

Order No. : 584105



ENGINE TEST RECORD

CUSTOMER **XMH**
 Model Serial No. **S6R2-MPTK2-75965**
 No. of Cyl. 6 Bore 170 mm Stroke 220 mm
 Total St. Vol. 29.96 l
 Injection Timing 18 °B.T.D.C
 Rated Output 1080 PS / 1450 min⁻¹ (Without Gov)
 F.O. Gas-Oil, Bunker A, S.G. 0.815 / 23 °C
 Arm Length 716mm, PS=WN/1000
 Dynamometer Arm Length 955mm, KW=FN/10000

Test Date **31-May, 2012**
 Barometric Press **1006.5** hPa
 Weather **Fine (Cloudy), Rainy**
 Governor (Pro or Gov) No. **18055231**
 Injection Pump No. **PS6-HL-40-32849**
 Turbo Charger No. **TF15M-67QVRC-120424001**

1. Load Test

※ : Surface Temp.

Test Bench No 304

Time	hour:min	11:30 11:35	16:45	11:55	17:05	17:25	17:55	18:15	18:20	
Load	%	0	25	50	75	100	100	110	Idring	
Eng.Speed	min ⁻¹	500	882	1111	1272	1400	1400	1450	500	
Brake Load	kgf									
	N	0	1961	3114	4072	4936	4936	5241	0	
Torque	kgf·m									
	N·m									
Output	kW	0	173	346	518	691	691	760	0	
Fuel Consumption	cm ³	-	300	500	800	1000	1000	1500	-	
	sec.	-	25.1	21.3	22.8	20.6	20.6	27.2	-	
	l/h	-	43.0	84.5	126.3	174.8	174.8	198.5	-	
	g/kW·h	-	203	199	199	206	206	213	-	
Water Temp.	°C	63	66	69	69	71	71	72	65	
Lub.Oil	Temp.	°C	76	79	82	86	87	87	88	
	Press.	MPa	0.48	0.54	0.57	0.60	0.62	0.62	0.62	0.44
Exh. Gas Temp.	TC out °C	131	336	411	420	425	426	438	267	
Intake Air Temp.	°C	24	25	25	25	25	25	25	25	
Charging Air	Temp.	°C	40	34	33	37	45	46	50	41
	Press.	MPa	-	0.020	0.066	0.134	0.206	0.206	0.232	-
Smoke	Bosch	-	0.2	0.2	0.2	0.2	0.2	0.2	-	
A/C Coolant Temp.	In °C	17	17	17	17	17	17	17	17	
Sea Water Temp.	Out °C	20	20	23	29	35	36	38	20	
Scale of Fuel Limit	mm	10.0	12.5	16.0	19.0	23.0	23.0	26.0	10.0	
Room Temp.	Dry. °C	28				29				
	Wet. °C	22				23				
Revise Factor										

2. Governor Test 100% Rated Load 1400 min⁻¹ ⇨ No Load Moment. — min⁻¹ (— %), Steady 1521 min⁻¹ (8.6 %)

3. Rack Set & Gov. Set 691 kW 1400 min⁻¹ No Load Max.Speed 1532 min⁻¹

QUALITY ASSURANCE DEPT.
 GENERAL MACHINERY & SPECIAL VEHICLES
 MITSUBISHI HEAVY INDUSTRIES, LTD.

Approved By *S. Nakada*
 Checked By *S. Mura*
 Tested By T. TOKUDA

機関番号 S6R2-MPTK2- 75965

No.		項目 ITEM	設定値 SETTING	動作値 WORKING		操舵室 WHEELHOUSE		機関室 ENGINE ROOM				機関 停止 ENGINE STOP
				社検 MFR'S	立会 WITNESS	計器盤 GAUGE PANEL		計器盤 GAUGE PANEL		停止盤 ALARM PANEL		
						ブザー BUZZER	表示 INDI-	ブザー BUZZER	表示 INDI-	ベル BELL	表示 INDI-	
1	水温上昇 WATER TEMP.	警報 ALARM	88±2℃	88 °C	- °C	○	○	○	○	-	-	-
2		停止 TRIP	95±2℃	95 °C	- °C	○	○	○	○	○	○	○
3	機関油圧低下 LUB.OIL PRESS.	警報 ALARM	0.25±0.02MPa	0.25 MPa	- MPa	○	○	○	○	-	-	-
4		停止 TRIP	0.15±0.02MPa	0.15 MPa	- MPa	○	○	○	○	○	○	○
5	過速度 OVER SPEED	停止 TRIP	1640~1680min ⁻¹	1650 min ⁻¹	- min ⁻¹	○	-	○	-	○	○	○
6												
7												
8												
9												
10												

○: 社内試験での確認を示す。
Confirmed at MFR'S TEST.
◎: 立会試験での確認を示す。
Confirmed at WITNESS TEST.
※印: 接点短絡による動作確認を示す。
Confirmed working by means of making contact.

		製造年月 MFD. DATE	製造番号 SERIAL No.
操舵室 WHEELHOUSE	計器盤 GAUGE PANEL		
機関室 ENGINE ROOM	計器盤 GAUGE PANEL		
	停止盤 ALARM PANEL	3-2012	J202

	設定値 SETTING	動作値 WORKING
ブーコンスイッチ BOOST CONTROL SW.	0.025MPa	0.025 MPa

Order No. : SB41C5



(1/2)

ENGINE TEST RECORD

CUSTOMER XMH
Model Serial No. S6R2-MPTK2-25963
No. of Cyl. 6 **Bore** 170 mm **Stroke** 220 mm
Total St. Vol. 29.96 l
Injection Timing 18 °B.T.D.C
Rated Output 1030 PS / 1450 min⁻¹ (Without fan)
F.O. Gas Oil, Bunker A, S.G. 0.815-1.23 °C
 Arm Length 716mm, PS=WN/1000
 Arm Length 955mm, kW=FN/10000
Dynamometer

Test Date 31-May-2012
Barometric Press 1026.5 hPa
Weather Fine, Cloudy, Rainy
Governor (Pro or not) No. 18065229
Injection Pump No. PS6-HL-40-22847
Turbo Charger No. TF15M-67QVR-20923002

1. Load Test		※ : Surface Temp.								Test Bench No.
Time	hour:min	13:55 14:00	14:10	14:20	14:30	15:00	15:30	15:40	15:45	
Load	%	0	25	50	75	100	100	110	Idring	
Eng. Speed	min ⁻¹	500	882	1111	1272	1400	1400	1450	500	
Brake Load	kgf									
	N									
Torque	kgf·m									
	N·m	0	1873	2973	3889	4713	4713	5005		
Output	kW	0	173	346	518	691	691	760	0	
Fuel Consumption	cm ³	—	240.7	469.0	706.8	981.5	981.2	1106.4	—	
	sec.	—	20.0	20.0	20.0	20.0	20.0	20.0	—	
	l/h	—	82.2	84.2	122.2	176.7	176.6	199.2	—	
	g/kW·h	—	204.0	188.3	200.1	208.4	208.3	213.6	—	
Water Temp.	°C	70	72	72	72	73	73	74	70	
Lub. Oil	Temp. °C	85	85	86	87	89	89	90	85	
	Press. MPa	0.41	0.52	0.56	0.58	0.60	0.59	0.60	0.40	
Exh. Gas Temp.	T/C out °C	167	264	409	424	426	426	442	156	
Intake Air Temp.	°C	26	26	27	27	28	28	28	27	
Charging Air	Temp. °C	47	37	36	37	46	46	46	47	
	Press. MPa	—	0.27	0.25	0.140	0.210	0.210	0.230	—	
Smoke	Bosch	—	0.2	0.2	0.2	0.2	0.2	0.2	—	
A/C Coolant Temp.	In °C	20	20	20	20	20	20	20	21	
Sea Water Temp.	Out °C	22	23	26	29	34	34	35	23	
Scale of Fuel Limit	mm	10.5	12.5	16.0	19.5	23.5	23.5	26.5	10.5	
Room Temp.	Dry. °C	25	~~~~~~						29	28
	Wet. °C	22	~~~~~~						22	22
Revise Factor										

2. Governor Test 100% Rated Load No Load
 1400 min⁻¹ → Moment. — min⁻¹ (— %), Steady 1494 min⁻¹ (6.7%)

3. Rack Set & Gov. Set 691 kW 1400 min⁻¹ No Load Max. Speed 1504 min⁻¹

QUALITY ASSURANCE DEPT. GENERAL MACHINERY & SPECIAL VEHICLES MITSUBISHI HEAVY INDUSTRIES, LTD.	Approved By	<u>S. Nakada</u>
	Checked By	<u>S. Minna</u>
	Tested By	<u>K. Kikuchi</u>

4994

機関番号 S6R2-MPTK2- 75963

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保護装置試験
PROTECTIVE DEVICE TEST

○: 社内試験での確認を示す。
Confirmed at MFR'S TEST.
◎: 立会試験での確認を示す。
Confirmed at WITNESS TEST.
※印: 接点短絡による動作確認を示す。
Confirmed working by means of making contact.

No.	項目 ITEM	設定値 SETTING	動作値 WORKING		操舵室 WHEELHOUSE		機関室 ENGINE ROOM				機関 停止 ENGINE STOP
			社検 MFR'S	立会 WITNESS	計器盤 GAUGE PANEL		計器盤 GAUGE PANEL		停止盤 ALARM PANEL		
					ブザー BUZZER	表示 INDI- CATION	ブザー BUZZER	表示 INDI- CATION	ベル BELL	表示 INDI- CATION	
1	水温上昇 WATER TEMP.	88±2°C	88 °C	- °C	○	○	○	○	-	-	-
2		95±2°C	95 °C	- °C	○	○	○	○	○	○	○
3	機関油圧低下 LUB.OIL PRESS.	0.25±0.02MPa	0.25 MPa	- MPa	○	○	○	○	-	-	-
4		0.15±0.02MPa	0.15 MPa	- MPa	○	○	○	○	○	○	○
5	過速度 OVER SPEED	1640~1680min ⁻¹	1640 min ⁻¹	- min ⁻¹	○	-	○	-	○	○	○
6											
7											
8											
9											
10											

		製造年月 MFD. DATE	製造番号 SERIAL No.
操舵室 WHEELHOUSE	計器盤 GAUGE PANEL	_____	_____
機関室 ENGINE ROOM	計器盤 GAUGE PANEL	_____	_____
	停止盤 ALARM PANEL	J200	

	設定値 SETTING	動作値 WORKING
ブーコンスイッチ BOOST CONTROL SW.	0.025MPa	0.025 MPa

Attached sheet to the Certificate No. TA10503M

• **Principal particulars of the approved Diesel Engine** (as of 9 September 2010) :

Model	No. of Cylinder	Bore (mm)	Stroke (mm)	Output (kW×min ⁻¹)	P _{max} (MPa)	P _{mi} (MPa)	Date of Approval
S6R2-M(P)TK2(L)	6	170	220	691×1400	14.02	2.2	2006.12.28
S6R2-M(P)TK3(L)	6	170	220	759×1406	14.6	2.31	2006.12.28
S6R2-T2M(P)TK3L	6	170	220	759×1406	14.2	2.31	2010.09.09
S6R2-T2M(P)TK3M	6	170	220	691×1406	13.9	2.22	2010.09.09
S12R-M(P)TA	12	170	180	600×1000	14.22	1.63	2006.12.28
				700×1100		1.73	
				800×1200		1.81	
				900×1300		1.88	
				990×1400		1.92	
				1080×1500		1.96	
				1140×1600		1.94	
				1200×1700		1.92	
1250×1800	1.89						
S12R-M(P)TK	12	170	180	700×1000	14.22	1.91	2006.12.28
				790×1100		1.95	
				880×1200		2	
				970×1300		2.03	
				1050×1400		2.04	
				1140×1500		2.07	
				1210×1600		2.06	
				1270×1700		2.03	
1330×1800	2.01						

• **Notice:**

Any change in design and/or quality control standards of the purifier should be informed to us for an approval without delay.

- The End -



NIPPON KAIJI KYOKAI

CERTIFICATE OF APPROVAL FOR BATCH AND MASS PRODUCED DIESEL ENGINE

Certificate No. TA10503M

This is to certify that the undernoted products have been approved as batch and mass produced machinery by the Society to apply the scheme of the survey and certification in accordance with Chapter4, Part2 of "Rules for Approval of Manufacturers and Service Suppliers".

This certificate is issued to

Manufacturer: MITSUBISHI HEAVY INDUSTRIES, LTD.
General Machinery & Special Vehicle Headquarters

Product: Diesel Engine

Type designations : S6R2-M(P)TK2(L) / S6R2-M(P)TK3(L)
S6R2-T2M(P)TK3L / S6R2-T2M(P)TK3M
S12R-M(P)TA / S12R-M(P)TK

Approval No.: 06B002D

The approval is conditional upon the machinery being produced in accordance with the relevant requirements of the Society's Rules and the manufacturer's standards in force at their works covering production methods, testing and inspection, quality control and workmanship.

Issued at Tokyo on 9th September 2010.

T. Narisawa
General Manager
Machinery Department



MITSUBISHI HEAVY INDUSTRIES, LTD.

GENERAL MACHINERY & SPECIAL VEHICLES

Engine Division, Engine Sales Department

Marine Engine Section

Tana 3000, Chuo-ku, Sagamihara, Kanagawa 252-5293, Japan

Date : AUG 27, 2012

CERTIFICATE OF ORIGIN

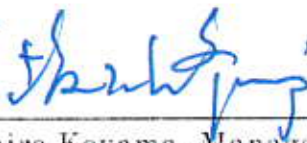
Dear Sir,

This is to certify that the Country of Origin of the below-mentioned Brand New Mitsubishi Marine Diesel Engine are Made In Japan.

Engine Model	Engine S/No
S6R2-MPTK2	75963
S6R2-MPTK2	75965

Yours Truly,

MITSUBISHI HEAVY INDUSTRIES, LTD.

for


Yoshihiro Koyama, Manager

Marine Engine Section