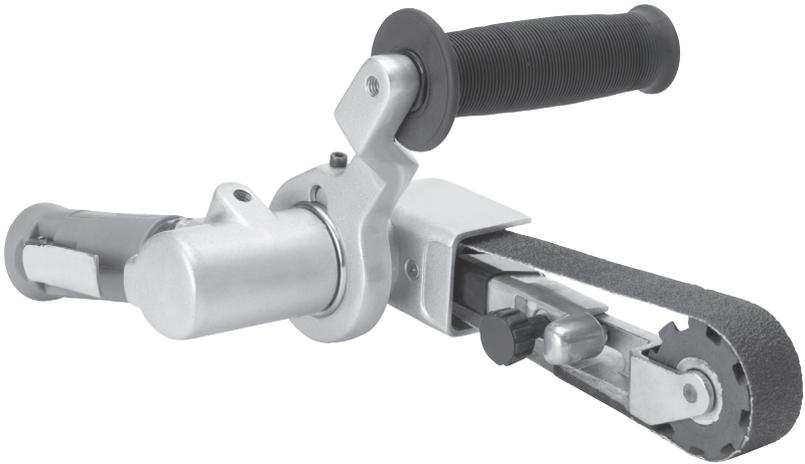


Grizzly *Industrial, Inc.*®

MODEL H8253 AIR BELT SANDER INSTRUCTION MANUAL



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#JB10165 PRINTED IN CHINA

WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.

Failure to read, understand and follow the instructions given in this manual may result in serious personal injury, including amputation, electrocution or death.

The owner of this machine/equipment is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, blade/cutter integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

WARNING!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains 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, 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, such as those dust masks that are specially designed to filter out microscopic particles.

SAFETY

WARNING

For Your Own Safety Read Instruction Manual Before Operating This Equipment

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words which are intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures.



Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE

This symbol is used to alert the user to useful information about proper operation of the equipment.

WARNING

Safety Instructions for Pneumatic Tools

- 1. READ THIS MANUAL.** This tool may cause personal injury if used incorrectly. This manual contains proper safety and operating instructions that must be followed to reduce this risk.
- 2. WEAR EYE PROTECTION.** This tool may throw small fragments during operation, which may cause serious eye injury. Always wear ANSI approved safety glasses or face shield to reduce your risk from this hazard.
- 3. WEAR A RESPIRATOR.** This tool may produce fine dust during operation, which can cause respiratory injury if inhaled. Always wear a respirator NIOSH approved for the type of material being processed.
- 4. WEAR HEARING PROTECTION.** Operating this tool for prolonged time periods may damage your hearing. Your risk depends on length and frequency of use. To reduce your risk of this hazard, wear hearing protection.
- 5. MAINTAIN SAFETY GUARDS.** Your tool may be equipped with safety guards or other structural components designed to reduce the risk of injury during operation. Never modify or operate this tool with any guards or components removed or damaged.
- 6. KEEP CHILDREN AWAY.** Prevent children from injury by keeping them away from this tool. Disconnect and lock the tool away when not in use.

7. **AVOID ENTANGLEMENTS.** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry, which may get caught in moving parts, when operating this tool. Wear a protective hair covering to contain long hair.
8. **USE CORRECT AIR PRESSURE.** Exceeding the maximum PSI rating of this tool may cause unpredictable operation or bursting.
9. **DISCONNECT AIR PRESSURE** before servicing, changing accessories, or moving to another location. Never leave this tool unattended when connected to air.
10. **SECURE TOOLING.** Always verify tooling is secure before operation.
11. **SHARP SURFACES.** DO NOT place hands near the tooling surfaces when in operation.
12. **REMOVE ADJUSTING KEYS AND WRENCHES AFTER USE.** These tools become dangerous projectiles if left on the tool when it is started.
13. **AVOID FLAMMABLES.** Do not use this tool around any flammables that may be ignited by sparks.
14. **SECURE WORK.** Use clamps or a vise to hold work when practical. It is safer than using your hand and frees both hands to operate tool.
15. **MAINTAIN TOOLS WITH CARE.** Keep tools lubricated and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **DO NOT FORCE TOOL.** It will do the job better and safer at the rate for which it was designed.
17. **CHECK FOR DAMAGED PARTS BEFORE USING.** Check for binding and alignment of parts, broken parts, part mounting, loose bolts, and any other conditions that may affect operation. Repair or replace damaged parts before operating.
18. **USE GOOD LIGHTING.** Keep work area well lighted. Dark work areas increase risk of accidental injury.
19. **AVOID UNINTENTIONAL OPERATION.** Always disconnect air when not in use, and do not carry tool with hand on trigger.
20. **USE THE RECOMMENDED ACCESSORIES.** Consult owner's manual for recommended accessories. Using improper accessories may increase the risk of injury.
21. **NEVER ALLOW UNTRAINED USERS TO USE THIS TOOL WHILE UNSUPERVISED.**
22. **IF YOU ARE UNSURE OF THE INTENDED OPERATION, STOP USING TOOL.** Seek formal training or research books or magazines that specialize in pneumatic tools.
23. **BE AWARE OF HOSE LOCATION.** Hoses can easily become a tripping hazard when laid across the floor in a disorganized fashion.
24. **DO NOT USE UNDER THE INFLUENCE OF DRUGS OR ALCOHOL, OR WHEN TIRED.**

CAUTION

No list of safety guidelines is complete, because every work environment is different. Always consider safety first and use common sense. Failure to use this tool with caution and respect could result in serious personal injury.

INTRODUCTION

Foreword

The specifications, details, and photographs in this manual represent the Model H8253 as supplied when the manual was prepared. However, owing to Grizzly's policy of continuous improvement, changes may be made at any time with no obligation on the part of Grizzly.

If you have any comments regarding this manual, please write to us at the following address:

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C/O Technical Documentation
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Bellingham, WA 98227-2069
E-Mail: manuals@grizzly.com

Most importantly, we stand behind our tools. If you have any service questions or parts requests, please call or write us at the location listed below.

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Muncy, PA 17756
Phone: (570) 546-9663
Fax: (800) 438-5901
E-Mail: techsupport@grizzly.com
Web Site: <http://www.grizzly.com>

Specifications

Motor Speed..... 18,000 RPM
Air Consumption..... 28 CFM
Air Inlet $\frac{1}{4}$ "-18 NPT
Required PSI 70-90 PSI
Maximum PSI 90 PSI
Abrasive Belt Size 1" W x 18" L
Sound Level 84 dB

Inventory

H8253 Inventory (Figure 1)	Qty.
A. Handle.....	1
B. Contact Arm Assembly	1
C. Hex Wrench (3mm).....	1
D. Air Motor Assembly.....	1
E. Sanding Belts 1" x 18"	11
F. Cap Screw M4-.7 x 14 (Belt Guard) ..	1
G. Belt Guard.....	1

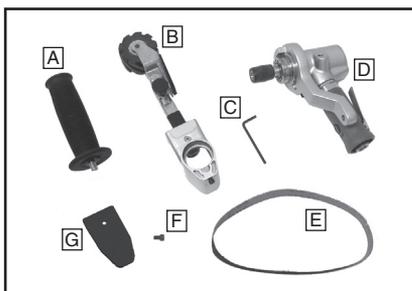


Figure 1. Model H8253 Inventory.

Compressed Air System

The Model H8253 is designed to be operated between 70-90 PSI using clean, dry, regulated, compressed air. **DO NOT exceed the 90 PSI maximum operating pressure for your sander.**

Before using your new sander, regulate the air pressure to find the optimum setting within the specified operating range. Start by testing the sander at a low setting, then increase the air pressure as needed for satisfactory results.

An in-line filter/lubricator/regulator unit can be installed, as depicted in **Figure 2**.

This filter/lubricator/regulator will protect your tool from damaging water build-up, allow you to adjust and maintain constant air pressure to your tool, and save you the inconvenience of having to manually lubricate your tool every time you use it.

!WARNING

Exceeding the maximum permissible operating pressure may damage the sander and cause it to malfunction. To protect yourself from personal injury, DO NOT allow the air pressure to exceed the recommended pressure for this sander!

Avoid overlubricating, as excess oil may spray out during sanding, potentially damaging the workpiece and sanding belt.

Check the current Grizzly catalog for availability of filters and regulators. If you plan on installing a filter and regulator in your compressed air system, always follow the connection instructions that come with those units.

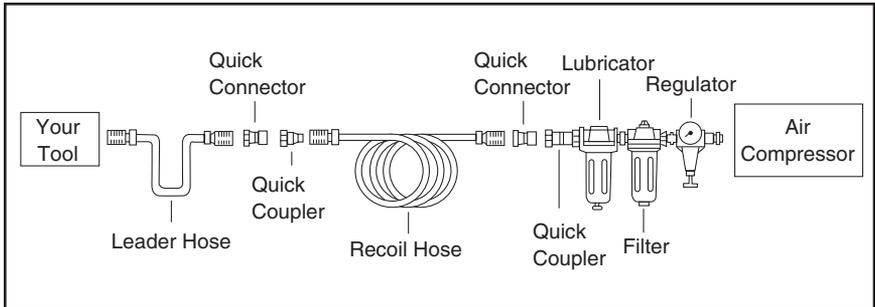


Figure 2. Typical filter and regulator installation order.

ASSEMBLY

The Model H8253 must be assembled before use. Assembly consists of connecting the contact arm assembly to the air motor and attaching the handle.

Connecting the Contact Arm

1. DO NOT YET CONNECT THE SANDER TO THE AIR SUPPLY!
2. Slide the contact arm assembly onto the air motor, making sure it is snug against the shoulder, as shown in **Figure 3**.

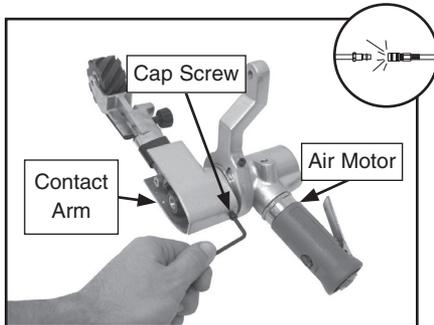


Figure 3. Installing the contact arm.

3. Tighten the cap screw to secure the contact arm assembly to the air motor.

Note: The angle of the contact arm will later be adjusted to suit the user's preference and specific sanding task performed. This procedure is discussed in **Adjustments** on **Page 8**.

Attaching the Handle

1. DO NOT YET CONNECT THE SANDER TO THE AIR SUPPLY!
2. Thread the handle into the handle arm, as shown in **Figure 4**.

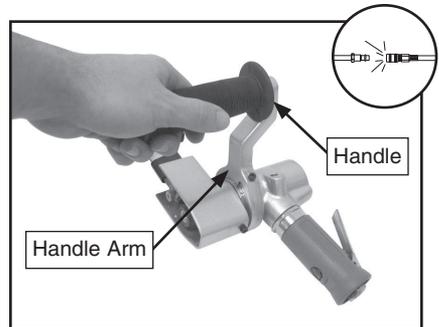
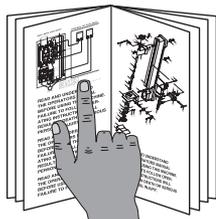


Figure 4. Attaching the handle.

3. Make sure the handle is tight enough to not come loose during operations.

OPERATIONS

⚠️ WARNING



Read the manual before operation. Become familiar with this tool, its safety instructions, and its operation before beginning any work. Serious personal injury may result if safety or operational information is not understood or followed.

⚠️ WARNING

Like all tools there is potential danger when operating this tool. Accidents are frequently caused by lack of familiarity or failure to pay attention. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

⚠️ CAUTION

To avoid accidental starting, disconnect the sander from the air supply when it is not in use.

Sanding Belt

Installing the Sanding Belt

1. DISCONNECT THE SANDER FROM THE AIR SUPPLY!
2. Place the sanding belt over the contact wheel, as shown in **Figure 5**.

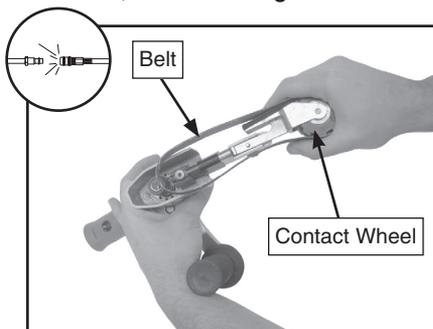


Figure 5. Preparing the sanding belt.

3. Compress the contact arm shaft by pressing the contact wheel towards the drive wheel. Slide the belt over the drive wheel until it is centered, then release pressure (**Figure 6**).

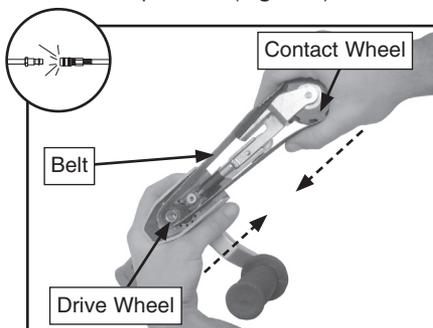


Figure 6. Attaching the sanding belt.

- Attach the belt guard with the M4-.7 x 6 cap screw, as shown in **Figure 7**.

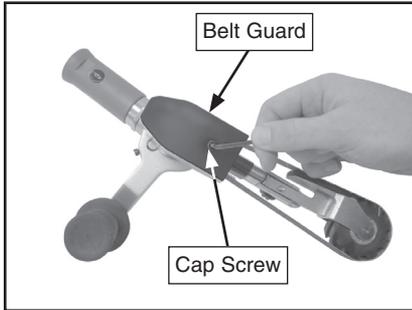


Figure 7. Installing guard.

Replacing the Sanding Belt

When the sanding belt loses its effectiveness, is damaged, or shows signs of excessive wear, it must be replaced.

To replace the sanding belt:

- DISCONNECT THE SANDER FROM THE AIR SUPPLY!
- Remove the belt guard.
- Compress the contact arm shaft by pressing the contact wheel towards the drive wheel. Slide the belt off the drive wheel, then release pressure (**Figure 8**).

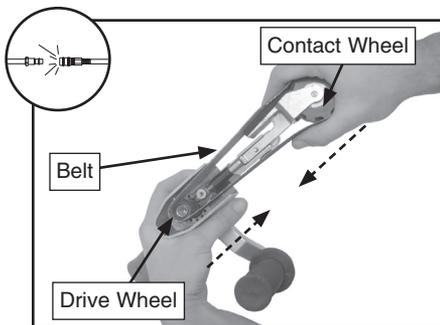


Figure 8. Removing the sanding belt.

- To install the new belt, refer to **"Installing the Sanding Belt"** on **Page 6**.

⚠ WARNING	
	EYE/LUNG/EAR INJURY HAZARD! Wear protective equipment when using this tool.
	ACCIDENTAL START HAZARD! Disconnect before service or tool changes.
	AIR PRESSURE HAZARD! Never exceed the maximum PSI rating for tool.

Operation

To operate the sander:

- Connect the sander to compressed air regulated at 70-90 PSI.
- Hold the sander securely and push the throttle lever to operate. Turn the valve screw to set the maximum belt speed (**Figure 9**).

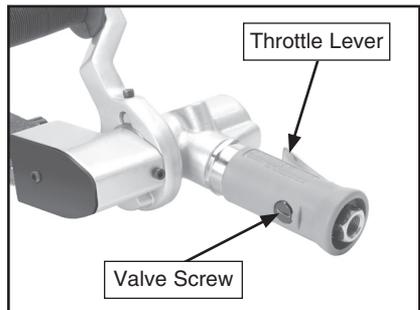


Figure 9. Sander controls.

- Release pressure on the throttle lever to stop the sander.

Adjustments

Adjusting the Contact Arm and Handle

1. Loosen the cap screws shown in **Figure 10**.

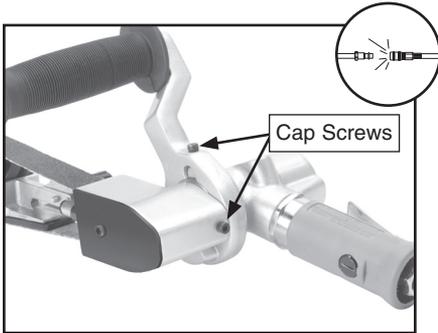


Figure 10. Sander adjustments.

2. Rotate the handle and contact arm to the desired position, then tighten the cap screws.

Note: By rotating the contact arm and handle, the Model H8253 can be adjusted for right or left hand use (**Figure 11**).

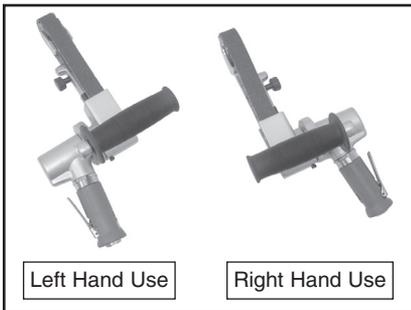


Figure 11. Left hand/right hand setup.

Adjusting the Belt Tracking

The sanding belt must be centered on the contact wheel to avoid damaging the sander and to allow for optimal sanding.

To adjust the belt tracking:

1. Connect the sander to compressed air regulated at 70-90 PSI.
2. Hold the sander firmly and press the throttle lever to turn it **ON**. Once the belt has reached full speed, turn the adjustment knob to adjust the belt tracking. Turning the knob clockwise will move the belt towards the adjusting knob and turning the knob counter-clockwise will move the belt away from the adjusting knob (**Figures 12 & 13**).

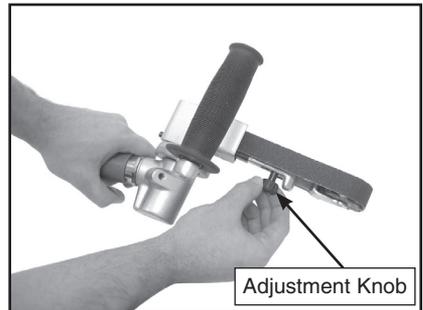


Figure 12. Belt tracking.

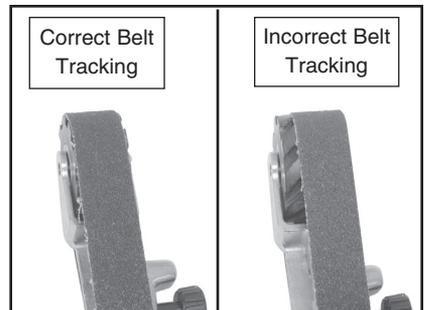


Figure 13. Belt tracking.

MAINTENANCE

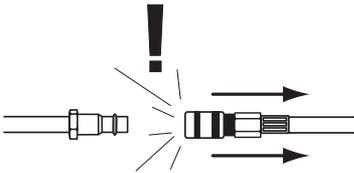
Cleaning

Keeping the sander clean is vital to its operation and leads to longer tool life. After every use, clean and inspect the sander.

- Wipe the housing with a dry cloth, or blow off the dust and debris with compressed air.
- Check for damage to tooling, hoses, housing or other accessories.

Do not allow dust, chips, sand, etc. into the air connectors or into the body of the sander air motor; this may result in leaks and damage to the sander and the air couplings.

WARNING



Always disconnect air from sander whenever servicing! During maintenance, a sander connected to air may start accidentally, causing personal injury!

Lubrication

The air sander **MUST** have 2-6 drops of oil dropped directly into the air inlet before and after each use and before storage.

After oiling, remove the sanding belt, then run the sander to purge excess oil. Wipe the tool down with a rag, re-install the sanding belt, then begin sanding.

Another option to manual oiling would be to install a lubricator in your air compressor line. If your air compressor line already has a lubricator, then regular lubrication of your sander will not be necessary. Just make sure there is always oil in the lubricator.

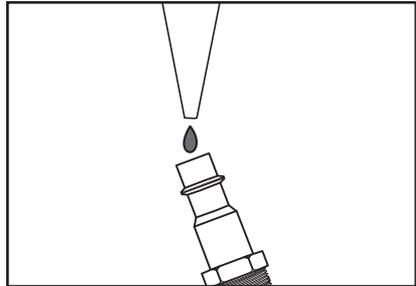
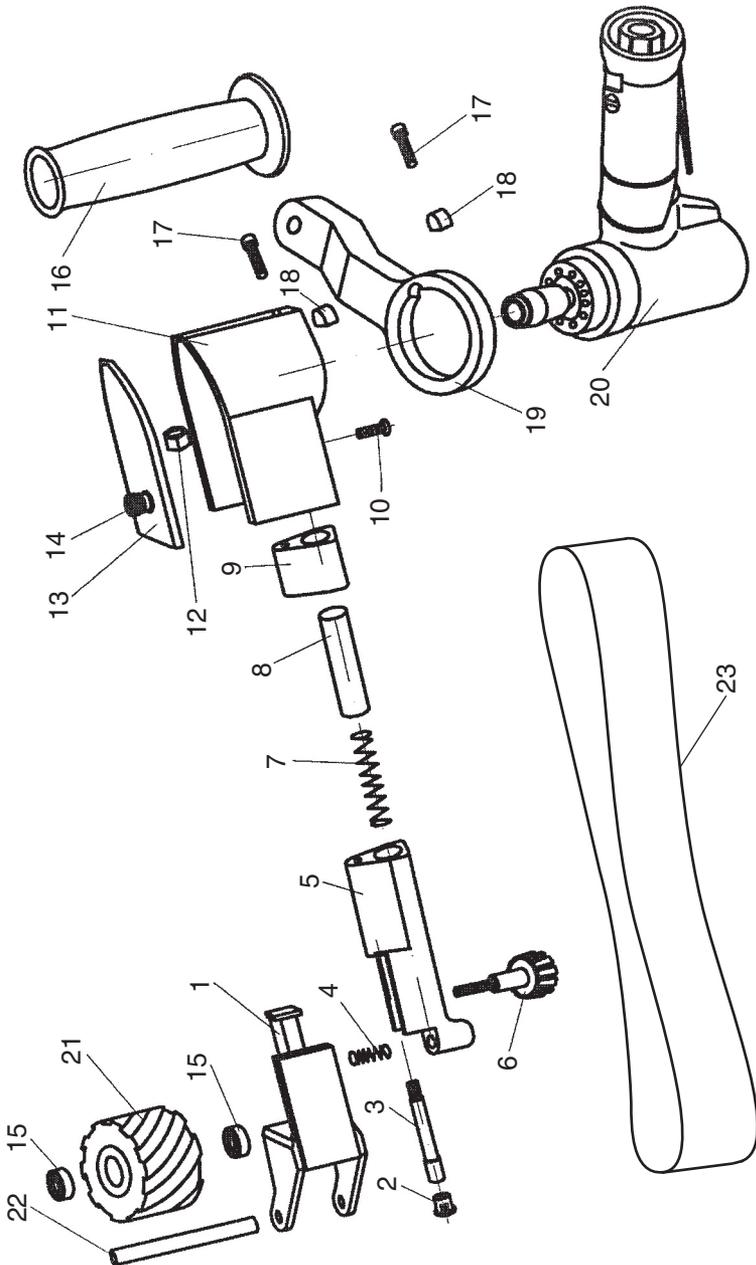


Figure 14. Lubricating sander via air inlet.

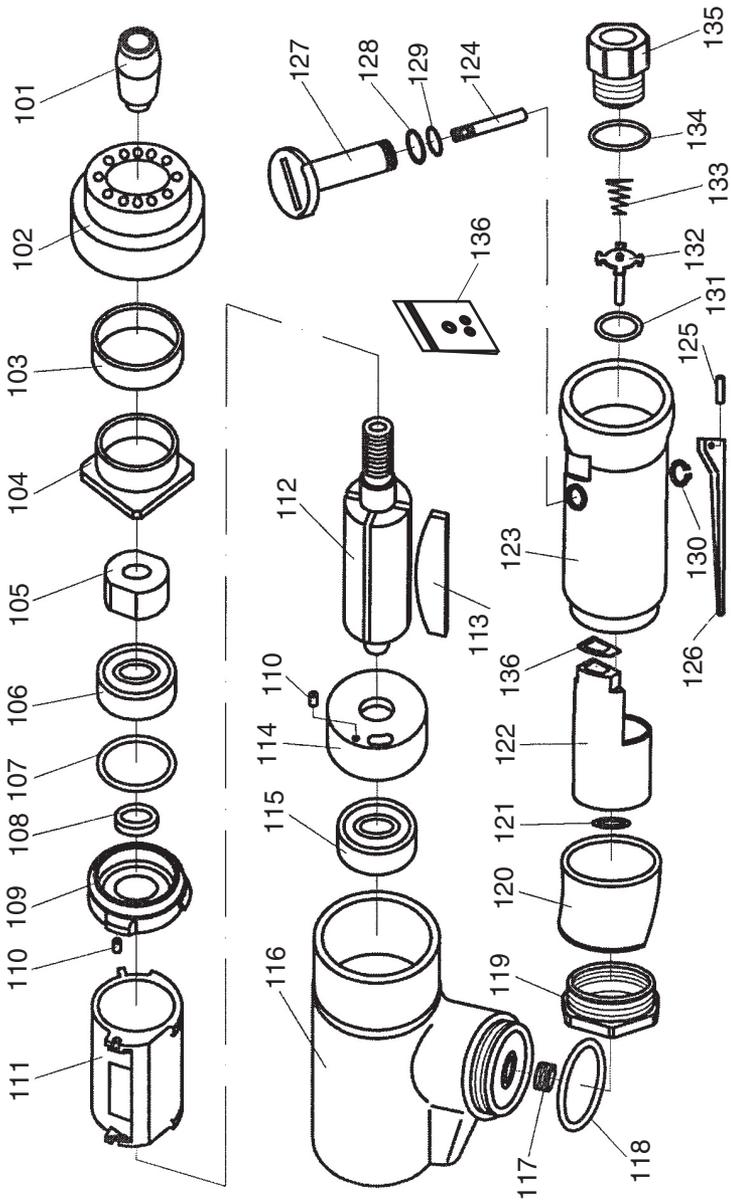
H8253 MAIN BREAKDOWN



H8253 MAIN PARTS LIST

REF	PART #	DESCRIPTION
1	PH8253001	CONTACT ARM ASSEMBLY
2	PH8253002	PLUG
3	PH8253003	GUIDE POST
4	PH8253004	COMPRESSION SPRING
5	PH8253005	TENSION ARM
6	PH8253006	KNOB M4-.7 X 22
7	PH8253007	COMPRESSION SPRING
8	PH8253008	TENSION SHAFT
9	PH8253009	DUST COVER
10	PFH41M	FLAT HD SCR M4-.7 X 16
11	PH8253011	MAIN HOUSING
12	PN06M	HEX NUT M5-.8
13	PH8253013	BELT GUARD
14	PSB110M	CAP SCREW M4-.7 X 6
15	PH8253015	BALL BEARING R4RS
16	PH8253016	HANDLE ASSEMBLY
17	PSB41M	CAP SCREW M4-.7 X 14
18	PH8253018	MOTOR LOCK
19	PH8253019	HANDLE SUPPORT
20	PH8253020	MOTOR ASSEMBLY
21	PH8253021	CONTACT WHEEL
22	PH8253022	CONTACT WHEEL SHAFT
23	PH8253023	SANDING BELT 1 X 18"

H8253 MOTOR BREAKDOWN



H8253 MOTOR PARTS LIST

REF	PART #	DESCRIPTION
101	PH8253101	DRIVE WHEEL
102	PH8253102	EXHAUST COVER
103	PH8253103	FELT SILENCER
104	PH8253104	AIR CONTROL RING
105	PH8253105	ROTOR NUT
106	P6000	BALL BEARING 6000ZZ
107	PH8253107	SHIM
108	PH8253108	SPACER
109	PH8253109	FRONT BEARING CUP
110	PH8253110	PIN
111	PH8253111	CYLINDER
112	PH8253112	ROTOR
113	PH8253113	BLADE
114	PH8253114	REAR BEARING CUP
115	P608	BALL BEARING 608ZZ
116	PH8253116	MOTOR HOUSING
117	PH8253117	SPECIAL SCREW
118	PH8253118	GASKET
119	PH8253119	LOCK RING
120	PH8253120	COLLAR
121	PH8253121	INTERNAL GASKET
122	PH8253122	INSERT
123	PH8253123	HANDLE HOUSING
124	PH8253124	VALVE STEM
125	PRP02	ROLL PIN 1/8 X 3/4
126	PH8253126	THROTTLE LEVER
127	PH8253127	SPEED REGULATOR
128	PORP009	O-RING 8.8 X 1.9 P9
129	PH8253129	O-RING 8 X 1
130	PR16M	EXT RETAINING RING 9MM
131	PH8253131	TIP VALVE SEAL
132	PH8253132	TIP VALVE
133	PH8253133	COMPRESSION SPRING
134	PORP016	O-RING 15.8 X 2.4 P16
135	PH8253135	INLET FITTING
136	PH8253136	O-RING REPLACEMENT KIT

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