

ZEXEL Ass'y No.	106693-6201
Bosch Ass'y No.	F 01G 09U 098
Bosch Typecode	
Engine Type	6HE1TC-S
Manufacturer	ISUZU
Edition date	27/06/06 (3)

**1 Adjustment conditions**

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
	Test oil		ISO4113 or (SAEJ96 7d)				
		N=Measure the actual speed.					
P	Test oil temperature	degC	40	40	45		
	Nozzle and nozzle holder		105780-8250				
	Bosch type code		1 688 901 101				
	Nozzle		105780-0120				
	Bosch type code		1 688 901 990				
	Nozzle holder		105780-2190				
P	Opening pressure	MPa	20.7				
P	Opening pressure	kgf/cm2	211				
	Injection pipe	mm	8-3-600				
		Outer diameter - inner diameter - length (mm)					
	Overflow valve		131424-8620				
P	Overflow valve opening pressure	kPa	206	172	240		
P	Overflow valve opening pressure	kgf/cm2	2.1	1.75	2.45		
P	Tester oil delivery pressure	kPa	255	255	255		
P	Tester oil delivery pressure	kgf/cm2	2.6	2.6	2.6		
	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	3.6	3.57	3.63		
S	Rack position		R=A				
		Q=80.3(mm3/st)/N=700(r/min)					
P	Beginning of injection position		NO.1				
		Governor side					
S	Difference between angles 1	deg.	60	59.75	60.25		
		NA					
S	Difference between angles 2	deg.	120	119.75	120.25		
		Rack position at N = 900 is the same as in the reference point A for row L 103662-3125					
S	Difference between angles 3	deg.	180	179.75	180.25		
		OFF					
S	Difference between angles 4	deg.	240	239.75	240.25		
		Rack position at N = 900 is the same as in the reference point A for row L 103662-3123					
S	Difference between angles 5	deg.	300	299.75	300.25		
		Rack position at N = 900 is the same as in the reference point A for row L 103662-3344					

**2.2 Injection quantity adjustment**

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Adjusting point		-				
P	Rack position		11.7				
P	Pump speed	r/min	700	700	700		
S	Average injection quantity	mm3/st.	107	105	109		
S	Max. variation between cylinders	%	0	-4	4		
P	Basic		*				
P	Fixing the rack		*				
P	Standard for adjustment of the maximum variation between cylinders		*				

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Adjusting point		Z				
P	Rack position		8+-0.5				
P	Pump speed	r/min	470	470	470		

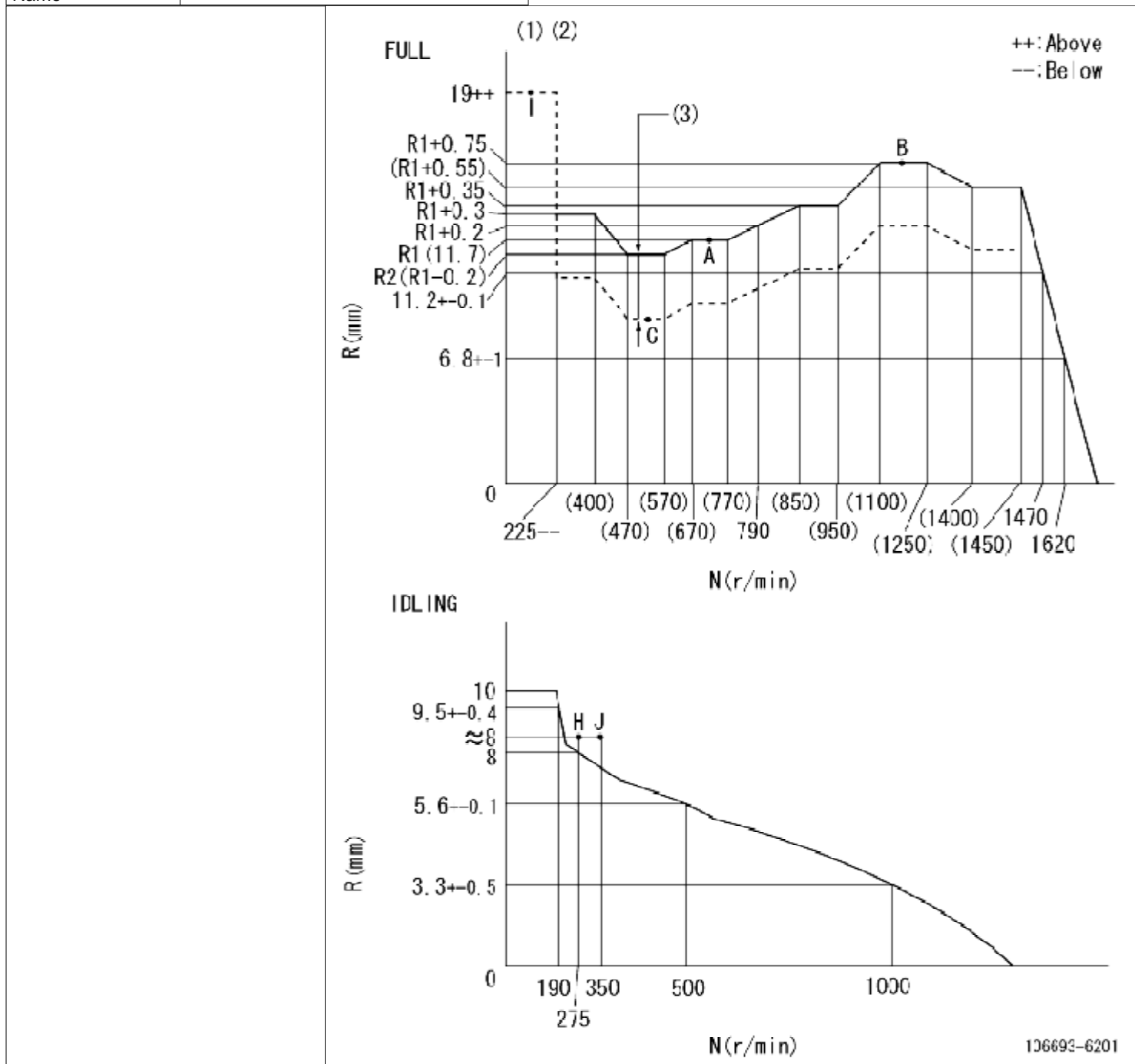
S	Average injection quantity	mm <sup>3</sup> /st.	12.5	9.3	15.7		
S	Max. variation between cylinders	%	0	-13	13		
P	Fixing the rack		*				
P	Standard for adjustment of the maximum variation between cylinders		*				

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Adjusting point		A				
P	Rack position		R1(11.7)				
P	Pump speed	r/min	700	700	700		
S	Average injection quantity	mm <sup>3</sup> /st.	107	106	108		
P	Basic		*				
P	Fixing the lever		*				
P	Boost pressure	kPa	68.6	68.6			
P	Boost pressure	mmHg	515	515			

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Adjusting point		B				
P	Rack position		R1+0.75				
P	Pump speed	r/min	1200	1200	1200		
S	Average injection quantity	mm <sup>3</sup> /st.	105.5	101.5	109.5		
P	Fixing the lever		*				
P	Boost pressure	kPa	68.6	68.6			
P	Boost pressure	mmHg	515	515			

2.3 Governor adjustment

Name \_\_\_\_\_



106693-6201

T1=AD90  
BCL=1.55±0.1mm

N: Pump speed  
R: Rack position (mm)  
(1) Torque cam stamping: T1  
(2) Tolerance for racks not indicated: ±0.05mm.  
(3) Boost compensator stroke: BCL

2.4 Boost compensator adjustment

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Pump speed	r/min	510	510	510		
P	Rack position		R2-1.55				
S	Boost pressure	kPa	12	10.7	13.3		
S	Boost pressure	mmHg	90	80	100		
CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Pump speed	r/min	510	510	510		
P	Rack position		R2(R1-0.2)				
S	Boost pressure	kPa	55.3	55.3	55.3		

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

		About				
S	Boost pressure	mmHg	415	415	415	
		About				

**2.5 Timer adjustment**

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
S	Pump speed	r/min	900--				
P	Advance angle	deg.	0	0	0		
	Load		3/5				
	Remarks						
		Start					

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Pump speed	r/min	850				
S	Advance angle	deg.	0.3		0.3		
	Load		3/5				

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Pump speed	r/min	-				
S	Advance angle	deg.	1.5	1	2		
	Load		3/5				
	Remarks						
		Measure the actual speed.					

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Pump speed	r/min	1075				
S	Advance angle	deg.	1.5	1	2		
	Load		4/5				

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Pump speed	r/min	1350				
S	Advance angle	deg.	5.5	5	6		
	Load		4/5				
	Remarks						
		Finish					

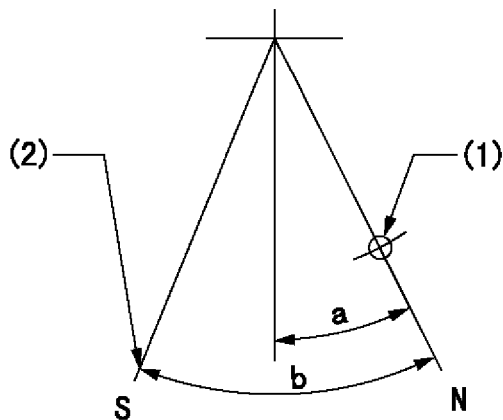
**2.6 Speed control lever angle**

Name	
a=20deg+-5deg b=35.5deg+-3deg	
aa=35mm	F: Full speed I: Idle (1) Use the pin at R = aa (2) Stopper bolt set position 'H'

**2.7 Stop lever angle**

Name

a=12deg+-5deg  
b=44deg+-5deg



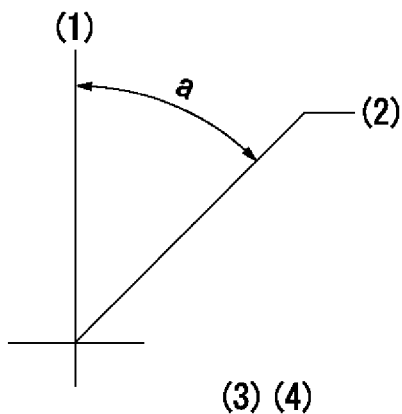
aa=40mm  
bb=1.5+-0.3mm  
cc=0r/min

N:Pump normal  
S:Stop the pump.  
(1)Use the pin at R = aa  
(2)Set the stopper bolt at rack position = bb, speed = cc and confirm non-injection.

**2.8 Timing setting**

Name

a=(50deg)



aa=7deg

(1)Pump vertical direction  
(2)Position of timer's threaded hole at No 1 cylinder's beginning of injection  
(3)B.T.D.C.: aa  
(4)-