

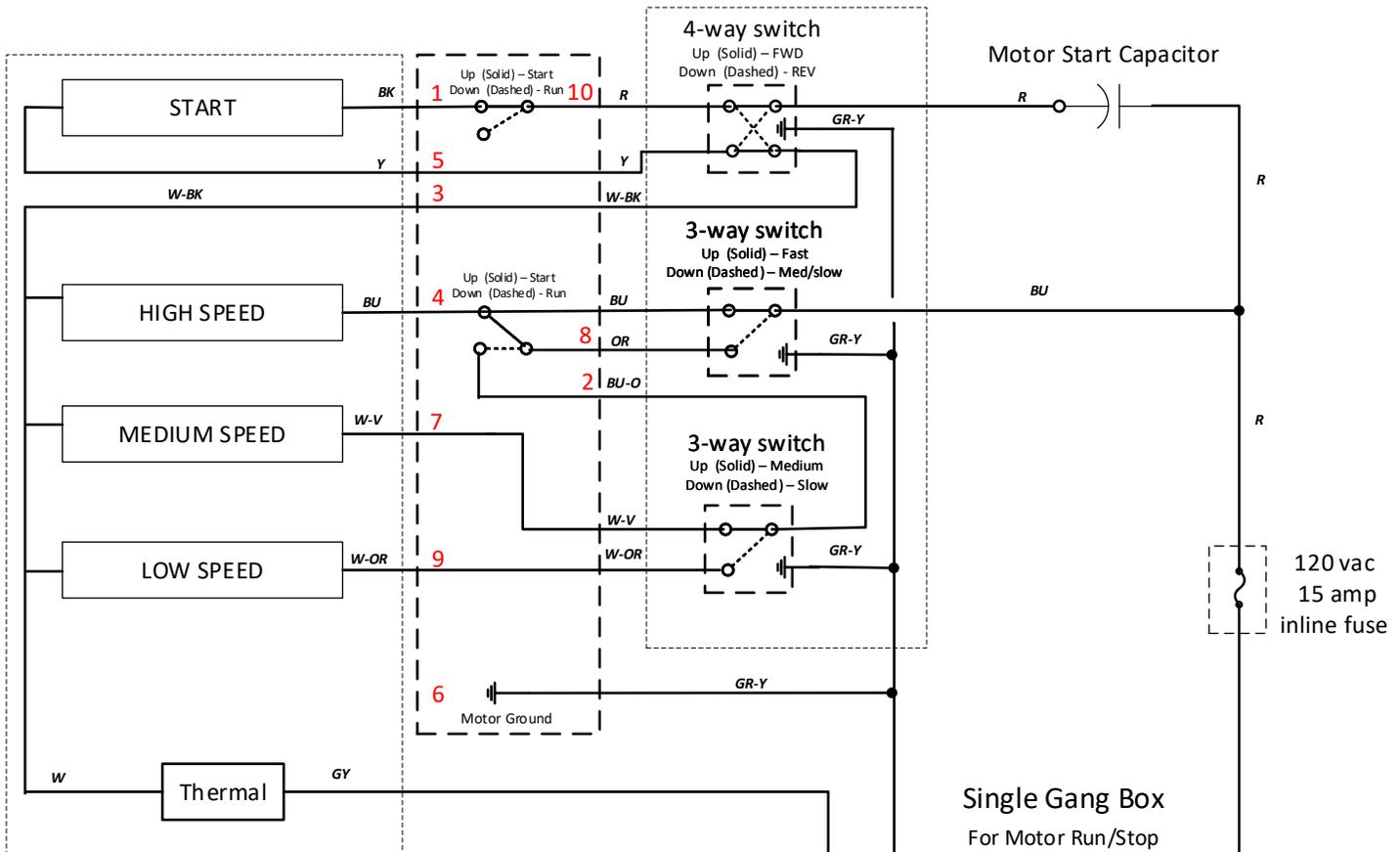
Motor

Motor Terminal Block

With Centrifugal Switch

3 – Gang Box

For Speed and Directional control



Notes

Drawing works with a 120 Vac Whirlpool 3 speed reversible washer motor.

Some wire colors may be different on similar motors.

Red numbers indicate the terminal block number, as counted left to right on the motor terminal block.

Terminals 8 and 9 are connected inside the terminal block, so low speed is powered anytime medium is powered. This does not appear to impact operability or running parameters, but may cause you to question what you are looking at in the terminal block.

With no shaft motion, 1 and 10 are connected to power the start windings. The centrifugal switch will cause the contacts to open when sufficient speed is reached, deenergizing the start windings.

With no shaft motion, terminals 8 and 4 are connected so that the motor initially starts in fast speed even if medium or low speed is selected. When the centrifugal switch activates, terminal 8 shifts to 2. If high speed is selected, the high windings will continue to be powered through 4. If medium or low is selected, power is fed from 2 to the medium/low switch and on to 7 or 9.

You can only switch between forward and reverse with the motor stopped since direction of start rotation is controlled by direction of current flow through the start winding. Changing the position of the 4 way switch will have no impact on a running motor since the start windings are deenergized after the centrifugal switch activates. You can change motor speed between high, medium, and low at any time.

Make sure you don't leave any bare wires/connectors exposed before you power it up, and make sure you clamp or mount the motor to a solid surface as well.

Credit to Jim Hardy, rest in peace, as he provided the initial drawings and discussions that allowed me to figure out the rest of this.

WIRE COLORS

- R – Red
- Y – Yellow
- W – White
- BU – Blue
- GY – Gray
- OR – Orange
- BL – Black
- BU-OR – Blue with orange stripe
- W-OR – White with orange stripe
- W-V – White with violet stripe
- GR-Y – Green with yellow stripe