

1984 Corvette: Service Bulletin: Engine Stops Running When Starting with Air Conditioning "On"

Subject: Engine Stops Running When Starting with Air Conditioning "On"

Model and Year: 1984 Corvette with Automatic Transmissions

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TO: ALL CHEVROLET DEALERS

Some 1984 Corvettes may exhibit a condition of the engine to stop running; when starting with the air conditioning "on". The following wiring revision will correct this condition and could assist idle quality as well.

This revision requires installing a 16 Ga. wire into the A/C discrete circuit at connector C-467, Pin F of the I/P to ECM harness, routing the wire through the bulk head connector and splicing into the A/C circuit of the engine, between the pressure cycling switch and the compressor clutch (see block diagram).

Vehicles involved are 1984 Corvettes with automatic transmissions built prior to VIN 115112.

Parts required to perform this revision are:

<u>Quantity</u>	<u>P/N</u>	<u>Description</u>
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1	12034046	Terminal, Female
22 Ft.	NPN	16 Ga. Black GXL Wire

The following steps are to be performed to accomplish this revision:

1. Remove I/P upper trim pad assembly. Remove L.H. and R.H. hush panels.
2. Extract female terminal (green wire) from gray I/P to ECM harness connector C-467, circuit 66 (see Figure 1.)
3. Cut off and discard extracted female terminal. Fold severed green wire back and tape it to the I/P harness, making sure the severed wire end is well insulated with electrical tape.
4. Utilize the 22 feet of 16 Ga. GXL black wire by stripping one end and crimping, P/N 12015856, female terminal on the stripped end. Insert the new terminal into connector C-467, Pin F.

NOTICE: This wire will supply the ECM with +B voltage when the A/C compressor clutch is engaged; therefore, it will be referred to as a "Signal wire", in this text.

5. Route 16 Ga. signal wire up and across the top of the A/C ducts and under the aluminum dash braces. Feed the wire down the L.H. forward side of the I/P panel adjacent the fog lamp switch.

NOTICE: Route wire avoiding any sharp edges as well as "Hot Spots" on or near the engine.

6. Using masking tape, secure the signal wire to the A/C ducts to avoid wire abrasion and rattles.
7. Remove I/P harness bulk head caps on the passenger compartment side, as well as the engine compartment side. DO NOT disconnect the bulk head connectors.
8. Feed the signal wire through the open (unused) bulk head, Pin #E4, located adjacent to a 12 Ga. red wire. it may be necessary to strip the feed end of the signal wire approximately two (2) inches from the end and "solder tint" the wire to aid in guiding the wire through the bulk

head connector.

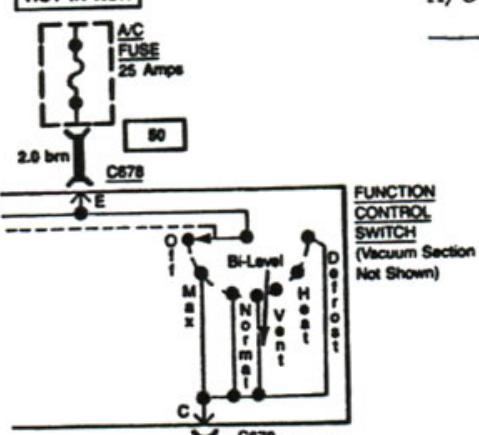
9. Once the signal wire has been fed through the bulk head connector, grease is to be packed around the signal wire at both sides of the connector. This step assures an adequate bulk head connector to signal wire seal.
10. Reinstall the bulk head harness caps.
11. Loop the signal wire down below the bulk head connector and back up behind the brake booster (see Figure 2.)
12. Route the signal wire along the R.H. hood release cable securing the wire to the cable with three (3) cable ties.
13. At the R.H. rear corner of the engine, direct the wire to the front of the engine and install it in the existing engine harness conduit (see Figure 3.)

NOTICE: Allow ample signal wire to EGR valve clearance.

14. Remove the harness end tape and strip the insulation back .5 inches on the green wire at the high pressure A/C switch connector (see Figure 4.)
15. Remove excess signal wire length, if necessary, and strip end back .75 inches. Wrap the signal wire around the A/C clutch green wire and solder to insure a good connection.
16. Retape harness at high pressure switch connector.
17. Reinstall I/P upper trim panel and hush panels.

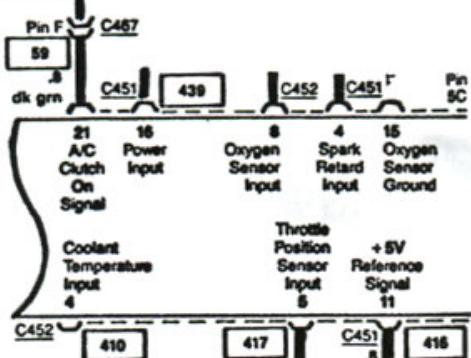
HOT IN RUN

A/C CLUTCH ON REVISED ECM SIGNAL INPUT BLOCK DIAGRAM



WIRING ADDITION
(BLACK 16 GA. GXL)

EXTRACT FEMALE TERMINAL - REMOVE TERM FROM WIRE FOLD WIRE BACK AND TAPE TO I/P HARNESS



ECM

FIGURE 1

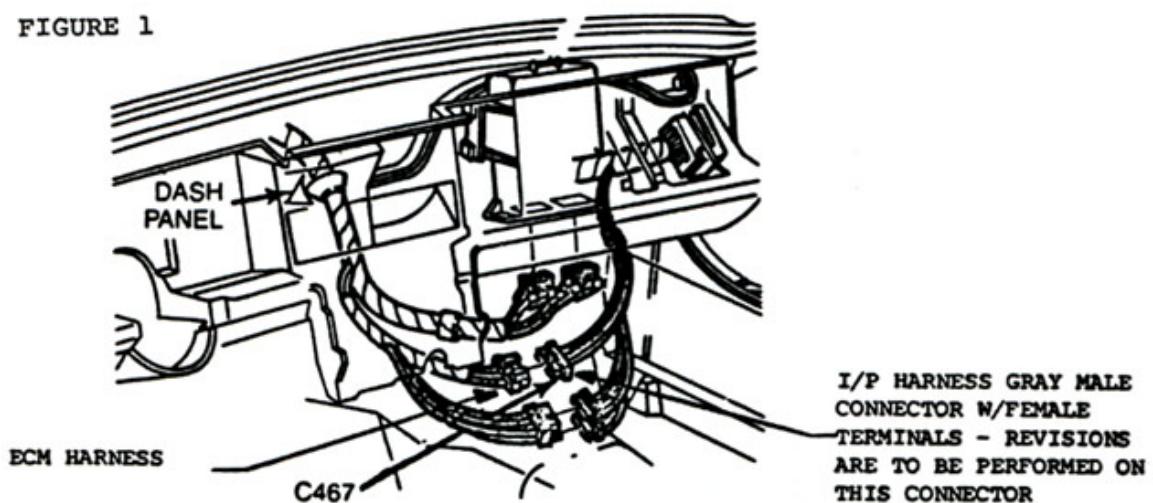


FIGURE 2

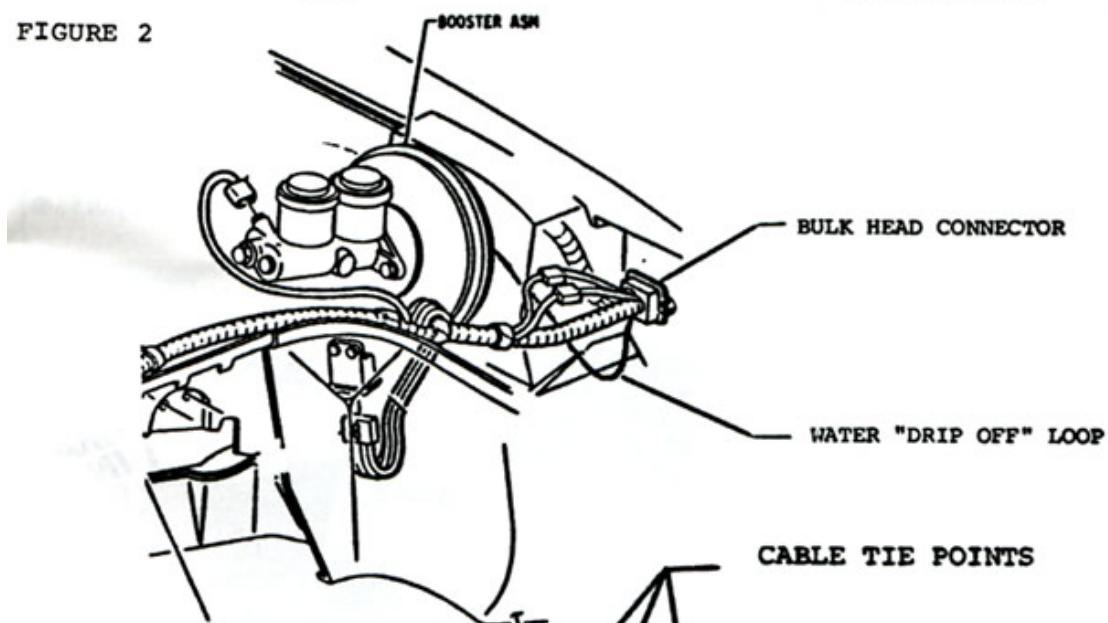


FIGURE 3

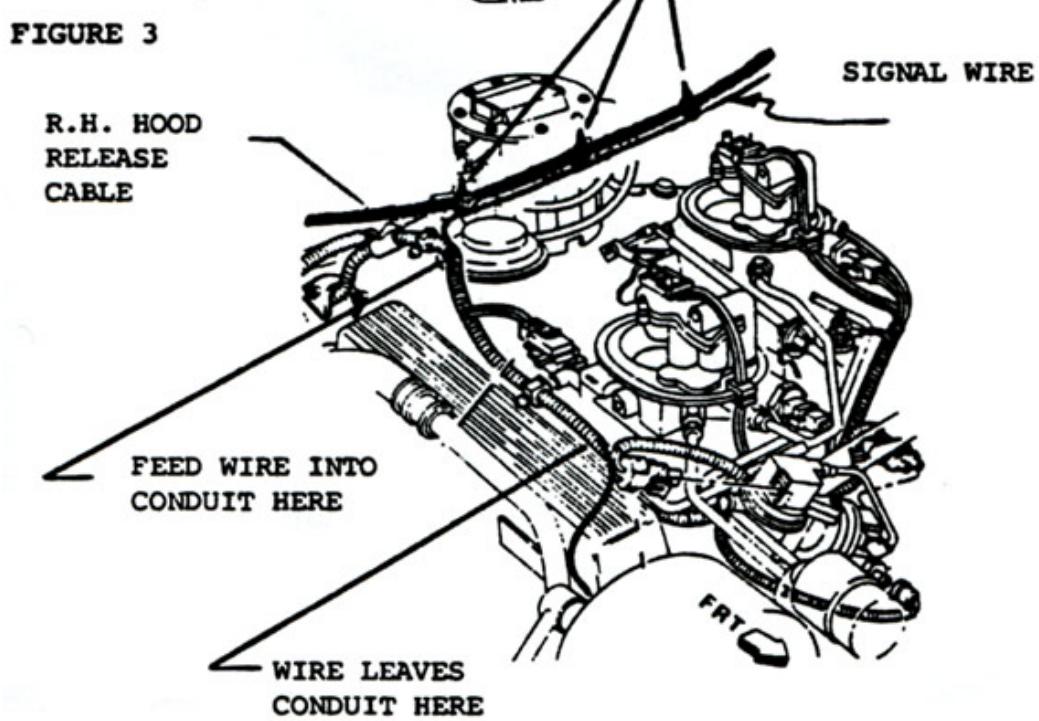
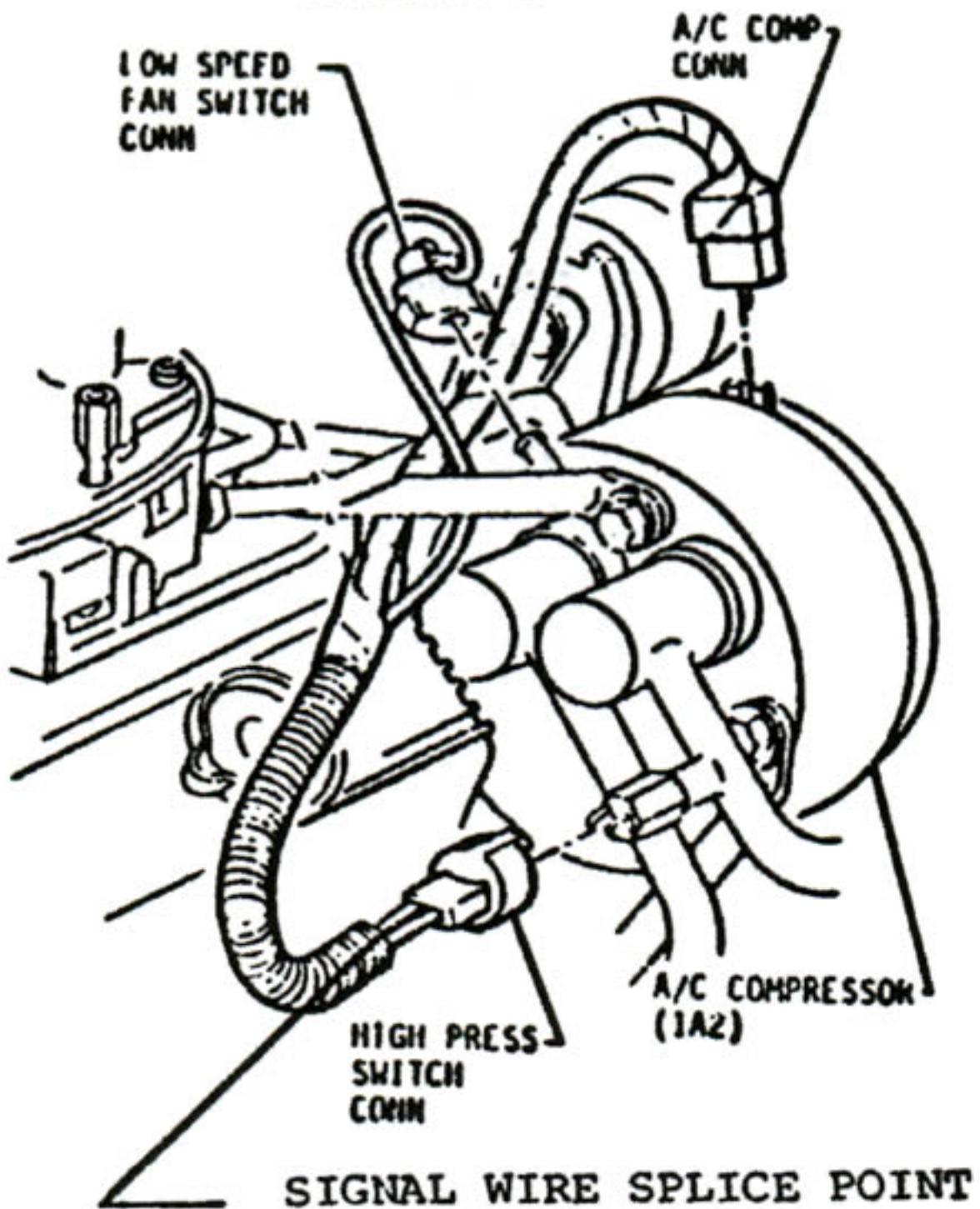


FIGURE 4



Online URL:

<https://www.corvetteactioncenter.com/tech/knowledgebase/article/1984-corvette-service-bulletin-engine-stops-running-when-starting-with-air-conditioning-on-1213.html>

