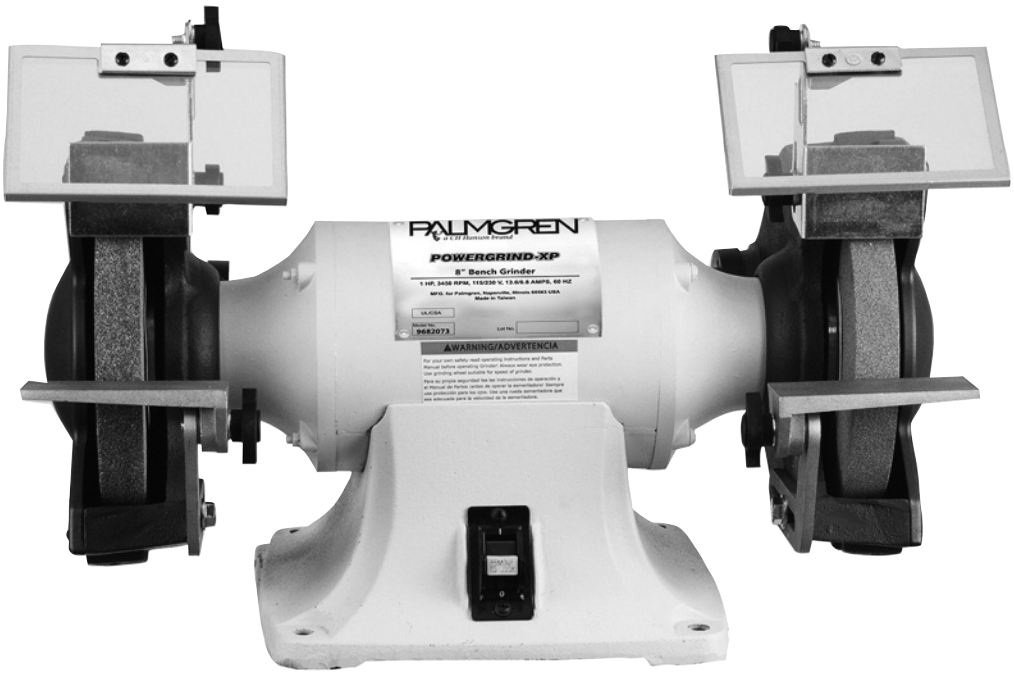
Operating Manual & Parts List **9682072A, 9682073A & 9682075A**

PALMGREN®
a CH Hanson brand

POWERGRIND-XP™

Bench Grinders



9682073A shown.

Read carefully and follow all safety rules and operating instructions before first use of this product.

9643556.01-1018

DESCRIPTION

Palmgren Bench Grinders are equipped with a totally enclosed ball bearing motor. Armature assembly is dynamically balanced for smooth operation. Motor housing is compact so long pieces of work can press against both wheels without touching the motor frame. Removable wheel guards allow for easy changing of wheels. Two-way tool rests are adjustable for wheel wear and angle grinding. Grinders come complete with spark guards, safety eyeshields and dust collection hose. .

UNPACKING

Check for shipping damage. If damage has occurred, a claim must be filed with the carrier immediately. Check for completeness. Immediately report missing parts to dealer.

To be certain the grinding wheels have not been damaged in shipment, strike the edges slightly with a metal object. A ringing sound indicates a good wheel, but a dull noise may signal a fracture.

WARNING: If you suspect a wheel of being fractured, replace it immediately. Fractured wheels may shatter, causing serious injury.

SPECIFICATIONS

9682072A, 6" Bench Grinder

Horsepower	1/2
Voltage	115/230
Amperes	5.5/2.8
Hertz	60
Phase	Single
RPM	3600
Rotation (viewed from left side)	Clockwise
Wheel diameter	6"
Wheel bore	1/2"

9682073A, 8" Bench Grinder

Horsepower	1
Voltage	115/230
Amperes	10/5
Hertz	60
Phase	Single
RPM	3600
Rotation (viewed from left side)	Clockwise
Wheel diameter	8"
Wheel bore	5/8"

9682075A, 10" Bench Grinder

Horsepower	1½
Voltage	115/230
Amperes	15/7.5
Hertz	60
Phase	Single
RPM	1800
Rotation (viewed from left side)	Clockwise
Wheel diameter	10"
Wheel bore	1"

SAFETY RULES

WARNING: For your own safety, read operating instructions manual before operating tool.

PROPOSITION 65 WARNING: Some dust created by using power tools contain chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

Some examples of these chemicals are:

- Lead from lead-based paints
- Crystalline silica from bricks and cement and other masonry products.
- Arsenic and chromium from chemically treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals; work in a well ventilated area and work with approved safety equipment. Always wear **OSHA/NIOSH** approved, properly fitting face mask or respirator when using such tools.

BE PREPARED FOR JOB

- Wear proper apparel. Do not wear loose clothing, gloves, neckties, rings, bracelets or other jewelry which may get caught in moving parts of machine.
- Wear protective hair covering to contain long hair.
- Wear safety shoes with non-slip soles.
- Wear safety glasses complying with United States ANSI Z87.1. Everyday glasses have only impact resistant lenses. They are NOT safety glasses.
- Wear face mask or dust mask if operation is dusty.
- Be alert and think clearly. Never operate power tools when tired, intoxicated or when taking medications that cause drowsiness.

PREPARE WORK AREA FOR JOB

- Keep work area clean. Cluttered work areas and work benches invite accidents.
- Do not use power tools in dangerous environments. Do not use power tools in damp or wet locations. Do not expose power tools to rain.
- Work area should be properly lighted.
- Use proper extension cord. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Extension Cord Table on page 4 shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.
- Keep visitors at a safe distance from work area.
- Keep children out of the workplace. Make workshop childproof. Use padlocks, master switches or remove switch keys to prevent any unintentional use of power tools.

TOOL SHOULD BE MAINTAINED

- Always unplug tool prior to inspection.
- Consult manual for specific maintaining and adjusting procedures.
- Keep tool clean for safest operation.
- Remove adjusting tools. Form habit of checking to see that adjusting tools are removed before turning machine on.
- Keep all parts in working order. Check to determine that the guard or other parts will operate properly and perform their intended function.
- Check for damaged parts. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other condition that may affect a tool's operation.
- A guard or other part that is damaged should be properly repaired or replaced. Do not perform makeshift repairs. (Use the parts list to order replacement parts.)
- Maintain tools with care. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

SAFETY RULES (CONTINUED)

KNOW HOW TO USE TOOL

- Use right tool for job. Do not force tool or attachment to do a job for which it was not designed.
- Disconnect tool from power when changing accessories such as grinding wheels, buffing wheels and the like.
- Avoid accidental start-up. Make sure that the switch is in the off position before plugging in.
- Do not force tool. It will work most efficiently at the rate for which it was designed.
- Keep hands away from moving parts and grinding surfaces.
- Never leave a tool running unattended. Turn the power off and do not leave tool until it comes to a complete stop.
- Do not overreach. Keep proper footing and balance.
- Never stand on tool. Serious injury could occur if tool is tipped over.
- Know your tool. Learn the tool's operation, application and specific limitations.
- Use recommended accessories. Understand and obey all safety instructions supplied with accessories. The use of improper accessories may cause risk of injury to persons.
- Do not over tighten wheel nut. Replace cracked wheel immediately. Use only flanges supplied with the grinder.
- Adjust distance between wheel and tool rest to maintain 1/16" or less gap.
- Handle the workpiece correctly. Whenever possible, use tool rest to support workpiece during grinding operation. Turn tool off if it jams.
- Secure work. Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.
- Always use guards and eyeshields.
- Clean grinding dust from beneath tool frequently.
- Direction of feed. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.

ASSEMBLY

Parts to be fastened to the unit should be located and accounted for before assembly.

IMPORTANT: Do not attempt assembly if parts are missing. Use this manual to order replacement parts.

A Knob (2)
B Flat washer, 5/16" (6)
C Tool rest bracket (2)
D Tool rest (2)
E Flat washer, 3/8" (2)
F Knob (2)
G Pan head screw, 3/16" x 3/8" (4)
H Upper eyeshield bracket (2)
I Eyeshield (2)
J Lower eyeshield bracket (2)
K Knob (2)
L Spark Deflector (2)
M Knob (2)

TOOL REST ASSEMBLY

Refer to figure 1

1. Place tool rest (D) over tool rest bracket (C) and secure in position with knob (F) and flat washer (E).
2. Attach tool rest bracket (C) to the bottom of the wheel guard (O) using knob (A) and flat washer (B). Make sure that the slot of the bracket is located over the raised boss on the wheel guard. Secure in position with knob.
3. Position tool rest (D) so that distance between tool rest (D) and wheel (P) is less than 1/16". Reposition angle of tool rest if necessary. Secure all knobs.

- Mount right tool rest in a similar manner.

EYESHIELD ASSEMBLY

Refer to figure 1

1. Attach spark guard (L) to left wheel guard (O) using knob (M), spring washer (N) and flat washer (B).
2. Mount left upper eyeshield bracket (H) to eyeshield (I) and lower eyeshield bracket (J) using two pan head screws (G).

NOTE: Left upper eyeshield bracket is stamped "L" for identification.

3. Slide knob (K) through hole at top of left spark deflector (L) into upper eyeshield bracket (H) and secure in position.
4. Locate eyeshield in desired position for protecting operator and secure all knobs and bolts.

- Mount right eyeshield assembly in a similar manner.

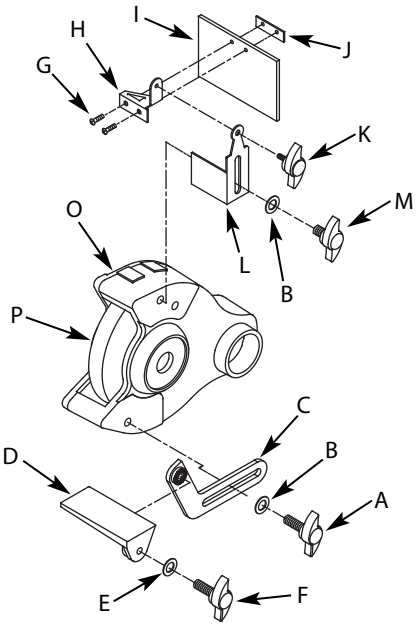


Figure 1 – Left Tool Rest and Eyeshield Assembly

DUST COLLECTION HOSE

- A dust collector hose has been provided with grinder. Slide hoses onto sides of T-connector and flanges. Mount the hose by sliding the flanges at each end over the exhaust ports on the left and right wheel guards. Attach 2½" shop vacuum hose to collector hose. Be sure hose is mounted securely.

DANGER: Be sure to empty shop vacuum of all flammable material (flammable liquids and vapors, paper, wood, plastic, etc.) before connecting vacuum to grinder. Hot sparks from grinder may ignite flammable materials in shop vacuum.

INSTALLATION

MOUNT GRINDER

- Mount grinder to a solid horizontal surface (hardware not provided). If mounted to metal pedestal, align mounting holes with corresponding holes in pedestal. Insert a 1/4-20 x 1¼" hex head bolt with flat washer through base of grinder. From bottom of pedestal, place a 1/4" flat washer and 1/4"-20 hex nut onto the bolt. Tighten only until space between grinder base and pedestal is 1/8" (base should be flush for 9682075A). Using second nut on each bolt, jam tighten against the first to prevent loosening by vibration.

INSTALLATION (CONTINUED)

- To mount grinder to wooden bench top, use 1/4 x 1¼" wood screws with flat washers beneath heads. Tighten screws until space between grinder base and bench top is 1/8" (base should be flush for 9682075A).

GROUNDING INSTRUCTIONS

WARNING: Improper connection of equipment grounding conductor can result in the risk of electrical shock. Equipment should be grounded while in use to protect operator from electrical shock.

- Check with a qualified electrician if grounding instructions are not understood or if in doubt as to whether the tool is properly grounded.
- This grinder is equipped with an approved 3-conductor cord rated at 300V and a 3-prong, grounding type plug (See Figure 2) for your protection against shock hazards.
- Grounding plug should be plugged directly into a properly installed and grounded 3-prong grounding-type receptacle (See Figure 2).

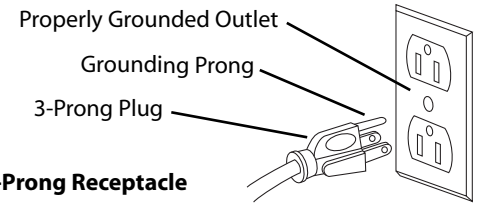


Figure 2 – 3-Prong Receptacle

- Do not remove or alter grounding prong in any manner. In the event of a malfunction or breakdown, grounding provides a path of least resistance for electrical shock.

WARNING: Do not permit fingers to touch the terminals of plug when installing or removing from outlet.

- Plug must be plugged into matching outlet that is properly installed and grounded in accordance with all local codes and ordinances. Do not modify plug provided. If it will not fit in outlet, have proper outlet installed by a qualified electrician.
- Inspect tool cords periodically, and, if damaged, have repaired by an authorized service facility.
- Green (or green and yellow) conductor in cord is the grounding wire. If repair or replacement of the electric cord or plug is necessary, do not connect the green (or green and yellow) wire to a live terminal.
- Where a 2-prong wall receptacle is encountered, it must be replaced with a properly grounded 3-prong receptacle installed in accordance with National Electric Code and local codes and ordinances.

WARNING: This work should be performed by a qualified electrician.

- A temporary 3-prong to 2-prong grounding adapter (See Figure 3) is available for connecting plugs to a two pole outlet if it is properly grounded.

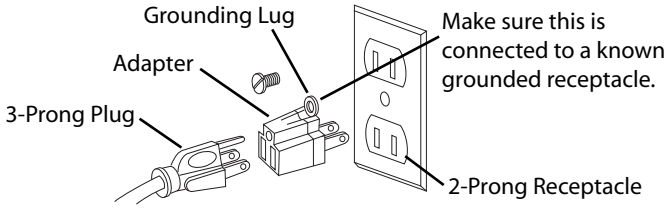


Figure 3 – 2-Prong Receptacle with Adapter

- Do not use a 3-prong to 2-prong grounding adapter unless permitted by local and national codes and ordinances.
  (A 3-prong to 2-prong grounding adapter is not permitted in Canada.) Where permitted, the rigid green tab or terminal on the side of the adapter must be securely connected to a permanent electrical ground such as a properly grounded water pipe, a properly grounded outlet box or a properly grounded wire system.
- Many cover plate screws, water pipes and outlet boxes are not properly grounded. To ensure proper ground, grounding means must be tested by a qualified electrician.

EXTENSION CORDS

Use proper extension cord. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

Extension Cord Table

		Volts	Total Length of Cord in Feet		
Ampere Rating		115	25	50	100
More Than	Not More Than	230	50	100	200
			Minimum Gage for Cord		
0	6		18	16	16
6	10		18	16	14
10	12		16	16	14
12	16		14	12	Not Recommended

ELECTRICAL CONNECTIONS

WARNING: All electrical connections must be performed by a qualified electrician. Make sure tool is off and disconnected from power source while motor is mounted, connected, reconnected or anytime wiring is inspected.

- Motor and wires are installed as shown in wiring diagram (See Figure 4). Motor is assembled with approved, 3-conductor cord to be used at 115/230 volts. Motor is prewired at the factory for 115 volts.
- To use the grinder with a 230 volt power supply, have a qualified electrician rewire motor and attach a 230 volt, 15 amp three-prong plug onto grinder line cord.

Figure 4 – Wiring Diagram

OPERATION

CAUTION: Always follow proper operating procedures as defined in this manual even if you are familiar with use of this or similar tools. Remember that being careless for even a fraction of a second can result in severe personal injury.

WARNING: Always wear safety glasses complying with United States ANSI Z87.1 (shown on package) before commencing power tool operation.

- Keep a steady, moderate pressure on the work and keep it moving at an even pace for smooth grinding.
- Pressing too hard overheats the motor and prematurely wears down the grinding wheels.
- Note the original bevel angle on the item to be sharpened and try to maintain that angle. Sharpening a cutting edge requires removing burrs from edge.

OPERATION (CONTINUED)

- Deburring edge is done best by using the grinder to pull burr from edge across the bevel angle.
- The grinding wheel should rotate into object being sharpened.
- Dip work into a coolant regularly to prevent overheating. Overheating can weaken metals.

MAINTENANCE

- As wheels wear, tool rests should be positioned closer to the face of the wheels.
- The gap between the wheel and the tool rest should not be greater than 1/16". When the wheels are worn to the extent that the 1/16" maximum gap cannot be maintained, the wheels should be replaced.
- Models 9682072A and 9682073A: Replacement wheels must have a minimum rated speed of at least 3600 RPM.
- Model 9682075: Replacement wheels must have a minimum rated speed of 1800 RPM.
- Maximum wheel diameter is 6" for 9682072A, 8" for 9682073A, and 10" for 9682075A.
- To loosen nuts holding the wheels, disconnect power and push a wood wedge between the tool rest and the wheel to keep the shaft from turning. The threads on the right side of the grinder (facing unit) are right hand; threads on the left side are left hand. Tighten nuts securely before operating the grinder.
- For grinding efficiency, wheels should be dressed periodically, especially if they become clogged from grinding soft metals.

TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Grinder won't start	1. Blown line fuse or tripped circuit breaker	1. If fuse is blown, replace with fuse of proper size. If breaker tripped, reset it
	2. Low line voltage	2. Check power supply for voltage and correct as needed
	3. Material wedged between wheel and guard	3. Turn grinder off and remove material
	4. Defective switch	4. Replace switch
	5. Defective, blown capacitor	5. Replace capacitor
Excessive vibration	1. Improper mounting of grinder or accessories	1. Remount
	2. Grinding wheel out of balance	2. Dress wheels or replace wheels
	3. Improper wheel mounting	3. Remount wheels, but rotate one wheel 90° with respect to its previous position. Other wheel should remain in its original position
Motor overheating	1. Excess pressure required to grind material	1. Dress wheel or replace wheel with one of proper grit
	2. Grinding on side of wheel	2. Grind only on face of wheel
	3. Motor not turning freely (without power)	3. Clean around wheels and shaft and/or replace bearings
Fuses are being blown or circuit breakers are being tripped	1. Overloading due to binding	1. Clean around wheels and shaft and/or replace bearings
	2. Defective plug	2. Replace plug
	3. Defective cord	3. Replace cord
	4. Defective switch	4. Replace switch
	5. Motor wired for different line voltage	5. Rewire motor as per wiring diagram, (See Installation, Page 4)
	6. Faulty internal wiring	6. Contact your Palmgren distributor
Motor does not develop proper torque	1. Motor wired for different line voltage	1. Rewire motor as per wiring diagram, (See Installation, Page 4)

REPAIR PARTS ILLUSTRATION FOR 9682072A, 6″ BENCH GRINDER

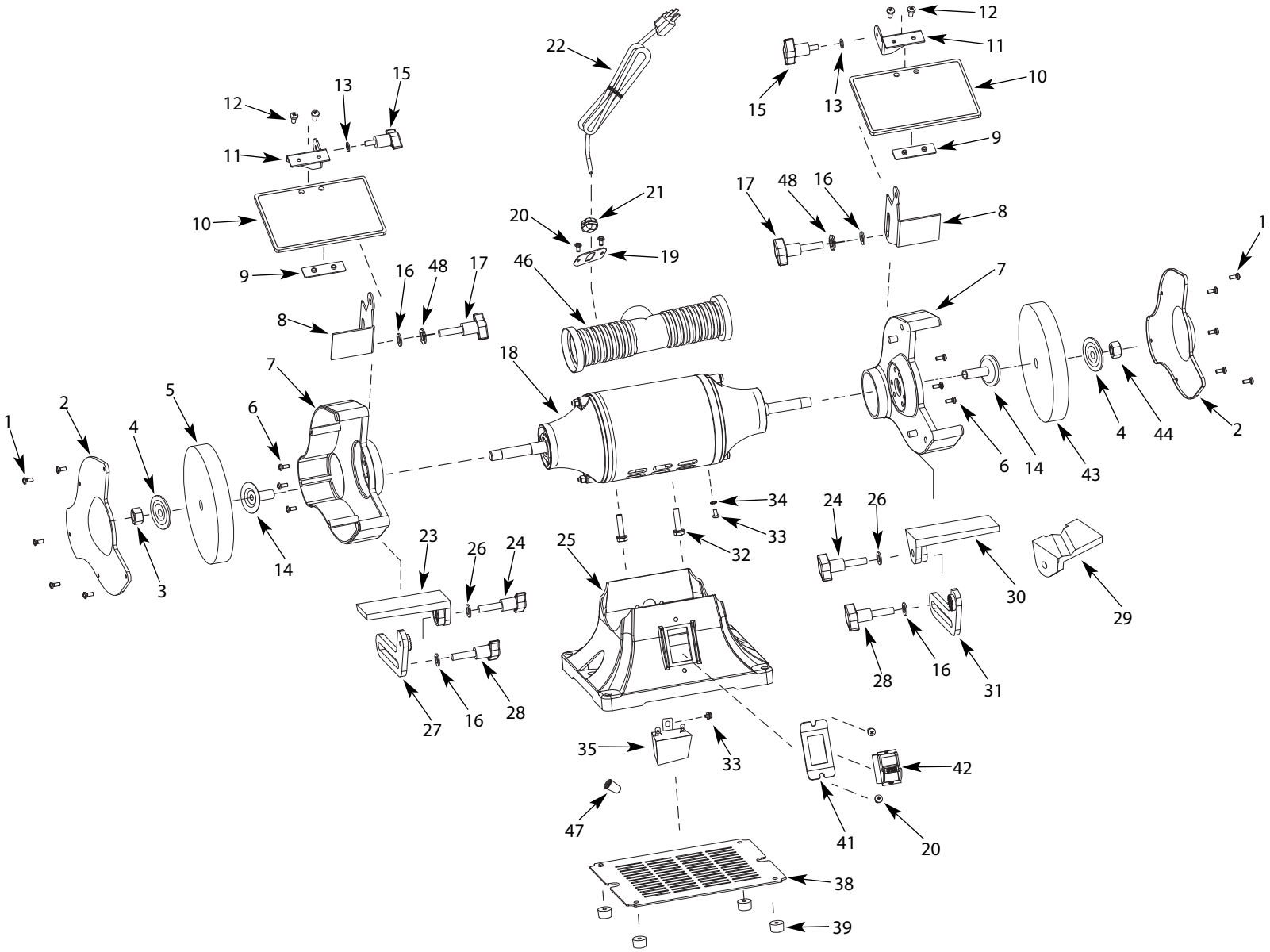


Figure 5 – Repair Parts Illustration for 9682072A, 6″ Bench Grinder

REPAIR PARTS LIST FOR 9682072A, 6″ BENCH GRINDER

Ref. No.	Description	Part Number	Qty.
1	Philips Screw, 3/16″×3/8″	*	10
2	Wheel Guard Cover	9624464.02	2
3	Hex Nut, 1/2″-12, LH Thread	9600064.00	1
4	Outer Wheel Flange	9618904.00	2
5	Grinding Wheel, 36 Grit, 1/2″ Bore	9602034.00	1
6	Philips Hex Bolt, Spring Washer, 1/4″×5/8″	*	6
7	Wheel Guard	9624465.02	2
8	Spark Deflector (Set of 2)	9616841.02	1
9	Eyeshield Plate	N/A	2
10	Eyeshield Kit (Includes 9, 10, 12) Set of 2	9632291.01	1
11	Upper Eyeshield Bracket (Set of 2)	9625177.02	1
12	Philips Screw, 3/16″×1/2″	*	4
13	Flat Washer, 1/4″	*	2
14	Inner Wheel Flange	9617315.01	2
15	Locking Knob, 1/4″×1/2″	9625816.00	2
16	Flat Washer, 3/8″	*	4
17	Spark Deflector Knob, 3/8″×1/2″	9625817.02	2
18	Motor	N/A	1
19	Clip Plate	9608099.01	1
20	Philips Screw, 3/16″×1/4″	*	4
21	Cord Clip	*	1
22	Power Cord	9600067.01	1
23	Tool Rest, Left	9625813.02	1
24	Locking Knob, 5/16″×1″	9625812.00	2
25	Base	N/A	1
26	Flat Washer, 5/16″	*	2
27	Tool Rest Bracket, Left	9625810.02	1
28	Locking Knob, 3/8×1/2″	9625817.02	2
29	Grooved Tool Rest, Right	9625825.01	1
30	Tool Rest, Right	9625825.02	1
31	Tool Rest Bracket, Right	9625826.02	1
32	Philips Screw, Spring Washer, M6×15	*	2
33	Philips Screw, 3/16″×1/4″	*	2
34	Star Lock Washer, 3/16″	*	1
35	Capacitor	9616908.02	1
38	Base Plate	9623758.02	1
39	Rubber Foot	9623991.00	4
41	Switch Plate	9636282.01	1
42	Switch	9608066.01	1
43	Grinding Wheel, 120 Grit, 1/2″ Bore	9602041.00	1
44	Hex Nut, 1/2″-12, RH Thread	9600548.00	1
46	Dust Port Assembly	9608070.08	1
47	Wire Nut	*	1
48	Spring Washer, 3/8″	*	2
Δ	Operating Instructions & Parts Manual	9643556.01	1

(Δ) Not shown.
(N/A) Not available as repair part.
(*) Standard hardware item, available locally.

REPAIR PARTS ILLUSTRATION FOR 9682073A, 8" BENCH GRINDER

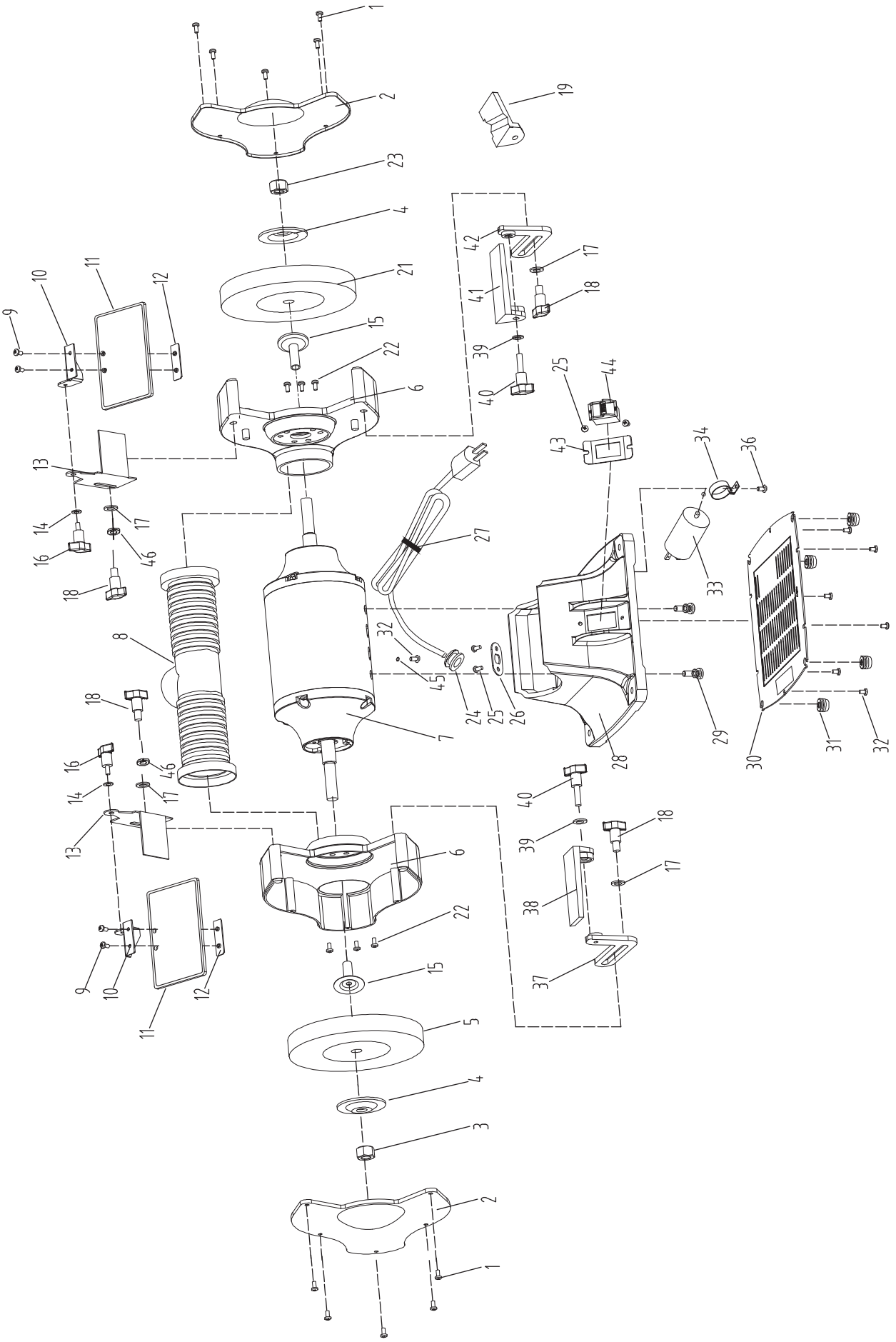


Figure 6 – Repair Parts Illustration for 9682073A, 8" Bench Grinder

REPAIR PARTS LIST FOR 9682073A, 8" BENCH GRINDER

Ref. No.	Description	Part Number	Qty.
1	Philips Screw, 3/16″×3/8″	*	10
2	Wheel Guard Cover	9624496.03	2
3	Hex Nut, 5/8″, LH Thread	9600088.00	1
4	Outer Wheel Flange	9600089.01	2
5	Grinding Wheel, 36 Grit, 5/8″ Bore	9602038.00	1
6	Wheel Guard Inner Cover	9626056.02	2
7	Motor Assembly	N/A	1
8	Dust Port Assembly	9608070.09	1
9	Philips Screw, 3/16″×1/2″	N/A	4
10	Eyeshield Mounting Plate (Set-L&R)	9625177.02	1
11	Eyeshield (includes 9, 11, 12) Set of 2	9632291.01	1
12	Eyeshield Plate	N/A	2
13	Spark Deflector (Set of 2)	9625815.02	1
14	Flat Washer, 1/4″	*	2
15	Inner Wheel Flange	9624498.01	2
16	Locking Knob, 1/4″×1/2″	9625816.00	2
17	Flat Washer, 3/8″	*	4
18	Locking Knob, 3/8″×1/2″	9625817.02	4
19	Grooved Tool Rest, Right	9625825.01	1
21	Grinding Wheel, 120 Grit, 5/8″ Bore	9602042.00	1
22	Philips Hex Bolt, Spring Washer, 1/4″×5/8″	*	6
23	Hex Nut, 5/8″	*	1
24	Cord Clip	*	1

Ref. No.	Description	Part Number	Qty.
25	Philips Screw, 3/16″×1/4″	*	4
26	Clip Plate	9608099.01	1
27	Power Cord	9600090.00	1
28	Base	N/A	1
29	Philips Hex Bolt, Spring Washer, M6×15	*	2
30	Base Plate	9624500.02	1
31	Rubber Foot	9623991.01	4
32	Philips Screw, 3/16″×1/4″	*	8
33	Capacitor, 125 V/300 UF	9616646.02	1
34	Capacitor Support	9616655.01	1
37	Tool Rest Bracket, Left	9631447.02	1
38	Tool Rest, Left	9625813.02	1
39	Flat Washer, 5/16″	*	2
40	Locking Knob, 5/16″×1″	9625812.00	2
41	Tool Rest, Right	9625825.02	1
42	Tool Rest Bracket, Right	9631448.02	1
43	Switch Plate	9636282.01	1
44	Switch	9608066.01	1
45	Toothed Lock Washer, 3/16″	*	1
46	Spring Washer, 3/8″	*	2
Δ	Operating Instructions & Parts Manual	9643556.01	1

(Δ) Not shown.
(N/A) Not available as repair part.
(*) Standard hardware item, available locally.

REPAIR PARTS ILLUSTRATION FOR 9682075A, 10" BENCH GRINDER

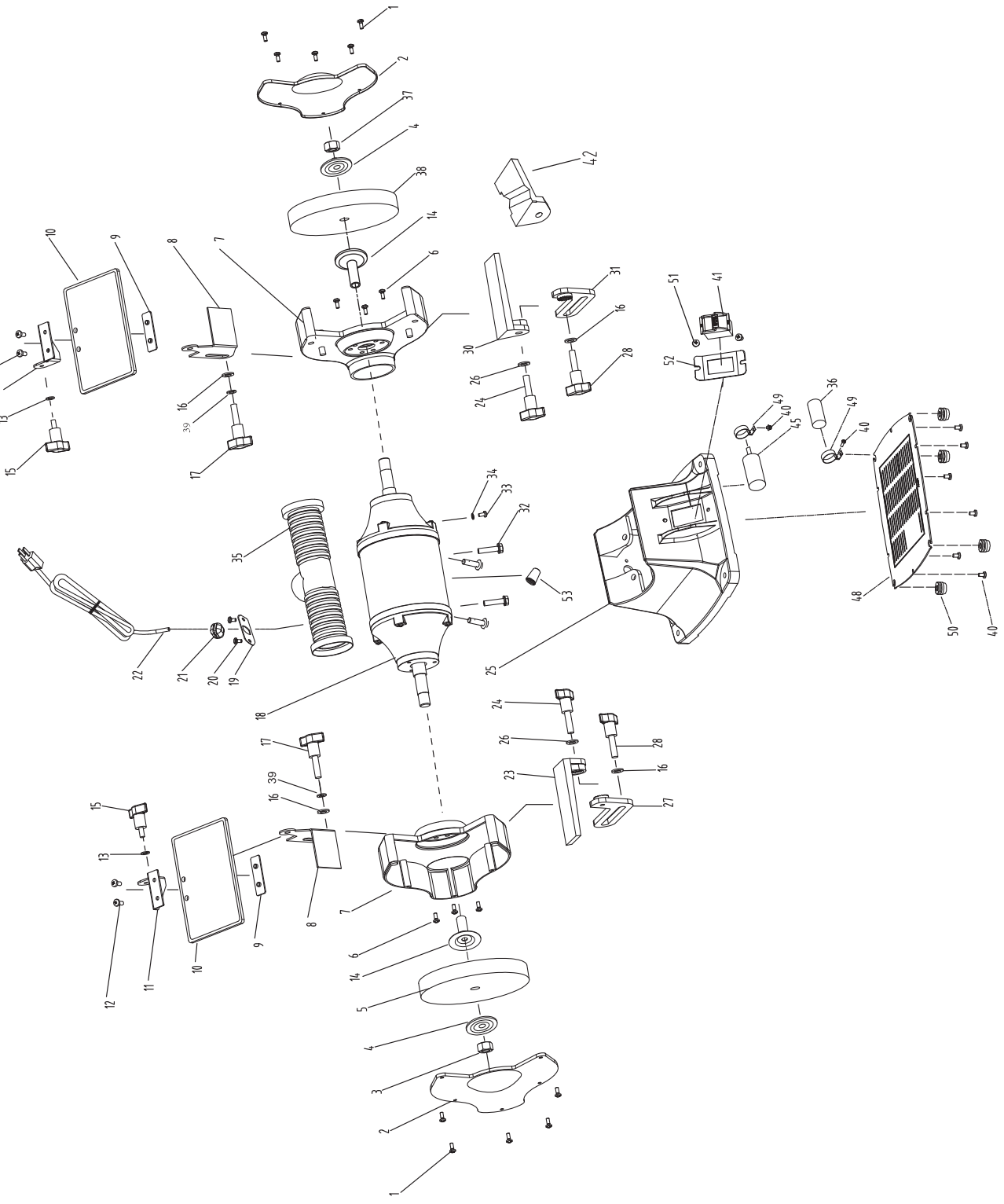


Figure 7 – Repair Parts Illustration for 9682075A, 10" Bench Grinder

REPAIR PARTS LIST FOR 9682075A, 10" BENCH GRINDER

Ref. No.	Description	Part Number	Qty.
1	Phillips Screw, Spring Washer, 1/4″×3/4″	*	10
2	Wheel Guard Cover	9616911.04	2
3	Hex Nut 1″, LH Thread	*	1
4	Outer Wheel Flange	9624480.00	2
5	Grinding Wheel 36 Grit, 1″ Bore	9602040.00	1
6	Philps Bolt , Spring Washer, 5/16″×3/4″	*	6
7	Wheel Guard	9626057.01	2
8	Spark Deflector (Set of 2)	9625815.02	1
9	Eyeshield Plate	N/A	2
10	Eyeshield Kit (Include 9,10,12)	9632291.01	1
11	Upper Eyeshield Bracket (Set of 2)	9625177.02	1
12	Phillips Screw, 3/16″×1/2″	N/A	4
13	Flat Washer, 1/4″	*	2
14	Inner Wheel Flange	9624481.01	2
15	Locking Knob, 1/4″×1/2″	9625816.00	2
16	Flat Washer, 3/8″	*	4
17	Locking Knob, 3/8″×1/2″	9625817.02	2
18	Motor	N/A	1
19	Cord Clip Plate	9608099.01	1
20	Phillips Screw, 3/16×1/4″	*	4
21	Lead Wire Clip	*	1
22	Power Cord	N/A	1
23	Tool Rest, Left	9625813.02	1
24	Locking Knob, 5/16″×1″	9625812.00	2
25	Base	N/A	1
26	Flat Washer, 5/16″	*	2
27	Tool Rest Bracket, Left	9626290.02	1
28	Locking Knob, 3/8″×1/2″	9625817.02	2
30	Tool Rest, Right	9625825.02	1
31	Tool Rest Bracket, Right	9626291.02	1
32	Phillips Bolt, Spring Washer, 5/16″×1″	*	4
33	Phillips Screw, 3/16″×1/4″	*	1
34	Toothed Lock Washer, 3/16″	*	1
35	Dust Port	9608070.10	1
36	Starting Capacitor	9643287.01	1
37	Hex Nut, 1″, RH Thread	*	1
38	Grinding Wheel , 120 Grit, 1″ Bore	9602043.00	1
39	Spring Washer, 3/8″	*	2
40	Phillips Screw, 3/16″×1/4″	*	8
41	Switch	9608066.01	1
42	Grooved Tool Rest, Right	9625825.01	1
45	Running Capacitor	9643289.01	1
48	Base Plate	9616919.02	1
49	Capacitor Support	9642909.01	2
50	Rubber Foot	9632291.00	4
51	Philips Screw, 3/16″×3/8″	*	2
52	Switch Plate	9636282.01	1
53	Wire Nut	9616899.01	1
Δ	Operating Instructions & Parts Manual	9643556.01	1

(Δ) Not shown.
(N/A) Not available as repair part.
(*) Standard hardware item, available locally.

PALMGREN WARRANTY

C.H. Hanson / Palmgren warrants their products to be free of defects in material or workmanship. This warranty does not cover defects due directly or indirectly to misuse, abuse, normal wear and tear, failure to properly maintain the product, heated, ground or otherwise altered, or used for a purpose other than that for which it was intended.

The warranty does not cover expendable and/or wear part (i.e. v-belts, screws, abrasives, jaws), damage to tools arising from alteration, abuse or use other than their intended purpose, packing and freight. The duration of this warranty is expressly limited to the terms noted below beginning from the date of delivery to the original user.

The Palmgren branded items carry the following warranties on parts:

All vises, clamps, positioning tables, tombstones, jack screws and vise accessories - LIFETIME.

All bench grinders, drill presses, tapping machines, band saws, lathes, milling machines, arbor presses, abrasive finishing machines and work stands - 3 YEARS.

The obligation of C.H. Hanson / Palmgren is limited solely to the repair or replacement, at our option, at its factory or authorized repair agent of any part that should prove inoperable. Purchaser must lubricate and maintain the product under normal operating conditions at all times. Prior to operation become familiar with product and the included materials, i.e. warnings, cautions and manuals.

Failure to follow these instructions will void the warranty.

This warranty is the purchaser's exclusive remedy against C. H. Hanson for any inoperable parts in its product. Under no circumstances is C. H. Hanson liable for any direct, indirect, incidental , special or consequential damages including loss of profits in any way related to the use or inability to use our products. This warranty gives you specific legal rights which may vary from state to state.

Assembly instruction

PEDESTAL DUST COLLECTOR

GU1

Part no. 9686003

GB

Table of contents

Preface

Dear customer,

Thank you very much for purchasing a product made by company.

Company accessories for metal working machines offer a maximum of quality, technically company solutions and convince by an outstanding price performance ratio. Continuous enhance-ments and product innovations guarantee state-of-the-art products and safety at any time.

Before commissioning the complete machine please thoroughly read these operating instructions and get familiar with the complete machine. Please also make sure that all persons operating the complete machine have read and understood the operating instructions beforehand.

The operating instructions of the entire machine shall be provided by the supplier of the entirety of all the connected machine components.

Information

These installation instructions contain specifications on the proper installation in a complete machine, and operation and maintenance of this incomplete machine.

If you have any further questions after reading these assembly instructions and you are not able to solve your problem with a help of these assembly instruction, please contact your specialised dealer or directly the company.

C.H.HANSON

2000 North Aurora Rd.

Naperville,IL 60563

Call 800-827-3398

1 Safety

Glossary of symbols

☞	provides further instructions
➜	calls on you to act
❍	listings

This part of the assembly instruction

- ❍ explains the meaning and use of the warning notes included in these assembly instruction,
- ❍ defines the intended use of the part machine,
- ❍ points out the dangers that might arise for you or others if these assembly instruction is not observed,
- ❍ informs you about how to avoid dangers.

In addition to these assembly instruction, please observe

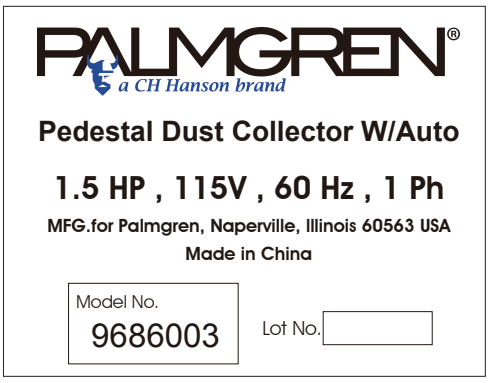
- ❍ the applicable laws and regulations,
- ❍ the statutory provisions for accident prevention,
- ❍ the prohibition, warning and mandatory signs as well as the warning notes on the complete machine.

When installing, operating, maintaining and repairing the machine, the relevant standards must be observed.

If European standards have not yet been incorporated in the national legislation of the country in question, the specific applicable regulations of each country must be observed.

If necessary, relevant measures must be taken to comply with national regulations before commissioning the machine.

1.1 Type plate



INFORMATION

If you are unable to rectify an issue using these assembly instruction, please contact us for advice:

C.H.HANSON

2000 North Aurora Rd.

Naperville,IL 60563

Call 800-827-3398

1.2 Safety instructions (warning notes)

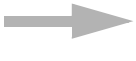
1.2.1 Classification of hazards

We classify the safety warnings into different categories. The table below gives an overview of the classification of symbols (ideogram) and the warning signs for each specific danger and its (possible) consequences.

Symbol	Alarm expression	Definition / consequence
	**DANGER!**	Impending danger that will cause serious injury or death to people.
	WARNING!	A danger that can cause serious injury or death.
	CAUTION!	A danger or unsafe procedure that can cause personal injury or damage to property.
	**ATTENTION!**	Situation that could cause damage to the machine and product, as well as other types of damage. No risk of injury to persons.
	**INFORMATION**	Practical tips and other important or useful information and notes. No dangerous or harmful consequences for people or objects.

In case of specific dangers, we replace the pictogram with

general danger



with a warning of

injury to hands,

hazardous electrical voltage,

or

rotating parts.

1.2.2 Other pictograms

Warning: automatic start-up!

Warning: tilting danger!

Warning: suspended loads!

Caution, danger of explosive substances!

Switching on forbidden!

Read the assembly instruction before commissioning!

Pull out the mains plug!

Wear protective gloves!

Wear safety shoes!

Wear a protective suit!

Contact address

1.3 Intended use

WARNING!

In the event of improper use, the machine

- **may be a hazard to personnel,**
- **the machine and other material property of the operating company will be endangered,**
- **the correct function of the machine may be affected.**

Machine substructure with electrically driven blower and cyclone separator for capture of air pollutants on manually-operated machine tools is for removing material with geometrically undefined cutting edges.

The use of the machine while operating with non-water miscible or water miscible cutting fluids is prohibited.

The machine must only be set up and operated in dry, ventilated rooms.

The machine is designed and constructed for use in non-explosive environments.

The defined conditions of use and performance data must not be changed.

The machine must neither be renovated nor modified in any other way without consultation with the manufacturer.

If the machine is used other than as specified above, without the permission of the company , the machine is no longer used properly.

We accept no liability for damage resulting from improper use.

We expressly point out that the guarantee will expire, if any constructive, technical or procedural changes are not performed by the company. It is also part of the intended use that you

- observe the limits of the machine,
- the assembly instruction is observed,
- the inspection and maintenance instructions are observed.

☞ "Technical specification“ on page 8

WARNING!

Extremely severe injuries due to non-intended use.
Do not make any modifications or alternations to the operation values of the machine. They could endanger the personnel and cause damage to the machine.

1.4 Reasonably foreseeable misuse

The installation of chip-type machines for tools with geometrically indeterminate cutting on the machine substructure GU1 must only be done by qualified personnel.

Qualified personnel

Due to their professional training, knowledge and experience as well as knowledge of relevant regulations, qualified personnel are able to perform the assigned tasks and to independently recognise and avoid any possible dangers.

Any use other than that specified under "Intended use" or any use beyond that described will be deemed non-intended use and is not permissible.

Any other use must be discussed with the manufacturer.

1.4.1 Avoiding misuse

Workplace limits

During activities that involve ablating machines, the general dust limit (inter alia) pursuant to TRGS 900 should be observed with regard to the release of aluminium, aluminium hydroxide, aluminium oxide (except aluminium oxide smoke), iron (II) oxide, iron (III) oxide, graphite, and magnesium oxide (except magnesium oxide smoke). For fraction absorbable by alveoli, the limit is 3 mg/m^3 and for the respirable fraction, 10 mg/m^3.

Where toxic, highly toxic, carcinogenic, mutagenic or fertility-damaging substances may be released, additionalsafety measures in accordance with §10, GefStoffV are necessary. In the case of fertility-damaging substances, the German Maternal Safety and Parental Leave Ordinance (MuSchEltZV) should be observed.

2 Technical specification

The following information represents the dimensions and indications of weight and the manufacturer‘s approved machine data.

Electrical connection	
❍Part no. 9686003	115V ~ 60Hz
Blower engine power	1.5 HP
Speed of the blower [rpm]	22000
Carrying capacity of the machine substructure	Max. 70 kg
Dust container volume	1.8 litres
Filter surface of exhaust air filter Filament fine filter	0.061 m^2
Weight of the machine substructure	40 kg
Utility space on the machine substructure	
❍ Depth	287mm
❍ Width	340mm

Emission measurement

The generation of noise emitted by the capture device is 89 dB(A) to 92 dB(A), measured at a distance of one meter from the machine and at a height of 1.6m.

INFORMATION

This numerical value was measured on a new machine under the operating conditions specified by the manufacturer. The noise behaviour of the machine might change depending on the age and wear of the machine.

Furthermore, the noise emission also depends on production engineering factors, e.g. speed, material and clamping conditions.

INFORMATION

The mentioned numerical value is the emission level.

Though there is a dependency between the degree of the noise emission and the degree of the noise disturbance it is not possible to use it reliably to determine if further precaution measures are required or not.

The following factors influence the actual degree of the noise exposure of the operator:

- ❍ Characteristics of the working area, e.g. size or damping behaviour,
- ❍ other noise sources, e.g. the number of machines,
- ❍ other processes taking place in proximity and the period of time, during which the operator is exposed to the noise.

Furthermore, it is possible that the admissible exposure level might be different from country to country due to national regulations.

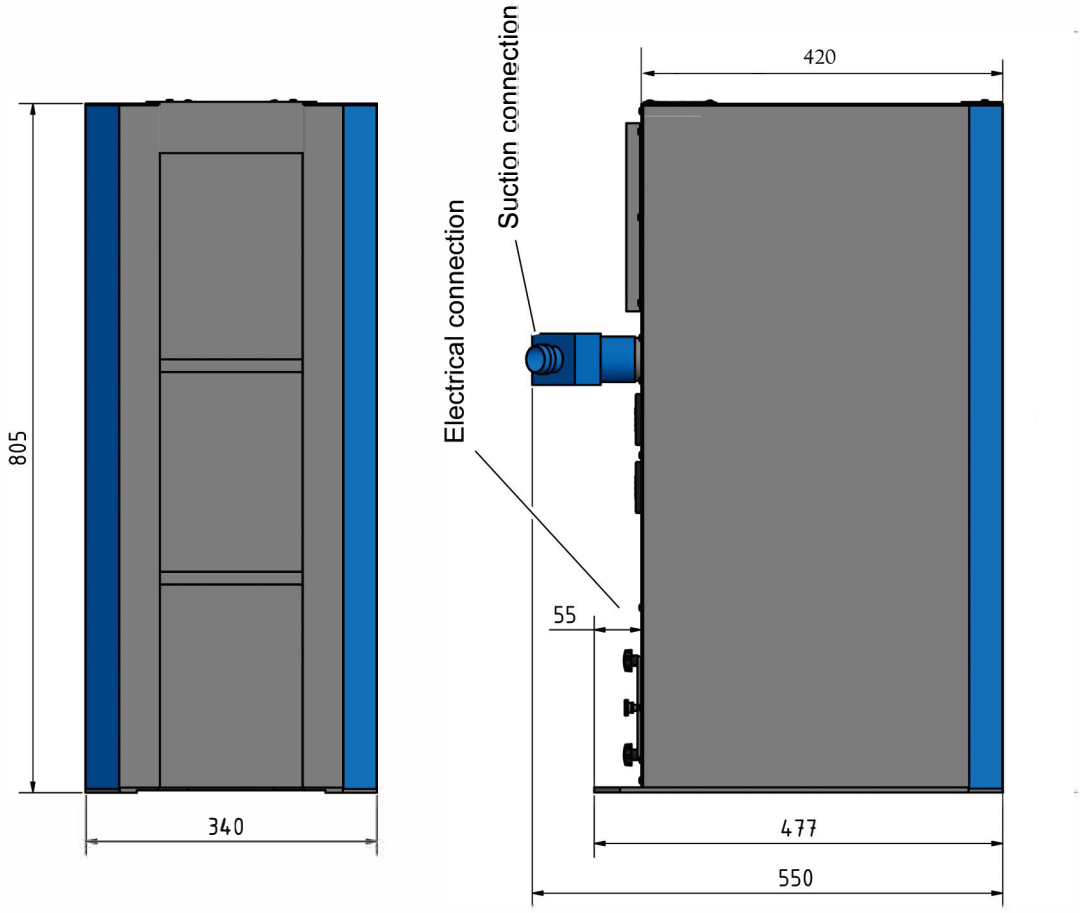
This information about the noise emission should, however, allow the operator of the machine to more easily evaluate the hazards and risks.

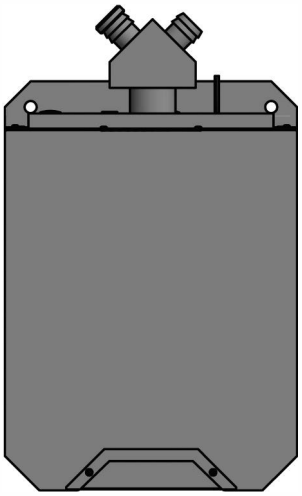
CAUTION!

Depending on the overall noise exposure and the basic threshold values, machine operators must wear appropriate hearing protection.

We generally recommend the use of noise and ear protectors.

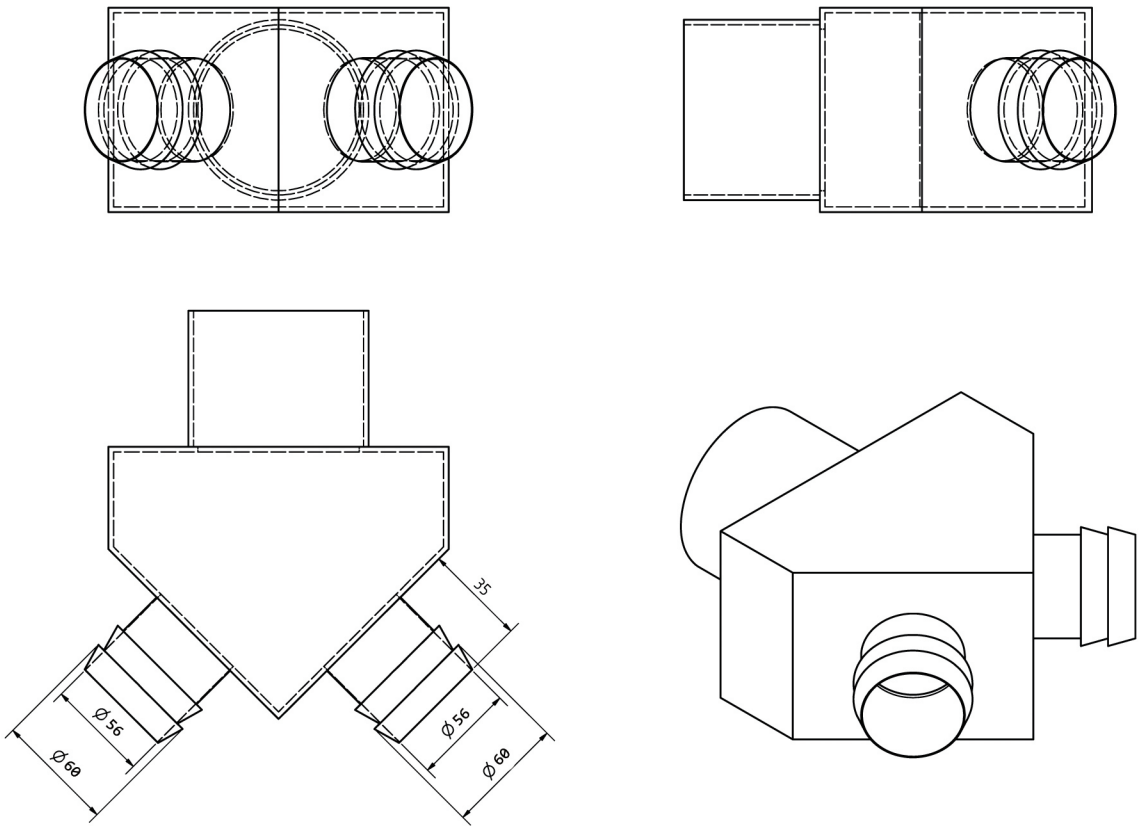
2.1 Dimensions



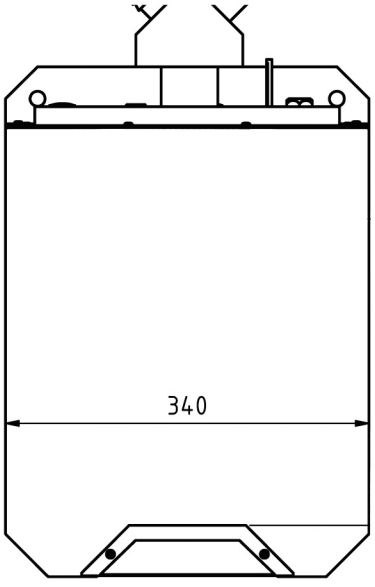


Gewicht / Weight : 40 kg

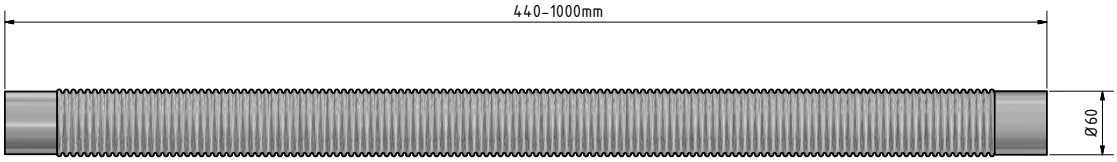
T-piece suction connection



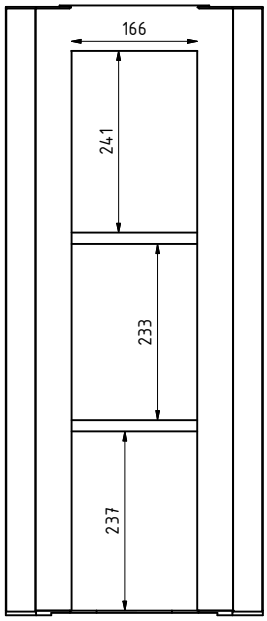
Utility space on the machine substructure

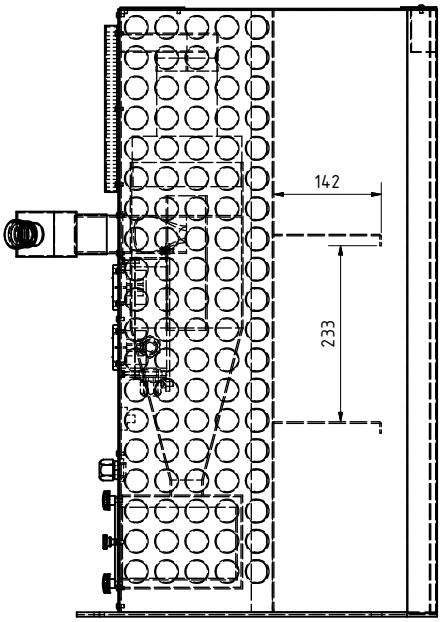


Suction Flex pipe

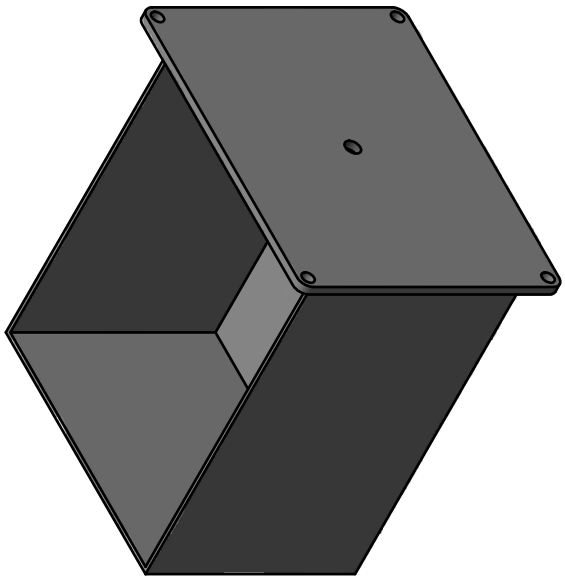


Storage compartments

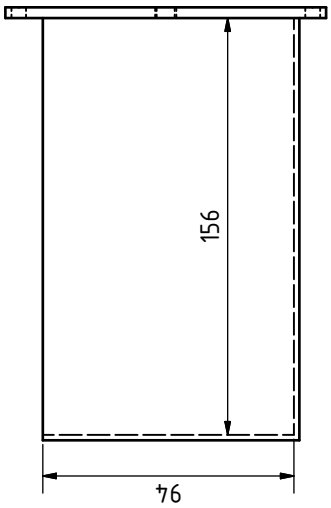


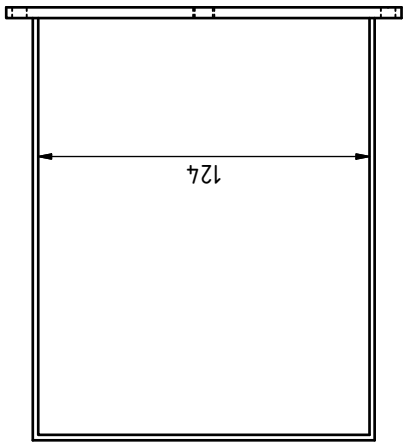


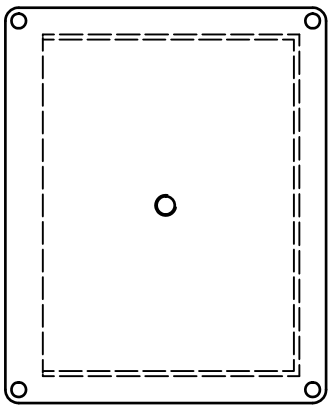
Dust container



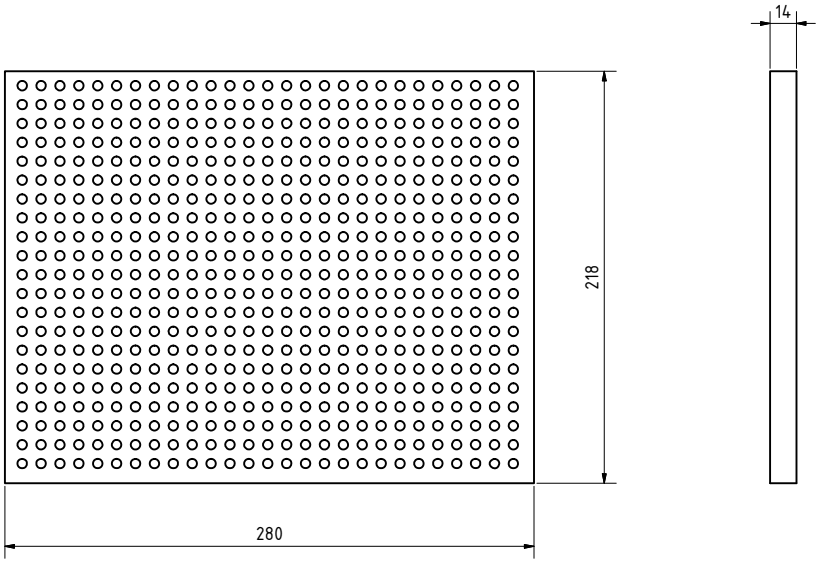
Behältervolumen : 1,8 Liter
Container volume : 1.8 litres







Exhaust air filter



Filament Fine filter
Filter surface: 0.061 m^2

3 Delivery, interdepartmental transport, unpacking

INFORMATION

The machine substructure with suction device is fully assembled. It is delivered in a transport box.

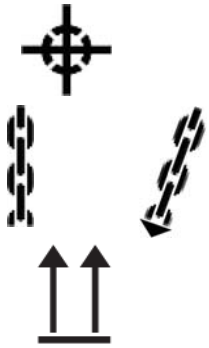
3.1 Delivery

Check the status of the machine immediately upon receipt and claim possible damages at the last carrier also if the packing is not being damaged. In order to ensure claims towards the freight carrier we recommend you to leave the machines, devices and packing material for the time being in the status at which you have determined the damage or to take photos of this status. Please inform us about any other claims within six days after receipt of delivery.

Check if all parts are firmly seated.

3.2 Interdepartmental transport

- Centres of gravity
- Load suspension points
  (Marking of the positions for the load suspension gear)



- Prescribed transport position
  (Marking of the top surface)
- Means of transport to be used
- Weights

WARNING!

Severe or fatal injuries may occur if parts of the machine tumble or fall down from the forklift truck or from the transport vehicle. Follow the instructions and information on the transport box.

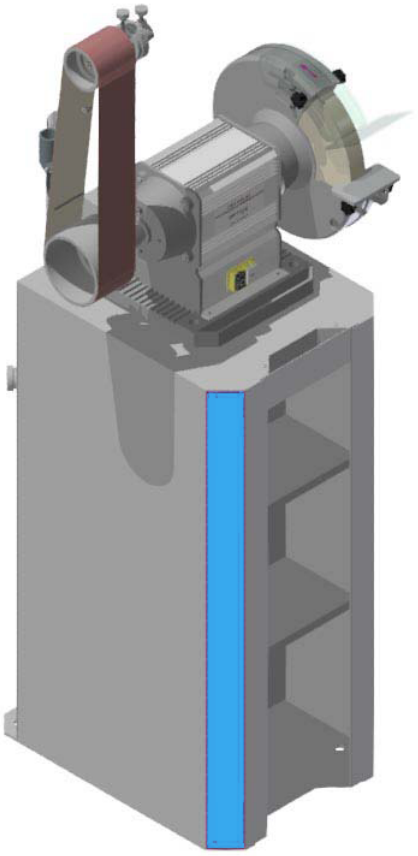
3.3 Unpacking

Install the machine close to its final position before unpacking. If the packaging shows signs of having possibly been damaged during transport, take the appropriate precautions to prevent the machine being damaged when unpacking. If damage is discovered, the carrier and/or shipper must be notified immediately so the necessary steps can be taken to register a complaint.

Examine the complete machine carefully and check whether all materials, such as shipping documents, assembly instruction and accessories have been delivered with the machine.

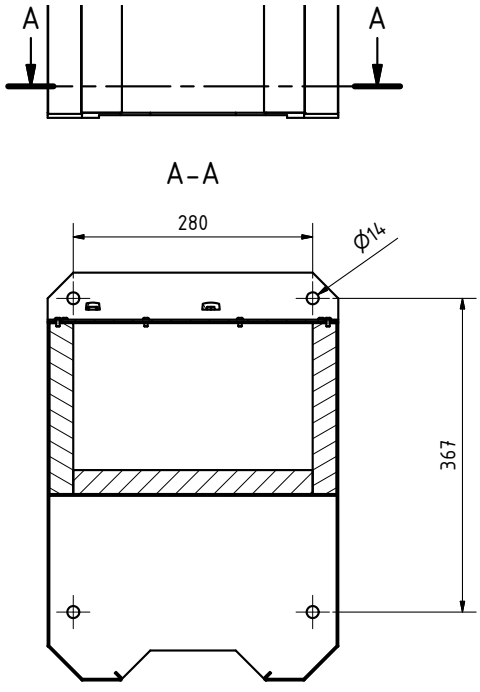
3.4 Example figure of a grinding machine

on the machine substructure with suction device.



3.5 Fitting possibility of the GU1

The machine substructure can be attached to the floor.



4 Operation

4.1 Description of Functioning of the Extraction System

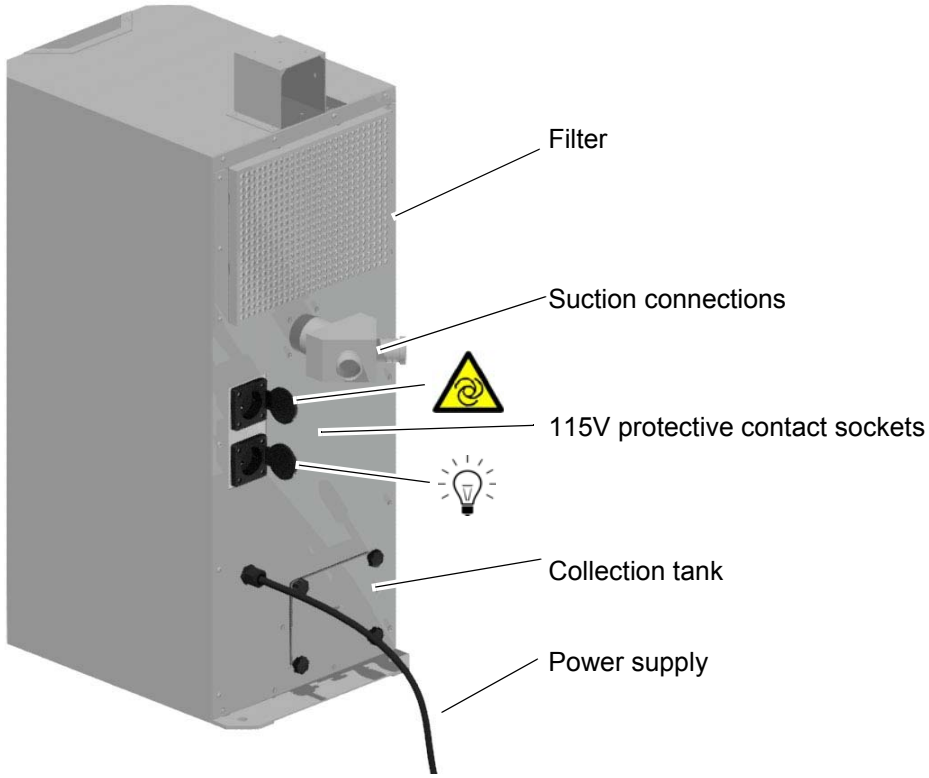
In the machine substructure is situated a fan than generates an underpressure. The underpressure occurring sucks in the ambient air. The quantity of air is directed through cyclone separator which collects the fine dust particulates from the suction connections and places it into a collection tank. The cleaned exhaust air is additionally led outwards via the filter.

4.2 Functional Description of the Electrical Connections

The 115V protection contact sockets situated on the rear are used to connect the equipment and machines.

- The maximum possible total current consumption on the both protective contact sockets is 20A for GU1 with 115V mains connection.

One 115V socket is used as a detection signal for switching on the fan in the machine substructure. The fan starts to run with a short delay as soon as the machine connected there is switched on. The fan shuts down as soon as the machine or equipment connected on 115V plug is switched off.



4.3 Fire and Explosion Prevention

From a particle size of 500 µm and below, flammable metal dusts are regarded as explosive.

Accumulated flammable dust can lead to explosive atmospheres by swirling up in machine tools and separators. This should be considered especially in the case of light metal dusts, e.g. aluminium and magnesium.

The machine substructure GU1 is not designed to remove an explosive atmosphere in the working area of the complete machine.

5 Maintenance

5.1 Inspection and maintenance

The type and level of wear depends to a large extent on the individual usage and operating conditions. Any indicated intervals therefore are only valid for the corresponding approved conditions.

Interval	Where?	What?	How?
Start of work, after every maintenance or repair work	**Collection tank**	Emptying	➜ Empty the collection tank regularly.
If the suction performance reduces. After empirical values on the part of the operator	**Exhaust filter**	Cleaning Replacing	➜ Wash out filter with water, dry off and reinsert. ➜ Replace the exhaust filter as required.

6.1 Advice for disposal / Options of reuse:

Please dispose of your equipment in an environmentally friendly manner, by not placing waste in the environment but in a professional manner.

Please do not simply throw away the packaging and later the disused machine, but dispose of both in accordance with the guidelines laid down by your city council/local authority or by an authorised disposal company.

6.2 Dismantling, disassembling, packing and loading

INFORMATION

Please take care in your interest and in the interest of the environment that all component parts of the machine are only disposed of in the intended and admitted way.

Please note that the electrical devices comprise a variety of reusable materials as well as environmentally hazardous components. Please ensure that these components are disposed of separately and professionally. In case of doubt, please contact your municipal waste management. If appropriate, call on the help of a specialist waste disposal company for the treatment of the material.

Please make sure that electrical components are disposed of professionally and in accordance with the statutory provisions.

The machine contains electrical and electronic components and must not be disposed of as household waste. According to the European directive 2011/65/EG regarding disused electrical and electronic devices and the implementation in national law, disused electrical tools and electrical equipment must be stored separately and recycled in an environmentally friendly manner.

As the machine operator, you should obtain information regarding the authorised collection or disposal system which applies for your company.

6.2.1 Decommissioning

CAUTION!

Disused equipment must be decommissioned in a professional manner in order to avoid later misuse and danger the environment or persons.

- **Disassemble the machine if required into easy-to-handle and reusable assemblies and component parts.**
- **Dispose of machine components and operating fluids using the intended disposal methods.**

6.2.2 Dismantling

➜ Dismantle the connection cable or sever the connection cable.

6.3 Disposal of new device packaging

All used packaging materials and packaging aids from the machine are recyclable and generally need to be supplied to the material reuse.

The packaging wood can be supplied to the disposal or the reuse.

Any packaging components made of cardboard box can be chopped up and supplied to the waste paper collection.

The films are made of polyethylene (PE) and the cushion parts are made of polystyrene (PS). These materials can be reused after reconditioning if they are passed to a collection station or to the appropriate waste management enterprise.

Only forward the packaging materials correctly sorted to allow direct reuse.

7 Spare parts

7.1 *Ordering spare parts*

Please indicate the following :

- *Serial No.*
- *Machines name*
- *Date of manufacture*
- *Article no.*

The article no. is located in the spare parts list.

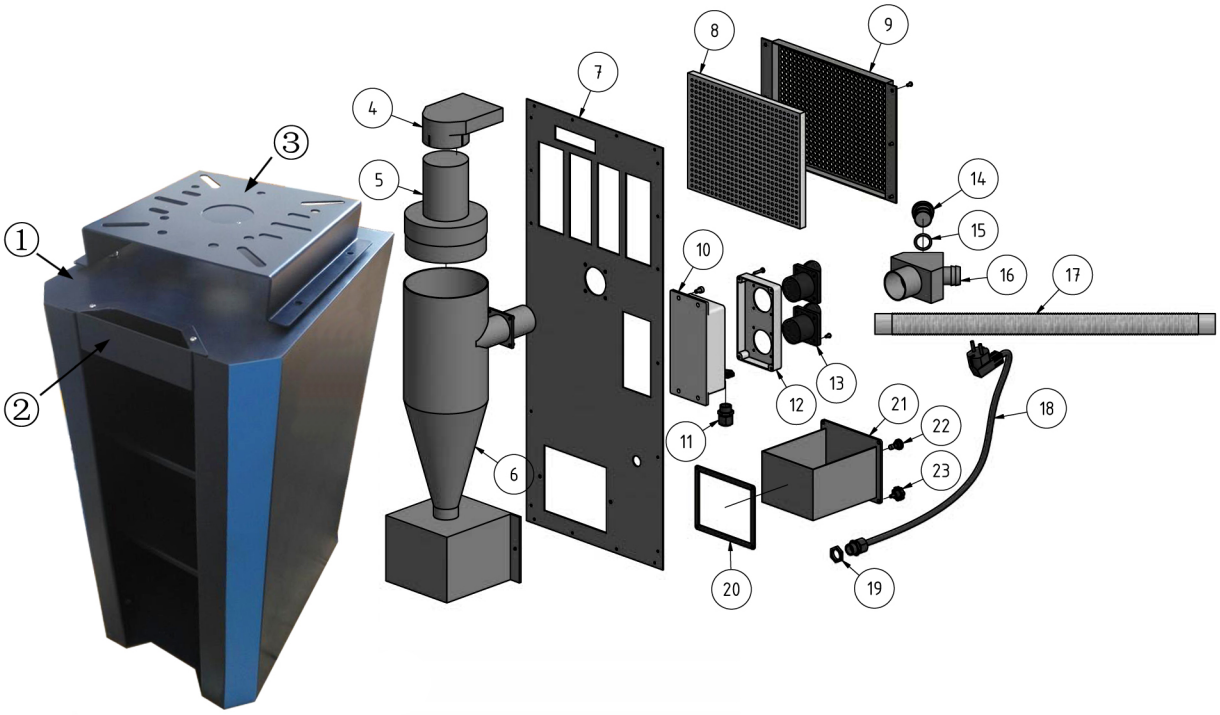
The serial no. is on the type plate.

7.2 Electrical spare parts

7.2.1 Wiring diagram

The current circuit diagram and spare parts list is located in the control cabinet of the machine or is located as printed paper in this manual.

7.3 GU1



Spare parts list GU1				
Pos.	Designation	Qty.	Size	Item no.
1	Substructure	1		0310711101
2	Cooling tank	1		0310711102
3	Top mounting plate	1		0310711103-1
4	Plug	1		0310711104
5	Motor	1		0310711105

Spare parts list GU1				
Pos.	Designation	Qty.	Size	Item no.
6	Cyclone	1		0310711106
7	Back board	1		0310711107
8	Filter	1		0310711108
9	Cover	1		0310711109
10	Housing	1		0310711110
11	Strain relief	1		0310711111
12	Cover	1		0310711112
13	Socket-outlet	2	115V for 115V GU1 supply	03107111132
14	Plug	1		0310711114
15	O-Ring	1		0310711115
16	Manifold	1		0310711116
17	flexibel suction tube (option)	1		0310711117-1
18	Plug cable	1	115V	0310711118-3
19	Clamping nut	1		0310711119
20	Seal	1		0310711120
21	Particles tank	1		0310711121
22	Knurled screw	1		0310711122