Real Time Warranty – Automated Transmission

Subject: Automated Transmission Real Time Warranty Pre-Call Checklist
Document Number: RRCC0010
Date: April 11, 2014

It is not necessary to call Automated RTW to open a claim
Make a repair per Pre-Authorized Warranty Repair Guidelines
Guaranteed payment without calling for Preapproval

See your warranty administrator and click below link or visit Roadranger.com for details

* Required before calling to open claim

1. **OEM warranty and Eaton warranty information:**
   - VIN
   - Fleet/Owner Name and Address
   - Fleet Unit Number
   - Vehicle Vocation
   - Transmission Serial Number
   - Engine Make and Model
   - Engine Governed Speed
   - Engine Rated Horsepower (LEP/UltraShift PLUS)
   - OEM Dealer Code
   - Vehicle “In Service Date”
   - OEM Base Chassis Warranty
   - OEM Transmission Warranty
   - RO Number
   - Failed Date
   - Failed Mileage

2. **Request fleet driver or fleet complete Driver Questionnaire:**

3. **Understand and attempt to duplicate complaint:**
   - When applicable, may require a short road test on lot or road

4. **Retrieve fault code and current configuration (software) information:**
   - Click here or visit Roadranger.com for list of approved communication boxes

5. **Save Snapshot and VPA data files (Gen 3 only):**
   - When applicable, save Snapshot and VPA data files to send to Automated RTW

6. **Troubleshoot Fault Codes:**
   - Perform diagnostics and record readings to report to Automated RTW
AutoShift/UltraShift Driver Questionnaire (Click to go back)

1. Describe what happened (report any observations not captured below):

2. If problem happens when first turning the key on skip to question #8

3. Does engine RPM rev up and down a few times in an effort to make a shift?  
   - Yes  
   - No  
   - Don’t Know  
   - NA

   If Yes:

   a) What gears is the transmission trying to shift?  
      - Circle any that apply or describe
      - 1-2  
      - 4-5  
      - 5-6  
      - 6-7  
      - 9-10  
      - 10-11  
      - 11-12  
      - 17-18

   b) Does the transmission eventually make the shift?  
      - Yes  
      - No  
      - Don’t Know  
      - NA

   c) Does the transmission shift back into the gear it is trying to shift out of?  
      - Yes  
      - No  
      - Don’t Know  
      - NA

   If No:

   a) What gears does the transmission stick in?  
      - Circle one or more below
      - 1  
      - 2  
      - 3  
      - 4  
      - 5  
      - 6  
      - 7  
      - 8  
      - 9  
      - 10  
      - 11  
      - 12  

   b) Are you able to go to Manual mode and make the transmission shift?  
      - Yes  
      - No  
      - Don’t Know  
      - NA

4. Do you have to stop the truck when the problem happens?  
   - Yes  
   - No  
   - Don’t Know  
   - NA

5. Does the transmission find neutral?  
   - Yes  
   - No  
   - Don’t Know  
   - NA

6. Do you have to shut the truck off in gear?  
   - Yes  
   - No  
   - Don’t Know  
   - NA

7. Does the transmission find neutral after turning key back on?  
   - Yes  
   - No  
   - Don’t Know  
   - NA

8. Does the engine start with the key?  
   - Yes  
   - No  
   - Don’t Know  
   - NA

9. What is in the gear display when the problem happens?  
   - Circle one or more below
   - - single dash  
   - - double dash  
   - flashing gear number  
   - solid gear number  
   - flashing F  
   - down arrows  
   - up arrows  
   - flashing CA  
   - blank display

10. Does the transmission service, check engine or antilock brake light come on when the problem happens?  
    - Trans Service  
    - Check Engine  
    - ABS  
    - None

11. Does the problem happen when the transmission is cold, hot or both?  
    - Cold  
    - Hot  
    - Both  
    - NA

12. Does the problem happen when operating in wet weather, dry weather or both?  
    - Wet  
    - Dry  
    - Both  
    - NA

13. How many times a day, week or month does the problem happen?  
    - Number of times ________
    - Times Day  
    - Times Week  
    - Times Month  
    - NA

14. How long has the truck had the problem?  
    - First Time  
    - Past 2 Weeks  
    - Past Month  
    - Several Months

15. How long have you been driving this truck?  
    - Days  
    - Weeks  
    - Months  
    - Years

16. List any known problems the truck has had in the past:  
    - Circle one or more below or describe known problem
    - transmission  
    - engine  
    - cooling system  
    - ABS  
    - OEM electrical  
    - hit by lightning  
    - accident  
    - sat in a flood

17. How long has it been since any known problems listed above happened?  
    - First Time  
    - Past 2 Weeks  
    - Past Month  
    - Several Months
Connecting to a Truck:

1. Physically Connect Approved Vehicle Link Adapter to Truck

2. Click on Connect

Successfully Connected Message

Click on Go To Fault Codes
Fault Code Information:

### Current Transmission Fault Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Status</th>
<th>Description</th>
<th>ID</th>
<th>FMI</th>
<th>Count</th>
<th>Timestamp</th>
</tr>
</thead>
<tbody>
<tr>
<td>34</td>
<td>Inactive</td>
<td>Weak battery voltage (TECU)</td>
<td>168</td>
<td>14: Special instructions</td>
<td>1</td>
<td>01h 32m</td>
</tr>
<tr>
<td>66</td>
<td>Inactive</td>
<td>ECA battery voltage</td>
<td>520271</td>
<td>4: Voltage below normal or shorted to low source</td>
<td>1</td>
<td>00h 01m</td>
</tr>
<tr>
<td>27</td>
<td>Inactive</td>
<td>Clutch disengagement</td>
<td>522</td>
<td>7: Mechanical system not responding or out of adjustment</td>
<td>13</td>
<td>03h 08m</td>
</tr>
<tr>
<td>33</td>
<td>Active</td>
<td>Low battery voltage (TECU)</td>
<td>160</td>
<td>4: Voltage below normal or shorted to low source</td>
<td>1</td>
<td>00h 05m</td>
</tr>
</tbody>
</table>

### Current Vehicle Fault Codes Tab

### Engine #1 (J1939)

<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
<th>ID</th>
<th>FMI</th>
<th>Count</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>Battery voltage / power input 1</td>
<td>168</td>
<td>1: Data valid but below normal operational range - most severe level</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td>Exhaust back pressure regulator solenoid</td>
<td>649</td>
<td>11: Root cause not known</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td>Actual engine - percent torque</td>
<td>313</td>
<td>17: Data valid but below normal operating range - least severe level</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

### Brakes - System Controller (J1939)

<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
<th>ID</th>
<th>FMI</th>
<th>Count</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>Power supply</td>
<td>39</td>
<td>4: Voltage below normal or shorted to low source</td>
<td>125</td>
<td></td>
</tr>
</tbody>
</table>

### Cab Controller Primary (J1939)

<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
<th>ID</th>
<th>FMI</th>
<th>Count</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>Power supply</td>
<td>627</td>
<td>5: Current below normal or open circuit</td>
<td>124</td>
<td></td>
</tr>
</tbody>
</table>

### Communications Unit, Cellular (J1939)

<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
<th>ID</th>
<th>FMI</th>
<th>Count</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>Power supply</td>
<td>627</td>
<td>6: Current above normal or grounded circuit</td>
<td>124</td>
<td></td>
</tr>
</tbody>
</table>
Current Transmission Configurations:

- Service Activity Report (Available from any screen)
- Optional Configurations
- Click on Apply to Save New Configuration

Creating a Service Activity Report (Sending Snapshot & VPA to Server):

1. Click on Service Activity Report
2. Fill In Required Information
3. Click on Start Report
For more information about ServiceRanger 4, please reference the ServiceRanger 4 user guide TCMT0072!

1. Go to www.roadranger.com
2. Type TCMT0072 in Search Bar and Press Enter
Click on ServiceRanger 4 User

Allow the Document to Load and Enjoy the Information!