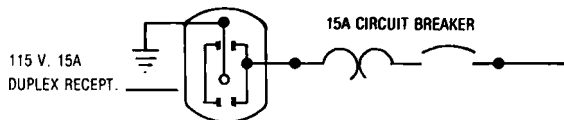
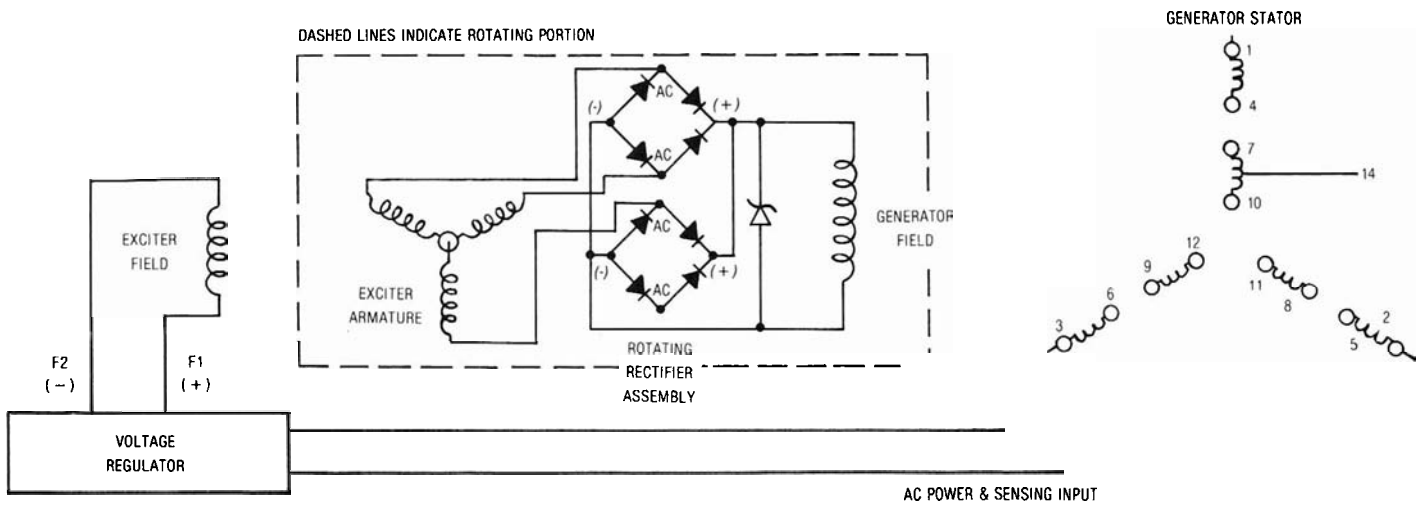


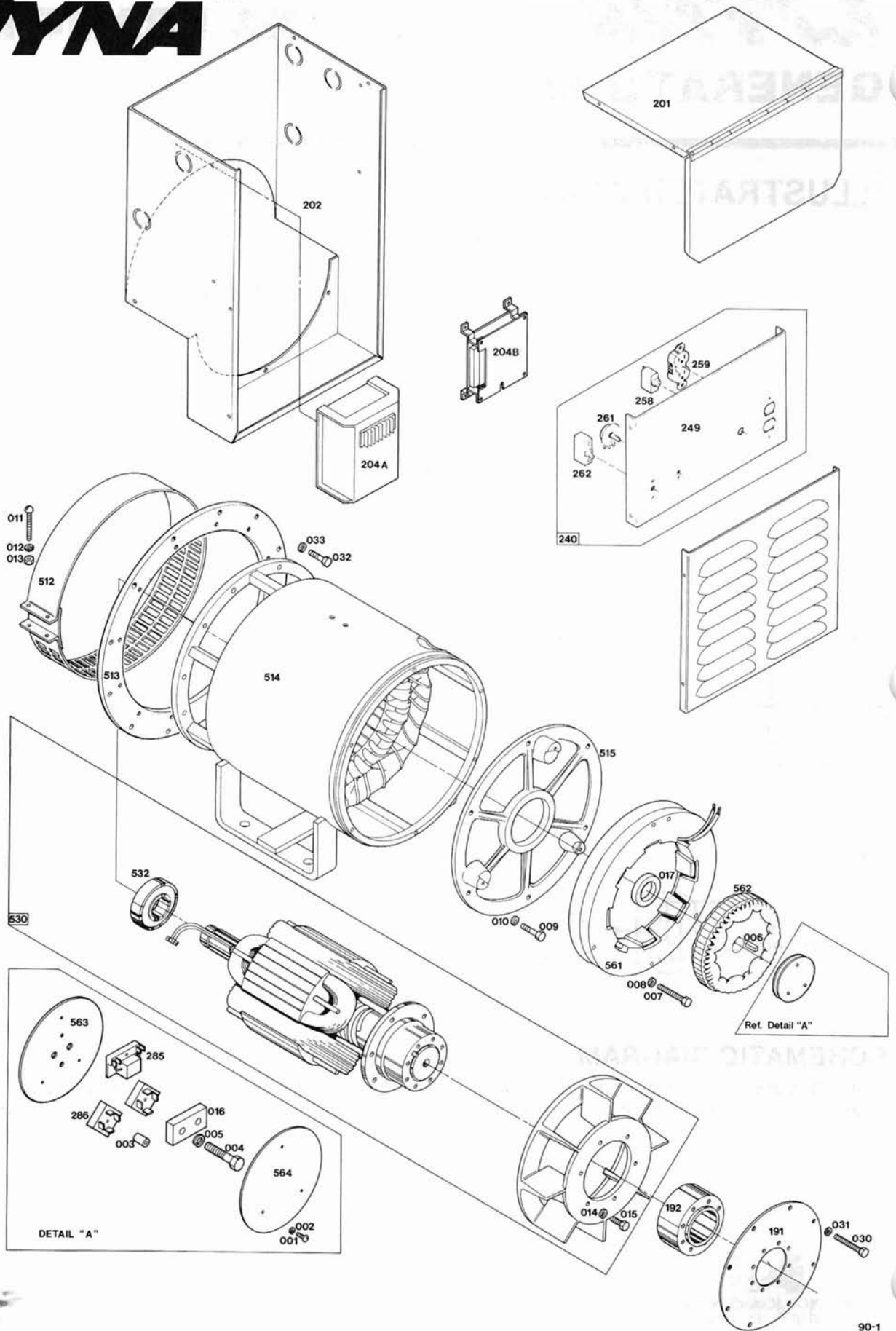
### ILLUSTRATED PARTS LIST

#### 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 CSA35PD4G-23  
MODEL CSA40PD4G-23  
MODEL CSA50PD4G-23**

REF. SYMB.	DYNA P/N	QTY.	DESCRIPTION	REF. SYMB.	DYNA P/N	QTY.	DESCRIPTION
001	42784	3	Screw 10-32 x 1/4	204B	92585-3	OPT	Voltage Regulator XR2004
002	484	3	Lockwasher #10 Split	240	91851	1	Recessed Recept. Panel
003A	91454	3	Threaded Spacer	249	91786	1	Recessed Recept. Panel (Bare)
003B	91331-11	3	Sleeving	258	91286	1	Circuit Breaker—15 Amp P.B.
004	93617-5	2	Cap Screw Hex Hd. 7/16-14 x 1 1/2 (SAE—5 Min.)	259	24749	1	Duplex Receptacle— NEMA 5-15R
005	90570-1	2	Lockwasher 7/16 Split	261	81111-2	OPT	Rheostat—VR Control
006	93622	1	Key 1/4 x 1/4 x 3/4 Long	262	81762-2	OPT	Field Circuit Breaker—2.5 Amp
007	91431	3	Cap Screw Hex Hd. 1/4-28 x 2 3/4	285	91455	1	Surge Suppressor
008	479	3	Lockwasher 1/4 Split	286	91452	2	Rectifier
009	91256	6	Cap Screw Hex Hd. 7/16-14 x 1 3/4	512	91337	1	Cover Impeller
010	90570	6	Lockwasher 7/16 Split	514A	91613-2	1	Shell & Stator Assy. 35 KW / 3 PH
011	639	2	Machine Screw Rd. Hd. 1/4-20 x 1 1/2	514B	91613-3	1	Shell & Stator Assy. 40 KW / 3 PH
012	479	2	Lockwasher 1/4 Split	514C	91613-8	1	Shell & Stator Assy. 50 KW / 3 PH
013	638	2	Hex Nut 1/4-20	515	91620	1	End Bracket
014	481	6	Lockwasher 3/8 Split	530A	91654-2	1	Rotor Assembly—35 KW
015	464	6	Cap Screw Hex Hd. 3/8-16 x 1 3/4	530B	91654-3	1	Rotor Assembly—40 KW
016	93616	1	Exciter Retainer Bar	530C	91654-4	1	Rotor Assembly—50 KW
017	93615	1	Exciter Support Collar	532	91627	1	Bearing
201	91639	1	Hinged Cover	561	91665	1	Exciter Stator
202	91642	1	Welded Box Assembly	562	91442	1	Exciter Rotor
203	91645	1	Louvered Cover	563	91413	1	Rotating Rectifier Assembly
204A	81111-1	OPT	Voltage Regulator KR4FF	564	91411-1	1	Cover (Rotating Rectifier)

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

HOUSING/FLYWHEEL ADAPTION		DRIVE DISC (2)		DISC SPACER		CAPSCREWS		HSG ADAPTER		CAPSCREWS		"G" DIM (REF ONLY)
PART #		REF 191	DIM	REF 192	DIM	REF 30	QTY	REF 513	DIM	REF 32	QTY	
SAE3/C108	92291-08	91628	10 3/8	91632-1	7/8	91658-4	8	NONE	16 1/8			2 7/16
SAE3/C110	92291-09	91629	12 3/8	91632	9/16	91658-3	8	NONE	16 1/8			2 1/8
SAE3/SP111	92291-10	91629-1	13 7/8	NONE		91658-1	8	NONE	16 1/8			1 9/16
SAE4/C108	92291-11	91628	10 3/8	91632-4	1 7/8	91658-8	8	91630	14 1/4	91658-3	12	2 7/16
SAE4/C110	92291-12	91629	12 3/8	91632-3	1 9/16	91658-7	8	91630	14 1/4	91658-3	12	2 1/8
SAE2/C110	92291-13	91629	12 3/8	91632-2	1 1/8	91658-5	8	91631	17 5/8	91658-2	12	2 1/8
SAE2/SP111	92291-14	91629-1	13 7/8	91632	9/16	91658-3	8	91631	17 5/8	91658-2	12	1 9/16

**TABLE 3-III/NSA—SPECIAL (NON-SAE) ADAPPTIONS**

*SP3/SP111	92291-15	91629-1	13 7/8	91632	9/16	91658-3	8	NONE	16 1/8			2 1/8
SAE2/*DD*	92291-19	92339	15 1/2	NONE		91658-1	8	92363	17 5/8	91658-2	12	2 3/32

NOTE 1: REF 31 & 33—Use lockwasher #481 with capscrew number series 91658  
 2: \*SP3—Nonstandard variation of the SAE3  
 3: \*DD\*—Detroit Diesel "Square Drive"

**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—35/40/55; Volts—120 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

**Resistance:**  
Exciter Field—F1-F2 25 ohms  
Exciter Rotor—.35 ohms  
Rotating Field—3-5 ohms  
Stator Main—0.10 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.