

5-0 IGNITE IGNITION COIL KIT INSTALLATION MANUAL

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

• Nissan Skyline R32 GTST / GTR – SKU# 50IGNRBR35_1

Engine: RB20DET / RB26DETT

• Nissan Skyline R33 GTR – SKU# 50IGNRBR35_2

Engine: RB26DETT

Nissan Skyline R34 GTR – SKU# 50IGNRBR35_3

Engine: RB26DETT

Nissan Skyline R33 GTST Series 1 – SKU# 50IGNRBR35

Engine: RB25DET

• Nissan Skyline R33 GTST Series 2 – SKU# 50IGNRBR35_5

Engine: RB25DET

• Nissan Skyline R34 GTT– SKU# 50IGNRBR35_6

Engine: RB25DET NEO

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 <u>www.50ignite.com/terms-and-conditions/</u>

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
- 6x Hitachi R35 ignition coils with sealing boss attached to the stalk
- 1x Mounting system
- 3x M8x1.25 35mm socket head cap bolt for the mounting system (All RB except RB25 NEO)
- 6x M6 Standoff with nuts (RB25 NEO only)
- 6x M6 Nyloc nut to secure the ignition coil
- A strip of Pinch weld grommet (for R32 R33 R34 GTR kits only)

Installation time is typically 20 mins, depending on your engine setup, requiring basic set of mechanical skills and hand tools;

- Basic hand tools (ratchet, extension, sockets, spanner)
- Allen key set

INFORMATION AND LIMITATIONS

• Spark plugs to use (as per OEM)

NGK BCPR series to your suitable heat range

• 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.

Note: OEM dwell time is approximately 1.9ms to 2.1ms, the coils may not operate correctly on stock ECU.

- Typical ignition dwell time setting is 4ms @ 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.
- The coil kit fits under the valley cover however, during competition or track use, we recommend removing the valley cover for better heat dissipation.



PROCEDURE

- 1. Disconnect/remove existing;
 - a. Battery
 - b. Coil valley cover
 - c. Ignition coils
 - d. Ignition loom (remove OEM igniter for R32 and R33)



Figure 1 – Remove the Existing Ignition System



2. Clean the top of your spark plug bore surface as indicated by the arrow for all 6 cylinders.

Figure 2 – Clean the Top Surface of the Spark Plug Bore

3. Pre-install your R35 coils onto the mounting bracket.



Figure 3 – Pre-install the Ignition Coil into the Mounting Bracket

- 4. Insert the coil assembly to the engine.
 - a. Secure using the 3x M8 socket head cap bolts for all RB except RB25 NEO.
 - b. Install and route the wiring harness as shown for all cylinder except 6th.



Figure 4 – Install the Coil Kit and Harness to the Engine (All RB except RB25 NEO)

For RB25 NEO only;

- c. Screw down the supplied 6x M6 standoff to the head, **long thread end facing upwards,** snug tight. Standoff position as per figure 5.
- d. Insert the coil assembly to the engine and fasten the mounting bracket using the supplied M6 nuts.
- e. Insert and route the wiring harness as shown on figure 4.



Figure 5 – M6 Standoff Position for RB25 NEO



Figure 6 – Install the Coil Kit and Harness to the Engine (RB25 NEO Only)

- 5. Plug in the supplied ignition harness connector to engine loom;
 - a. R32 GTST / GTR 6 pin grey flat signal connector + 3 pin grey connector.
 - b. R33 GTST RB25DET S1 7 pin grey flat signal connector + 2 pin grey connector.
 - c. R33 GTST RB25DET S2 8 pin black connector.
 - d. R33 GTR 6 pin grey flat signal connector + 2 pin black connector.
 - e. R34 GTT RB25DET NEO 8 pin black connector.
 - f. R34 GTR 8 pin black connector.



Figure 7 – Connect the Supplied Ignition Loom Main Connector to Engine Loom



Figure 8 – Fasten any Additional Ground on Existing Engine Loom to a Reachable Area



7. Install the supplied pinch weld grommet to RB26DETT valley cover only, as shown;

Figure 9 – Install the Supplied Pinch Weld Grommet to Protect Wiring Harness from Abrasion (RB26DETT Only)

For RB20DET and RB25 (including NEO), cut the back of the valley cover plastic as shown for ignition harness clearance.



Figure 10 – Cut the Back of the Valley Cover Plastic (RB20 and RB25 only)

W.E

8. Install the valley cover back on (or leave it off).



Figure 11 – Installation Finished

CONCLUSION

Installation is now complete. Re-check all steps in the procedure, if all good, re-connect battery and start the engine. It is also recommended to check or replace your spark plugs on this installation and perform a check-up tune. The R35 coil dwell time can be found in our website under 'installation manual'.