MMR Diff Pump Driver Harness

Installation Guide

v0.9

Modular Motorsports Racing, Inc.
816 Calle Plano
Camarillo, CA 93012
(805)383-4130
http://www.modularmotorsportsracing.com

Table of Contents

Installation

The MMR Diff Pump Harness is compatible with all GT350/GT500 and Dark Horse Mustang diff pumps. The harness includes a factory pump connector and a simple 3 wire hookup.

Start by disconnecting the ground wire on your battery.

Next, plug the pump harness 6-pin connector into the differential pump.

Route the diff pump harness into the cabin if possible, but wherever the harness is routed, the inline module located near the end of the harness should be located away from high temperature heat sources.

The harness has 3 wires that will require connection to your vehicle.

Wire Color	Connection	Function
Red	Battery Positive Terminal, 30amp, Fused	Pump Power
Black	Battery Negative Terminal (or a clean chassis ground)	Pump Ground
Green	Switched +12v	Pump Trigger

The red wire should be connected to the battery positive terminal through a 30 amp fuse (an inline fuse near the battery works well for this application).

The black wire should be connected to the negative terminal of the battery (or a good clean chassis ground).

When extending the red and black wires in the harness, use a minimum of 16gauge wire (or 14gauge for longer wire lengths)

The green trigger wire should be connected to a switched +12v power source which is used to enable/disable the pump. The trigger wire can be connected to a temperature controlled switch, a toggle switch, or any other switched +12v source in order turn on and off the pump.

Once the wiring harness has been routed, it should be secured so that it does not interfere with any mechanical/moving/heat generating parts of the vehicle.

Reconnect the negative battery cable.

Troubleshooting

Following are solution to some common issues you may encounter with your pump/harness:

Symptom

The pump is not running when I send +12v to the green wire

Solution

Check the fuse and that you are supplying a clean ground to the harness. Make sure that you have +12v on both the red and green wires.

Symptom

The pump oscillates when first started

Solution

At colder temperatures, the oil in the differential has a higher viscosity, resulting in the pump having to work harder to pump the fluid. In these situations, the pump may limit itself in order to decrease the amount of current that it pulls. Once the fluid is warmed up, the amount of current required to pump the fluid will drop causing the oscillations to stop. It is recommended that the pump is run only when the gear oil has reached normal operating temperatures.

Technical Support

To obtain technical support for your device, please contact:

Modular Motorsports Racing

Phone: 805-383-4130
8AM – 5PM PST

Email: support@modularmotorsportsracing.com

Website: http://www.modularmotorsportsracing.com