The Fuller®
8LL Transmissions

8 plus 2 Versatility for On/Off-Highway Applications and Demanding On-Highway Duty

- Eight road speed gears and two additional deep reduction ratios in low and reverse for on/off-highway versatility.
- Improved tolerance to driver abuse due to new mainshaft washer design.
- High capacity tapered roller bearings on both auxiliary countershafts for increased bearing life.
- Improved output seal system increases seal life and eliminates potential for seal damage during yoke service.
- Easy range shifting and long life due to proven heavy-duty synchronizer technology.
- Binocular-type range and deep reduction shift cylinder assembly for greater serviceability and fewer parts.
- Increased lubrication protection with optional integral oil pump.
- Standard SAE 6-bolt and 8-bolt PTO openings and optional thru-shaft PTO provision at rear.
- Roadranger warranties are available for a wide variety of applications. To find the coverage that applies to your specific vocation, please see the Vocational Warranty Guide (TCVY0900) at www.eaton.com/roadranger.
**Fuller® On/Off-Highway Transmissions**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>CAPACITY</th>
<th>WEIGHT*</th>
<th>LENGTH**</th>
<th>SPEEDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RT-8908LL</td>
<td>860 lbs.ft. [1166 Nm]</td>
<td>690 lbs. [312.98 kg]</td>
<td>33.1 in. [840.74 mm]</td>
<td>8 forward, 2 low, 3 reverse</td>
</tr>
<tr>
<td>RTO-14908LL</td>
<td>1450 lbs.ft. [1966 Nm]</td>
<td>690 lbs. [312.98 kg]</td>
<td>33.1 in. [840.74 mm]</td>
<td>8 forward, 2 low, 3 reverse</td>
</tr>
<tr>
<td>RTO-16908LL</td>
<td>1650 lbs.ft. [2237 Nm]</td>
<td>690 lbs. [312.98 kg]</td>
<td>33.1 in. [840.74 mm]</td>
<td>8 forward, 2 low, 3 reverse</td>
</tr>
</tbody>
</table>

* Less clutch housing, lubricant and end yoke. ** Lengths listed are from face of clutch housing to front bottoming surface of companion flange or yoke.

**Specifications:**

- **Clutch Housing:**
  - SAE #1 and #2.
  - Grey iron or aluminum available.
- **Power Take-Offs:**
  - 2 SAE standard openings.
  - Right side, regular duty, 6-bolt, short length.
  - Bottom, heavy-duty, 8-bolt.
  - Thru-shaft PTO also available as an option.
- **PTO Drive Gears:**
  - Right side, 45-tooth, 6/8 pitch.
  - Bottom, 47-tooth, 6/8 pitch.
  - B ratio PTO gear turns at .94 engine speed. (RT-8908LL)
  - PTO’s, .70 engine speed.
  - Constant mesh type PTO required, right side opening.
- **Oil Capacity:**
  - Approx. 28 pints [13.2 liters].
  - Optional integral oil pump available.
  - Integral oil pump is standard on RTO-16908LL and optional on RTO-14908LL.

**Ratios and Steps:**

<table>
<thead>
<tr>
<th>GEAR</th>
<th>RT-8908LL RATIO</th>
<th>% STEP</th>
<th>RTO-11/14/ 16908LL RATIO</th>
<th>% STEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>8th</td>
<td>1.00</td>
<td>34</td>
<td>.74</td>
<td>34</td>
</tr>
<tr>
<td>7th</td>
<td>1.34</td>
<td>36</td>
<td>1.00</td>
<td>36</td>
</tr>
<tr>
<td>6th</td>
<td>1.83</td>
<td>35</td>
<td>1.36</td>
<td>35</td>
</tr>
<tr>
<td>5th</td>
<td>2.46</td>
<td></td>
<td>1.83</td>
<td></td>
</tr>
<tr>
<td>Range Shift</td>
<td></td>
<td>38</td>
<td>2.53</td>
<td>38</td>
</tr>
<tr>
<td>4th</td>
<td>3.40</td>
<td>34</td>
<td>3.40</td>
<td>34</td>
</tr>
<tr>
<td>3rd</td>
<td>4.58</td>
<td>36</td>
<td>4.63</td>
<td>35</td>
</tr>
<tr>
<td>2nd</td>
<td>6.23</td>
<td>35</td>
<td>6.24</td>
<td>51</td>
</tr>
<tr>
<td>1st</td>
<td>8.39</td>
<td>51</td>
<td>9.42</td>
<td>55</td>
</tr>
<tr>
<td>Low</td>
<td>12.57</td>
<td>55</td>
<td>14.56</td>
<td></td>
</tr>
<tr>
<td>Lo-Lo</td>
<td>19.58</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hi Reverse</td>
<td>3.89</td>
<td>38</td>
<td>2.89</td>
<td></td>
</tr>
<tr>
<td>Low Reverse</td>
<td>13.24</td>
<td>34</td>
<td>9.95</td>
<td></td>
</tr>
<tr>
<td>Lo-Lo Reverse</td>
<td>20.47</td>
<td>36</td>
<td>15.22</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>19.58</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Shift Pattern:**

- Standard progressive “H” shift pattern only. (Previously designated as “X” pattern.)

**Performance Chart:**

- Based on engine operating at 2100 RPM and top speed of 65 MPH.

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**Backed by Roadranger Support**

For specing or service assistance, call 1-800-826-HELP (4357) or visit www.eaton.com/roadranger.

In Mexico, call 001-800-826-4357.

Roadranger: Eaton and trusted partners providing the best products and services in the industry, ensuring more time on the road.

**Eaton**

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