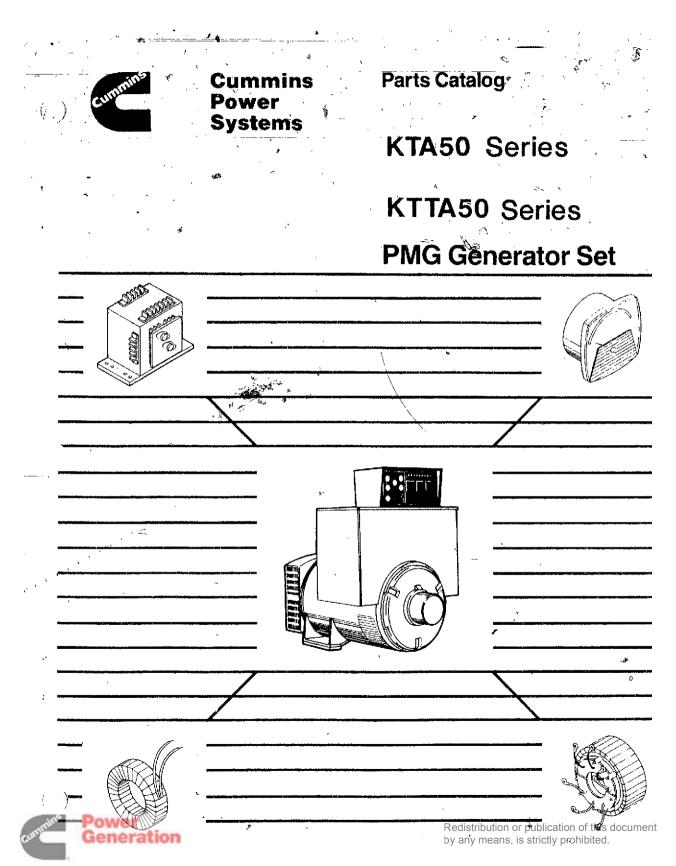
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Index

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		GRID	69	GRID
	Adapter, Generator Alarm Module Alternator Ammater - AC Ammater - DC	05,08	Harness, Engine Harness, Engine Control Harness, Générator Control Heater, Generator Heater, Water Horn, Electrical	AB C10, C12 C14, C16 B13, B15 A10, A12 C19
	Belt, Drive ., Board, AutoStart Board, LED Lights	A6 <sup>3</sup> C17, C18 C6	Indicator, Air Service	
-	Cap, Radiator Cleaner, Air - Extra Heavy Duty Cleaner, Air - Heavy Duty Cleaner, Air - Indoor Cleaner, Air - Outdoor Contactor, Heater	A6 A8 A8 A8 A8 A8 A8 A12	Regulator Voltage	B17, B19 B17, B19 B17, B19
•	Control, Engine : Control, Generator Set Control, Generator <b>Set</b> Control, Overspeed Controller, Governor	C10, C12 C4 C6, C8 C17, C18 C17, C18	Sender, Pressure - Oil Sender, Temperature Starter Stator, Exciter Stator, Generator	A8 A8 A6 B13, B15 B13, B15
-	Disk. Drive Element, Air Cleaner	B†7, B19 A8		<ul> <li>A10</li> <li>A13</li> <li>A15</li> <li>A15</li> <li>A15</li> <li>A10</li> <li>A10</li></ul>
	Element, Oil Filter Exciter, Permament Magnet Filter, Fuel	A6 B20 <sup>™</sup> A8	Switch, Temperature Jachometer Transducer, Temperature - Water	C10, C12 A6
	Filter, Oil Filter, Water Gauge, Pressure - Oil Gauge, Temperature	AB A6 C10, C12 C10, C12	Transducer, Watt Transducer, Pressure - 011 . Transformer, Current	C18 A6 C4
	Generators Generator Size Table Guard Belt	B11∿ B8, B9 A6	Voltmeter C6,C8 Wattmeter	, С10, С12 С6, С8

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arranged in groups of related items, and each part or assembly is identified by a Reference Number. All parts illustrated are typical, and unless otherwise mentioned in the description column the parts are interchangeable between models. Dual Part No. may be applicable: CPS are Cummins Power Systems assigned Part Numbers and GEC are th Cummins Engine Company asigned Part Numbers.

These typical illustrations are subject to change and reflect only the latest replace ment parts arrangement. The Right and Left sides of the Generator Set are determined by FACING the FRONT of the Set (Engine Radiator End)

#### Set Data Table

ENGINE 10. No.	GEN SET ID NO	RPM RATING	BATTERY VOLTAGE
Note 1. KTA50-G <u>*#</u>	Note 2 <u>xxx</u> KTA∰ - §	1800 RPM/ 1500 RPM	24 VDC
KTTA50-G <u>*#</u>	×××KTTA® - §	`1800 RPM/ 1500 RPM	24 VDC

Note 1 \* - Letter S for Standby, Letter C for Continious Duty applications Note:1 # - Number 1 thru 9 used to denote size varations Note:2 x - Numbers used to denote kW ratings, eg. 230 means 2,30,000 watt set Note 2 @ - Number used to denote size varations. \* NOTE.2 § - Numbers and a letter used to provide configuration identification

\*

#### Electrical Data Table

	TAGE		Lurar.		NATES
LOW Y	HIGH Y	HERTZ	WIRE	PHASE -	NOTES
190/110	380/219	60	12	3	
208/120	416/220	60	12	3	
220/127	440/254	60	, 12	3	6
230/133	460/266	60	12	3	
240/139	480/277	60	12	3	
190/110	380/219	50	12	3	
200/115	400/231	50	12		
208/120		50	12		*
208/120-	410/240	1 30	14		

#### Engine Replacement Parts

The External Engine Components added or modified during the Generator Set Assembly and most General Maintance Items are identified in this Parts Catalog. For Internal Engin Parts and Components not covered herein; refer to the applicable Cumming Engine G Driv Parts Catalog.



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**General Information** 

For parts or service, contact the distributor from whom you purchased this equipment or refer to the nearest Authorized Cummins Distributor.

To avoid errors or delays in filling your parts order, always give the full MODEL, SERIAL and ID No. from the nameplate.

Model\_\_\_\_

AC Generator Set



kw	kva	pf	phase
voltac	e	amps	· · · ·
duty		overload	
rpm		hz	<b>b</b>
class	of insulation	pmg voltage	
field	amp max	field voltag	le max
genera	tor model no.	· · · · · · · · · · · · · · · · · · ·	
voltac	e regulator model no	).	
ID no.			
genera	tor set serial no.	······································	· ····································
BS5000		NEMA	

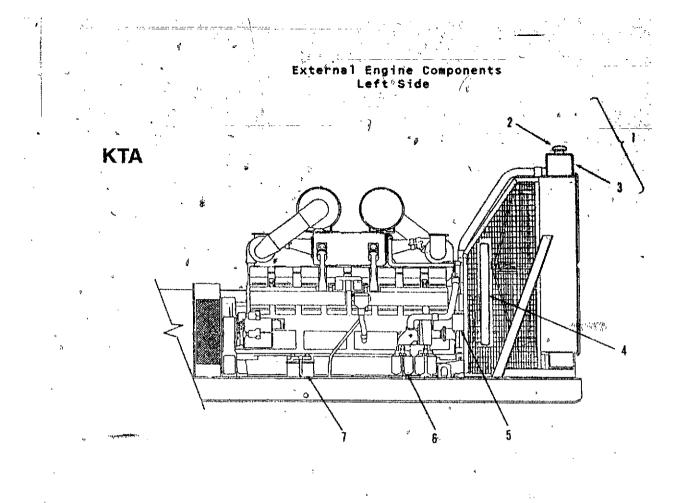
For handy reference, insert "YOUR" nameplate information in the spaces above.

AWARNING

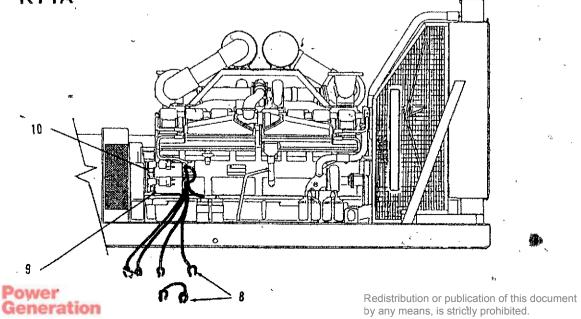
TAKE ALL NECESSARY PRECAUTIONS WHEN CHECKING OR CHANGING ENGINE DIL NOT TO INGEST, BREATHE THE FUMES OR CONTACT THE OIL. USED ENGINE OILS "HAVE BEEN IDENTIFIED BY FEDERAL AND SOME STATE AGENORES AS CAUSING CANCER.



TAKE ALL NECESSARY PRECAUTIONS WHEN HANDLING ENGINE GASKETS. DO NOT INGEST, BREATHE, OR CONTACT DUST FROM GASKETS. USE ADEQUATE VENTILATION AND WEAR PROTECTIVE GLOVES, MASK AND CLOTHING. ASBESTOS HAS BEEN TOENTLIFIED BY FEDERAL AND SOME STATE AGENCIES AS CAUSING CANCER, or publication of this document by any means, is strictly prohibited.







# External Engline Components Left Side

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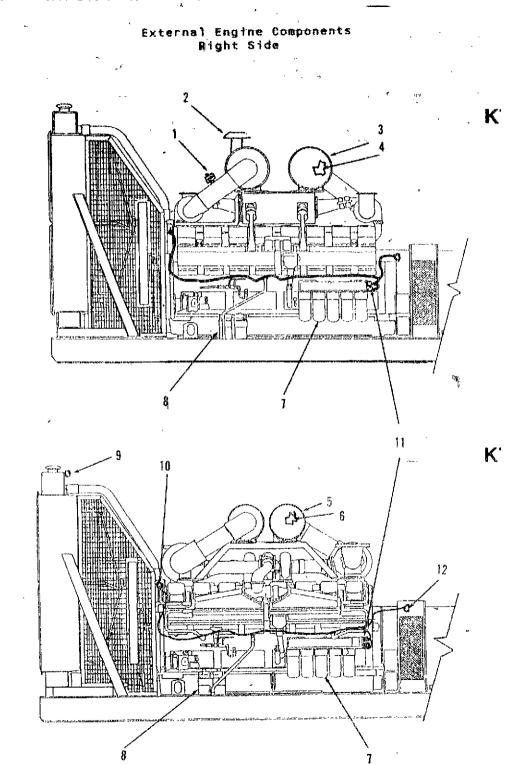
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REF	CPS	CEC	OTY	PART
. <b>NO</b>	PART NO	PARI NV.	USED	DESCRIPTION
1			- 1	Cooling System - Radiator
	Note 1 Note 2	· · ·		Spec A & B & D' Spec C
	HUL4 .4		۰.	KTA50G1, G2 (Beerward# 53071A-4PA)
•	None Built	0	-	KTA50G3, G4
<u>،</u> د		•	Ś	KTTA50G1 (Bearward# 53071-5PA)
2	130-0523		1	Cap, Radiator / //////////////////////////////////
	130-2981			7 PSI (For 3" Fill Tube)
	130-3395			10 PSI (For 2" Fill Tube)
3			1	Radiator (Includes Front Guards, Excludes Cap)
			,	Spec A & B & D Standard Cooling 40°C/100°F
		3050213		KTA50G1 with Dry Manifold
	1	3050212	•	KTA50G1 with Wet Man Fold
	·-	3050212		KTA50G2 with Dry or Wet Manifold
		3050212		KTA50G3 & G4 Dry Manifold (No Wet Manifold Application)
		3050212		KTTA50G with Dry Manifold (No wet Manifold Application) Hi Ambient Cooling 50°C/125°F
		3050212		KTA50G1 with Dry or Wet Manifold
		3050212		KTA50G2 with Dry or Wet Manifold
°		3050212		KIA50G3 & G4 Dry Manifold (No Wet Manifold Application)
		3050212		KTTA50G with Dry Manifold (No Wet Magifold Application)
				Spec C Standard or Hi Ambient Cooling
	130-3405			KTA50G1 with Dry Manafold
	130~3405			KTA50G2 with Dry Manifold
	N/A			KTA50G3 & G4 with Dry Manifold
	130~3406		,	KTTA50G with Dry Manifold
4			1	Belt, Drive (Fan) Spec A & B & D
	-	3003461		All Models
		2002341		Spec C
5		3003341		All Models Charging System Components
5	191-1846-01	3016627	1	Alternator (35 Amp, 24 VDC)
	130~3317-01		1	Pulley, Drive
	511-0163	3040283	2	Belt, Drive Céles Marga Mérangan Iskékasing Champal DCA1
6	Notée 3 130-3538	3318201	4	Filter, Water - W/Corosion Inhibiting Chemical DCA4 Service for 90&up Gal Cooling Systems
	130-3541	3318318		Pre-Charging for 90 & up Gal Cooling Systems
7	122-0526	3313283	2	filter, Oil - Bypass
8	5			Cables & Leads
	416-0473		2	Cable, Battery - Jumper'
	416-0444 416-0680		4 3	Cable, Battery (44" Lg) Lead, Electrical
9	410 0000	3010125	2	Starter, 24 VDC
10	307-2621-02		1	Switch, Magnetic
		,		
NOTES		8 & D Coo	lina Sve	tems Assembled at Cummins Engine Company. For
				er to the applicable Engine G-Drive Parts Manuals
1	0 0 0 0			
				talled at Cummins Power System Facitities and is wit with Bearward for additional replacement components.
		D ÉNGINEER		USA OFFICE: BEARWARD RADIATOR
		ad, Far Co		Route 22 Box 187
	Northam	pton, Engla	and NN4	9HU Fleetwood, PA 19522 215-944-6017
	•	ġ.		
	3 Replacem	ent cartri	dges rec	commend and should be used in lieu of the Original
				tem which contains a Pre-Charge amount of DCA or
				; with Pre-charge Cartridge may overload the Cooling
	SARIGU 9	ng cause c	ooring s	ystem problems.
nints	Power			Redistribution or publicat
	Genera	ation		by any means, is strictly
The second value of the se				by any mound, to building



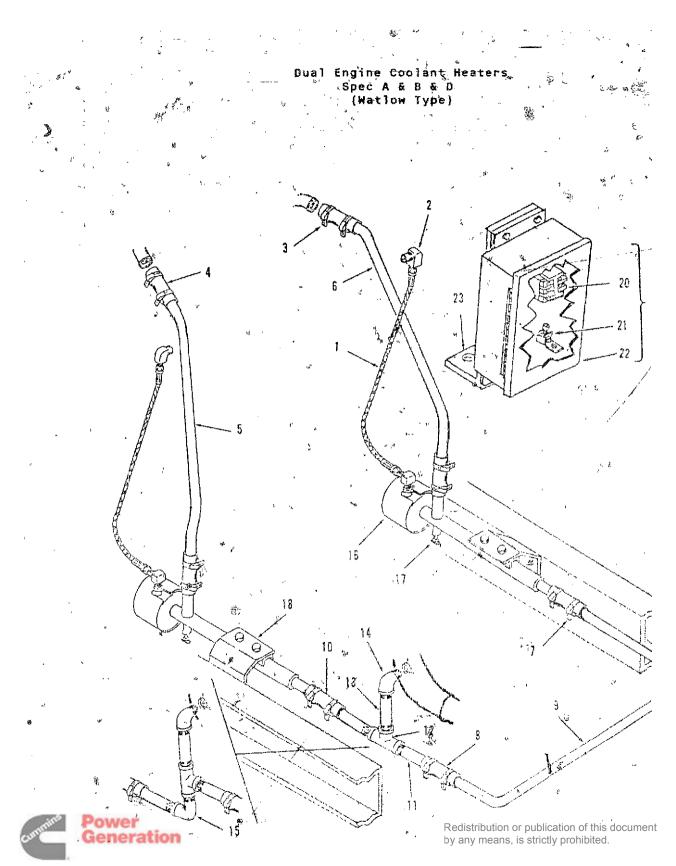


External Engine Companents Right Side

PART QTY CEO\* DESCRIPTION PART NO. USED . ŃŌ. PART NO. Indicator, Air Restriction (Includes Fitting) Cap. Air Cleaner (Select as Applicable) 2 178957 140-2228 2 2 For 6" Tube Inlet a 3028847 140-2264 For 8" Tube Inlet 3017003 140-2364 ы <u>(</u>1 For 10" Tube Inlet 📚 🚽 140-2352 . # 3058481 Air Cleaner (Includes Element(s) unless A Disposable Type) 2 31 KTA50G1 & G2 Indoor (16"00, 7"00 Outlet) 140~2264 3028847 Outdoor (16"OD, B"OD Inlet, 7"OD Outlet) 3017002 140~2363 Heavy Duty (Rectangular Shape, 8"OD Outlet) 140-2345-02 3015349 KTA50G3 & G4 Indoor (13%"OD, Disposable) Heavy Duty (18"OD, 10"OD Inlet, 8"OD Outlet) 140-2413 3050498 140-2349 3058474 Element(s), Air Cleaner KTAG1 & G2 2 Indoor & Outdoor 3010842 140-2402 140-2408 3013212 Heavy Duty Primary Heavy Duty Safety 140-2407 3013213 KTAG3 & G4 Heavy Duty Primary 140-2411 3060222 Reavy Duty Safety +140-2412 3060223 Air Cleaner (Includes Elements(s) unless Disposable Type) 5 2 KTTA50G1 140-2413 3050498 Indoor (13%"00, Disposable) 3058474 Heavy Duty (18"00, 10"0D Inlet, 8"0D Outlet) 140-2349 Element(%), Air Cleaner 6 2 KTTA50G1 Heavy Duty Primary 140~2411 3060222 140-2412 3060223 Heavy Duty Safety 9 Filter, Oil 122-0757 3310169 5 Filter, Fuel 8 149-2232 299202 2 Switch & Harness - Low Coolant Level 9 1 Switch, Low Coolant Level 309-0579-03 3046031 Harness, Wiring 338-2393 3050414 Switch, Sender & Harness - Engine Coolant Temperature Items 10 Transducer (Sender) - Temperature (All Specs) 302-1854 3015238 2 Spec A, B & C OLD STYLE (Nason) Note 1 Switch, Temperarure - Alarm, Low Temp3 (2 Wire Harness) 309-0570 3034866 1 Switch, Temperature - Shutdown, Hi Temp\_(2 Wire Harness) 309-0569-04 3048725 1 Switch, Temperature - Alarm & Shutdown (4 Wire Harness) 309-0572-02 3048727 1 Spec A,B,C & D NEW STYLE(Robert-Shaw); Spec A,B,C, Require Note 1 Adapter Harness for interface with Engine Wiring Harness) Switch, Temperature - Alarm (u/w 338-2471 Forked Harness) 309-0596-06 3056355 1 Switch, Temperature - Shutdown (u/w 338-2471 in Dual Switch 309-0596-04 3056353 1 Applications or with 338-2473 Harness in Single Application. Harness, Wiring (Spec A, B, C Single Switch Application) 338-2471 3066834 1 Harness, Wiring - Forked (Spec A,B,C Dual Switch Application) Switch, Sender & Harness - Engine Oil Pressure 3066832 338-2473 1. 11 Transducer (Sender), Pressure (All Specs) Spec A, B & C OLD STYLE (Nason) Switch - Shutdown with 3 Wire Harness (12PSI) 302-1853 3015237 1 Note 1 309-0565-01 3034864 1 Switch - Alarm & shutdown with 4 Wire Harness (12/18PSI) 309-0566 3034863 1 Spec A.B.C & D NEW STYLE (Robert-Shaw); Spec A.B.C Require Adapter Harness for interface with Engine Wiring Harness) Note 1 Switch, Pressure - Alarm (u/w 338-2470 Forked Harness) 309-0595-02 3056344 \* 1 Switch, Pressure - Shutdown (u/w 338-2470 in Dual Switch 309-0595-03 3056345 1 Application or with 338-2472 in Single Application) Harness, Wiring (Spec A.B.C Single Switch Application) 338-2472 -3065830 Harness, Wiring (Spec A, B, C Dual Switch Application) 338-2470 3066835 1 · 12 Harness, Wiring - Engine Spec A, B & C 338-2389-02 3053027 1 338-2052-02 3062872 1 Spec D

P. New Style Switches introducted During Spec B & C Gen that Assembly and Standard on Spec D Gon Sate during 1988. Replacement of old style (NASON) items with Bensie Standard on Spec D Geitems Recommended by Cummins Engine Company Engineering. by any means, is strictly prohibited.

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يوجد مل	-	1 1954			Dual Engine Coolant Heaters
			1	200	
¢,	ą.,		î i		Spec A & B & D
v V≃4	- en 1		. ι*	s in the second s	(Watlow Type)
Š.,		ca zet			
	- N		\		
1	12	1. 32		<u>د</u> بر.	
	ېښېرونه د	ا المناسبة	* 35A		and the second
سل ب				\ <u>*</u>	
, %* 	REF	CPS	CEC	VOTY	PART
	NO.	PART NO	PART NO.	USED	DESCRIPTION
		'	<b>@</b> .		λ
	1 :			₩ \ 2	Hose Assembly - Oil Pressure (Selecters required)
	- • (d)	501-0537-03	A\$4032\$\$	۲.	32" Lg
4460	1	· 1	AS40405S	1	40" Lg
	1	501-0537-07		· ·	50" Lg
c.	_ /	501-0537-26		é	60" Lg
	3	502-1043-01		4	Elbow, Piper - Male, 90 DEG
			43828A	8.	Clamp Hose
	4	503-1602	3027706	4	Hose, Rubber 🦾 🥛
,	· 5/	130-3339	3060899	1	Tube, Mater '
	6   7)	130-3340 503-1603	3060900 438284	6	Clamp, Hose
	8	303-1003	200517	2 1	Hose, Rubber
	ğ		3056251	1	Tube, Water
	10		3009805	ĩ	Hose, Rubber
	11		153409	- 2	Nipple, Pipe - Half
	11 12 13		3056256	1	Tee, Pipe
	1/3		5,9120	1	Nipple, Pipe
	14	-	590/6C	1	Elbow, Pipe - Street - 90"
	İŞ 👘		3056257	1	Elbow, Pipe - Street - 90" (Used on some installations)
	15 16	Note 1.	3050257	2	Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock,
		Note 1.	3056257	-	Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may orgmay not incluse pressure switch)
				-	Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may orymay not include pressure switch) With Oil Pressure Switch
Í		333~0389~06	3053979	-	Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may orgmay not include pressure switch) With,Oil Pressure Switch 120 VAC, 4000 Wait
Í			3053979	-	Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may orgmay not include pressure switch) With Oil Pressure Switch 120 VAC, 4000 Watt 480 VAC, 4000 Watt
Í		333-0389-06 333-0389-04	3053979 3056184	-	Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may organay not include pressure switch) With Oil Pressure Switch 120 VAC, 4000 Watt 480 VAC, 4000 Watt Without Oil Pressure Switch
		333~0389~06 333-0389~04 333-0413~09	3053979 3056184 3063630	-	Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may orgmay not include pressure switch) With Oil Pressure Switch 120 VAC, 4000 Watt 480 VAC, 4000 Watt Without Oil Pressure Switch 120 VAC, 4000 Watt
		333~0389-06 333-0389-04 333-0413~09 333-0413~08	3053979 3056184 3063530 3063473	-	Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may orgmay not include pressure switch) With Oil Pressure Switch 120 VAC, 4000 Watt 480 VAC, 4000 Watt Without Oil Pressure Switch 120 VAC, 4000 Watt 208 VAC, 4000 Watt
		333~0389~06 333-0389~04 333-0413~09	3053979 3056184 3063530 3063473	-	Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may orginar not include pressure switch) With Oil Pressure Switch 120 VAC, 4000 Watt 480 VAC, 4000 Watt 120 VAC, 4000 Watt 208 VAC, 4000 Watt 480 VAC, 4000 Watt 480 VAC, 4000 Watt 480 VAC, 4000 Watt Attaching Parts for Heater
		333~0389-06 333-0389-04 333-0413~09 333-0413~08	3053979 3056184 3063530 3063473	-	Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may orginar not include pressure switch) With Oil Pressure Switch 120 VAC, 4000 Watt 480 VAC, 4000 Watt 120 VAC, 4000 Watt 208 VAC, 4000 Watt 480 VAC, 4000 Watt 480 VAC, 4000 Watt 480 VAC, 4000 Watt Attaching Parts for Heater
		333-0389-06 333-0389-04 333-0413-09 333-0413-08 333-0413-10	3053979 3056184 3063630 3063473 3063631	2	Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may originary not include pressure switch) With, Dil Pressure Switch 120 VAC, 4000 Watt 480 VAC, 4000 Watt Without Dil Pressure Switch 120 VAC, 4000 Watt 208 VAC, 4000 Watt 480 VAC, 4000 Watt
		333-0389-05 333-0389-04 333-0413-09 333-0413-08 333-0413-10 800-0222	3053979 3056184 3063630 3063473 3053631 \$114	2	Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may orgmay not include pressure switch) With Oil Pressure Switch 120 VAC, 4000 Watt 450 VAC, 4000 Watt 208 VAC, 4000 Watt 208 VAC, 4000 Watt 480 VAC, 4000 Watt 480 VAC, 4000 Watt 500 VAC, 4000 Watt 410 VAC, 4000 Watt 500 VAC, 4000 VAC, 4000 Watt 500 VAC, 4000 VAC, 4
		333~0389~06 333-0389~04 333-0413~09 333-0413~08 333~0413~10 800~0222 850~0101	3053979 3056184 3053630 3063473 3053631 \$114 \$600	2 4 4 4 4	Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may orgmay not include pressure switch) With, 0il Pressure Switch 120 VAC, 4000 Watt Without Oil Pressure Switch 120 VAC, 4000 Watt 208 VAC, 4000 Watt 208 VAC, 4000 Watt 480 VAC, 4000 Watt 480 VAC, 4000 Watt 480 VAC, 4000 Watt 500 VAC, 4000 Watt 500 VAC, 4000 Watt 500 VAC, 4000 Watt 500 VAC, 500 VAC, 500 Watt 500 VAC, 500 VAC,
	16	333-0389-06 333-0389-04 333-0413-09 333-0413-08 333-0413-10 800-0222 850-0101 402-0608	3053979 3056184 3063630 3063473 3063631 \$114 \$600 3035083 3035084 \$923E	2 4 4 4 2 2	Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may organy not include pressure switch) With Oil Pressure Switch 120 VAC, 4000 Watt 480 VAC, 4000 Watt 208 VAC, 4000 Watt 208 VAC, 4000 Watt 480 VAC, 4000 Watt 480 VAC, 4000 Watt 500 VAC, 4000 Watt Screw, Cap - Hex Head (1/4-20 x 3/4") Washer Lock - Spring (1/4") Isolator, Vibration Sock, Drain (1/4 NPT)
	16	333-0389-06 333-0389-04 333-0413-09 333-0413-08 333-0413-10 800-0222 \$50-0101 402-0608 ,402-0609	3053979 3056184 2063630 3063473 3063631 \$114 \$600 2035083 3035084	2 4 4 4 4	Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may organay not include pressure switch) With Oil Pressure Switch 120 VAC, 4000 Watt Without Oil Pressure Switch 120 VAC, 4000 Watt 208 VAC, 4000 Watt 480 VAC, 4000 Watt 480 VAC, 4000 Watt 500 VAC, 500 Vact 500 VAC, 500 Vact 500 VAC, 500 Vact 500 VAC, 500 Vact 500
	16	333-0389-06 333-0389-04 333-0413-09 333-0413-08 333-0413-10 800-0222 850-0101 402-0608 ,402-0608 ,402-0609 504-0003 130-3189	3053979 3056184 3063630 3063473 3053631 \$114 \$600 3035083 3035084 \$923E 3056255	2 4 4 2 2	Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may orgonal not include pressure switch) With Oil Pressure Switch 120 VAC, 4000 Watt 480 VAC, 4000 Watt 208 VAC, 4000 Watt 208 VAC, 4000 Watt 480 VAC, 4000 Watt 480 VAC, 4000 Watt 480 VAC, 4000 Watt 500 VAC, 4000 Watt 100 VAC, 4000 VAC,
	16	333-0389-06 333-0389-04 333-0413-09 333-0413-08 333-0413-10 800-0222 \$50-0101 402-0608 ,402-0608 ,402-0609 504-0003_130-3189 800-0210	3053979 3056184 3063630 3063473 3063631 \$114 \$600 2035083 3035084 \$9236 3056255 \$1030	2 4 4 4 2 2 8	Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may originary not include pressure switch) With Oil Pressure Switch 120 VAC, 4000 Watt 480 VAC, 4000 Watt 208 VAC, 4000 Watt 208 VAC, 4000 Watt 480 VAC, 4000 Watt 208 VAC, 5000 Wat
	16	333-0389-06 333-0389-04 333-0413-09 333-0413-08 333-0413-10 800-0222 850-0101 402-0608 402-0608 402-0608 504-0003 130-3189 800-0210 850-0103	3053979 3056184 3063630 3063473 3053631 \$114 \$600 2035083 3035084 \$923E 3056255 \$1030 \$604	2 4 4 2 2 8 8	Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may organy not include pressure switch) With Oil Pressure Switch 120 VAC, 4000 Watt 480 VAC, 4000 Watt 208 VAC, 4000 VAC, 4000 Watt 208 VAC, 4000 Watt 208 VAC, 4000 Watt 208 VAC, 4000 VAC, 4
	17 18	333-0389-06 333-0389-04 333-0413-09 333-0413-08 333-0413-10 800-0222 \$50-0101 402-0608 ,402-0608 ,402-0609 504-0003_130-3189 800-0210	3053979 3056184 3063630 3063473 3083631 \$114 \$600 3035083 3035084 \$9235 \$1030 \$604 \$254	2 4 4 4 2 2 8 8 8 8	Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may orgamay not include pressure switch) With Oil Pressure Switch 120 VAC, 4000 Watt 420 VAC, 4000 Watt 208 VAC, 4000 Voration 209 Piezeker 200 Voration 200 Piezeker 200 P
	16 17 18 19	333-0389-06 333-0389-04 333-0413-09 333-0413-08 333-0413-10 800-0222 850-0101 402-0608 402-0608 402-0608 504-0003 130-3189 800-0210 850-0103	3053979 3056184 3063630 3063473 3053631 \$114 \$600 3035083 3035084 \$923E 3056255 \$1030 \$604 \$254 3063475	2 4 4 2 2 8 8	Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may orgmay not include pressure switch) With, Oil Pressure Switch 120 VAC, 4000 Watt 480 VAC, 4000 Watt 208 VAC, 4000 Watt 208 VAC, 4000 Watt 480 VAC, 4000 Watt 480 VAC, 4000 Watt 480 VAC, 4000 Watt 508 VAC, 4000 Watt 480 VAC, 4000 Watt 508 VAC, 4000 Vatt 508 VAC, 4000 VAC,
	17 18 19 20	333-0389-06 333-0389-04 333-0413-09 333-0413-10 800-0222 850-0101 402-0608 ,402-0608 ,402-0609 504-0003 130-3189 900-0210 850-0103 871-0028	3053979 3056184 3063630 3063473 3083631 \$114 \$600 3035083 3035084 \$9235 \$1030 \$604 \$254	2 4 4 4 2 2 8 8 8 8	Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may orginar not include pressure switch) With Oil Pressure Switch 120 VAC, 4000 Watt 480 VAC, 4000 Watt 208 VAC, 4000 Watt
	17 18 19 20 21	333-0389-06 333-0389-04 333-0413-09 333-0413-10 800-0222 850-0101 402-0608 402-6609 504-0003 130-3189 800-0210 850-0103 871-0028	3053979 3056184 3063630 3063473 3053631 \$114 \$600 3035083 3035084 \$923E 3056255 \$1030 \$604 \$254 3063475	2 4 4 4 2 8 8 8 8 8 8 2 1	Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolart (Includes Thermostat, Drain Cock, Mounting Nuts and may organy not include pressure switch) With Oil Pressure Switch 120 VAC, 4000 Watt 480 VAC, 4000 Watt 208 VAC, 4000 Voration 209 Hex Head 208 VAC, 4000 Voration 208 Vorati
	17 18 19 20 21 22	333-0389-06 333-0389-04 333-0413-09 333-0413-10 800-0222 850-0101 402-0608 ,402-0608 ,402-0609 504-0003 130-3189 900-0210 850-0103 871-0028	3053979 3056184 3063630 3063473 3053631 \$114 \$600 3035083 3035084 \$923E 3056255 \$1030 \$604 \$2254 3063477	2 4 4 4 4 2 2 8 8 8 2 1 1 1	<pre>Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may organy not include pressure switch) With Oil Pressure Switch 120 VAC, 4000 Watt 480 VAC, 4000 Watt 208 VAC, 4000 Watt 208 VAC, 4000 Watt 480 VAC, 4000 Watt 480 VAC, 4000 Watt 480 VAC, 4000 Watt 500 VAC, 4000 VAC, 4000 VAC, 4000 VAC, 500 VAC</pre>
	17 18 19 20 21	333-0389-06 333-0389-04 333-0413-09 333-0413-10 800-0222 850-0101 402-0608 402-6609 504-0003 130-3189 800-0210 850-0103 871-0028	3053979 3056184 3063630 3063473 3053631 \$114 \$600 3035083 3035084 \$923E 3056255 \$1030 \$604 \$254 3063475	2 4 4 4 2 8 8 8 8 8 8 2 1	<pre>Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may organay not include pressure switch) With Oil Pressure Switch 120 VAC, 4000 Watt 480 VAC, 4000 Watt 208 VAC, 4000 Watt 208 VAC, 4000 Watt 480 VAC, 4000 Watt 480 VAC, 4000 Watt 480 VAC, 4000 Watt 508 VAC, 4000 Vatt 508 VAC, 4000 Vatt 508 VAC, 4000 Vatt 508 VAC, 508 VAC, 508 Vatt 508 VAC, 508 VAC,</pre>
	17 18 19 20 21 22	333-0389-06 333-0389-04 333-0413-09 333-0413-10 800-0222 850-0101 402-0608 402-0608 402-0608 402-0609 504-0003 130-3189 800-0210 850-0103 871-0028 Note 2 Note 3.	3053979 3056184 3063630 3063473 3083631 \$114 \$600 2035083 3035084 \$923E 3056255 \$1030 \$604 \$255 \$1030 \$604 \$255 \$1030 \$604 \$255 \$3063475 3063476	44422 86821112	<pre>Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may organy not include pressure switch) With Oil Pressure Switch 120 VAC, 4000 Watt 480 VAC, 4000 Watt 208 VAC, 4000 VAC, 400</pre>
	17 18 19 20 21 22	333-0389-06 333-0389-04 333-0413-08 333-0413-08 333-0413-10 800-0222 850-0101 402-0608 .602-0608 .602-0609 504-0003 130-3189 800-0210 850-0103 871-0028 Note 2 Note 3 800-0227	3053979 3056184 3063630 3063473 3053631 \$114 \$600 3035083 3035084 \$9235 3056255 \$1030 \$604 \$254 3063475 3063477 3063476 \$114'	2 4 4 4 4 2 2 8 6 8 2 4 1 1 2 6	Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may orgamy not include pressure switch) With Oil Pressure Switch 120 VAC, 4000 Watt 480 VAC, 4000 Watt 208 Vac, 4000 Vac, 4000 209 Franket Mounting - Bor Attaching Parts for Brackets Sorew, Cap - hex Head (1/4-20 x 3/4")
	17 18 19 20 21 22	333-0389-06 333-0389-04 333-0413-09 333-0413-10 800-0222 850-0101 402-0608 402-0608 402-0608 402-0609 504-0003 130-3189 800-0210 850-0103 871-0028 Note 2 Note 3.	3053979 3056184 3063630 3063473 3083631 \$114 \$600 2035083 3035084 \$923E 3056255 \$1030 \$604 \$255 \$1030 \$604 \$254 3063475 3063476	44422 86821112	<pre>Elbow, Pipe - Street - 90" (Used on some installations) Heater, Electrical - Coolant (Includes Thermostat, Drain Cock, Mounting Nuts and may organy not include pressure switch) With Oil Pressure Switch 120 VAC, 4000 Watt 480 VAC, 4000 Watt 208 VAC, 4000 VAC, 4</pre>

2. Watlow No. 191-16-6-1 3 Watlow No. 303-62-29-29

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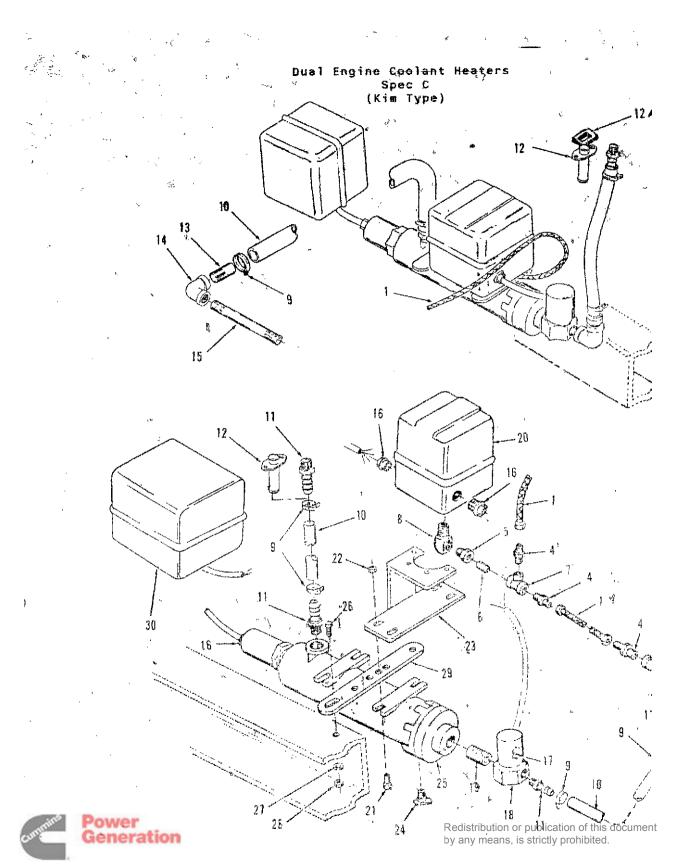
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## Dual Engine Coolant Heaters Spec C {Kim Type

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		-				
	REF NO	CPS PART NO.	OEC PART NO.	USED	PART DESCRIPTION	
	1	501-0199		` 2 <b>`</b>	Line. Fuel - flexible	
	ź	505-0037		ĩ	Elbow ~ 90 Degree (1/8 NPT)	
	้วิ	505-0104		ī	Nipple, Pipe - Close (1/8 NPT x 1-1/2")	
	' 4	502-0193		4	Adapter, Hex - Pipe to Line	
		505-0007		2	Bushing, Reducer - Hex (1/4 NPT x 1/8 NPT)	
•	9 6	505-0098		1	Nipple, Pipe - Close (1/8 NPT x 3/4")	
	7				Tee, Pipe (1/8 NPT)	
	8	505-0059	•	2	Elbow, Pipe - Street, 90 Degree (1/8 NPT)	
	"9	502-0054		5	Clamp. Hose	
		503-0398	`\ <sub>6</sub>	AB AB	Hose, Rubber - Bulk (1"10 x 1-3/8"00) (Sold in Multi Foot	
-	<u>10</u>	503-0249		га др	lengths, order length as required	
				7		
	13	505-0759	0100001		Adapter, Hose to Pipe Adapter, Hose with Flange (Used on some applications)	
	12	130-3200	3178301	<u>ک</u> ر		•
	124		3177556	232	Seal - Rectangular Ring	
	13	505-0324		1	Nipple, Pipe - Half (3/4 NPT × 2")	
	14	505-0132		1	Elbow, Pipe - Street, 90 Degree (3/4 NPT)	
	15	505-043B		1	Nipple, Pipe (3/4 NPT x 8")	
	16	331-0027		12	Clamp. Cable	
	17				Terminals	
		323-0957	÷	4 '	Nut, Wire	
		332-0014	5 <sup>*</sup>	8	, Lug, Terminsk - Ring (#10)	
		332-0149		8	Lug, Terminal 5. Ring (#8)	
	18			-	Switch, Thermostatic	
		309-0490	`	5	100° - 120° Fahrenheit	
		309~0253		2	120° – 140° Fahrenheit	
	19	505-0004		2	Nipple, Pipe - Close (3/4 NPT x 1-1/21)	
	20	309-0271		2	Switch, Pressure - 0:1	
					Attaching Parts for Switch	
		812-0079		8	Screw, Machine - Round Head (#8-32 x 1/2")	
.,		854~0007	•	8 े	*Washer, Lock - ET (*8)	
	21	800-0008		4	Screw, Cap - Hex Head (1/4-20 x 1-1/%")	
		870-0212		2	Nút Self-locking - Hes (1/4-20)	
	2 <b>7</b> 23	333-0224		″2	Bracket Support - Pressure Switch	
	24	504-0003		. 2	Cock, Drain	
	25	0	•	, *	'Heater, Electrical	
		333-0143		11.2	4000 Watt, 208 VAC - 1 Phase	
		333-0164		ν <sup>2</sup> 2	4000 Wett, 208 VAC - 3 Phase	5
		333-0138		2 '	4000 Watt, 240 VAC - 1 Phase	
		333-0190		2,	4000 Watt, 240 VAC - 3 Phase	· .
		333-0150			4000 Watt, 277 VAC - 1 Phase	
		333-0183			4000 Watt, 380 VAC ~ 1 Phase	
		333-0174		2	' '4000 Watt 380 VAC - 3 Phase	
		333-0161	. •	ž	4000 Watt, 480 VAC - 1 Phase	
		333-0144		ź	4000 Watt / 480 VAC - 3/Phase	
	26	821-0030	-	é	Screw, Self-locking - Hex Head (5/15-16 x 1-1/4")	
_	27	850-0045		ŝ	Washer, Lock - Spring (5/16")	
	28	862-0045		s,	Nut, Hex (5/16-18)	
	29	130-1191	· .	1	Bracket, Mounting	
	29	190-1191		· .	Contactor	
	20	307-1460		. +	220 VAC, 3 Pole	
		307-1160	3	Sec. 74	RED VAC, 3 Pole	
	-	301-1704		· .*	SVE VAG, D POIC	
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Power Generation

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#### GENERATOR SECTION

Table-of-Contents

Generator Size Table SPEC A & B & D 32 Generator Size Table SPEC C ...... **e**. . . . . . . 33 Generators SAE0/SAE18 ...... 35 Generator Stator Section [Frame Size 6] 37 39 Generator Rotor Section [Frame Size 6, SAE0/SAE18]..... 41 44 Permanent Magnet Exciter

## GENERATOR TABLE SPEC A & B & D

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#### Low Range Generators

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		<u>.</u>					1							
	[	(	}	[		· · · · · · · · · · · · · · · · · · ·		OLTAGE					50 HER	
	OPTION CODE	FRAME	ADPTR SAE	DISK SAE	ĻEAD	KW RATING	380 190	416 208	440 220	460 230	480 240	380 190	400 200	416 208
	-				_	<b>ģ</b> i								
'n	MG8320	6 AS ≍	t> 0	18	6	Standby Prime Pwr	610 575	640 600	660 625	680 640	700 550	540 500	55D 515	570 525
	MG8321	6 A .'	o	`18 `\$	6	Standby Prime	670 625	700 650	740 675	770 710	800 730	610 555	630 580	650 600
	MGB322	6 B	0	18	6	Standby Prime Pwr	750 690	800 730	830 770	860 800	900 820	680 620	700 640	720 -660
	MG8323	6 C	,r0	, <sup>18</sup>	6 A	Standay ° ⊪Prime ⊮Pwr	880 820 -	920 850	960 880	1000 920	1050 950	800 730	825 750	840 765
	MG8324	-6 D	Ο ~	18	6	Standby Prime Pwr	950 880	1000 950	1050 990	1100 1020	1150 1050	875 800	900 825	920 850
-	MG8326	6 A	0	- 18	12	Standby Prime Pwg	670 625	700 650	740 _ <del>6</del> 75	*770 710	800 730	610. 555 ¥2	630 580	650 600
*	MG8327	68	0	18	12	Standby Prime Pwr	750 680	600 730	830 770	'860 800	900 820	680 620	700 640	720 660
	MG8328	60	0	18	12 12	Standby Prime Pwr	880 820	92C 850	960 880	1000 920	1050 950	800 <sup>°</sup> 730	825 750	840 765,
	MG8329	6 D	0	18	12	Standby Prame	950 580	1003 950	1050 990	1100 1020	1150 1050	875 800	900 825	920 850
	MG8330	7 4	ō	18	6	Standby Prime Pwn	1120 1630	1175 1075	120Č 1110	1225 11,25	1250 1150	1000 920	1080 950	1075 975
	MG8331	78	C	18	6	Srandby Prime	1300 1200	1350 1250 ×	1420 1320	1475 1350	1500 1315	_1;0 1080	1160 1050	1180 1075
	MG8332	7 C	0	18	e	Standby Prtme Pwr	166C 1525	1700 1600	1975 1650	1850 1725	1875 1800	1450 1350	1525 1400	1600 1450
1			<u> </u>	L							to marrie the second			L

## Medium Range Generators

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PTTON	FRAME	*ADPTR	DISK	LEAD	W RATING	VOLTAGE AT 60 HERTZ	AT 50 HERTZ
CODE	SIZE	SAE	SAE			4160/2400	3300/1905
	7 A	6				r	
198333	Y A	0	18	8	Standby Privoe Pwr	540 500	430
AG8334	7 B	0	81,	6	Standby	. 810	650
			İ		Prime Pwr .	750 /	600
G8335	7 C	O	18	6	Standoy	າຕຣຽ	860
			ļ	-	P# 156	1000	800
G8336	10	0	18	12	Standby	1620 🧋 🗸 🗸	1300
					Prome Pwr	` 1500	1200



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#### GENERATOR TABLE SPEC C

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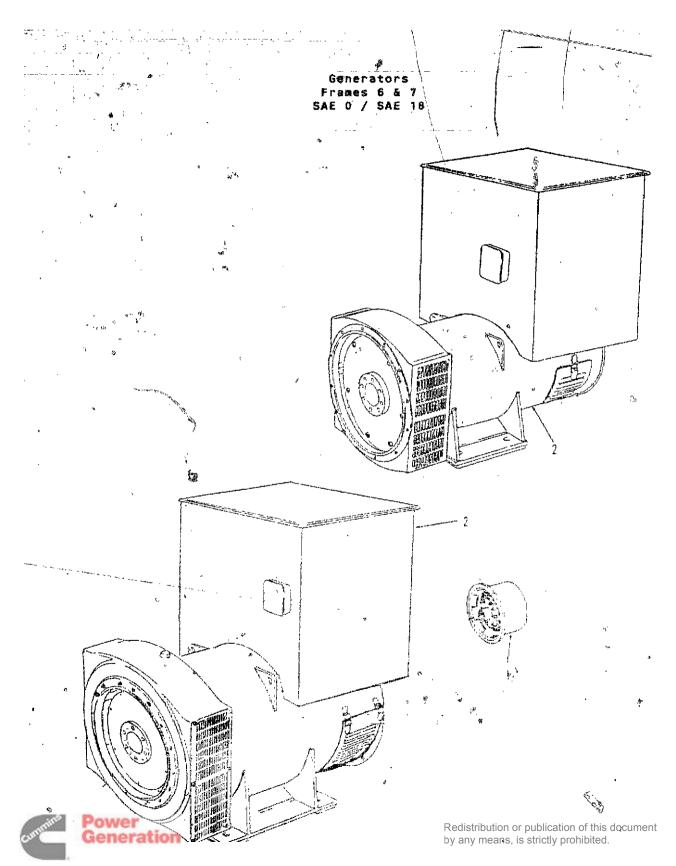
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VOLTAGE AT 60 50 HERTZ THER T 7 ĀΪ OPTION ERAME AOPTR DISK **kW RATING** LEAD CODE SIZE SAE SAE 9MG0020 6 AS'. Standby Prime Pwr 9MG0021 6 A Standby .770 Prime \$55 9MG0022 6.8 Standby 68D Prime Pwr 9MG0023 6 C Standby Prime Pwr 9MG0024 6 0 Standby Prime Pwr 9MG00,26 6 A. Standby Paime Pwr 9MQ0027 δ Β Standby 830-A 860 770, Prime Pwn 1. 800 6 C 9MG0028 Û Standby P4D Prime Pwr -820 9MG0029 5 D Standby -950 ÷r ině \* 880 7 A 9MG0C30 Ú £ Standby ٩, Frime Phyr 1.375 9MG0031 7 B € Standby 14"5 Prame 1,350 9MG0032 7 C C St andby Pinne Pwr 

Medium Range Generators

	PTION	FRAME	ADPTR	DISK	LEAD	KW RATING	VOCTAGE & 60 HERTA	AT 50 FERT2
	SODE	SIZE	SAE	SAE			4160/2450	3300/1925
1	8333	7 A	0	18	6	Standby Prime Pwr	540 500	430 400
914(	38334	7 B	٥	18	6	Standby Pwr	810 752	650 . 620
9140	58335	7 <u>C</u>	0	18	6	Standby Prime	1050 1000	860 800
ower	38336	70	0	18	12	Standby Prime Pwysr-	1520 1509 Redistribution or p	1300 1200 blication of this document
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#### Generators Frames 6 & 7 SAE 0 / SAE 18

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REF NO	CPS Part No.	CEC PART NO.	OTY USED	PART DESCRIPTION
1	,		1 .	Module, Permanent Magnet Exciter
				(See Separate Page for Components)
•	249-0298		4	Attaching Parts For Module Screw. Cap - Hex/Head (M8 x 16mm) .
	249-0218	-14 60	4	<ul> <li>Washer, Lock (M8)</li> </ul>
	249-0315		4	Clamp, Retraining
2,	Note 1	-		Generator [Includes PMG Exciter]
<sup>ب</sup> د.			12	(See Separate Pages for Stater and Refor Components)
A**				Attaching Parts Generator To Skid
				Frame 6 and 7
	800-0242	\$161	d-L	Screw, Cap - Hex Head (1-8 x 3-1/2″)
	B50-0109			' Washer, Lock - Sprang (1")
		146180	8	Washer, Flat (1')
		3025064	4 4	Spacer (frame 6 only)
F	370-4046-01 370-4046-02		4	Shima • Shima •
	370-4046-02		2	Shim
	B62-0037	S222	4	Nut, Hex (1-8)
	002 0001	5221	-	Attaching Parts Adapter to Flywheel Housing
				Frame 6
	800-02)5	S113	2	Screw, Cap - Hex Head (1/2-13 x 1-1/2)
,	600-0236	\$106	4	1 Screw, Cap - Hex Head (1/2-13 + 1-3741)
	850-0105	5608	6	Washer Lock - Spring (1/21)
				Frame 7
	800-0236	\$106	2	Screw Cab H Hex Head [1/2-13 + 1-3 4]
	656-0105		12	Washer Lock - Sanning (1701)
	800-0242		2	Schew Rap - Head (108 x 3-1)1
	650,0109	S613	4	Washer jock - Spring (1985)
				Attaching Parts Drive Disc to Flywheel Frame 6
	815-6719	206332	Ē	Sonew Cap - 12 Forms Oniver 6 8-11 v 1 1 477
	526-0362	200303	£	vastew taskin iz Horiton ter orbrit tillt. Nastern fret fret
	51 5 5 5 5 E	200001		Frame 7
	615-0728	206391	ę	Domewic Clark (12 Pronts Christer (12 Pronts)
	526-0362	200861	f	Western the liter

Note 1: For replacement Demonstor please supply the joind are builded interaction nameprate data

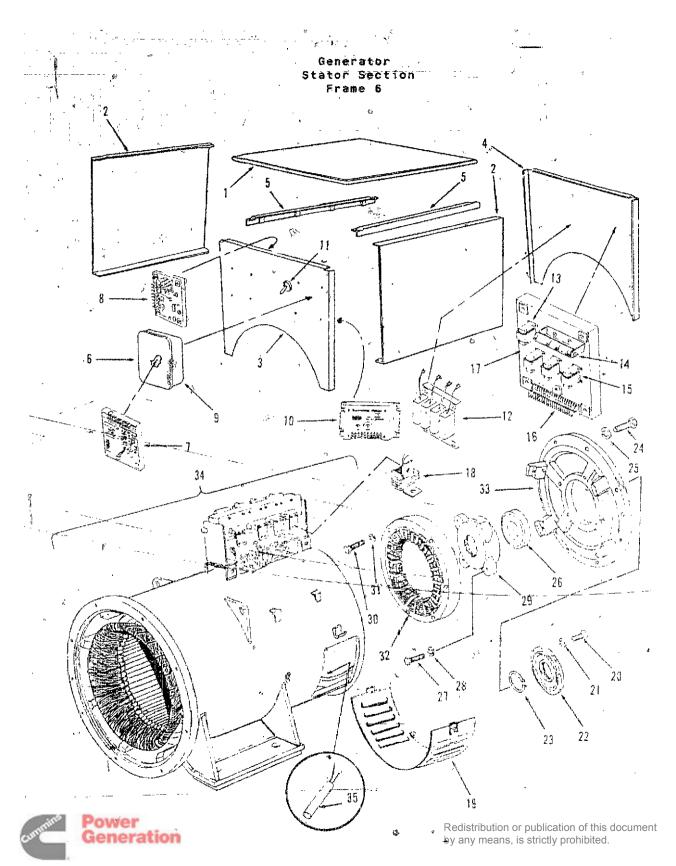


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#### Generator Stator Section Frame 6

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	-			1 v	_ <del>1</del> . 4
'REF NO.	CPS PART NO.	CEC PART NO.	OTY USED	PART DESCRIPTION	
· 1	Note 1		1	Lid	
· 2	Note 1		2	Panel, Side	1
. 2			1	Panel, Front	
	Note 1		-		•
4	Note 1		1	Panel, Rear	
5	Note 1		2 ;		
6	249-0425		2	2.14	
			_	Attaching Parts	
	249-0304	Ç	8	Screw, Captive	
7				Regulator, Voltage	
	305-0770	1	1	Standard Standard	
	305-0778	]	1	3 Phase (Used with 3 Phase Sensing Module)	
	305-0803	٤	1	Manual	
				Attaching Parts	
	249-0398		4	Pillar, Threaded	
8	300-3278		1	Module, 3 Phase Sensing	
				Attaching Parts	
	249-0398		4	Pillar, Threaded ,	
9	249-0395		2	Box	
· 10	305-0822		ŧ	Module, Overvoltage	
	000 0022		τ.	Attaching Parts	
	249-0295		4	Screw, Cap - Hex Head (M5 x 35mm)	
	249-0288		4	Washer, Plastic (M5) .	
	249-0287		4	Nut, Hex ~ Nylon (M5)	
11			ĩ	Switch	
	249-0449		1	RFI Suppressor Assy	
12	249-0569		1	Choke -	
13	302-1851				
14	354-0031		1	Resistor, Adjustable	+
15	249-0504		3	Transformer, Voltage Sensing	L.
16	249-0289		3	Block, Terminal, Desch, Terminal, Disck Mountains	
17	249-0424		1	Panel, Terminal Block Mounting	
18	302-1852-	-02	3	Transformer, Current	
19	249-0513		1	Grille, Inlet - Air	
20	249-0243		4	Screw, Cap - Hex Head (M10 × 30mm)	
21	249-0202		4	Washer, Lock - Spring (M10)	
22	249-0510		1	Cap, Bear <sup>e</sup> ing - Outer	· · · · · · · · · · · · · · · · · · ·
23	249-0447		1	Circlipt	
24	249-0204		8	Screw, Cap Hex Head (M12 x 40mm)	
25	249-0205		. 8	- Washer, Lock - Spring (M12)	
26	249-0448		1	Bearing, Ball	
27	249-0245		4	Screw, Cap - Hex Head (M10 x 50mm)	
28	249-0202		4	Washer. Lock - Spring (M10)	
_ 29	249-0509	-	1	Cap, Bearing - Inner	
30	249-0445		6	Screw, Cap ~ Hex Head (M6 x 85mm)	
31	249-0212		6	Washer, Lock -«Spring (M6)	
32	249~0470		1	Stator, Exciter	
33	249-0527		1	Bracket,"End	
34	Note 1		1	Stator, Generator (Includes Terminal Studs a	nd Links)
				Attaching Parts Stator to Adapter	
	249-0204		8	Screw, Cap - Hex Head (M12 × 40mm)	
	249-0205		8	Washer, Lock - Spring (M12)	
35	1.0 0.000		-	Heater, Electrical - Replacement	
~~	249-0621		1	70 Watt, 120 VAC	
•	249-0622		ĩ	70 Watt, 240 VAC	
	240 0022		•	La riseray when rive	

Notes: 1. Items not stocked, replacement available only on special order with long lead time likely.



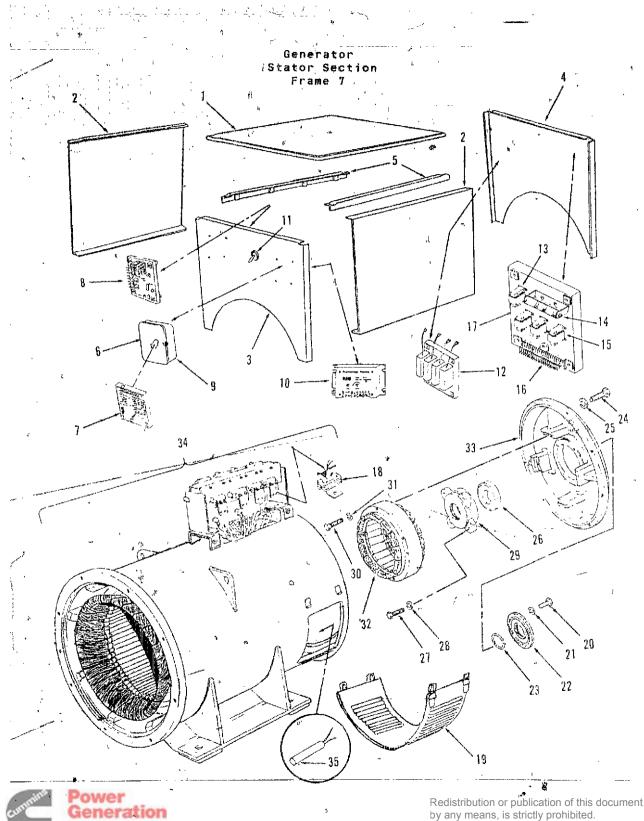
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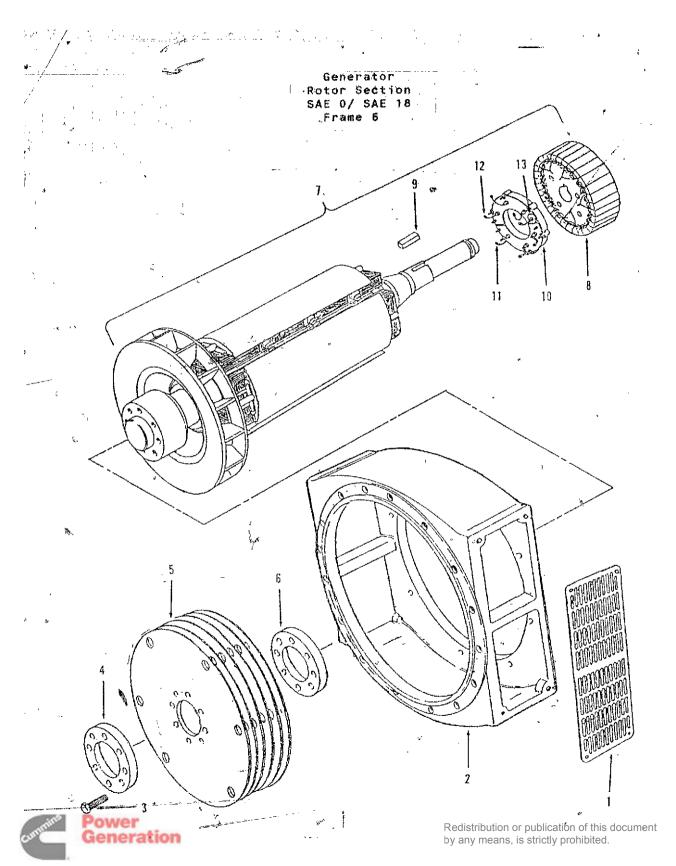
Generator Stator Section

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				Frame 7
				Frame 7
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3.				
			. i	
REF	CPS	CEC	QTY	PART
NO.	PART NO.	PART NO.	USED	DESCRIPTION
	3			
1	Note 1		1	Lid 3
2	Note 1		2	Panel, Side
3	Note 1		ĩ	Panel, Front
4	Note 1	1	1	Concert, Strong
-	Note 1			Panel, Rear
5	Note 1		2	Bracket, Angle
6	249-0425		2	Lid
•			•	Attaching Parts
	249~0304		8	Screw, Captive
7		1		Regulator, Voltage
	305-0770		1	Standard
	305-0778		ī	3 Phase (Used with 3 Phase Sensing Module)
			1	
	305-0803		1	Manual Sector
				Attaching Parts
	249-0398		4	Pillar, Threaded
8	300-3278		1	Module, 3 Phase Sensing
		٠.		Attaching Parts 🚡 👘
	249-0398	`	4	Pillar, Threaded
9	249-0395		2	Box
10	305-0822		ī	Module, Overvoltage
	JOJ DOLL		-	Attaching Parts
	A 14 4405		4	
	249-0295	¢-		Screw, Cap - Hex Head (M5 x 35mm)
	249-0280	(	4	Washer, Piastic (\\$) 🦫
	249-0287	· · · · ·	4	Nut, Hex - Nylon (M5) 👘 👘
11	249~0449		1	Switch
12	249-0569		1,	RFI Suppressor Assy
13	302-1851		1.	Choke
. 14	354-0031		·\ <u>1</u> .s	Resistor, Adjustable
15				Transformer
10	302-1884		3	Voltage Sensing (Used on Standard Voltage Generators)
	302-1876		3	Isolation (Used on Medium Voltage Generators)
1.6			š	Block, Terminal
16	249-0289		1	
17	249-0424		L	Panel, Terminal Block Mounting *
18				Transformer, Current
	302-1852-0		3	Used on Standard Voltage Generators
	302-1852-0	з,	3	bsed on Medium Voltage Generators
19	249~0583			Grille, "Inlet - Air
20	249-0243	and the second s	4	Screw, Cap - Hex Head (M10 x 30mm)
21	249-0202-1		4	Washer, Lock - Spring (M10)
22	249-0510		1	Cap, Bearing - Outer
23	249-0447	٩	1	Circlip
24	249-0204	4~	8	Screw, Cap - Hex Head (M12 x 40mm)
25			8	Washer, Lock - Spring (M12)
	249-0205		1	
26	249-0448	ł		Bearing, Ball
27	249-0245	l.	4	Screw, Cap - Hex Head (M10 x 50mm)
28	249-0202	<u>,</u> 42 -	4	Washer, Lock - Spring (M10)
29	249-0509		1	Cap, Bearing - Inner
30	249-0438	1	6	Screw, Cap - Hex Head (M8 × 85mm)
31	249-0218		6	Washer, Lock - Spring (M6)
32	249-0470		1	Stator, Exciter
33	249-0471		ĩ	Bracket, End
			1	Stator, Generator (Includes Terminal Studs and Links)
34	Note 1		T	Staton, Generator (includes serional stats and cond)
		,		Attaching Parts Stator to Adapter
	249-0204		8	Screw, Cap - Hex Head (M12 × 40mm)
	249~0205		· 8	Washer, Lock - Spring (M12)
÷ ,35				Heater, Electrical - <u>Replacement</u>
	249-0621		1	70 Watt, 120 VAC
	249-0622		1	70 Watt, 240 VAC

ation

Notes: 1. Item not stocked, replacement may be available only by special order with a long lead time, likely



SAE OPSAE 18 Frame 16 REF ĊPS CFC ٥ĩ٣ PART PART NO. USED DESCRIPTION NO. PART NO. 1 249-0534 2 Screen, Air - Adapter Attaching Parte Screw, Cap | Hex Head (M5 x 12mm) 249 0294 12 Washer, Lock - Spring (M5) Washer, Plat (M5) "Adepter, Generator SA& O 249-0007 249-0065 12 12 ١ 249 0533 1 Screw, Cap - Hex Head (M20 x 75mm) 3 249 0437 8 Plate, Prossure Disc, Drive SAE 18 1 4 249 0230 5 149 0276 5 49 0277 16 Spacer Rotor, Generator (Includes Excitor, Key, and Rectifier Assy) 2 Note 1 1 249-0512 8 1 Rotor, Exciter (Does Not Include Rectifier Assy) Q. 249-0620 1 Key Rectifier Assy (Includes Diodes) 10 249 0231 1 Diode, Forward Polarity # Diode, Reverse Polarity 11 249 0239 з 12 249 0238 Э. 13 249 0240 1 Var įster 1

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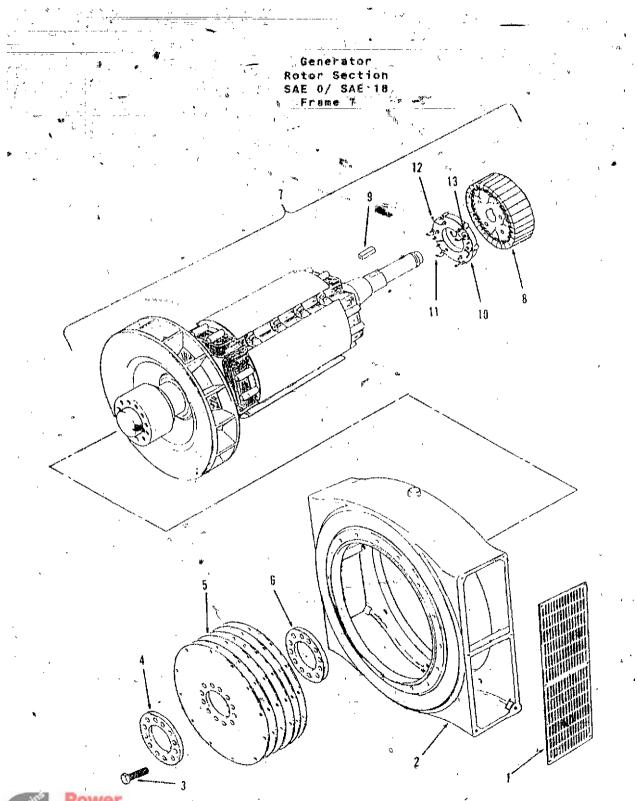
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> 1 Item not stocked, replacement available only on special order with long lead time likely.





Power Generation

#### Generator Rotor Section SAE 0/ SAE 18 Frame 7

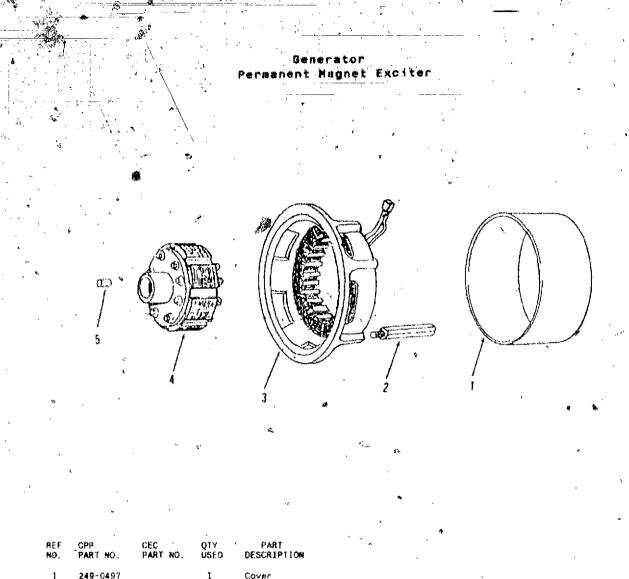
REF	CPS	CEC	QTY	PART	ې د او د بورونه
NO.	PART NO.	PART NO	USED	DESCRIPTION	
ï	249-0482		2	Screen, Air - Adaptar Attaching Parts	,
	249-0294	\$	i2	Screw, Cap - Hex Head (M5 x 12mm)	
	249-0307	• • •	12	Washer, Lock - Spring (M5)	
	249-0365		12	Washer, Flat (M5)	4
2	249 0481		ī	Adapter," Generator SAE 0	÷
а.	249-0444		8	Screw, Cap - Hex Head (M24 x 75mm)	
4	249 0467		1	Plate, Pressure	
5	249 0469		6	Disc. Drive SAE 18	
6	249 0468		1	Spacer	· · · · · ·
7	Note 14		1	Rotor, Generator (Includes Exciter, Key, and	Rectifier Assy}
8	249-0503		1	Rotor, Exciter (Does Not Include Rectifier As	
ង្ខ	249-0620		1	Key	
10	249 0237		1	Rectifier Assy (Includes Diodes)	
11	249~0239		Э	Diode, Forward Polarity	÷ 54
12	249 ·0238	1	3	Diode, Reverse Polarity	<b>N</b> .
13	249-0586		1	Varister	` a ``

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Notes 1 Item not stocked, replacement available only on special order with long lead time likely



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1	249-0497	1	Gover .
		` <i>.</i>	Attaching Parts For Cover
4	249-0294	3	Screw, Cap - Hex Head (MS x 12mm)
	249-0307	3	Washer, Lock (M5)
2	249-0423	3	Billar, Threaded
3	249~0426	1	Stator, Exciter with Frame
4			Rotor, Exciter (Select Rotor as Required)
	249-0427	1	Frame 2, 3, 4 Generators
	249-0644	1	Frame 5, 6, 7 Generators
			Attaching Parts For Rotor (Select Bolt as Required)
	249-0399	1	Bolt - Frame 2, 3, 4 Generators
	249-0495	1	Bolt - Frame 5, 6, 7 Generators
	249-0202	1	Washer, Lock (M10)
5	249-0313	1	P וח, Dowel

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SECTION CONTRO

## TABLE OF CONTENTS

·• .

	Control, Generator Set	53
	Control Panel, Generator (Sets with LED Indicator Lights)	55
	Control Panel, Generator (Sets with Bulb Indicator Lights)	57
•	Control Panel, Engine (Sets with LED Indicator Lights)	59 <sub>wv</sub>
	Control Panel, Engine (Sets with Build Indicator Lights)	<b>61</b> -
	Control Wiring Harnesses (Sets with LED Indicator Lights)	63 ŕ
í.	Control Wiring Harnesses (Sets with Bulb Indicator Lights)	
	Control Internal Components (Sets with LED Ind Lights)	66
	Control Internal Components (Sets with Bulb Ind Lights)	67 -
	// Control Alarm Module	68

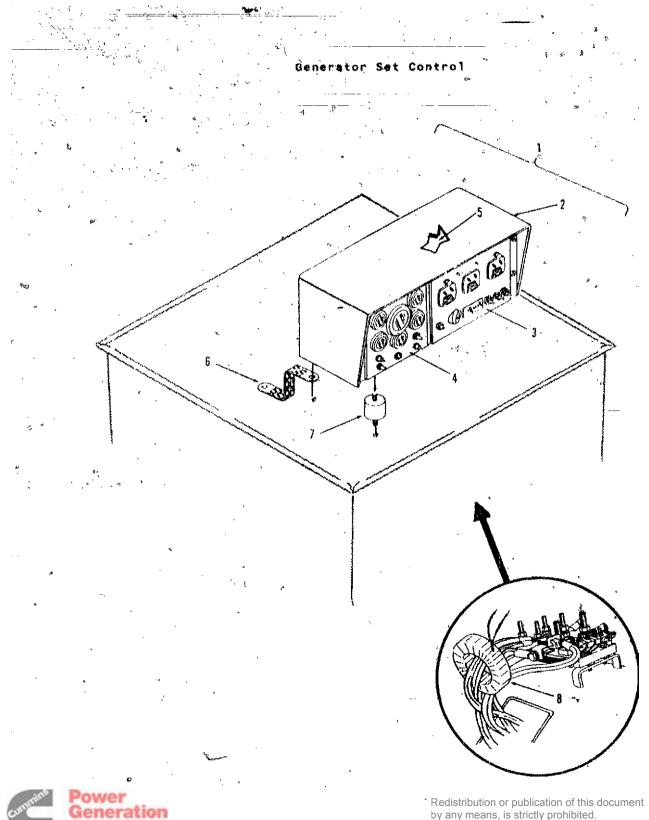


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#### Control Generator Set

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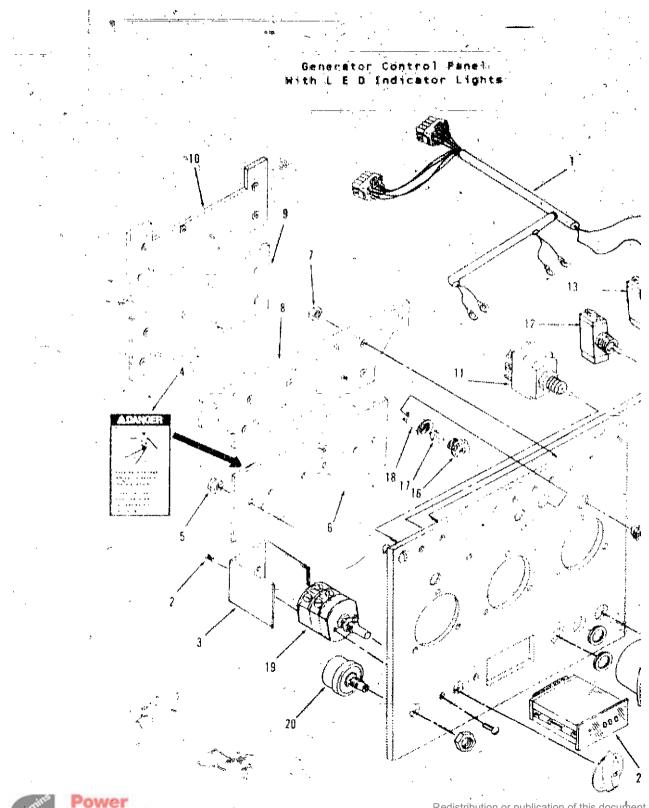
REF	CPS PART ND,	CEC PART NO.	OTY USED	PART. DESCRIPTION
1	. ·		REF	Control, Generator Set (See Items 3 Thru S for Components)"
	867-1001	70299	A.	Attaching Pertm for Control Nut, Nex (1/4-20)
	850-1040	20189	9 8 <	Washer, Lock - Spring (1/4")
2	Note 1	6.10.4	ĩ	Cover, Control
			,	Attaching Part for Cover
	815-0701	3016086	6	Screw, Machine - Round Head (1/4 20 x 1/2")
3'	,		REE	Control Panel, Generator (See Separate Pages for Components)
4			REF	Control Panel Engine (See Separate Pages for Components)
<u>+</u>			REİ	Internal Components and Wiring Harnesses (See Separate Pages - Selection)
. • 6	3.17 2402	3016849	1	Lead, Electrical Ground
7	402-0610	204493	4	Mount, Vibration
(f)				Inanaformer (worrent (Select as Required)
	302-1866-05	3011674	.1	400 5 Hatto (Used with 200/400 AMP Ammeter)
	302 1866 09	3011678	1	600 5 Ratio (Used with 300/600 AMP Ammeter)
h.	302 1066-13	3011682	۴.	800 5 Raths (Used with 400/800 AMP Ammeter)
•	302 1865-15	3011684	4	1000 5 Ratio (Used with 500/1000 AMP Ammeter)
	302 1866 TV	3011686 `	'.1	1200 5 Ratio (Used with 600/1200 AMP Ammeter and 1200 AMP
-				Single Scale Ammeter)
	362-1866-21	3011690	. 69	"1600.5 Ratio (Used with 800/1600 AMP Ammeter)
	302-1866-24		3	2000-5 Ratio (Used with 1000/2000 AMP Ammeter)
	302-1868-27		£	2500 5 Ratio (Used with 2500 AMP Single Scale Ammeter)
	302 1866-28	3051480	.!	, 3000 5 Ratio (Usad with 1500/3000 AMP & 3000 AMP Single Scala Ammèters)

Notes 1 Item not stacked replacement available only on special order with long lead time likely.

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#### Generator Control Panal Swith L E D Indicator Lights

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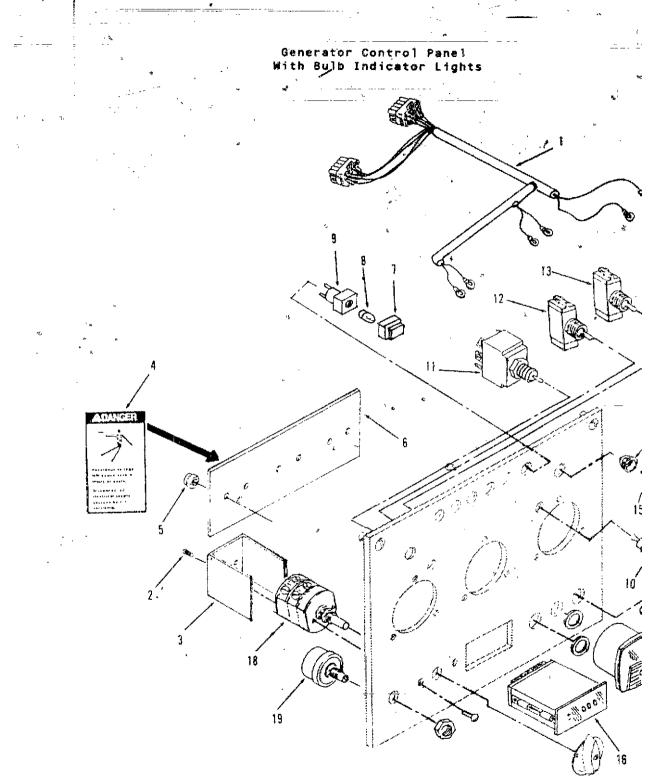
ΰŤΥ PART C€C 24 F 6 DESCRIPTION ÚSĽO PART NO. Lin . Harheas, Wiring (See Separate Pages for Selection " and Applications) y Screw, Machine - Round Hend (#9-32 + 1/4") 2 612-0075 2 Shield Switch 300-3523 ٦ ч Decel (Werning) 98-5387 4 1 Nue Acorn Plastic 5 810 0437 7 Shrald Metern đ 308 3522 Nut Self-lacking HAN (#8 32 ) 141 670-0451 20646 401.3064 Printed Concust Board 10 150 11055 ġ 300-0283 1 Printed Cincust Board 4 LID Lights 300-3282 .053663 4 3053062 Printed Circuit Based 2 (El Lights 10 3000-3281 Switch bogle 15 (AUTOSTART ON/OFF/STANDBY) 3015057 (SYNCHPON121NG) 3015058 1 Switch Toggle (ALARM SILLNCE) 3055138 10 Switch Toggle (PANEL L10015) Light Poont (tess Bulb) 3035149 1.3 3 - 323-0398 3035018 2 1.4 Bulb Incancescent 353 0397-01 15 3035018 2 iens Clear (SYNCHRON12INC) 3056064 1.6 Bulb. Incandescent 3056065 1 17 3056063 Socket Light 19 Switch Selector (Includes knob) 3015860 19 308-0884 Rhecatat 20 303-6288 3058451 Wattnieto 3056071 2% 302 1860 1 Motor (TYPICAL) 2.2 Voltmeter 302 1896 301504 F Enequaricy/RPM 3015044 302-1858 1 Amméter (Sélect as Required) DUAL SCALE 200/400 AMP 302 1871 05 30 (95.0) . 1 · - 1 300/600 AMP 20101862 3015635 400/800 AMP 9015036 30 - 20 × 1-500/1000 AMP 302 1871 06 2051478 102 1864 600/1200 AMP 1015031 1 800/1600 AMP 302 1865 3015038 1 302-1871 01 3015039 ł 1000/2000 AMP 1500/3000 AMP 301-1871-09 3459965 1 2000/4000 AMP 307-1871-10 3059866 1 SINGLE SCALE 1200 AMP 302-1871-02 3015040 Ī, 1600 AMP 302-1871-03 3035041 1 302-1871-04 3015042 2000 AMP 1 2500 AHP 302-1871-07 30514/9 1 3000 AMP 302-1871-08 3051480 1



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Contents Power Generation

#### Generator Control Panel With Bulb Indicator Lights

- - -

QTY PART REF CP S CEC **ÚSED** DESCRIPTION NO. PART NO. PART NO. Harness, Wiring (See Separate Pages for Selection and Applications) 1 2 812-0075 2 Screw, Machine - Round Head (#8-32 x 1/4") 306~3523 Shield, Switch .1 3 Decal (Warning) 4 98-5567 1 Nut, Acorn - Plastic 5 870-0437 7 6 306-3522 1 Shield, Meters tens, Indicator Light 7 3018795 Δ Orange 3018796 1 Red 3018797 1 Green 3018798 2 White (SYNCHRONIZING) 3018799 8 Bulb, Incandescent Ĥ Socket & Socket with Switch 9 7 3018800 Socket, Light Socket, Light with Push Switch Light, Indicator - Red Lens (UPPER/LOWER SCALE INDICATING) 3014667 1 10 3015133 2 Switch, Toggle 11 3015057 (AUTOSTART-ON/OFF/STANDBY) 1 3015058 1 (SYNCHRONIZING) Switch, Toggle (ALARM SILENCE) 12 3055738 1 3035149 Switch, Toggte (PANEL LIGHTS) 13 1 Light, Panel (Less Bulb) Bulb, Incandescent 14 322~0398 3035016 2 15 322-0397-01 3035018 ż Wattmeter 16 3015018 1 Meter 17 302-1856 3015043 1 Voltmeter 302-1858 3015044 1 Frequency/RPM Ammeter (Select as Required) DUAL SCALE 302-1871-05 3039530 200/400 AMP 1 302-1862 3015035 1 300/600 AMP 302~1863 3015036 400/800 AMP 1 302-1871-06 3051478 1 500/1000 AMP 3015037 600/1200 AMP 302-1864 1 302-1865 3015038 1 800/1600 AMP 302-1871-01 3015039 1000/2000 AMP 1 302-1871-09 3059965 1 1500/3000 AMP 302-1871-10 3059966 1 2000/4000 AMP SINGLE SCALE 302-1871-02 3015040 1 1200 AMP 302-1871-03 3015041 1 1600 AMP 302-1871-04 3015042 2000 AMP 1 2500 AMP 302-1871-07 3051479 1 302-1871-08 3051480 3000 AMP 1 3015850 Switch, Selector(Includes Knob) 308-0884 1 18 " 1 19 303-0288 3058451 Rheostat

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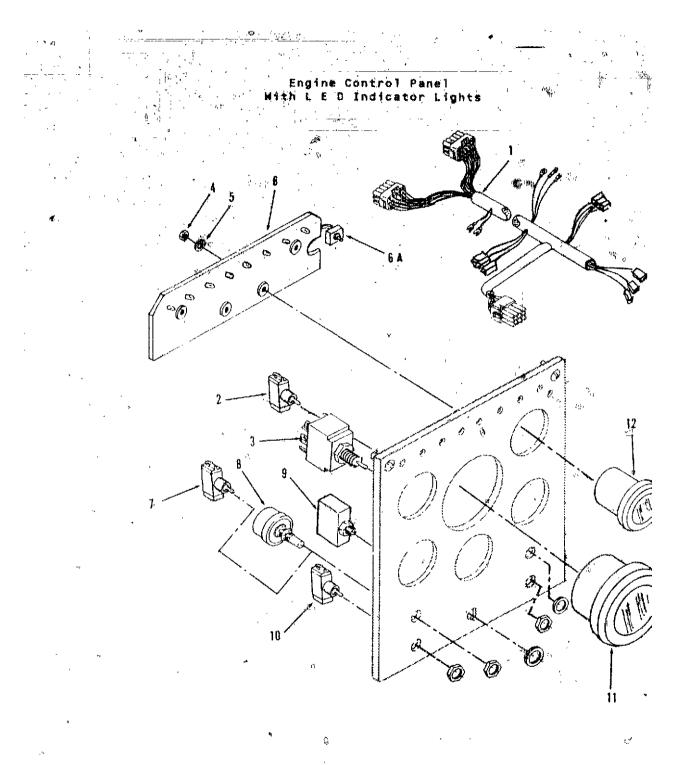
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#### Engine Control Panel, With L E D Indicator Lights

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		in a start		nint ·
REF",	CPS Part NO.	CEC "PART NO."	USED	PART Description
1	338-2252	3053044	`1`	Harnoss, Wiring (Includes items 2 & 3)
. 5		3055486	1	Switch, Toggle (CRANK)
· 3		102057	1	Switch, Toggle (START/RUN/OFF)
4	870-0451	70646	4	Nut, Self-gocking - Hex (#8-32)
15	526-0352	128006	-4	Washer, Flat (3/16")
6	·		•	Pringed Circuit Board (Includes Test Lamp'Switch)
	300-3279	3053060	1,	5 L E D Indicator Lights /
	300-3280	3053061	1	8 L E D Indicator Lights
6A		3055498	1	Switch, Toggle (LAMP TÉST)
7		3015055	1	Switch, Toggle (RAISE/LOWER)
8	303-0290	3015105	1	Potentiometer (SPEED ADJUST)
9	320-1616	3034953	1	Circutt Breaker
10	308-0885-02	104215	1.	Switch, Toggle (RUN/IDLE)
11 -	302-1855	3031734	1	Tachometer
12				Gauge/Meter
-··· ,	193-0400-01	3015232	1	Gauge, Pressure - Oil
-	193-0401-01		1	Gauge, Temperature - 011
	193-0402-01		. 1	Gauga, Temperature - Water
	302-1857-01		1	Voltmeter
	302-1859-01		1	Hourmeter

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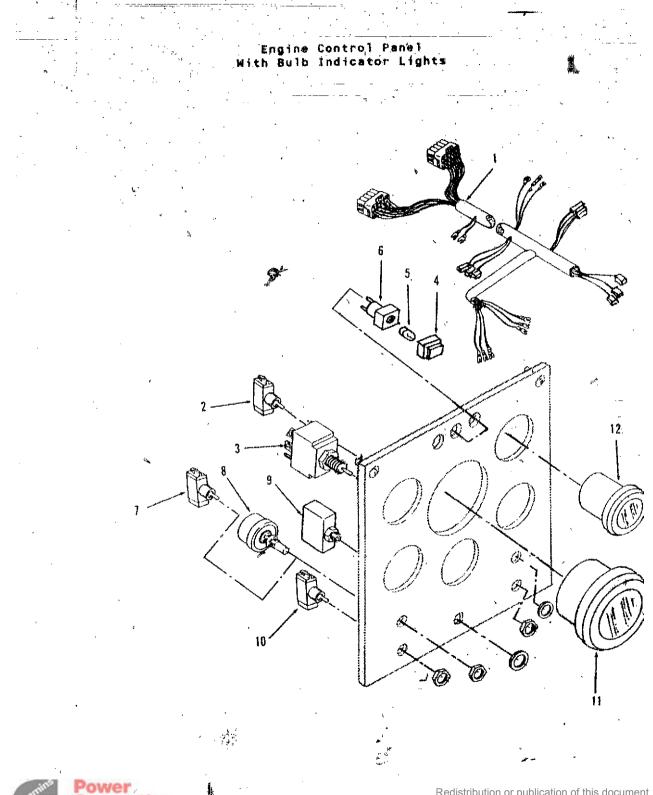
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#### Engine Control Panel With Bulb\_Indicator\_Lights

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OTY. USED PART ŘĔF CPS ĊEG DESCRIPTION PART NO. PART NO. NÓ. Harness, Wiring (Includes items 2 & 3) Switch, Toggle (CRANK) Switch, Toggle (START/RUN/OFF) 3035126 1 1 3055486 1 2 1 102057 Lens, Light (DRANGE) Bulb, Light з 3018795 3 3 3018799 5 Socket, Light 3018800 3 6 Switch.- Toggle (RAISE/LOWER) 3016055 1 7 Potentiometer (SPEED ADJUST) 3015105 303-0290 1 8 Circuit Breaker Switch, Toggle (RUN/IDLE) 320-1016 3034953 1 Q, 308-0885-02 104215 1 10 Tachometer 11 302-1855 3031734 1 Gauge or Meter Gauge; Pressure - 011 12 1 193-0400-01 3015232 Gauge, Temperature - 011 193-0401-01 3015233 1 Gauge, Temperature - Water 193-0402-01 3015234 1 Voltmeter 302-1857-01 3015235 1 Hourmeter 302-1859-01 3035766 1

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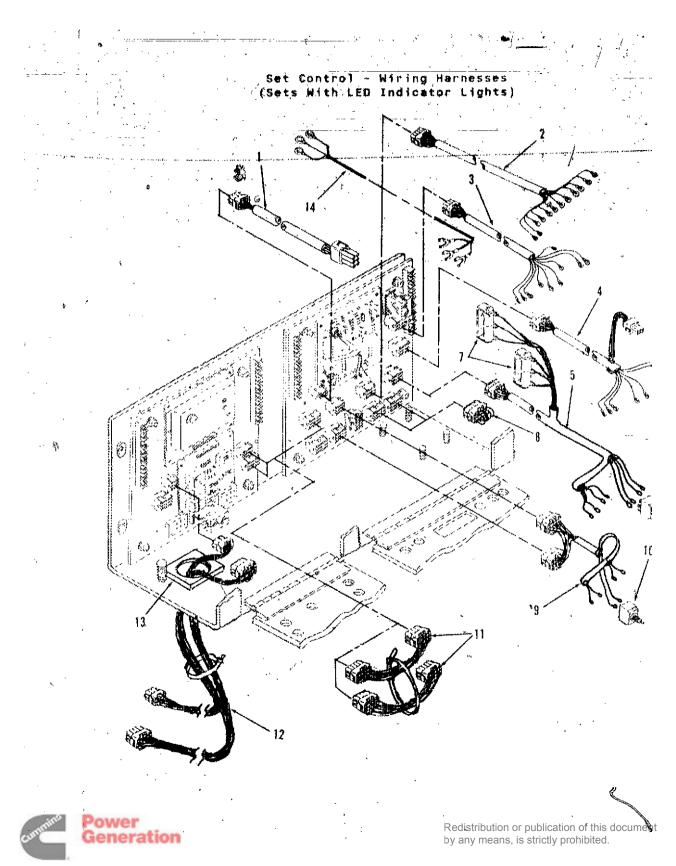
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## Set Control - Wiring Harnesses (Sets With LED Indicator Lights)

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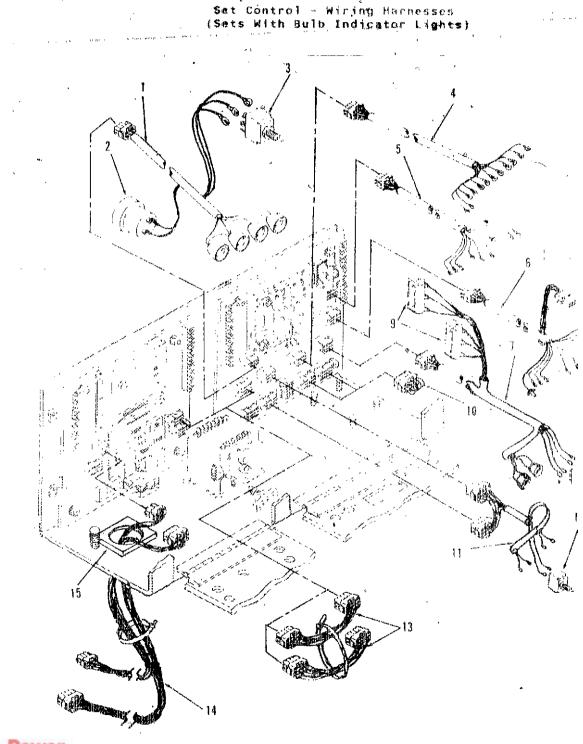
.: }	ref No.	CPP PART NO.	CEC PART NO.	USED.	PART 2 0 DESCRIPTION
•	1.	338-2255	3053048	. 1	Harness, Wiring (PCB TO LED PCB)
	· 2 ´	338-2258	3056066	1	Harness, Wiring, (PCB TO WATTMETER)
	3	336-2250	3035147	1	Harness, Wiring (PCB TO VOLT/AMP SELECTOR SWITCH)
	4	338-2253	3053046	1	Harness, Wiring (PCB TO AC METER)
	.5	338-2383	3053033	1 .	Harness, Wiring (PCB TO RESISTORS AND SYNCHRONIZING SWITCH; Includes The Resistors and Switch)
	6		3015058	1	Switch, Toggle (SYNCHRONIZING)
	2		3055739	2	Resistor, Wirewound with Mounting Bracket
					Attaching Parts for Resistor
		860-0003	3043636	4	Nut, Hex
		050~0D10	3043637	4	Washer, Lock - Spring
	8	338-2312	3056089	2	Harness, Wiring (HIGH/LOW WYE ADAPIER)
-	9	338-2256	3056061	1	Harness, Wiring (PCB TO PANEL LIGHTS AND SWITCH, Includes The Switch)
	10		3035149	1	Switch, Toggle (PANEL LIGHIS)
	11	338-2248,,	3035132	1	Harness Assembly, Wiring (ENGINE CONTROL PCB TO GENERATOR CONTROL PCB)
-	12			- 1	Harness Assembly, Wiring - With Shielded Leads (ENGINE WIRING HARNESS TO ENGINE CONTROL PCB, Select Length as Applicable)
		338-2301-01	3053037	1	5 3 Feet
		338-2301-02		1	7.3 Feet
	,	338-2301-03		1	9,3 Feet
1		338-2301-04		1	11 3 Feet
		338-2301-05		1	15 3 Feet
		338-2301-06	3053042	1	25 3 Feet
		338~2301-07		1	50 0 Feet
		338-2301-08		1	1 3 Feet
	13	331-0525	204494	1	Gasket, Conduit
	14	338-2251	3044442	1	Harness, Wiring (PCB/TO GEN TERMINAL BLOCK)

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## Set Control - Wiring Harnesses (Sets With Bulb Indicator Lights)

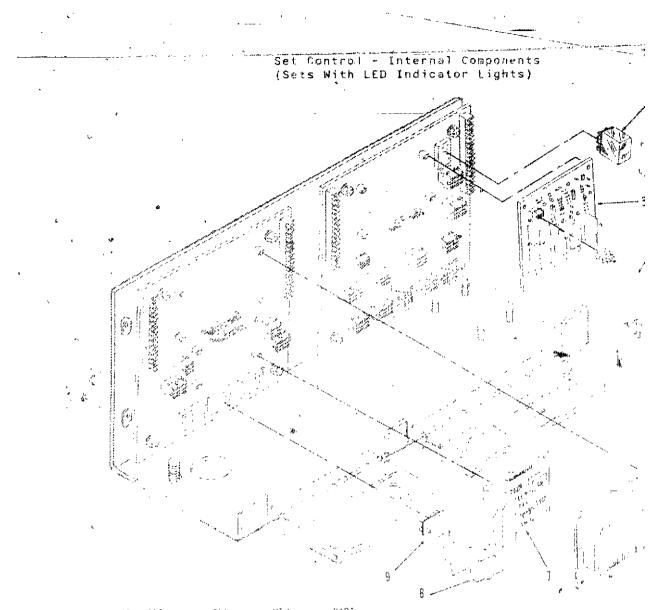
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•				. •	
	REF NO.		GEC PART NO.	OTY USED	PART DESCRIPTION
	1	•	3035145	t	Harness, Wiring (PCB TO HORN, SWITCH AND INDECATOR LIGHTS; Includes The Horn and Switch)
	× م		3015118	1	Horn, Electrical = 24 VDC
	- ×		3015056	i	Switch, Toggle (ALARM SILENCE)
	3		3035142	i	Nachasa Wiring (PCB TO WANT TRANSDUCEN)
	5	-338-2250	3035147	1	Harnaas, Wiring (PCB TO VOLT/AMP SELECTOR SWITCH)
•		0330 - <b>1</b> 130	3035144	ī	Harness, Wiring (PCB TO AC METER AND RED INDICATOR LIGHTS.
	0			•	Includeá Red Indicator Lights)
	7		3035146	1	Harness, Wiring (PCB TO RESISTORS, SYNCHRONIZING LIGHTS AND
	,			-	SWITCH; Includes The Resistors and Switch)
	9		3015058	1	Switch, Toggle (SYNCHRONIZING)
		•	3015109	2	Resistor, Wirewound with Mounting Bracket
	ĩ				Attaching Parts for Remistor
	Į.	860-0003	3843636	4	Nut, Hex (#S-40)
	9	850-0010	3043637	4	Wesher, Lock - Spring (#4)
	10 .		3035140	2	Harness Wiring (HIGH/LOW WYE ADAPTER)
	11	338-2256	3056061	1	Harness, Wiring (PCB TO PANEL LIGHTS AND SWITCH, Includes
	<b>11.1</b>	000 1,200			The Switch)
-	12	•	3035149	1	Switch, Toggle (PANEL LIGHTS)
	13	338-2248	3035132	1	Harness Assembly, Wiring (ENGINE CONTROL PCB 10 GENERATOR
	1.0	440 CE-10			CONTROL PCB)
	14				Harness Assembly, Wiring (ENGINE WIRING HARNESS TO ENGINE
	1-			5	CONTROL PCB, Select Length as Applicable)
		338-2276-01	3035127	1	5.3 Feet
		338-2276-02		1	73 Freet
		338-2276-03		1	\$.3 Feet
		338-2276-04		1	11 3 Feet
		338-2276-05		1	් 15 3 Feet ද . ්
	13	331-0525	204494	ī	Gasket, Conduit
	15			-	· · · · ·



REF	CPP	CEC	Q1 K	PART
NU	PAR" NO	PART NO	្រងមិម	DE SCPIPTIO <del>N</del>
1	367-2623	3034057	,	Hereinen Helli.
2	567-2622	3034948	4	έτε <b>*</b> Σ <sup>−2</sup>
à	538-2254	505 (C. 7	•	Harness with ng - Autoboth to the Dictory Cwelton
4		3011057		Twitten Togg e (Autoster))
4	500-3017	310.4341	<u>۱</u> ۰	Bonno Metrina Circa ri Antostrit
		-		Attaching Parts for Buard
	815-0802	10310	L.	Surew, Machine - Pan Head Rends / U.b.,
	850-1020	70262	4	Washer Loom - Spring (##)
6	151-0583 03		•	(prend) (prend
-				Attacking Parts for doard
	815-0B02	1010	4	A HE MARK AND A REAL REAL AND A CONTRACT AND A REAL AND A REAL AND A REAL AND A REAL AND A REAL AND A REAL AND A
		70262	đ	Washer Look - Strang (191
7		3034453	• •	"เอากาว" เป็นเป็นอยุชุส
• •				Attaching Parts for Edand
	815-0802	70310	4	The Man File Pro Huge Roman States
	850-1020	70262	4	Nasher Juch - San Ng (Ab)
1Cg	307-2623	3034957	1	A DATE AND A DATE AND A DATE AND A DATE AND A DATE AND A DATE AND A DATE AND A DATE AND A DATE AND A DATE AND A
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