Ref.: Z32T1000

Service Manual

Vacuum Cleaner

MODELS MC-E780 / MC-E781 / MC-E783

SPECIFICATIONS

	MC-E780	MC-E781	MC-E783	
Power source	AC230V AC230-240V 50Hz	AC230V AC230-240V 50Hz	AC230V AC230-240V 50Hz	Depending on version
Input power (max.)	1500W	1500W	1500W	
Vacuum	30 kPa	30 kPa	30 kPa	
Power cord length	5 m	5 m	5 m	
Radio of operation	7.8 m	7.8 m	7.8 m	
Net weight	6.1 kg	6.1 kg	6.1 kg	
Dimensions (LxWxH) mm	410x282x255	410x282x255	410x282x255	
Attachments:				
Floor nozzle	•	•	•	
Extension tube	•	•	•	
Dusting brush	•	•	•	
Crevice nozzle	•	•	•	

Specifications are subject to change without notice for further improvement.

Panasonic

Matsushita Electric España, S.A.
DIVISION DE ASPIRADORAS
Zona Industrial del Polígono de CELRÀ
17460 CELRÀ (Girona) SPAIN

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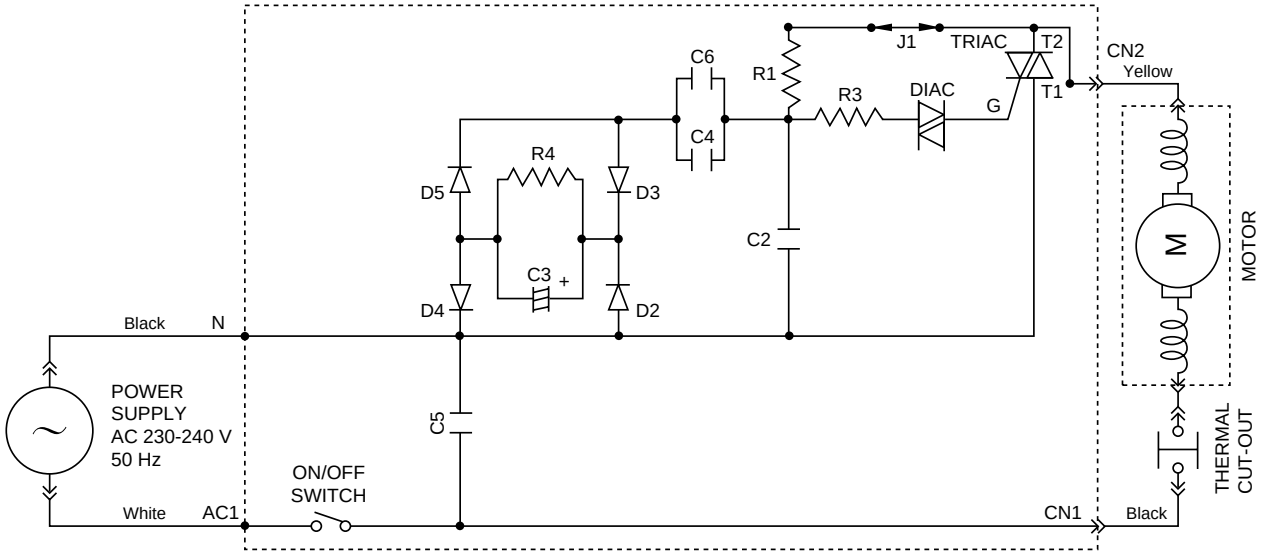
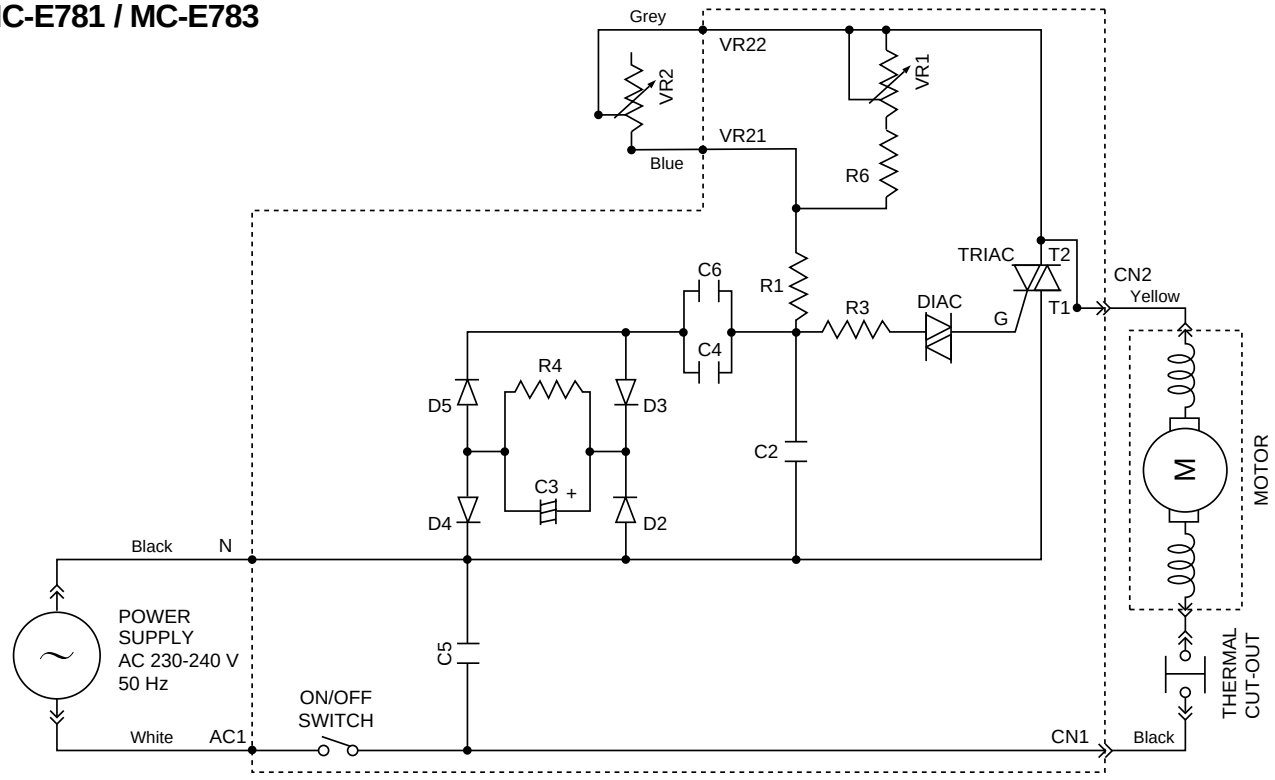
MC-E780

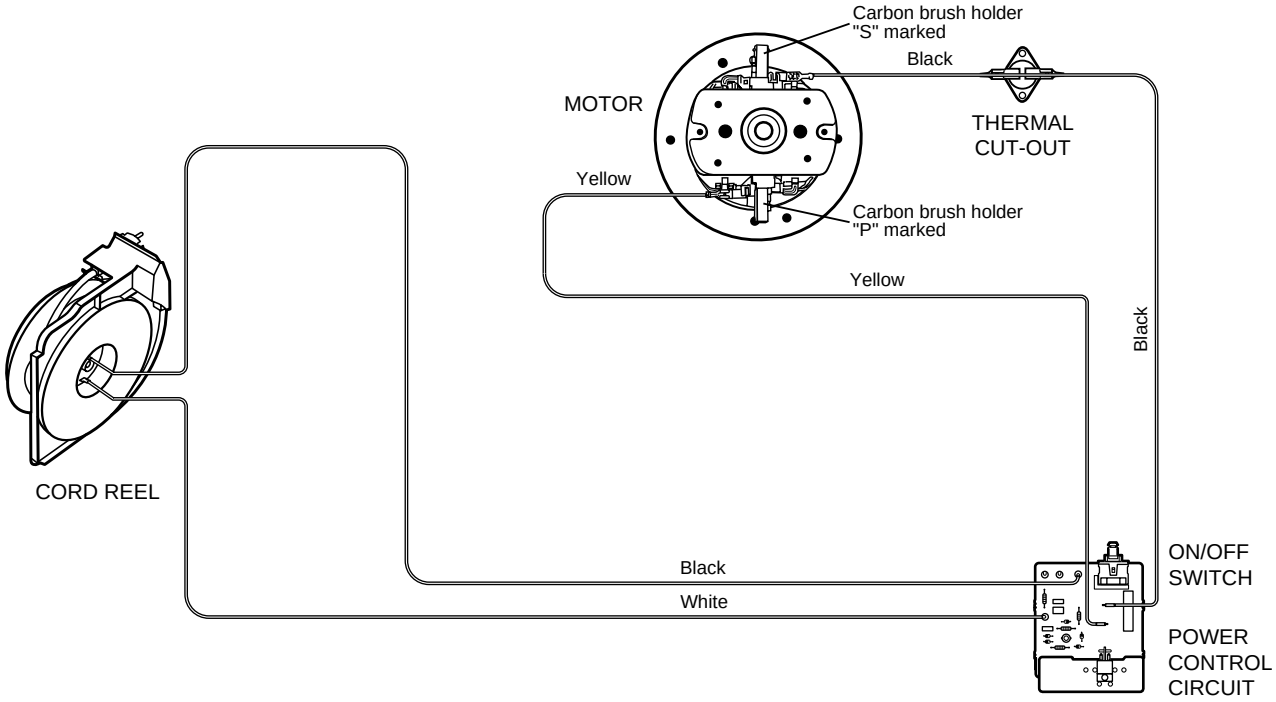


MC-E781 / MC-E783

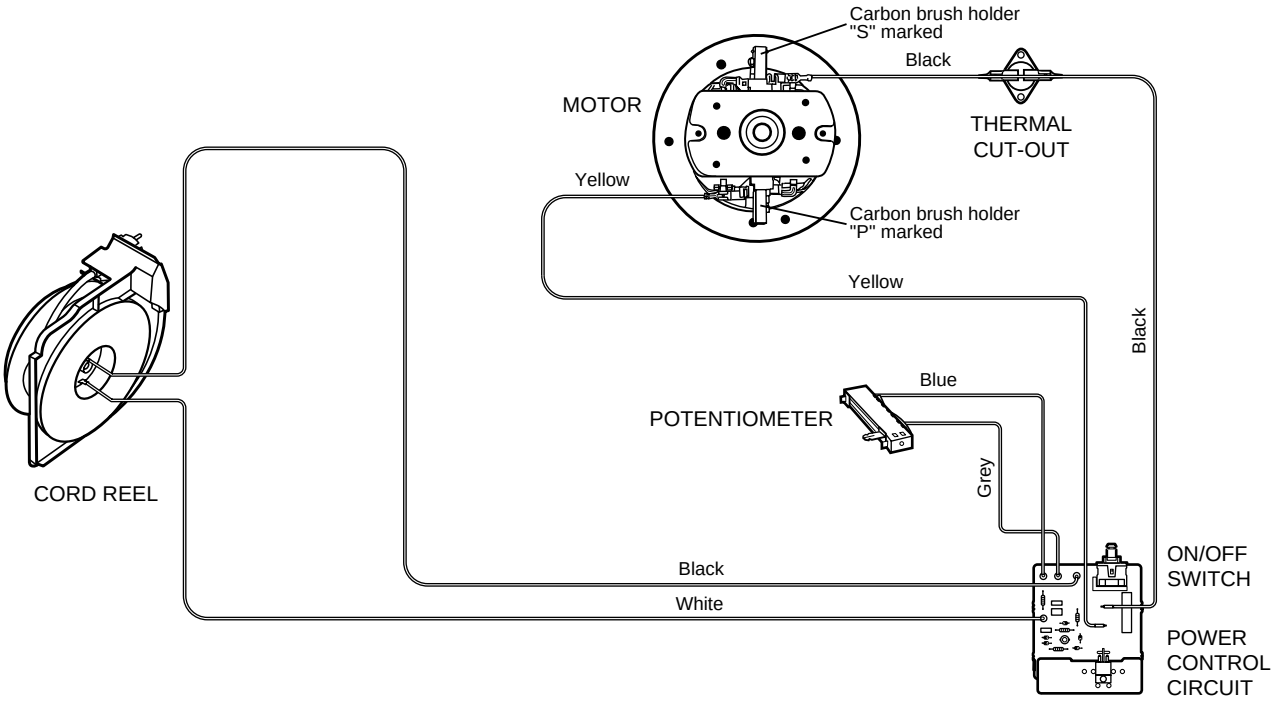


■ PICTORIAL WIRING DIAGRAM

MC-E780



MC-E781 / MC-E783



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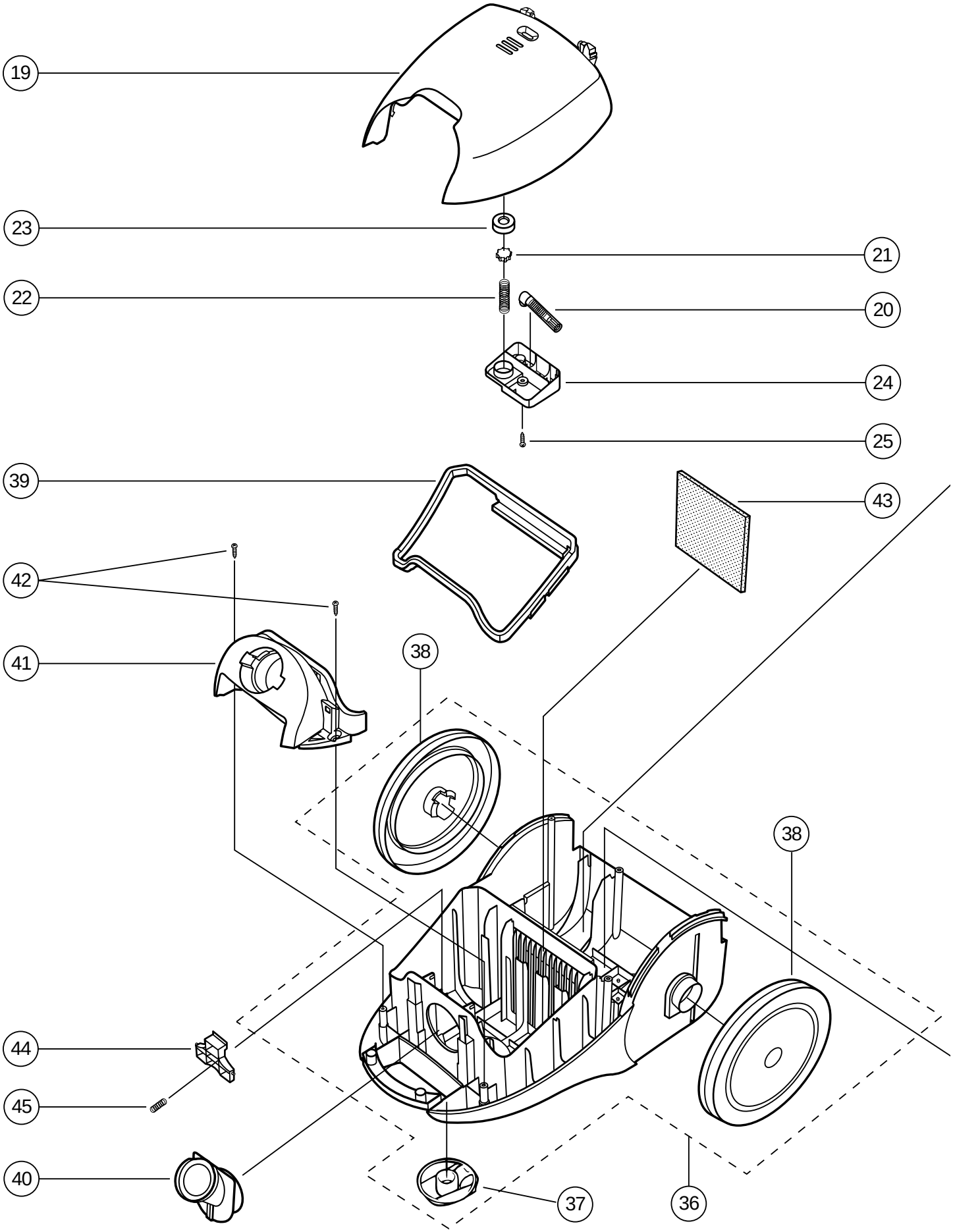

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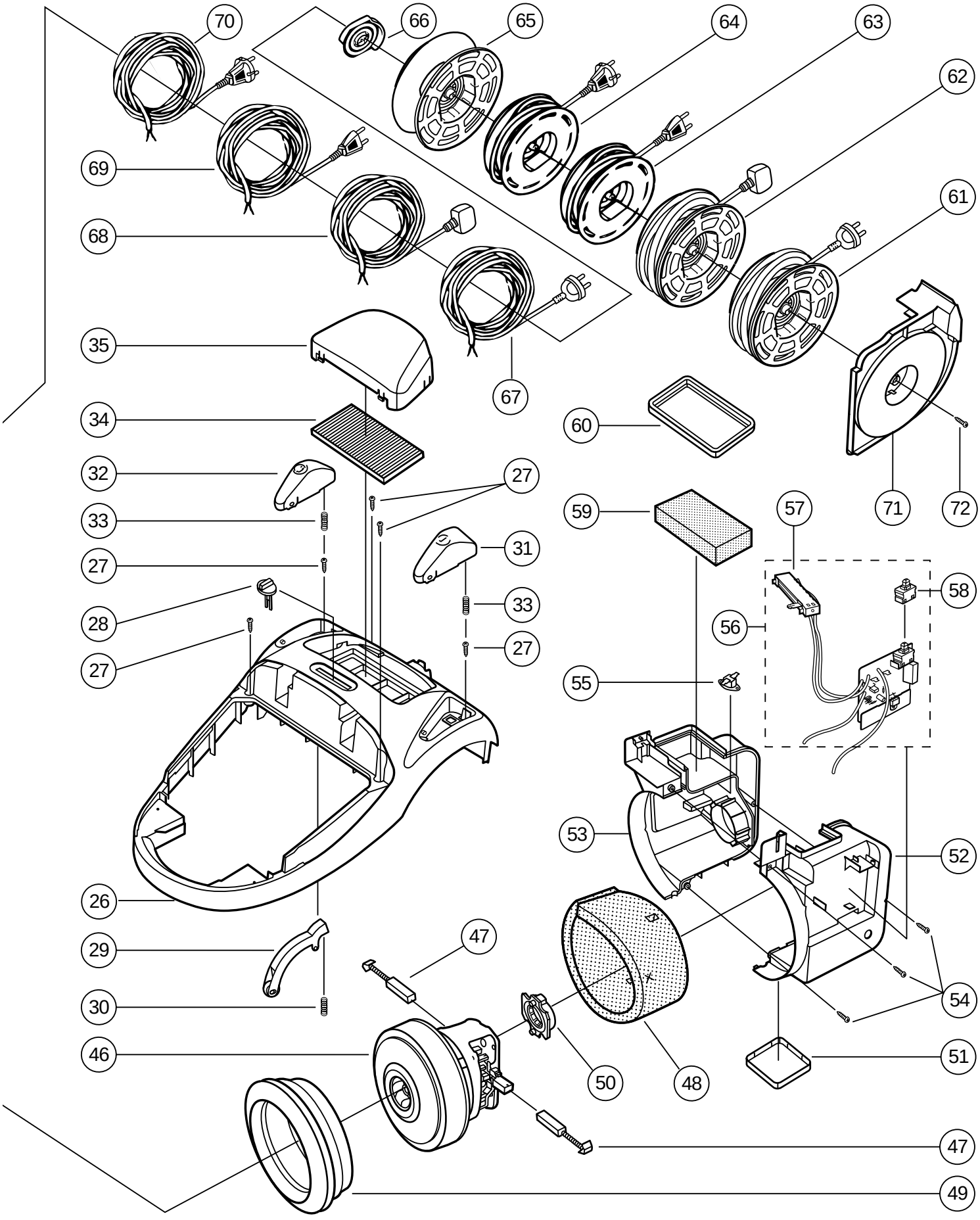

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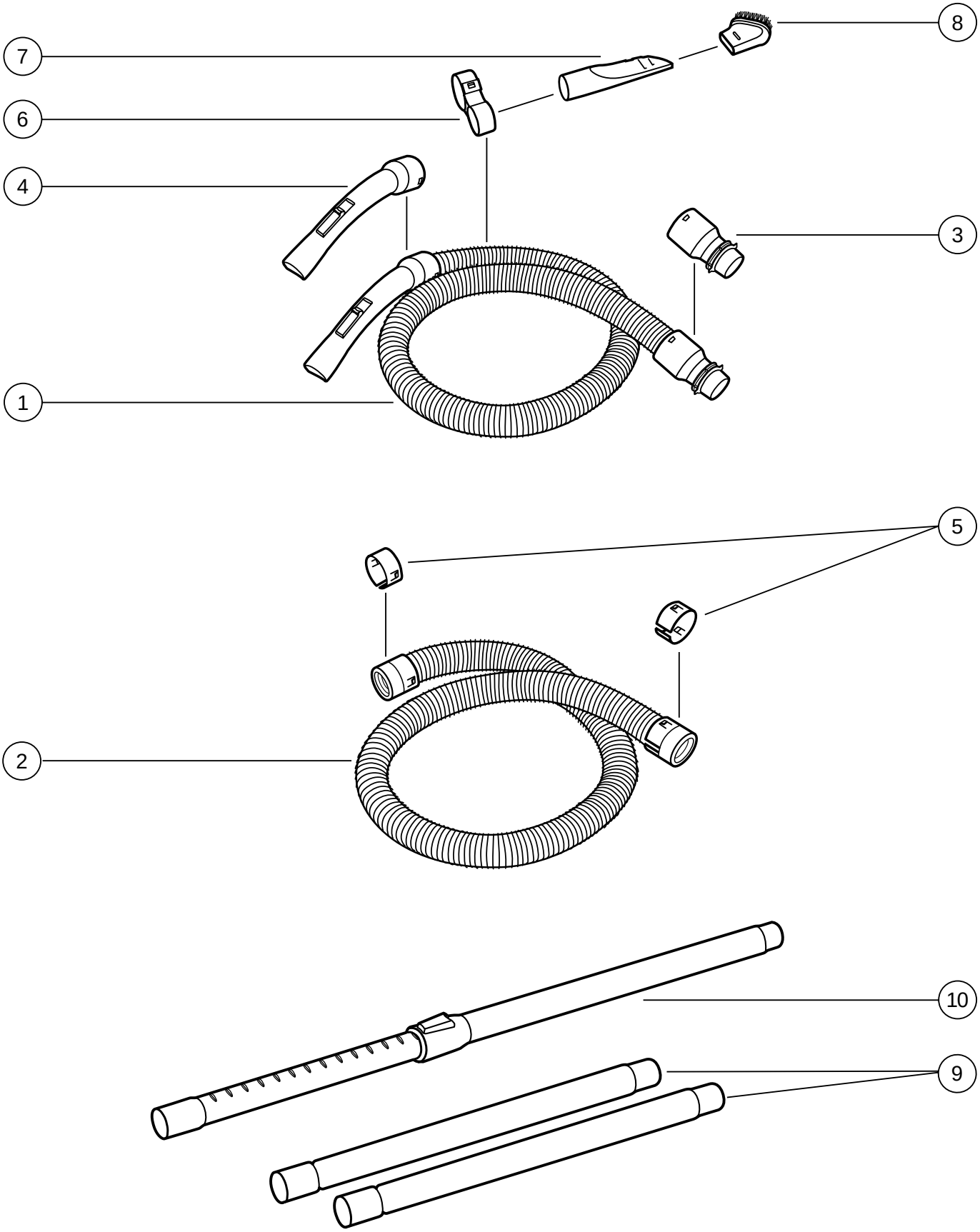

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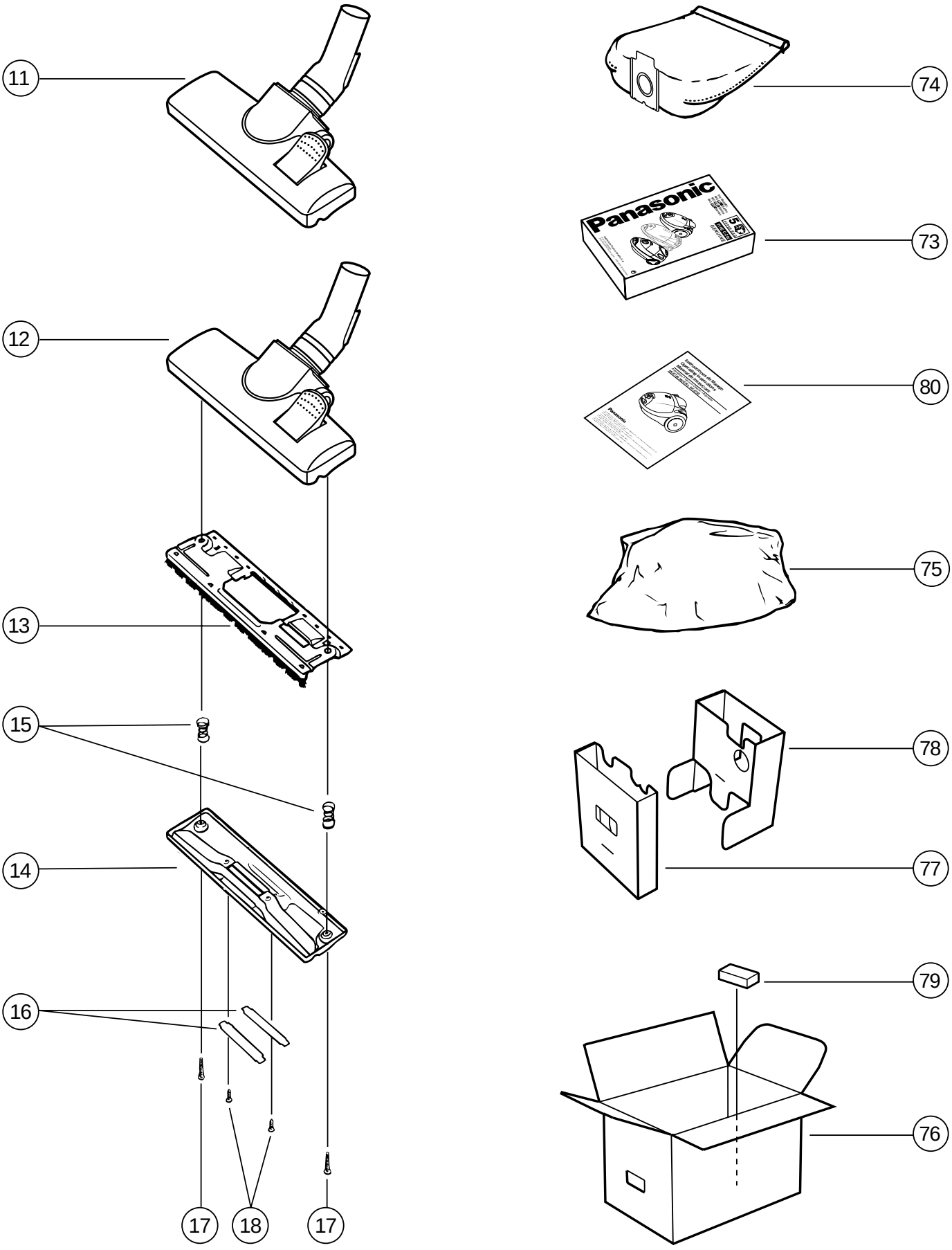

■ SPARE PARTS LIST

REF. No.	DESCRIPTION	PART No.	Pcs/Set	MC-E780	MC-E781	MC-E783	Applied for all countries (✓)	REMARKS
1	HOSE UNIT	AMC8A92T1034	1	•	•	•	✓	
2	HOSE	AMC8A01K0034	1	•	•	•	✓	
3	HOSE CONNECTING TUBE	AMC8A0281034	1	•	•	•	✓	
4	CURVED TUBE UNIT	AMC8A94P1034	1	•	•	•	✓	
5	HOSE HOLDER	AMC8A1125034	2	•	•	•	✓	
6	ACCESSORY SUPPORT	AMC8A73T1034	1	•	•	•	✓	
7	CREVICE NOZZLE	AMC8A13P1034	1	•	•	•	✓	
8	DUSTING BRUSH	AMC8A97P1034	1	•	•	•	✓	
9	EXTENSION WAND (METALLIC)	AMC8A12P1000	2	•	•		✓	
10	TELESCOPIC WAND	AMC8A85P3100	1			•	✓	
11	FLOOR NOZZLE	AMC8A99T1034	1	•	•	•	✓	
12	FLOOR NOZZLE COVER	AMC8A90T1034	1	•	•	•	✓	
13	FLOOR NOZZLE BRUSH	AMC8A89D1000	1	•	•	•	✓	
14	FLOOR NOZZLE BASE PLATE	AMC8A39D1000	1	•	•	•	✓	
15	FLOOR NOZZLE SPRING	AMC8A36D1000	2	•	•	•	✓	
16	FLOOR NOZZLE LINEN RETAKE	AMC8A41D1000	2	•	•	•	✓	
17	FLOOR NOZZLE SCREW	XTN35+25BFY	2	•	•	•	✓	
18	FLOOR NOZZLE SCREW	XTN35+14BFY	2	•	•	•	✓	
19	DUST COVER (GREEN COLOUR)	AMC8T01T00E1	1	•			✓	
	DUST COVER (BLUE COLOUR)	AMC8T01T00Z4	1	•			✓	
	DUST COVER (YELLOW COLOUR)	AMC8T01T1093	1		•		✓	
	DUST COVER (GREEN COLOUR)	AMC8T01T10E1	1		•		✓	
	DUST COVER (BLUE COLOUR)	AMC8T01T10Z4	1		•		✓	
	DUST COVER (BLACK COLOUR)	AMC8T01T3061	1			•	✓	
20	DUST INDICATOR	AMC8I99T1000	1	•	•	•	✓	
21	VALVE	AMC8I07A1000	1	•	•	•	✓	
22	VALVE SPRING	AMC8I09T1000	1	•	•	•	✓	
23	VALVE SUPPORT	AMC8I22E1061	1	•	•	•	✓	
24	INDICATOR COVER	AMC8I17T1039	1	•	•	•	✓	
25	TAPPING SCREW	XTN4+18B	1	•	•	•	✓	
26	UPPER BODY (GREEN COLOUR)	AMC8C01T00E1	1	•			✓	
	UPPER BODY (BLUE COLOUR)	AMC8C01T00Z4	1	•			✓	
	UPPER BODY (YELLOW COLOUR)	AMC8C01T1093	1		•		✓	
	UPPER BODY (GREEN COLOUR)	AMC8C01T10E1	1		•		✓	
	UPPER BODY (BLUE COLOUR)	AMC8C01T10Z4	1		•		✓	
	UPPER BODY (BLACK COLOUR)	AMC8C01T1061	1			•	✓	
27	TAPPING SCREW	XTN4+18B	5	•	•	•	✓	
28	POTENTIOMETER BUTTON (ORANGE COLOUR)	AMC8E17T10B0	1		•		✓	
	POTENTIOMETER BUTTON (GREY COLOUR)	AMC8E17T1039	1		•	•	✓	
29	BRAKE LEVER UNIT	AMC8P96T1000	1	•	•	•	✓	
30	BRAKE SPRING	AMC8P2201000	1	•	•	•	✓	
31	SWITCH PEDAL (ORANGE COLOUR)	AMC8T14T10B0	1	•	•		✓	
	SWITCH PEDAL (GREY COLOUR)	AMC8T14T1039	1		•	•	✓	
32	CORD REEL PEDAL (ORANGE COLOUR)	AMC8T13T10B0	1	•	•		✓	
	CORD REEL PEDAL (GREY COLOUR)	AMC8T13T1039	1		•	•	✓	
33	SPRING	AMC8P2201000	2	•	•	•	✓	
34	ELECTROSTATIC CLEAN AIR FILTER	AMC8F28T1000	1	•	•		✓	
	ELECTROSTATIC S-CLASS FILTER	AMC8F28T3000	1			•	✓	

■ SPARE PARTS LIST

REF. No.	DESCRIPTION	PART No.	Pcs/Set	MC-E780	MC-E781	MC-E783	Applied for all countries (✓)	REMARKS
35	EXHAUST COVER (GREEN COLOUR)	AMC8T07T10E1	1	•	•		✓	
	EXHAUST COVER (BLUE COLOUR)	AMC8T07T10Z4	1	•	•		✓	
	EXHAUST COVER (YELLOW COLOUR)	AMC8T07T1093	1		•		✓	
	EXHAUST COVER (BLAK COLOUR)	AMC8T07T3061	1			•	✓	
36	LOWER BODY UNIT	AMC8C99T0039	1	•			✓	
	LOWER BODY UNIT	AMC8C99T1039	1		•	•	✓	
37	CASTER	AMC8R99D1034	1	•	•	•	✓	
38	WHEEL	AMC8R01T1039	2	•	•	•	✓	
39	DUST COVER SEAL	AMC8T04T1034	1	•	•	•	✓	
40	SUCTION PACKING	AMC8T12T1000	1	•	•	•	✓	
41	FRONT COVER (GREEN COLOUR)	AMC8T11T10E1	1	•	•		✓	
	FRONT COVER (YELLOW COLOUR)	AMC8T11T1093	1		•		✓	
	FRONT COVER (BLUE COLOUR)	AMC8T11T10Z4	1	•	•		✓	
	FRONT COVER (BLACK COLOUR)	AMC8T11T1061	1			•	✓	
42	TAPPING SCREW	XTN4+18B	2	•	•	•	✓	
43	CENTRAL FILTER	AMC8F03D1100	1	•	•	•	✓	
44	PAPER BAG CLAMP	AMC8F02E1134	1	•	•	•	✓	
45	PAPER BAG CLAMP SPRING	AMC8F30E1000	1	•	•	•	✓	
46	MOTOR SDS-1504P / AC230V	AMC81SF04P00	1	•	•	•	✓	
	MOTOR SDS-1503P / AC230-240V	AMC81SF03P00	1	•	•	•	✓	Only to UK, Australia, N. Zealand.
47	CARBON BRUSH	AMC8201C9801	2	•	•	•	✓	
48	NOISE SUPPRESSOR	AMC8E11K1000	1	•	•	•	✓	
49	FRONT MOTOR SUPPORT	AMC8E08T1000	1	•	•	•	✓	
50	REAR MOTOR SUPPORT	AMC8E09T0000	1	•	•	•	✓	
51	CENTRAL MOTOR SUPPORT	AMC8E13L1000	1		•	•	✓	
52	MOTOR COVER A	AMC8D55T1000	1	•	•	•	✓	
53	MOTOR COVER B	AMC8D56T1000	1	•	•	•	✓	
54	TAPPING SCREW	XTN4+18B	3	•	•	•	✓	
55	THERMAL CUT-OUT	AMC8E1401200	1	•	•	•	✓	
56	POWER CONTROL CIRCUIT	AMC8E91T0000	1	•			✓	
	POWER CONTROL CIRCUIT	AMC8E91T3000	1		•	•	✓	
57	SLIDING POTENTIOMETER	AMC8E1693000	1		•	•	✓	
58	ON/OFF SWITCH	AMC8E01P1000	1	•	•	•	✓	
59	REAR FILTER	AMC8F31T1000	1	•	•	•	✓	
60	EXHAUST SUPPRESOR	AMC8T10T1000	1		•	•	✓	
61	CORD REEL UNIT	AMC8PZ3P6000	1	•	•	•		Applied to Australia and N.Zealand.
62	CORD REEL UNIT	AMC8PZ1P6000	1	•	•	•		Applied to UK and Ireland.
63	CORD REEL UNIT	AMC8P88P6000	1	•	•	•		Applied to Italy, Switzerland and Portugal.
64	CORD REEL UNIT	AMC8P97P6000	1	•	•	•		Applied to East Europen countries & West countries, except above.
65	CORD REEL	AMC8P90P1000	1	•	•	•	✓	
66	RAIL BASE UNIT	AMC8P93L1000	1	•	•	•	✓	
67	POWER SUPPLY CORD	AMC8EZ3L0061	1	•	•	•		Applied to Australia and N.Zealand.
68	POWER SUPPLY CORD	AMC8EZ1L0061	1	•	•	•		Applied to UK and Ireland.
69	POWER SUPPLY CORD	AMC8E98L0061	1	•	•	•		Applied to Italy, Switzerland and Portugal.
70	POWER SUPPLY CORD	AMC8E97L0061	1	•	•	•		Applied to East Europen countries & West countries, except above.

■ SPARE PARTS LIST

REF. No.	DESCRIPTION	PART No.	Pcs/Set	MC-E780	MC-E781	MC-E783	Applied for all countries (✓)	REMARKS
71	CORD REEL SUPPORT UNIT	AMC8P91T1000	1	•	•	•	✓	
72	TAPPING SCREW (CORD REEL)	XTT4*16C	1	•	•	•	✓	Needed a screwdriver type TORK T20 H
73	DUST PAPER BAG (PACK OF 5/PC.)	AMC8F96T1000	1	•	•	•	✓	Detachable type C-20E
74	CLOTH DUST BAG (RE-USABLE)	AMC8F99T1000	-	•	•	•	✓	Optional
75	SET COVER	AMC8Z05P1000	1	•	•	•	✓	
76	CARTON BOX	AMC8Z01T0000	1	•			✓	
	CARTON BOX	AMC8Z01T1000	1		•		✓	
	CARTON BOX	AMC8Z01T3000	1			•	✓	
77	CUSHION A	AMC8Z02T1000	1	•	•	•	✓	
78	CUSHION B	AMC8Z03T1000	1	•	•	•	✓	
79	CUSHION SUPPLEMENT	AMC8Z09J2000	1	•	•	•	✓	
80	OPERATING INSTRUCTIONS	AMC8Z07T1010	1	•	•	•	Depend on language	Spanish, English, Portuguese, Italian, Finish and Greek
	OPERATING INSTRUCTIONS	AMC8Z07T1070	1	•	•	•	Depend on language	German, Dutch, French, Swedish, Norwegian and Danish.
	OPERATING INSTRUCTIONS	AMC8Z07T1020	1	•	•	•	Depend on language	Russian

■ REPLACEMENT OF MAIN PARTS

IMPORTANT: Before replacing any part always DISCONNECT THE CLEANER FROM THE ELECTRICITY SUPPLY.

- **MOTOR / CARBON BRUSHES**

(1) Motor

1. To remove the dust cover first pull it out from one side and then rotate it up wards to take it out. (Fig.1)

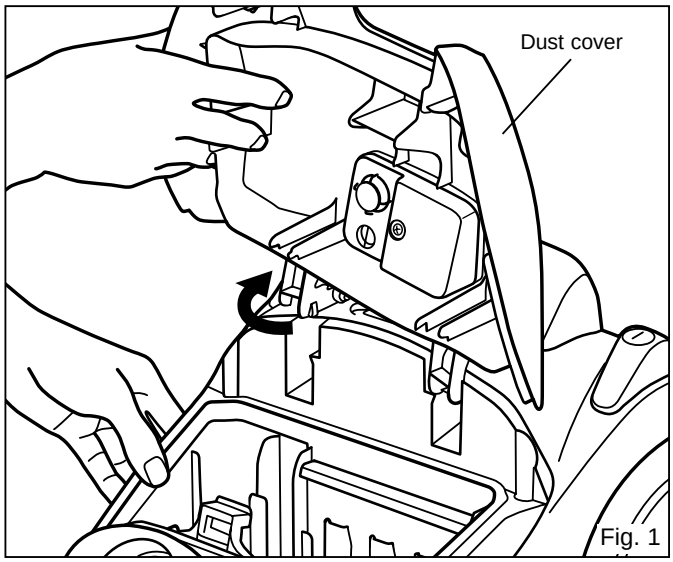

Fig. 1

2. Remove cord reel and switch pedal prying out as indicated with a flat-head screwdriver. (Fig. 2)
   NOTE: When prying out take care not to damage the body.

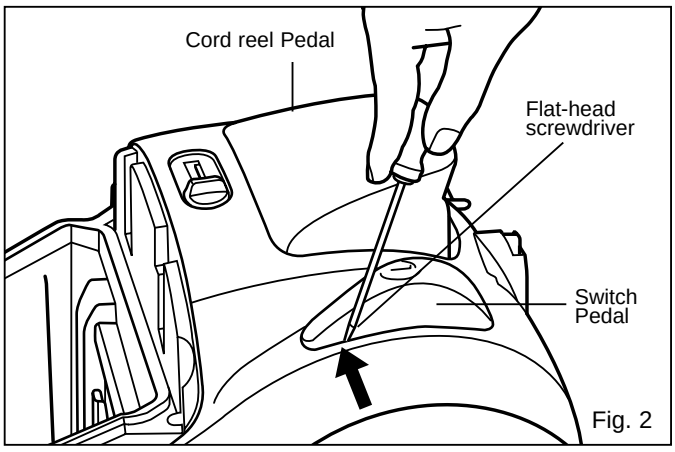

Fig. 2

REPLACEMENT OF MAIN PARTS

3. Remove 7 screws from upper body and take out front cover and upper body. (Fig. 3)

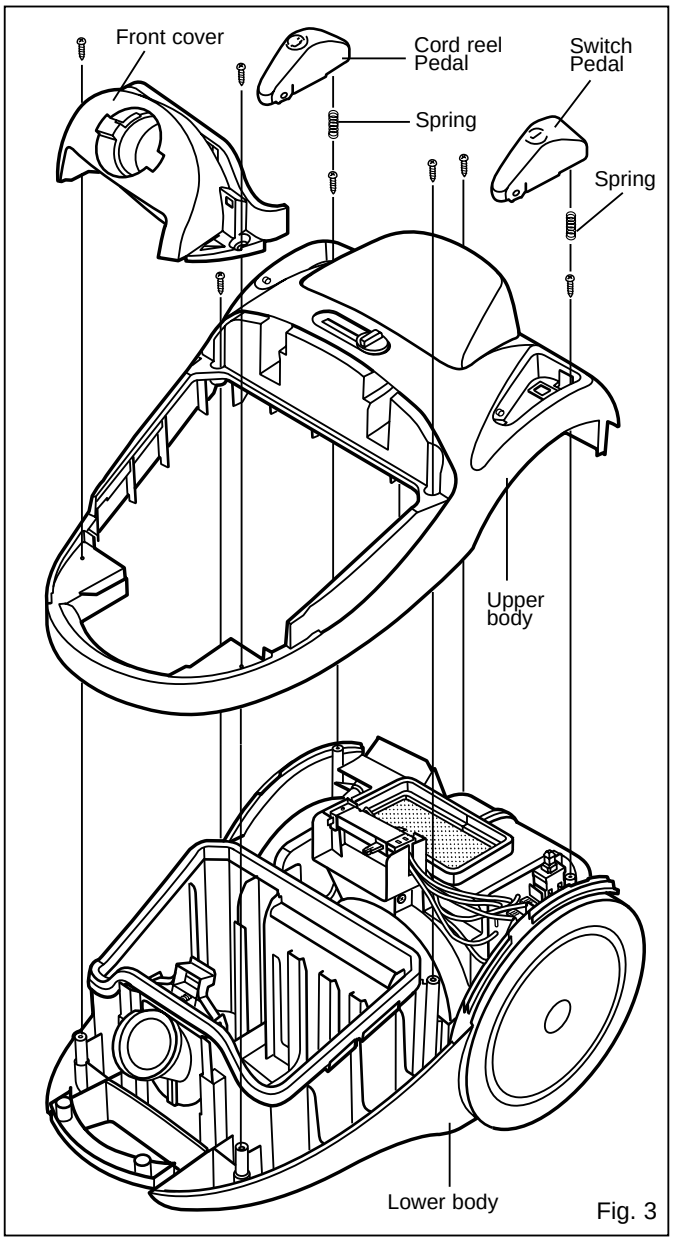

Fig. 3

4. Take out cord reel ass'y and remove black and white lead wires (provided with quick-connect terminal) from the contact spring tabs. (Fig. 4)

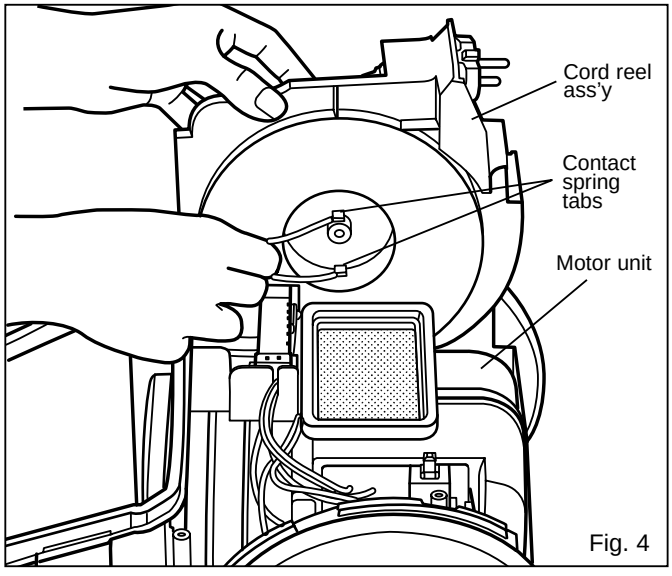

Fig. 4

■ REMPLACEMENT OF MAIN PARTS

5. Take out motor unit and remove sliding potentiometer, exhaust suppressor, rear filter and central motor support. Then disconnect yellow and black lead wires (provided with quick-connect terminal) from the power control circuit tabs. (Fig. 5)

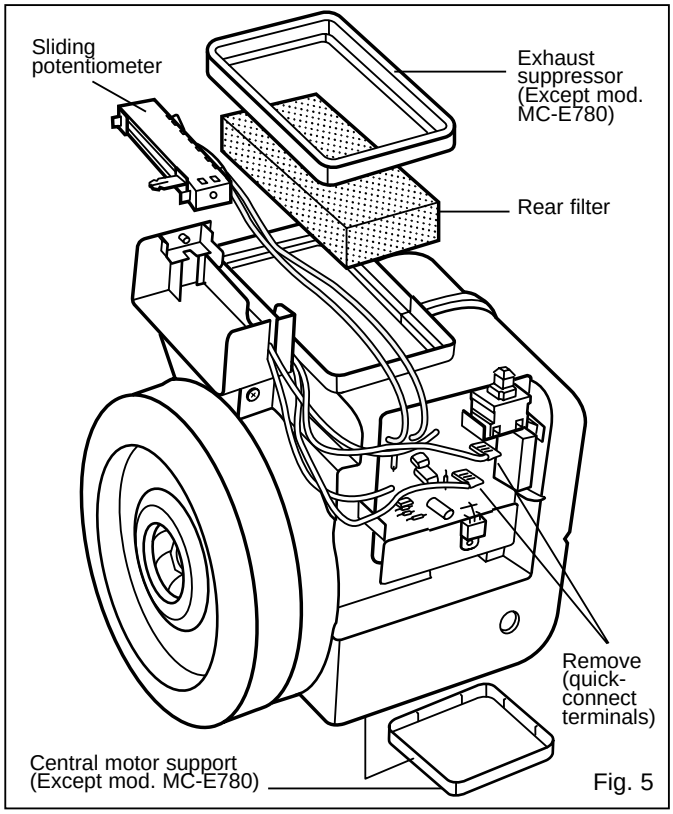

Fig. 5

6. Remove 3 screws from motor cover and separate cover A and B. (Fig. 6)
7. Remove noise suppressor and disconnect yellow and black lead wires (provided with quick-connect terminals) from the carbon brush holder tabs.

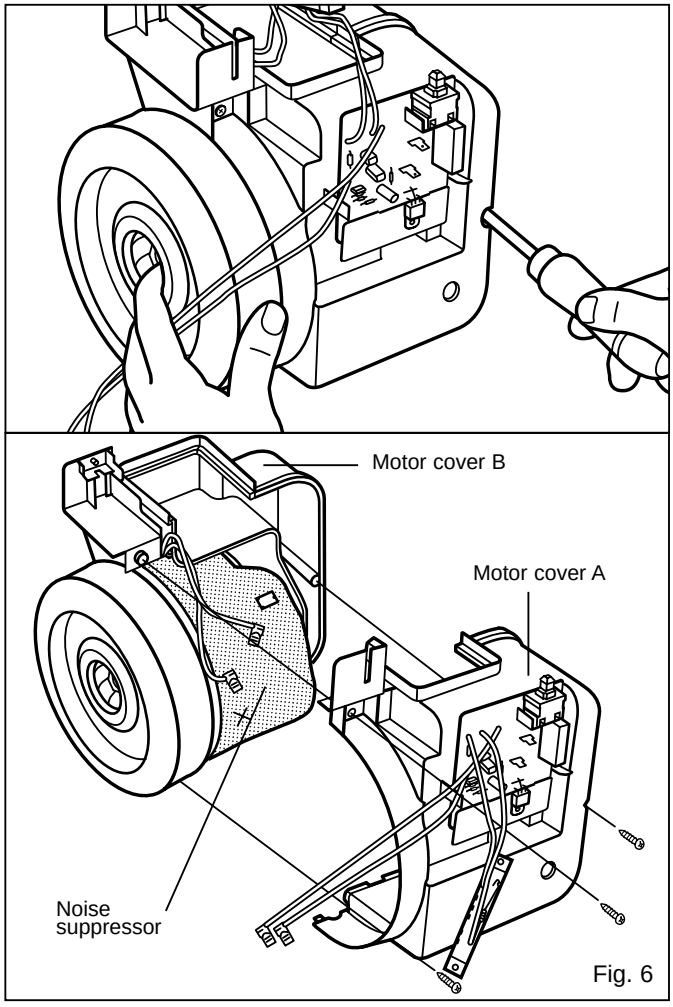

Fig. 6

■ REPLACEMENT OF MAIN PARTS

8. Remove from the motor rear /front motor supports and noise suppressor. (Fig. 7)

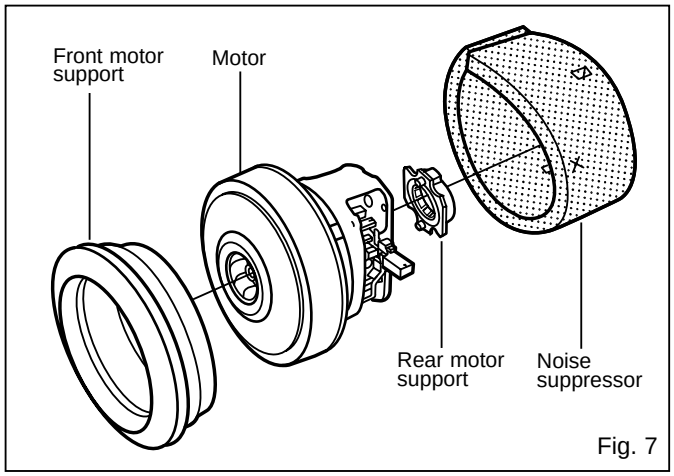

Fig. 7

9. Replace the motor with a new one and connect yellow and black lead wires to the carbon brush holder tabs.
   NOTE: Yellow lead wire should be connected to carbon brush holder tab marked with letter “P”.
10. Reassemble front / rear motor supports and noise suppressor.
    NOTE: Make sure the lead wires are correctly positioned to avoid be pinched between parts and adjust the position of the rear motor support to the proper motor cover position. (Fig. 8)

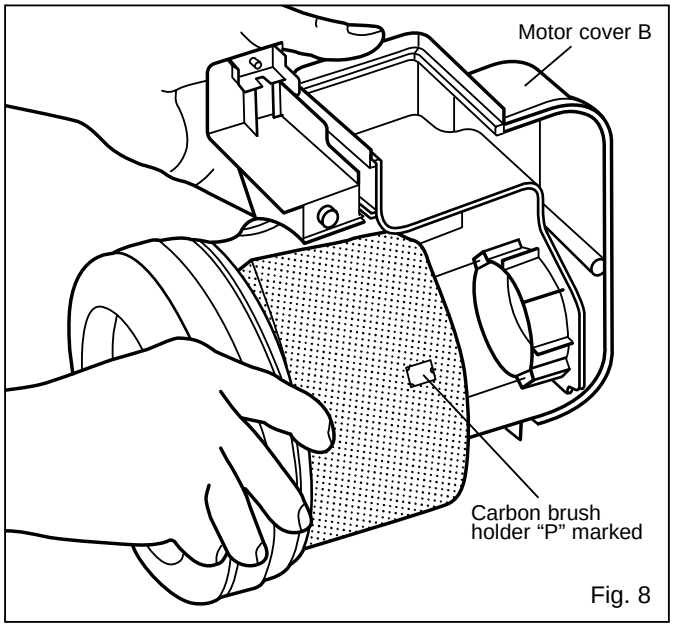

Fig. 8

11. Reassemble motor cover A and B and refasten the screws.
    NOTE: Before reassemble motor cover A, check the thermal cut-out is correctly placed in its holding. (Fig. 9)
12. Place the motor unit and cord reel ass’y into the lower body.
13. Connect the lead wires according to the schematic diagram and reassemble the remaining parts in the reverse order.

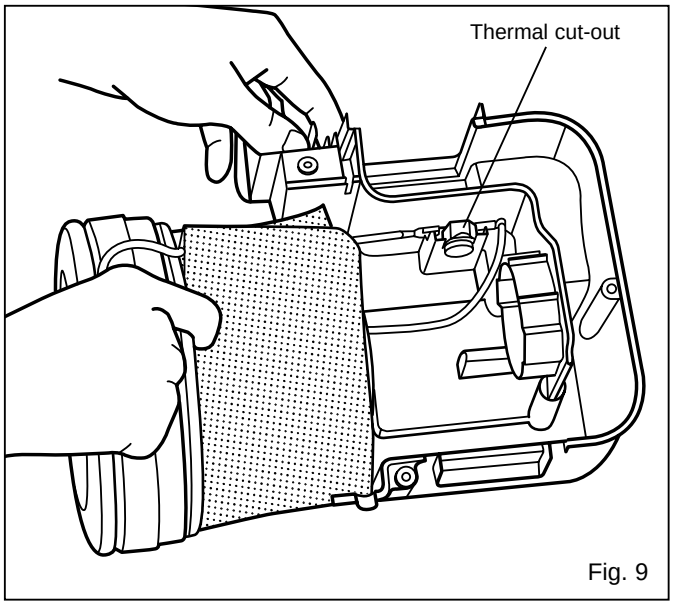

Fig. 9

■ REPLACEMENT OF MAIN PARTS

(2) Carbon brushes

NOTE: The two carbon brushes should be replaced at the same time.

1. Take out motor unit and remove motor cover A and B as explained previously in paragraph (1) “Motor”, points 1-6.
2. Disconnect yellow and black lead wires (provided with quick-connect terminals) from the carbon brush holder tabs.
3. Bend the metal end of the carbon brush holder and take out the carbon brush. (Fig. 10)
4. Cut off the metal end of the carbon brush. (Fig. 11)

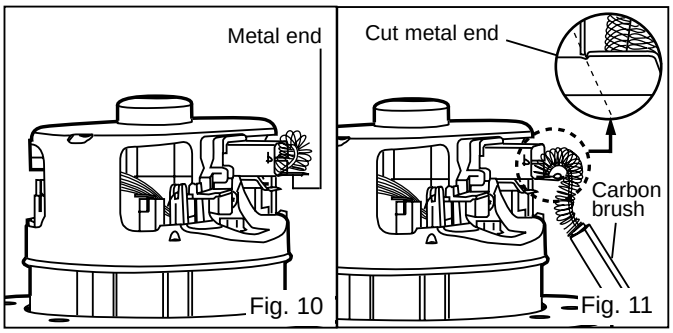

Fig. 10 Fig. 11

5. Insert the new carbon brush into the brush holder and push the carbon brush until the protruded pins of the brush holder fix into the holes of the metal end. (Fig. 12)
6. Connect yellow and black lead wires to the carbon brush holder tabs and reassemble motor unit.
7. Place motor unit and cord reel ass’y into the lower body.
8. Connect the lead wires according to the schematic diagram and reassemble the remaining parts in the reverse order.

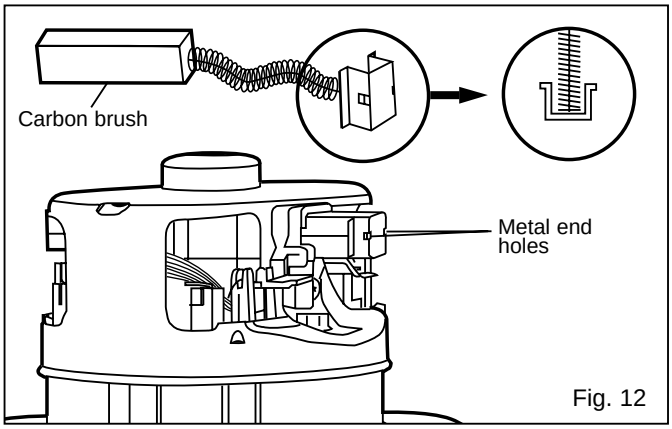

Fig. 12

• THERMAL CUT-OUT

1. Take out motor unit and separate motor cover A and B, as explained previously in paragraph (1) “Motor”, points 1-6.
2. Take out thermal cut- out from its lodging and remove the lead wires (provided with quick-connect terminal) from the thermal cut-out tabs. (Fig.13)
3. Replace the thermal cut-out with a new one. Connect the lead wires to the thermal cut-out tabs and reinstall it.
4. Reassemble motor cover A and B and refasten the screws.
5. Place motor unit and cord reel ass’y into the lower body.
6. Connect the lead wires according to the schematic diagram and reassemble the remaining parts in the reverse order.

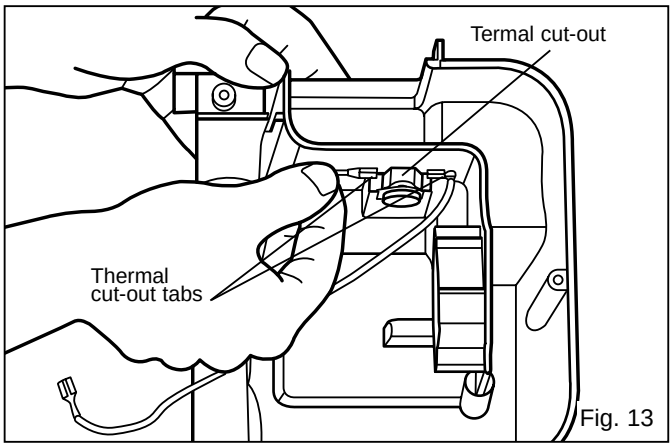

Fig. 13

• POWER CONTROL CIRCUIT / ON/OFF SWITCH / SLIDING POTENTIOMETER

(1) Power Control Circuit

1. Take out cord reel ass’y as explained previously in paragraph (1) “Motor”, points 1-4.
2. Take out motor unit and disconnect yellow and black lead wires (provided with quick-connect terminals) from the power control circuit tabs. (Fig. 14)

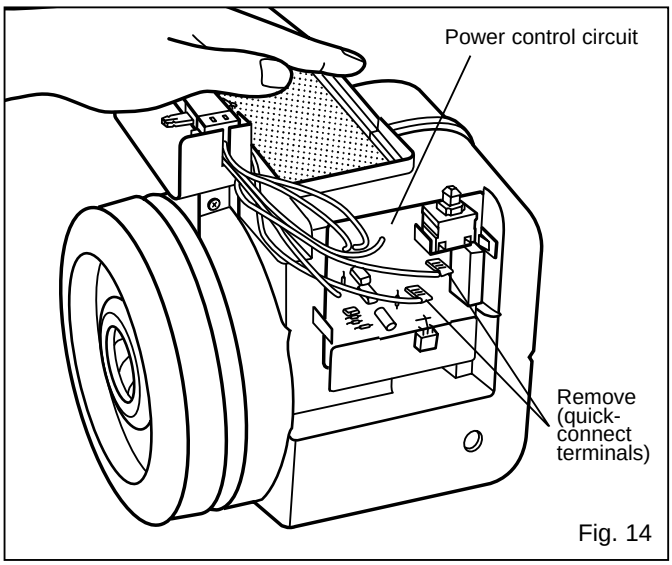

Fig. 14

REPLACEMENT OF MAIN PARTS

3. Remove power control circuit from its fastening points and disconnect the lead wires from the power control circuit. (Fig. 15)
4. Replace power control circuit with a new one and connect the lead wires according to the schematic diagram.
5. Reinstall power control circuit in its holding points.
6. Place motor unit and cord reel ass'y into the lower body and reassemble the remaining parts in the reverse order.

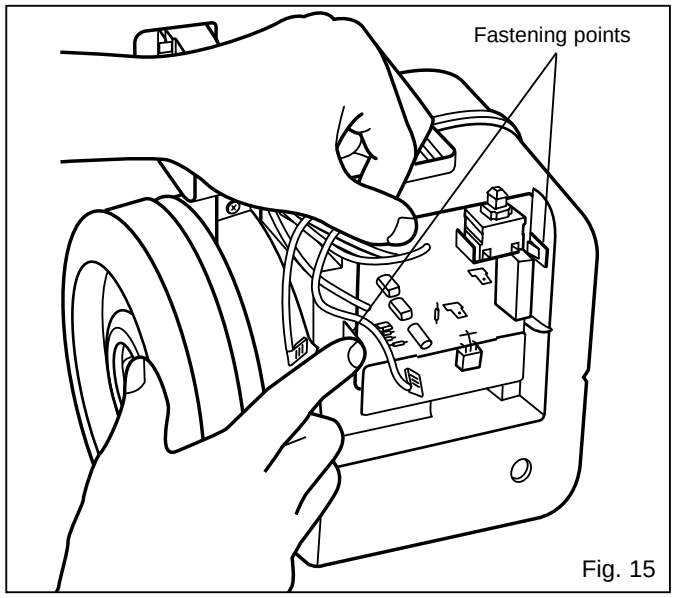

Fig. 15

(2) ON/OFF Switch

1. Remove upper body as explained previously in paragraph (1) "Motor", points 1-3.
2. Take out cord reel ass'y and motor unit.
3. Release power control circuit from its fastening points.
4. Remove ON/OFF switch from the power control circuit and replace with a new one. (Fig. 16)
5. Place power control circuit in its fastening points.
6. Reinstall motor unit and cord reel ass'y into lower body connect according to the shematic diagram and reassemble the remaining parts in the reverse order.

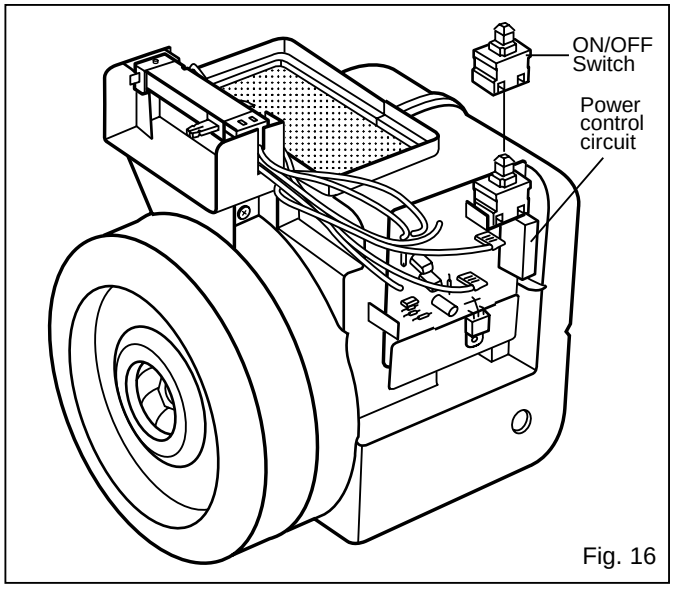

Fig. 16

(3) Sliding Potentiometer

1. Remove upper body as explained previously in paragraph (1) "Motor", points 1-3.
2. Take out the sliding potentiometer from its support and remove lead wires (blue and grey) from the potentiometer tabs. (Fig. 17)
   NOTE: Observe the correct position of the lead wires before installing the new one.

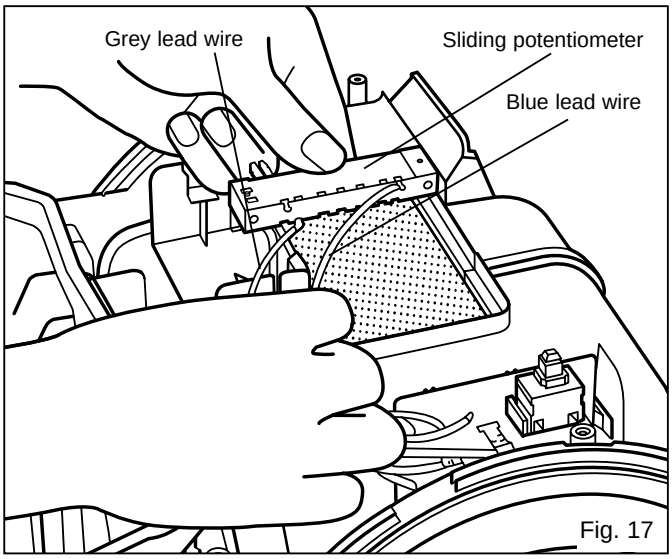

Fig. 17

3. Replace the potentiometer with a new one and connect the lead wires (blue and grey) to the potentiometer tabs.
4. Reinstall the potentiometer in its support and reassemble the remaining parts in the reverse order. (Fig. 18)

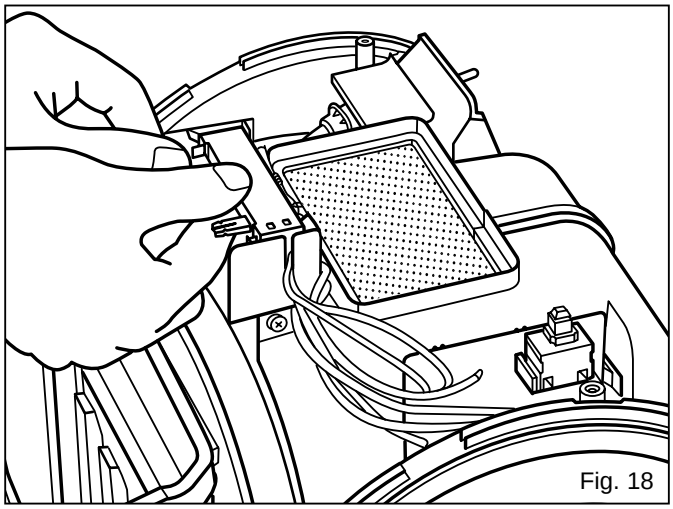
Fig. 18

- **CORD REEL UNIT / POWER CORD**

(1) Cord reel unit.

1. Remove upper body and cord reel ass'y as explained previously in paragraph (1) "Motor", points 1-4.
2. Before removing the screw that fix the cord reel unit and cord reel support unwind the power cord to release the cord reel spring efficiency. Them remove the screw .(Fig. 19)

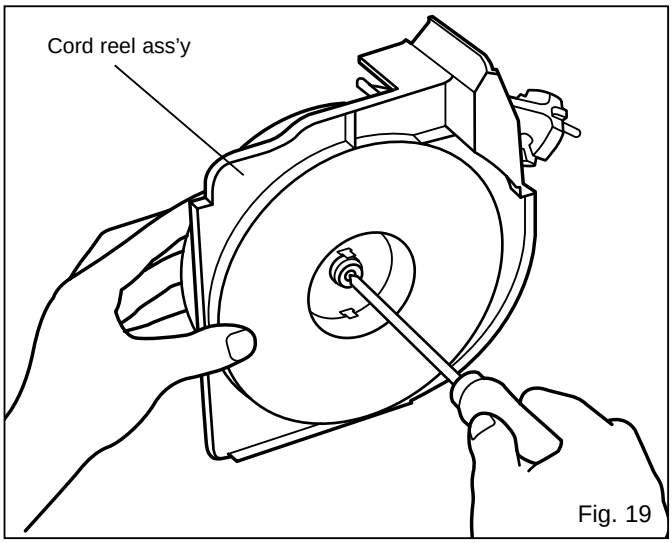

Fig. 19

3. Separate cord reel unit and cord reel support. (Fig. 20)
4. Replace the cord reel unit with a new one.
5. Reassemble cord reel unit and cord reel support and refasten the screw.
   NOTE: Wind up the power cord extra times as indicated on the spring plate to maintain the cord reel spring efficiency.
6. Connect the lead wires according to the schematic diagram and place the cord reel ass'y into place. Then reassemble the remaining parts in the reverse order.

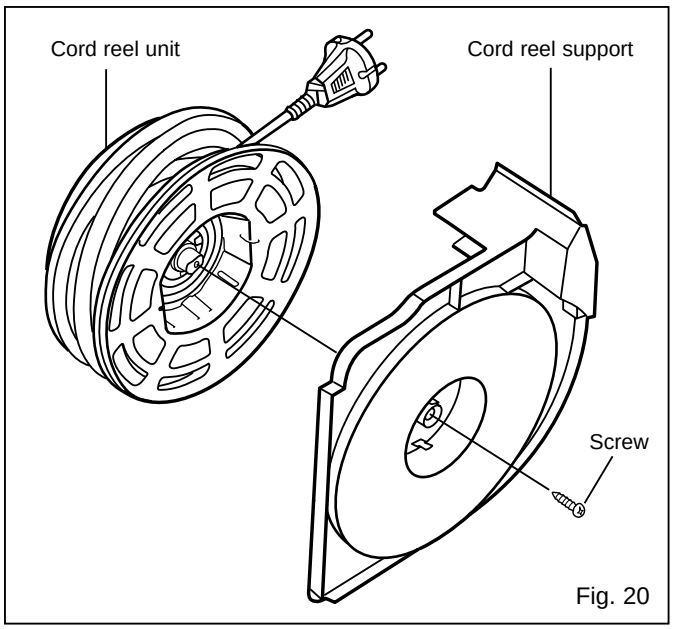

Fig. 20

REPLACEMENT OF MAIN PARTS

(2) Power cord

1. Remove cord reel unit as explained previously in paragraph (1) “Cord reel unit”, points 1-3.
2. Unwind the total power cord length from the cord reel.
3. Press and release the stopper on the cord reel and lift the contact base by pushing its lower end. (Fig. 21)
4. Disconnect the power cord from the contact base and replace it with a new one. (Fig. 22)
   NOTE: Observe the colour of the power cord lead wires before reinstalling the new one.
5. Insert the contact base through the cord reel slot and wind up the total power cord length in the arrow direction as indicated on the spring plate. (Fig. 23)
6. Reassemble cord reel unit and cord reel support and refasten the screw. Then wind up the power cord extra times as indicated on the spring plate to maintain spring efficiency.
7. Place cord reel ass’y into the lower body . Connect the lead wires according to he schematic diagram and reassemble the remaining parts in the reverse order.

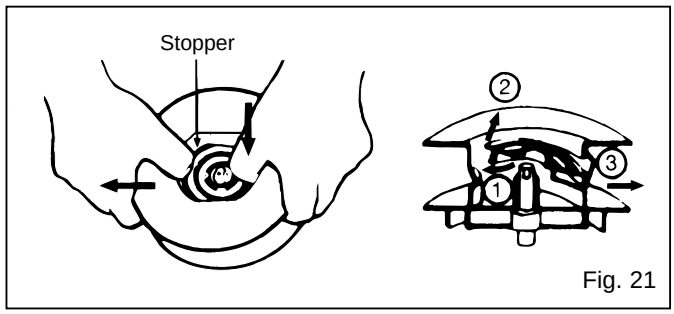

Fig. 21

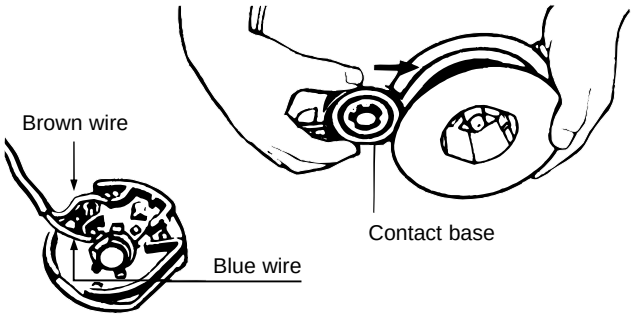

Fig. 22

Fig. 23

- **BRAKE LEVER UNIT**

1. Remove upper body as explained previously in paragraph (1) “Motor”, points 1-3.
2. Turn upper body over exposing the underside and remove brake lever unit by pressing it sidewards as indicated. (Fig. 24)

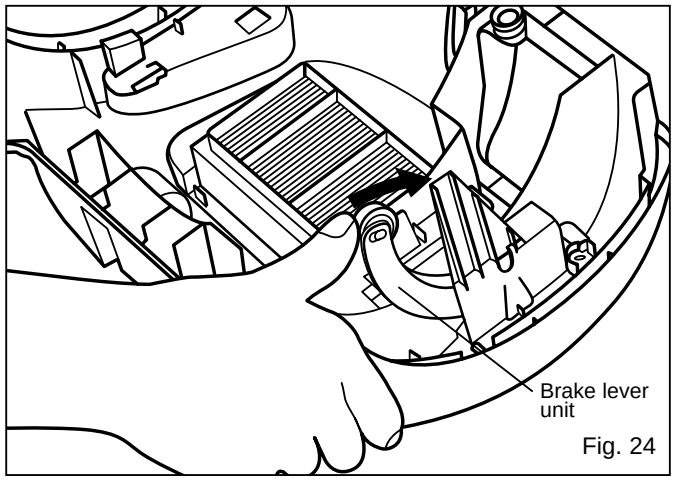

Fig. 24

3. Replace the brake lever unit with a new one and reinstall it in its lodging. (Fig. 25)
4. Reassemble upper body and remaining parts in the reverse order.

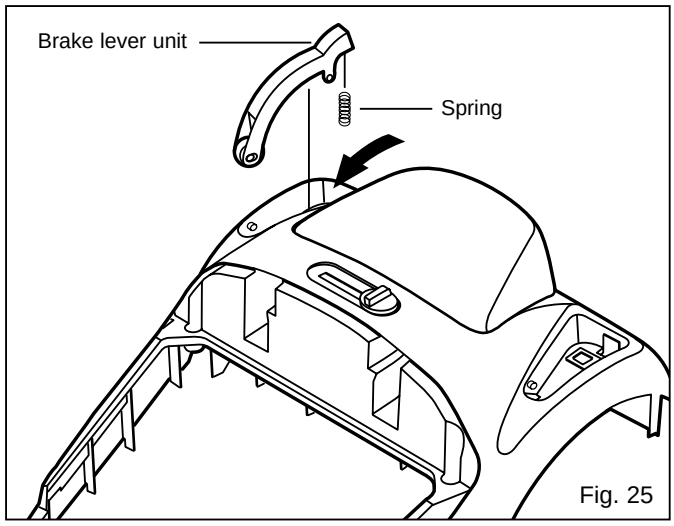

Fig. 25

■ TROUBLE SHOOTING GUIDE

CONDITION	CHECKPOINT	METHOD OF INSPECTION	CAUSE / REMEDY
Motor fails to rotate. (no noise is heard at all).	Power cord connection.	Check power cord continuity between plug pins and contact base.	If there is no continuity, replace the power cord.
	Motor continuity.	Check motor continuity between carbon brush holder tabs.	If there is no continuity, replace the motor.
	Carbon brushes.	Check if there is gap between carbon brush and conmutator.	If there is gap between carbon brush and conmutator, replace both carbon brushes.
	ON/OFF Switch.	Check continuity across switch connections.	If there is no continuity, replace ON/OFF switch.
	Thermal cut-out.	Check continuity across thermal cut-out tabs.	If there is no continuity, replace thermal cut-out.
	Triac.	Check if the triac is in open circuit.	If it is in open circuit, replace it. replace power control circuit.
	Power control circuit.	Check if the diac is in open circuit.	If it is in open circuit, replace power control circuit.
	*Sliding potentiometer.	Check if the potentiometer is in open circuit or if the lead wires connection are not correct.	If it is in open circuit, replace it. If the lead wire connections are not correct, repair them.
	Trimmer Potentiometer (VR1)	Place the sliding potentiometer at min. power and check if the potentiometer (VR1) is adjusted at 450W.	If it is adjusted at 450W and the motor doesn't work, replace power control circuit.
Motor runs but does not suction.	Hose or Suction inlet.	Check if there is any blockage in the hose or suction inlet.	If there is any blockage, remove it.
	Dust bag / Central filter.	Check if dust bag is full or dust accumulated in central filter.	If the paper bag is full, replace it. If the central filter is dirt, clean or replace it.
Noise or vibration.	Motor fan	Check dust accumulated in motor fan (it could happen if the vacuum cleaner has been used with a broken dust bag or without central filter).	If there is dust accumulated in motor fan, replace the motor and check filter condition. (never try to dismantle the motor fan).
Motor does not change power. (Runs always at full speed)	*Sliding potentiometer.	Check if the potentiometer is short-circuited	If it is short-circuited, replace it.
	Power control circuit	Check if the power control circuit is short-circuited.	If it is short-circuited, replace it.
Motor runs irregularly.	* Sliding potentiometer	Check possible bad contact of the sliding potentiometer tabs.	If there is bad contact, replace the sliding potentiometer.

NOTE: Parts marked (*)only affect to mdels MC-E781 and MC-E783.

PACKING INSTRUCTIONS

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