

EAM101

GAC to Barber Colman DYNA 1 or DYNA 8000 Interface Module

1 INTRODUCTION

The Governors America Corp. EAM101 is an electronic device that allows GAC Load Sharing Modules and Auto Synchronizers to operate with the Barber Colman (BC) DYNA 1 or DYNA 8000 speed control units.

Sophisticated generator paralleling systems can be assembled with GAC high performance accessories to control BC equipped engines.

The EAM101 module requires five connections to the BC speed control unit. These are the positive lead from the battery supply, signal ground (not battery ground) at the speed control unit, the +4 and +8 V DC connections, and an output to the speed control unit to adjust its speed setting. The EAM101 draws less than one milliamp from the speed control unit, assuring no adverse effects on the system.



The second terminal block on the EAM101 offers 6 terminals and accepts connections from an external speed trim pot, GAC PIN TP501 or TP503, and signals from the GAC Load Sharing Module, Auto Synchronizer and 50/60 Hz switch.

2 WIRING AND DIMENSIONS



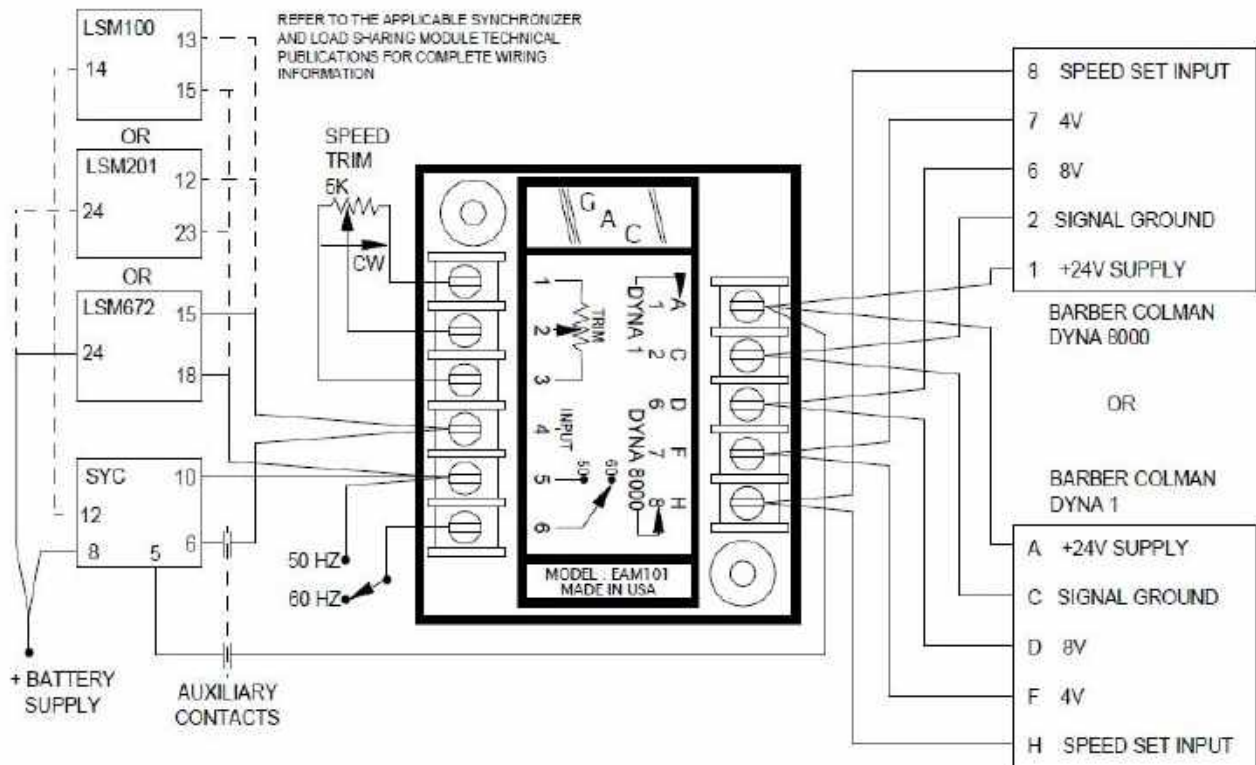
An overspeed shutdown device, independent of the governor system, should be provided to prevent loss of engine control which may cause personal injury or equipment damage.

Terminal 2 of the EAM101 has the same sensitivity as the speed trim input., Terminal J, of the ESC63C Series speed control unit, -40 Hz/volt

Terminal 4 of the EAM101 has the same sensitivity as the Load Sharing / Synchronizer input, Terminal R, of the ESC63C Series speed control unit, -104 Hz/volt

Terminal C(-)	Terminal (+)	Voltage
5	1	8.0
5	2	5.6
5	3	4
5	4	5
5	6	5.5

The wiring for typical generator paralleling systems is shown in the following diagram. Note the signal ground reference, which is Terminal C/2 of the EAM101.



TESTING and TROUBLESHOOTING

Complete testing with the EAM101 Installed. All voltage tests for troubleshooting are made with 24 VDC applied to the system, the BC speed control unit connected, and no connections to the 6 terminal block.

1. Apply 24 V DC to Terminals All (+) and C/2 (-).
2. The voltage measured between Terminals 5 (-) and D/6 (+) should be 8 V DC.
3. The voltage measured between Terminals 5 (-) and F/7 (+) should be 4 V DC.
4. If these two measurements are incorrect, check the operation of the Barber Colman speed control unit and the wiring from it to the EAM101.
5. If the voltages measured in Steps 1 and 2 are correct, and the system still does not operate, make the following measurements.