

ECM-ACU+ (S-1) TROUBLESHOOTING GUIDE

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Symptom:	Possible Reasons:	Solutions:
Motor will not run	High voltage is not being supplied to the vent.	Supply high voltage to the vent.
	Disconnect may be "OFF".	Switch the disconnect to "ON".
	Low voltage control connection to the ACU may be installed backwards.	Verify the wires leaving the connector face away from the control board per Illustration A .
	Low voltage control connection to the motor may be loose.	Verify the low voltage connector on the motor is firmly connected.
	High voltage connection to the motor may be loose.	Verify the high voltage connector on the motor is firmly connected. NOTE: the low voltage and high voltage lines share a connector for the 1/10 HP motor.
	Low voltage control connector to the ACU may be wired incorrectly.	Verify the wire positions on the low voltage control connector match that of Illustration B .
	Low voltage control connector to the motor may be wired incorrectly.	Verify the wire positions on the low voltage motor connector match that of Illustration C for 1/3, 1/2, 3/4, and 1HP motors and Illustration D for 1/10th HP motors.
	High voltage connector to the motor may be wired incorrectly.	Verify the wire positions on the high voltage connector match that of Illustration E for 1/3, 1/2, 3/4, and 1HP motors and Illustration F for 1/10th HP motors.
	Red jumper wire may be installed incorrectly.	Verify the red jumper wire is intact for 120-Volt motors (Illustration E) or that it is clipped and isolated for 240-Volt motors (Illustration G).
Red STATUS LED will not light	ACU is not receiving 24VAC from transformer.	Verify the BLUE and YELLOW wires from the transformer have 24VAC across them and that they are connected to the "24Vac" and "Neu" terminals. NOTE: they are AC power, so polarity is not an issue.
	Transformer is not receiving high voltage or is connected improperly.	Verify the transformer is wired according to the wiring diagram on the transformer.
	ACU is not receiving input from either the Building Automation System (BAS) or the ADJUST potentiometer.	Have the BAS send a signal of 0.2 VDC or higher to the ACU or turn the ADJUST potentiometer clockwise.
	Transformer is damaged.	Replace transformer.
Green FLOW INDEX LED not flashing	Low voltage connector to the ACU may be wired incorrectly.	Verify the wire positions on the low voltage control connector match that of Illustration B .
	Low voltage connector to the motor may be wired incorrectly.	Verify the wire positions on the low voltage motor connector match that of Illustration C for 1/3, 1/2, 3/4, and 1HP motors and Illustration D for 1/10th HP motors.
Motor not responding to (BAS) signal	ACU is in "Temporary Override" mode.	Wait 15 minutes or cycle power.
	BAS signal is below 0.2 VDC.	BAS signal must be above 0.2 VDC in order to operate the fan motor.
	BAS signal polarity may be reversed.	Verify the BAS signal is connected with the positive (+) lead connected to "Signal" and the negative (-) lead connected to "Common" on the ACU.
Motor not turning off when BAS signal is off or below 0.2 VDC.	Jumper may be in the "M" position (Permanent Manual Override).	Move jumper to "Opt" position or turn "Adjust" potentiometer fully counter clockwise to set the default torque output to zero.
	"Startup" mode may still be enabled.	While BAS signal is above 0.2 VDC, cycle power to the ACU 5 times to clear ou "Startup" mode.

ILLUSTRATIONS

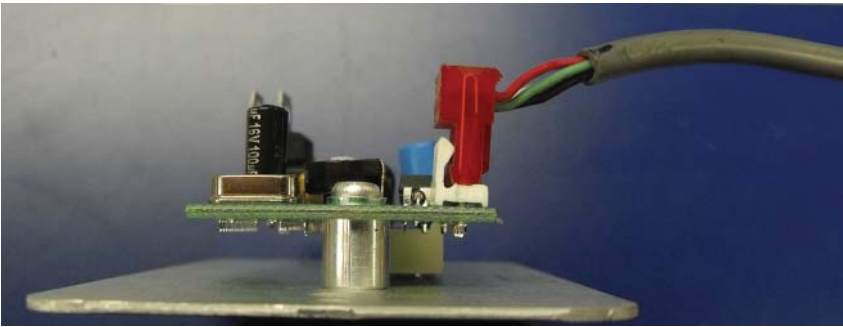


Illustration A - Low Voltage Control Connection

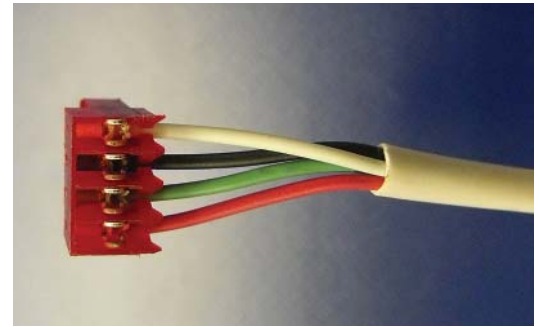


Illustration B - Low Voltage Control Terminations

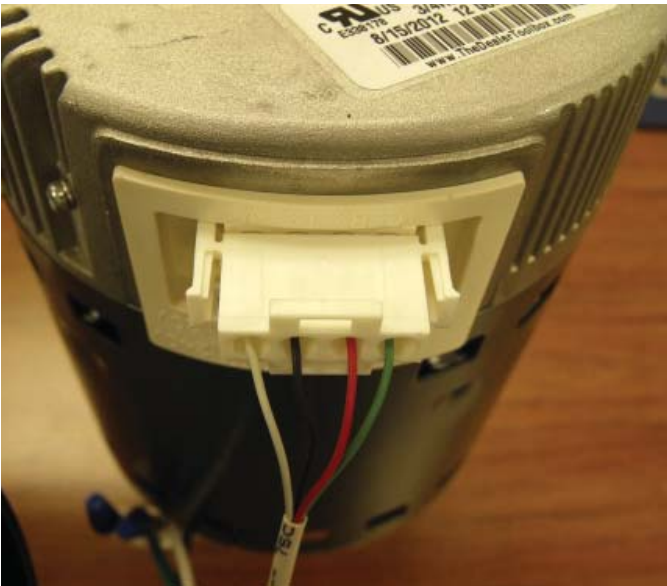


Illustration C - Low Voltage Connection to 1/3, 1/2, 3/4 and 1 HP Motors

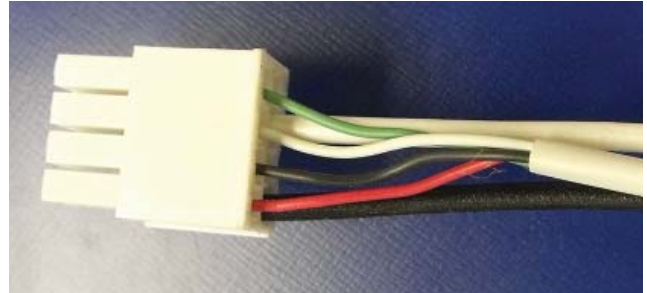


Illustration D - Low Voltage Connection to 1/10 HP Motors



Illustration E - High Voltage Connector for 1/3, 1/2, 3/4 and 1 HP Motors - With Red Jumper Intact for 120-Volt Use

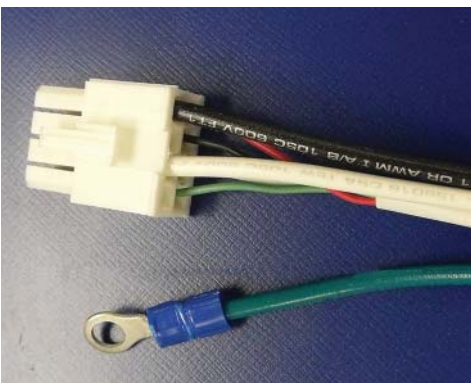


Illustration F - High Voltage Connections for 1/10th HP Motors

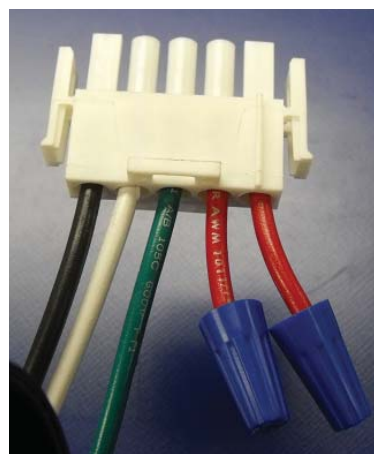


Illustration G - High Voltage Connector for 1/3, 1/2, 3/4 and 1 HP Motors - With Red Jumper Clipped and Isolated for 240-Volt Use

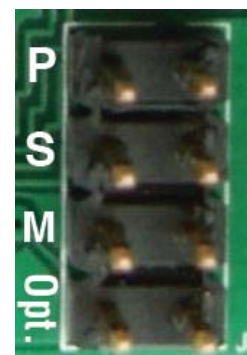


Illustration H - Shunt Jumper Terminals