

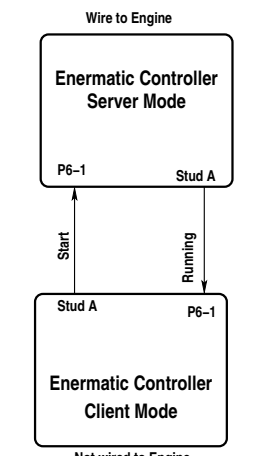
Customer Distribution Center

Pos
Neg

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

NOTE: Locate Alt. Shunt and Bat. Shunt close to negative distribution – maximum voltage drop is -40 mV, shunt to negative distribution at maximum current.
REV. 4

- 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.
 11. Connect both ground wires in P2 adjacent at negative distribution with no intervening connections.
 12. Connect if sender is two wire, not if tank is grounded to 12V negative already.



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	
WWDW	9	
WWDG	10	
ASHA	11	
ASHG	12	
BSHG	13	
BSHB	14	
B1T(+)	15	
B1T(-)	16	

Connector: Molex #19418-0039
Pins are Molex #19420-0009
Mates with J1 on EnerMatic Engine Controller
All connector wires are #16 AWG
Plug Molex #19417-0119

P2

B+	1	
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

FIELD VOLTS

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

Note 12 To fuel level sender
Note 12 To oil level sender

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

Home Limit Switch	1	LIM0 - P1 - Throttle Control Unit (GRN)
Wide Open Limit Switch	2	LIM1 - P1 - Throttle Control Unit (GRY)
	3	-MOLEX PLUG-
12V Negative	4	-MOLEX PLUG-
12V_5V	5	-MOLEX PLUG-
12V_PWR	6	-MOLEX PLUG-
Error Out	7	-MOLEX PLUG-
Status Out	8	-MOLEX PLUG-
TOD Out	9	-MOLEX PLUG-
TOD2 Out	10	-MOLEX PLUG-

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	2	-MOLEX PLUG-
n/c	3	-MOLEX PLUG-
BUS0L	4	-MOLEX PLUG-
BUS0H	5	-MOLEX PLUG-
BUS1L	6	-MOLEX PLUG-
BUS1H	7	-MOLEX PLUG-
NET_GND	8	-MOLEX PLUG-
GUARD	9	-MOLEX PLUG-

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

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

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

P4

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