

Twin Tub Washing Machines

Twin tubs are not very popular now, front loaders are just as economic on water. This section is very brief due to the small number of these machines requiring repair.

U1 Asian Twin Tubs

Examples Hitachi, Samsung etc.

They have a wash tub with a impeller or pulsation driven by a belt from a capacitor run motor (F7). The time and the forward and reverse is controlled by a clockwork timer. The spinner in a separate tub is directly connected to a capacitor run motor mounted on three springs. The spin time is controlled by a second clockwork timer. The drain pump is a shaded pole motor (F8) coupled directly to the pump as in automatic washing machines (E5). The drain pump operates when the spinner operates draining the spin water. The wash tub is emptied by rotating the selector switch which also pull a cord lifting a plug/valve allowing the wash water to go to the pump.

U2 Faults and Repairs

Remove power before starting repairs!

Spin motor failure. The seal between the spinner and the motor starts to leak, the water getting on the motor causing the motor winding to fail. With different brands and model the dimensions are different enough to make using a used motor replacement very difficult. Remove the top (plastic), lay the machine on it front (on mat) Remove back, undo the bolts and locking nuts holding spinner shaft to the motor. Pull the spinner out through the top. Replace the boot seal between the spinner and the motor. Replace the motor. When fitting the spinner use a rocking action (Appendix3 A3.1).

Spin brake Adjustment. The lid of the spinner operate a brake on the spinner motor. It may need adjusting, access through the back.

Pump Problems. Described in E5, access the same as for spin motor.

Drain valve. The cord operating the drain valve may break. Remove plastic covers inside the wash tub to get access.

Washer. The motor and wash bearing will out last the rest of the machine

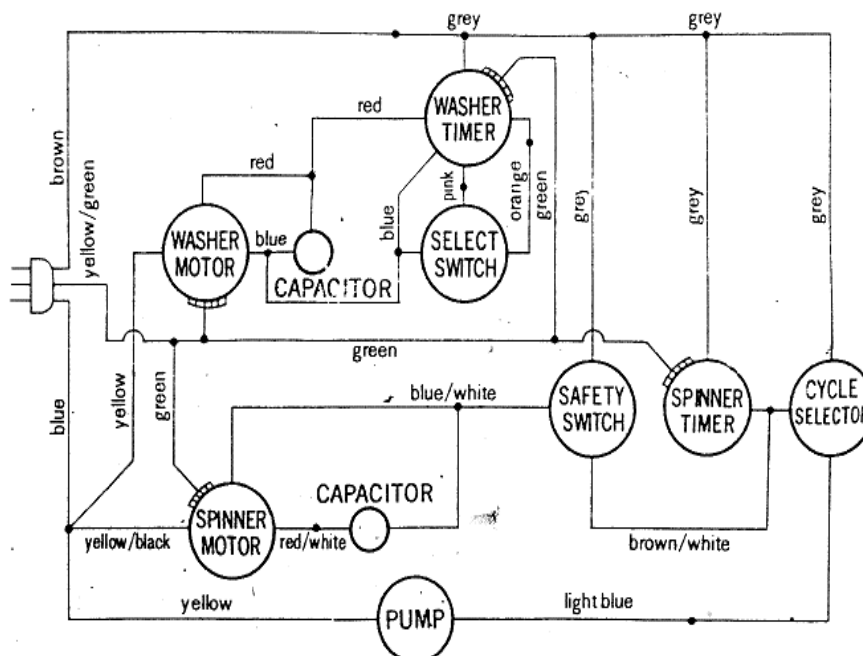


Illustration 1: Asian TT Circuit

U3 Hoover Twin Tub

These have a wash tub with an impeller or pulsator on the side of the wash bowl. It is driven by a belt from a shaded pole motor (F8) and on later models a capacitor run motor (F7). The wash timer is driven by a cable from the end of the wash motor. The spinner is mounted on a bearing on a rubber mount. The top is held by the boot seal. The spinner is driven by a small belt from a series motor (F5). It also drive a pump by an elastic belt. The spinner is timed by the operator lifting the lid. Water is pump out of the wash tub when the spinner is operating and a pinch valve opened. Parts where available well after they where discontinued. Most of them will have been retired.

U4 Faults and Repairs

These will have done a lot of work and most part will have been replaced.

Removing the back: Undo the clamp for the drain hose. Undo the three screw at the top.

Refitting requires the mains cord to fit in the slot with a grommet.

Pump Belt Replacement: The elastic belt do not last very long, remove the back, undo the screw up the centre of the spin motor bracket. It has a Phillips head screw. This allow clearance for the belt to fit between the pulley and the base of the machine. Check for free rotation of the pump!

Pump Repair: Remove the belt, remove the pump pulley undo the screw holding the pump to the frame, unclip the pump cover. If the pump bearing and seal is not available the seal can be replace if too much wear has not taken place. The seal is a standard oil seal (025.075.25)

Spinner Seal Replacement: Same as for Asian twin tub, except that a nut and bolt clamps the spinner shaft to the pulley.

Wash bearing and seal replacement: Grub screw hold the pulley on, the pulsator slide into the wash bowl. If the bearing is not available the seal is a standard oil seal (043.078.25)

Spin motor brush replacement: Remove the splash cover (internal spring clip), the brushes are held in by a metal lever and spring.

Lid switch adjustment: The lid operates a cable with adjustment bolt. Also the micro-switch has some adjustment on it also. The switch can also fail.

Other Problems: The pinch valve can leak, replace, the plastic wash motor pulley can wear, replace.