



5-0 IGNITE IGNITION COIL KIT INSTALLATION MANUAL

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

- Mitsubishi Lancer Evolution 4 to 9 – SKU# 50IGN4G63R35

Engine: 4G63 (Non Mivec) and 4G63 (Mivec)

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
- 4x Hitachi R35 ignition coils with sealing boss attached to the stalk
- 1x Mounting system
- 4x M6x1 – 16mm long hex head flange bolt for the mounting system
- 4x Round washers for the mounting system
- 4x M6x1 – 25mm long socket head cap bolt for the coils
- 4x Dress up washers for the coils
- 1x M6 Nyloc nut to secure the relay (batch fire kit only)
- 1x Deutsch 6 pin female connector with terminal (sequential fire kit only)

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

THIS INSTALLATION GUIDE SHOWS THE STEPS REQUIRED TO INSTALL THE BATCH FIRE KIT. INSTALLATION OF THE SEQUENTIAL KIT IS SIMILAR WITH AN ADDITIONAL REQUIREMENT TO TERMINATE THE WIRING TO YOUR ECU FOR THE 4 SIGNAL WIRES, ROUTING OF THE 12V SWITCHED POWER AND GROUND.

INFORMATION AND LIMITATIONS

- **Spark plugs to use (as per OEM)**
 - Non-Mivec - NGK BR#EIX series (13/16" hex size)
 - Mivec – NGK LFR#AIX (5/8" hex size, longer thread reach)

denotes 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 correctly. The OEM ECU ignition coil dwell time setting is 4.7ms @ 14V, this dwell time **exceeds** the recommended dwell time for R35 coil. Prolonged operation with the aforementioned dwell time will shorten the coil life significantly.
- Typical R35 coil ignition dwell time setting is 3.9ms @ 14V for sequential fire. For batch fire configuration, dwell time of 2.8ms @ 14V or less is recommended. 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.

PROCEDURE

1. Disconnect/remove existing;
 - a. Battery
 - b. Coil valley cover
 - c. Ignition coils
2. Pre-install your R35 coils onto the mounting bracket, leave cylinder 4 coil hand tightened.
3. Insert the assembly to the engine.
4. Install the supplied M6 bolts (with washers underneath) to fasten the mounting plate to the valve cover. **Start from the bolt hole closest to the timing belt and work across to the gearbox side (coil number 4 has to be removed for access to the last hole as indicated).**

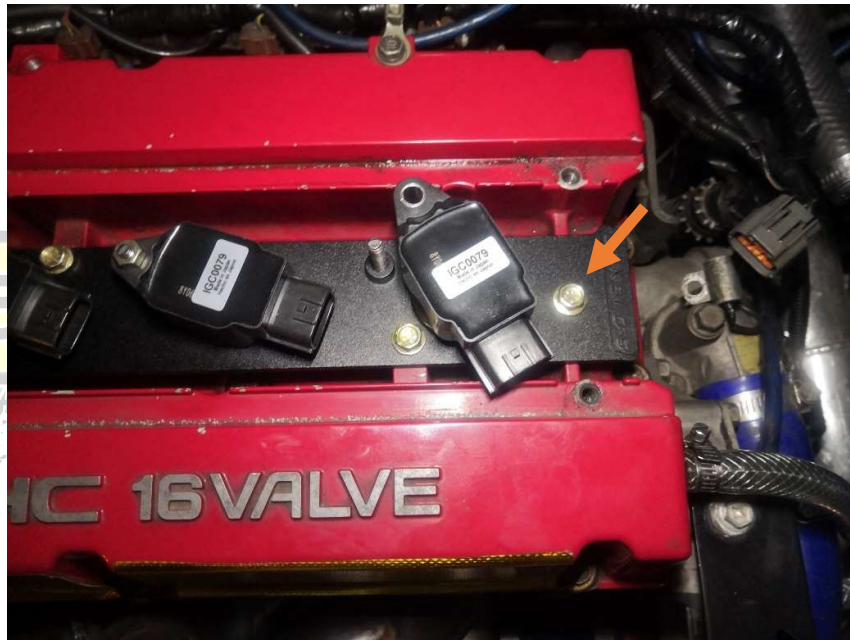


Figure 1 – Fastening the Mounting Plate to The Valve Cover

5. Reposition and tighten 4th cylinder coil. Connect the supplied harness as pictured, tuck the main connector onto the provided slot on the mounting plate. Remove the connector bracket as shown.



Figure 2 – Tucking the Connector and Removing Bracket

6. Route the individual coil wiring as shown.



Figure 3 – Routing the Harness

7. Remove the indicated bolt and attach the ground ring from the harness.

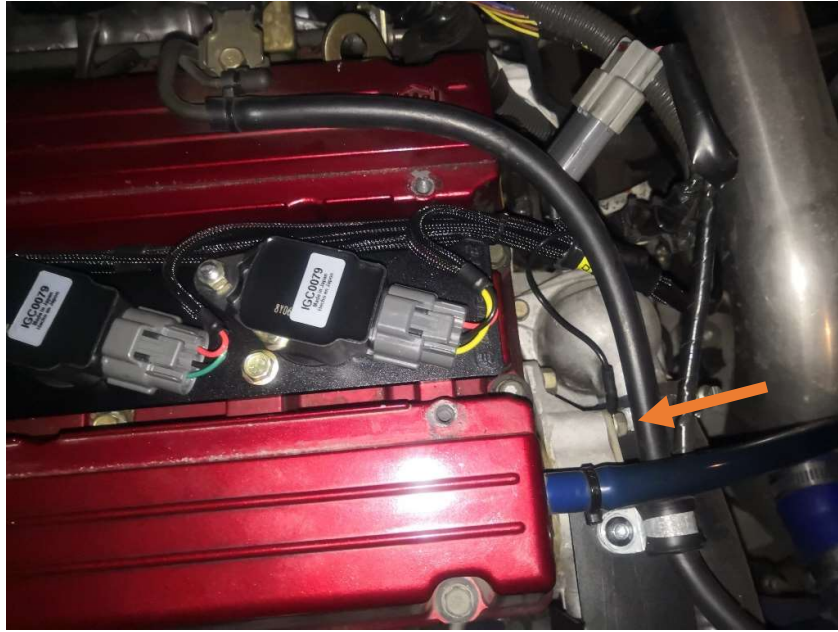


Figure 4 – Attaching the Ground Terminal

8. Mount the relay to the battery holder post.
9. Connect the relay positive ring terminal to the battery post.



Figure 5 – Mounting the Relay and Connecting the Positive Power Source

10. Install the coil valley cover back on.

SEQUENTIAL FIRE WIRING PINOUT (SEQUENTIAL FIRE KIT ONLY)

- Red – 12V switched power, 20A capable
- Black – Ground (cylinder head)
- Yellow – Cylinder 1 Signal
- Green – Cylinder 2 Signal
- Purple – Cylinder 3 Signal
- Blue – Cylinder 4 Signal

CONCLUSION

Installation is now complete. Re-check all steps in the procedure, if all is good, re-connect battery and start the engine. It is also recommended to check or replace your spark plugs on this installation. The R35 coil dwell time can be found in our website under 'installation guide', note that the dwell time table is applicable for sequential fire configuration only. For batch fire, the dwell time shall be reduced to prolong the coil life as explained under the information and limitation section above.

