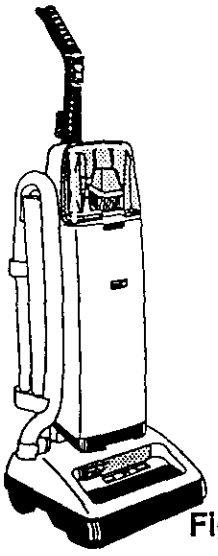


Fig. 1

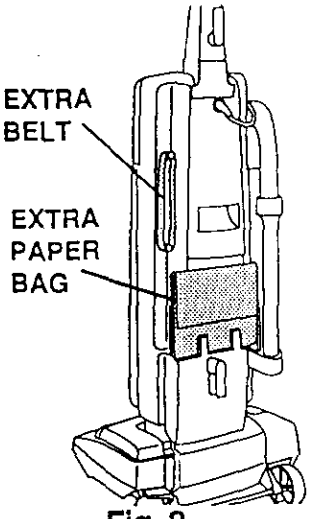


Fig. 2

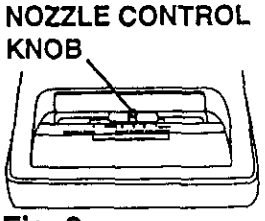


Fig. 3

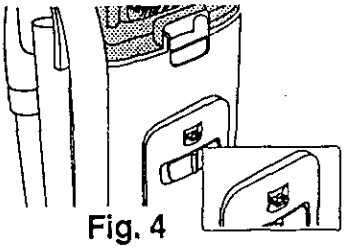


Fig. 4

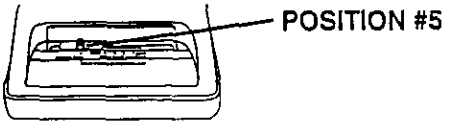


Fig. 5

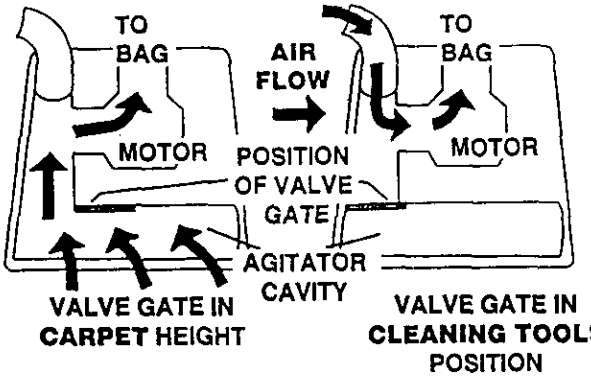


Fig. 6

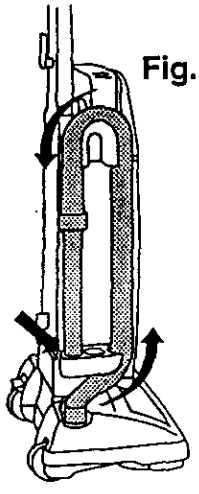
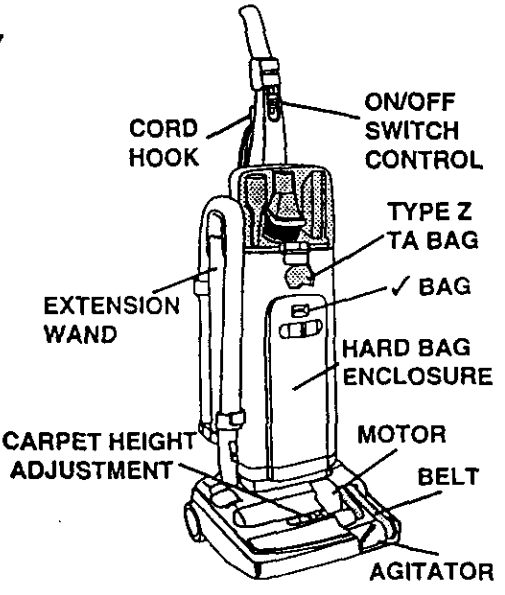


Fig. 7



Dimension™ Upright

The **Dimension™** Upright series of cleaners was first introduced in mid-1994 as replacements for Legacy models. **Fig. 1.**

All models were introduced initially with:

- Molded, integral handle grips
- On/Off switch on the front of the upper handle
- Two brush agitator (Replaceable Roll Sleeve)
- Extra bag and belt storage on the unit **Fig. 2**
- One 12v headlight
- Hard bag enclosure
- One speed motor
- Stair cleaning handle
- Four position carpet height adjustment **Fig. 3**
- Top tool conversion
- Triple stretch hose
- Tool storage on the front of the unit
- One molded extension wand
- **Type Z microfiltration** throw away bags

Some models have a "check bag" indicator on the outside of the bag door. **Fig. 4**

The cleaning tool hose attaches to the cleaner through the top of the hood and **CAN** stay attached at all times.

When using cleaning tools, the nozzle control must be in the **#5 cleaning tools** position. **Fig. 5**

With the nozzle control in **the number 5 position**, a valve gate in the main body closes and blocks all air flow from the agitator cavity therefore diverting it to the hose.

Set on carpet, positions 1-4, the gate valve is opened allowing air to flow from the agitator cavity to the motor. **Fig. 6**

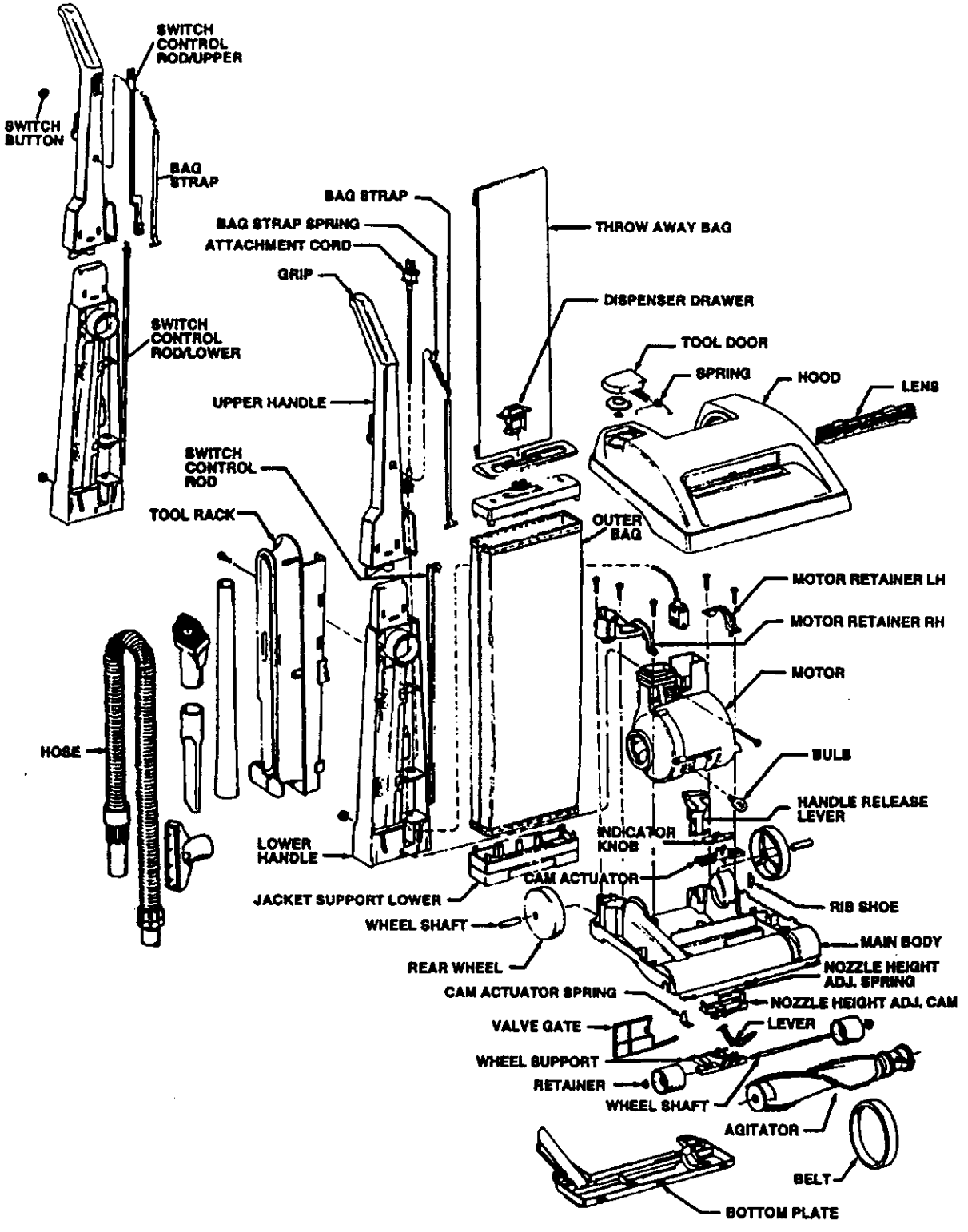
To ensure maximum efficiency in the 4 floor cleaning positions both hose ends must be firmly connected to the cleaner base and tool rack **Fig. 7** or the hose removed completely and the tool door closed.

Refer to the Hoover Service Manual for repair procedures and the Microfiche Parts Catalog – light brown header – for spare parts.

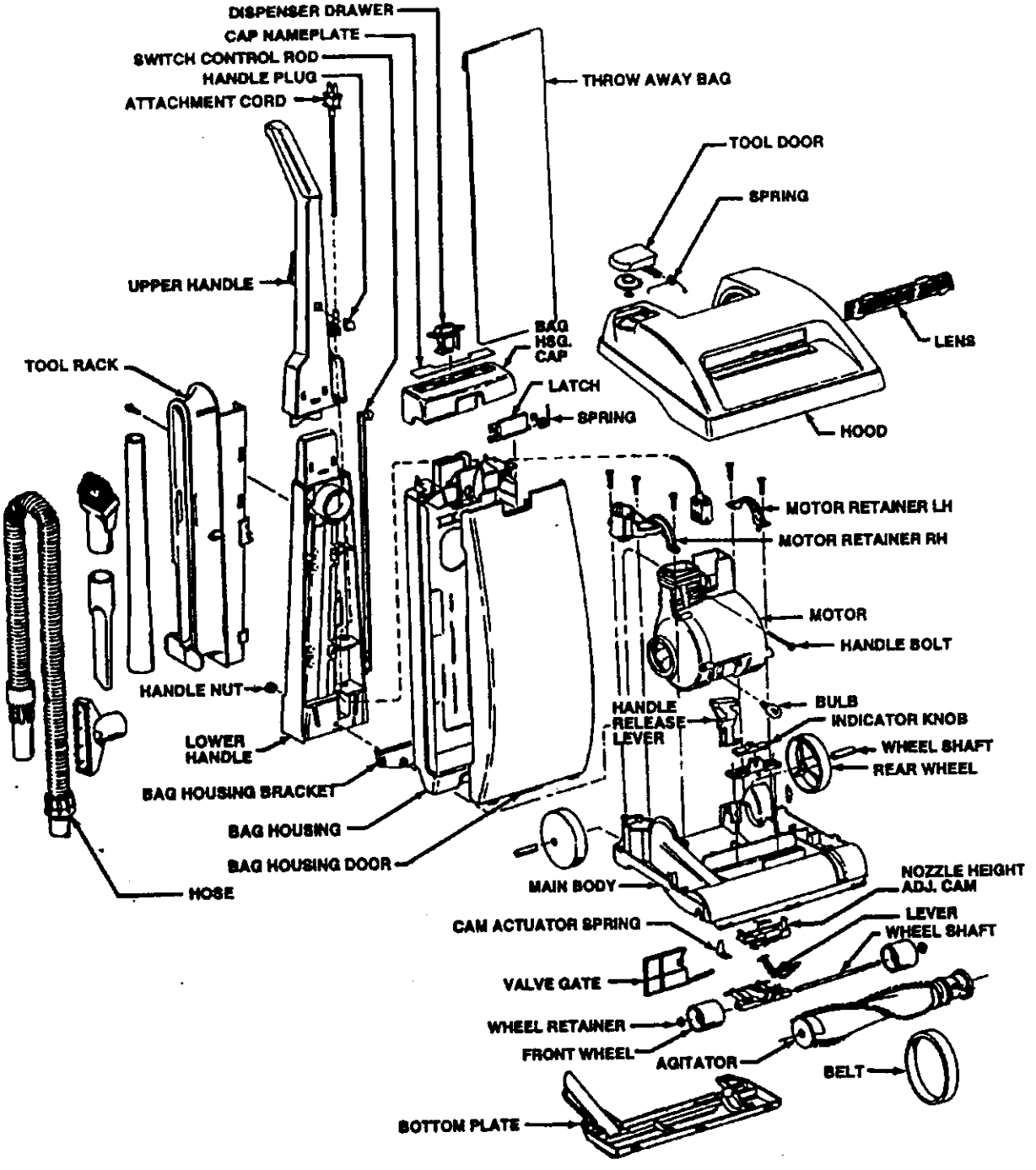
SERVICE INSTRUCTIONS
LEGACY, LEGACY II, DIMENSION
& DIRT FINDER CLEANERS

Service Dept. 1/96

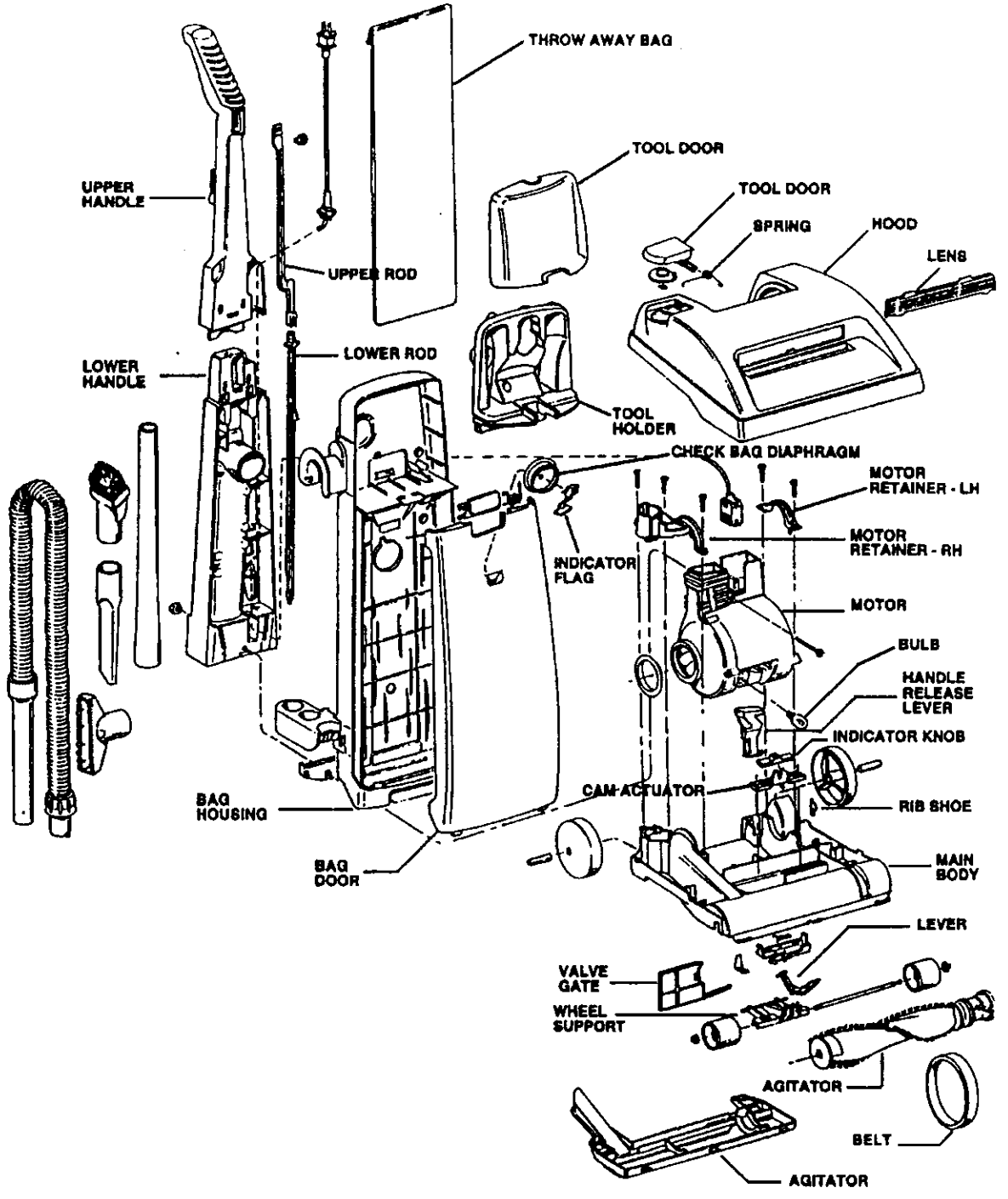
Legacy/Legacy II



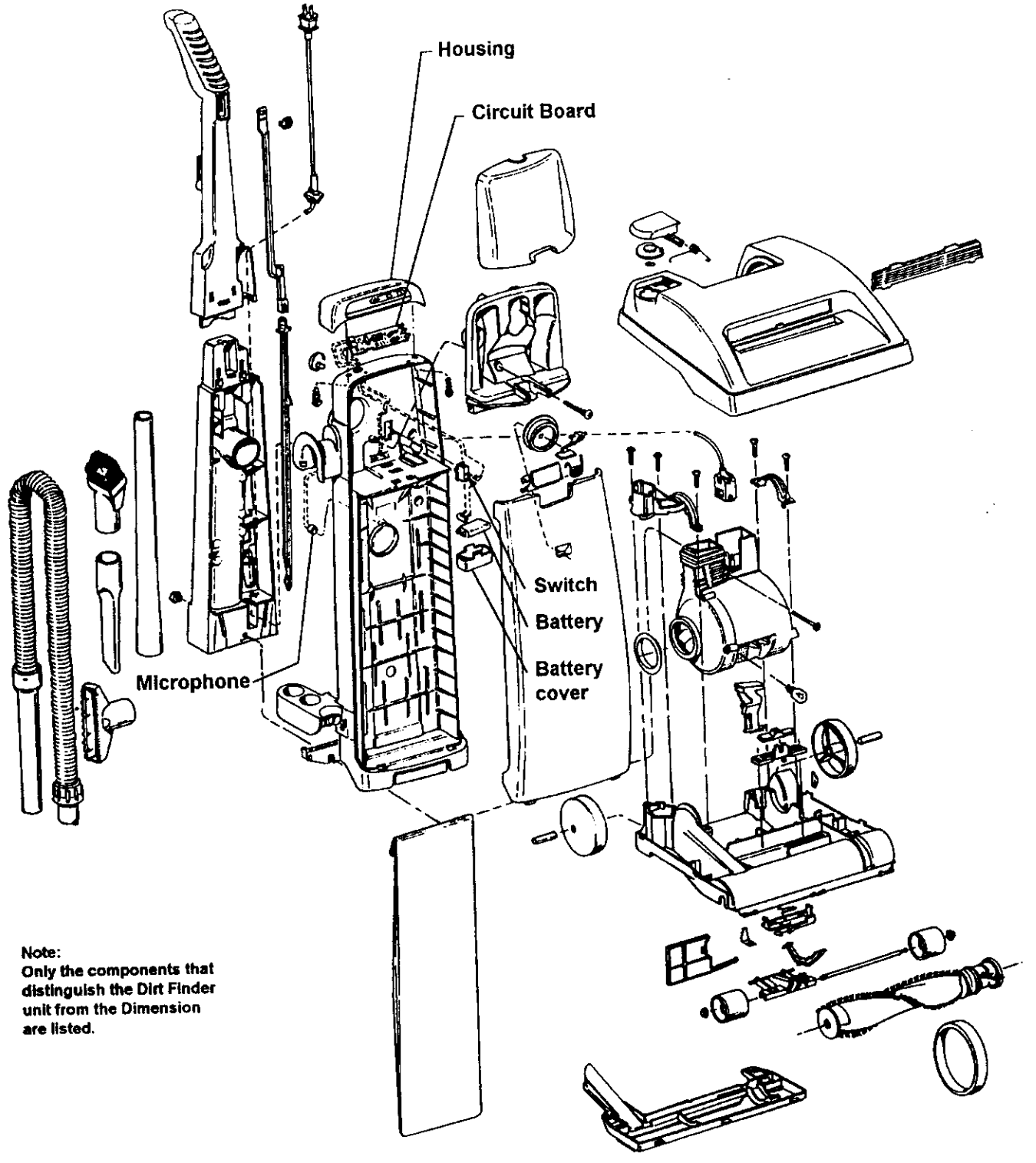
Legacy - Hard Bag



Dimension


THROW AWAY BAG
TOOL DOOR
TOOL DOOR
SPRING
HOOD
LENS
UPPER HANDLE
UPPER ROD
LOWER ROD
LOWER HANDLE
TOOL HOLDER
CHECK BAG DIAPHRAGM
MOTOR RETAINER - LH
MOTOR RETAINER - RH
INDICATOR FLAG
MOTOR
BULB
HANDLE RELEASE LEVER
INDICATOR KNOB
CAM ACTUATOR
RIB SHOE
BAG HOUSING
BAG DOOR
MAIN BODY
LEVER
VALVE GATE
WHEEL SUPPORT
AGITATOR
BELT
AGITATOR

Dirt Finder



Note:
Only the components that distinguish the Dirt Finder unit from the Dimension are listed.

I. General

These uprights are lightweight upright vacuums that feature high performance computer design motors, double edge cleaning, quick release cord wraps and top conversion cleaning tools.

All models have automatic height adjustment in that the nozzle is free to float up and down on the carpet. These models additionally have front wheel height control to limit the minimum nozzle height which allows the user to select the proper setting for optimum operation on various types of carpets.

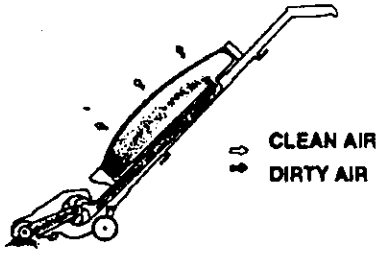
The Legacy and Legacy II models use Type "A" top-fill disposable bags.

The Dimension/Dirt Finder uses Type "Z" top-fill disposable bags.

Microfiltration bags are available for both models.

II. Operation

These cleaners operate on a Dirty Air System principle, i.e., dirty air passes through the motor area (fan) before reaching the bag.



As illustrated, air and dirt are sucked through the molded agitator housing and directed into the motor area. The fan then propels the air and dirt up the handle passage and into the throw-away bag.

The Legacy units are controlled by an on/off switch located on the side of the unit. **(Fig. A)**

The Legacy II, Dimension and Dirt Finder units are controlled by an on/off switch located in the front of the upper handle. **(Fig. B)**

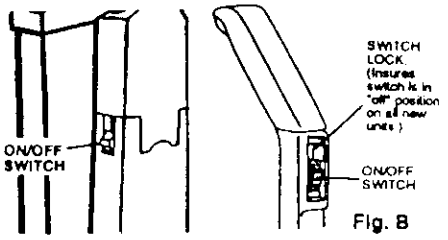
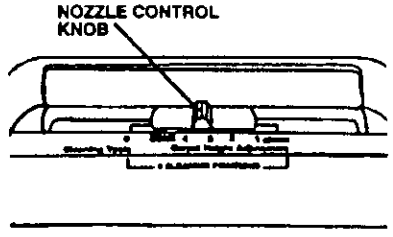


Fig. A

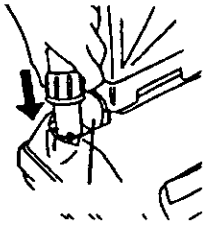
Fig. B

The carpet height adjustment lever has four settings for carpet cleaning and one for the top tool conversion.

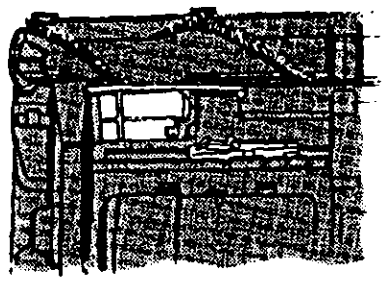


It is important that the unit be in the proper setting (carpet - for floor cleaning, and cleaning tools - when using the hose and tools). This will ensure optimum performance.

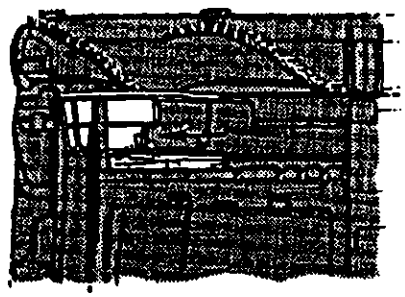
The cleaning tool hose attaches to the unit through the tool door located on the top of the hood. The air is directed to the hose by adjusting the nozzle control knob to the cleaning tool position.



The valve gate operates in conjunction with the height adjustment lever. When the lever is in any one of the four carpet settings the valve gate is open. The cam is not contacting the valve gate.



As the lever is moved to the cleaning tools position the cam locks on to the gate and slides it to shut off suction to the agitator cavity.



Note: These illustrations are shown without the bottom plate or wheel assembly in place.

Dirt Finder feature:

The embedded Dirt Finder system is powered by a regular 9V alkaline battery. The battery is located in a holder inside the bag compartment.

The circuitry is energized when the cleaner on/off switch is turned to the on position. A separate switch mounted in the bag housing is actuated by a raised rib on the upper switch rod.

A microphone, located near dirt duct, senses debris that strikes the tube and signals the circuit board which controls the lights.

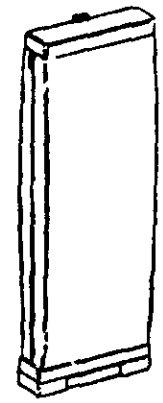
The green light signifies clean and the red dirty.

It is important to note that when you turn on the unit the red light will come on. After a few seconds the red light will go off and the green light will come on. This function lets you know the Dirt Finder feature is ready. If this lighting pattern does not occur check the troubleshooting portion of this instruction.

III. Disassembly

Models with a bag door skip to section B.

A. Outer bag (Legacy and Legacy II Models)



1. Release jacket support upper from bag strap **(Fig. 1)**.

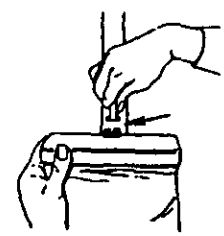


Fig. 1

2. Release outer bag retention clips (Legacy - 2 upper, 2 lower; Legacy II - 2 upper, the 2 lower tabs are there but are not fastened) ... grasp bag attachment collar support area and pull out. **(Fig. 2)**

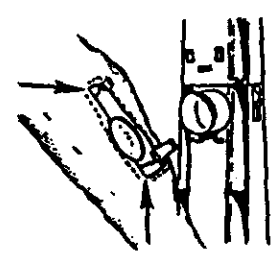


Fig. 2

3. Remove handle bolt and nut **(Fig. 3 & 4)**.

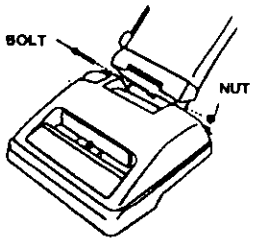


Fig. 3

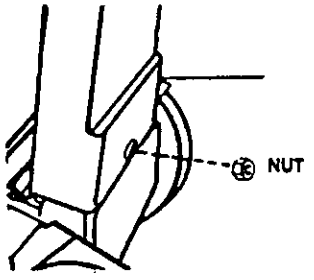


Fig. 4

4. Remove outer bag.

Note: Re-assemble in reverse order.

The retention/guide ribs on the jacket support lower must mate with the retention/guide ribs on the lower handle. **(Fig. 5A).**

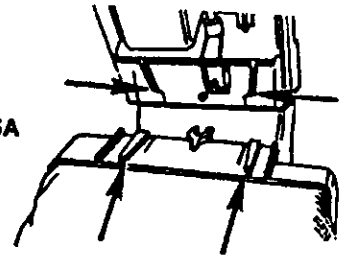


Fig. 5A

Note: Units without bag door skip to Section D.

B. Bag housing (Legacy II and Dimension) Bag housing/Dirt Finder circuitry (Dirt Finder)

1. Remove bag door.

a. Pull bag door latch forward and remove door from cleaner **(Fig. 5B).**

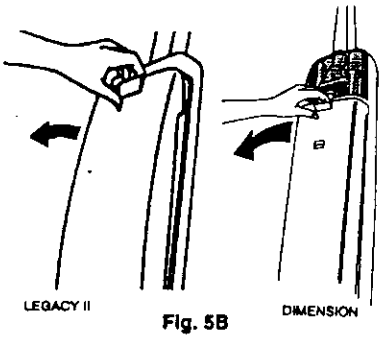


Fig. 5B

2. Remove throw-away bag.

3. Remove bag housing.

a. Release two tabs on inside of bag housing located above dirt tube **(Fig. 5C)**

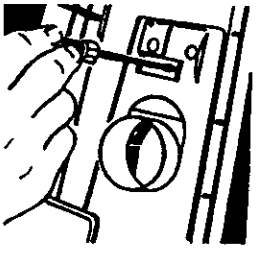


Fig. 5C

Note: On Dimension/Dirt Finder models, the tool door and holder must be removed to access the tabs.

To remove tool door/tool holder.

1. Unsnap hinges at base of door (where applicable to remove **(Fig. 5D).**

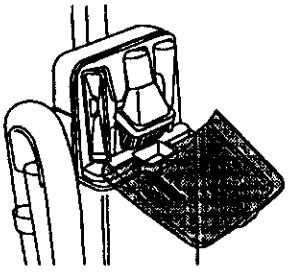


Fig. 5D

2. Remove tool holder mounting screw (located in screw cavity under the dusting brush).

3. Pry outward on both sides of the tool holder to release tabs and pivot holder out of position **(Fig. 5E).**

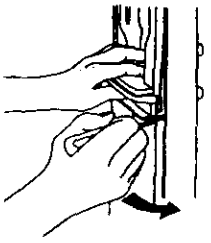


Fig. 5E

b. Lift bag housing out of bag housing bracket located on lower handle. **(Fig. 5F)**

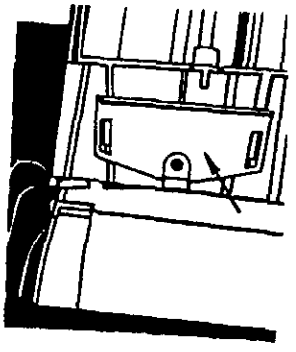


Fig. 5F

C. Dirt Finder circuitry

At this point you can access the dirt finder circuitry. This circuitry is housed in the bag housing. Fig. 5G is a cutaway view that illustrates positioning of the components and switch from the back of the bag housing.

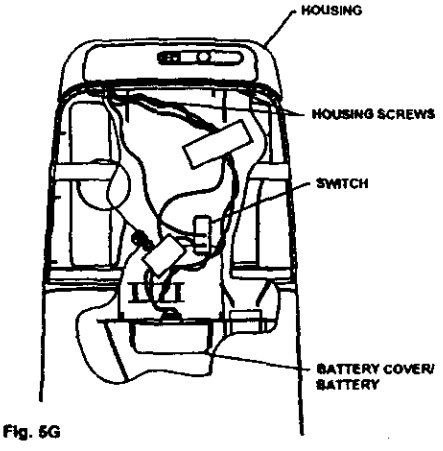


Fig. 5G

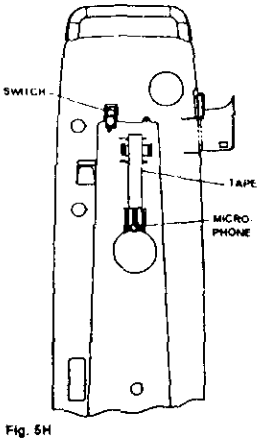


Fig. 5H

D. Switch

1. Disconnect leads and snap switch out of bag housing.

E. Circuit Board

1. Remove housing screws.

2. Snap circuit board out of housing and disconnect leads.

Note: The discharge of static electricity to a circuit board can damage the component. When removing the circuit board from the special anti-static bag, the following precautions should be taken.

a. Avoid being statically charged when handling board. Serviceman should ground himself if possible.

b. Circuit board should be handled by outside edge or metal heat sink only.

c. DON'T touch the metal traces (circuits) on bottom of circuit board.

F. Microphone

The microphone is housed in the bag housing above the opening for the dirt duct **(Fig 5H).**

To remove:
1. Grasp microphone leads near the base of the microphone and slowly pull the mic out of the seat.

2. Disconnect leads at board (Fig 5I)

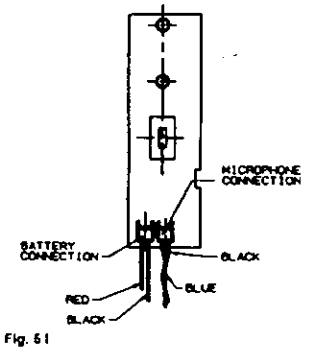
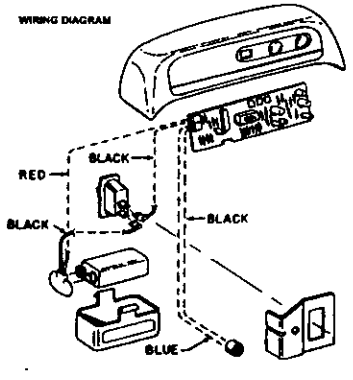


Fig. 5 I

Note: It is important upon reassembly of the microphone to firmly push the microphone into the seat in bag housing. Also, replace the electrical tape and position as illustrated in Fig. 5H. This will insure optimum performance of the microphone.



G. Bag housing bracket

a. Remove handle bolt and nut.

b. Remove bracket by sliding it off of the tapered rails located on the lower handle. **(Fig. 5J).**

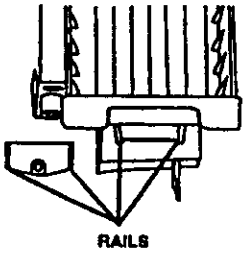


Fig. 5J

H. Jacket support cap (Legacy, Legacy II models with air freshener dispenser)

1. Remove air freshener dispenser.

2. Locate and release the two retention tabs for the cap on the inside of the jacket. **(Fig. 6).**

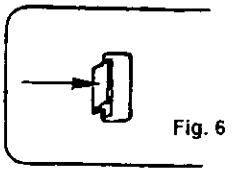


Fig. 6

3. Remove cap.

I. Jacket support - upper (Legacy, Legacy II models without air freshener dispenser).

1. Release 6 retention tabs on inside of jacket support upper and separate outer bag collar from jacket support. **(Fig. 7).**

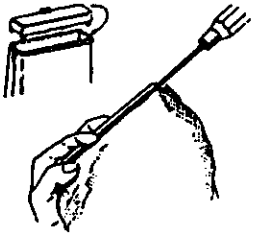


Fig. 7

J. Jacket Support - Lower

1. Release 6 retention tabs on inside of jacket support lower and separate outer bag collar from jacket support. **(Fig. 8)**

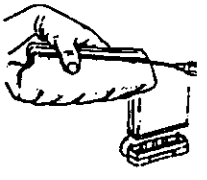


Fig. 8

K. Tool rack (Legacy, Legacy II models)

1. Remove tools.

2. Remove hose.

a. Rotate hose in opposite direction of indicator arrow and remove hose. **(Fig. 9)**

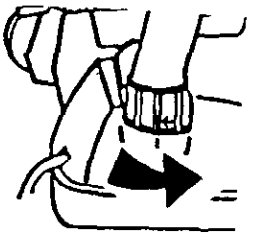


Fig. 9

3. Remove bag housing (where applicable)

4. Remove retaining screw located on the back of the handle and remove rack. **(Fig. 10).**

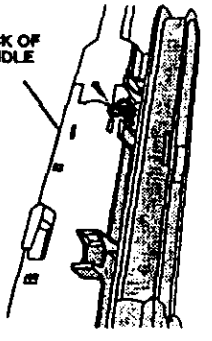


Fig. 10

For proper alignment of the tool rack during re-assembly, hook Notch A of rack on rib A of the handle. **(Fig. 11).**

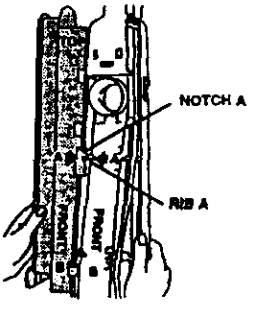
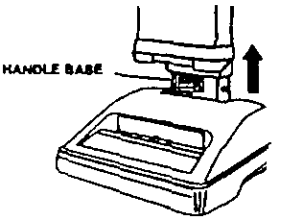


Fig. 11

L. Attachment cord - handle upper/lower - switch control rod

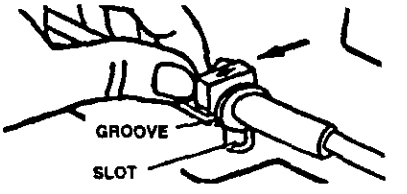
With jacket or bag housing, tool rack and handle nut and bolt removed, the handle can be disassembled by grasping and pulling upward off of motor assembly.

IMPORTANT: Be careful not to set handle assembly down on exposed switch rod at handle base. This could damage rod.

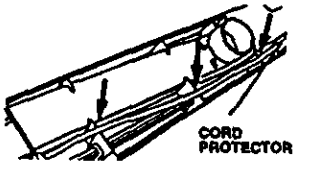


1. Remove attachment cord.

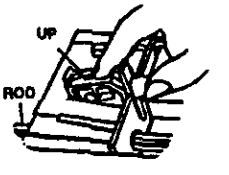
a. Slide cord protector and connector out of handle upon re-assembly, be sure to align the arrow on the cord protector and press groove in cord protector into slot in handle.



Press the cord into place on the three notches indicated below.



Position the connector in the handle with the "UP" side visible.



2. Separate handle.

a. Separate by grasping both halves and pulling apart. **(Fig. 12)**

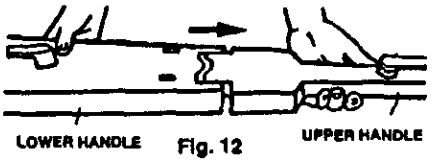
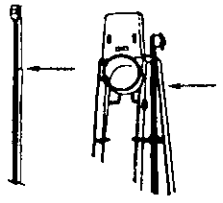


Fig. 12

3. Remove switch control rod from the lower handle.

The lower rib of the switch control rod is tapered as shown in **Fig. 13.** This protrusion must be raised to clear the support rib in the lower handle (Fig. 13) in order to facilitate removal.

Fig. 13



NOTE: Early model Legacy II lower handle assembly includes an integral muffler system. This system consists of a muffler louver, muffler foam and a muffler cover. All of these items are **permanently** attached to the lower handle so if a problem related to the system occurs the complete lower handle assembly must be replaced. This handle with muffler is no longer available in service.

4. Upper Handle Assembly -

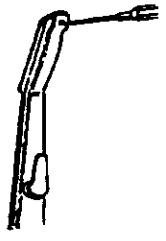
The upper handle's are stocked as assemblies only.

The serviceable components are the bag strap and spring on models without the hard bags.

To service bag strap.

a. Remove the handle grip from the upper handle by releasing the handle cap retention tab. **(Fig. 14)**

Fig. 14



The bag strap spring is retained to the upper handle and can now be removed in conjunction with the bag strap **(Fig. 15)**

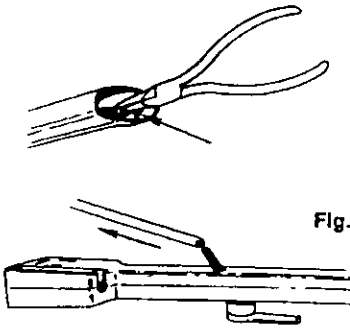


Fig. 15

M. Hood

1. Remove height adjustment indicator knob (friction fit). **(Fig. 16)**

Fig. 16

2. Turn cleaner over and remove the 4 hood retention tabs. **(Fig. 17).**

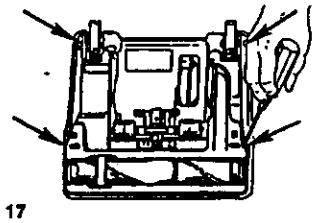


Fig. 17

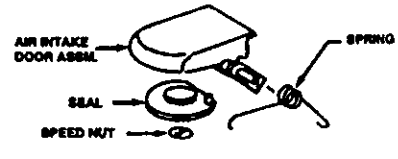
3. Remove hood.

Note: The furniture guard is molded onto the hood and is not replaceable.

Air intake door assembly.

Remove door assembly by unsnapping it from the locator bosses on the inside of the hood.

All the components of the door assembly listed are replaceable.



Headlight lens/panel

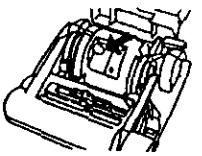
The headlight lens and/or panels are removable by eleasing the retention tabs as illustrated. (Fig. 18)

Fig. 18

N. Headlight

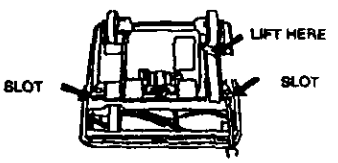
1. Remove hood.

2. Remove bulb by pulling straight out of socket; push new bulb into socket until it locks in place.



O. Bottom plate

1. Place screwdriver in RH slot and remove bottom plate.



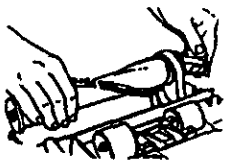
P. Agitator - belt

1. Remove bottom plate.

2. Remove hood.

3. Remove belt from motor shaft.

4. Slide agitator and belt out of housing.



Note: When re-assembling belt, follow the diagram on the main body for proper orientation.

For instructions concerning the agitator see agitator section.

Q. Front wheel support/wheels/lever

1. Remove bottom plate.

2. Release the cam actuator spring from the front wheel support retaining boss and remove by pulling it out of the main body retention pocket. (Fig. 20)

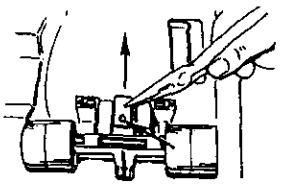


Fig. 20

3. Pivot assembly upward and remove from unit.

On Legacy units, you will encounter one of the two wheel arrangements illustrated below. **(Fig. 21,22)**

Early Design

Models produced prior to 4/8/91 lever positioned on **outer edge** of the support.

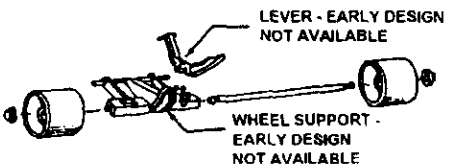


Fig. 21

Latest Design

Models produced after 4/8/91 lever positioned in the **center** of the support.

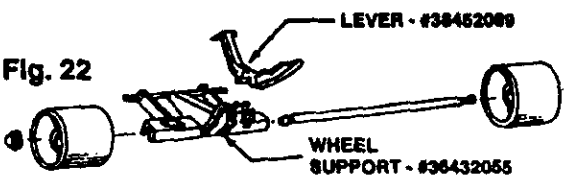
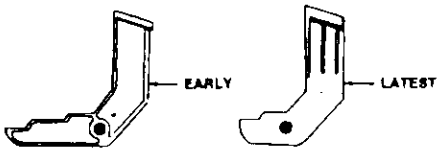


Fig. 22

The latest lever will be available in service for use on both style supports and is a drop-in replacement..

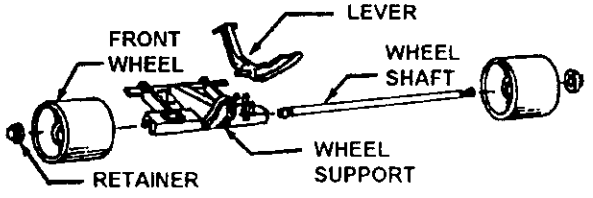


The early design wheel supports are no longer available in service. Updating the unit from the early style support to the latest will require replacement of the main body.

Wheels
Remove wheels from support by prying wheel retainer from shaft and sliding shaft out of support.

Note: Replace the wheel retainers once they are removed from the shaft.

Lever Remove lever by unsnapping it out of the support.



R. Valve gate

1. Remove bottom plate.

2. Slide valve gate out of housing **(Fig. 23).**

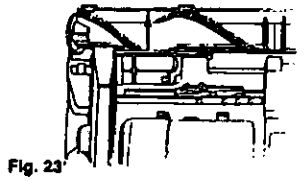


Fig. 23

Note: On the late model units, the main body has been revised so the valve gate "snaps" into position and is retained in the main body.

S. Nozzle height adjustment cam/cam actuator

1. Remove bottom plate.

2. Remove valve gate.

3. Remove front wheel support.

4. Remove hood.

5. Release the 2 nozzle height adjustment cam retention tabs **(Fig. 24)**

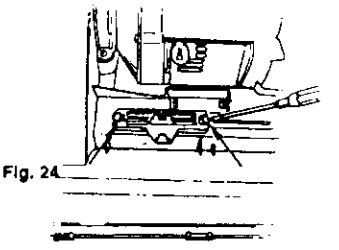
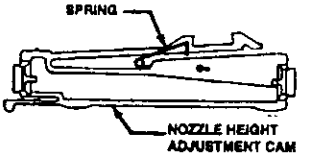


Fig. 24

6. Separate nozzle height adjustment cam and cam actuator.



The spring on the cam is replaceable.

T. Rear wheels

1. Release the rear wheel shaft from the main body retention slots. **(Fig. 25)**

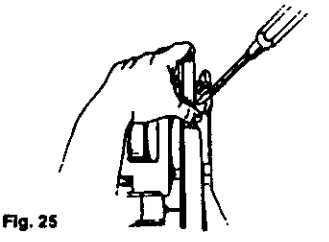


Fig. 25

Note: The main body must be flexed on one side or the other of the rear wheels while pulling upward on the rear wheel shaft and then on the other side of the rear wheel to facilitate removal.

U. Handle release lever.

1. Remove hood.

2. Lower handle to its lowest position.

3. Release the handle lever shaft protrusion from the main body retention slots. **(Fig. 26).**

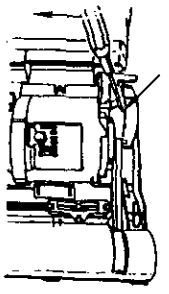


Fig. 26

V. Motor assembly

1. Remove handle.

2. Remove hood.

3. Release belt from the motor shaft.

4. Remover motor retainer right half and left half. **(Fig. 27)**

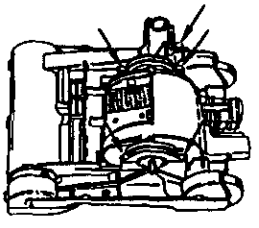


Fig. 27

5. Lift motor off the main body. Check for the seal at the inlet to the fan chamber. This seal is friction fit and slides out of the housing.

Motor (See pg. 106 for exploded view)

Motor service

Serviceable components are listed on the above schematic. Failure of any component not listed requires replacement of the entire motor.

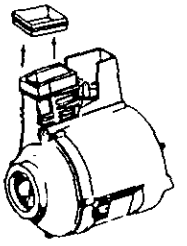
Fan

1. Remove light bulb by pulling straight out of the socket.

2. Remove four screws which retain the fan chamber to the motor end cap assembly.

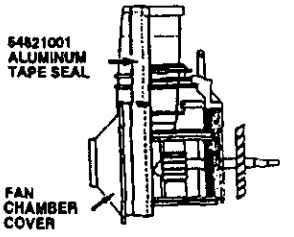
3. Remove **motor end cap assembly** by sliding it off the fan chamber and motor housing assembly.

4. Remove the **molded duct seal** by sliding it off the housings.



5. Lift off **fan chamber** and remove fan (LH thread)

At this point, you have broken a latex paint seal between the motor housing and fan chamber cover. It is important that aluminum tape be installed in its place as shown below.



Motor brush holder assembly

(Replaced as an assembly which includes motor brush and holder)

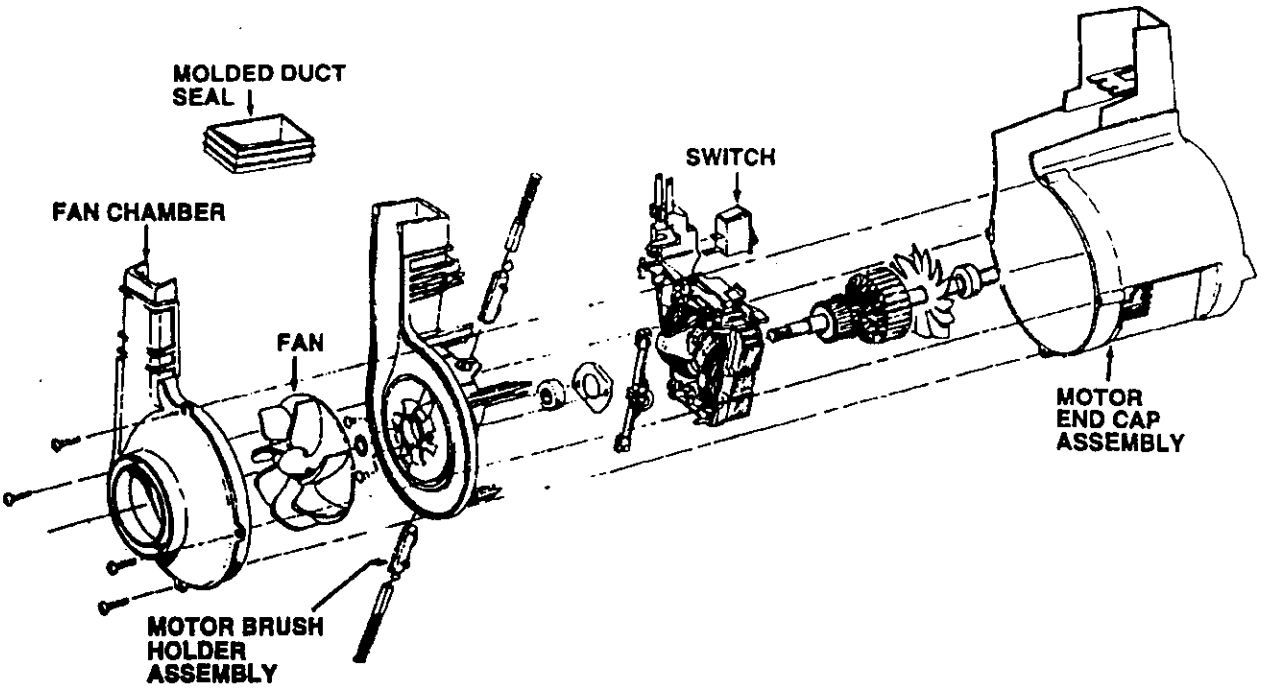
1. Remove four screws which retain fan chamber to motor end cap assembly.

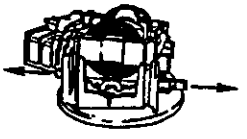
2. Slide fan chamber and motor housing assembly out of motor end cap assembly.

3. Grasp motor brush holder assemblies with pliers and slide then outward to release the terminal connection.

Upon reassembly of new motor brush holder assemblies, position holders and slide them into place insuring the field terminal connection and continue to insert until they stop.

Do not grasp outside of brush holder with pliers as it could damage the holder and cause the carbon brush to stick.





On/off switch

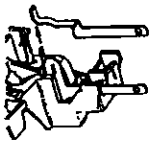
1. Remove fan.

2. Remove brush holders.

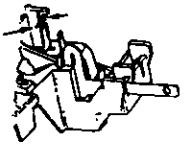
3. Remove armature.

4. Remove field assembly

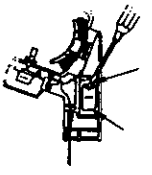
5. Remove switch/attachment cord terminal blade.



6. Remove field winding lead from switch terminal by uncrimping connection.



7. Remove switch by releasing switch pressure tabs and snapping switch out of holder.



Note: When installing a new switch, the field winding lead must be securely crimped to the proper switch terminal.

IV. Troubleshooting check list - Legacy/Legacy II/Dimension/Dirt Finder

The following is a guide to aid in determining the origin of a problem for which these models could conceivably be brought in for service.

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTION
A. Motor won't run	1. Not firmly plugged in.	1. Check power cord for proper connections.
	2. No voltage in customer's wall plug.	2. Plug into known good voltage source.
	3. On/off switch bad.	3. Replace switch
	4. Open in attachment cord.	4. Replace cord.
	5. Open circuit in motor.	5. Check motor wiring (armature & field).
	6. Fan jammed by foreign object.	6. Remove obstruction.
	7. Broken switch control rod.	7. Replace switch control rod.
B. Motor runs cleaner won't pickup.	1. Agitator belt broken or worn.	1. Replace belt.
	2. Bag full.	2. Replace throw-away bag.
	3. Worn agitator brushes.	3. Replace agitator.
	4. Warped or damaged bottom plate.	4. Replace bottom plate.
	5. Blocked air flow system.	5. Clear blockage.
	6. Nozzle control knob in "cleaning tools" position.	6. Adjust to one of the four carpet cleaning positions.
C. Motor intermittent	1. Loose wire connection.	1. Check all connections.
	2. Defective on/off switch.	2. Check and change switch.
	3. Worn carbon brushes.	3. Replace motor brush holder assembly.
	4. Motor brush hanging in holder.	4. Replace motor brush holder assembly.
D. Motor runs hot	1. Refer to 2 and 5 under Item B	1. The items referred can cause the motor to run hot because all restrict the air supply. Field and armature will be generally discolored. Replace motor.
	2. Worn carbon brushes.	2. Replace motor brush holder assembly.
	3. Shorted or overloaded field coil.	3. Replace motor.
	4. Shorted or overloaded armature.	4. Replace motor.
	5. Loose wire connection.	5. Connections should be tight to prevent high resistance. Tighten connections or replace as necessary.
	6. Motor air vent clogged.	6. Clear air restriction.
	7. Tight motor bearings.	7. Check and replace motor if necessary.
E. Cleaner noisy	1. Interference between bottom plate and agitator.	1. Check to see if bottom plate is damaged or mispositioned.
	2. Broken blade(s) on fan.	2. Replace fan.
	3. Agitator bearings dry or worn.	3. Grease or replace bearings.
	4. Warped agitator.	4. Replace agitator.
F. No pickup using tools	1. Cleaner not set to "cleaning tools" position.	1. Check setting.
	2. Obstruction in hose.	2. Clear obstruction.
	3. Valve gate not functioning.	3. Remove bottom plate and check operation

This section addresses problems associated with the Dirt Finder feature in the Dirt Finder unit.

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTION
A. Circuit board won't light	1. 9V battery not installed.	1. Install battery and check operation.
	2. Low battery.	2. Change battery.
	3. Battery disconnected.	3. Connect and check operation.
	4. Switch failed.	4. Replace switch.
	5. Switch out of position.	5. Check switch mounting bracket to insure its in position and switch is snapped into bracket.
	6. Wires not connected at switch or circuit board.	6. Check and reconnect.
	7. Circuit board failed	7. Replace board (check items 1 - 6 first)
	8. Bag housing not firmly locked into place.	8. Check that housing is snapped into place. This will insure raised projection on switch rod contacts switch.
	Note: Normal lighting pattern is discussed in the basic operation section of this instruction	
B. Light does not change from green to red during normal operation	1. Carpet clean.	1. The red light may seldom come on during cleaning. This means your cleaner is picking up primarily fine surface dust and lint which the system may not detect or that the carpet is clean. Switch unit to Hi - sensitivity and recheck.
	Note: To check lighting pattern, unplug unit, turn cleaner switch to on (green light will illuminate). Tap inside the opening of the dirt duct with a screwdriver. The light should change from green to red. If the light does not change, check the following.	
	1. Microphone out of position.	1. Check to insure the mic is firmly pressed into the seat.
	2. Dirt duct opening "caked with dirt"	2. Clean opening and recheck.
	3. Microphone leads disconnected from circuit board.	3. Check and reconnect.
	4. Microphone failed.	4. Replace microphone (Check 1 - 3 first).

Troubleshooting Guide

Legacy & Legacy II

The following is a guide to aid in determining the origin of a problem for which these models could conceivably be brought in for service.

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTION
A. Motor won't run	1. Not firmly plugged in.	1. Check power cord for proper connections.
	2. No voltage in customer's wall plug.	2. Plug into known good voltage source.
	3. On/off switch bad.	3. Replace switch
	4. Open in attachment cord.	4. Replace cord.
	5. Open circuit in motor.	5. Check motor wiring (armature & field).
	6. Fan jammed by foreign object.	6. Remove obstruction.
	7. Broken switch control rod.	7. Replace switch control rod.
	8. Crimped connections for field wires loose	8. Check and re-crimp or solder.
	9. Motor brushes worn or stuck in holder	9. Replace motor brush holder assembly.
	10. Motor bearing(s) failed - seized	10. Replace. Cleaner will hum loudly when energized if this condition exists.
B. Motor runs cleaner won't pickup	1. Agitator belt broken or worn.	1. Replace belt.
	2. Bag full.	2. Replace throw-away bag.
	3. Worn agitator brushes.	3. Replace agitator.
	4. Warped or damaged bottom plate.	4. Replace bottom plate.
	5. Blocked air flow system.	5. Clear blockage.
	6. Nozzle control knob in "cleaning tools" position.	6. Adjust to one of the four carpet cleaning positions.
	7. Carpet height adjustment lever in "cleaning tools" position.	7. Set to one of the four "carpet height adjustment" settings when using for floor cleaning.
	8. Fan blades worn or fan stripped.	8. Replace fan
	9. Bottom plate mis-positioned. Not sealing	9. Reposition and recheck operation.
	10. Valve gate shifted to close off agit. cavity.	10. Check position and function of valve gate. Height adjustment cam should pull valve gate to open agitator cavity when moved to the "carpet height adjustment" settings. Check to insure valve gate is not staying closed.
	11. Tool door seal missing or worn.	11. Replace seal. This applies to models without permanently attached hose.
C. Motor intermittent	1. Loose wire connection.	1. Check all connections.
	2. Defective on/off switch.	2. Check and change switch.
	3. Worn carbon brushes.	3. Replace motor brush holder assembly.
	4. Motor brush hanging in holder.	4. Replace motor brush holder assembly.
D. Motor runs hot	1. Refer to 2 and 5 under Item B	1. The items referred can cause the motor to run hot because all restrict the air supply. Field and armature will be generally discolored. Replace motor.
	2. Worn carbon brushes.	2. Replace motor brush holder assembly.
	3. Shorted or overloaded field coil.	3. Replace motor.
	4. Shorted or overloaded armature.	4. Replace motor.
	5. Motor air vent clogged.	6. Clear air restriction.
	6. Tight motor bearings.	7. Check and replace motor if necessary.

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTION
E. Cleaner noisy	1. Interference between bottom plate and agitator.	1. Check to see if bottom plate is damaged or mis-positioned.
	2. Broken blade(s) on fan	2. Replace fan.
	3. Agitator bearings dry or worn.	3. Grease or replace bearings.
	4. Warped agitator.	4. Replace agitator.
	5. Belt worn - slipping.	5. Replace belt.
	6. Objects lodged in fan or fan chamber	6. Clear obstruction. Check condition of fan.
	7. Motor bearing(s) failed	7. Replace motor.
F. No pickup using tools	1. Cleaner not set to "cleaning tools" position.	1. Check setting.
	2. Obstruction in hose.	2. Clear obstruction.
	3. Valve gate not functioning.	3. Check position and function of valve gate. Height adjustment cam should push valve gate to close off agitator cavity when moved to "cleaning tools" position. Also, a mis-positioned bottom plate will not "trap" the gate to allow for proper function.
	4. Valve gate missing.	4. Replace and check operation.
	5. Hole in hose	5. Replace hose.
	6. Loose or leaking hose ends.	6. Check to insure both ends are tight.
G. Dirt /Dust leakage inside cleaner.	1. Seal at inlet to motor damaged.	1. Check and replace if necessary. A cardboard template should be used over the face of the seal when sliding motor into housing. Template size should match the size of the seal.
	2. Seal at exit of fan chamber missing or damaged.	2. Replace if missing or damaged.
	3. Leakage at junction of fan chamber cover to motor housing.	3. In production, a latex paint seal is used to seal this junction. If the motor is disassembled, this seal is broken. Clean area and apply aluminum tape (Part no. 54821001) at this junction.
	4. Loose motor retainer cap(s).	4. Tighten. Handle will also be very unstable if this condition exists.
	5. Fan chamber or cover cracked.	5. Replace.
H. Belts continually breaking.	1. Off brand belt being used.	1. Install genuine Hoover belt and check.
	2. Agitator "dragging"	2. Check for worn agitator bearings, worn or missing thrust washers and thread or carpet fiber built up under thread guards. Belt should be melted in area of break if this condition exists.
	3. "Belt end" motor bearing failing. Armature shaft overheating.	3. Replace motor. Belt should be very tacky if this condition exists.
I. Cleaner nozz. will not raise when handle is put into upright pos.	1. Lever on wheel support missing or broken.	1. Replace lever.
	2. Boss on motor which contacts lever broken	2. If broken, replace motor housing.