

INSTRUCTION MANUAL
BWC36015 SIGNAL FOLLOWER ISOLATION CARD OPTION KIT
FOR THE BRONCO II 160 SERIES D.C. MOTOR CONTROLLER

The model BWC36015 Signal Follower Isolation Card provides isolation and signal direction control for the Bronco II 160 Series of D.C. motor controllers. Input signal (voltage or current) ranges are easily selected with a Plug-Type Programming Jumper. Output linearity is within $\pm 1\%$.

The card is designed to plug into the top position of the 160 Series main circuit board. Power supply voltages and circuit common are connected through this plug, eliminating the need for separate AC input voltages.

Stand-off spacers are provided to mount the isolation card to the main circuit board. The input signal (voltage or current) is connected to TB3 and a signal connection is required from TB4-2 to the Bronco II, refer to Fig. 3-2 p.15 in the bronco II Series Instruction Manual. See the attached drawing for mechanical assembly instructions or see page 3 in the Manual.

BWC36015 ADJUSTMENT PROCEDURE

1. Select proper input signal. Position programming jumper J6 for the correct voltage or current range.

INPUT SIGNAL

- 1 - 5 mA
 - 4 - 20 mA
 - 0 - 10 VDC
 - 0 - 14 VDC (7V/1000 RPM Tach Input)
 - 0 - 100 VDC (50V/1000 RPM Tach Input)
2. When the BWC36015 provides the reference for motor operation, the MIN SPEED adjustment, R27; and the MAX SPEED adjustment, R28; (both located on the BWC36015) control the adjustment of minimum and maximum speed. When this board is bypassed, such as with an Auto-Manual switch in the Manual position, the MIN SPEED, R27; and MAX SPEED, R28; (located on the B160 Series main board) control the minimum and maximum speed.
 3. With the minimum reference applied to the input at TB3 on the BWC36015 board, adjust the MIN SPEED adjustment, R27; to the lowest desired motor speed. Clockwise rotation of R27 increases the minimum speed.

4. With the maximum reference applied to the input at TB3 on the BWC36015 board, adjust the MAX SPEED adjustment, R28; to the maximum motor speed required. Clockwise rotation of R28 will increase the motor speed.

NOTE: The MAX SPEED adjustment, R27; located on the main circuit board will affect the range of adjustment of the MAX SPEED adjustment, R28; on the BWC36015 board. Therefore, R27 on the main circuit board should be adjusted first. Please consult section 3.3.5 in the Bronco II 160 Series Instruction Manual for adjustment procedures.

5. To insure accurate performance, once the initial adjustments have been completed, recheck the minimum and maximum speed and make a final adjustment if required.

