

5-0 IGNITE IGNITION COIL KIT INSTALLATION MANUAL

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

• Nissan Skyline R32 – SKU# 50IGNR32RB2026

Engine: RB20DET (GTST) and RB26DETT (GTR)

• Nissan Skyline R33 – SKU# 50IGNR33RB25S1, 50IGNR33RB25S2, 50IGNR33RB26

Engine: RB25DET S1 (GTST), RB25DET S2 (GTST) and RB26DETT (GTR)

Nissan Skyline R34 – SKU# 50IGNR34RB26, 50IGNR34RB25NEO

Engine: RB26DETT (GTR), RB25DET NEO (GTT)

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

LIABILITY DISCLAIMER

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Under no circumstances shall 5-0 Ignite, nor any of its officers, directors and employees, be liable for any incidental or consequential damage to property or equipment, loss of property or equipment, loss of profit or revenue and injury or death by either direct or indirect relation to any vehicles, components and person(s) as a result of sale, use or installation of any products supplied by 5-0 Ignite. 5-0 Ignite will not be held responsible for any labour costs to fit or remove of any the product(s) supplied with or without relation to warranty.

5-0 Ignite will only respond to queries with its direct customers that have purchased the product(s) in regard to all matters unless otherwise agreed, such as involving 3rd party queries in such situations where technical assistance is required. All ECU-related settings must be addressed to your tuner or ECU manufacturer representative/ technical support.

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 loom
- 1x Mounting plate (additional 3 mounting adapters for RB25DET NEO kit)
- 3x Stainless-steel stand-offs
- 3x Spring washers (additional 3 'skinny' spring washers for RB25DET NEO kit)
- 3x M8 hex nuts
- 3x Zip ties
- 6x 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;

- Rachet wrench
- Drive extension
- 10mm hex socket (RB25DET NEO kit)
- 12mm hex socket
- 13mm hex socket
- 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.
- Set up on RB20DET and RB25DET with stock 'J' pipe modification, adjustment or custom replacement of the 'J' pipe is necessary to provide sufficient gap between the top of the ignition coil and the pipe.
- RB25DET NEO kit forward facing plenum application only.
- Set up on RB20DET and RB25DET with stock valve cover breather 'tee' adjustment of the breather 'tee' and hose is required to provide clearance between the pipe and the ignition coil.
- 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 negative terminal
 - b. Stock 'J' pipe and cam cover breather hose (RB20DET and RB25DET only)
 - c. Coil valley cover
 - d. Ignition harness
 - e. Amplifier module 'igniter' (RB20DET, RB25DET S1, R32 GTR RB26 and R33 GTR RB26)
 - f. Ignition coils 'coil packs'
 - g. Ignition coil bracket



Figure 1 - Existing ignition components removed

 Where a ground wire exists on the OEM ECU side of ignition coil connector, bolt it down to a clean ground source (i.e. cylinder head or intake manifold). Extending the ground wire may be required.

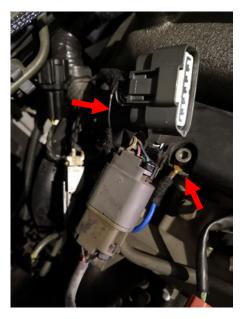


Figure 2- Extended ground wire on the OEM ECU side ignition connector bolted to intake manifold

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3. Hand screw the supplied 3 stainless-steel stand-offs to the position shown in the photo (hex section at the top), torque down to 16Nm using 12mm socket.



Figure 3- Stand-off install (all RBs except NEO)

3A. **For RB25 NEO**, utilising 6 of your original coil pack bolts, install the adapter plate in the following arrangement prior to bolting down the stainless-steel stand offs. Torque these bolts to 10Nm;



Figure 4- Mounting adapter install (RB25DET NEO)

3B. For RB25 NEO, hand screw the supplied 3 stainless-steel stand offs to the mounting adapter as shown (hex section at the top). The 'skinny' spring washer is placed between the stand-off and the mounting adapter indicated by the arrows below IF YOU ARE USING NGK BCPR SERIES SPARK PLUGS (JIS HEIGHT). Torque down to 16Nm using 12mm socket;



4. Pre-assemble the supplied ignition harness to the mounting plate by sliding the velcro portion of the rubber boot into the mounting plate slot at 5 places. Zip tie the harness at two places indicated by the arrow below (zip tie loop around hole provision on 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 6 is the closest to the main connector and does NOT have any Velcro on the connector boot.

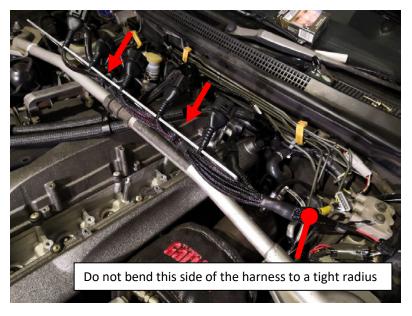


Figure 6 – Pre-assembly of the ignition harness to the mounting plate

 Install the mounting plate/harness assembly. Ensure any parts of the harness is not pinched or potentially damaged from engine movement. Install the ground wire ring of the harness to the rear of the plate, place springs washers first then nuts on. Torque down to 16Nm using 13mm socket.



Figure 8 - Assembly of harness and mounting plate to the engine

6. Connect the main power and signal connector from the harness' tail to the OEM connector. The harness bypasses any original ignition igniter; therefore, the igniter module is no longer required. Zip tie the harness for the connectors not to be damaged from abrasion. Vehicles without original igniter (RB25 S2, RB25 NEO and R34 RB26 GTR) will only have a single 8 pin black connector to connect.



7. Apply light amount of rubber grease to the lip of the ignition coils.



Figure 10 - Apply rubber grease to the lip of the ignition coils

8. Insert the ignition coils to the mounting plate, align with spark plug and push down (with light twist) until it has seated onto the grooves. Wipe any excessive grease. Connect the ignition coil connectors.



Figure 11 - Insert ignition coils onto the mounting plate

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.