

VERTIGRIND 270 SAFETY & OPERATORS MANUAL AND PARTS LISTING

04-12-2007



FLOOREX PRODUCTS

1800 FLOOREX

1800 356 673

BUILT IN AUSTRALIA

**VERTIGRIND 270 MANUAL &
PARTS LISTING
TABLE OF CONTENTS**

PAGE 1.	TABLE OF CONTENTS
PAGE 2.	SAFETY INSTRUCTIONS
PAGE 3.	SAFETY INSTRUCTIONS CONT...
PAGE 4.	OPERATING INSTRUCTIONS
PAGE 5.	OPERATING INSTRUCTIONS CONT...
PAGE 6.	OPERATING INSTRUCTIONS CONT...
PAGE 7.	OPERATING INSTRUCTIONS CONT...
PAGE 8.	ELECTRICALSAFETY
PAGE 9.	ELECTRICALSAFETY CONT...
PAGE 10.	PROBLEM SOLVING
PAGE 11.	PARTS LISTING VERTIGRIND 270

VERTIGRIND 270 MANUAL &
PARTS LISTING
SAFETY INSTRUCTIONS

1. **Read and understand the instructions on the machine and in this manual. Different models may have different parts and controls.**
2. **Equipment should only be operated by trained personnel, in good physical condition and mental health (not fatigued). The operator and maintenance personnel must physically be able to handle the bulk weight and power of this machine.**
3. **This is a **one person machine**. Maintain a safe operating distance to other personnel. Remember 'one machine, one operator'.**
4. **This equipment is intended for commercial use.**
5. **for the operators' safety and the safety of others, always keep all guards and shrouds in place.**
6. **Never start or run machine when unattended.**
7. **This machine is intended for use on floor and wall surfaces only with the assistance of a load balancer in the wall application.**
8. **Never start or run machine with when disks are not in contact with the surface.**
9. **Do not lend or rent machine without the operating instructions for the machine.**

VERTIGRIND 270 MANUAL &
PARTS LISTING

SAFETY INSTRUCTIONS CONT...

10. **Wear clothing suitable for the job and for the work place including, safety shoes, hard hat, hearing protection, non fogging vented safety goggles, and dust mask suitable for dust.**
11. **Keep body parts or any loose clothing away from moving parts. Failure to comply could result in bodily injury.**
12. **Do not modify machine in any way. Only use genuine VERTIGRIND 270 parts and accessories.**
13. **Repairs should be performed by qualified persons only.**
14. **Ensure parts have stopped moving and disconnect power when servicing or changing blades or accessories.**
15. **Never operate machine in rain or if heavy moisture is present.**
16. **Petrol is extremely flammable and poisonous. Petrol should only be dispensed in well ventilated areas, and only when engine is cool.**
17. **WARNING! POISONOUS EXHAUST GASES. Do not operate petrol powered equipment without adequate ventilation. Carbon monoxide is and invisible odorless gas that can harm or can kill you.**

VERTIGRIND 270 MANUAL &
PARTS LISTING

OPERATING INSTRUCTIONS

1. **When using the VERTIGRIND 270 on a wall or vertical surface Ensure the load balancer is adjusted correctly. Use a load balancer suspended from a certified anchor point at the top or above the top of the wall. This takes all the weight of the machine and when adjusted correctly it should take very little force to move the machine up the wall.**

2. **Wear clothes suitable for the job and for the work place including, safety shoes, hard hat, hearing protection, non fogging vented safety goggles, and dust respirator suitable for dust.**

2. **WARNING! POISONOUS EXHAUST GASES. Do not operate petrol powered equipment without adequate ventilation. Carbon monoxide is an invisible odorless gas that can harm or can kill you.**

3. **All equipment must be tested and tagged prior to use on any job.**

4. **Inspect entire area to be ground before grinding and remove any bolts or concrete nails (etc) that could damage diamond tooling or machine and which could cause a hazardous situation.**

5. **Ensure there are no obstacles or existing structures that could present a hazard to the operator. If so, take necessary action to eliminate the hazard.**

6. **Disconnect unit from all power sources.**

**VERTIGRIND 270 MANUAL &
PARTS LISTING**

OPERATING INSTRUCTIONS CONT...

- 7. Lay machine over and inspect blades and blade retainers for wear. Replace as necessary.**
- 8. The blades are removed by unscrewing the blade retaining nuts by hand or in unusual circumstances use the wrench supplied.**
- 9. Install appropriate diamond tooling into the machine. Only use genuine VERTIGRIND 270 tooling. Failure to comply could result in bodily injury.**
- 10. Tilt machine back onto the disk**
- 11. Connect machine to suitable power outlet. Only use heavy duty power lead suitable for high current use (preferably 2.mm² cable), no longer than 40 meters. (For petrol powered equipment, refer to engine manual for start up procedure).**
- 12. When no power is available within the specified distance, have a qualified person install a suitable power outlet closer to your work. Alternatively use 4.mm² cable for up to 60 meters max.**
- 13. Connect a suitable dust extractor to the machine via a 38mm flexible hose. The machine is designed to take the standard FLOOREX hoe with 1x 38mm hose end and 1x 50mm hose end to make connection of dust extractors easy and hassle free.**

Continued...

**VERTIGRIND 270 MANUAL &
PARTS LISTING**

OPERATING INSTRUCTIONS CONT...

- 14. When using the VERTIGRIND 270 on a wall or vertical surface, ensure the load balancer is adjusted correctly. Use a load balancer suspended from a certified anchor point at the top or above the top of the wall. This takes all the weight of the machine and when adjusted correctly it should take very little force to move the machine up the wall.**

- 15. Switch on the dust extractor.**

- 16. Ensure machine is on a smooth surface.**

- 17. Keep machine clear of drainage pits and grates or any such hazard. Failure to comply could result in bodily injury and or could damage the machine or property.**

- 18. Never start or run machine with when disks are not in contact with the surface. Failure to comply could result in bodily injury and or could damage the machine or property.**

- 19. Hold the handles firmly and push firmly against the wall or floor and switch the machine on by activating the two toggle switches beside each hand grip. Do not modify the switches in any way the dual activation is required to stop one hand operation.**

- 20. Do not attempt to make any adjustments while the machine is in operation. Any adjustments must only be performed when machine is stopped and power disconnected.**

Continued...

VERTIGRIND 270 MANUAL &
PARTS LISTING

OPERATING INSTRUCTIONS CONT...

21. After a few minutes of grinding check the wear of the diamond tooling. This is a good idea if the diamonds are wearing out fast due to soft concrete / abrasive concrete. FLOOREX has a wide range of diamonds to suit every need. See page 11 for a guide...

20. See the chart on page 10 for tips on how to grind faster on tough concrete and other ways problems can be rectified.

21. **WARNING!** Breathable silica may be generated by use and maintenance of this machine. Silica can cause severe and permanent lung damage, cancer, and/or other serious diseases. Do not breathe the dust. Do not rely on your sight or smell to determine if dust is in the air. Silica may be in the air without a visible dust cloud. If air monitoring for silica is not provided by your employer at your work site, you must wear appropriate respiratory protection when operating or maintaining this equipment. Consult your employer for proper respiratory protection.

VERTIGRIND 270 MANUAL &
PARTS LISTING
ELECTRICAL SAFETY

1. All electrical maintenance and repairs to be carried out by qualified persons only.
2. **CAUTION** - Line terminals may be alive when main switch is in the off position. Disconnect all power at source before performing any maintenance or repairs.
3. **WARNING - DO NOT** operate the machine with any electrical panels open.
4. Never operate machine in the rain or if heavy moisture is present.
5. The Vertigrind 270 is equipped with a pair of safety switches that stop one handed operation. Do not bypass or modify any electrical equipment in any way
6. Never connect or disconnect power cables with voltage present or while under load.
7. Disconnect all power connections and observe lock out / tag out procedures before attempting to carry out any maintenance or repair on any equipment.
8. Avoid any contact with any rotating parts or driven parts.
9. Never use equipment that has not been tested and tagged (including cords).

**VERTIGRIND 270 MANUAL &
PARTS LISTING**

ELECTRICAL SAFETY CONT...

- 10. Before connecting the machine to power, check the condition of all power leads and cables on, or used in conjunction with the machine. DO NOT USE it if any fault(s) cuts; wear marks, Bare wires out of plugs or sockets, etc... Get qualified persons to repair and re-tag it as required by regulations in your country.**

- 13. Connect machine to suitable power outlet. Only use heavy duty power lead suitable for high current use (preferably 2.mm² cable), no longer than 40 meters. (For petrol powered equipment, refer to engine manual for start up procedure).**

- 14. If no power is available within the specified distance have a qualified person install a suitable power outlet closer to your work. Alternatively use 4 mm² cable for up to 60 meters.**

VERTIGRIND 270 MANUAL & PARTS LISTING

PROBLEM SOLVING

Diamond Grinding has many variables. When you understand some of these, you can solve many problems without a lot of bother and expense.

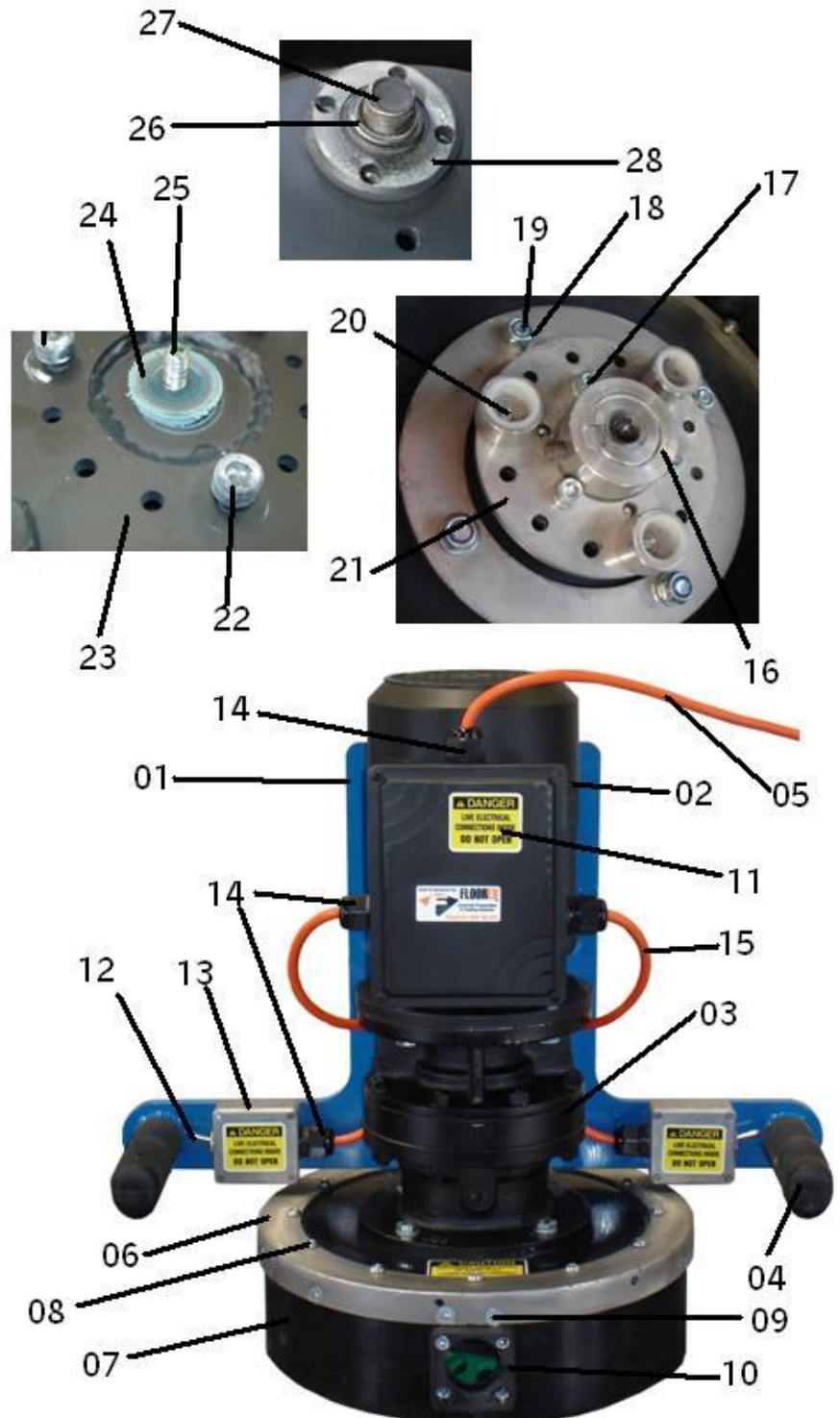
PROBLEM	CAUSE	REMEDY	WHAT IS IT DOING?
Machine will not start / run.	No power is present at cable end.	Check the power is present with another tool.	Using another tool confirms power is present
	Machine is trying to start on glue or other sticky substance.	Clear a patch with a scraper and grind into the glue a little at a time.	This means it only tackles a small amount of glue at a time and keeps the glue residue coated with dust, preventing glue build-up on the diamonds.
	Power lead is too small in capacity or too long.	Upgrade the power lead to 2.5mm ² (15meters) max or 4mm ² (40 meters max).	The long / small capacity cable is too restrictive and can't allow enough power through for the machine to start / run properly.
Machine is not grinding at all.	No blade / accessories in unit.	Fit blade. Note; check wear on machine.	
	Very hard concrete or glazed topping on concrete.	Turn dust extractor down / restrict flow. Only just control the dust from escaping.	The extra dust accumulating on the floor acts as an abrasive between the segments and the floor thus exposing the diamonds better.
		Place river sand or equivalent on the floor. (if applicable)	The sand is an abrasive as described above.
		Use softer grade of diamond tooling.	The softer grade will expose the diamonds better.
		Use coarser diamond tooling.	The coarser diamond tooling can get through the hard topping without wearing out the diamonds too fast.
The diamonds are wearing out too fast.	The concrete is: *Soft *Abrasive *Rain Damaged *A rough finish (Scarified).	Use a powerful dust extractor to remove as much dust as possible.	The dust, as described acts as an abrasive between the segments exposing the diamonds prematurely, wasting them.
		Use harder diamond matrix.	The harder segments don't expose as easily.
		Use tooling with more segments or area ² of segment.	The tooling with more segments or area ² doesn't have the same weight on them, reducing wear.

VERTIGRIND 270 MANUAL & PARTS LISTING

PARTS LISTING VERTIGRIND 270

NUMBER REFERENCE IS IN THE PART NO. Example 15 = V27015

Part no.	Description
V27001.	Chassis
V27002.	Motor .55kw 2pole
V27003.	Transmission
V27004.	Rubber handle grip
V27005.	Lead inlet with plug
V27006.	Floating shroud s/steel
V27007.	Poly shroud 85x6x1m
V27008.	Shroud screw (rubber)
V27009.	Shroud screws (poly)
V27010.	Vac port screws
V27011.	Sticker set complete
V27012.	Switch toggle
V27013.	Enclosure toggle switch
V27014.	Gland M16
V27015.	Lead toggle switch
V27016.	Hub
V27017.	Socket head M6x15
V27018.	Nut Nyloc M8
V27019.	Bolt M8x40
V27020.	Drive cup M6
V27021.	Hub flange
V27022.	Drive socket head M8x40
V27023.	Disc main
V27024.	Poly urethane disk 30x8
V27025.	Disk bolt M8x40
V27026.	Rubber damper
V27027.	Disk retainer bolt M14x25
V27028.	Disk retainer



**1800 FLOOREX
1800 356 673**