

Instruction Booklet for GETEC Hydra-Max Hydraulic Generators

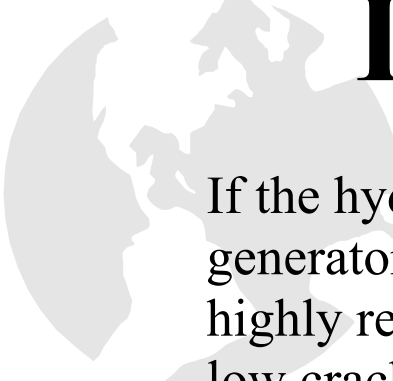
Model 620-20 _____ GPM 13 _____
PSI 2000 _____

Hydro-Max Theory and Operation

The Hydro-Max hydraulic generator is a hydraulically-powered alternating current (AC) generator. With the minimum recommended flow passing through the motor, the generator is spinning at 3720 and produces 110 Volt AC at 62 Hz. As the load is supplied to the generator, the voltage will increase to 120 Volt and the frequency will stabilize at 60 Hz (3600 RPM). The voltage is maintained via a capacitor (voltage regulator). The precise mF the capacitor is matched at the time of manufacture of the generator. Should the generator drop below 3000 RPM, the voltage will also drop at a very steep curve. Changing the mF of the capacitor will also vary the voltage.

The built-in flow control on the motor will maintain the generator's speed as long as the flow does not drop below the recommended minimum or exceed the maximum allowed flow. If the temperature of the hydraulic oil exceeds 160 F, some slippage will occur and the generator will not be able to maintain its proper speed. The standard voltage is set up for 120 volts but can very easily be changed by the customer as needed.

Important Hydraulic Circuit Installation Information



If the hydraulically-driven welder/generator or generator is mounted below the system tank, it is highly recommended that a check valve with a very low cracking pressure is installed in the case drain line (free flow motor to tank, blocking tank to motor). This will eliminate seal leakage during non-use time. It is also recommended that the case drain be connected directly to the top of the tank and not through a cooler or filter.

Hydro-Max™

General Installation

The Hydro-Max™ is a hydraulically-driven AC generator that will deliver its rated output power when the proper flow at 2000 PSI 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.

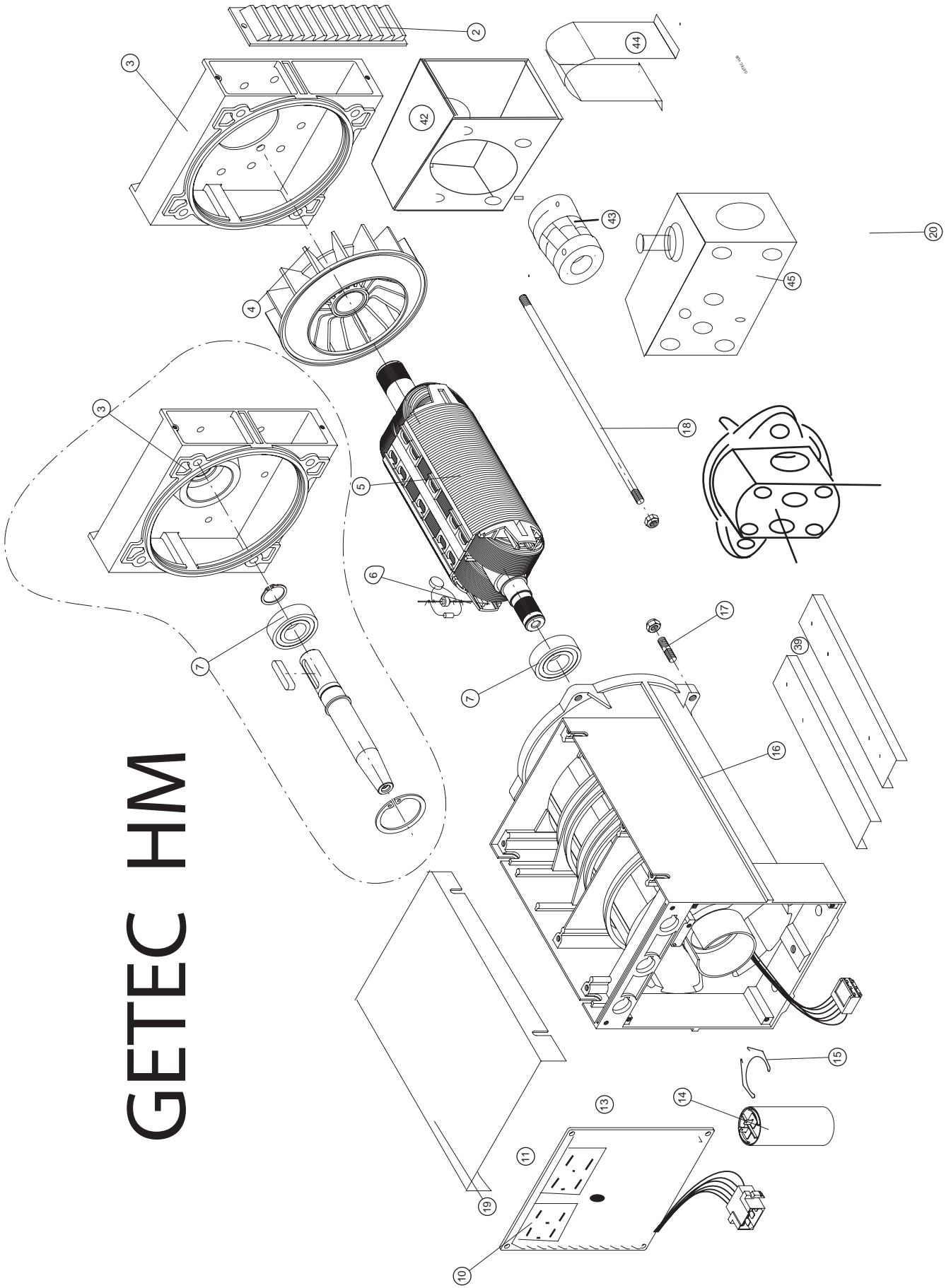
When starting a new hydraulic system, we strongly recommend that you connect the pressure line to the return line, bypassing the hydraulic generator drive. Operate the system for 10 minutes that way. This will clean the system; otherwise all kinds of problems will occur. After connecting the pressure 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.

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.

GETEC HM



GETEC Series 100 Parts List

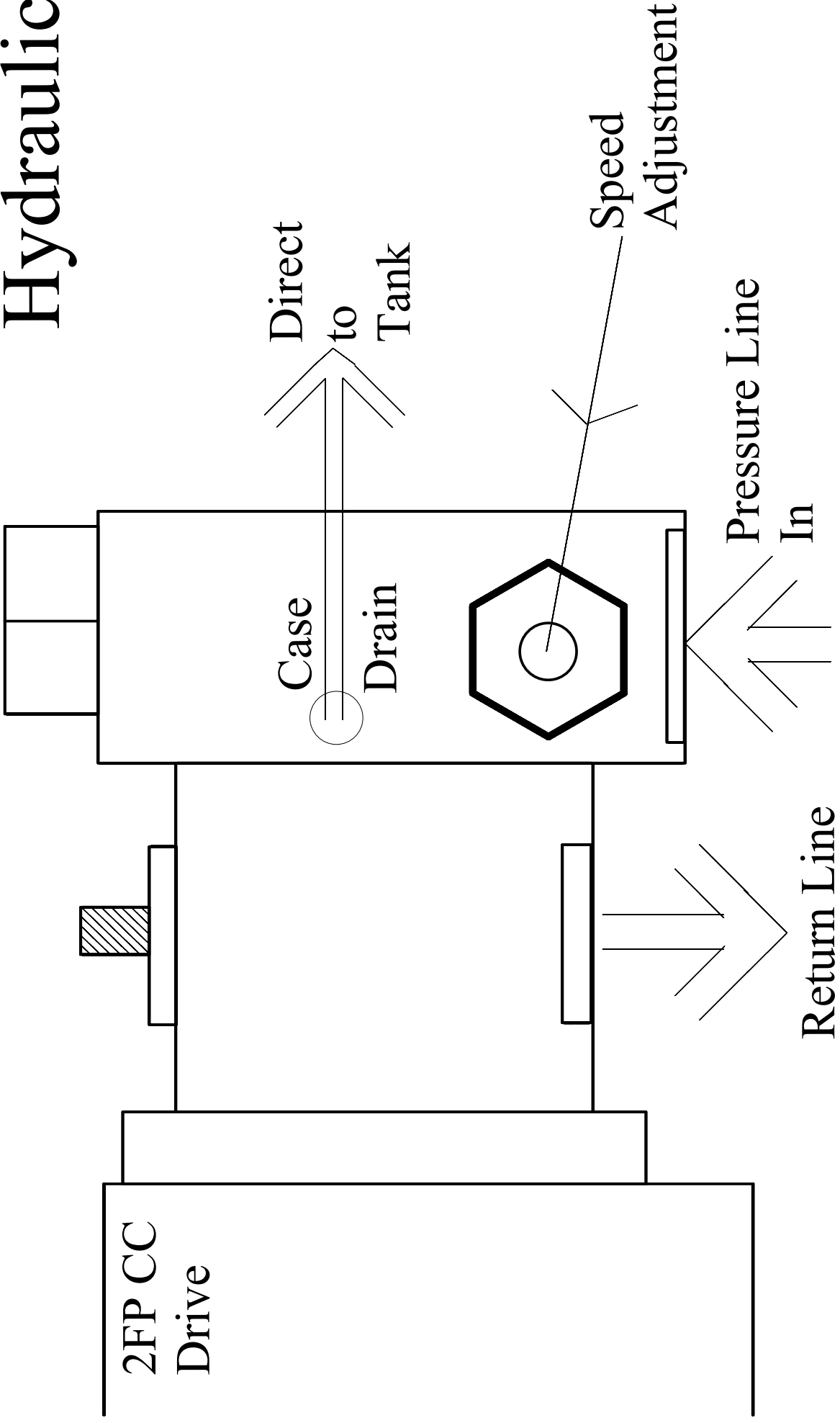
HYDROMAX Page 1 of 2

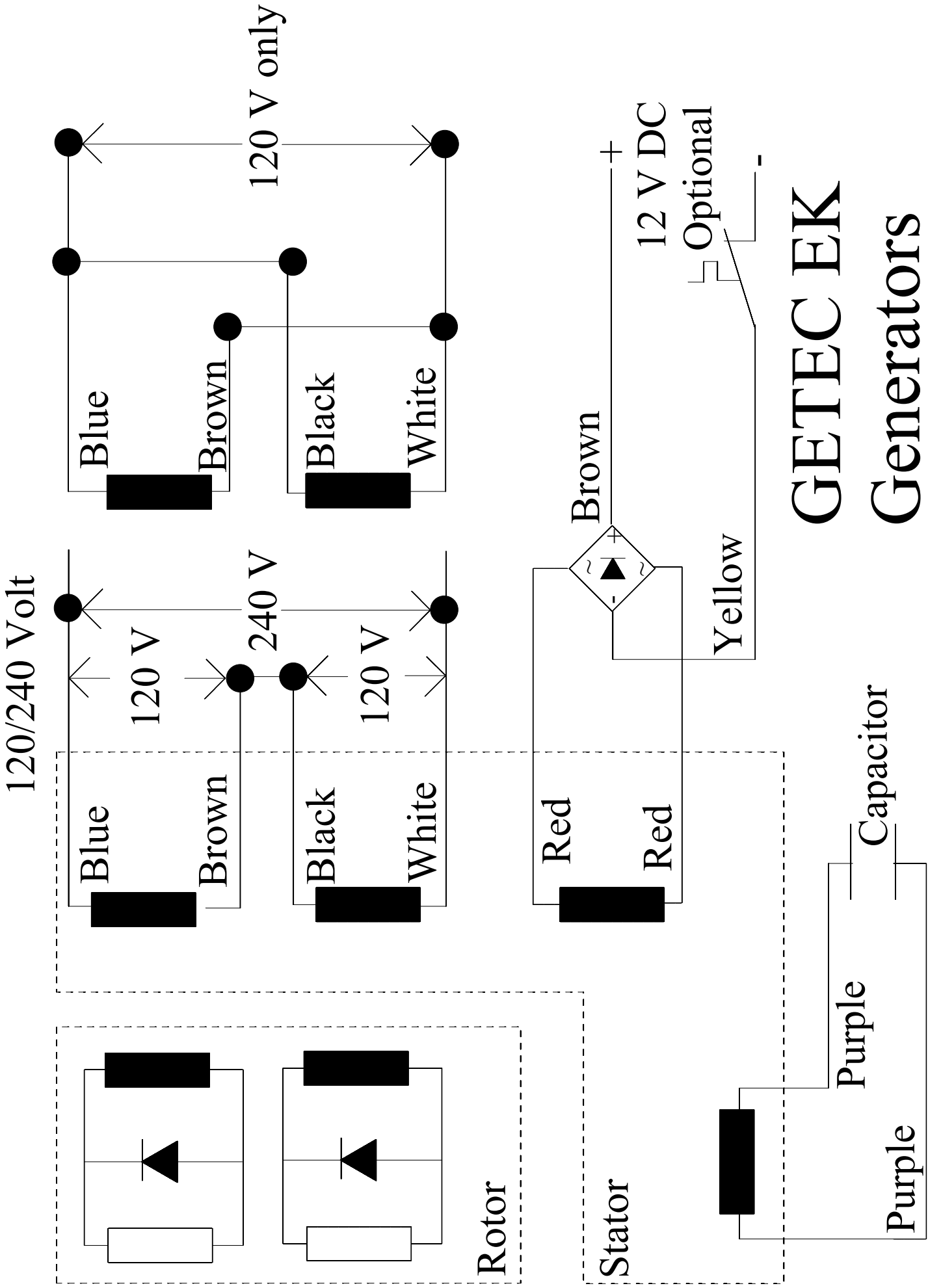
| Item # | GETEC # | Description | Price |
|--------|------------|--------------------------------------|--------|
| 2 | 600869 | Front Grid | 6.00 |
| 3 | 600872 | Front Shield B3-B14 | 60.00 |
| 4a | 600873 | Fan | 9.00 |
| 4b | 600874 | | |
| 5a | 600875 | | |
| 5b | 600876 | | |
| 5c | 600877 | Rotor E100 6.2 | 200.00 |
| 5d | 600878 | | |
| 5e | 600879 | | |
| 5f | 600880 | | |
| 6 | 600881 | Diode & Varistor & EMC Capacitor | 24.00 |
| 7 | 600882 | Bearing | 36.00 |
| 1 | 600887-D20 | Recepticle Panel | 90.00 |
| 14a | 600892 | | |
| 14b | 600893 | | |
| 14c | 601383 | Capacitor 35 mf | 36.00 |
| 14d | 600895 | Capacitor 40uF 450 | 36.00 |
| 15 | 600896 | Capacitor block spring | 3.00 |
| 16a | 600897 | | |
| 16b | 600898 | | |
| 16c | 600899 | Housing M & Stat. E100 6.2 120/240 V | 420.00 |
| 16d | 600900 | | |
| 16e | 600901 | | |

GETEC Series 100 Parts List HYDROMAX Page 2 of 2

| Item # | GETEC # | Description | Price |
|--------|---------|----------------------------|--------|
| 16f | 600902 | | |
| 17 | 600903 | Bolt – M8 * 30 | 1.80 |
| 18 | 600904 | Shaft bolt | 6.00 |
| 19a | 600905 | Black top cover | 42.00 |
| 20 | 600868 | KIT: from J609B to B3/B14 | 120.00 |
| 39 | 600674 | Rails Set | 60.00 |
| 42 | 601111 | | |
| 42a | 600970 | Motor Mount A-2 | 120.00 |
| 43 | 600971 | | |
| 43a | 601109 | | |
| 44 | 600114 | Coupling Cover | 6.00 |
| 45 | 601112 | | |
| 45a | 600922 | Flow Control Assembly Int. | 360.00 |
| 46 | 601115 | | |
| 46a | 601115 | | |
| 46b | 601116 | | |
| 46c | 601114 | | |
| 46d | 600975 | Hydraulic Motor (6.2) 12 | 720.00 |
| 80 | 601450 | Generator only | 600.00 |
| | | | |
| | | | |

GETEC Hydraulic





GETEC EK Generators

2FP95 Hi-Flow Flow Regulator

The 2FP95 hi-flow regulator has been factory set to maintain the generator's speed at its proper limits. The regulator may need very slight adjustments after connecting to its new system. Type of oil, temperatures, minimum and maximum flow may affect this regulator in a different way than our test setup. The regulator will not be out of adjustment more than **1/8 of a turn**.

Clockwise will slow the generator down (reduce flow).

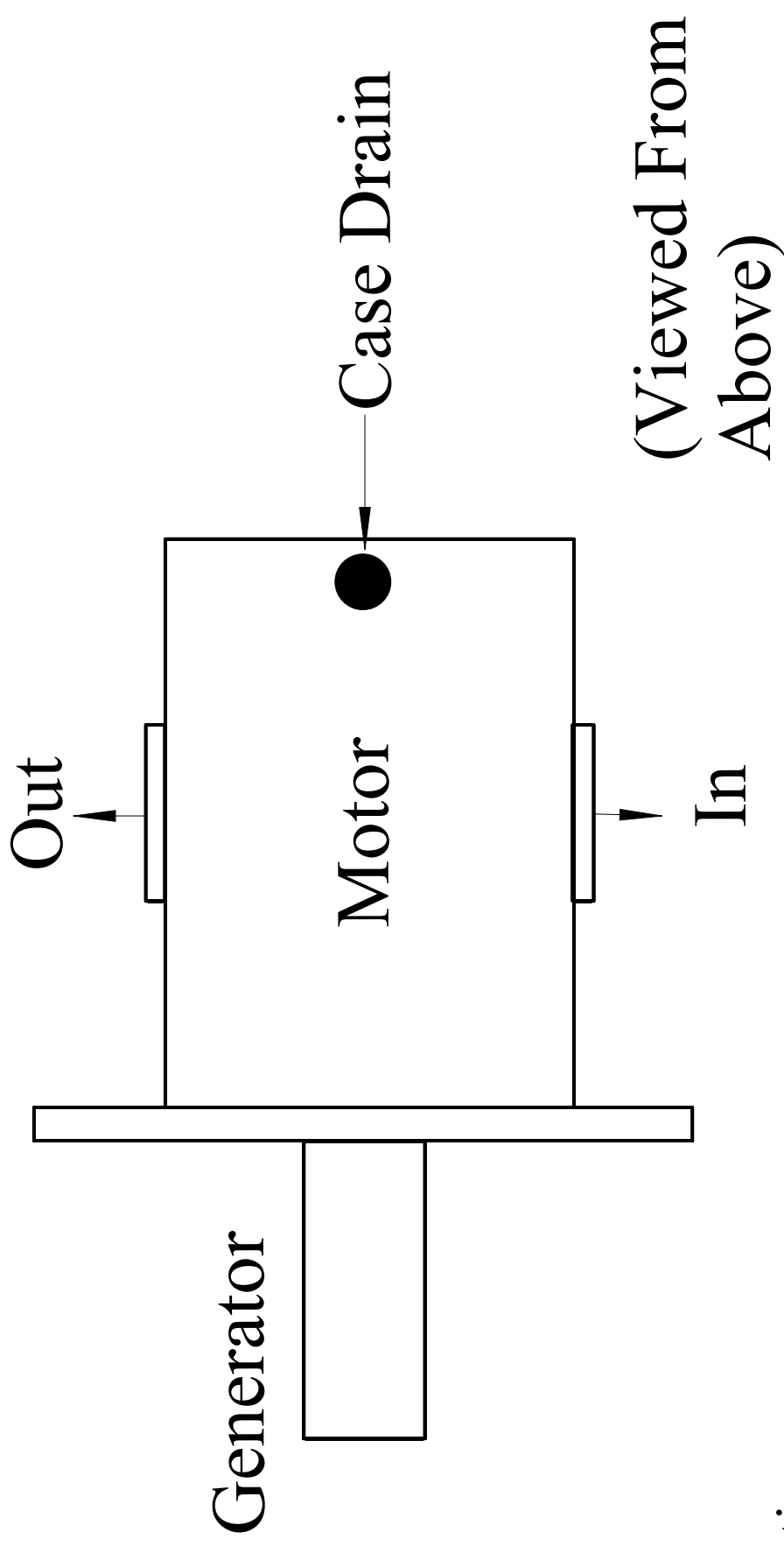
CounterClockwise will speed up the generator (increase flow, if present).

Caution : Overadjustment will cause damage to generator and void warranty.

HM 401

HM 621

Hydraulic Drive

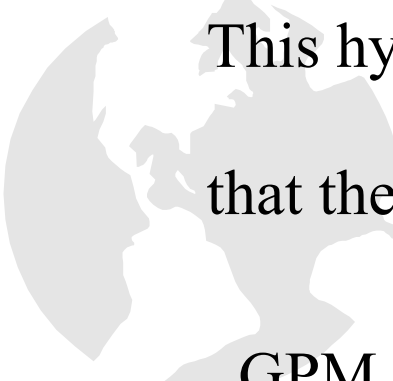


Caution

Do not allow generator to exceed 3800 RPM

Model _____

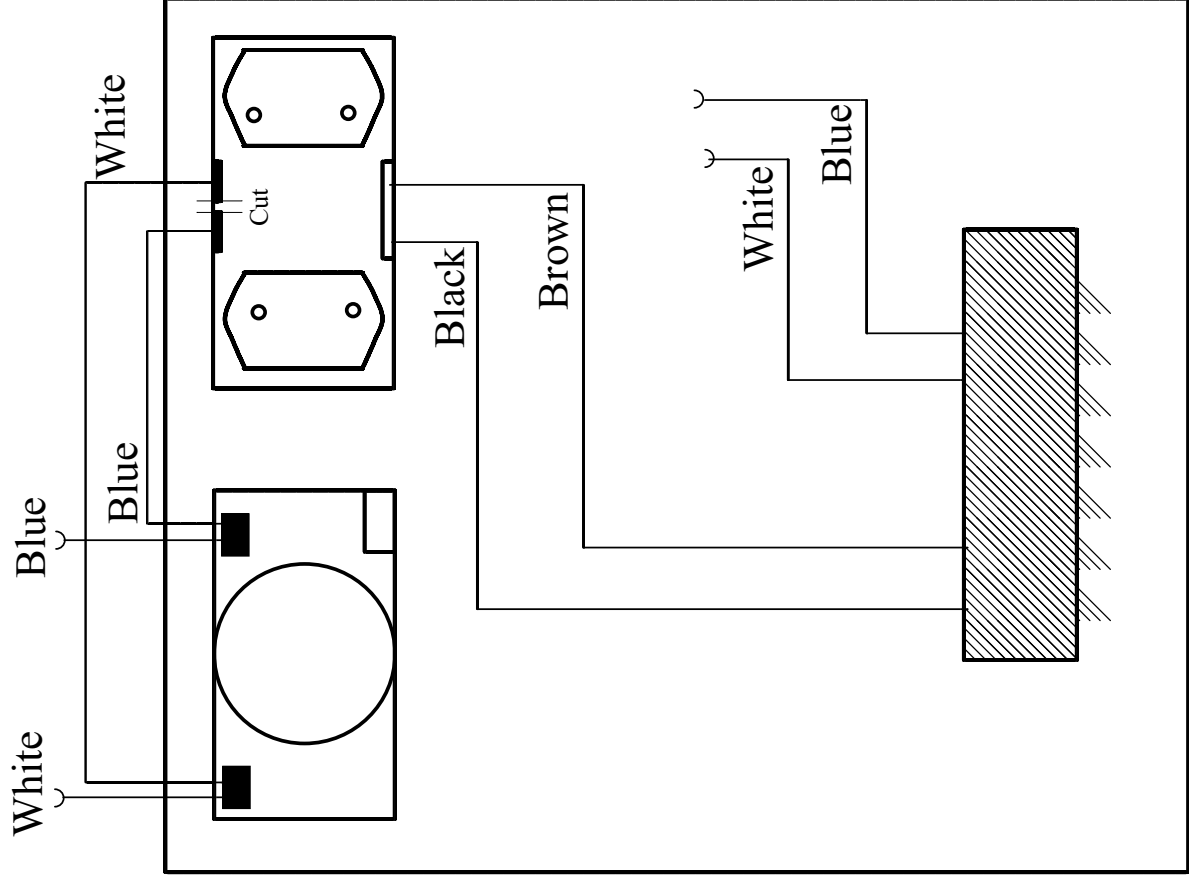
IMPORTANT



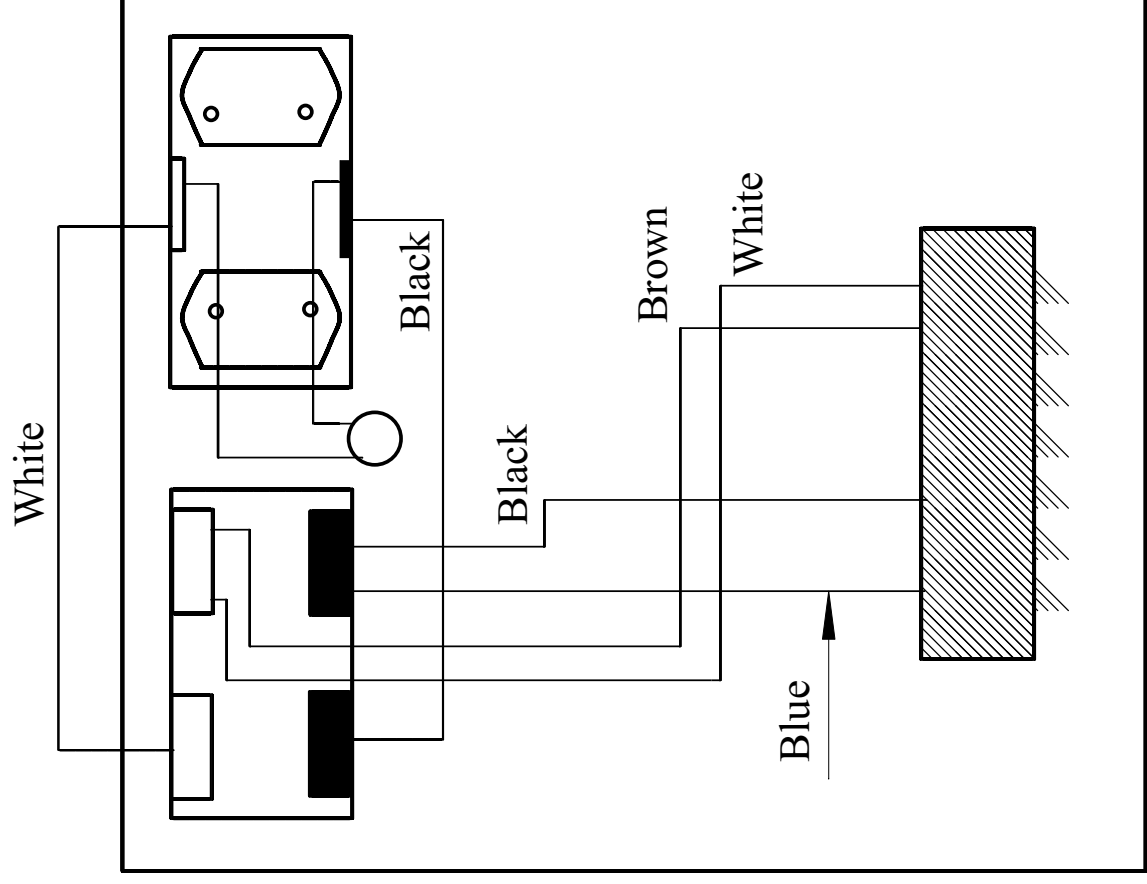
This hydraulically-driven generator requires
that the hydraulic system is able to deliver
_GPM up to _PSI to the generator drive.

Otherwise the generator cannot produce its
rated output.

Standard E Panels

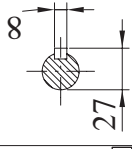
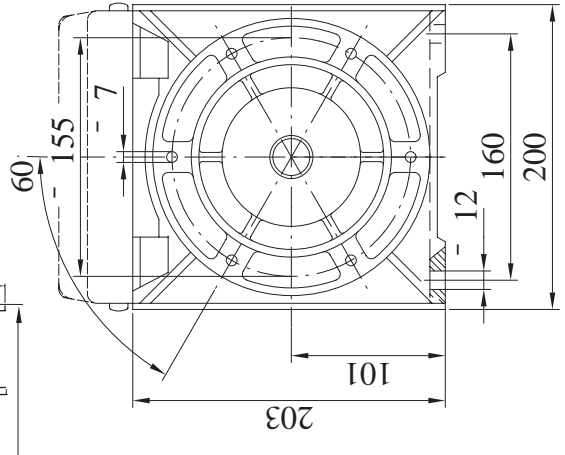
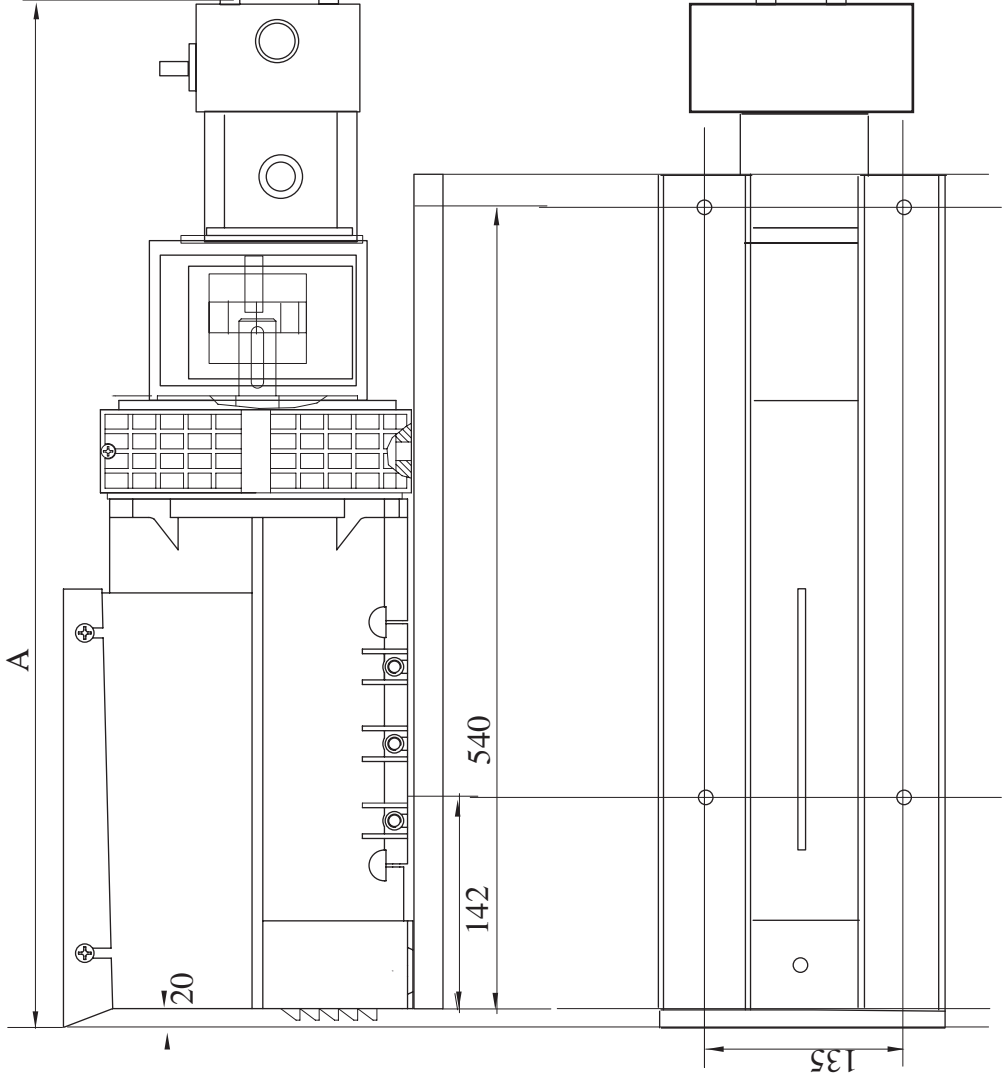
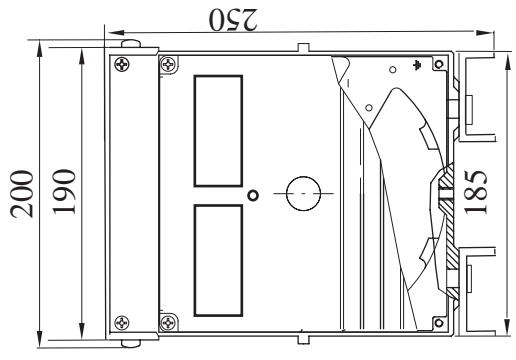


120 / 240



120

| Model | A |
|-------|-----|
| 480 | 625 |
| 620 | 625 |
| 750 | 680 |
| 850 | 680 |
| 1000 | 680 |



HYDROMAX DIMENSIONS O Nodels



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(845) 292-0830 (Fax)

GETEC Product Line

**Hydraulically Driven AC Generators
3000 Watt to 34000 Watt**

**Hydraulically Driven Welder-Generators
200 Amp to 400 Amp**



**Vehicle Jump Starters
Hydraulically Driven
650 Amp and 1000 Amp**

**Magnet Generators w. Controllers
6 KW to 34 KVA**

*Manufacturer of high quality hydraulic generators and
welders*

*Getec's Web Page
<http://www.getecinc.com>*