

ZEXEL Ass'y No.	106675-4610
Bosch Ass'y No.	F 019 Z20 142
Bosch Typecode	
Engine Type	D2366T
Manufacturer	DPICO
Edition date	12.10.06 (5)

### 1 Adjustment conditions

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
	Test oil		ISO4113 or {SAEJ96 7d}				
		1404 Test oil					
P	Test oil temperature	degC	40	40	45		
	Nozzle and nozzle holder		105780-8140				
	Bosch type code		EF8511/9A				
	Nozzle		105780-0000				
	Bosch type code		DN12SD12T				
	Nozzle holder		105780-2080				
	Bosch type code		EF8511/9				
P	Opening pressure	MPa	17.2				
P	Opening pressure	kgf/cm2	175				
	Injection pipe	mm	8-3-600				
		Outer diameter - inner diameter - length (mm)					
	Overflow valve		131424-4420				
P	Overflow valve opening pressure	kPa	157	123	191		
P	Overflow valve opening pressure	kgf/cm2	1.6	1.25	1.95		
P	Tester oil delivery pressure	kPa	157	157	157		
P	Tester oil delivery pressure	kgf/cm2	1.6	1.6	1.6		
	Direction of rotation (viewed from drive side)		R				
			Right				

### 2 Adjustment specification

#### 2.1 Injection timing adjustment

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Direction of rotation (viewed from drive side)		R				
			Right				
P	Injection order		1-5-3-6-2-4				
S	Pre-stroke	mm	4.3	4.25	4.35		
P	Beginning of injection position		NO.1				
		Governor side					
S	Difference between angles 1	deg.	60	59.5	60.5		
		Cal 1-5					
S	Difference between angles 2	deg.	120	119.5	120.5		
		Cal 1-3					
S	Difference between angles 3	deg.	180	179.5	180.5		
		Cal 1-6					
S	Difference between angles 4	deg.	240	239.5	240.5		
		Cyl.1-2					
S	Difference between angles 5	deg.	300	299.5	300.5		
		Cal 1-4					

#### 2.2 Injection quantity adjustment

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Adjusting point		A				
P	Rack position		10.8				
P	Pump speed	r/min	1100	1100	1100		
S	Average injection quantity	mm3/st.	145	143	147		
S	Max. variation between cylinders	%	0	-2	2		
P	Basic		*				
P	Fixing the lever		*				
P	Boost pressure	kPa	80	80			
P	Boost pressure	mmHg	600	600			
CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Adjusting point		B				
P	Rack position		4.9+-0.5				
P	Pump speed	r/min	400	400	400		
S	Average injection quantity	mm3/st.	15.5	14	17		
S	Max. variation between cylinders	%	0	-15	15		
P	Fixing the rack		*				
P	Boost pressure	kPa	0	0	0		
P	Boost pressure	mmHg	0	0	0		

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Adjusting point		E				
P	Rack position		-				
P	Pump speed	r/min	100	100	100		
S	Average injection quantity	mm <sup>3</sup> /st.	146	146	156		
P	Fixing the lever		*				
P	Boost pressure	kPa	0	0	0		
P	Boost pressure	mmHg	0	0	0		
P	Rack limit		*				

2.3 Governor adjustment

Name	
K=7 BCL=1.6±0.1mm	N: Pump speed R: Rack position (mm) (1) Target notch: K (2) Tolerance for racks not indicated: ±0.05mm. (3) Deliver without the torque control spring operating. (4) RACK LIMIT (5) Boost compensator stroke: BCL (6) Set idle sub-spring

2.4 Boost compensator adjustment

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Pump speed	r/min	500	500	500		
P	Rack position		R1-1.6				
S	Boost pressure	kPa	13.3	11.3	15.3		
S	Boost pressure	mmHg	100	85	115		

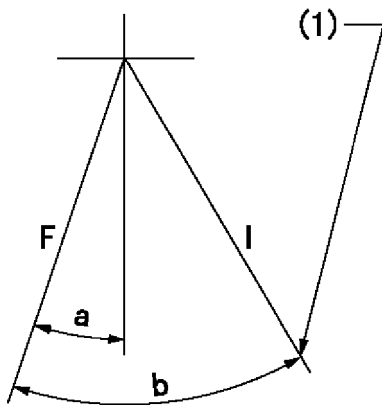
CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Pump speed	r/min	500	500	500		
P	Rack position		R1-1				
S	Boost pressure	kPa	32	28	36		
S	Boost pressure	mmHg	240	210	270		

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Pump speed	r/min	500	500	500		
P	Rack position		R1(10.8)				
S	Boost pressure	kPa	66.7	66.7	66.7		
		About					
S	Boost pressure	mmHg	500	500	500		
		About					

**2.5 Speed control lever angle**

Name

a=10deg+5deg  
b=27deg+5deg

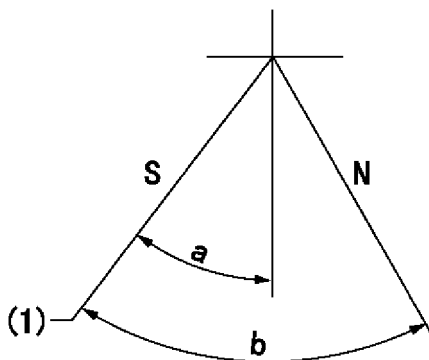


F: Full speed  
I: Idle  
(1) Stopper bolt setting

**2.6 Stop lever angle**

Name

a=32deg+5deg  
b=70deg+5deg

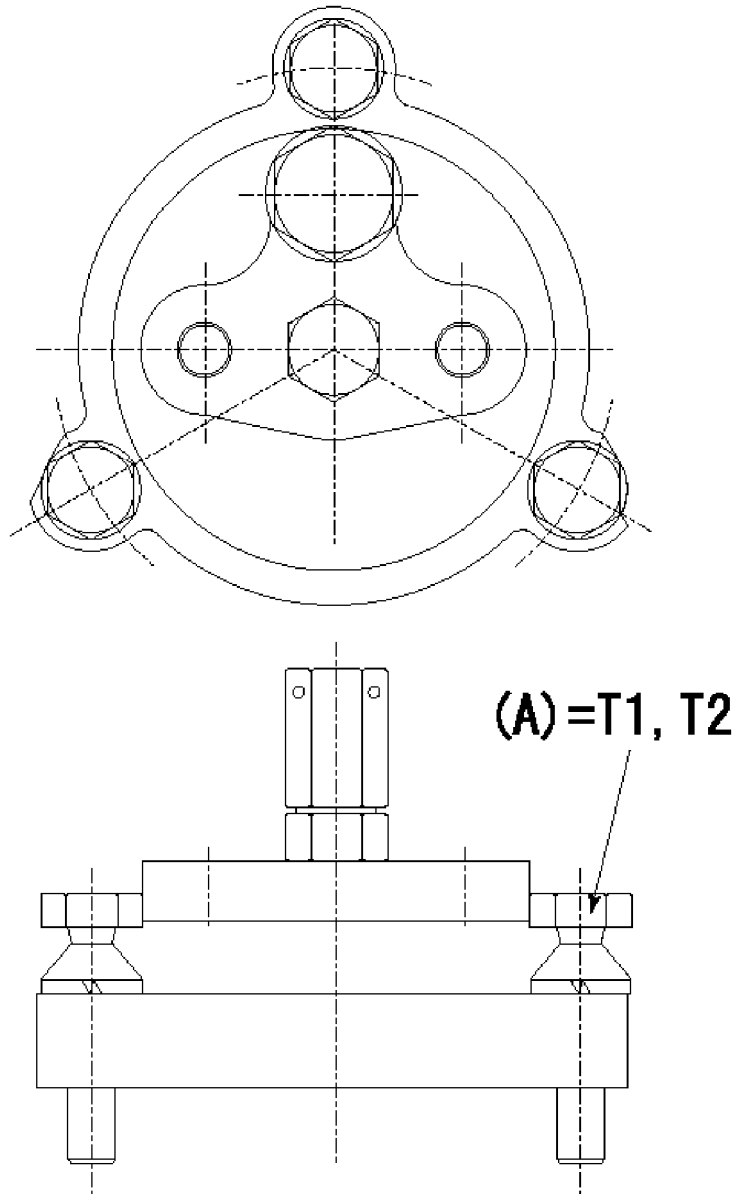


N: Pump normal  
S: Stop the pump.  
(1) Pump speed aa and rack position bb (to be sealed at delivery)

**2.7 Additional device adjustment**

2.7.1 Additional device 1

Name TAMPER PROOF

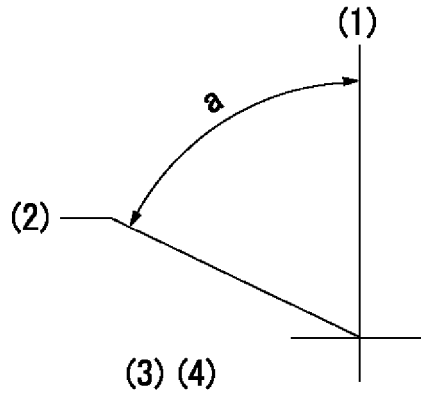


T1=2.5N-m(0.25kgf-m)  
T2=2.9~4.4N-m(0.3~0.45kgf-m)

Tamperproofing-equipped boost compensator cover installation procedure  
 (A) After adjusting the boost compensator, tighten the bolts to remove the heads.  
 (1) Before adjusting the governor and the boost compensator, tighten the screw to the specified torque.  
 (Tightening torque T = T1 maximum)  
 (2) After adjusting the governor and the boost compensator, tighten to the specified torque to break off the bolt heads.  
 (Tightening torque T = T2)

**2.8 Timing setting**Name 

a=(70deg)



(1) Pump vertical direction

(2) Coupling's key groove position at No 1 cylinder's beginning of injection

(3)-

(4)-