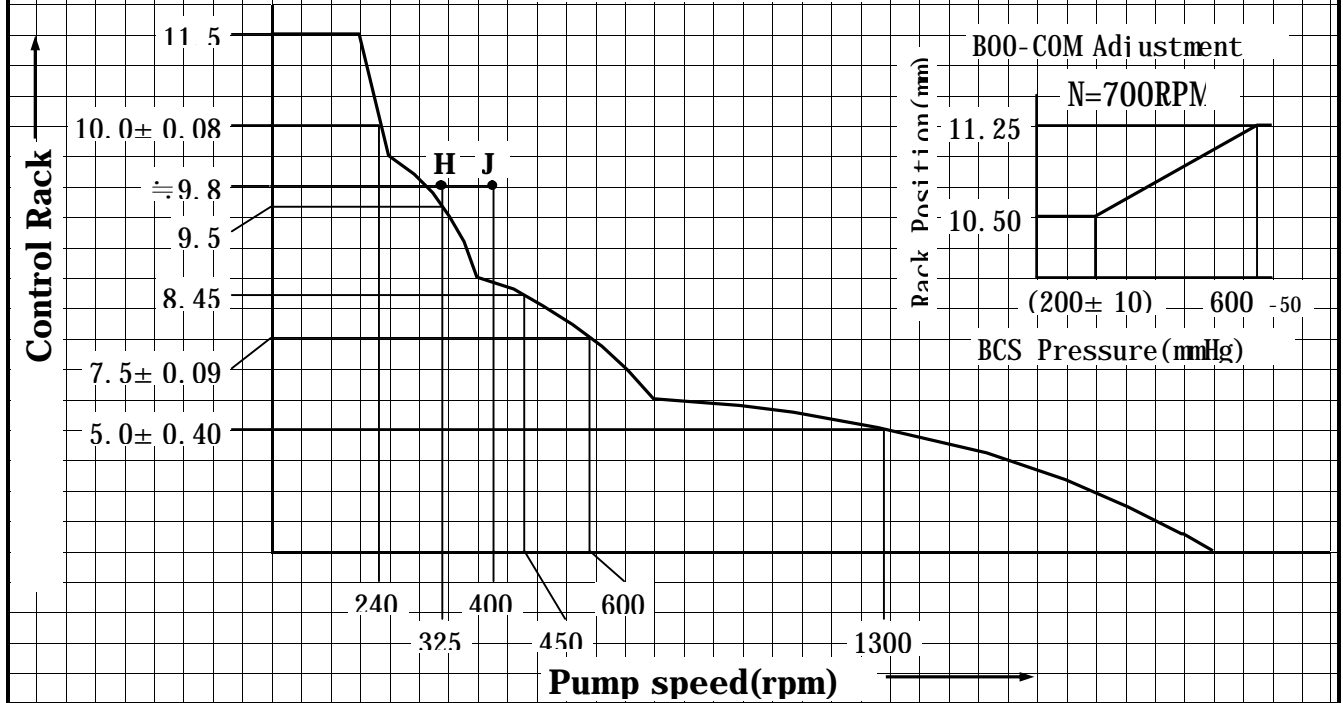
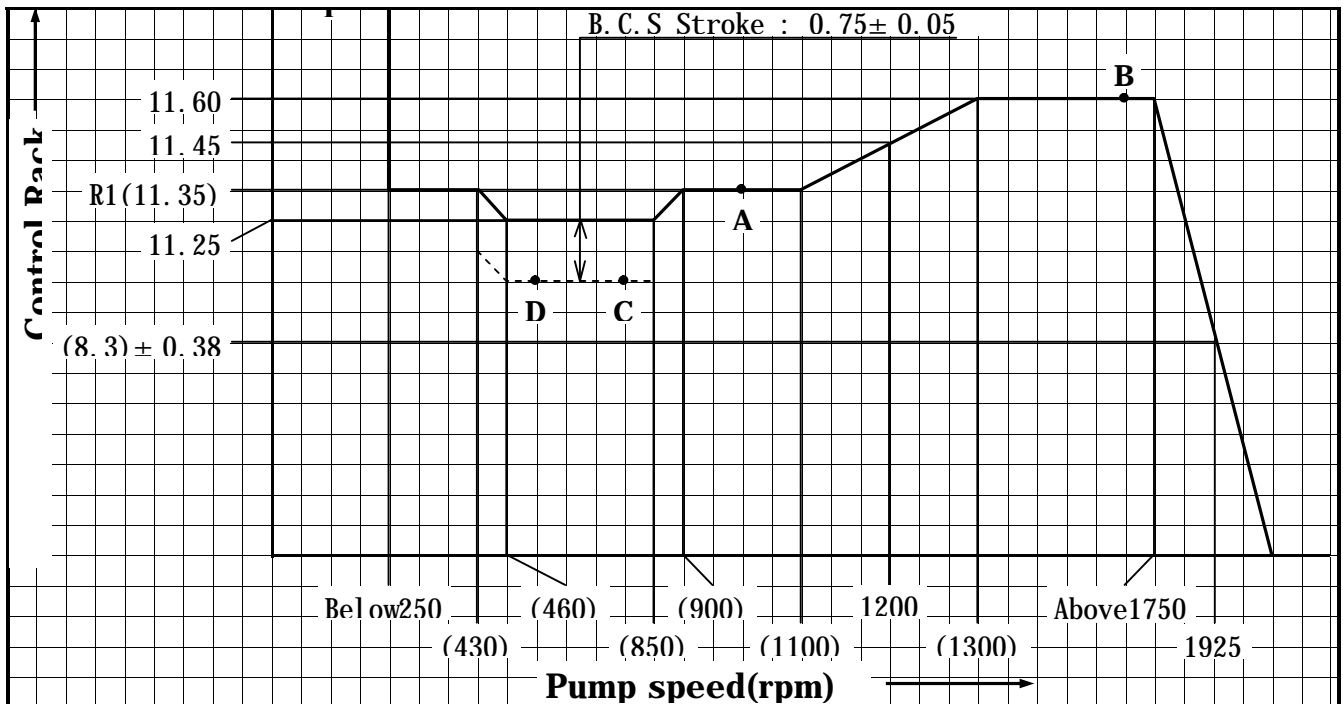
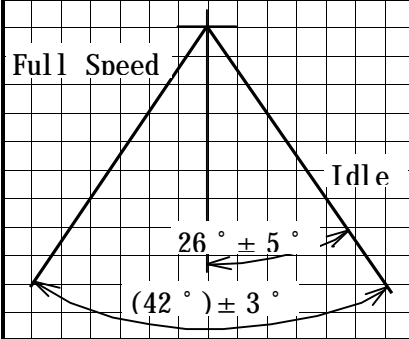
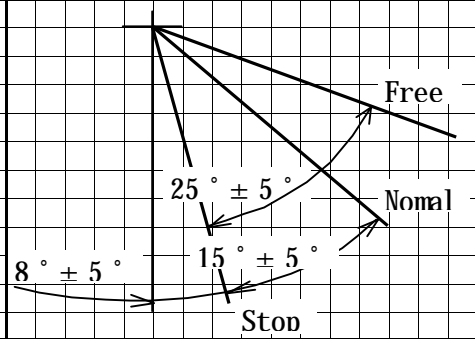


주 적 데 이 터 INJ. PUMP CALIBRATION DATA				Ass'y No. :	1 0 1 4 0 1 - 9 9 9 0			
				Engine Mdel:	4D31 TCI			
Drawing No. : 98 - 02 - 05 - 01				A kind of car: 3.5Ton Truck STD				
Company :				HYUNDAI MOTORS				
General Ass'y No. :				Date : 1998. 02. 05.				
Injection Pump			Governor			Timing Device		
1 0 1 0 4 1 - 9 1 3 0			1 0 5 9 2 1 - 9 2 6 0			1 0 5 6 7 6 - 1 0 7 0		
KP-PES4A95C321RS2S			KP-EP/RLD325-1750A2EXR			KP-EP/SCDM100-1700B4DR		
<b>1. Test Conditions :</b>								
Pump rotation : 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/cm <sup>2</sup>					Transfer pump pressure : 2.6 Kgf/cm <sup>2</sup>			
Injection pipe : 2 mm × 6 mm × 600 mm					Oil temp. : 40°C +5°C			
Test oil : ISO 4113 or SAE Standard test oil(SAE J967D)								
Overflow valve opening pressure : 2.6 Kgf/cm <sup>2</sup>								
<b>2. Injection Timing :</b>								
Pre- stroke : No. 1 plunger 3.6± 0.05 mm								
Note : Adjust with control rack position of mm								
Injection order : 1 ~ 3 ~ 4 ~ 2 (Interval 90° ± 30')								
Plunger are numbered from the Drive side								
Tappet clearance : Bolt adjustment type → More than 0.3mm for all cylinders.								
Shim adjustment type → Manually rotate the camshaft 2~3 times and confirm that it rotates smoothly.								
<b>3. Injection Quantity :</b>								
Adjusting point	Rack position (mm)	Pump speed (r/min)	Injection Q'ty (cc/1000st)	Max. var. bet. cyl. (%)	Fixed	B. C. S pressure (mmHg)	Remarks	
	11.35	1,000	Each Cylinder 73.5± 1.8		Rack	Above700		
	≒9.8	325	Each Cylinder 21.0± 2.7		Rack	0		
H	R1(11.35)	1,000	73.5± 1.0		Lever	Above700		
A	11.6	1,700	(81.5)± 2.0		Lever	Above700		
B	10.5	680	(48.5)± 2.0		Lever	0		
C	10.5	500	(48.5)± 2.0		Lever	0		
D	Above18.5	100	(80.0) +5.0		Lever	0		
I								
<b>4. Timing Advance Specification :</b>								
Pump Speed (r/min)	1,100	1,700						
Advance Angle (°)	Below0.3	4.0± 0.5						
<b>DPICO</b>			DOOWON PRECISION INDUSTRY Co., Ltd.			Service Department		
			503-5, SHINSA-DONG, KANGNAM-GU, SEOUL, KOREA			TEL: (02) 510-7241 ~6, FAX: (02) 510-7111		
<b>3. Governor Adjustment</b>				Ass'y No. : 1 0 1 4 0 1 - 9 9 9 0				
Stop lever set : r/min = 1,700 r/min				Rack position = 6.5 -0.5 mm				
Unindication of acommon difference the rack : ± 0.05				Torque cam : M42				
Above18.5								



Ass'y No. : 1 0 1 4 0 1 - 9 9 9 0

Speed Control Lever Angle	Stop Lever Angle	Timing Setting
 <p>Full Speed</p> <p>Idle</p> <p><math>26^{\circ} \pm 5^{\circ}</math></p> <p><math>(42^{\circ}) \pm 3^{\circ}</math></p>	 <p>Free</p> <p>Normal</p> <p>Stop</p> <p><math>25^{\circ} \pm 5^{\circ}</math></p> <p><math>15^{\circ} \pm 5^{\circ}</math></p> <p><math>8^{\circ} \pm 5^{\circ}</math></p>	<p>At No. 1 plunger beginning of injection position.</p> <p>BTDC : <math>10^{\circ}</math></p> <p><math>131^{\circ} \pm 20^{\circ}</math></p> <p>Gear "33"</p> 