

# OPERATING MANUAL

# *Tool - Co*

## **BDG250 FLOOR GRINDER**



MACHINE CODE: BDG2501

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## INTRODUCTION AND DESCRIPTION

This manual is intended to provide operation and service information necessary for the safe and efficient use of the Tool-Co BDG250 Floor Grinder.

Operating or servicing the unit other than in accordance with the instructions given may subject the machine to conditions beyond its capability, which may result in machine failure or personal injury.

### IMPORTANT

**Read the entire operating manual carefully before attempting to use the floor grinder. Special attention should be paid to the section titled 'Safety Precautions'.**

The floor grinder is a sturdy, reliable and easy to use machine.

The floor grinder is fitted with a 2.2kW single phase motor. This motor offers a direct drive to the grinding plate with the incorporation of a flexible coupling between the motor and the plate.

The shroud system is unique in design, automatically adjusting to suit segment height and floor angle. This shroud system, when used in conjunction with an appropriate industrial vacuum unit, eliminates dust loss during grinding. The shroud has two removable sections to enable the operator to grind close up to the wall etc. Please note that dust loss is possible when this section is removed.

The floor grinder comes complete with a water connection for wet grinding should this be required. This incorporates a ball valve allowing the operator to regulate the water supply to obtain the best grinding results.

The floor grinder has a foldable handle which enables it to be easily transported in the trunk of most small vehicles. The rear wheels can also be extended outward should the operator want more stability from the grinder. This requires the use of an 8mm Allan Key. The operator can also raise or lower the height of the handle to maximize their comfort when using the grinder, and the new designed lifter system makes operator handy to use.

### TECHNICAL DATA

Motor Horsepower	3hp
Motor kW Rating	2.2kW
Motor Rotations Per Minute	1410rpm
Unit Weight	67kg
Plate Type	Standard 250mm Plate
Plate Bolt Types	M10 x 25 Countersunk Cap Screw
Main Construction	Powder Coated Steel

### SAFETY PRECAUTIONS

The floor grinder has been designed to minimize noise and vibration levels and to provide maximum operator safety. However, incorrect use of the grinder may cause serious injury and therefore the following precautions must be taken:

1. Do not use the grinder for longer than prescribed in your local environmental working regulations, as the noise load from extensive daily use may result in hearing defects.
2. Always use protective earplugs or earmuffs, goggles, gloves and correct footwear.
3. Do not modify the grinder in any manner, or use a machine that has been modified by anyone other than the manufacturer or authorised dealer.
4. Do not add weight to the machine to make the grinder work harder.
5. Reduce the number of segments on the grinding plate to increase performance.
6. Be sure that re-tipped and new grinding plates are properly balanced.
7. Do not run the grinder with grinding head raised any higher than necessary, i.e tipped back on handle.
8. Always be sure that folding handle latch is secure and has not vibrated loose after use.
9. When grinding, the machine is exposed to high vibration. Occasionally check machine for bolts/nuts which may have vibrated loose.
10. Do not allow water or cotton to enter the interior of the motor.

## OPERATION

The floor grinder is designed to be used either wet or dry. If the floor is being ground dry, ensure a suitable industrial vacuum is connected and that the operator is wearing suitable breathing respiratory equipment. Contact your local work place health authority to ensure that their requirements regarding respiratory equipment are being met.

### STARTING THE GRINDER

1. Check the grinding plate being used is suitable for the material being ground AND THAT THEY ARE CORRECTLY BALANCED.
2. Check that the grinding plates being used are in good order and properly attached, with all countersunk bolts firmly in place. Check this occasionally during use, as they can work loose during operation.
3. Check that the grinding plate is adjusted so that it sits level on the ground.
4. Check that all nuts and bolts on the folding handle latch are tight and firm.
5. Raise the grinding plates from the floor.
6. Start the motor by pressing the black switch on the starter box.
7. Lower the grinding plate and commence grinding.

### STOPPING THE GRINDER

1. De-press the red stop button on the starter box.

### NOTE:

1. By turning and pushing the handles, you can fix the vertical grinding position.
2. Adjust the axle's width to improve grinding stability.



1



2

**FAULT DIAGNOSIS**

Symptom	Possible Cause	Action
Machine will not start	No power is available.	Check that the power cable is plugged in / switched on.
	Machine is trying to start on glue or sticky substance.	Clear a patch with scraper and grind into the glue a little, preventing build up.
	Extension cord is too thin or is too long.	Upgrade the extension cord to a larger cable.
Grinder runs for 5-15 minutes, then stops.	The current allow screw is not adjusted properly.	Adjust the current screw to the right position.
	Extension cable too long and/or not made from heavy enough cable.	Get electrician to check extension lead compatibility.
Grinder runs but does not perform adequately.	Motor defective.	Repair or replace.
Grinder vibrates during use.	Grinding plates not correctly balanced.	Replace or re-balance grinding plates.
Grinding noise coming from grinding head when up on jockey wheel.	Excessively worn motor bearings.	Have motor serviced.

**MAINTENANCE**

Daily cleaning: The motor in use should always be kept clean. No water, or debris should be allowed to get into the interior of the motor.

Check on load current: While the motor is in operation, constant care should be taken to keep the load current below the maximum recommended motor current rating.

Operational sounds: During operation of the motor there must be no rubbing sounds, shrieks or other random noises. Stop the motor immediately and restart after inspection and corrections have been made.

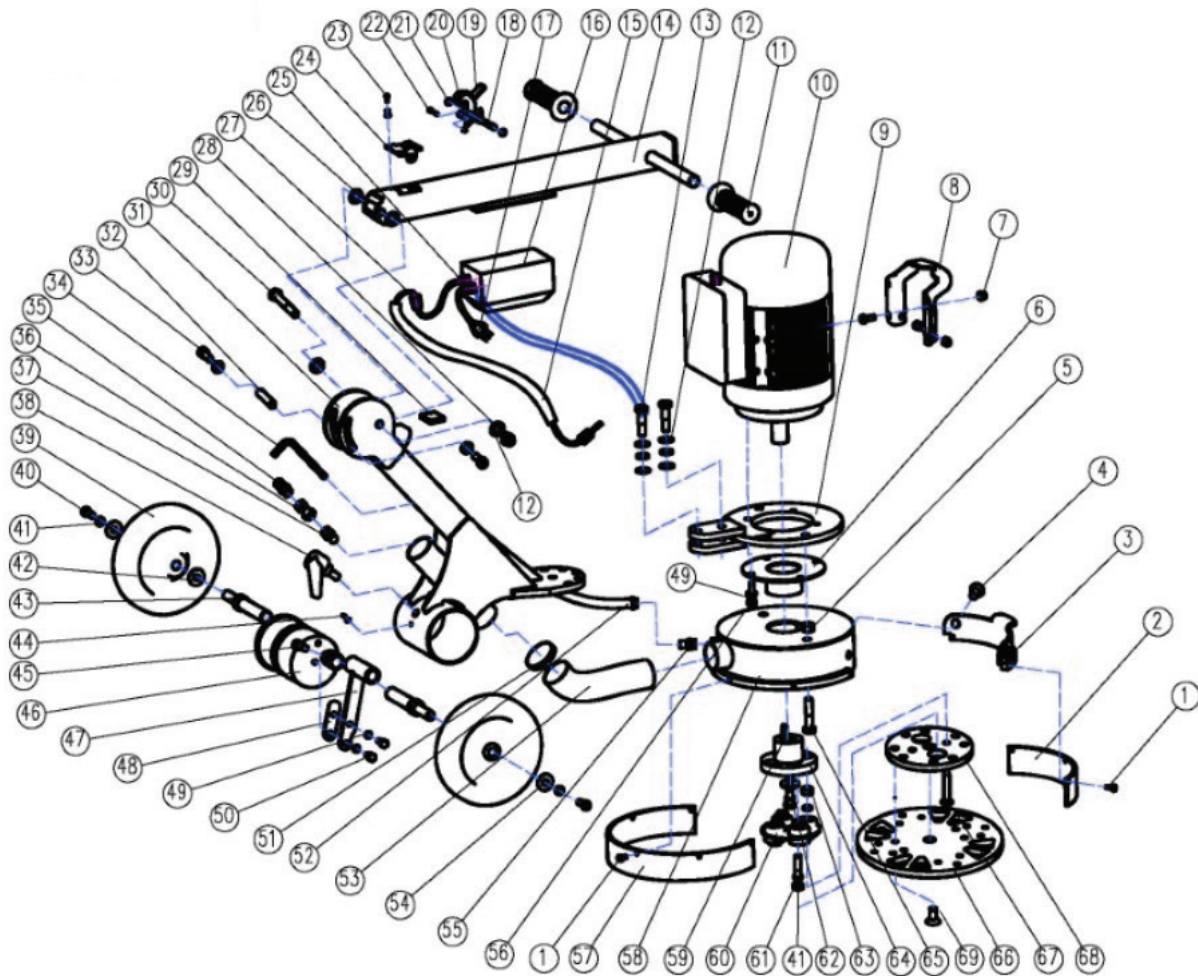
Check folding handle latch periodically. This is adjustable. To adjust, loosen the lock nut on the latch and then screw in until a satisfactory tension has been achieved.

The wheel bearings use sealed bearings and require no regular greasing.

**\*NB To minimize vibration and uneven blade wear, rotate plate every 2 hours. Failure to do so can lead to premature wear of the flexible coupling.\***

**\*\*Ensure all re-tipped and new grinding plates are properly balanced.\*\***

## PARTS DIAGRAM & LIST



Position Number	Part Number	Description	Qty Req
1	BDG2501/0206	M5 x 20 Self Drill Screw	9
2	BDG2501/0207	Shroud Strip - Short	1
3	BDG2501/0208	Detachable Shroud	1
4	BDG2501/0209	Hexagon Countersunk Cap Screw, M12 x 25	2
5	BDG2501/0210	M12 Hexagon Nuts	2
6	BDG2501/0211	Location Case	1
7	BDG2501/0212	Hexagon Head Bolt	4
	BDG2501/0213	Hexagon Lock Nut	4
8	BDG2501/0214	Front Handle Assembly	1
9	BDG2501/0215	Base	1
10	BDG2501/0216	Electrical Motor	1
11	BDG2501/0217	Rubber Handle Grip	2
12	BDG2501/0218	Plain Washer	6

**\*NB "Qty Req" Indicates the quantity of parts required to make up a full set.\***

**\*\*Parts are ordered individually.\*\***

Position Number	Part Number	Description	Qty Req
13	BDG2501/0219	Hexagon Head Bolt	2
	BDG2501/0220	Spring Lock Washer	2
14	BDG2501/0221	Handlebar Upper Arm	1
15	BDG2501/0222	Flexible Conduit L=450mm	1
16	BDG2501/0223-5	Complete Switch	1
	BDG2501/0223	Breaker,Gv2-Me16c (Switch)	1
	BDG2501/0224	Breaker Crust,Gv2-Mc02 (Switch Box)	1
	BDG2501/0225	UVT Assemble (Under Voltage Relay)	1
17	SP-LEAD	Three Core Power Lead	1
	G-AF001	Three Pin Plug Top	1
18 19 20 21 22 24	BDG2501/0228	Complete Locking Catch	1
23	BDG2501/0232	Plain Washer	4
	BDG2501/0233	Spring Lock Washer	4
	BDG2501/0234	Cross Recessed Pan Head Screw	4
25	BDG2501/0236	Cable Splice, M18	2
26	BDG2501/0237	Plain Washer	2
27	BDG2501/0238	Cable Splice, M20	2
28	BDG2501/0464	Hexagon Jam Nut	1
29	BDG2501/0240	Rubber Pad	1
30	BDG2501/0241	Hexagon Head Bolt	1
31	BDG2501/0242	Handlebar Lower Arm	1
32	BDG2501/0243	Location Pin	1
33	BDG2501/0244	Hexagon Cap Screw	2
	BDG2501/0160	Plain Washer	2
34	BDG2501/0436	Allen Key 6mm	1
	BDG2501/0467	Allen Key 8mm	1
35 36 37	BDG2501/0437	Complete Water Feed (With Lever)	1
38	BDG2501/0441	Adjustable Handle M12 x 25	1
39	BDG2501/0305	Wheel	2
40	BDG2501/0338	Hexagon Head Screw	2

Position Number	Part Number	Description	Qty Req
41	BDG2501/0442	Spring Lock Washer	7
42	BDG2501/0443	Adjusting Shaft	2
43	BDG2501/0444	Wheel Shaft	2
44	BDG2501/0109	Grease Nipple (Zerk Fitting)	1
	BDG2501/0445	Plain Washer	1
45	BDG2501/0446	Inner Hexagon Screw	2
46	BDG2501/0447	Eccentric Shaft	1
47	BDG2501/0448	Lift Lever	1
48	BDG2501/0266	Spacer Plate	1
49	BDG2501/0449	Spring Lock Washer	6
50	BDG2501/0450	Hexagon Bolt	2
51	BDG2501/0451	Pipe Clip	2
52	BDG2501/0452	Flexible Conduit Length 480mm	1
	BDG2501/0453	Small Clip	2
53	BDG2501/0454	Vent-Pipe	1
54	BDG2501/0455	Big Plain Washer	3
55	BDG2501/0456	Water Spout	1
56	BDG2501/0457	Hexagon Head Bolt	4
	BDG2501/0458	Plain Washer	4
57	BDG2501/0459	Shroud Strip Long	1
58	BDG2501/0460	Enclosure	1
59	BDG2501/0465	Key	1
60	BDG2501/0272	Flex Coupling	1
61	BDG2501/0461	Hexagon Head Bolt	2
62	BDG2501/0463	Hexagon Head Bolt	1
63	BDG2501/0466	Hexagon Nut	2
64	BDG2501/0267	Driving Sleeve	1
65	BDG2501/0462	Hexagon Head Bolt	2
66	BDG2501/0463	250mm Blank Plate	1
67	BDG2501/0277	Countersunk Cap Screw	2
68	BDG2501/0239	Dowel Disc	1
69	BDG2501/0290	M10 x 25 Countersunk Cap Screw	4

**\*NB "Qty Req" Indicates the quantity of parts required to make up a full set.\***

**\*\*Parts are ordered individually.\*\***

## RECOMMENDED VACUUM

Designed to fit the BDG250 Floor Grinder.  
Uses a single motor with a two-stage filtering system.  
Compatible with the continuous drop-down bagging system for ease of use and efficiency. **\*Sold Separately\***



VCC-BM00000



VCC-BM00241



VCC-BD00225



VCC-BD00438



VCC-BC00033



VCC-BC00034



VCC-BD00030



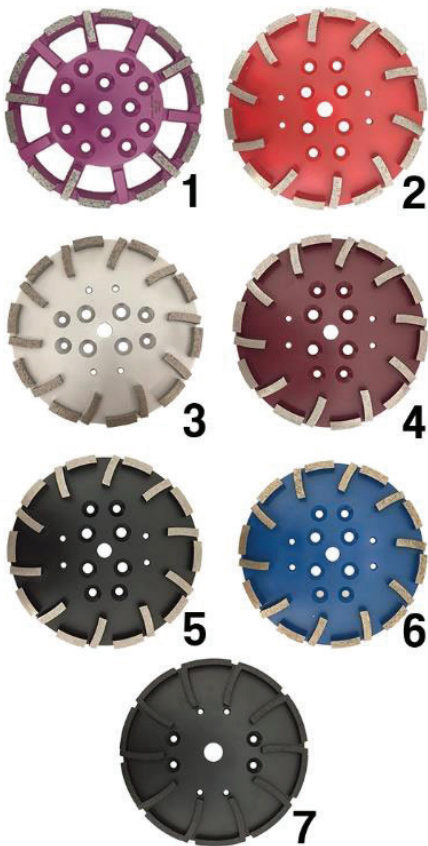
VCC-BM00004



VCM-AZ00280	Tool-Co G12-S
Power	1700W
Max Air Flow	300m3/h
Max Vacuum	220mbar
Primary Filter	1400 cm2, F8
Second Filter	1250 cm2, H13
Packaging Dimensions	65 x 42 x 110cm
Weight	44kg (40kg)
VCC-BM00431	Drum Pre-Filter
VCC-BM00287	Rear Filter

VCC-BM00000	G12-S Vacuum Adaptor To Fit BDG250 Floor Grinder
VCC-BM00241	Continuous Drop-Down Bag
VCC-BM00225	Drop-Down Bag Holder
VCC-BD00438	D50mm x 375mm Hose & Fitting
VCC-BC00033	D40mm Lower Wand
VCC-BC00034	D40mm Upper Wand
VCC-BD00030	Floor Brush 40mm x 400mm
VCC-BM00004	Spare Brush

## RECOMMENDED TOOLS



1	<b>LFG250S0</b>	250mm x 12mm x 16 Seg Purple 16#	Medium Floor Coating Removal
2	<b>LFG250S</b>	250mm x 12mm x 20 Seg Red 25#	Medium Floor Coarse Grinding
3	<b>LFG250S5</b>	250mm x 12mm x 20 Seg Silver 40#	Medium Floor Medium Grinding
4	<b>LFG250S2</b>	250mm x 12mm x 20 Seg Brown 80#	Medium Floor Fine Grinding
5	<b>LFG250S3</b>	250mm x 12mm x 20 Seg Black 120#	Medium Floor Extra Fine Grinding
6	<b>LFG250SA</b>	250mm x 12mm x 20 Seg Blue 25#	Abrasive Floor Coarse Grinding
7	<b>BFG250P</b>	250mm x 10mm x 20 Seg Black 25#	Hard Floor Coarse Grinding



1	<b>LCFE16PCD</b>	250mm x 16PCD Premium	Aggressive Coating Removal
2	<b>LCFE15PCD</b>	250mm x 15PCD Economy	Aggressive Coating Removal

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