

Technical Service Information



TSI-04-13-03

Date: January, 2004

Subject File: TRANSMISSION

Subject: New Fault Code 93 for Eaton AutoShift Transmission with System Controller Version 800, 801, or Greater

Model: 5500i

Model: 5600i

Model: 5900i

Model: 9200i

Model: 9400i

Model: 9900i

Unit Code: 13GMV

Unit Code: 13GNR

Unit Code: 13GNT

Unit Code: 13GNU

Unit Code: 13GNV

Unit Code: 13GNW

DESCRIPTION

NOTICE

The information supplied herein has been furnished by the manufacturer and/or the supplier for use with its product. International Truck and Engine Corporation reprints this information based on representations made to the Company by the manufacturer and/or supplier and is not responsible for any errors or mishaps resulting from such errors or from any misuse of the product. Every user is urged to carefully follow the instructions which accompany the product. Please refer to Eaton Bulletin TAIB-0806, which provides information on Fault Code 93.

Date: November 12, 2003

Bulletin Type: Service

TAIB-0806

Topic: Addition of Fault Code 93 for AutoShift Gen 2

Issue/Background:

Unable to determine if the System Controller (Push Button Controller) is at fault when Fault Code 35 (Loss of J-1939 communications) is set.

Correction/Action:

Created Fault Code 93. Fault Code 93 will be set if the System Controller does not detect J-1939 communication from the engine but does detect J-1939 communication from another ECU talking on the J-1939 link. If a Fault Code 93 has been set the System Controller is working correctly.

Timing:

For System controller Version 800 and 801 or greater.

Warranty Strategy:

Trouble shoot Fault Code 93 as needed per the attached Troubleshooting procedure. . Troubleshooting procedure can also be found in the Troubleshooting Guide TRTS-0062. Eaton Warranty is not responsible for the diagnostic or repair time involved with this code. This code detects a non-Eaton system or component that is adversely affecting the operation of the transmission.

System Code: 93

(SID 231, FMI 14)

Loss of J-1939 Communication from the Engine

Overview

This fault code indicates the System Controller is broadcasting J-1939 messages and receiving J-1939 messages, but has not received J-1939 messages from the engine.

Detection

The fault is detected if J-1939 communication from the engine is lost for 5 seconds.

Fallback

If the fault occurs while moving, it causes a 1-speed fallback. Once vehicle has stopped, the starting gear and reverse can be engaged. If the failure occurs at system initialization, it causes an AutoSelect fallback mode.

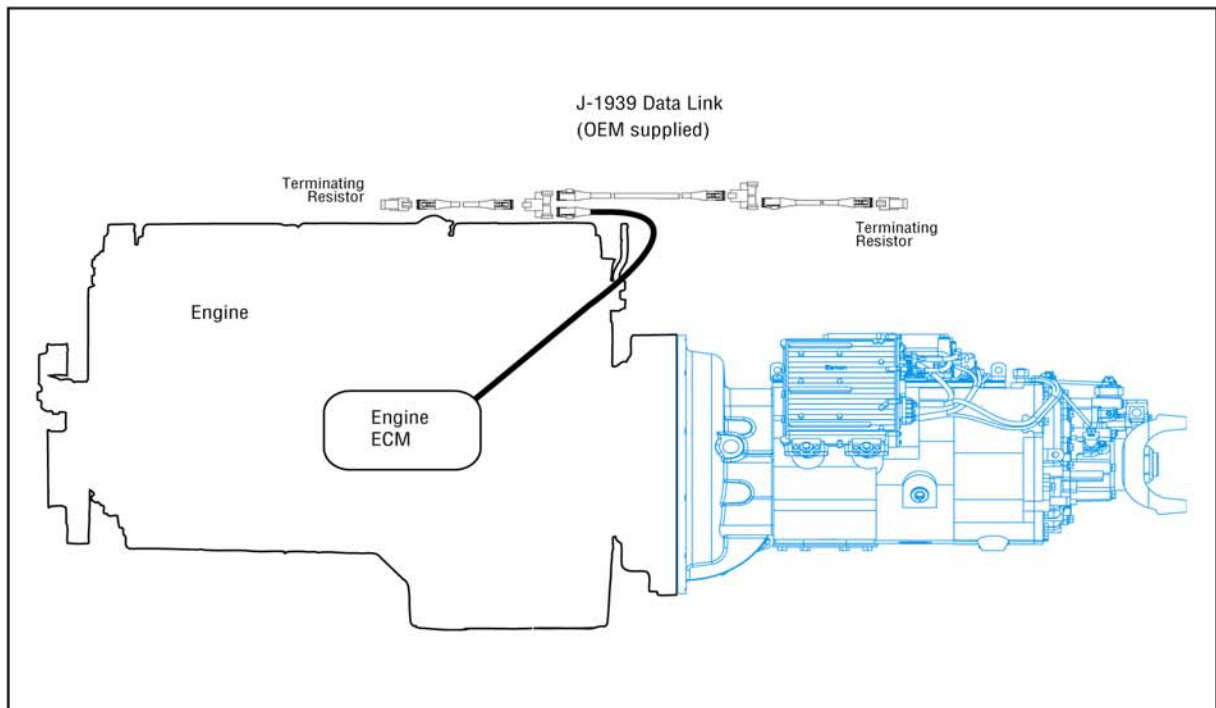
Required Tools

- Basic Hand Tools
- Troubleshooting Guide

Possible Causes

This fault code can be caused by any of the following:

- OEM supplied J-1939 harness
- Engine ECM



Fault Isolation Procedures

Code 93(SID 231, FMI 5), Loss of J-1939 Communication from the Engine Test

Step A	Procedure	Condition	Action
	1. Key on.		
	2. If fault code 93 is present, inactive or active.		
	3. Inspect OEM J-1939 harness.		
		If problem found	Repair OEM J-1939 harness. Go to Step V .
		If no problem is found	Go to Step V .

Step V	Procedure	Condition	Action
	1. Key off.		
	2. Reconnect all connectors.		
	3. Key on.		
	4. Clear codes (see page 1-3).		
	5. Use Driving Techniques to attempt to reset the code (see page 1-4).		
	6. Check for codes (see page 1-3).	If no codes	Test complete.
		If code 93 appears	Return to Step A to find error in testing.
		If code other than 93 appears	Go to Fault Code Isolation Procedure Index (see page 1-9).

Code 93
(SID 231, FMI 5)