

ZEXEL Ass'y No.	104746-1494
Bosch Ass'y No.	9 460 611 371
Bosch Typecode	
Engine Type	D201-03
Manufacturer	ISUZU
Edition date	01.02.02 (5)

**1 Adjustment conditions**

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
	Test oil		ISO4113orSAEJ967 d				
		1404 Test oil					
P	Test oil temperature	degC	45	45	50		
	Nozzle		105780-0060				
	Bosch type code		NP-DN0SD1510				
	Nozzle holder		105780-2150				
P	Opening pressure	MPa	13	13	13.3		
P	Opening pressure	kgf/cm2	133	133	136		
	Injection pipe		157805-7320				
P	Injection pipe	mm	2-6-450				
		Inside diameter - outside diameter - length (mm)					
	Joint assembly		157641-4720				
	Tube assembly		157641-4020				
P	Transfer pump pressure	kPa	20	20	20		
P	Transfer pump pressure	kgf/cm2	0.2	0.2	0.2		
	Direction of rotation (viewed from drive side)		L				
		Left					

**2 Adjustment specification****2.1 Full load delivery**

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Pump speed	r/min	800	800	800		
S	Average injection quantity	mm3/st.	29.7	29.2	30.2		
S	Difference in delivery	mm3/st.	3		3		
P	Basic		*				
P	Oil temperature	degC	50	48	52		

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Pump speed	r/min	800	800	800		
C	Average injection quantity	mm3/st.	29.7	28.7	30.7		
C	Difference in delivery	mm3/st.	3		3		
P	Basic		*				
P	Oil temperature	degC	50	48	52		

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Pump speed	r/min	1050	1050	1050		
C	Average injection quantity	mm3/st.	34.7	34.7	34.7		
		About					
C	Difference in delivery	mm3/st.	4		4		
P	Oil temperature	degC	50	48	52		

**2.2 Governing**

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Pump speed	r/min	1100	1100	1100		
S	Average injection quantity	mm3/st.	25	24	26		
S	Difference in delivery	mm3/st.	3		3		
P	Basic		*				
P	Oil temperature	degC	50	48	52		

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Pump speed	r/min	1100	1100	1100		
C	Average injection quantity	mm3/st.	25	23.5	26.5		
C	Difference in delivery	mm3/st.	3		3		
P	Basic		*				
P	Oil temperature	degC	50	48	52		

**2.3 Idle**

CAT	Designation	Unit	Set value	min.	max.	Actual values	OT
P	Pump speed	r/min	700	700	700		
S	Average injection quantity	mm3/st.	20.7	19.7	21.7		

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

S	Difference in delivery	mm <sup>3</sup> /st.	3		3		
P	Basic		*				
P	Oil temperature	degC	50	48	52		
<b>CAT</b>	<b>Designation</b>	<b>Unit</b>	<b>Set value</b>	<b>min.</b>	<b>max.</b>	<b>Actual values</b>	<b>OT</b>
P	Pump speed	r/min	700	700	700		
C	Average injection quantity	mm <sup>3</sup> /st.	20.7	18.7	22.7		
C	Difference in delivery	mm <sup>3</sup> /st.	3		3		
P	Basic		*				
P	Oil temperature	degC	50	48	52		

**2.4 Start**

<b>CAT</b>	<b>Designation</b>	<b>Unit</b>	<b>Set value</b>	<b>min.</b>	<b>max.</b>	<b>Actual values</b>	<b>OT</b>
P	Pump speed	r/min	100	100	100		
S	Average injection quantity	mm <sup>3</sup> /st.	0		0		
	About						
P	Oil temperature	degC	48	46	50		
	Remarks						
	Magnet OFF at idling position						

<b>CAT</b>	<b>Designation</b>	<b>Unit</b>	<b>Set value</b>	<b>min.</b>	<b>max.</b>	<b>Actual values</b>	<b>OT</b>
P	Pump speed	r/min	100	100	100		
C	Average injection quantity	mm <sup>3</sup> /st.	81	81	81		
	About						
P	Oil temperature	degC	48	46	50		
	Remarks						
	Full						

**2.5 Stop**

<b>CAT</b>	<b>Designation</b>	<b>Unit</b>	<b>Set value</b>	<b>min.</b>	<b>max.</b>	<b>Actual values</b>	<b>OT</b>
P	Pump speed	r/min	700	700	700		
S	Average injection quantity	mm <sup>3</sup> /st.	0	0	0		
P	Oil temperature	degC	50	48	52		
	Remarks						
	Magnet OFF at idling position						

<b>CAT</b>	<b>Designation</b>	<b>Unit</b>	<b>Set value</b>	<b>min.</b>	<b>max.</b>	<b>Actual values</b>	<b>OT</b>
P	Pump speed	r/min	700	700	700		
C	Average injection quantity	mm <sup>3</sup> /st.	0	0	0		
P	Oil temperature	degC	50	48	52		
	Remarks						
	Magnet OFF at idling position						

**2.6 Overflow**

<b>CAT</b>	<b>Designation</b>	<b>Unit</b>	<b>Set value</b>	<b>min.</b>	<b>max.</b>	<b>Actual values</b>	<b>OT</b>
P	Pump speed	r/min	1050	1050	1050		
S	Overflow quantity	cm <sup>3</sup> /min	420	290	550		
P	Oil temperature	degC	50	48	52		

<b>CAT</b>	<b>Designation</b>	<b>Unit</b>	<b>Set value</b>	<b>min.</b>	<b>max.</b>	<b>Actual values</b>	<b>OT</b>
P	Pump speed	r/min	1050	1050	1050		
C	Overflow quantity	cm <sup>3</sup> /min	420	290	550		
P	Oil temperature	degC	50	48	52		

**2.7 Pump chamber pressure**

<b>CAT</b>	<b>Designation</b>	<b>Unit</b>	<b>Set value</b>	<b>min.</b>	<b>max.</b>	<b>Actual values</b>	<b>OT</b>
P	Pump speed	r/min	1100	1100	1100		
S	Pressure	kPa	520	500	540		
S	Pressure	kgf/cm <sup>2</sup>	5.3	5.1	5.5		
P	Basic		*				
P	Oil temperature	degC	50	48	52		

<b>CAT</b>	<b>Designation</b>	<b>Unit</b>	<b>Set value</b>	<b>min.</b>	<b>max.</b>	<b>Actual values</b>	<b>OT</b>
P	Pump speed	r/min	1100	1100	1100		
C	Pressure	kPa	520	500	540		
C	Pressure	kgf/cm <sup>2</sup>	5.3	5.1	5.5		
P	Basic		*				
P	Oil temperature	degC	50	48	52		

**2.8 Timer**

<b>CAT</b>	<b>Designation</b>	<b>Unit</b>	<b>Set value</b>	<b>min.</b>	<b>max.</b>	<b>Actual values</b>	<b>OT</b>
P	Pump speed	r/min	1100	1100	1100		
S	Timer stroke	mm	1.6	1.4	1.8		
P	Basic		*				

P	Oil temperature	degC	50	48	52		
<b>CAT</b>	<b>Designation</b>	<b>Unit</b>	<b>Set value</b>	<b>min.</b>	<b>max.</b>	<b>Actual values</b>	<b>OT</b>
P	Pump speed	r/min	680	680	680		
C	Timer stroke	mm	0.5	0.2	0.8		
P	Oil temperature	degC	50	48	52		
<b>CAT</b>	<b>Designation</b>	<b>Unit</b>	<b>Set value</b>	<b>min.</b>	<b>max.</b>	<b>Actual values</b>	<b>OT</b>
P	Pump speed	r/min	1100	1100	1100		
C	Timer stroke	mm	1.6	1.4	1.8		
P	Basic		*				
P	Oil temperature	degC	50	48	52		

**2.9 Magnet**

<b>CAT</b>	<b>Designation</b>	<b>Unit</b>	<b>Set value</b>	<b>min.</b>	<b>max.</b>	<b>Actual values</b>	<b>OT</b>
C	Max. applied voltage	V	8	8	8		
P	Test voltage	V	13	12	14		

**3 Assembly dimension**

<b>CAT</b>	<b>Designation</b>	<b>Unit</b>	<b>Set value</b>	<b>min.</b>	<b>max.</b>	<b>Actual values</b>	<b>OT</b>
S	K dimension	mm	2.8	2.7	2.9		
S	KF dimension	mm	5	4.9	5.1		
S	MS dimension	mm	2.1	2	2.2		
S	Pre-stroke	mm	0.45	0.43	0.47		
S	Control lever angle alpha	deg.	7	5	9		
S	Control lever angle beta	deg.	9	4	14		
		About					