



5-0 IGNITE IGNITION COIL KIT INSTALLATION MANUAL

This installation manual is applicable to the following engine models;

- 1JZGTE
- 1JZGTE VVTI
- 2JZGE VVTI (Naturally Aspirated, Forward Facing Plenum Highly Recommended)
- 2JZGTE
- 2JZGTE VVTI

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 semi plug and play ignition coil harness
- 6x Hitachi R35 ignition coils with sealing boss attached to the stalk
- 1x Mounting system
- 3x M6x1 – 20mm socket head cap bolt for the mounting system
- 6x M6x1 – 35mm socket head cap bolt for the coils (with spring washers)
- 1x Deutsch 8-pin connector with terminals.

NOTE: 2JZ engines requires the rear intake side valve cover stud to be replaced with a regular M6x1 socket head cap bolt (not supplied)

Installation time varies, depending on your engine setup, requiring basic set of mechanical skills and hand tools;

- Basic hand tools (ratchet, extension, sockets, spanner)
- Pliers
- Allen key set
- Weatherproof crimp pliers

INFORMATION AND LIMITATIONS

- Spark plugs to use (as per OEM)
NGK BKR series to your suitable heat range
- **Kit is semi plug and play, you are required to terminate the harness end for ground and +12V power and route signal wires to ECU.**
- **If you haven't replaced your PCV cross over hose between your valve cover, it is highly likely that these have become hard and will break during removal. It is recommended to replace these hose(s).**
- Kit is designed to be used on aftermarket, modern standalone ECUs such as Haltech/Motec/Emtron etc for sequential ignition.
- 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 hot engine 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 (you may cut and delete the existing OEM loom to the OEM coils from the junction)
 - e. Remove the cross over PCV tube between the two valve covers.

2. Install the mounting bracket using the bolts supplied. Tighten to 9Nm.

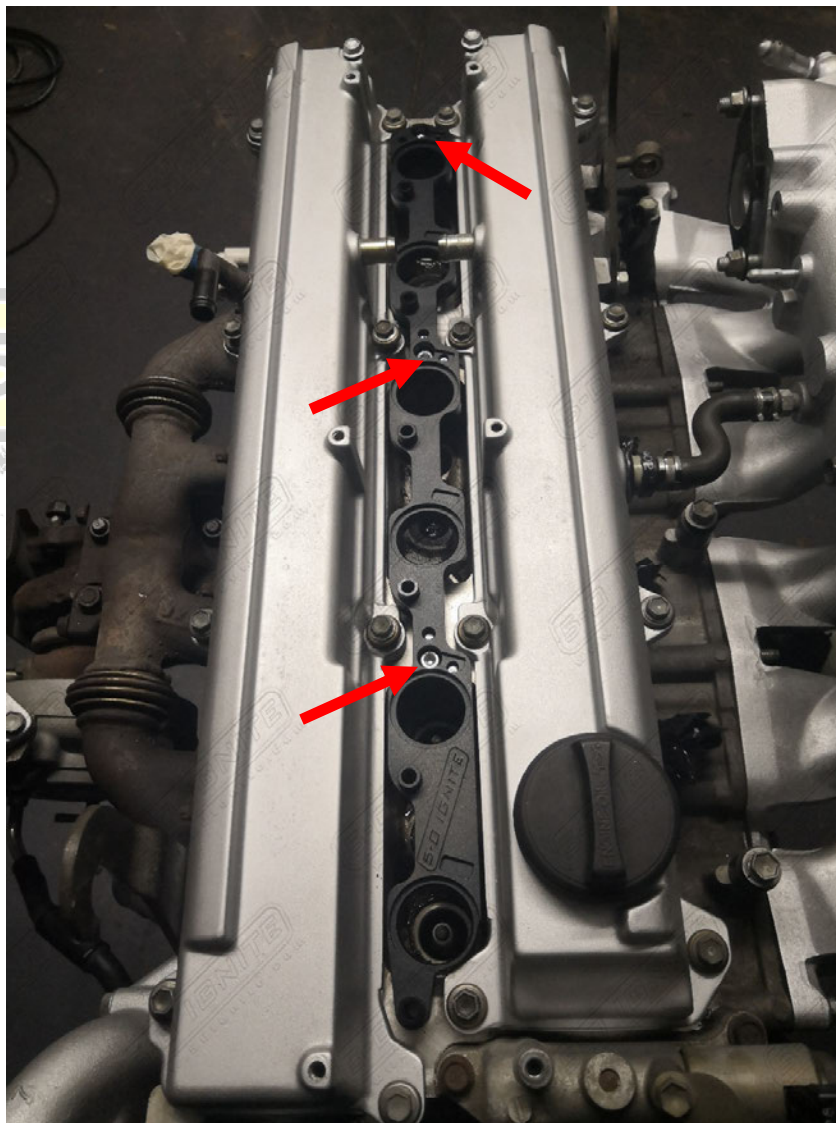


Figure 1 - Mounting Bracket Installed

Note: 2JZs requires this valve cover stud to be extracted and replaced with a regular socket head cap bolt (not supplied).

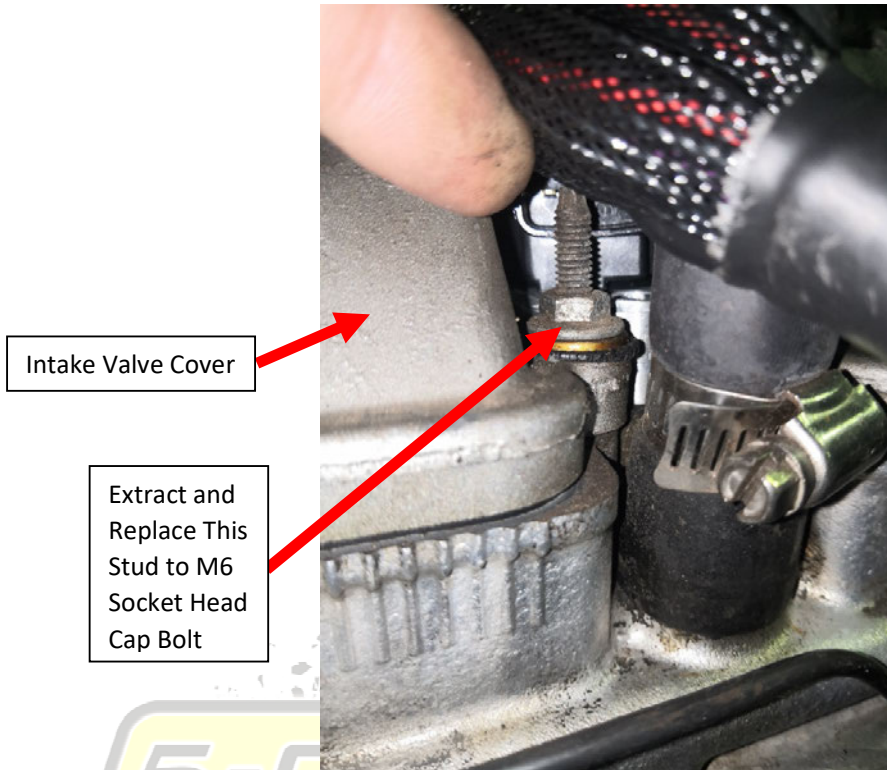


Figure 2 - Extracting and Replacing Valve Cover Stud Only on 2JZs (Viewed from Rear of the Engine)

3. Lubricate the inside tip of the stalk using di-electric grease. Stalk will install easily regardless, HOWEVER, this allows the stalk to seat properly.



Figure 3 – Apply Di-Electric Grease on the Inside of the Stalk Tip

4. Place the ignition coils on but do not tighten it down yet.

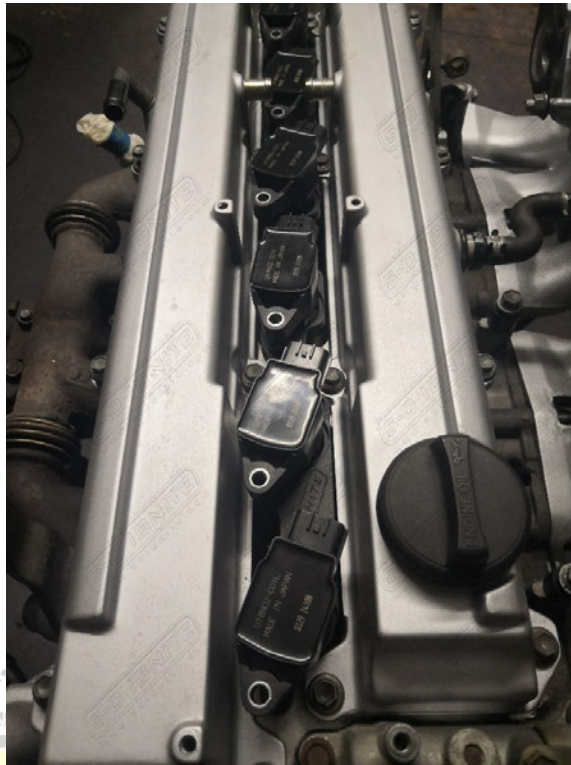


Figure 4 - Ignition Coil Placed On

5. Install the supplied wiring harness and tuck it to the intake side like such.

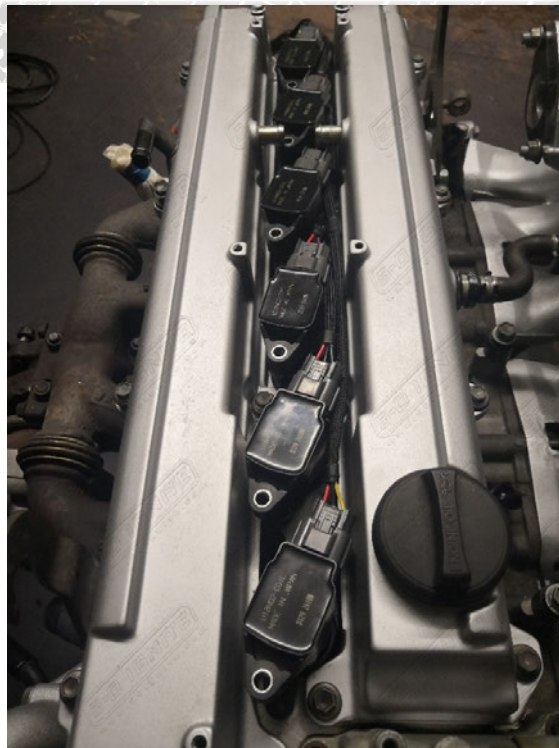


Figure 5 - Wiring Harness Installed

- Using the bolts provided, fasten down the coils to the mounting adapter. Snug tight, **DO NOT OVER TIGHTEN.**



Figure 6 - Tighten the Coils onto the Mounting Bracket

- Install new valve cover cross over PCV hose(s) and mount the valley cover back on. The hardware installation is complete.



Figure 7 - Hardware Installation Complete

WIRING

Red	+12V
Black	Cylinder Head Ground
Yellow	Cylinder 1 Signal
Green	Cylinder 2 Signal
Purple	Cylinder 3 Signal
Blue	Cylinder 4 Signal
Brown	Cylinder 5 Signal
White	Cylinder 6 Signal

Recommended wiring gauge are 16 AWG for power and ground, 18 AWG for signal wires to ECU. It is possible to splice power and ground from the existing OEM wiring loom but best to re-route to a new power source for motorsport application such as to your PDM or Ignition relay source.



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'.