



5-0 IGNITE IGNITION COIL KIT INSTALLATION MANUAL

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

- Nissan Silvia/180sx S13 and S14 – SKU# 50IGNS13S14SR20

Engine: SR20DET (with ignition igniter)

- Nissan Silvia S15 – SKU# 50IGNS15SR20

Engine: SR20DET (without ignition igniter)

Please read this installation manual 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/

PREFACE

Thank you for purchasing 5-0 ignite ignition coil 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 Pre-made plug and play ignition coil harness
- 1x Igniter delete patch harness (applicable for S13 and S14 kit only)
- 1x Mounting plate
- 1x M8x1.25 hex head bolt
- 4x M6x1 – 25mm long hex head flange bolt (installed on mounting plate)
- 4x spring washers (installed on the bolt)
- 4x Denso Audi R8 ignition coils (if so, purchased as selectable option)

Installation time is typically 30 mins, depending on your engine setup, requiring basic set of mechanical skills and hand tools;

- Ratchet wrench
- Drive extension
- 10mm hex socket
- 12mm hex ring end spanner
- 13mm hex ring end spanner
- Allen key set
- A rag
- Rubber grease
- Side cutter
- Torque wrench (10 to 30Nm capable)

INFORMATION AND LIMITATIONS

- **You must use NGK BKR series (or equivalent) ISO height, resistive type spark plugs with 5/8" hex size when using Audi R8 ignition coils and our kit.**
- Although the kit can be run with OEM ECU, aftermarket ECU is highly desirable which allows you to set ignition dwell time table to maximise the coil's performance.
- Typical ignition dwell time setting is 2.8ms @ 14V. Your tuner will determine the appropriate dwell times across the remaining voltage and RPM axis range.
- Any part of the ignition loom must be sufficiently protected or moved away from close proximity of any exhaust components.
- **You must remove the OEM ignition igniter for S13 and S14 vehicles and install the supplied patch harness.**
- Vehicles fitted with vented bonnet (hood) – sufficient water ducting/channelling underneath the vents must be installed to ensure water is drained away from any critical components of your engine including this ignition coil kit.

PROCEDURE

1. Disconnect/remove existing;
 - a. Battery
 - b. Coil valley cover
 - c. Ignition harness
 - d. Amplifier module 'igniter' (S13 and S14 only located on the RHD passenger side strut tower)
 - e. Ignition coils 'coil packs'
2. Apply light amount of rubber grease to the lip of each coil indicated by the arrow;



Figure 1 - Lubricate the lip of the ignition coils

3. Plug the ignition harness into each coil and loosely fit the coils onto the mounting plate (lip through the mounting plate). **Note:** The top of the mounting plate is where the brand is stamped on. The order of cylinder is as per the harness, by length, where coil connector for cylinder 4 is the closest to the 6-pin grey connector.



Figure 2- Pre-assembling coils and harness into the mounting plate

4. Place the assembly onto the engine, aligning all the coils onto their spark plugs. Do not push the coils down just yet.

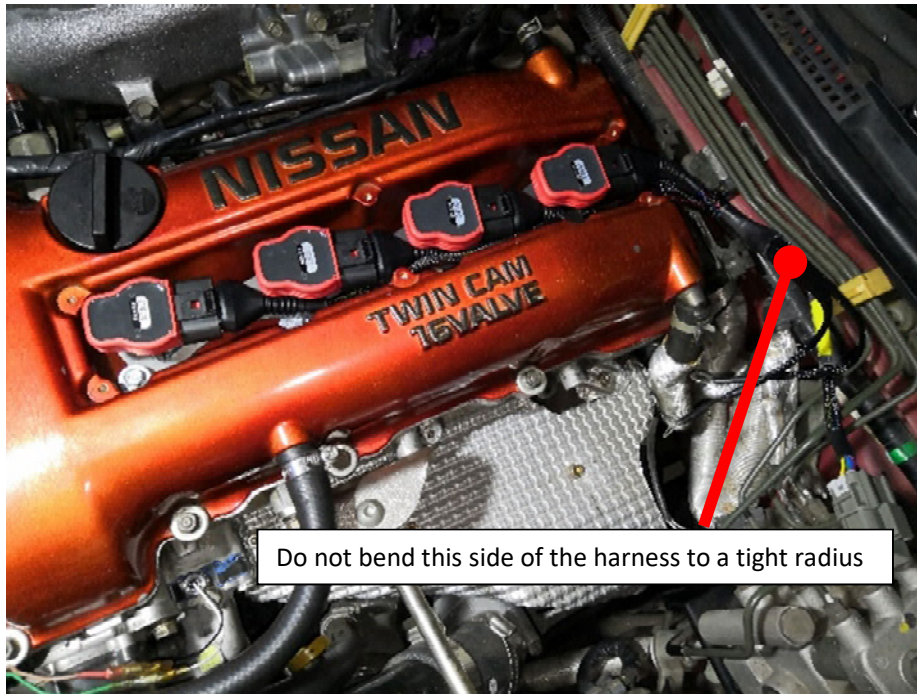


Figure 3- Place the assembly onto the engine

5. Screw and torque down the mounting plate bolts to 10Nm at 4 locations.
6. Arrange the ignition harness to avoid any part of the harness getting crushed or pinched. If all good, push each coil down to secure.
7. Plug in the grey 6-pin connector.



Figure 4 – Connect the main connector

8. Secure down each ground ring to the cylinder head, ensure surfaces are clean;

- X To reduce ground loop, **do not** secure both ground ring terminals at the same bolt down point.
- O Bolting down to the valve cover is fine if you struggle for access on the back of the cylinder head. Otherwise, ideally;
- O Utilise the stock grounding point at the back of the head for one for the ground ring.
- O Utilise the engine lifting point bolt hole for the other ground ring.



Figure 5 – Ground wire bolt down points



Figure 6 – Bolt down the other ground wire ring on stock ground position behind the head

9. Connect the igniter bypass patch harness to where stock igniter used to be **(S13 and S14 only)**. Zip tie them securely to prevent abrasion.

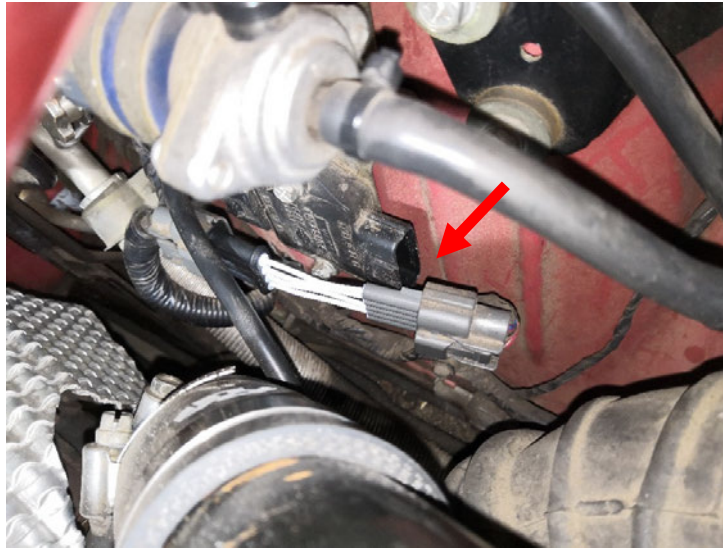


Figure 7 - Connect igniter patch harness

10. Check for any part of the harness whether they are susceptible to contact abrasion from any other parts in the engine bay. If required, these areas need to be protected or tied away from making contact.

CONCLUSION

Installation is now complete. Re-check all steps in the procedure, if all good, re-connect battery and start the engine. Coil valley cover will no longer be used. We recommend to not cover the coils to aid heat dissipation. Mounting plate and harness does not require to be removed to access the spark plugs in future, simply disconnect the coil connectors and gently pull up the coils to remove individually. It is also recommended to check or replace your spark plugs on this installation.