

Technical BULLETIN

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All 2017~2018 YZF-R6 models – Difficult to start when the engine is cold

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INTRODUCTION

Problem: Under certain conditions, customers may experience difficulty starting the engine when cold. When this happens, the customer has to hold the start button for an extended period of time or make multiple attempts to get the engine to start.

Cause: Due to the variety of blends and varying ethanol content of fuel available within the US market, the air / fuel ratio may become too lean at the time of start-up.



Remedy: To remedy this condition, the factory has developed revised ECU fuel mapping for injection duration at start-up to correspond to the varying types of gasoline available in the US market. If you encounter a customer who has experienced this condition, please update the unit's ECU with the revised program using the YDT (Yamaha Diagnostic Tool).

NOTE: This modification does not alter emissions compliance of the product.



DEALER ACTION SUMMARY

Unsold

Units: To ensure customer satisfaction, update the ECU program on all affected unsold units at the time of PDI using the YDT (Yamaha Diagnostic Tool).

Sold Units: If you encounter a customer who has experienced this condition on an affected unit, update the unit's ECU with the revised program using the YDT (Yamaha Diagnostic Tool).

Parts

Required: No.

Warranty: Submit a Service-per-Bulletin (90 Code) Warranty Request for reimbursement refer to the *Warranty Information* section).



AFFECTED RANGE

All 2017 and 2018 model YZF-R6 motorcycles, PID's listed below:

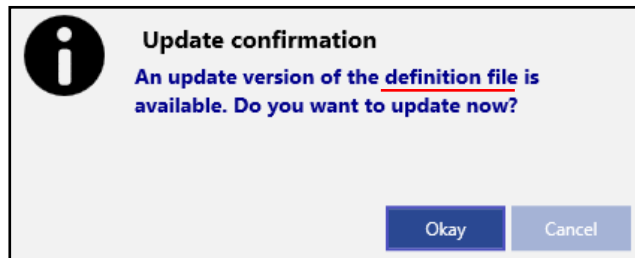
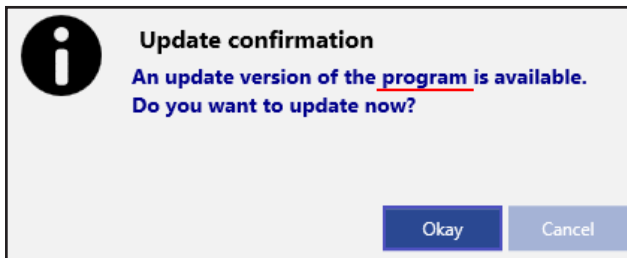
Model	Model Code	Frame Number			Spec
		Prefix	From	To	
2017 YZF-R6H	BN61	RJ28E	0000009	0002412	U49
2017 YZF-R6HC	BN62	RJ28Y	0000016	0001254	CA
2018 YZF-R6J	BN67	RJ28E	0002413	0003918	U49
2018 YZF-R6JC	BN68	RJ28Y	0001255	0001866	CA



SERVICE PROCEDURES

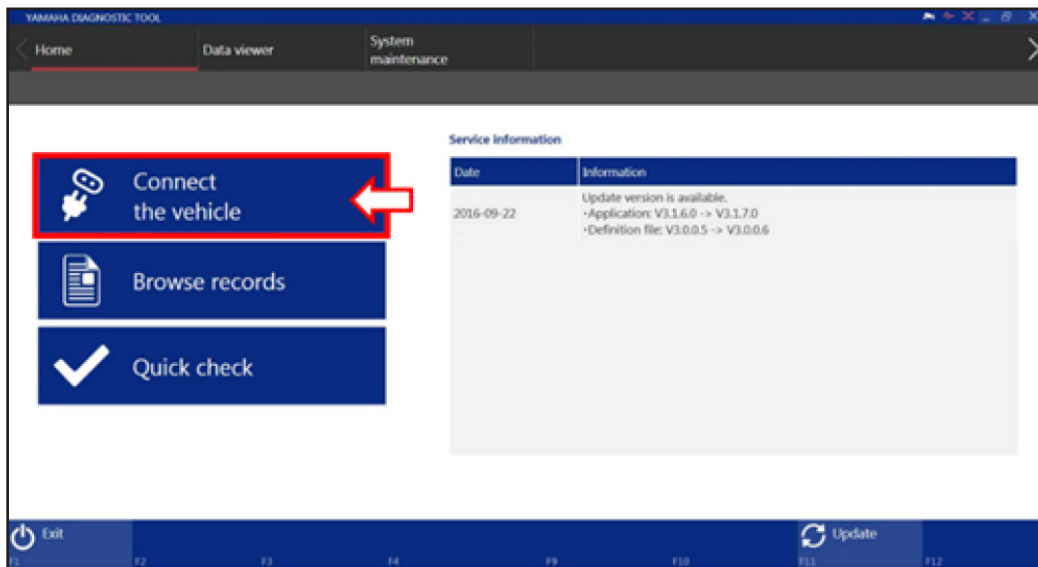
1. Make sure the Yamaha Diagnostic Tool (YDT) Version 3.1 or later is up to date, including importing any and all new Standard, Definition, and ECU reprogramming files available for the tool. When the software is launched, YDT will automatically check for these updates if the computer is connected to the internet. If updates are available, install them by following the prompts within the program.

TIP: If firmware for the Adapter Interface (AI) is available, you must follow the on-screen prompts to import it. Then, connect the AI to the computer and update it from the “System Maintenance” tab at the top of the home screen. Next, choose “Adapter Interface Reprogram.” Consult the YDT Operation Manual for additional details, which is also located within the System Maintenance menu.



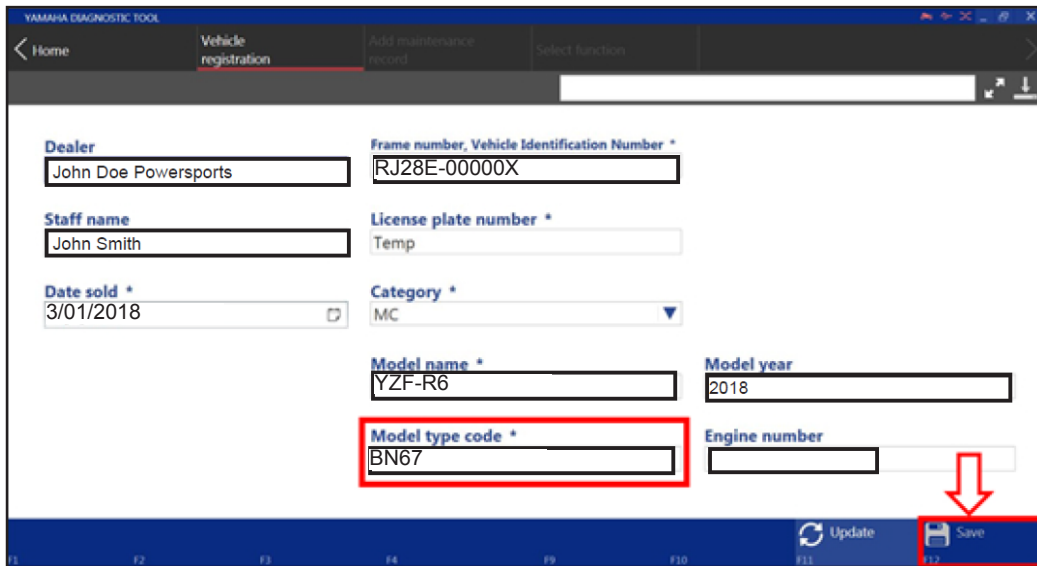
2. Before beginning the process, verify the computer’s screensaver is disabled, close all other programs running on the PC, and verify the battery of the unit being modified is completely charged.

Establish a full connection to the vehicle by using the “Connect the vehicle” function.



NOTICE:

The battery voltage of the vehicle must be fully charged in order to successfully reprogram the ECU. It is advised to connect the vehicle to an appropriate battery charger during the reprogramming process. **DO NOT** allow the PC’s screen saver to initiate during this reprogramming process. Avoid using other programs, do not disconnect any of the cables, and do not turn the ignition switch off during the ECU reprogramming process. Failure to follow any of these instructions may result in irreversible damage to the ECU.

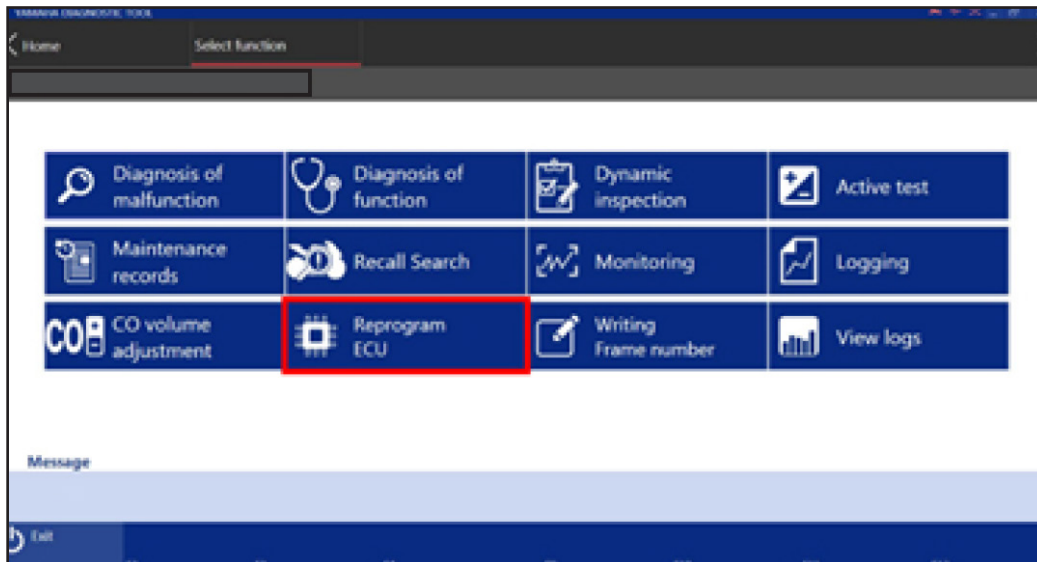


If the unit has previously been connected to YDT v.3.x, the unit's information will already be present. If this is the first time YDT has been connected to the vehicle, you will be prompted to enter the unit's VIN and customer information in order to proceed.

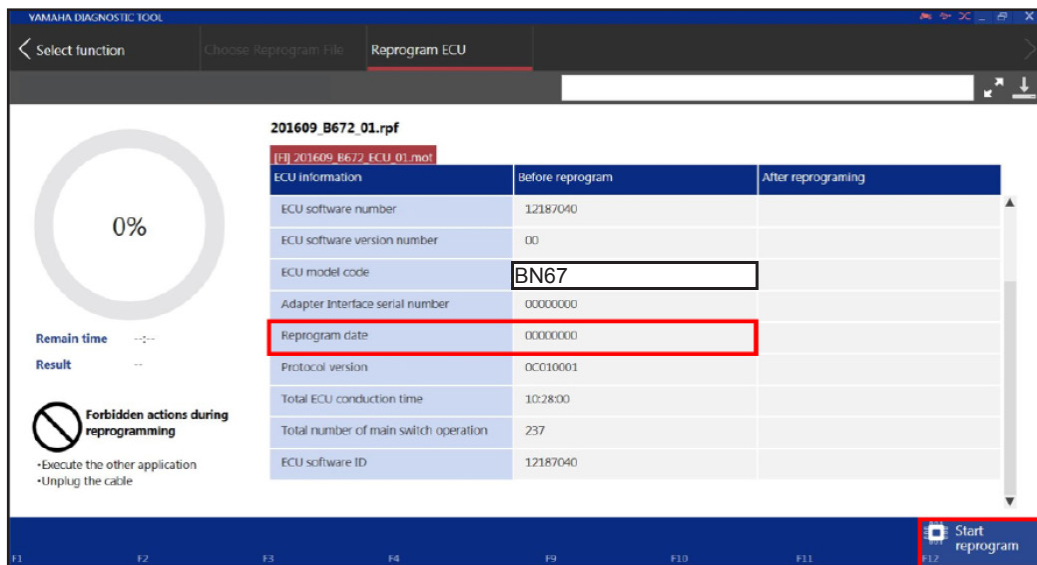
It is CRITICAL to enter the proper VIN or PID and verify the Model Code is correct. If you are unsure of the model code, generally it is located under the seat on a small label.

On the "Add maintenance record" screen, select Recall/Service campaign from the drop-down menu. Add the technician and mileage, then click "Save" in the bottom right corner of the screen. Next, choose "Select function" option at the top of the screen, which will bring you to the function menu.

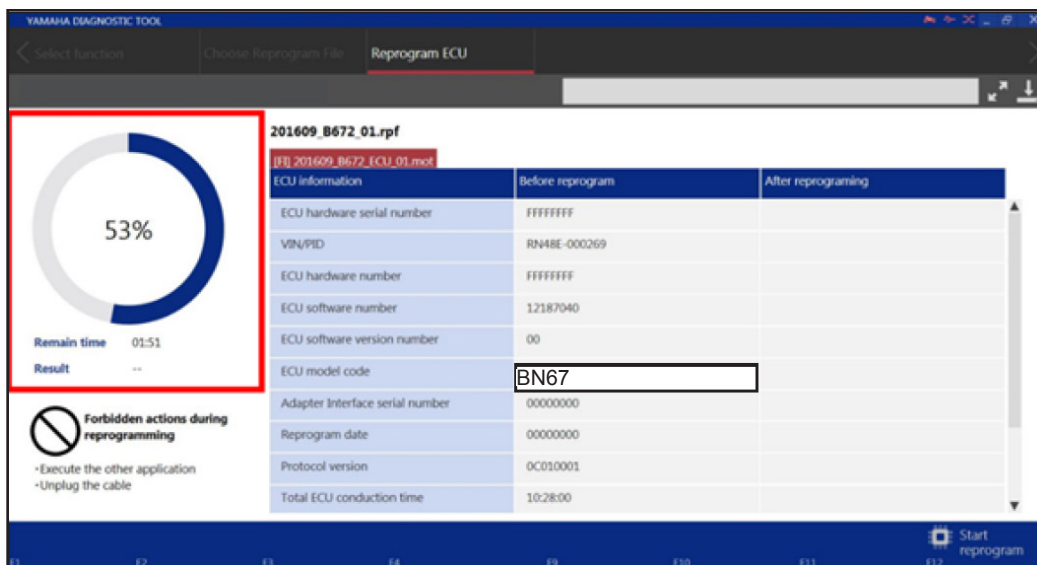
- From the function menu, click on "Reprogram ECU."



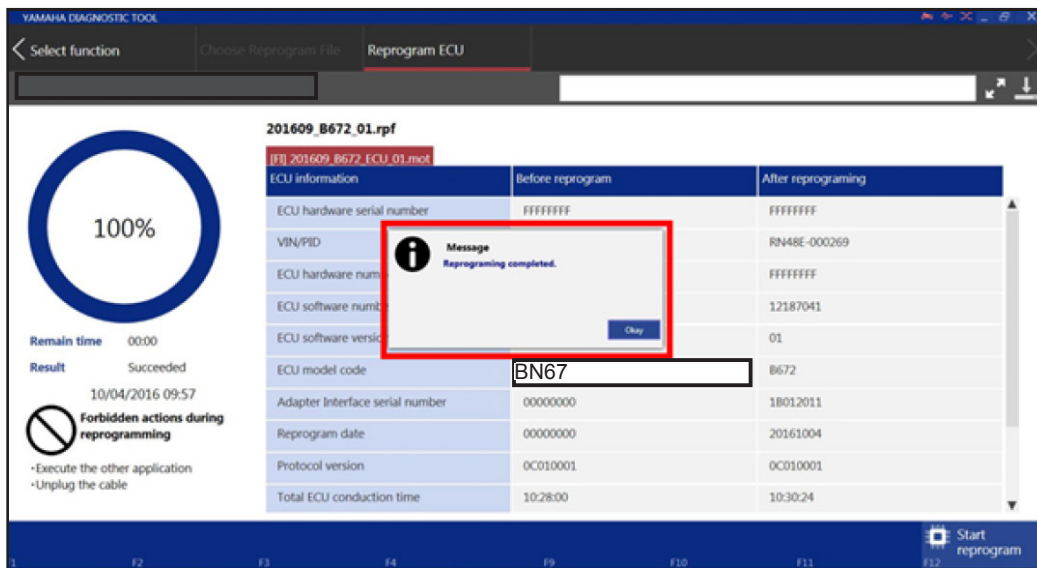
Once the Reprogramming function opens, be patient while the Diagnostic Tool reads the ECU's information; reading the ECU may take several minutes. When the information has successfully been read, the "before program" chart will populate. To ensure the unit has not been previously reprogrammed, verify the "Reprogram date" is displayed as "00000000." When you have verified this information, click "Start reprogram" from the bottom right side corner.



During the ECU reprogramming process, the progress will be displayed on the left side of the screen (see screen below). Even if the reprogramming appears to have stalled or become frozen, do not exit the program or disconnect the unit. Depending on the computer's hardware, reprogramming may take in excess of 5 minutes.



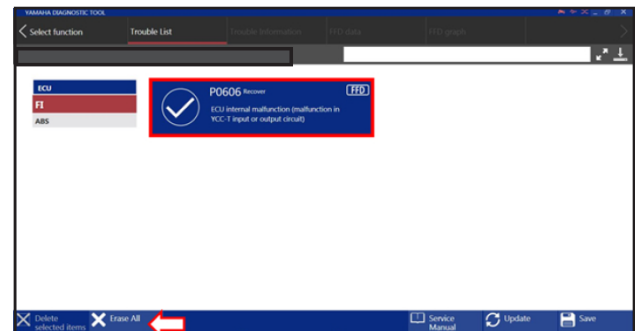
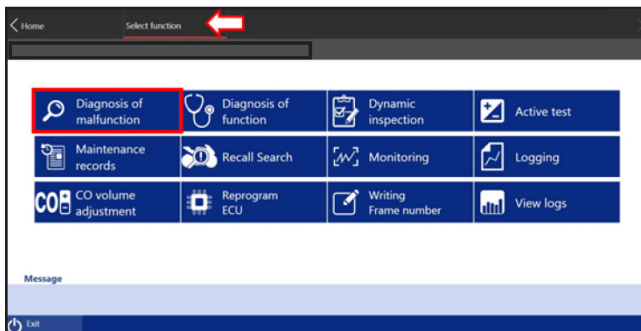
When the progress indicator reaches 100%, wait until YDT displays the "Reprogramming completed" message as shown below before proceeding to the next step.



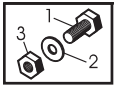
Once the “reprogramming completed” message displays, confirm the Reprogram date changed from “00...” to the actual date (formatted YYYYMMDD) on the before/after reprogramming chart as shown below.



- Turn the key off, then on again. Re-establish the connection to the vehicle using YDT. From the Select Function menu, enter “Diagnosis of malfunction,” and erase any fault/event codes that are present.



TIP: If the key is not switched off / on again before attempting the clear the trouble codes, the codes will not be able to be erased.



PARTS INFORMATION

No parts are required to perform this modification.

The ECU's part number will supersede at a later date. Once this supersession takes place, the new part will be supplied with this updated software pre-installed.



WARRANTY INFORMATION

Service of all affected units is authorized regardless of warranty status.

After completion, select Campaign Number **090ZA** from the Campaign Number pull-down menu in the Yamaha Dealer System (YDS) when entering your claim. The labor allowance for this repair is **0.2** hour.

This Service-per-Bulletin 90 Code (090ZA) will only be valid for 1 year from date of issue of this Technical Bulletin and will expire 8/10/2019.

The screenshot displays two side-by-side windows from the Yamaha Dealer System (YDS). The left window, titled "Warranty Claim", shows a list of claim types with radio buttons. The "Recall / Service per Bulletin Claim (90 Codes)" option is selected and highlighted with a red box. The right window, titled "Unit Recall/Service Campaign", contains a form for entering recall information. A red arrow points to the "Campaign Nbr:" field, with the text "ENTER CAMPAIGN CODE (090ZA) HERE" written in red above it. Below the form, there is a table with columns for "Primary ID", "Finish Date", "Miles Or Hrs", "UCM", "Repair Option", and "Remove". The table is currently empty.

If you have any questions about proper procedures for Factory Modification Campaigns, see Chapter 7 in your Warranty and Y.E.S. Handbook (LIT-11760-00-16).