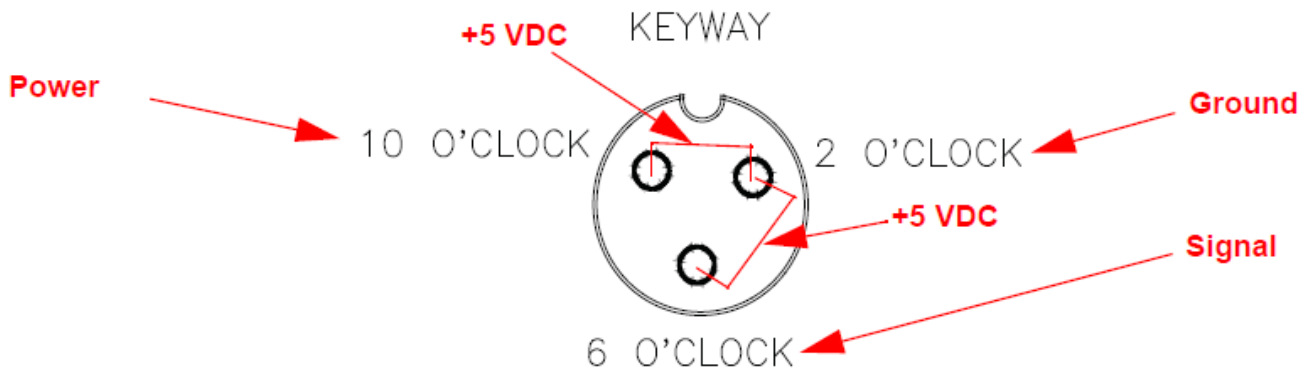
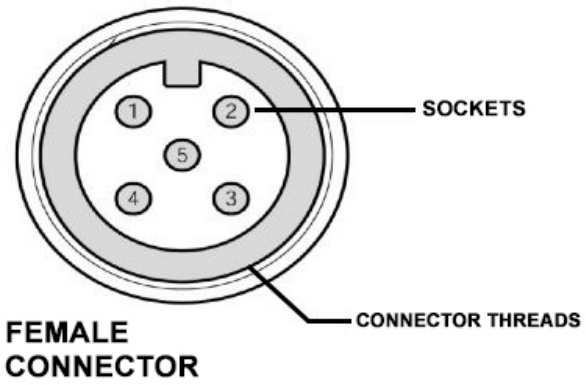
TROUBLESHOOTING

GEN I TROUBLESHOOTING CHART

Symptom	Problem	Solution
No Fertilizer being delivered - all rows	Fan and auger not turning	Verify all hydraulic couplers are fully engaged.
		With hydraulics turned off see if fan rotates by hand. If not replace fan motor.
	Fan air gauge pressure less than 16 inch H^20	Fan rotation must be clockwise (CW) when viewed from the screen side of fan. If rotation is not CW, see Hydraulic Schematics in Section 10 and plumb as shown for your machine.
		Set gap between fan and shroud to ¼ inch (6 mm).
		Make sure hydraulic gages read within limits stated in Section 4.2.1.
	Auger turning wrong direction. Auger should turn same direction as fan CW from fan screen side of unit.	See Hydraulic Schematics in Section 10 and plumb as shown for your machine.
	Fan running auger not turning	Check condition and routing of auger motor chain.
		Check for auger obstructions (with chain off auger should turn with pliers and minimal force). Clean out any plugged rows and check for auger obstructions.
	Fan running auger not turning and not obstructed.	Check controller calibration settings, controller cabling and connections at the controller, PWM Valve and encoder. When running a catch test with your controller you should have a 2-12 volt DC signal at the PWM Plug. The higher the rate the higher the voltage. The resistance of the PWM coil should be approximately 7.1 ohms.
		To verify the Montag metering system will operate you can apply a 12 volt DC + and – source to the pins on the PWM coil with the fan running the metering auger should run at max RPM's.
	Fan running auger turns then stops – no auger obstructions or controller not recording rate.	Check controller high and low limit calibration settings.
		Check set screw on encoder shaft.
		Check all PWM valve and encoder cables and connections.
		Check for proper signal from controller to encoder. For Montag supplied Raven 36 pulse encoders check for + 5 volts DC between the ground and power socket and the ground and signal socket. See diagram below.

Symptom	Problem	Solution
OPTION 1 - Raven 5 Volt Encoder 		
OPTION 2 - Eaton 12 Volt Internal Speed Sensor 		**Female Connector Harness End** • Pin 1 is Brown 12 VDC+ • Pin 3 is Blue Common • Pin 4 is Black Signal.
		If voltage is correct, auger is turning and no rate is being recorded. Replace encoder.
		For all other encoders contact your supplier's technical service department for voltages and pinning.
Actual rate applied is higher than desired rate.	Controller settings are not correct.	Check calibration settings and adjust as needed. Verify CFR and encoder pulse settings. Also check low limit setting if set to high auger will not run slow enough.
	Loose or bad connection.	Check all controller cable connections.
	Auger chain drive.	Check condition and routing of auger motor chain.
No Fertilizer being delivered – some rows or actual rate applied is lower than desired rate.	Air passages plugged / obstructed.	Clear air passages at air chamber outlet tubes.
	Build up on augers or in hoses.	Clean augers or hoses (check quality of fertilizer as needed).
	Fertilizer bridged in tank.	Clear bridging and (check quality of fertilizer).
	Kinked or worn hoses	Check condition of hoses for sharp bends and worn spots and replace as needed.