

<b>조 정 데 이 터</b>				Ass'y No. : <b>1 0 4 7 8 0 - 7 0 5 0</b>			
<b>INJ. PUMP CALIBRATION DATA</b>				ENG. Type : T-2 H/All A/T			
Drawing No. : 97 - 01 - 09 - 04				A kind of car : Grace			
General Ass'y No. : KP-VE4/10F2100RNP....				Company : HYUNDAI MOTORS			
Pre - Stroke :				Date : 1997. 01. 09.			
Pump rotation: Clockwise-viewed from drive side							
<b>1. Test Conditions</b>							
1-1	Nozzle ; 105780-0000(KP-DN12SD12T)			1-4	Injection pipe : 2mm×6mm×840mm		
1-2	Nozzle holder : 105780-2080			1-5	Fuel oil temperature : 45 + 5℃		
1-3	Nozzle opening pressure : 150+5 Kgf/cm <sup>2</sup>			1-6	Supply pump pressure : 0.2 Kgf/cm <sup>2</sup>		
<b>2. Setting</b>				Pump speed		Settings	
				(r/min)		Charge air pressure(mmHg)	
						Difference in delivery	
2-1	Timing device travel			1,100	3.2±0.2 mm		
2-2	Supply pump pressure			1,100	4.7±0.3 Kgf/cm <sup>2</sup>		
2-3	Full load delivery(FULL)			1,100	50.1±1.0 cc/1000st		
						3.0	
2-4	Idle speed regulation			425	11.0±2.0 cc/1000st		
2-5	Start			100	55.0~75.0 cc/1000st		
2-6	Full load speed regulation			2,350	10.0±3.0 cc/1000st		
2-7	Load-timer Adjustment			1,100	42.0±1.0 cc/1000st		
						T = 2.3±0.2 mm	
<b>3. Test Specifications</b>				Charge air pressure(mmHg)			
3-1	Timing device	N = r/min	600	800	1,100	1,750	2,000
		mm	0.9±0.4	1.8±0.4	3.2±0.2	6.2±0.4	7.3±0.4
3-2	Supply pump	N = r/min	600		1,100		2,000
		Kgf/cm <sup>2</sup>	3.4±0.3		4.7±0.3		6.9±0.3
3-3	Overflow delivery	N = r/min	1,100	cc/1000st	400±130		BCS Pressure
3-4	Fuel injection quantities						
	Speed control lever position	Pump speed (r/min)	Fuel delivery (cc/1000st)		Charge air pressure (mmHg)		<b>4. Dimensions</b>
	Full - load speed	500	43.1±1.6				K 3.3±0.1
		900	44.6±2.0				KF 5.8±0.1
		1,100	50.1±1.0				MS 1.0±0.1
		1,750	42.7±2.0				BCS
		2,000	40.2±1.6				
							<b>Control lever angle</b>
							α 22.° ± 4.
	Switch OFF Magnet valve	100	M/V OFF Q = 0				A mm
	Idling stop	800	Below 5.0				β 31.° ± 5.
							B mm
3-5	Solenoid valve	Max. cut-in voltage		8 V			
		Test voltage		12 ~ 14 V			
<b>DPICO</b>		DOOWON PRECISION INDUSTRY Co., Ltd.				Service Department	
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		Ass'y No. : 104780 - 7020, 7030, 7040, 7050					
* Load timer adjustment.							
1. Adjust the governor shaft so that the clearance between the end of the flange and the end of the governor shaft is approximately 3mm and then lock the nut.							

2. Load timer adjustment.

(1) Fix the control lever in the position satisfying the following conditions:

- Boost Pressure : \_\_\_\_\_
- Pump speed : 1,100 r/min
- Fuel injection quantity :  $42.0 \pm 1.0$  cc/1000st

(2) With the control lever positioned as described in (1) above adjust the governor sleeve so that the timer reduction value ( $\Delta T$ ) conforms to the specified values (item 2-7)

$T = 17 \sim 22$  N·m (1.7~2.2 Kg·m)

3. Confirmation of Timer Characteristics.

Fix the control lever in the position satisfying the following conditions and confirm the timer stroke.

Control lever position			Specified Values	
Pump speed (r/min)	Fuel injection q'ty (cc/1000st)	Boost pressure (mmHg)	Timer stroke (mm)	Timer reduction value (mm)
1,100	$50.1 \pm 1.0$		$3.2 \pm 0.2$	
	$42.0 \pm 1.0$		$2.3 \pm 0.2$	(0.9)
	$30.0 \pm 1.0$		$0.8 \pm 0.4$	(2.4)
425	$11.0 \pm 2.0$		0	

※ Potentiometer adjustment

Pump speed (r/min)	Control lever position	Fuel injection Q'ty(cc/1000st)	In-put voltage	Out-put voltage	Remark
-	Idling	-	10V	$1.3 \pm 0.3$ V	Adjusting point
-	Full speed	-	10V	$(6.0 \pm 0.6)$ V	Check point

In-put  
Out-put  
Ground

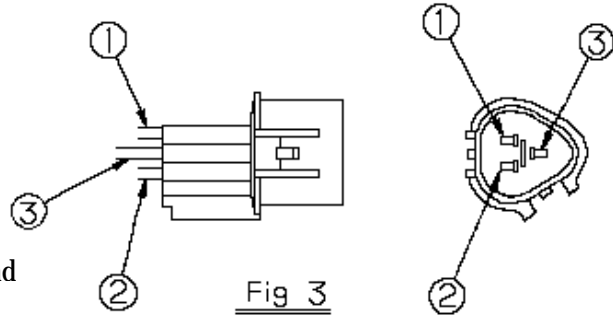
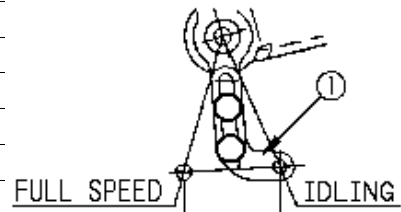


Fig 3

Ass'y No. : 104780 - 7020, 7030, 7040, 7050

※ Accelerator link stroke adjustment.

Adjust the accelerator link's stroke ( $32.9 \pm 1$  mm) between the idling and full speed position as shown as below.



32.9±1

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