

Instruction Booklet for GETEC Hydra-Max Hydraulic Generators

Model _____
HMT13MT

GPM __ 10 .6cu in _____
PSI __ 2500 _____

ALTEC 991005718

T13314PCTT525208

Hydro-Max™

General Installation

The Hydro-Max™ is a hydraulically-driven AC generator that will deliver its rated output power when the proper flow is connected to its hydraulic drive. Oil temperature should be between 100-140° F. A 10 micron filter is also recommended to maintain the drive at its maximum performance. Depending on the size of the reservoir, an oil cooler must be used; the smaller the reservoir, the larger the cooler.

The tank should **NEVER** be smaller than 2 times the required GPM.

When starting a new hydraulic system, we strongly recommend that you connect the pressure line to the return line, bypassing the hydraulic generator drive. Operate the system for 10 minutes that way. This will clean the system; otherwise all kinds of problems will occur. After connecting the pressure and return line to the generator's hydraulic drive, start your system at a low speed, slowly increasing the speed until you reached the proper operating speed. While setting up a hydraulically-driven generator, it is necessary to check the speed setting of the hydraulic drive, since most systems will vary in many ways (temperature - flow - viscosity/type of oil - etc.) from our test set up.

NEVER allow the generator to exceed 3900 RPM. Damage caused by overspeed is NOT covered by the Generator warranty.

The return line pressure, under no circumstances, should reach 100 PSI or seal-failure will occur.

The case drain must be connected directly to the tank (do **NOT** connect to return line). Return line must be 3/4 or larger.

The Model HMT13M is a 3 Phase AC Generator that operates at 3600 RPM

It is powered by a Bend Axis Hydraulic Motor .

The Motor is connected to the Generator via a Motor Mount and 2 Jaw type Couplings. The Motor Mount is a very precise machined part that provides a perfect Motor to Generator alignment. The Generator provides 208 Volt of 3 Phase Power and at the same time 120 Volt frome each Phase to Neutral.

This Generator is rated at 13 kva of Power Output.

The Compound Transformer Design provides extremely high Motor Starting.


The Compound Transformer also functions also as a Voltage Regulator. Not like a common Generator Design this Compound Transformer will slightly increase the Voltage as a Load is supplied.

The Voltage is also controlled by the Speed of the Generator.

CAUTION

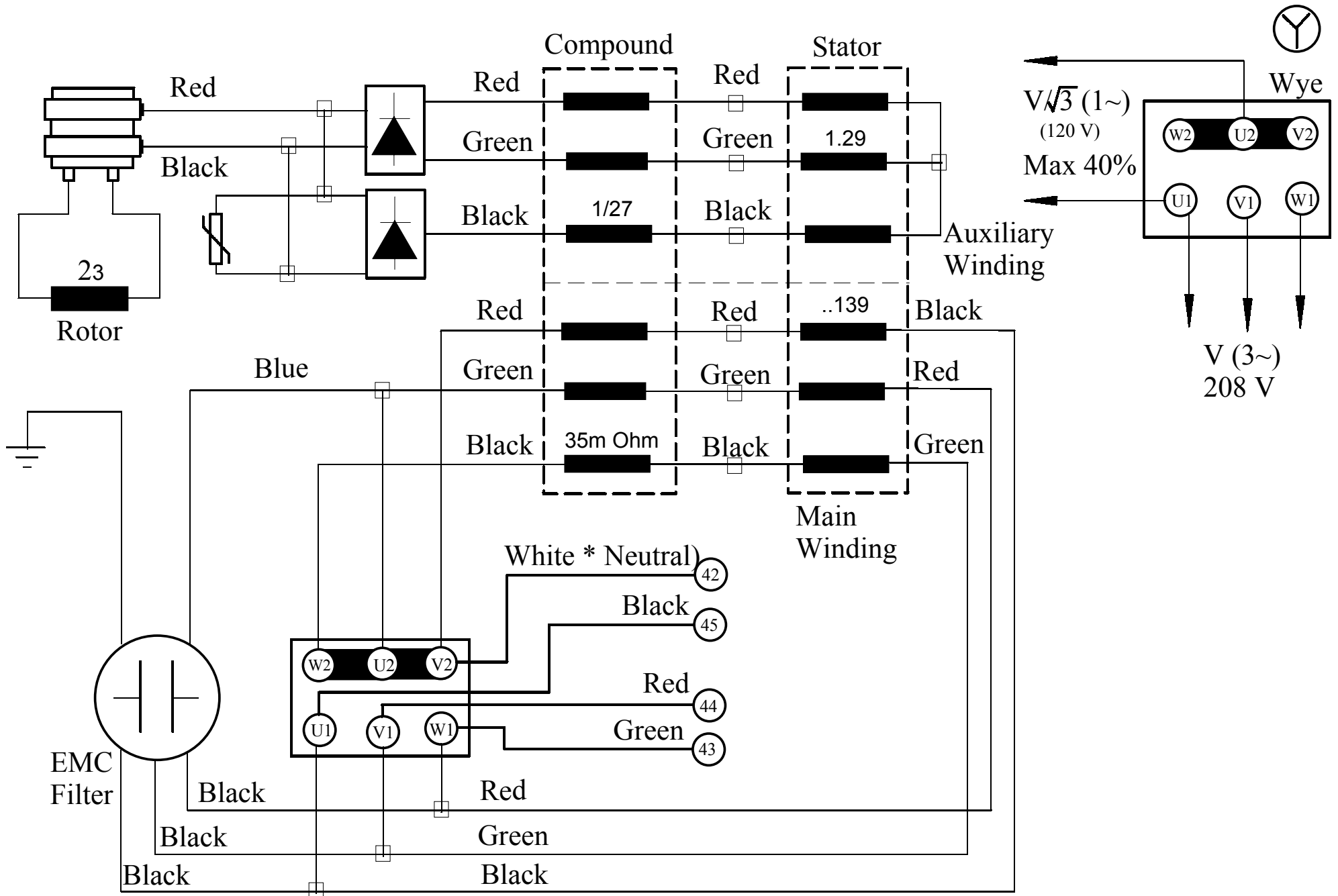
If Generator exceeds 3720 RPM internal Damage will ocure and this is not covered under Warranty.

Caution



When used with customer
supplied flow regulator, use
extreme caution on initial setup.
Overspeed will cause physical
damage and is not covered under
manufacturer's warranty.

ET-100 3 Phase 120/208



GETEC 100-3Ph Parts List

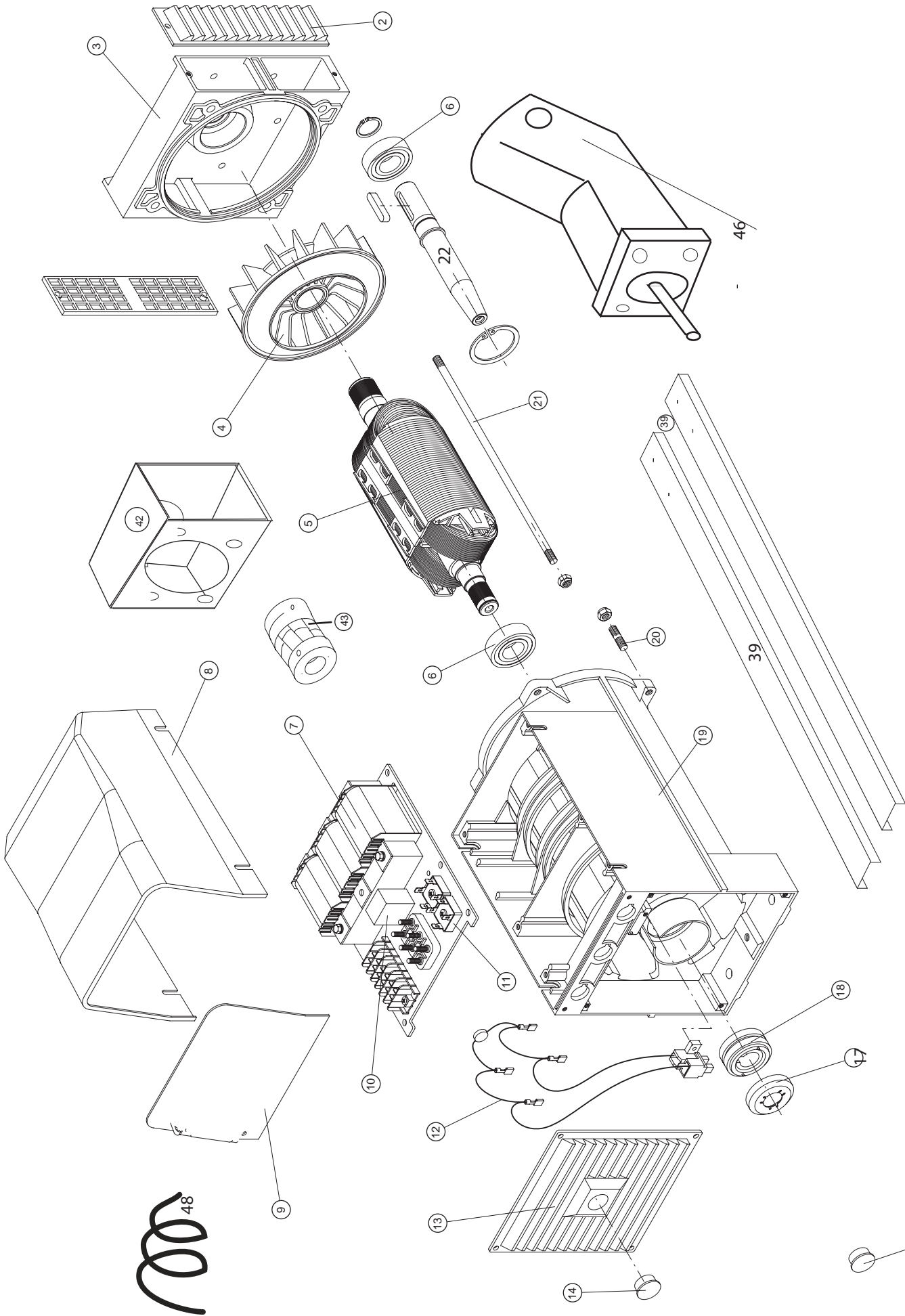
Page 1 of 2 Mobil Tool

Item #	GETEC #	Description	List Price
2	60977	Front Grid	
3c	600978	Front Shield B3-B14	
4a	600979	Fan	
5e	600980	Rotor 100-3ph 13.0	
6	600937	Bearing C.E.	
7e	600981	Compound for 100-3ph 13.0 120/208V	
8a	600982	Black top cover	
9a	600983	Blank panel ET	
10	600984	EMC filter	
11	600985	Field rectifier bridge	
12	600986	Brush-holder & brushes & varistor	
13	600987	End cove	
14	600988	Tap	
17	600990	Slip ring cover	
18	600991	Slip ring	
19e	600992	Housing L & Stat. 100-3ph 13.0 208V0	
20	600993	Stay bolt – M8x300	
21	600994	Shaft stay bolt	
22	600995	KIT: from J609B to B3/B14	
39	600674	Rails (set)	
42	601010a	Motor Mount,2Bolt	
43a	601011	Coupling Set 24 & 20 MM	
43b	601012	Coupling Set 24 & 18 MM	
46a	60101	Hydraulic Motor- Rex Roth 4 Bolt	
46b	601014	Fitting Kit for Hydraulic Motor	

GETEC 100 3-Ph Parts List

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Item #	GETEC #	Description	List Price
48	601016	Power Cord 25 ft.	
49	601015	Romex Connector	
46	601357	2 Bolt Rexroth Motor.	
100	601017	Complete Generator less Hydraulic Motor & fitting kit	
		Complete Generator Including Piston Motor	



HMTM 13 PARTS

Voltage Adjustment for HMT13M

Remove Black top Cover.

Locate 2 Screws to loosen for Adjusting Voltage.

Loosen both Bolts.

With Screwdriver lift some Laminations a small amount.

Retighten the 2 Screws. Check voltage at 60

HZ, should be between 115 and 125 volt.

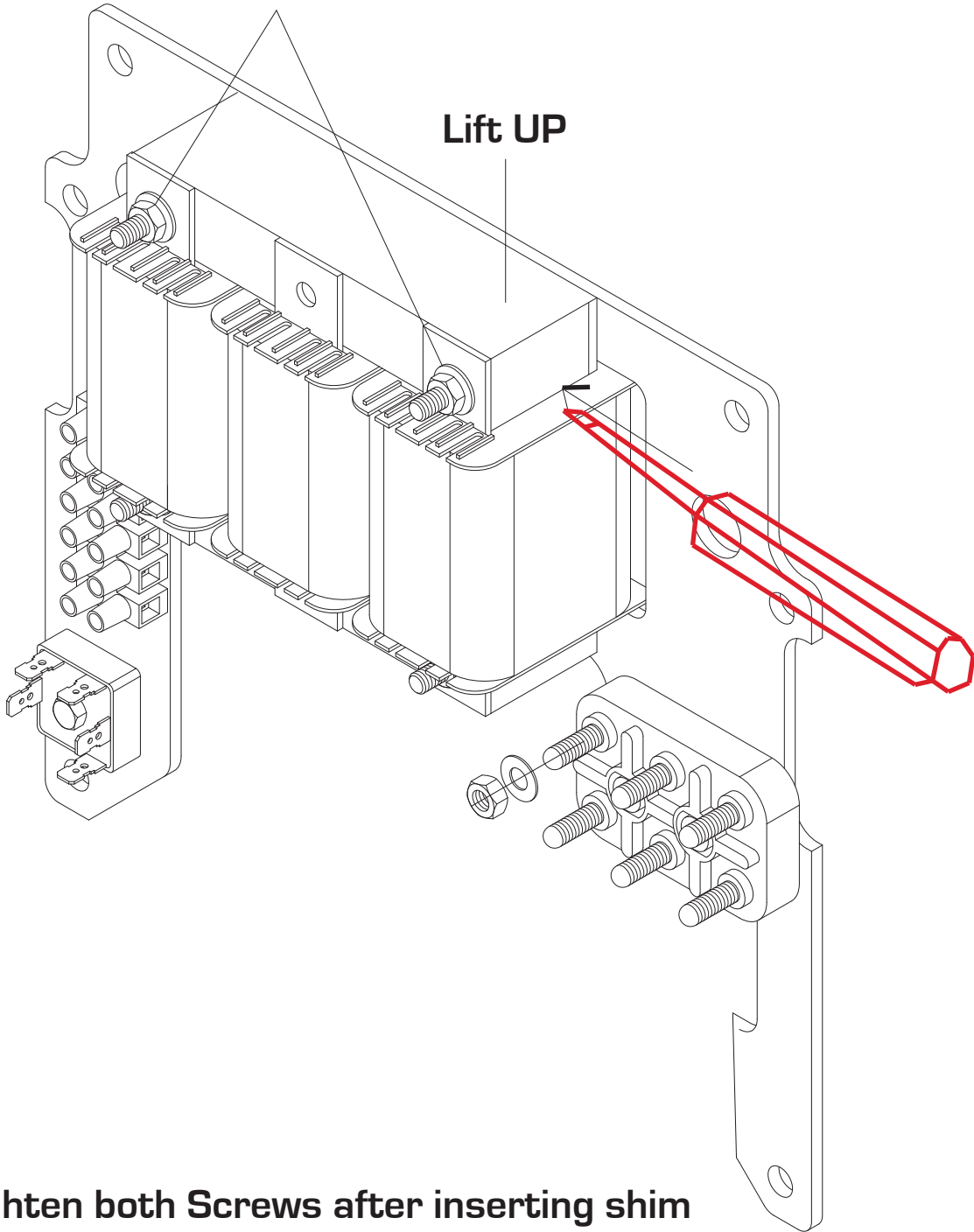
If Voltage is too high move Laminations closer to the Transformer Coils.

See two Drawings for more Details.

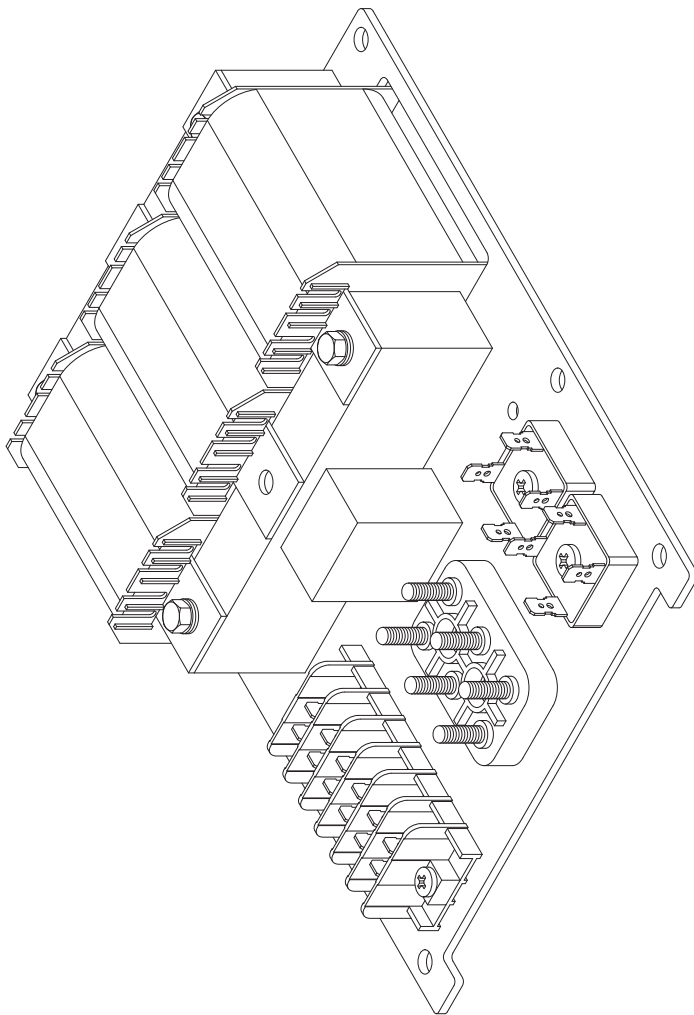
Loosen this two screws

Lift UP

Increase Voltage
Decrease Voltage



Retighten both Screws after inserting shim



Trouble Shooting

If Generator fails to produce Voltage check the following.

Check Resistance of Rotor.

Remove Red and Black wire from Rectifier going to the Brushes and measure Resistance, should be close to 30 Ohms. If open or very high check Condition of Brushes and condition of Slipping.

Check 2 Rectifiers located on right side right behind the Front Panel.

Check Excitation Windings as follows

Remove the 3 wires coming from the Transformer from the Rectifiers and check resistance between them, should be 0.02 Ohms.

Check Resistance between the Main Windings as follows

Measure Resistance between Terminal 1-2-3 on Main Terminal Block, should be 0.8 Ohms.

Check Resistance between 1-2-3 and the Neutral Bar on the Main Terminal Block, should be .4 Ohms.

