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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 this 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 (110V/60Hz) / 3.0 hp (220V/50Hz) 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	3.0 hp
Motor KW Rating	1.1 kw	2.2 kw
Voltage	110V/60Hz	220V/50Hz
Motor RPM	1730 rpm	1410 rpm
Unit Weight	132 lbs. /60kg	132 lbs. /60kg
Plate Type	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

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.

Fit for America



Swiving head



Normal quick joint

Level Adjustment Handle

Level Adjustment Fastener

## **Safety Precautions**

The 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.

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/M.

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.

## Technical Data

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.

This exploded view diagram illustrates the assembly of a robotic arm. The components are numbered 1 through 72. The main assembly includes a blue robotic arm (1) with a black motor (16) and a black control box (17). The arm is connected to a blue base (18) and a blue arm (19). The arm is equipped with two black wheels (71, 72) and a black motor (69). The arm is also equipped with a black control box (17) and a black motor (16). The arm is connected to a blue base (18) and a blue arm (19). The arm is equipped with two black wheels (71, 72) and a black motor (69). The arm is also equipped with a black control box (17) and a black motor (16).



## Parts List

No.	Part name	Series No.	Qty	No.	Part name	Series No.	Qty
1	upper bracket	BKFG260001	1	37	hexagon countersunk screw		2
2	external plug		1	38	locating pin	BKFG260012	1
3	motor circuit breaker		1	39	hexagon countersunk screw		3
4	switch box		1	40	grinding shoes plate	BKFG260013	1
5	undervoltage tripping		1	41	flange	BKFG260009	1
6				42	flat gasket		2
7	hexagon socket screw		2	43	hex screw		2
8	drive wire		1	44	steel band		2
9	nylon waterproof joint		2	45	wired hose		1
10	Bakelite ball		1	46	hex screw		2
11	angle fix set	BKFG260003	1	47	nut		2
12	hexagon socket round screw		2	48	flat gasket		2
13	R steel rubber buffer		3	49	pagoda-shape connector		1
14	lock nut		3	50	valve		1
15	hexagon socket round screw		3	51	quick connector	BKFG260016	1
16	motor		1	52	spring(left/right)		2
17	handle of motor	BKFG260016	1	53	lock nut		2
18	nut		4	54	adapter sleeve	BKFG260004	2
19	hexagon socket screw		4	55	flat gasket		4
20	hex screw		2	56	hexagon countersunk screw		2
21	flat gasket		2	57	O ring		1
22	fixed mount of motor	BKFG260005	1	58	converter plate	BKFG260011	1
23	dust collector	BKFG260006	1	59	steel band		2
24	cross screw with flat pad		8	60	fiber hose		1
25	dust cover (long)		1	61	gradienter		1
26	dust collector accessory	BKFG260007	1	62	cross screw with flat pad		2
27	hexagon countersunk screw		2	63	bottom bracket	BKFG260002	1
28	dust cover (short)		1	64	nameplate		1
29	flat gasket		4	65	handle screw		1
30	fix plate of motor	BKFG260008	1	66	axle	BKFG260014	1
31	hex screw		4	67	wheel		2
32	flat gasket		1	68	hexagon socket round screw		2
33	hex screw		1	69	hexagon socket screw		2
34	Coupling	BKFG260010	1	70	flat gasket		2
35	lock nut		2	71	horizontal adjust handle	BKFG260015	1
36	flat gasket		2	72	handle		2