<u>Update2.3</u> Create new page 5 in **J-D Hoover 600 - 900 Data JD7 Hoover Round Motor Connections ( Alternative 520)** 



Illustration 1: Hoover alternative 520 Motor

- 1 Start Winding resistance Start 10 $\Omega$ , Fast 6 $\Omega$ , slow 9 $\Omega$
- 4 Start Round motor with internal switches, bush bearings
- 2 Neutral
- 3 Fast
- 7 Slow

Add to end of E2.3.3 *Water valves may drip with gravity feed systems as the water pressure turns off the valve.* 

# Maytag late model update

Replace Performa with:

#### Late Model Machines and Performa.

These work the same as the early machines but the brake and seals are redesigned and are not interchangeable with the early machines. The spin and agitator seals are now triple lip seals and suffer the same reliability and durability as other manufacturer (see E10).

# Change P3 heading to: P3 Access (Performa and Late Model Machines)

### P3.3 Agitator Removal

The top of the agitator lifts off and the agitator is held on with a bolt.

P3.4 Belt. The belt is still under the machine as in early machines.

**P3.5** Spin Seal and agitator shaft seal replacement. This has a triple lip seal with a aluminum cast hub a little like the Kleenmaid. Having lip seals they suffer the same fate as Simpson changed from a gland seal to a lip seal. The seal kit comes with very good instructions. A special tool is required but a homemade can can be made with a welder. See P5.2 and P5.3.

### P5.2 Seal Kit Replacement (Late models with hub)

Maytag supplies detailed instructions in there seal and bearing kit for its replacement. The following are my suggestions.

A home made spin bowl hub spanner can be made, the Hoover 600-900 gearbox bolts are the same tread as those used to bolt the spin bowl to the hub.

Remove the outer cabinet to get better access to the springs and pliers can be used instead of the spring removal tool.

Check for wear on the agitator shaft/bush for wear. If there is wear the agitator lip seal will not not seal. There should be no sideways movement on the agitator shaft. Repair see P5.3.

### P5.3 Gearbox Agitator Bush Replacement. (Late models)

Check for wear on the agitator (see above P5.2). Maytag only sell complete gearboxes and are very expensive. A  $\frac{3}{4}$  x 7/8 inch bush can be purchased from bearing suppler, it is double the required length and cut be cut in half to make two bushes. I turned up a little plug on a lathe to knock the old bush out and push the new bush back in.

- 1. The top of the gearbox has to be removed. Using a screw driver bend out the tabs holding it together. These can be bent and hammered down on reassemble. There is provision in the bottom half casting to drill and bolt the two halves together if needed.
- 2. Remove the small "O" ring from the top of the agitator shaft and remove the agitator shaft.
- 3. Replace the bush and reassemble.

Add to section V (Vacuum cleaners)

# P7 Maytag Centennial

This is a Whirlpool with a Maytag badge. When the two companies combined, it appeared that Maytag drop the Performa design and used the Whirlpool design. See N1 for details and repairs.

#### P7.1 Access

Access to the control panel is like the Whirlpool, but instead of using screw they used a spring clip. Use a **thin** paint scraper to push the spring clip in as shown in illustration 3. This then allow the control panel to move forward and rotate up. (Like P3.1 and some other USA washers)



Illustration 2: Maytag Centennial Control Panel Access

A = plastic lugs B = spring clip C = paint scraper

#### V4.5 Dyson DC01

This is an upright vacuum cleaner with a grey body with yellow plastic bits. It has a Vacuum motor in the base driving the beaters with a flat rubber belt from the end of the motor. It has a cycle instead of bags and two filters, a motor filter, and an exit filter.

The air flow through the vacuum cleaner through "pipes" and has a hose for corners and other bits. These can block so clean them if the suction is poor.

#### Access to the motor

This can be a bit tricky.

- 1. Remove the bottom beater cover (4 screws) and the belt.
- 2. Remove the wheel on the belt end. Yellow plastic covers the axle. Spring these off. Remove the 'E' clip and the wheel.
- 3. Remove the top cover from the beaters, by springing off the "rotating hinge" at the other end off the motor (opposite the belt) and rotating down.
- 4. Remove the second plastic bit.

- 5. Undo the 6 screws (T15) holding the bottom motor cover and remove the cover. Take note about the rubber flap valve.
- 6. This gives access to the vacuum motor, noise capacitor, and thermal overload.

## Add to section T Dishwasher

### T16 LG Dishwasher

This information applies to model "LD1204W1" with a plastic moulded base. It also has a float valve in-line with the water valve with a polystyrene float operating a rod with an magnet to operate the water valve. Its a bit like an early ASKO dishwasher (T15/T2.2) It has a capacitor run pump and a synchronous drain pump. The heater is an in-line with a pressure sensor.

### Access

- 1. Remove the top
- 2. Remove the bottom front plastic cover, leaving the second moulded plastic front cover.
- 3. Remove the side panels. The RHS from the front gives the best access to the inside.
- 4. Remove the front plastic cover.

#### Add to O4.4 (at end)

Early models had a metal washer over the bearing, this stopped water entering the bearing. But was left out on later models. I put a rubber washer from a toilet (flush) to protect the bearing.

#### Add to end of 04.4

Early models had a metal washer over the bearing, this stopped water entering the bearing. But was left out on later models. I put a rubber washer from a toilet (flush, buy at hardware stores) to protect the bearing. This is fitted from the top before the seal is fitted.

#### Replace S5.2

#### **S5.2** Faults and Repairs

Similar to the other dryers. The back bearing fails like the F/P dryer, see S4.2.2 for details. The back bearing has a wider inter race, but the Hoover /F/P dryer bearing can be used with their spacers. Also use the felt washer, see S4.2.2.

The drum bolt can also give problems. These are held in with a sheet metal plate and is fixed to the drum with with the metal bent over around the round holes ('sheet metal rivets'). When these give way, a replacement drum can be very expensive. I now reinforce this plate with round head <sup>1</sup>/<sub>4</sub> inch and bolts, spring washers and nuts. This can be done with only pulling the vent chamber off at the back.

### Add to end of R6-LG2

### **Alternative Front Panel Removal**

For LG WD147505SD with direct drive motor. This only has a small plastic cover for the pump cleaning, and hinge brackets at the bottom to hold the front panel on.

- 1. Remove the plastic door to the pump cleaning, remove the white painted screw and remove the complete plastic housing.
- 2. Remove the 2 bottom screw now exposed. ( Bottom screw holding the pump housing to panel)
- 3. Remove the top cover and soap draw, and door seal as above. Steps 1,2,3,5,6.
- 4. Remove the 2 screw holding the control panel to the cabinet. These are accessed from the inside, towards the front. There is a plastic clip also, and move the control panel forward.
- 5. This now exposes the 2 screws at the top of the front panel. Remove and hinge the fron panel forward and down.



Illustration 3: New Simpson Dryer

*TM Timer Motor, Mtr Capacitor Run Motor, TL1 Thermostat in air tube/fan, TL2/3 Thermostat in element box, R1 68\Omega, R2 38\Omega, C Capacitor 8\muF* 

#### **PCB** problems

Later models have a electronic controller with auto sensing. After replacing noisy motor bearings (6001) and testing the dryer would not heat. I wasted a lot of time checking the PCB and sensor only to discovered when run with out the sensor connected it would heat, it would also heat if used in time mode. Will it only heat when the sensor is damp, talking mate he say that the sensor/PCB are not reliable, and use the time mode. (Not a fix but a work around solution).

#### **O5.0 Gearbox Belt**

The gearbox belt has the tension pulley (idler pulley) on the out side causing the belt to bend both ways, resulting in the 'Vee' section becoming cracked. This does not normally cause a problem. The genuine belt are more slippy than a standard belt and more expensive. On spin cycle the belt pulls the idler pulley out reducing the pressure on the belt allowing it to slip, reducing the load on the motor during the start of the spin cycle. I have use a standard industrial 'V' belt the next size belt larger and experimented with the belt tension by using wire in the idler tension spring and monitor the start up current on the spin cycle. If there is not enough tension the belt will slip on the wash cycle.

#### Add to Maytag and renumber the remaining P5.

#### **P5.2 Agitator seal Replacement**

Maytag replaced the gland seal with a lip seal on the agitator shaft. These where not successful like all other manufactures who did similar thing. The stem nut cannot be modified to take the earlier

gland seal, like the Simpsons. Only problems is the agitator shaft and seal, the steel is corroded and the new lip seal will not be successful, a complete stem kit is required and a new agitator shaft also, which can be very expensive.

I have found a cheaper alternative. I used 19.36.7 (7230-cr) oil seal, a little was needed to be taken off the stem nut for it to fit. I the put a speedi sleeve (19mm – 99076) using the supplied instructions. They are not cheap, but this is much cheaper than the Maytag parts and the seal is running on stainless steel.