SUBJECT: Inspection and Machining of the Flywheel
DATE: February 2012

Additions, Revisions, or Updates

<table>
<thead>
<tr>
<th>Publication Number / Title</th>
<th>Platform</th>
<th>Section Title</th>
<th>Change</th>
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<tr>
<td>DDC-SVC-MAN-0081</td>
<td>EPA07/10</td>
<td>Inspection of the Flywheel</td>
<td>This procedure has been modified.</td>
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<tr>
<td>DD Platform</td>
<td></td>
<td>Machining of the Flywheel</td>
<td>This is a new procedure.</td>
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13400 Outer Drive, West, Detroit, Michigan 48239-4001
Telephone: 313-592-5000
www.demanddetroit.com
2 Inspection of the Flywheel

Inspect as follows:

1. Mount a dial indicator with a magnetic base on the flywheel housing.
2. The maximum allowable run-out is 0.0254 mm per millimeter of radius (0.001 in. per inch of radius) total indicator reading per inch of radius (or 0.0254 mm per millimeter of radius). The radius is measured from the center of the flywheel to the outer edge of the clutch contact face of the flywheel.
3. Remove the flywheel. Refer to section "Removal of the Flywheel"
4. Thoroughly clean the flywheel and check it for cracks, scoring, burned areas, or rough spots.
5. Using an accurate straightedge (1) and a feeler gauge, check the friction (clutch) surface (2) for evenness.
6. Check the bearing surface and the threaded holes for wear and damage.
3  Machining of the Flywheel

Machine as follows:

**NOTE:** Before beginning any machining work on the flywheel, check it to see if machining is possible. If the scores or cracks are deeper than 1 mm (0.04 in.), replace the flywheel. If the width of the flywheel between the friction surface and the mounting flange is less than 68 mm (2.67 in), replace the flywheel.

**WARNING: PERSONAL INJURY (rdai14)**
To avoid injury while performing the test or procedure, wear adequate eye, face protection, and heat-resistant gloves.

**NOTE:** Maintain all original radii during the machining process.

1. Machine the flywheel friction surface, if required, to the specifications listed in the table below the following figures.
### Flywheel Specifications

<table>
<thead>
<tr>
<th>Description</th>
<th>Measurement Specifications</th>
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<tr>
<td>1 - Flywheel Shoulder Diameter (for ring gear mounting)</td>
<td>432.49 – 432.645 mm</td>
</tr>
<tr>
<td>2 – Flywheel Diameter for Mounting Clutch</td>
<td>435.82 – 435.883 mm</td>
</tr>
<tr>
<td>3 – Flywheel Width between Friction Surface and Mounting Flange New</td>
<td>69.2 mm</td>
</tr>
<tr>
<td>4 - Flywheel Minimum Width Between Friction Surface and Mounting Flange After Machining</td>
<td>67.2 mm</td>
</tr>
<tr>
<td>Flywheel Permissible Deviation From True (radial and lateral)</td>
<td>0.2 mm</td>
</tr>
</tbody>
</table>

**NOTE:** After machining, the friction surface must not have any cavities or chatter marks.

2. The surface finish (peak-to-valley height) after machining should be 0.016 mm (0.0006 in.). A rougher surface finish will cause rapid clutch lining wear, while a smoother finish could cause difficulties in clutch disengagement.
3. Check the radial and lateral deviation from true of the flywheel. The deviation from true must not exceed 0.2 mm (0.008 in.).
4. Install the flywheel. Refer to section "Installation of the Flywheel"