

For wiring, I used the 1999 Durango as a base. For the majority of the blending, I merged together

the donor C105 and C106 connections with the TJ C103 and C104. Below is a the pin relationships used:

Donor C105:

CAVITY	CIRCUIT	FUNCTION	CONNECT TO TJ HARNESS
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C105 CAV 1	K125 WT/DB	Trans relay control	* add wire, see 8W-31-2, fed from transmission relay
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C105 CAV 2	T16 RD	Trans ctrl relay out	* add wire from terminal 87 on control relay, see 8W-31-2
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C105 CAV 3	G7 WT/OR	Vehicle Speed Sensor	use donor harness to transfer case speed sensor,
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splice in to +5V and - on throttle position sensor, pin sensor signal

to this cavity

C105 CAV 4	F142 OR/DG	Auto shutdown relay	TJ C103 CAV 1
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C105 CAV 5	not used		
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C105 CAV 6	not used		
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C105 CAV 7	not used		
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C105 CAV 8	not used		
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Donor C106:

C106 CAV 1	F24 RD/DG	Fused ign sw (run)	TJ C103 CAV 11
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C106 CAV 2	C3 DB/BK	a/c comp clutch output	TJ C103 CAV 5
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C106 CAV 3	T41 BK/WT	park/neutral sw	TJ C104 CAV 5
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C106 CAV 4	K4 BK/LB	sensor ground	TJ C103 CAV 8
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C106 CAV 5	G107 BK/GY	4wd sense	TJ C103 CAV 13
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C106 CAV 6	K125 WT/DB	generator src (b+)	* TJ C103 CAV 2 add wire to terminal 86 on
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transmission control relay - see 8W-20-3

C106 CAV 7 A142 DG/OR auto shtdwn relay out TJ C103 CAV 1

C106 CAV 8 Z12 BK/TN ground TJ C103 CAV 10

C106 CAV 9 not used

C106 CAV 10 not used

C106 CAV 11 not used

C106 CAV 12 L10 BR/LG fused ign sw (run) TJ C104 CAV 10

C106 CAV 13 A14 RD/WT fused b+ TJ C103 CAV 3

C106 CAV 14 not used

C106 CAV 15 F18 LG/BK fused ign sw (st-run) TJ C103 CAV 9

C106 CAV 16 L1 VT/BK back-up lamp feed C104 CAV 9

*** = double check, made last minute changes**

Another set of instructions I found from a V-8 Swap

C103 Black Firewall Connector

- 1 OR/DG O2 Sensor ----- Splice to OR/DG of Dodge Harness**
- 2 DG/OR Alternator-PCM ----- Splice into DG/OR of Dodge Harness**
- 3 RD/WT PDC-PCM Power ----- Splice to RD/WT of Dodge Harness PCM C1 22**
- 4 Not Used**
- 5 Not Used**
- 6 DB/LG Fuel Level Sensor ----- Unchanged**
- 7 DG/WT Fuel Pump Power Relay ----- Unchanged**
- 8 BR/YL Speed Sensor Ground-PCM ----- Unchanged**
- 9 RD/LG**
- 10 BK/TN PCM-ADLD ----- Unchanged**
- 11 BK/LB PCM-ADLD ----- Unchanged**
- 12 WT/OR Speed Sensor ----- Splice to WT/OR of Dodge Harness PCM C2 27**
- 13 BK/RD Transfer Case Indicator-Instrument Panel ----- Unchanged**
- 14 DB/BK A/C Clutch-Compressor Clutch Relay in PDC ----- Splice to DB/BK (a/c clutch) of Dodge Harness**

C104 Gray Firewall Connector

- 1 LG A/C High Pressure Switch -----LG/WT (a/c high pressure switch) of Dodge Harness**
- 2 DB/WT A/C Low Pressure Switch**
- 3 Not Used**
- 4 Not Used**
- 5 BR/LB PDC Starter Relay Ground-PCM ----- Splice to BK/WT of Dodge Harness PCM C1 6**
- 6 Not Used**
- 7 Not Used**
- 8 Not Used**
- 9 VT/BK**
- 10 VT/WT Neutral Safety/Backup light Power ----- Splice to BR/LG of Dodge Transmission Harness**
- 11 DG/LG Injector/coil Power**
- 12 BR PDC Starter Relay-Starter ----- Spliced on Starter Wire From Dodge**
- 13 DB PCM-Fuse Block ----- Splice to LG/BK of Dodge Harness PCM C1 2**
- 14 Not Used**

***VT/BK wire from Dodge transmission harness is for backup lights. I have added auxiliary backup lights so I spliced this into the relay for them.**

C1 4 I had to y splice the BR/YL from the speed sensor into the BR/YL sensor ground of the Dodge harness since I made a stand alone speed sensor/fuel pump/transfer case harness

C1 31,32 BK/TN of Dodge harness must be y spliced into BK/TN of original Jeep harness.

C2 31 I had to y splice the VI/OR from the speed sensor into the OR 5v ref of the Dodge harness since I made a stand-alone speed sensor/fuel pump/transfer case harness.

Transmission control relay (Colors are for my relay plug reference only)

30 ----- BR/OR ----- Battery

85 ----- YL -----PK/BK PCM C2 30

86 ----- VI/OR ----- DG/LG from Alternator

87 ----- PI/WT ----- transmission plug pin 1

Cooling fan relay

A/C System

DB/BK from Dodge compressor to DB/BK C103 14 of Jeep

DB/OR from A/C low-pressure switch spliced to DB of Dodge high-pressure switch

LG/WT from Dodge high-pressure switch spliced LG C104 1 of Jeep

Overdrive

PCM C3 13 Transmission overdrive sense to momentary switch (added on) second terminal grounded

PCM C3 6 Overdrive lamp driver to amber led (added on) second terminal grounded

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Alright folks...here is the way I have things wired...see if you can spot the error!

I am working with a 97 TJ FSM and 98 ZJ FSM downloaded from Jeeps Limited.

If I say PCM C3 26, I mean PCM plug C3, pin 26.

I used the TJ plugs at the firewall, and spliced the Dodge engine harness in.

Color Code

DG=Dark Green

LG=Light Green

TN=Tan

BR=Brown

YL=Yellow

OR=Orange

RD=Red

WT=White

BK=Black

GY=Gray

DB=Dark Blue

LB=Light Blue

VT=Violet

The first plug is a square 16 pin.

DG/BK-----DG/OR-----RD/WT-----(blank)

DB/BK-----DB/LG-----DG/WT-----BR/YL

RD/LG-----BK/TN-----BK/LB-----(blank)

BK/RD-----(blank)----- (blank)-----BK/WT

Here's where I have things going from this plug right now

DG/BK

PCM C3 12 DG/OR splits and runs to the center pin of the ASD Relay in the PDC.

The second part of the DG/OR coming from PCM C3 12 is spliced to DG/BK to the plug then runs to the Generator, Coil, Injectors, and O2 sensors.

This is the ASD Relay Output Circuit.

DG/OR

DG/OR runs from PCM C3 25 to the plug, but then I do not know where it goes.

The ZJ FSM labels PCM C3 25 as the "Generator Driver"

RD/WT

RD/WT runs from the PDC to the plug, and then is spliced to RD/YL and runs to C1 22.

This is the Fused B(+) circuit

BLANK

DB/BK

I have traced DB/BK to the A/C relay in the PDC, and I am not running A/C so this wire is not being used

DB/LG

DB/LG runs from PCM C3 26 to the plug to the Fuel Module.

This is the Low Fuel Sense Signal.

DG/WH

DG/WH runs from the Fuel Pump Relay to the plug to the Fuel Module.

This is the Fuel Pump Power.

BR/YL

BR/YL runs from the Battery Temperature Sensor(under the battery) to the plug, then is spliced to BK/LB with other sensor grounds and grounded to the engine block.

BK/LB is the Sensor Ground Circuit and runs to PCM C1 4.

RD/LG

RD/LG runs from the PDC to the plug, then is spliced to OR on the engine harness and runs to PCM C1 2.

This is the Fused Ignition Output.

BK/TN

BK/TN runs under the dash to a yellow connector at the left kick panel and is connected to the yellow plug at pin 9.

I am not sure what circuit this wire runs, but I currently have it running from the plug to a ground on the block.

BK/LB

BK/LB runs to the same yellow connector under the dash and is connected at pin 6.

I am unsure of the function of this wire, but due to its color I have it spliced into the BK/LB Sensor Ground Circuit which also runs to a ground on the block.

BLANK

BK/RD

BK/RD runs from the Tcase switch to the Instrument Cluster

BLANK

BLANK

BK/WT

BK/WT runs from a blue plug under the dash right next to the previously mentioned yellow plug and is landed on pin 11.

I do not know the function of this wire, and it is currently not connected to anything after the plug.

The second firewall connector is a 10 pin connector.

BR/LB-----(blank)-----(blank)-----DB/WT-----LG/DG
VT/WT-----VT/BK-----(blank)-----(blank)-----(blank)

BR/LB

BR/LB runs from the Starter Relay in the PDC to the plug, then splits and runs to PCM C1 6(Park/Neutral Switch) and the Tcase Park/Neutral Switch

BLANK

BLANK

DB/WT

DB/WT runs from PCM C3 22 to the plug, but I do not have it connected to anything beyond this point. The FSM lists PCM C3 22 as the A/C Pressure Switch Sense, and I am not running A/C

LG/DG

LG/DG runs from PCM C3 23 to the plug, but I do not have it connected to anything beyond this point. The FSM does not list anything on PCM C3 pin 23.

VT/WT

VT/WT runs from the Dash to the plug where it is spliced to BR/LG from the Park/Neutral Switch on the trans

VT/BK

VT/BK runs from the Dash to the plug where it is spliced to YL/GR from the Park/Neutral Switch on the trans.

BLANK

BLANK

BLANK

The Park/Neutral Switch on the Trans is wired as follows

YL/DG-----BK/WT-----BR/LG

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This is the Fused B(+) circuit

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This is the Low Fuel Sense Signal.

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DG/WH runs from the Fuel Pump Relay to the plug to the Fuel Module.

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BR/YL runs from the Battery Temperature Sensor(under the battery) to the plug, then is spliced to BK/LB

with other sensor grounds and grounded to the engine block.
BK/LB is the Sensor Ground Circuit and runs to PCM C1 4.

RD/LG

RD/LG runs from the PDC to the plug, then is spliced to OR on the engine harness and runs to PCM C1 2.
This is the Fused Ignition Output.

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VT/WT

VT/WT runs from the Dash to the plug where it is spliced to BR/LG from the Park/Neutral Switch on the trans

VT/BK

VT/BK runs from the Dash to the plug where it is spliced to YL/GR from the Park/Neutral Switch on the trans.

BLANK

BLANK

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The Park/Neutral Switch on the Trans is wired as follows

YL/DG-----BK/WT-----BR/LG

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