

VIRGINIA ABRASIVES™

REAL EQUIPMENT

Floor Grinder

Operating Manual



Model # FG-10
Item # 433-50000

Please read these instructions carefully before using.

CE  RoHS

	Page Number
Contents	2
Introduction and Description	3
Technical Data	4
Operation	5
Safety Precautions	6
Troubleshooting	7
Maintenance	7
Parts Diagram	8
Parts List	9-10

Introduction and Description

This manual is intended to provide operation and service information necessary for the safe and efficient use of the Virginia Abrasives Floor Grinder. Operating or servicing the unit other than in accordance with the instructions given may subject the machine to conditions beyond its capability. This may result in the machine failure or personal injury.

IMPORTANT:

Read the entire operating manual carefully before attempting to use the floor grinder. Special attention should be given to the section entitled "Safety Precautions".

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

The floor grinder is fitted with a 1.5 hp single phase motor. This motor offers a direct drive to the grinding plate by way of a flexible coupling between the motor and the plate.

The shroud system is unique in design by automatically adjusting to suit segment height and floor angle. This shroud system when used in conjunction with an appropriate industrial vacuum unit helps eliminate dust during grinding. The shroud has 2 removable sections to allow the operator to maneuver the grinder close to the wall. Please note that fugitive dust will likely occur when using the grinder with the two shroud sections removed.

The floor grinder comes complete with a water connection for wet grinding, if required. The water connection incorporates a ball valve that allows 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 vehicles. The rear wheels can be extended outward for added stability during use. The operator can raise or lower the height of the handle to maximize comfort.

The newly designed lifting handle system makes the machine easy to lift.

Technical Data

Motor HP	1.5 hp
Motor KW Rating	1.1 kw
Motor RPM	1730 rpm
Unit Weight	106 lbs. /48kg
Plate Type	Standard 10 inch grinding head
Plate Bolt Types	M12x25 countersunk socket head
Main Construction	Powder Coated Steel

Operation

The floor grinder is designed to be used either wet or dry. If the application requires dry grinding, a suitable industrial vacuum is required.

Consult Safety Data Sheets for the materials being ground. Concrete dust and floor coatings contain materials that can be harmful. **SEE SAFETY PRECAUTIONS FOR Silica Dust Warning.**

Contact your industrial hygiene professional for detailed information on required personal protective equipment PPE. Always use appropriate personal protective equipment (Hearing, Eye, Respiratory and Hand Protection).

Operating the Grinder

1. Make sure the diamond tooling is suitable for the material being ground and that the tooling is correctly balanced.
2. Ensure that the grinding plates are in good condition and properly mounted. Never use damaged tooling.
3. All countersunk bolts must be tightened to specifications and firmly in place. Take periodic breaks to ensure that bolts are properly tightened, as they can loosen during operation.
4. Check that the grinding plate is adjusted so that it sits level on the work surface (use the bubble-level on the machine as a reference).

5. Check that all nuts and bolts on the folding handle latch are tight and secure.
6. Raise the grinding plates from the floor.
7. Start the motor by pressing the black switch on the starter box.
8. Lower the grinding plate and begin grinding. Keep the grinding head moving side to side on the work surface to create an evenly ground surface until the desired results are reached.

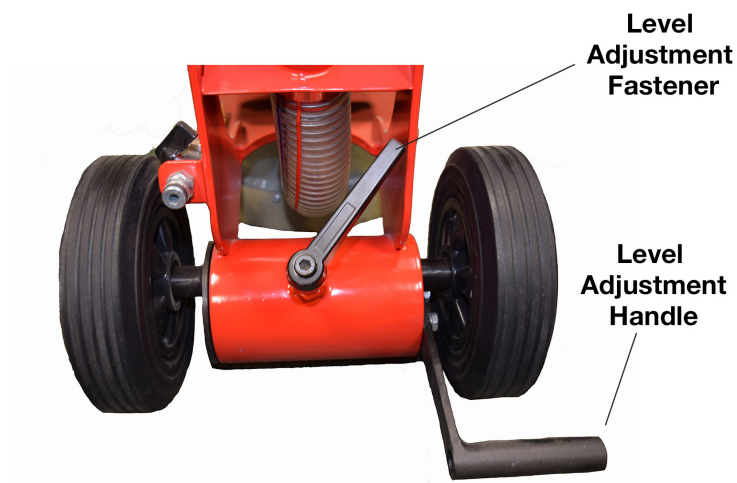
Stopping the Grinder

1. Depress the red stop button on the start box.

Note:

The position of the axle may be adjusted as needed for leveling.

1. Adjust the vertical grinding position by loosening the level adjustment fastener counter clockwise.
2. Lifting the level adjustment handle raises the back end of the grinder.
3. Lowering the level adjustment handle lowers the back end of the grinder.
4. Use “bubble-level”, mounted on the machine as a reference.
5. Secure desired grinder position by tightening the level adjustment fastener clockwise.



Safety Precautions

The Virginia Abrasives Floor Grinder has been designed to minimize noise, 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 damage.
2. Always use hearing protection, goggles, gloves and appropriate footwear.
3. Do not modify the grinder in any manner. Do not use a machine that has been modified by anyone other than the manufacturer or authorized dealers.
4. Do not add weight to the machine. Use different grinding plates to achieve the desired grinding performance.
5. Do not operate the grinder with the grinding head raised any higher than necessary. i.e. tipped back on handle.
6. Always be sure that folding handle latch is secure and has not become loose during use.
7. During normal use the machine is exposed to vibration. Occasionally check machine for bolts/nuts which may have vibrated loose.
8. Do not allow water or flammable materials to enter the interior of the motor.

Respirable Silica Dust Warning

Grinding/cutting/drilling of masonry, concrete, metal and other materials can generate dust, mists and fumes containing chemicals known to cause serious or fatal injury or illness, such as respiratory disease, cancer, birth defects or other reproductive harm. If you are unfamiliar with the risks associated with the particular process and/or material being cut or the composition of the tool being used, review the Safety Data Sheets (SDS) and/or consult your employer, the manufacturers/suppliers, governmental agencies such as OSHA and NIOSH and other sources on hazardous materials. The state of California and other authorities have published lists of substances known to cause cancer, reproductive toxicity, or other harmful effects.

Use engineering controls to control dust, mist and fumes at the source wherever possible. Use good work practices and follow the recommendations of the manufacturers/suppliers, OSHA/NIOSH, and occupational and trade associations. Water should be used for dust suppression when wet grinding/cutting/drilling is feasible. When the hazards from inhalation of dust, mists and fumes cannot be eliminated, the operator and any bystanders should always wear a respirator approved by NIOSH/MSHA for the material being used.

Grinding/cutting/drilling of masonry, concrete and other materials containing silica may generate dust or mists containing crystalline silica. Silica is a basic component of sand, quartz, brick clay, granite and numerous other minerals and rocks. Repeated and/or substantial inhalation of airborne crystalline silica can cause serious or fatal respiratory diseases, including silicosis. The state of California and other authorities have listed respirable crystalline silica as a substance known to cause cancer. When grinding/cutting/drilling such materials, always follow the respiratory precautions mentioned above.

Troubleshooting

Symptom	Possible Cause	Action
Grinder runs for short time then stops	The electrical power current limit screw is not adjusted properly	Adjust the current limit screw located in the Schneider housing to the appropriate setting.
Grinder runs but does not perform adequately.	Tooling is not matched to the application	Re-evaluate tooling selection.
Grinder vibrates during use	Grinding plates not correctly balanced	Replace grinding plates.
Grinding noise coming from grinding head under no-load operation.	Worn motor bearings or drive coupling	Have machine evaluated and serviced by authorized service professional.

Maintenance

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

Check operating amperage draw: While the motor is in operation, take care to keep the operating amperage below maximum level.

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

Check the security of the adjustable folding handle latch periodically.
The wheel bearings use sealed bearings and require no regular greasing.

Parts Diagram

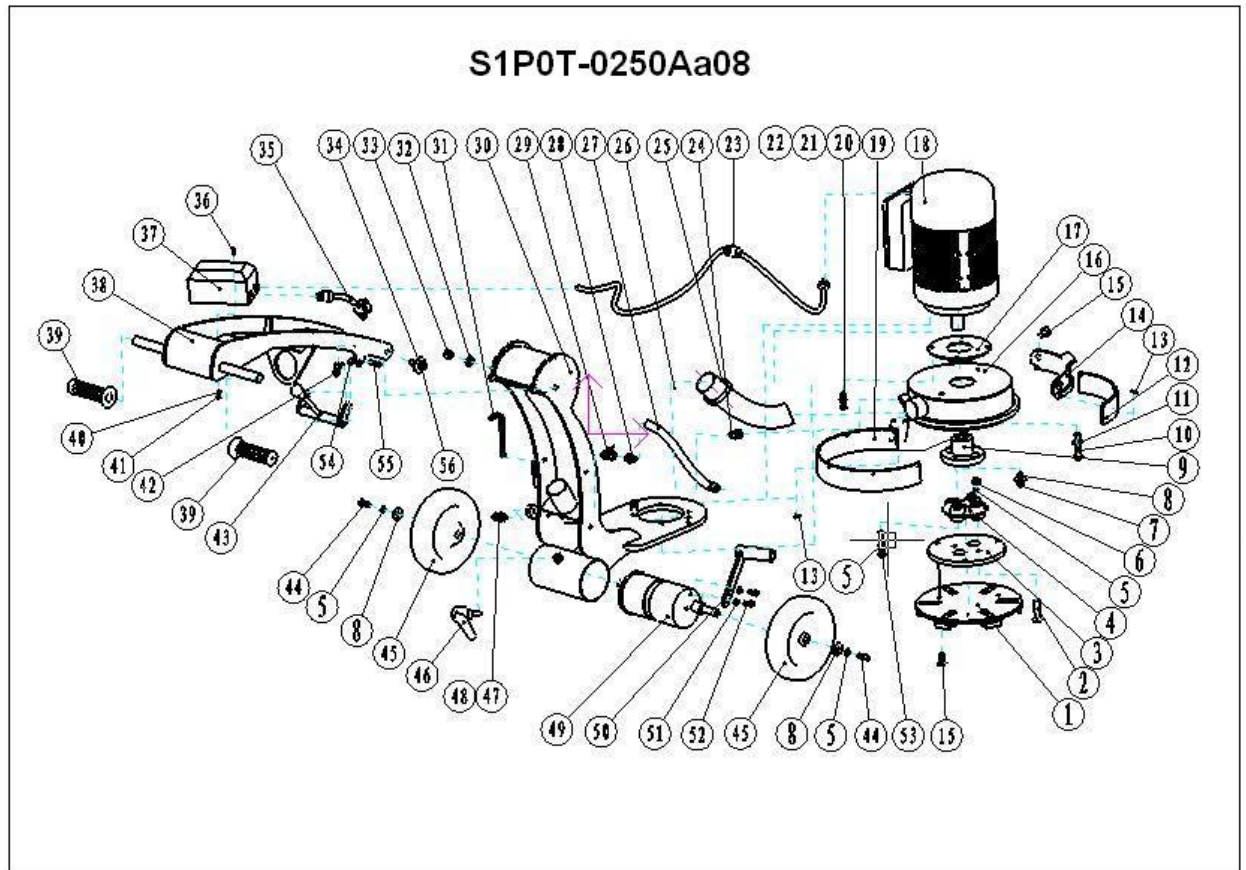


Diagram #	Item #	Item Description	QTY
1	434-50001	Millstones	1 Ea
2	434-50002	Hexagon Socket Countersunk	1 Ea Head Cap Head Screw
3	434-50003	Dowel Disc	1 Ea
4	434-50004	Flex Coupling	1 Ea
5	434-50005	Spring Lock Washers	1 Ea
6	434-50006	Hexagon Nut	1 Ea
7	434-50007	Hexagon Head Bolts	1 Ea
8	434-50008	Big Plain Washers	1 Ea

9	434-50009	Driving Sleeve	1 Ea
10	434-50010	Hexagon Head Bolts	1 Ea
11	434-50011	Hexagon Nut M12	1 Ea
12	434-50012	Shroud Plastic Wear Strip Set	1Ea
13	434-50013	Hexagon Socket Button Head	1 Ea Screws
14	434-50014	Detachable Shroud	1 Ea
15	434-50015	Hexagon Socket Countersunk	1 Ea Head Cap head Screw M8x16
16	434-50016	Enclosure	1 Ea
17	434-50017	Location Case	1 Ea
18	434-50018	Electrical Motor	1 Ea
19	434-50019	Shroud Plastic Wear Strip Set	1 Ea
20	434-50020	Washer 8-2/2	1 Ea
21	434-50021	Spring Washer 8-6/2	1 Ea
22	434-50022	Hexagon Head Bolts	1 Ea
23	434-50023	Cable Tie-In	1 Ea
24	434-50024	Pipe Joint	1 Ea
25	434-50025	Flexible Conduit L=480	1 Ea
26	434-50026	Big Clip	1 Ea
27	434-50027	Flex. Conduit L=245/Small Clip	1 Ea
28	434-50028	Crossover Coupling	1 Ea
29	434-50029	Crossover Coupling	1 Ea
30	434-50030	Frame Body part	1 Ea
31	434-50031	Inner Hexagon Spanner	1 Ea
32	434-50032	Flat Washer 12	1 Ea
33	434-50033	Hexagon Jam Nuts	1 Ea
34	434-50034	Big Plain Washers	1 Ea
35	434-50035	Power Cord	1 Ea
36	434-50036	Cross Recessed Pan Head Screw	1 Ea M4X16
37	434-50037	BreakerGV2-ME16C/CrustGV2-MC02	1 Ea /UVT Assemble
38	434-50038	Upper Arm	1 Ea
39	434-50039	Grip	1 Ea
40	434-50040	Plain Washers	1 Ea
41	434-50041	Hex. Lock Nut M4	1 Ea
42	434-50042	Lock Twist Spring	1 Ea
43	434-50043	Positioning Clamping Claw	1 Ea Buckle
44	434-50044	Hexagon Socket Button Head	1 Ea Screws
45	434-50045	Wheel	1 Ea
46	434-50046	Adjustable Handle M12*25	1 Ea
47	434-50047	Quick Joint	1 Ea
48	434-50048	O-Ring	1 Ea
49	434-50049	Eccentric Shaft	1 Ea
50	434-50050	Lift Lever	1 Ea
51	434-50051	Spring Washer	1 Ea

52	434-50052	Hexagon Bolt	1 Ea
53	434-50053	Hexagon Head Bolts	1 Ea
54	434-50054	Flat Washer 8	1 Ea
55	434-50055	Hexagon Socket Button Head	1 Ea Screws
56	434-50056	Hex Flat Round Head Screws	1 Ea
57	434-50057	Key	1 Ea