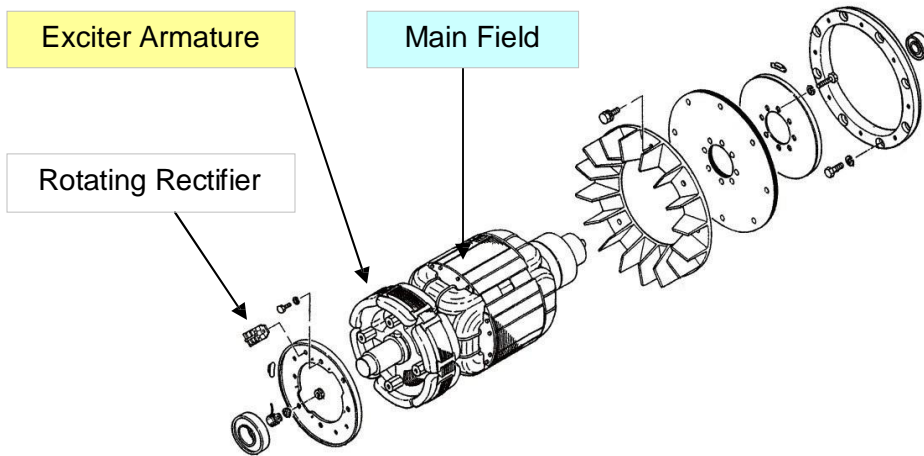


## Gen-Set Ohms $\Omega$ Chart

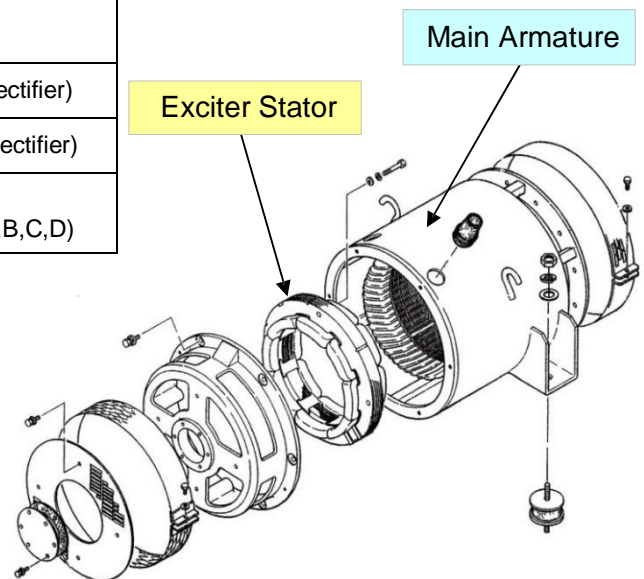
This documentation can be used by the service technician as a reference guide when diagnosing Gen-Sets on DCA & TLG model generators.

Only qualified technicians should service Multiquip products. Multiquip is not responsible for any damage to equipment or components caused by unqualified personnel.



For best results use only high quality and properly calibrated test equipment

<u>Name of Part</u>	<u>Wires</u>	<u>Location of Wires</u>
Exciter Stator	J & K	(connected to AVR)
Exciter Armature	U V W	(connected to rotating rectifier)
Main Field	DC+ DC -	(connected to rotating rectifier)
Main Armature	12 Load Leads 4 Open Delta Leads	(AC Outputs) (connected to AVR – A,B,C,D)





This bulletin is provided for technical reference and service related updates. If you have any questions, comments or do not wish to receive these e-mails, please reply to this e-mail or call the Service Technical Support Group 800 478-1244.

## Ohms Resistance Chart

Generator Model #	Gen-Set Model #	RESISTANCE MEASURED IN OHMS Ω						
							Main Armature	
							AVR Inputs	
		Main		Exciter			A-B	B-C
Armature	Field	Armature	Stator	Stator 2	C-D			
AC Outputs	DC+ DC-	U V W	J + K -		D-A			
DCA-10SS		0.1204	97.3	-	-	6	-	-
DCA10SPX2 / SPX3 / 4	DFS-0140XK	0.160	2.84	0.3	17.5	-	1.12	3.35
TLG8SSK4F	-	0.297	6.54	0.90	10.6	-	0.359	1.03
TLG12SPX / SPX3 / 4	-	0.069	7.75	1.24	10.7	-	0.40	1.20
DCA15SPX	-	0.069	11.6	0.85	17	-	0.76	2.6
DCA15SPX2 / SPX3 / 4	DFS-0220XK	0.062	3.66	0.3	17.6	-	0.90	2.60
DCA20SPX	DF-0277I	0.052	4.0	0.3	18.05	-	0.89	2.54
DCA36SPX	DB-0667I2	0.017	1.8	0.21	15.2	-	0.78	2.2
DCA56SPX	DB-1007I	0.008	1.33	0.08	17	-	0.41	1.12
DCA44SPX3	DB-0667I	0.016	1.8	0.21	15	-	0.66	1.97
DCA25SSAI	-	0.14	2	0.47	51	51	0.9	2.7
DCA25SSI	DB-0281	0.155	1.09	0.16	14	-	0.83	2.5
DCA25SSI2	DF-0270	0.124	4	0.3	17.6	-	0.9	2.7
DCA25SSIU / SSIU2	DF-0270	0.124	4	0.3	17.6	-	0.9	2.7
DCA25USI / USI2	DF-0270	0.124	4	0.3	17.6	-	0.9	2.7
DCA40SSAI	-	0.1074	0.143	0.143	13	13	0.5	1.5
DCA40SSI	DB-0501	0.082	1.46	0.21	15	-	0.74	2.22
DCA45SSIU	DB-0501	0.082	1.46	0.21	15	-	0.74	2.22
DCA45SSIU2 / SSJU3	DB-0501	0.082	1.46	0.21	15	-	0.74	2.22
DCA-45SSIU4	DH-0480	0.099	1.33	0.137	18.8		0.78	2.15
DCA45USI	DB-0501	0.082	1.46	0.21	15	-	0.74	2.22
DCA45USI2	DH-0480	0.099	1.33	0.137	18.8		0.78	2.15
DCA60SSAI	-	0.042	0.93	0.143	12	12	0.41	1.25
DCA60SSI / SSI2	DB-0661	0.048	1.8	0.21	15	-	0.61	1.83
DCA70SSJU / SSJU2	DB-0831	0.032	1.2	0.08	17.3	-	0.37	1.11
DCA-70SSI / SSIU	DB-0831	0.032	1.2	0.08	17.3	-	0.37	1.11
DCA-70SSIU2	DH-0750	0.046	1.79	0.137	18.8	-	0.67	1.85
DCA70USJ / USI	DB-0831	0.032	1.2	0.08	17.3	-	0.37	1.11
DCA70USI2	DH-0750	0.046	1.79	0.137	18.8	-	0.67	1.85
DCA85SSJU / SSJU2	DB-1001	0.021	1.33	0.08	17.3	-	0.32	0.96
DCA85USJ / USJ2	DB-1001	0.021	1.33	0.08	17.3	-	0.32	0.96
DCA85SSK / SSM	DB-1001	0.021	1.33	0.08	17.3	-	0.32	0.96
DCA100SSJU	DB-1101	0.022	1.4	0.08	17.3	-	0.32	0.97



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## Ohms Resistance Chart Continued

Generator Model #	Gen-Set Model #	RESISTANCE MEASURED IN OHMS Ω						
							Main Armature	
							AVR Inputs	
		Main		Exciter			A-B	B-C
		Armature	Field	Armature	Stator	Stator 2	C-D	
AC Outputs	DC+ DC-	U V W	J + K -		D-A			
DCA125SSK	DB-1381	0.015	1.52	0.08	17.3	-	0.28	0.84
DCA125SSM / SSM2	DB-1381	0.015	1.52	0.08	17.3	-	0.28	0.84
DCA125SSJU	DB-1381	0.015	1.52	0.08	17.3	-	0.28	0.84
DCA125USJ / USI	DB-1381	0.015	1.52	0.08	17.3	-	0.28	0.84
DCA150SSK / SSK2	DB-1651	0.011	1.75	0.08	17.3	-	0.27	0.82
DCA150SSM	DB-1651	0.011	1.75	0.08	17.3	-	0.27	0.82
DCA150SSJU / SSV	DB-1651	0.011	1.75	0.08	17.3	-	0.27	0.82
DCA-150SSJU2	DB-1651	0.011	1.75	0.08	17.3	-	0.27	0.82
DCA150USJ / USJ2	DB-1651	0.011	1.75	0.08	17.3	-	0.27	0.82
DCA180SSK / SSK2	DF-1950	0.011	1.54	0.11	17.2	-	0.32	0.96
DCA180SSV / SSJU	DF-1950	0.011	1.54	0.11	17.2	-	0.32	0.96
DCA220SSK / SSJU	DF-2400	0.007	1.8	0.11	17.2	-	0.3	0.9
DCA275SPX	DB-3031	0.0048	2.1	0.48	23.5	-	0.33	1
DCA300SSK	DF-3300	0.005	2.49	0.12	19.3	-	0.27	0.81
DCA300SSK2 / SSK4	DF-3300	0.005	2.49	0.12	19.3	-	0.27	0.81
DCA400SSK / SSK2	DF-4400	0.003	2.83	0.12	19.3	-	0.3	0.9
DCA400SSV / SSI	DF-4400	0.003	2.83	0.12	19.3	-	0.3	0.9
DCA500SSK	DF-5500	0.003	1.88	0.09	26.6	-	0.22	0.66
DCA600SSK / SSV	DF-6600	0.002	2.02	0.09	26.6	-	0.24	0.72
DCA800SSK / SSK2	DF-8800	0.001	2.28	0.09	26.6	-	0.21	0.63

For accurate inspection, disconnect and isolate all leads to be tested.

When checking resistance on AC output leads are as follows: **U1 to X1**

**U2 to X2**

**V1 to Y1**

**W1 to Z1**

**W2 to Z2**

See diagram on next page

## Reference Diagram

The below diagram is for general reference only (not model specific). Always refer to operation and parts manual for specific diagrams.

