DC 23

dyson

service manual

Issue 2 (Issued Feb 08)

This manual is written specifically for Dyson trained engineers and covers the full DC23 range. The service instructions assume the engineer has the approved tools and test equipment with them.

Contents Page

DC23 dyson stowaway

The full-sized cylinder with hygienic bin emptying

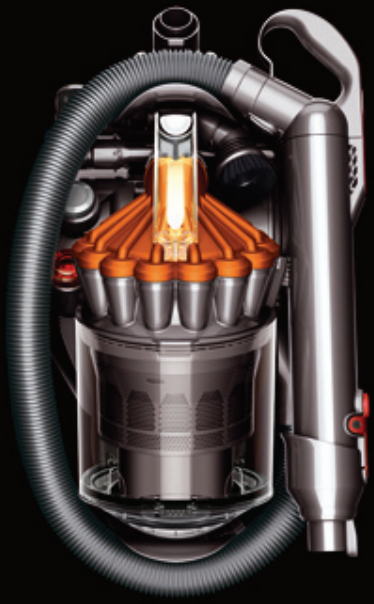
Sits on the stairs

Hygienic bin emptying

Lower profile contact head

Doesn't lose suction and captures more microscopic dust

Combines Cyclone™ technology with a core separator an extra cyclonic stage between the outer and inner cyclones to separate particles as small as 0.5 micron from the airflow.



Electrical safety testing

Ensure that at all times during the repair and testing of products that customers, pets, children and you are not exposed to any Live electrical supply.

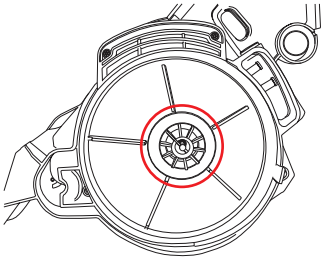
The following tests **must** be performed prior to and upon completion of all repairs to Dyson floorcare products and **before** any functional checks. **You must ensure that a full visual inspection of the product is completed prior to repair.**

This is vital to avoid any possibility of personal injury to the end user.

The Seaward Primetest 200 (or equivalent) should be used to test the electrical insulation of a Class 11 appliance; it indicates any electrical leakage.

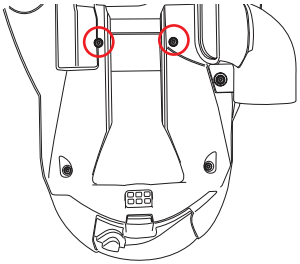
Insulation test points:

All variants

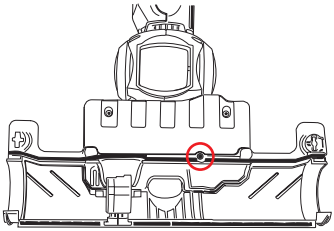


Test directly onto the motor through the grille in the pre-filter housing.

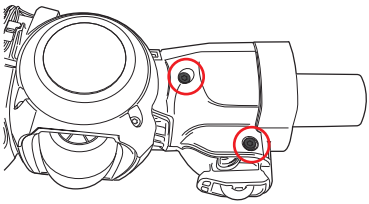
Motorhead variant



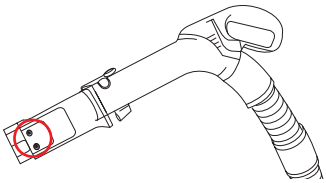
Test the two screws highlighted in the upper chassis.



Test the front screw in the brushbar motor cover lower.



Test the two screws in the stow neck cover.



Test the two screws in the wand cuff cover.

Test results

An insulation test reading of >2 MΩ is acceptable.

A reading of below 2 MΩ is not considered safe and further investigation, rectification and testing must be completed before the product is used. The following components must be visually inspected:

- The vac motor.
- The cyclone inlet wiring loom.
- The wires underneath the brushbar motor cover lower.
- The wires behind the stow neck cover.
- The wires behind the wand cuff cover.

If you cannot repair a product with an insulation test reading of below 2MΩ you must inform the customer that the product is unsafe to use. Please inform the customer of the required actions to repair the product (including the charge structure).

If the product is left un-repaired please indicate on your paperwork/hand held device that the product is electrically unsafe and attach a 'WARNING: product electrically unsafe' sticker in a visable location on the product.

Electrical overview

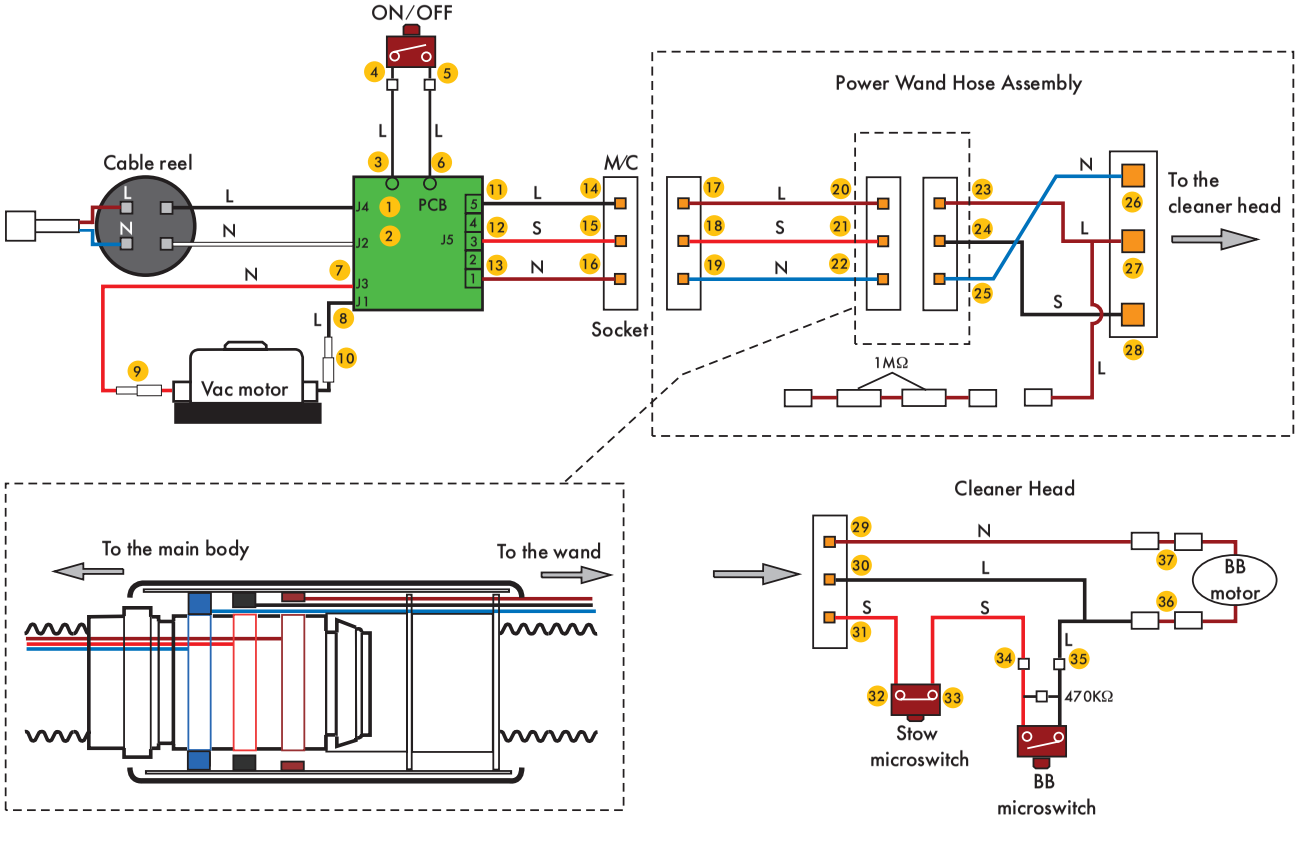
Plugging the powercord into a suitable electrical outlet and pressing the on/off actuator will always turn on the vacuum and brushbar motor simultaneously. Pressing the brushbar actuator will turn the brushbar motor off. Pressing the brushbar actuator whilst the brushbar motor is off will turn the brushbar motor on again. Note: for safety purposes, if the product is unplugged from the electrical outlet without turning the product off at the on/off actuator first, the brushbar will fail to turn upon plugging the product back into the electrical outlet. To activate the brushbar it will be necessary to switch the product off and then on again at the actuator.

The vacuum motor is fitted with a heat sensitive Thermal Cut-out (TCO). This will shut the motor down to up to 60 minutes if it reaches a temperature >96 degrees. Excessive temperatures within the motor are usually caused by machine/filter blockages.

The brushbar motor is protected by a current overload switch that turns off power to the brushbar motor if the brushbar is obstructed (usually caused by a blockage around the brushbar or within the brush housing). The obstruction must be cleared and the motor reset by pressing the brushbar actuator. If the cause of the obstruction is not cleared the overload switch will continually activate.

For added protection the underside of the power floor tool assembly neck contains a stow microswitch that is activated when the floor tool is stowed (stored) on the rear of the product. When activated the brushbar motor will not operate.

Wire colours may vary between territories



Wiring schematic Motorhead variant

Electrical fault diagnostic - Motorhead variant

Note: check 'points' refer to the wiring schematic on page 4.

No power to either motor

1. Check for damage/electrical failure to the plug and powercord.
2. Carry out a resistance test across the fuse (UK only).
3. Check the mechanical actuation of the on/off switch.
4. Check for a loose connection at points 1-6.
5. Carry out a resistance test on the cable rewind assembly (Live pin on the plug to point 1, and neutral pin on the plug to point 2) and across the on/off switch (points 4-6).

If no faults are found replace the PCB assembly.

No power to the vacuum motor (brushbar motor operates)

1. Check for a loose connection at points 7-10.
2. Carry out a resistance test between points 7-9 and 8-10 (the wires from the PCB assembly to the vacuum motor).
3. Carry out a visual inspection of the vacuum motor (commutator, brushes, windings etc.).
4. Carry out a resistance test across the vacuum motor.

If no faults are found replace the PCB assembly.

No power to the brushbar motor (vacuum motor operates)

1. Check for a loose connection between points 11-37.
2. Carry out a resistance test of the Live wire from the PCB assembly to the end of the power wand/hose assembly (11-27).
3. Carry out a resistance test of the Switch wire from the PCB assembly to the end of the power wand/hose assembly (12-28).
4. Carry out a resistance test of the Neutral wire from the PCB assembly to the end of the power wand/hose assembly (13-26).
5. Check the mechanical actuation of the stow microswitch and cam and the brushbar microswitch.
6. Carry out a resistance test across the brushbar microswitch (points 34-35).
7. Carry out a resistance test across the Neutral wire within the power floor tool (points 29-37).
8. Carry out a resistance test across the Live wire within the power floor tool (points 30-36).
9. Carry out a visual inspection of the brushbar motor (commutator, brushes, windings etc.).
10. Carry out a resistance test across the brushes on the brushbar motor.

If no faults are found replace the PCB assembly.

Unable to turn the brushbar motor on or off using the brushbar switch

1. Check for a loose connection onto the brushbar microswitch (points 34 & 35).
2. Check the mechanical actuation of the brushbar actuator and the brushbar switch.

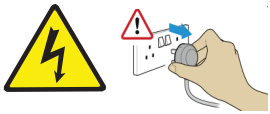
If no faults are found replace the PCB assembly.

Brushbar motor operating whilst power floor tool is in stowed position

1. Check for a loose connection onto the stow microswitch (points 32 & 33).
2. Check the mechanical actuation of the stow microswitch cam and stow microswitch.
3. Carry out a resistance test from the PCB assembly to the end of the power wand/hose assembly (points 11-27, 12-28 & 13-26).

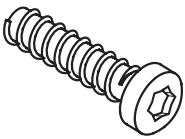
If no faults are found replace the PCB assembly.

General notes

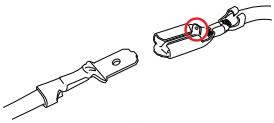


Disconnect the machine from the electrical outlet at all times during repair and test. Failure to do so could result in electric shock or personal injury.

Wire colours may vary between territories.



All screws used in DC23 are Torx T15 unless otherwise stated.

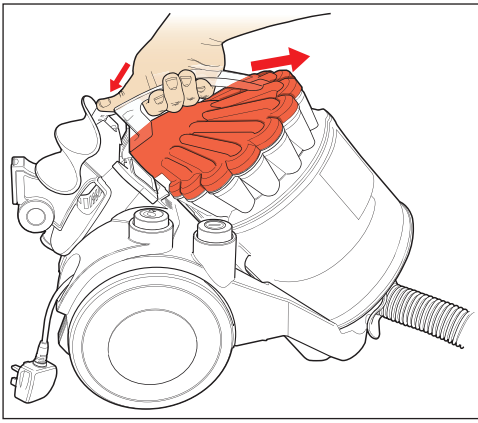


Female terminal clips used in DC23 contain a locking mechanism. The release pip will need to be activated before separation from the male terminal can occur.

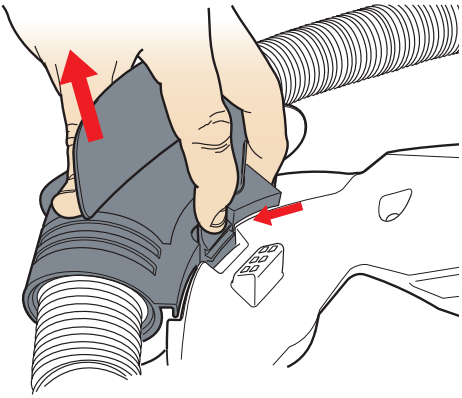
Protective safety goggles and gloves must be worn when applying glue.

Recommended tools to repair DC23:
Torx T-10 and T-15 screwdrivers
Philips screwdriver
Large flat bladed screwdriver
Terminal screwdriver
Long/needle nosed pliers

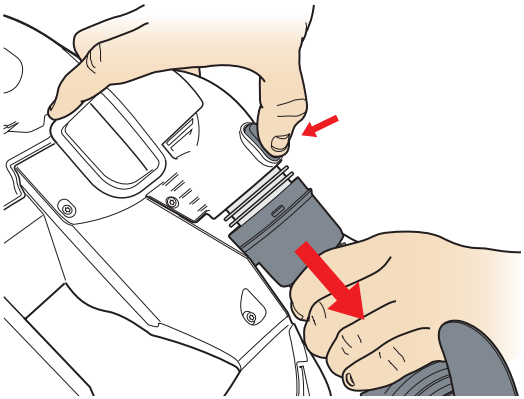
Cable rewind replacment - removal



01 Press the cyclone release catch to remove the cyclone and bin assemblies from the front of the product.

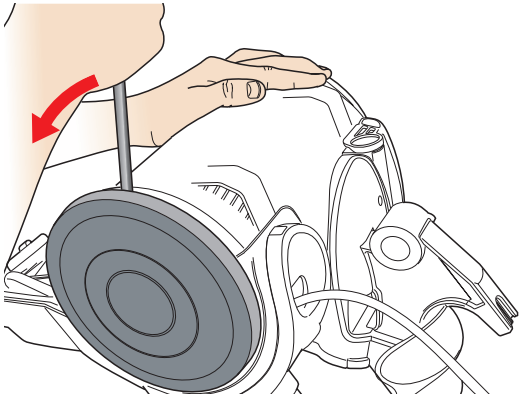


02 Push the hose bracket release catch to remove the hose and wand assemblies from the front of the product.

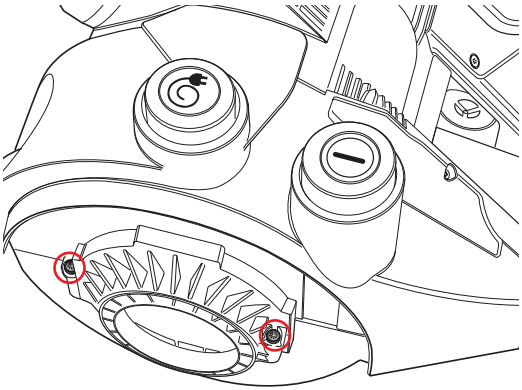


Motorhead variant only

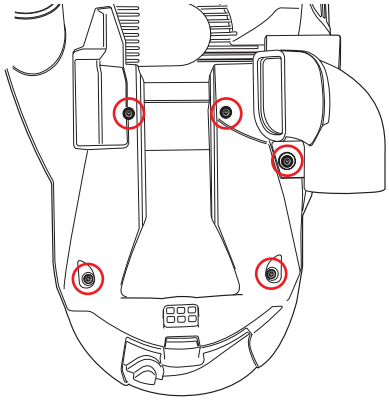
03 Press the release catch on the cyclone inlet to release the hose and wand assemblies from the product.



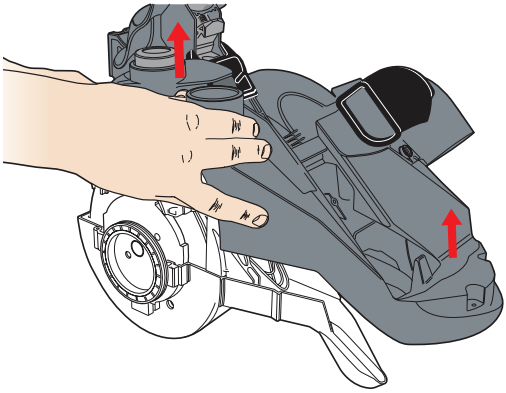
04 Lever the wheel next to the cable rewind firmly off the product using a large flat bladed screwdriver.



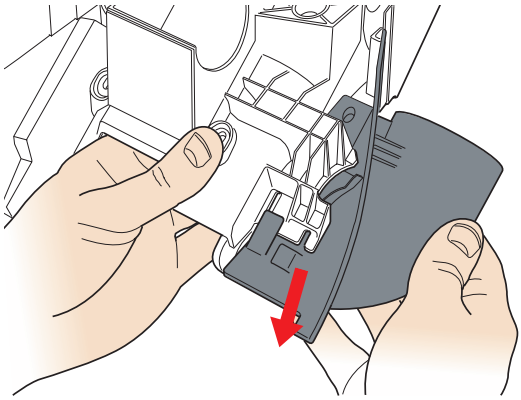
05 Undo the two screws in the side of the product.



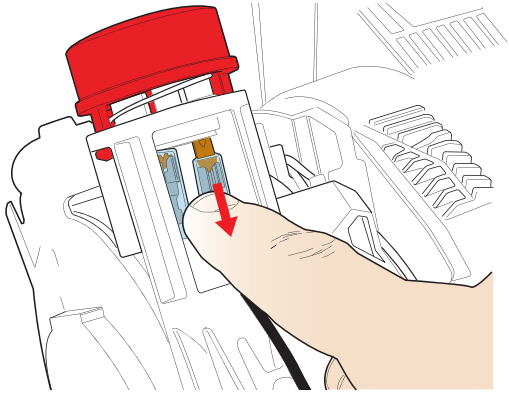
06 Undo the five screws in the upper chassis.



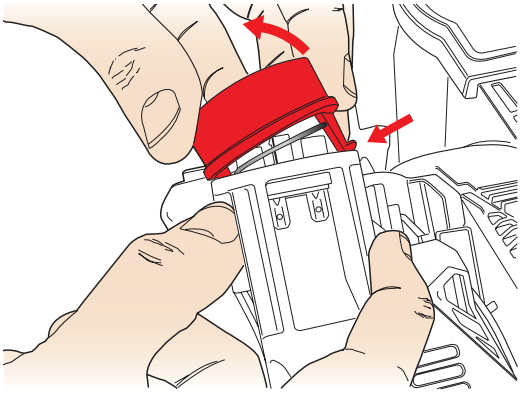
07 Lift off the upper chassis.



08 Slide the cyclone inlet off the upper chassis.*

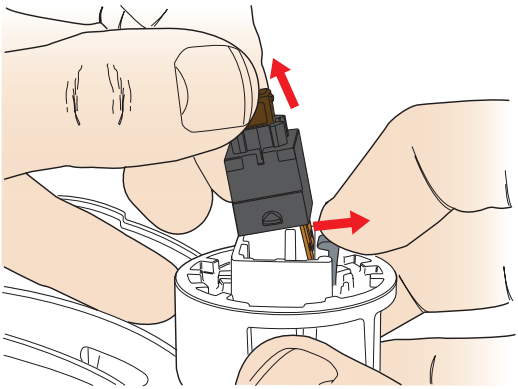


09 Disconnect the two wires from the switch.

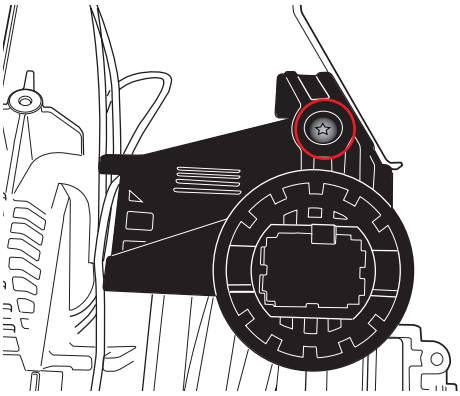


10 Remove the switch actuator and spring from the switch housing.*

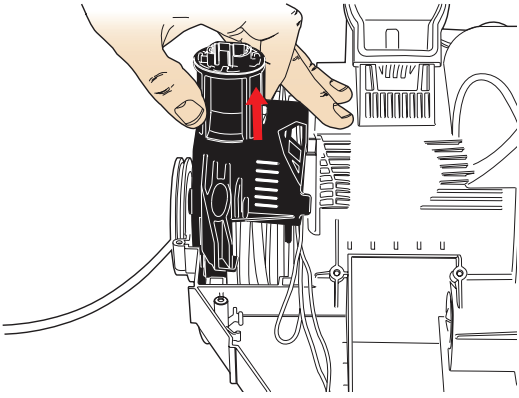
*Not necessary if replacing the cable rewind only.



11 Remove the switch from the switch housing.*

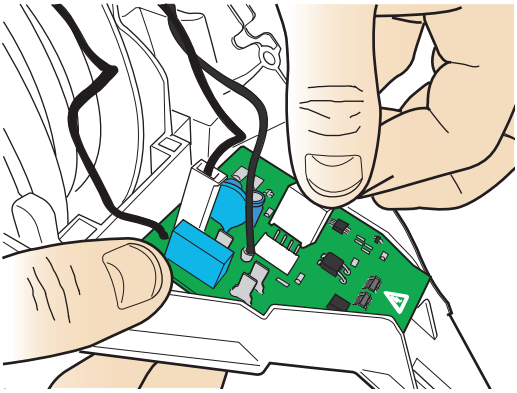


12 Remove the screw in the switch housing.



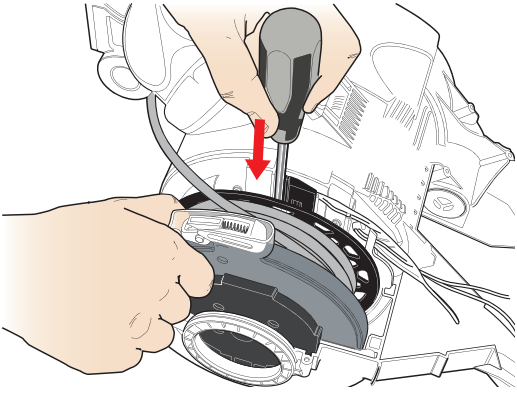
13 Remove the switch housing from the product.

*Not necessary if replacing the cable rewind only.

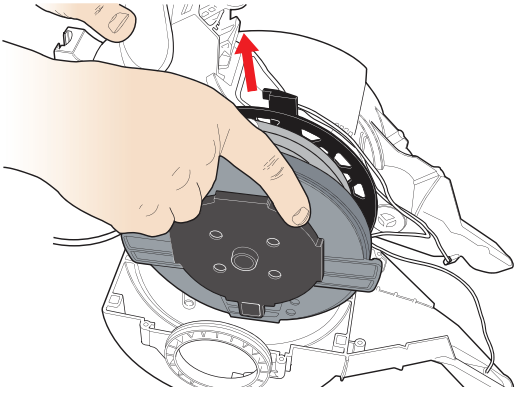


Motorhead variant only

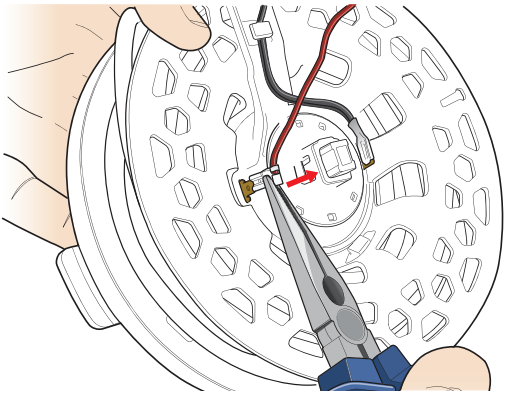
14 If the PCB assembly needs replacing, carefully detach all wires from it and remove it from the product.



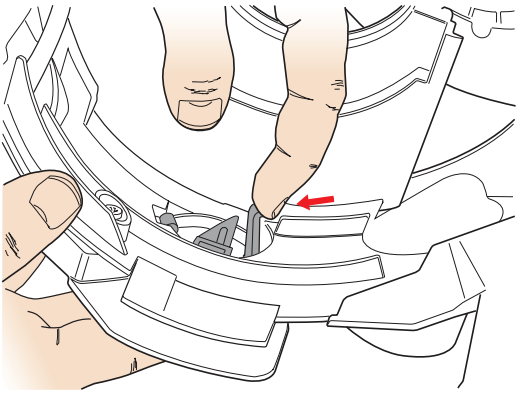
15 Slide a large flat bladed screwdriver down the channel between the cable rewind assembly and the main chassis to activate the cable rewind release clip.



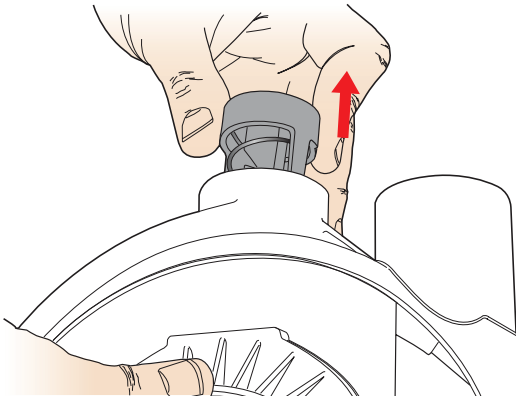
16 Remove the cable rewind assembly from the main body.



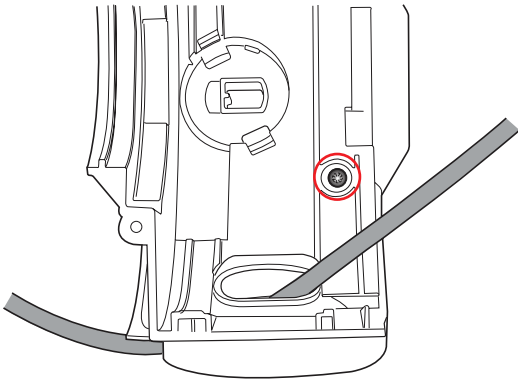
17 Release the motor wire from the cable rewind assembly.



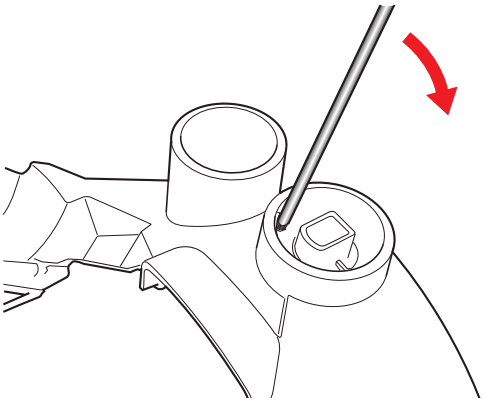
18 Unclip the cable rewind actuator from the product.



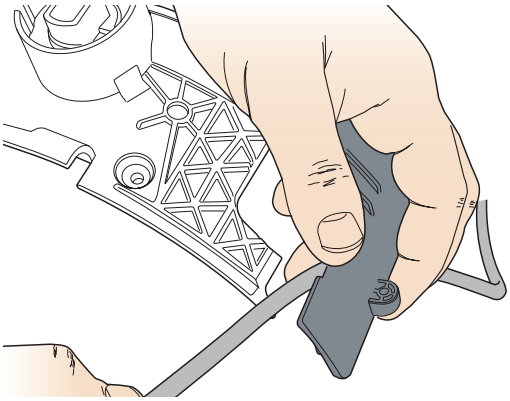
19 Slide the cable rewind actuator and spring out of the upper chassis.



20 Remove the cable guard screw.

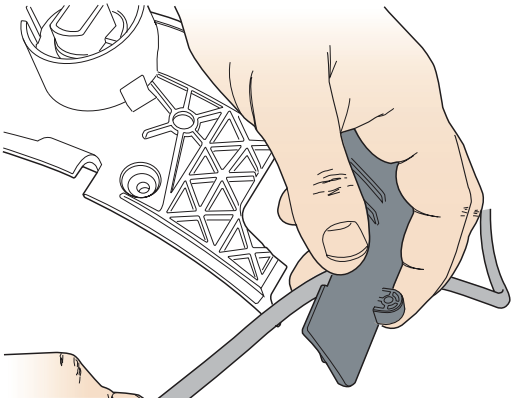


21 Insert a Torx T15 screwdriver into the detail at the bottom of the cable rewind actuator housing and lever down to release the cable guard from the upper chassis.

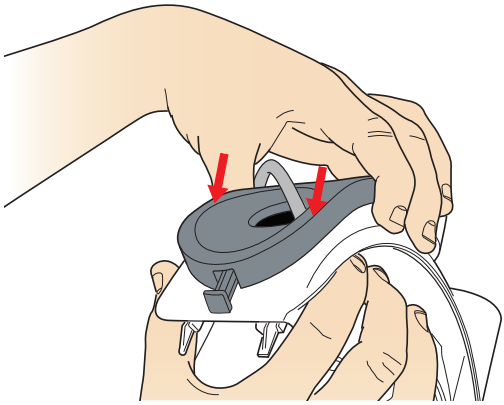


22 Release the cable from the upper chassis.

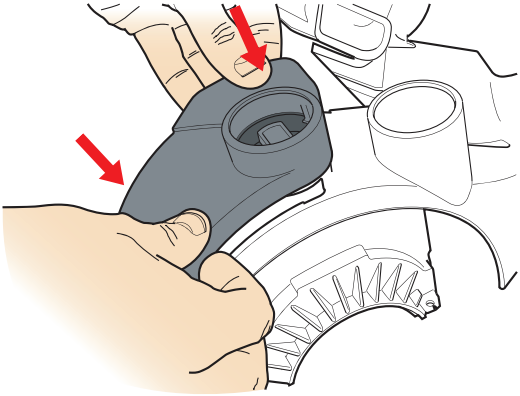
Cable rewind replacement - fitting



23 Locate the cable into the cable rewind housing.

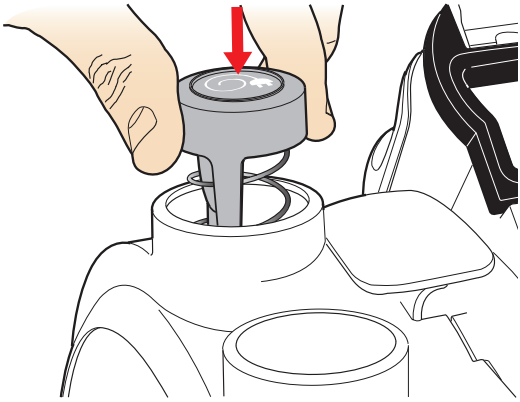


24 Locate the cable guard onto the detail on the rear of the upper chassis.

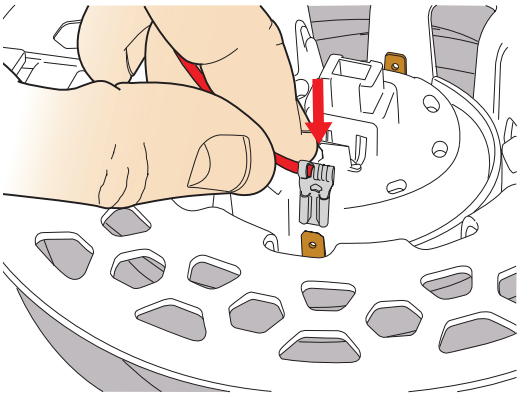


25 Press the cable guard onto the upper chassis.

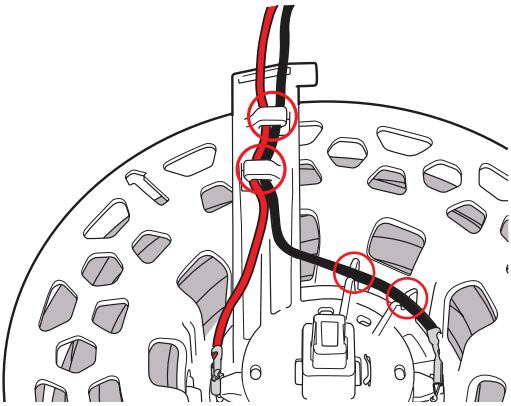
Fit the screw on the underside.



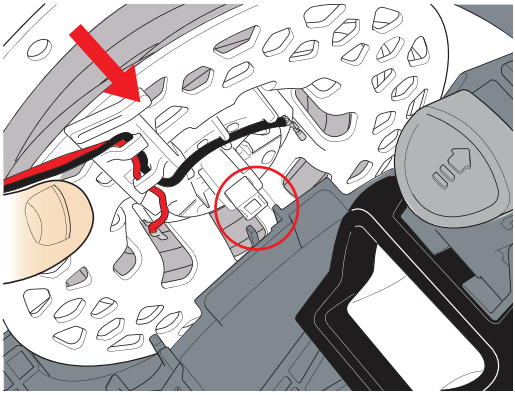
26 Locate the cable rewind actuator and spring into the upper chassis.



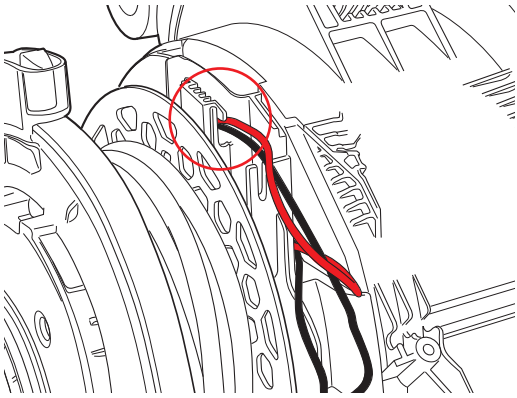
27 Attach the motor wire onto the cable rewind.



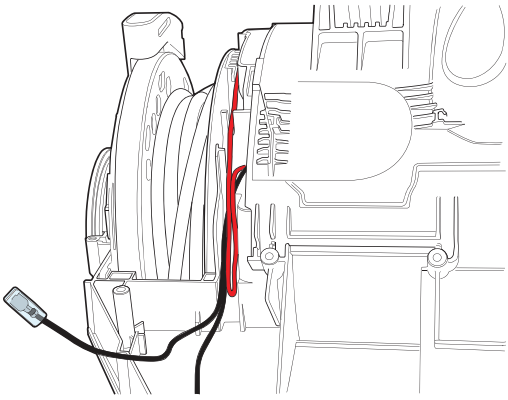
28 Dress the wires neatly within the clips on the cable rewind holder.



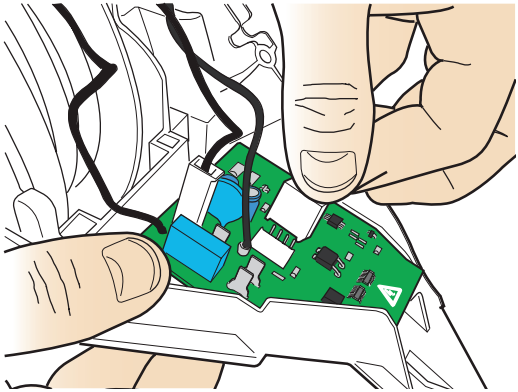
29 Lower the cable rewind into the side of the product ensuring the release mechanism locates within the channel.



30 Ensure any wires are located under the detail on the top of the cable rewind holder.

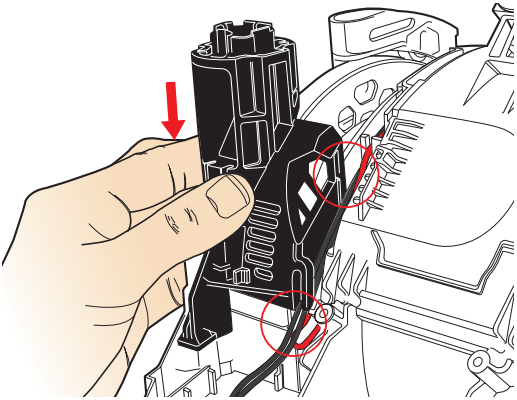


31 Dress all wires neatly within the channels provided.

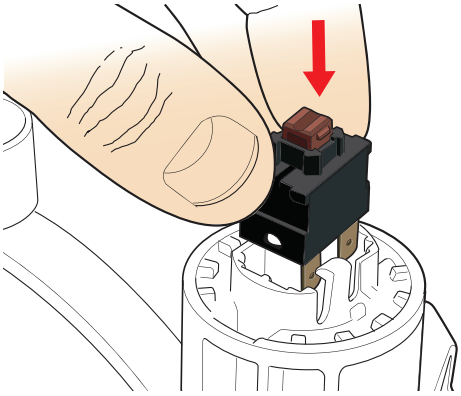


Motorhead variant only

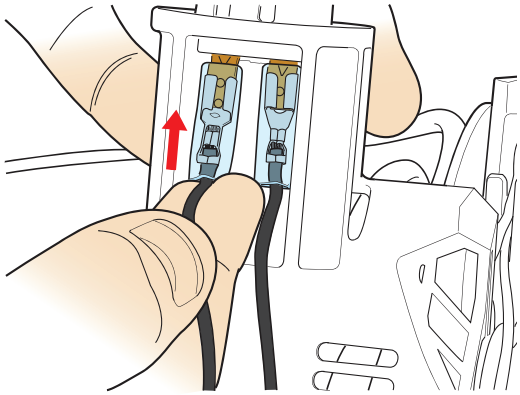
32 If previously removed, locate the PCB assembly onto the product. Carefully connect all wires.



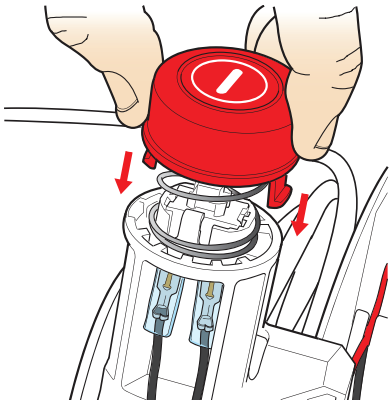
33 Lower the switch housing onto the detail on the side of the chassis ensuring the wires are retained within the detail on the front of the housing.
Fit the screw in the front of the switch housing.



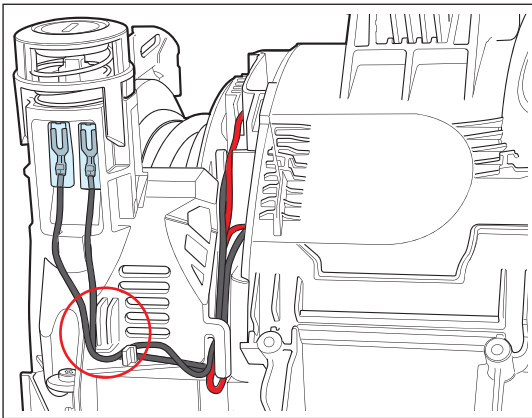
34 If previously removed locate the switch into the top of the switch housing.



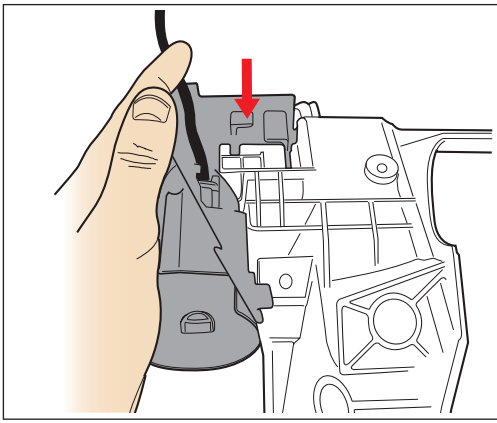
35 Attach the wires to the switch.



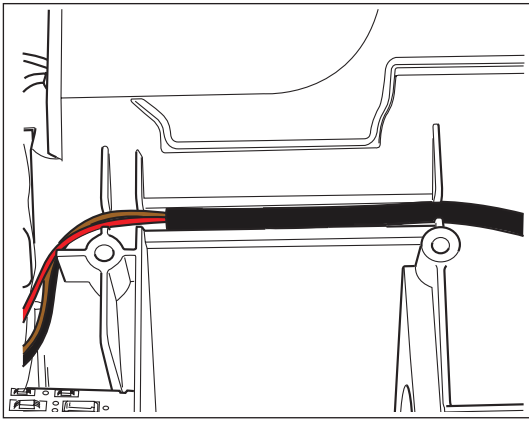
36 If previously removed push the on/off actuator onto the switch ensuring the lugs click into the switch housing.



37 Dress the switch wires into the channels provided on the switch housing.

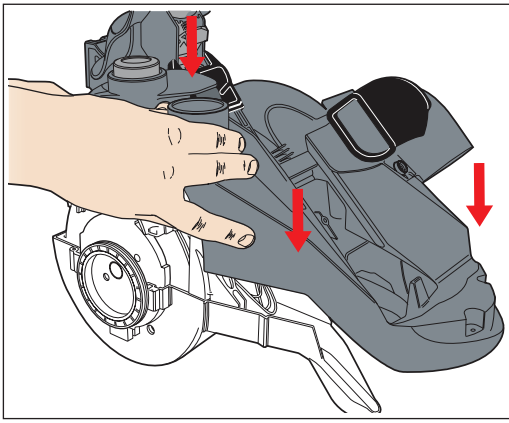


38 If previously removed slide the cyclone inlet onto the UMC.

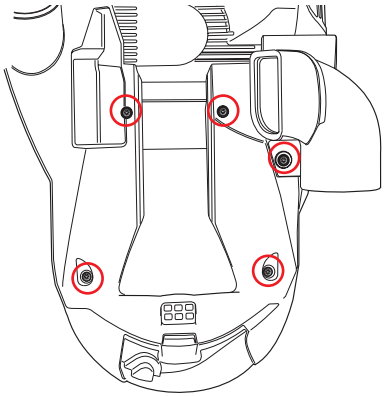


Motorhead variant only

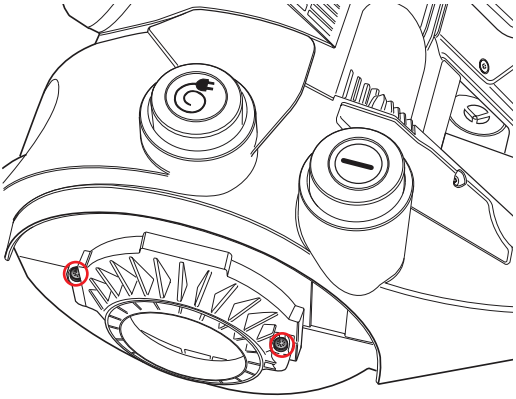
39 Ensure the cyclone inlet cable is located into the channel provided on the front of the main chassis.



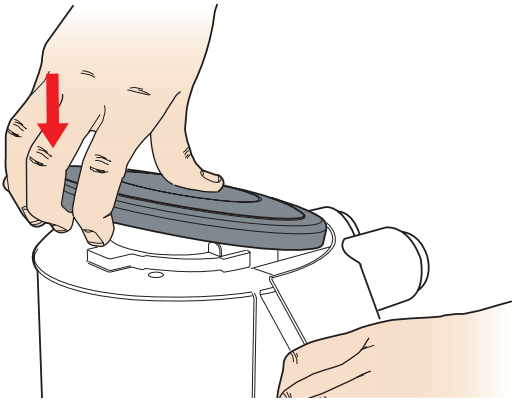
40 Lower the upper chassis onto the main body.



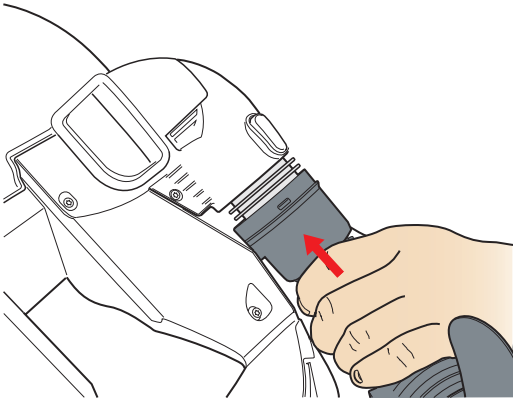
41 Fit the five screws on the front of the product.



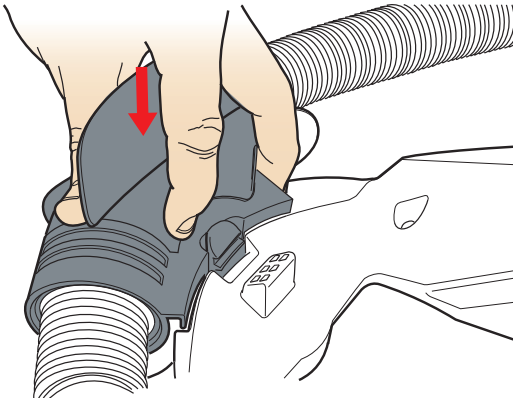
42 Fit the two screws on the side of the product.



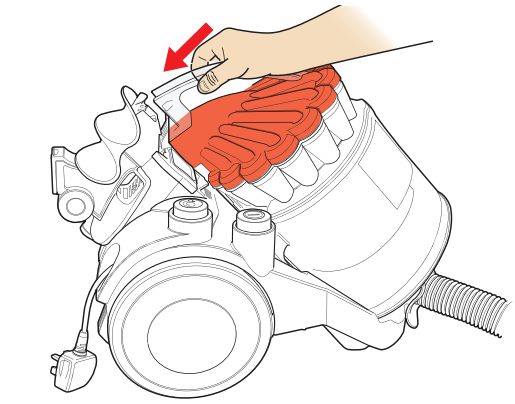
43 Locate the rear wheel onto the side of the product.
Press firmly to fit.



44 Slide the hose into the cyclone inlet.



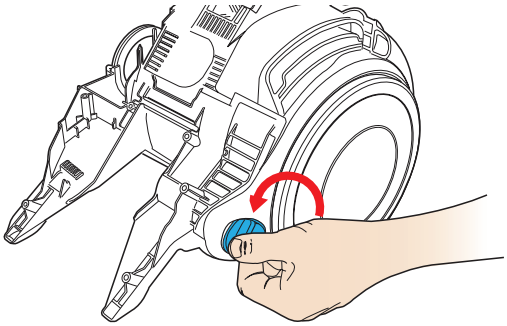
45 Clip the hose retainer onto the front of the product.



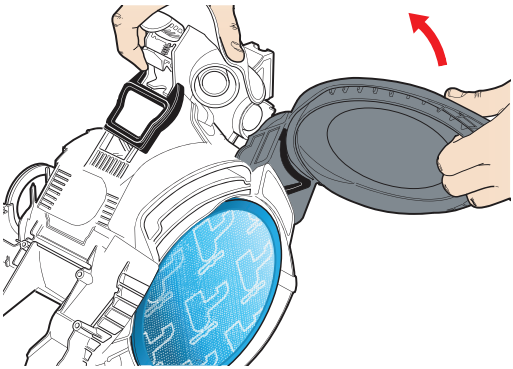
46 Replace the cyclone and the bin assemblies onto the product.

Motor bucket assembly replacement - removal

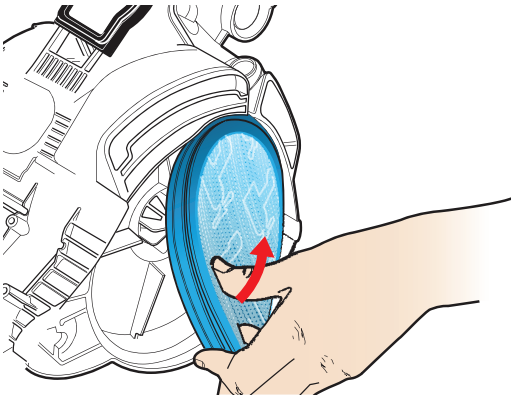
Before continuing the following parts should be removed as previously shown:
Cable rewind and PCB assembly (pages 6-13)



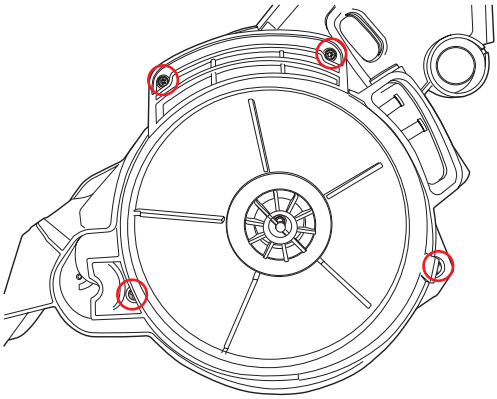
47 Unlock the pre-filter cover fastener.



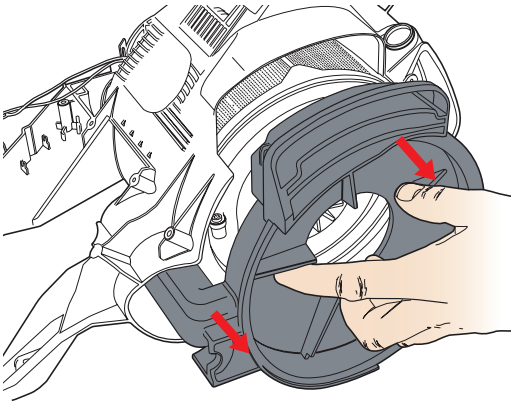
48 Open the pre-filter cover assembly. Should it need replacing it can be pulled firmly off the hinge points on the rear of the product.



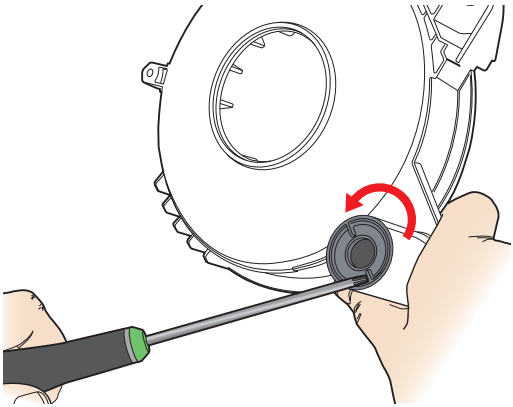
49 Remove the pre-filter assembly.



50 Remove the four Philips screws from the pre-filter housing.

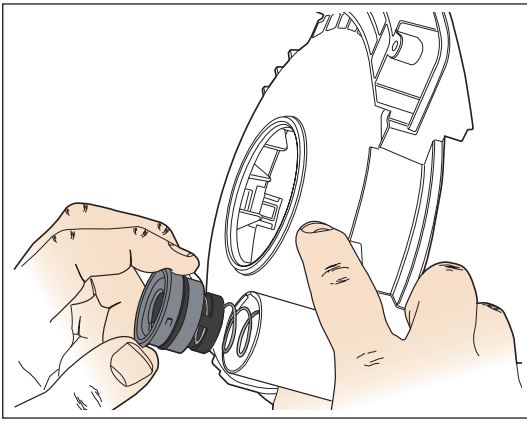


51 Remove the pre-filter housing.

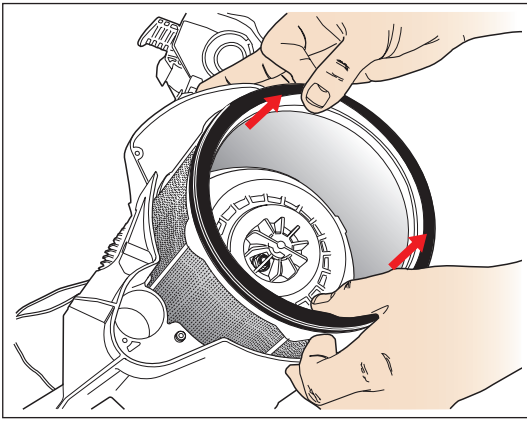


52 Twist the the bleed valve cap to unlock it.*

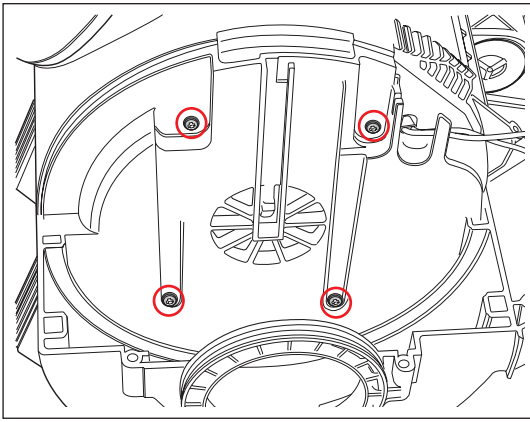
* Only necessary if replacing the bleed valve assembly.



53 With the bleed valve cap unlocked all parts can be pulled away from the pre-filter housing. All parts can be fitted in reverse.*

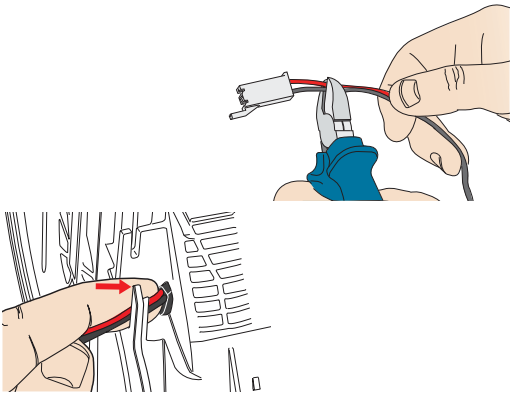


54 Remove the post filter assembly.

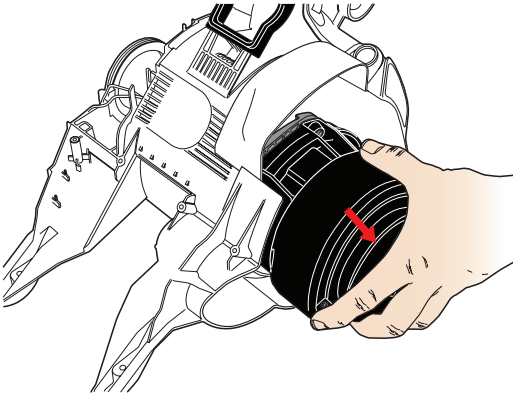


55 Remove the four Torx T-10 screws from the side of the cable rewind assembly.
Note: it will be necessary to access two of the screws through holes in the side of the main chassis.

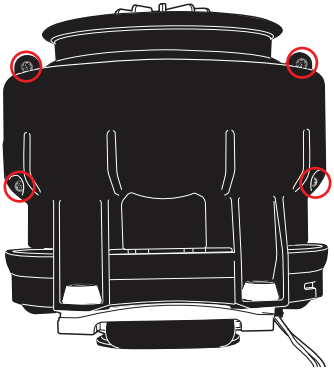
* Only necessary if replacing bleed valve assembly.



56 Snip the connector clip off the end of the motor wiring assembly (Motorhead models only). Push the wiring grommet through the main chassis.

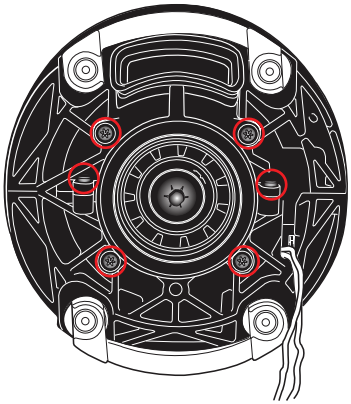


57 Remove the motor bucket from the product.

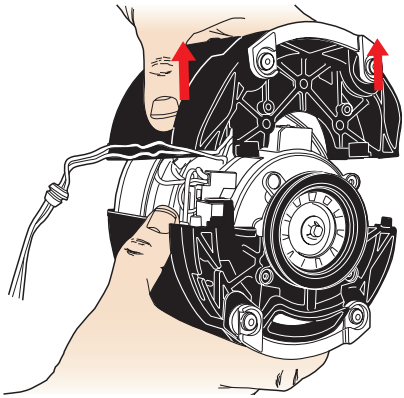


58 Remove the four screws from the top of the motor bucket.*

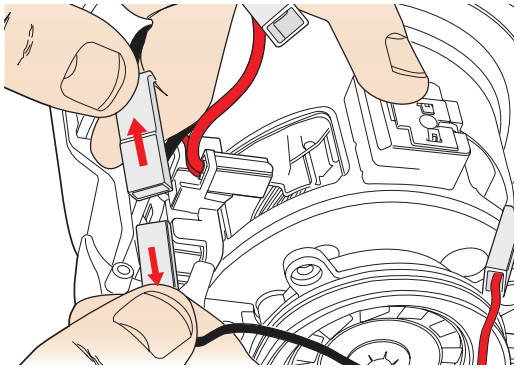
* Only necessary if replacing the motor wiring assembly.
All parts are offered together within the motor bucket assembly.



59 Remove the six screws from the side of the motor bucket. Unclip the motor wires from the side of the bucket.*



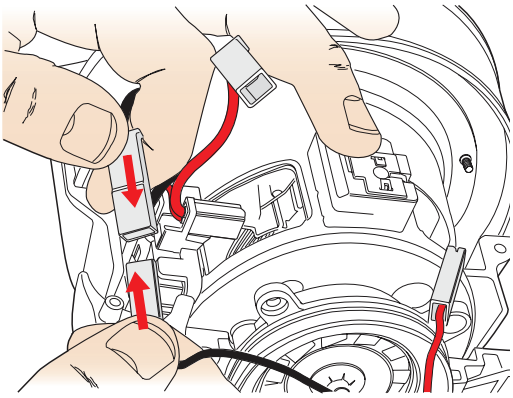
60 Separate the two halves of the motor bucket.*



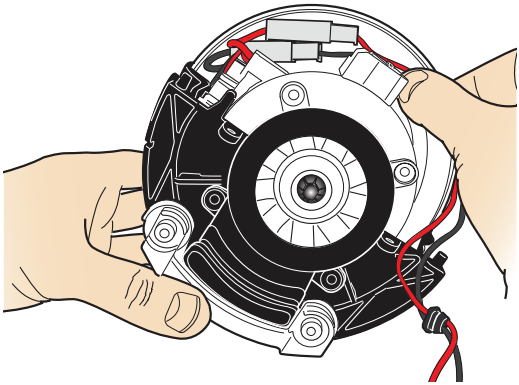
61 Separate the motor wires.*

* Only necessary if replacing bleed valve assembly.
All parts are offered together within the motor bucket assembly

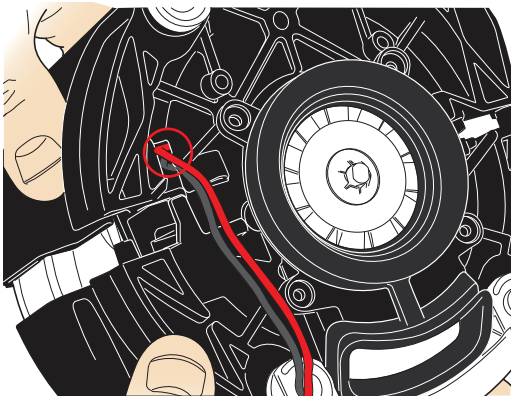
Motor Bucket assembly replacement - fitting



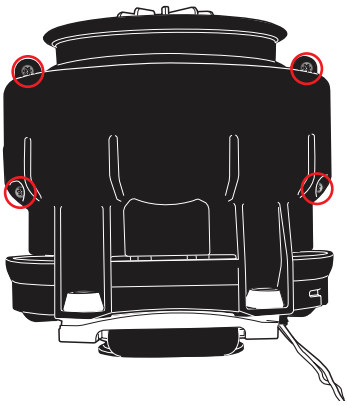
62 Connect the motor wiring assembly to the motor wires.



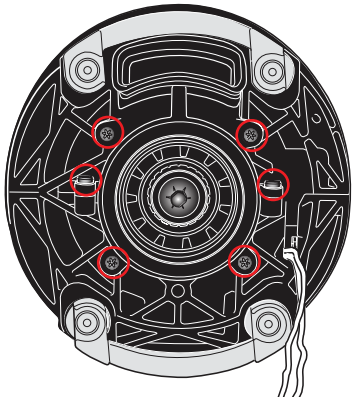
63 Locate the cable clips neatly within the fancase.



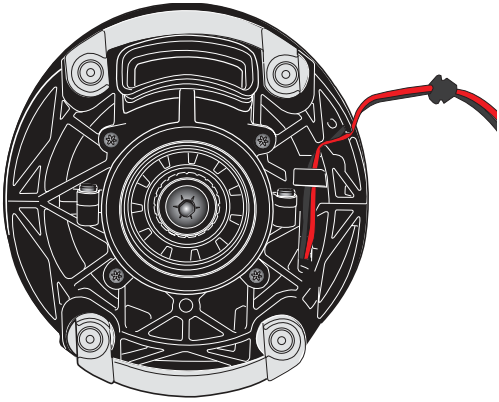
64 Fit the upper half of the motor bucket over the motor ensuring the motor wires are located within the slot. Push the two halves together ensuring no wires are trapped and all edges are adequately seated.



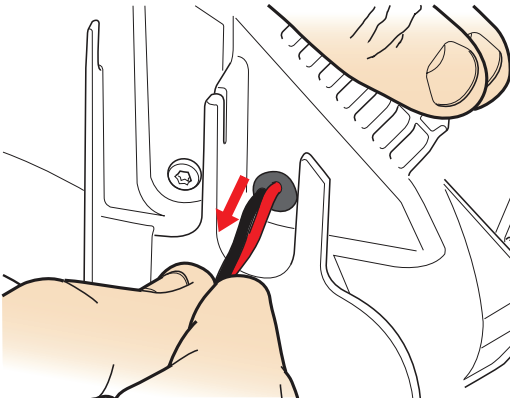
65 Fit the four screws in the motor bucket.



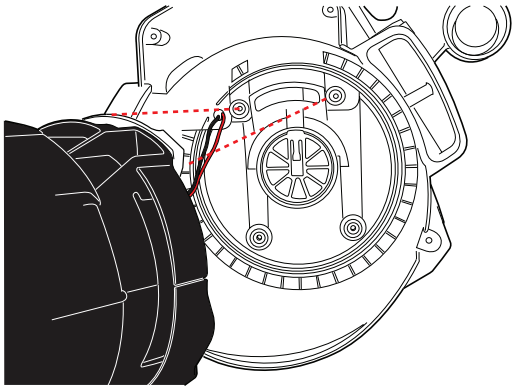
66 Fit the six screws in the side of the motor bucket.



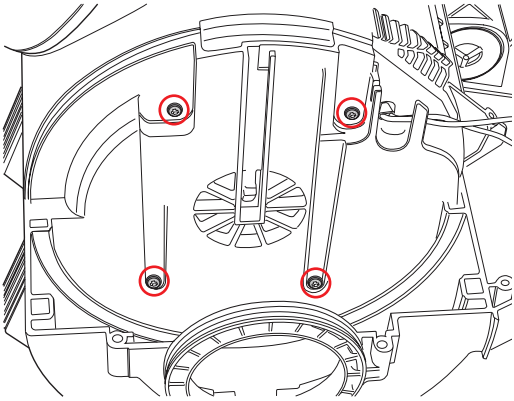
67 Neatly dress the motor wiring assembly under the clip and within the channels on the end of the motor bucket.



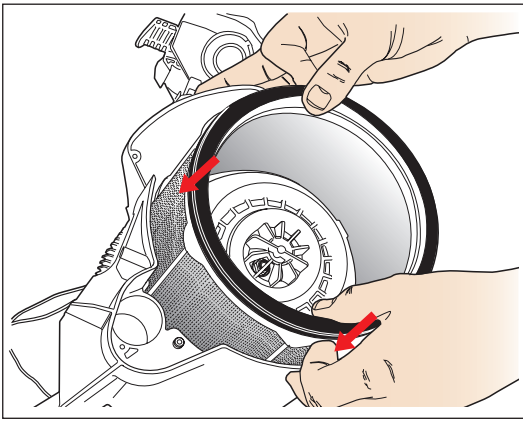
68 Pull the motor wires through the hole in the main body. Ensure the grommet is adequately seated in the hole.



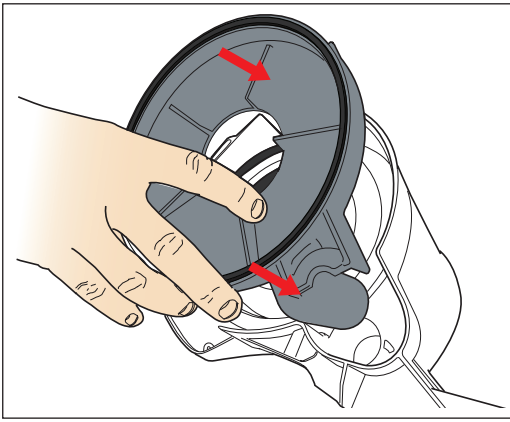
69 Locate the exhaust of the motor onto the detail in the main chassis.



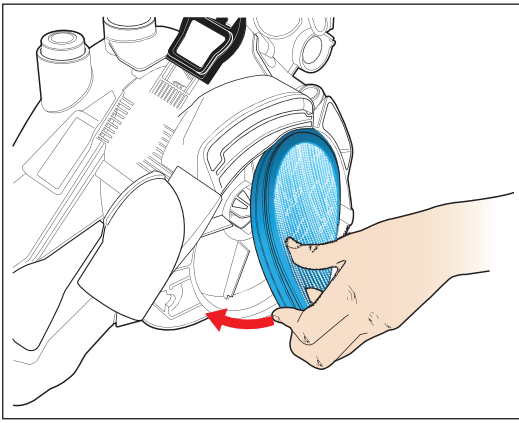
70 Fit the four Torx T-10 screws.



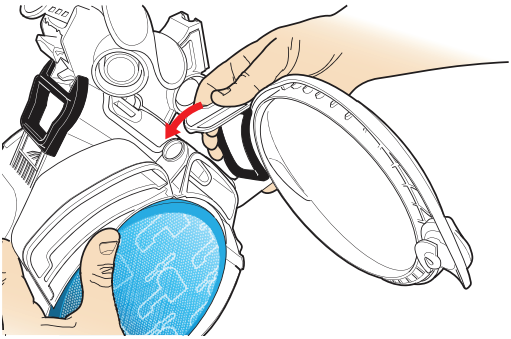
71 Fit the post filter assembly.



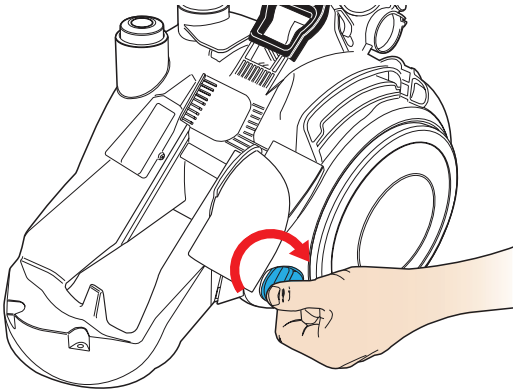
72 Fit the pre-filter housing.
Fit the four Philips screws.



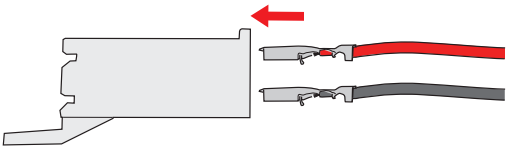
73 Fit the pre-filter assembly.



74 If previously removed clip the pre-filter cover onto the hinge points on the side of the product.



75 Twist and lock the pre-filter cover fastener.

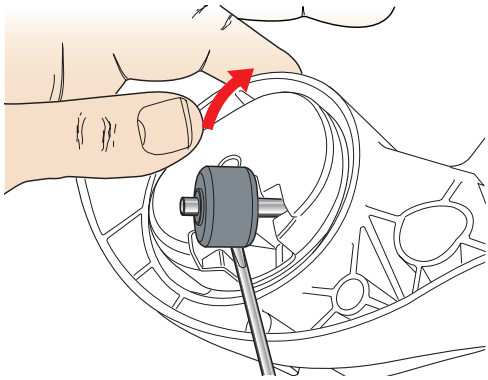


76 Attach the connector clip onto the ends of the motor wiring assembly (Motorhead models only).
Important: the wires **must** be fitted in the orientation shown.

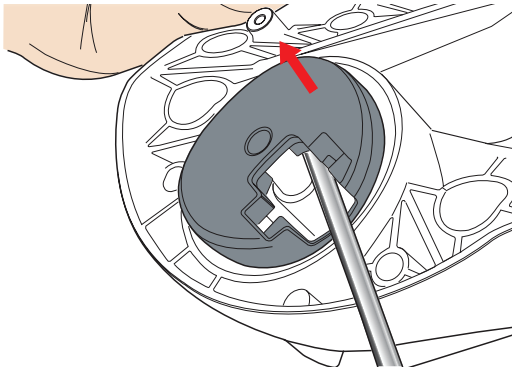
After fitting the motor the following parts should be fitted as previously shown:
Cable rewind and PCB assembly (pages 14-21)

Main chassis replacement - dismantle

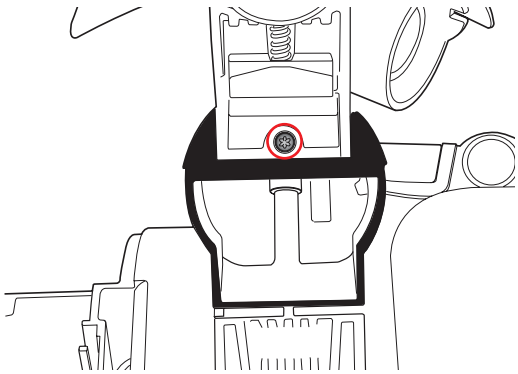
Before continuing the following parts should be removed as previously shown:
Cable rewind and PCB assembly (pages 6-13)
Motor bucket assembly (pages 22-26)



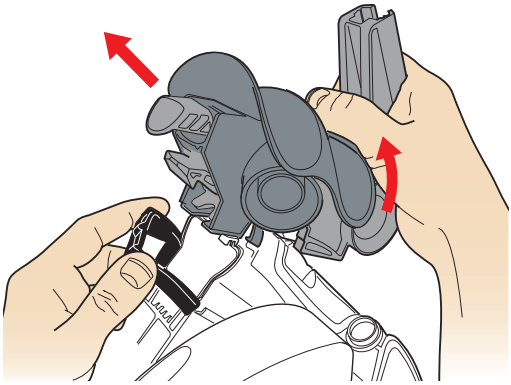
77 Prise the castor wheel and axle out of the castor body.



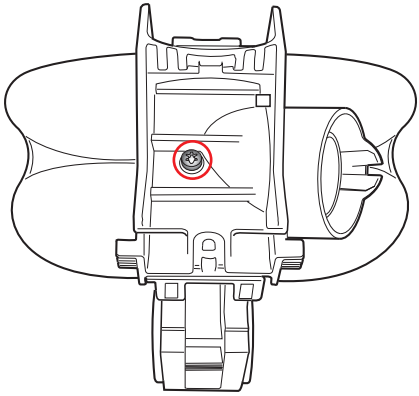
78 Prise the castor body off the base of the chassis.



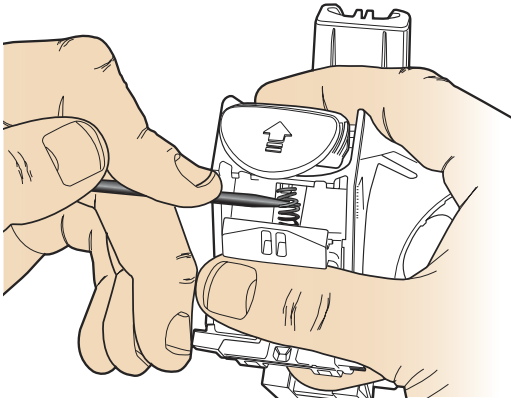
79 Remove the screw in front of the cyclone release catch.



80 Release the top edge of the exhaust seal from the main chassis. Release the tool storage and all parts attached to it from the main chassis.

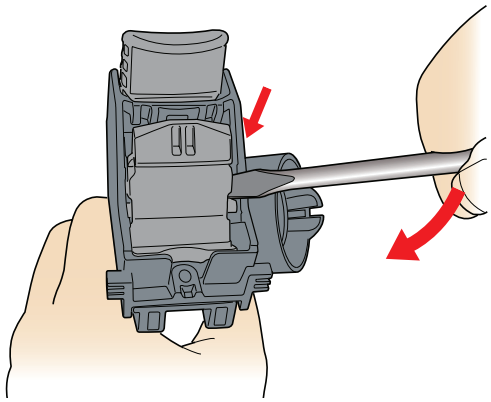


81 Remove the screw and rear hose guide from the tool storage.*

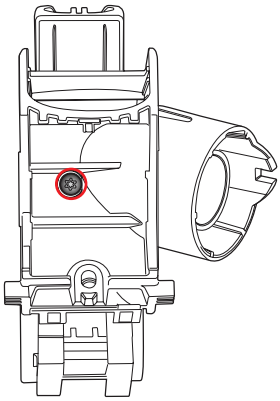


82 Carefully remove the cyclone release catch spring.*

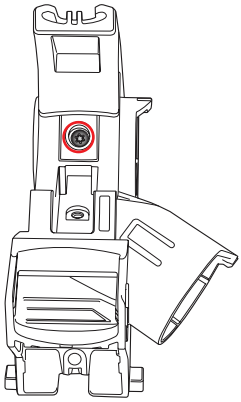
*Only necessary if replacing any of the components attached to the tool storage.



83 Prise the cyclone release catch out of the cyclone release catch housing.*

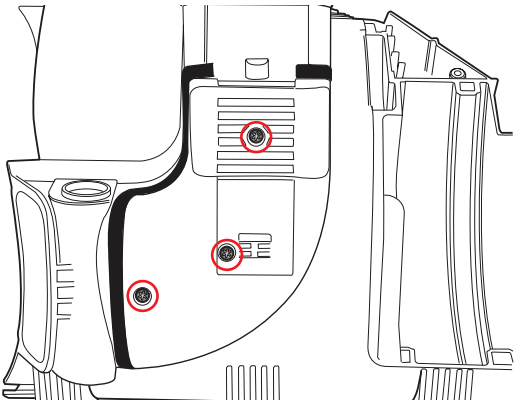


84 Remove the screw and cyclone release catch housing from the tool storage.*

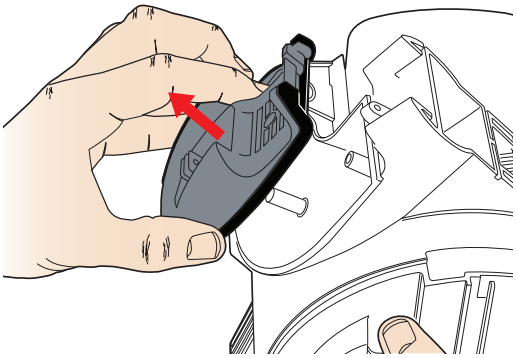


85 Remove the screw and parking yoke from the tool storage.*

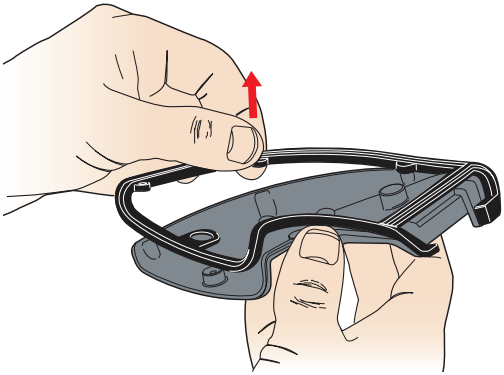
*Only necessary if replacing any of the components attached to the tool storage.



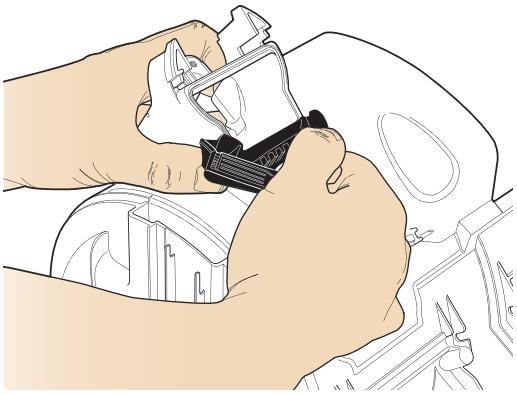
86 Remove the three screws in the duct cover.



87 Remove the duct cover and seal.

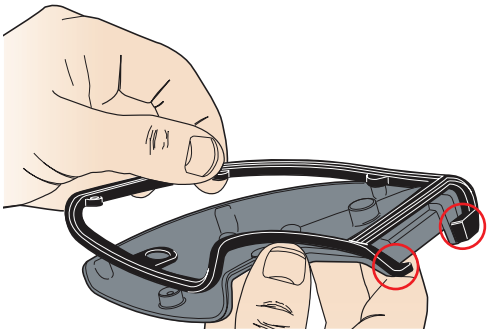


88 Pull the duct cover seal off the duct cover.

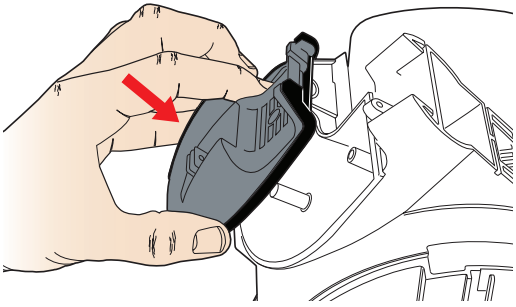


89 Pull the cyclone exhaust seal off the main chassis.

Main chassis replacement - assemble

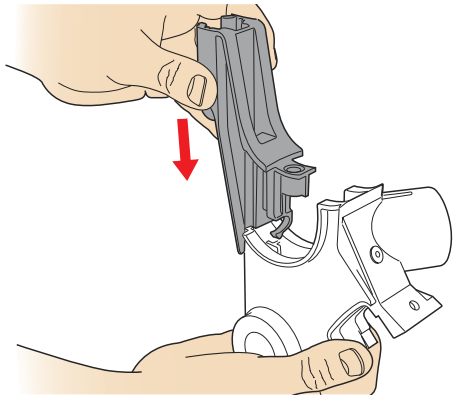


90 Locate the duct cover seal onto the duct cover. One spot of glue should be applied to each side of the duct cover too hold the ends of the duct cover seal in place.



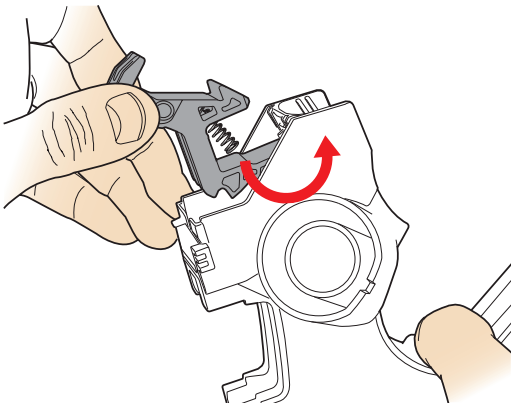
91 Fit the duct cover and seal onto the main chassis. Ensure the seal is correctly seated around all edges of the cover and main chassis.

Fit the three screws.



92 If previously removed slide the park yoke into the tool storage.

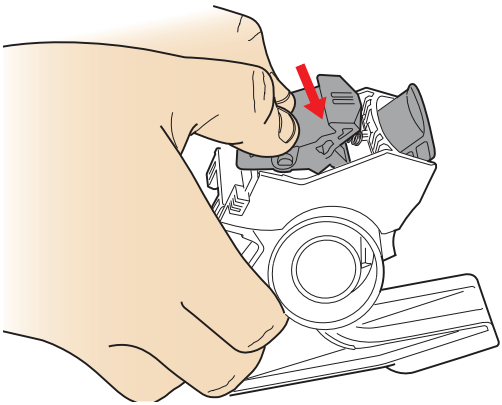
Fit the screw.



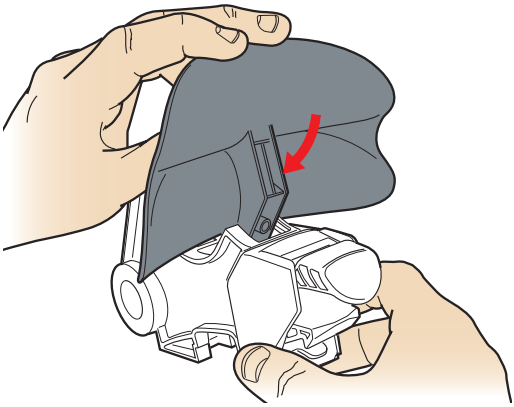
93 Locate the cyclone release catch housing onto the front of the tool storage.

Fit the screw.

Locate the spring onto the cyclone release catch. Insert the cyclone release catch into the housing ensuring the spring locates onto the cruciform in the cyclone release catch housing.

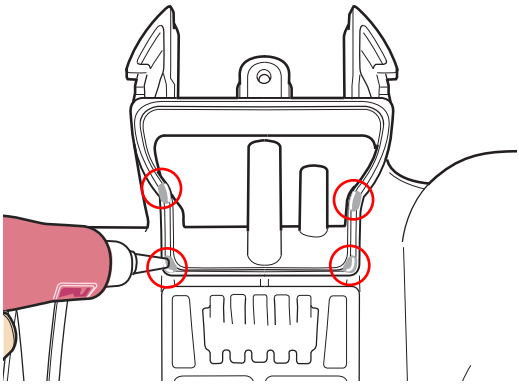


94 Once located push the catch firmly into the housing.



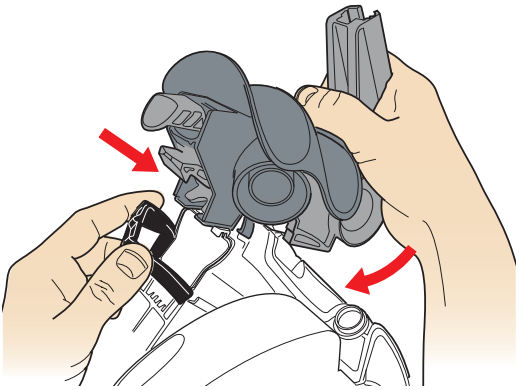
95 Slide the rear hose guide into the tool storage.

Fit the screw.



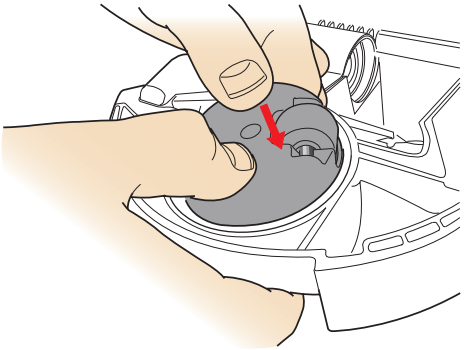
96 Apply one spot of glue to the four locations shown.

Fit the cyclone exhaust seal onto the main chassis.



97 Peel the top edge of the exhaust seal from the main chassis.
Position the front of the tool storage onto the main chassis.
Lower the rear onto the retainer of the duct cover.
Slide the main cassis to lock.

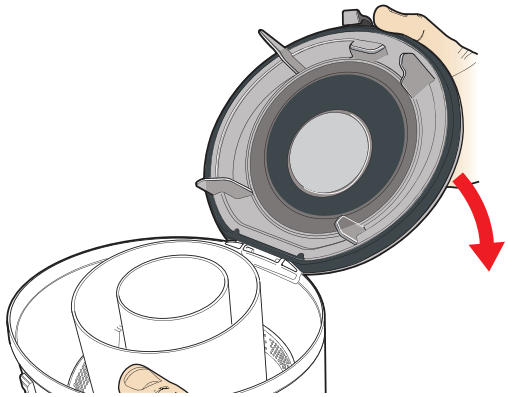
Fit the screw.



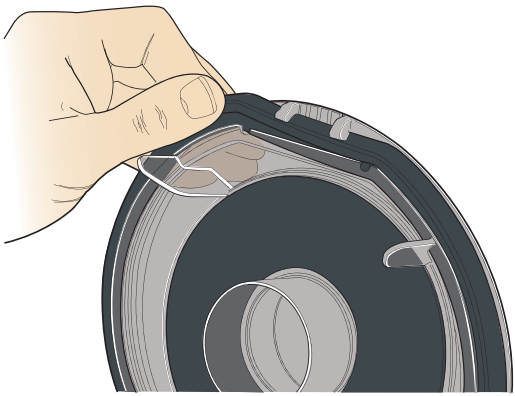
98 Locate the castor wheel and axle into the castor body. Firmly press the castor body onto the base of the main chassis.

After fitting, the following parts should be fitted as previously shown:
Motor bucket assembly (pages 27-31)
Cable rewind assembly (pages 14-21)

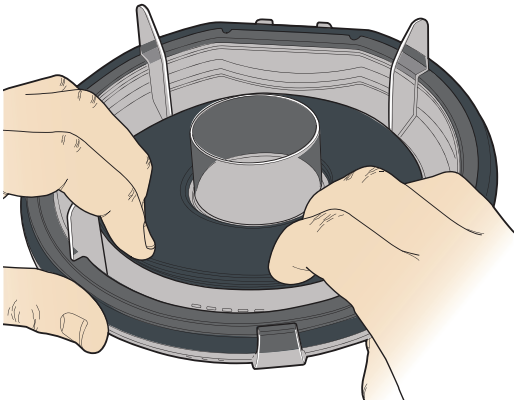
Sub-assemblies - Bin assembly



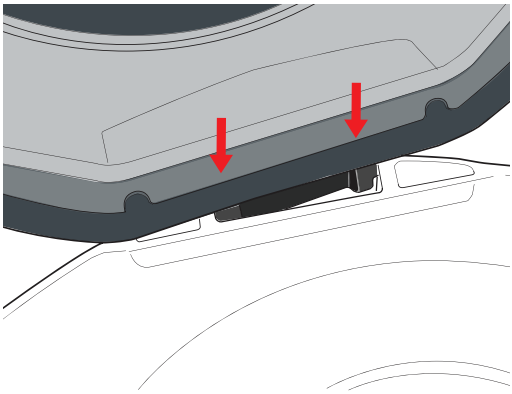
99 Firmly pull back the bin base assembly to remove from the bin assembly.



100 The bin base seal can be replaced by firmly pulling it off the bin base assembly. When fitting ensure the seal is adequately seated around all edges and details.

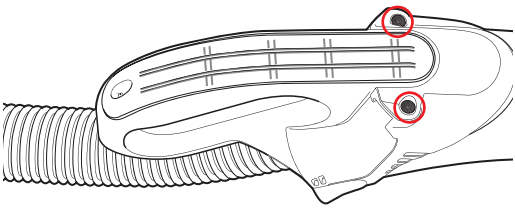


101 If the FDC/IDC needs replacing pull it away from the bin base. When replacing ensure it is firmly pushed in and seated correctly.

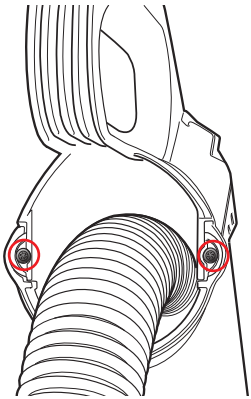


102 To fit the bin base assembly locate the two lugs into the bin assembly and push firmly until clicked into place.

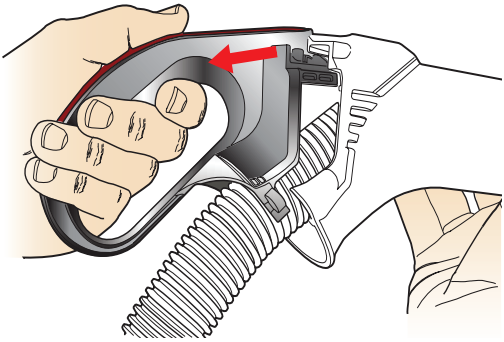
Sub-assemblies - Power wand hose assembly



103 To remove the wand handle from the power wand hose assembly, undo the two screws on the top of the wand.

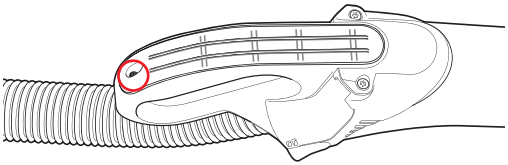


104 Undo the two Torx T-8 screws on the rear of the wand handle.

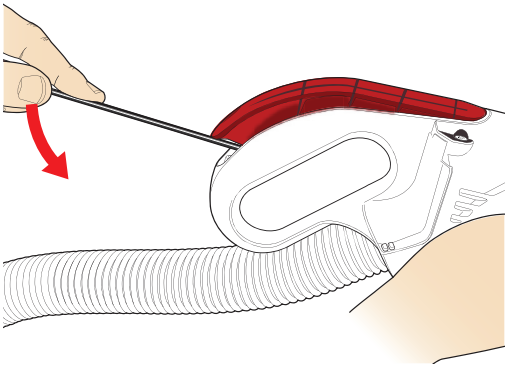


105 Slide the wand handle out of the rear of the power wand hose assembly.

Fit in reverse.

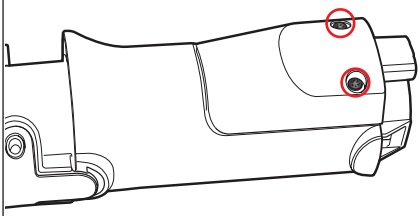


106 The wand handle cover can be replaced by removing the Torx T-8 screw in the rear of the cover.

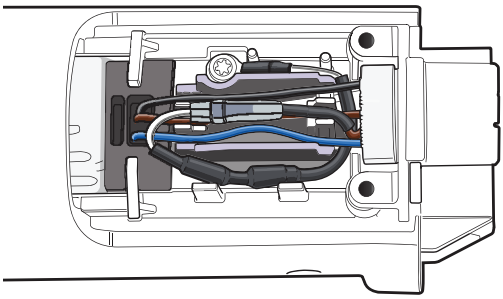


107 With the screw removed carefully prise out from the rear using a thin, flat bladed screwdriver.

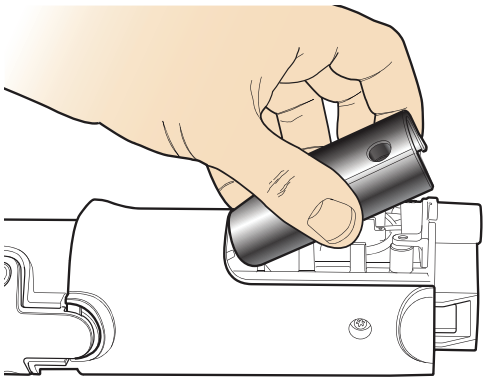
Fit in reverse.



108 The wand cuff cover can be replaced if necessary by undoing the two screws shown and lifting off the cover.



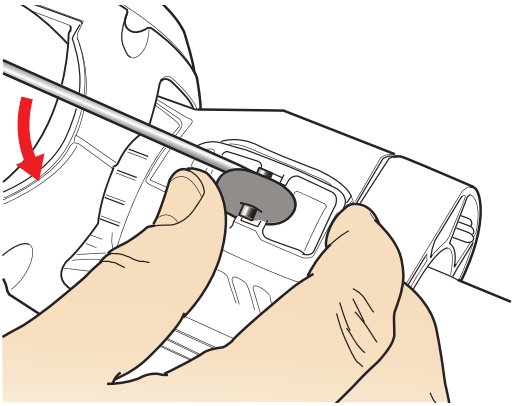
109 Before fitting a new cover, ensure all wires are located within the channels and retainers provided.



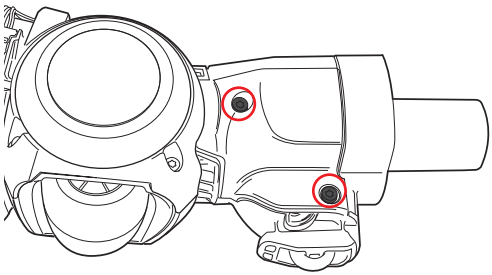
110 To fit, locate the detail on the rear of the cover under the lip on the wand. Lower the cover onto the wand.

Fit the two screws.

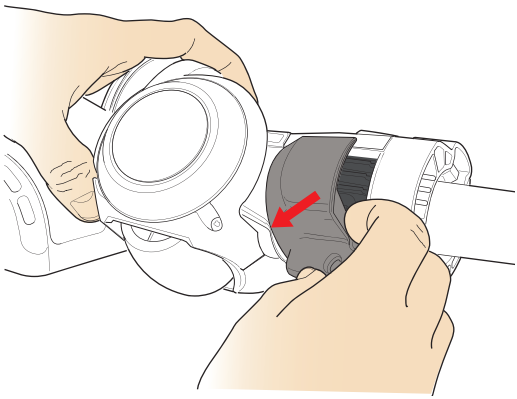
Sub-assemblies - Power floor tool - dismantle



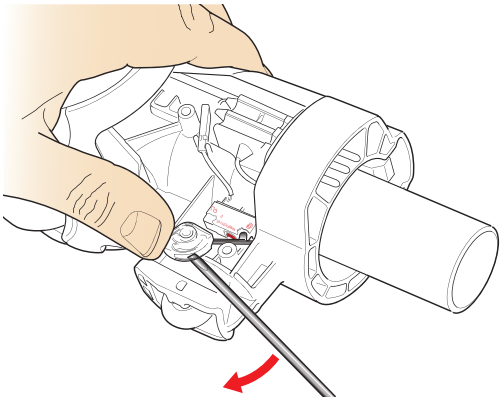
111 The stow wheel or axle can be replaced by prising out the stow using a thin, flat bladed screwdriver.
To fit, push both parts firmly into the stow.



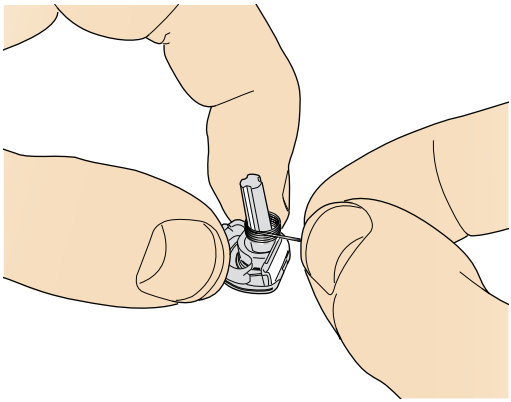
112 To replace the stow neck cover, stow microswitch cam or spring remove the two short screws in the cover.



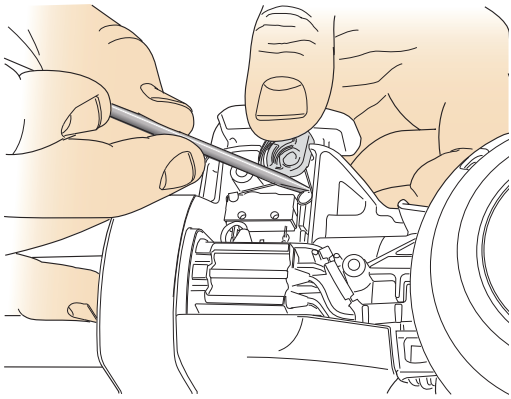
113 Firmly pull from the rear of the cover off the side of the neck.



114 Carefully prise the microswitch cam and spring out of the neck.

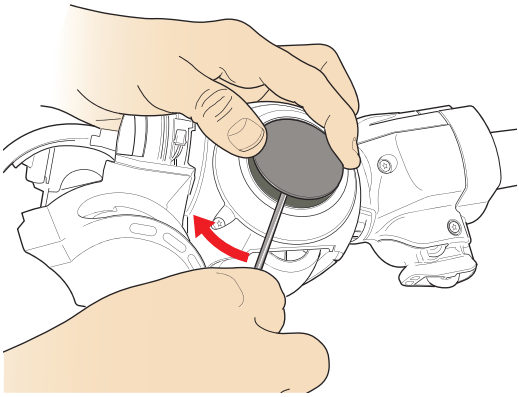


115 When fitting the spring, ensure the tail of the spring locates into the channel in the microswitch cam.

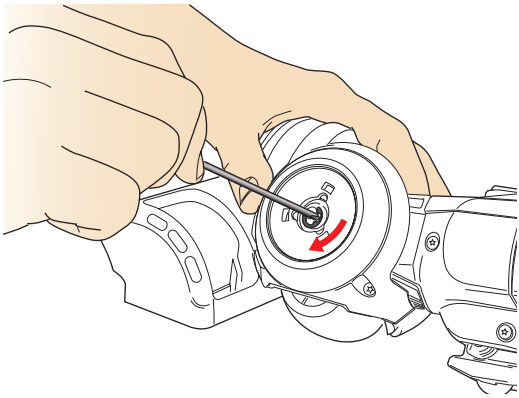


116 Locate the pillar on the cam into the hole in the side of the neck. Locate the ring on the end of the spring over the thin pillar in the neck ensuring the tail of the spring remains retained within the cam channel. Twist the cam into position.
Test the Actuation of the cam against the microswitch.

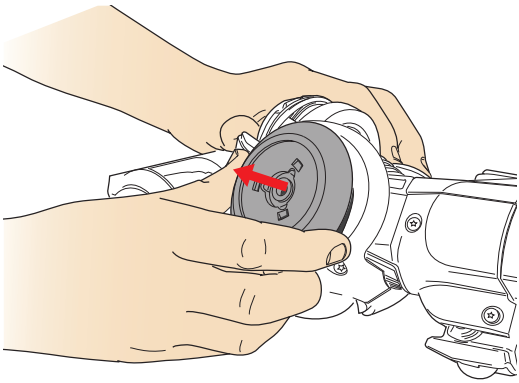
Fit the stow neck cover and two short screws.



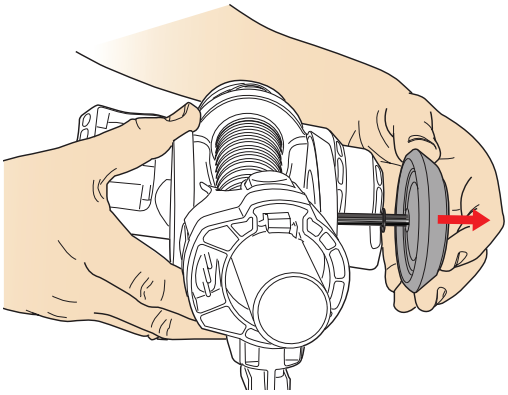
117 If either outer wheel hub, glamour cap or the axle need replacing, prise the relevant glamour cap off the wheel hub using a thin, flat bladed screwdriver.



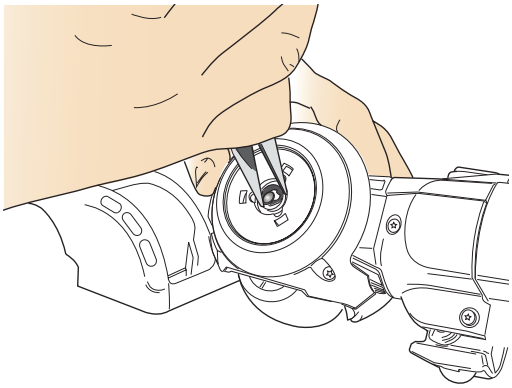
118 Carefully remove the e-clip and washer.



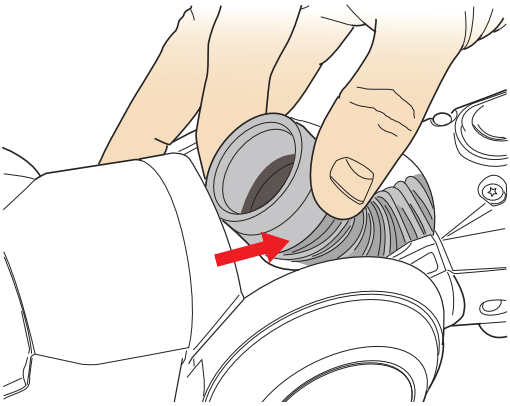
119 Slide the wheel hub off the axle.



120 The axle, outer wheel hub, glamour cap and remaining washers can then be removed from the side of the floor tool if necessary.

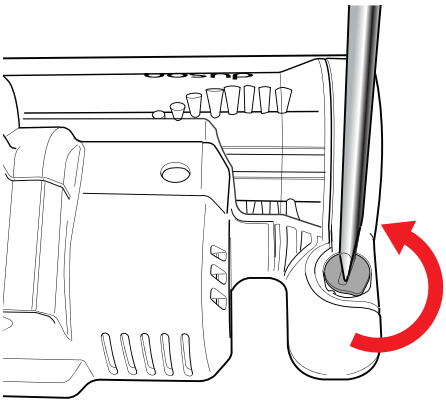


121 Fit in reverse ensuring all washers are fitted (two on either side of each wheel).

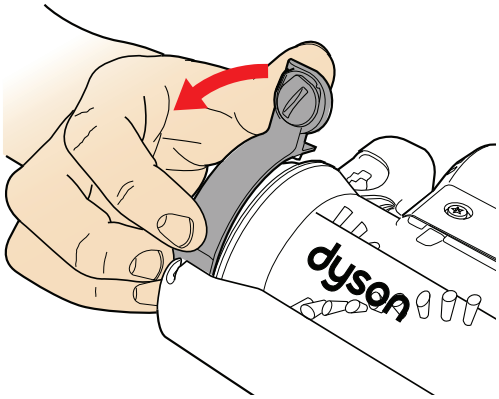


122 The internal hose can be replaced by simply lifting out the top of the floor tool.

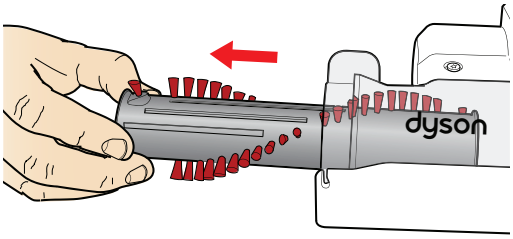
Fit in reverse.



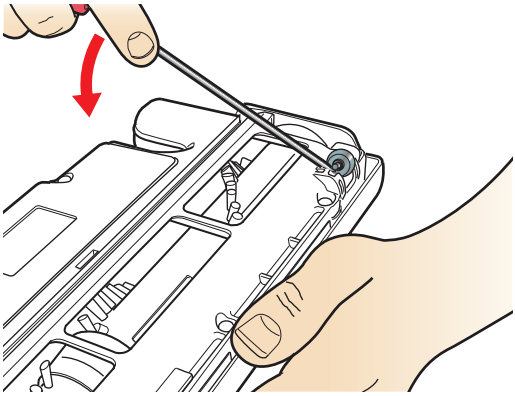
123 Turn the endcap fasteners counter-clockwise using a large, flat bladed screwdriver or coin.



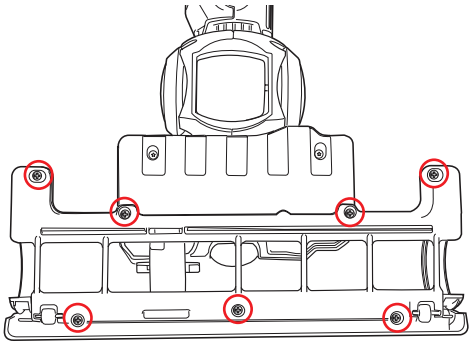
124 Twist the endcap assemblies off the sides of the brush housing.



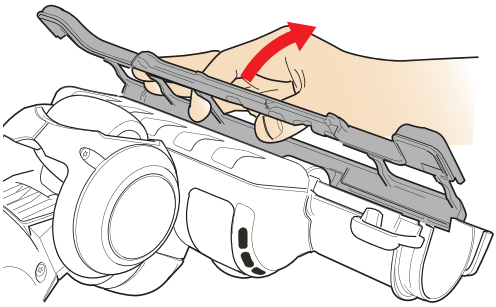
125 Slide each half of the brushbar assembly out of the brush housing.



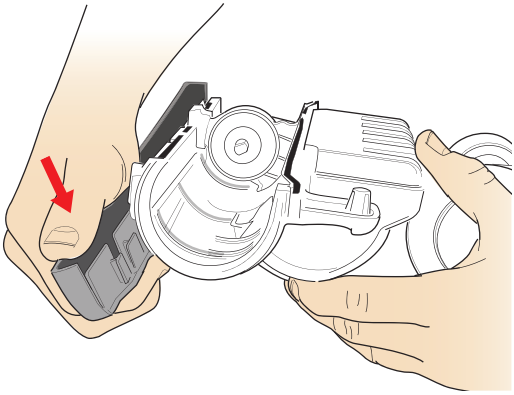
126 The soleplate wheels or axles can be prised out from the soleplate assembly if necessary using a thin, flat bladed screwdriver.
To fit, firmly press both parts into the soleplate assembly.



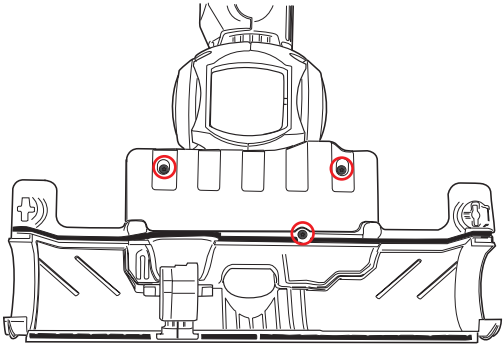
127 Undo the seven Philips screws in the soleplate assembly.



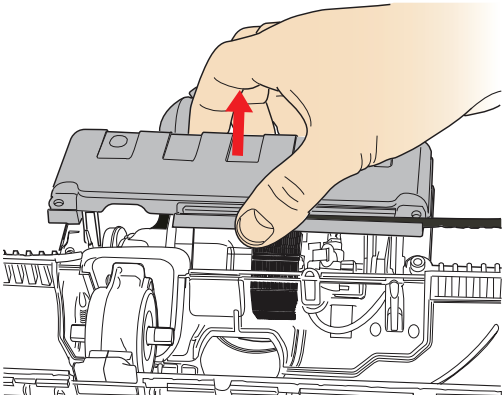
128 Remove the soleplate assembly from the brush housing.
If necessary any lenghts of rope seal in the brush housing can be replaced.



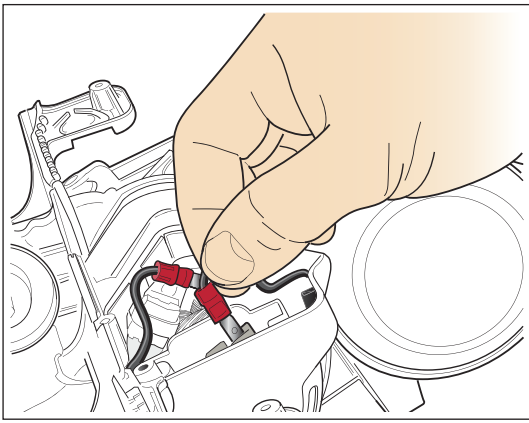
129 The bumper strip can be replaced by pushing very firmly away from the front of the brush housing.



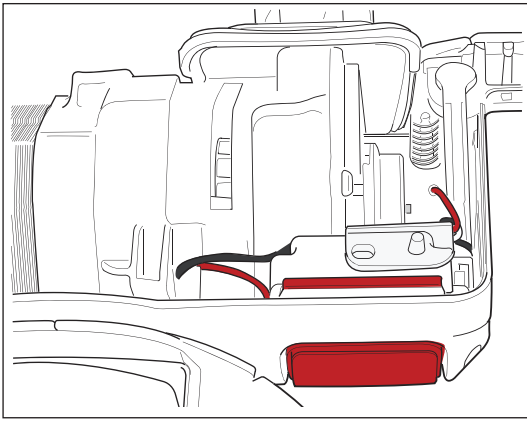
130 Undo the three screws in the brushbar motor cover lower.



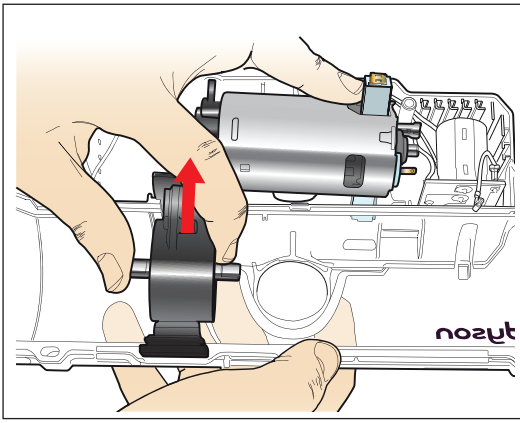
131 Lift the brushbar motor cover lower off the brushbar motor cover.



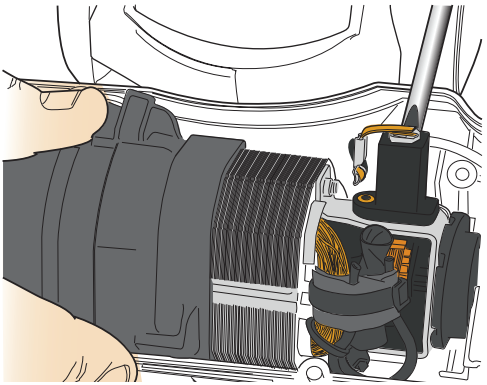
132 Disconnect the two brushbar motor wires from the connectors.



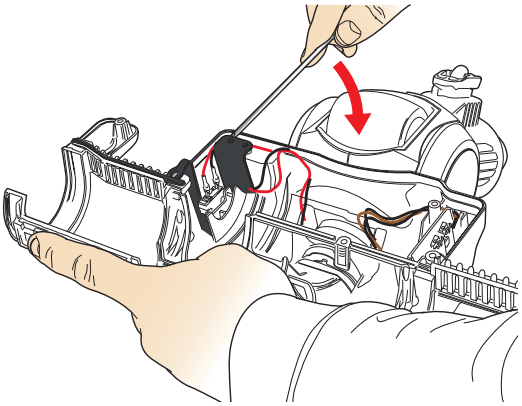
133 Carefully release the brushbar microswitch loom from the rubber retainer on the rear of the brushbar motor.



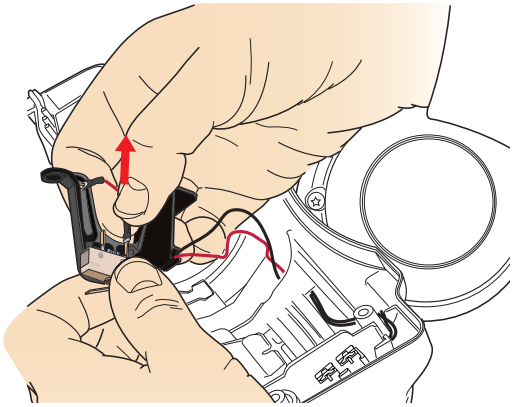
134 Release the brushbar motor from the brushbar motor front mount.



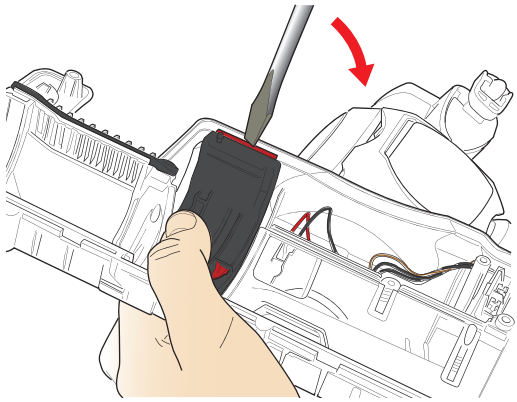
135 Remove the brushbar motor from the brush housing.
Note: it may be necessary to use a screwdriver to carefully ease the motor out.



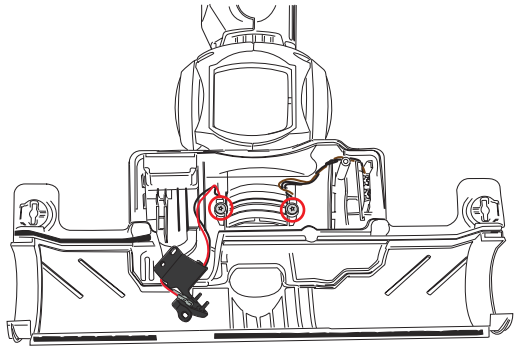
136 Carefully prise the brushbar microswitch holder off the retaining peg on the brushbar motor cover.



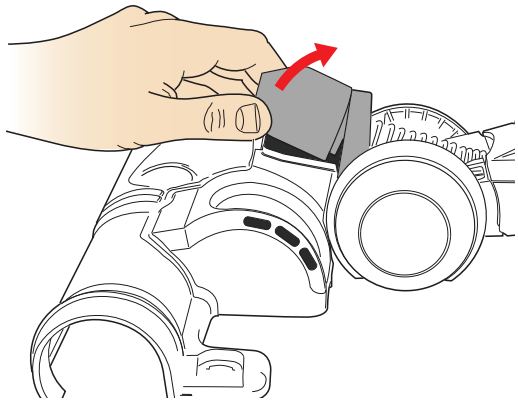
137 Carefully detach the wires from the brushbar microswitch. Remove the switch from the holder.



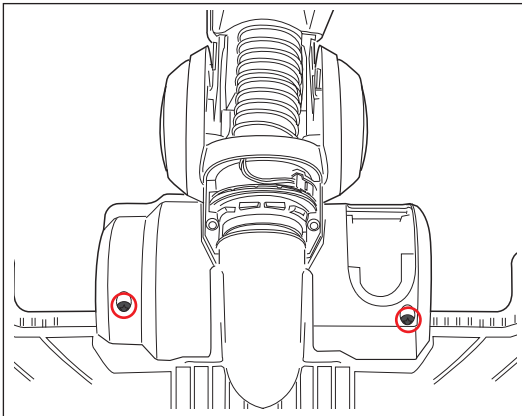
138 If the brushbar actuator needs replacing, release the lip of it firmly from the brushbar motor cover using a large, flat bladed screwdriver.



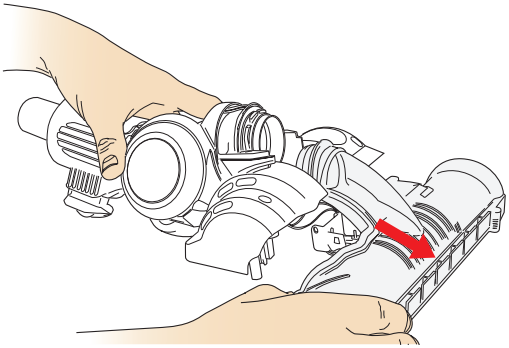
139 Undo the two long screws in the underside of the brushbar motor cover.



140 Lift the gimble cover off the top of the brushbar motor cover.

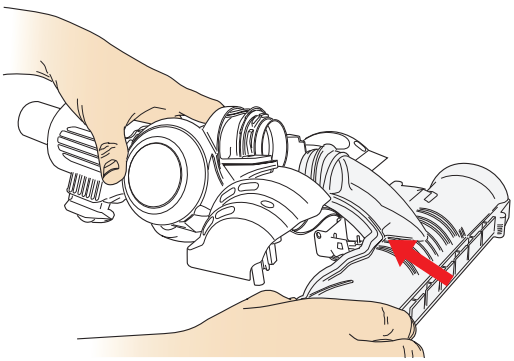


141 Undo the two screws in the top of the brushbar motor cover.

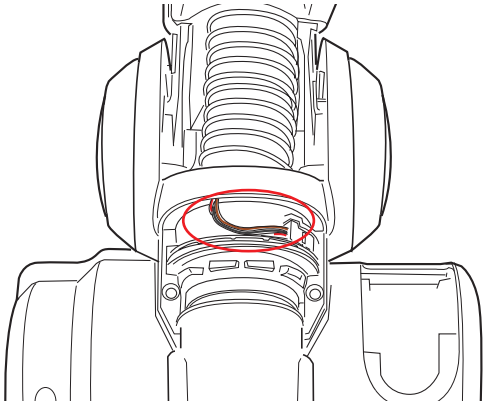


142 If the brush housing needs replacing, slide it away from the front of the brushbar motor cover. Remove the brushbar motor front mount from the front of the brush housing.
Remove the ropeseal if not done previously.

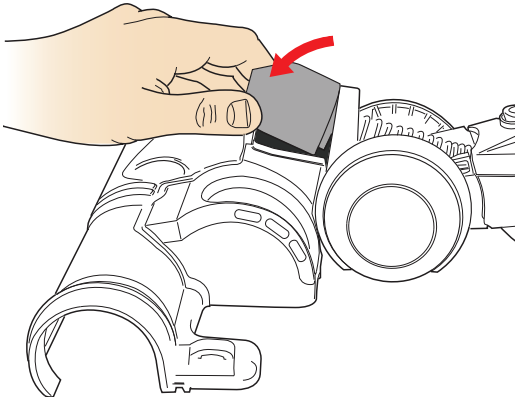
Sub-assemblies - Power floor tool - assemble



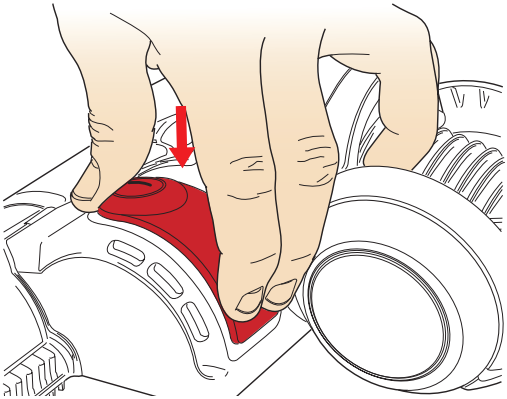
143 Slide the brush housing under the brushbar motor cover and into the neck.
Refit the two screws.



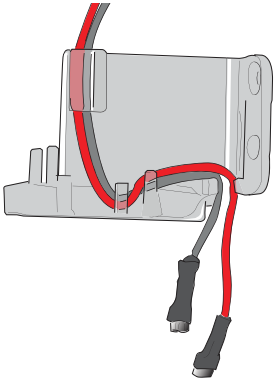
144 Ensure all wires are correctly located within the neck and can move freely.



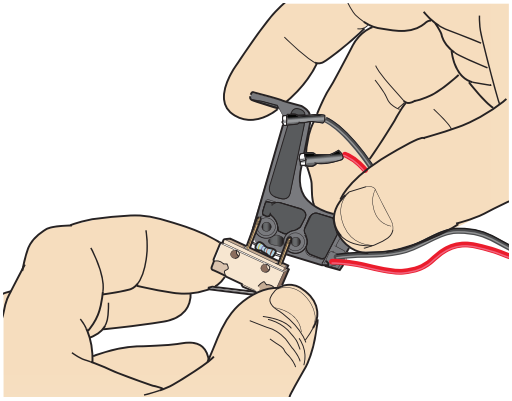
145 Locate the rear of the of the gimble cover into the neck. Clip the front of the cover onto the brush housing.
Refit the two long screws in the underside of the brush housing.



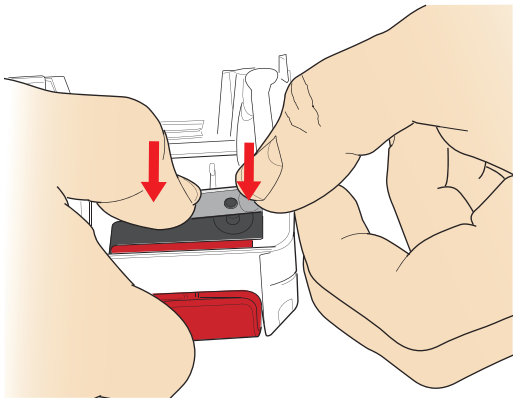
146 Locate the front of the brushbar actuator into the top of the brushbar motor cover.
Force the rear of the actuator into the cover
Turn the floor tool over and locate the lip of the actuator over the ledge in the underside of the brushbar motor cover.



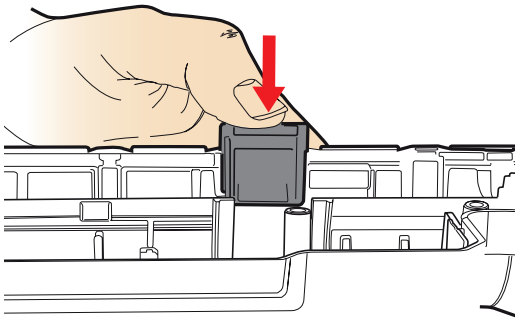
147 Ensure the brushbar microswitch loom is correctly located within all retainers on the rear of the switch holder.



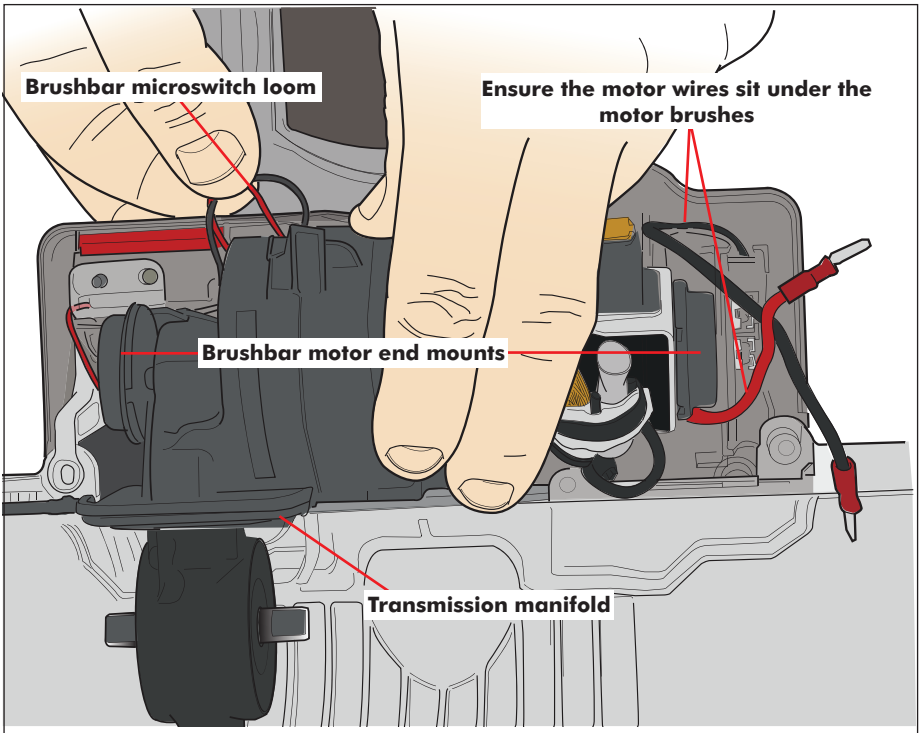
148 Locate the brushbar microswitch onto the two pegs on the holder.
Attach the brushbar microswitch loom to the switch (red wire onto the front terminal).



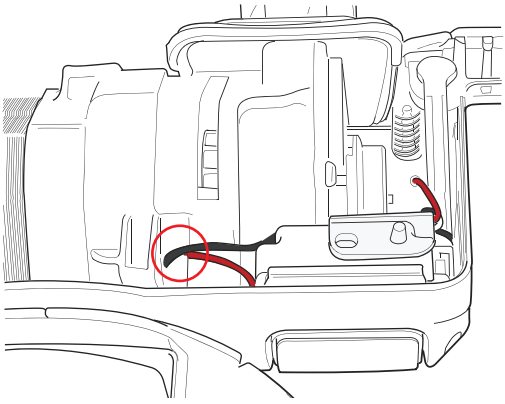
149 Firmly press the brushbar microswitch holder over the retaining peg on the brushbar motor cover.



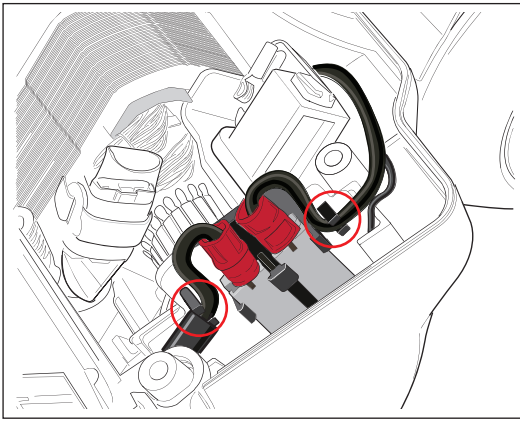
150 Locate the brushbar motor front mount into the front of the brush housing.



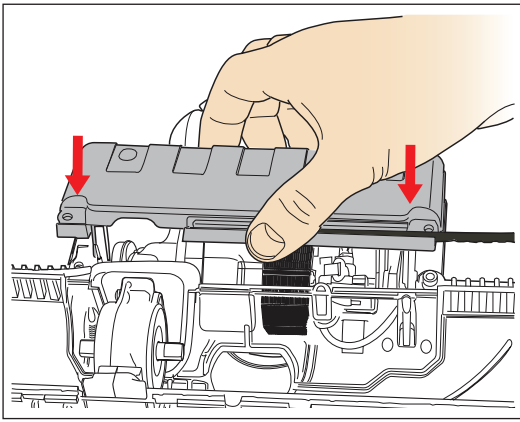
151 Ensure the brushbar motor wires are looped under the motor brushes. **Important:** Hold the brushbar microswitch loom out of the way. Lower the brushbar into the brushbar motor cover. When correctly located the brushbar motor end mounts will sit onto the shelves. Ensure the transmission manifold is sealed behind the brush housing.



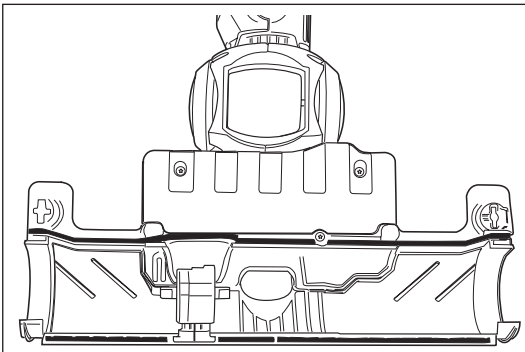
152 Carefully locate the brushbar microswitch loom behind the rubber retainer on the rear of the brushbar motor.



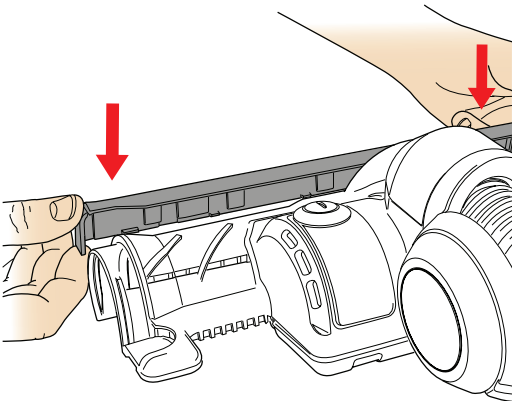
153 Attach the motor wires to the connectors. Ensure the wires are retained in the channels on the connector housing.



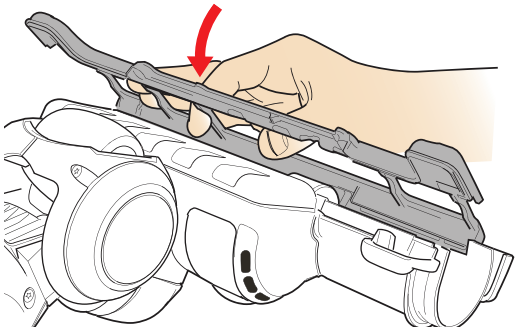
154 Lower the brushbar motor cover lower onto the brush housing. Fit the three screws.



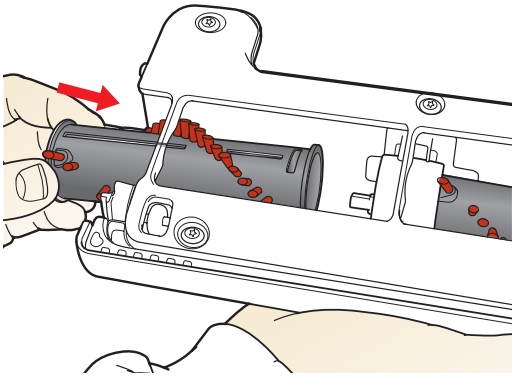
155 Ensure if previously removed that all lengths of ropeseal are fitted into the edges of the brush housing.



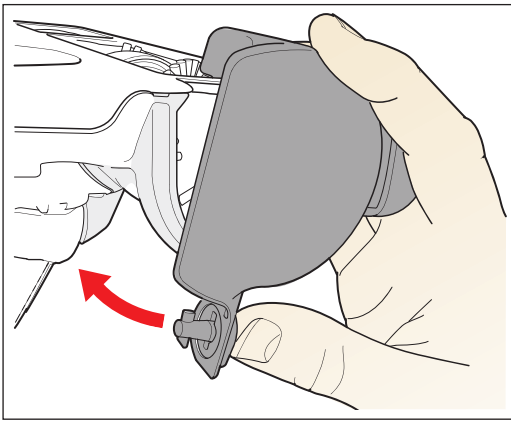
156 Press the bumper strip firmly onto the front of the brush housing if previously removed.



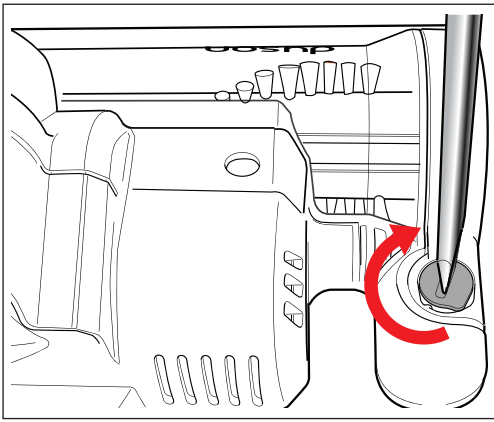
157 Lower the soleplate assembly onto the brush housing.



158 Locate the two halves of the brushbar assembly into the transmission of the brushbar motor.

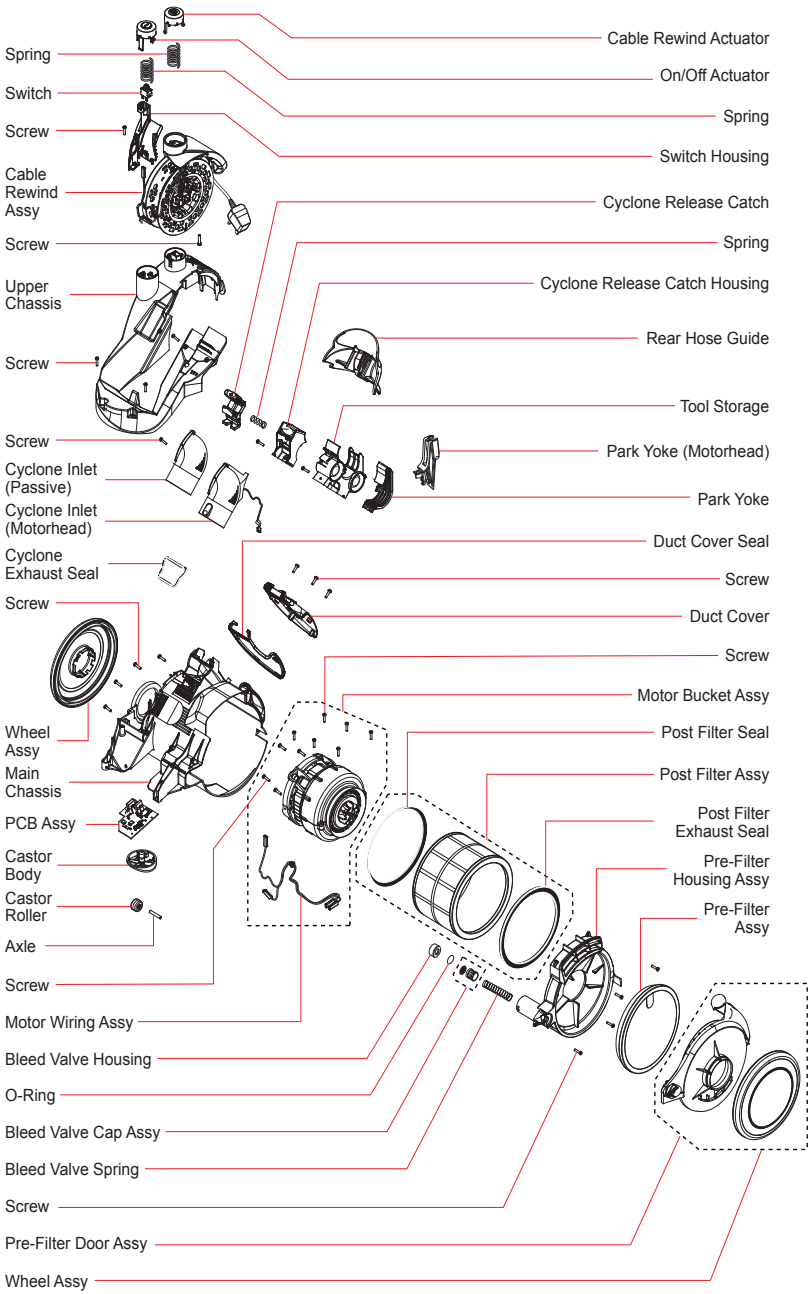


159 Locate the endcap assemblies onto the ends of the brushbar assembly. Twist into position on the brush housing.

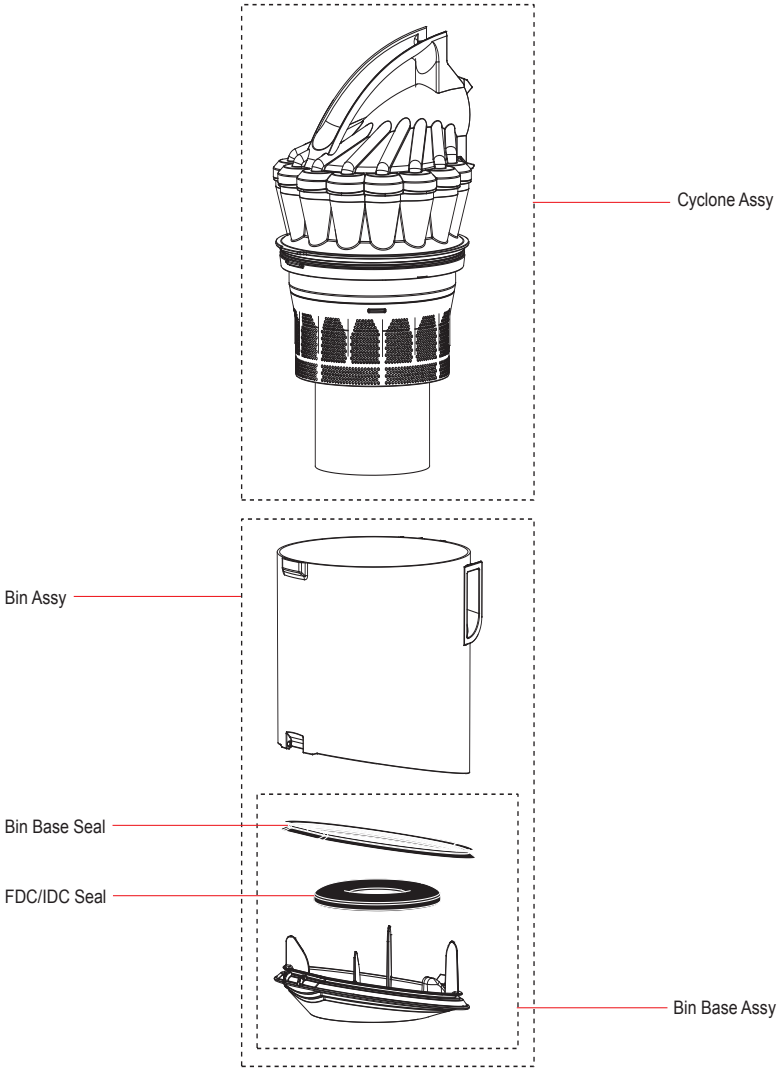


160 Twist the endcap fasteners clockwise to lock in position.

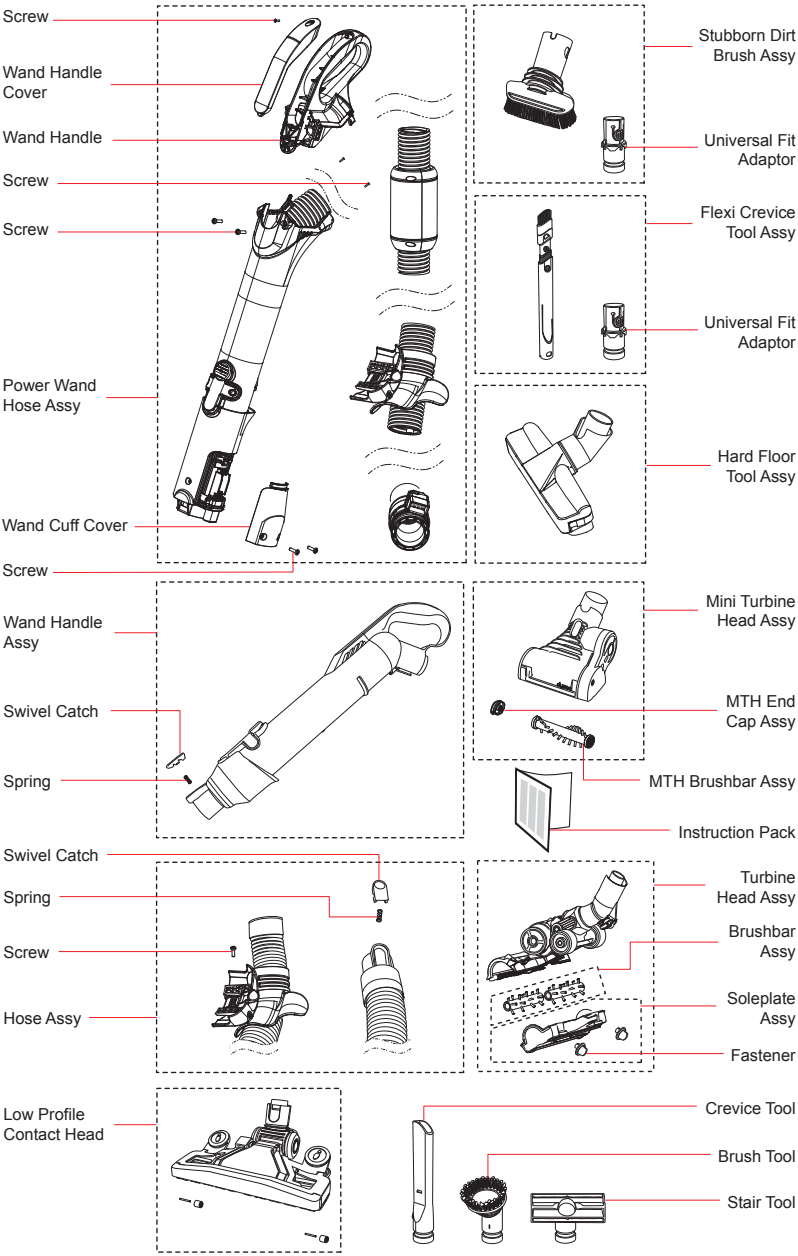
Main body


Spring
Switch
Screw
Cable Rewind Assy
Screw
Upper Chassis
Screw
Screw
Cyclone Inlet (Passive)
Cyclone Inlet (Motorhead)
Cyclone Exhaust Seal
Screw
Wheel Assy
Main Chassis
PCB Assy
Castor Body
Castor Roller
Axle
Screw
Motor Wiring Assy
Bleed Valve Housing
O-Ring
Bleed Valve Cap Assy
Bleed Valve Spring
Screw
Pre-Filter Door Assy
Wheel Assy
Cable Rewind Actuator
On/Off Actuator
Spring
Switch Housing
Cyclone Release Catch
Spring
Cyclone Release Catch Housing
Rear Hose Guide
Tool Storage
Park Yoke (Motorhead)
Park Yoke
Duct Cover Seal
Screw
Duct Cover
Screw
Motor Bucket Assy
Post Filter Seal
Post Filter Assy
Post Filter Exhaust Seal
Pre-Filter Housing Assy
Pre-Filter Assy

Cyclone and bin assemblies



Wand and hose assemblies



Power floor tool assembly