ZEXEL Ass'y No.	101609-9060
Bosch Ass'y No.	F 019 Z20 035
Bosch Typecode	
Engine Type	6D16
Manufacturer	DPICO
Edition date	20.11.03

1 Adjustment conditions

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
	Test oil		ISO4113 or {SAEJ967d}				
		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	6-2-600				
		Outer diameter - inner diameter - length (mm)					
	Overflow valve		131424-5520				
P	Overflow valve opening pressure	kPa	255	221	289		
P	Overflow valve opening pressure	kgf/cm2	2.6	2.25	2.95		
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)		L				
		Left					

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)		L				
		Left					
P	Injection order		1-5-3-6-2-4				
S	Pre-stroke	mm	3.8	3.75	3.85		
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

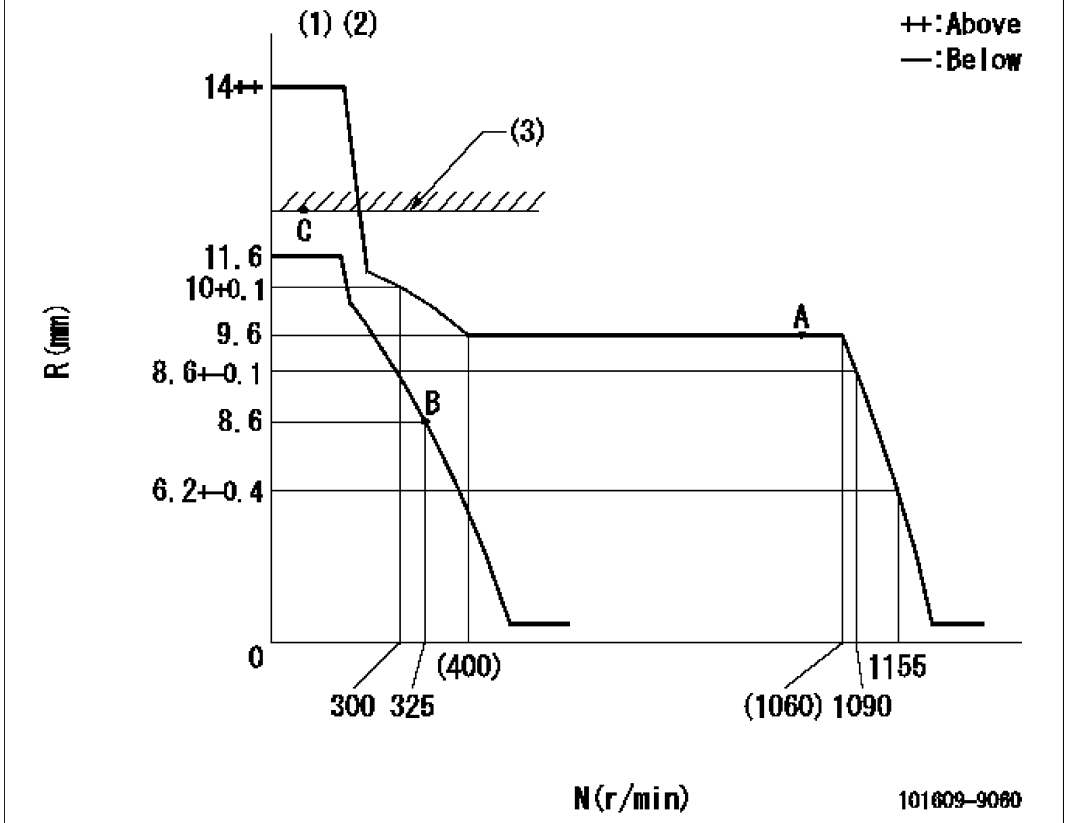
CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Adjusting point		A				
P	Rack position		9.6				
P	Pump speed	r/min	1000	1000	1000		
S	Average injection quantity	mm3/st.	77	76	78		
S	Max. variation between cylinders	%	0	-2.5	2.5		
P	Basic		*				
P	Fixing the lever		*				

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Adjusting point		B				
P	Rack position		8.6+-0.5				
P	Pump speed	r/min	325	325	325		
S	Average injection quantity	mm3/st.	15	13.5	16.5		
S	Max. variation between cylinders	%	0	-15	15		
P	Fixing the rack		*				

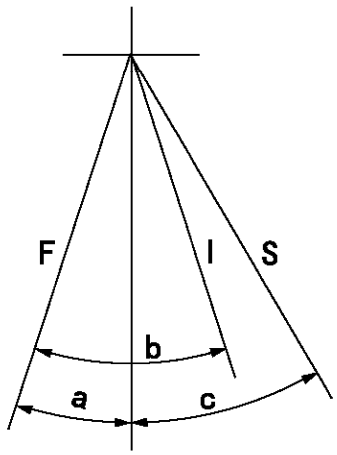
CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Adjusting point		C				
P	Rack position		-				
P	Pump speed	r/min	100	100	100		
S	Average injection quantity	mm3/st.	71	61	81		
P	Fixing the lever		*				
P	Rack limit		*				

S = Setting value, C = Check value)
OT = Outside Tolerance (X is set)

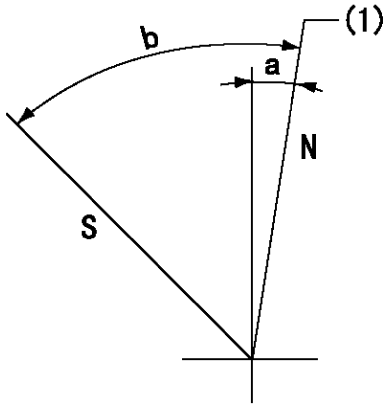
2.3 Governor adjustment

Name	
	
K=16	N:Pump speed R:Rack position (mm) (1)Target notch: K (2)Tolerance for racks not indicated: +-0.05mm. (3)RACK LIMIT

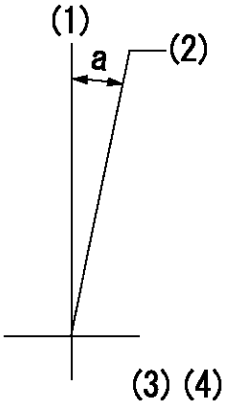
2.4 Speed control lever angle

Name	
a=(14deg)+-5deg b=(25deg)+-5deg c=35deg+-3deg	
	F:Full speed I:Idle S:Stop

2.5 Stop lever angle

Name	
a=2.5deg+-5deg b=53deg+-5deg	
	N:Pump normal S:Stop the pump. (1)Normal

2.6 Timing setting

Name	
a=(2deg)	
aa=18deg	(1)Pump vertical direction (2)Position of coupling's tooth at No 1 cylinder's beginning of injection (3)B.T.D.C.: aa (4)-