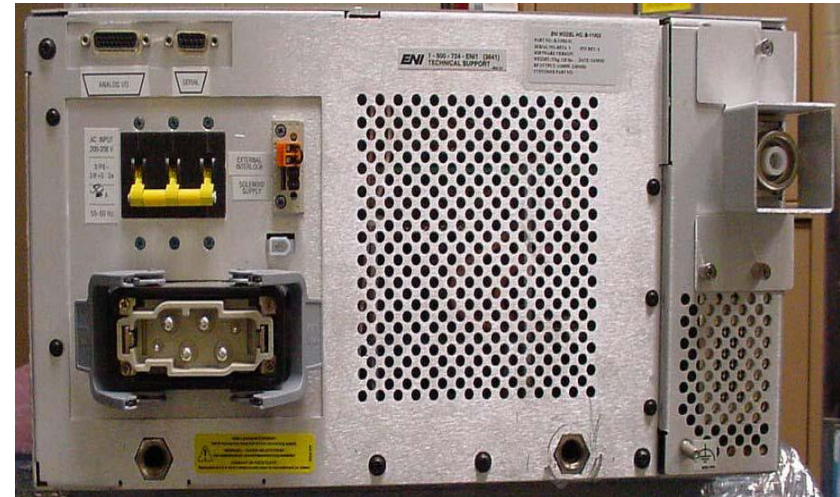
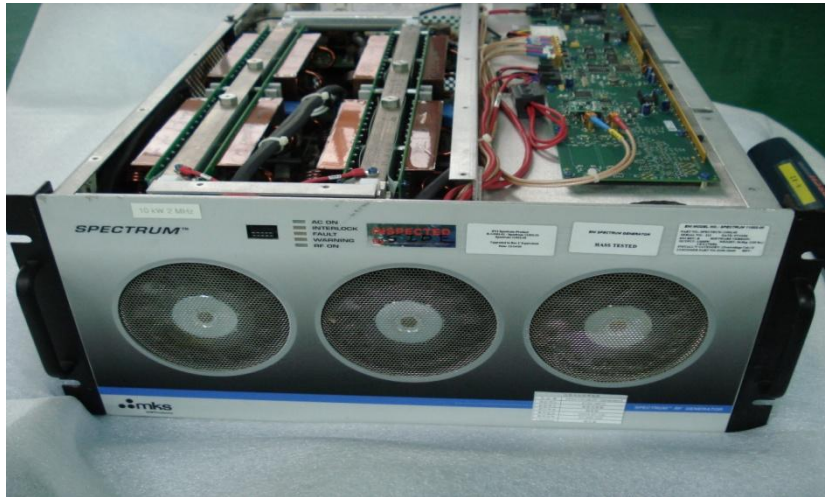


# RF GENERATOR REPAIR EXPERIENCE

MKS Spectrum (B-11002-01)

RF Plasma 1.8~2.17 Mhz RF Generator





Mak	ENI	ENI	ENI	ENI
M O D E L				
	OEM-6 SERISE ENI 전 MODEL REPAIR가능	OEM-12B SERISE	OEM-1250,2000 SERISE	SPECTRUM1 1002,10513 SERISE
Mak	ENI	ENI	ENI	ENI
M O D E L				
	OEM-25 SERISE	PL2-HF SERISE	ACG-3B SERISE	OEM-25XL SERISE

Mak	ENI	ENI	ENI	ENI
M O D E L	 <p data-bbox="170 656 562 758">OEM-28 SERISE</p>	 <p data-bbox="595 656 987 758">OEM-50 SERISE</p>	 <p data-bbox="1020 656 1412 758">GMW25 GHW 50 SERISE</p>	 <p data-bbox="1445 656 1837 758">NOVA-50 SERISE</p>
Mak	AE	AE	AE	AE
M O D E L	 <p data-bbox="170 1233 562 1335">PDX-900 SERISE</p>	 <p data-bbox="595 1233 987 1335">RFG-1250 HALO</p>	 <p data-bbox="1020 1233 1412 1335">RFG-1250 , 2000-2V ,3000 RFDS-1250 SERISE PDX8000 SERISE</p>	 <p data-bbox="1445 1233 1837 1335">RFG-5500 SERISE ATLAS2012 SERISE VHF2060 SERISE</p>

Mak	AE	AE	AE RFPP	AE RPP
M O D E L	 <p data-bbox="166 655 349 679">RFX II 3000 SERISE</p>	 <p data-bbox="596 655 765 679">HFV-8000 SERISE</p>	 <p data-bbox="1027 655 1230 679">LF-5,10,20,30 SERISE</p>	 <p data-bbox="1458 655 1692 679">RF-5,10,20,30,50 SERISE</p>
Mak	AE	AE	AE	AE
M O D E L	 <p data-bbox="166 1233 330 1258">OVATION SERISE</p>	 <p data-bbox="596 1233 693 1258">APEX1513</p>	 <p data-bbox="1027 1233 1124 1258">APEX3013</p>	 <p data-bbox="1458 1233 1555 1258">APEX5513</p>

Mak	COMDEL	COMDEL	COMDEL	COMDEL
M O D E L	 <p>2003.11.24</p> <p>CLF-5000</p>	 <p>CPS-1000, 1001S SERIE</p>	 <p>CLX-600 SERIE</p>	 <p>CDX-2000 SERIE</p>
Mak	DAIHEN	DAIHEN	DAIHEN	DAIHEN
M O D E L	 <p>MGA20SA SERIE</p>	 <p>2003.12.12</p> <p>DRFS-5SA SERIE</p>	 <p>2003.12.12</p> <p>MFG15SA SERIE</p>	 <p>DRF10SB SERIE MFG20SA3 SERIE WGA30 SERIE</p>



Mak	PEARL	ADTEC	ADTEC	AGL MKS MICROWAVE
M O D E L	 <p>RP-3000-27 SERISE</p>	 <p>AX-1000II SERISE</p>	 <p>AX-2000,2000II SERISE</p>	 <p>GL139 SERISE</p>
Mak	MKS MICROWAVE	MKS RPS	MKS RPS	AE RPS
M O D E L	 <p>AX-2115 SERISE ASTEX SXRHC MAGNETRON HEAD</p>	 <p>AX7670 SERISE</p>	 <p>AX7651-2,FI20620 SERISE AX7645 SERISE</p>	 <p>AE RAPID 6KW SERISE</p>

Mak	LCD用 AE RFPP	LCD用 AD-TEC	LCD用 KYOSAN	
M O D E L	 <p>RFPP 20R,30S,50S SERISE</p>	 <p>AX-7500,10000 SERISE</p>	 <p>RFK-20,30,50,100 SERISE</p>	

# MATCHING BOX REPAIR EXPERIENCE


Mak	AMAT	AMAT	AMAT	AMAT	
M O D E L	 <p data-bbox="148 686 554 782">VECTRAMATCHER SERISE 0010-13622</p>	 <p data-bbox="573 686 979 782">P-5000 0010-09416 (POLY)</p>	 <p data-bbox="1000 686 1406 782">P-5000 0010-09750 (CVD)</p>	 <p data-bbox="1427 686 1833 782">P-5000 0010-20524 (PVD)</p>	
	M O D E L	 <p data-bbox="148 1229 554 1325">P-5000 0010-30094 (METAL)</p>	 <p data-bbox="573 1229 979 1325">P-5000 0010-36162 (OXIDE)</p>	 <p data-bbox="1000 1229 1406 1325">P-5000 0010-36408 (DPS)</p>	 <p data-bbox="1427 1229 1833 1325">0010-30686(HE ,MXP) SERISE 0010-13621(HE,PVD)</p>



Mak	<b>TRAZER</b>	<b>TRAZER</b>	<b>TRAZER</b>	<b>TRAZER</b>
M O D E L	 <p data-bbox="142 648 558 762">TRAZER AMU2,5 SERISE</p>	 <p data-bbox="558 648 987 762">TRAZER SRN1-2 SERISE</p>	 <p data-bbox="987 648 1416 762">TRAZER AMU SERISE</p>	 <p data-bbox="1416 648 1846 762">TRAZER AMU10 SERISE</p>
Mak	<b>MATTSON</b>	<b>MATTSON</b>	<b>AE DRESSLER</b>	<b>AE DRESSLER</b>
M O D E L	 <p data-bbox="142 1223 558 1343">RFS-1000 SERISE RFS-2502 SERISE RFS-3019 SERISE</p>	 <p data-bbox="558 1223 987 1343">RFS- SERISE</p>	 <p data-bbox="987 1223 1416 1343">VM 1000A SERISE</p>	 <p data-bbox="1416 1223 1846 1343">VM 1500AW SERISE</p>

Mak	AE	AE	AE	AE
M O D E L	 <p>MERCURY SERISE</p>	 <p>5031-020</p>	 <p>DOME serise</p>	 <p>3155086-001 SERISE</p>
Mak	AE	AE	AE	AE
M O D E L	 <p>RFPF AM-20 SERISE</p>	 <p>AZX63,72,90 SERISE</p>	 <p>Navigator1013,2060,3013,5513 SERISE</p>	 <p>BOTTOM1</p>

Mak	ENI	ENI	ENI	ENI
M O D E L	 <p data-bbox="150 648 554 762">MWD-25 SERISE</p>	 <p data-bbox="581 648 983 762">MWM-25 SERISE</p>	 <p data-bbox="1012 648 1414 762">MW-5 SERISE</p>	 <p data-bbox="1443 648 1845 762">MWH-5 SERISE</p>
Mak	KYOSAN	PSC	SIDE MATCHER	PEARL
M O D E L	 <p data-bbox="150 1229 554 1343">30 TE12 SERISE</p>	 <p data-bbox="581 1229 983 1343">PSC SERISE</p>	 <p data-bbox="1012 1229 1414 1343">SIDE MATCHER</p>	 <p data-bbox="1443 1229 1845 1343">M-30AW2VD SERISE</p>

Mak	<b>ADTEC</b>	<b>LAM</b>	<b>LAM</b>	<b>LAM</b>	
M O D E L					
	AMV2000S SERISE	TOP MATCH	MINI MATCH	DSQ MATCH	
	Mak	<b>DAIHEN</b>	<b>DAIHEN</b>	<b>ASTECH</b>	<b>LCD用 DAIHEN / KYOSAN</b>
	M O D E L				
MGM-20SA SERISE RMN SERISE		RMA-40A SERISE	ATL-100	DAIHEN RMN-30D2,50B,75A SERISE KYOSAN MBK-30,100 SERISE	

# RPS REPAIR EXPERIENCE



**AX7670  
3L**



**FI80131  
6L**

**AX7651-2  
FI20620-1  
2L**

**RPS**

**AX7645**



Model	Flow	MKS P/N
ASTRON	2L	FI20620-1 AX7657
ASTRON i	3L	AX7670
ASTRON e	4L	FI80130
ASTRON ex	6L	FI80131 FI80133 AX7680
ASTRON ex	8L	FI80132
ASTRON hf	15L	FI80146
ASTRON hf+	22L	AX7635-02

# REPAIRMENT SERVICE

- **Consumable Parts Replacement**  
*Plasma Block, FFKM O-ring, Ceramic Center Ring,*
- *Thermal Conducting, Power MOSFET*
- **PCB Repair.**
- **Function Test:**  
*Ignition Test, Burn-In Test, Power Range Test*  
*particle test, block leak test*
- **Warranty: 3month**



**AX7651-2 = FI20620-1**



**AE RAPID 6KW SERISE**

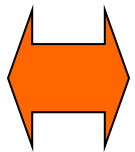
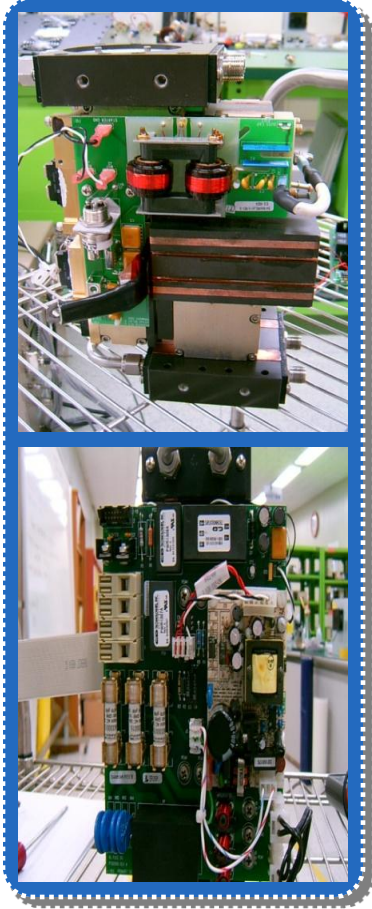
**FAIL BOARD REPLACE and REPAIR**

**PLASMA GAS BLOCK CHANGE**

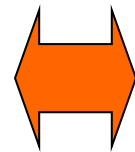
# Technology

# RPS REPAIR SYSTEM

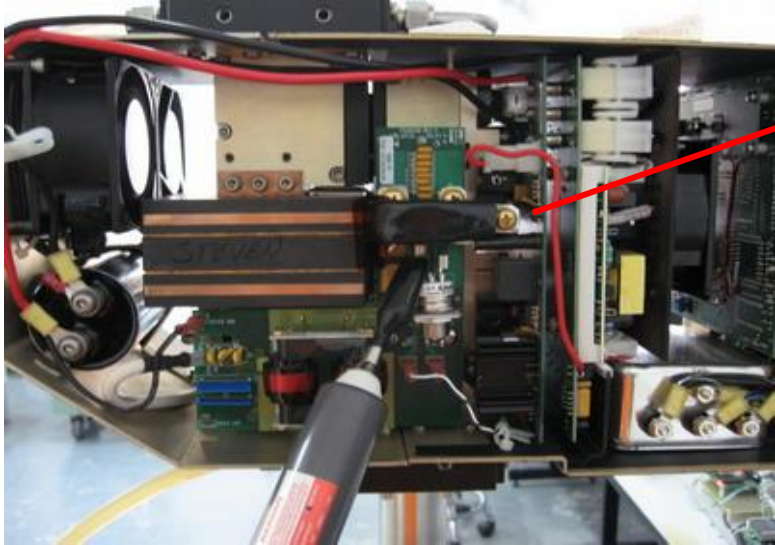
# Getting Components



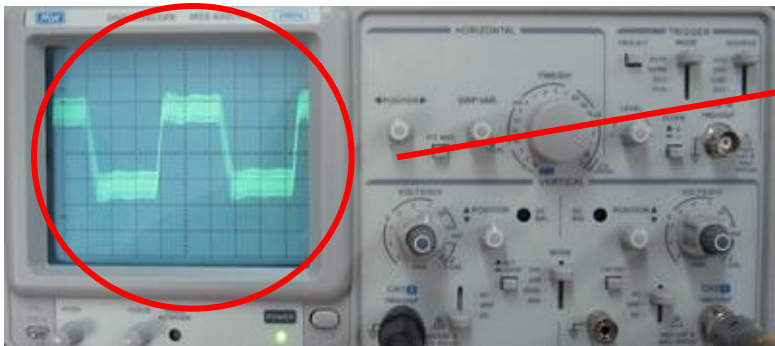
**REPAIR TEST SYSTEM**



# Ignition Waveform Test



1. Test the ignition waveform



2. Ignition waveform  
Vp-p:300V  
Frequency:400K



# PART SOURCING

## Semiconductor 200mm



- Description Al Cathode 50
- Material AL + Anodizing
- Application Gas Diffuser



- Description Al Ground Ring 7
- Material AL + Anodizing
- Application Shield



- Description Pedestal
- Material AL
- Application Wafer Stage



- Description Baffle Plate
- Material AL + Anodizing
- Application Gas Diffuser



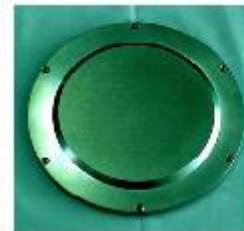
- Description BLOCKPLATE(T EOS)
- Material AL + Anodizing
- Application Gas Diffuser



- Description Chamber Liner 120
- Material AL + Anodizing
- Application Chamber Shield



- Description Chamber Wall Liner
- Material AL + Anodizing
- Application Chamber Liner



- Description Shower Head E C LID
- Material SUS + AL
- Application Gas Diffuser



- Description Collimator
- Material AL
- Application Ion Diffuser



- Description Lower SGD (30 0mm)
- Material AL + Anodizing
- Application Gas Diffuser



- Description PENDLUM V/V PLATE
- Material AL + Anodizing

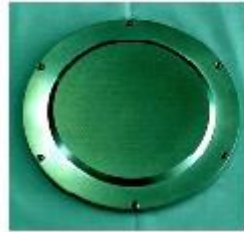


- Description GATE BONNET E
- Material P/N AL

# Semiconductor 200mm



- Description PENDLUM V/V PLATE
- Material AL + Anodizing



- Description Shower Head E C LID
- Material SUS + AL
- Application Gas Diffuer



- Description Slit Valve Liner
- Material AL + Anodizing
- Application Chamber Shield



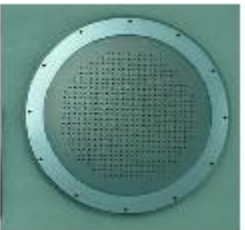
- Description SSGD Top Lid
- Material AL
- Application Gas Diffuer



- Description Shield (SST,AL 14)
- Material SUS
- Application Shield



- Description WAFER 8" POK E
- Material AL + Anodizing



- Description Upper Cooling Plate
- Material AL + Anodizing
- Application Gas Diffuer



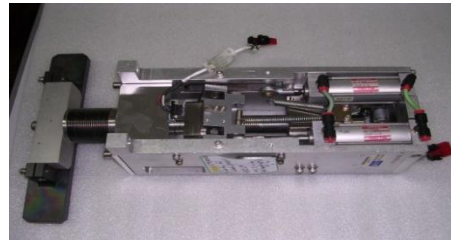
- Description Upper Electrode
- Material AL + Anodizing
- Application Gas Diffuser



- Description : Upper Chamber DPS
- Material : AL + Anodizing

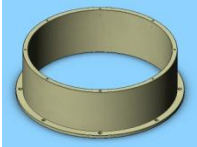


- Description : Chamber Liner (MXP, SUPER-E)
- Material : AL + Anodizing



- Description : Gate Door Ass'y
- Material : AL + Anodizing

# Semiconductor 300mm AMAT Parts



DPS II Metal  
Cathode Liner  
0021-13612



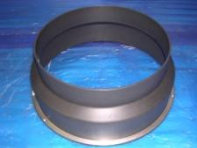
EMAX CT+  
Insulator External  
0021-26626



EMAX CT+  
SGD Inner Cooling  
0040-79926



Producer  
Chamber Liner (Right)  
0040-99549 Rev003.



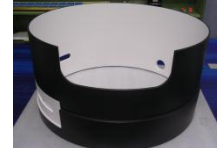
DPS OPUS  
Cathode Liner  
0040-08152



EMAX CT+  
SGD Outer Cooling  
0040-79927



DPS II Metal  
Slit V/v Liner  
0040-41703Rev004.



Producer  
Chamber Liner (Left)  
0040-99548 Rev005.



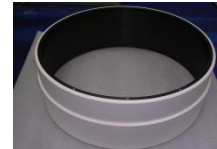
EMAX CT+ Producer  
Mesh  
0040-85138 Rev002.



DPS II Metal  
Upper Chamber  
0040-88340



DPS II Poly  
Upper Chamber  
0040-43978



Producer  
Cathode Liner Sleeve  
0021-27015 Rev003.



DPS II Metal  
Lower Chamber Liner  
0040-81155



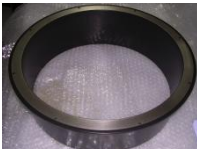
DPS II Poly  
Slit V/v Liner  
0020-63668



DPS II Poly  
Lower Chamber Liner  
0040-43977



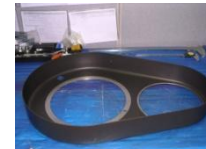
AMAT ACP  
ACP Door Valve  
0021-31804 Rev001.



DPS II Poly  
Cathode Liner  
0021-13430



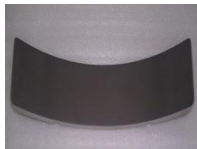
DPS II Poly  
Slit V/v Liner  
0040-81165



DPS OPUS  
Lower Liner  
0021-42764



DPS II Poly  
Screen  
0021-13434

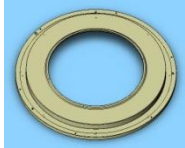


EMAX CT+  
Slit Door Liner  
0020-52965



Producer  
Slit Door Liner  
0021-27883Rev003.

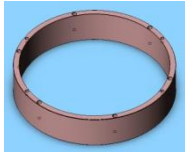
# Semiconductor 300mm Parts



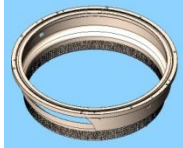
SCCM SP  
Plate Shield  
3D10-101187-13



SCCM SP  
Plate Exhaust  
3D10-100845-11



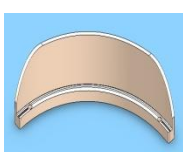
SCCM SP  
Ring BTM Shield  
3D10-100844-11



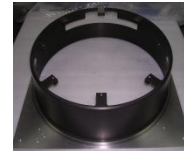
SCCM SP  
Shield Depo  
3D10-101194-12



SCCM SP  
Depo Window  
3D10-302734-12



SCCM SP  
Shutter BTM Type  
3D10-101152-13



2300 EXELAN FLEX  
Chamber Liner  
715-030860-001



2300 EXELAN VERSYS  
Chamber Liner  
715-801021-012



2300  
Chamber Liner  
715-801021-801



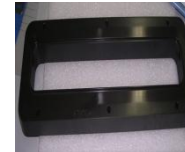
2300  
Chamber Liner  
715-801021-838



2300  
Hot Edge Ring  
715-443178-300



2300  
Chamber Liner  
715-801021-839



2300 EXELAN FLEX 45  
Plate Rocker Barrier  
715-802381-104



2300 EXELAN FLEX 45  
Plate Rocker Barrier  
715-802381-002



2300  
AL G.D.P.  
715-801916-008



LAM  
EXT, AL Slotted  
715-045264-242



NOVELLUS  
Shower Head  
15-176142-00



NOVELLUS  
Shower Head  
15-167054-00