

EXHIBIT 21

Exhibit H-1
Claim Chart Comparing the Dyson V8 line to U.S. Patent No. 9,301,666

The Dyson V8 line¹ (the “V8 Accused Products”) include each and every limitation of (at least) each of claims 1-4, 6-12 of U.S. Patent No. 9,301,666 (the “’666 Patent” and the “Asserted Claims,” respectively). The limitations of the Asserted Claims of the Asserted Patent are satisfied literally by the V8 Accused Products, although SharkNinja reserves the right to contend that any claim element found not to be literally embodied by the V8 Accused Products is present under the doctrine of equivalents because there are no substantial differences for each claim element, and the elements of the V8 Accused Products perform substantially the same function, in substantially the same way, to achieve substantially the same result as the claimed invention. SharkNinja reserves the right to amend these Infringement Contention charts or assert new theories of infringement, including without limitation by amending or asserting literal infringement or the doctrine of equivalents, in light of the Court’s claim construction or subsequent discovery. SharkNinja reserves the right to supplement, modify, or amend the following preliminary claim charts as discovery continues and in accordance with subsequent events in the litigation.

SharkNinja’s decision to assert claims 1-4, 6-12 of the ’666 Patent, but not other claims is not a concession that the V8 Accused Products do not infringe other unasserted claims.

An inspection of physical samples of the V8 Accused Products, along with reviews of Dyson product literature, demonstrates infringement of each and every claim below but a physical sample is impossible to include in this chart; SharkNinja explicitly reserves the right to rely on physical samples, other photos and videos of same, the boxes and manuals included with the V8 Accused Products in any demonstration of infringement, including any demonstration of the presence of any of the limitations in the chart below. Discovery is just beginning; SharkNinja further explicitly reserves the right and ability to rely on materials yet to be produced by Dyson (or third parties) in order to demonstrate infringement.

SharkNinja reserves the right to rely on the entirety of the material cited in this chart to show infringement. Citations presented for one claim limitation are expressly incorporated by reference into all other limitations for that claim as well as all limitations of all claims on which that claim depends.

¹ The Dyson Accused Products include the Dyson Cyclone V8™ line.

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<u>U.S. Patent No. 9,301,666</u>	
<u>Claim 1</u>	<u>Dyson V8</u>
1. A hand vacuum cleaner comprising an air treatment portion and a main body, the air treatment portion comprising a first cyclonic cleaning stage, a second cyclonic cleaning stage and a pre-motor filter, the hand vacuum cleaner comprising:	To the extent the preamble is limiting, each of the Dyson Accused Products is a hand carriable surface cleaning apparatus. <i>See, e.g.,</i> https://www.dyson.com/vacuum-cleaners/cordless/v8. For example, the below images show a hand vacuum cleaner comprising an air treatment portion and a main body, the air treatment portion comprising a first cyclonic cleaning stage, a second cyclonic cleaning stage and a pre-motor filter.  https://www.dyson.com/vacuum-cleaners/cordless/v8

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<https://www.dyson.com/vacuum-cleaners/cordless/v8>

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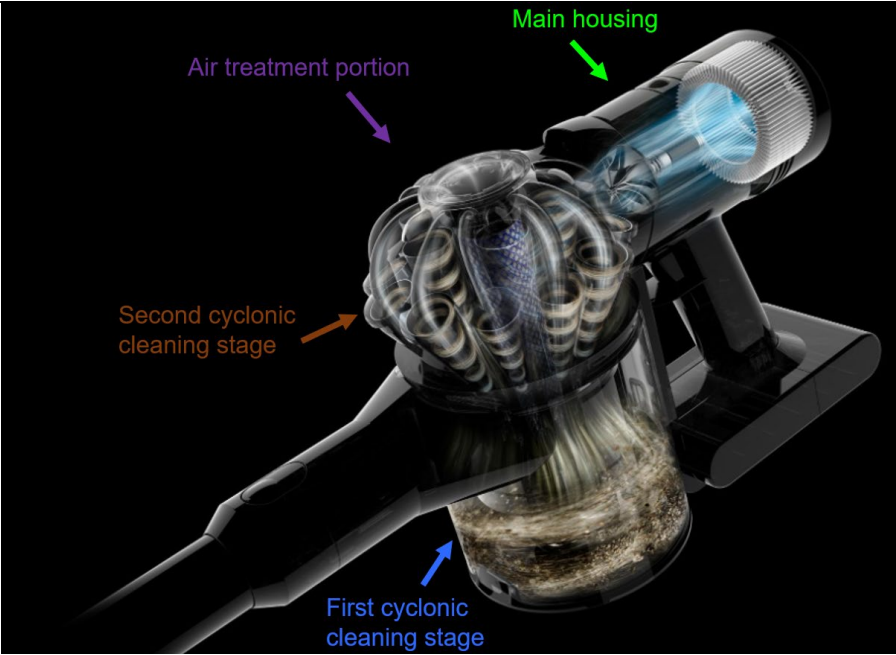
	 https://www.dyson.com/vacuum-cleaners/cordless/v8 (annotated)
a) a fluid flow path extending from a dirty air inlet to a clean air outlet and the dirty fluid inlet defines a passage extending along a passage axis;	Each of the Dyson Accused Products includes a fluid flow path extending from a dirty air inlet to a clean air outlet and the dirty fluid inlet defines a passage extending along a passage axis. For example, the below images show a fluid flow path extending between a dirty air inlet and a clean air outlet and the dirty fluid inlet defines a passage extending along a passage axis.

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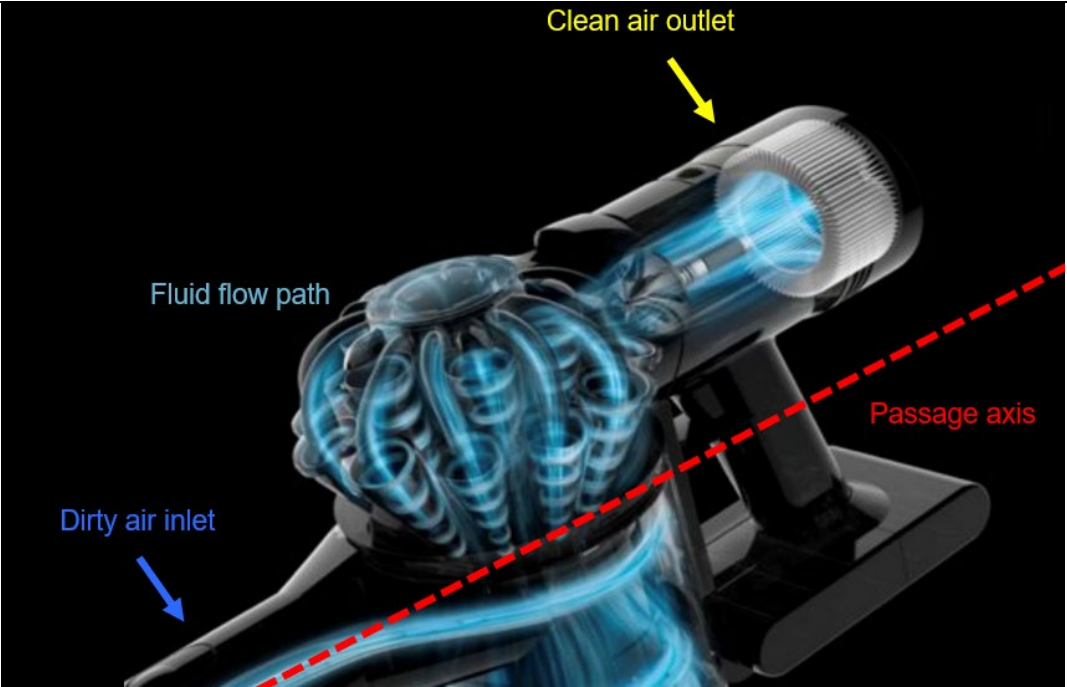
	 https://www.dyson.com/vacuum-cleaners/cordless/v8/absolute-hepa-silver (annotated)
b) the first cyclonic cleaning stage is positioned in the fluid flow path and comprises a first cyclone having a dirt collection region wherein the dirt collection region has an openable bottom;	Each of the Dyson Accused Products includes a first cyclonic cleaning stage positioned in the fluid flow path and comprises a first cyclone having a dirt collection region wherein the dirt collection region has an openable bottom. For example, the below images show a first cyclonic cleaning stage positioned in the fluid flow path.

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<https://www.dyson.com/vacuum-cleaners/cordless/v8> (annotated)

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<https://www.dyson.com/vacuum-cleaners/cordless/v8>

For example, the below images show a first cyclone having a dirt collection region wherein the dirt collection region has an openable bottom.

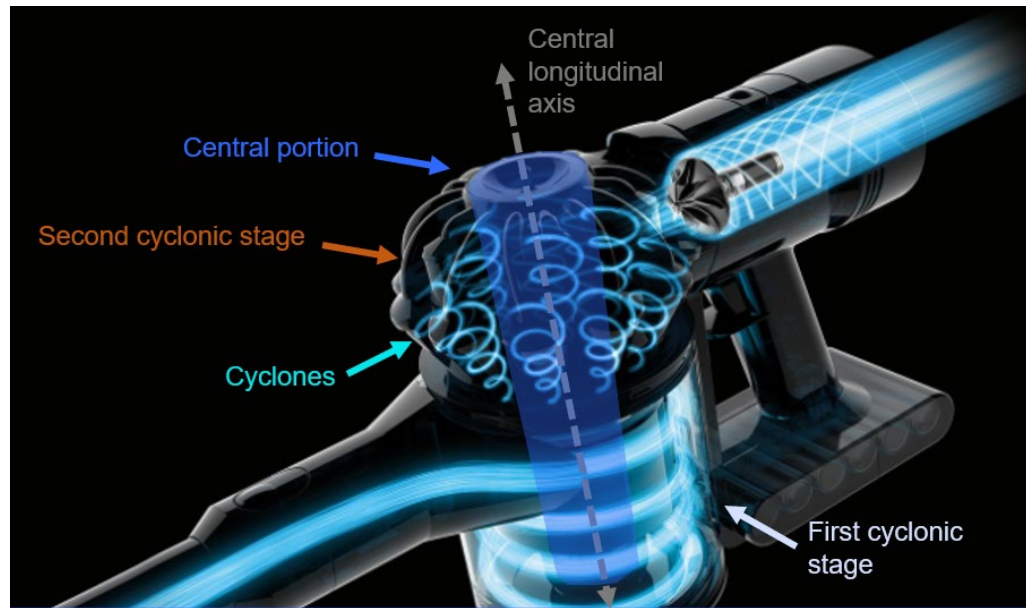
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	 https://www.dyson.com/vacuum-cleaners/cordless/v8/absolute-hepa-silver (annotated)
c) the second cyclonic cleaning stage is positioned in the fluid flow path downstream from the first cyclonic cleaning stage and comprises a central longitudinal axis, the second cyclonic cleaning stage comprising a plurality of cyclones in parallel that are arranged around a central portion and, after exiting the second stage cyclones, air enters an upper portion of the central	Each of the Dyson Accused Products includes a second cyclonic cleaning stage positioned in the fluid flow path downstream from the first cyclonic cleaning stage and comprises a central longitudinal axis, the second cyclonic cleaning stage comprising a plurality of cyclones in parallel that are arranged around a central portion and, after exiting the second stage cyclones, air enters an upper portion of the central portion at a position below the upper portion where the air enters the central portion. For example, the below image shows a second cyclonic cleaning stage positioned in the fluid flow path downstream from the first cyclonic cleaning stage and comprises a central longitudinal axis, and a second cyclonic cleaning stage comprising a plurality of cyclones

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portion and exits the central portion at a position below the upper portion where the air enters the central portion;

in parallel that are arranged around a central portion. The below images show that after exiting the second stage cyclones, air enters an upper portion of the central portion and exits the central portion at a position below the upper portion where the air enters the central portion.



<https://www.dyson.com.mx/products/cord-free/sticks/dyson-v8/features> (annotated)

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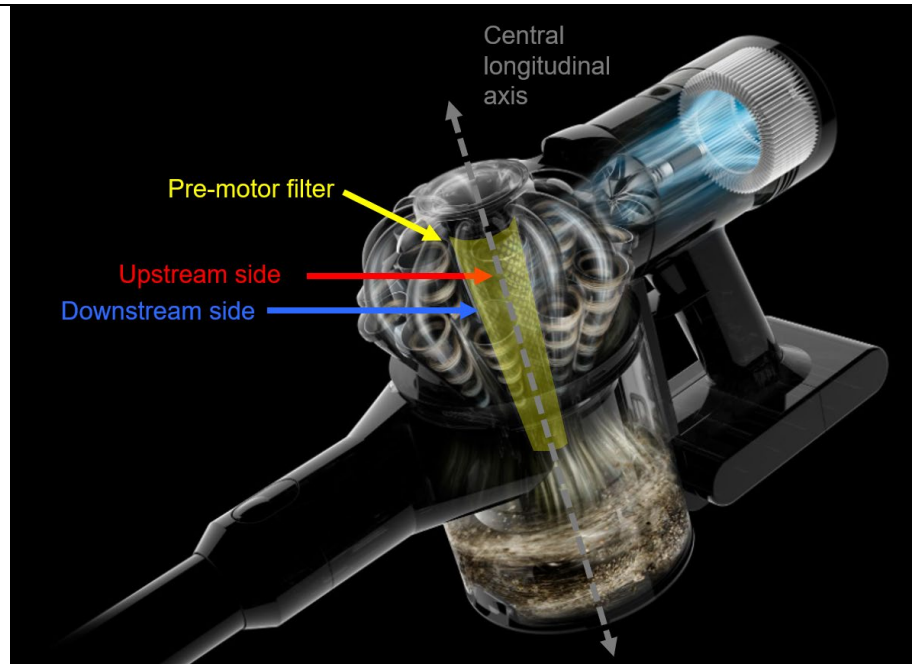
	 Photograph of Dyson V8™ vacuum (annotated)
d) the pre-motor filter is positioned in the fluid flow path downstream from the second cyclonic cleaning stage and comprises an upstream side and a downstream side wherein the central longitudinal axis extends through a volume occupied by the pre-motor filter; and,	Each of the Dyson Accused Products includes a pre-motor filter is positioned in the fluid flow path downstream from the second cyclonic cleaning stage and comprises an upstream side and a downstream side wherein the central longitudinal axis extends through a volume occupied by the pre-motor filter. For example, the below images show a pre-motor filter is positioned in the fluid flow path downstream from the second cyclonic cleaning stage and comprises an upstream side and a downstream side wherein the central longitudinal axis extends through a volume occupied by the pre-motor filter.

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<https://www.dyson.com/vacuum-cleaners/cordless/v8/absolute-hepa-silver>

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<https://www.dyson.com/vacuum-cleaners/cordless/v8> (annotated)

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Photograph of Dyson V8™ Absolute

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e) the main body comprises a fluid flow motor housing for a fluid flow motor that is disposed in the fluid flow path downstream from the pre-motor filter, wherein the fluid flow motor has a rotational axis and a projection of the rotational axis intersects the central longitudinal axis and the fluid flow motor housing is secured to only a portion of a sidewall of the air treatment portion, wherein

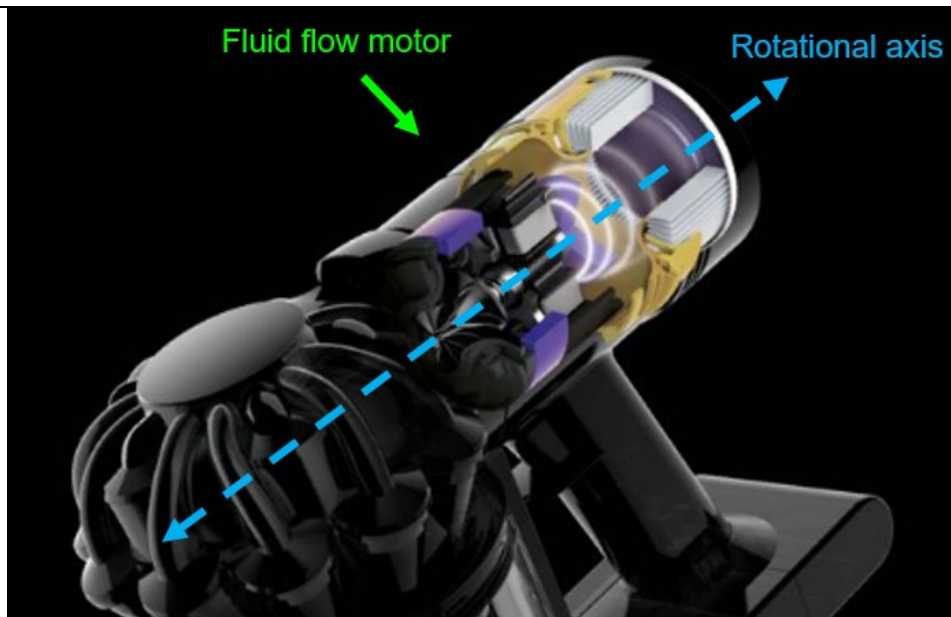
Each of the Dyson Accused Products includes a main body that comprises a fluid flow motor housing for a fluid flow motor that is disposed in the fluid flow path downstream from the pre-motor filter, wherein the fluid flow motor has a rotational axis and a projection of the rotational axis intersects the central longitudinal axis and the fluid flow motor housing is secured to only a portion of a sidewall of the air treatment portion.

For example, the below images show a main body that comprises a fluid flow motor housing for a fluid flow motor that is disposed in the fluid flow path downstream from the pre-motor filter, wherein the fluid flow motor has a rotational axis and a projection of the rotational axis intersects the central longitudinal axis and the fluid flow motor housing is secured to only a portion of a sidewall of the air treatment portion.



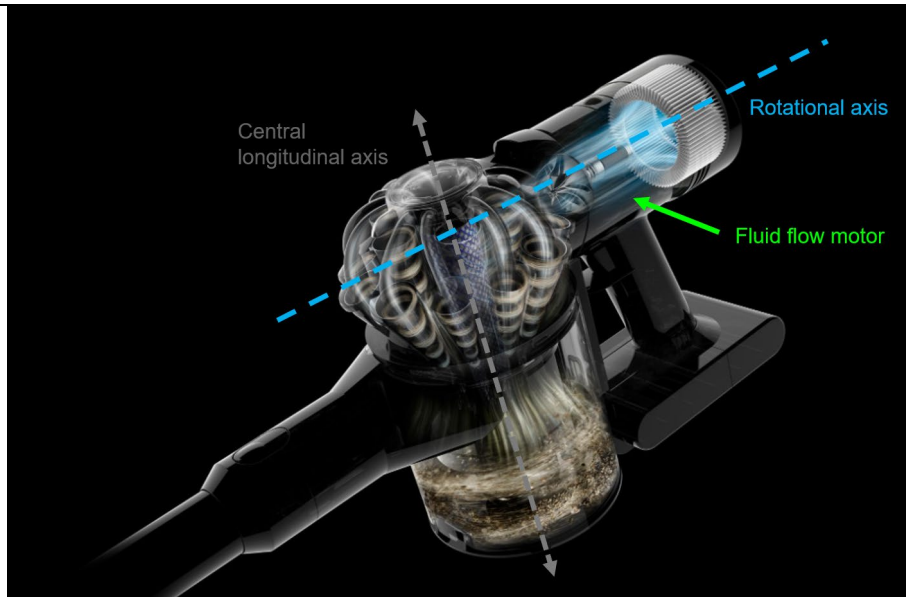
<https://www.dyson.com/vacuum-cleaners/cordless/v8/absolute-hepa-silver> (annotated)

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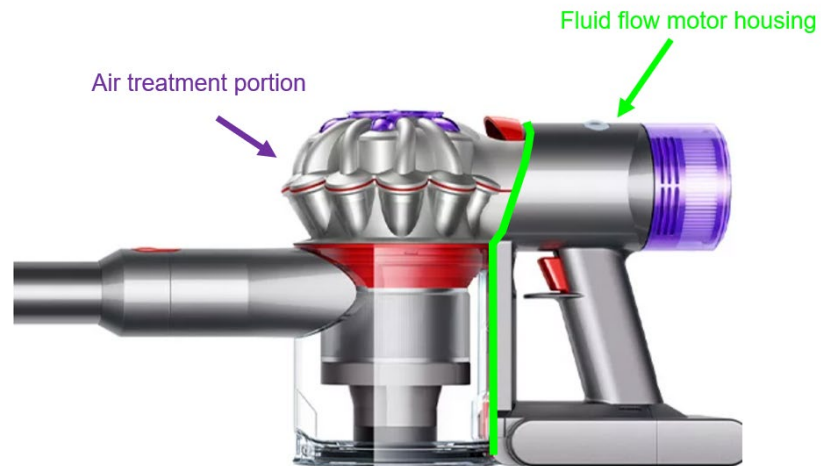


<https://www.dyson.com/vacuum-cleaners/cordless/v8/absolute-hepa-silver> (annotated)

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<https://www.dyson.com/vacuum-cleaners/cordless/v8> (annotated)



<https://www.dyson.com/vacuum-cleaners/cordless/v8/silver-nickel> (annotated)

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(i) the fluid flow motor and a handle of the hand vacuum cleaner are positioned rearward of the second cyclonic cleaning stage;	Each of the Dyson Accused Products includes a fluid flow motor and a handle of the hand vacuum cleaner are positioned rearward of the second cyclonic cleaning stage. For example, the below images show a fluid flow motor and a handle of the hand vacuum cleaner are positioned rearward of the second cyclonic cleaning stage.  https://www.dyson.com/vacuum-cleaners/cordless/v8/absolute-hepa-silver
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<https://www.dyson.com/vacuum-cleaners/cordless/v8>

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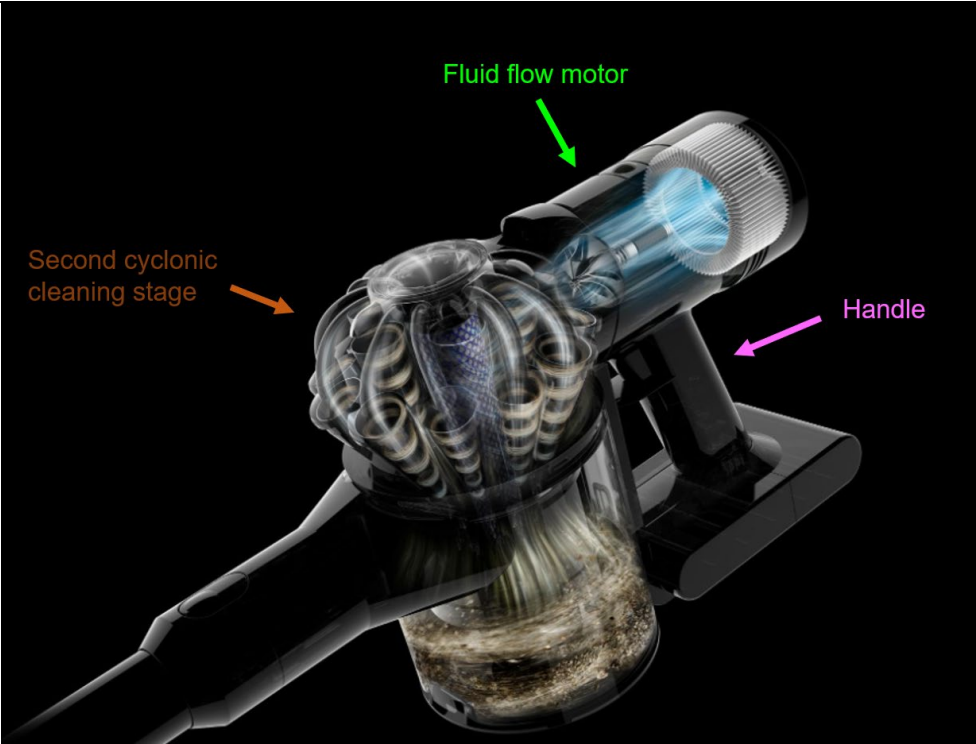
	 https://www.dyson.com/vacuum-cleaners/cordless/v8 (annotated)
(ii) the dirt collection region is positioned beneath and vertically aligned with the cyclones of the first and second cyclonic cleaning stages and the pre-motor filter; and,	Each of the Dyson Accused Products includes a dirt collection region that is positioned beneath and vertically aligned with the cyclones of the first and second cyclonic cleaning stages and the pre-motor filter. For example, the below images show a dirt collection region that is positioned beneath and vertically aligned with the cyclones of the first and second cyclonic cleaning stages and the pre-motor filter.

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<https://www.dyson.com/vacuum-cleaners/cordless/v8/absolute-hepa-silver> (annotated)

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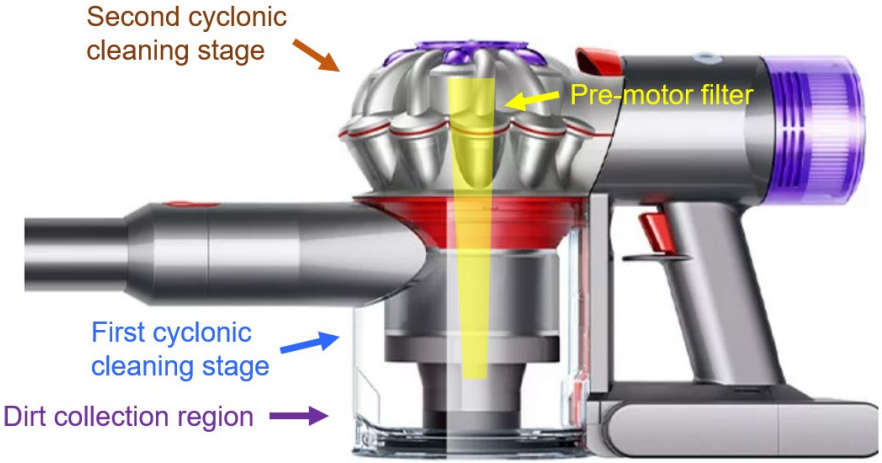
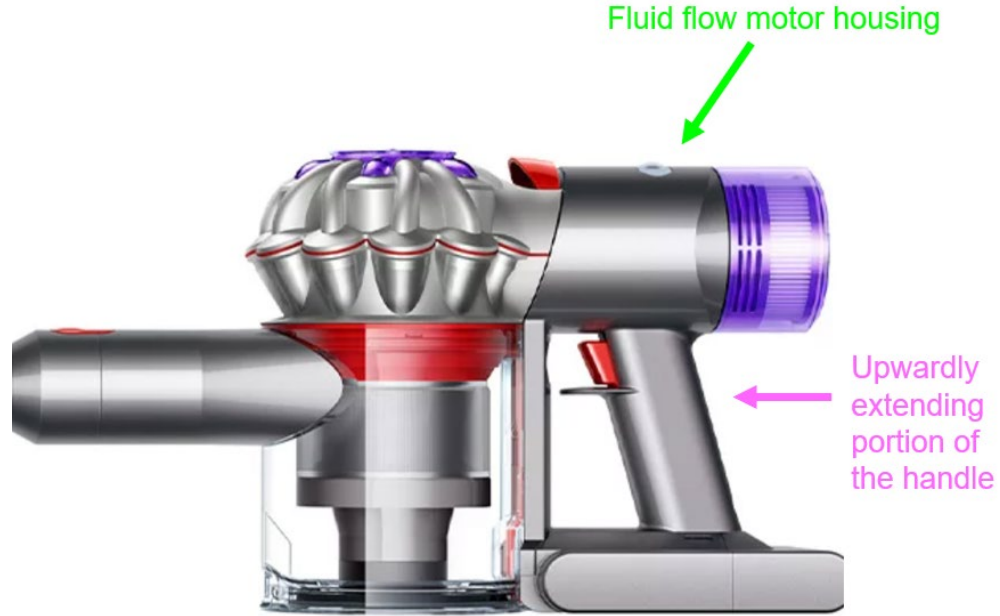
	 The diagram shows a side view of a Dyson V8 cordless stick vacuum cleaner with a transparent dust bin. A yellow vertical arrow indicates the path of air flow through the machine. Labels with arrows point to specific components: 'Second cyclonic cleaning stage' (top), 'Pre-motor filter' (yellow arrow pointing to the filter), 'First cyclonic cleaning stage' (middle), and 'Dirt collection region' (bottom of the dust bin). https://www.dyson.com/vacuum-cleaners/cordless/v8/silver-nickel (annotated)
(iii) the handle comprises an upwardly extending portion when the hand vacuum cleaner is positioned on a horizontal surface, the upwardly extending portion extends away from the fluid flow motor housing and the passage axis of the dirty fluid inlet intersects the upwardly extending portion of the handle.	Each of the Dyson Accused Products includes a handle that comprises an upwardly extending portion when the hand vacuum cleaner is positioned on a horizontal surface, the upwardly extending portion extends away from the fluid flow motor housing and the passage axis of the dirty fluid inlet intersects the upwardly extending portion of the handle. For example, the below images show a handle that comprises an upwardly extending portion when the hand vacuum cleaner is positioned on a horizontal surface, the upwardly extending portion extends away from the fluid flow motor housing and the passage axis of the dirty fluid inlet intersects the upwardly extending portion of the handle.

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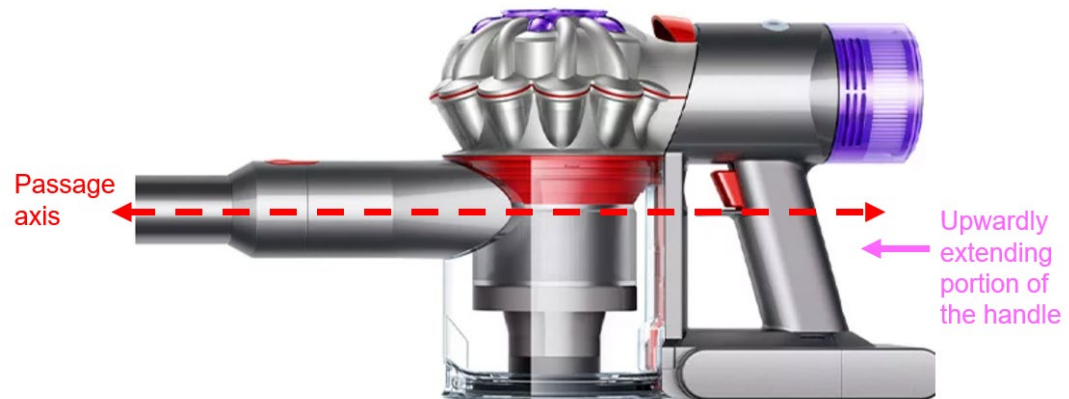


<https://www.dyson.com/vacuum-cleaners/cordless/v8/absolute-hepa-silver>

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<https://www.dyson.com/vacuum-cleaners/cordless/v8/silver-nickel> (annotated)



<https://www.dyson.com/vacuum-cleaners/cordless/v8/silver-nickel> (annotated)

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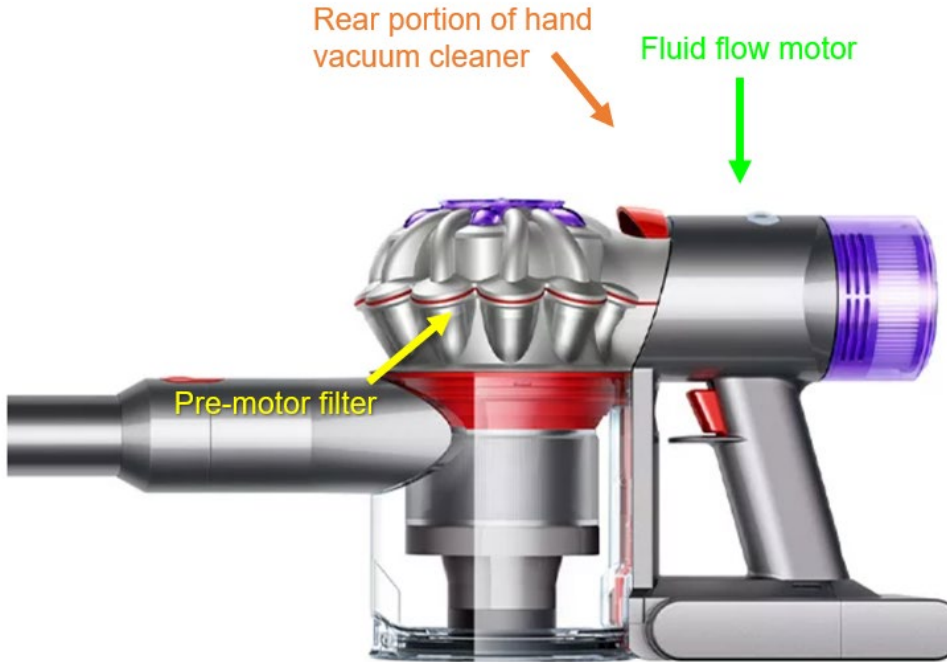
2. The hand vacuum cleaner of claim 1, wherein the fluid flow motor is provided in a rear portion of the hand vacuum cleaner and the pre-motor filter is provided forward of the rear portion.	Each of the Dyson Accused Products includes a fluid flow motor provided in a rear portion of the hand vacuum cleaner and a pre-motor filter provided forward of the rear portion. For example, the below images show a fluid flow motor provided in a rear portion of the hand vacuum cleaner and a pre-motor filter provided forward of the rear portion.  https://www.dyson.com/vacuum-cleaners/cordless/v8/silver-nickel (annotated)
3. The hand vacuum cleaner of claim 1, wherein each of the second cyclones are smaller than the first cyclone.	Each of the Dyson Accused Products includes a plurality of second cyclones, wherein each of the second cyclones are smaller than the first cyclone. For example, the below images show a plurality of second cyclones, wherein each of the second cyclones are smaller than the first cyclone.

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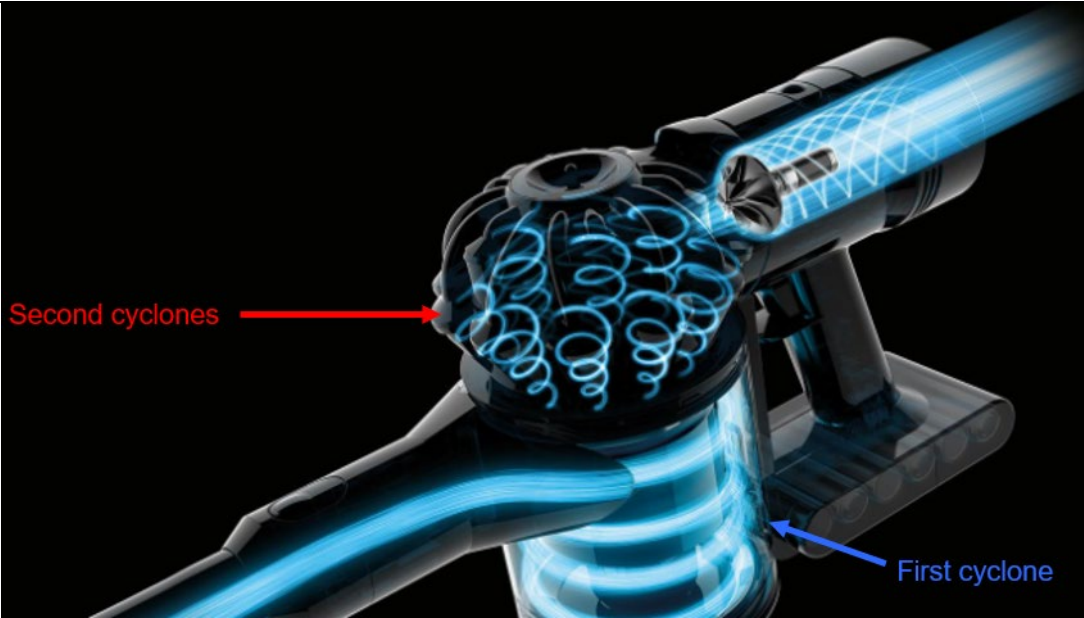
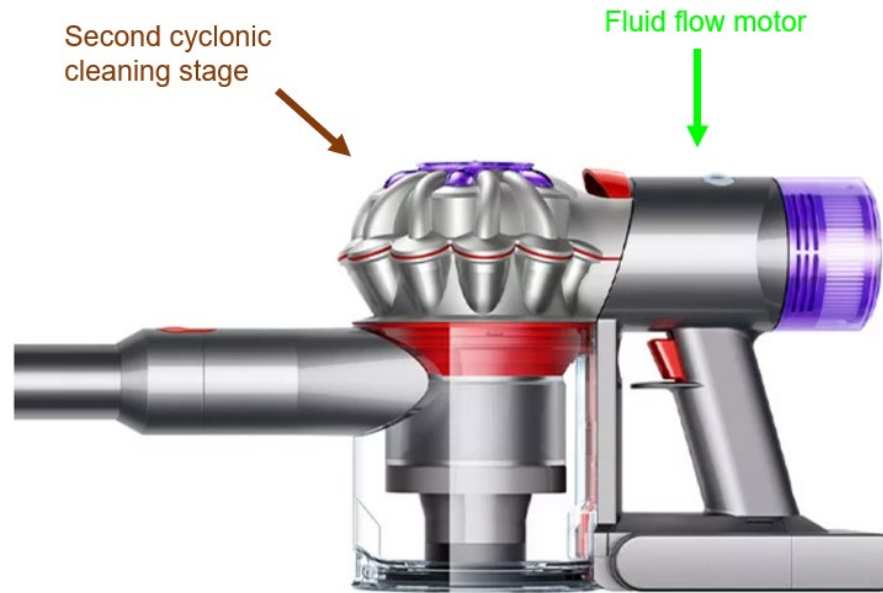
	 https://www.dyson.com.mx/products/cord-free/sticks/dyson-v8/features (annotated)
4. The hand vacuum cleaner of claim 1, wherein the fluid flow motor is rearward of the second cyclonic cleaning stage and air travels downwardly through the central portion prior to travelling rearwardly to the fluid flow motor.	Each of the Dyson Accused Products includes a fluid flow motor that is rearward of the second cyclonic cleaning stage and wherein air travels downwardly through the central portion prior to travelling rearwardly to the fluid flow motor. For example, the below images show a fluid flow motor that is rearward of the second cyclonic cleaning stage and wherein air travels downwardly through the central portion prior to travelling rearwardly to the fluid flow motor.

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<https://www.dyson.com/vacuum-cleaners/cordless/v8/silver-nickel> (annotated)

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	 https://www.dyson.com/vacuum-cleaners/cordless/v8 (annotated)
6. The hand vacuum cleaner of claim 1, wherein a lower end of the pre-motor filter is located below a lower end of the second cyclonic cleaning stage.	Each of the Dyson Accused Products includes a pre-motor filter, wherein the lower end of the pre-motor filter is located below a lower end of the second cyclonic cleaning stage. For example, the below images show a pre-motor filter, wherein the lower end of the pre-motor filter is located below a lower end of the second cyclonic cleaning stage.

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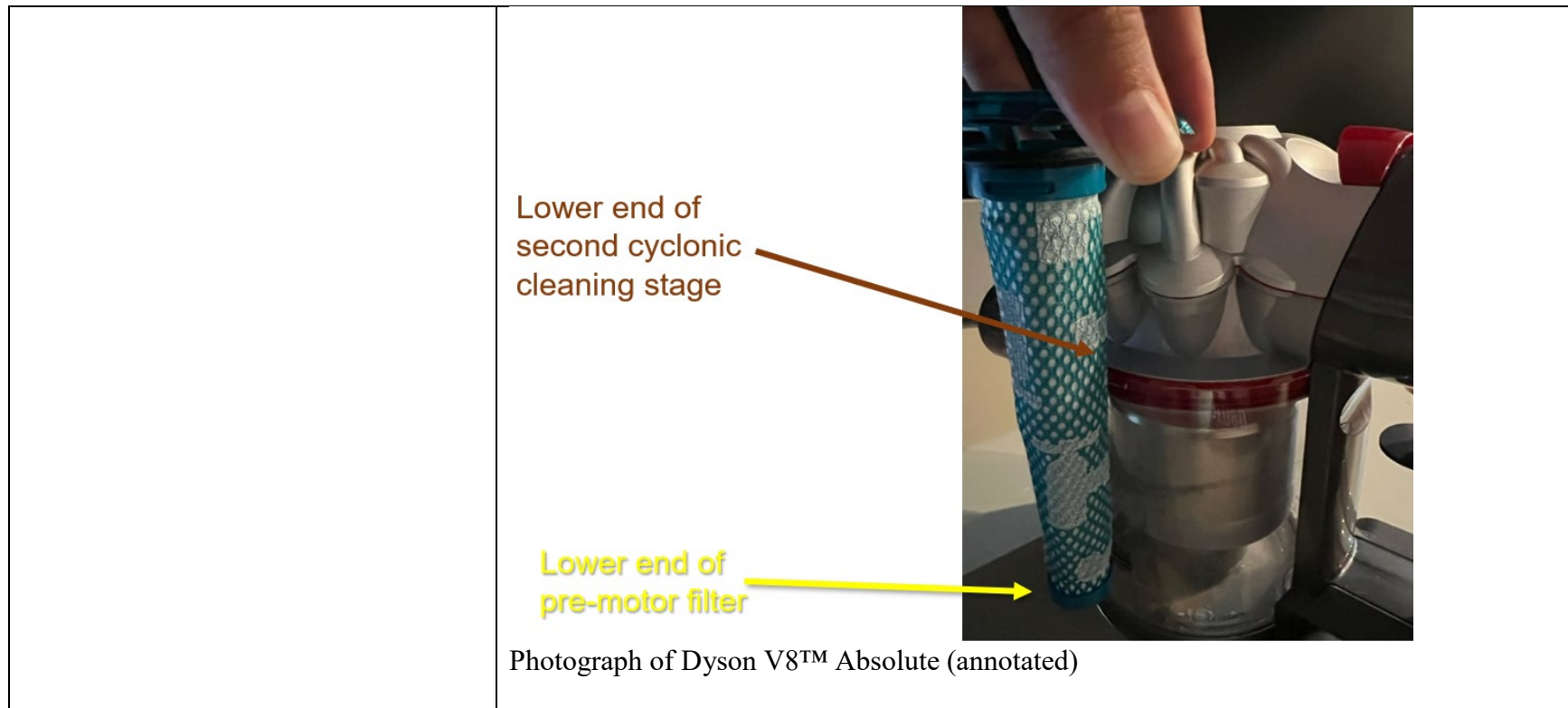


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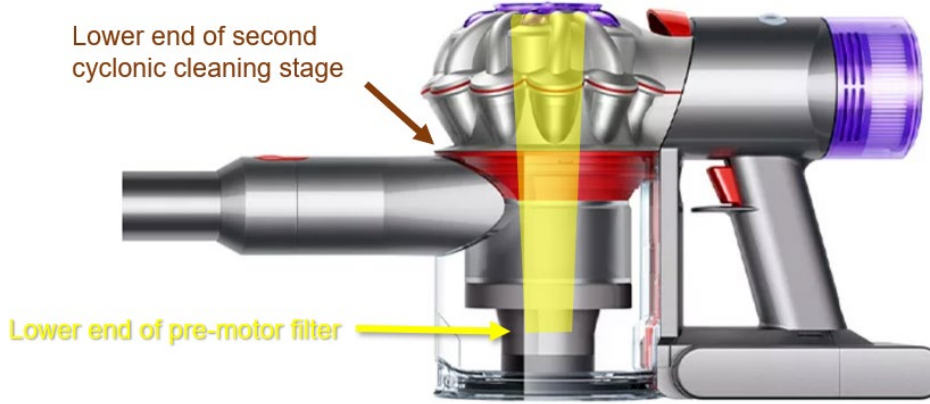
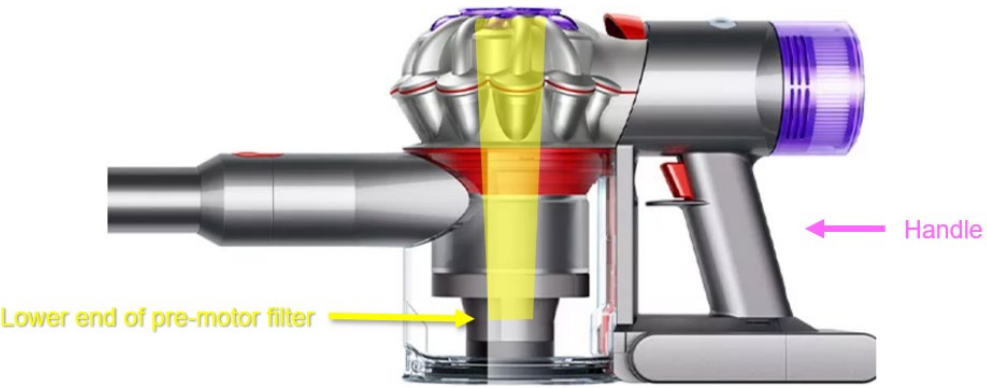
	 Lower end of second cyclonic cleaning stage Lower end of pre-motor filter https://www.dyson.com/vacuum-cleaners/cordless/v8/silver-nickel (annotated)
7. The hand vacuum cleaner of claim 1, wherein a portion of a handle of the hand vacuum cleaner is located above a lower end of the pre-motor filter.	Each of the Dyson Accused Products includes a portion of a handle of the hand vacuum cleaner that is located above a lower end of the pre-motor filter. For example, the below images show a portion of a handle of the hand vacuum cleaner that is located above a lower end of the pre-motor filter.  Handle Lower end of pre-motor filter

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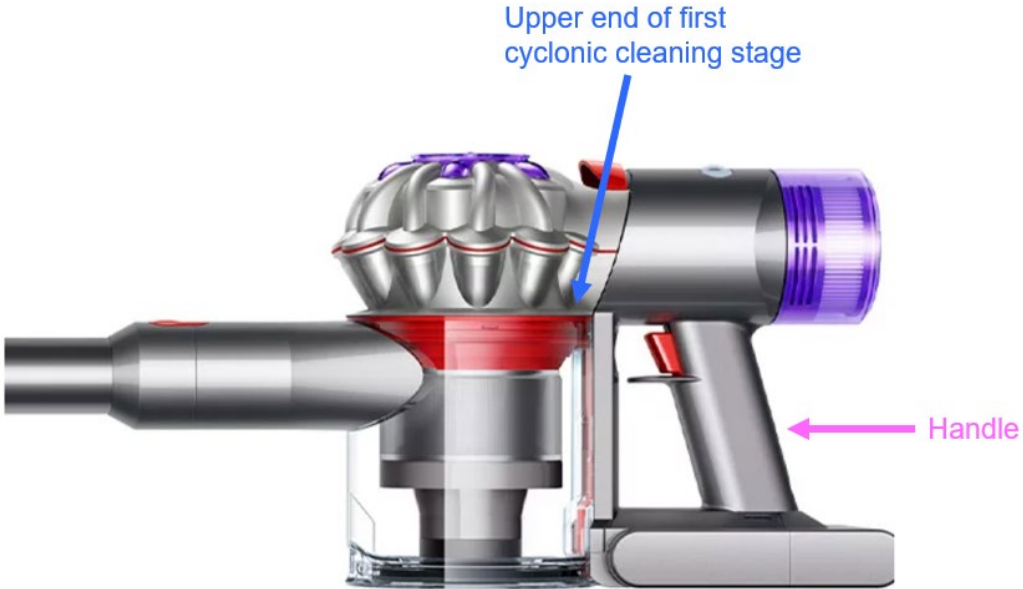
	https://www.dyson.com/vacuum-cleaners/cordless/v8/silver-nickel (annotated)
8. The hand vacuum cleaner of claim 1 wherein an end of the handle is mounted to the hand vacuum cleaner at a position adjacent an upper end of the first cyclonic cleaning stage.	Each of the Dyson Accused Products includes a handle, wherein an end of the handle is mounted to the hand vacuum cleaner at a position adjacent an upper end of the first cyclonic cleaning stage. For example, the below images show a handle, wherein an end of the handle is mounted to the hand vacuum cleaner at a position adjacent an upper end of the first cyclonic cleaning stage.  https://www.dyson.com/vacuum-cleaners/cordless/v8/silver-nickel (annotated)
9. The hand vacuum cleaner of claim 1 wherein the dirt collection region has a pivotally openable bottom.	Each of the Dyson Accused Products includes a dirt collection region that has a pivotally openable bottom.

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For example, the below images show a dirt collection region that has a pivotally openable bottom.



<https://www.dyson.com/vacuum-cleaners/cordless/v8/absolute-hepa-silver> (annotated)

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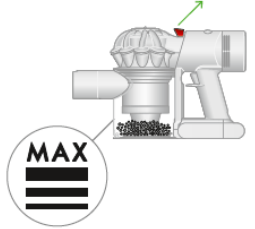
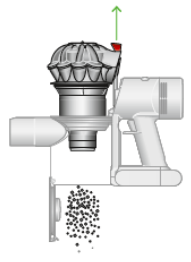
	Emptying your bin Empty as soon as the dirt reaches the MAX level – don't overfill. Using your machine when the dirt is above the MAX line may affect the performance and require more frequent filter washing.  The MAX mark on the bin of the machine, showing that the dirt should not be filled over the Max mark when the machine is at the angle of normal use. Release the dirt Remove the wand from your machine. Hold your machine over the bin and pull the bin release catch upwards. The cyclone will slide up and the bin base will open.  The bin release catch is located on the top of the cyclone where it joins the main body of your machine. Minimize dust contact Cover your bin tightly in a dustproof bag while you empty. Remove the bin carefully, seal the bag tightly and dispose. https://www.dyson.com/content/dam/dyson/maintenance/user-guides/en_anz/vacuums/dyson-v8-285l-user-manual-2022-ANZ-V2.pdf
10. The hand vacuum cleaner of claim 9 wherein the bottom is openable when the dirt collection region is attached to the main body.	Each of the Dyson Accused Products includes a dirt collection region that has a pivotally openable bottom that is openable when the dirt collection region is attached to the main body. For example, the below images show a dirt collection region that has a pivotally openable bottom that is openable when the dirt collection region is attached to the main body.

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<https://www.dyson.com/vacuum-cleaners/cordless/v8/absolute-hepa-silver> (annotated)

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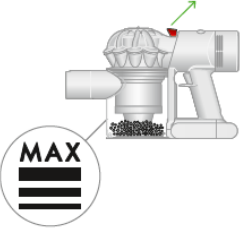
	Emptying your bin Empty as soon as the dirt reaches the MAX level – don't overfill. Using your machine when the dirt is above the MAX line may affect the performance and require more frequent filter washing.  The MAX mark on the bin of the machine, showing that the dirt should not be filled over the Max mark when the machine is at the angle of normal use. Release the dirt Remove the wand from your machine. Hold your machine over the bin and pull the bin release catch upwards. The cyclone will slide up and the bin base will open.  The bin release catch is located on the top of the cyclone where it joins the main body of your machine. Minimize dust contact Cover your bin tightly in a dustproof bag while you empty. Remove the bin carefully, seal the bag tightly and dispose. https://www.dyson.com/content/dam/dyson/maintenance/user-guides/en_auz/vacuums/dyson-v8-285l-user-manual-2022-ANZ-V2.pdf
11. The hand vacuum cleaner of claim 1 wherein the rotational axis of the fluid flow motor is displaced from the passage axis in a direction parallel to the central longitudinal axis.	Each of the Dyson Accused Products includes a rotational axis of the fluid flow motor that is displaced from the passage axis in a direction parallel to the central longitudinal axis. For example, the below images show a rotational axis of the fluid flow motor that is displaced from the passage axis in a direction parallel to the central longitudinal axis.

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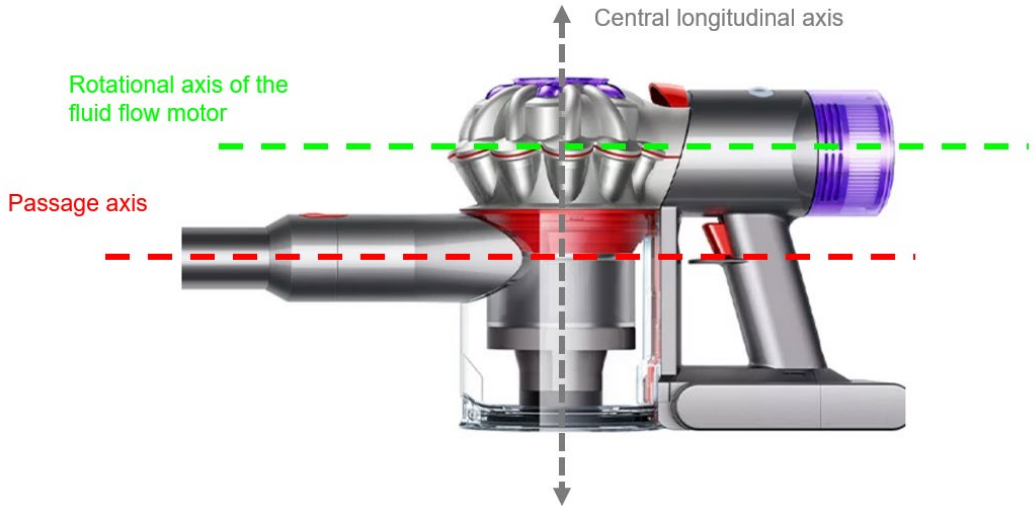
	 Central longitudinal axis Rotational axis of the fluid flow motor Passage axis https://www.dyson.com/vacuum-cleaners/cordless/v8/silver-nickel (annotated)
12. The hand vacuum cleaner of claim 11 wherein the rotational axis of the fluid flow motor is parallel to the passage axis.	Each of the Dyson Accused Products includes a rotational axis of the fluid flow motor that is parallel to the passage axis. For example, the below images show a rotational axis of the fluid flow motor that is parallel to the passage axis.

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