

# OWNER'S MANUAL

# PARTS BOOK

# **FLOOR GRINDER**

**DFG280** 



Doc. # OIPB-S30004 Orig. Rel. – 11/2018 Curr. Rev. - 01



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# ORIGINAL LANGUAGE OPERATING MANUAL FOR BARTELL RIDE-ON TROWELS

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00	11/2018	Initial Release	AN
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SAFETY PRECAUTIONS				
	DANGER EXPLOSION HAZARD  Never operate the machine in an explosive atmosphere, near combustible materials, or where ventilation does not clear exhaust fumes.			
Zaddati La	WARNING BURN HAZARD  Never come into contact with the engine or muffler when engine is operating or shortly after it is turned off. Serious burns may occur.			
Sec.	CAUTION ROTATING HAZARD Never place hands or feet inside safety guard rings. Serious injury will result from contact with rotating blades.			
	CAUTION  MOVING PARTS  Before starting the machine, ensure that all guards and safety devices are in place and functioning properly.			
	ATTENTION READ OWNER'S MANUAL Read and understand owner's manual before using this machine. Failure to follow operating instructions could result in serious injury or death.			

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## **QUALITY ASSURANCE/ MACHINE BREAK IN**

The Bartell Floor Grinder is the product of extensive engineering development designed to give long life and unmatched performance. The Floor Grinders are shipped completely assembled.

You can help ensure that your Floor Grinder will perform at top levels by observing a simple routing on first use. Consider that your new Grinder is like a new car. Just as you would break in a new car to the road or any new machine to the job, you should start gradually and build up to full use. Learn what your machine can do and how it will respond. Full throttle and control may be used after this time period, as allowed by material. This will serve to further break in the machine on your specific application, as well as provide you with additional practice using the machine.

We thank you for the confidence you have placed in us by purchasing a Bartell Floor Grinder and wish you many years of satisfied use.

## WARRANTY INFORMATION

Bartell agrees to furnish without charge, F.O.B. our plant, a replacement for any part or portion thereof, comprising the main unit of the Bartell Floor Grinder, consisting of the handle, housing assembly, save and except tooling, and power units, prove upon our examination, to be defective in either material or workmanship within a period of twelve (12) months from date of purchase, provided that notice of such defective part or portion thereof is given to Bartell Ltd. within the twelve month warranty period. No further or other guarantee or warranty expressed or implied in connection with the sale of the Grinder is given and our sole liability consists in replacing defective parts or portions thereof. We shall not be responsible for any special, indirect or consequential damages arising in any manner whatsoever.

This guarantee is for the sole benefit of the original purchaser as end user. Our responsibility under this guarantee ends in the case the original purchaser transfers ownership of the Floor Grinder, makes any changes or adds any parts or devices not of our manufacture to the Floor Grinder machine.



## **SPECIFICATIONS**

DFG280					
Dimen	sions				
Grinding Width, mm (in)	254 (10)				
Overall Width, mm (in)	280 (11)				
Overall Length, mm (in)	1020 (40)				
Folded Length, mm (in)	660 (26)				
Overall Height, mm (in)	940 (37)				
Folded Height mm (in)	550 (21.6)				
Wei	ght				
Weight, kg (lb.)	44 (97)				
Perfor	mance				
Speed of Grinding Head (RPM)	1720				
Power Source					
Power kw (HP)	1.1 (1.5)				
Volts (V)	120				
Frequency (Hz)	60				
Amperage (A)	15				



## PREVENTATIVE MAINTENANCE AND ROUTINE SERVICE PLAN

This Bartell Floor Grinder has been assembled with care and will provide years of service. Preventative maintenance and routine service are essential to the long life of your Floor Grinder. Your dealer is interested in your new machine and has the desire to help you get the most value from it. After reading through this manual thoroughly, you will find that you can do some of the regular maintenance yourself. However, when in need of parts or major service be sure to see your Bartell dealer. For your convenience, we have provided this space to record relevant data about your Floor Grinder. When in need of parts or service be prepared to provide your Floor Grinder serial number. Locate the serial number now and record in the space below.

Date Purchased:	Type of Machine:	
Dealer Name:	Model:	
Dealer Phone:	Serial Number:	

Replacement Parts Used				Maintena	ance Log:
Part No.	Quantity	Cost	Date	Date	Operation



#### **ROUTINE SERVICE SCHEDULE**

Routine Serv	vice Intervals	Each Use	After 1.5 months or 50 hrs	Each 3 months or 100 hrs	Each 6 months or 200 hrs	Each 9 months or 300 hrs	Each 12 months or 400 hrs
General I	nspection						
Guards	Check		0	0	0	0	0
Warning Stickers	Check		0	0	0	0	0
Test Run	Check Operation		0	0	0	0	0
Fasteners	Check Tightness	0					
Elec	trical						
Cord	Check for Damage	0					
Plug	Check for Damage	0					
Switches/Buttons	Check	0					
Grinding C	omponents					1	
Tooling	Check Life	0					
Drive Coupling	Check for	0					
Taalina Dlata	Damage						
Tooling Plate Check				0	0	0	0
	otor						
Fan	Check - Clean		0	0	0	0	0

#### **ROUTINE SERVICE INTERVALS**

Due to the nature and environment of use, Floor Grinders could be exposed to severe operating conditions. Some general maintenance guidelines will extend the useful life of your machine.

- The initial service for your grinder should be performed after 25 hours of use, at which time your mechanic (or authorized repair shop) should complete all the recommended checks in the schedule above. The maintenance log is handy for keeping a record of the maintenance performed and the parts used for servicing your grinder.
- Regular service according to the schedule above will prolong the life of the floor grinder and prevent expensive repairs.
- Keeping your floor grinder clean and free from debris is the single most important regular maintenance operation, over and above the checks in the service schedule above, that can be performed. After each use your grinder should be cleaned to remove any dust and debris from the undercarriage and surrounding components.
- In the Service Schedule above, items that should be checked, replaced or adjusted are indicated by "o" in the appropriate column. For ease of recording place, a checkmark through the "o" when the item is complete. If an item is not required or not completed place an "x" through the "o" in the box.
- Failure to have your floor grinder regularly serviced and properly maintained in accordance with the manufacturer's instructions will lead to premature failure and void the warranty.



## **OPERATING SAFETY PRECAUTIONS**

The floor grinders are constructed according to existing safety rules and regulations. These technical precautions should not be removed or changed under any circumstances. While operating the machines the following points should also be kept in mind:

**IMPORTANT:** NEVER attempt to disable or circumvent these safety devices. They are present for the operator's protection and any tampering will result in substantial risk to the operator and all present at the job site. If your compactor's safety devices have been tampered with, do not use the equipment. Immediately contact your sales representative to obtain replacement parts or return the compactor to your dealer for repairs.

The instructions provided in this manual are done so to ensure the operator's safety as well as that of others, the equipment, and the job site. Failure to follow these guidelines can lead to serious personal injury and even death. The operator and any service personnel should read and understand the entire manual before working with or servicing any Bartell Floor Grinder.

- The grinders should always be operated with all safety covers and technical precautions.
- During transport, cleaning, repair or maintenance the grinder must be disconnected from the power supply. That also applies to the changing of tools.
- The safety ring can only be removed while operating the machine directly against the
  wall. While operating the machine without the safety ring dust can be generated. In this
  case the operator must wear a mask. In all other cases the grinder must be operated
  with the safety ring.
- The operator should never leave the machine unattended during operation.
- Before leaving the machine, all rotary parts should be brought to a standstill. Electric
  models must be disconnected from the power supply. Make sure that the machine cannot
  roll or move by itself.
- After any maintenance and adjustment all safety covers must be reattached.
- Ear protectors must be worn.
- Eye protectors must be worn.
- Safety shoes with steel caps must be worn.
- In the event of a large amount of dust during operation, connect a dust collector to the grinder.
- Depending on the floor (floor coating) grinding can produce gases. The operator must be held responsible if these generated gases are dangerous and if protection is necessary. Grinding floors containing asbestos is especially dangerous and can cause health problems. Special masks must be worn which keep the breathing air clean. A dust collector must be used and should be equipped with filters suitable for asbestos dust.
- The floor must be brushed before grinding because loose material could get into the tools and fly away. Anchor screws and bolts coming out of the floor can also be seen better if the floor is clean. If the grinding head hits a anchor screw or bolt then serious damage can be caused to the machine or grinding head.



## **OPERATION INSTRUCTIONS**

#### **SETTING UP YOUR FLOOR GRINDER**

Your Floor Grinder comes fully assembled with handle and motor fully installed. The handle is folded to allow for easier transportation. The handle can be moved into operating position by releasing the two locking pins on either side of the handle, the handle can then be moved into 1 of 3 positions. With the handle in the desired position the locking pins can be reengaged. Tooling can now be installed, and your Floor Grinder is ready for use.

#### PRIOR TO OPERATION

- Make sure that all dust, debris etc., are thoroughly removed from the unit prior to operation. Special effort should be given to the bottom of the machine where the tooling plate is located.
- Check all bolts and screws for tightness and make sure all bolts and screws are securely tightened. Loose bolts and screws may cause damage to the unit. Make sure tooling is properly installed.
- Connect the vacuum hose to the dust extraction port if a dust control vacuum is being used.
- Ensure the power supply is correct for the machine before making the connection.

#### CHANGING OR INSTALLING TOOLING

- Tilt the machine onto the back wheels and rest it on the handlebar.
- All tooling is fixed in grooves and held in place by magnets.
- Check the grinding tool for wear and replace if needed.
- Remove tooling by sliding tooling to the centre of the disk.
- Fix new tools by sliding the tool in the groove starting from the centre of the machine

**ATTENTION:** Before working on the grinder bring the motor to a total stand still and disconnect from the power supply.

**CAUTION**: Tools can be hot after use.



#### **OPERATION**

#### Operating

After mounting the appropriate tools and plugging the machine in to the correct power source the operation of the grinder can begin.

Check that the stop button is out by rotating clockwise. Lift the grinding head slightly by tipping the machine back, then press the start button. Lower the head back onto the floor, and ensure the head moves evenly across the surface for a smooth finish.

• The machine is also fitted with two removable panels in the dust shroud which can assist with edge work. Undo the two thumb nuts and remove the panel to allow the grinding head to get closer to the vertical surface. Once done, replace the panel then refit and tighten the two thumb nuts. (Turn off machine first before removing the panel)

#### Stopping procedure

To stop the machine, press the red stop button and allow grinding head to slow to a stop on the floor. Unplug machine if job is finished and when changing tools or performing work.

**ATTENTION:** When switching on the motor, the machine may jump slightly due to rotating tooling.

**ATTENTION:** Never switch on machine while the grinding head is on the floor.



## **ELECTRICAL INSTRUCTIONS**

The DFG280 machine is supplied with a specially commissioned 110V electric motor and starter switch assembly. Each unit is fully tested, and the safety overload relays have been calibrated and set according to the manufacturer's specifications. In the event of the malfunction on a new machine the owner should first check that the power supply on-site is suitable and adequate.

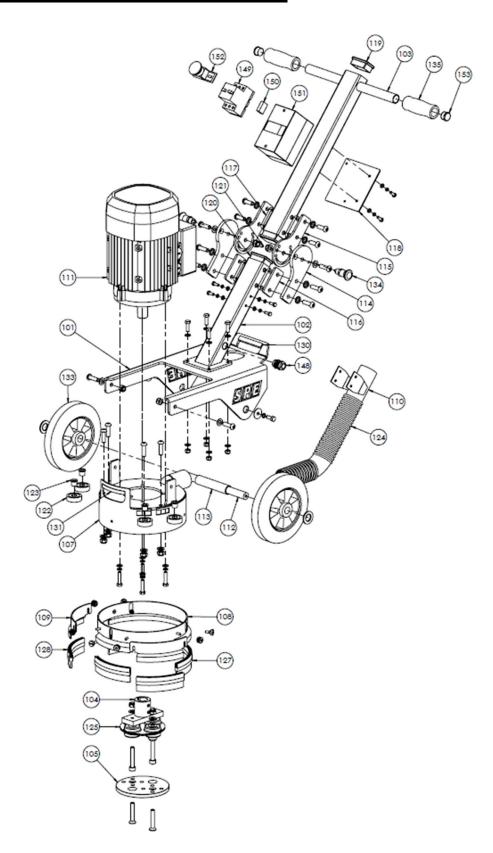
#### **DFG280-6** (120V)

The 120V motor requires a 15 Amp supply.

All cables should be fully uncoiled and never left wrapped around cable reels or tied in loops. The motor is protected with a safety trip in the panel. Should the trip be activated, it will reset automatically after cooling down. Damage will occur if the motor repeatedly cuts out. Possible causes are either an inadequate power supply, overloading of the machine, or an electrical fault.



## PARTS LIST 1 - DFG280 OVERVIEW

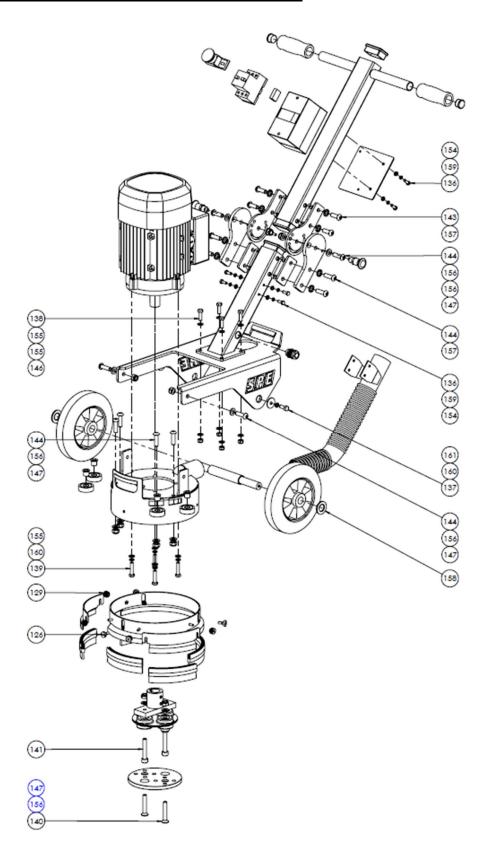




## **DFG280 OVERVIEW - PARTS LIST 1**

Item #	Part #	Description	QTY	Remarks
101	905350	MAIN BODY PLATE	1	
102	905351	HANDLE (BOTTOM SECTION)	1	
103	905352	HANDLE (TOP)		
104	905353	CONNECTOR	1	
105	905354	GRINDING PLATE ADAPTOR	1	*Only required if using grinding plate, instead of Slidemag Plate.
107	905356	SHROUD	1	
108	905357	FLOATING SHROUD	1	
109	905358	EDGING SHROUD	2	
110	905359	EXHAUST BRACKET	1	
111	12116	MOTOR	1	
112	905361	AXLE (REAR)	1	
113	905362	AXLE SLEEVE	1	
114	905363	PIVOT PLATE (10MM)	2	
115	905364	PIVOT PLATE	2	
116	905365	PIVOT PLATE PACKER	2	
117	905366	CLAMPING BAR	4	
118	905367	ELECTRICAL BOX PLATE	1	
119	905368	END CAP	2	
120	905369	END CAP (WITH HOLE)	1	
121	905370	ROLL PIN, M6x20MM	2	
122	905371	BEARING	4	
123	905372	BEARING SPACER	4	
124	905373	EXTRACTION TUBE	1	
125	905374	FLEXI-COUPLING	1	
127	905376	DUST SKIRT (420MM)	1	
128	905377	DUST SKIRT (140MM)	1	
130	905380	HANDLE GRIP (BACK)	1	
131	905380	HANDLE GRIP (FRONT)	1	
133	906013	WHEEL (REAR)	2	
134	907379	LOCKING PIN	2	
135	909104	HANDLEBAR GRIP	2	
148	12128	CABLE GLAND EMC	1	
149	12120	MOTOR STARTER	1	
150	12118	UNDER VOLTAGE COIL	1	
151	12121	ENCLOSUDE W/ STOD DUTTON	4	
152	12121	ENCLOSURE W/ STOP BUTTON	1	
153	TI/009	TUBE INSERT (BLACK)	2	

## PARTS LIST 2 - DFG280 FASTENERS

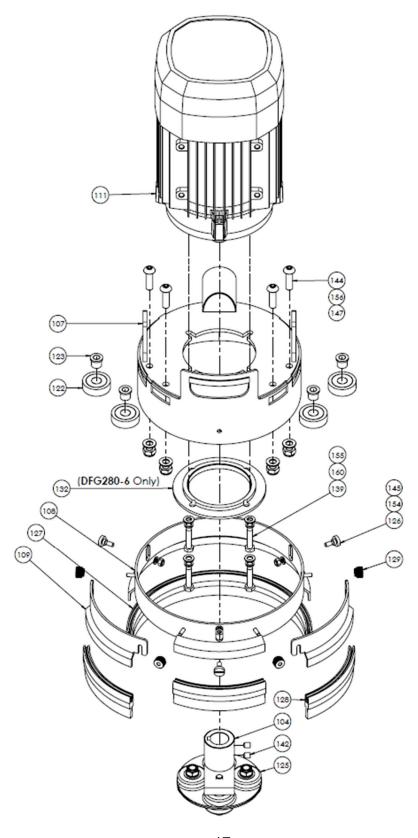




## **DFG280 FASTENERS - PARTS LIST 2**

Item #	Part #	Description	QTY	Remarks
126	905375	RETAINING SCREW	3	
129	905378	THUMB NUT	4	
136	11746	HHCS, M6-1.0 X 16MM	6	
137	10999	HHCS, M8-1.25 X 20MM	2	
138	11619	HHCS, M8-1.25 X 25MM	4	
139	10155	HHCS, M8-1.25 X 35MM	4	
140	12090	FHSCS, M10-1.5 X 60MM	2	
141	11862	SHCS, M10-1.5 X 60MM	2	
143	11933	BHSCS, M10-1.5 X 30MM	4	
144	11934	BHSCS, M10-1.5 X 35MM	12	
146	11617	LOCKNUT, M8-1.25	4	
147	11802	LOCKNUT, M10-1.5	10	
154	14447	FLAT WASHER, M6	9	
155	11667	FLAT WASHER, M8	12	
156	41516	FLAT WASHER, M10	14	
157	41516	FLAT WASHER, M10	8	
158	60754	FLAT WASHER, M20	2	
159	14448	LOCKWASHER, M6	6	
160	11614	LOCKWASHER, M8	6	
161	64003	REPAIR WASHER, M8	2	

## PARTS LIST 3 - DFG280 GRINDING HEAD

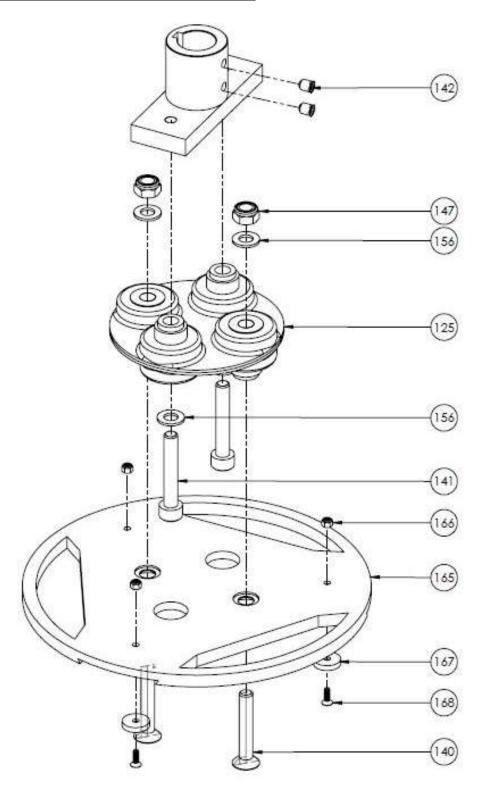




## **DFG280 GRINDING HEAD - PARTS LIST 3**

Item #	Part #	Description	QTY	Remarks
104	905382	CONNECTOR	1	
107	905356	SHROUD	1	
108	905357	FLOATING SHROUD	1	
109	905358	SHROUD EDGING	2	
111	12116	MOTOR (110V)	1	
122	905371	BEARING	4	
123	905372	BEARING SPACER	4	
125	905374	FLEXI-COUPLING	1	
126	905375	RETAINING SCREW	3	
127	905376	DUST SKIRT (420MM)	1	
128	905377	DUST SKIRT (140MM)	3	
129	905378	THUMB NUT	4	
132	905381	ADAPTER PLATE	1	
139	10155	HHCS, M8-1.25 X 35MM	4	
142	30217	SET SCREW, M8-1.25 X 10MM	2	
144	11934	BHSCS, M10-1.5 X 35MM	12	
145	50622	LOCKNUT, M6-1.0	3	
147	11802	LOCKNUT, M10-1.5	10	
154	14447	FLAT WASHER, M6	9	
155	11667	FLAT WASHER, M8	12	
156	41516	FLAT WASHER, M10	14	
160	11614	LOCK WASHER, M8	6	

# PARTS LIST 4 – DFG280 ADAPTER





## **DFG280 ADAPTER -PARTS LIST 4**

Item #	Part #	Description	Qty	Remarks
125	905374	FLEXI-COUPLING	1	
140	12090	FHSCS, M10-1.5 X 60MM	2	
141	11862	SHCS, M10-1.5 X 60MM	2	
142	30217	SET SCREW, M8-1.25 X 10MM	2	
147	11802	NYLON LOCKNUT, M10-1.5	10	
156	41516	FLAT WASHER, M10	14	
165	905384	SLIDEMAG TOOLING PLATE	1	
166	8758910	NYLON LOCKNUT M4-0.7	3	
167	8704100305	MAGNET	3	
168	14954	FHSCS M4-0.7 x 12mm LG	3	

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### **DECLARATION OF CONFORMITY**

Declaration of Conformity / Certificat de conformité / Gelijkvormigheids certificaat Declaración de Conformidad/Declaração de Conformidade/Dichiarazione Di Conformita

We: Bartell Morrison Inc. Bartell Morrison (USA) LLC.

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Declare under our sole responsibility that the product to which this declaration relates is in conformity with the following standard(s) or other normative documents.

Déclarons sous notre responsabilité que le produit cette déclaration est conforme aux normes suivantes ou d'autres documents habituels.

Verklaren onder onze verantwoordelijkheid dat het product naar welke de verklaring verwijst conform de volgende standaards of anders gebruikelijke documenten is.

Declaramos bajo nuestra única responsabilidad que el producto en lo que esta declaración concierne, es conforme con la siguiente normativa u otros documentos.

Declara sob sua responsabilidade que o produto a quem esta declaração interessar, está em comformidade com os seguintes documentos legais ou normas directivas.

Dichiariamo sotto la ns. unica responsibilita che il prodotto al quale questa dichiarazione si riferisce, è fabbricato in conformità ai seguenti standard e documenti di normative.

EN 349:1993 Safe	tv of Machinery	- Minimum gaps t	to avoid crushing of	parts of the human

body.

EN 418:1993 Safety of Machinery - Emergency stop equipment, functional aspects - Principles

for design

EN 12100-1:2003 Safety of Machinery - Basic Concepts, general principles for design - Part 1: Basic

Terminology, methodology

EN 12100-2:2003 Safety of Machinery - Basic Concepts, general principles for design - Part 2:

**Technical Principles** 

EN ISO 4872:1978 Acoustics - Measurement of Airborne noise emitted by construction equipment

intended for outdoor use - Method for determining compliance with noise limits.

EN ISO 5349-1:2001 Mechanical vibration. Measurement and evaluation of human exposure to hand-

transmitted vibration. General requirements

EN ISO 5349-2:2001 Mechanical vibration. Measurement and assessment of human exposure to hand-

transmitted vibration. Practical guidance for measurement at the workplace.

Following the provisions of Directive(s):

Suivant les directive(s) déterminées:

Volgens de vastgestelde richtlijnen:

Siguiendo las directiva(s):

No sequimento das clausulas da Directiva(s): Seguendo quanto indicato dalla Direttiva(s):

98/37/EC Machinery Directive

2000/14/EC Noise Directive

2001/95/EC General Product Safety Directive

2002/95/EC Reduction of Hazardous Waste Directive



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