Service Manual Vacuum Cleaner

> Model No. MC-CJ913-Y747 MC-CJ913-Y149 MC-CJ913-Y147 MC-CJ913-K747 MC-CJ913-K149 MC-CJ913-K147



\land WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE •

There are special components used in this equipment which are important for safety. These parts are marked by \triangle in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.



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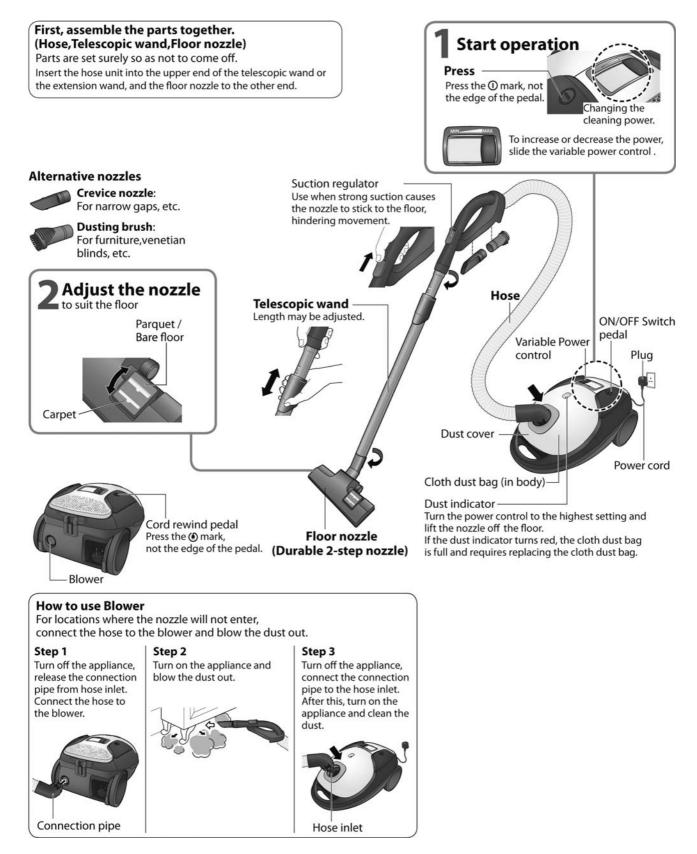
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1 Specifications

Model No.	MC-CJ913
Power source	220V-240V ~ 50/60Hz
Max. input	2000W
Nominal input	1500-1800W
Dimensions (WxLxH)	320mm x 500mm x 265mm
Net weight	6.1kg
Cord length	5m
Extension Wand	Telescopic(Magic Telescopic Wand)
Nozzle	Floor nozzle(Durable 2-step nozzle)
Crevice nozzle	1
Dusting brush	1

2 Location of Controls and Components



3 Troubleshooting Guide

CONDITION	CHECKPOINT	FIGURE	CHECK METHOD	REMEDY
The Motor doesn't rotate.	CORD REEL UNIT RAIL BASE UNIT	Cord Reel Unit	 Check the continuity at both ends of the Plug and both ends of the Lead Wire Terminal of the Cord Reel Unit. (Discon- nection check) There must be no problems between the Cord Reel Unit and the Rail Base Unit (e.g. burns in the contact, entry of dust). 	If there is no continuity, replace the Cord Reel Unit, or the Rail Base Unit.
	MOTOR	Fan Motor Unit	 Check the continuity between the terminals of the Motor. Confirm that the Motor can be rotated by fingers without being locked. Visually check for burns in the Motor (e.g. burns in the coil). 	 If there is a problem, replace the Fan Motor Unit. * Also check and replace the Fuse.(on the P.C.B. Assy)
	FUSE	P. C. B. Assy Fuse	 Check if the Fuse has blown. Causes of fuse blowing: 1. Overcurrent 2. Burn of the Motor 3. Short-circuiting due to incorrect wiring 	 If the Fuse has blown, remove the cause and replace the Fuse. *If a burn in the Motor caused the Fuse to blow, then also replace the Motor.
	P.C.B. ASSY	P. C. B. Assy	 Check the internal components for problems. (Burnt, melted, broken, etc.) There must be no broken foil of the Printed Circuit Board. There must be no breaks in the Lead Wires. 	 If there is a problem, replace the P.C.B. Assy.
	TRIAC (on the P.C.B. Assy)		 Check the Triac by conducting the following inspection. Check theTriac on the F *Using a tester, see if continuity is of between each pair of Triac legs. The normality are as follows. 1.T1 - T2 : No continuity 2.T2 - G : No continuity 3.T1 - G : Continuity *Connect the T1 side to the positive of the tester, and then check the c 	detected e side

CONDITION	CHECKPOINT	FIGURE	CHECK METHOD	REMEDY
<u> </u>	ON/OFF		Check the continuity by press-	If there is a problem, replace
	SWITCH	On/Off Switch	ing the On/Off Switch.	the P.C.B. Assy.
	(in the P.C.B.		5	
	Assy)			
			Obertal that the Trian has not	K there is a nuclei of the second
 The Motor doesn't rotate. The Power Control doesn't function. 	TRIAC (on the P.C.B. Assy)		 Check that the Triac has not been short-circuited. If there is continuity between T1 and T2, then there is a problem in the components. 	If there is a problem, replace the P.C.B. Assy.
	POWER CON- TROL VOL- UME (in the P.C.B. Assy)	Power Control Volume	 The resistance between A and B must be switchable. 0~470Ω 	 If there is a problem, replace the P.C.B. Assy.
The Cord cannot			If the Cord cannot be pulled	If it is impossible to resolve the
be pulled out.	UNIT MOTOR CASE UNIT	Motor Case Unit Brake Lever	out, press the Brake Lever and confirm that the Cord can be rewound. Repeat operations to rewind and pull out the Cord two or three times and confirm that it can be normally rewound.	problem due to an abnormal condition of the Cord, separate the Body, untwist the Cord, and rewind it. Or, replace the Cord Reel Unit and rewind the Cord.
 The Cord can- not be rewound. The pulled out 			Separate the Body and; • Confirm that a sufficient num- ber of spare turns have been	 Make spare turns according to the engraved number of turns, or;
Cord cannot be locked.		Cord Reel Unit	 made. Confirm that the Cord Reel Spring is working. Confirm that the Brake Lever Unit is working correctly to stop the Cord from rewinding. 	Replace the Cord Reel Unit. Replace the Motor Case Unit.
1. The suction power is low. 2. The Motor stops during vacuuming. (The Thermo Protector in the Fan Motor Unit works.)	DUST BAG FILTER EXTENSION WAND UNIT HOSE C UNIT	Filter Dust Bag Extension Wand Unit	Check for clogging with dust. • Dust Bag • Filter (in the Dust Box) • Hose C Unit • Extension Wand Unit	Remove dust. • Replace any broken Dust Bag, Filter, and/or Hose C Unit.
		Hose C Unit		

4 Disassembly and Assembly Instructions

Important: Always turn the vacuum cleaner is power off before replacing components.

Remove the power cord and plug from the mains.

* Attention

(1) When disassembling the vacuum cleaner, check the connections and wiring (pulling) of each component, and ensure that everything is restored correctly once repairs are complete.

(2) Handle all disassembled components and packing with care, and be sure to replace any components that may be accidentally damaged.

(3) Once repair operations are complete, always inspect the area around the repairs for any degradation, and ensure that all components that were removed for repair have been replaced in the correct wiring configurations. It is also necessary to test the operation of the vacuum cleaner and ensure that it is safe for subsequent use.

Insulation resistance:

Must be at least 5M Ω when a direct current of 500V is applied between the power plug terminals and the exterior of the motor.

· Dielectric strength:

Must be able to withstand 1250V of alternating current applied between the power plug terminals and the exterior of the motor for one minute.

(4) Do not make changes to models, components, or materials during repairs and services.

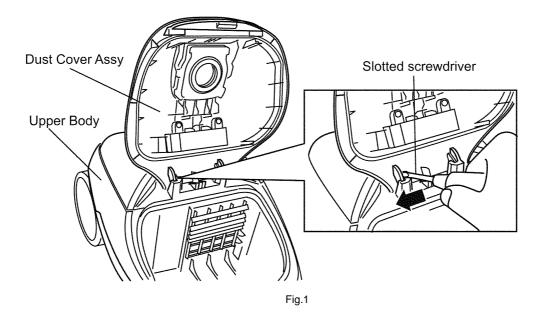
(5) If a wiring unit has been supplied as a spare part, the wiring unit must be simply replaced as it is, without any additional repairs or connections made to even part of the wiring.

(6) Insert/remove the fast-on terminals by pushing/pulling them straight out without jiggling them or applying unnecessary force.

4.1. Disassembly of the Dust Cover Assy

1. Open the Dust Cover Assy and insert a slotted screwdriver in the gap between the Dust Cover Assy and the Upper Body.

Move the slotted screwdriver in the direction of the arrow, and disassemble the Dust Cover Assy pulling upward.



4.2. Disassembly of the Dust Bag Holder

 Remove the Dust Bag Holder by inserting a slotted screwdriver into the mount of the Dust Bag Holder on the Lower Body Unit.

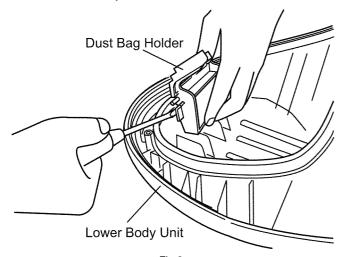
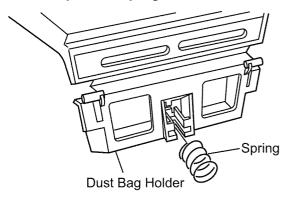
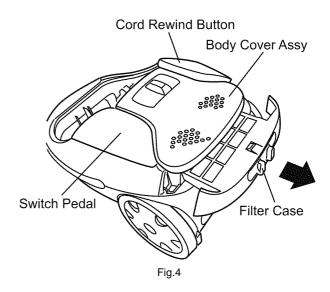


Fig.2 Caution (There is a Spring inside) * When replacing the Dust Bag Holder, disassemble and replace the Spring mounted inside.

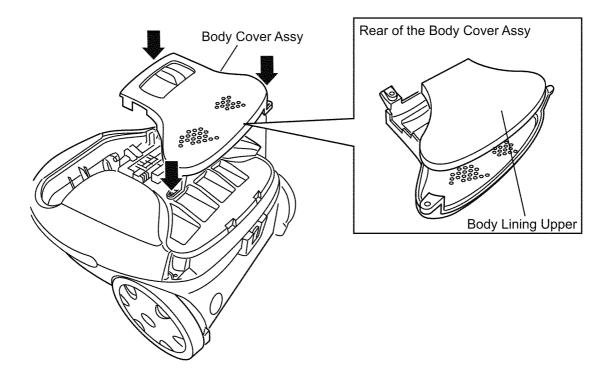


4.3. Disassembly of Body Cover Assy, Switch Pedal, Cord Rewind Button

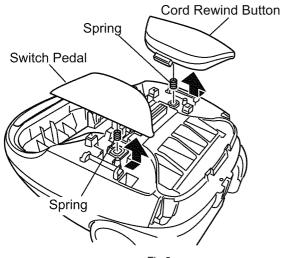
1. Remove the Filter Case



2. Remove 3 screws and disassemble the Body Cover Assy



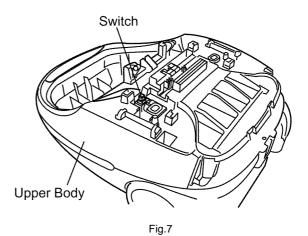
3. Disassemble the Switch Pedal/Cord Rewind Button toward the direction of the arrow Caution: (Spring is placed inside.)
*Be careful not to lose the Spring.



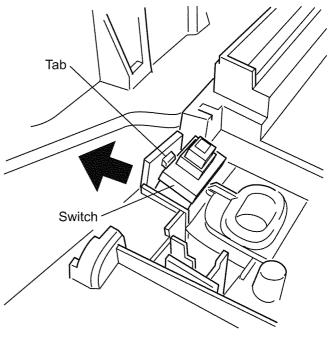


4.4. Disassembly of Upper Body, Handle Cover, and Guide Lever

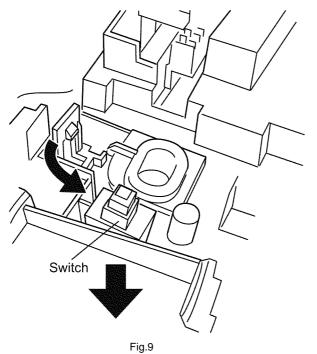
1. Disassemble the Body Cover Assy and Switch Pedal as described in (4.3).



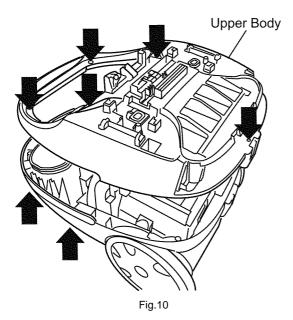
2. Remove the Switch (part of the P.C.B. Assy) from the Upper Body by pressing the tab in direction of the arrow.



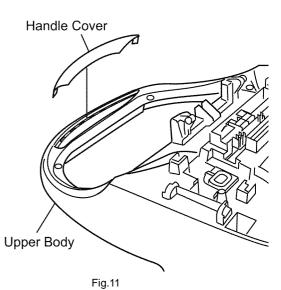
3. Slide the Switch, and push it inward at the position shown in the figure.



4. Remove 7 screws and disassemble the Upper Body slowly pulling it upwards.

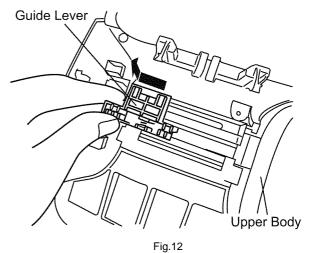


- 5. Disassembly of Handle Cover
 - Disassemble the Handle Cover from the Upper Body.



6. Disassembly of Guide Lever

Slide and disassemble the Guide Lever to the direction of the arrow.



4.5. Disassembly of Motor Case Set

1. Disassemble the Rear Cover to the direction of the arrow, and disassemble the Motor Case Set pulling upward.

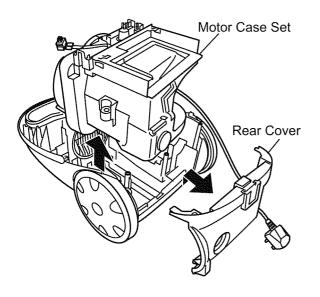


Fig.13

4.6. Disassembly of Cord Reel Unit

 Release the pretension of the Cord Reel Unit slowly by holding on the Power Plug and pressing on the Brake Lever.

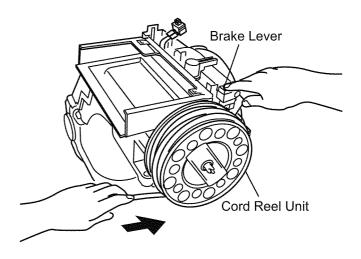
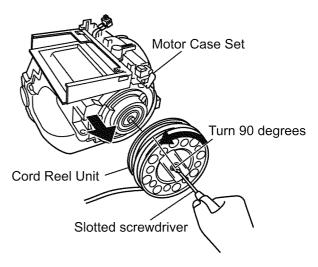


Fig.14

2. Remove the Cord Reel Unit from the Motor Case Set by inserting a slotted screwdriver into the shaft of the Cord Reel Unit and turning it 90 degrees counterclockwise.





To assemble

- a. Assemble in reverse order of the disassembly
- a. Turn the Cord Reel Unit holding on the Plug
- b. Number of turns for pretension of the Cord is engraved on the steel plate at the side of the Cord Reel Unit

4.7. Disassembly of Rail Base Unit

1. Remove screw and disassemble the Rail Base Unit from the Motor Case Set.

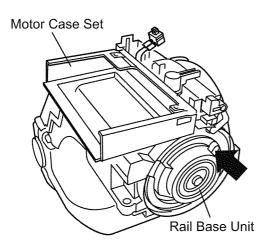
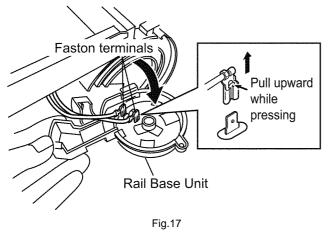


Fig.16 2. Remove the faston terminals on the Rail Base Unit.

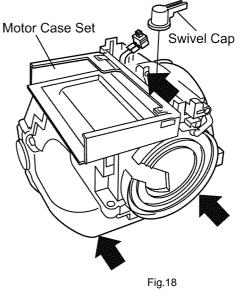




* Apply the included furoyl when replacing the Rail Base Unit or the Cord Reel Unit. (Refer to the included instruction sheet for detail)

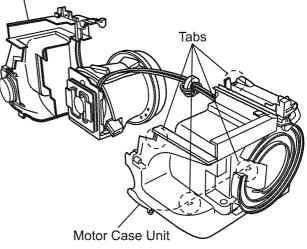
4.8. Disassembly of Fan Motor Unit

1. Disassemble the Swivel Cap and remove 3 screws.



2. Remove the tabs (4 positions) of the Motor Case Unit and Motor Support Cover, and disassemble the Motor Case Unit and the Motor Support Cover.

Motor Support Cover



- Fig.19
- 3. Disassemble the Noise Suppressor Unit
- 4. Disassemble the Motor Support Rubber (Rear)
- 5. Remove 2 screws and disassemble the Motor Support Front
- 6. Remove the Motor Support Front AU
- 7. Remove the faston terminals on the Lead Wire C Unit.

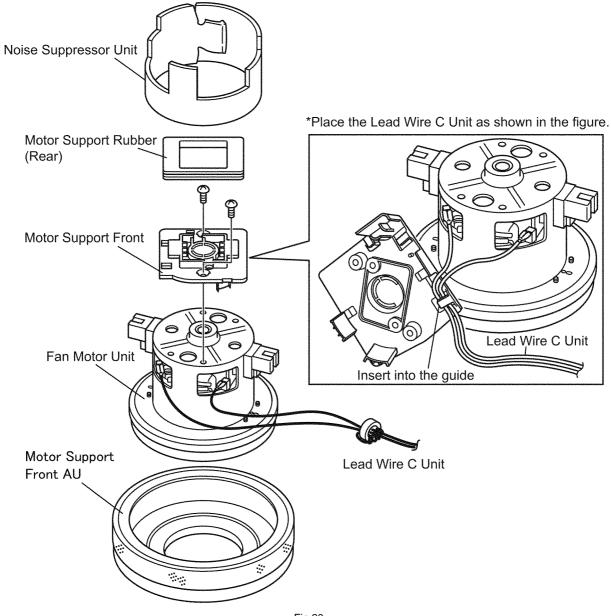
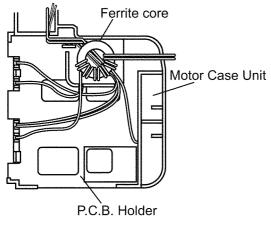


Fig.20

Wiring diagram for assembly

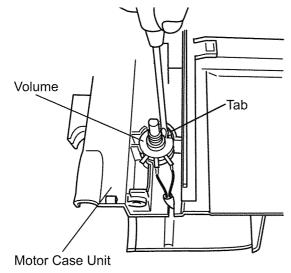
Place the ferrite core as shown in the figure, and assemble the Motor Case Unit taking care of the wiring of each wire.



4.9. Disassembly of P.C.B. Assy

1. Disassembly of Volume (a part of P.C.B. Assy)

Disassemble the Volume by widening the tab of the Motor Case Unit using a slotted screwdriver.



2. Disassemble the P.C.B. Holder by pressing on the tabs (2 positions) on the Motor Case Unit with your finger.

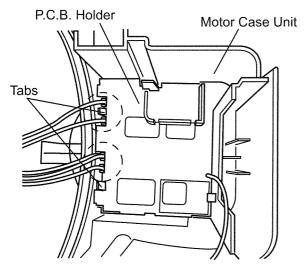


Fig.23

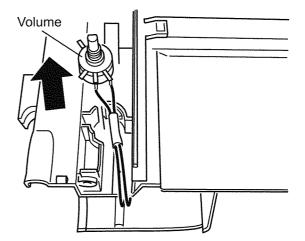
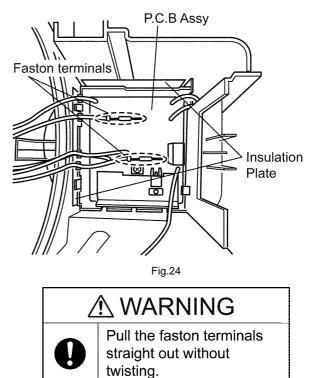


Fig.22

3. Remove the faston terminals and disassemble the P.C.B. Assy.



4.10. Replacement of Blower Cover

1. Assemble the Spring (for Blower Cover) onto the Blower Cover

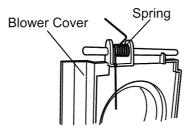
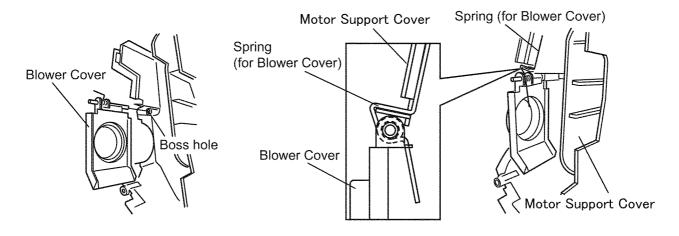


Fig.25 2. Assemble by inserting the shaft of the Blower Cover into the boss hole.



5 Wiring Connection Diagram

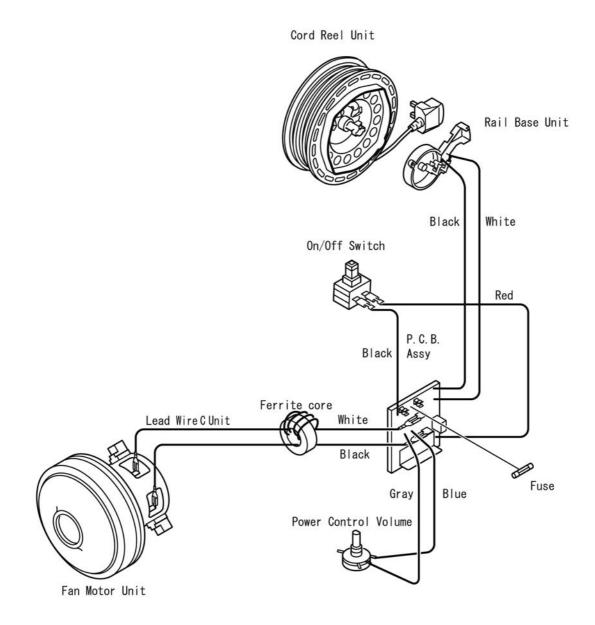
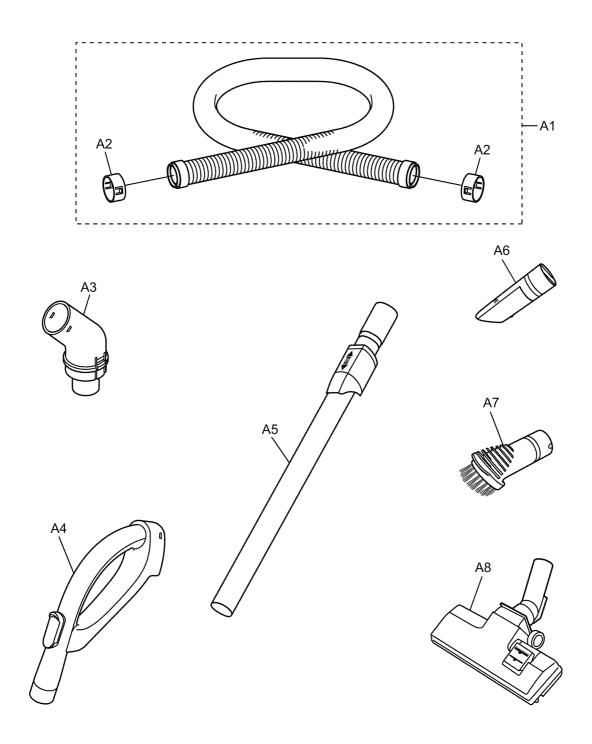


Fig.27

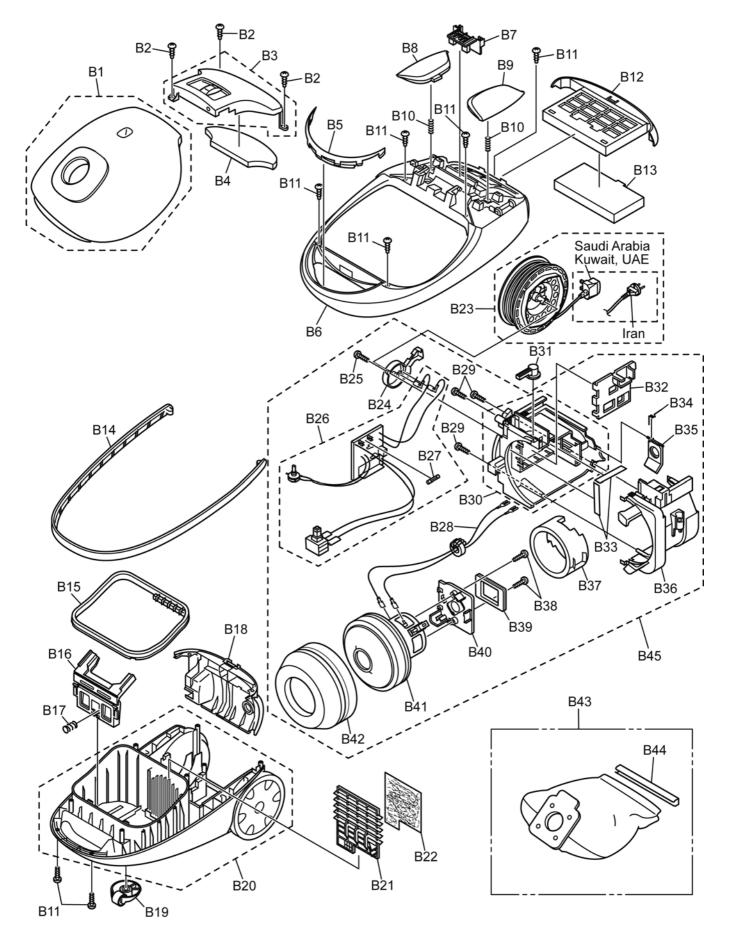
- 6 Exploded View and Replacement Parts List
- 6.1. EXPLODED VIEW (ATTACHMENTS)



6.2. PARTS LIST (ATTACHMENTS)

Safety	Ref.No.	Service Parts No.	Parts Name & Description	Q'ty	Remarks
	A1	AMV75PB60V0J	HOSE C UNIT	1	(HOSE)
	A2	AMC24P-0R0V	HOSE SUPPORTER	2	
	A3	AMV92PB80V0J	CONNECTION PIPE	1	
	A4	AMV98PB80V0J	CURVED WAND	1	(SUCTION REGULATOR)
	A5	AMC99P-HP0	EXTENSION WAND UNIT	1	(TELESCOPIC WAND)
	A6	AMC60RMV060J	CREVICE TOOL	1	(CREVICE NOZZLE)
	A7	AMV88RB6000J	DUSTING BRUSH UNIT	1	(DUSTING BRUSH)
	A8	AMC99R-RS0U	FLOOR NOZZLE ASSY	1	(FLOOR NOZZLE)

6.3. EXPLODED VIEW (BODY UNIT)



6.4. PARTS LIST (BODY UNIT)

Safety	Ref. No.	Service Parts No.	Parts Name & Description	Q'ty	Remarks
~	B1		DUST COVER ASSY	1	BLACK
	B1		DUST COVER ASSY	1	YELLOW
	B2	XTN4+20BFJ	SCREW	3	
	B3		BODY COVER ASSY	1	BLACK
	B3		BODY COVER ASSY	1	YELLOW
	B4		BODY LINING UPPER	1	
	B5	AMV06BB8020J	HANDLE COVER	1	
	B6	AMV02AB80V0J		1	
	B7	AMV75NB80V0J		1	
	B8		CORD REWIND BUTTON	1	(CORD REWIND PEDAL)
	B9	AMV05EB80V0J	SWITCH PEDAL	1	(ON/OFF SWITCH PEDAL)
	B10	AMC71N-4P0	SPRING	2	
	B11	XTN4+20BFJ	SCREW	7	
	B12	AMV42KB80V0J	FILTER CASE	1	
	B13	AMV85LB5000J	EXHAUST PACKING UNIT	1	(ANTI BACTERIA FILTER)
	B14	AMV31AB8020J	FURNITURE GUARD	1	
	B15	AMV73KB80V0J	DUST BOX PACKING	1	
	B16	AMV23KB8000J	DUST BAG HOLDER	1	
	B17	AMC34DYP000J	SPRING	1	
	B18	AMV01LB80V0J	REAR COVER	1	
	B19	AMC95C-0G0Z	CASTER UNIT	1	
	B20	AMV97AB60V0J	LOWER BODY UNIT	1	
	B21	AMC43KRH000J	PRE-FILTER	1	
	B22	AMC30K-RH0	FILTER	1	(PRE MOTOR FILTER)
A	B23	AMV99NB6008J	CORD REEL UNIT	1	SAUDI ARABIA , KUWAIT , UAE
≜	B23	AMV99NB600EJ	CORD REEL UNIT	1	IRAN
A	B24	AMV98NB8000J	RAIL BASE UNIT	1	
	B25	XTN4+14BFJ	SCREW	1	
A	B26	AMV87GB6000J	P.C.B ASSY	1	
A	B27	AMV13WB8000J	FUSE	1	250V , 12A
A	B28	AMV69VB6000J	LEAD WIRE C UNIT	1	
	B29	XTN4+14BFJ	SCREW	3	
A	B30	AMV99FB6000J	MOTOR CASE UNIT	1	
	B31	AMV25QB8000J	SWIVEL CAP	1	
A	B32	AMV59VB8000J	P.C.B HOLDER	1	
≜	B33	AMV23EB8000J	INSULATION PLATE	2	
	B34	AMC33L-UF0	SPRING(FOR BLOWER COVER)	1	
	B35	AMV29LB80V0J	BLOWER COVER	1	
A	B36	AMV63FB8000J	MOTOR SUPPORT COVER	1	
A	B37	AMV99GB6000J	NOISE SUPPRESSOR UNIT	1	
	B38	XTT4+10FFJ	SCREW	2	
	B39		MOTOR SUPPORT RUBBER(REAR)	1	
A	B40		MOTOR SUPPORT FRONT	1	
A	B41	AMV92FB600CJ	FAN MOTOR UNIT	1	
	B42	AMV0VFB7000J	MOTOR SUPPORT FRONT AU	1	
	B43	AMC99K-UF0	DUST BAG (CLOTH)	1	(CLOTH DUST BAG)
	B44	AMC23K-UG0	DUST BAG SUPPORTER	1	
	B45	AMV0PFB6000J	MOTOR CASE SET	1	
	-	AMV61ZB5000J	INDIVIDUAL CARTON	1	
	-	AMV69ZB8000J	CUSHION A	1	
	-	AMV70ZB8000J	CUSHION B	1	
	-	AMV0TZB8000J	CUSHION C	1	T
	-	AMV01ZB6000J	INSTRUCTION BOOK	1	MC-CJ915/913/911
	-	AMV10ZB8000J	BODY BAG	1	
	-	AMV46ZB8000J	PARTITION BOARD	1	
	-	AMV72Z9U000J	CUSHION PLATE A	1	
	-	AMV56ZB8000J	CUSHION BOTTOM	1	SAUDI ARABIA , KUWAIT , UAE