

# Wiring Guide for Swapping R32 RB20DET into 1995 240SX

Compiled by Shane Stafford, 12.11.2003. Tested on my engine (it works!).

ECU pins on the RB20DET are noted where applicable

Errors in the 1995 S14 FSM are noted - verify those connections if you are trying to do a 1996-1998 S14!

Wiring for wiper, ASCD, etc. is not included (no splices are needed, just add the S14 wiring to the RB harness)

The A/C temperature sensors and fuel pump control module are not necessary for the KA A/C system and fuel pump.

Pins on the RB20DET side are ECU plug pin #'s.

**Plug on RB20DET**

**O**

|   |   |   |   |
|---|---|---|---|
| a | b | c |   |
| e | f | g | h |

a G/OR Neutral switch (pin 44)  
 b LG A/C relay (cut signal) (pin 9)  
 c SB P/S switch (pin 19)  
 e W/PU Power to ignition coil relay  
 f B/R Ignition switch (ON signal) (pin 45)  
 g  
 h W/B Power to ECCS relay, injectors, and backup power to ECU (pin 58)

**P**

|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| a | b |   | O | c | d | e |
| f | g | h |   | j | k | l |

a BR O2 sensor heater power  
 b B/Y Inition switch (START signal) (pin 43)  
 c OR/B Monitor and check lamp  
 d Y/G VSS  
 e B/P Fuel pump relay  
 f see W-1 main harness  
 g see W-1 main harness  
 h see W-1 main harness  
 j Y/R tach signal  
 k L/B thermal transmitter  
 l LG A/C engine temp sensor

**Q**

|   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|
|   |   | a | b |   | O | c | d | e |
| f | g | h | i | j | k | l | m | n |

a L/B A/C engine temp sensor  
 b  
 c Y (TX)  
 d Y/G (RX)  
 e B Ground  
 f  
 g  
 h  
 i  
 j  
 k Y/PU (CHK)  
 l  
 m LG/R A/C switch (pin 46) from thermo control  
 n B/Y Air regulator (to fuel pump relay)

**R**

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| a | b |   | c | d | e |
| f |   | g | h | i | j |

a LG Fuel pump term. voltage ctrl (pin 104)  
 b  
 c  
 d  
 e  
 f G/W pin 106???  
 g  
 h  
 i  
 j  
 k

**S**

|   |   |
|---|---|
| a | b |
|---|---|

a PU Throttle sensor output signal (pin 56)  
 b B Sensor grounds (pin 30)

**Connection to 1995 240SX**

F3(40) G/OR (matches FSM)  
 F3(43) B/P (matches FSM)  
 F3(15) PU/W (FSM says 31)  
 F3(1) B/R  
 F3(1) B/R

Should wire separately to F3(17) R and F3(1)  
 Wire ECU backup power to F3(17), all others to F3(1).

F3(18) BR (FSM says 10)  
 F3(34) OR (matches FSM)  
 F3(30) OR (FSM says 22)  
 You don't really want a speed limiter, do you?  
 F3(11) B/P (FSM says 11)

F3(26) Y/R  
 F3(28) Y

Ground this wire.

F3(46) OR/L (matches FSM)  
 F3(10) B/Y (FSM says 26)

Nothing is needed from this plug

My car did not have this plug.