Questions, call : 1-800-MOTO-USA

http://www.cannondale.com/motorsports

Cannondale Motorsports
Service Bulletin

BULLETIN : SB02-010

MODELS : All 2000, 2001, and 2002 ATVs and Motorcycles shipped prior to 06/12/02

ISSUED : 06/13/02

SUBJECT : Fuel pump run on

CONDITION : The positive (+) fuel pump terminal of affected vehicle is “hot” all the time, even if the ignition switch is OFF (ATVs). If the fuel pump negative (-) terminal shorts to the fuel pump housing or the vehicle frame, the fuel pump will come on and stay on depleting the battery. A continuously running fuel pump will pressurize the fuel system, possibly damage the fuel pump, possibly damage the ECU fuel pump circuit, and deplete the battery.

SOLUTION : The negative pump terminal of affected vehicles is bare and MUST be insulated to avoid accidental contact with the pump housing or frame. For affected vehicles, install thermal shrink wrap and an insulating boots on both fuel pump leads. The positive pump terminal should have a protective boot already installed, however, the thermal tubing should be added to that terminal.
Units have been serviced at the factory. All 2000, 2001, and 2002 model ATVs and Motorcycles should be inspected for potential short circuits of the fuel pump terminals.

⚠ WARNING

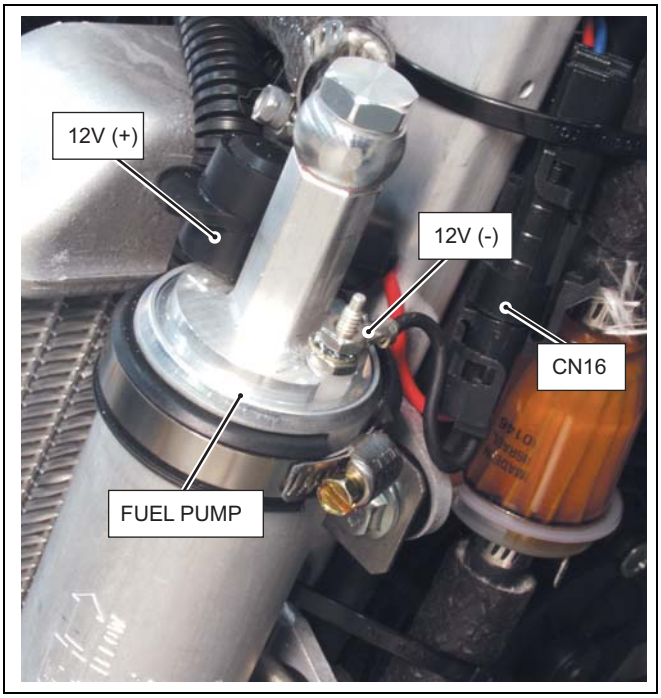
Failure to perform this MANDATORY service bulletin can result in a malfunction of the vehicle fuel pump circuit. A malfunctioning fuel system increases the risk of a fuel fire or explosion. Anyone servicing or operating the vehicle can be severely injured or killed. Complete the Instructions of this MANDATORY service bulletin as directed for all affected vehicles.

PARTS : The following parts necessary to perform this MANDATORY service bulletin are available free of chrage:
Thermal shrink tubing, Insulating boot - P/N 5002410,

If you have any questions about this service bulletin, call toll free 1-800-MOTO-USA.

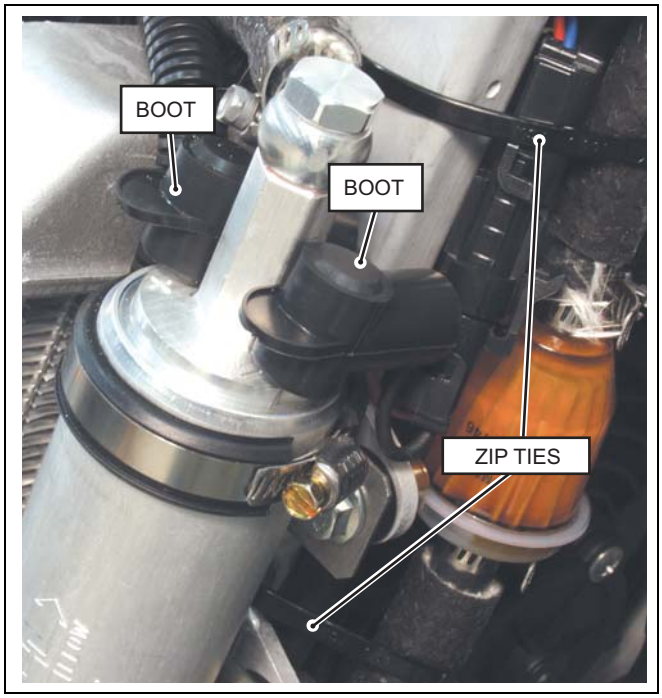
Information is subject to change without notice.

ALL ATVS



INCORRECT

(NO 12V (-) BOOT)



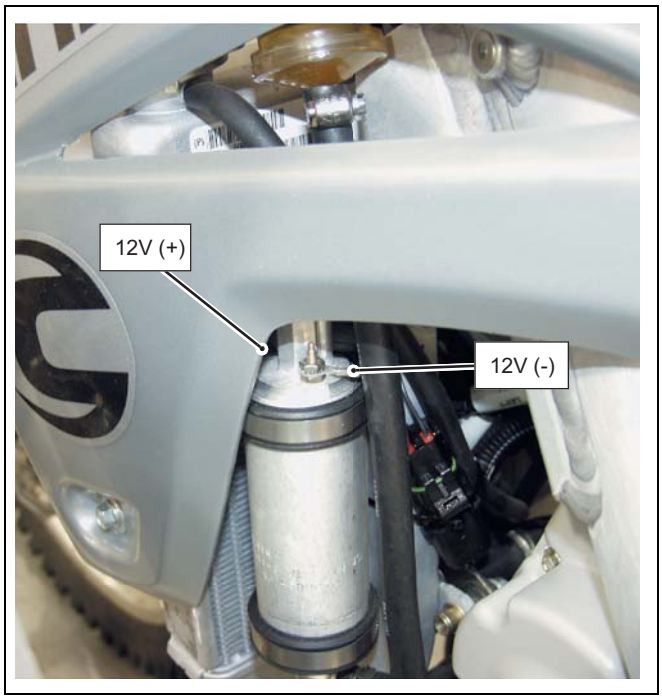
CORRECTED

(BOOTS W/ SHRINK TUBING)

⚠ WARNING

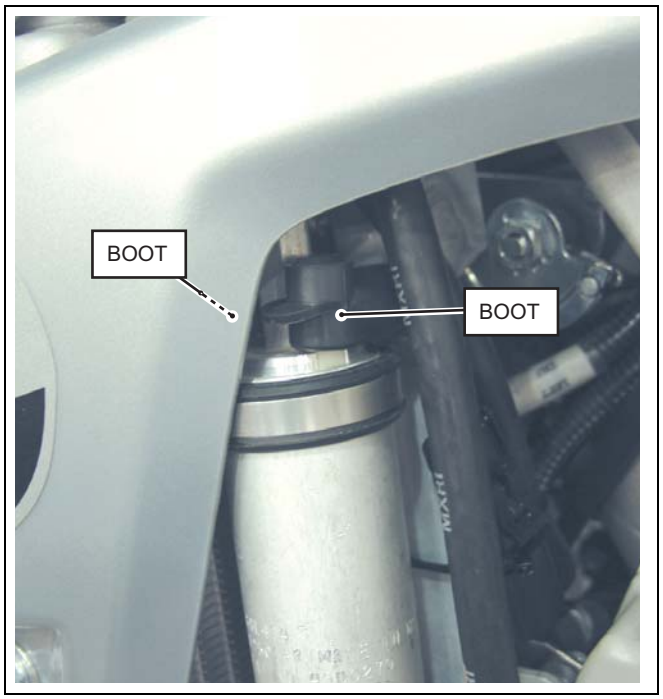
On ATVs, you MUST replace the zip tie securing CN16 and the upper fuel hose to the vehicle frame. If you fail to replace it as indicated in the photo above, the fuel hose can interfere with the throttle bellcrank. The operator can lose the ability to control the engine speed and be severely injured or killed.

2000, 2001 MOTORCYCLES



INCORRECT

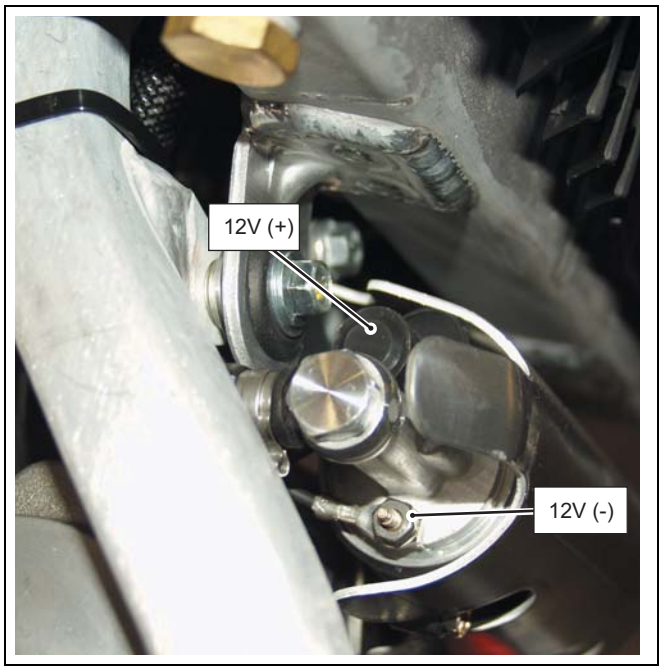
(NO 12V (-) BOOT)



CORRECTED

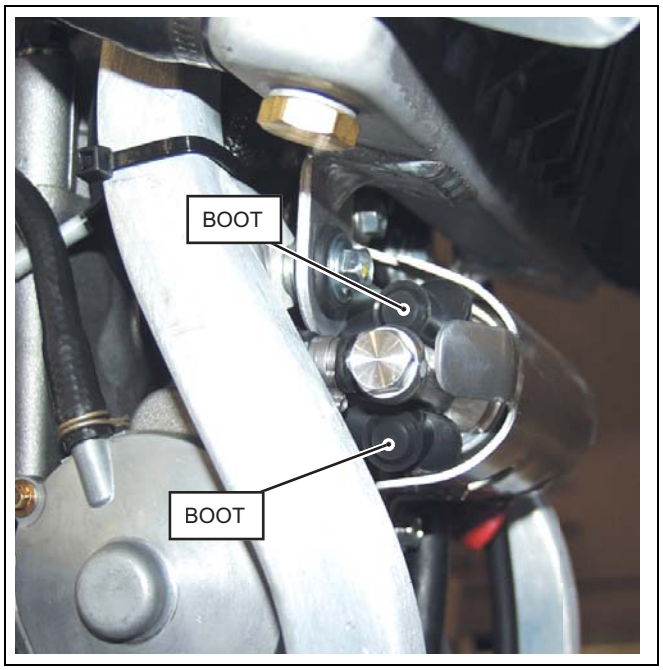
(BOOTS W/ SHRINK TUBING)

2002 MOTORCYCLES



2002 MOTORCYCLE INCORRECT

(NO 12V (-) BOOT)



CORRECTED

(BOOTS W/ SHRINK TUBING)

INSTRUCTIONS

The following procedure can be performed as described on either a motorcycle or ATV.

⚠ WARNING

Gasoline is extremely flammable; take extra safety precautions when servicing any part of the fuel system.
Disconnect the battery.
Remove the main fuse.
Don't smoke.
Work in a well-ventilated area which is free of sources that could ignite any spilled fuel accidentally (e.g. cigarettes, welders, torches, grinders, electric shop tools, etc.)

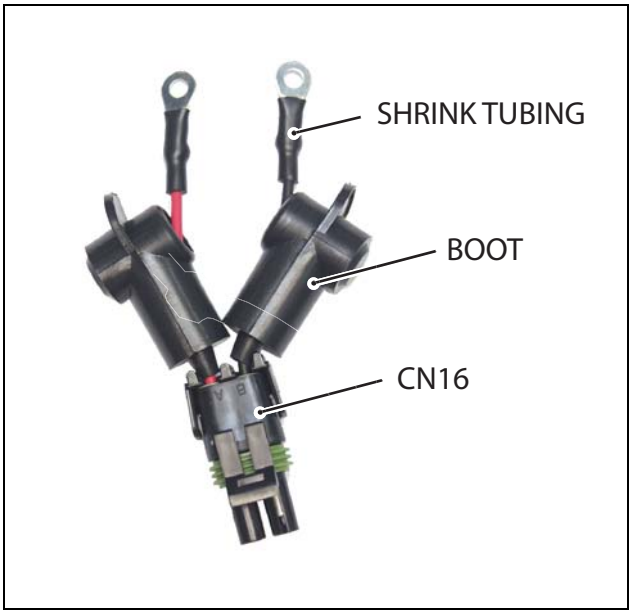
1. Disconnect the battery.

2. Remove the main fuse.

3. Remove the nut and star washer from the fuel pump negative terminal posts and disconnect the negative fuel pump harness leads from the fuel pump.

4. Disconnect the fuel pump lead from the main harness connector CN16.

   Take the pump lead to a work table and install a 3/4" piece of thermal shrink wrap tubing covering onto each terminal ends as indicated. Then, install the protective insulating boots onto the lead ends.



5. Make sure the lower fuel terminal nuts are not loose before reinstalling the lead terminals back onto the fuel pump. The lower nuts can loosen up when the upper nuts are loosened. If you don't tighten the nut first, the connection to the fuel pump may loosen up later making the connection to the fuel pump intermittent. Also, be sure to reinstall the star washer on top of the terminal end before the upper nut. Tighten the upper nut to

CAUTION :

Be sure to hold the lower nut with an open end wrench while tightening the upper nuts. Do not over-tighten the upper nuts or the post threads may strip.

Be sure to observe the correct polarity; connect the red wire to the positive (+) pump terminal. Connect the black wire to the negative (-) pump terminal.

6. Test for continuity between each pump lead and the fuel pump housing. There should be no continuity. Correct if necessary. Test for continuity between each pump lead and the vehicle frame. There should be no continuity.

7. Reconnect the battery and reinstall the main fuse.

8. Obtain the vehicle wiring diagram and check the fuel pump circuit for damage.

9. With the ignition switch OFF:

   With the fuse installed and the battery connected, there should be 12V positive(+) potential at the main harness connector CN16 pin A. Correct if necessary.

   Disconnect the ECU connectors and test for continuity between harness connector CN16 pin B and ECU connector P1 H1. There should be continuity. If an OL is observed correct the circuit and retest.

   Reconnect the ECU and test for continuity between CN16 pin B and ground. There should be no continuity. If continuity is observed the ECU may be damaged. Replace and retest.

10. Connect the positive lead of a multi meter to the main harness connector CN16 pin A and connect the negative lead to CN16 pin B; switch the ignition key ON and press the start button without turning over the engine, voltage should be present for three seconds and then shut off. If an voltage is present the ECU may be damaged. Replace and retest.

11. If voltage is present as indicated, reconnect the main harness to the fuel pump lead.

12. Test for proper engine operation.