



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 Revision 2 Mounting System

Engine: SR20DET (with ignition igniter)

- Nissan Silvia S15 – SKU# 50IGNS15SR20 Revision 2 Mounting System

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 system (includes a mounting plate and 4 sealing boss)
- 1x M8x1.25 hex head bolt for the harness ground ring
- 4x M6x1 – 16mm long hex head flange bolt for the mounting system
- 4x Round washers for the mounting system
- 4x Denso Audi R8 ignition coils (if so, purchased as selectable option)

Installation time is typically 10 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
- Torque wrench (10 to 30Nm capable)

INFORMATION AND LIMITATIONS

- **Ideal spark plugs to use are NGK BCPR series (5/8" hex size) when using Audi R8 ignition coils and our kit (these also have the required longer reach than NGK BKR series)**
- 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.**

PROCEDURE

1. Disconnect/remove existing;
 - a. Battery
 - b. Coil valley cover
 - c. Ignition harness
 - d. Amplifier module 'igniter' (**S13 and S14 only** typically located on the exhaust side strut tower)
 - e. Ignition coils 'coil packs'
2. Pre-install the mounting bosses onto the mounting plate (self-explanatory). Using 2 hands, 4 fingers, install into the valve cover and press down on the sealing boss individually to ensure that it has seated properly. Install and fasten the M6 supplied bolts and tighten to snug or 10Nm.



Figure 1 – Installing the Mounting System

3. Slip the ignition coils onto the mounting system, **do not press down yet**. Plug in your supplied harness onto the coil first. 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- Install the Coils and Harness

4. Tidy up your harness, avoid pinch or crush points, and press down on the coil to seat.

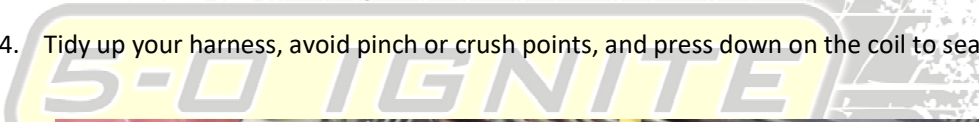


Figure 3- Tidy up the Harness and Seat the Coils

5. Plug in the grey 6-pin connector.



Figure 3 – Connect the main connector

6. 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 4 – Ground wire bolt down points



Figure 5 – Bolt down the other ground wire ring on stock ground position behind the head

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



Figure 6 - Connect igniter patch harness

8. 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 system is 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.

Replacement sealing boss O-rings: BS027 Duro 70

