

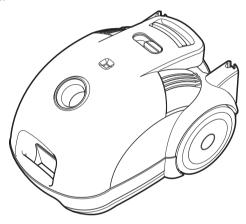
May, 2003 P/No. : 3828FI5879A Printed in China



# VACUUM CLEANER SERVICE MANUAL

#### **CAUTION**

BEFORE SERVICING THE UNIT, READ THE "SAFETY PRECAUTIONS" IN THIS MANUAL.



MODELS: V-C3A41ND, V-C3A42SD, V-C3A53ND, V-C3A54SD, V-C3A55HT, V-C3A56HTU

V-CP643ND/NT/SD/ST/STR/STS V-CP653ND/NT/SD/ST/STR/STS V-CP663ND/NT/SD/ST/STR/STS

# **CONTENTS**

SAFETY PRECAUTIONS	3
SERVICING PRECAUTIONS	4
SPECIFICATIONS	4
FEATURES	4
CONTROL LOCATIONS	5
VACUUM POWER ADJUSTMENT	5
DISASSEMBLY INSTRUCTIONS	6~7
TROUBLESHOOTING GUIDE	8~10
BLOCK DIAGRAM	11~12
SCHEMATIC DIAGRAM	11~12
PRINTED CIRCUIT diagram	11~12
EXPLODED VIEW	13~16
REPLACEMENT PARTS LIST	17~18
APPENDIX	19
1. THE TYPE OF POWER CORD & PARTS NUMBER	19
2. COLOR & PARTS NUMBER	20
3. MOTOR & P.C.B ASS'Y PARTS NUMBER	21

# SAFETY PRECAUTIONS

# BEFORE OPERATING THIS VACUUM CLEANER, READ THIS SERVICE MANUAL THOROUGHLY, AND OBSERVE EACH POINT CAREFULLY.

#### Change the paper bag or clean the cloth bag in case the indicator moves toward red.

- 1) If the dust bag is full, intake power will be reduced.
- 2) When the dust bag is full of dust, pull out the dust bag from the inside of body base.

#### 2. Filter

- 1) The filter is composed of a clean filter, a exhaust filter and a paper bag or a cloth bag.
- 2) Never use the vacuum cleaner without filters. It may harm to the motor.
- 3) When the cloth bag, the clean filter and the exhaust filter are soiled, wash the filter with neutral cleanser.

# **NOTE**: Re-use of the cloth bag, clean filter and exhaust filter.

- Never wash the filter in a washing machine or in a dishwasher.
- · Never use hot water for washing the filter.
- Re-use the filter after drying it completely in the shade.
- · Do not dry near fire or direct sunray.

#### 3. Dust indicator

Dust indicator shows you red color when the filter is full of

Then, change the paper bag with new one or clean the cloth bag.

#### 4. Avoid suction such materials as :

- Liquid or wet dust: Clogging the ventilation holes, reduces the intake power significantly and harms the motor.
- Inflammable liquids such as benzene, alcohol or solvents.
- 3) Burning objects such as cigarette butts.
- 4) Bulky objects such as vinyl, paper etc.
- Sharp objects such as needles, pins, metal or glass particles etc.

#### 5. Attachments

- Nozzle : for cleaning wooden floor, the room floor and carpet.
- Crevice Tool : for cleaning any crevice, inside corners of window frames.

However, do not use the crevice tool more than 20 minutes because it may cause harm to the motor.

- Close supervision is necessary when this vacuum cleaner is used by or near children.
   Children's carelessness may cause damage to the cleaner or injure persons.
- Air exhausted from the vacuum cleaner is normally warm. But if extraordinarily hot air is exhausted, check if the telescopic tube, hose or dust bag is clogged or not.
- Electric shock could occur if used outdoors or on wet surfaces.

# SERVICING PRECAUTIONS

BEFORE ATTEMPTING TO SERVICE OR ADJUST ANY PART OF THE VACUUM CLEANER, DISCONNECT THE ELECTRICAL POWER SUPPLY CORD FROM THE WALL OUTLET.

#### 1. Motor exchange

- 1) Separate the Body Cover and Body Base by unfastening the screws.
- 2) Disconnect the lead wires.
- 3) Lift the old motor and replace it with a new one.

2. In case of exchanging other parts, refer to the exploded view.

# **SPECIFICATIONS**

MODEL: V-CP643ND/NT/SD/ST

POWER SOURCE: ON RATING PLATE

• POWER CONSUMPTION: ON RATING PLATE

• POWER CONTROL:

- MAIN: SLIDE CONTROL

(V-C3A42SD, V-CP643SD/ST, V-C3A54SD,

V-CP653SD/ST, V-CP663SD/ST)

**PUSH ON/OFF** 

(V-C3A41ND, V-CP643ND/NT, V-C3A53ND,

V-CP653ND/NT, V-CP663ND/NT)

HOSE SLIDE CONTROL

(V-C3A55HT, V-C3A56HTU)

• CAPACITY: 3.0 liters

• CORD LENGTH: 5 m / 6 m

• HOSE LENGTH: 1.5 m

• NET WEIGHT: 3.9 kg

PACKING WEIGHT: 6.4 kg

• **NET DIMENSION**: 285 x 396 x 246 (W x D x H)mm

PACKING DIMENSION: 330 x 530 x 290 (W x D x H)

(with plastic, steel and

aluminium pipe)

330 x 570 x 290 (W x D x H)

(with telescopic pipe)

#### ATTACHMENTS

HOSE	1EA
STEEL PIPE ASM	2EA
TELESCOPIC PIPE ASM	1EA
NOZZLE ASM	1EA
CREVICE TOOL	1EA
CLOTH BAG ASM(OPTIONAL)	1EA
EXTRA PAPER BAG ASM(PAPER, OPTIONAL).	1EA
DUSTING BRUSH(OPTIONAL)	1EA
UPHOLSTERY NOZZLE(OPTIONAL)	1EA

This specifications are subject to change according to the buyer's request.

# **FEATURES**

THIS VACUUM CLEANER IS THE MOST MODERN STYLE GOODS, SUITABLE FOR HOUSEHOLD USE AND IT RUNS AFTER A NEW VARIATION IN ORDER TO MEET MODERN LIFE SENSE BY IMPROVING THE DESIGN, THE STRUCTURE AND THE POWER.

#### 1. Strong Suction Power

This vacuum cleaner has a strong suction power because it utilizes a highly efficient and powerful motor.

#### 2. Automatic Cord Winding Mechanism

It is very convenient becasue it winds the cord automatically after operating the unit.

#### 3. Vacuum Power Adjustment

It is very convenient becasue vacuum power varies with cleaning work by moving the slide knob.

#### 4. Convenient Push Button Switch

Using the switch located in the main body, this vacuum cleaner can be operated easily.

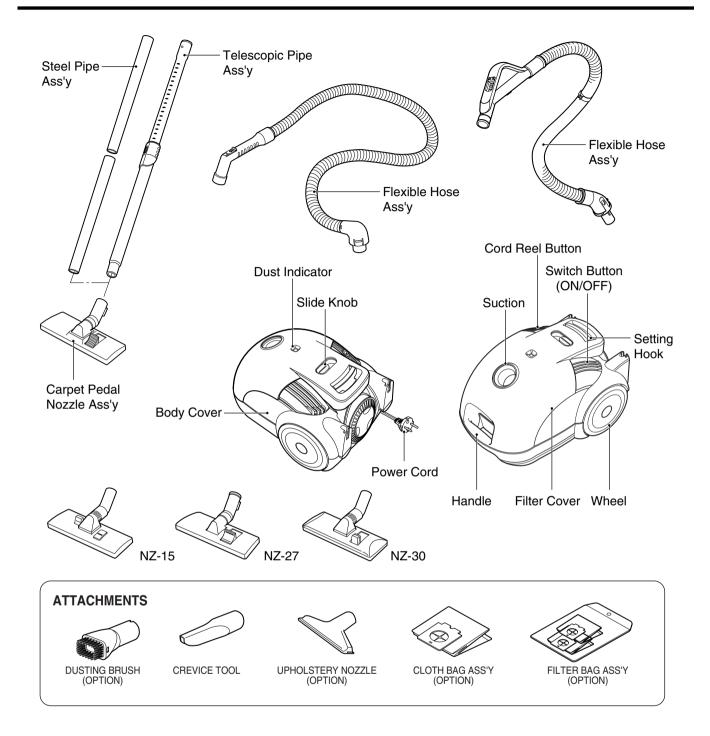
#### 5. Excellent Running

Running is execllent by adopting large wheel. (Ø150)

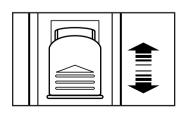
#### 6. Miscellaneous

- 1) The dust indicator shows you red color when to exchange the filter bag or to clean the cloth bag.
- 2) The washable cloth bag can be used for a long time.

# **CONTROL LOCATIONS**



# **VACUMM POWER ADJUSTMENT**



When you want to control the vacuum power for curtains and clothes, slide the slide knob on the handle.

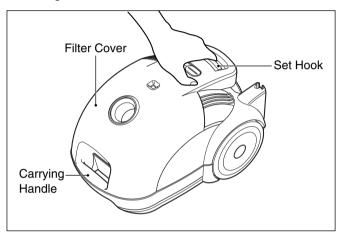
# **DISASSEMBLY INSTRUCTIONS**

**NOTE:** Before attempting to service or adjust any part of the vacuum cleaner, disconnect the electrical power supply cord from the wall outlet.

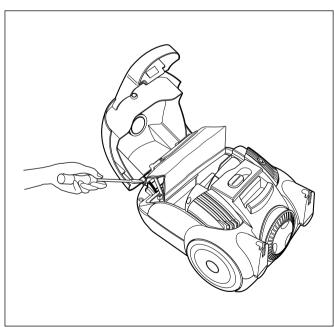
- Almost all the parts of this vacuum cleaner can be assembled with a screw driver and each connecting component easily fits each other. Disassemble one by one referring to the exploded view.
- If possible, don't disassemble except for the necessary parts. It is not necessary to disassemble the parts that are not detailed in the exploded view.

#### 1. Filter Cover Assembly Replacement

I) Grasp carrying handle and open filter cover by lifting set hook.

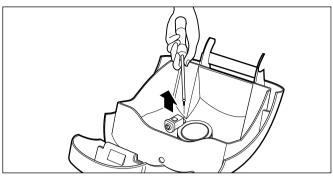


2) Push the hinge side by inserting flat screw driver in crack between hinge and body cover.



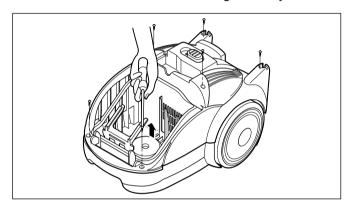
#### 2. Indicator Assembly Replacement

- 1) Grasp indicator assembly and push it out in the direction of the arrow.
- 2) Lift the indicator assembly.

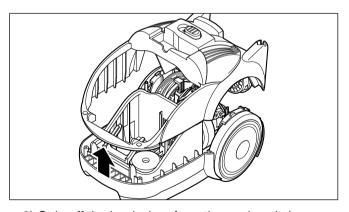


#### 3. Body Cover Assembly Replacement

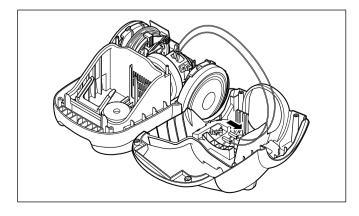
1) Open the filter cover in the direction of arrow and remove the two screws fastening the body base.



2) Lift body cover in the direction of the arrow.

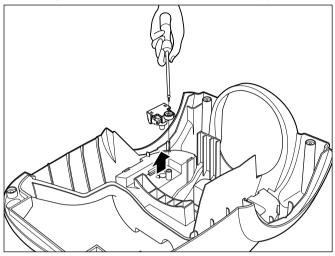


3) Strip off the lead wires from the push switch.

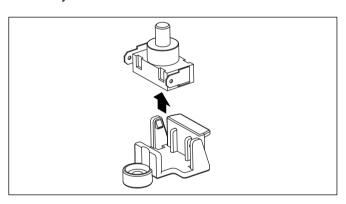


#### 4. Push Switch Assembly Replacement

1) Remove the screws fastening the Switch Supporter Ass'y in the direction of the arrow on the body cover, and then lift the Switch Supporter.

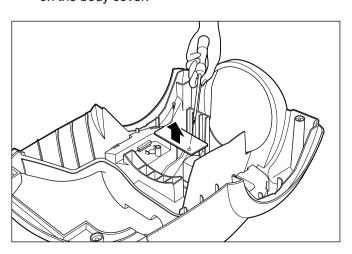


2) Lift the Switch Ass'y from the Switch Supporter Ass'y.

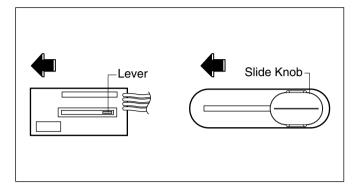


#### 5. P.W.B ASM Replacement.

1) Remove the two screws fastening the P.W.B Ass'y on the body cover.

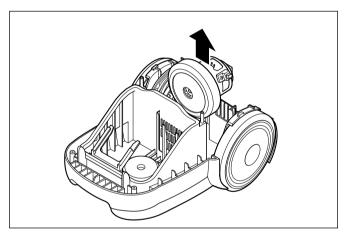


2) When reassembling, assemble after sliding the lever of P.W.B Ass'y and switch knob to the left side.



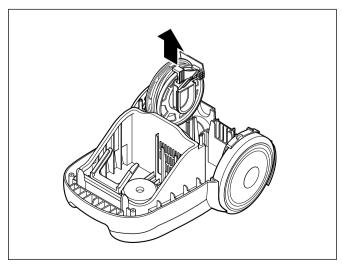
#### 6. Motor Assembly Replacement

• Lift the motor assembly in direction of the arrow after stripping off the lead wires.



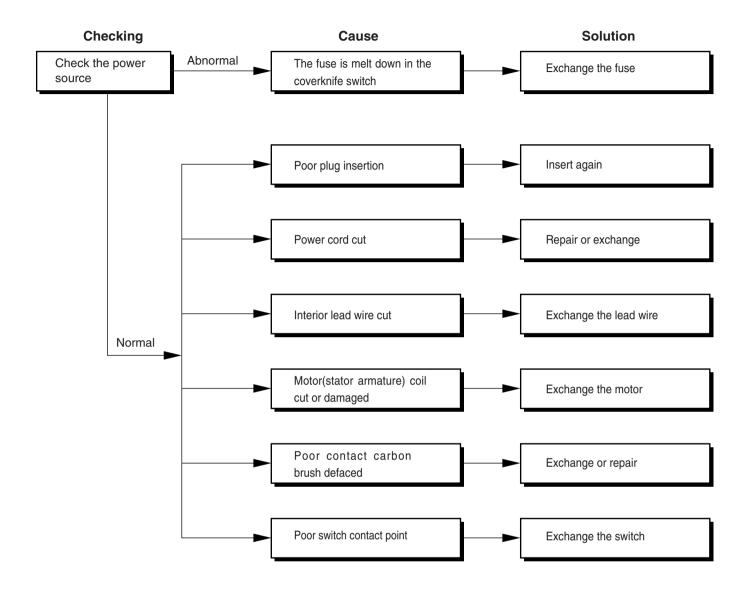
#### 7. Cord Reel Assembly Replacement

• Lift the cord reel assembly from the body base in direction of the arrow.

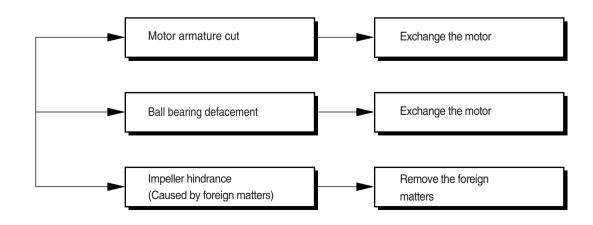


# TROUBLE SHOOTING GUIDE

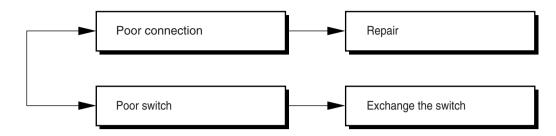
### 1. SWITCH ON BUT MOTOR DOES NOT TURN



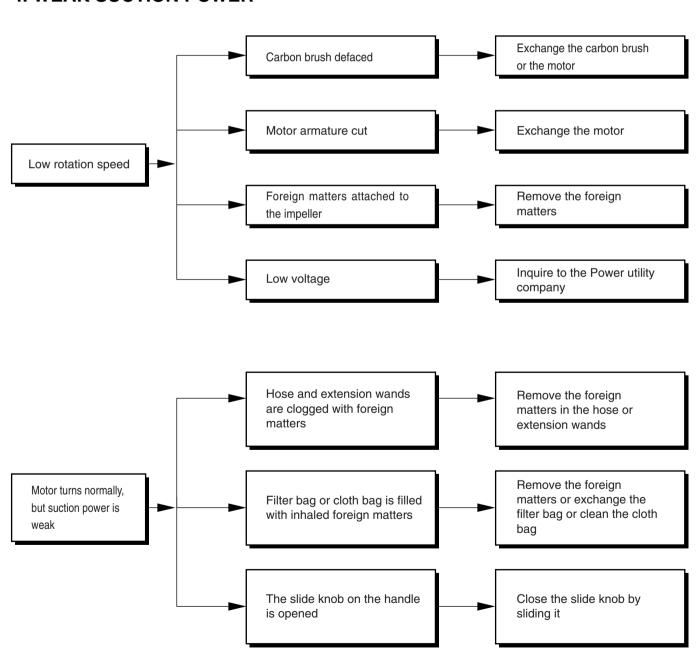
# 2. SWITCH ON, MOTOR DOES NOT TURN BUT BUZZES



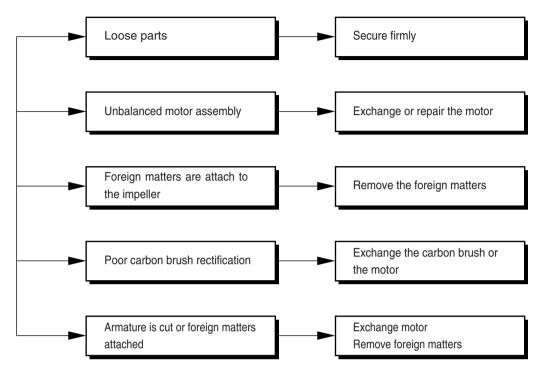
### 3. SWITCH OFF BUT MOTOR TURNS



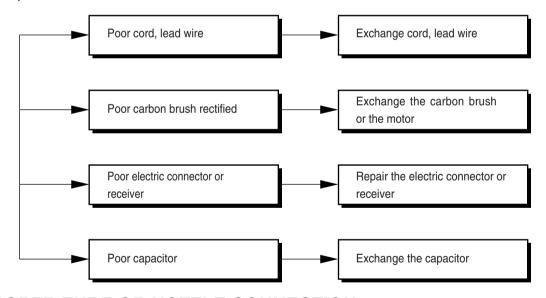
### **4. WEAK SUCTION POWER**



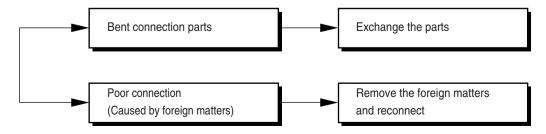
#### 5. VIBRATION NOISES

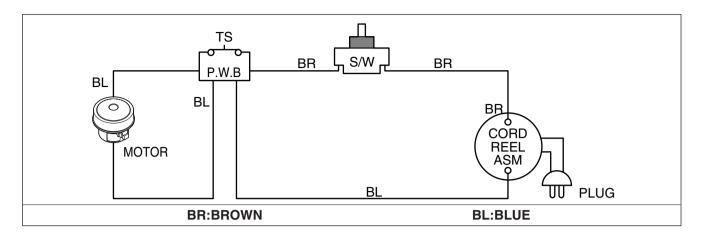


### 6. RADIO, TV RECEPTION DISTURBANCE



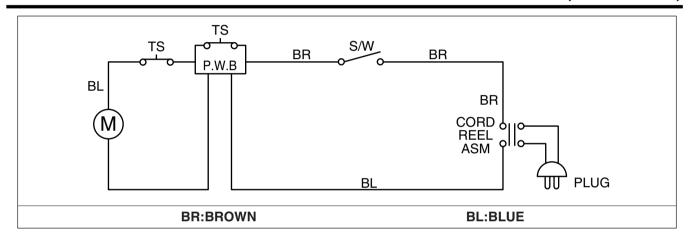
### 7. IMPROPER TUBE OR NOZZLE CONNECTION





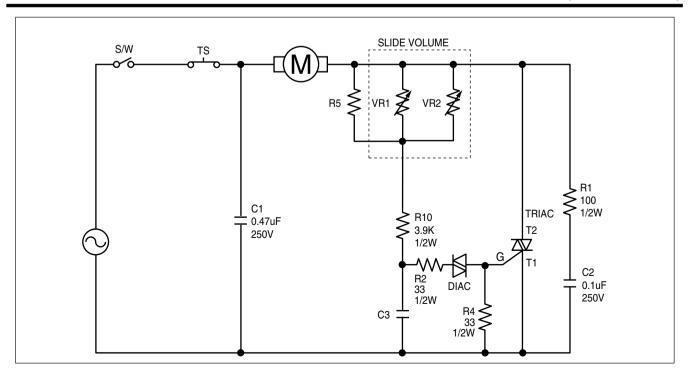
# **SCHEMATIC DIAGRAM**

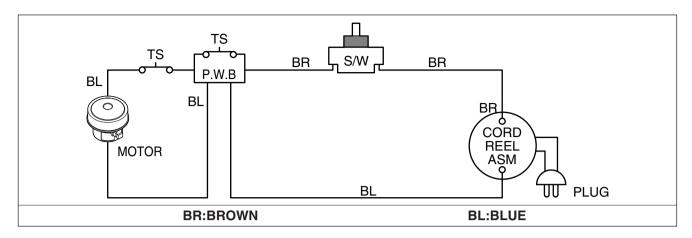
(V-CP643SD/ST)



# PRINTED CIRCUIT DIAGRAM

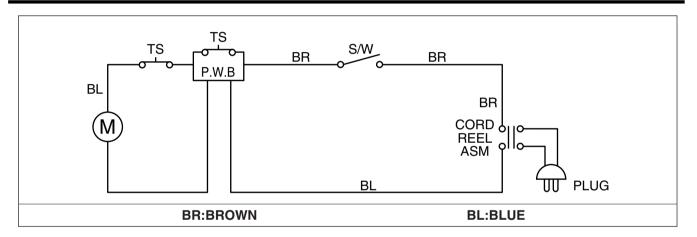
(V-CP643SD/ST)





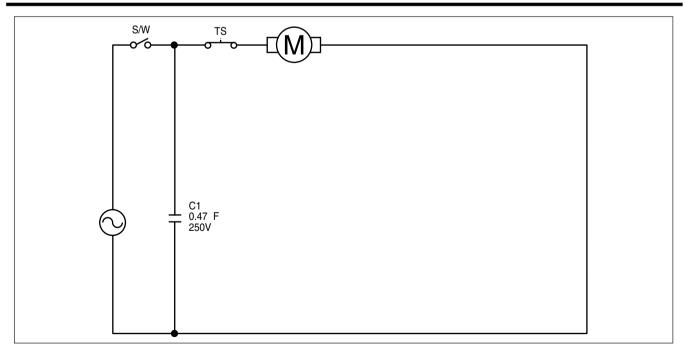
# **SCHEMATIC DIAGRAM**

(V-CP643ND/NT)



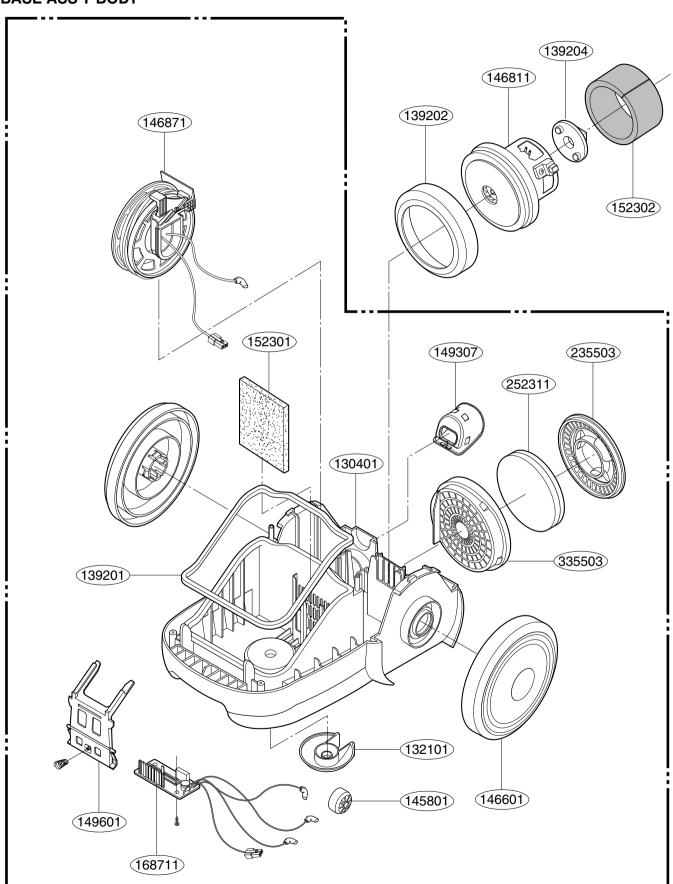
# PRINTED CIRCUIT DIAGRAM

(V-CP643ND/NT)

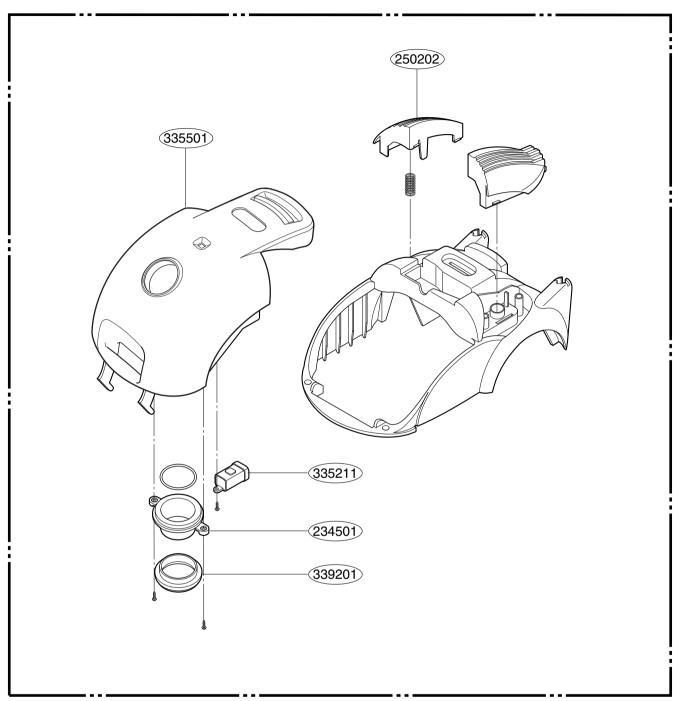


# **EXPLODED VIEW**

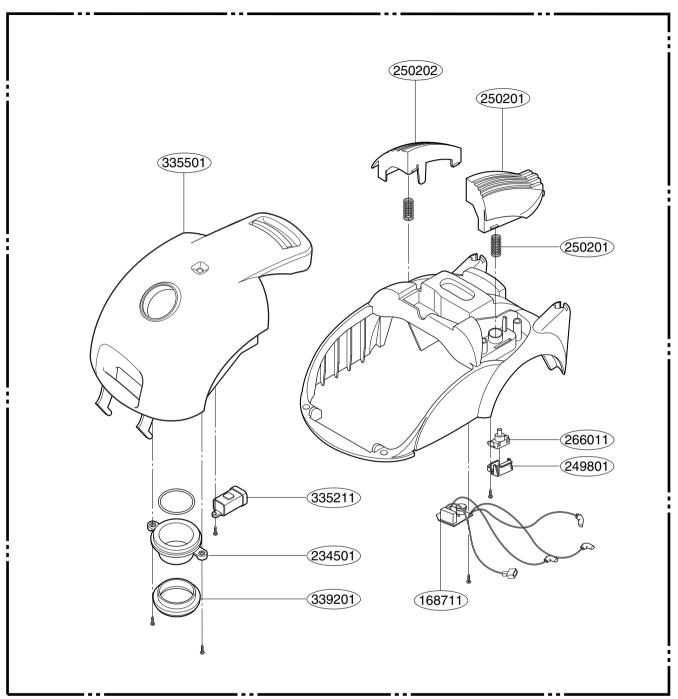
### **BASE ASS'Y BODY**



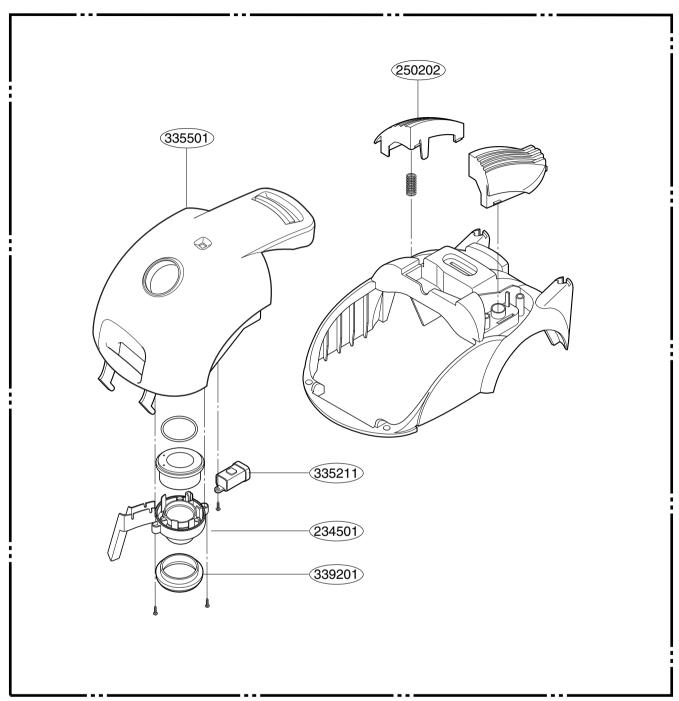
# COVER ASS'Y BODY SLIDE TYPE



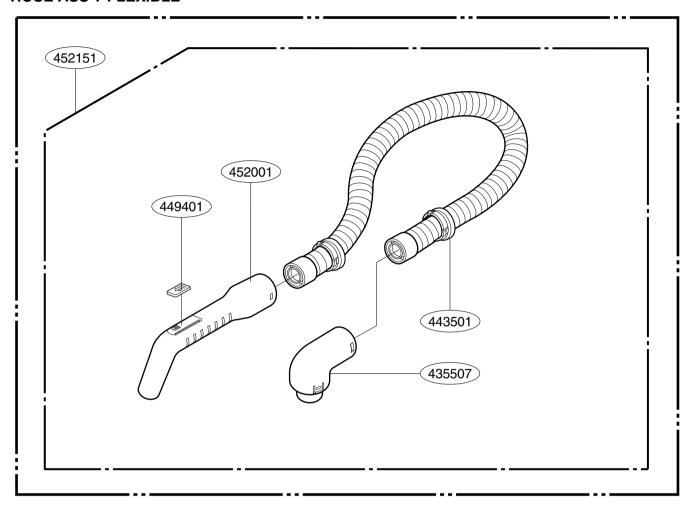
### COVER ASS'Y BODY ON/OFF TYPE



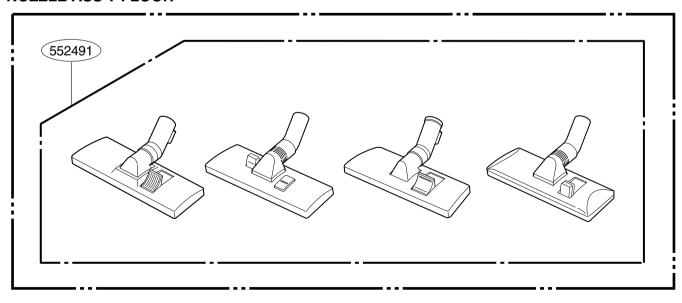
# COVER ASS'Y BODY HOSE SLIDE TYPE



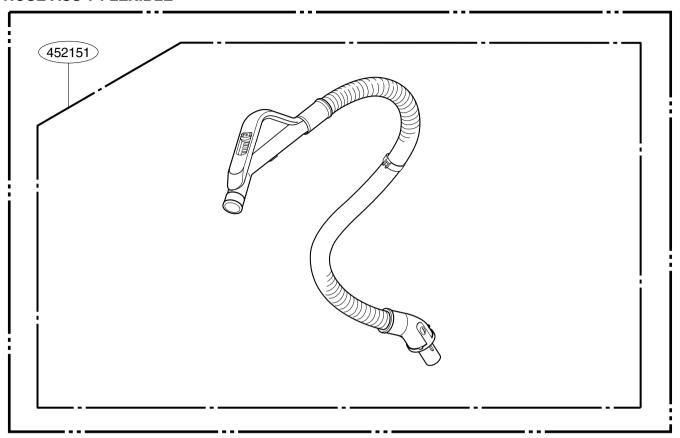
### **HOSE ASS'Y FLEXIBLE**



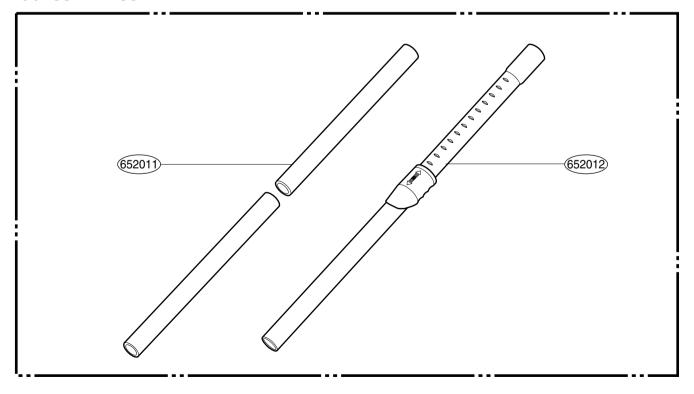
### **NOZZLE ASS'Y FLOOR**



### **HOSE ASS'Y FLEXIBLE**



### **ACCESSARY ASS'Y**



# **REPLACEMENT PARTS LIST**

LOCATION NO.	PART NO.	DESCRIPTION	APPLICATION	REMARK
130401	3040FI1509A	BODY BASE		
132101	3I20036E	FRAME,CASTER		
139201	3920FI4718R	PACKING, DUST SEAL		
139202	3920FI3794A	PACKING, MOTOR MOUNTING	V-C3A41ND, V-C3A42SD V-CP643ND/NT/SD/ST	1400W
139202	3920Fl3766A	PACKING, MOTOR MOUNTING	V-C3A53ND, V-C3A54SD V-CP663ND/NT/SD/ST	1600W 1500W
139204	3920FI4653B	PACKING,SEAL	V-C3A41ND, V-C3A42SD V-CP643ND/NT/SD/ST	1400W
139204	3920Fl3763B	PACKING,SEAL	V-C3A53ND, V-C3A54SD V-CP663ND/NT/SD/ST	1600W 1500W
145801	4I20014E	ROLLER,CASTER		
146601	4660FI2422A	WHEEL		
146811	4681Fl2373D	MOTOT ASSEMBLY ,VC	V-C3A41ND, V-C3A42SD V-CP643ND/NT/SD/ST	1400W
146811	4681Fl2456B	MOTOT ASSEMBLY ,VC	V-C3A53ND, V-C3A54SD V-CP663ND/NT/SD/ST	1600W 1500W
146871	4687FI1479H	CORD REEL ASSEMBLY		
149601	4960FI2327A	MOUNT,BAG		
152301	4I70098K	FILTER(MECH),MOTOR SAFETY		
152302	4I23008B	PACKING,ABSORBING		
152311	5231Fl3512B	FILTER ASSEMBLY,PAPER		
152312	5231FI2443A	FILTER ASSEMBLY,CLOTH		
168711	6871FX2167A	PWB(PCB) ASSEMBLY	V-C3A42SD, V-C3A54SD V-CP643SD/ST V-CP653SD/ST V-CP663SD/ST	SLIDE TYPE
235501	3550FI1668A	COVER,BODY		
235503	3550FI2558A	COVER,EXHAUST FILTER		
243501		RING CONNECTOR		
249401	4940FI4663A	KNOB,CONTROL		
249701	4L70024C	SPRING,BUTTON		
250201	5020FI2351A	BUTTON,POWER SWITCH		
250202	5020FI2350A	BUTTON,CORD REEL		
252311	5231Fl3788A	FILTER(MECH),EXHAUST		
266011	6601FI3472A	SWITCH ASSEMBLY, PUSH		

LOCATION NO.	PART NO.	DESCRIPTION	APPLICATION	REMARK
335211	3521Fl3703F	INDICATOR ASSEMBLY	V-C3A41ND, V-C3A42SD V-CP643ND/NT/SD/ST	1400W
335211	3521Fl3703E	INDICATOR ASSEMBLY	V-C3A53ND, V-C3A54SD V-CP663ND/NT/SD/ST	1600W 1500W
335501	3550FI1669A	COVER,FILTER		
435507	5200FI2269A	PIPE,CONNECTOR		
443501	4350FI3497A	RING,CLOSE		
449321	4932FI2268A	CONNECTOR(MECH),HOSE		
452001	3650FI2275A	PIPE,BENDING		
452151	5215FI1248L	HOSE ASSEMBLY FLEXIBLE		
552491	5249FI2182A	NOZZLE ASSEMBLY,FLOOR	NZ-5	
552491	5249FI2449A	NOZZLE ASSEMBLY,FLOOR	NZ-27 BLACK	
650581	3l21007N	TOOL,CREVICE		
652011	5201FI2324A	PIPE ASSEMBLY STEEL	2-STEP STEEL	
652012	5201FI2438X	PIPE ASSEMBLY TELESCOPIC		
652031	3I20011E	BRUSH ASSEMBLY DUST	BLACK	
652481	5248FI2259A	NOZZLE,UPHOLSTERY	BLACK	
149307	4930Fl3802A	HOLDER,CORD		
335503	3550FI2562A	COVER ,SUB BODY		

# **APPENDIX**

#### 1. THE TYPE OF POWER CORD & PARTS NUMBER

ТҮРЕ	TYPE OF PLUG		POWER CORD ASS'Y P/NO	CORD REEL ASS'Y P/NO.(L/NO. 146871)
<b>A-1</b>		12.7	6411Fl2422Q	4970Fl1479R
S-1		6.3	2182011A	4970FI1479Q
C-2		4.8	2l12045B 2l12045H 2l12045L	4970FI1479L 4970FI1479H 4970 FI1479P
C-1		4	6411Fl2230B	-
B-3		Color identification of fuse  Brown 13A  Yellow 5A  Blue 3A	6411FI2169A	-

### 2. COLOR & PARTS NUMBER

	DESCRIPTION COLOR	METAL GREEN	MICA BLUE	LIGHT SILVER	REMARK
335501	COVER FILTER	3550FI1669A	3550FI16669B	3550FI1669C	-
250201	BUTTON, POWER SWITCH	5020Fl2351A	5020Fl2351B	5020Fl2351D	-
250202	BUTTON, CORD REEL	5020Fl2350A	5020Fl2350B	5020FI2350D	-

	DESCRIPTION COLOR	CHAMPAINGN COLD	CRANBERRY RED	COBALT BLUE	REMARK
335501	COVER FILTER	3550FI1669D	3550FI1669E	3550FI1669F	-
250201	BUTTON, POWER SWITCH	5020Fl2351D	5020FI2351E	5020Fl2351F	-
250202	BUTTON, CORD REEL	5020FI2350D	5020FI2350E	5020Fl2350F	-

	DESCRIPTION COLOR	ATAG RED		REMARK
335501	COVER FILTER	3550FI1669G		-
250201	BUTTON, POWER SWITCH	5020Fl2351G		-
250202	BUTTON, CORD REEL	5020FI2350G		-

### 3. MOTOR & PWB ASS'Y POWER CORD ASS'Y & CORD REEL ASS'Y PARTS NUMBER

LOCATION NO.	DESCRIPTION	PART NO.	REMARK
		4681Fl2373D	VMC-500E5, 230V/50HZ
		4681FI2456F	VMC-462E5, 230V/50HZ
146811	MOTOR ASSY.VC	4681FI2457A	VMC-420E5, 230V/50HZ
		4681FI2456C	VMC-460E6, 240V/50HZ
		4681FI2373G	VMC-500L2, 127V/50HZ/60HZ
			230V/50HZ, VMC-420E5, T/P
		6871FX2172A	230V/50HZ, VMC-462E5, T/P
168711	PWB ASSY, MAIN	N.	240V/50HZ, VMC-460E6, T/P
100711		6871FX2172B	230V/50HZ, VMC-500E5, T/P
		6871FX2168B	1600W91500W, T/P(ON-OFF)
		6871FX2168C	1400W, T/P(ON-OFF)
		2l12045L	C-2-1, 6.3m, TP=90
164111	POWER CORD ASSY	2l12045B	C-2-1, 6.3m, TP=75
104111	FOWER CORD ASST	641Fl2422Q	A-1, 5.3m, V-CP643ND
		2l82011A	S-1, 6.3m
		4687FI1479L	C-2-1, 6.3m, V-CP663SER, V-C3A53ND, V-C3A54SD
146871	CORD REEL ASSY	4687FI1479Q	C-2-1, 6.3m, V-CP643SER, V-C3A41ND, V-C3A42SD
		4687FI1479H	C-2-1, 5.3m, V-CP663DT
		4687FI1479R	A-1, 5.3m, V-CP643ND