

Part 573 Safety Recall Report

21V-865

Manufacturer Name : Yamaha Motor Corporation, USA

Submission Date : NOV 30, 2021

NHTSA Recall No. : 21V-865

Manufacturer Recall No. : 990152



Manufacturer Information :

Manufacturer Name : Yamaha Motor Corporation, USA

Address : 6555 Katella Avenue

Cypress CA 90630-5101

Company phone : 800-962-7926

Population :

Number of potentially involved : 2,462

Estimated percentage with defect : 5 %

Vehicle Information :

Vehicle 1 : 2016-2021 Yamaha FJR13

Vehicle Type : MOTORCYCLES

Body Style : OTHER

Power Train : GAS

Descriptive Information : In affected motorcycles, when the rider is shifting into second gear under certain conditions, such as if the throttle is applied before the clutch is fully engaged, causing unusually high rpm, the Engine Control Unit (ECU) will react by limiting the maximum engine speed available. This is due to rev-limiter programming intended to protect second gear components from abnormal stress. However, this rev-limiter programming may be overly restrictive, possibly preventing the acceleration performance the rider anticipates, increasing the risk of a crash.

Production Dates : DEC 01, 2015 - AUG 31, 2021

VIN Range 1 : Begin : JYARP29E6GA000002 **End :** JYARP29EXKA000822 Not sequential

VIN Range 2 : Begin : JYARP29Y3GA000002 **End :** JYARP29Y8KA000151 Not sequential

VIN Range 3 : Begin : JYARP30E0GA000001 **End :** JYARP30E8MA001165 Not sequential

VIN Range 4 : Begin : JYARP30Y7GA000006 **End :** JYARP30Y3MA000242 Not sequential

VIN Range 5 : Begin : JYARP31Y4JA000003 **End :** JYARP31Y3LA000092 Not sequential

Description of Defect :

Description of the Defect : In certain affected motorcycles, when the rider is shifting into second gear under certain conditions, such as if the throttle is applied before the clutch is fully engaged, causing unusually high rpm, the Engine Control Unit (ECU) will react by limiting the maximum engine speed available. This is due to rev-limiter programming intended to protect second gear components from abnormal stress. However, this rev-limiter programming may be overly restrictive, possibly preventing the acceleration performance the rider anticipates

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : The side of second gear may not be strong enough to handle high speed loads. As a result, cracks may occur due to constant stress applied during repeated gear shift operation and, eventually, the gear could break. If this happens, the transmission and, in turn, the rear wheel, could lock

Description of the Cause : when the rider is shifting into second gear under certain conditions, such as if the throttle is applied before the clutch is fully engaged, causing unusually high rpm, the Engine Control Unit (ECU) will react by limiting the maximum engine speed available. This is due to rev-limiter programming intended to protect second gear components from abnormal stress. However, this rev-limiter programming may be overly restrictive, possibly preventing the acceleration performance the rider anticipates

Identification of Any Warning that can Occur : In unmodified units, the rider may experience difficulty shifting, finding neutral and false neutrals may occur prior to gear breakage. Customers are urged not to operate the affected motorcycle until inspection and or modification is performed

Involved Components :

Component Name 1 : ECU

Component Description : Electronic Control Unit

Component Part Number : B96-8591A-10

Component Name 2 : ECU

Component Description : Electronic Control Unit

Component Part Number : B96-8591A-50

Component Name 3 : ECU

Component Description : Electronic Control Unit

Component Part Number : B96-8591A-51

Component Name 4 : ECU

Component Description : Electronic Control Unit

Component Part Number : B96-8591A-80

Supplier Identification :**Component Manufacturer**

Name : NR
Address : NR
NR
Country : NR

Chronology :

November 2021, Yamaha Motor corporation USA was informed by the manufacturer, Yamaha Motor Co., LTD that such a condition could exist in previously modified units. This was determined pursuant to quality control review, testing and a review of foreign models that use substantially similar part design.

Units previously modified under campaign 20V813, product previously reworked by the factory prior to sale will only be subject to ECU reprogramming.

Description of Remedy :

Description of Remedy Program : Affected units must have the main axle and drive axle assemblies replaced with the stronger parts and the Engine Control Unit (ECU) reprogrammed to prevent excessive rpm leading to second gear damage. Units previously modified under campaign 20V813, product previously reworked by the factory prior to sale will only be subject to ECU reprogramming.

How Remedy Component Differs from Recalled Component : Second pinion gear is now forged and 2nd pinion on the main axel and 1st and 5th wheel gear on the drive axle have a small identification groove machined on them to aid identification

Identify How/When Recall Condition was Corrected in Production : With the start of September 2021 production, the new style forged 2nd pinion gear on the main transmission axel and 1st and 5th wheel gear on the drive transmission axel are and revised ECU programming are used for engine/transmission assembly and unit production

Recall Schedule :

Description of Recall Schedule : We anticipate commencing dealer/consumer notification shortly after the owner's notification letter is approved by NHTSA, the affected VIN range is ascertained, and the Technical Bulletin's service procedures are confirmed and finalized by Yamaha staff. assuming the Agency can review and approve the customer notification letter within 5 days of receipt (perhaps December 3rd we will have the letter and technical bulletin printed. Normal turnaround time is 3 working days for such a printing. Hence the materials will be ready for mailing approximately December

9th. Final copies of these notification documents will be forwarded to the Agency as soon as possible.

Planned Dealer Notification Date : DEC 09, 2021 - DEC 10, 2021

Planned Owner Notification Date : DEC 09, 2021 - DEC 10, 2021

* NR - Not Reported