

☒ 納入仕様書 FOR DELIVERY ☐ 見積用 FOR PROPOSAL ☐ 承認用 FOR APPROVAL ☐ 完成図書 AS BUILT or FINAL

御注文主会社名
PURCHASER KSB AKTIENGESELLSCHAFT

殿

最終客先名
OWNER PSI PAUL SCHERER INSTLTUT

殿

機 番
ITEM NO. 1RNM22-AP001

客先工事番号
PURCHASER'S JOB NO.

型 番
MODEL HN22D-B2

日機装類別/見積番号
SELLER'S JOB/QUOTE NO.

EKU74E7063A

KSB JOB NO. 9972877336

	名 称 DESCRIPTION	図 番 DRAWING NO.	改 訂 REV											NOS OF COPY C + 增	写配布先 (部数)							塗 装				
			0	1	2	3	4	5	6	7	F	AF25	AF23		AF23-2	AF31	AF32	AF27								
1	DATA SHEET	KU74E7063A-DS	4/3	/	/	/	/	/	/	/	/	/	/	/	+		1		1							
2	PERFORM. CURVE	KU74E7063A-A22D	/	/	/	/	/	/	/	/	/	/	/	/	+		1									
3	OUTLINE DWG.	KU74E7063A-OD	/	/	/	/	/	/	/	/	/	/	/	/	+		2				1					
4	CROSS SECTION	KU74E7063A-SD	/	/	/	/	/	/	/	/	/	/	/	/	+											
5	CONNECTION BOX CROSS SECTION	KU74E7063A-JB	/	/	/	/	/	/	/	/	/	/	/	/	+											
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18	PDF(NKG)		/	/	/	/	/	/	/	/	/	/	/	/	+											

F#A596 ノンシル

INDICATES DATE OF ISSUE FOR COLUMN '0'
AND DATE OF REVISION FOR OTHER COLUMN

F:FINAL
C:COPY (普通紙)
営:営業 (SALES)

2015: 記書類 (○印を付してあります) を送付申し上げます。

営業担当

承 認
APPROVED BY

起 案
MADE BY

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R. YAGI
APR. 03. 2015
CENTRI.

K. SEKINE
APR. 03. 2015
CENTRI.

送 付 先

XE10 ROBERT BERN
150615

☐ カバーシート毎にホチキス止め、(ホチキス止め位置は、左上一箇所)
その後、まとめてクリップ止め願います
☐ 両面コピー不可



NIKKISO NON-SEAL PUMP DATA SHEET

(CENTRIFUGAL CANNED MOTOR PUMP) HN22D-B2CGT*04D1XX-ASD5G1L1

PURCHASER KSB AKTIENGESELLSCHAFT
 OWNER PSI PAUL SCHERER INSTLTUT
 SITE
 UNIT
 SERVICE CIRCULATION PUMP
 ITEM NO. 1RNM22-AP001
 NO. OF PUMP REQ 1 DRIVER CANNED MOTOR
 PUMP MFR. NIKKISO CO., LTD. MODEL NO. HN22D-B2

DOC NO. KU74E7063A-DS REV. 0
 PURCHASER JOB NO.
 ORDER NO.
 NIKKISO MASTER NO. EKU74E7063
 MADE BY A. NAKADA 2015-03
 APPROVED BY O. WATANABE 2015-03
 KSB JOB NO. 9972877336
 SERIAL NO. EK74E7063A-1

OPERATING CONDITION				PERFORMANCE	
LIQUID HEAVY WATER RADIOACTIVITY 1X10 ⁶ GY				SPEED (min ⁻¹)	2850
PUMPING TEMP. (°C)	40	DISCH. PRESS (barG)	RATED 13	NPSHR (WATER) (m)	1.47
SP. GR. @PT	1.1	SUCT. PRESS (barG)	MAX 15.3	MIN. CONTINUOUS FLOW (m ³ /h)	3
VAP. PRESS @PT (barA)	#		NOR 15.3	ROTATION (VIEWED FROM MOTOR)	CW
VISCOSITY @PT (mPa·s)	0.803	DIFF. PRESS (bar)	4.31	PUMP EFF (%)	42.9
SP. HEAT @PT (kJ/kg·°C)	3.35	DIFF. HEAD (m)	#2 40	RATED BHP (KW)	3.62
MELTING TEMP. (°C)		NPSHA (m)	#1	MAX. BHP (KW)	4.38
CORR/EROS. CAUSED BY		HYD. hp (kW)	1.55	HEAD (M)	44.1
				WITH RATED IMP.	

CONSTRUCTION				AUXILIARY PIPING	
CASING MOUNT	FOOT	CASING SPLIT	RADIAL	C. W. REQ (m ³ /h)	14.4
TYPE	SINGLE VOLUTE			REV. CIRCULATION (m ³ /h)	-
MAX. ALLOWABLE PRESS. (barG)	40	@ (°C)	40	LOSS IN REV. CIRC. LINE (m)	-
HYDROSTATIC TEST PRESS. (barG)	60			EXT. FLUSH FLUID	-
IMPELLER DIA. (mm)	RATED 165	MAX 186	MIN 148	(m ³ /h)	-
MOUNT	OVERHUNG	IMPELLER TYPE	CLOSED	(barG)	-
BEARING TYPE	RADIAL SLEEVE	THRUST	PLAIN		
LUBRICATION	SELF (PUMPING LIQUID)				

MATERIALS					
NOZZLES OR PORTS	SIZE	RATING	FACING	LOCATION	
SUCTION DIN2545	DN 50	PN 40	FORM D	END	
DISCHARGE DIN2545	DN 32	PN 40	FORM D	TOP	
CASING DRAIN	RC 1/2		W/SWAGE LOCK		
BEARING MONITOR MECHANICAL TYPE					
CASING	SCS14A				
IMPELLER	SCS14				
SHAFT	SUS316L				
STATOR LINER (CAN)	HC-N				
ROTOR SLEEVE (CAN)	HC-N				
BEARING	CG11				
SHAFT SLEEVE	SUS316L/HCR				
THRUST WASHER	SUS316L/HCR				
PUMP GASKET	SUS316/GRA				
MOTOR GASKET	PTFE				
STATOR BAND	SS400 (C. ST.)				

MOTOR DRIVER				INSPECTION & TESTS		
kW	6.3	SYNCHRONOUS SPEED (min ⁻¹)	3000	TEST	REQ	WIT
VOLT / PHASE / HERTZ	380 / 3 / 50			PERFORMANCE	YES	NO
FULL LOAD AMPS	15.2	LOCKED ROTOR AMPS	68	HYDROSTATIC	YES	NO
MANUFACTURER	NIKKISO					
TYPE	SQUIRREL CAGE INDUCTION MOTOR					
INS. CLASS	220	ENCL/EX-PROOF	IP55/TE			
CONDUIT TAP	FOR MOTOR LEAD M32x1.5					
	FOR THERMOSTAT & PT100 M20x1.5					
				MASS (kg)		105
				(PUMP & MOTOR)		

REMARKS

THE ABOVE SPECIFIC DATA MARKED AS # HAVE BEEN
 CONSIDERED AS ONES CONFIRMED BY YOU.
 #1 : THE NPSHA HAS BEEN RECOMMENDED BY US.
 PLEASE CONFIRM.
 #2 : WITH DISCHARGE ORIFICE
 PAINTING RAL 6011 (GREEN)

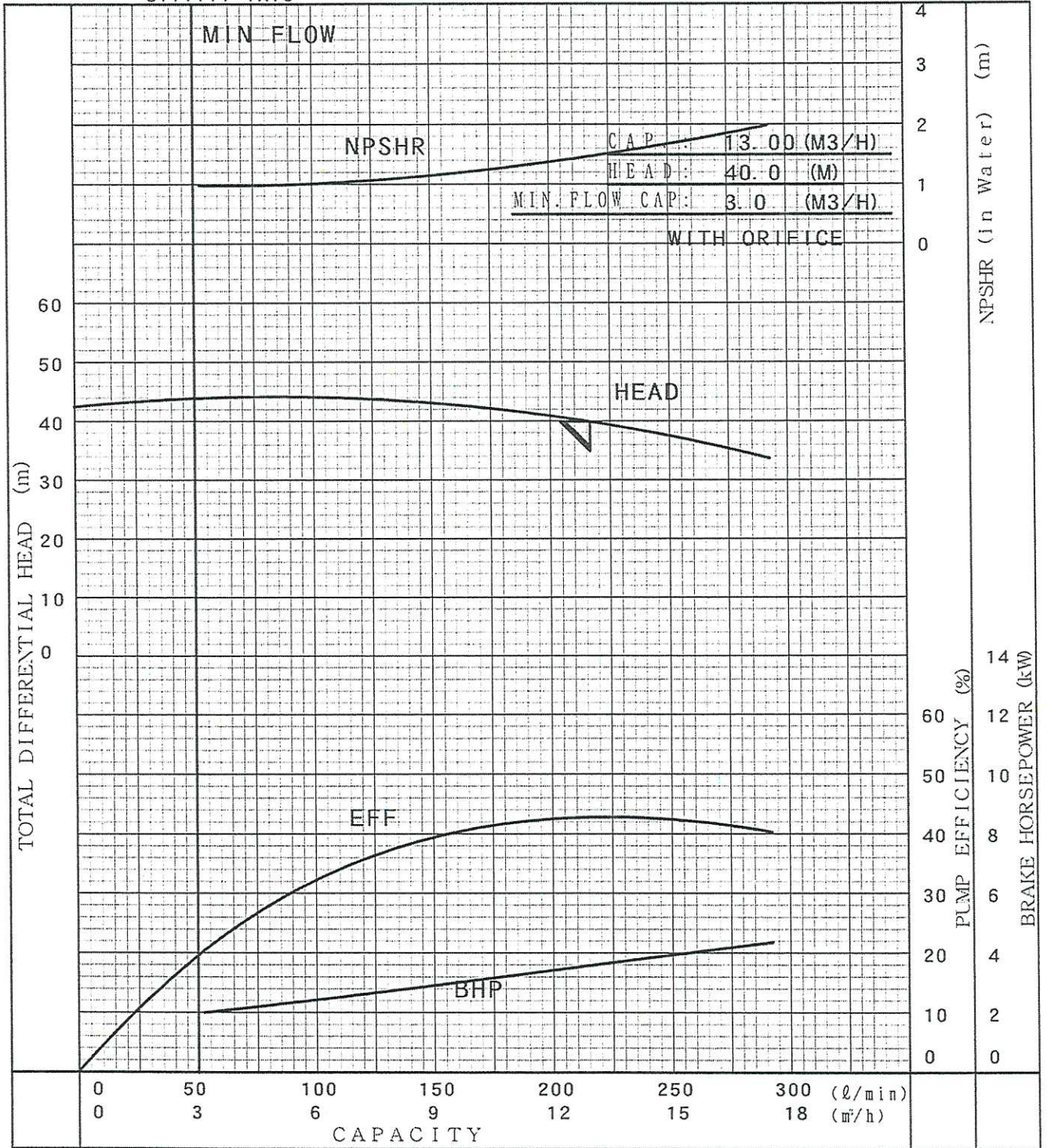
MATERIAL CODE (ASTM EQUIVALENT)

FCD450 DUCTILE IRON (A536 65-45-12)
 SCW480 CAST STEEL (A216 WCB)
 S25C STEEL (A108 1025)
 SCS13A 304 SS CASTING (A351 CFS)
 SCS14A 316 SS CASTING (A351 CFSM)
 SUS304 304 SS (A276 304)
 SUS316 316 SS (A276 316)
 HC HASTELLOY C-276 (B575) EQUIV.
 CG X CARBON GRAPHITE NO. X (---)
 Y6501 NON-ASBESTOS SHEET (---)
 PTFE POLYTETRAFLUORO ETHYLENE (---)
 HCR HARD CHROMIUM PLATING (---)
 GRA GRAPHITE SHEET (---)

ITEM NO. 1RNM22-AP001
NO. REQ'D 1

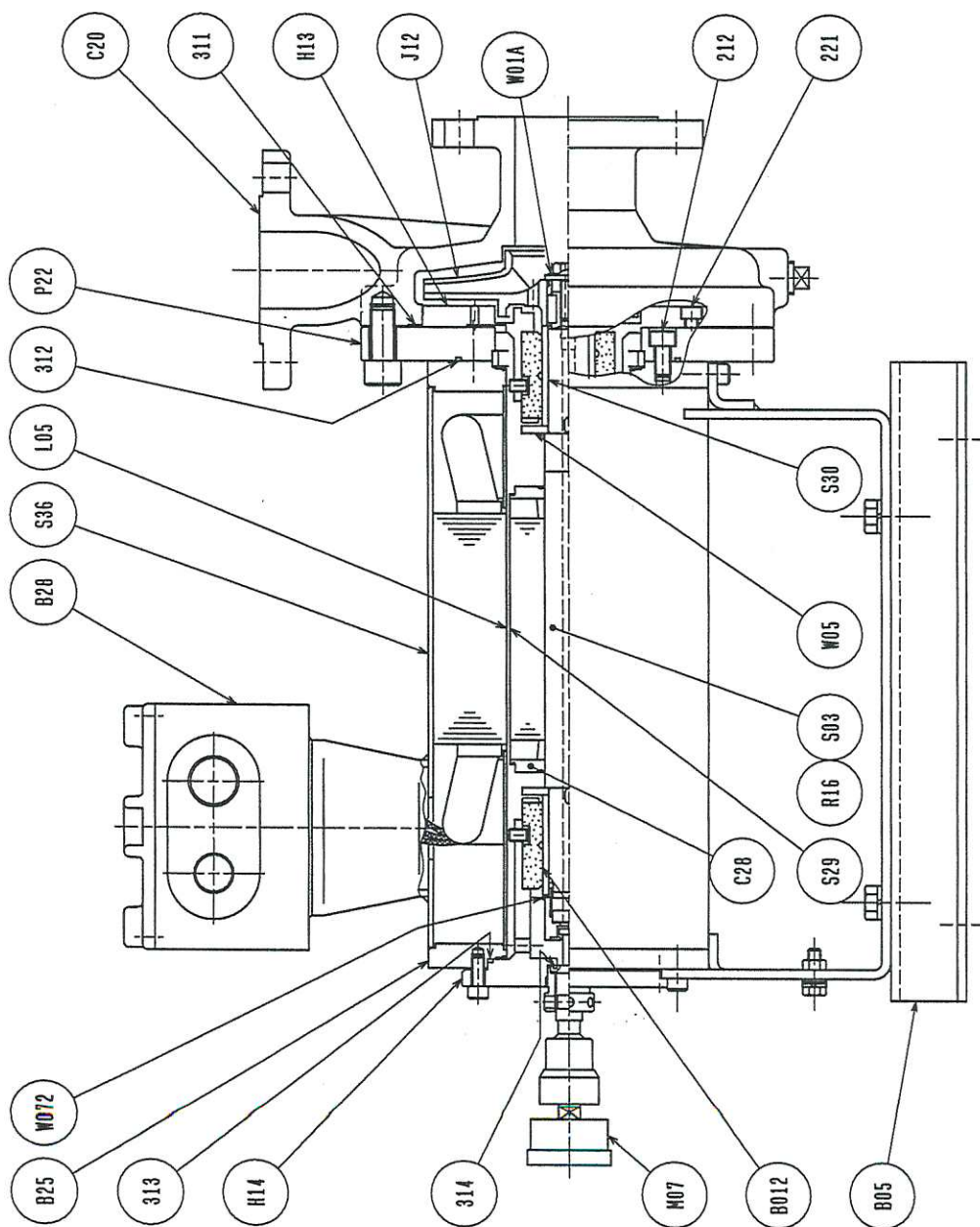
DOCUMENT NO. KU74E7063A-A22D
MODEL HN22D-B2
SERIAL NO. EK74E7063A-1
KSB JOB NO. 9972877336

SPEC. LIQUID HEAVY WATER RADIOA TEMP. 40.0 °C SP. MASS 1.100 kg/l VISC. 0.80 mPa·s ☒ SPECIFIED PT.
ACTIVITY 1X10



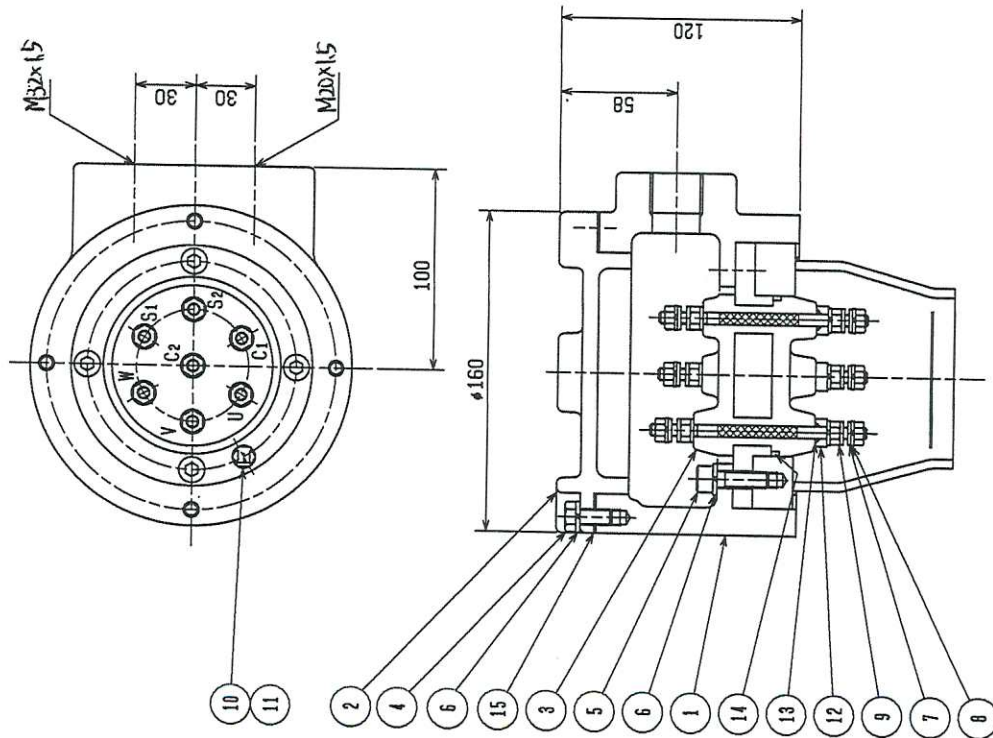
◇ X					APPROVED BY	CHECKED BY	MADE BY
◇ X					AF13	AF13	AF13
◇ X					2015-03-11	2015-03-11	2015-03-11
◇ X					O. WATANABE	A. NAKADA	S. AYABE
REV.	DATE	DESCRIPTION	MADE BY	APPROVED BY			

ITEM	PART NAME	MATERIAL	Q'TY	REMARK
B012	BEARING	C611	2	
B05	BASE ASS'Y	SS400	1	
B25	END BELL	SUS316	2	
B28	TERMINAL BOX ASS'Y	—	1	
C20	CASING	SCS14A	1	
C28	END COVER	SUS316	2	
H13	FB HOUSING	SUS316	1	
H14	RB HOUSING	SUS316	1	
J12	IMPELLER	SCS14	1	
L05	STATOR LINER	HC-N	1	
M07	BEARING MONITOR ASS'Y	SUS316	1	
P22	ADAPTOR PLATE	SUS316	1	
R16	ROTOR ASS'Y	—	1	
S03	SHAFT	SUS316L	1	
S29	ROTOR SLEEVE	HC-N	1	
S30	SHAFT SLEEVE	SUS316L/RCR	2	
S36	STATOR ASS'Y	—	1	
W01A	WASHER ASS'Y	SUS316/316L	1	
W05	THRUST WASHER	SUS316L/RCR	2	
W072	TONGUED WASHER	SUS316L	1	
212	BOL T	SUS316L	8	
221	BOL T	SUS316L	4	
311	GASKET	SUS316/8RA	1	
312	GASKET	PTFE	1	
313	GASKET	PTFE	1	
314	GASKET	PTFE	1	



KSB JOB NO. 9972877336

製造番号 SERIAL NO. EK74E7063A-1		検査 ITEM NO. 1RMH22-AP001	
名 称 TITLE 白銅製 ノンシールポンプ NIKKISO NON-SEAL PUMP 断面図 CROSS SECTION		図番/DWG. NO. KUT4E7063A-SD	
REV. DATE DESCRIPTION		MODEL: HW220-B2	
APPROVED A. YAMADA	CHECKED A. YAMADA	MADE S. YAMADA	3RD ANGLE PROJECTION
SIGNATURE DATE	2015-03-10	2015-03-10	2015-03-10
FORM NO. 10099-1009		NIKKISO NIKKISO CO., LTD. TOKYO, JAPAN	



FOR MOTOR FRAME NO. A1~A3, B1~B3

	TERMINALS TO BE USED	ALLOWABLE TORQUE FOR TIGHTENING
MOTOR LEAD	U, V, W (M6)	2.45 N·m
THERMOSTAT LEAD	SL, S2 (M6)	2.45 N·m
PT100	C1, C2 (M6)	2.45 N·m

KSB JOB NO. 9972877336

製造番号 SERIAL NO.		機 名 ITEM NO.	
EK74E7063A-1		1RMW22-AP001	
◇×		名 称 TITLE	
◇×		日本電機工業株式会社	
◇×		NIKKISO NON-SEAL PUMP	
◇×		ターミナルボックス 断面図	
REV.		CONNECTION BOX CROSS SECTION	
DATE	DATE	DATE	DATE
2015-03-10	2015-03-10	2015-03-10	2015-03-10
SIGNATURE	APPROVED	CHECKED	MADE
O. MATSUDA	AF13	AF13	AF13
			S. AYABE
図番 Dwg. NO.		図番 Dwg. NO.	
KUT4E7063A-TB		KUT4E7063A-TB	
3RD ANGLE PROJECTION		3RD ANGLE PROJECTION	
NIKKISO		NIKKISO CO., LTD.	
TOKYO, JAPAN		TOKYO, JAPAN	
FORM NO.		TAI-11	

ITEM	NAME	MATERIAL	Q'TY	REMARKS
1	BODY	FC250	1	
2	COVER	FC250	1	
3	TERMINAL ASS'Y		1	
4	BOLT	S25C	4	M8
5	BOLT	SCH435	4	M8
6	SPRING WASHER	SWRH	8	FOR M8 NUT
7	WASHER	C2600P	28	FOR M6 NUT
8	SPRING WASHER	SWRH	21	FOR M6 NUT
9	NUT	C3601W	28	M6
10	BOLT	C3604BD	1	M6 GROUND TERMINAL
11	WASHER	C2600P	1	FOR M6 BOLT
12	WASHER	C3604BD	7	
13	GASKET	FLUORO RUBBER	7	
14	GASKET	FLUORO RUBBER	1	
15	GASKET	V6500	1	