PALMGREN®

4″ × 36″ belt/ 8″ disc Sander

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

965027502 - 1023

TABLE OF CONTENTS

GETTING STARTED

STRUCTURAL REQUIREMENTS

Make sure all supporting structures and load attaching devices are strong enough to hold your intended loads. If in doubt, consult a qualified structural engineer.

ELECTRICAL REQUIREMENTS

Refer to Specifications on page 4 for the tools electrical requirements. The standard allowable voltage variation is plus or minus 10%.

TOOLS NEEDED

Standard mechanic's hand tool set.

UNPACKING

UNPACK

Do not discard packing materials until after machine has been inspected for damage and completeness. Locate loose parts and set aside. Refer to contents list.

INSPECT

After unpacking the unit, carefully inspect for any damage that may have occurred during transit. Check for loose, missing or damaged parts. Shipping damage claims must be filed with the carrier.

- All tools should be visually inspected before use, in addition to regular periodic maintenance inspections.
- Be sure that the voltage labeled on the unit matches your power supply.

PACKAGE CONTENTS

A. Miter gauge assembly (1)
B. Disc worktable (1)
C. Table handle (3)
D. Flat washer D8 (3)
E. Belt worktable support (1)
F. Belt worktable (1)
G. Sanding disc cover (1)
H. Philips screw M4×8 (2)
I. Belt support rod (1)
J. Adapter (1)
K. Inner hex wrench (1)

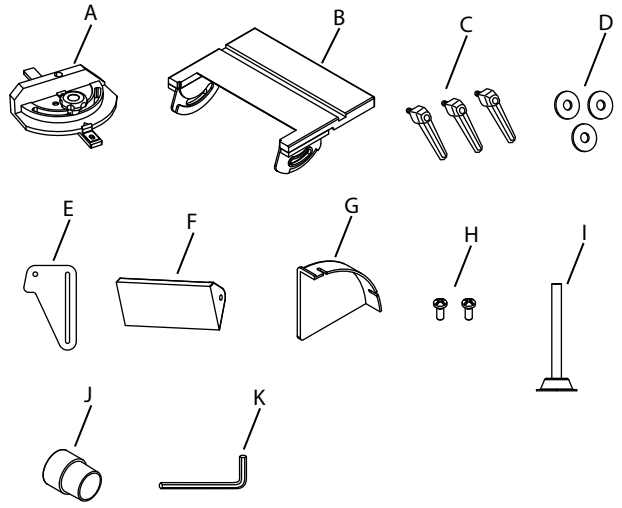

Figure 1 – Carton contents.

SPECIFICATIONS

Model 9681063, 4″ × 36″ Belt/ 8″ Disc Sander	
Motor	3/4 HP, 120 V, 5 A, 60 Hz
Speed (no load)	3580 RPM
Belt Size	4″ × 36″
Belt Speed	2160 FPM
Belt Worktable Size (W × D)	6″ × 3″
Belt Table Tilt	up to 60º
Disc Size	8″
Disc Speed	3580 RPM
Disc Worktable Size (W × D)	10″ × 6″
Disc Worktable w/Miter Gauge Slot, Tilt	up to 45°
Tool Dims. Vertical Arm (W × D × H)	23″ × 13-½″ × 20-½″
Tool Dims. Horizontal Arm (W × D × H)	23″ × 22″ × 9-½″
Net Weight	38.5 lbs
Shipping Weight	41.8 lbs

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.

- Always wear safety goggles or safety glasses with side shields.
- Always wear respiratory and hearing protection.
- To reduce the risk of injury, user and all bystanders must read and understand instruction manual before using this product.
- Failure to keep your hands away from the moving part and cutting surface will result in serious personal injury.
- No children or pregnant women should enter the work area where the paint sanding is being done until all clean-up is completed.
- A dust mask or respirator should be worn by all persons entering the work area. The filter should be replaced daily or whenever the wearer has difficulty breathing.
- NO EATING, DRINKING or SMOKING should be done in the work area to prevent ingesting contaminated paint particles. Workers should wash and clean up before eating, drinking or smoking. Articles of food, drink, or smoking should not be left in the work area where dust would settle on them.
- Paint should be removed in such a manner as to minimize the amount of dust generated.
- Areas where paint removal is occurring should be sealed with 4-mil plastic sheeting.
- Sanding should be done in a manner to reduce tracking of paint dust outside the work area.
- All surfaces in the work area should be vacuumed and thoroughly cleaned daily for the duration of the sanding project. Vacuum filter bags should be changed frequently.
- Plastic drop cloths should be gathered up and disposed of along with any dust, chips or other removal debris. They should be placed in sealed refuse receptacles and disposed of through regular trash pick-up procedures. During clean-up, children and pregnant women should be kept away from the immediate work area.
- All toys, washable furniture and utensils used by children should be washed thoroughly before being used again.

WARNING: Use of this tool can generate and/or disperse dust, which may cause serious and permanent respiratory or other injury. Always use NIOSH/OSHA approved respiratory protection appropriate for the dust exposure. Direct particles away from face and body.

POWER TOOL SAFETY

- READ and become familiar with the entire Instruction Manual. LEARN the tool's application, limitations and possible hazards.
- KEEP GUARDS IN PLACE and in working order.
- REMOVE ADJUSTING KEYS AND WRENCHES. Form the habit of checking to see that keys and adjusting wrenches are removed from the tool before turning ON.
- KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
- DO NOT USE IN DANGEROUS ENVIRONMENTS. Do not use power tools in damp locations, or expose them to rain or snow. Keep work area well lit.
- KEEP CHILDREN AWAY. All visitors and bystanders should be kept a safe distance from work area.
- MAKE WORKSHOP CHILD PROOF with padlocks, master switches or by removing starter keys.
- DO NOT FORCE THE TOOL. It will do the job better and safer at the rate for which it was designed.
- USE THE RIGHT TOOL. Do not force the tool or an attachment to do a job for which it was not designed.
- USE PROPER EXTENSION CORDS. 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 result in a drop in line voltage and in loss of power which will cause the tool to overheat. The 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 gauge. The smaller the gauge number, the heavier the cord.
- WEAR PROPER APPAREL. Do not wear loose clothing, gloves, neckties, rings, bracelets or other jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
- ALWAYS WEAR EYE PROTECTION. Any power tool can throw foreign objects into the eyes and could cause permanent eye damage. Always wear Safety Goggles (not glasses) that comply with ANSI Safety standard Z87.1. Everyday eyeglasses have only impact–resistant lenses. They are **NOT** safety glasses. NOTE: Glasses or goggles not in compliance with ANSI Z87.1 could seriously injure you when they break.
- WEAR A FACE MASK OR DUST MASK. Sanding operation produces dust.
- SECURE WORK. Use clamps or a vise to hold work when practical. It is safer than using your hand and it frees both hands to operate the tool.
- DISCONNECT TOOLS FROM POWER SOURCE before servicing, and when changing accessories such as blades, bits and cutters.
- REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure switch is in the OFF position before plugging the tool in.
- USE RECOMMENDED ACCESSORIES. Consult this Instruction Manual for recommended accessories. The use of improper accessories may cause risk of injury to yourself or others.
- NEVER STAND ON THE TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
- CHECK FOR DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function – check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.

SAFETY RULES (CONTINUED)

- NEVER LEAVE THE TOOL RUNNING UNATTENDED. TURN THE POWER "OFF". Do not walk away from a running tool until the blade comes to a complete stop and the tool is unplugged from the power source.
- DO NOT OVERREACH. Keep proper footing and balance at all times.
- MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- DO NOT use power tool in presence of flammable liquids or gases.
- DO NOT operate the tool if you are under the influence of any drugs, alcohol or medication that could affect your ability to use the tool properly.
- Dust generated from certain materials can be hazardous to your health. Always operate saw in well-ventilated area and provide for proper dust removal.
- WEAR HEARING PROTECTION to reduce the risk of induced hearing loss.

WARNING: People with electronic devices, such as pacemakers, should consult their physician(s) before using this product. Operation of electrical equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.

SANDING TOOL SAFETY

- USE sander on horizontal surfaces only. Operating the sander when mounted on non-horizontal surfaces might result in motor damage.
- TO STOP it from tipping over or moving when in use, the sander must be securely fastened to a bench top or supporting surface.
- PLACE the sander so neither the user nor bystanders are forced to stand in line with the abrasive belt or disc.
- MAKE SURE the sanding belt is installed in the correct direction. See directional arrow on back of belt.
- ALWAYS have the tracking adjusted properly so the belt does not run off the pulleys.
- DO NOT USE sanding belts or discs that are damaged, torn or loose. Use only correct size sanding belt and disc. Narrower belts uncover parts that could trap fingers.
- MAKE SURE there are no nails or foreign objects in the part of the workpiece to be sanded.
- ALWAYS HOLD the workpiece firmly when sanding. Keep hands away from sanding belt or disc. Sand only one workpiece at a time.
- ALWAYS HOLD the workpiece firmly on the table when using the disc sander and when using the belt sander.
- ALWAYS SAND ON THE DOWNWARD SIDE of the sanding disc when using the disc sander. Sanding on the upward side of the disc could cause the workpiece to fly out of position, resulting in injury.
- ALWAYS maintain a minimum clearance of 1/16 in. (1.6 mm) or less between the table or backstop and the sanding belt or disc.
- DO NOT sand pieces of material that are too small to be safely supported.
- KEEP fingers away from where the belt goes into the dust trap.
- WHEN sanding a large workpiece, provide additional support at table height.

INSTALLATION

DANGER: Do not expose the machine to rain or operate the machine in damp locations.

DANGER: This machine must be grounded while in use to protect the operator from electric shock.

IMPORTANT ELECTRICAL INFORMATION

- A separate electrical circuit should be used for your machines. This circuit should not be less than #12 wire and should be protected with a 20-A time-lag fuse.
- If an extension cord is used, use only 3-wire extension cords which have 3-pronged grounding type plugs and matching receptacle which will accept the machine's plug.
- Before connecting the machine to the power line, make sure the switch is in the "OFF" position and be sure that the electric current is of the same characteristics as indicated on the machine.
- All line connections should make good contact.
- Running on low voltage will damage the machine.
- Repair or replace damaged or worn cord immediately.

MOTOR SPECIFICATIONS

Your machine is wired for 120 V, 60Hz alternating current. Before connecting the machine to the power source, make sure the switch is in the "OFF" position.

GROUNDING INSTRUCTIONS

All grounded, cord-connected machines: In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This machine is equipped with an electric cord having an equipment grounding conductor and a grounding plug.

The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided–if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the machine is properly

Use only 3-wire extension cords that have 3-pronged grounding type plugs and matching 3-conductor receptacles that accept the machine's plug

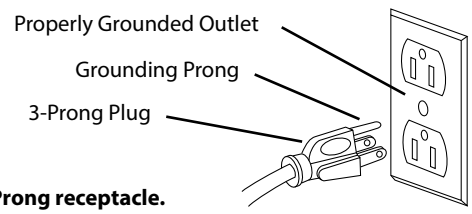

Figure 2 – 3-Prong receptacle.

INSTALLATION (CONTINUED)

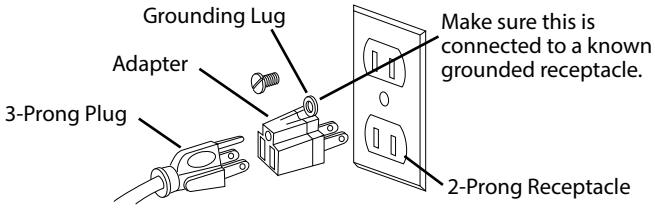

Figure 3 – 2-Prong receptacle with adapter.

WARNING: In all cases, make certain the receptacle in question is properly grounded. If you are not sure, have a electrician check the receptacle.

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	

OPERATION

WARNING: To avoid injury, always keep the plug disconnected from the power source and the switch turned OFF until the sander is completely assembled and adjusted properly.

KNOW YOUR TOOL

Refer to Figure 4.

A. On/Off Switch
B. Sanding Disc Cover
C. 8-in. Diameter Sanding Disc
D. Disc Worktable
E. Disc Table Handle
F. Dust Exhaust Port
G. Dust Port Lock Knob
H. Belt Tension Lever
I. Belt Support Rod
J. Belt Tracking Knob
K. 4-in. Width / 36-in. Length Sanding Belt
L. Belt Worktable

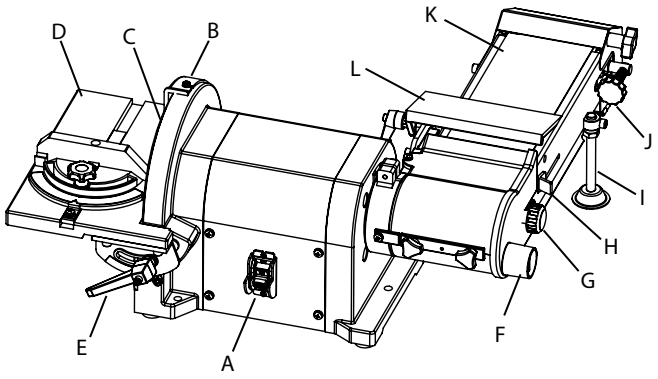

Figure 4 – Key parts diagram.

REMOVE PROTECTIVE PLATE FROM DISC

Refer to Figure 5.

NOTE: A steel plate protects the disc during transportation. Remove the plate before using sanding disc.

1. Remove the three screws.
2. Remove the steel plate.
3. Replace the three screws.

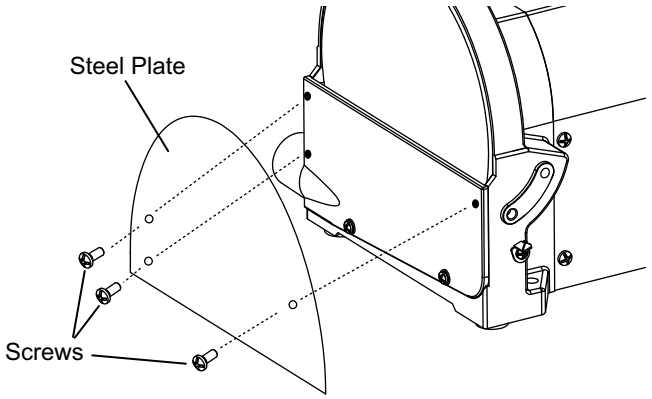

Figure 5 – Remove protective plate from disc.

MOUNT WORKTABLE FOR DISC

Refer to Figure 6, page 6.

CAUTION: To avoid trapping the workpiece or fingers between the worktable and sanding disc, the worktable edge should be positioned a maximum of
1/16-in. (1.6 mm) from sanding disc plate.

The larger worktable is used with the sanding disc. It should be used to support workpieces in all sanding operations except inside curve applications.

1. Locate worktable handle and washers in parts bag.
2. Place the worktable onto the sander frame, aligning the semi-circular slot with the threaded hole.
3. Place a washer on threaded shaft of each worktable handle, insert through semi-circular slot, and tighten into threaded hole. Repeat on other side of table.
4. Adjust worktable to level or any angle between 0° and 45° for sanding.
5. Mount the sanding disc cover onto the metal frame that surrounds the sanding disc with the two Phillips screws.
6. The cover guards the left, upward rotation side of the sanding disc to prevent any accidents from occurring. Always sand on the downward, right side of the rotating disc.

OPERATION (CONTINUED)

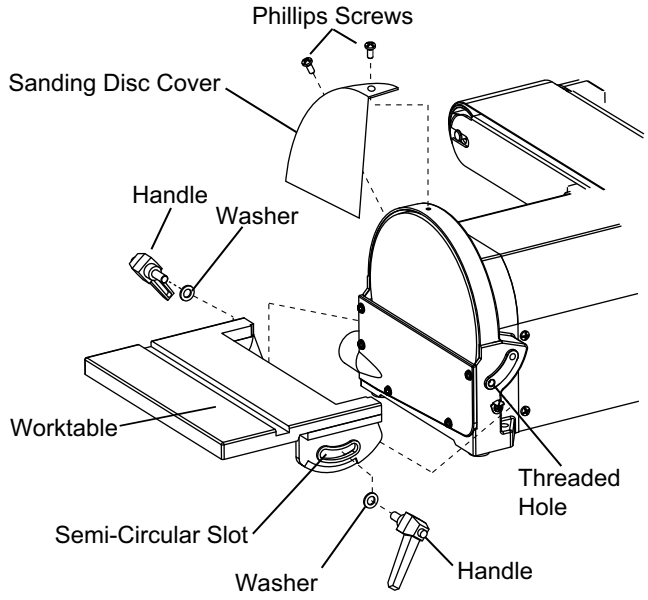

Figure 6 – Mount worktable to disc.

MOUNT WORKTABLE FOR BELT

Refer to Figure 7

1. Place the support for worktable onto the sander frame. Align the slot on the support with the threaded holes. Insert two socket head cap screws through the slot and tighten into threaded holes using a 5mm hex key.
2. Place washer onto the handle and thread through the worktable into the support for worktable.
3. Position workable so that distance between worktable and belt is 1/16˝ or less.
4. Use square to set worktable 90º to belt.
5. Securely tighten all nuts and bolts.

- Worktable can be used at 90° to the sanding belt or tilted up to 60° of the sanding belt.

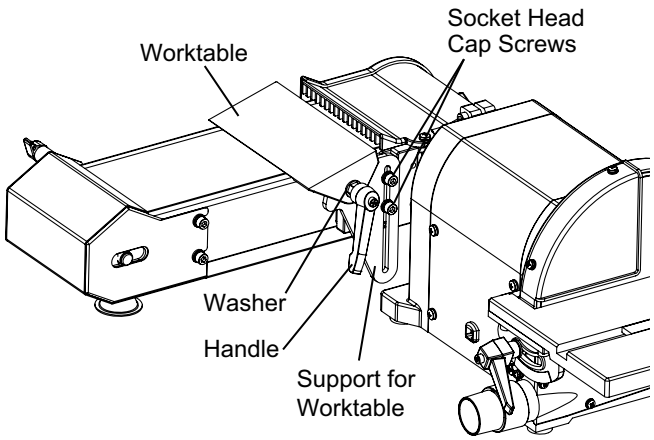

Figure 7 – Mount worktable to belt.

INSTALL BELT SUPPORT ROD

Refer to Figure 8.

The support rod is designed for adjusting the level of sanding belt.

1. Place the support rod to the hole on the sander frame.
2. Adjust the locking nut on the upper end of the support rod with an adjustable wrench. Adjust the support rod upward or downward to level the sanding belt.
3. When the level of the sanding belt is achieved, adjust the locking nut to suitable position and tighten the fixing screw.

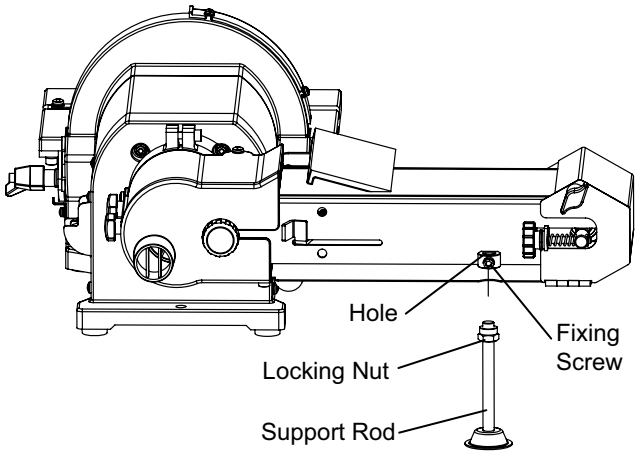

Figure 8 – Install belt support.

MITER GAUGE

Refer to Figure 9.

A miter gauge is supplied with your sander and can be used with the disc workable. The miter gauge can be adjusted from 0° to 60° right or left for angle or miter sanding.

1. Install the miter gauge bar into the table slot as shown.
2. Loosen lock knob and then rotate miter gauge to the desired angle.
3. Tighten lock knob.

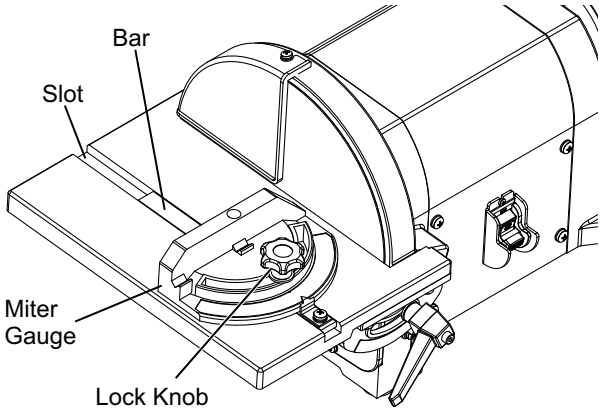

Figure 9 – Install miter gauge.

OPERATION (CONTINUED)

ON/OFF SWITCH

Refer to Figure 10

The ON/OFF power switch is located on the front of the sander, and incorporates a removable safety key.

In situations where the sander may be left unattended, the operator has the option of removing the safety key of the ON/OFF switch to render the sander inoperable.

When the operator is ready to use the machine again, simply insert the safety key into the slot in the switch and pushing it in until it "seats."

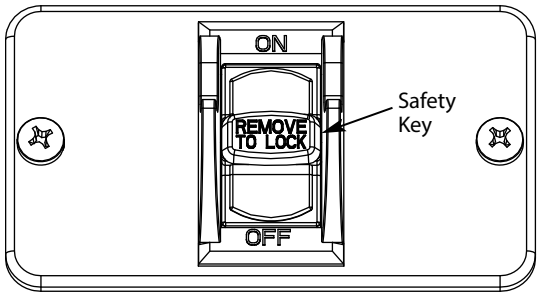

Figure 10 – On/Off switch with safety key.

PROPERLY TRACK SANDING BELT

Refer to Figure 11.

1. Plug in the sander.
2. Turn power switch ON, then immediately OFF, noting whether the belt tends to track properly or travel to the left or right on the idler wheel.
3. If the sanding belt does not slide to either side, it is tracking properly. If sliding is observed proceed to step 4.
4. Viewed from the switch end, if the sanding belt runs toward the disc side, slightly turn the tracking knob clockwise (down). If the belt runs away from the disc side, slightly turn the tracking knob counterclockwise (up).
5. Repeat steps 2 and 4 as necessary until belt is tracking properly.

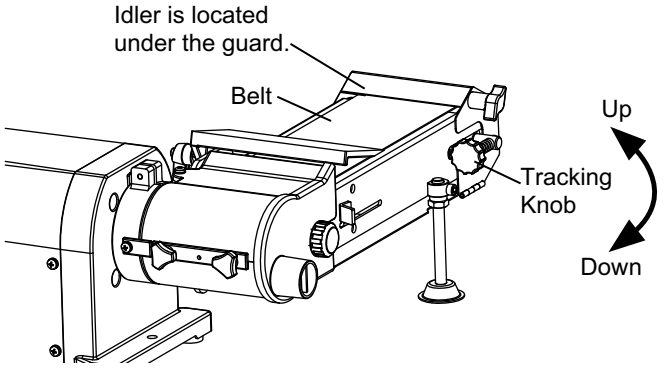

Figure 11 – Adjust sanding belt tracking.

SQUARE WORKTABLE TO DISC

Refer to Figure 12.

1. Using a combination square, place one side of the square on the worktable with the other side against the sanding disc, and check to see if the disc table is 90° to the disc.
2. If the disc table surface is not 90° to the disc, loosen the table lock knob and adjust the worktable to 90°. Tighten the table lock knob.
3. Loosen the screw and secure the scale pointer at 0°.

NOTE: The worktable can be tilted from 0° to 45° by loosening the table lock knob. Tilt the worktable to the desired angle. Tighten table lock knob.

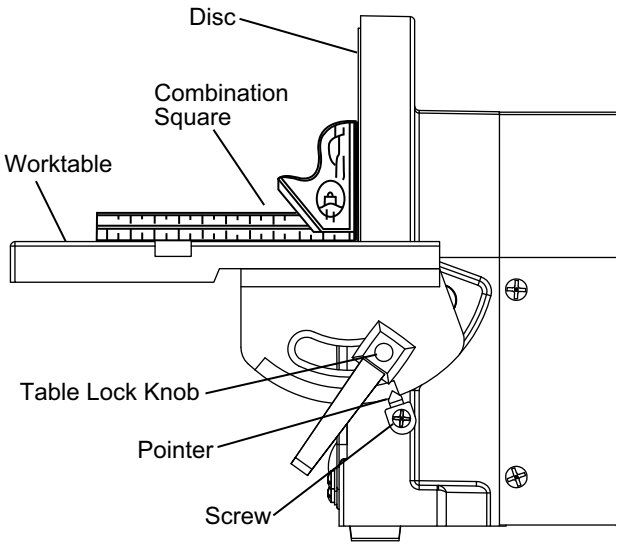

Figure 12 – Square worktable to disc and reset pointer.

BELT HORIZONTAL SANDING

Refer to Figure 13.

- When using the sanding belt in the horizontal position to perform surface or edge sanding, the worktable must always be used.
- Always hold the workpiece firmly, keeping your fingers away from the sanding belt.
- Always keep the end of the workpiece against the worktable and move the workpiece evenly across the sanding belt.
- Apply only enough pressure to allow the sanding belt to remove material.
- Use extra caution when sanding very thin pieces.

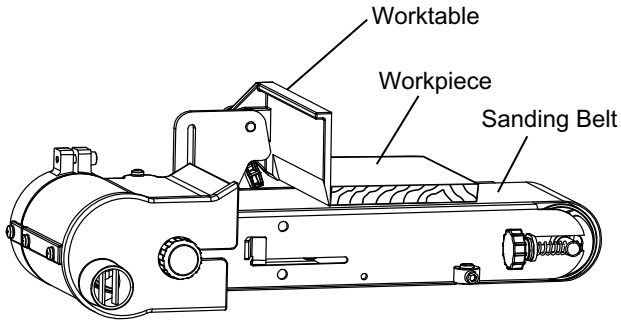

Figure 13 – Horizontal belt sanding.

OPERATION (CONTINUED)

SANDING LONG WORKPIECES

Refer to Figure 14.

This sander can be used to sanding long workpieces.

1. Remove the belt exhaust cover by loosen the lock knob.
2. Remove the two knobs beside the dust port and loosen the screw bove the upper dust port , but do not remove it at this time. The upper dust port can be removed.
3. This provides the largest use area of the sanding belt.
4. Replace the belt exhaust cover when operation is complete.

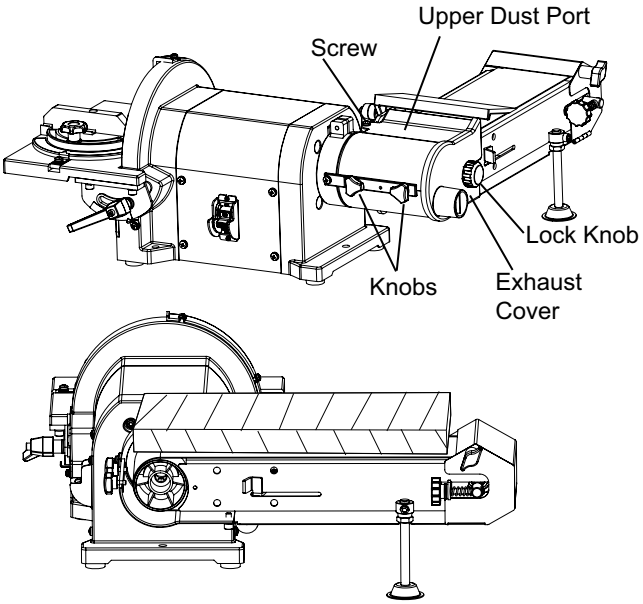

Figure 14 – Sand long workpieces.

VERTICAL OR HORIZONTAL BELT POSITION

Refer to Figure 15.

Depending on operator needs and the workpiece, the worktable can be used with either the horizontal or vertical position.

To change from one position to the other:

1. Loosen the socket head cap screw by turning it counterclockwise with the 5 mm hex key.
2. Manually move the work support station into the vertical or horizontal position, as required.
3. Retighten the socket head cap screw by turning it clockwise.

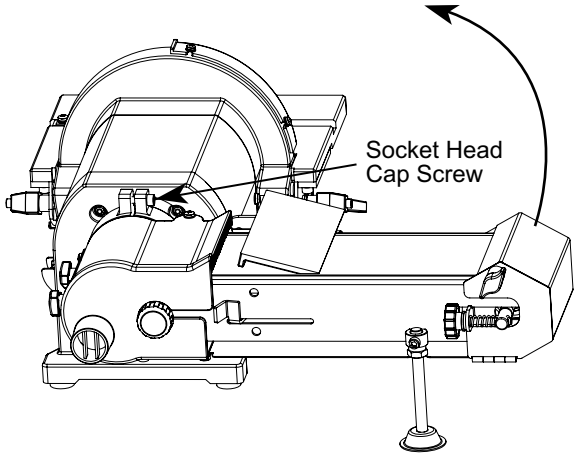

Figure 15 – Change belt to horizontal or vertical position.

SANDING OUTSIDE CURVES

Freehand sanding of outside curves should be done on the sanding disc. Keep fingers a minimum of 1 in. (25.4 mm) from the sanding disc

MAINTENANCE

WARNING: For your safety, turn switch OFF and remove the power cord from the electrical outlet before adjusting or performing maintenance on your sander.

WARNING: To avoid electric shock or fire, all repairs to the electrical components should be done by a qualified service technician.

WARNING: Before each use check for damaged, missing, or worn parts; check for alignment of moving parts, binding, improper mounting, or any other conditions that may affect the operation. Should any of these conditions exist, do not use the sander until properly repaired or parts are replaced.

REPLACING SANDING DISC

Refer to Figure 16.

A sanding disc is pre-mounted at the factory. Use only sanding discs that measures 8 in. (200 mm) in diameter.

1. Remove the disc cover and worktable and then remove the disc cover by removing four screws.
2. Remove the disc paper.
3. Press the new sanding disc firmly in position around the velcro. Make sure the disc is centered on the plate.
4. Reinstall the disc cover, tighten four screws and place sanding table back on unit.

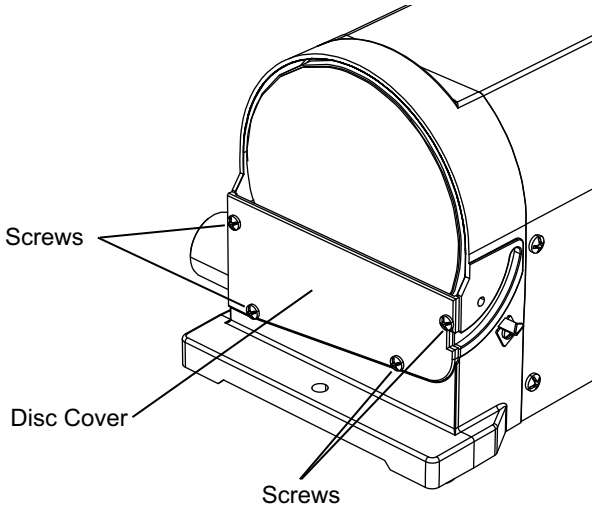

Figure 16 – Replace sanding disc.

MAINTENANCE (CONTINUED)

REPLACING SANDING BELT

Refer to Figure 17.

1. Remove the belt sander support rod.
2. Remove the belt exhaust cover by loosen the lock knob. **NOTE:** Do not remove the lock knob.
3. Loosen the belt guard cover knob until the belt guard cover can be opened directly.
4. Pull out the tension lever to release the tension of the sanding belt.
5. Remove the sanding belt from both the drive drum and the idler drum.
6. Place new sanding belt over both the drive drum and the idler drum. Make sure the belt arrow located on the inside of the belt is pointed in the correct direction.
7. Replace the belt exhaust cover in position.
8. Replace and tighten the lock knob and push the tension lever in to apply belt tension.
9. Push the belt by hand and check if the sanding belt tends running to one side or the other of the drive drum or the idler drum.
10. View from the switch end of sander, if the sanding belt runs toward disc, slightly turn the tracking knob clockwise (down).
11. View from the switch end of sander, if the sanding belt runs away from the disc, slightly turn the tracking knob counter-clockwise (up).
12. Plug in the sander and turn the switch ON and OFF quickly to check if the sanding belt moves to either side. Re-adjust and fine-tune the belt tracking if necessary.

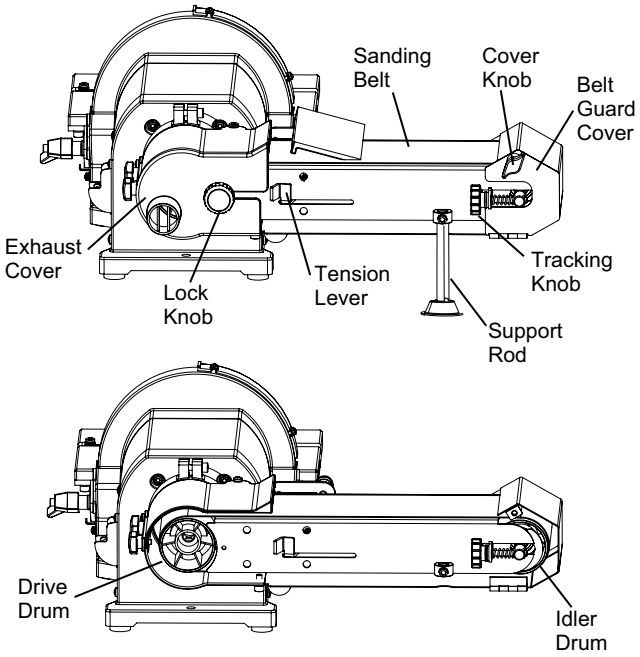

Figure 17 – Replace sanding belt.

LUBRICATION

Ball bearings are grease packed at the factory and require no further lubrication.

Use a paste wax to ensure smooth operation on all moving table parts.

Do not use any lubrication on the belt plate as this might end up on the wheels, causing them to slip

TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Motor will not run.	1. Defective or broken ON/OFF switch / switch cord / switch relay.	1. Replace all broken or defective parts before using sander.
	2. Burned out motor.	2. Contact Professional Service Station for repair. Any attempt to repair this motor may create a hazard unless repair is done by a qualified technician.
	3. Blown house fuse	3. Replace house fuse. Turn OFF other appliances and power tools on the same circuit.
Machine slows down while sanding.	Operator applying too much pressure to workpiece.	Use less pressure in applying workpiece to sanding surface.
Motor does not develop full speed.	1. Power line overloaded with lights, other tools, etc.	1. Reduce the load on power line.
	2. Long/wrong extension cord being used.	2. Replace with correct extension cord.
	3. Incorrect fuses or circuit breakers in power cord.	3. Install correct fuses or circuit breaker.
Sanding belt runs off pulleys.	Not tracking properly.	Adjust the tracking. See "Properly Track Sanding Belt", page 7.
Wood burns while sanding.	1. Sanding disc or belt glazed with sap.	1. Replace belt or disc.
	2. Excessive pressure being applied to work-piece.	2. Reduce pressure applied to workpiece.
Motor overheats.	Motor overload.	Reduce motor load. Allow to cool off before restarting.

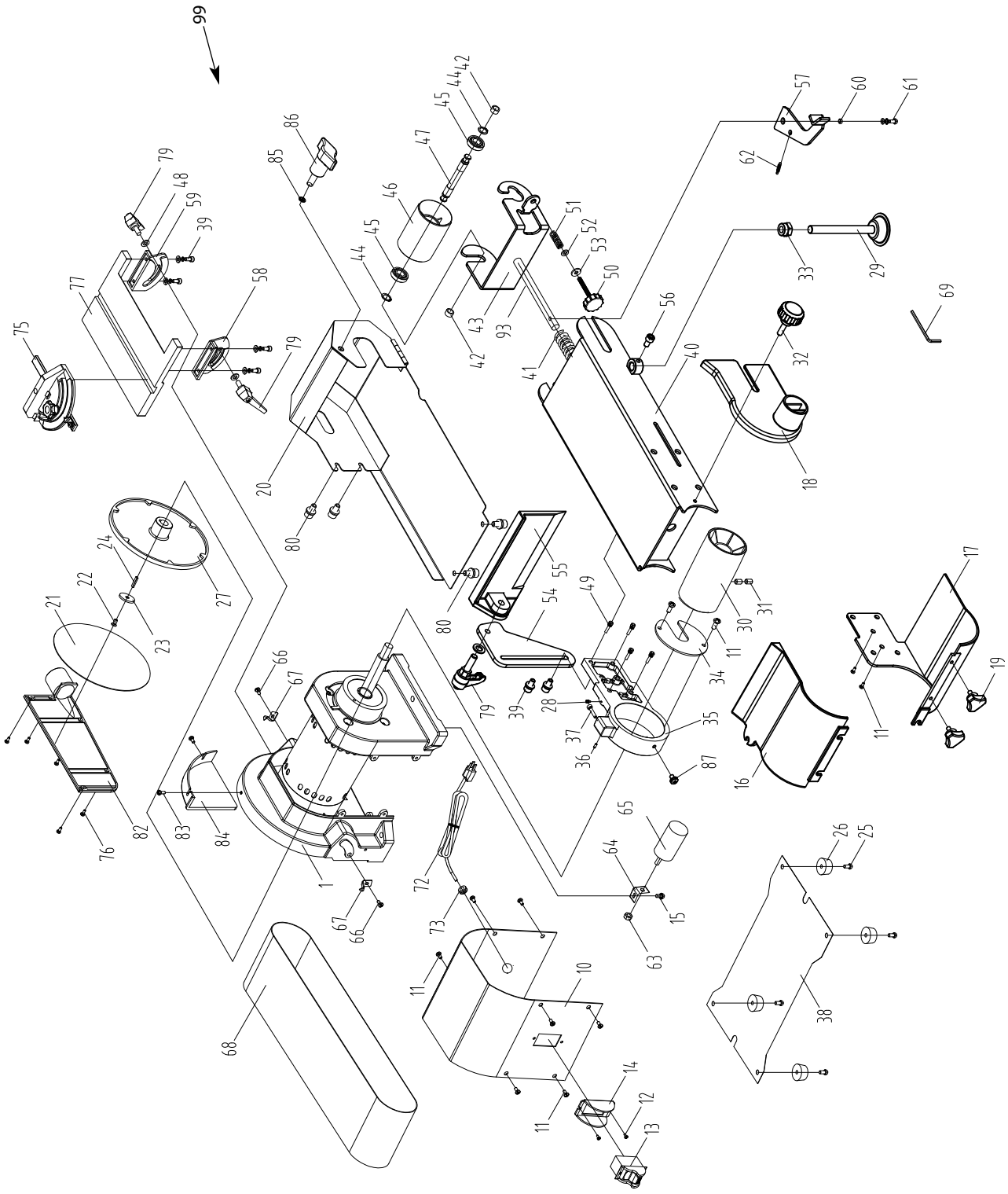

Figure 18 – Repair Parts Illustration for Model 9681063, 4″ × 36″ Belt/ 8″ Disc Sander

REPAIR PARTS LIST FOR MODEL 9681063, 4″ × 36″ BELT/ 8″ DISC SANDER

Ref. No.	Description	Part No.	Qty.
1	Motor Assembly	965022401	1
9	Hex Nut With Flange M5	*	4
10	Housing	965022501	1
11	Philips Screw M5×10	*	12
12	Philips Screw M3×10	*	2
13	Switch	960806601	1
14	Switch Bracket	965022601	1
15	Philips Screw M4×10	*	1
16	Upper Belt Guard	965022701	1
17	Lower Belt Guard	965022801	1
18	Guard Port Cover	965022901	1
19	Lock Knob	965023001	2
20	Belt Cover	965023101	1
21	Sanding Disc 8″×100 Grit	965023201	1
22	Philips Sunk Screw (M6×16 LH)	*	1
23	Sander Pad	965023301	1
24	C Type Key C4.8×15mm	965023401	1
25	Philips Screw M5×12	*	4
26	Rubber Foot	965023501	4
27	Aluminum Disc	965023601	1
28	Philips Screw M5×25	*	1
29	Belt Bracket Base Assembly	965023701	1
30	Drive Drum	965023801	1
31	Hex Socket Set Screw M8×12	*	2
32	Knob	965023901	1
33	Hex Nut M10	*	1
34	Baffle	965024001	1
35	Tilting Arm Bracket	965024101	1
36	Location Pin	965024201	1
37	Hex Socket Screw M6×25	*	1
38	Base Plate	965024301	1
39	Hex Socket Screw M6×12	*	6
40	Belt Frame	965024401	1
41	Pressure Spring	965024501	1
42	Bushing	965024601	2
43	Guide Frame	965024701	1
44	Retainer For Shaft M12	965024801	2
45	Bearing 6001-2RS	*	2
46	Idler Drum	965024901	1
47	Idler Shaft	965025001	1
48	Flat Washer M8	*	3
49	Hex Socket Screw Assembly M6×15	*	4
50	Belt Adjusting Knob	965025101	1
51	Adjusting Spring	965025201	1
52	Rubber Washer	965025301	1
53	Big Flat Washer M6	*	1
54	Belt Table Support	965025401	1
55	Belt Table	965025501	1
56	Hex Socket Screw M6×10	*	1
57	Tension Plate	965025601	1
58	Right Table Support	965025701	1
59	Left Table Support	965025801	1
60	Sleeve	965025901	1
61	Philips Screw Assembly M5×16	*	1
62	Tension Spring	965026001	1
63	Hex Nut M8	*	1
64	Capacitor Support	965026101	1
65	Capacitor 80Mfd/300V	965026201	1
66	Philips Screw Assembly M4×8	*	2
67	Pointer	965026301	2
68	Belt 4″×36″80 Grit	965026401	1
69	Hex Wrench	*	1
72	Power Cord	965026701	1
73	Strain Relief	965026801	1
75	Miter Gauge Assembly	964231501	1
76	Philips Screw M4×10	*	5
77	Disc Table	965026901	1
79	Locking Handle	965027001	3
80	Philips Screw Assembly M5×8	*	4
82	Lower Disc Guard	965027101	1
83	Philips Screw Assembly M4×8	*	2
84	Upper Disc Guard	965027201	1
85	Star Washer	*	1
86	Cover Handle	965027301	1
87	Philips Screw Assembly M5×10	*	1
Δ	Operating Instructions and Parts Manual	965027402	

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

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®

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