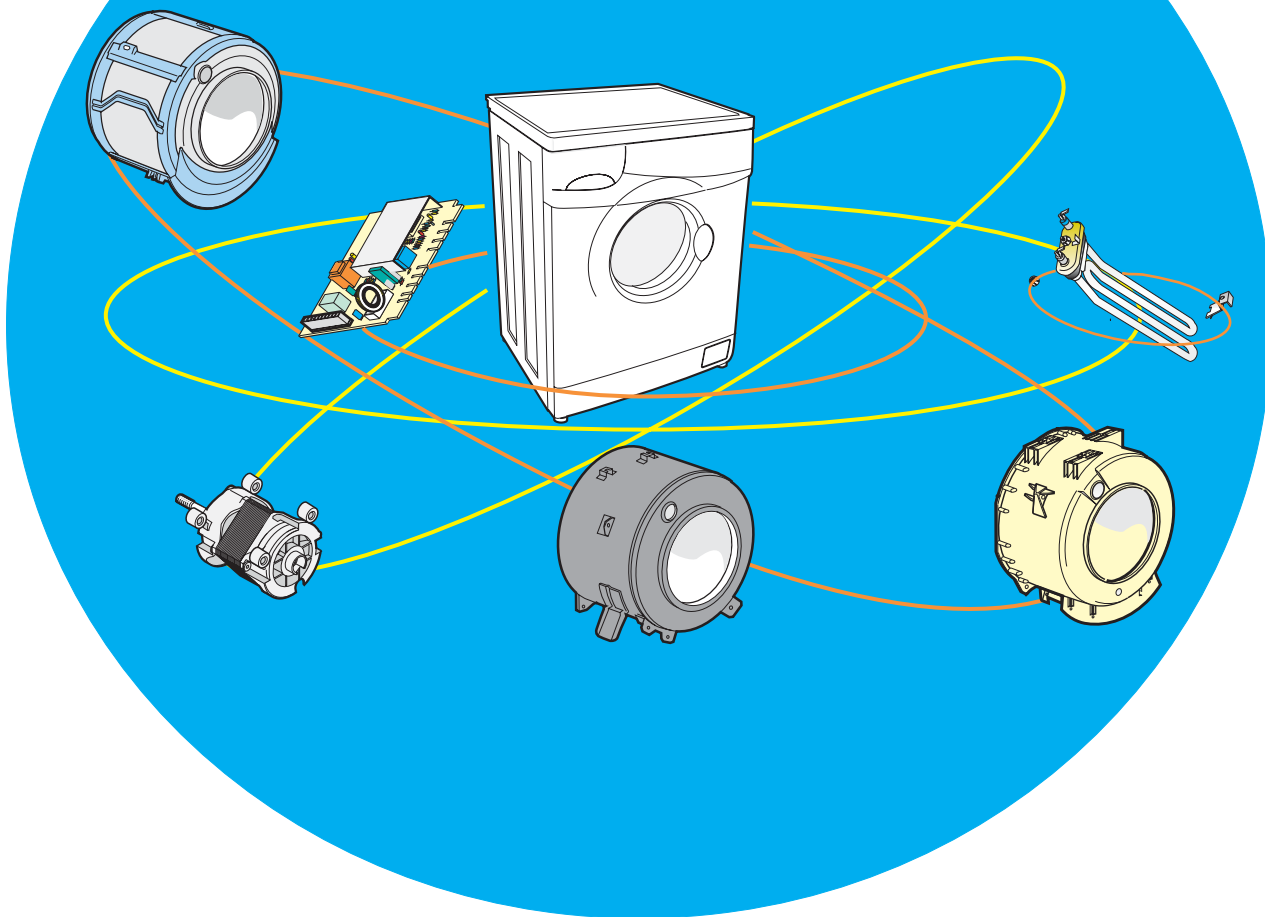


# Service Manual

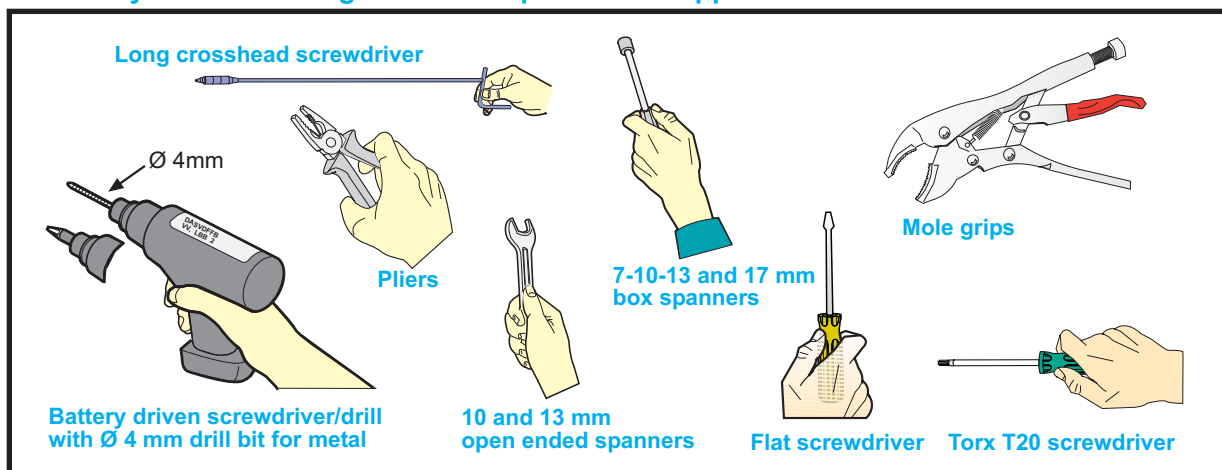


## MECHANICAL FRONT-LOADING WASHING MACHINE AND WASHER/DRIER

**IMPORTANT**  
Remove the plug from the mains power supply when  
carrying out any operations on the machine.

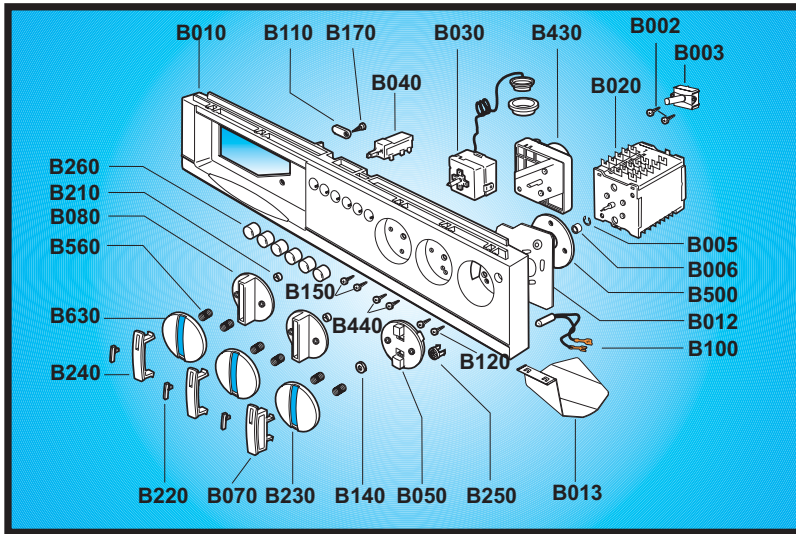
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Tools necessary for dismantling the various parts of the appliance:



**IMPORTANT:**

The washing machine used as a reference model for the compilation of this manual is the 42 litre version with enamelled tub. Any maintenance operations referring to other versions have been written in blue. This Manual must be used together with all the other technical documents appertaining to the product itself (Exploded views, technical documents and any other technical information provided). This manual refers to the replacement of a Control Panel on a washing machine or washer/drier that possesses all the components that may be used on models currently on the market. Furthermore, the illustrations and examples refer to a fictitious product.



**Removing the oscillating unit locking bolts:**

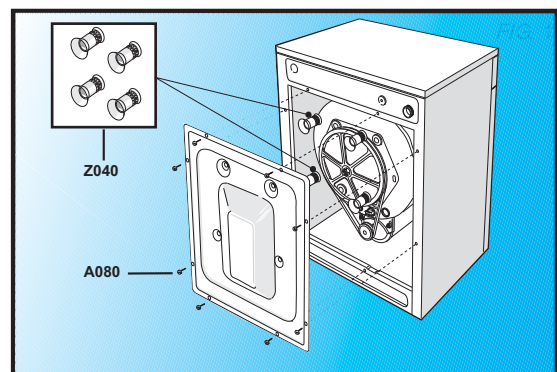
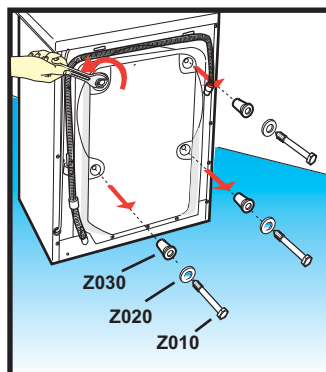
- (a) Use a 10 mm spanner to remove the 4 hexagonal head fixing bolts (Z010), the respective washers (Z020) and rubber packing plugs (Z030).
- (b) Insert a screwdriver in the holes left and lever out the four spacers (Z040).
- (c) Lean the appliance forward to recover the four fallen spacers.

**Version with Polypropylene tub:**

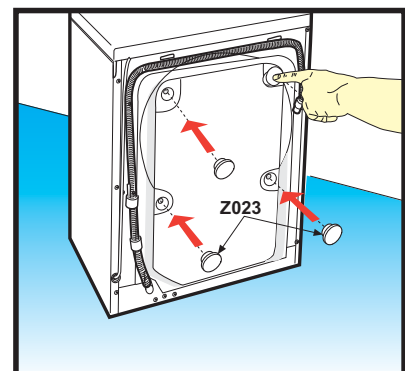
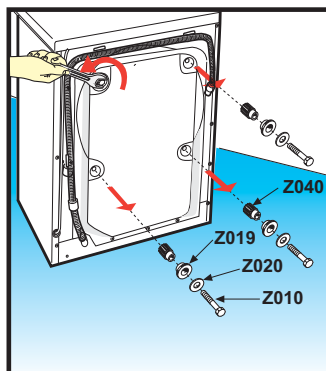
- (a) Use a 10 mm spanner to remove the 4 hexagonal head fixing bolts (Z010), washers (Z020), spacer bushes (Z019) and packing spacers (Z040).
- (b) Close off the four packing bolt holes using the four plugs (Z023) provided in the document envelope.

**Important:** If the spacers remain trapped inside the appliance, open the rear panel by removing the eight fixing screws (A080) and recover the spacers. Store these parts carefully as they will be useful when transporting the machine in the future.

**For Enamelled and S/ Steel tubs**

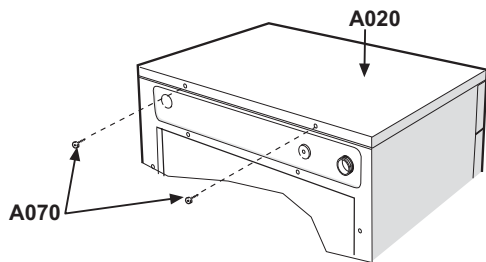


**For Polypropylene tubs**



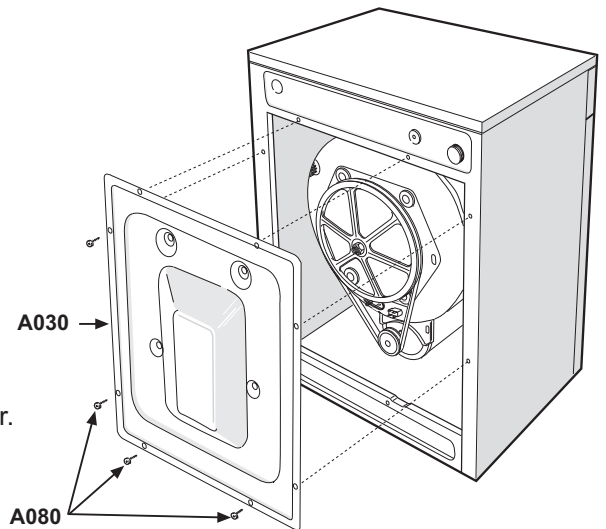
## Step 1 Removing the top cover (A020):

- (a) Remove the 2 fixing screws (A070) on the rear of the top cover (A020) of the cabinet.
- (b) Lift the back part of the cover and push it forwards to remove it.
- (c) To re-assemble, follow the same procedure in reverse order.



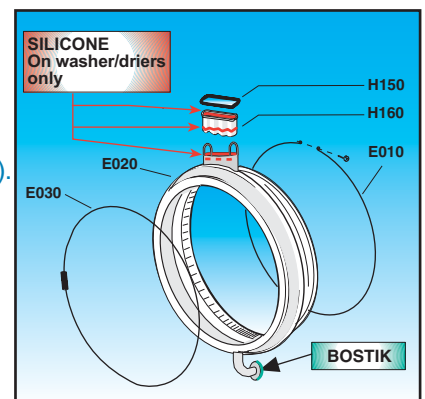
## Step 2 Removing the rear cover (A030):

- (a) Remove the eight fixing screws (A080) securing the rear panel (A030) to the cabinet.
- For 33 cm and 39 cm washing machines:
- (a) Remove the twelve fixing screws (A080) securing the rear panel (A030) to the cabinet.
  - (b) To re-assemble, follow the same procedure in reverse order.



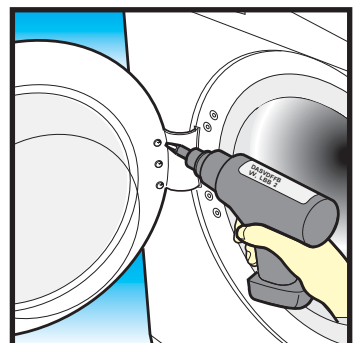
## Step 3 Removing the door gasket (E020):

- (a) Remove the top cover and rear panel (Steps 1 and 2).
  - (b) Open the door and remove the sprung clamp band (E030). Then release the door gasket (E020) from the front panel of the cabinet.
- For washer/drier only: Release the door seal from the drying heater element box and remove it. Recover the black union (H160) and the retaining spring (H150).
- (c) From above, unscrew the inner sprung clamp band (E010) then carefully remove the door gasket from the tub. Note that the water drain pipe at the bottom must also be removed with the gasket. The drain pipe is held in position by a high-temperature water resistant sealant (Bostik type).
  - (d) To re-assemble, follow the same procedure in reverse order, taking care to clean any hardened sealant from the door seal drain pipe housing.
- For washer/drier only: the door seal must be re-sealed onto the dryer element box using a high temperature and water resistant silicone.
- For 33 cm and 39 cm washing machines: to re-assemble, insert a spacer under the wash motor to obtain more working space for fitting the door gasket. Follow the same procedure in reverse order, taking care to clean any hardened sealant from the door gasket drain pipe housing.
- (e) Apply new high temperature water-resistant sealant (Bostik type) to the door gasket drain pipe.



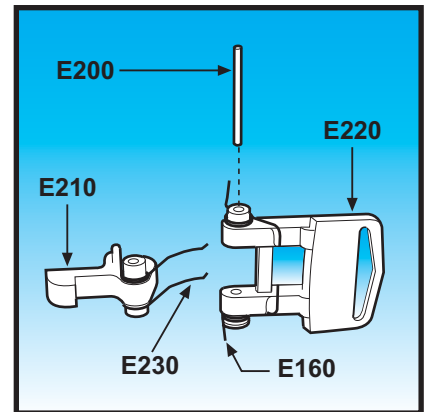
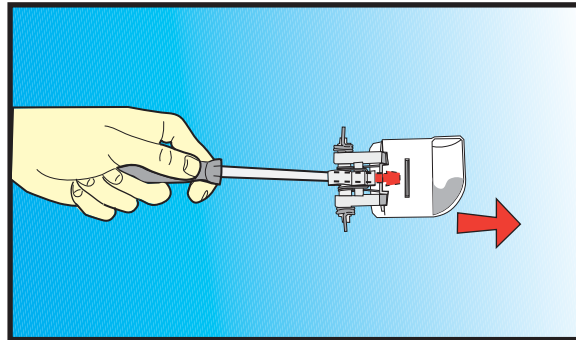
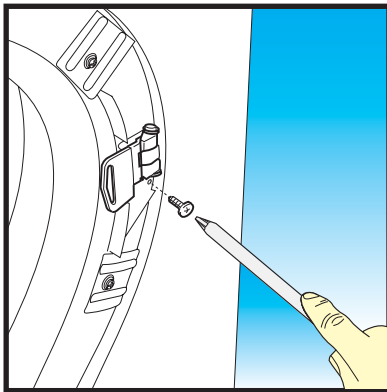
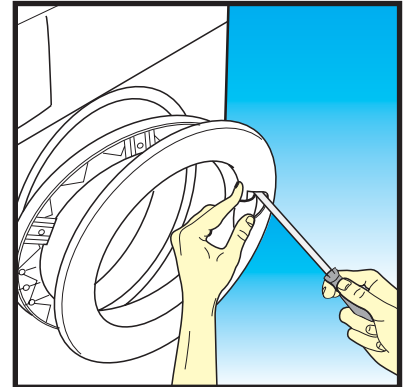
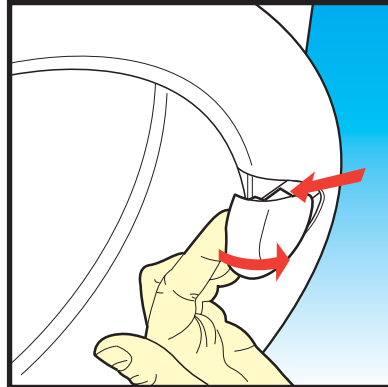
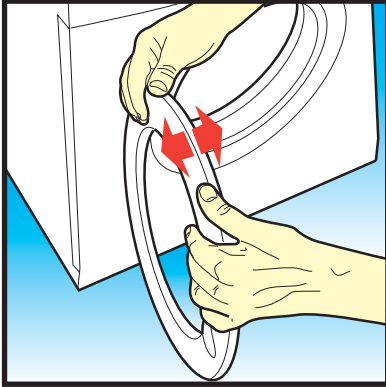
## Step 4 Removing the door:

- (a) Open the door and remove the three screws (E120) fixing the door to the hinge.
- (b) To re-assemble, follow the same procedure in reverse order.



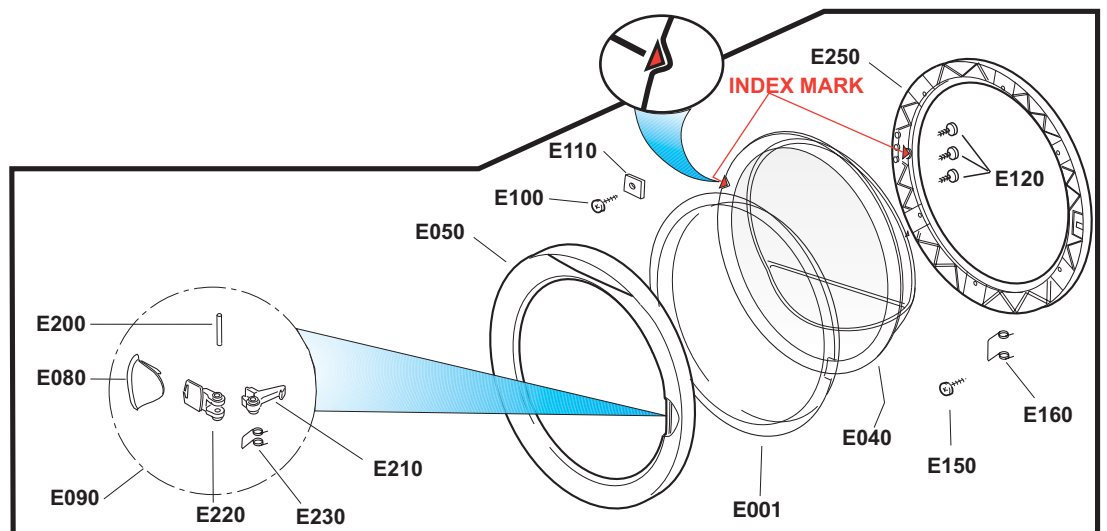
**Step 5** Removing the door handle assembly (E090) and/or the door surround (E050):

- (a) Open the machine door.
- (b) Lever off the top part of the door surround using your hands to access the two screws (E150) securing the handle return spring (E160). Then remove the screws using a cross-head screwdriver.
- (c) Remove the spring (E160) noting its position, then extract the entire handle assembly.
- (d) To re-assemble, follow the same procedure in reverse order, taking care to assemble the handle (E080) last.



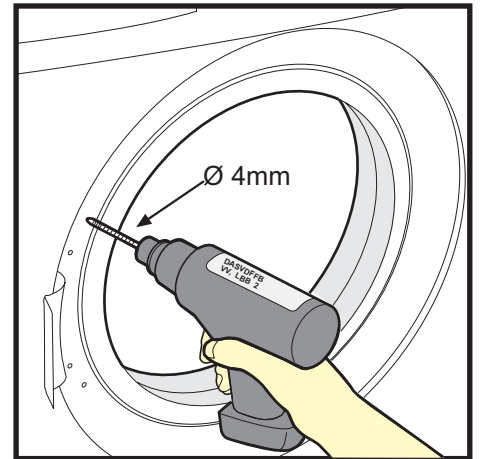
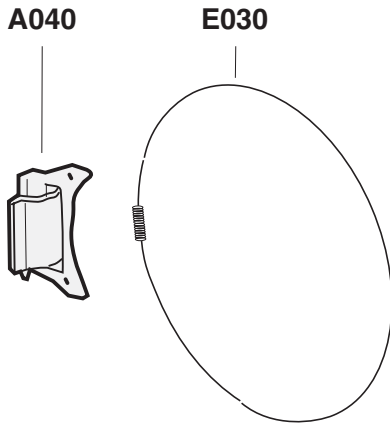
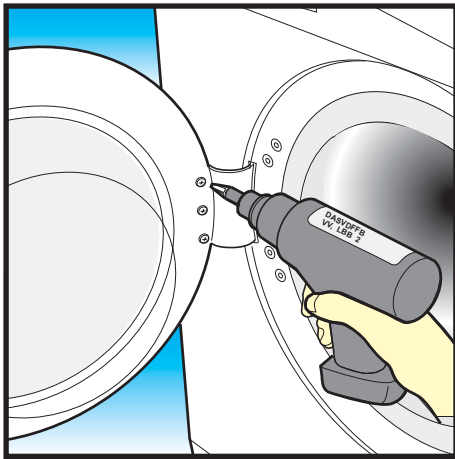
**Step 6** Removing the door glass (E040) and/or door glass protection (E001):

- (a) Follow **Step 5**.
- (b) Unscrew the 6 screws (E100) and the 6 glass clamping plates (E110) and then remove the glass and/or the door glass protection (E001).
- (c) To re-assemble, follow the same procedure in reverse order, making sure that the door glass is installed in the correct position (see index mark on drawing). Fit the handle (E080) last.



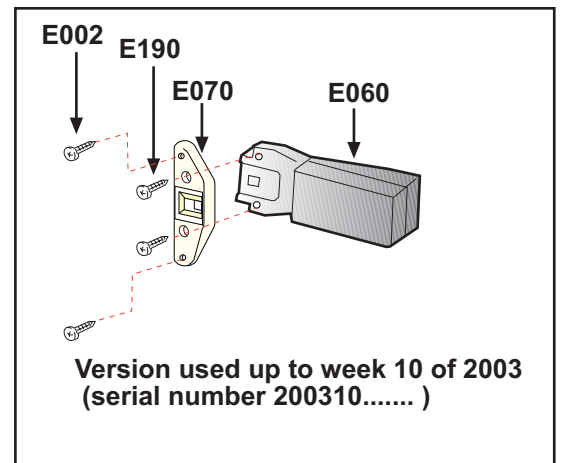
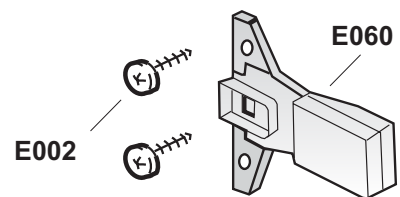
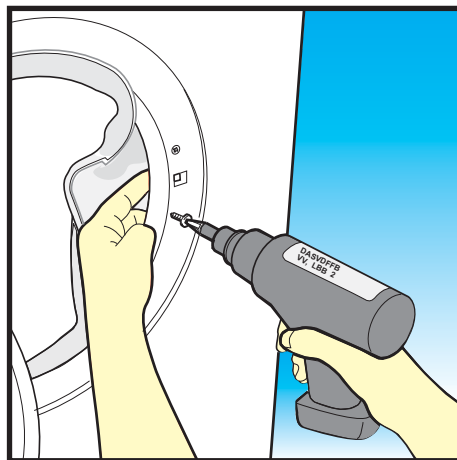
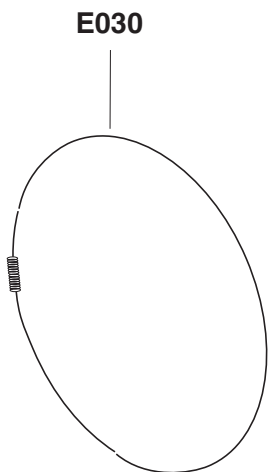
**Step 7** Removing the door hinge (A040):

- (a) Carry out the operations in **Step 4** to remove the door.
- (b) Remove the sprung clamp band (**E030**).
- (c) Remove door gasket (hinge side) in order not to damage it during the next operation.
- (d) Use a  $\varnothing 4$  mm drill bit to drill out the 4 rivets (**A240**) securing the hinge to the cabinet, taking care not to damage the door gasket.
- (e) Extract the rivets from the front panel and remove the hinge.
- (f) To re-assemble, follow the same procedure in reverse order.



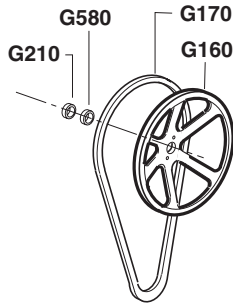
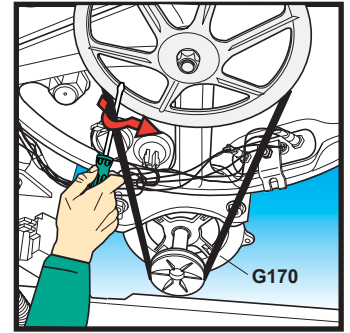
**Step 8** Removing door catch (E060):

- (a) Open the door.
- (b) Remove the sprung clamp band (**E030**).
- (c) Remove the door gasket (**E020**) from the catch side of the door.
- (d) Remove the two fixing screws (**E002**) securing the door catch (**E060**) to the front panel.
- (e) Disconnect the wires, noting their positions.
- (f) To re-assemble, follow the same procedure in reverse order.



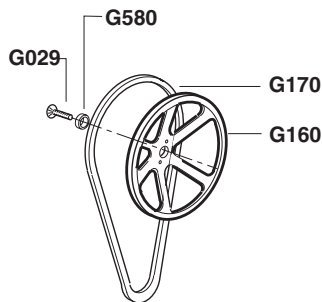
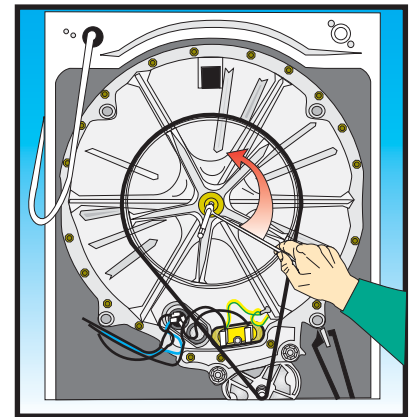
**Step 9 Removing the drive belt (G170) and/or driven pulley (G160):**

- (a) Remove the rear cover (**Step 2**).
- (b) To remove the V drive belt (**G170**), insert a tool between the belt and the pulley (**G160**). Rotate the pulley and remove the belt.
- (c) Use a **19 mm** spanner to remove nut (**G210**) and cup washer (**G580**).
- (d) The pulley can normally be removed from the drum shaft manually. However, if this is not possible, use a rubber headed hammer to gently strike the shaft.
- (e) To re-assemble, follow the same procedure in reverse order, either using new nuts or applying a locking compound to the re-used ones.



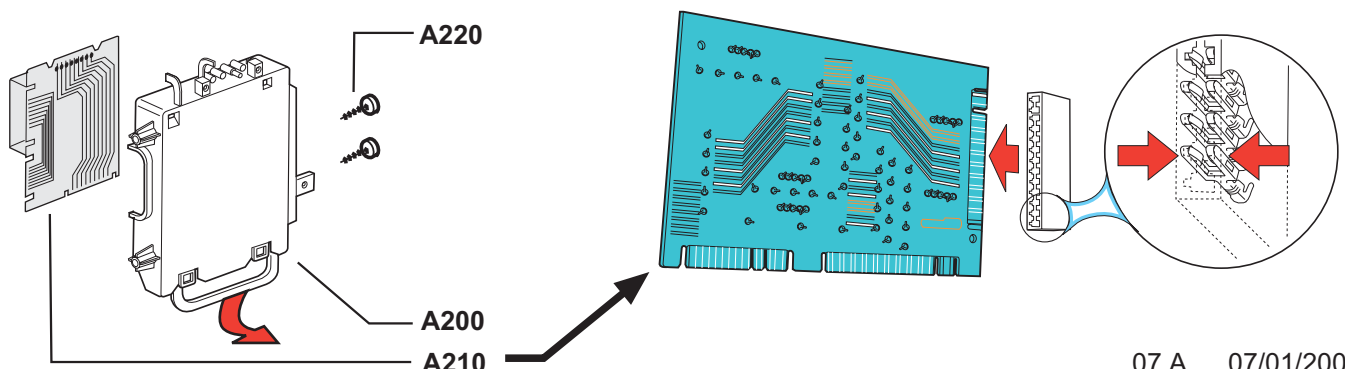
**Step 9 For 33 cm and 39 cm washing machines: Removing the drive belt (G170) and/or driven pulley (G160):**

- (a) Remove the rear cover (**Step 2**).
- (b) To remove the V drive belt (**G170**), insert a tool between the belt and the pulley (**G160**). Rotate the pulley and remove the belt.
- (c) Use a **6 mm** Allen key to remove screw (**G029**) and cup washer (**G580**).
- (d) The pulley can normally be removed from the drum shaft manually. However, if this is not possible, use a rubber headed hammer to gently strike the shaft.
- (e) To re-assemble, follow the same procedure in reverse order.



**Step 10 Removing the electronic wash module (A210) and/or support (A200):**

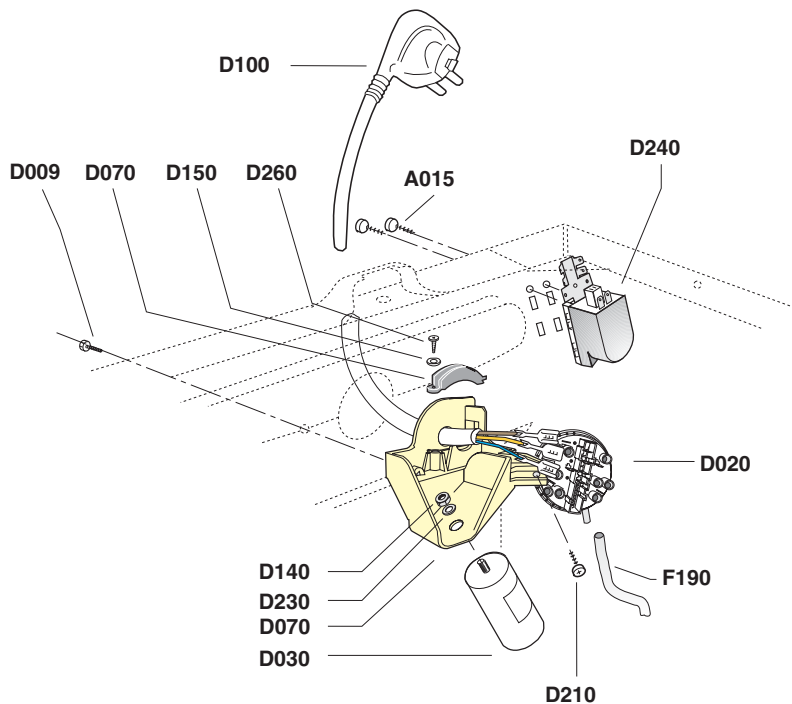
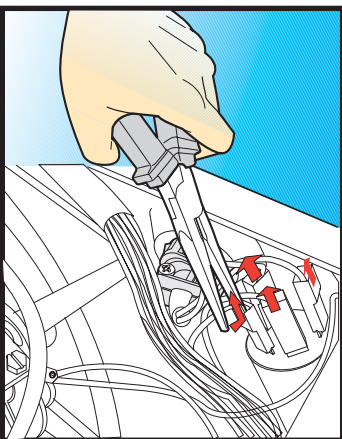
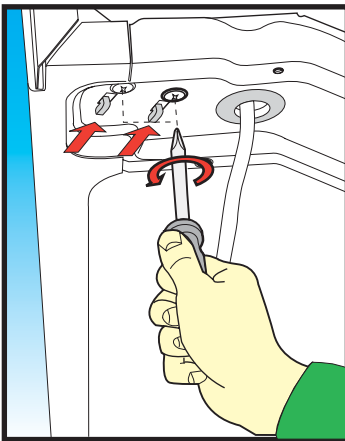
- (a) Remove the rear cover (**Step 2**).
- (b) Remove the two fixing screws (**A220**) securing the module mounting box (**A200**).
- (c) Remove the module mounting box (**A200**) from its housing, then delicately remove the electronic module (**A210**) by levering on the plastic locking clips.
- (d) Carefully disconnect the electric connectors.
- (e) To re-assemble, follow the same procedure in reverse order, making sure that the connectors are tight in order to avoid false contacts.



- Step 11** Removing and/or replacing:
- the power supply cable (D100)
  - the suppressor (D240)
  - the cable grommet and pressure switch mounting (D070)
  - the pressure switch (D020)
  - the condenser (D030)

The following operations are common to all five components:  
Remove the top cover (**Step 1**).

- (a) To remove the **power supply cable (D100)**, simply disconnect the wires from the suppressor (**D240**), noting their positions. **Important** : The wires must be disconnected using a pair of pliers to pull off the fastons without any sideways movement. It is also **important** not to pull the wires as this may compromise the operation of the faston connectors.  
Use a cross-head screwdriver to slacken screw (**D260**) on the cable grommet (**D020**), then pull the cable (**D100**) outwards. To re-assemble, follow the same procedure in reverse order.
- (b) To remove the **suppressor (D240)**, disconnect the power supply cable (**D100**). Use a cross-head screwdriver to slacken the two screws (**A015**) from the outside of the appliance, then release it. To re-assemble, follow the same procedure in reverse order, taking care to insert the two radio suppressor lugs in their respective slots in the appliance cabinet.
- (c) To remove the **cable grommet (D070)**, remove the power cable following Step (a) above, remove screw (**D009**) from the outside of the machine and extract the unit from the inside. To re-assemble, follow the same procedure in reverse order.
- (d) To remove the **pressure switch (D020)**, disconnect the wires, noting their positions, then remove the pressure switch, which is fixed to support (**D070**) by screw (**D210**). Remove the air pipe (**F190**). To re-assemble, follow the same procedure in reverse order.
- (e) To remove the condenser (**D030**), remove the rear panel (**Step 2**), disconnect the wires, noting their positions, then remove nut (**D140**) and washer (**D230**) from the support (**D070**). To re-assemble, follow the same procedure in reverse order.





# MAINTENANCE PROCEDURES

## Step 11 For 33 cm and 39 cm washing machines, 42 litre washer/driers

### Removing and/or replacing:

- the power supply cable (D100)
- the suppressor (D240)
- the cable grommet (D070)
- the pressure switch (D020)
- the condenser (D030)

### The following operations are common to all four components:

Remove the top cover and rear panel (**Steps 1 and 2**).

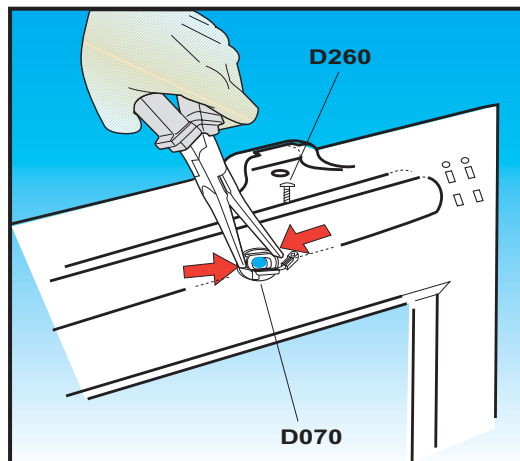
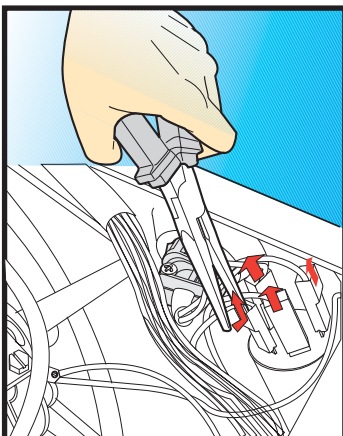
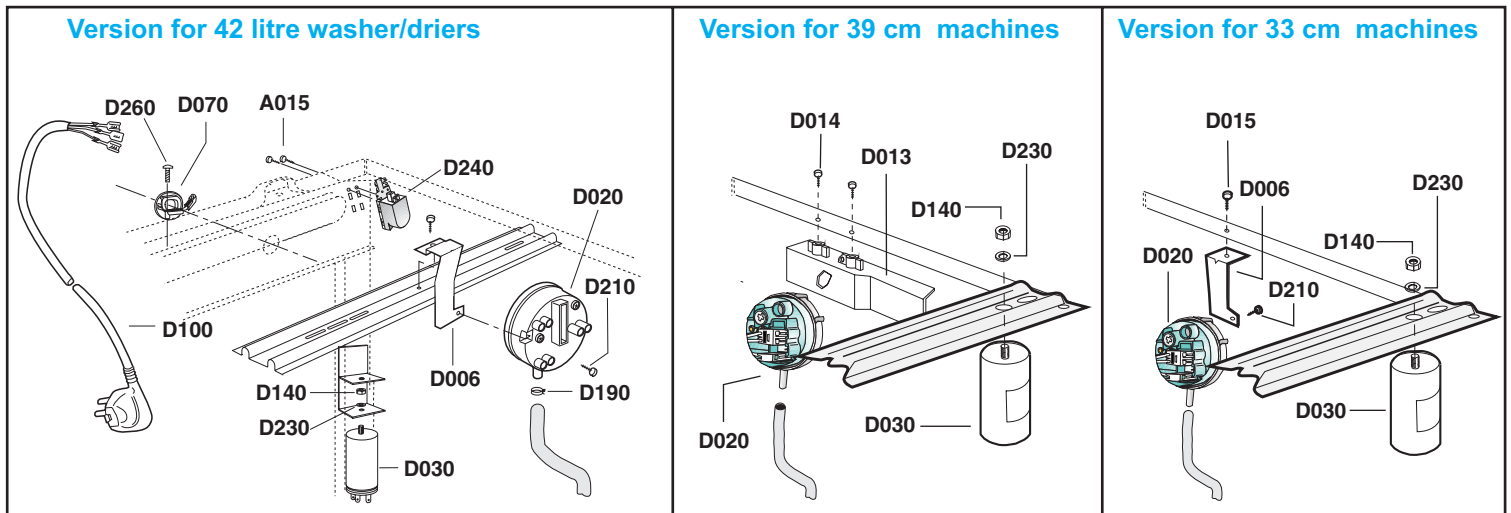
- To remove the **power supply cable (D100)**, simply disconnect the wires from the suppressor (**D240**), noting their positions. **Important** : The wires must be disconnected using a pair of pliers to pull off the fastons without any sideways movement. It is also **important** not to pull the wires as this may compromise the operation of the faston connectors.
- Use a cross-head screwdriver to slacken screw (**D260**) on the cable grommet (**D070**), then pull the cable (**D100**) outwards.  
To re-assemble, follow the same procedure in reverse order.
- To remove the **suppressor (D240)**, disconnect the power supply cable (**D100**).
- Use a crosshead screwdriver to slacken the two screws (**A015**) from the outside of the appliance, then release it.  
To re-assemble, follow the same procedure in reverse order, taking care to insert the two radio suppressor lugs in their respective slots in the appliance cabinet.
- To remove the **cable grommet (D070)**, first remove the power supply cable (**D100**), then press the retaining lugs on the sides of the cable grommet, grasp the cable and remove the entire unit (power cable plus grommet).
- Remove fixing screw (**D260**) and then remove the power supply cable (**D100**).  
To re-assemble, follow the same procedure in reverse order.

### For 39 cm washing machines

- To remove the **pressure switch (D020)**, disconnect the wires, noting their positions, then remove the switch itself from its mounting box (**D013**) using a flat head tool to lever the locking tabs. Remove the air pipe (**F190**).

### For 33 cm washing machines and 42 litre washer/driers

- To remove the **pressure switch (D020)**, disconnect the wires, noting their positions, then use a crosshead screwdriver to remove fixing screw (**D210**) securing it to the support bracket (**D006**). Remove the air pipe (**F190**).
- To remove the **condenser (D030)**, disconnect the wires, noting their positions, then remove nut (**D140**) and washer (**D230**).  
To re-assemble, follow the same procedure in reverse order.



**Step 12**

**Removing:**

- the detergent dispenser cover (C020)
- the detergent dispenser (C010)
- the detergent feed/steam discharge coupling (C060).

**Common operations:**

- (a) Remove the top cover (**Step 1**).
- (b) Remove the rear cover (**Step 2**).
- (c) Remove the detergent drawer (C030) from its housing by levering downwards and pulling (**Step 25**).
- (d) Remove the distribution rod (**Step 31**).
- (e) Remove the three steel screws (C150) securing the dispenser to the front panel.
- (f) Use a long crosshead screwdriver to remove the four fixing screws securing the Control Panel (**Step 28**), without disconnecting the components.
- (g) Release the steam discharge coupling fitted on the right of the dispenser.
- (h) Remove the hose clips (C130) from the solenoid valve pipes and disconnect them from the detergent dispenser together with the air-break-filter hose (D370).
- (i) Use a pair of pliers to remove the spring clip (C140) securing the detergent feed coupling to the dispenser.

**- the detergent dispenser cover (C020) and/or the detergent dispenser (C010)**

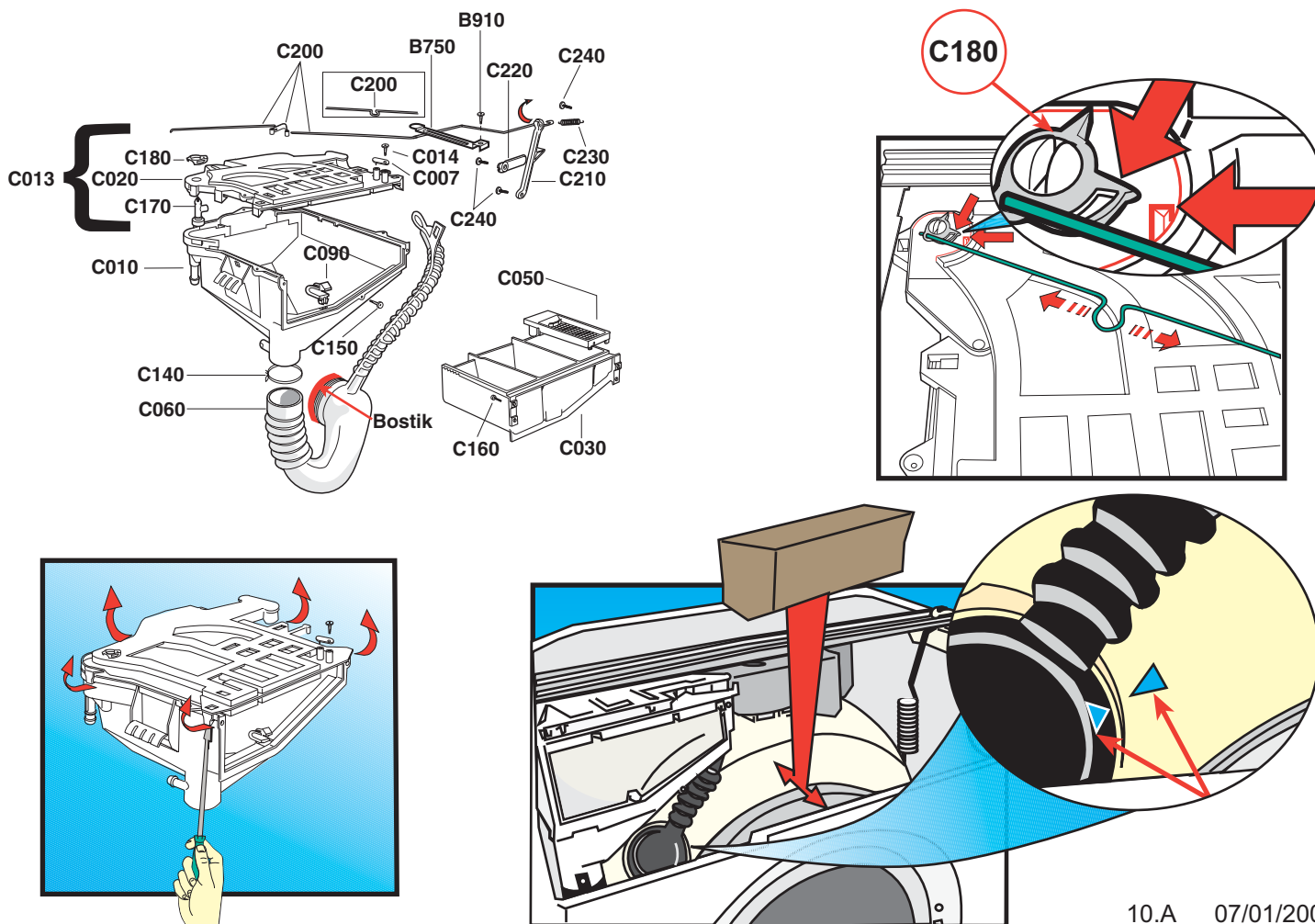
- (j) From the top, remove the detergent dispenser from its housing.
- (k) Use a flat screwdriver to lever the sides of the cover (C020) near to the lugs clamping it to the dispenser body (C010) and lift off the cover.  
If necessary, at this point replace the detergent dispenser (C010).  
To re-assemble, follow the same procedure in reverse order making sure that all the parts not involved in the operation are recovered.

**- the detergent feed/steam discharge coupling (C060)**

- (l) Remove the detergent feed and steam discharge coupling (C060) from the tub.

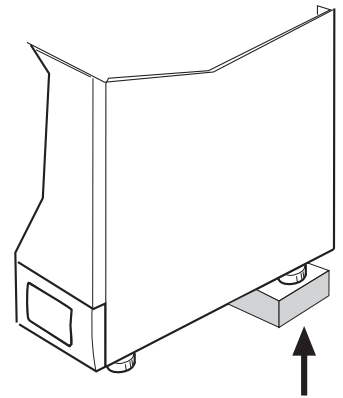
**To re-assemble:** Insert a spacer between the tub and the front panel of the cabinet (**see figure**) in order to obtain more working space for fitting the detergent feed coupling. Apply a **Bostik** type sealant between the coupling and the tub, fit the new coupling making sure that the reference marks on the tub and coupling are aligned (**see figure**).  
Position spring clip (C140) in such a manner that it does not interfere with the tub during operation. Adjust the distribution rod by making sure that the reference mark on the distributor (C180) is perfectly aligned with the reference mark on the top of the detergent dispenser (C020) (**Step 31**).

**Important:** This operation must be carried out with the timer knob set at a wash position **Screws (C150) securing the detergent dispenser to the front panel must be screwed in using a manual screwdriver to prevent stripping the threads in the detergent dispenser holes.**



**Step 13 Replacing the wash motor (G130):**

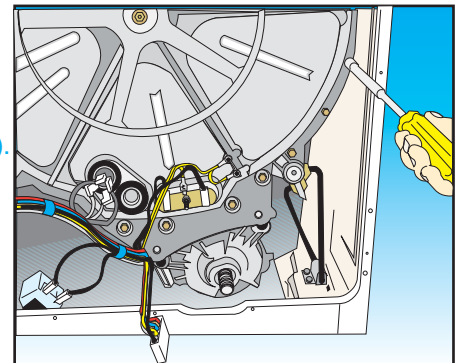
- (a) Remove the rear cover (**Step 2**).
- (b) Insert a spacer under the right rear foot, then lean the machine forwards slightly to obtain more working space (Motor replacement only).
- (c) To remove the drive belt (**G170**), insert a tool between the belt and the pulley (**G160**), rotate the pulley and remove the belt.
- (d) Disconnect the motor terminal board by pressing the two locking tabs and then remove it.  
Remove the motor earth screw and then disconnect the wiring.  
**NB:** When refitting the motor, ensure that the earth screw is very tight in order to avoid earth continuity problems.
- (e) Use a **13 mm** socket spanner and a **13 mm** open-ended spanner to remove the four\* bolts (**G380**), the four\* locknuts (**G410**), the eight\* washers (**G390**), the four\* spacers (**G540**) and the four bushes (**G400**) (\* in the case of a high speed washing machine).  
On low speed washing machines there are three bolts, three nuts, six washers and three spacers.



**Version with 42 litre polypropylene tub:** use a pair of pliers to remove the two split-pins (**G001**) and remove the locking pins (**G002**). Recover the four bushes (**G400**).

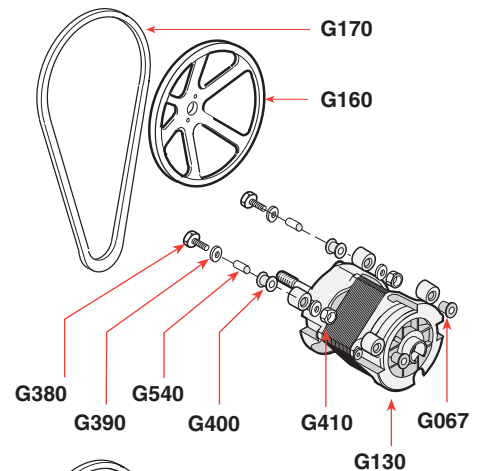
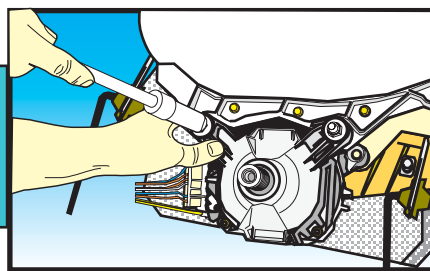
**Version for 39 cm washing machines:** Use a **13 mm** socket spanner and a **13 mm** open-ended spanner to remove the two bolts (**G380**), the two fixing nuts (**G410**), the four washers (**G390**), the two spacers (**G540**), the two bushes (**G400**) and the two bushes (**G067**).

**Version for 33 cm washing machines:** Use an **8 mm** spanner to slacken the hexagonal head fixing screws (**G004**) securing the tub back plate (only those highlighted in the figure). Then use a **13 mm** socket spanner and a **13 mm** open-ended spanner to remove the two bolts (**G380**), the two fixing nuts (**G410**), the four washers (**G390**), the two spacers (**G540**), the two bushes (**G400**) and the two bushes (**G067**).

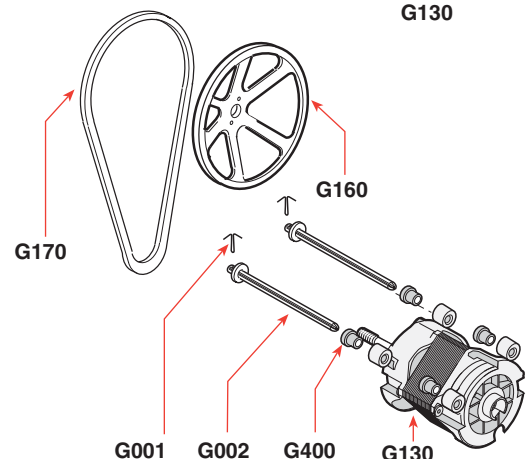
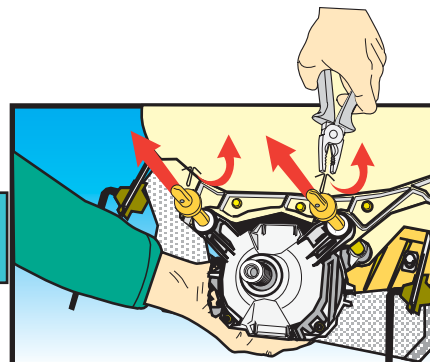


- (f) To re-assemble: Follow the same procedure in reverse order, preferably replacing the two motor bolts (right side) first, followed by the others. It is advisable to replace the nuts (**G410**) with new ones in order to be certain of their self-locking characteristics. Otherwise, use the old nuts and apply a suitable locking compound.

**For washing machines with:**  
- 42 l. Enamelled or S/ Steel tubs  
- 39 cm Polypropylene tubs  
- 33 cm Polypropylene tubs



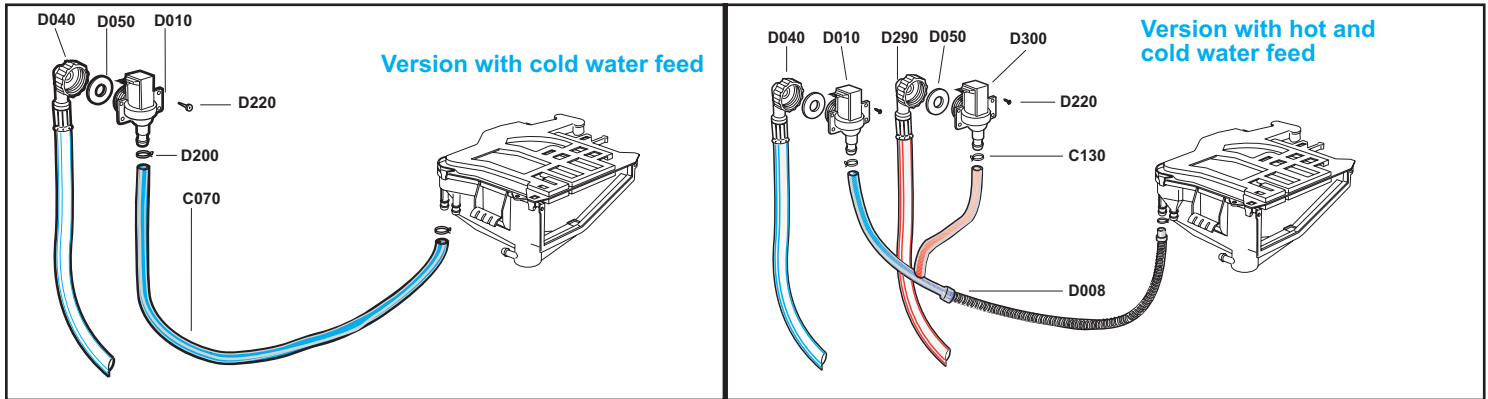
**For washing machines with:**  
- 42 l. Polypropylene tubs



## MAINTENANCE PROCEDURES

### Step 14 Removing the solenoid valve (D010 and/or D300) and/or the internal water system of the washing machine:

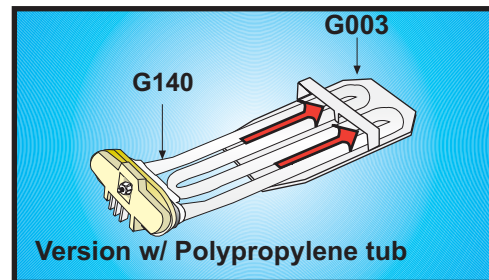
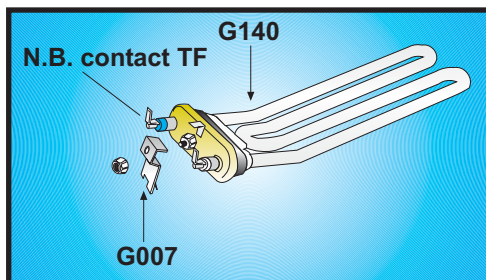
- Remove the top cover (**Step 1**).
- Disconnect the wiring (for solenoid valve replacement only).
- Remove the water feed hose (**D040**) and washer (**D050**).
- Remove the two screws (**D220**) securing the solenoid valve from the back of the cabinet.
- Remove the solenoid valve, then use a pair of pliers to slacken pipe spring clips (**D200** or **C130**) and remove the pipes (**C070** or **D008**).
- To re-assemble, follow the same procedure in reverse order. It is advisable to wet the ends of new solenoid valves with a solution of soap and water to make it easier to slide the pipes on.



### Step 15 Removing and/or replacing the wash water heater element (G140):

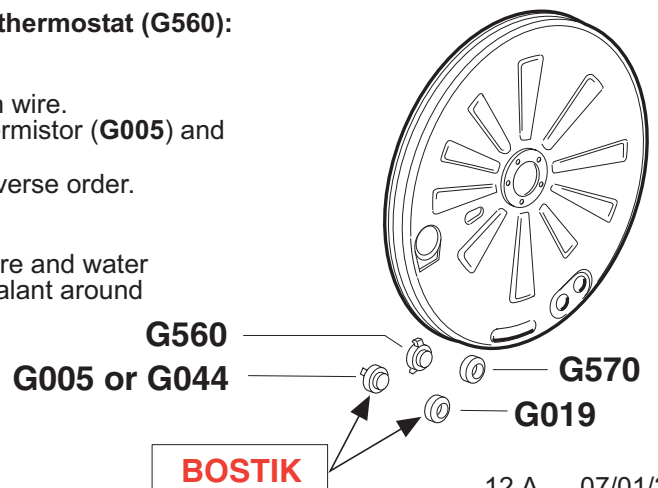
- Remove the rear cover (**Step 2**).
- Remove the V drive belt (**G170**) (**Step 9**).
- Disconnect the wiring, noting the position of each wire.
- In the case of washing machines with stainless steel tubs, remove the locknut on the galvanised plate (**G007**) using a **10 mm box spanner**.
- Slacken the nut of the heater element completely without removing it from the thread.
- Use a rubber headed mallet or similar to gently strike the nut and push the threaded rod into the body of the element, then remove it. If the element is difficult to remove, use a flat screwdriver as a lever between the slot in the tub and the element itself (**G140**).
- To re-assemble, follow the same procedure in reverse order, ensuring that the heater element does not touch the drum.  
On washing machines with enamelled tubs, make sure that the element is inserted in the fixing bracket on the bottom of the inside of the tub. Arrange the wiring so that none of the wires touch any moving parts of the appliance.  
On washing machines with polypropylene tubs, make sure that the heater element does not touch the drum by inserting it in the slot of the heater element protection plate (**G003**).

Important: The blue coloured contact of the heater element indicates the overheat fuse and corresponds to the wire marked TF.



### Step 16 Removing the thermistor (G005) and/or fixed thermostat (G560):

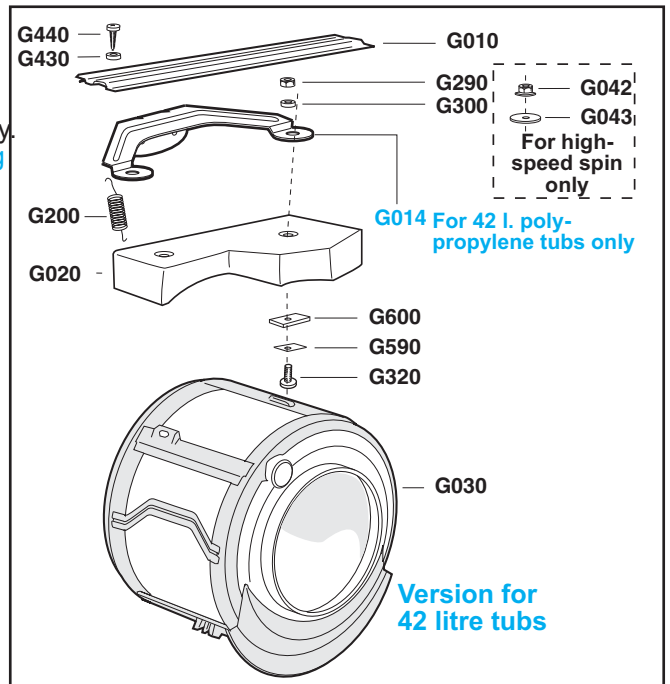
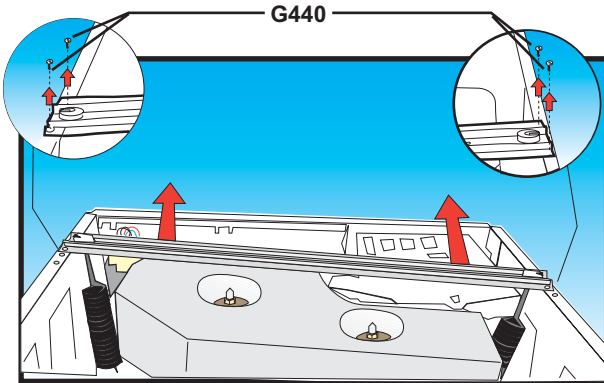
- Remove the rear cover (**Step 2**).
- Disconnect the wiring, noting the position of each wire.
- Use a flat screwdriver as a lever between the thermistor (**G005**) and the gasket (**G570**) to remove the thermistor.
- To re-assemble, follow the same procedure in reverse order. When re-assembling, clean off any hardened sealant residues from the component housing. Refit the component using a new high-temperature and water resistant sealant (**Bostik** type), spreading the sealant around the circumference of the capsule and avoiding the part in contact with water.



**Step 17** Removing the upper counterweight (G020):

- (a) Remove the top cover (Step 1).
- (b) Remove the two locknuts (G290) or (G042) and the two washers (G300) or (G043) securing the counterweight, lower the oscillating unit and move it to the rear, then remove the counterweight vertically.
- (c) To re-assemble, follow the same procedure in reverse order.

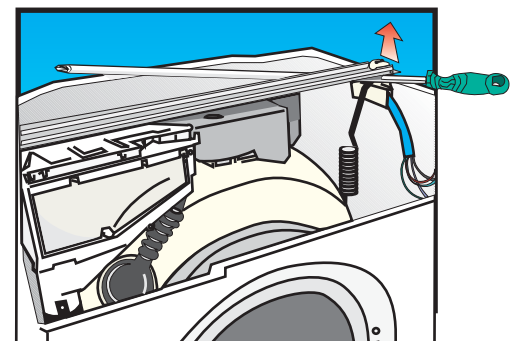
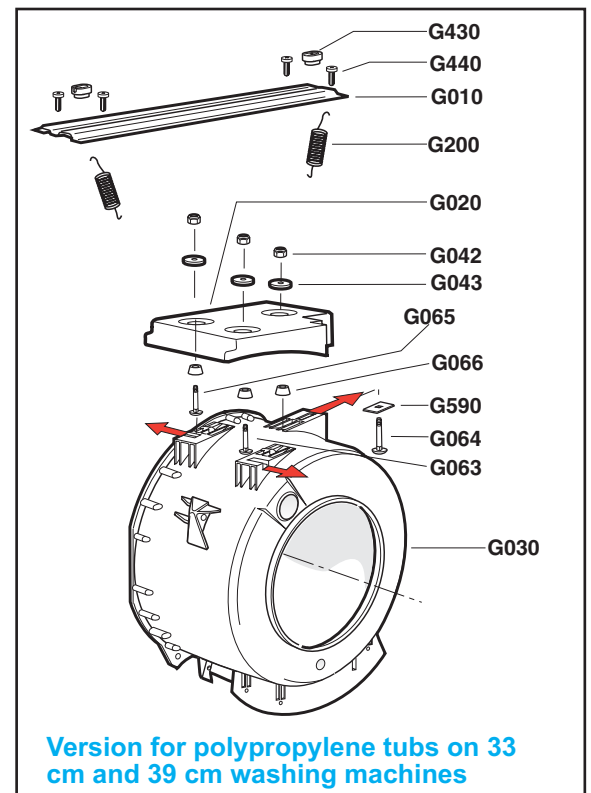
In the case of a stainless steel tub, first remove the four fixing screws (G440) of the cross-member on which the springs (G010) are anchored and then move the oscillating unit forward.



**Step 17** For 33 cm and 39 cm washing machines  
Removing the upper counterweight (G020):

- (a) Remove the top cover (Step 1).
- (b) Remove the rear cover (Step 2).
- (c) Use a crosshead screwdriver to remove the three fixing screws (C150) securing the detergent dispenser to the Control Panel.
- (d) Use a long crosshead screwdriver to remove the four fixing screws (B290) securing the Control Panel (B010) (Step 32).
- (e) Use a crosshead screwdriver to remove the two fixing screws (G440) securing the spring anchor cross-member (G010) on the right-hand side of the washing machine.
- (f) Raise the spring anchor cross-member (G010) a few centimetres and insert a spacer between it and the top edge of the cabinet (see figure).
- (g) Use a 13 mm box spanner to remove the three nuts (G042) securing the upper counterweight and the three washers (G043).
- (h) In order to remove the upper counterweight (G020), the three fixing bolts (G064-G063-G065) must be removed first. Lift the counterweight near to bolt (G063) at the front of the tub and remove the bolt from its housing slot. Use a pair of pliers if necessary. Leave the bolt assembled with the counterweight support plate (G590) and bush (G066).
- (i) Repeat this operation for bolt (G065) at the rear of the tub.
- (j) To remove bolt (G064) on the right of the tub, slide the counterweight towards the right-hand side of the cabinet.

To re-assemble: Start with bolt (G064) by placing it with its components on the new counterweight. Insert the entire assembly in the housing slot. For the remainder, follow the dismantling procedure in reverse order.



**Step 18**

**Removing:**

- the tub back plate (G550)
- the drum (G530)
- the bearings (G220-G230)
- the seal (G240)

- (a) Remove the top cover and rear panel ( **Steps 1 and 2** ).
- (b) Place a spacer under the motor in order to lift the oscillating unit.
- (c) Remove the drive belt (G170) (**Step 9**).
- (d) Remove the electrical wiring and earthing system, together with the respective screws, noting the positions of the wires.
- (e) Remove the adjustable thermostat bulb, the fixed thermostats and their respective gaskets (**Step 16**).
- (f) Remove the heater element (**Step 15**).
- (g) Use two **13 mm** spanners to remove the tub back plate fixing ring (G730) and gasket (G060).

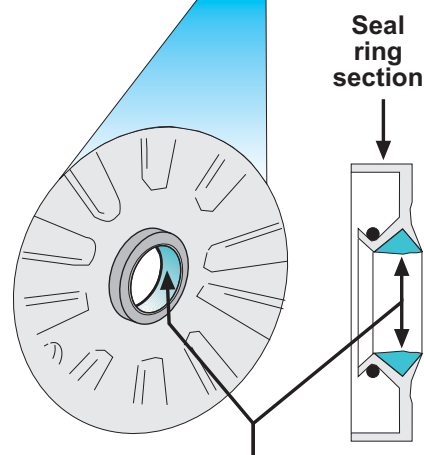
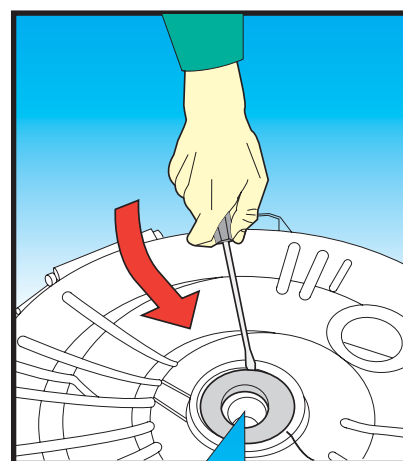
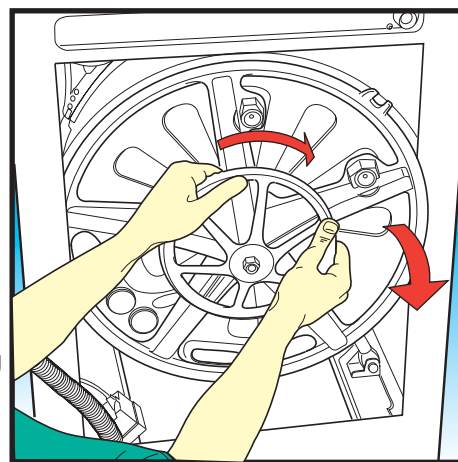
For 42 litre stainless steel tubs with screw fixing: Use a **10 mm** box spanner unscrew the twelve tub back plate fixing screws (G004).

For 42 litre polypropylene tubs, use an **8 mm** box spanner to unscrew the twelve tub back plate fixing screws (G004). Remove the wash motor (**Step 13**)

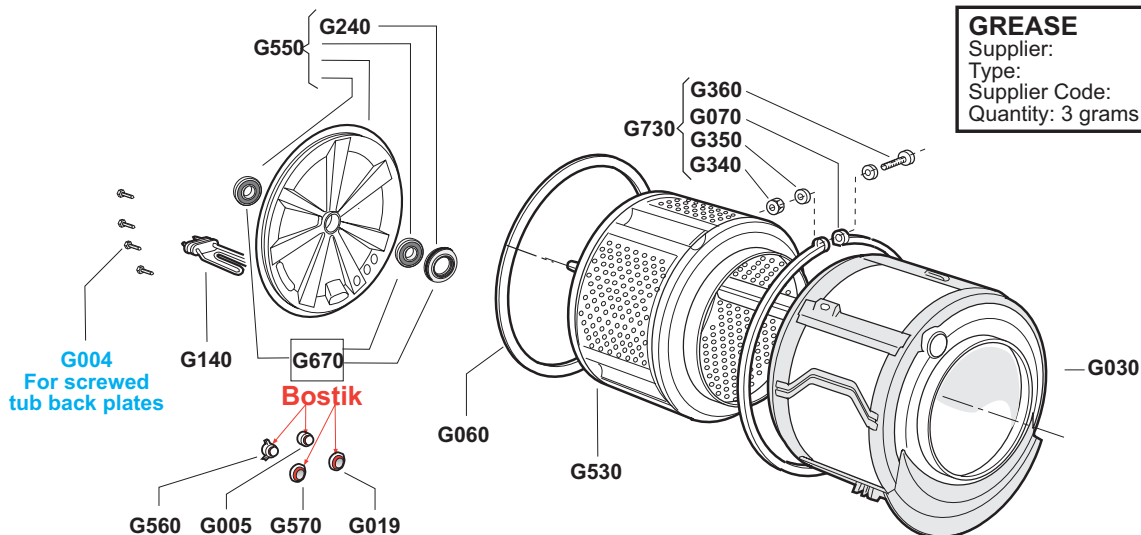
For 39 cm washing machines: Use an **8 mm** box spanner to unscrew the twenty three tub back plate fixing screws (G004). Remove the wash motor (**Step 13**)

For 33 cm washing machines: Use an **8 mm** box spanner to unscrew the twenty three tub back plate fixing screws (G004). Remove the wash motor (**Step 13**)

- (h) Grasp the pulley and rotate the tub back plate by hand until the locating slot is freed, then remove it.
- (i) Use a **19 mm** spanner to remove nut (G210) and cup washer (G580) from the drum shaft.
- (j) The pulley can normally be removed from the drum shaft manually. However, if this is not possible, use a rubber headed hammer to gently strike the shaft.
- (k) To separate the tub back plate from the drum, hit the shaft gently using a rubber headed hammer.
- (l) If necessary, at this point replace the bearings (G220-G230).
- (m) If necessary, replace the seal (G240) on the tub back plate using a flat screwdriver.
- (n) To re-assemble, follow the same procedure in reverse order, making sure to apply water-repellent grease inside the seal (G240). It is advisable to use a new gasket between the tub back plate and the tub itself and to wet the contact surfaces with a solution of liquid silicone to facilitate positioning of the gasket. In addition, when tightening the back plate fixing ring, use a rubber hammer to strike around the circumference of the plate to ensure that the back plate, gasket and tub are assembled together correctly. Remember to apply a Bostik type heat resistant sealant between the fixed thermostats and the gaskets and between the gaskets and the tub back plate.



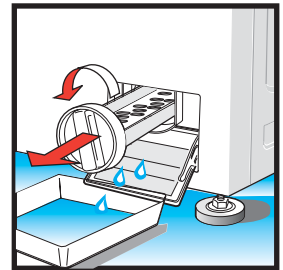
**GREASE**  
 Supplier: KLÜBER  
 Type: AMBLYGON TA 15.2  
 Supplier Code: 547357  
 Quantity: 3 grams



**Step 19**

**Removing and/or replacing:**

- the drain hose (F090)
- the electric drain pump (F010)
- the union (F080) between the electric pump (F010) and the filter body (F020)
- the drain coupling (F070) between the tub and filter body (F020)



**COMMON OPERATIONS:**

- (a) Remove the rear cover (**Step 2**).
- (b) Use a shallow container capable of holding the approximately half a litre of water that remains in the filter at the end of the wash cycle.
- (c) Open the filter door, release the filter cap (**F060**) without removing it completely, then remove the filter.

**Removing the drain hose (F090):**

- (d) Use a pair of pliers to release hose clip (**F150**) and slide it towards the drain pump, then remove the hose.

**Removing the electric drain pump (F010):**

- (e) Disconnect the wiring.  
Release hose clip (**F100**) and slide it onto the rubber union (**F080**).  
Remove rubber union (**F080**) from the electric pump (**F010**).  
From the bottom of the machine, remove the two screws (**F130**) using a 10 mm socket.  
Remove the electric pump from its housing.

**Removing union F080:**

- (f) All the above operations (points **a, b, c**) must be carried out, except for the removal of the electric pump (**F010**) and drain hose (**F090**).  
To remove union (**F080**), use a pair of pliers to slacken the two hose clips (**F100**).

For 33 cm and 39 cm washing machines

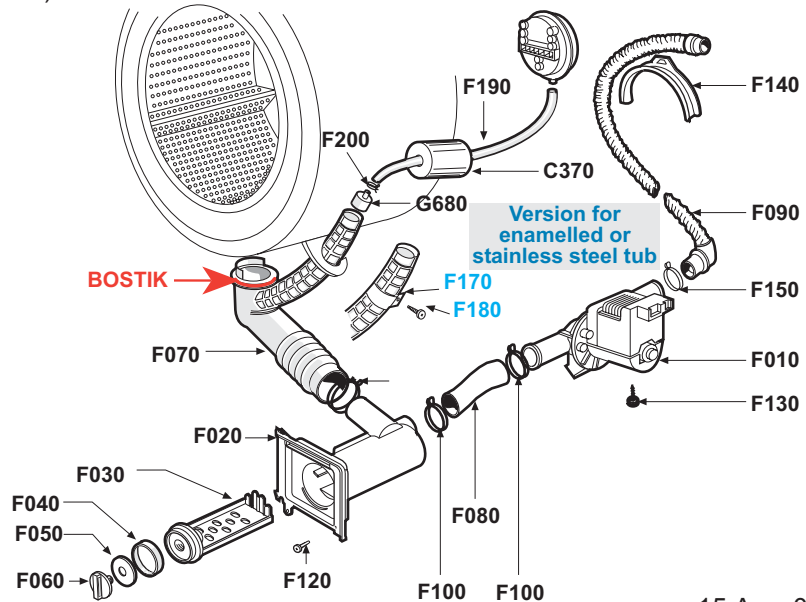
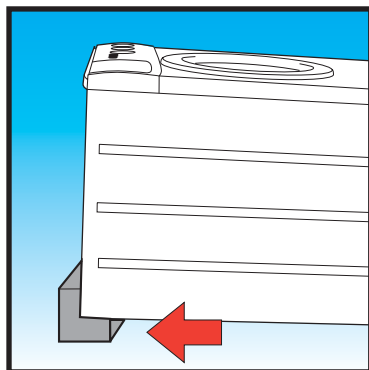
**Removing union F080:**

- (f) All the operations reported above must be carried out.  
Use a crosshead screwdriver to remove the two screws (**F120**) securing the filter body (**F020**) to the cabinet.  
Use a 7 mm open-ended spanner to slacken hose clamp (**F110**) and then remove the water drain coupling (**F070**).  
Remove the entire assembly consisting of the following parts from the back of the washing machine:  
- the drain pump (**F010**)  
- the drain coupling union (**F080**)  
- the filter body (**F020**)  
To remove union (**F080**), use a pair of pliers to slacken the two hose clips (**F100**).

**Removing the drain coupling (F070):**

- (g) Lie the machine on its back on a protective surface in order not to damage the solenoid valves.  
Slacken the hose clip (**F110**) (filter body side - **F020**) using a 7 mm box spanner or flat screwdriver.  
Remove the pressure switch pipe by slackening hose clip (**F200**), then remove coupling (**F070**) from the tub.  
Rotate the pressure switch chamber support to allow the coupling to be extracted, then recover the pressure switch pipe connector (**G680**).  
Clean any hardened sealant from the drain hole in the tub.

- (h) To re-assemble, follow the same procedure in reverse order, taking care to apply new sealant (**BOSTIK** type) between the coupling (**F070**) and the hole in the tub.

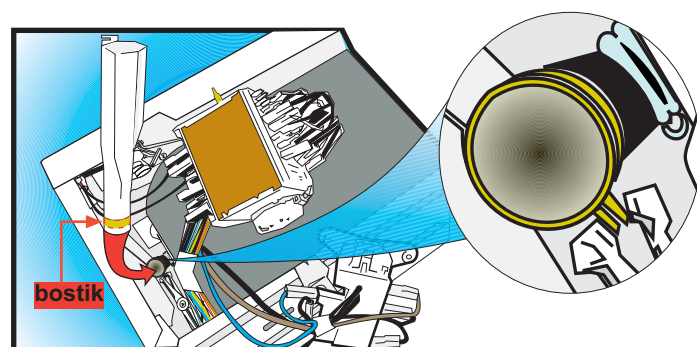
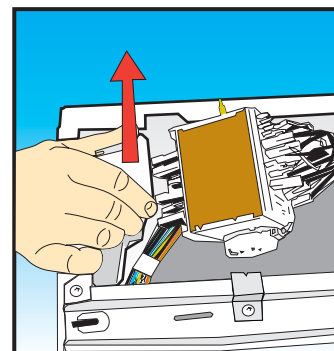
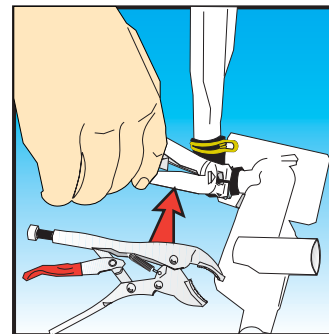


## Step 20

### For Washer/drier only

#### Removing the overfill pipe (F007):

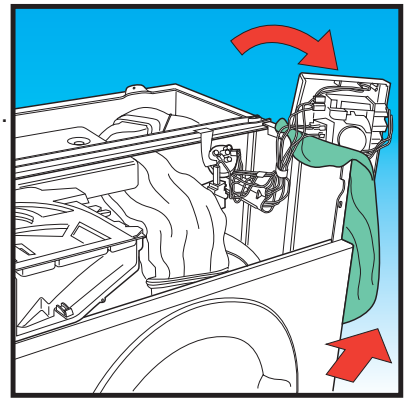
- (a) Remove the top cover (**Step 1**).
- (b) Remove the rear cover (**Step 2**).
- (c) Remove the door gasket (**Step 3**).
- (d) Unscrew the two fixing screws (**E002**) securing the door catch (**E060**) (**Step 8**) and place it on the tub near to the drying group.
- (e) Remove the programmer knob (**Step 29**).
- (f) Remove the programmer (**Step 30**) from the Control Panel without disconnecting the electric contacts and place it near to the door catch.
- (g) Unscrew the two screws (**A220**) securing the electronic module mounting box (**A200**), without removing the module itself, and position the wiring such that it does not interfere with the subsequent operations.
- (h) Use a pair of mole grips to slacken clip (**F008**) between the filter body and overfill pipe coupling (**F007**).
- (i) Use a long screwdriver to remove the locking screw (**F005**) from the overfill pipe.
- (j) Remove the overfill pipe (**F007**) from above through the space left by the removal of the programmer.
- (k) Recover coupling (**F006**) still fixed to the overfill pipe and clean off any remaining Bostik.
- (l) Recover hose clip (**F004**) located between the coupling and the overfill pipe.
- (m) To re-assemble: Fit the coupling on the filter body. It is advisable to lubricate the two surfaces with soap and water. Then position the hose clip (**F008**) to clamp the hose.
- (n) Use a pair of mole grips to position hose clip (**F004**) without releasing it, i.e. leaving it open in the jaws of the grips.
- (o) Place a high temperature resistant sealant (Bostik type) on the lower end of the overfill hose on which the coupling will be fitted.
- (p) From above, insert the overfill hose in the already positioned coupling, making sure that the overfill hose remains near to its fixing hole.
- (q) Release the mole grips to tighten hose clip (**F004**) onto the overfill hose.
- (r) Continue with the operations in reverse order to that used for the dismantling.





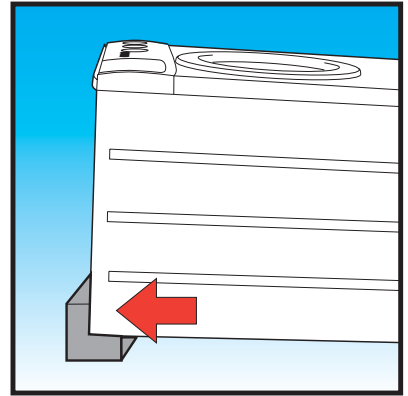
**Step 21 Replacing the tub (G030) and/or the lower counterweight (G080):**

- (a) Remove the top cover (**Step 1**).
- (b) Remove the rear cover (**Step 2**).
- (c) Remove the door gasket (**E020**) (**Step 3**).
- (d) Remove the detergent drawer (**Step 24**) and detergent dispenser (**Step 26**).
- (e) Remove the Control Panel (**Step 32**) without removing the electrical components, buttons, knobs and move it to one side (see drawing).
- (f) Remove the two fixing screws (**A220**) securing the electronic module support (**A200**) to the cabinet (**Step 10**) without removing the electronic wash module (**A210**).
- (g) Disconnect the wires from the main motor, the heater element, the fixed thermostat (**G560**), thermistor (**G005**), the solenoid valves (**D010**) and (**D300**) and the electric pump (**F010**). Disconnect the earthing system from the tub by removing the relative screws.
- (h) Free the lower part of the tub from the friction pads or from the dampers using a **17 mm** box spanner.
- (i) Remove the cable grommet and pressure switch support (**D070**) (**Step 11**), and disconnect the pressure switch (**D020**) from the air pipe (**F190**).



For 33 cm and 39 cm washing machines and 42 litre washer/driers

- (i) Remove the cable grommet (**D070**) and pressure switch (**D020**) (**Step 11**).
- (j) Use a **7 mm** box spanner to remove the hose clip (**F110**) in order to disconnect the pressure switch chamber rubber coupling (**F070**) from the filter body (**F020**).
- (k) **For Washer/drier only:** Remove the steam condenser (**Step 25**).
- (l) **For Washer/drier only:** Remove the drying fan motor group (**Step 26**) and the drying heater element group (**Step 24**).
- (m) Remove the drive belt (**G170**) (**Step 9**) and motor (**G130**) (**Step 13**).
- (n) Remove the tub back plate (**G550**) together with the drum assembly (**G530**) (**Step 18**).
- (o) Lie the machine on its back on a blanket.
- (p) Remove the four cross-member fixing screws (**G440**), remove the wiring from under the spring anchor cross-member in order to protect it from damage during the removal of the tub.

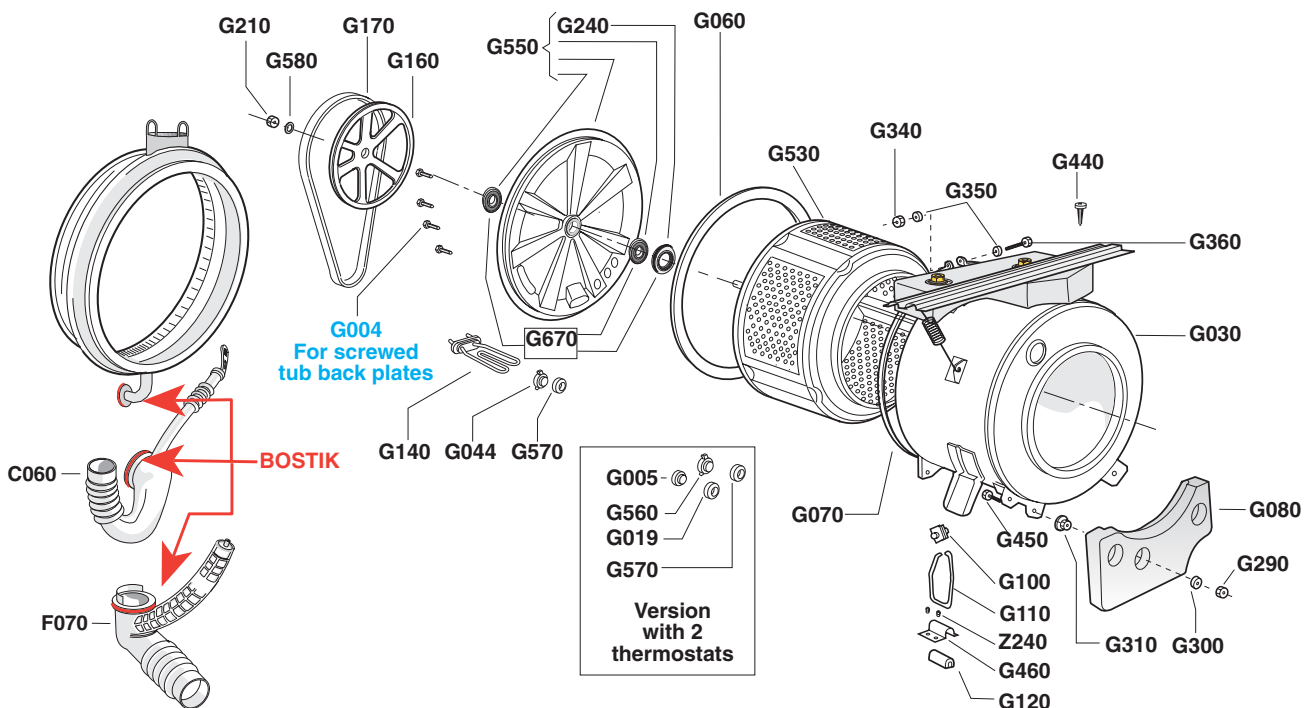


Place two pieces of wood between the tub and the cabinet. Extract the tub (**G030**) from the top part of the cabinet, sliding it on the two pieces of wood.

- (q) To re-assemble, follow the same procedure in reverse order, taking care to apply **BOSTIK** type sealant between the tub and the various rubber unions (see drawing).

**Removing the lower counterweight (G080):**

- (r) Carry out all the operations described above except for points "m" and "n". Once the tub has been removed, use a **13 mm** box spanner to remove the three nuts (**G290**), the three washers (**G300**) and then replace the counterweight (**G080**). To re-assemble, follow the same procedure in reverse order.



**Step 22**

**For washer/drier only**

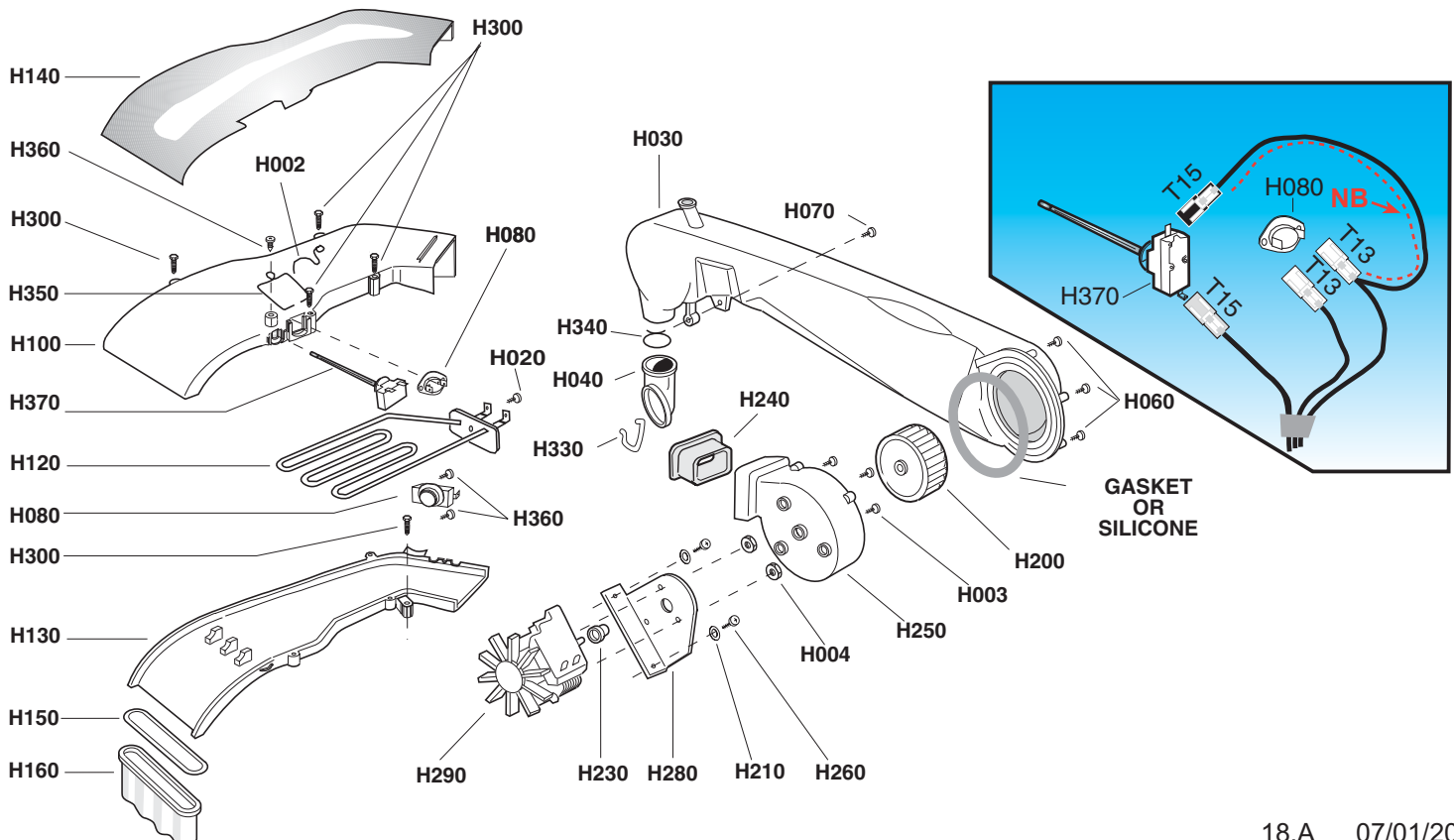
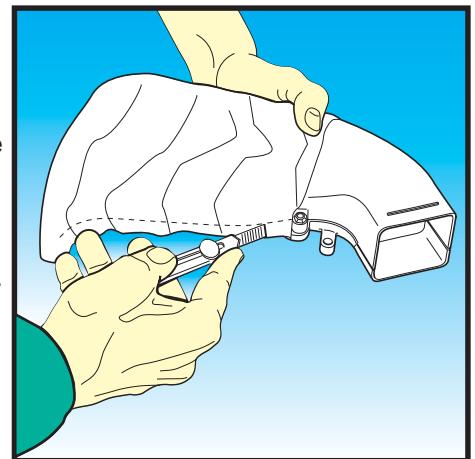
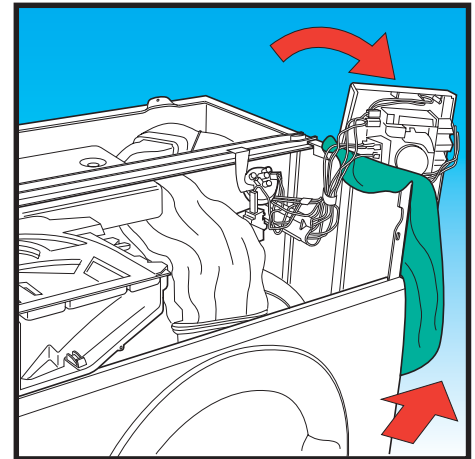
**Removing the thermostats (H080) and (H370) and/or drying heater element (H120):**

- (a) Remove the top cover (**Step 1**).
- (b) Remove the rear cover (**Step 2**).
- (c) Remove the detergent drawer (**Step 25**) and detergent dispenser (**Step 26**).
- (d) Remove the Control Panel (**Step 32**) without removing the electrical components, buttons, knobs and move it to one side (see drawing).
- (e) Release the door seal (**E020**) (**Step 3**) from the drying heater element box and remove it.
- (f) Recover the black union (**H160**) and the retaining spring (**H150**).
- (g) Remove the three fixing screws (**H060**) securing the fan scroll to the condenser.
- (h) Remove the two fixing screws (**H260**) from the motor unit mounting bracket, then remove the fan motor group.
- (i) Disconnect the electric wiring from the drying thermostats and heater element, noting their positions.
- (j) Remove the two heater element group fixing screws, noting the different lengths.
- (k) Remove the heater element housing assembly from the front.
- (l) Use a sharp blade to cut the insulation (**H140**) longitudinally on the thermostat side.
- (m) Remove the manual reset fixed thermostat (**H080**), by removing the two fixing screws (**H360**) using a crosshead screwdriver. Remove the screw, the spring (**H002**) and ½ inch thermostat (**H080**), remove screw (**H360**), spring (**H350**) and long-bulb thermostat (**H370**). Remove the two hexagonal head screws fixing the two parts of the aluminium container.
- (n) Extract the heater element (**H120**) by removing the set screw (**H020**).

To re-assemble, follow the same procedure in reverse order. Make sure that, once the heater element has been replaced, aluminium tape (**high-temperature element**) is used to repair the previously made cut.  
 Re-assemble the rubber coupling (**H160**), remembering to apply high-temperature resistant silicone sealant.  
 Seal the gasket on the scroll and around the door seal using silicone sealant..

**Note for reconnecting the wiring:**

**It is extremely important** that the wire with the black faston marked T15, bridged with the wire with white faston marked T13, is connected to the top faston of the long-bulb thermostat. This is to prevent damage to the faston during the washing machine spin cycle.

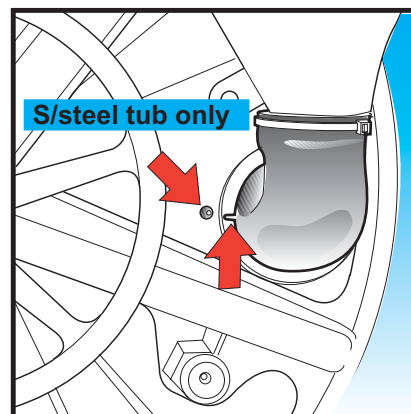
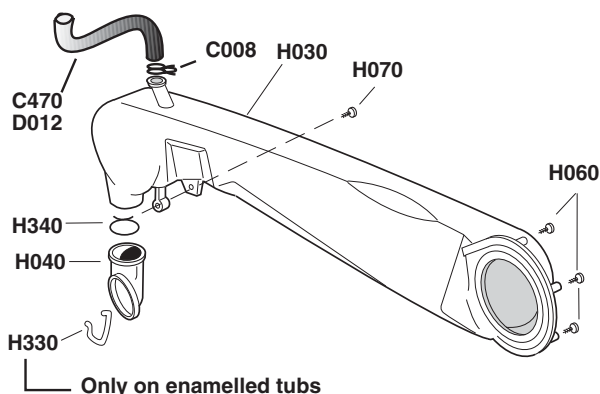


**Step 23**

**For washer/driers only**

**Removing the steam condenser (H030) and coupling (H040) from the washer/drier:**

- (a) Remove the top cover (**Step 1**).
- (b) Remove the rear cover (**Step 2**).
- (c) Cut hose clip (**H340**) from around the rubber union (**H040**) at the bottom of the condenser. Remove the union from the tub back plate and recover the spring (**H330**), where present.
- (d) Remove hose clip (**C008**) and the connected pipe (**C470** or **D012**).
- (e) Remove the condenser fixing screws (**H060**) and (**H070**).
- (f) To re-assemble, follow the same procedure in reverse order, using a new hose clip to fix the rubber union. Clean of any hardened sealant from the tub back plate. Replace spring (**H330**), where fitted. Insert the union in the hole in the tub back plate, applying high-temperature resistant sealant (Bostik type) between the union and the hole in the back plate. On stainless steel tubs, make sure that the two index marks are aligned (see drawing). Make sure that the relative positions of the condenser and union and the condenser and the fan scroll are correct.

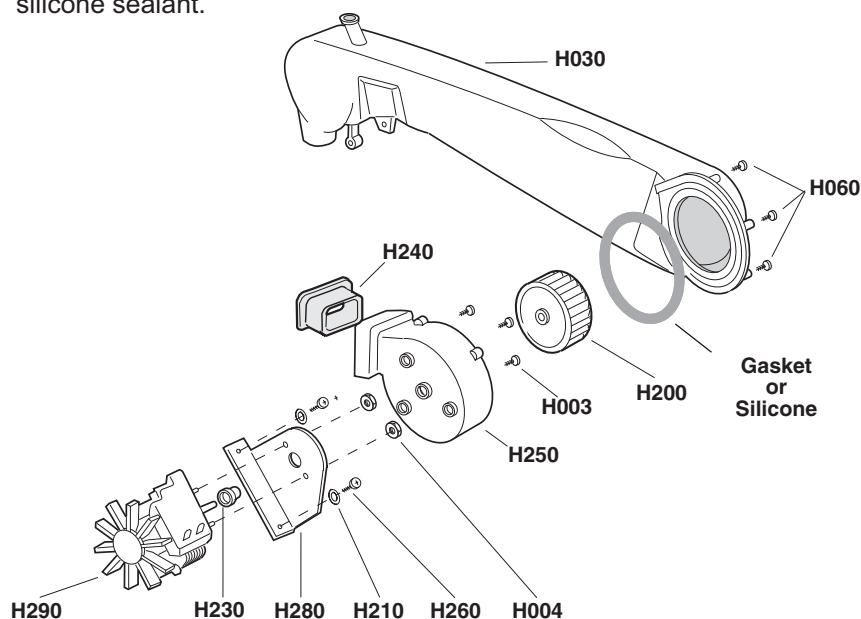


**Step 24**

**For washer/driers only**

**Removing the drying fan motor group present on the Washer/drier only:**

- (a) Remove the top cover (**Step 1**).
- (b) Remove the rear cover (**Step 2**).
- (c) Place a spacer under the motor to raise the oscillating unit. This will provide greater working space. Then use a **7 mm** box spanner to unscrew the three screws (**H060**) securing the steam condenser (**H030**) to the fan scroll (**H250**).
- (d) Use a **10 mm** box spanner to remove the two screws (**H260**) securing the motor mounting (**H280**) to the tub.
- (e) Disconnect the wires, noting their positions.
- (f) Remove the fan motor group.
- (g) Recover the fan (**H200**) by slackening the brass nut, rotating it anti-clockwise (**LEFT-HAND THREAD**).
- (h) Recover the fan motor shaft seal (**H230**), the scroll (**H250**), the motor mounting (**H280**) by removing the three screws (**H003**), and the fan motor (**H290**) by removing the two nuts (**H004**).
- (i) To re-assemble, follow the same procedure in reverse order, placing the sponge gasket between the fan scroll (**H250**) and the duct (**H030**). If the gasket is damaged, it can be replaced with an airtight silicone sealant.



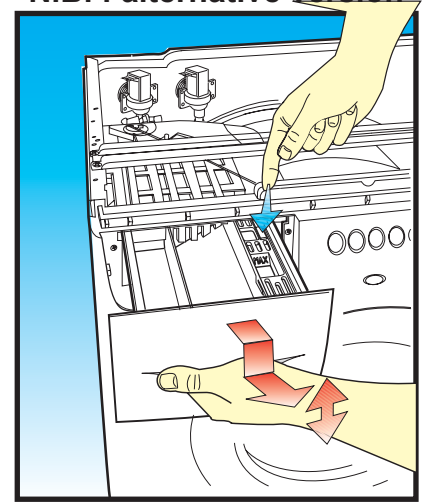
**Step 25** Removing the drawer handle (C040) from the Control Panel:

- (a) Pull the detergent dispenser drawer out as far as it will go.
- (b) Press downwards, pull gently and extract the drawer.

**Alternative version**

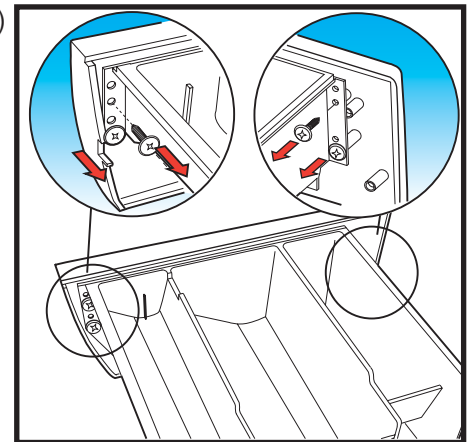
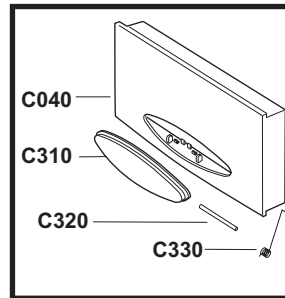
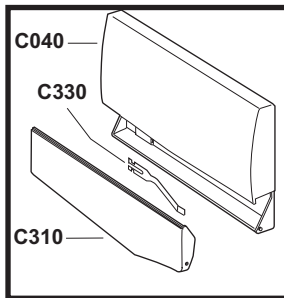
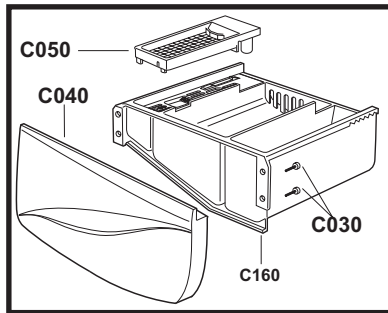
- (b) Press the lever on the fabric conditioner compartment downwards, pull gently and extract the drawer.
- (c) To replace the drawer, insert it in the guides and push it inwards.

**N.B. : alternative version**



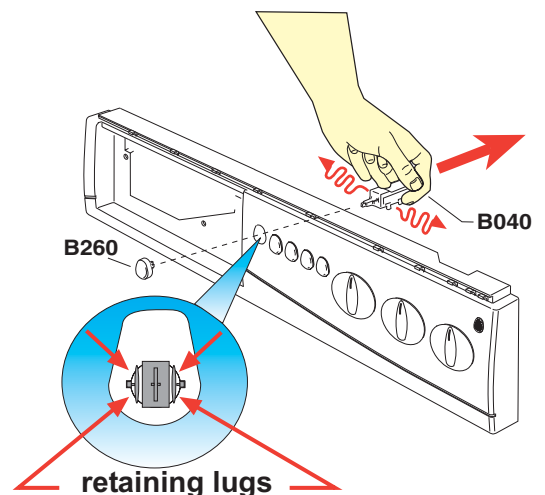
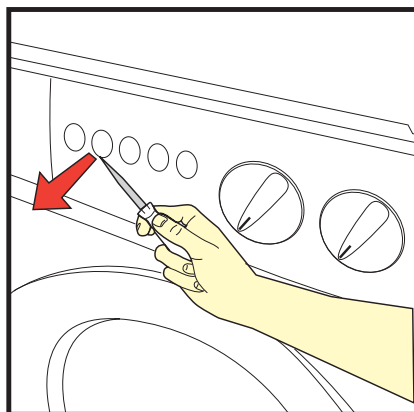
**Step 26** Replacing the detergent drawer (C030) or drawer handle (C040):

- (a) Extract the drawer (Step 25).
- (b) Use a crosshead screwdriver to remove the four fixing screws (C160) securing the handle (C040) to the drawer (C030). Recover the fabric conditioner tray (C050).
- (c) To re-assemble, follow the same procedure in reverse order.



**Step 27** Removing the switch (B040) from the Control Panel:

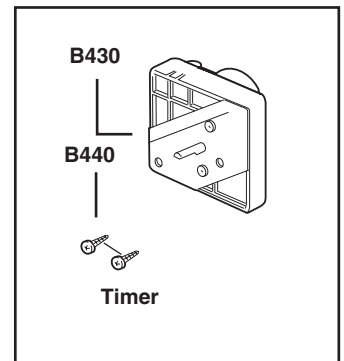
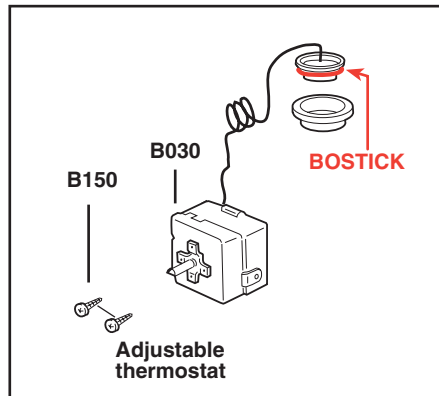
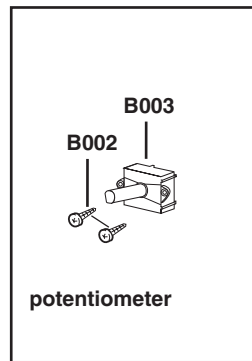
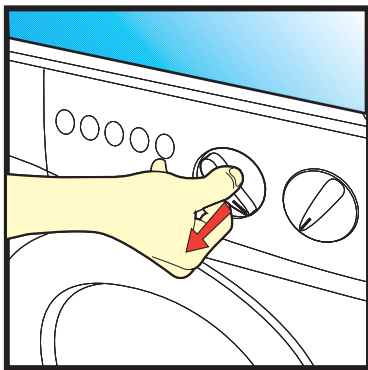
- (a) Remove the top cover (Step 1).
- (b) Use a very thin flat screwdriver as a lever between the circumference of button (B260) and the front panel to remove the button. Place a cloth between the two parts to protect them.
- (c) Remove the switch by levering the retaining lugs with a flat screwdriver, at the same time pull the switch (B040) back moving it left and right to help disengage the lugs.
- (d) Disconnect the wires, noting their positions.
- (e) To re-assemble, follow the same procedure in reverse order.



**Step 28** Removing:

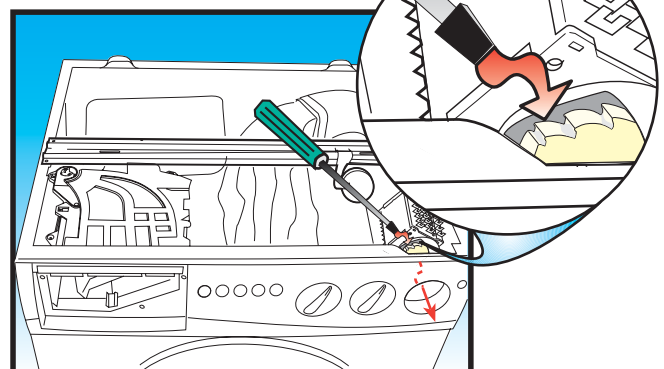
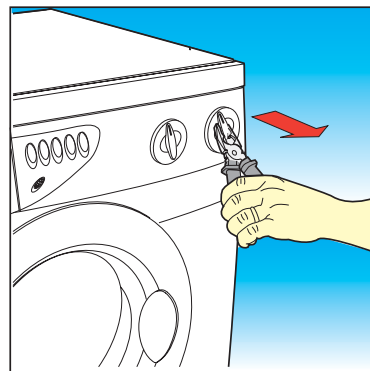
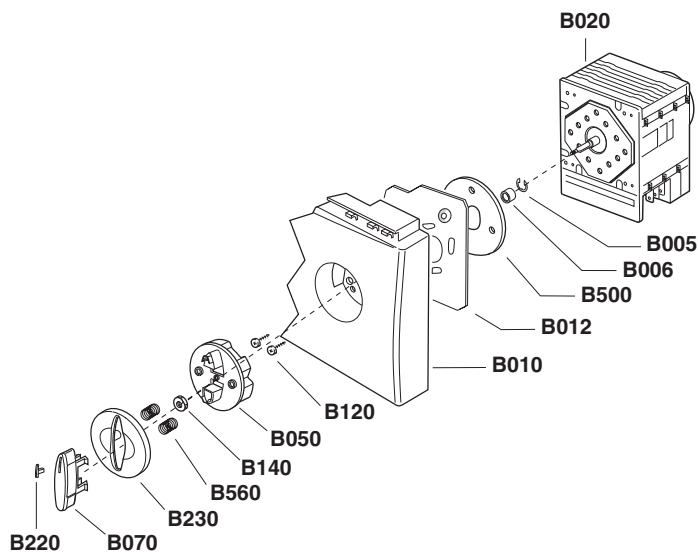
- the knob
- the potentiometer (B003)
- the adjustable thermostat (B030)
- the timer (B430)

- (a) Remove the top cover (**Step 1**).
- (b) Remove the rear panel (**A030**) if replacing the adjustable thermostat (**B030**).
- (c) Use a small flat screwdriver to prise the various components apart and separate them.
- (d) Remove:
  - the two screws (**B002**) securing the potentiometer (**B003**) and/or
  - the two screws (**B150**) securing the adjustable thermostat (**B030**) and/or
  - the two screws (**B440**) securing the timer (**B430**).
- (e) If the appliance is fitted with an adjustable thermostat (**B030**), remove the probe bulb from the bottom of the tub. Remove the copper capillary from the taped wiring bundle.
- (f) To re-assemble, follow the same procedure in reverse order, repositioning the new components. Thoroughly clean any hardened sealant from the probe seating and re-assemble using a new high temperature water-resistant sealant (Bostik type). Then tape the new adjustable thermostat capillary along the wiring bundle.



**Step 29** Removing and/or dismantling the programmer knob:

- (a) Remove the top cover (**Step 1**).
- (b) Grip the programmer knob cover with a pair of pliers and, with a protective cloth between the tool and the knob, pull outwards to disengage the knob cover (**B070**).
- (c) Remove the insert (**B070**) and the cover plate (**B230**). Then carefully remove the pieces.
- (d) Use a 7 mm box spanner to remove the M4 nut from the programmer spindle.
- (e) From the inside of the appliance, lever the cam (**B050**) outwards and remove it together with the two springs (**B560**).  
To re-assemble, follow the same procedure in reverse order.

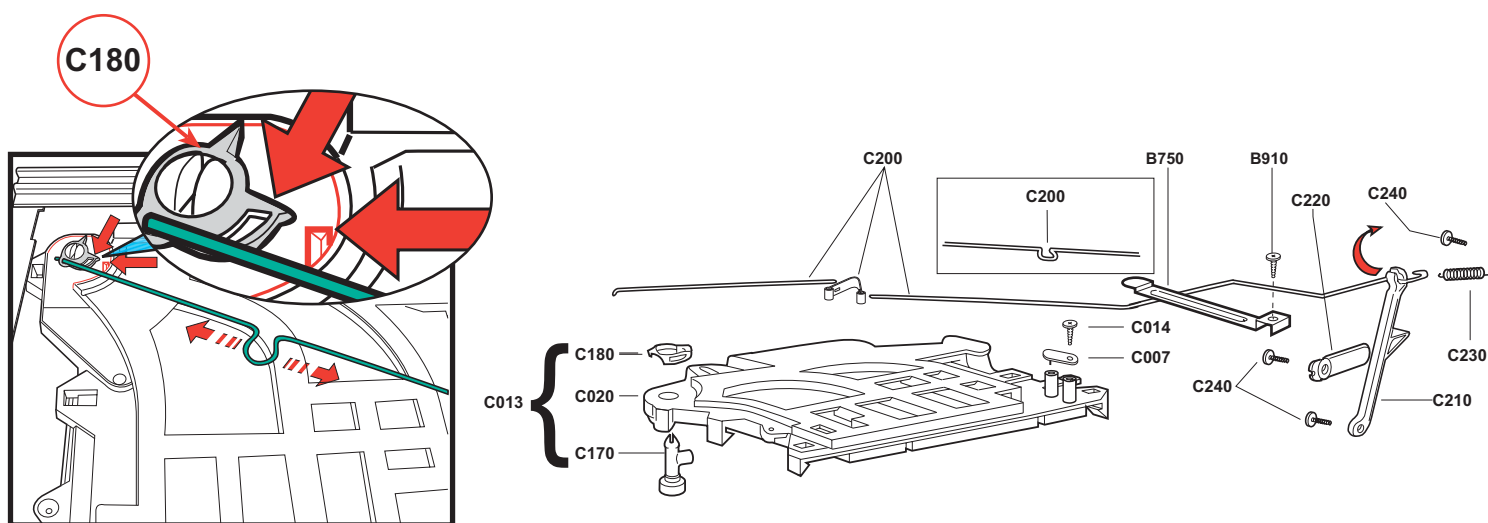


**Step 30 Removing the programmer (B020):**

- (a) Remove the top cover (**Step 1**).
- (b) Remove the programmer knob (**Step 29**).
- (c) Remove the two screws (**B120**) securing the programmer to the front panel.
- (d) Disconnect the wires from the programmer to replace and reconnect them to the new part. Check that the wire markings correspond to those stamped on the programmer. It may be necessary to ease the door catch mountings slightly (**Step 8**) in order to obtain sufficient movement on the programmer side.
- (e) To re-assemble, follow the same procedure in reverse order.

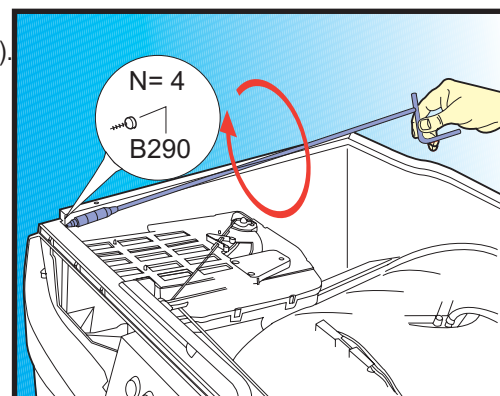
**Step 31 Removing the distribution rod (C200):**

- (a) Remove the top cover (**Step 1**).
- (b) Remove (where fitted) the Control Panel alignment bracket (**B750**) by unscrewing screw (**B910**).
- (c) Remove (where fitted) the distribution rod end stop (**C007**) by unscrewing screw (**C014**).
- (d) Remove the distribution rod (**C200**) from spring (**C230**), disengage the rod from the return lever (**C210**) by slightly twisting the end.
- (e) To re-assemble, follow the same procedure in reverse order. To adjust the rod, position the programmer knob at a first wash position then reduce or enlarge the omega of the rod to position the reference mark on the distributor (**C180**) in perfect alignment with the embossed reference on the top of the detergent dispenser cover (**C020**).



**Step 32 Removing the Control Panel (B010):**

- (a) Remove the top cover (**Step 1**).
- (b) Remove the detergent drawer handle (**Step 2**).
- (c) Remove the detergent drawer (**Step 25**) and detergent dispenser (**Step 26**).
- (d) Remove the switches (**Step 27**) noting the sequence.
- (e) Remove the knob thermostat/potentiometer/timer knob (**Step 28**).
- (f) Remove the thermostat and/or timer and/or potentiometer (**Step 28**).
- (g) Remove the programmer knob (**Step 29**).
- (h) Remove the programmer (**Step 30**).
- (i) Remove the distribution rod from the return lever (**Step 31**).
- (j) Remove the indicator light (**B100**) from its housing.
- (k) Use a long crosshead screwdriver to remove the four screws (**B290**) securing the Control Panel.
- (l) Remove the Control Panel and recover the following components:
  - link rod spring (**C230**) and screw (**C240**)
  - return lever (**C210**) and screw (**C240**)
  - return lever stop (**C220**) and screw (**C240**)
  - indicator light (**B250**)
  - the timer no push-pull spacer (**B500**), where fitted
  - the timer protection plate (**B012**)
- (m) To re-assemble, follow the same procedure in reverse order, repositioning the new components. If necessary re-adjust the distribution rod (**Step 31**).



SWITCH FUNCTIONS AND SYMBOLS		
SYMBOLS ON THE FRONT PANEL	FUNCTION	WIRE MARKING
	NO SPIN	NC
	HALF LOAD	IE
COLD COLD	ENABLE COLD WATER FEED	CC
	STOP WITH WATER IN TUB (SOAK)	ST
	EXCLDE HEATER ELEMENT	ER
<b>e</b>	SIXTY DEGREES-ECONOMIZER	SC
<input type="checkbox"/> High Speed <input type="checkbox"/> Low Speed	FAST SPIN BUTTON PRESSED	MC
<input type="checkbox"/> Low Speed <input type="checkbox"/> High Speed	FAST SPIN BUTTON NOT PRESSED	MC
START CANCEL	START - CANCEL	AV
HOT COLD	ENABLE HOT WATER FEED	HC
<input type="checkbox"/> Energetic <input type="checkbox"/> Delicate	REDUCE MOTOR RPM FOR DELICATE WASH (On 1837/4654 replaces 60° electrical system)	DE
PRE-WASH 	PRE - WASH	PW
	NO SPIN + STOP H2O	NC
	FOURTH RINSE + HIGH WATER LEVEL	SR
LIGHT-WASH 	LIGHT - WASH	LW
	NO SPIN + DRYING SAFETY	NC
<input type="checkbox"/> On <input type="checkbox"/> Off	ON/OFF	AS
	HALF LOAD + DRYING SAFETY	IE
	SKIP RINSE	SR
<b>EC</b>	65° /45° (DISHWASHERS)	EC
<b>SL</b>	SUPER WASH (DISHWASHERS)	SL
	DELICATE DRYING (DRYER)	AD
	ANTI-CREASE (DRYER)	AP
RESET 	DRAIN PUMP (CONDENSATION DRYER)	PP
	HIGH LEVEL	AL

The above table indicates the functions (column B) and markings on the wires of the switches (column C) of each button (column A).