

Part 573 Safety Recall Report

20V-392

Manufacturer Name : Gillig, LLC
Submission Date : JUL 24, 2020
NHTSA Recall No. : 20V-392
Manufacturer Recall No. : NR

**Manufacturer Information :**

Manufacturer Name : Gillig, LLC
Address : 451 Discovery Drive
 LIVERMORE CA 94551
Company phone : 1-800-735-1500

Population :

Number of potentially involved : 375
Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2018-2020 GILLIG LOW FLOOR
Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES
Body Style : ALL
Power Train : HYBRID ELECTRIC
Descriptive Information : Gillig LLC is recalling certain MY 2013 to 2020 hybrid and all-electric Low Floor buses with electro-hydraulic power steering assist.
Production Dates : MAR 14, 2018 - MAY 13, 2020
VIN Range 1 : Begin : 15GGD3016J3190568 **End :** 15GGB3015L3195219 Not sequential

Description of Defect :

Description of the Defect : Certain hybrid and all-electric Low Floor buses are equipped with a steering system that uses a high-voltage electric motor and hydraulic pump assembly to provide power steering assist. The shaft coupling between the motor and pump may fail and result in a loss of power steering assist. The affected part numbers are Gillig Part No. 05-71881-003, 05-71881-004, 05-71881-005. The above part numbers were possibly sold as aftermarket equipment or provided under warranty to customers.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : If power steering assist is lost, manual steering functionality is retained but would require higher steering effort, particularly at lower speeds, increasing the risk of a crash.

Noise and fluid leakage from the power steering system motor-pump assembly, possibly increased steering effort.

Description of the Cause : The output shaft of the electric motor has a pressed-on coupler that connects it to the input shaft of the hydraulic power steering pump. The internal spline of the motor shaft coupler has a lower hardness than the corresponding spline on

the shaft to the pump. As a result, the softer spline in the coupling may strip-out, causing a loss of rotation of the pump and result in a loss of hydraulic power steering assist.

The recall population includes all vehicles equipped with the part numbers specified above as well as the aftermarket sales and warranty units.

Identification of Any Warning NR
that can Occur :

Involved Components :

Component Name 1 : NR

Component Description : NR

Component Part Number : NR

Supplier Identification :

Component Manufacturer

Name : Eaton Corporation

Address : 1208 West 20th Avenue
Spokane Washington 99203

Country : United States

Chronology :

12/18/2019 GILLIG received reports of failed pumps used as remedy for recall 17V-559. GILLIG returned six (6) of these pumps to Eaton raising suspicions about the hardness specifications of the new coupler;

01/29/2020 Eaton determined the issue is caused by low hardness of the new coupler

03/05/2020 Eaton implemented the new corrective action in production and notified GILLIG;

04/2020 GILLIG issued new part numbers for the permanent corrective action to address affected parts and initiated population analysis;

06/29/2020 GILLIG completed population analysis and identified 474 buses potentially affected and 57 parts sold as aftermarket equipment;

06/29/2020 GILLIG decided to voluntarily file a formal safety recall with NHTSA.

Description of Remedy :

Description of Remedy Program : All affected motor-pump assemblies will be rebuilt at an authorized service center at no cost to the customer.

How Remedy Component Differs from Recalled Component : The recalled component is the "PUMP, POWER STEERING, EATON, ELECTRIC, 230V AC" part, which is a high-voltage electric motor and hydraulic pump assembly that provides power steering assist. The affected Gillig part numbers are 05-71881-003, 05-71881-004, 05-71881-005. The remedy motor-pump assemblies are part numbers 05-71881-006, 05-71881-007, 05-71881-008 and are built with a new coupler that meets the required hardness specification.

Identify How/When Recall Condition was Corrected in Production : GILLIG will use these new pump part numbers on any affected bus that will be built after 5/13/2020.

Recall Schedule :

Description of Recall Schedule : Recall notices will be sent as soon as NHTSA approves the draft letter.

Planned Dealer Notification Date : NR - NR

Planned Owner Notification Date : AUG 03, 2020 - AUG 07, 2020

* NR - Not Reported