

Bee-R Ignition Rev Limiter Fitting Guide

Some of these photos/details are pinched from Hashiriya's guide on Driftworks.

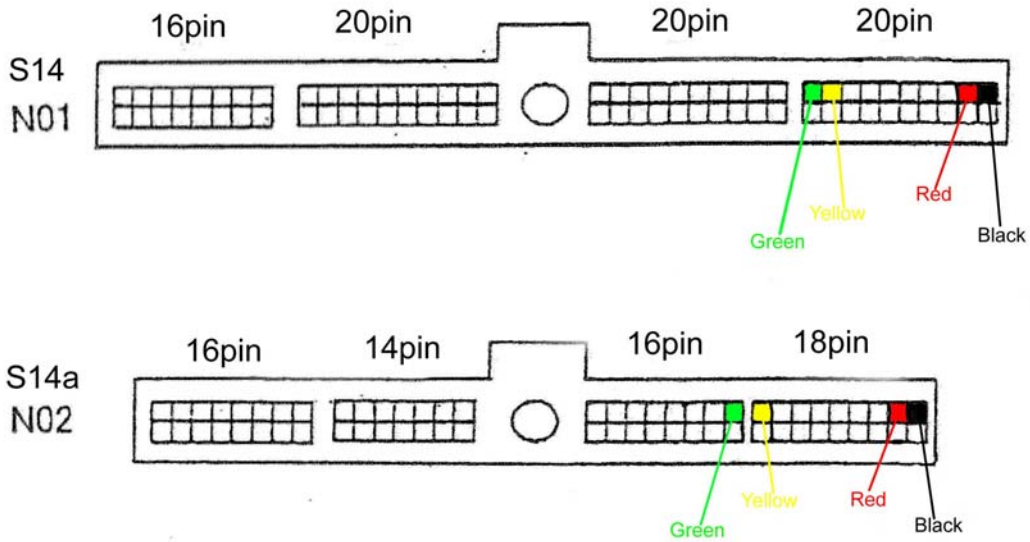
1) Remove the battery negative



2) Remove the trim covering the ECU in the passenger footwell. I take the passenger seat out now to give me more room.



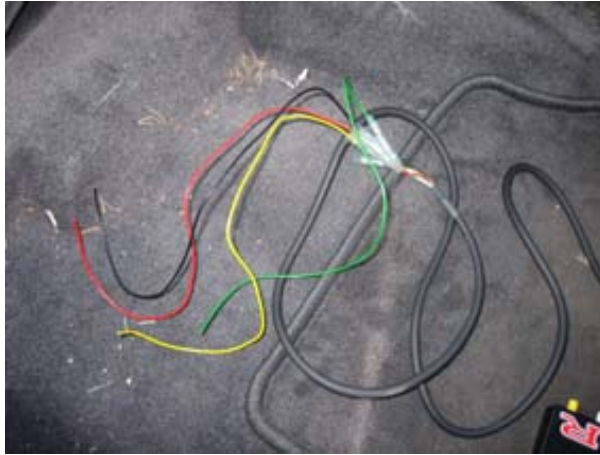
3) Disconnect the ECU plug and locate the correct wires using the diagram below. I have coloured each pin to match the Bee-R wire colours. The green and yellow are already reversed on this diagram as it seems the Bee-R diagram is wrong for most cars. If when the car is all back together and it won't start, swap the green/yellow. For CA18DET/Zenki S14, use diagram N01
 For Kouki S14 / S15, use diagram N02
 Red top SR20DET user should use diagram N02 also.



This picture shows the wires on an S14a separated from the rest by the knife



4) You don't need to cut any of these wires. The Bee-R wires just piggy backs onto the ECU wires. I used the connectors supplied as below. The 4 wires were cut back and soldered onto the ECU wires as it is easier and neater than using loads of crimps.



You can see from right to left the green, red, yellow and black piggy backed onto the ECU wires with the connectors just below.



5) That's the tricky bit done. Near the control unit you will see 3 loops of wire (brown, white and grey). For 4 cylinder engines cut the grey wire.



6) Last wire to go. The white wire of the Bee-R needs to be connected to the handbrake warning light wire. Mine was quite easy, as will many others because you can connect into a Turbo timer wire if you know where it is. Otherwise you need to take the centre console apart. From memory (as I didn't need to do it) you will find 2 screws at the front just behind the stereo fascia and 2 in the cubby hole at the back. Once the centre console is removed enough you will see a small switch near the bottom of the handbrake. Join the Bee-R white wire onto the wire from the switch.





7) You are now all wired in. Check that the wires are connected correctly at the ECU. Put the plug back on the ECU. Reconnect the battery. Turn the ignition on and check for smells/smoke etc (worst case scenario). If okay start the car, if it wont start you need to swap the green and yellow wires. Replace all the trim panels. Both the Rev 1 and Rev 2 should be at position 0. Rev the car and it should cut at 2500rpm with the handbrake up or down. Change the setting on Rev 1 to 2 and try again. With the handbrake up it should rev to 2500rpm, with it down it should now be 3500rpm. Rev 2 can be used as a launch control. Adjust Rev 1 and Rev 2 to the setting you require using the table below.

Most limiters are Type B. this means that the variable limit is:

0 2500
1 3000
2 3500
3 4000
4 4500
5 5000
6 5500
7 6000
8 6500
9 7000
A 7500
B 8000
C 8500
D 9000
E 9500
F 10000

REV1 is the normal rev limit and REV2 is the limit when Handbrake/switch is engaged.

GAIN sets the frequency and length of cut. The lower the number the quicker the cut. e.g. 1 = bababababa F= BANG!!!.....BANG!!!..... IF you set the GAIN to 0 the limiter will not function.

There has been potential problems reported with Power FC users. The earth wiring may need to be reviewed in some cases...