

# Technical BULLETIN

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## 2006~2007 FJR1300A/AE

### Poor Engine Performance with Change in Altitude



#### INTRODUCTION

**Symptom:** Poor engine performance occurs when changing to a higher or lower altitude while cruising at a relatively steady speed (more noticeable when altitude changes 3000 feet or more).

**Cause:** The ECU has an automatic altitude-compensation feature that adjusts fuel injection for the elevation. The ECU senses the current altitude whenever the main switch is turned on, and then every time the throttle is increased above about 1/4 throttle. If the rider is cruising with a relatively low throttle setting, altitude compensation will not take place again until the 1/4-throttle threshold is passed (or the main switch is cycled). It is therefore possible to ride to a new elevation without altitude compensation because of light throttle usage. This results in temporary loss of some engine performance.



**Remedy:** An alternate ECU can be installed which engages the altitude compensation feature with less throttle position movement. Note that some throttle movement must still occur for this feature to function.

Yamaha is sending a letter to customers with affected units registered as of 10/16/07 explaining how this altitude compensation feature works and offering the alternate ECU free of charge.



#### DEALER ACTION SUMMARY

**Unsold Units:** During Predelivery Inspection (PDI), replace the ECU with the new version per affected unit.

**Sold**

**Units:**

Replace the ECU with the new version. Yamaha is manufacturing the alternate ECUs for this modification as quickly as possible, but you will not be able to get parts for all customers at once. We are asking you to give modification priority to customers who are likely to use their FJR1300 in areas with significant altitude changes, and appreciate your patience while these alternate ECUs are being manufactured and delivered.

**Parts**

**Required:** Yes (see *Parts Information* section).

**Warranty:** Submit a Service-Per-Bulletin (90 Code) Warranty Request for parts and labor (see *Warranty Information* section).



**AFFECTED RANGE**

FJR1300AV/AW	RP15E-0000003 ~ 0004056
FJR1300AVC/AWC	RP15Y-0000001 ~ 0000744
FJR1300AEV/AEW	RP16E-0000006 ~ 0001212
FJR1300AEVC/AEWC	RP16Y-0000005 ~ 0000226

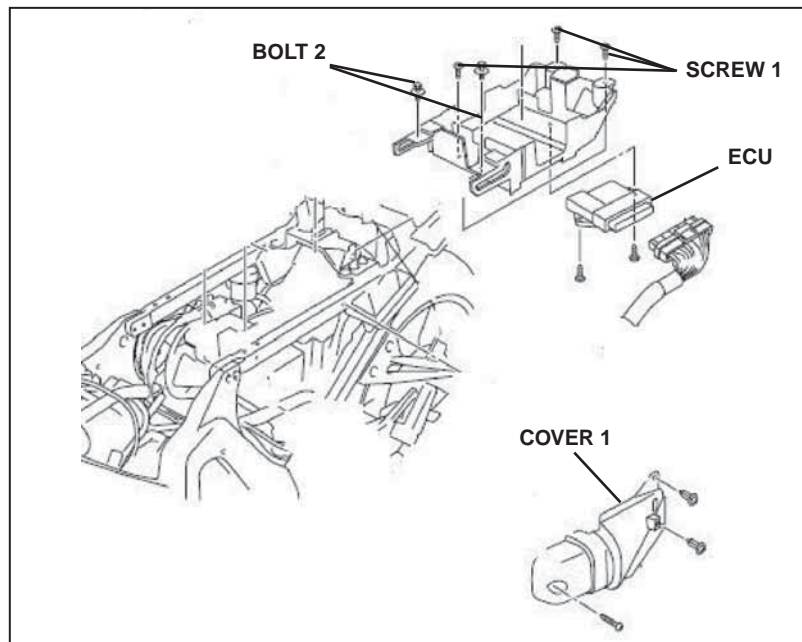


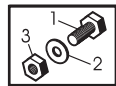
**SERVICE PROCEDURES**

Replace the ECU according to the procedure on page 4-15 and 4-16 of the Service Manual LIT-11616-19-83. No adjustments are necessary.

**Removal Tips:**

1. Remove left side cover.
2. Remove cover 1 and unplug ECU.
3. Disconnect and remove Shift ECU (AE models only).
4. Remove screw 1 (qty 3).
5. Remove bolt 2 (qty 2).
6. Lift and slide the front of the storage tray back past the rear fuel tank mount, then remove the storage tray.
7. Remove the ECU mounting screws and the ECU from the bottom of the storage tray.
8. Install the new ECU with mounting screws and reassemble in reverse order.





## PARTS INFORMATION

Part Number	Part Name	Qty.	Dealer Cost
90891-30054-00	FJR1300 ECU Kit • Screws	1 Kit 2	\$327.03



## WARRANTY INFORMATION

Service of all affected units is authorized regardless of warranty status. To receive credit for parts and labor for the modification, after completion, select **090UF** from the Problem Code pull down menu in the Yamaha Dealer System (YDS). If submitting a paper warranty claim, use Problem Code **90UF**.

The labor allowance is **0.3** hour.



YAMAHA MOTOR CORPORATION, U.S.A.

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October 17, 2007

Dear FJR1300 Owner:

We hope you are continuing to find your FJR to be a satisfying sport touring machine, whether used for daily commuting, weekend getaways, or long cross-country adventures.

We have had a question from a few FJR owners regarding the altitude-compensation feature of the fuel injection system. While riding at a relatively steady speed on a road with significant elevation changes (3000 feet or more), they have noticed a temporary loss of some engine performance. They wonder what might be wrong, if anything, particularly since it doesn't happen at other times.

The motorcycle's fuel injection has an automatic altitude-compensation feature that is controlled by the engine control unit (ECU). The ECU takes a reading of the current altitude whenever the main switch is turned on, as well as every time the throttle is increased above about 1/4 throttle, and then makes any necessary fuel mixture adjustments.

The key factor for this altitude-related poor performance is a steady speed with light throttle. If the rider is cruising with a relatively low throttle setting, altitude compensation will not take place again until the 1/4-throttle threshold is passed (or the main switch is cycled off and on). It is therefore possible to ride to a new elevation without altitude compensation because of light throttle usage. This results in the temporary loss of some engine performance.

Your Yamaha dealer can install an alternate ECU on your motorcycle that will take a reading from the altitude sensor with less throttle movement input. Please call your Yamaha dealer to make a service appointment to have this modification performed. Yamaha is manufacturing the alternate ECUs for this modification as quickly as possible, but your dealer may not be able to get parts for all customers immediately. We are asking him or her to give priority to customers who are likely to use their FJR1300 in areas with significant altitude changes, so let your dealer know if you ride in such conditions. We assure you that every effort is being made to get the parts to your dealer as soon as they are available. Your dealer will have more information on parts availability, and we appreciate your patience if there is a delay. The modification will be free of charge.

We thank you again for purchasing an FJR1300. Customers like you are the reason we are in the motorcycle business. We know you have a choice in motorcycle brands and we are pleased to know you have chosen to be part of the growing Yamaha family.

Sincerely,

Service Division  
Customer Support Group