



Customer Distribution Center

Pos
Neg

75 Volts full scale.
Shunt signals
for analog meters,
0.05 Volts full scale.

- GRN 1 Water Temperature Switch
 - GRN 2 Water Temperature Sensor
 - RED 1 Oil Pressure Switch
 - WHT 2 Oil Pressure Sensor
 - BRN 1 Gear Tooth Sensor for RPM
 - RED 2
 - WHT 1
 - BLK 3
- All wires #16
- Signal wire sets are twisted.

B1_VOLTS

P1	1	
AUXV	2	
Y0	3	-MOLEX PLUG-
Z0	4	-MOLEX PLUG-
Y1	5	-MOLEX PLUG-
Z1	6	-MOLEX PLUG-
SLRS	7	
SLRG	8	
WNDW	9	
WNDG	10	
ASHA	11	
ASHG	12	
BSHG	13	
BSHB	14	
B1T(+)	15	
B1T(-)	16	

FIELD VOLTS

P2	1	B+
FLD_V	2	
Analog Ground	3	
Ground	4	

Connector: Molex #19418-0025
Pins are Molex #19420-0009
Mates with J2 on EnerMatic Engine Controller
All connector wires are #16 AWG

1	Water Temp. Switch
2	Water Temp. Switch Return
3	Water Temp. Sensor Signal
4	Water Temp. Sensor Return
5	Oil Pressure Switch
6	Oil Pressure Switch Return
7	Oil Pressure Sensor Signal
8	Oil Pressure Sensor Return
9	Gear Tooth Sensor (12V_PWR)
10	Gear Tooth Sensor Signal
11	Gear Tooth Sensor Return
12	Fuel and Oil Sender (12V_PWR)
13	Fuel Sender Signal
14	Fuel Sender Return
15	Oil Level Sender Signal
16	Oil Level Sender Return

Connector: Molex #19418-0039
Pins are Molex #19420-0009
Mates with J5 on EnerMatic Engine Controller
All connector wires are #16 AWG
Plug Molex #19417-0119

P6	1	Home Limit Switch
Wide Open Limit Switch	2	LIMO - P1 - Throttle Control Unit(GRN)
	3	LIM1 - P1 - Throttle Control Unit(GRY)
	4	12V Negative
	5	12V_PWR
	6	12V_PWR
	7	Error Out
	8	Status Out
	9	TOD Out
	10	TOD2 Out

Connector is Molex #19418-0025
Pins are Molex #19420-0009
Mates with J6 on EnerMatic Engine Controller
All connector wires are #16 AWG
Plug Molex #19417-0119

XTALK NETWORK

P3	1	DIO
n/c	2	
BUS0L	3	
BUS0H	4	
BUS1L	5	
BUS1H	6	
NET_GND	7	
GUARD	8	

Connector is Molex #19418-0023
Pins are Molex #19420-0009
Mates with J3 on EnerMatic Engine Controller
All connector wires are #16 AWG
Plug Molex #19417-0119

P0	1	Tx_0
	2	Rx_0
	3	Gnd
	4	Tx_1
	5	Rx_1
	6	Gnd

Connector is Molex #19418-0021
Pins are Molex #19420-0009
Mates with J0 on EnerMatic Controller
All connector wires are #16 AWG

P4	1	IGN0_IN
	2	IGN1_IN
	3	Emergency Stop Input
	4	Remote Run Input
	5	
	6	
	7	V3_IN
	8	Throb+
	9	Throb-
	10	T1_IN
	11	12V Negative
	12	Parallel Out
	13	Solar Out
	14	Wind Out
	15	T2_IN
	16	12V Negative

Connector: Molex #19418-0039
Pins are Molex #19420-0009
Mates with J4 on EnerMatic Engine Controller
All connector wires are #16 AWG
Plug Molex #19417-0119

- NOTES:**
1. Connect dashed line only if Energy Battery is grounded negatively.
 2. 12V and Energy Battery circuits must be isolated except in case of 1) above.
 3. All wires to P0 thru P6 shall be #16 AWG Marine Grade wire.
 4. Color codes are suggested and make troubleshooting easier.
 5. Heavy current wires must be sized according to length.
 6. Many other electrical circuits exist alongside those shown here.
 7. Proper fusing is mandatory.
 8. Wire exactly as shown - DO NOT combine wires.
 9. Wire Engine 12V Alternator per engine manufacturer's Instructions.
 10. Denotes twisted pair.

REV. 2: 20091223