PALMGREN®

1", 2" & 4" Belt Grinders

9682401A shown.

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

9637113.01-0721

DESCRIPTION

Palmgren Belt Grinders are used for grinding, deburring, squaring, polishing and finishing metals, woods and plastics. Belt grinders have totally enclosed, fan-cooled direct drive motors. Belt housing swivels from vertical to horizontal for grinding long workpieces. Features include a fully adjustable tool rest, quick release belt tension and tracking mechanism, OSHA compliant safety guard with dust collection port and easy opening side door for belt changes.

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.

WARNING: If you suspect a belt of being damaged, replace it immediately.

The belt grinder comes assembled as one unit. Additional parts which need to be fastened to belt grinder should be located and accounted for before assembling.

SPECIFICATIONS

9682401A - 1″ Belt Grinder

Belt Size	1 X 42″, 80 Grit
Belt Platen Area	10 × 1½″
Belt Speed	1800 FPM
Dust Collection Chute	2″ Diameter
Dimensions (L × W × H)	22 × 16 × 24″
Switch	DP, Locking Rocker
Motor	1/2 HP, 120/240 V, 5/2.5 Amps, 1725 RPM, 60 Hz, 1 PH
Weight	46 lbs

9682402A - 2″ Belt Grinder

Belt Size	2 X 48″, 80 Grit
Belt Platen Area	12¼ × 2½″
Belt Speed	4500 FPM
Dust Collection Chute	2″ Diameter
Dimensions (L × W × H)	25 × 15 3/16 × 26″
Switch	DP, Locking Rocker
Motor	3/4 HP, 120/240 V, 7/3.5 Amps, 3450 RPM, 60 Hz, 1 PH
Weight	60 lbs

9682404A - 4″ Belt Grinder

Belt Size	4 X 36″, 80 Grit
Belt Platen Area	7 3/8 × 4½″
Belt Speed	3600 FPM
Dust Collection Chute	2″ Diameter
Dimensions (L × W × H)	19 × 17½ × 21″
Switch	DP, Locking Rocker
Motor	3/4 HP, 120/240 V, 7/3.5 Amps, 3450 RPM, 60 Hz, 1 PH
Weight	59 lbs

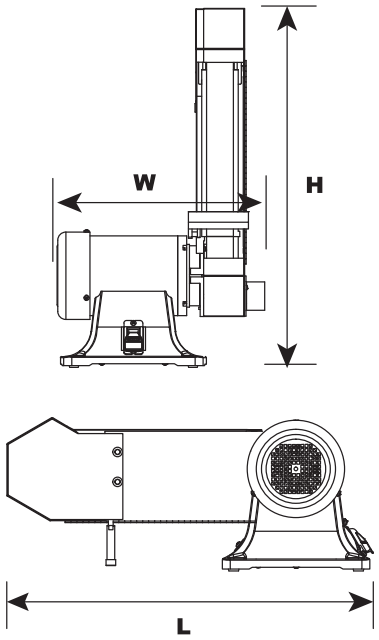

Figure 1 – Dimensions L×W×H.

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.

SAFETY RULES (CONTINUED)

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.
- Proper electrical plug should be plugged directly into properly grounded, three-prong receptacle.
- Extension cords should have a grounding prong and the three wires of the extension cord should be of the correct gauge.
- 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.
- Replace worn or damaged cord immediately.
- 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.

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.
- Turn machine off if it jams. Belt jams when it digs too deeply into workpiece. (Motor force keeps it stuck in the work.)
- Maintain 1/16˝ maximum clearance between tool rest and sanding belt.
- Handle the workpiece correctly. Whenever possible, use tool rest to support workpiece during grinding operation. Turn tool off if it jams.
- Make sure the tool is secured to a steady, flat working surface. When used with a stand, make sure the stand is bolted to a flat surface to prevent tipping over.
- Support workpiece with tool rest.
- Clean sanding dust from beneath tool frequently.

ASSEMBLY

CAUTION: Do not attempt assembly if parts are missing. Use parts list to order repair parts.

A Stop Rod with Hex Nut (1)
B Bracket (1)
C Tool Rest (1)
D M8×28 Knob with Flat Washer (1)
E M8×16 Hex Bolt (1)
F Hex Wrench (1)
G Dust Port (1)
H Screw (3)
- Fork Spanner (1)

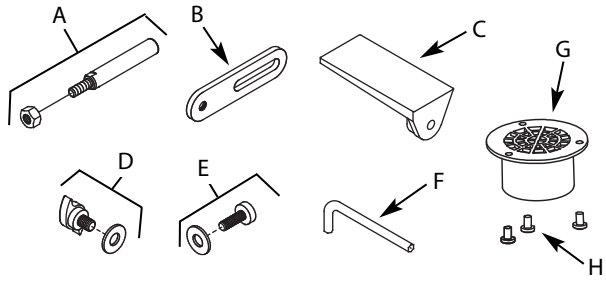

Figure 2 – Parts for assembly.

ASSEMBLE TOOL REST

Refer to Figures 2 and 7, page 8.

1. Attach the tool rest assembly to slot on platen (Ref. No. 57) using flat washer and hex cap screw (Ref. Nos. 24 and 59).
2. Slide knob (Ref. No. 23) and flat washer (Ref. No. 24) through hole in the tool rest (Ref. No. 25).
3. Thread knob into the tool rest bracket (Ref. No 26). Tighten finger tight.
4. Position tool rest so that distance between tool rest and belt is 1/16˝ or less. Use square to set tool rest 90º to belt. Secure all nuts and bolts tight.

ASSEMBLY (CONTINUED)

ASSEMBLE DUST PORT

Refer to Figure 7, page 8.

Use screws to assembly the dust port (Ref. No.51) to pulley cover (Ref. No.7)

ATTACH SUPPORT SCREW

Refer to Figures 2,page 3 and 7, page 8.

A support screw with nut is provided for positive stop when the belt assembly position is adjusted horizontally. To attach support screw:

1. Thread the support screw (Ref. No. 47) into the threaded hole on the rear side of platen (Ref. No. 57).
2. Tighten hex nut.

INSTALLATION

MOUNT BELT GRINDER

Refer to Figure 3.

Choose a suitable location to mount the belt grinder. The belt grinder must be installed in a place with ample lighting and correct power supply. To install belt grinder:

- The belt grinder must be bolted to a firm, level surface.
- Make sure there is plenty of room for moving the workpiece. There must be enough room that neither operators nor bystanders will have to stand in line with the workpiece while using the tool. Allow room so that belt assembly can be positioned horizontally and vertically.
- Belt grinder can be installed on a workbench or a tool stand (see Recommended Accessories in Parts Lists) using bolts, lock washers and hex nuts (not supplied).
- Figure 3 shows the base dimensions and mounting holes.

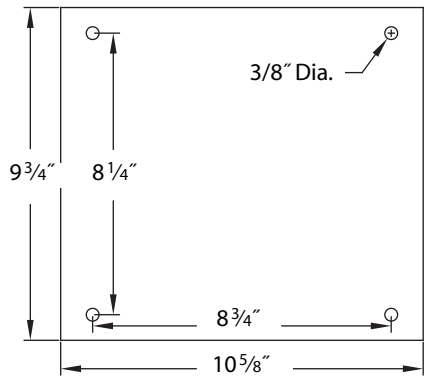

Figure 3 – Base dimension and mounting holes.

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 4) 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 4).

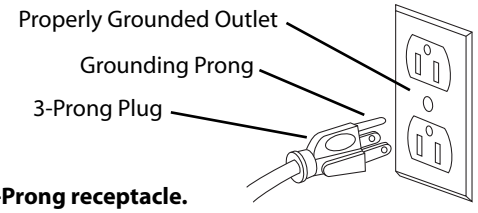

Figure 4 – 3-Prong receptacle.

- 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 5) is available for connecting plugs to a two pole outlet if it is properly grounded.

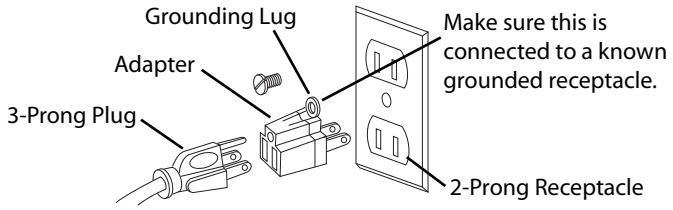

Figure 5 – 2-Prong receptacle with adapter.

- 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.

INSTALLATION (CONTINUED)

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		120	25	50	100	150
More Than	Not More Than	240	50	100	150	300
			Minimum Gage for Cord			
0	6		18	16	16	14
6	10		18	16	14	12
10	12		16	16	14	12
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 6). Motor is assembled with approved, 3-conductor cord to be used at 120/240 volts. Motor is prewired at the factory for 120 volts.
- To use the grinder with a 240V power supply, have a qualified electrician rewire motor and attach a 240 volt, 15A three-prong plug onto grinder line cord.

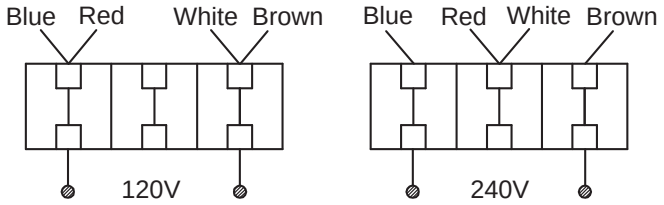

Figure 6 – Wiring diagram.

OPERATION

WARNING: Operation of any power tool can result in foreign objects being thrown into eyes which can result in severe eye damage. Always wear safety goggles complying with United States ANSI Z87.1 (shown on package) before commencing power tool operation.

CAUTION: Always observe the following safety precautions:

- Whenever adjusting or replacing any parts on the belt grinder turn power off and remove the plug from power source.
- Recheck tool rest bolts, they must be tightened securely.
- Make sure all guards are properly attached. All guards should be securely fastened.
- Make sure all moving parts are free and clear of any interference.
- Make sure all fasteners are tight and have not vibrated loose.
- With power disconnected, test operation by hand for clearance and adjust if necessary.
- Always wear eye protection or face shield.
- Make sure abrasive belt tracks properly. Correct tracking gives optimum performance.
- After turning switch on, always allow belt to come up to full speed before sanding or grinding.
- Abrasive belt must travel towards tool rest.
- Avoid kickback by grinding in accordance with the directional arrows.
- Keep your hands clear of abrasive belt and all moving parts.
- For optimum performance do not stall motor or reduce speed. Do not force the work into the abrasive.
- Support workpiece with tool rest when grinding with belt.
- Never push a sharp corner of workpiece rapidly against belt. Abrasive backing may tear.
- Replace abrasives when they become loaded (glazed) or frayed.
- When grinding metal, move workpiece across abrasive to prevent heat build-up.
- Never attempt wet sanding. If work-piece becomes too hot to handle, cool it in water.
- Do not expose to rain or use in damp locations.

BELT INSTALLATION AND TRACKING

Refer to Figure 7, page 8.

- Sanding belt should be replaced when worn, torn, or glazed.
- Use abrasive belts suitable for speed of grinder.

1. Loosen belt cover knobs (Ref. No. 50) and open belt cover.
2. Release belt tension by pulling up on tension handle (Ref. No. 45). Slide old belt off the drive and tracking pulleys.
3. Slide new belt over the drive and tracking pulleys, center belt on pulleys, and pull down on tension handle to tension belt.
4. Replace belt cover and tighten knobs.
5. Rotate belt by hand to check tracking, belt should ride centered on drive and idler pulleys. Adjust socket head bolt (Ref. No. 41) at top of tracking bracket to track belt properly. Be sure to secure socket head bolts with hex nut (Ref. No. 40).

- Be sure abrasive belt rotates toward worktable.

ADJUST BELT ASSEMBLY POSITION

Refer to Figure 7, page 8.

The belt assembly can be adjusted from vertical to horizontal position.

1. Loosen the belt housing bolt (Ref. No. 58) that clamps belt housing to motor assembly.
2. Tilt belt assembly to desired position (from vertical to horizontal). Secure belt assembly position by tightening belt housing bolt.

ABRASIVE BELT FINISHING

WARNING: Excessive force on the belt will shorten the life of the belt and the motor.

- Finishing flat surfaces: Hold workpiece firmly with both hands, keep fingers away from abrasive belt.

  Use tool rest. Tool rest is used to position and stabilize work. Keep end butted against tool rest and move work evenly across abrasive belt. Use extra caution when finishing very thin pieces.

  For finishing long pieces: remove tool rest. Apply only enough pressure to allow abrasive belt to remove material.
- Finishing curved edges: Finish outside curves on flat portion of abrasive belt.

MAINTENANCE

WARNING: Make certain that the unit is disconnected from power source before attempting to service or remove any component.

CLEANING

- Keep machine and workshop clean. Do not allow sawdust to accumulate.
- Keep the pulleys clean. Dirt on pulleys will cause poor tracking and belt slippage.
- Operate belt grinder with dust collector to keep dust from accumulating.

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.

- Be certain motor is kept clean and is frequently vacuumed free of dust.
- Use soap and water to clean painted parts, rubber parts and plastic guards.

LUBRICATION

- The shielded ball bearings in this grinder are permanently lubricated at the factory. They require no further lubrication.
- When operation seems stiff, a light coat of paste wax applied to the tool rest will make it easier to feed the work while finishing.
- Do not apply wax to the belt platen. Belt could pick up wax and deposit it on pulleys causing belt to slip.

KEEP BELT GRINDER IN REPAIR

- If power cord is worn, cut or damaged, have it replaced immediately.
- Replace worn abrasives when needed.
- Replace any damaged or missing parts. Use parts list to order parts.

TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Motor will not 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. Defective switch.	3. Replace switch.
	4. Defective, blown capacitor.	4. Replace capacitor.
Motor will not start; fuses blown or circuit breakers tripped.	1. Overloading due to binding.	1. Clean around pulleys 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 motors as per line voltage (See "Electrical Connections", page 5).
	6. Faulty internal wiring.	6. Replace motor.
Motor fails to develop full power (power output of motor decreases rapidly with decrease in voltage at motor terminals).	1. Power line overloaded with lights, appliances and other motors.	1. Reduce load on power line.
	2. Undersized wires or circuits too long.	2. Increase wire sizes, or reduce length of wiring.
	3. General overloading of power company's facilities.	3. Request a voltage check from power company.
Motor overheats.	Motor overloaded.	Reduce load on motor.
Motor stalls (resulting in blown fuses or tripped circuit breakers).	1. Short circuit in motor or loose connections.	1. Inspect connections in motor for loose or shorted terminals or worn insulation on lead wires.
	2. Low voltage.	2. Correct the low line voltage conditions.
	3. Motor wired for different line voltage.	3. Rewire motor as per line voltage.
	4. Incorrect fuses or circuit breakers in power line.	4. Install correct fuses or circuit breakers (See "Electrical Connections", page 5).
	5. Motor overloaded.	5. Reduce load on motor.
Machine slows down while operating.	Applying too much pressure to workpiece.	Ease up on pressure.
Abrasive belt runs off top pulley.	Not tracking properly.	See "Belt Installation", page 5.

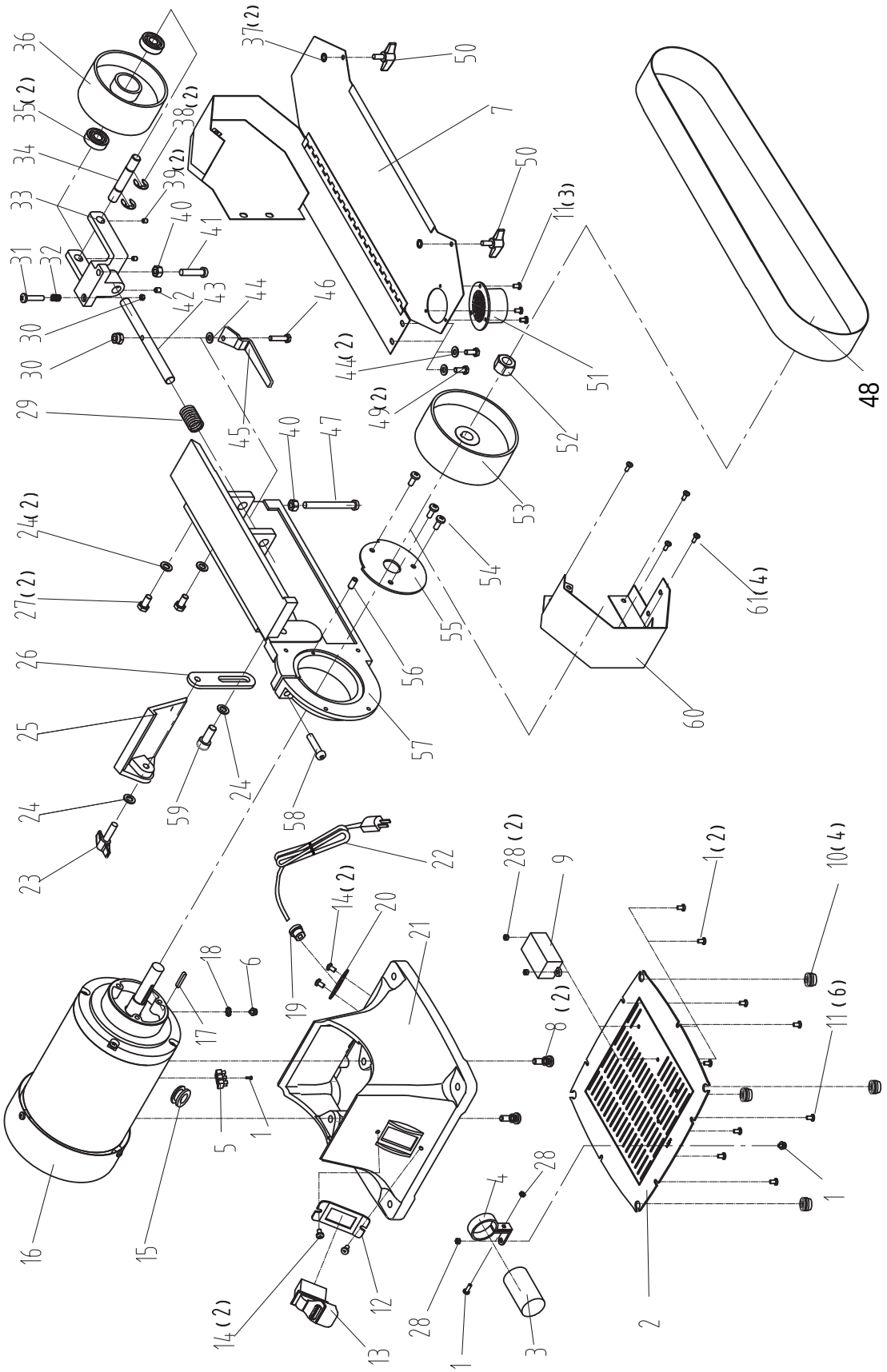

Figure 7 – Repair parts illustration for 9682401A, 1" Belt Grinder .

REPAIR PARTS LIST FOR 9682401A, 1˝ BELT GRINDER

Ref. No.	Description	Part No.	Qty.
1	Philips Screw, M4×15	*	5
2	Base Cover	9628660.01	1
3	Start Capacitor, 150µF / 125V	9628659.01	1
4	Capacitor Support	9628658.01	1
5	Wire Block	9616899.01	1
6	Philips Screw, Spring Washer & Flat Washer M4×8	*	1
7	Pulley Cover Assembly	9628754.02	1
8	Hex Bolt & Spring Washer Assembly, M8×20	*	2
9	Electronic Centrifugal Switch, 30A 115V	9643070.01	1
10	Rubber Feet	9623991.01	4
11	Philips Screw & Flat Washer, M4×8	*	9
12	Switch Plate	9636282.01	1
13	Switch	9616080.00	1
14	Philips Screw, M5×8	*	4
15	Cord Bushing	*	1
16	Motor Assembly	N/A	1
17	Key A5×15	9628748.01	1
18	Star Washer, M4	*	1
19	Strain Relief Bushing	*	1
20	Clip Plate	9608099.01	1
21	Base	N/A	1
22	Cord	9628656.01	1
23	Adjust Knob, M8×28	9625812.01	1
24	Flat Washer, M8	*	3
25	Tool Rest	9628751.01	1
26	Belt Work Table Support	9628669.01	1
27	Hex Bolt, M8×10	*	2
28	Hex Nut, M4	*	4
29	Tension Spring	9628672.01	1
30	Lock Nut, M6	*	2
31	Philips Screw, M6×30	*	1
32	Adjust Spring	9628673.01	1
33	Idler Pulley Support	9628752.01	1
34	Idler Shaft	9628753.01	1
35	Ball Bearing, 6201ZZ	*	2
36	Idler Pulley	9628755.01	1
37	Retaining Ring, M5	9628680.01	2
38	Lock Washer, M9	*	2
39	Set Screw, with Cup Point, M5×6	*	2
40	Hex Nut, M8	*	2
41	Hex Socket Head Cap Screw, M8×30	*	1
42	Set Screw with Flat Point, M6×8	*	1
43	Bracket Shaft	9628756.01	1
44	Flat Washer, M6	*	3
45	Tension Knob	9628684.01	1
46	Hex Bolt, M6×30	*	1
47	Support Screw with Cap, M8×100	9628682.01	1
48	Belt, 1"×42" Med. Grit	9601345.00	1
49	Hex Bolt, M6×10	*	2
50	Knob M6×15	9628677.01	2
51	Dust Chute	9628678.01	1
52	Hex Nut, M16	*	1
53	Drive Pulley	9628749.01	1
54	Philips Screw & Spring Washer Assembly, M6×10	*	3
55	Pivot Stop Bracket	9628667.01	1
56	Spring Pin, M5×15	*	1
57	Platen	9628750.01	1
58	Hex Socket Head Cap Screws, M8×25	*	1
59	Hex Socket Head Cap Screws & Flat Washer, M8×16	*	1
60	Lower Guard	9628747.02	1
61	Philips Screw, M5×10	*	4
Δ	Operating Instructions & Parts Manual	9637113.01	1
	Recommended Accessories		
†	Stand	9670101	

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

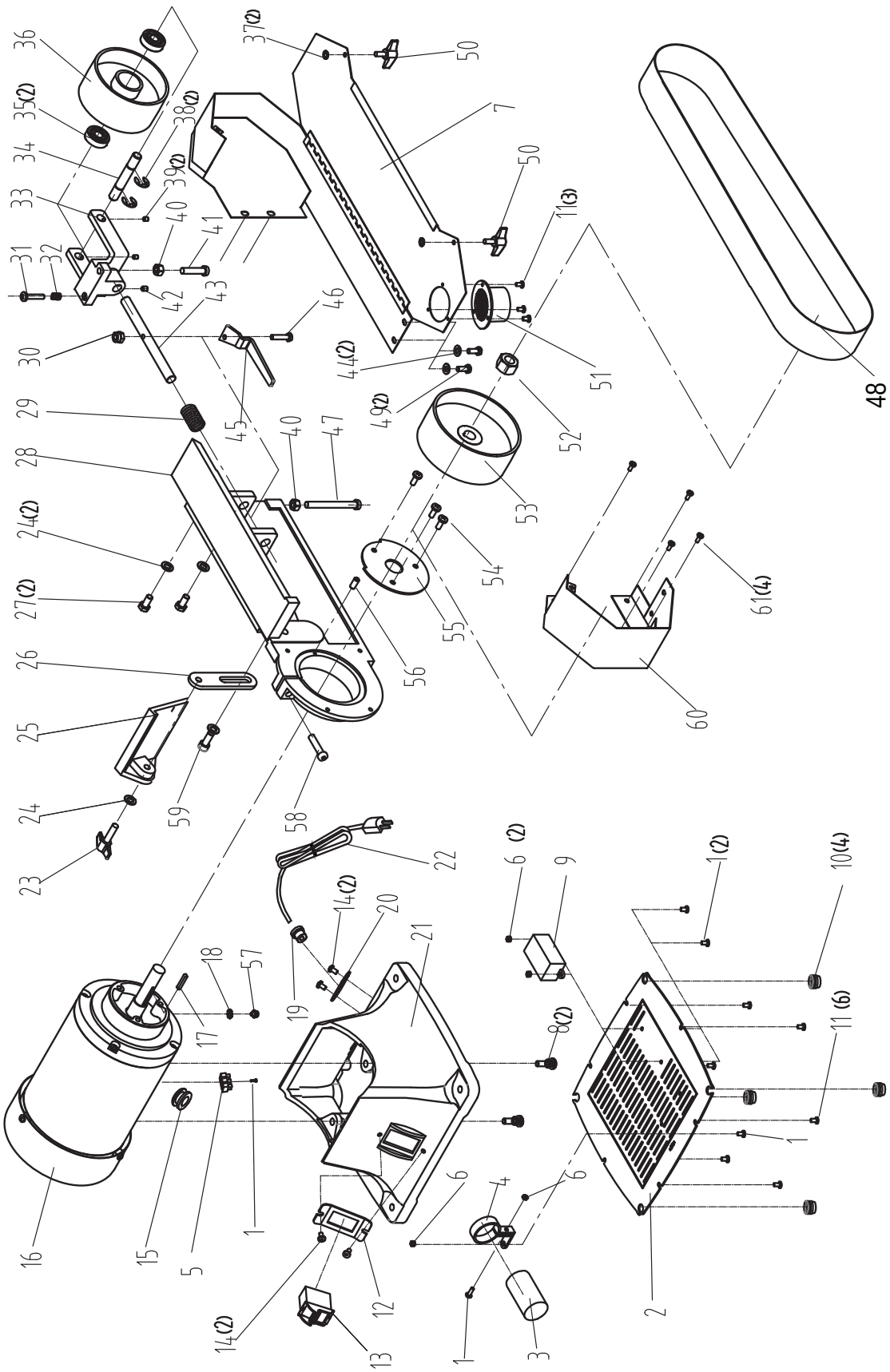

Figure 8 – Repair parts illustration for 9682204A, 2" Belt Grinder.

REPAIR PARTS LIST FOR 9682204A, 2" BELT GRINDER

Ref. No.	Description	Part No.	Qty.
1	Philips Screw, M4×15	*	5
2	Base Cover	9628660.01	1
3	Start Capacitor, 150µF / 125V	9628659.01	1
4	Capacitor Support	9628658.01	1
5	Wire Block	9616899.01	1
6	Hex Nut, M4	*	4
7	Pulley Cover Assembly	9628676.02	1
8	Hex Bolt & Spring Washer Assembly, M8×20	*	2
9	Electronic Centrifugal Switch, 30A 115V	9643070.01	1
10	Rubber Feet	9623991.01	4
11	Philips Screw & Flat Washer, M4×8	*	8
12	Switch Plate	9636282.01	1
13	Switch	9616080.00	1
14	Philips Screw, M5×8	*	4
15	Cord Bushing	*	1
16	Motor Assembly	N/A	1
17	Key, A5×25	9628665.01	1
18	Star Washer, M4	*	1
19	Strain Relief Bushing	*	1
20	Clip Plate	9608099.01	1
21	Base	N/A	1
22	Cord	9628656.01	1
23	Adjust Knob, M8×28	9625812.01	1
24	Flat Washer, M8	*	3
25	Tool Rest	9628670.01	1
26	Belt Work Table Support	9628669.01	1
27	Hex Bolt, M8×10	*	2
28	Platen	9628668.01	1
29	Tension Spring	9628672.01	1
30	Lock Nut, M6	*	1
31	Philips Screw, M6×30	*	1
32	Adjust Spring	9628673.01	1
33	Idler Pulley Support	9628674.01	1
34	Idler Shaft	9628675.01	1
35	Ball Bearing, 6201ZZ	*	2
36	Idler Pulley	9628679.01	1
37	Retaining Ring, M5	9628680.01	2
38	Lock Washer, M9	*	2
39	Set Screw with Cup Point, M5×6	*	2
40	Hex Nut, M8	*	2
41	Hex Socket Head Cap Screw, M8×35	*	1
42	Set Screw with Flat Point, M6×8	*	1
43	Bracket Shaft	9628756.01	1
44	Flat Washer, M6	*	2
45	Tension Knob	9628684.01	1
46	Hex Bolt, M6×30	*	1
47	Support Screw with Cap, M8×80	9628682.02	1
48	Belt, 2"×48" Med. Grit	9630788.00	1
49	Hex Bolt, M6×10	*	2
50	Knob M6×15	9628677.01	1
51	Dust Chute	9628678.01	1
52	Hex Nut, M16	*	1
53	Drive Pulley	9628666.01	1
54	Philips Screw & Spring Washer Assembly, M6×10	*	3
55	Pivot Stop Bracket	9628667.01	1
56	Spring Pin, M5×15	*	1
57	Philips Screw & Flat Washer, M4×8	*	1
58	Hex Socket Head Cap Screws, M8×12	*	1
59	Hex Socket Head Cap Screws & Flat Washer, M8×16	*	1
60	Lower Guard	9628664.01	1
61	Philips Screw, M5×10	*	4
Δ	Operating Instructions & Parts Manual	9637113.01	1
	Recommended Accessories		
†	Stand	9670101	

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

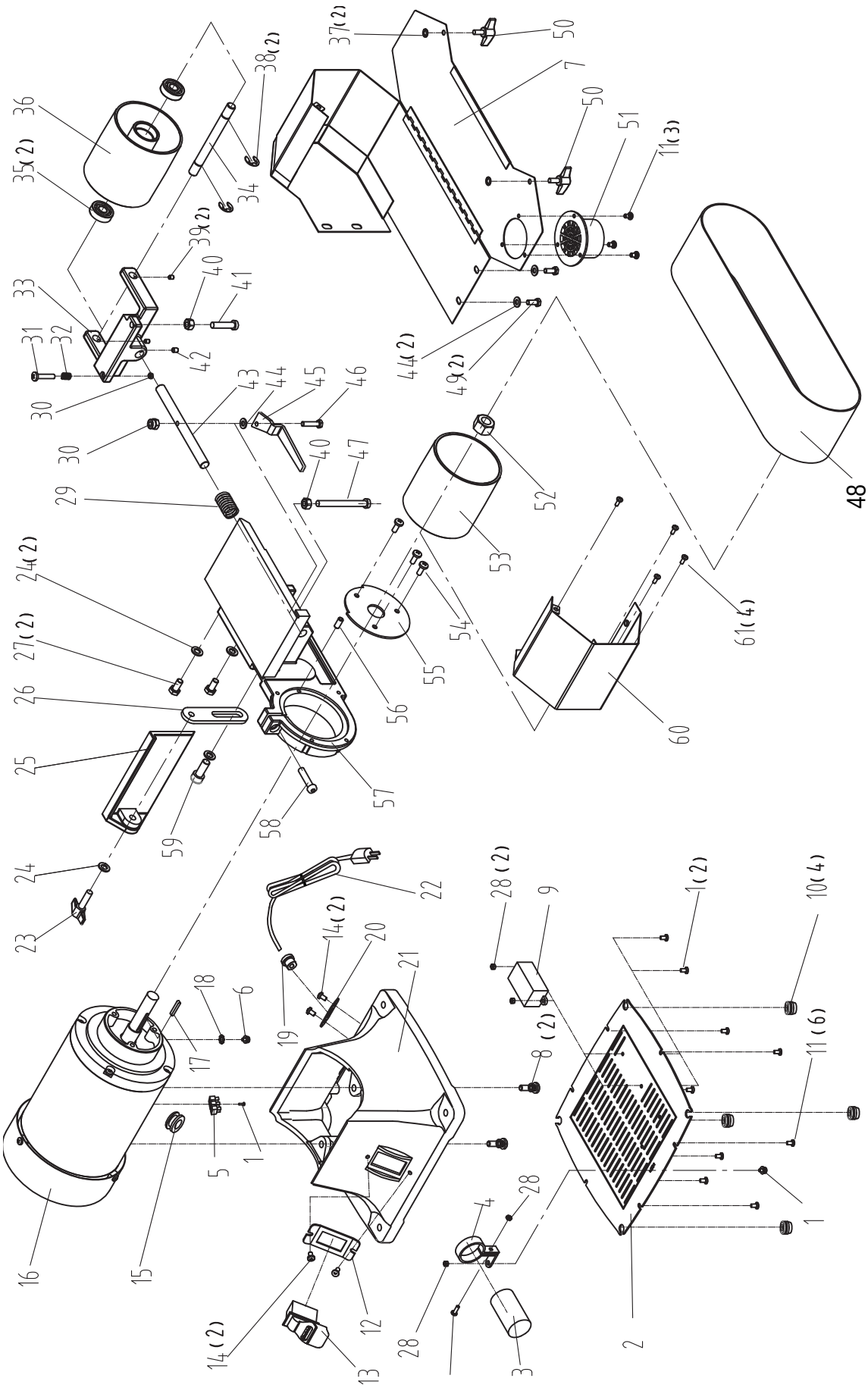

Figure 9 – Repair parts illustration for 9682404A, 4" Belt Grinder.

REPAIR PARTS LIST FOR 9682404A, 4" BELT GRINDER

Ref. No.	Description	Part No.	Qty.
1	Philips Screw, M4×15	*	5
2	Base Cover	9628660.01	1
3	Start Capacitor, 150µF/125V	9628659.01	1
4	Capacitor Support	9628658.01	1
5	Wire Block	9616899.01	1
6	Philips Screw, Spring Washer & Flat Washer Assy., M4×8	*	1
7	Pulley Cover Assembly	9628765.02	1
8	Hex Bolt & Spring Washer Assembly, M8×20	*	2
9	Electronic Centrifugal Switch, 30A 115V	9643070.01	1
10	Rubber Feet	9623991.01	4
11	Philips Screw & Flat Washer, M4×8	*	9
12	Switch Plate	9636282.01	1
13	Switch	9616080.00	1
14	Philips Screw, M5×8	*	4
15	Cord Bushing	*	1
16	Motor Assembly	N/A	1
17	Key 5×50	9628748.03	1
18	Star Washer, M4	*	1
19	Strain Relief Bushing	*	1
20	Clip Plate	9608099.01	1
21	Base	N/A	1
22	Cord	9628656.01	1
23	Adjust Knob, M8×28	9625812.01	1
24	Flat Washer, M8	*	3
25	Tool Rest	9628762.01	1
26	Belt Work Table Support	9628669.01	1
27	Hex Bolt, M8×10	*	2
28	Hex Nut, M4	*	4
29	Tension Spring	9628672.01	1
30	Lock Nut, M6	*	2
31	Philips Screw, M6×30	*	1
32	Adjust Spring	9628673.01	1
33	Idler Pulley Support	9628763.01	1
34	Idler Shaft	9628764.01	1
35	Ball Bearing, 6201ZZ	*	2
36	Idler Pulley	9628766.01	1
37	Retaining Ring, M5	*	2
38	Lock Washer, M9	*	2
39	Set Screw with Cup Point, M5×6	*	2
40	Hex Nut, M8	*	2
41	Hex Socket Head Cap Screw, M8×30	*	1
42	Set Screw with Flat Point, M6×8	*	1
43	Bracket Shaft	9628756.01	1
44	Flat Washer, M6	*	3
45	Tension Knob	9628684.01	1
46	Hex Bolt, M6×30	*	1
47	Support Screw with Cap, M8×100	9628682.03	1
48	Belt, 4"×36" Med. Grit	9630787.00	1
49	Hex Bolt, M6×10	*	2
50	Knob M6×15	9628677.01	2
51	Dust Chute	9628678.01	1
52	Hex Nut, M16	*	1
53	Drive Pulley	9628760.01	1
54	Philips Screw & Spring Washer Assembly, M6×10	*	3
55	Pivot Stop Bracket	9628677.01	1
56	Spring Pin, M5×15	*	1
57	Platen	9628761.01	1
58	Hex Socket Head Cap Screw, M8×25	*	1
59	Hex Socket Head Cap Screw & Flat Washer, M8×16	*	1
60	Lower Guard	9628758.02	1
61	Philips Screw, M5×10	*	4
Δ	Operating Instructions & Parts Manual	9637113.01	1
	Recommended Accessories		
†	Stand	9670101	

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

NOTES

NOTES

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 is 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 arbor presses, vises, clamps, positioning tables, tombstones, jack screws and vise accessories - LIFETIME.

All bench grinders, drill presses, tapping machines, band saws, lathes, milling machines, 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 elated to the use or inability to use our products. This warranty gives you specific legal rights which may vary from state to state.

PALMGREN®

Palmgren - a C.H. Hanson Company
2000 N. Aurora Rd., Naperville, IL 60563 U.S.A.
or call ***1-800-827-3398***