

주 저 데 이 터 INJ. PUMP CALIBRATION DATA				Ass'y No. : 1 0 4 7 4 5 - 7 9 0 0			
				ENG. Type A1 4D56 T/C M/T			
Drawing No. : 97 - 03 - 03 - 05				A kind of car :			
General Ass'y No. : KP-VE4/10F2100RNP....				Company : HYUNDAI MOTORS			
Pre - Stroke :				Pump rotation: Clockwise-viewed from drive side			
1. Test Conditions							
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°C		
1-3	Nozzle opening pressure : 150+5 Kgf/cm²			1-6	Supply pump pressure : 0.2 Kgf/cm²		
2. Setting				Pump speed (r/min)		Settings	
				Charge air pressure(mmHg)		Difference in delivery	
2-1	Timing device travel		1,250	3.7±0.2 mm		550±10	
2-2	Supply pump pressure		1,250	4.9±0.3 Kgf/cm²		550±10	
2-3	Full load delivery(FULL)		1,250	61.0±1.0 cc/1000st		550±10	
			750	58.5±1.0 cc/1000st		330±10	
2-4	Idle speed regulation		375	11.0±1.5 cc/1000st		0	
2-5	Start		100	55.0~75.0 cc/1000st		0	
2-6	Full load speed regulation		2,650	25.0±3.0 cc/1000st		550±10	
2-7	Load-timer Adjustment		1,250	50.0±1.0 cc/1000st		550±10	
				T = 2.9±0.2 mm		550±10	
3. Test Specifications				Charge air pressure(mmHg) 550±10			
3-1	Timing device		N = r/min	500	750	1,250	1,750
			mm	1.2±0.4	2.0±0.4	3.7±0.2	5.8±0.4
3-2	Supply pump		N = r/min	600	1,250		2,100
			Kgf/cm²	3.4±0.3	4.9±0.3		6.8±0.3
3-3	Overflow delivery		N = r/min	1,250	cc/1000st		420±130
							BCS Pressure 550±10
3-4	Fuel injection quantities						
Speed control lever position		Pump speed (r/min)	Fuel delivery (cc/1000st)	Charge air pressure (mmHg)		4. Dimensions	
Full - load speed		425	40.5±2.0	0		K	3.3±0.1
		425	40.5±2.0	90±10		KF	5.8±0.1
		600	43.0±2.0	0		MS	1.0±0.1
		600	(47.0±2.0)	150±10		BCS	
		1,250	61.0±1.0	550±10			
		1,750	(59.2)	550±10		Control lever angle	
		2,100	(55.0±1.5)	550±10		α	(57.° ± 4.°)
Switch OFF Magnet valve		100	M/V OFF Q = 0	0		A	mm
Idling stop		600	Below 5.0	0		β	(38.° ± 5.°)
		750	Below 3.0	0		B	mm
3-5	Solenoid valve		Max. cut-in voltage		8 V		
			Test voltage		12 ~ 14 V		
DPICO		DOOWON PRECISION INDUSTRY Co., Ltd.				Service Department	
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				ASSY No. : 104745 - 7870, 7880, 7890, 7900			
※ 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	: 550±10	mmHg
Pump speed	: 1,250	r/min
Fuel injection quantity	: 50.0±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 (ΔT) conforms to the specified values (item 2-7)

$$T = 17 \sim 22 \text{ N} \cdot \text{m} (1.7 \sim 2.2 \text{ Kg} \cdot \text{m})$$

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)
1,250	61.0±1.0	500±10	3.7±0.2	
	50.0±1.0		2.9±0.2	(0.8)
	40.0±1.0		1.6±0.2	(2.1)
375	(11.0±1.5)	0	0	

✖ Accelerator link stroke adjustment.

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



