40 AMP PWM ELECTRIC MOTOR DRIVER

2106 F AVENUE
KEARNEY NE 68847
877.218.1981

PN# 18022

40 AMP MAXIMUM

The Pump Driver Module (EMD) replaces the servo valve. System flow is controlled by regulating the pump speed via a PWM signal to the EMD.

NOTE: This unit will ONLY work with PWM (Pulse Width Modulated) Control drives. Set the PWM frequency of your controller to 150 Hz.

MODULE INSTALLATION

Position the EMD where wiring will work the best. Extension cables are available. Secure the EMD to the equipment, fastening with screws, using the holes in the mounting flanges.

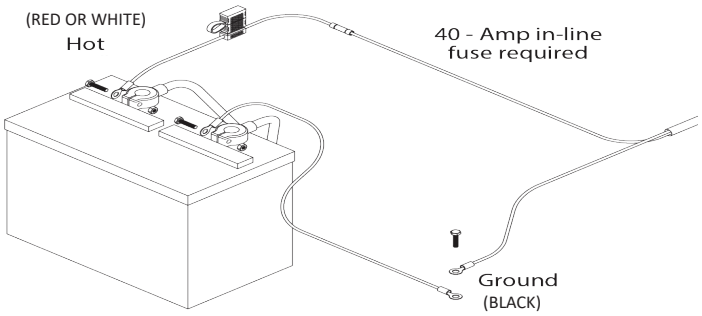
ELECTRIC INSTALLATION

This section explains how to hook-up your EMD to a 12-volt power connection, and how to connect your EMD to your controller harness.

The EMD MUST be connected to a 12-volt DC negative ground electrical system.

POWER BATTERY CONNECTION

Locate the power cable and route to the battery. In routing cable avoid areas where the cable may be subjected to abrasion or excessive heat. Attach the BLACK wire to ground. See Illustration to the upper right. Be sure there is a good metal-to-metal contact. Connect the RED (or WHITE) wire to the positive battery terminal. Connect the power to the EMD by plugging the 2-Pin M/P 480 Tower on the power cable into the 2-Pin M/P 480 Shroud of the EMD module.



SIGNAL AND MOTOR CONNECTIONS

Connect the other end of the cable to the mating connector on the controller harness using Adapter Cable P/N 53556 if required.

Locate the pump cable or “y” harness for dual pump system. Plug the 2-pin M/P 480 Shroud into the 2-pin M/P 480 Tower on the EMD module. Connect the other end to the pump. Insure that the pump is running in the correct direction. If not, simply reverse the wires from the pump to the pump cable.

See Next Page for Applicable Diagram.

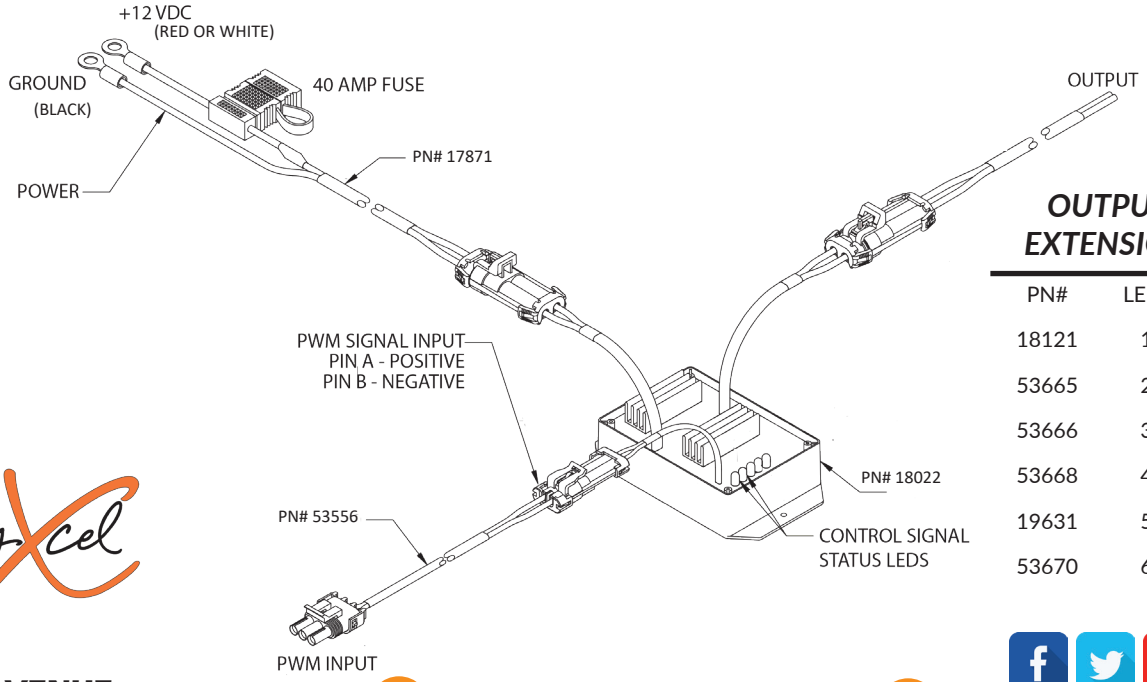
LED STATUS INDICATOR CODES

See table on page two for LED status indicator code explanations.

NOTE: Be sure to route cables away from sharp edges, areas of high heat and moving parts. Secure all cables firmly with plastic cable ties.

LED TROUBLESHOOTING GUIDE

	COLOR	TIME LINE	LED STATE	CONDITION
POWER	GREEN		OFF	NO POWER (OR LESS THEN 6.8V)
	GREEN		1hz FLASH	UNDER VOLTAGE (LESS THAN 10.5V)
	GREEN		ON SOLID	12V SUPPLIED (POWER ACCEPTIBLE)
PWM	BLUE		OFF	NO PWM SIGNAL TO THE MODULE
	BLUE		1hz FLASH	PWM SIGNAL PRESENT
	BLUE		ON SOLID	MAXIMUM DUTY CYCLE
MOTOR CURRENT	RED		OFF	NORMAL OPERATION (UNDER MAX)
	RED		1hz FLASH	OPEN CIRCUIT CONDITION
	RED		ON SOLID	OVER CURRENT (OUTPUT SHORTED)
TEMP	YELLOW		OFF	MODULE WITHIN TEMPERATURE RANGE
	YELLOW		1hz FLASH	MODULE TEMP IS ELEVATED
	YELLOW		ON SOLID	MODULE AUTO SHUTDOWN FROM TEMP
MOTOR RUNNING	ORANGE		OFF	MOTOR IS NOT RUNNING
	ORANGE		ON SOLID	MOTOR IS RUNNING



OUTPUT EXTENSION

PN#	LENGTH
18121	10FT
53665	20FT
53666	30FT
53668	40FT
19631	50FT
53670	60FT

A 2106 F AVENUE
KEARNEY, NE 68847

P 877.218.1981

W WWW.AGXCEL.COM