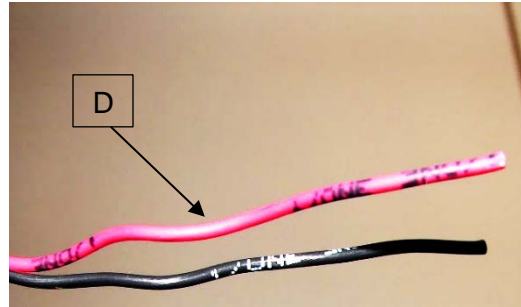
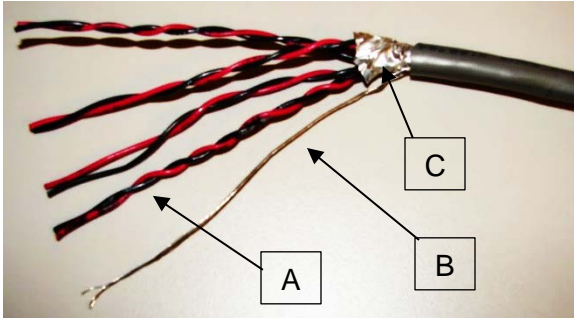


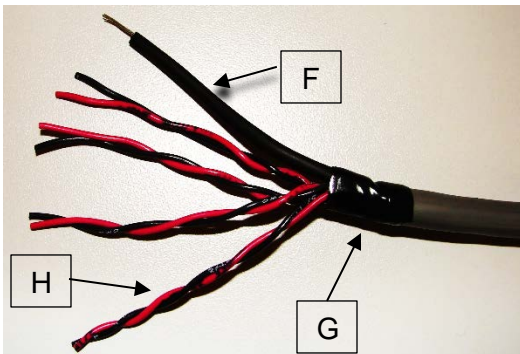
GEARED MACHINE INCREMENTAL ENCODER CABLE INSTRUCTIONS

1. ENCODER CABLE FEATURES



- A. Twisted Pairs – Cancel out induced currents.
- B. Shield Drain – Connect to an electrically isolated encoder and ground at drive for best resistance to noise.
- C. Overall Foil Shield – With shield drain wire grounded at the drive, the foil creates a barrier from noise interference.
- D. Red and Black Numbered Pairs – For easy identification.
- E. Cable part numbers are: EC-TGD-30FT, EC-TGD-50FT. Lengths are 30ft and 50ft respectively. Cut cable to correct length and prepare for installation as shown in steps F through H.

2. CABLE PREPARED FOR INSTALLATION



- F. An exposed shield is conductive and can short out nearby circuits. Cover the shield drain wire with electrical tape or heat shrink tubing.
- G. An exposed foil is also conductive and must be covered with electrical tape or heat shrink tubing.
- H. Connect the pairs to the encoder according to the table below to ensure any induced currents will cancel out.

3. CABLE WIRING CHART

| INCREMENTAL ENCODER CABLE WIRING CHART | |
|--|------------------|
| WIRE COLOR / NO. | ENCODER TERMINAL |
| RED #1 | +V |
| BLACK #1 | GND |
| RED #2 | A |
| BLACK #2 | A\ |
| RED #3 | B |
| BLACK #3 | B\ |
| RED #4 | Z |
| BLACK #4 | Z\ |
| SHIELD DRAIN WIRE | CG |

1. CG stands for case ground. Use a meter to check that there is no continuity between the empty CG terminal and motor ground. If there is continuity, then the encoder is not electrically isolated from the motor and could be subject to noise interference caused by the motor. When wired correctly, the shield is connected to the encoder case ground CG terminal and grounded at the drive. Since the encoder is isolated, the shield is only grounded at one end, the drive end, which is the correct and recommended practice for shielded cable.
2. Z and Z\ terminals provide an index signal for encoder position reference. Not required for normal operation, but may be available on some elevator drives as an enhancement option. Refer to drive manufacturer's instructions.