GOVERNORS AMERICA CORP.

ENGINE GOVERNING SYSTEMS

PRODUCT INFORMATION BULLETIN

PIB4081

AUGUST 1997

EAM101 BC INTERFACE MODULE

DESCRIPTION

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 VDC 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 other terminal block (6 terminals) on the EAM101 accepts connections from an external speed trim pot, GAC P/N TP501 or TP503, and signals from the GAC Load Sharing Module, Auto Synchronizer and 50/60 Hz switch.

OPERATION

Instructions on the operation of the GAC LSM100, LSM201, or LSM672 Load Sharing Modules, and the SYC6714 Synchronizer are found in publications PTI4110, PTI4100, PTI4000, and PTI4030 respectively.

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 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.

WIRING

The wiring for typical generator paralleling systems is shown in Diagram 1. Attention should be given to the signal ground reference, which is Terminal C/2 of the EAM101.

TESTING and TROUBLESHOOTING

(While 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 VDC to Terminals A/1 (+) and C/2 (-).

2. The voltage measured between Terminals 5 (-) and D/6 (+) should be 8 VDC.

3. The voltage measured between Terminals 5 (- and F/7 (+) should be 4 VDC.

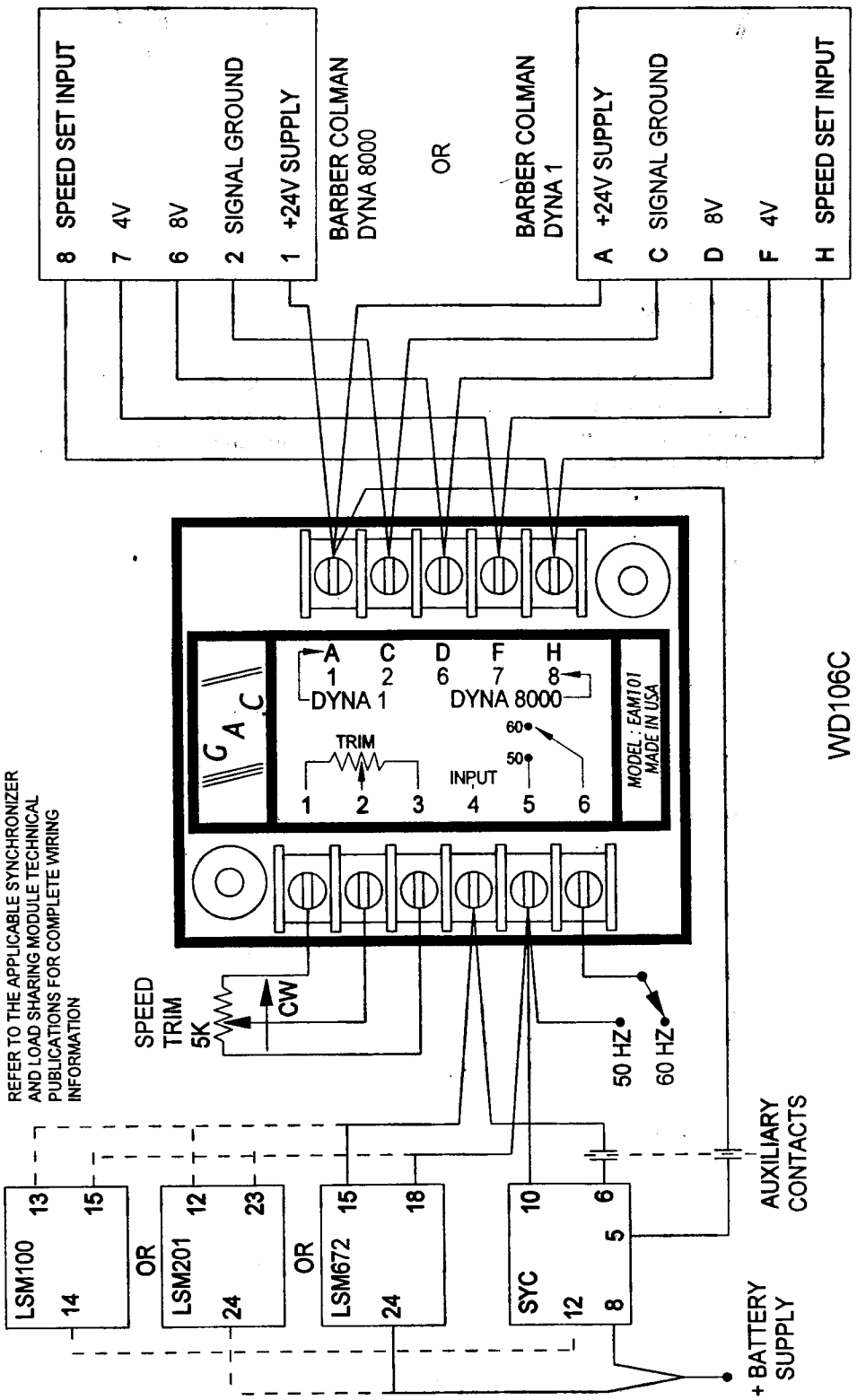
If these two measurements are incorrect, check the operation of the BC speed control unit and the wiring from it to the EAM101.

4. If the voltages measured in Steps 1 and 2 are correct, and the system still does not operate, make the following measurements.

Terminal (-)	Terminal (+)	Voltage (VDC)
5	1	8.0
5	2	5.6
5	3	4.0
5	4	5.0
5	6	5.5

If any of the voltages in Step 4 are incorrect, the EAM101 is defective.

WIRING DIAGRAM



GOVERNORS AMERICA CORP.

720 Silver St. • Agawam, MA 01001 USA • (413) 786-5600
FAX (413) 786-5666
Internet: www.governors-america.com
E-mail: info@governors-america.com