

Generation 2 and 3 - AutoShift® and UltraShift®

Symptom(s)

A Fault Code 43 with recent time stamps and/or high number of occurrences with one or more of the following symptoms.

- Transmission is unable to complete a shift across the range.
- Transmission range is either stuck in HI or LO.
- Transmission cannot complete engagement into HI or LO.

If Fault Code 41 is also present, refer to Pre-Authorized Range Split Complaints Fault Code 41 - Repair Guideline RWRG0056 available at www.roadranger.com.

Causes

This fault code can be caused by failure of short to battery, short to ground, or open circuit is detected in a Range Solenoid Valve or Transmission Harness.

Repair Guideline

Generation 3 only - when troubleshooting an inactive code see "Product Diagnostic Mode (PDM)" in troubleshooting manual.

Step A

Retrieve and document all transmission fault code information. Claim can be denied without this required information.

Step B

1. Key off.
2. Disconnect negative battery cable.
3. Disconnect the Transmission Controller connector.
4. Measure resistance between the following pins:

Gen 2 Transmissions - Measure at Transmission Harness 30-way connector pins:

- F1 and F3
- F3 and F2

Gen 3 Transmissions - Measure resistance between the Transmission Harness 38-way connector pins:

- 28 and 6
- 34 and 6

Note: Observe polarity on Volt\Ohm Meter.

If both resistances are within range of 9 to 16 ohms, go to **Step C**.

If resistance is outside of range, go to **Step D**.

Step C

1. Measure resistance between the following Transmission Harness connector and ground.
 - Gen 2 Transmissions - Measure resistance between the Transmission Harness 30-way connector pin F3 and ground.
 - Gen 3 Transmissions - Measure resistance between the Transmission Harness 38-way connector pin 6 and ground.

If resistance is more than 10K ohms or open circuit [OL], replace Transmission Harness and Range Valve.

Step D

1. Disconnect the Transmission Harness from Range Valve.
2. Measure resistance between Range Valve pins:
 - A and C
 - B and C

If resistance is 9 to 16 ohms, go to **Step E**.

If resistance is outside of range, replace Range Valve.

Step E

1. Measure resistance between Range Valve pin C and ground.
 - If resistance is more than 10K ohms or open circuit [OL], replace Transmission Harness.
 - If resistance is less than 10K ohms (shorted to ground), replace Range Valve.

Pre-Authorized Warranty Repair Guideline RWRG0063

Note: If concern is not corrected with above repair procedure, call RoadRanger Call Center at 1-800-826-4357.

Warranty Parts

- Generation 2 - Range Valve (K-3682)
- Generation 2 - Transmission Harness (K-3527)
- Generation 3 - Range Valve (K-3682)
- Generation 3 - Transmission Harness (K-3681)

Warranty Labor

When diagnosing the range shift complaint Eaton will pay OEM SRT diagnostic time.

When repair requires the replacement of the range valve and/or transmission harness, the repair pays OEM SRT for range valve replacement and/or Transmission Harness.

Warranty Coding

- ATA Code: NA
- Failed Part #: Use Correct PN
- Complaint Code: Range Shift - Slow (34)
- Failure Code: Range Shifts (AF)
- Responsibility Code: RTW COMMITMENT (601)

Warranty Claim Filing

Reference warranty coverage. File pre-authorized warranty claim through appropriate OEM or through Direct Pay. Reference guideline number RWRG0060 in warranty claim text.

Note: Repairs that exceed parts and labor parameters cannot be pre-authorized.

Filing through Direct Pay

Click here for Direct Pay submission guidelines and claim forms:



**Submission Guidelines
and Claim Forms**

Parts Disposition

Parts can be scrapped.

Warranty Disclaimer

If the failure is not the result of an accident, damage, negligence, abuse or misuse, improper installation or maintenance or any other conditions described in the Limits and Exclusions section of Warranty Manual TCWY0600, then Roadranger will treat the condition as covered under its warranty. However, this conclusion does not necessarily mean that a defect in fact exists. In all cases, Roadranger shall make the final determination and interpretation as to the warrantability of the Product.