### INJ. PUMP CALIBRATION DATA

**Ass'y No.:** 1 0 1 6 0 7 - 9 5 7 1  
**E/G Model:** 6D16 '96 E/M  
**A kind of car:** 8Ton Truck  
**Company:** HYUNDAI MOTORS  
**Drawing No.:** 97 - 03 - 12 - 01  
**General Ass'y No.:**  
**Date:** 1997. 03. 12.

### Injection pump | Governor | Timing device
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1 0 1 0 6 1 - 8 8 9 0 | 1 0 5 9 3 2 - 1 5 7 1 | 1 0 5 6 7 2 - 5 3 1 0  

### Test Conditions:
- **Pump rotation:** Counter clockwise (Viewed from drive side)
- **Nozzle & Nozzle Holder Ass'y:** 105780-8140(BOSCH Type No.EF8511/9A)  
- **Nozzle Holder:** 105780-2080(BOSCH Type No.EF8511/9)  
- **Nozzle:** 105780-0000(BOSCH Type No.DN12SD12T)  
- **Nozzle opening pressure:** 175 Kgf/cm²  
- **Injection pipe:** 2 mm × 6 mm × 600 mm  
- **Transfer pump pressure:** 1.6 Kgf/cm²  
- **Oil Temp.:** 40±5℃  
- **Test Oil:** ISO 4113 or SAE Standard Test Oil(SAE J967d)  
- **Overflow valve opening pressure:** 2.6 Kgf/cm²

### Injection Timing:
- **Pre-stroke:** No.1 plunger 3.2 ± 0.05 mm  
  - **Nozzle opening pressure:** 175 Kgf/cm²  
  - **Injection pipe:** 2 mm × 6 mm × 600 mm  
- **Injection order:** 1 ~ 5 ~ 3 ~ 6 ~ 2 ~ 4 (Interval 60 ° ±30°)  
- **Injection order:** Plunger are numbered from the Governor side.  
- **Tappet clearance:** Bolt adjustment type—More than 0.3mm for all cylinders.  
- **Shim adjustment type:** Manually rotate the camshaft 2 ~3times and confirm that it rotates smoothly.

### Injection Quantity:

<table>
<thead>
<tr>
<th>Adjusting point</th>
<th>Rack position (mm)</th>
<th>Pump speed (r/min)</th>
<th>Injection Q'ty (cc/1000St)</th>
<th>Max. var bet. cyl (%)</th>
<th>Fixed</th>
<th>B.C.S pressure (mmHg)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>≈ 9.6</td>
<td>700</td>
<td>Each cylinder 96.0±2.4</td>
<td>Rack</td>
<td></td>
<td>Basic</td>
<td></td>
</tr>
<tr>
<td>Z</td>
<td>≈ 9.6</td>
<td>285</td>
<td>--</td>
<td>Rack</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z</td>
<td>≈ 9.6</td>
<td>550</td>
<td>Each cylinder 30.0±3.0</td>
<td>Lever</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>R1(11.6)</td>
<td>700</td>
<td>96.0±1.0</td>
<td>Lever</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>12.65</td>
<td>1,450</td>
<td>(117.4)±2.0</td>
<td>Lever</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>(20.0)</td>
<td>100</td>
<td>(136.0)±10.0</td>
<td>Lever</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11.45</td>
<td>580</td>
<td>89.0±1.5</td>
<td>Lever</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Timing Advance Specification:
- **Pump Speed (r/min):** 1,000  
- **Advance Angle (°):** Below 0.5 5.0±0.5

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**DPICO**  
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503-5, SHINSA-DONG, KANGNAM-GU, SEOUL, KOREA.  
TEL:(02)510-7241~7, FAX:(02)510-7110

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**3. Governor Adjustment**

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**Ass'y No.:** 1 0 1 6 0 7 - 9 5 7 1
Micro switch adjustment: Adjustment the bolt so that the micro switch operates at control lever position of R=9.2±0.1 / 400r/min

Unindication of a common difference the rack: ±0.05

Torque Cam: "L11"

Adjustment the bolt so that the micro switch operates at control lever position of R=9.2±0.1 / 400r/min

Unindication of a common difference the rack: ±0.05

Torque Cam: "L11"
<table>
<thead>
<tr>
<th>SPEED CONTROL LEVER</th>
<th>STOP LEVER ANGLE</th>
<th>TIMING SETTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>(42°) ±3°</td>
<td>(27°) ±5°</td>
<td>AT No.1 plunger beginning of injection position.</td>
</tr>
<tr>
<td>Idling</td>
<td>Normal</td>
<td>B.T.D.C : 10°</td>
</tr>
<tr>
<td>Full speed</td>
<td>Stop</td>
<td>Timing device's tooth position</td>
</tr>
<tr>
<td>18.5° ±5°</td>
<td>11.5° ±5°</td>
<td>2° ±2°</td>
</tr>
</tbody>
</table>