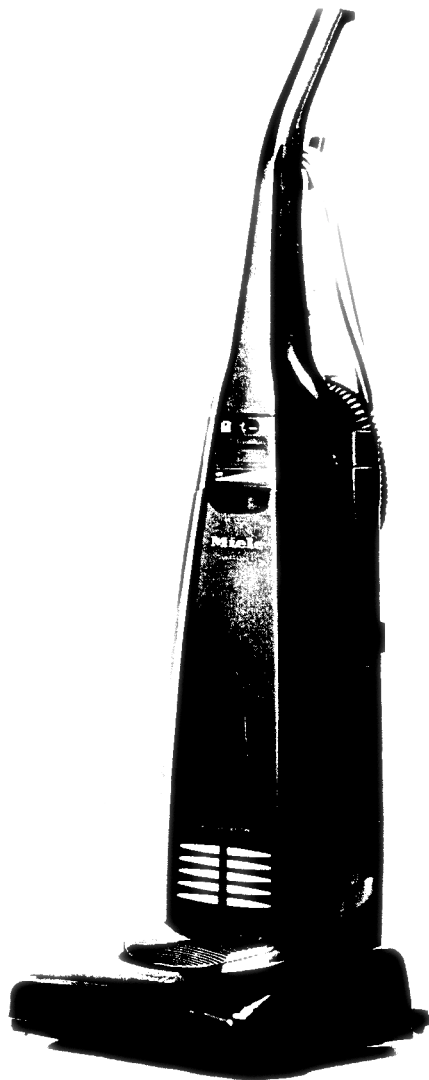


# Service Manual

Vacuum Cleaner

MODELS S171i / S172i



**Miele®**

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## 1.0 Construction & Design

### 1.1 Features

Features	S171I	S172I
Variable Motor Speed		•
Automatic Cord Rewind		•
Change Bag Indicator	•	•
Bare Floor Adjustment		•
Double Beater Bar	•	•
Double Beater Brush	•	•
Headlight		•
Brush Edge Cleaning	•	•
Micron Filtration	•	•
Integrated Tool Storage	•	•

### 1.2 Technical Data

#### 1.2.1 Water Lift

49.2 inches

#### 1.2.2 Air Flow

50 CFM

#### 1.2.3 Dust Bags

2 ply recyclable paper

#### 1.2.4 Dust Bag Volume

6 quarts

#### 1.2.5 Operational Radius

25 feet standard

34 feet with Extension

#### 1.2.6 Weight

S171i - 13.7 lbs

S172I - 14.1 lbs

#### 1.2.7 Electrical Connection

120 Vac, 60 Hz

#### 1.2.8 Rated Load

800 Watts

#### 1.2.9 Motor Power

7.3 Amp

#### 1.2.10 Safety Classification

Double Insulated

#### 1.2.11 Safety Certification

ETL 9700717

#### 1.2.12 Cord Length

24.9 feet

#### 1.2.13 Change Bag Indicator

Both S171I & S172I

#### 1.2.14 Brush Roll

Both S171I & S172I

#### 1.2.15 Filtration

Pre Motor Filtration, Electrostatic Super  
Clean Filter

## 1.3 Accessories

### 1.4 Standard Accessories

Extension Wand

Crevice Tool

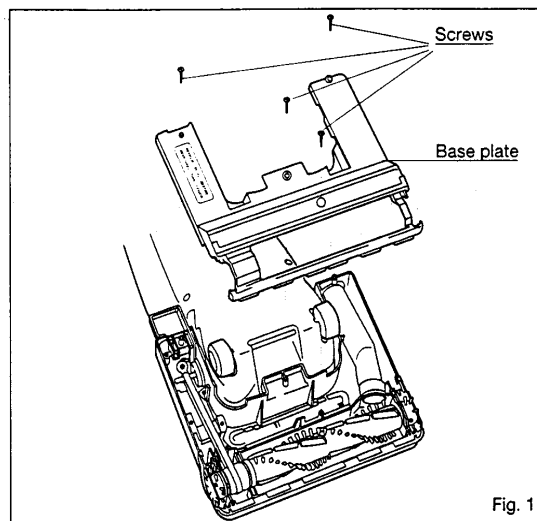
Dusting Brush

## 2.0 REPLACING THE MAIN PARTS

**IMPORTANT:** BEFORE REPLACING ANY PART ALWAYS UNPLUG THE VACUUM FROM THE ELECTRICAL SUPPLY.

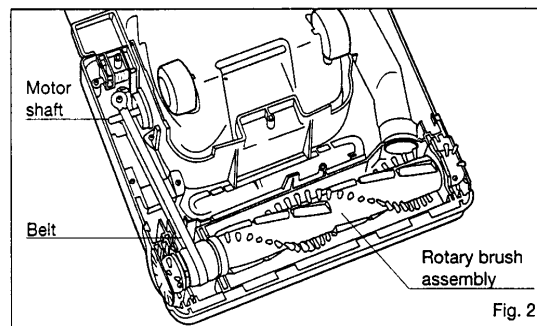
### 2.1 REPLACING THE BELT

1. Loosen the 4 screws from the base plate and remove base plate. (Fig. 1)
2. Release the belt from the motor shaft and then lift up the rotary brush assembly to remove the belt. (Fig. 2)
3. Install the new belt around the pulley and motor shaft.
4. Re-install the base plate and tighten the screws.



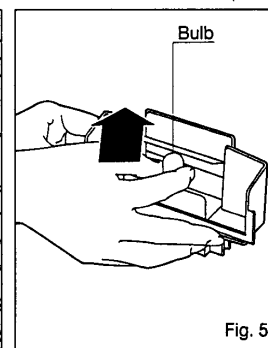
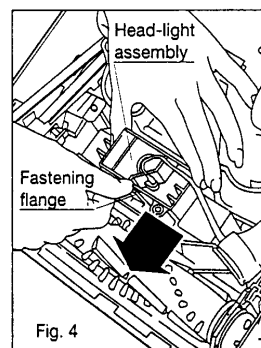
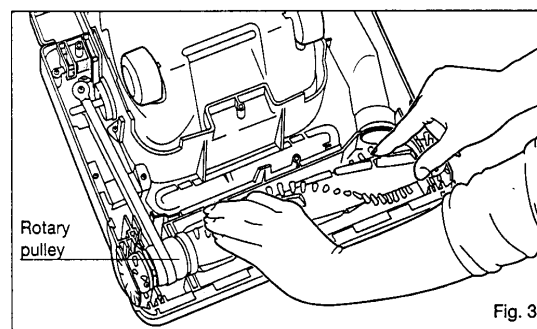
### 2.2 REPLACING THE ROTARY BRUSH ASSEMBLY

1. Remove the base plate and rotary brush assembly as outlined in Section 2.1.
2. Install the new assembly by first installing the belt around the pulley and placing the brush ends into their holders. Next, pull the belt over the motor shaft. (Fig. 3)
3. Re-install the base plate and tighten the screws.



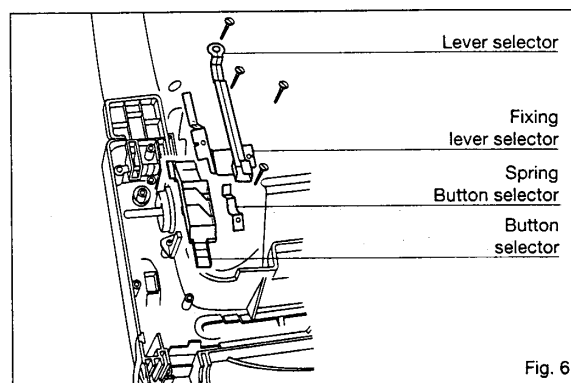
### 2.3 REPLACING THE BULB

1. Remove the base plate as outlined in Section 2.1.
2. Release the fastening flange and lift the complete head-light assembly out of the vacuum. (Fig. 4)
3. Pull out the bulb and replace it with a new one. (Fig. 5)
4. Press the headlight assembly back into place.
5. Re-install the base plate and tighten the screws.



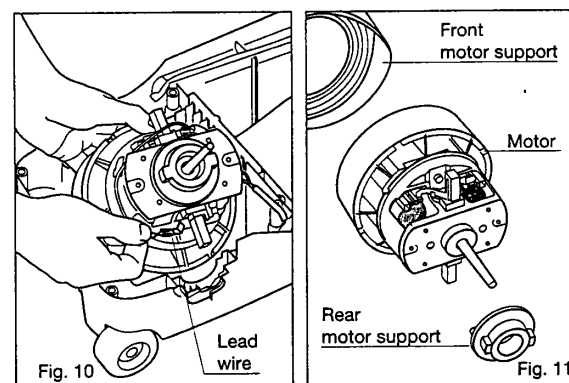
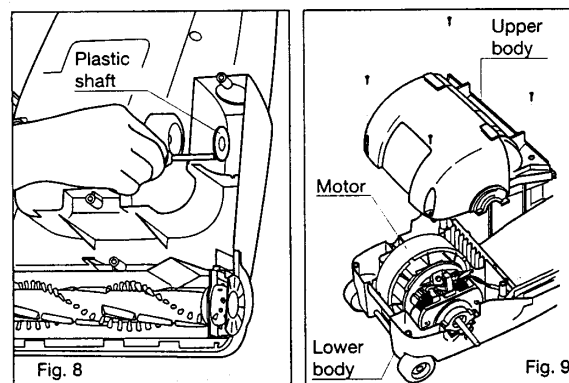
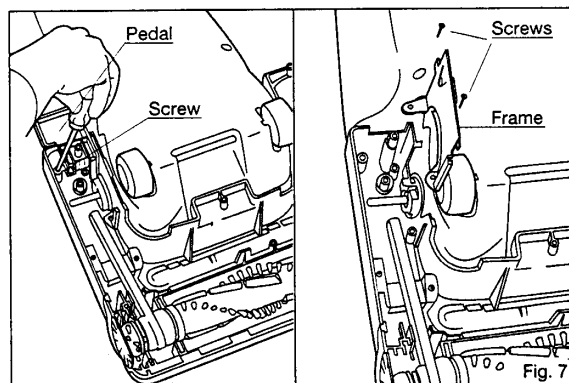
## 2.4 REPLACING THE BEATER BAR SELECTOR

1. Remove the base plate as outlined in section 2.1.
2. Release the belt from the motor shaft.
3. Loosen the screw holding the lever selector, two holding the fixing lever selector and one holding the spring button selector. (Fig. 6)
4. Replace any damaged parts and re-assemble in the reverse order.



## 2.5 REPLACING THE MOTOR

1. Remove the base plate as outlined in section 2.1.
2. Release the belt from the motor shaft.
3. Remove the screw holding the pedal and the two holding the frame. (Fig. 7)
4. Insert a flat-head screwdriver at the nozzle housing and carefully pry out the plastic shaft. Remove the floor nozzle cover. (Fig. 8)
5. Turn the vacuum cleaner over and remove the four screws from the upper body. (Fig. 9)
6. Take out the motor and remove the two lead wires (provided with quick-terminals) from the carbon brush holder terminals. (Fig. 10)
7. Dismount the front / rear motor supports and replace the motor. (Fig. 11)
8. Assemble the front / rear motor supports on to the new motor and connect the two lead wires to the carbon brush holder terminals.
9. Place the motor in the lower body and re-install the rest of the parts in reverse order.

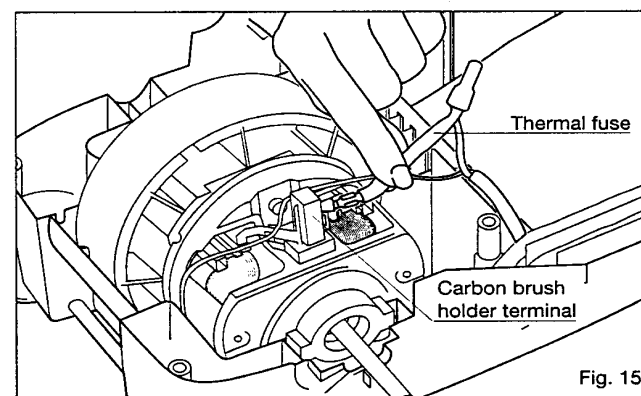
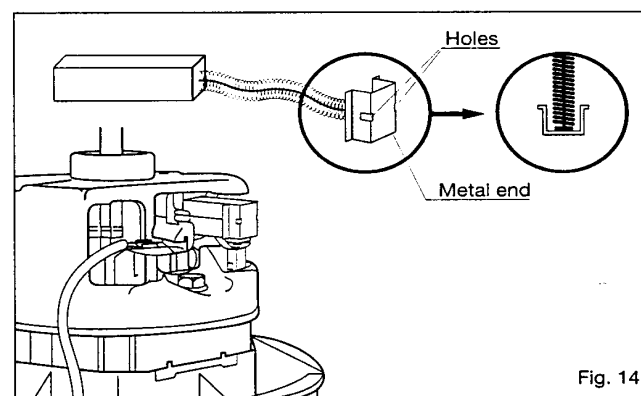
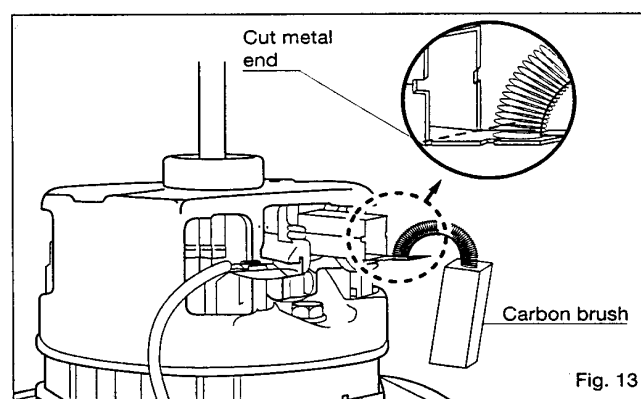
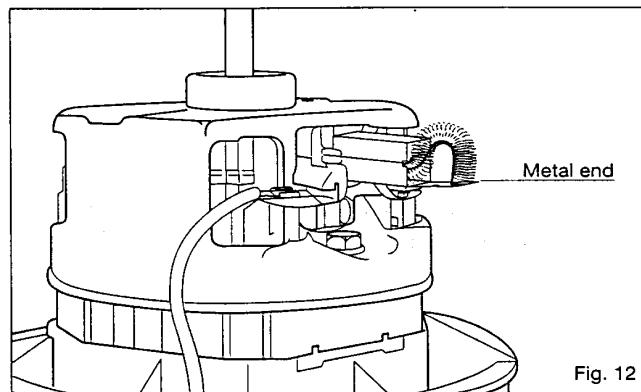


## 2.6 REPLACING THE CARBON BRUSHES

1. Remove the motor as outlined in section 2.5.
2. Bend the metal end of the carbon brush holder so it is out of the way and pull out the carbon brush. (Fig. 12)
3. Cut off the metal end of the carbon brush holder. (Fig. 13)
4. Insert a new carbon brush into the brush holder and push it in until the protruding pins of the new metal end latch into the notches of the brush holder. (Fig. 14)
5. Connect the two wires to the carbon brush holder terminals and replace the motor in the lower body.
6. Re-install the rest of the parts in reverse order.

## 2.7 REPLACING THE THERMAL FUSE

1. Remove the upper body as shown in Fig.9 of page 5.
2. Remove the wire nut and disconnect the thermal fuse from the carbon brush holder terminal. (Fig. 15)
3. Replace the thermal fuse and connect it as shown in the wiring diagram.
4. Re-assemble in the reverse order.



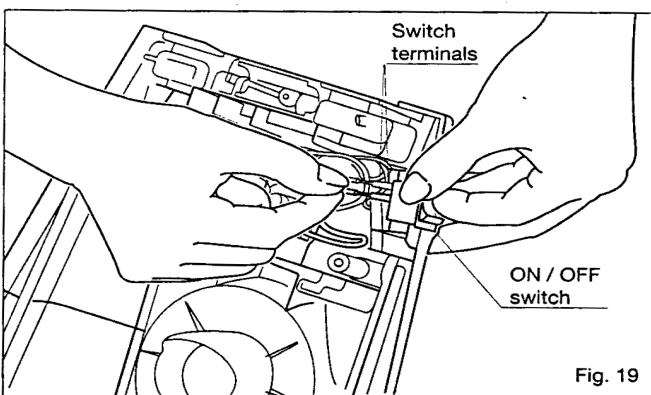
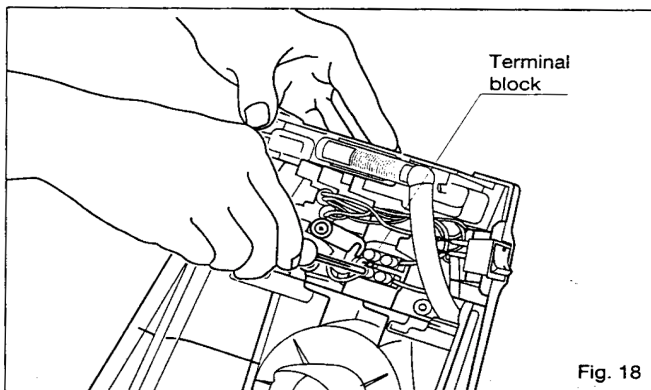
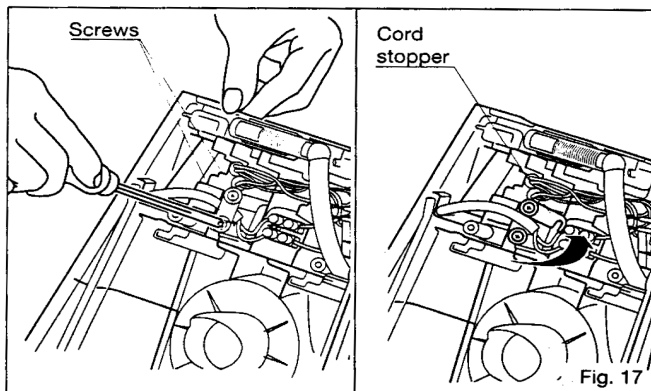
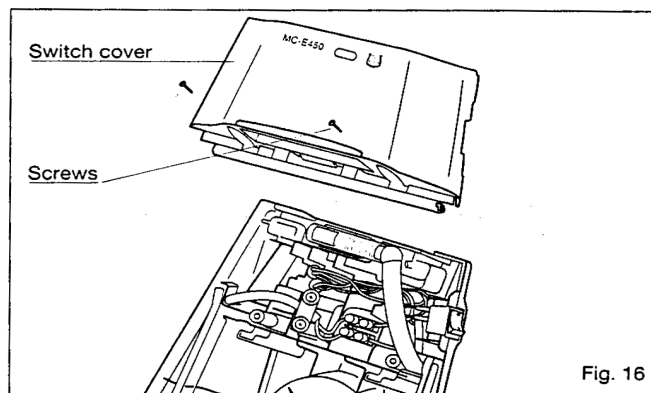
## 2.8 REPLACING THE POWER CORD

1. Loosen the two screws from the switch cover and remove cover. (Fig. 16)
2. Remove the two screws from the cord stopper. (Fig. 17)
3. Disconnect the blue and brown wires from the terminal block to the power cord. (Fig. 18)
4. Replace the power cord and secure the new cord using the cord stopper. Then connect the wires to the terminal block according to the wiring diagram.
5. Re-install the switch cover and tighten the two screws.

## 2.8 REPLACING THE ON/OFF SWITCH

1. Remove the switch cover as outlined in section 2.8.
2. Disconnect the two wires (provided with quick-terminal) from the ON/OFF switch terminals. (Fig. 19)
3. Replace the ON/OFF switch and connect the two wires according to the wiring diagram.

## 2.10 REPLACING THE POWER CONTROL





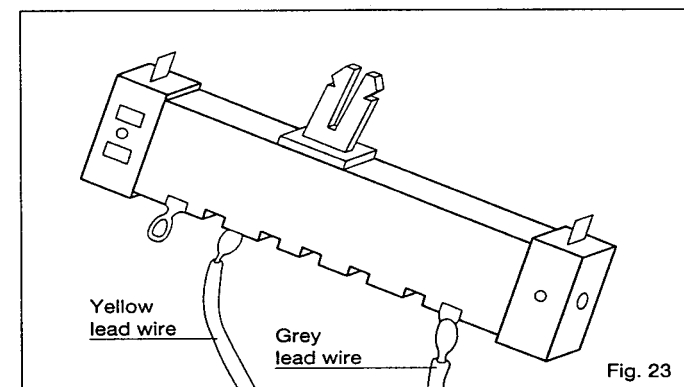
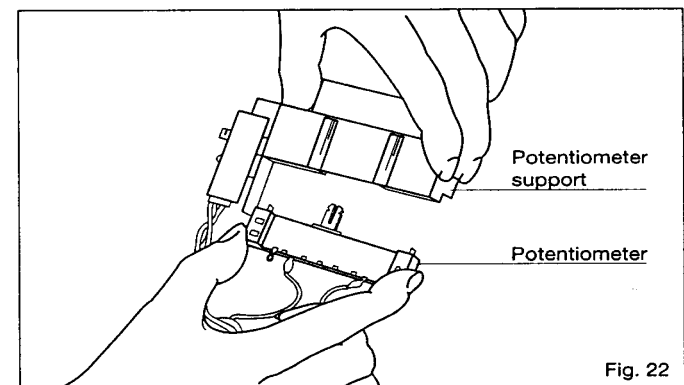
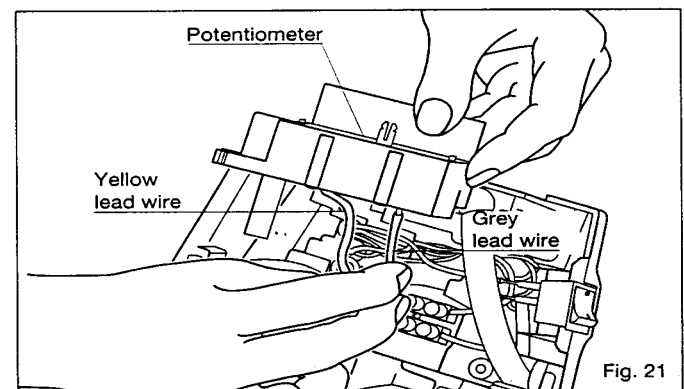
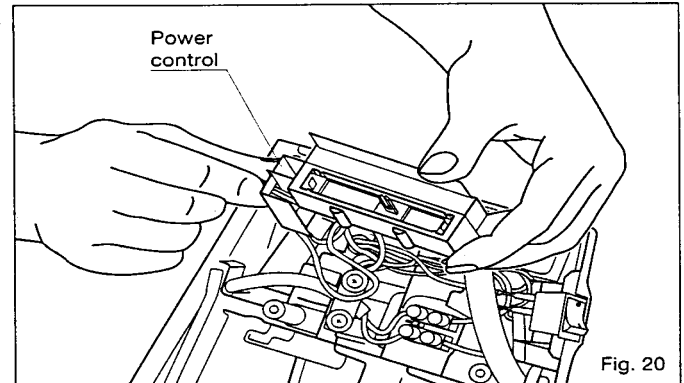
## AND POTENTIOMETER (S172i)

1. Remove the switch cover as outlined in section 2.8
2. Press the two clamps holding the power control unit in it's housing and remove. (Fig. 20)
3. Disconnect the yellow and black wires from the power control.
4. Unsolder the gray wire that is connected to the potentiometer and remove the power control. (Fig. 21)
5. Install the new power control, solder on the gray wire and reconnect the black and yellow wires according to the wiring diagram.

### 2.11 Potentiometer

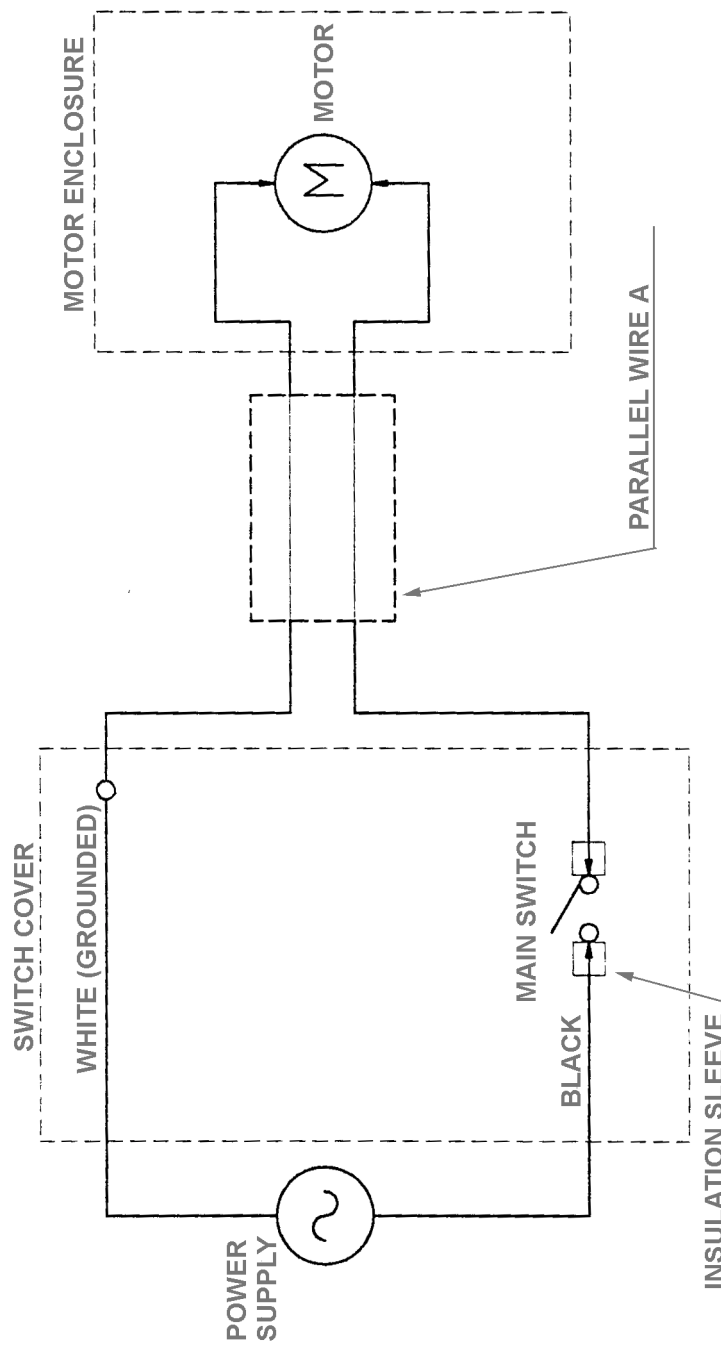
1. Remove the switch cover as outlined in section 2.8.
2. Pull out the power control unit and remove the potentiometer from its support. (Fig. 22)
3. Unsolder the yellow and gray wires from the potentiometer tabs. (Fig. 23)
4. Replace the potentiometer and solder the yellow and gray wires to their respective tabs.

**NOTE: MAKE SURE THE WIRES ARE IN THE CORRECT POSITION BEFORE SOLDERING.**

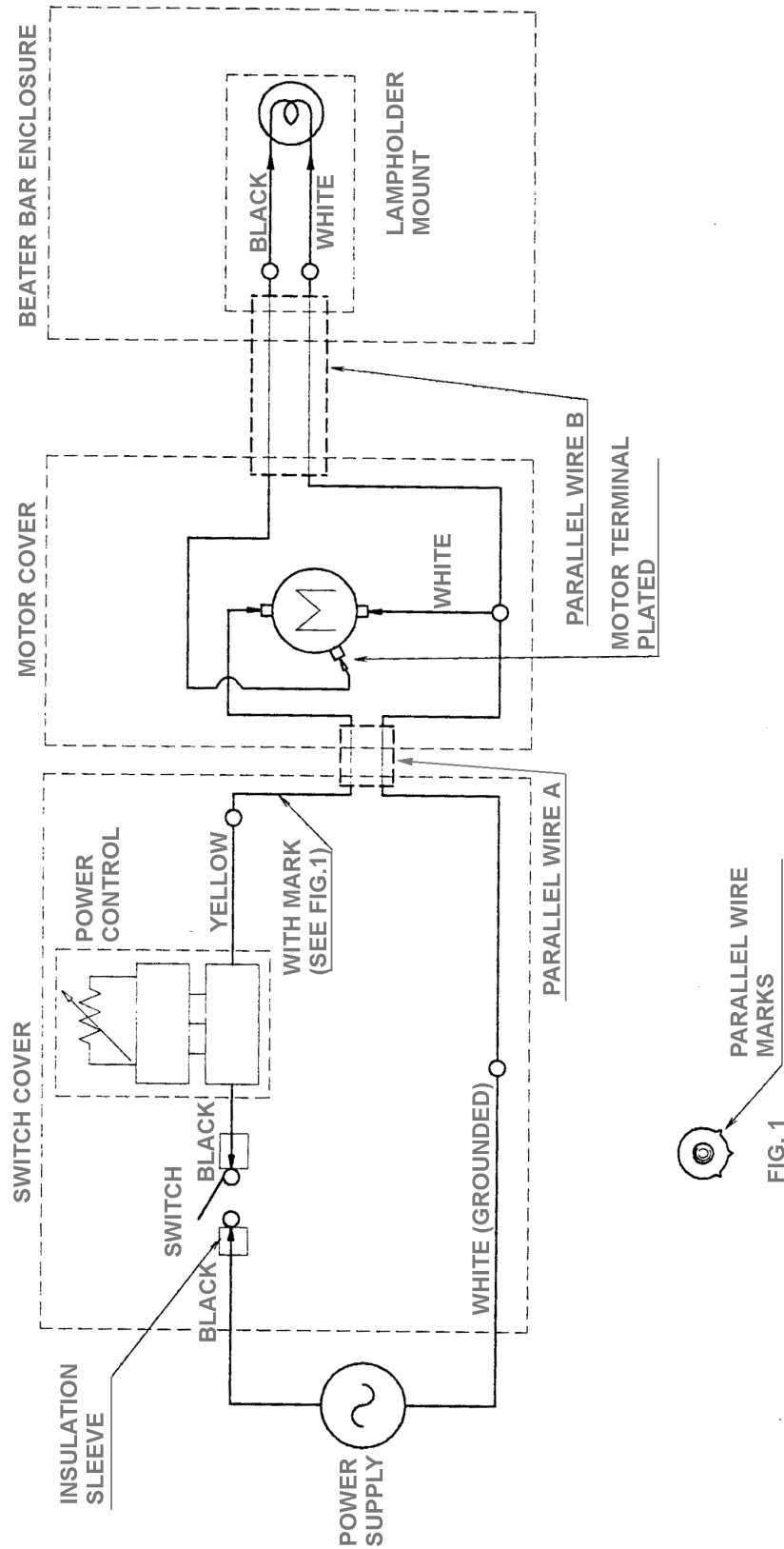


CONDITION	CHECK POINT	METHOD OF INSPECTION	CAUSE/REMEDY
Motor fails to operate (no noise is heard at all).	Power cord	Check power cord continuity.	If there is no continuity, replace it.
	Motor continuity	Check continuity of motor and lead wires.	
	Carbon brush not contacting the commutator	Check if there is gap between carbon brush and commutator.	If there is gap between carbon brush and commutator, replace both carbon brushes.
	ON / OFF Switch	Check continuity across the switch terminals.	If there is no continuity, replace the switch.
	Power control	Short-circuit yellow and black lead wires from the power control and connect the vacuum cleaner.	If the motor works, replace the power control.
	Thermal fuse	Check thermal fuse continuity.	If there is no continuity, replace it.
Motor runs but no suction	Hose or suction pipe	Check for clog in hose or suction pipe.	If there is a clog, remove it.
	Dust bag or central filter	Check if dust bag or central filter is clogged or full.	If the paper bag is full, replace it. If central filter is dirty clean or replace it
Noise or vibration	Motor fan	Check for dust accumulated in motor fan (It could happen if the vacuum has been used with a broken dust bag or without a filter).	In this case, replace the motor and check filter condition (never dismantle the motor fan).
	Carbon brushes	Check for uneven wear of carbon brushes.	Replace carbon brushes (be sure to change both).
	Rotary brush (bearing support A-B).	Remove the rotary brush assembly and check if bearing support A-B is broken or deformed.	If bearing support A or B is defective, replace it.
	Rotary brush (bearings)	Place the rotary brush assembly on a flat surface and turn the rotary brush to check for bearing noise or clearance.	If there is bearing noise or clearance, replace the rotary brush assembly.
Rotary brush does not turn	Belt	Remove the base plate and check if the belt is broken or loose.	If the belt is broken, replace it. If loose, re-install it.
	Beater bar selector	Remove the base plate and check if the lever selector changes position.	If the lever selector does not change position, replace it.
Rotary brush does not stop.	Pulleys	Remove base plate and check if the two pulleys are blocked or out of position.	If the two pulleys are blocked, replace the rotary brush assemble.
	Beater bar selector	Remove the base plate and check if the lever selector changes position.	If the lever selector does not change position, replace it.

SCHEMATIC DIAGRAM - MODEL S171i

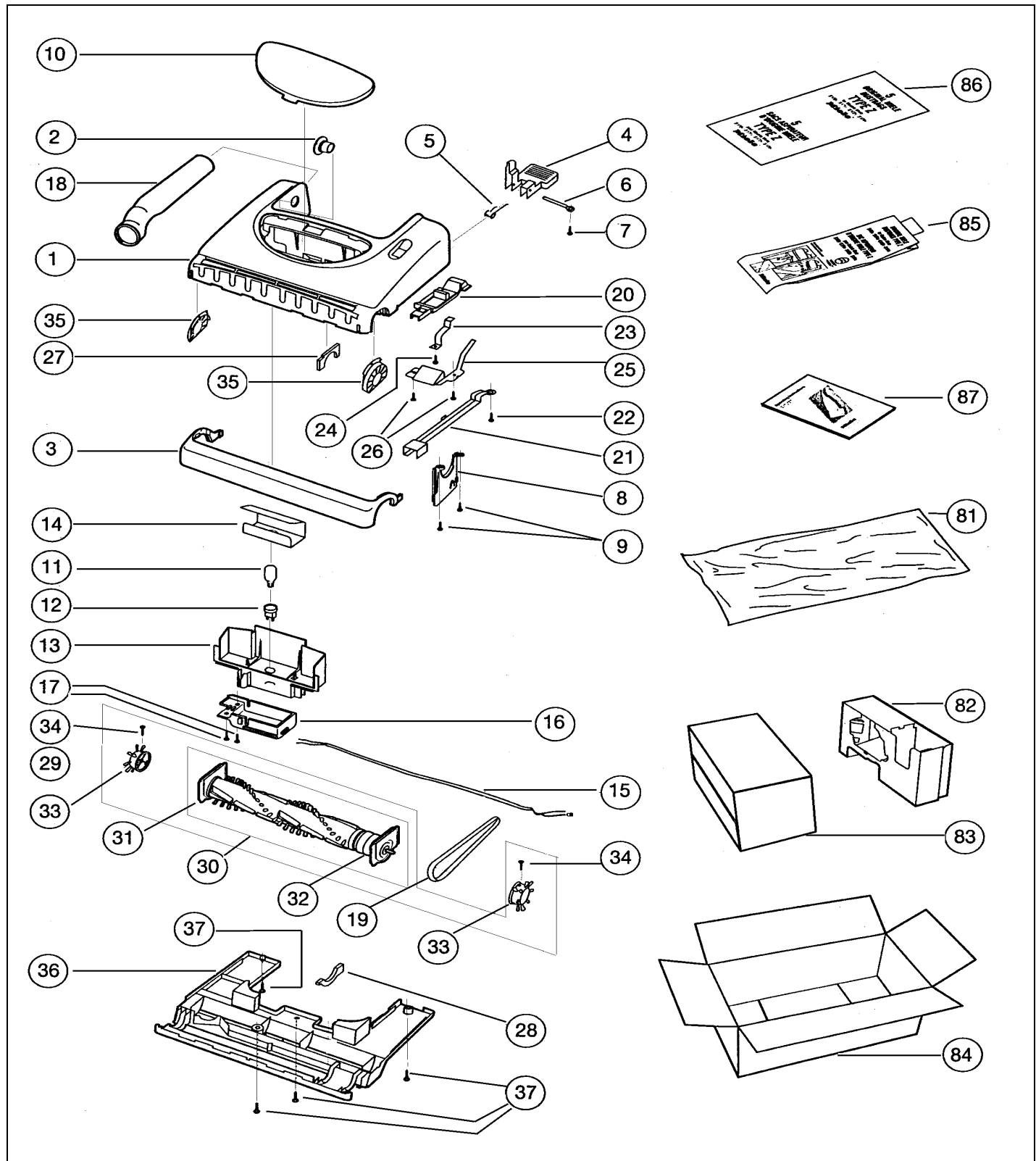


SCHEMATIC DIAGRAM OF MODEL S172 i

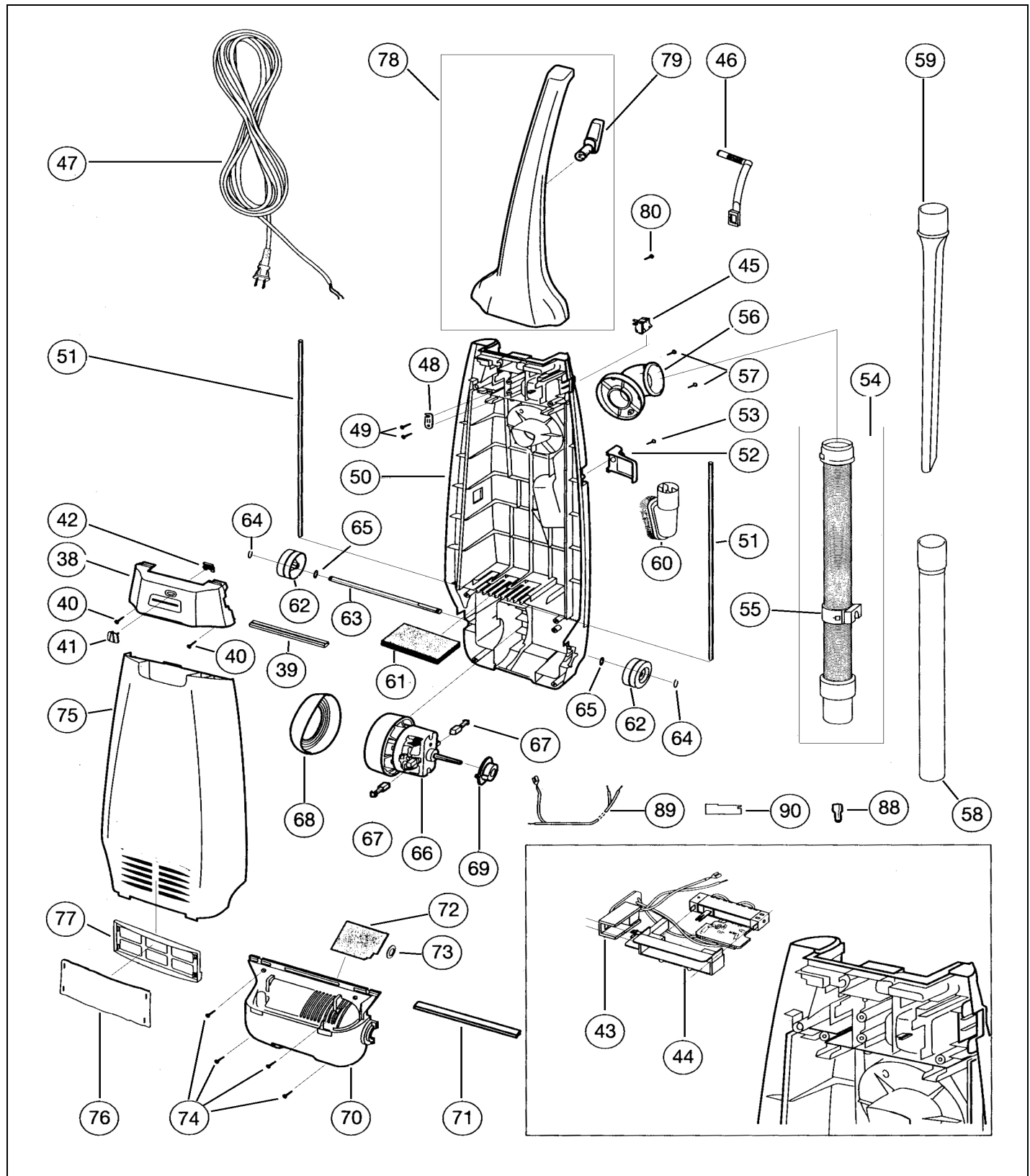


# PARTS LIST

## EXPLODED VIEW



## EXPLODED VIEW



REF.	DESCRIPTION	PART. No.	Pcs		REMARKS
1	Floor nozzle cover	A28G8073	1		
	Floor nozzle cover	A28G90A3	1		
2	Plastic shaft	C2791 000	1		Common with S170i/S174i
3	Floor nozzle bumper	A33G1034	1		
4	Floor nozzle pedal	A2991 034	1		Common with S170i
5	Pedal spring	A4791 000	1		Common with S170i/S174i
6	Pedal shaft	A3091 000	1		Common with S170i/S174i
7	Tapping screw	XTN4+188	1		
8	Frame	A43G1073	1		
	Frame	A43G10A3	1		
9	Tapping screw	XTN4+18B	2		
10	Lens cover	11 4G 1073	1		
	Lens cover	11 4G 1001	1		
11	Lamp	D25B6100	1		
12	Lamp holder	D26G2000	1		
13	Lamp holder base	D28G9063	1		
14	Reflector	D27G2000	1		
15	Parallel lead wire B	D31G9000	1		
16	Connector cover	D29G9063	1		
17	Tapping screw	XTN4+18B	2		
18	Suction pipe	H02G1034	1		
19	Belt (pack 2/pcs.)	SO1 B41 00	1		New part no. for models S170i/S171i/S172i/S174i
20	Button selector	R31G1034	1		
21	Lever selector	R23G1000	1		
22	Fixing screw	C08G1000	1		
23	Spring button selector	R33G1100	1		
24	Tapping screw	XTN4+128	1		
25	Fixing button selector	R48G1000	1		
26	Tapping screw	XTN4+12B	2		
27	Rotary felt A	R42B1 000	1		Common with S170i/S174i
28	Rotary felt B	R43B11 00	1		Common with S170i/S174i
29	Rotary brush assembly	R98G1064	1		
30	Rotary brush	R88G1064	1		
31	Bearing support A	R12G1064	1		
32	Bearing support B	R13G1061	1		
33	Side brush B	R91G1061			
34	Tapping screw	XSN3+16E	2		
35	Side brush protector	R45B1134	2		Common with S174i
36	Base plate assembly	AZ3G8034	1		
37	Tapping screw	XTN4+18B	4		
38	Switch cover	T37G8073	1		
	Switch cover	T37G90A3	1		
39	Switch cover package	C24G1034	1		
40	Tapping screw	XTN4+18B	2		
41	Potentiometer button	E1 7G1034	1		
42	Button supplement	E21 92032	1		
43	Power control assembly	E91G9000	1		
44	Potentiometer support	E59G9063	1		
45	Main switch WK873A5	E01B0000	1		Common with S170i



46	Bag check indicator	I99G1000	1		
47	Power cord SVTAWG18	E97B0500	1		
48	Cord stopper	PI 6921 00	1		Common with S170i
49	Fixing screw	C08G1000	2		
50	Lower body assembly	C99G1273	1		
	Lower body assembly	C99G12A3	1		
51	Dust seal	T0491 034	2		Common with S170i
52	Extension wand support	C25G1034	1		
53	Tapping screw	XTN4+128	1		
54	Detachable hose	AZOB7034	1		
55	Hose support	C26B1134	1		
56	Suction inlet	T11 G1034	1		
57	Tapping screw	XTN4+12B	2		
58	Extension wand	A1291 034	1		Common with S170i / S174i
59	Crevice nozzle	A1391 034	1		Common with S170i / S174i
60	Dusting brush	A97G1034	1		
61	Central filter	F03911 00	1		Common with S170i / S174i
62	Wheel	R0191 034	2		Common with S170i / S174i
63	Wheel shaft	A55G1100	1		
64	Fixing washer	XUB70001	2		Common with S170i / S174i
65	Plain washer	XWG7000J	2		Common with S170i / S174i
66	Motor SDS-801M	1S801 MOO	1		Common with S170i
	Motor SDS-801 MT	1 S801 MTO	1		
67	Carbon brush	1 30C9801	2		Common with S170i / S174i
68	Front motor support	E0891 000	1		Common with S170i / S174i
69	Rear motor support	ED9B1000	1		Common with S170i / S174i
70	Upper body	C01G1173	1		
	Upper body	COIG11A3	1		
71	Upper body seal	C0991 034	1		Common with S170i
72	Rear filter	T0991 300	1		Common with S170i / S174i
73	Fixing washer	XUZ0300J	1		
74	Tapping screw	XTN4+18B	4		
75	Dust cover	T01G8073	1		
	Dust cover	T01G90A3	1		
76	Electrostatic filter (pack 3/pcs.)	S02B0000	1		New part no. For models S170i/S171i/S172i
77	Electrostatic filter support	F1891034	1		Common with S170i
78	Handle unit	H99G1073	1		
	Handle unit	H99G10A3	1		
79	Hook A	H0791 073	1		
	Hook A	H0791 OA3	1		
80	Handle screw	H10B1000	1		Common with S174i
81	Set cover	Z05G1100	1		Common with S170i/S174i
82	Cushion A	Z02G1000	1		
83	Cushion B	Z03G1000	1		
84	Carton box	ZOI G8000	1		
	Carton box	Z01G9000	1		
85	Paper bag / Type Z	F01B0100	1		
86	Paper bag pack / Type Z	F96B01 00	2		New part no. for models S170i/S171i/S172i/S174i
87	Operating manual	Z07G8090	1		

88	Cable connector	E0671 000			
89	Parallel lead wire A	D30G8000	1		
	Parallel lead wire A	D30G9000	1		
90	Insulating sleeve	1-480435-0	2		For main switch terminals

