

FOREDOM[®] FILER



For Your Own Safety:

Read this Entire Manual Before
Operating your Foredom Tool.

**Safety Warnings & Guidelines
Should be Carefully Followed to
Prevent Injury from Excessive
Exposure to Vibration.**

Always Wear Eye Protection and
Use a Dust Collection System
While Using this Tool.

www.foredom.net

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Safety Warnings

The reciprocating action performed by the Filer causes vibration. **Exposure to EXCESSIVE vibration can aggravate or cause serious and permanent injury to the operator, including disorders related to fingers, hands, wrists, joints, circulatory and nervous systems.** Injury can develop gradually and it is **ALWAYS** important for the operator to closely monitor feelings of numbness, tingling, whitening of the skin, weakness and/or other unusual sensations. The operator should stop work immediately if any these conditions are observed and seek medical attention if symptoms persist.

Controlling the extent of vibration is key to preventing operator injury. Several factors influence vibration levels. Recognizing and employing good judgement regarding these factors help to minimize the potential for generating harmful exposure to vibration and the risk of injury to the operator.

Factors include but are not limited to:

- 1. Speed or Strokes per Minute (SPM)**
- 2. Stroke Length**
- 3. Weight of Inserted Accessory**
- 4. Angle of Accessory held Against the Working Surface**
- 5. Type of Accessory and Grit**

See pages 10-11 for **Vibration Testing Results** conducted by an independent laboratory. Read this manual and its supporting documents throughout to ensure that your work is performed within safe exposure limits.

Follow these Safety Guidelines when Working with the Filer

- Work at motor input speeds of 10,000 RPM or less— the equivalent output of 4,000 Strokes per Minute.
- We recommend using a Foredom Dual Speed Range Dial Control in place of a foot pedal. This specialized control has a 'LO' setting that restricts speed to between 1,000 and 10,000 RPM or 4,000 SPM, the maximum speed or number of strokes allowable for Filer operation. The 'HI' setting permits use at the maximum speed of your motor— 18,000 RPM for Series SR motors and 15,000 RPM for Series TX motors. See page 7 for details.

If you are using Foredom's standard dial speed control, set the dial to around 1/2 speed for Series SR motors and 3/4 speed for Series TX motors. This will keep you running at or under 10,000 RPM or 4,000 SPM.

- Use as short an accessory as possible and insert it as far as it can go into the Filer chamber or A-891012 Abrasive Stone Holder.
- Use a relaxed angle (as parallel as possible) when applying the accessory to the work piece.
- Whenever practical use finer grit accessories that create less surface tension than coarser grit.
- Excessive side pressure may bend or break the shank of an accessory.
- Let the speed of the accessory do the work.
- The filer must be 'Off' (Motor Not Running) during tool or accessory installation, belt changing, or stroke adjustment.

Additional Safety Guidelines for Using the Filer with your Flexible Shaft Machine

Always wear safety glasses or face shields whenever you operate this power tool to prevent eye or face injuries.

Always use files and other accessories rated for 10,000 SPM— Strokes Per Minute.

Never wear loose clothing, dangling jewelry or other apparel which may become caught in the equipment.

Always keep hands, fingers & hair well away from the tool.

Secure the work piece or item that you are working in a vise or other work holding device. Holding it with your hand can result in serious hand injury.

Always use a proper dust collection system or wear a respirator to prevent the inhalation of dust particles and other debris.

Do Not use accessories longer than 4" (100mm) long.

Do Not use accessories that have bent or damaged shanks.

Do Not use abrasive stones if they are cracked or damaged.

During lapping and filing, particles from the work piece or accessory may fly off as projectiles. **Users must use safety glasses or face shields and protective clothing.**

Never touch the accessory while the tool is in motion.

Foredom Filer Kit AK89000 Includes:



General Information

The Filer is a reciprocating tool that attaches over the top of Foredom's H.30 (quick disconnect), H.30H (square drive), and H.30SJ (slip joint) chuck style handpieces. Partnered with our flexible shaft machine, the Filer offers a power assist to tiresome hand filing operations and can be used to file, hone, polish and lap on straight and curved surfaces.

- The aluminum Filer housing has a pistol grip for ergonomic and easy handling.
- Comes prelubricated and never requires any additional lubrication.
- Holds accessories with different shank sizes from 2.35mm (3/32") to 6.4mm (1/4"). See pg 3 & 4 for inserting accessories.
- Stroke length can be adjusted from 0mm to 5mm. See pg 4 for adjusting stroke length.
- Filer has a 2.5 : 1 belt drive reduction and can run at a Maximum Input Motor Speed of 10,000 RPM – the equivalent Output of 4,000 SPM. Maintaining a consistent speed of operation is critical for good results and productivity. The best and easiest way to achieve that is to use a manual speed control rather than a foot pedal. Use ONLY in forward rotation.

Specifications

Length: 5-1/2" x Width: 2-1/4" (at widest) x Height: 3"

Weight: Approximately 600 g (includes filer, handpiece and Abrasive stone holder p/n A-891012)

Noise Level: Not exceeding 61db at 4,000 SPM or 10,000 RPM

Vibration levels: See Maximum Suggested Settings on page 3 and more detailed documentation on pages 10-11

Speed & Operating Recommendations

Maintaining a consistent speed of operation is critical for good results. The best and easiest way to achieve that is to use a dial speed control in place of a foot pedal (details on page 7). A dial control will allow you to determine the best speed for your specific task and to find and repeat that speed every time.

Stroke length adjustment does not effect the speed or belt reduction ratio. Both the stroke length and speed you set will vary depending on the weight of the file or stone with holder, grit and work piece material. **The rule of thumb is that the longer the stroke the slower the speed, see chart below.** The work piece geometry will also dictate the size and shape of the abrasive tool needed.

Recommended Maximum Settings*:

Tool Weight	Stroke Length	Stroke Speed	Motor Speed
7 grams	1mm	2,900 spm	7,250 rpm
7 grams	3mm	1,400 spm	3,500 rpm
28 grams	1mm	4,000 spm	10,000 rpm
28 grams	3mm	2,100 spm	5,250 rpm

* See Vibration Diagram and Effective Work Time vs Vibration Charts on pages 10-11.

The Freedom Filer requires no lubrication and should *never* be lubricated.

Handpiece Installation

1. Slide the HPG-30 foam handpiece grip onto the H.30® handpiece until it is about 1" from the geared chuck end of the housing.

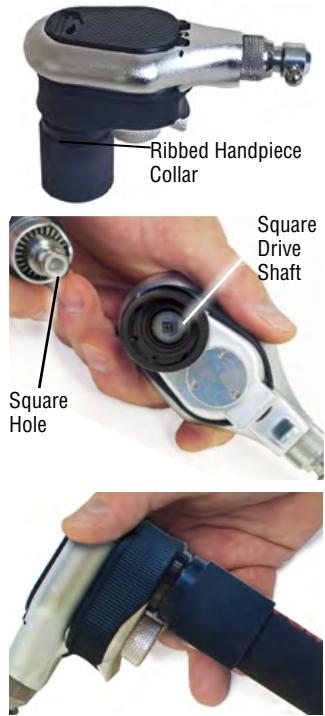


2. Using the HPCCK-0 Chuck Key open the jaws enough to insert the shank of the A-69210 Drive Cup all the way in until the shank of the drive cup is not visible. Tighten with the chuck key.



3. Turn and loosen the Filer's Ribbed Collar so that the handpiece can fit into it. Align the square drive shaft inside the Collar with the square hole in the Drive Cup. Slide the handpiece into the Filer Head until it bottoms out.

IMPORTANT: Tighten the Ribbed Handpiece Collar until it is firmly attached so that it cannot be pulled off.



WARNING:

The filer must be 'Off' or disconnected from the flexible shaft machine during tool or accessory installation, belt changing or stroke adjustment.

Accessory Installation

The Freedom Filer accepts accessories with shank diameters from 3/32" (2.35mm) to 1/4" (6.4mm).

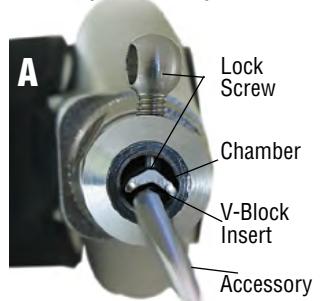
1. Insert the accessory shank into the Filer Chamber as far as it will go. You may first need to loosen the HP89037 Lock Screw.

A. Use one V-Block Insert with 3/32" (2.35mm) Shank Accessories Insert one A-891014 V-Block Insert so that the V-shaped notch holds the accessory shank against the inside wall of the chamber (photo A).

B. Use two V-Block Inserts with 1/8" (3.2mm) or 3mm Shank Accessories

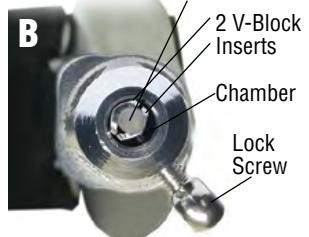
2. Insert two A-891014 V-Block Inserts so that the V-shaped notch holds the accessory shank between the two V-block Inserts (photo B).

3/32" (2.35mm) Shank



NEVER insert abrasive bars or rods directly into the chamber.

1/8" (3.2mm) or 3mm Shank



3. Tighten the Lock Screw so that it securely holds the accessory.

Tip: Insert the A-69219 Hex Key with handle (3mm) through the hole in the HP89037 Lock Screw to tighten accessories with shank diameters from 3/32" (2.35mm) to 1/4" (6.4mm) in the chamber.

Do not over tighten.

Mounting Larger Shank Accessories

5/32" (4mm)— 1/4" (6.4mm) Directly into Filer Collet
Do Not use V-Block Inserts with 5/32" (4mm) to 1/4" (6.4mm) shank accessories. Insert the accessory shank as far as possible into the Filer chamber and tighten the Lock Screw to hold the accessory firmly in place.

The **A-891012 Abrasive Stone Holder** (supplied) must be used to attach abrasive stones or bars to the filer chamber.

NEVER insert abrasive stones or bars directly into the filer.

The A-891012 Abrasive Stone Holder has a 1/4" diameter shank that fits directly into the filer chamber like a 1/4" shank accessory. Stones with round shapes or tools with round shanks should be placed in the groove in the lower jaw to securely mount them.

Mounting Stones in the Abrasive Stone Holder

Using the **A-69219 Hex Key with plastic handle**, loosen the spring loaded jaw. Insert an abrasive stone between the jaws and tighten the jaws until they firmly hold the stone. Stones with round shapes or tools with round shanks should be placed in the groove in the lower jaw to securely mount them.



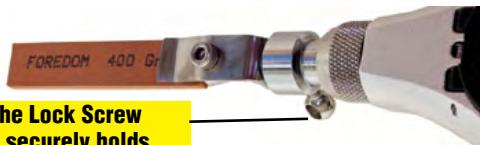
A-69219
Hex Key
with handle



A-891012
Abrasive
Stone Holder

Insert the Abrasive Stone Holder all the way into the chamber so that it bottoms out.

Caution: Over tightening will damage or break the abrasive stone.



Tighten the Lock Screw so that it securely holds the Abrasive Stone Holder.

Stroke Length Adjustment

1. Open the black plastic access door by pushing on the raised arrow on the door towards the filer front and open it.

2. Rotate the large eccentric cam with connecting rod until the stroke adjustment set screw hole is at the 6:00 o'clock position.

3-a & b. Using the **A-69219 Hex Key with handle**, insert it through the access hole in the housing into the stroke adjustment lock screw hole and turn counterclockwise by 1/2 a turn to loosen the stroke adjustment set screw. Hold in the Hex Key in place.

4. Place both prongs on the open-end of the **A-891013 Wrench** into the adjustment slots in the inner eccentric cam and rotate it so that the witness mark lines up with the desired stroke length setting.

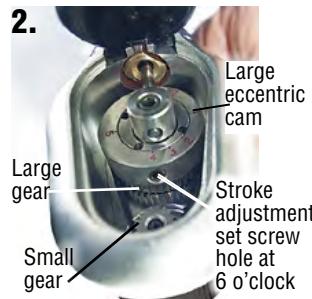
The settings numbered 1 through 5 represent the stroke length in millimeters (5mm is the maximum stroke length). A setting of 1 equals a 1mm stroke. When the witness mark is set between the numbers such as halfway between 2 and 3 the stroke length would be 2.5mm.

5. Once the witness mark is set to the desired stroke number, tighten the stroke length lock screw with the **A-69219 Hex Key with handle**.

6. Remove Hex Key and close access door.



Black Plastic
Access Door



Large eccentric cam
Large gear
Small gear
Stroke adjustment set screw hole at 6 o'clock



3-a.
Access Hole
Hex Key with handle



3-b.
Set screw hole at 6 o'clock



4.
A-891013 Wrench
Witness mark

Drive Belt Replacement and Adjustment

Belt Removal Instructions

It is easier to remove, replace or tension the belt with the H.30 Handpiece attached to the Filer head.

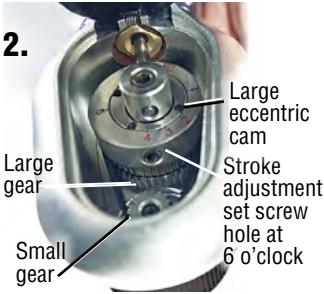
1. Open the black plastic access door by pushing on the raised arrow on the door towards the filer front and open it.

2. Rotate the large eccentric cam until the stroke adjustment set screw hole is at the 6:00 o'clock position.

3-a and b Using the **A-69219 Hex Key with handle**, insert it through the access hole in the housing into the stroke adjustment set screw and hold in place.

4. Use the **UA121 Long Hex Key** to loosen the set screw in the center of the larger eccentric cam by 2 or 3 turns. Remove and set the Long Hex Key aside.

5. Remove the **HP89037 Lock Screw** from the collet end of the Filer.



6. Use the box-end of the **A-89103 Wrench** to loosen the Knurled Collar Nut on the Filer chamber section.

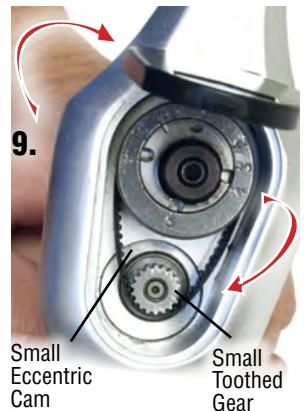
7. Loosen the Knurled Collar Nut by hand until it is unthreaded and gently slide the Plunger Assembly completely out of the housing. Remove Hex Key with handle from center access hole.

8. On each side of the **Filer Head** lift the rubber cushion to expose the small set screws on the sides of the housing. Use the **A-891016 Hex Key** (1.5mm) to loosen the set screws by 2 to 3 turns. **Do not remove the set screws.**

9. Gently turn and rotate the Handpiece and Ribbed Handpiece Collar clockwise while observing the small toothed gear.

Warning: Do not rotate the Handpiece and Ribbed Handpiece Collar more than 1/3 of a complete turn. The small gear will rotate on the small eccentric cam closer to the larger gear and large eccentric cam. This loosens the belt tension.

continued



10. Using needle-nose pliers or tweezers pull the belt off the small gear first. Then gently remove it from the large gear and eccentric cam.

11. Use a cotton swab, pipe cleaner or compressed air to clean out any debris and dust from the main housing chamber.

Belt Replacement Instructions

12. Take the new belt and gently drop it down over the large gear below the large eccentric cam so that it aligns on the large toothed gear.

13. Make sure that the two gears are rotated so that they are the closest to each other as they can be. Then using your finger on the inside of the belt, pull the belt up and over the small gear and push it gently onto the small toothed gear.

Belt Adjustment Instructions

14. Rotate the H.30 Handpiece and Ribbed Handpiece Collar counterclockwise slowly to move the small gear on the eccentric cam away from the large gear and eccentric cam. Make sure that the slack is removed without making the belt too tight.

15. Tighten the set screws on the outer sides of the housing under the rubber cushion with the **A-891016 Small Hex Key** (1.5mm).

Be sure to tighten the small set screws on Both Sides of the Filer Head.

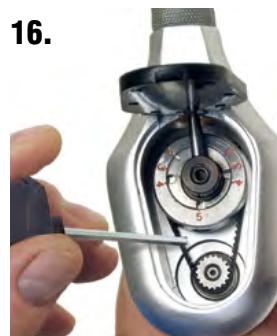


15.

Ribbed Handpiece Collar

16. Check for proper belt adjustment, by applying a light pressure at the mid-way point of the belt using a hex key or pencil. If the belt can be moved more than 1/32" (1mm), loosen the two set screws on each side of the housing and repeat steps 14 and 15 in order to tighten the belt.

17. When all of the belt slack has been removed, a slight tension has been achieved and the set screws have been tightened to lock the belt adjustment, re-install the connecting rod and plunger assembly.



Note: The belt on the Foredom Filer is a gear-belt that does not require high tension to operate properly. For proper adjustment make sure that all the slack is removed without making the belt too tight.

- Rotate the large eccentric cam by hand to observe whether the drive assembly feels smooth as it turns. If it feels uneven, 'lumpy or bumpy' it means that the belt is too tight.

- If the belt is noisy or squeaks it may be too tight.

- Run the unit at high speed with the access door open to observe if the belt is moving in a straight line on either side of the cams. If the belt slaps around it is too loose. **Be careful not to put your fingers inside the chamber where they can be caught by the moving belt.**

- When a new belt has been installed, there will be an initial 'stretch' that takes place. The new belt will become a little loose after several hours of use. This is normal and only requires an adjustment to remove belt slack. After the initial readjustment the drive belt will provide many hours of use without further adjustments.

- **Follow steps 8 and 14-17 if you only need to remove belt slack.**

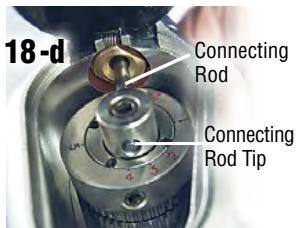
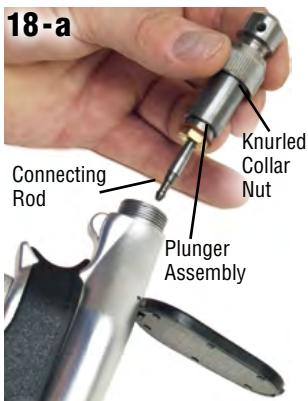
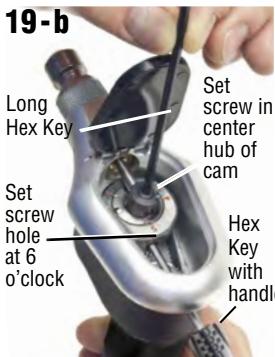
Plunger Reattachment Instructions

18-a, b, c and d. Slide the plunger assembly and connecting rod into the housing so that the connecting rod is inserted into the cross-hole completely. You may have to realign the cross-hole by rotating the center hub in the large eccentric cam. To insure that the connecting rod is completely inserted you will need to thread on the knurled collar nut into the housing. Tighten the plunger assembly snug into the housing with the box-end of the **A-891013 Wrench**.

The tip of the connecting rod should appear on the opposite side of the cross-hole but not extend beyond the hole.

Replace the Lock Screw after tightening.

19. Using the **A-69219 Hex Key with handle**, insert it through access hole in the housing into the stroke adjustment set screw and hold in place. Push and hold the plunger forcibly in to the housing until the connecting rod is fully in place and Using the **UA121 Long Hex Key** tighten the set screw in the center hub of the large cam.



20. Remove hex keys. Close and secure black plastic access door.

Dual Speed Range Dial Control Recommended

We recommend using a Foredom Dual Speed Range Dial Control in place of a foot pedal. This specialized control has 'LO' setting that restricts speed to between 1,000 and 10,000 RPM or 4,000 SPM, the maximum speed or number of strokes allowable for Filer operation. The 'HI' setting permits use at the maximum speed of your motor— 18,000 RPM for Series SR motors and 15,000 RPM for Series TX motors. The key to using this dial speed control is the ability to set the ideal speed for the weight, grit, size and type of abrasive accessory along with the specific geometry of the work piece. Users can set the dial and turn off motor power without losing their setting.



Foredom P/N Description

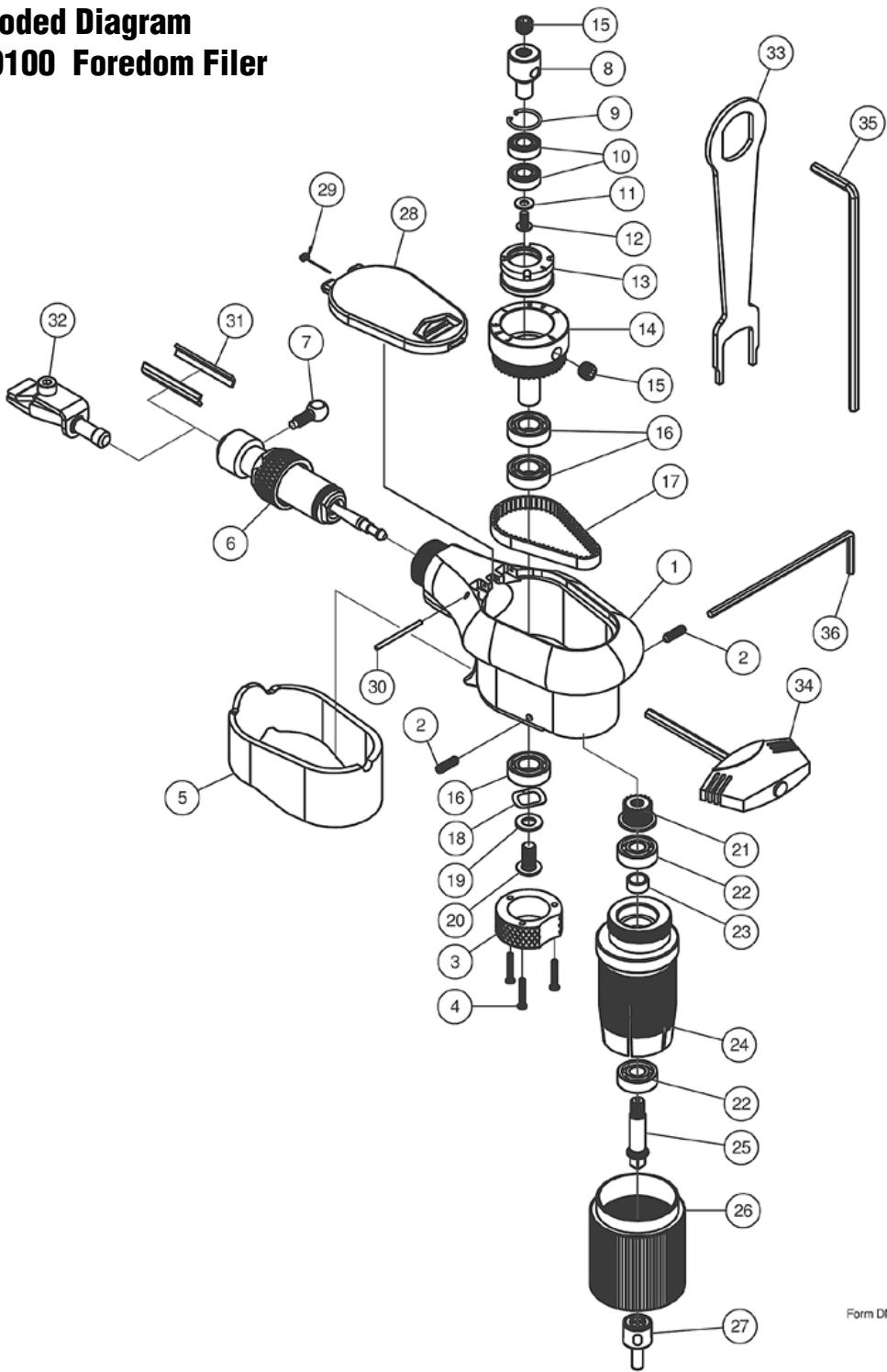
Foredom P/N	Description
C.EMF-1	Dial Speed Control for Series SR Motors, 115v
C.EMXF-1	Dial Speed Control for Series TX Motors, 115v
C.EMHF-2	Dial Speed Control for Series SR Motors, 230v for use in North America
C.EMHF-21	Dial Speed Control for Series SR Motors, 230v for use in United Kingdom
C.EMHF-22	Dial Speed Control for Series SR Motors, 230v for use in Continental Europe
C.EMHF-26	Dial Speed Control for Series SR Motors, 230v for use in Australia



AK89130 Kit with H.30® Handpiece, Mounting Tools, Handpiece Grip, 150 grit File Set, Carrying Case.

AP1131 Carrying Case is also sold separately.

Exploded Diagram A-89100 Freedom Filer

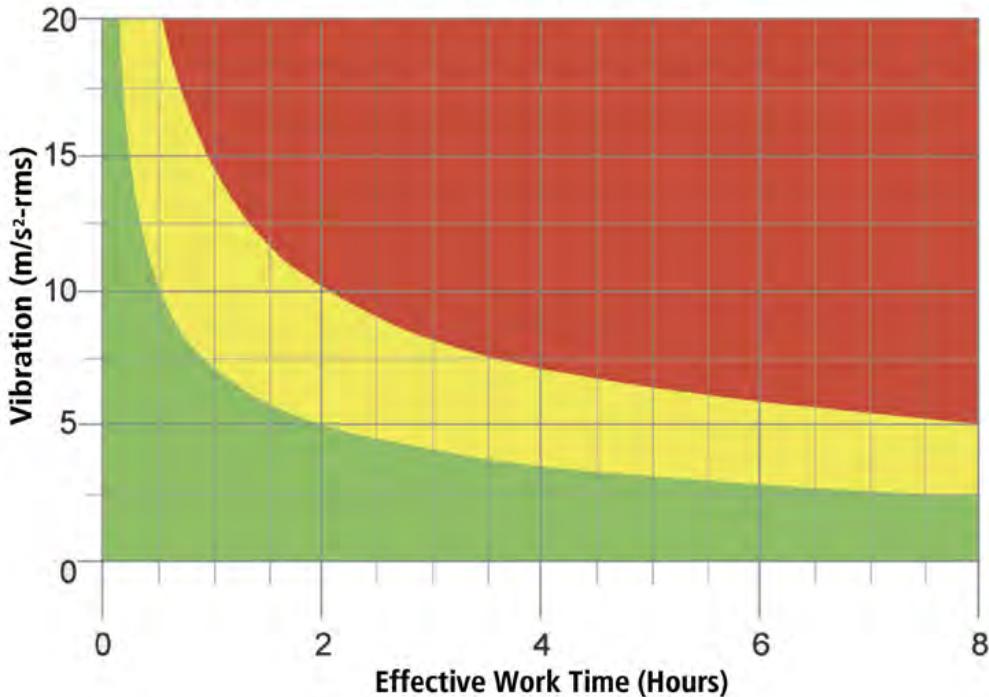


Form DN 6/2014

Parts List A-89100 Freedom Filer

Item	Freedom P/N	Description	Quantity
1	---	Housing	1
2	A-891028	Set Screw, M3 x 10mm	2
3	---	Bearing Cap	1
4	A-891017	Screw, M2 x 12, Cross Recessed	3
5	A-891018	Finger Grip	1
6	A-891019	Piston Assembly (Includes Item 7, Screw)	1
7	H P89037	Locking Screw	1
8	---	Drive Shaft	1
9	A-891020	Internal Circlip	1
10	---	Ball Bearing, 06mm x ø12mm x 4mm	2
11	---	Flat Washer, M3	1
12	---	Screw, M3 x 6mm, Hex Socket Button Head	1
13	---	Eccentric Housing	1
14	---	Stroke Adjustment Pully	1
15	A-891021	Set Screw, M6 x 5mm, Hex Socket	2
16	A-891022	Ball Bearing, 08mm x 016mm x 5mm	3
17	HP8901 6	Drive Belt	1
18	---	Wavy Spring Washer	1
19	---	Flat Washer, MS	1
20	---	Screw, MS x 10mm, Hex Socket Button Head	1
21	---	Pinion	1
22	A-891023	Ball Bearing, 06mm x ø15mm x 5mm	2
23	---	Bearing Spacer	1
24	---	Bearing Seat	1
25	---	Drive Shaft	1
26	A-891024	Ribbed Handpiece Collar	1
27	A-69210	Drive Cup	1
28	A-891025	Dust Cap Assembly (Includes Items 29, Spring, and 30, Pin)	1
29	A-891026	Torsion Spring	1
30	A-891027	Spring Pin	1
31	A-891014	V-Block Insert	2
32	A-891012	Abrasive Stone Holder	1
33	A-891013	Adjustment Wrench	1
34	A-69219	Hex Key, 3mm, with Handle	1
35	UA121	Hex Key, 3mm, Long Arm	1
36	A-891016	Hex Key, 1.5mm	1

Effective Work Time vs. Vibration



- Safe Exposure – No Action Required
- Approaching Exposure Limits – Action Required
- Above Exposure Limits – Should Not Be Exposed

Hand Arm Vibration Limits Established from the EU Occupational Health Directive 2002/44/EC

These factors contribute to vibration exposure while using the Foredom Filer:

Speed or Strokes per Minute – We recommend using a Foredom Dual Speed Range Dial Control in place of a foot pedal. This specialized control has a ‘LO’ setting that restricts speed to between 1,000 and 10,000 RPM or 4,000 SPM, the maximum speed or number of strokes allowable for Filer operation. The ‘HI’ setting permits use at the maximum speed of your motor– 18,000 RPM for Series SR motors and 15,000 RPM for Series TX motors. The key to using this dial speed control is the ability to set the ideal speed for the weight, grit, size and type of abrasive accessory along with the specific geometry of the work piece. Users can set the dial and turn off motor power without losing their setting.

Stroke Length – Stroke length and vibration are directly correlated. The longer the stroke the greater the vibration. Stroke length can be adjusted from 1mm to 5mm.

Weight of Inserted Accessory – The weight of the accessory is also directly proportional to the level of vibration exposure. The Abrasive Stone Holder with a stone is the heaviest accessory that we offer.

Angle of Accessory held Against the Working Surface – The greater the angle from 0° to 90° the greater the vibration. Try and keep your accessory at a low angle and as close to parallel to the work piece to reduce vibration levels.

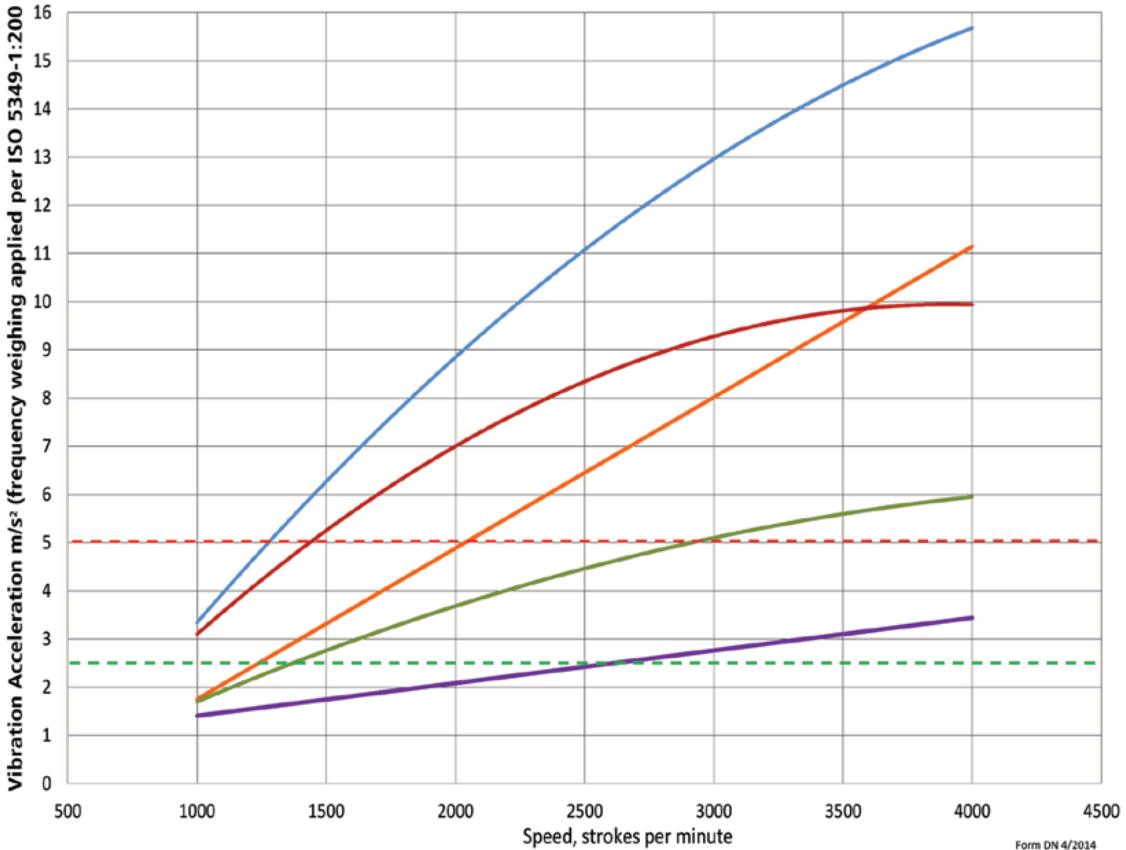
Type of Accessory and Grit – Diamond files and fine grit ceramic stones produce less vibration than coarse grain stone bars and rods.

The operator needs to learn and understand these factors in order to operate the tool with a minimum amount of vibration. When required settings place the tool’s vibration within the yellow or red colors in the chart, then the exposure duration must be limited accordingly.

There may be one factor that cannot be limited – such as the use of the Abrasive Stone Holder with an abrasive stone which adds the greatest amount of weight to the tool. In this example, the operator would reduce Stroke Length and SPM to the lowest settings that perform the work. This is done to keep the overall vibrations as low as possible.

If you must run the Filer within the red zone, then maximum use time must be heeded to limit exposure to these vibrations.

Vibration Diagram– Freedom Filer



A(8) = Average exposure over an 8 hour work day

- 5.0 m/s² A(8)(ELV) exposure limit value
- 1mm Stroke Length, 7.2g
Flat Diamond File AK891012NF
Average Uncertainty K = 1.5 m/s²
- 3mm Stroke Length, 7.2g
Flat Diamond File AK891012NF
Average Uncertainty K = 2.6 m/s²
- 5mm Stroke Length, 7.2g
Flat Diamond File AK891012NF
Average Uncertainty K = 2.6 m/s²
- 2.5 m/s² A(8) (EAV) exposure action value
- 1mm Stroke Length, 27.8g
Polishing Stone AK8941 20 with A-891012 Holder
Average Uncertainty K = 1.0 m/s²
- 3mm Stroke Length, 278g
Polishing Stone AK8941 20 with A-891012 Holder
Average Uncertainty K = 2.0 m/s²

The Diagram plots measured vibration levels at different speeds and stroke lengths when using the Filer with a Flat Diamond File and a Polishing Stone mounted in an Abrasive Stone Holder.

Measurements have been made in accordance with ISO 28927-8:2009/AMD 1:2014. Hand-held portable power tools – Test methods for evaluation of vibration emission – Saws, polishing and filing machines with reciprocating action and small saws with oscillating or rotating action.

The declared vibration exposure values and corresponding uncertainty values were obtained by laboratory type testing and processing using Bruel & Kjaer equipment.

Filer Accessories—

Super Stones Bars and Rods

Super Stones produce uniform surface finishes and come in color coded grits. They are long lasting, heat and wear resistant with ceramic fibers that will not break or dull. They are great for polishing narrow slots, interior and intricate spaces on all types of metals including gold, platinum, stainless, copper, aluminum, and even silicon and plastics. Must be used with Abrasive stone holder.

Bars: 0.5mm thick x 1mm wide x 100mm long

Rods:

3mm dia. x 50mm long

A-SSF12003 1,200 grit

A-SSR10003 1,000 grit

A-SSR8003 800 grit

A-SSR6003 600 grit

A-SSR4003 400 grit

A-SSR3003 300 grit

A-SSR1803 180 grit

A-SSR1203 120 grit

A-SSF120012 1,200 grit

A-SSF100012 1,000 grit

A-SSF80012 800 grit

A-SSF60012 600 grit

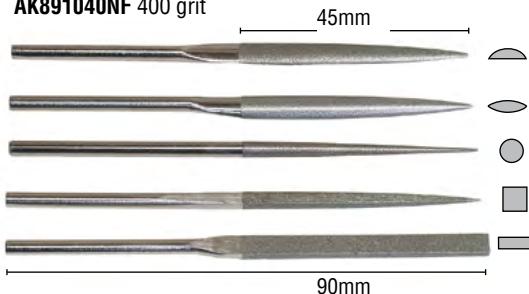
5-pc Diamond Needle File Sets in 3 Grits

Shapes and dimensions shown below. Also available individually

AK891012NF 150 grit (comes in all Kits except AK89000)

AK891020NF 200 grit

AK891040NF 400 grit



Abrasive EDM Stones in 3 Grits

Available individually or in assortment kit.

(One of each comes in all Kits except AK89000)

Dimensions: 2mm thick x 8mm wide x 68mm long

A-894120 120 grit

A-894220 220 grit

A-894400 400 grit

AK894000 assortment
with 2 of each grit



Filer Kits

AK89000 Kit with Mounting Tools and Handpiece Grip No Handpiece, No Files, No Carrying Case.

AK89110 Kit with Mounting Tools, Handpiece Grip, 150 grit File Set and Carrying Case, No Handpiece, 1 ea. of Abrasive EDM Stones.

AK89130 Kit with H.30® Handpiece, Mounting Tools, Handpiece Grip, 150 grit File Set, Carrying Case, 1 ea. of Abrasive EDM Stones.

AK89130H Kit with square drive H.30H Handpiece, Mounting Tools, Handpiece Grip, 150 grit File Set, Carrying Case, 1 ea. of Abrasive EDM Stones.

AK89130SJ Kit with slip joint H.30SJ Handpiece, Mounting Tools, Handpiece Grip, 150 grit File Set, Carrying Case, 1 ea. of Abrasive EDM Stones.

LIMITED WARRANTY

Freedom Electric Company warrants the Filer Attachment to be free of defects in material or workmanship for a period of one year after purchase.

Blackstone Industries, LLC d/b/a The Freedom Electric Company warrants, to the original purchaser only, that its products will be free from defects in material or workmanship for the applicable period of time indicated above following the purchase date. During the warranty period, the defective product will be repaired or replaced without charge or, at our sole option, the purchase price will be refunded. This warranty does not cover damage caused in transit or by accident, misuse or ordinary wear.

ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO WARRANTIES OF FITNESS AND MERCHANTABILITY, ARE HEREBY LIMITED IN DURATION TO A PERIOD ENDING ONE YEAR FROM DATE OF PURCHASE, AND WE WILL NOT BE LIABLE OR RESPONSIBLE FOR ANY SPECIAL OR CONSEQUENTIAL DAMAGES.

Repair or replacement will be made at our option if the product is returned post-paid to:

Freedom Electric Company

16 Stony Hill Road, Bethel, CT USA 06801

All warranty repairs must be done at the factory at the above address. We will not pay any shipping or transportation charges.

This warranty only covers the original purchaser of the product. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

FOREDOM®

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