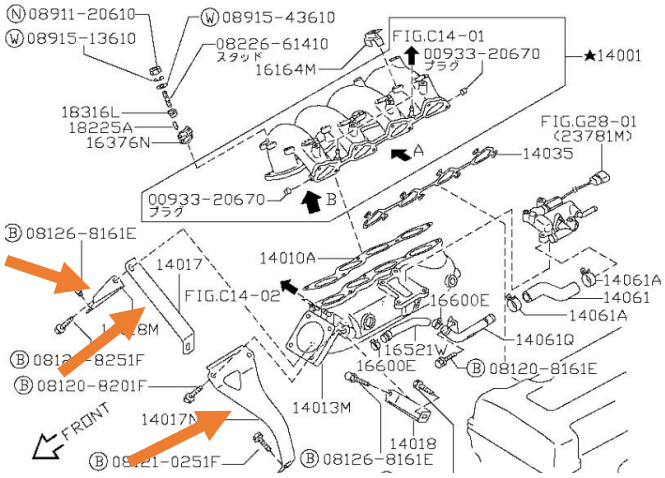

Figure 2 - Remove intake manifold bracing brackets

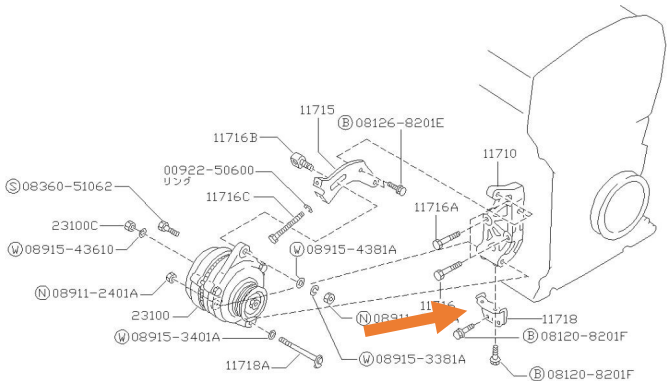

Figure 3 - Remove the bottom 'L' bracket

5. Install the lower mounting bracket. Position all the bolts then tighten the two bottom bolts first prior to tightening the main long bolt. Ensure washers are placed under each bolt head and the nut.

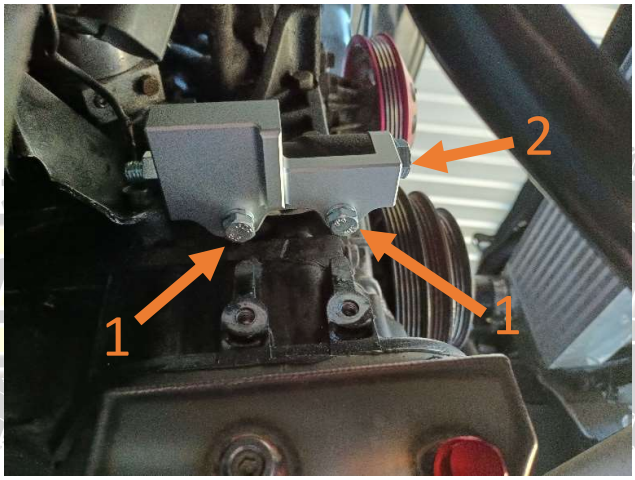

Figure 4 – Install and tighten the bottom mounting bracket

6. Support your LS alternator on the engine bay and connect the two ring terminals and rectangle plug connector.

Figure 5 – Connect the wiring

7. Mount the alternator onto the lower mounting bracket with the provided M10x1.5 – 75mm long bolt. Washer to be placed under the bolt head. Have the bolt snug but not fully tightened yet.

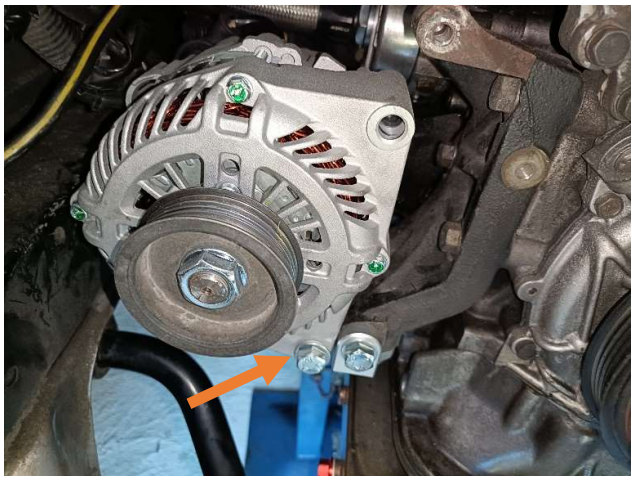

Figure 6 – Mount the alternator to the lower mounting bracket

8. Transfer the OEM pulley onto your LS alternator. The SR20DET has two OEM pulley variants: **The short version has an overall pulley thickness of 26mm and the long version has an overall pulley thickness of 30mm. <u>If you have the short version pulley, you need to install the supplied pulley spacer</u>.**

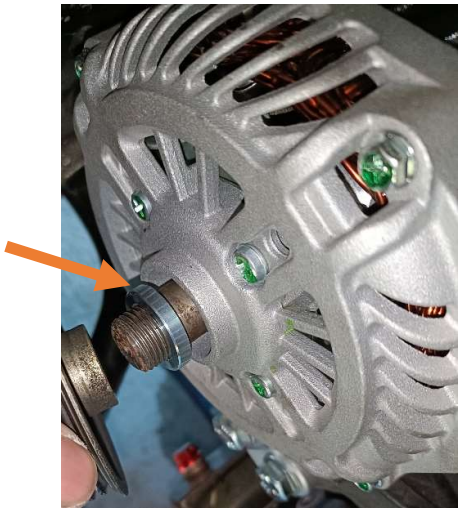

Figure 7 - Install the supplied pulley spacer for short OEM pulley

Alternator Pulley Type	Pulley Spacer
OEM Pulley 'short' 26mm O/A thickness	Required
OEM Pulley 'long' 30mm O/A thickness	Not Required
Optional 5-0 Ignite 12% Underdriven Pulley	Not Required

9. Install the upper mounting bracket using the supplied bolts.

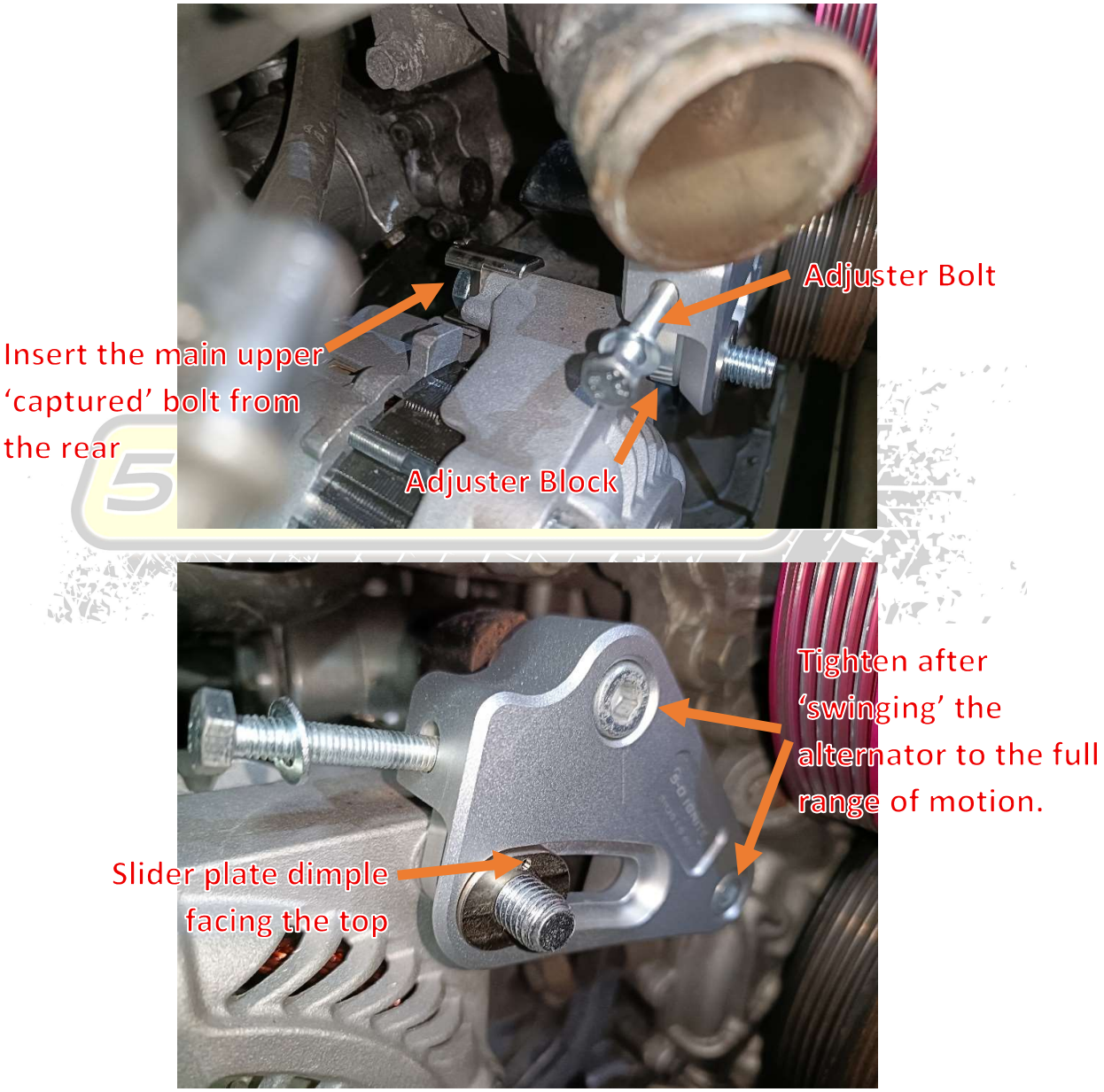

Figure 8 - Install the upper mounting bracket

10. Install the spring washer and nut to the upper main bolt. Install your drive belt and tension the belt by tightening the M6 adjuster bolt.

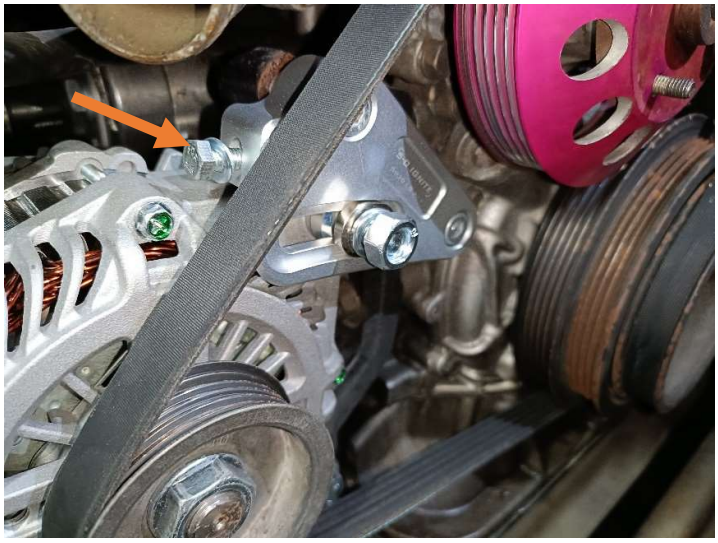

Figure 9 - Install and tension the drive belt

11. Tighten the alternator lower and upper mounting bolt and nut.

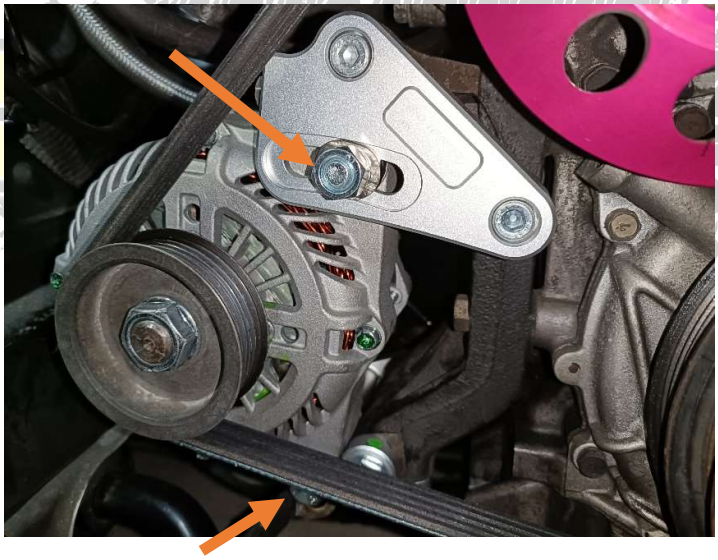

Figure 10 - Installation complete

CONCLUSION

Installation is now complete. Re-check all steps in the procedure, if all is good, re-connect battery and start the engine. Ensure that voltage is above 13.7 V when the engine is running and the drive belt is sufficiently tensioned.