



Industrial Contractors' Supplies, Inc.

Dust Director Division

15061 Route 30, N. Huntingdon, PA 15642

Phone: 412 . 824 . 6933

Fax: 412 . 824 . 4704

www.DustDirector.com

## HEAVY-DUTY, HIGH TORQUE FLOOR GRINDER

### OWNER'S MANUAL

OPERATION ! CARE ! SERVICE

20" 165 RPM 1.5 HP  
Totally Enclosed Dust / Moisture Protected Unit



Shown with Optional Three (3)  
Weight Plates - Combination  
Dust Control / Splash Guard & 4  
Gallon Solution Tank Included.

Commercial Use Only

# MACHINE SPECIFICATIONS

---

Model	CFG-20
Voltage	115V / 60Hz
Power Cord	50ft. (15.2 m)
	14-3 ST Fixed
Motor	1.5 HP / 180 Frame
RPM (Brush)	165
Gear Box	11:1, Planetary 3-Idler Steel Cut Helical Gears
Machine Weight (without weights)	135 lbs. (59.87 Kg)
Machine Weight (with weights - (3) 25 lb. horseshoe weight plates)	210 lbs. (59.87 Kg)

## FEATURES

- Dual trigger negative pressure switch allows operator to run with either hand
- Safety switch lock mechanism prevents accidental start
- Hardened steel transmission gears and steel gearbox coupler
- Planetary gearbox means strength
- Premium 180 frame motor provides better cooling and more torque with longer motor life
- One piece welded heavy gauge steel handles give superior handling stability
- Ergonomically designed foot operated positive lock handle adjustment eliminates bending
- High strength steel frames withstand heavy duty wear situations.

---

### 115 Volt to 230 Volt Field Conversion Procedure - To Use Your High Torque Grinder with a Generator

---

A HIGH TORQUE Floor Grinder operates on 9 - 10 Amps. Its starting torque however, requires 24 - 25 amps for one second. With a Grinder Plate attached, the starting torque may now require a 50 amp generator. Thus, to use your grinder with a generator, it is recommended to convert your 115 volt machine to a 230 volt motor - which would allow you to use a 25 amp generator. You can re-wire a 115 volt motor to 230 volts yourself, by following the steps below. You will need three wire nut connectors and an appropriate 230 volt plug.

1. Disconnect power - Observe and follow the **Important Safety Instructions** below (page 2).
2. On the side of the motor is the wiring connection box. Remove its cover by unfastening two screws.
3. You will see (8) wires, labeled as follows:
  - L1 (white) and L2 (black) ~ Incoming voltage lines.
  - T1, T2, T3, T4, T5 and T8. (Lines T6 and T7 - not seen - are internal motor wires.)
4. **The 115 volt line connections is as follows:**
  - L1 is connected to: T1, T3 and T8
  - L2 is connected to: T2, T4 and T5
5. **To re-wire the 115 volt motor to 230 volts**, proceed as follows:
  - L1 goes to T1 ~ connect the two wires together using a wire nut.
  - L2 goes to T4 and T5 ~ connect the three wires together using a wire nut.
  - Lines T2, T3 and T8 are connected together ~ connect the three wires together using a wire nut.
6. Re-install cover for the wiring connection box. **Note:** If the Grinder Plate is running backwards, change leads T5 and T8.

## SERVICE INFORMATION

To obtain consistent performance over the life of your equipment read through these instructions and save them for future reference. If you require service, contact Industrial Contractors Supplies. Always refer to your Limited Warranty for complete service information.

The model number and serial number are indicated on the data plate on the side of the handle. For prompt and complete service, refer to these numbers when inquiring about service.

## IMPORTANT SAFETY INSTRUCTION

When using an electrical appliance, basic precautions should always be followed, including the following:

### READ ALL INSTRUCTION BEFORE USING THIS FLOOR MACHINE.

Warning: Electric Shock Can Cause Serious Injury or Be Fatal. Please Read the Following Instructions on the Use and Operations of the Floor Machine.

- Your floor machine is equipped with a safety switch lock and power switch riggers designed for your safety. Do not attempt to bypass or defeat the safety switch lock. Never use any device to lock the power switch triggers in the "on" position.
- Do not leave the floor machine plugged in. Turn off the switch and unplug the electrical cord when not in use and before servicing or changing the brushes or pads.
- Do not allow the machine to be used as a toy. Close attention is necessary when used near children. Do not leave the machine connected to an electrical outlet unattended.
- Use only as described in this manual. Use only manufacturer's recommended attachments.
- Do not use with a damaged cord or plug. If the machine is not working as it should, has been dropped, damaged, or left outdoors, return it to Industrial Contractors Supplies before using.
- Use care to keep the electrical supply cord from sharp edges or corners. Keep the cord away from heated surfaces.
- Connect to properly grounded 3-wire electrical outlets only. Refer to Grounding Instructions.
- Do not use extension cords or outlets with inadequate current carrying capacity.
- Turn off all controls before unplugging.
- Do not unplug by pulling on the cord. To unplug, grasp the plug and pull.
- Do not handle the plug or floor machine with wet hands.
- Wind the cord no tighter than is necessary to retain it during storage.
- Use extra care when working on or near stairs.
- Do not use in conjunction with flammable or combustible liquids such as gasoline, or use in areas where explosive vapor or dust may be present.
- Store your floor machine indoors in a cool, dry area.
- Keep your work area well lighted.
- **WARNING:** To avoid electrical shock, use indoors only.

## GROUNDING INSTRUCTIONS

This appliance must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord that has an equipment-grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Improper connection of an equipment grounding conductor can result in risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the machine. If it will not fit the outlet have a proper outlet installed by a qualified electrician.

The machine is for use on a nominal 120 volt circuit and has a grounding plug. A temporary adapter may be used to connect this plug to a two pole receptacle if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. The green colored rigid ear, lug or the like extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adapter is used it must be held in place by a metal screw.

## CHOOSING THE RIGHT BRUSH AND DRIVE BLOCK

Your floor machine is packed completely assembled and ready for use after you install a brush or drive block.

The machine is designed to be used for many different floor care applications. Make sure you use the correct brush or pad for the type of job you want to perform. Industrial Contractors Supplies carries a complete assortment of brushes and pads.

When ordering brushes or drive blocks, the following is the correct diameter (size) to order: 20" Brush, 18" Block.

## BRUSH AND PAD DRIVER INSTALLATION

**Note: Disconnect the power cord from the electrical outlet before installing a brush or pad driver.**

To install a brush or pad driver, leave the handle in the upright position and tip the machine backwards so it rests on its wheels and upper handle section.

The brush and pad driver both attach in the same manner: align the cut-outs on the inner ring of the brush or pad driver with the tables on the inside of the ring of the drive hub.

Push the brush or pad driver firmly in position, then turn it counter-clockwise until it locks in place. To remove, turn the brush or pad driver clockwise until it stops, and lift it off.

**Note:** Always remove the brush or pad driver when the machine is not in use.



**NOTE: Disconnect power cord from the electrical outlet before installing or removing brush, pad, or pad driver.**

## ADJUSTMENTS - HANDLE

The handle can be adjusted to any desired work position by simply pushing up on the handle lock. Move the handle to the desired position, then firmly push down on the handle lock which will lock the handle in position.

## HANDLE CAM LOCK ADJUSTMENT

With the handle cam lock in the "up" position (unlocked), tighten the adjusting nuts until there is a slight drag when the handle is raised or lowered. The tube should be locked securely when the handle lock is pressed downward.





## CONTROLS - ON/OFF POWER SWITCH TRIGGERS

**ON/OFF POWER SWITCH TRIGGERS** - The ON/OFF switch is conveniently located in the form of dual triggers underneath the handle grips.

**TO TURN THE MACHINE ON** - The operating handle must be lowered to the operating position before switching the machine ON. Place both hands firmly on the handle grips with your fingers around the power triggers. Do not apply pressure on the triggers before the safety switch is disengaged.

Disengage the safety switch lock by pushing it forward with one thumb. Then, while holding the safety switch lock in disengaged position, squeeze the power triggers toward the handle grips and return your thumb to the handle grip.

To stop the machine, simply release the triggers. The safety switch lock will automatically return to the engaged position.

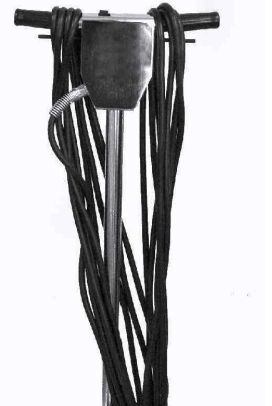
## GUIDELINES FOR OPERATION

- Your floor machine is a very sensitive, powerful unit. When in operation, it should be guided gradually and smoothly without sudden or rough motions. You will want to practice with your machine on a smooth surface first until you have experience in operating it.
- For ease of operation, always keep the brush or pad surface level, balanced, and flat on the floor at all times.
- Always adjust the operating handle to a comfortable height at which the brush or pad surface is balanced before starting the machine. (see "Handle Adjustment" Pg 4 ).
- Your floor machine will operate differently on various surfaces. For example, there will be much more resistance when the machine is used with a brush on carpeted surface than when it is used with a pad on a smooth surface.
- **BEGIN OPERATING THE FLOOR MACHINE WITH THE BRUSH OR PAD SURFACE LEVEL, BALANCED AND FLAT ON THE FLOOR.**
- To move the machine to the right, slowly apply slight upward pressure on the handle.
- To move the machine to the left, slowly apply slight downward pressure on the handle.
- To move the machine forward or backward, keep brush or pad flat on the floor and push or pull machine in the desired direction.

**DO NOT LET THE MACHINE REST ON THE PAD OR BRUSH FOR AN EXTENDED PERIOD OF TIME.** This may alter the shape of the pad or brush which may cause the machine to wobble.

## CORD STORAGE

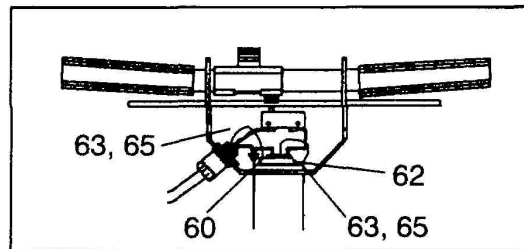
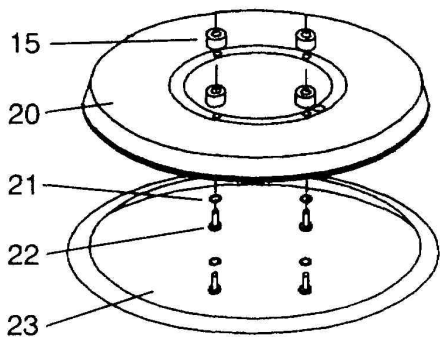
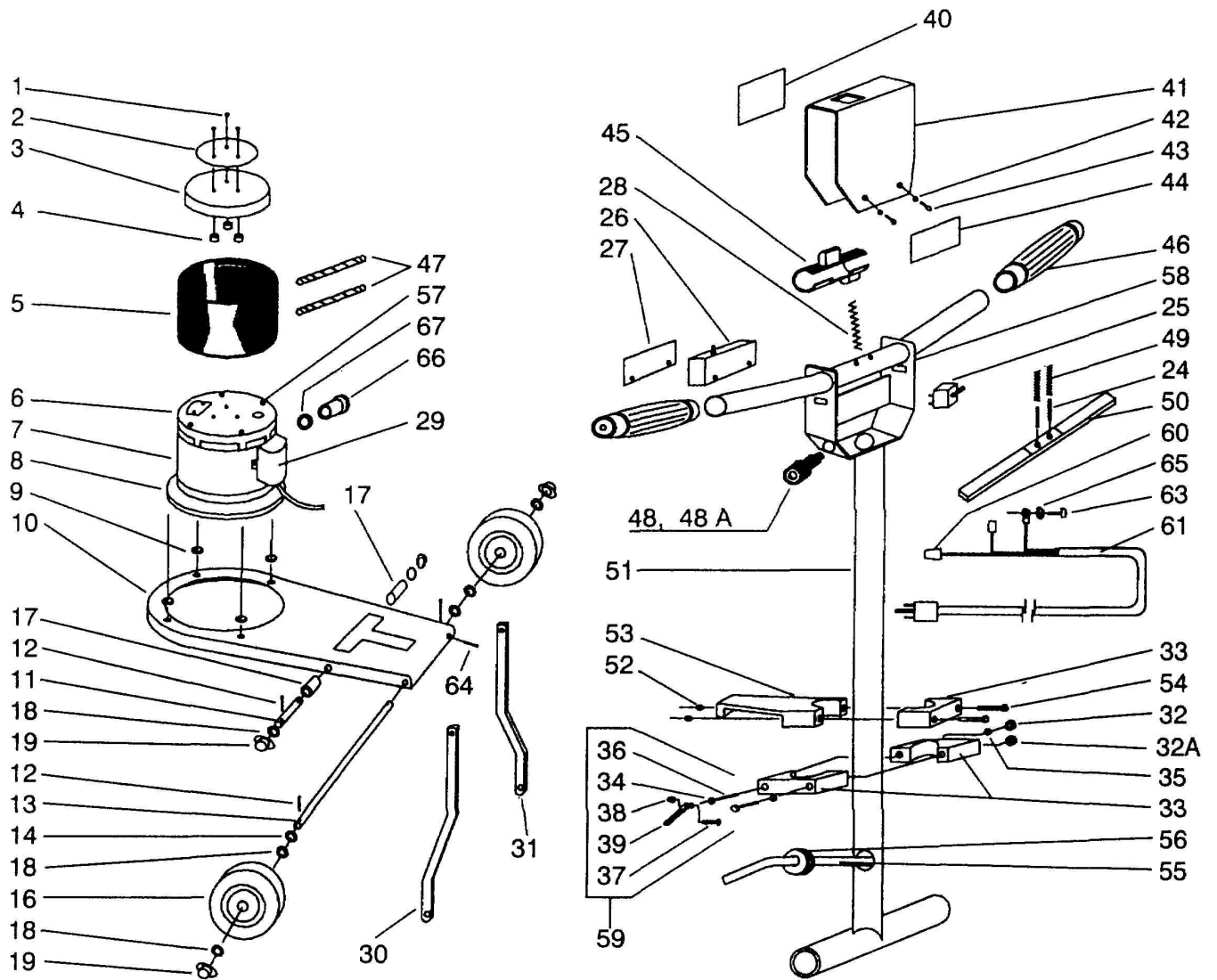
When not in use, loosely wind the power cord around the cord storage hook on the handle shaft and both of the handle grips, as shown.



## CLEAN UP AND STORAGE

After being used, your floor machine can be wiped clean with a soft, damp cloth and should be stored in a clean, dry place.

# PARTS DIAGRAM



# PARTS LISTS

Reference No	Part No.	Description	Qty Required
1.....	H0040.....	Screw, Fan Cover.....	3
2.....		.Label.....	1
3.....	E0030HDM.....	Fan Cover.....	1
4.....	E0030HDM.....	Fan.....	1
5.....	H0100.....	Lynch Pin 1/4".....	2
6.....	A0032WPIN.....	Weight Retaining Pin.....	2
7.....	E0030HDM.....	Motor, 115V/230V/60Hz, 180 Frame, Chrome, 1 1/2HP..1	1
8.....	G0002XHD.....	Gear Unit, 11-1, 3-Idler-Black.....	1
9.....	H0005.....	Lockwasher, 5/16" ID, Ext Tooth.....	4
10.....	W0001P.....	Frame, Floor Machine.....	1
11.....	M0006P.....	Shaft Handle.....	1
12.....	H0006.....	Cotter Pin.....	4
13.....	M0005P.....	Shaft, Axle.....	1
14.....	H0007.....	Spring Washer.....	2
15.....	M0004.....	Spacer, Frame/Brush Cover.....	4
16.....	C0004.....	Wheel 5" Diameter.....	2
18.....	H0008.....	Steel Washer, 33/64" x 7/8".....	12
19.....	H0009.....	NutPush - .50".....	4
20.....	S0003CP/S0004CP.....	Brush Cover, 17"/20".....	1
21.....	H0010.....	Lockwasher, 5/16" ID.....	4
22.....	H0011.....	Screw, 5/16" x 2.0SocHd.....	4
23.....	C0001.....	Bumper, 17" Black.....	1
24.....	H0012.....	Roll Pin.....	2
26.....	E0007.....	Switch, ON/OFF.....	1
27.....	H0013.....	Insulation, Switch.....	1
28.....	H0014.....	Spring.....	1
31.....	S0005P.....	Connecting Leg - Right.....	2
32.....	H0015.....	Nut, 3/8" - 16 Hex Nyloc Thin.....	1
32A.....	H0057.....	Nut, 3/8" - 16 Hex Nyloc Standard.....	1
33.....	C0006P.....	Clamp, Handle Lock.....	1
34.....	H0001P.....	Washer, Hardened Slotted.....	1
35.....	H0016.....	Washer, 3/8".....	3
36.....	H0017.....	Stud, Clamp.....	1
37.....	H0018.....	Rivet, 5/16" x 1.25 Long Rd Head.....	1
38.....	H0019.....	Push Nut, 5/16".....	1
39.....	M0001P-1.....	Cam. HandleLock.....	1
40.....	L0002.....	Label, Switchbox.....	1
41.....	W0003CP.....	Cover Asm, Switchbox.....	1
42.....	H0020.....	Lockwasher, #10 Ext Tooth.....	3
43.....	H0040.....	Screw, 10-24 x .50 Pan Head.....	2
44.....	L0005.....	Label, Warning.....	1
45.....	C0003.....	Switch Safety.....	1
46.....	C0007.....	Handle Grip, Black.....	2
48.....	H0021.....	Strain Relief, Power Cord.....	1
48A.....	H0022.....	Nut, Strain Relief.....	1
48B.....	H0022-1.....	Washer.....	1
49.....	H0023.....	Spring, Trigger.....	2
50.....	S0008P.....	Trigger.....	1
51.....	W0002P.....	Handle Weldment.....	1
53.....	C0008P.....	Cord Hook Body.....	1
56.....	H0028.....	Grommet.....	1
57.....	H0026.....	Screw, Motor - 1/4" - 20 x 6 3/4.....	4
59.....	HP0003.....	Cam Lock Asm, Incl 34, 36, 37, 38, 39.....	1
60.....	H0027.....	Nut, Wire.....	1
61.....	E0003.....	Power Cord, 14-3 ST, 50 FT Long.....	1
62.....	H0066.....	Clamp, Power Cord.....	1
63.....	H0040.....	Screw, 10-24 x .50.....	2
64.....	H0031.....	Cotter Pin.....	1
65.....	H0020.....	Lockwasher, #10 Ext. Tooth.....	1
83.....	H0042.....	Bolt, .375 - 16 x .875 Long.....	2
84.....	H0004.....	Lockwasher.....	2

# Limited Warranty

---

Your equipment which has been manufactured, tested and inspected in accordance with carefully specified engineering requirements, is warranted to be free from defects in material and workmanship. This Limited Warranty is, however, subject to the following qualifications, conditions and limitations which are set forth to provide you and all users of the equipment with information concerning the duration, extent, availability and applicability of this Limited Warranty, the procedure to be taken to obtain its performance, and other information concerning the Limited Warranty policy.

The Limited Warranty is extended to the original end user as follows:

- Machine: 3 year parts replacement and 1 year service labor warranty
- Replacement parts guaranteed for 90 days from date of installation against defects in material and workmanship.

This Limited Warranty ~ will not cover damage attributable to the following:

- Improper, unreasonable or negligent use or abuse of the equipment.
- Use of equipment with hot water or high temperature above 130 degrees Fahrenheit (Solution Tanks).
- Abrasions or punctures of the equipment.

The start date of the Limited Warranty coverage shall be the purchase date of the original end user or six months from the date the machine was shipped from the Factory, whichever comes first.

## **PARTS OF EQUIPMENT NOT COVERED BY THE LIMITED WARRANTY**

Certain parts of equipment require replacement in the ordinary course of use due to normal wear by reason of their characteristics. Normal wear items such as cords, switches, bumpers, carbon brushes, handle grips, belts, bearings, etc. are excluded from the Limited Warranty.

## **EXCEPTIONS AND EXCLUSIONS FROM THE LIMITED WARRANTY**

This equipment is required to be used on electric current as indicated on the data plate. Otherwise damage, defects, malfunctions or other failure of the equipment arising from use on electric current not as indicated are excepted and excluded from this Limited Warranty. Defects, malfunctions, failure or damage of the equipment caused by improper, unreasonable or neglect use or abuse while in possession of the purchaser are likewise excluded from this warranty. If repair is done on your equipment by anyone other than those designated as authorized to perform such work without first having obtained factory instructions, INDUSTRIAL CONTRACTORS SUPPLIES at its sole option, may determine that this warranty will not apply and that reimbursement for such repair will not be made because of the failure to comply with such factory specified instructions.

## **PROCEDURE TO BE TAKEN TO OBTAIN PERFORMANCE OF LIMITED WARRANTY REPAIR**

To secure repair of the equipment or any warranted parts under this Limited Warranty, the following procedure should be taken. The inoperative equipment or warranted parts, together with satisfactory evidence of the purchase date, must be delivered, with shipping and delivery charges prepaid, to one of the following:

1. INDUSTRIAL CONTRACTORS SUPPLIES;
2. An authorized service station.

If you are unable to locate any of the foregoing, you may write or otherwise communicate with INDUSTRIAL CONTRACTORS SUPPLIES before repair service is performed by anyone else. In such event, INDUSTRIAL CONTRACTORS SUPPLIES will provide either the location of a closely available authorized distributor service department, or authorized service station or other factory instructions. Upon compliance with the above procedure, all warranted defects will be repaired, at no additional charge or costs to the customer, and the repaired product returned to the customer, with all shipping and delivery charges prepaid. In following the procedures above set forth, PLEASE MAKE CERTAIN to state the model, type and serial number as shown on the data plate of the equipment.

## **REPLACEMENT**

In the event of a defect, malfunction or failure of your equipment or any warranted part to conform with this warranty, INDUSTRIAL CONTRACTORS SUPPLIES may, at its sole option and own expense, replace the equipment or any warranted part with another new identical or reasonably equivalent model or part in lieu of repairing the defect.

## **NO REFUND OF PURCHASE PRICE**

INDUSTRIAL CONTRACTORS SUPPLIES will not, as a matter of its Limited Warranty policy, refund the customer's purchase price.