



Hand-Held Scarifiers



Needleguns



Walk-Behind Scarifiers



Impact Tools



Sanders



Specialty Tools



Industrial Vacuums



2" & 3" Dust-free Grinder *Electric*

Mfg February 2013 and Later
w/top mount slide switch



Configurations

Part	Description
2" <u>Fixed</u> Dust Collector	
141.2292	Grinder, dust-free
141.2272	Grinder, dust-free, kit
141.2262	Grinder, dust-free, system
3" <u>Fixed</u> Dust Collector	
141.2293	Grinder, dust-free
141.2273	Grinder, dust-free, kit
141.2263	Grinder, dust-free, system
3" <u>Floating</u> Dust Collector	
140.229*	Grinder, dust-free
140.2293*	Grinder, dust-free, system

*BPH abrasive *not recommended* for use with floating shroud.

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Introduction

The Desco 2" and 3" grinder is a quality power tool available with highly effective dust collection. The tool is lightweight and affords the user maximum ease and efficiency in a variety of applications. The tool is double insulated to provide an extra measure of safety from the hazard of electrical shock. As with any product of a quality manufacture, service life largely depends on correct handling. These instructions are prepared to help you obtain maximum safety and performance at all times.

Main Applications

- De-slugging welds
- Stripping paint
- Cleaning castings
- Removing rust & corrosion

Technical Specifications

Power	110v, 1,200w
Weight	4.2lb
Speed, no load	10,000rpm

Important Safety Information

Read and understand all of the safety precautions, warnings and operating instructions in the instruction manual before operating or maintaining this power tool.

Most accidents that result from power tool operation and maintenance are caused by failure to observe basic safety rules or precautions. An accident can often be avoided by recognizing a potentially hazardous situation before it occurs, and by observing appropriate safety procedures

Basic safety precautions are outlined in the Safety section of this instruction manual and in the section which contain the operation and maintenance instructions.

Hazards that must be avoided to prevent bodily injury or machine damage are identified by warnings on the power tool and in this instruction manual.

Basic Safety Rules



WARNING Read and understand all instructions

Failure to follow all instructions listed below may result in electrical shock, fire and/or serious personal injury.

Work Area

1. **Keep work area clean and well lit.** Cluttered benches and dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres,** such as in the presence of flammable liquids, gasses, or dust. Power tools create sparks which may ignite dust or fumes.
3. **Keep bystanders away** while operating a power tool.

Electrical Safety

1. **Double insulated, polarized plug.** If the plug does not fit, reverse it. If it still does not fit, contact an electrician to install a polarized outlet. Do not change the plug to accommodate the outlet.
2. **Avoid body contact with grounded surfaces** such as pipes, radiators, or structural members. There is an increased risk of electrical shock when your body is grounded.
3. **Keep tool dry.** Do not expose tool to water or wet conditions. Water entering the tool will increase the risk of electrical shock.
4. **Do not abuse the power cord.** Never use the cord to carry the tool or pull the plug from a receptacle. Replace damaged cords immediately.
5. **When operating a power tool outside, use an outdoor extension cord** marked "W-A" or "W".

Personal Safety

1. **Stay alert,** watch what you are doing and use common sense when operating a power tool. Do not operate tool when tired or substance impaired.
2. **Dress properly.** Do not wear loose clothing or jewelry. Contain long hair. Keep hair, clothing and hands away from moving parts.
3. **Use safety equipment.** Always wear eye protection. Other precautions may be required depending on the situation. These include: ear protection (ear plugs) vibration protection (gloves), steel toe shoes or hard hats.
4. **Avoid accidental starting.** Be sure the switch is off before plugging in.
5. **Do not overreach.** Keep proper footing and balance at all times.



Tool Use and Care

1. **Secure the work.** Use clamps or other securing method to firmly hold work to a stable platform. Do not attempt to hold work in one hand and operate the tool with the other hand.
2. **Do not force tool.** Apply light hold down pressure and let the tool do the work. Use the correct tool for your application.
3. **Do not use tool if switch is broken.** Any tool that can not be controlled with the switch is dangerous and must be repaired.
4. **Do not tape trigger closed** to fashion a trigger lock. If you drop or otherwise loose control of the tool, it will continue to run and may cause dangerous unintended results.
5. **Disconnect plug from power source before making adjustments** or changing accessories. Failure to unplug may result in injury if the tool were to accidentally start while adjusting.
6. **Store tools out of reach of untrained persons.** Tools are dangerous in the hands of untrained users.
7. **Maintain tools with care.** Keep cutting tools sharp and clean. Properly maintained tools, with sharp cutting edges are less likely to bind and are easier to control.
8. **Check for misaligned or binding of moving parts,** breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.

Operation

Prior to Operation

- 1) **Power Source** – Ensure that the power source conforms to the requirements specified in this document.
- 2) **Power Switch** – Ensure that the switch is in the OFF position prior to connecting to a power source.
- 3) **Extension Cord** – When the work area is far away from the power source, use an extension cord of adequate rated capacity. The extension cord should be kept as short as practical.
- 4) **Check the Receptacle** – If the receptacle only loosely accepts the plug, the receptacle must be repaired. If such a faulty receptacle is used, it may cause overheating, resulting in a serious hazard.
- 5) **Check your work environment** – Ensure the following before operation:
 - No flammable gas or liquid at worksite.
 - Work piece secured to prevent unwanted movement
 - Area cleared of children or unauthorized personnel.
- 6) **Observe abrasive speed rating** – Use only abrasives rated to run at 10,000 rpm or greater.

Grinder Operation

- 1) **Hold the grinder firmly with both hands.** One hand on the tool body handle and the other on the side handle.

- 2) **Switch Operation**

Switch On: The switch is equipped with a double safety lock-off lever to prevent the tool from accidentally starting. As a result, two steps are necessary to start the tool:

- 1) push backward on the lock-off button to release then,
- 2) pull the power lever switch.

Switch Off: Release the power lever to turn off.



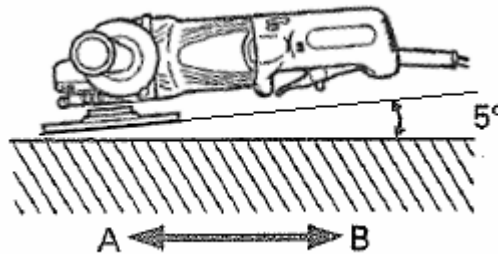
- 3) **Use light grinding pressure** – There is no need to press hard when grinding. Usually the grinder's own weight is sufficient to allow the required light contact with the surface to be grinded. Let the tool do the work.



WARNING: Do not press the grinder forcibly against the surface to be ground. Heavy pressure can result in wheel breakage and serious injury. It can also damage the surface being ground or damage the grinder's motor.

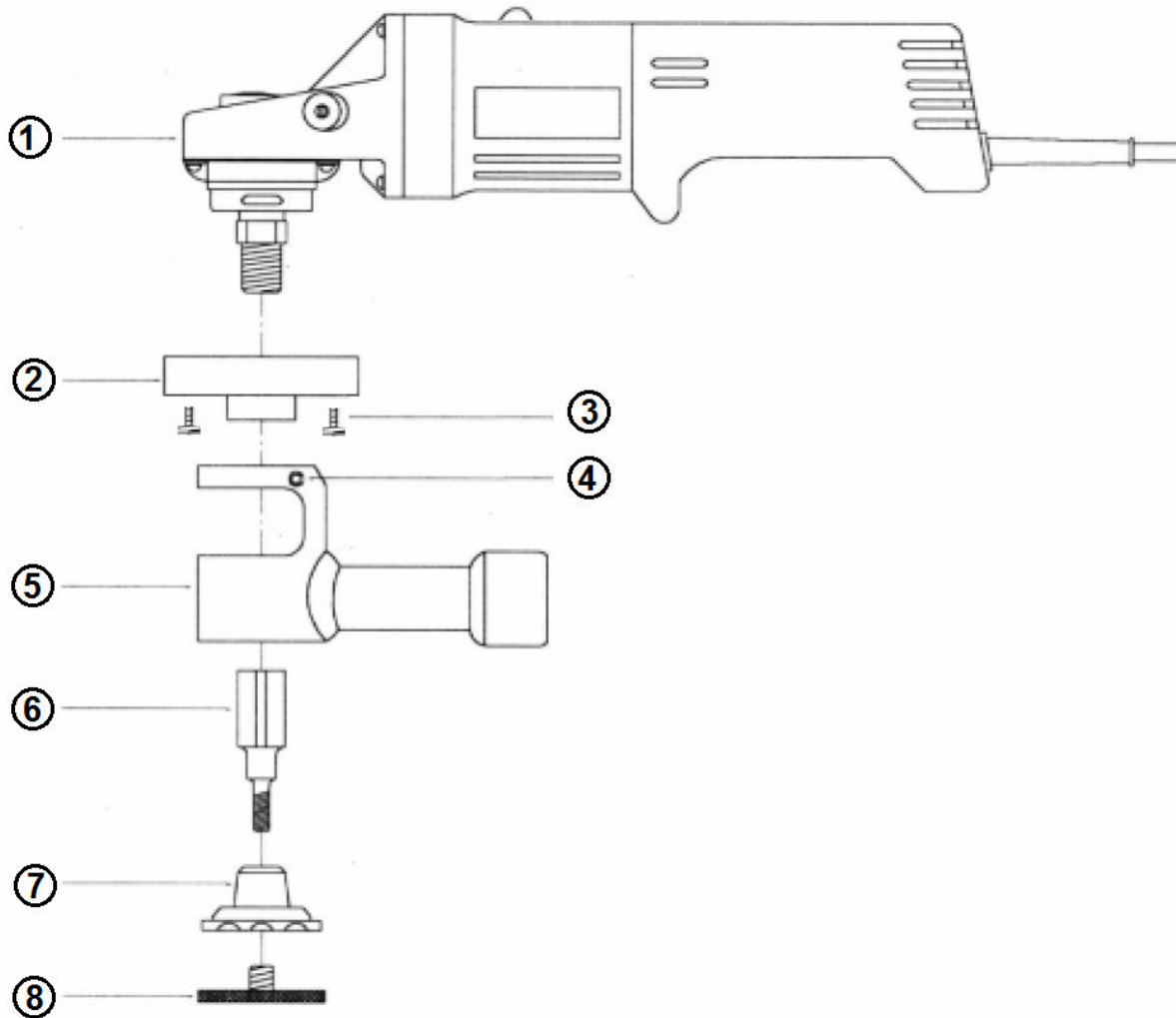
- 4) **Use proper grinding angle and motion:**

- Grind only with the wheel's front edge by lifting the grinder a very slight angle of about 5° as shown below. While it is technically possible to grind with the wheel flat against the surface, the slight angle will help the operator control the tool.
- Move the grinder in the proper direction. When using a new abrasive wheel in direction A, the wheel edge may cut into the work piece. In this case, grind in direction B. Once the wheel edge is worn, the work piece can be ground in both directions.



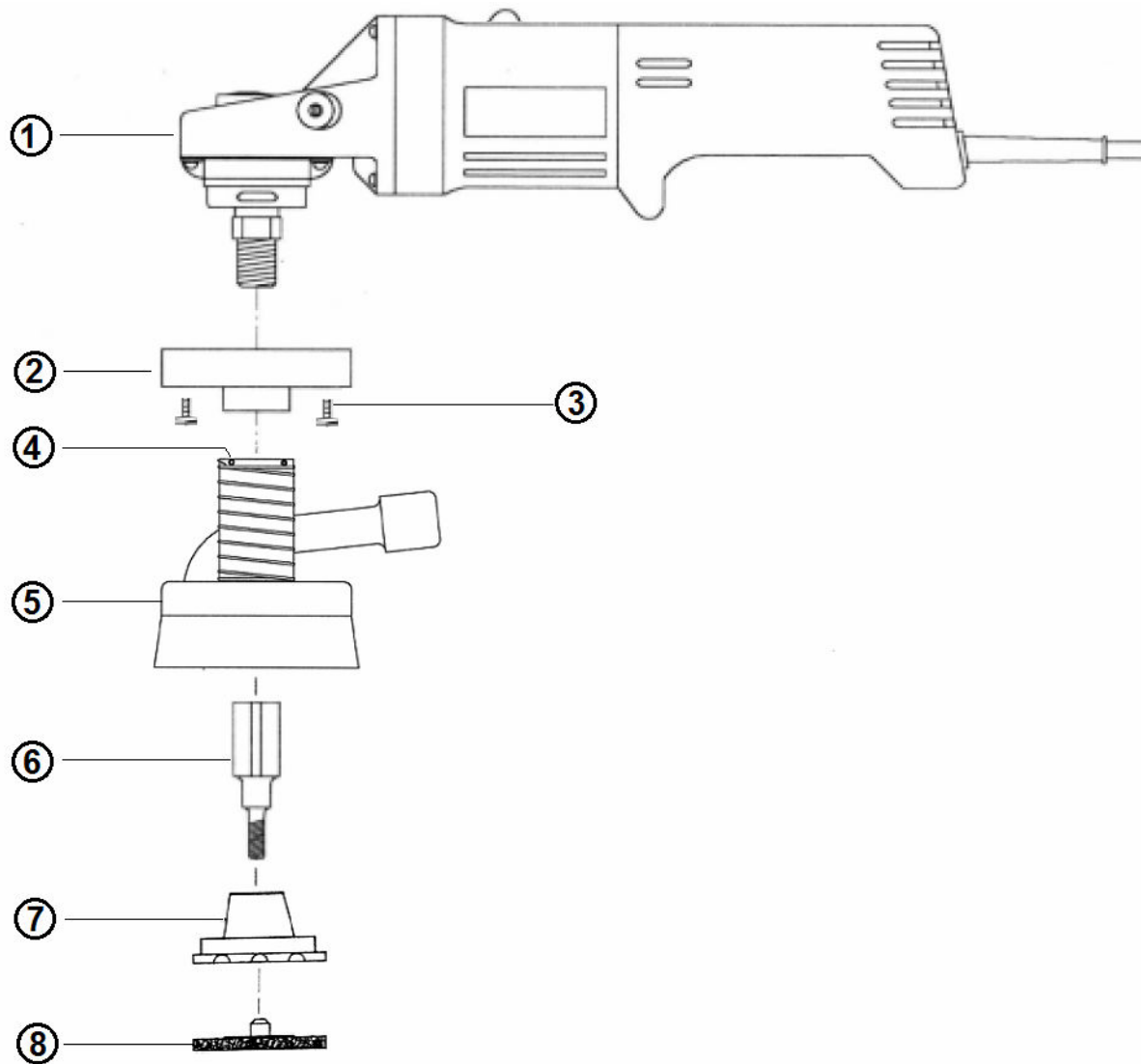
Schematics

2" and 3" Fixed-head Shroud



Ref	Part	Description
1	700.315	Right angle motor
2	141.011	Adapter plate
3	750.107	Bolt, socket head, 10-32 x 1-1/4", 4 required
4	750.135	Set screw, 10-32, 2 required
5	141.003	2" Dust Shroud
	141.004	3" Dust Shroud
6	141.006	Mandrel
7	825.1315	2" Back-up Pad
	820.1318	3" Back-up Pad
8	-	Consumable Product

3" Floating Shroud

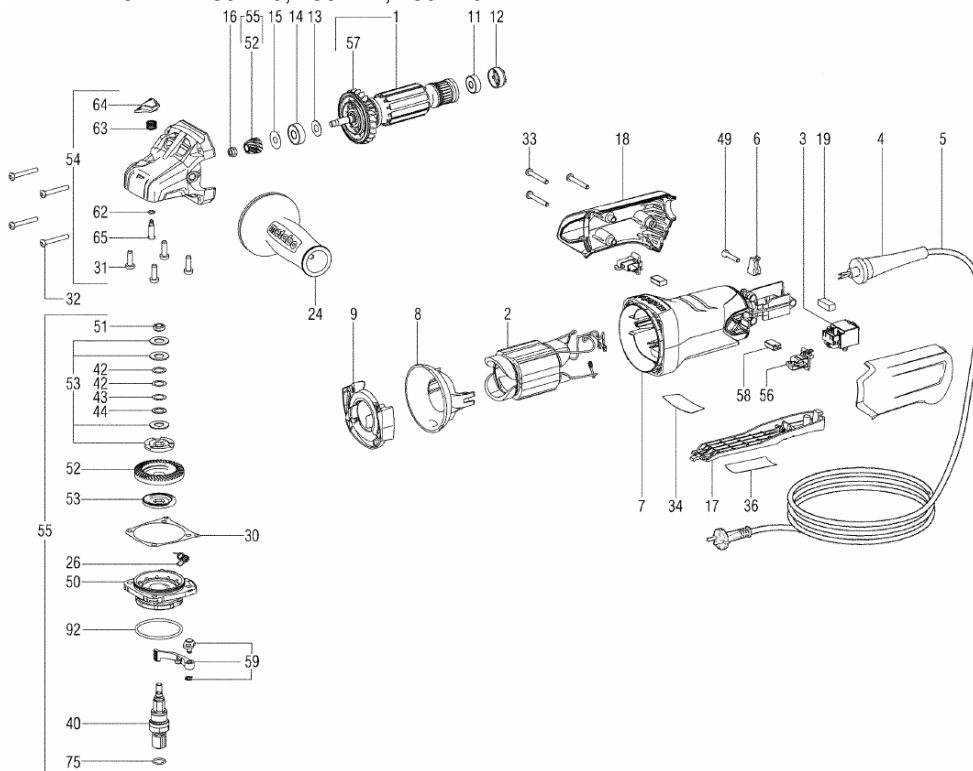


Ref	Part	Description
1	700.315	Right angle motor
2	141.011	Adapter plate
3	750.107	Bolt, socket head, 10-32 x 1-1/4", 4 required
4	750.135	Set screw, 3 required
5	140.013	Floating dust shroud assembly
6	141.006	Mandrel
7	825.1318	Back-up pad (mandrel comes with backup pad)
8	-	Consumable product

Grinder Motor Schematic, PN 700.415

Used on Grinders/Sanders:

- 2" 141.2292, 141.2272
- 3" 141.2293, 141.2273, 140.229, 140.2294
- 4" 150.327, 150.329
- 4.5" 150.220, 150.227, 150.229



Ref	Part	Description
1	550.310010950	Armature compl., 120V
2	550.311011950	Field coil w.field coil,120 V
3	550.343410250	Switch 2-pole,X2
4	550.344100970	Cable sleeve
5	550.344492750	Cable with UL-CSA-plug
6	550.343362490	Cable clip
7	550.315013580	Motor housing
8	550.339151190	Baffle
9	550.339151200	Baffle
11	550.143115170	Ball bearing,6x19x6
12	550.344097870	Rubber bushing
13	550.339133060	Washer,8,05x17x0,4
14	550.143115180	Ball bearing,8x22x7
15	550.339006390	Washer,7,05x19,5x0,2
16	550.341100940	Hexagon nut w.recess
17	550.316053960	Shift lever compl.
18	550.343433940	Motor cap 2 parts black
19	550.344101400	Foam rubber,20 x 8 x 6,35
21	550.341031290	Clamping flange
23	550.339204490	Wheel guard,D115
24	550.316046590	Side support handle compl.
26	550.342022040	Spring clip
30	550.339011970	Gasket
31	550.141121640	Fill. head screw(DIN 7985)
32	550.141116980	Self-tap. fill. h. screw

Ref	Part	Description
33	550.141116980	Self-tap. fill. h. screw
34	550.338059830	Rating plate
36	550.338122090	Warning Label 52x22
40	550.341604440	Spindle shaft 5/8"
41	550.316055450	Clamping nut compl.,5/8"
42	550.141151120	Washer 10,2 X 14,8X 0,2
43	550.141152300	Washer 10,2 X 14,8X 0,1
44	550.141153920	Washer 10,2 X 14,8X 0,5
49	550.141117060	Self-tap. fill. h. screw
50	550.343433280	Flange compl.
51	550.341102460	Nut
52	550.316054970	Bevel gear w.pinion
53	550.316055080	Friction washer set compl.
54	550.316055100	Gear housing compl.
55	550.316054230	Safety clutch w.pinion
56	550.316055230	Brush holder compl.
57	550.316054850	Fan w. dust guard
58	550.316055200	Carbon brush set cut-off
59	550.316055110	Clamping lever compl.
62	550.143193650	O-ring
63	550.342003390	Pressure spring
64	550.343433130	Push button
65	550.341515640	Bolt
75	550.143192150	O-ring
92	550.143195640	O-ring

