

WIRE WINDING MACHINE

INSTRUCTION MANUAL

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INSTRUCTIONS

1. Make sure there is sufficient amount of 'loose' fiberglass core. If you need to produce 1ft coil, leave at least 10ft fiberglass core 'loose'.



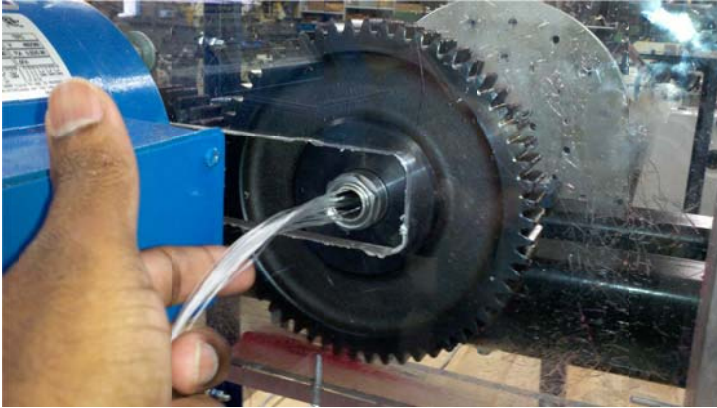
2. Turn on switch "3".



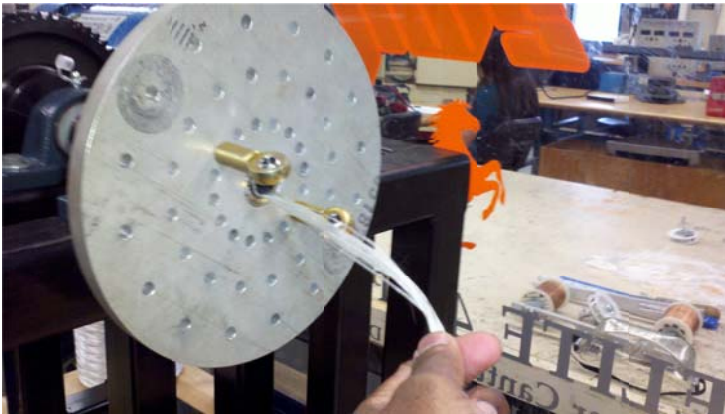
3. Now feed the fiberglass core through the rotating cylinders at the back and see that the core is approximately in the center of these cylinders. Feed sufficient amount such that the fiberglass core can reach front cylinders. Now turn off switch "#1".



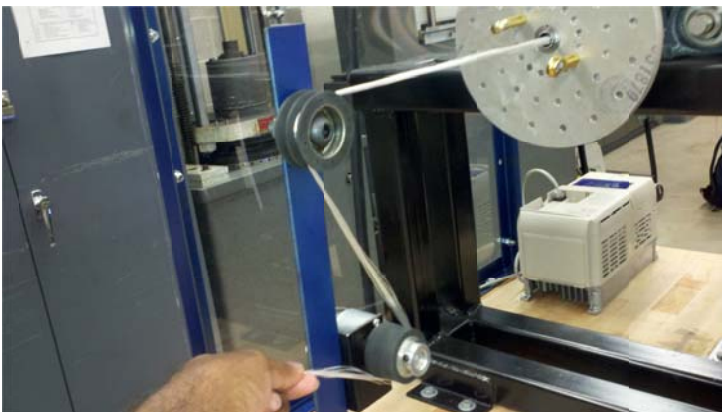
4. Insert the fiberglass core through the hollow tube driven by the motor.



5. Pull the fiberglass core from the other side of the hollow tube.



6. Run the fiberglass core through the middle cylinders.



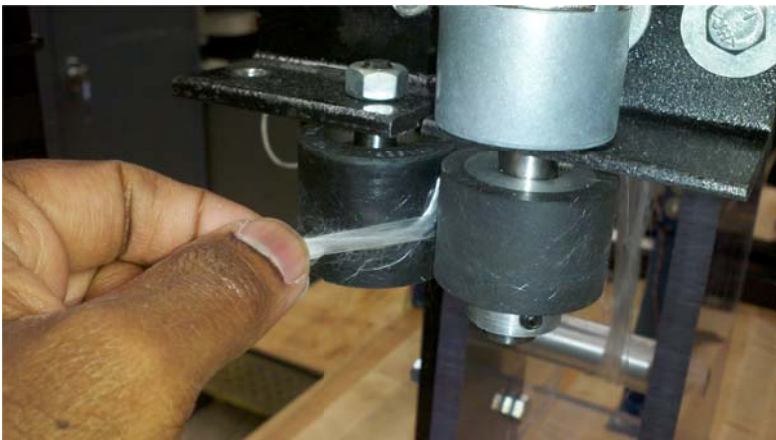
7. Then, run the fiberglass core through the resistance measurement box and the front cylinders.



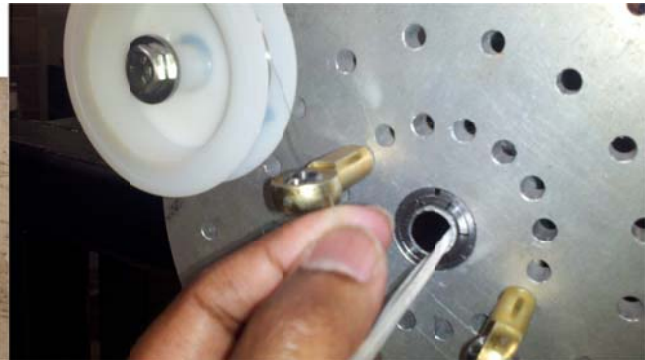
8. Turn on switch “#1”. The front cylinders will start rotating. Insert the tip of the fiberglass core midway between the rotating cylinders.



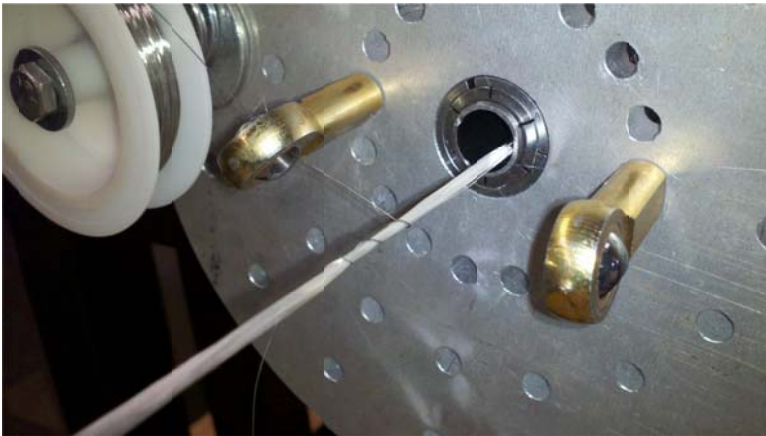
9. Once the fiberglass core is pulled in by the cylinders make sure that it is approximately centered. Turn off switch ‘#1’.



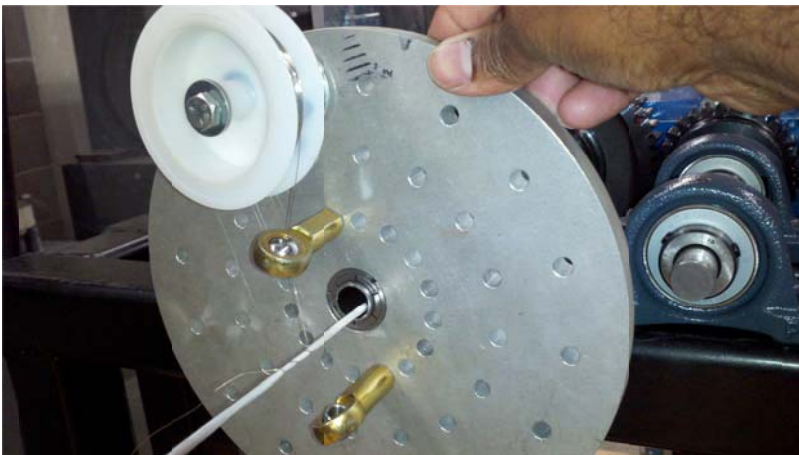
10. Now mount the wire spool on the metal disc and hand-tighten the bolt. The amount of tightening should be such that the spool does not freely rotate.



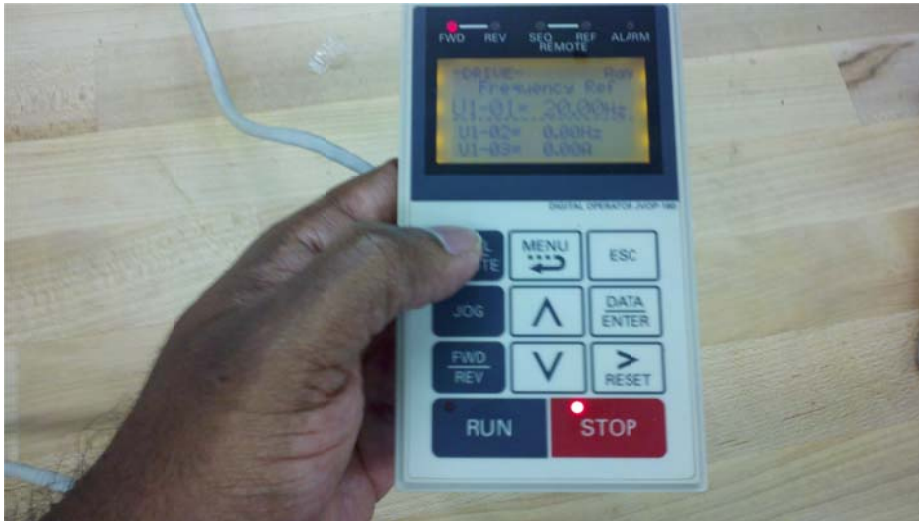
11. Now pass the wire from the spool through the 'eye' mounted on the metal disc and wind a few turns manually around the fiberglass core.



12. Now hold the free end of the wire, and rotate the metal disc by hand forward a few revolutions. This is to make sure that the wire is winding correctly around the fiberglass core. At this stage, also check the tension in the wire. If the tension is too low, adjust the bolt behind the metal disc and tighten. Then rotate the metal disc once again and recheck the tension in the wire.



13. If another spool is needed, mount the second spool diametrically opposite to the first spool following the process described above.
14. On the motor remote control pad, press 'local/remote'. You should see the red LED indicating 'FWD'.



15. Now turn on switches “#1” and “#2” simultaneously till there is sufficient tension in the entire fiberglass core. Turn them off once you find the fiberglass core is sufficiently tensioned.
16. Now press ‘RUN’ on the motor control remote pad.
17. The machine will start winding the coil on the fiberglass core. Equidistant spacing of the coil will be achieved after about 30 seconds of run time.
18. As the “coil-wound” fiberglass core reaches the resistance measurement section, the resistance measuring meter will indicate the resistance of the coil being produced in “Ohms per foot”. This reading can be changed depending on the power density of the coil that needs to be produced by changing the speed of rotation of the motor. The speed of rotation of the motor, indicated on the control pad by “Hz”, can be changed using the Up/Down arrows.
19. Once the needed coil-wound fiberglass core is produced, turn off switches “#1” and “#2”. Press “STOP” on the motor control pad.
20. In case of an emergency, press the “Emergency Stop” button located next to switches 1, 2 and 3. This will shut down the entire machine.