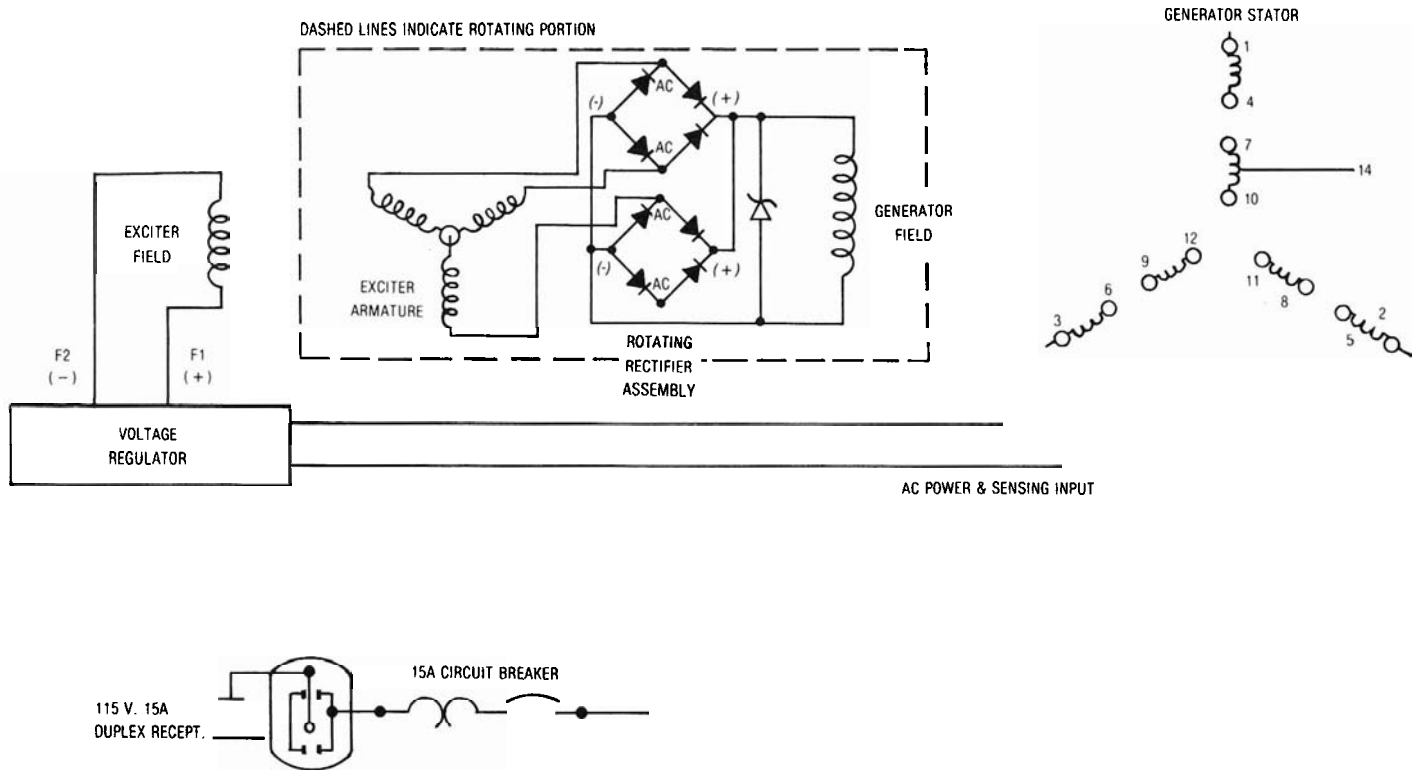


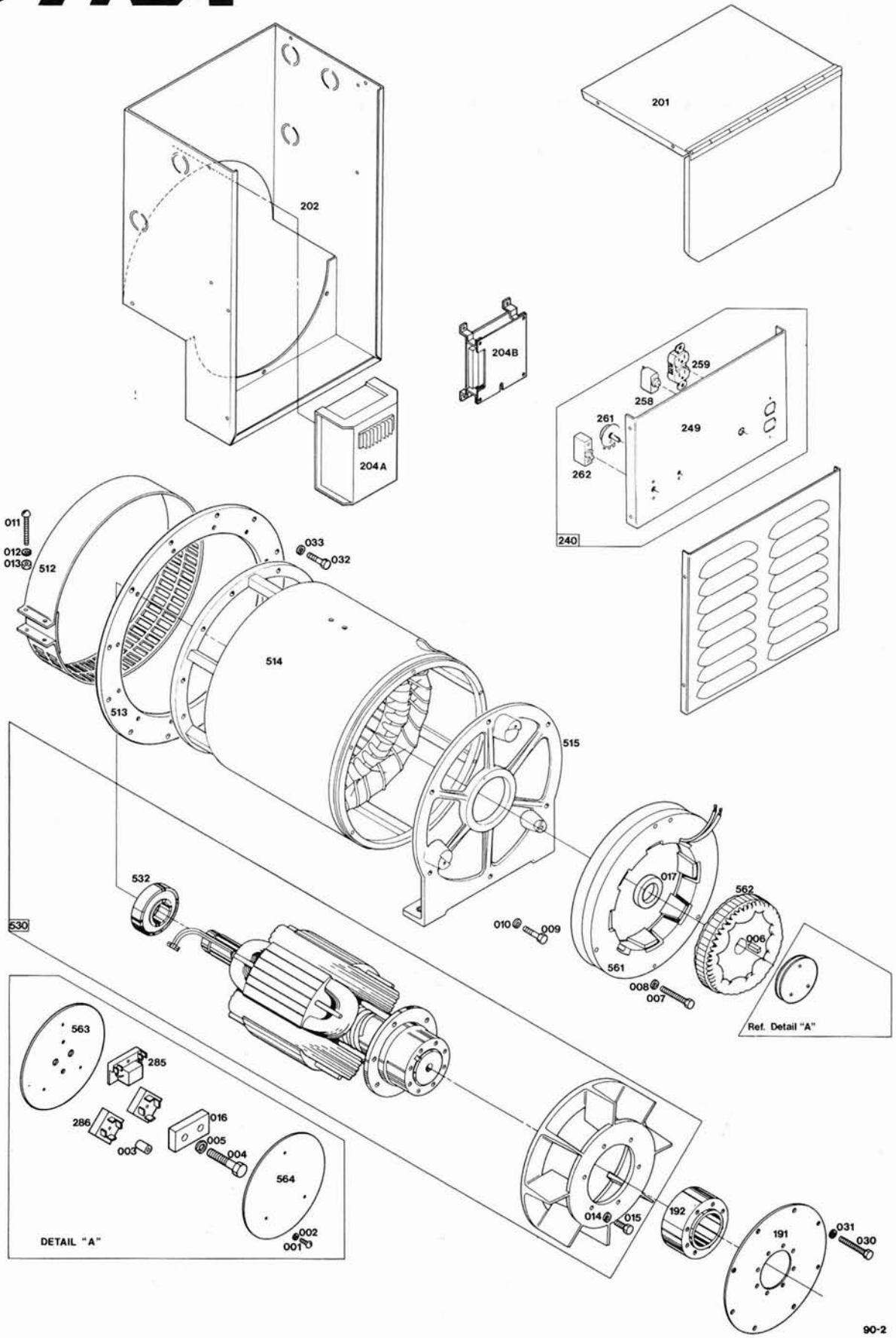
### ILLUSTRATED PARTS LIST

#### 12/13 BROAD RANGE RECONNECTABLE



### SCHEMATIC DIAGRAM

This IPL contains wiring, illustration, parts list, ordering information and technical data to perform routine maintenance on this generator. Consult factory with model no., serial no. and test data for further assistance.



**MODEL CSA12PD4G-23/A**

REF. SYMB.	DYNA P/N	QTY.	DESCRIPTION	REF. SYMB.	DYNA P/N	QTY.	DESCRIPTION
001	42784	3	Screw 10-32 x 1/4	201	91639	1	Hinged Cover
002	484	3	Lockwasher #10 Split	202	91642	1	Welded Box Assembly
003A	91454	3	Threaded Spacer	203	91645	1	Louvered Cover
003B	91331-11	3	Sleeving	204A	81111-1	OPT	Voltage Regulator KR4FF
004	93617-5	2	Cap Screw Hex Hd. 7/16-14 x 1 1/2 (SAE—5 Min.)	204B	92585-3	OPT	Voltage Regulator XR2004
005	90570-1	2	Lockwasher 7/16 Split	240	91851	1	Recessed Recept. Panel
006	93622	1	Key 1/4 x 1/4 x 3/4 Long	249	91786	1	Recessed Recept. Panel (Bare)
007	91431	3	Cap Screw Hex Hd. 1/4-28 x 2 3/4	258	91286	1	Circuit Breaker—15 Amp P.B.
008	479	3	Lockwasher 1/4 Split	259	24749	1	Duplex Receptacle— NEMA 5-15R
009	91256	6	Cap Screw Hex Hd. 7/16-14 x 1 3/4	261	81111-2	OPT	Rheostat—VR Control
010	90570	6	Lockwasher 7/16 Split	262	81762-2	OPT	Field Circuit Breaker—2.5 Amp
011	639	2	Machine Screw Rd. Hd. 1/4-20 x 1 1/2	285	91455	1	Surge Suppressor
012	479	2	Lockwasher 1/4 Split	286	91452	2	Rectifier
013	638	2	Hex Nut 1/4-20	512	91337	1	Cover Impeller
014	481	6	Lockwasher 3/8 Split	514	91527-6	1	Shell & Stator Assembly
015	464	6	Cap Screw Hex Hd. 3/8-16 x 1 3/4	515	91517	1	End Bracket
016	93616	1	Exciter Retainer Bar	530	91528-1	1	Rotor Assembly
017	93615	1	Exciter Support Collar	532	91111	1	Bearing
				561	91665	1	Exciter Stator
				562	91442	1	Exciter Rotor
				563	91413	1	Rotating Rectifier Assembly
				564	91411-1	1	Cover (Rotating Rectifier)

**TABLE 3-I/SAE—STANDARD SAE ADAPPTIONS—SHELL LENGTH I**

HOUSING/FLYWHEEL ADAPTION	PART #	DRIVE DISC (2)		DISC SPACER		CAPSCREWS		HSG ADAPTER		CAPSCREWS		"G" DIM (REF ONLY)
		REF 191	DIM	REF 192	DIM	REF 30	QTY	REF 513	DIM	REF 32	QTY	
SAE4/C106	92296-01	91523	8 1/2	NONE		91658-1	6	NONE	14 1/4			1 3/16
SAE4/C107	92296-02	91633	9 1/2	NONE		91658-1	6	NONE	14 1/4			1 3/16
SAE4/C108	92296-03	91564	10 3/8	91524	1 1/4	91658-6	6	NONE	14 1/4			2 7/16
SAE4/C110	92296-04	91565	12 3/8	91524-1	1 5/16	91658-4	6	NONE	14 1/4			2 1/8
SAE3/C108	92296-05	91564	10 3/8	91524-2	1 3/4	91658-8	6	91567	16 1/8	91658-2	12	2 7/16
SAE3/C110	92296-06	91565	12 3/8	91524-3	1 7/16	91658-6	6	91567	16 1/8	91658-2	12	2 7/16
SAE3/SP111	92296-07	91566	13 7/8	91524-4	7/8	91658-4	6	91567	16 1/8	91658-2	12	1 9/16
SAE5/C106	92296-10	91523	8 1/2	91524-5	9/16	91658-3	6	91929	12 3/8	91658-2	12	1 3/16
SAE5/C107	92296-09	91633	9 1/2	91524-5	9/16	91658-3	6	91929	12 3/8	91658-2	12	1 3/16
SAE5/C108	92296-11	91564	10 3/8	91524-7	1 13/16	91658-7	6	91929	12 3/8	91658-2	12	2 7/16

NOTE 1: REF 31 & 33—Use lockwasher #481 with capscrew number series 91658

**PARTS ORDERING INFORMATION REQUIRED**



To fill your order for service parts, please advise the complete Generator model number and serial number, part number(s), and part description. If in doubt, consult the factory prior to placing the order. Send all parts orders to Dyna Technology, Inc., 225 South Cordova Ave., Le Center, MN 56057.

# TECHNICAL DATA

## GENERATOR SPECIFICATIONS:

KW—12; Volts—120/139 Volt Coil Groups; PF—0.8; PH—3/1; Hz—60; RPM—1800

**Normal Voltage:** 12/13 Lead Broad Range  
Stator Output Reconnectable, Adjustable  $\pm$  10%

**Residual Voltage:**  
50 Volts A.C. L to L; 25 Volts A.C. L to N (When connected for 240 volt)

**Resistance:**  
Exciter Field—F1-F2 25 ohms  
Exciter Rotor—.35 ohms  
Rotating Field—3-5 ohms  
Stator Main—0.29 ohms L to N

**Separately Excited:**  
12 VDC to Exciter Field: F1 Positive-F2 Negative  
Approximately 200 Volts L to L; 100 Volts L to N

## BASIC TEST PROCEDURE:

Refer to illustration for component location by Reference Number.  
Example: No output—Check rectifiers, Reference Number 286.

Reference Number 563 is rotating rectifier assembly; there are two Reference Number 286 rectifiers mounted on rectifier assembly.

### No Output:

- Check for loose or open connections.
- Check for residual voltage output, at Stator Terminals G1, G2, G3 and N.
- Check rectifiers, Reference Number 286.
- Check winding resistance, opens and grounds, Reference Numbers 514, 530, 561, and 562.
- Separately excite and check output.

### Low Voltage—No Load:

- Check speed (1800 RPM nominal).
- Check generator load.
- Check for loose connections.
- Check rectifiers, Reference Number 286.
- Check winding resistance, Reference Numbers 561, 562, 514 and 530.

### Low Voltage—Full Load:

- Check speed (1800 RPM nominal).
- Check generator load.
- Check for loose connections.
- Check winding resistance, Reference Numbers 561, 562, 514 and 530.