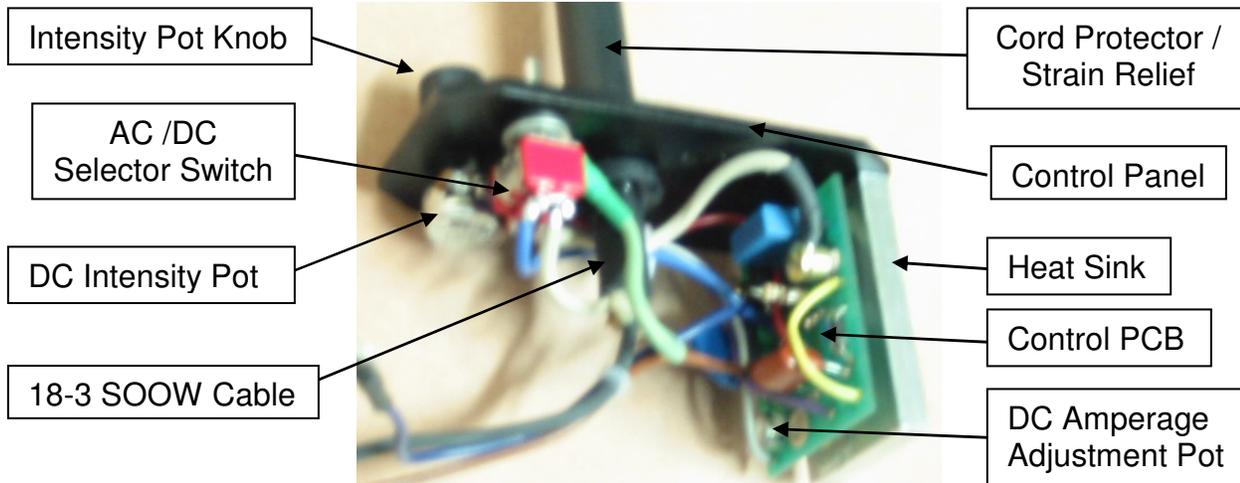


## WE-7 Cord Set / Controls

October, 2016



The WE-7 has had several series of Printed Circuit Boards manufactured for use with this model. While function of the PCB has remained the same, the design, component selection, and physical mounting has changed. If an older series of PCB is to be changed, it is recommended that the Heat Sink also be changed. The mounting of the Heat Sink to the Control Panel has remained unchanged.

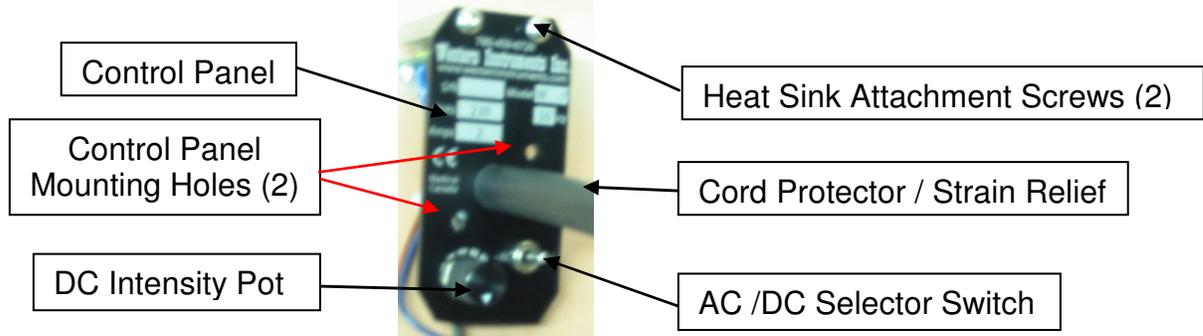
There are 2 possible outcomes of damage to this assembly.

1. After about 2500 hours of continuous use, the Cable or Strain Relief may become damaged due to age or abuse. The Power Cord and Strain Relief are first assembled. The wires on the cable are then striped to the necessary length, and their ends prepared in the same fashion as originally assembled. The Cord and Strain Relief are then pulled through the Control Panel until the Strain Relief's Flange is tight to the inside of the Panel. An appropriate AC Plug is installed on the Mains end of the 18-3 SOOW Cable (which is approximately 10mm / 0.375" in Diameter).
2. Typically an operator will move the AC / DC Selector Switch when the Yoke is activated. This action will typically cause one or more of the Semiconductors on the PCB to fail. The repair Technician can then either rework the PCB, or purchase a new board. When removing and reinstalling the Board, ensure heat conductor paste is used in the appropriate spots, and that the original fasteners (Nylon and Metallic) are used in the appropriate locations.

When a Repair Technician is ready to reinstall a new or repaired Control Panel ensure the *DC Amperage Draw Potentiometer (R3)* is adjusted to maximum so when operational the Yoke will lift 23 kg (50 Pounds). The Repair Technician must take care when activating the Yoke with the Control Panel not fastened to the Yoke, as the Ground is not connected. The Repair Technician must first ensure the Yoke will lift 4.6 kg (10 Pounds) in AC Mode, to ensure the Contact Feet (Pole Pieces) are ground flat. The repair technician must then adjust the Potentiometer on the PCB (R2) so the *DC Intensity Pot* is adjusted to a minimum setting. When the Yoke is activated, the Repair Technician slowly turns up the

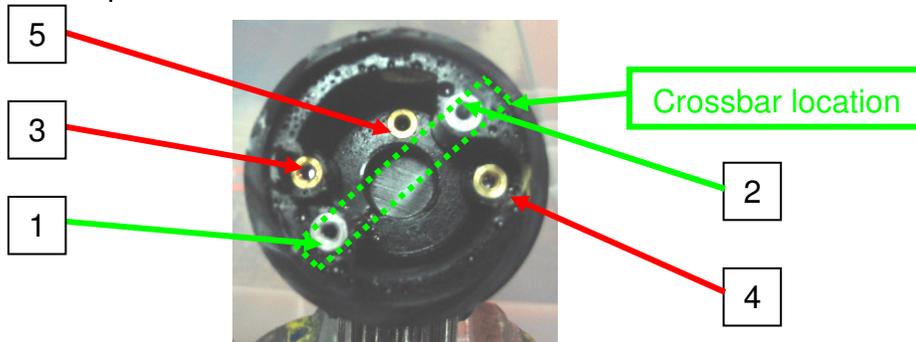
Potentiometer R2, until the Yoke lifts 23kg (50 Pounds) or until the desired lift is achieved. For a Control Panel Wiring Diagram and PCB Schematic, contact Western Instrument or your Dealer.

The alignment of the Control Panel to the corresponding receptacles that are cast into the Yoke housing may not be perfect. Care must be taken to 'start' both mounting fasteners at the same time, and slowly tighten them together to ensure the receptacles 'give' (or move



together) to align themselves to the Control Panel. The Repair Technician should take note of this if the entire Cord Set is being replaced.

Located inside the Junction Tube, at the rear of the WE Yoke housing are 5, #6-32 fastener receptacles. This is illustrated below, with all wires and hardware removed;



These connections are used for the following purposes;

- 1 and 2 are used for connecting the Control Panel and to ground the electrical system.

Note: The **Ground** Wire (Green) from the Power Cord is connected to the Control Panel, which in turn is connected to the Stand-Offs / Cross Bar and ground.

- 3 is used to connect the **Control** Wire (Blue),
- 4 is used to connect the **Power** Wire (Black) to the Switch.
- 5 is for connecting power from the switch (Brown) to the Control Board.

Note: -For trouble shooting purposes the Repair Technician can note that the finger activation Switch (Licon #11-304), is connected between 4 and 5.

-For directions on how to trouble shoot a WE-Series Frame, contact Western Instrument or you Distributor.

### Prices;

Complete Assembly with Power Cord	325.00 €	\$350.00
Flat Rate to rebuild existing assembly	195.00 €	\$255.00
WE-7 Control Housing (Cast Reinforced Urethane)	105.00 €	\$136.50
Power Cord	6.00 € / meter	\$2.50/ft
Strain Relief	10.00 €	\$12.00
PCB (installed on Heat Sink)	240.00 €	\$265.00
AC /DC Selector Switch	25.00 €	\$32.50

DC Intensity Pot  
Knob for Pot  
Heat Sink  
Control Panel

20.00 €  
18.00 €  
28.00 €  
26.00 €

\$26.00  
\$23.50  
\$35.00  
\$34.00