New Simpson Dryer

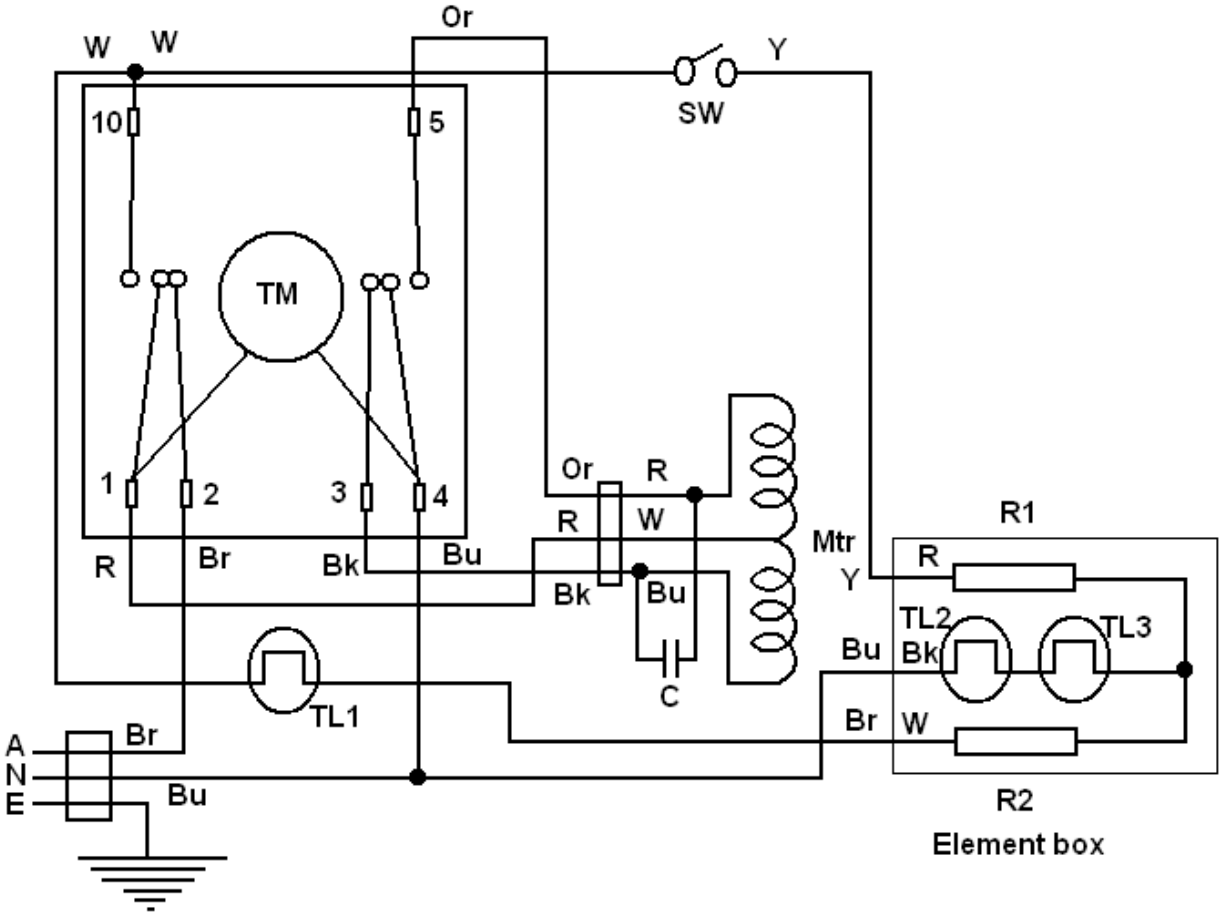

Illustration 1: New Simpson Dryer

TM Timer Motor
Mtr Capacitor Run Motor
TL1 Thermostat in air tube/fan
TL2/3 Thermostat in element box
R1 68Ω
R2 38Ω
C Capacitor

Replace **M7.5 Water valve Replacement** with the following:
Test M4.1.1.1, faults M5.5. Remove control panel (M3.1). A plastic holder with 2 screw at the back holds the valves in place, remove. I find it easier to cut the back of the control compartment so that the valves can side upwards. A hacksaw or tin snips can use for the cutting. Slide the valve out, have a **cloth to absorb any water** as any leaks will run into the out of balance switch. Swap the seal ring, be careful not to break it, use small screw driver and gentle lift it over the ridge. (F/P do not supply them with there valves). Now put the new valve in place. **Test for leaks by using M4.1.1.1** before fitting the control panel.

The water valve coil is 12V (spade connectors) or 24V (miniature connectors). The hot is a standard valve except for the coil. That cold valve is a variable flow valve. Genuine valves are expensive and as the main fault is the failure of the rubber diaphragm. I use a standard 240V valve as used in Hoover and Simpson and swap the coil. The coils pull off, a screw driver under the coil can help but be careful not to break the plastic. It also works for the cold valve but the temperature regulation is not as good. The coils just pull off and push on. The coils are reliable. Replacing the cold valve will only effect the wash temperature a little, other wise it works OK.

Add to A1.1

The reason for turning off and pulling out the plug is because the power point may be wired incorrectly and the switch may not turn off the power. The machine still has 240V on the neutral. I have come across many incorrect wired power points indicated by the tester describe in appendix 1.(A1.2). Another reason is the switch contacts may weld together and the switch does not disconnect the power.

Add to B2.3

1. Insulation meter. This measures the insulation at 500V. A digital meter will measure it at only 9v.

Add KD1.7

KD1.7 Betts Motor in Simpson

T2 & T5 Start windings
T6 Fast Speed (Run)
T4 Slow Speed
T7 Main Neutral
T3 Control Neutral

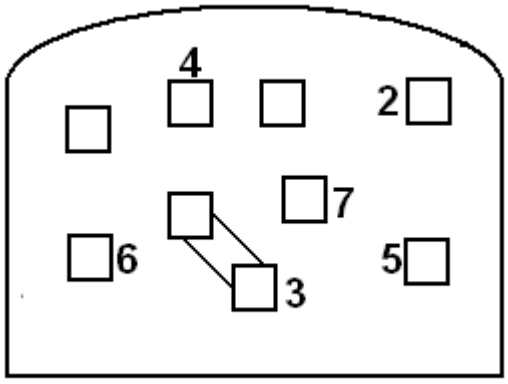

Illustration 9: Betts Motor (In Simpson)

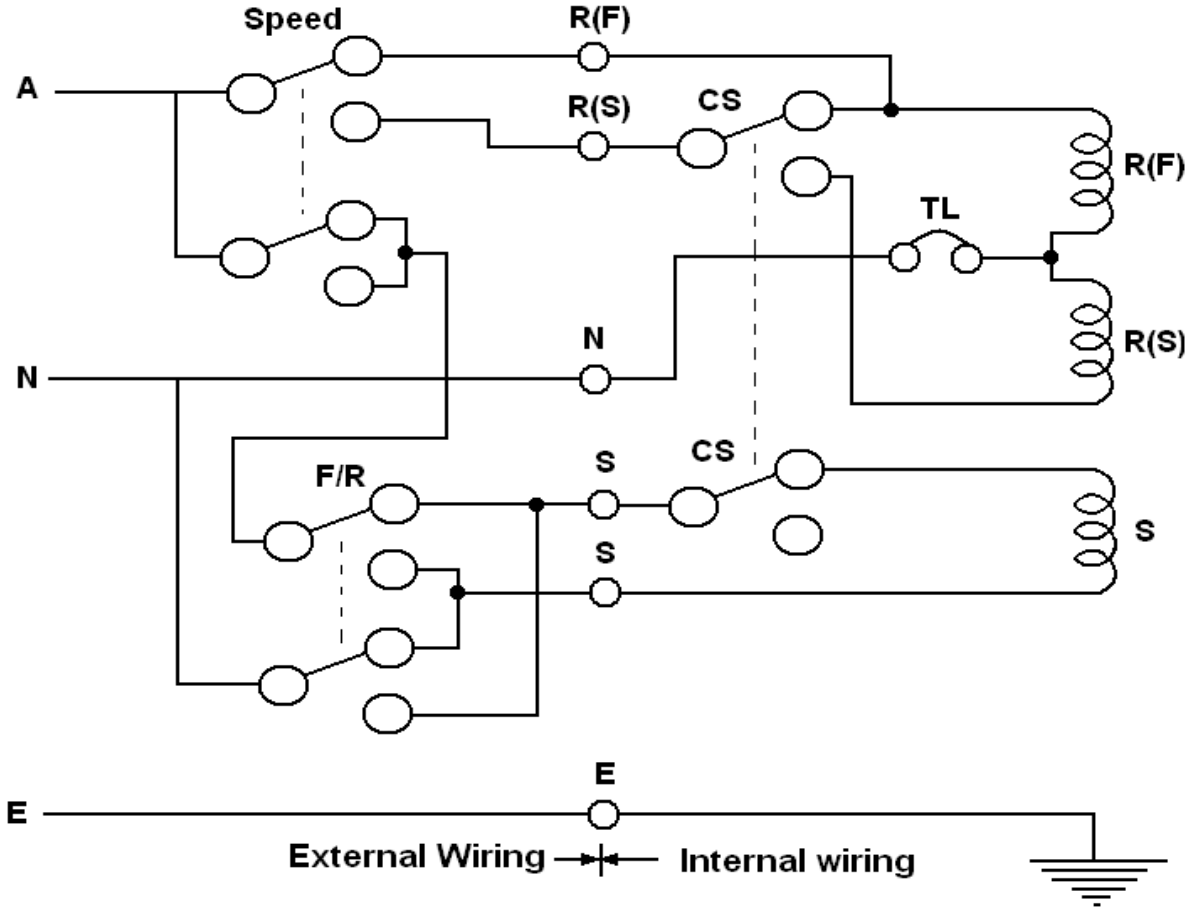

Illustration 11*: Split Phase Motor Tester (See F6.4.1)*

Codes: R(F) fast run, R(S) slow run CS motor centripetal switch F/R forward/reverse switch

Add to D2.7

7 Optional: Why did the component fail? Was it fault design, or poor quality manufacture? Was it something the customer did to the washing to cause the problem? (ie repeated soaking clothes in washer overnight causing noisy bearing, gray water use Appendix 6 etc). What can be done to prevent this from happening again?

Add to Appendix A3

A3.5 Parts Replacement

Before replacing the parts compare the original faulty part with the replacement part for any difference. Manufacturer may change the part slightly. Hoover pumps had different size bolt holding the pump. The mounting plate had to be drilled. Sometimes the manufacturer may supply instruction on modifications. Check what parts are supplied and what needs to used from the original.

A3.6 Wash Bowl Removal.

For Simpson, Hoover and others top suspension Washing machine. Instead of lifting the wash bowl out over the top, lay the machine on a rug to protect the paint, and slide the wash bowl out through the “top” opening. You will have to lift the bowl when it “catches” in the cabinet.

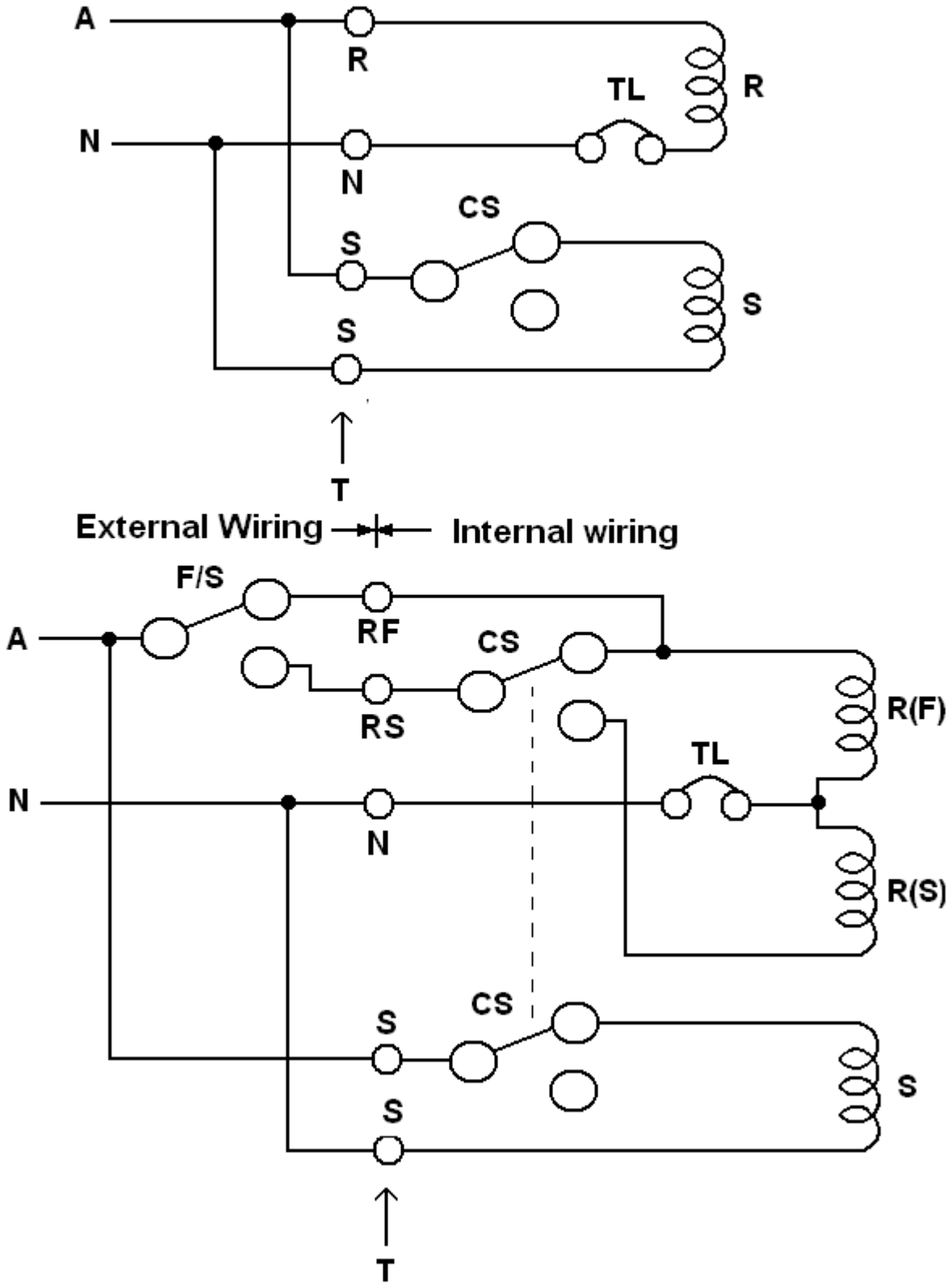

Illustration 8: *Split Phase Motor Circuits: Top: single speed*

Bottom: Two speed Wired for non-reversing application.

S Start R Run windings (F) Fast (S) Slow TL Thermal overload CS Motor centrifugal switch(s)

T Motor terminals for reversing connection F/S External Speed switch