

INJECTION PUMP TEST SPECIFICATIONS

093000-2752

INJECTION PUMP	093000-275# (ND-PES4A90G321RND275)	MANU-FACTURER	MITSUBISHI
GOVERNOR	091300-213# (R801)	ENGINE TYPE	4D32
TIMER	091800-221#	VEHICLE MODEL	CANTER

1. INJECTION TIMING

1) Rotation	: Clockwise viewed from drive side	4) Pre-stroke	: 3.55 – 3.65 mm
2) Injection Order	: 1 – 3 – 4 – 2	5) Tappet Clearance	: More than 0.2 mm
3) Injection Interval	: 90° ± 30'	6) Locked Timing Location	: —

2. ADJUSTMENT OF DELIVERY QUANTITY

Test Conditions

1) Nozzle	: 093400 – 0540 (DN12SD12A)	4) Feed Pressure	: 1.6 kgf/cm ²
2) Nozzle Opening Pressure	: 175 – 185 kgf/cm ²	5) High Pressure Pipe	: ø2 x ø6 x 600 mm
3) Test Oil	: SAE J967 (ISO4113)	6) Fuel Temperature	: 40 – 45 °C (104 – 113 °F)

Pump Speed (rpm)	Rack Travel (mm)	Number of Strokes	Delivery Quantity (cc/cyl.)	Max. Spread in Delivery (cc)	Remarks
300	11.0	500	3.0 – 5.0	1.0	
900	14.0	200	11.1 – 12.1	0.6	
1750	14.0	200	13.5 – 14.5	0.8	
1900	10.2	200	3.5 – 4.5	0.6	

Overflow valve opening : 1.6 kgf/cm²

3. ADJUSTMENT OF GOVERNOR...Refer to the right side of this sheet.

4. ADJUSTMENT OF PUMP WITH GOVERNOR OPERATION

Lever Position (deg)	Pump Speed (rpm)	Number of Strokes	Delivery Quantity (cc/cyl.)	Remarks
FULL	900	1000	57 – 59	
	1750	1000	68 – 72	
	500	1000	42 – 50	
	700	1000	46 – 50	

NOTE

The 1st cylinder is on the governor side.

5. ADJUSTMENT OF TIMER

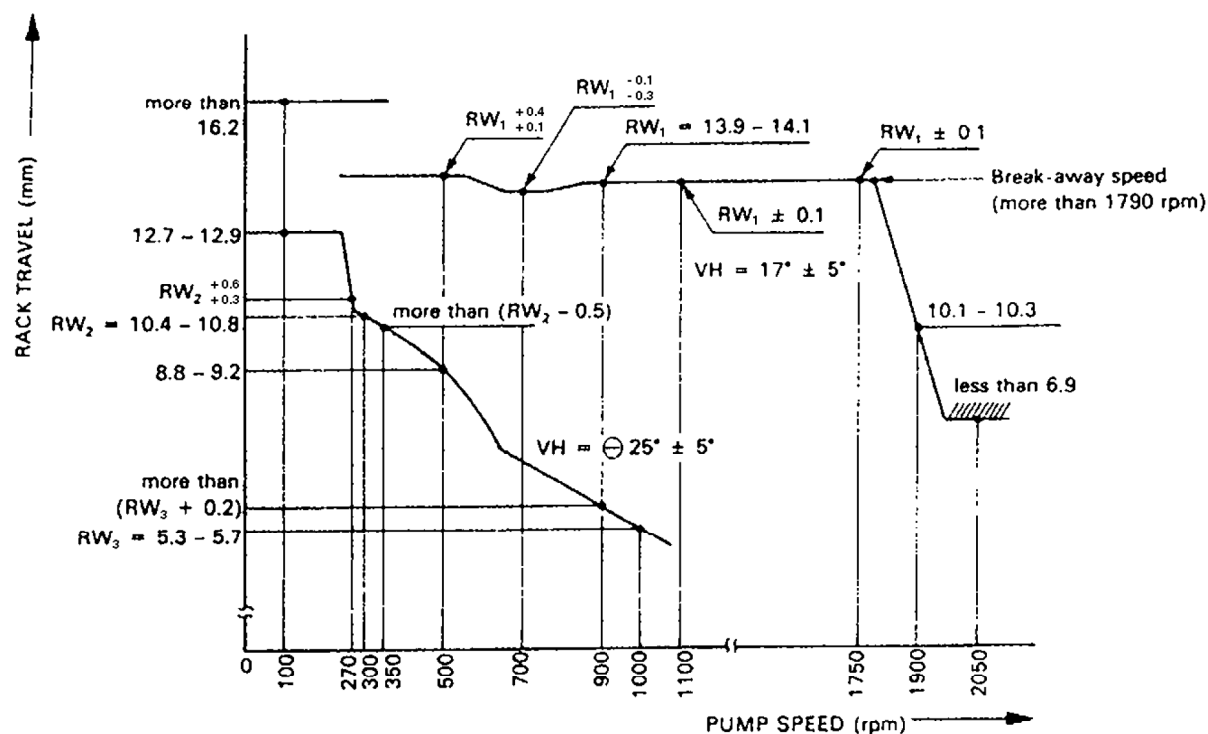
N.A. : Not Applicable

Pump Speed (rpm)	1400	1750				
Advance Angle (deg)	Less than 0.5	6.0 – 7.0				

3. ADJUSTMENT OF GOVERNOR

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Control Speed Range : 300 – 1750 rpm



6. ADJUSTMENT OF BOOST COMPENSATOR (Full lever position)

Pump Speed (rpm)	Boost Pressure (mmHg)	RW (mm)	Delivery Quantity (cc/200st)
N.A.	N.A.	N.A.	N.A.

NOTE:

- (1) Adjusting Lever Position
Setting position 0° to be at vertical position.
- (2) When rack is once at pump speed 300 rpm in idle lever position, then pump speed increased to 800 rpm and returned to 300 rpm, the distance between the original rack position and new rack position must be less than 0.2mm.
- (3) Stop Lever Set
Rack travel must be 6.7 – 6.9 mm when the stop lever is pulled at pump speed 500 rpm, then fuel delivery must be less than 0.9 cc/200 st.1cyl.
- (4) Temporary Adjustment of Stop Cam
 $L_1 = 30.5 \text{ mm}$ $L_2 = 30.5 \text{ mm}$ $L_3 = 25.8 \text{ mm}$