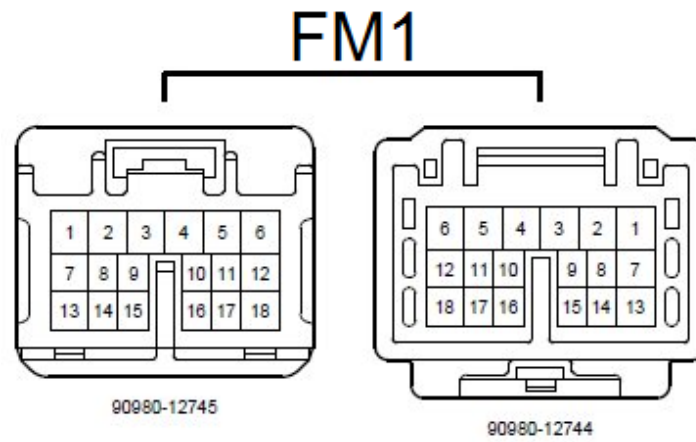


FM1 CHASSIS CONNECTOR WIRING



FM1 is the chassis integration connector that is being fitted to the 3rd gen Sienna wiring harness to convert it for engine swap use. This fits the pins on the existing harness and can be added with no wire crimping necessary.

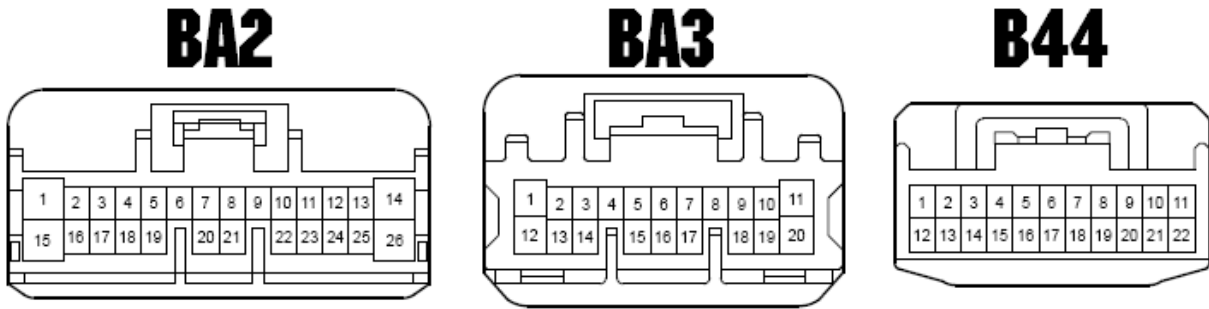
- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Fuel Injector Power 2. Ignition (Front Bank) 3. Ignition (Rear Bank) 4. AFR Power 5. – 6. DBW Power (+BM) 7. – 8. Alternator Ignition 9. MAF Power | <ol style="list-style-type: none"> 10. Oil Pressure Switch 11. Ground 12. Coolant Temp (Optional) 13. Starter Solenoid 14. Alternator Charge Light 15. Alternator Battery Sense 16. – 17. Ground 18. A/C Magnetic Clutch |
|---|---|

Notes:

1. The grounds here are intended to be signal references, do not just connect to the chassis because the wires will burn up if the main engine grounding cable fails.
2. The coolant temp wire is optional and intended for the SW20 and AW11 application, the ZZW30 application does not need it.

Pinout for Sienna 82121-08160 or 82121-08150 harness (3rd gen 2GR-FE Sienna)

The chassis integration connectors on the 3rd gen Sienna are as follows:



BA2

1	White-Blue	AFR Power
4	Yellow	Oil Pressure Switch
15	Blue	DBW Power (+BM)
23	White	Alternator Charge light
24	Green	Alternator Battery Sense
25	Black-White	MAF Power
26	Black	Starter Solenoid

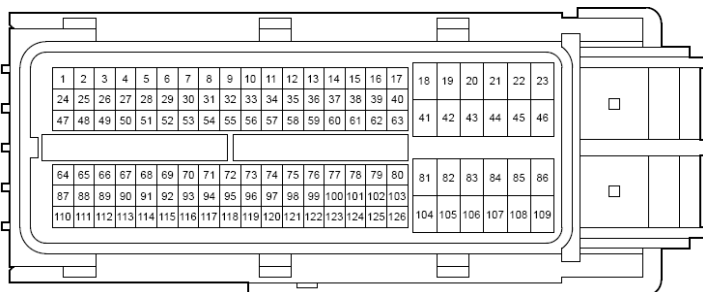
BA3

1	Red	Ignition (Front bank)
11	Green	Ignition (Rear bank)
12	Blue	A/C Magnetic Clutch
18	Brown	Ground for OBDII port
20	White-Blue	Fuel Injector Power

B44

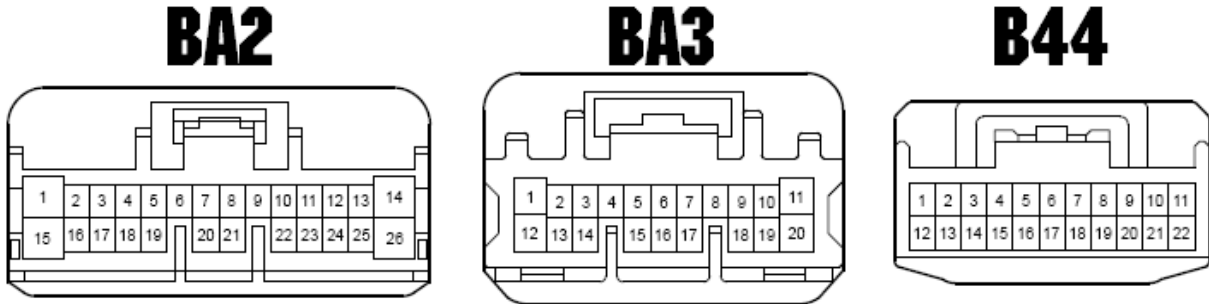
4	Red	Alternator Ignition
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Also, to set the ECU in "Drive" Mode, move the brown wire at position 113 to position 27 on the large ECU connector and connect the brown wire to the black wire with a white stripe on the front secondary oxygen sensor connector.



Pinout for Sienna 82121-08100 or 82121-08110 harness (3rd gen 2GR-FE Sienna)

The chassis integration connectors on the 3rd gen Sienna are as follows:



BA2

1	White-Blue	AFR Power
7	Yellow	Oil Pressure Switch
15	Blue	DBW Power (+BM)
24	White	Alternator Charge light
25	Green	Alternator Battery Sense
3	Black-Red	MAF Power
26	Black	Starter Solenoid

BA3

1	Red	Ignition (Front bank)
11	Green	Ignition (Rear bank)
12	Blue	A/C Magnetic Clutch
18	Brown	Ground for OBDII port
20	White-Blue	Fuel Injector Power

B44

9	Red	Alternator Ignition
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Also, to set the ECU in "Drive" Mode, move the brown wire at position 113 to position 27 on the large ECU connector and connect the brown wire to the black wire with a white stripe on the front secondary oxygen sensor connector.

