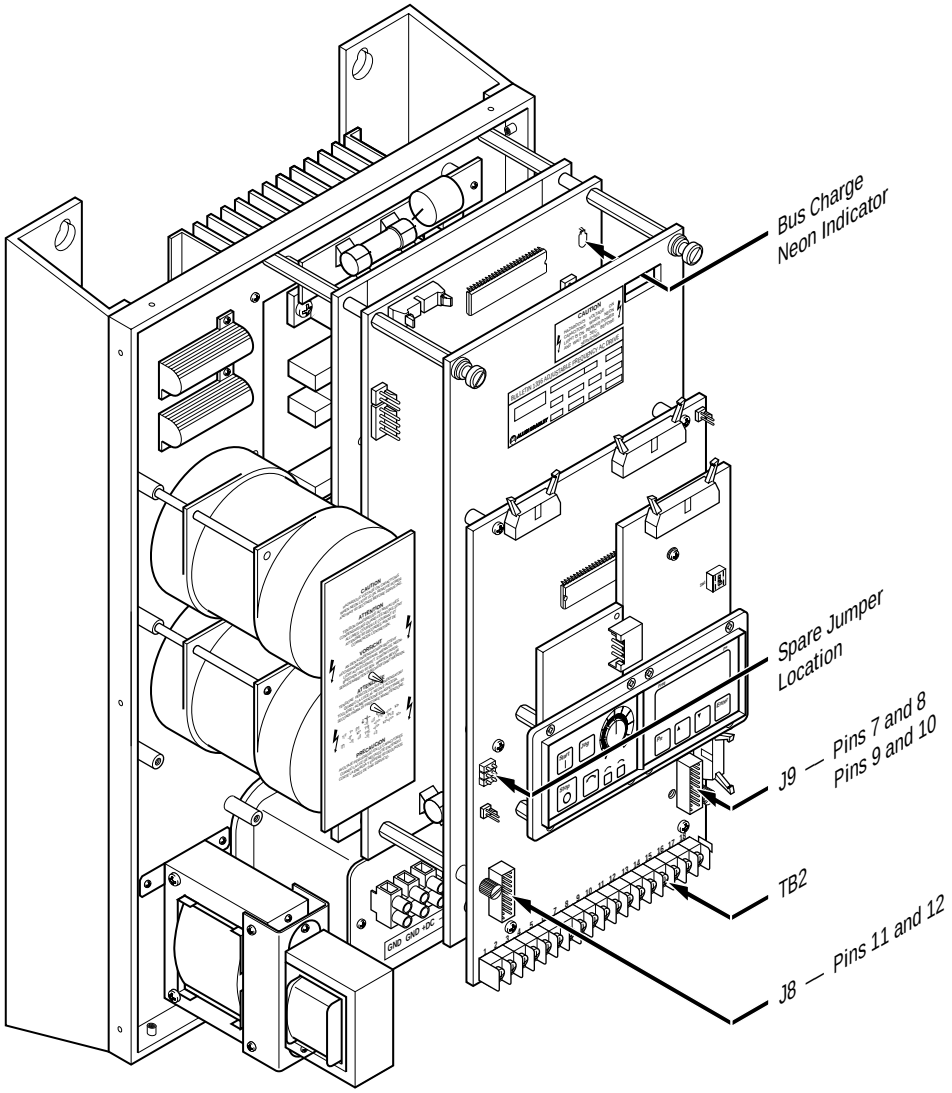
Terminal Block TB2 and TB3 – Control and Signal Wiring

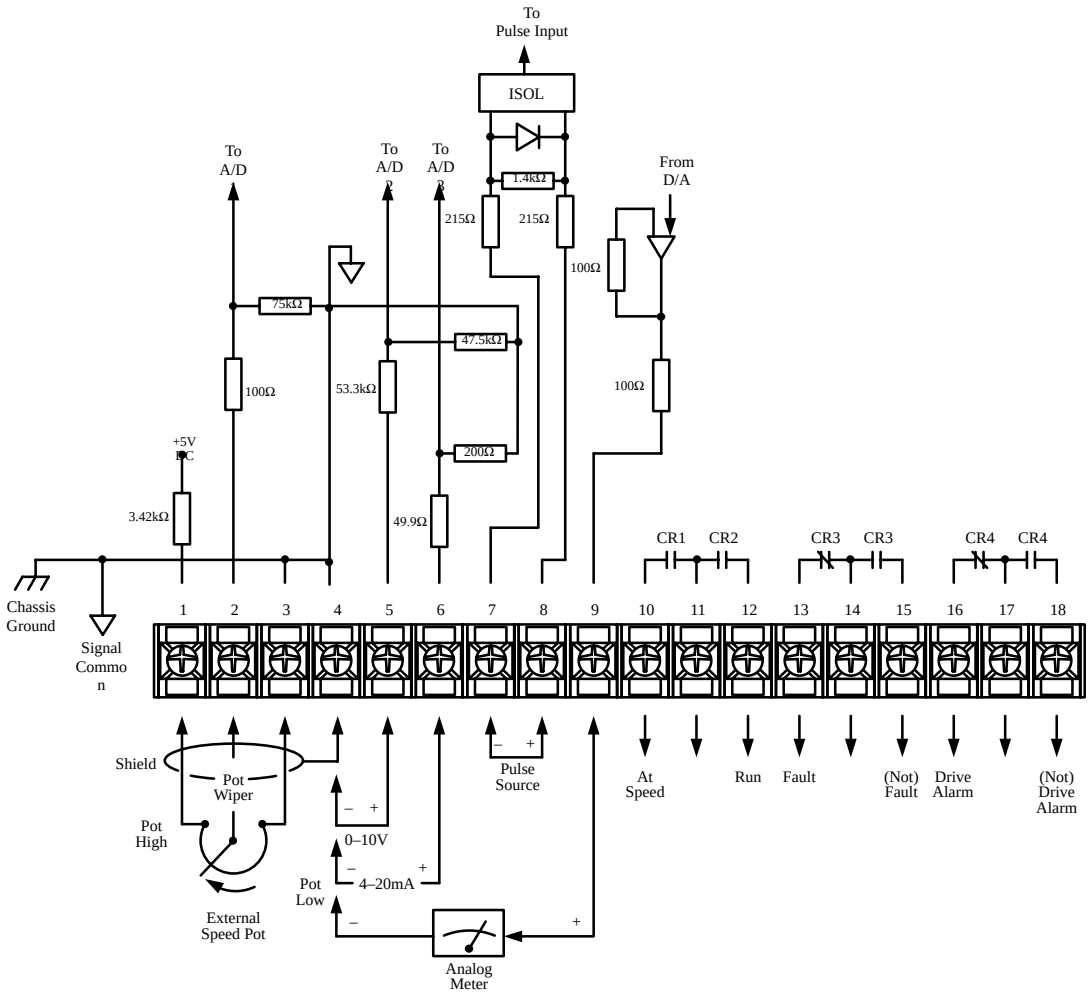
Terminal block TB2 is located at the bottom of the Main Control Board. TB2 is an eighteen position terminal block with markings of 1 to 18.

Terminal block TB3 is a twelve position terminal block located on optional interface boards L1, L2 or L3 directly above terminal block TB2. If either L1, L2 or L3 is present, refer to Appendix A — Logic Interface Options for wiring details.



Terminal Block TB2 Control and Signal Wiring

The drive is capable of operating from an optional Local or Remote Control Panel with minimum connections to terminal block TB2. When required, external operator elements may be connected to provide additional drive control. Additional drive control functions and status outputs are also available for use at TB2 as detailed on the following pages.



	Signal	Wire Group ❶	Maximum Wire Size ❷	Recommended Torque ❸
Terminals 1, 2, 3	External Speed Potentiometer	5	14 AWG	7 In-Lbs
Terminals 3 and 4	Signal Common	5	14 AWG	7 In-Lbs
Terminals 5, Signal Common	0-10V DC	5	14 AWG	7 In-Lbs
Terminals 6, Signal Common	4-20mA	5	14 AWG	7 In-Lbs
Terminals 7 and 8	Pulse Train	6	14 AWG	7 In-Lbs
Terminals 9, Signal Common	Meter Output	5	14 AWG	7 In-Lbs
Terminals 10 and 11	At Speed Contact	3	14 AWG	7 In-Lbs
Terminals 11 and 12	Run Contact	3	14 AWG	7 In-Lbs
Terminals 13, 14, 15	Fault Contacts	3	14 AWG	7 In-Lbs
Terminals 16, 17, 18	Drive Alarm Contacts	3	14 AWG	7 In-Lbs

❶ Wire group number chart, page 6-3.

❷ 2.50 mm^2.

❸ .79 N-m.

Terminal Block TB2 – Control and Signal Wiring (cont.)

Important: Control functions affected by drive parameter programming and selection are indicated on the following pages. Refer to the 1336 Programming Manual to verify that the drive is programmed to meet your requirements.

Terminal 1

Potentiometer High

Full CW or high side external potentiometer connection.

Terminal 2

Potentiometer Wiper

Wiper external potentiometer connection.

Terminal 3

Potentiometer Low

Full CCW or low side external potentiometer connection

These terminals are provided for connecting a remote 10kΩ potentiometer. The potentiometer frequency control is the range between drive minimum and maximum frequency settings.

For drives with Main Control Board Firmware Version 1.0. or 1.10, the frequency resolution is the range divided by 514, but no less than 0.005Hz.

For drives with Main Control Board Firmware Version 1.11-3.01, the frequency resolution is the range divided by 633, but no less than 0.005Hz.

Terminals 1, 2, 3

Open Circuit Detection

For drives with Main Control Board Firmware Version 1.01 or 1.11-3.01, drive logic is capable of detecting an open circuit potentiometer input at TB2, Terminal 3. Drive logic will detect an open circuit at the potentiometer low input only if the potentiometer wiper remains connected to Terminal 2 and pot high is connected to Terminal 1.

For drives with Main Control Board Firmware Version 1.01, drive logic is not capable of detecting an open circuit at TB2, Terminal 3.

Terminals 3 and 4

Signal Common

These terminals are provided to terminate both minus and drive common signals to TB2. Terminals 3 or 4 are also used to terminate any shields for cables connected to TB2.