

# TECHNICAL INFORMATION

**Makita**

PRODUCT

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**Models No.** ▶ 9564VCL, 9565VCL

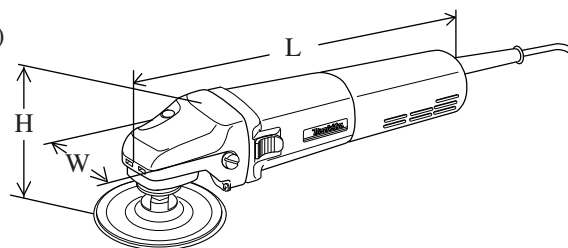
**Description** ▶ Angle grinder 115mm (4-1/2") / 125mm (5")

## CONCEPTION AND MAIN APPLICATIONS

The above models are low speed version of Model 9564CV and 9565CV, equipped with speed control dial.

The plastic head cover making it easy to grip gear housing, is required for stonework.

The wide rpm. range (2,000 - 6,800 rpm.) provides you not only fine grinding work but also ideal sanding application.



Dimensions : mm ( " )	
Model No.	9564VCL, 9565VCL
Width ( W )	80 (3-5/32)
Height ( H )	114 (4-1/12)
Length ( L )	311 (12-1/4)

## Specification

Voltage (V)	Current (A)	Cycle (Hz)	Continuous Rating (W)		Max. Output(W)
			Input	Output	
100	15	50 / 60	1,400	840	2,000
120	12	50 / 60	1,400	840	2,000
220	6.7	50 / 60	1,400	840	2,400
230	6.4	50 / 60	1,400	840	2,400
240	6.1	50 / 60	1,400	840	2,400

Specifications		Model No.	9564CVL	9565CVL
Abrasive disc : mm ( " ) in diameter			115 ( 4-1/2 )	125 ( 5 )
No load speed : (min - max rpm)			2,000 - 6,800	
"Super joint system-S J S"			Yes	
Electronic	Current limiter		Yes	
	Speed control dial		Yes	
	Soft starter		Yes	
	Constant speed		Yes	
Cord length : m ( ft )			2.5 ( 8.2 )	
Net weight :Kg (lbs )			1.8 ( 4.0 )	

## Standard equipment

for Model 9564VCL

- \* Pad 115mm of hook and loop type ..... 1 pc.
- \* Lock nut wrench ..... 1 pc.
- \* Grip 36 assembly ..... 1 pc.
- \* Hard cover ..... 1 pc.
- \* Abrasive disc 115-60 (Hook and loop type) ..... 1pc.
- \* Wheel cover ..... 1 pc.
- \* Inner flange ..... 1 pc.
- \* Lock nut ..... 1 pc.

for Model 9565VCL

- \* Pad 125mm of hook and loop type ..... 1 pc.
- \* Lock nut wrench ..... 1 pc.
- \* Grip 36 assembly ..... 1 pc.
- \* Hard cover ..... 1 pc.
- \* Abrasive disc 125-60 (Hook and loop type) ..... 1pc.
- \* Wheel cover ..... 1 pc.
- \* Inner flange ..... 1 pc.
- \* Lock nut ..... 1 pc.

< Note > The standard equipment for the tool shown may differ from country to country.

## Optional accessories

For Model 9564CVL

- \* Rubber pad 100
- \* Lock nut 14-48
- \* Abrasive disc 115-24, 30, 50, 80, 120
- \* - ditto - (Hook and loop type)115-40, 60, 80, 120, 180,
- \* Wire cup brush 90 set
- \* Wheel cover for wire cup brush 90
- \* Dust collecting wheel cover

For Model 9565CVL

- \* Rubber pad 115
- \* Lock nut 14-48
- \* Abrasive disc 125-24, 30, 50, 80, 120
- \* - ditto - (Hook and loop type)125-40, 60, 80, 120, 180,
- \* Wire cup brush 90 set
- \* Wheel cover for wire cup brush 90
- \* Dust collecting wheel cover

**Electronic limiter for 9564CVL, 9565CVL**

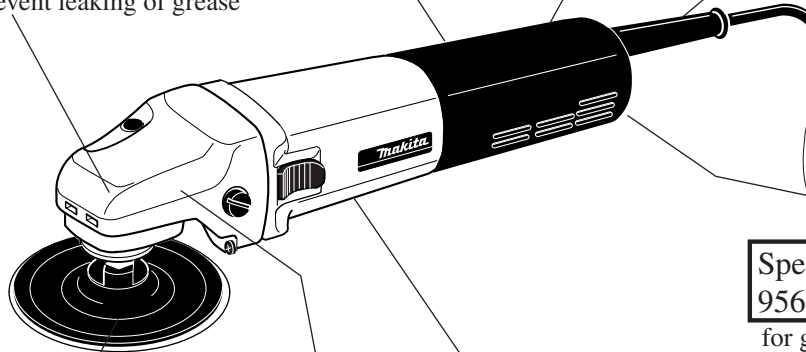
stops the electric current when accidental over load on the machine, and protects motor from burning. And when the machine will be freed from the load, restart the motor automatically. At this time, the soft starter functions for suppression of starting shock.

**Electronic controller for 9564CVL, 9565CVL**

for keeping constant rpm. even under loaded condition, and for suppressing starting shock.

**High sealed gear housing**  
to prevent leaking of grease

**Tough Cord guard**  
excellent in flexibility  
to protect power supply cord  
from disconnection.



**Speed control dial for 9564CVL and 9565CVL**  
for getting optimum rotating  
speed to suit various work piece.

**Hook and loop type pad**  
for easy and quick changing disc

**Plastic head cover for**  
easy and comfortable masonry work

**High power and tough 1,400W motor**

High power from slim and compact body thanks to new S60 type motor and electronic control system.

Jig zag, and powdered varnish coating on armature and field ensure effective protection from sharp grinding dust.

**"Super Joint System - SJS"**

Lock spring joining spiral bevel gear and armature shaft provides following benefits.

- \* Smooth and comfortable grinding work.
- \* Suppression of shock by accidental wheel lock during work.
- \* Prevention of damage on gear coming from accidental wheel lock.

**Adjustable wheel cover's position**

Wheel cover's position can be adjusted without any tool.

**Protection from dust**

	Dust proof bearing	Labyrinth structure	Dust proof washer
Fan side of armature	X	○ Double Labyrinth	○
Commutator side of armature	○	○	○
Wheel side of spindle	** ○	○	X

\*\* ○ : The spindle portion is protected from not only dust but also intruding water firmly.

		Products with speed control	
Manufacturer		MAKITA	C
Model No.		9564CVL	9565CVL
Wheel diameter: mm (")		115 (4-1/2)	125 (5)
Power input (W)		1,400	1,200
No load speed : (min - max rpm)		2,000 - 6,800	2,200 - 6,800
Motor size		S60-55	62.5-58
Clutch		*Yes	No
Electronic features	Soft start	Yes	Yes
	Constant speed	Yes	Yes
	Current limiter	Yes	Yes
	Speed control dial	Yes	Yes
Auto break carbon brush		Yes	No
Net weight : Kg (lbs)		1.8 (4.0)	1.9 (4.2)

\*Yes : equipped with  
"Super joint system-SJS"

## ► Repair

### <1> Replacing spiral bevel gear 11

- (1) Remove tapping screw 4x18 and detach rear cover from motor housing.  
And remove carbon brush as illustrated in Fig. 1.
- (2) Remove tapping screw 4x28 and detach gear housing from motor housing.  
And remove armature with gear housing cover as illustrated in Fig. 1.

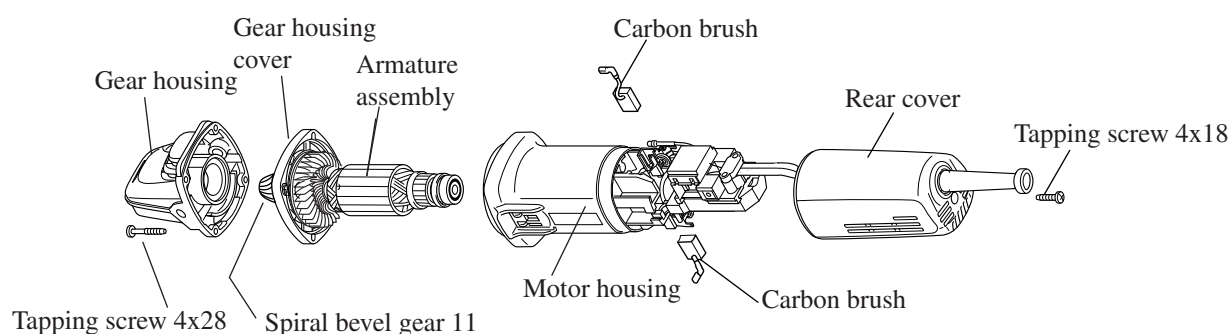


Fig. 1

- (3) Detach retaining ring S-5 and flat washer 6 from armature as illustrated in Fig.2.

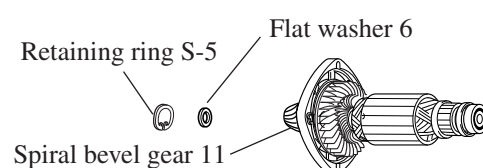


Fig. 2

- (4) Remove spiral bevel gear 11 with bearing extractor No.1R269. And remove lock spring 12 by turning it anti-clockwise. When removing, grip lock spring 12 with gloved hand for anti-skid.

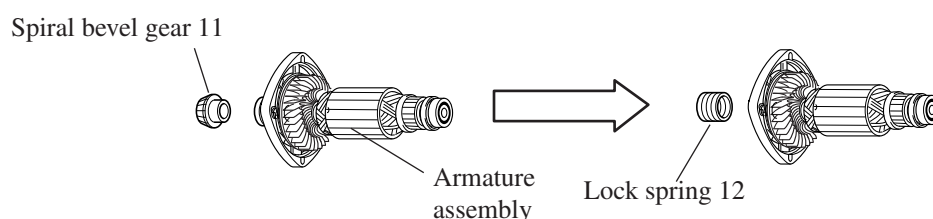


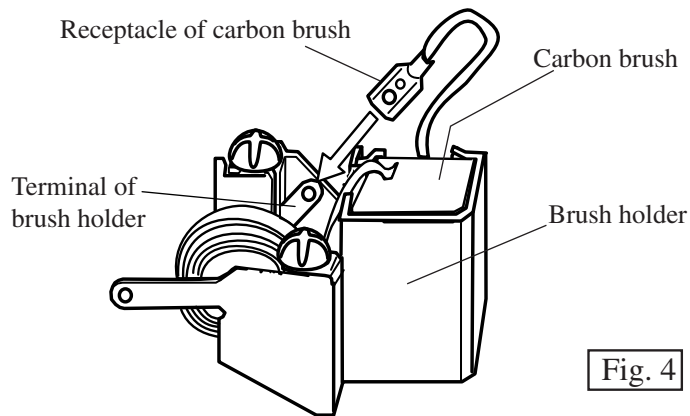
Fig. 3

< Note > Replace lock spring 12 and retaining ring S-5 as a set, when replacing spiral bevel gear 11.

- (5) When assembling spiral bevel gear 11 to armature, take the reverse step.

**Attaching carbon brush**

Connect the receptacle of carbon brush with the terminal of brush holder by pushing in the direction of the arrow, as illustrated in Fig. 4.



Push the receptacle of carbon brush until it stops as illustrated in Fig. 4A.

Completely attached receptacle of carbon brush

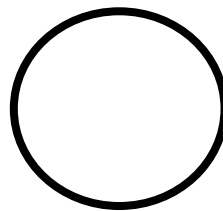
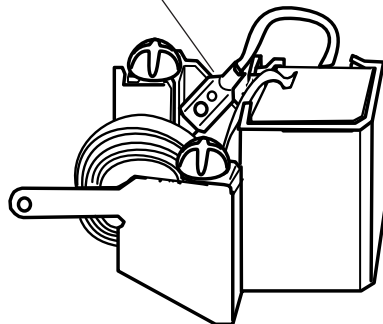


Fig. 4A

Incompletely attached receptacle of carbon brush

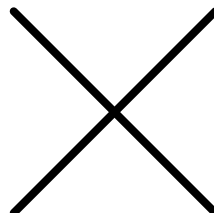
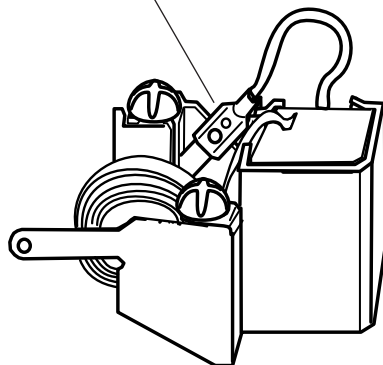
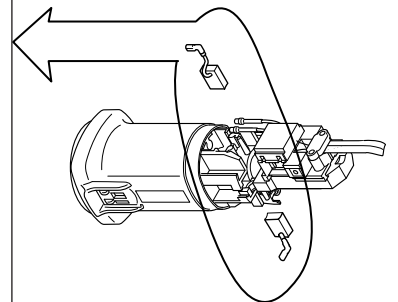
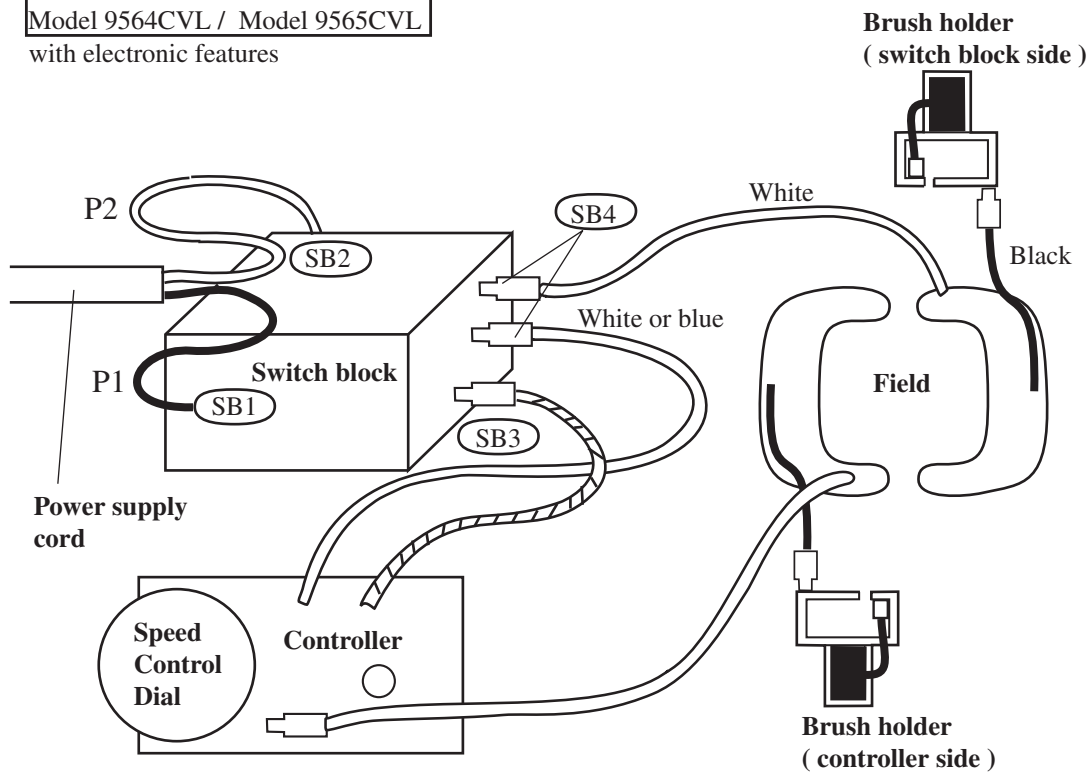


Fig. 4B



## ► **Circuit diagram**

Model 9564CVL / Model 9565CVL  
with electronic features



< Note >

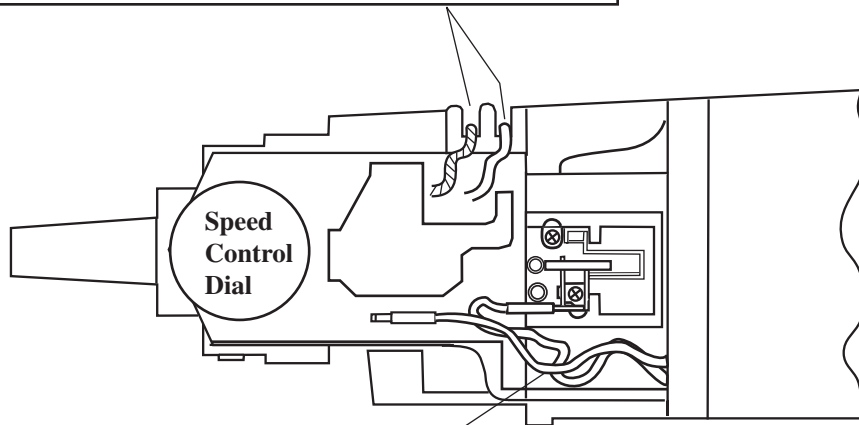
The numbers, SB1, SB2, SB3 and SB4 are indicated on the switch block.

Fig. 4

## ► **Wiring diagram**

Model 9564CVL / Model 9565CVL

Put the lead wires of controller in the lead holder so that they are not slacken.



Be careful not to loosen the lead wires of field in motor housing  
Put the loosened lead wires in the above place.

Fig. 5

Model 9564,CVL / Model 9565CVL

with electronic features

Put lead wires of power supply cord by strain relief as illustrated in Fig. 8.

Do not loosen the lead wires of filed in motor housing.  
Put the loosened ones in the place as illustrated in Fig.8.

Fix lead wires of controller with lead holder.

Put their slack part in the place as illustrated in Fig.8.

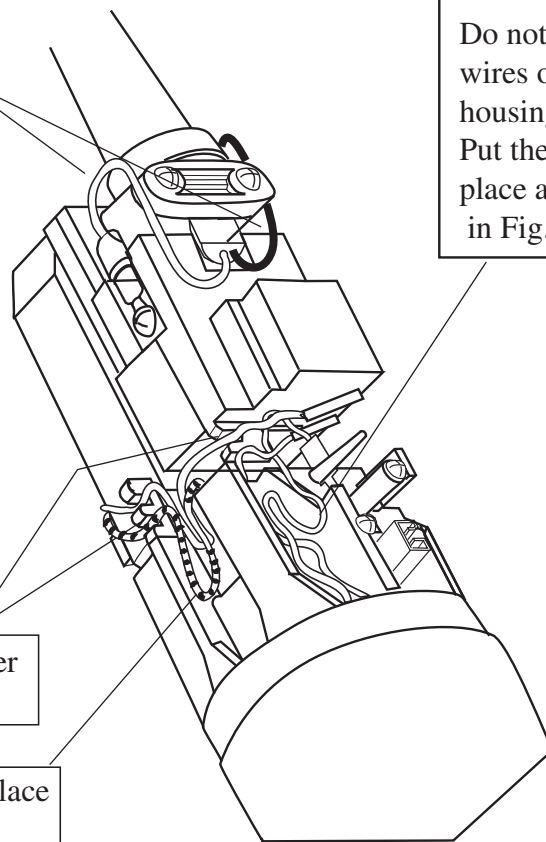


Fig. 6