

XTALK NETWORK
P5

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

Connector is Molex #19418-0023
Pins are Molex #19420-0009
Mates with J5 on EnerMatic Engine Controller
All connector wires are #16 AWG
Plug Molex #19417-0119

P4

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 J302 on EnerMatic Controller
All connector wires are #16 AWG

P3

B1_VOLTS 1	
FIELD VOLTS 2	
IGNITION INPUT 0 3	--MOLEX PLUG--
IGNITION INPUT 1 4	--MOLEX PLUG--
ERROR OUT(+) 5	--MOLEX PLUG--
STATUS OUT(+) 6	--MOLEX PLUG--
SOLAR OUT(+) 7	--MOLEX PLUG--
WIND OUT(+) 8	--MOLEX PLUG--
TOD_OUT(+) 9	--MOLEX PLUG--
B1T(-) 10	
ASHA 11	
ASHG 12	
BSHG 13	
BSHB 14	
B1T(+) 15	
PARALLEL OUT(+) 16	--MOLEX PLUG--

Connector: Molex #19418-0039
Pins are Molex #19420-0009
Mates with J3 on EnerMatic Engine Controller
All connector wires are #16 AWG
Plug Molex #19417-0119

P2

B+ 1	
12V_PWR 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

P1

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	--MOLEX PLUG--
Fuel Sender Signal 13	--MOLEX PLUG--
Fuel Sender Return 14	--MOLEX PLUG--
Oil Level Sender Signal 15	--MOLEX PLUG--
Oil Level Sender Return 16	--MOLEX PLUG--

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

P6

Y0 1	--MOLEX PLUG--
Z0 2	--MOLEX PLUG--
Y1 3	--MOLEX PLUG--
Z1 4	--MOLEX PLUG--
Ground 5	--MOLEX PLUG--
5V 6	--MOLEX PLUG--
Ground 7	--MOLEX PLUG--
5V 8	--MOLEX PLUG--

Connector is Molex #19418-0023
Pins are Molex #19420-0009
Mates with J6 on EnerMatic Engine Controller
All connector wires are #16 AWG
Plug Molex #19417-0119

P7

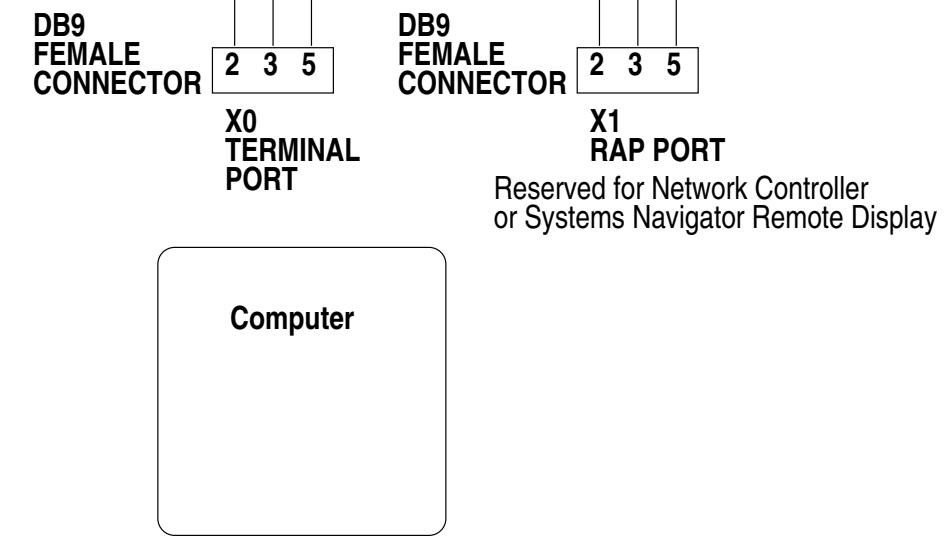
T1_IN 1	--MOLEX PLUG--
T2_IN 2	--MOLEX PLUG--
AUXV_IN 3	--MOLEX PLUG--
V3_IN 4	--MOLEX PLUG--
BB_LINE 5	--MOLEX PLUG--
AOUT 6	--MOLEX PLUG--
Ground 7	--MOLEX PLUG--
5V 8	--MOLEX PLUG--

Connector is Molex #19418-0023
Pins are Molex #19420-0009
Mates with J7 on EnerMatic Engine Controller
All connector wires are #16 AWG
Plug Molex #19417-0119

P8

Emergency Stop Input 1	
Remote Run Input 2	
TOD2 OUT 3	--MOLEX PLUG--
Temperature 2(+) 4	
Limit 0 Input 5	--MOLEX PLUG--
Limit 1 Input 6	--MOLEX PLUG--
Ground 7	--MOLEX PLUG--
Watchdog Output 8	--MOLEX PLUG--

Connector is Molex #19418-0023
Pins are Molex #19420-0009
Mates with J8 on EnerMatic Engine Controller
All connector wires are #16 AWG
Plug Molex #19417-0119



Notes:
Pyrometer switch required to protect exhaust over-temperature due to loss of water flow
All wires to P1 thru P8 shall be #16 AWG Marine Grade wire.
Color codes are suggested and make troubleshooting easier.
Heavy current wires must be sized according to length.
Many other electrical circuits exist alongside those shown here.
Proper fusing is mandatory.
Wire exactly as shown - DO NOT combine wires.

CONTRACT NUMBER	DATE	AMPLE POWER COMPANY
DRAWN: Mitch Ishihara	01-06-2008	2442 NW MARKET ST., #3, SEATTLE, WA 98107
CHECKED:		Ph: (206) 789-0827 Fax: (206) 789-9003 www.amplepower.com
DESIGN:		
ELECTRICAL:		
WIRING:		
APPROVED:		
RELEASED:		

SCALE: 1:1 FILENAME: control_marine_eng_cntrl.rlg SHEET: 1 OF 1