

FOREDOM® Angle Grinder Attachment

Versatile Angle Grinder attaches to Foredom handpieces H.30®, H.30H, and H.30SJ. It is quality-machined, sturdy and compact. Use for a broad range of grinding, sanding, polishing and finishing work with 2" and smaller discs and 3/8" arbor hole wheels.



Made for Foredom's H.30® Handpiece!

Read Instructions Before Use!

Includes: 2 hubs for 3/8" arbor hole wheels, 120 grit flap wheel (installed), velcro-type disc mandrel, Screw-Lok mandrel, assorted sanding discs, and tools for attaching. Add-on accessories available separately.

One Year Limited Warranty

Specifications:
Length: 3 1/4"
Width: 2 1/8" (at widest)
Depth: 2 1/4"
Arbor Shaft has a M8 x1.0 thread

Optimum Motor Operating Speed:
5,000 –15,000 RPM.
Max. Speed: 18,000 RPM for short intervals
1 to .75 gear reduction

www.foredom.net

Foredom Electric Co.
Bethel, CT 06801 USA

F-1363 12/17 n Printed in USA

AK69110



SAFETY INSTRUCTIONS

Foredom® Angle Grinder Attachment

Please read these safety instructions before operating this tool. They are for your protection and should always be followed to reduce the risk of personal injury or damage to the handpiece.

Safety Instructions

Never operate this Angle Grinder in Reverse motor rotation or at high speed.

Always wear proper eye protection while using this attachment on your H.30® handpiece.

Do not wear loose fitting clothing or jewelry. Tie back long hair.

Keep your hands away from the moving accessory.

Secure the workpiece in a vise or other type of clamp.

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

Make sure your power tool is unplugged when you are changing accessories or performing maintenance.

Do not apply excessive pressure against the wheel or disc. Let the tool do the work.

Optimum Motor Operating Speed is 5,000 –15,000 RPM.

Max. Speed: 18,000 RPM.

1 to .75 gear reduction reduces speed by 25% (see yellow chart). Even with gear reduction, running motor at maximum speed is unsafe and will lead to heat, vibration, and premature wear of the grinder. For best performance, run the motor between half and three-quarter speed. Use a light touch on your foot pedal and avoid depressing it fully or use a dial control.

Virtually maintenance-free, requires no lubrication!

Never immerse the unit in any cleaning solution!

Inspect the Angle Grinder and Drive Cup after every 50 hours of use. Make sure that the spindle rotates freely when removed from the H.30® handpiece.

Wipe off with a damp rag only. Do not use compressed air as dust particles may be forced into the ball bearings or gears and cause damage.

One Year Limited Warranty

Please retain your proof of purchase for warranty repairs or replacement.

Foredom Motor – Speed	RPM	Angle Grinder RPM
SR – Full Speed	18,000	13,500
TX – Full Speed	15,000	12,250
SR – Half Speed	9,000	6,750
LX – Full Speed	5,000	3,750

Angle Grinder Provides Gear Reduction 1 to .75

ASSEMBLY

Attaching Angle Grinder Head to H.30® Handpiece

Remove handpiece from flexible shaft before mounting angle grinder.

1. Use the chuck key to open the 3-jaw chuck on your handpiece.

2. Insert and tighten the drive cup (A-69210) until drive cup head is flush with the chuck jaws.

3. Loosen angle grinder collar holdfast screw (UA690).

NEVER operate this Angle Grinder in Reverse!

4. Align and match up the square hole in the drive cup with square inner drive shaft in angle grinder spindle and insert handpiece until it bottoms out into the mounting collar.

Visit www.foredom.net to view videos on this product.



5. Tighten collar holdfast screw.

6. Check that the handpiece is engaged by turning the mounted flap wheel or accessory by hand while looking into bottom of handpiece to ensure that handpiece keyway or spindle is rotating. When you are sure that the Angle Grinder head is attached properly, you can reconnect the H.30® handpiece to the flexible shaft.

Make sure your power tool is unplugged when you are changing accessories!

Removing & Installing Accessories:

3/8" Diameter Arbor Hole Accessories

7. Removing the flap wheel mounted on your angle grinder
Insert the open-end wrench (A-69218) onto flats on the angle grinder spindle through the slot in the open end of the safety shield. You may need to turn spindle to align the flats so the wrench fits all the way in and prevents the spindle from turning.

8. While holding the open-end wrench firmly, insert the 3mm hex wrench (A-69219) into the center wheel mounting screw and turn counterclockwise.



Foredom Angle Grinder Attachment

AK69110 KIT includes:



For video instructions and maintenance information go to:
www.foredom.net

9. Remove the 5mm (A-69212) Short Hub with 8mm (UA690) screw from flap wheel and insert new accessory with the same arbor hole thickness.

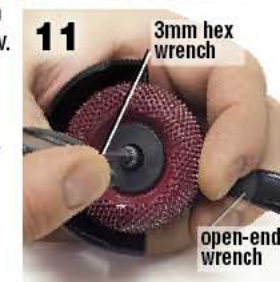
Hubs for 3/8" Diameter Arbor Hole Accessories (included)



Thinner Accessories with arbor hole thickness from 1/32" – 5/32" (1mm – 4mm) require the **Short Hub** with 8mm screw (A-69212).

Thicker Accessories with arbor hole thickness from 5/32" – 9/32" (4mm – 7mm) require the **Long Hub** (A-69212L) & 14mm mounting screw.

10-11. Insert new accessory with hub into Inner Wheel Arbor (A-69213) and tighten wheel mounting screw with 3mm hex wrench while holding the open-end wrench to prevent spindle from turning.



Installing Disc Mandrels (or similar accessory) to the Threaded Spindle

Follow steps 7 – 9 to remove accessory and hub.

12. Remove Inner Wheel Arbor (A-69213) by holding open-end wrench (A-69218) in spindle flats to prevent spindle from turning and inserting pins on Face Spanner Wrench (A-69217) into holes on inner wheel arbor and turning counterclockwise to unscrew and remove.

13. To Attach: Hold open-end wrench on spindle flats to prevent spindle rotation. Tighten mandrel or arbor snugly by hand. This works for the 2 Disc Mandrels shown at right above. Use this same method to attach Optional Quick Change Arbor (A-69223) or Optional Right Angle Adapter (A-69224).

All of these have a 8mm X 1.0mm thread.

IMPORTANT: To prevent excessive run-out *Always* be sure the hub extends at least 1/32" (1mm) from the bottom of the accessory into the Inner Wheel Arbor (A-69213 shown in step 10 photo).



A-69222 Velcro-Type Disc Mandrel



A-69225 Screw-Lok Disc Mandrel



Accessories included:



A-2202 120 grit Flap Wheel
Max. Speed 10,000 RPM
comes installed on Angle Grinder Head

The **A-69212 Short Hub** with **UA690 Mounting Screw** holds it onto the Angle Grinder Head.

Assembly instructions 7 – 9 describe how to remove the Flap Wheel *and* how to remove the Hub from the Flap Wheel.

Screw-Lok Discs

A-3602
Sandpaper
Disc, 40 grit
6-holes

A-3603
Sandpaper
Disc, 80 grit
6-holes

A-3604
Sandpaper
Disc, 120 grit
6-holes

A-3606
Sandpaper
Disc, 240 grit
6-holes

A-3522
Abrasive
Pad, 80 grit

A-69225
Screw-Lok
Disc
Mandrel



Also Included with your Angle Grinder Screw-Lok Disc Mandrel and Five 2" Discs

Max. Speed 10,000 RPM
Screw-Lok Disc Mandrel screws onto the Angle Grinder. It has a threaded hole for attaching discs with a plastic screw back. The Sandpaper Discs overhang the backing for smooth sanding edges and flexibility on sanding contours. **See Installing Disc Mandrels at left, steps 7–13.**

Imperial™ Microfinishing Film PSA Discs:

A-4594
320 grit

A-4593
400 grit

A-4592
600 grit

A-10041-5
PSA
Velcro[®]
discs 5-pk.

A-69222
Velcro[®] Type
Disc Mandrel



USE WITH



USE WITH



Discs should be Centered

Do Not Mount Discs Off-Center



Included with your Angle Grinder PSA Sanding Discs

The Angle Grinder comes with assorted sanding discs and 5 PSA (Pressure Sensitive Adhesive) Velcro[®] discs. To use the sanding discs with the A-69222 Disc Mandrel a PSA Velcro[®] disc (A-10041) must be attached to the back of the PSA sanding discs. The Velcro[®] disc insulates the sanding disc, prevents slippage and allows removal and reuse of the sanding discs. Velcro-type backed discs can also be used with Optional Velcro[®] Sanding Heads shown on reverse.

Max. Speeds:
PSA sanding discs
10,000 RPM

To properly install the sanding discs: Carefully line up the sanding disc and the PSA disc with the disc mandrel so that the mandrel is centered. An even, exposed edge will be visible around the mandrel's edge. If it looks off center, remove and replace it until it looks centered and press down to secure it to the surface.

If Sanding Discs are installed Off Center it can cause vibration, premature wear of both sanding disc and mandrel. It may hit the safety shield when rotating.

Visit www.foedom.net for how-to videos and more about these products.

Yellow highlights indicate items included with the AK69110 Angle Grinder kit

Foedom reserves the right to substitute comparable accessories in kits.



A-D11

2" Cut Off Wheel 3/8" Diameter Arbor Hole

Max. Speed 30,000 RPM 2" x 3/64" thick, 60 grit, Fiberglass Reinforced Cut-Off Wheels are used to cut off, groove, and trim metal, wood, and ceramics.

Aggressive Shaping and Sanding hard and soft woods, acrylic, diestone, plaster, hard rubber and fiberglass



A-KB25626 Red Flat Face Coarse

A-KB25627 Blue Flat Face Fine

A-KB25628 Red Round Face Coarse

A-KB25629 Blue Round Face Fine

Typhoon 2" Typhoon Discs 3/8" Diameter Arbor Hole

Max. Speed 10,000 RPM

Typhoons have unique structurally aligned tungsten carbide points that last long and do not load quickly. Use the fine grits for general shaping and sanding. The coarse grit is for rapid and aggressive shaping and roughing out work. Ideal for use on hard and soft woods, acrylic, die stone, plaster, hard rubber and fiberglass.



A-69212 5mm Short Hub with 8mm screw

A-HB58 Brass Brush For easily cleaning Typhoon Discs. It removes dust or chips from between rows of carbide points. **Caution – Do not clean Typhoons with a file card or steel brush.**



For complete kit contents go to: www.foedom.net

AK6901 Stone Carving Kit 20pc.

Max. Speed 10,000 RPM



AK6903 Wood Carving Kit 72pc.



Maximum Speeds for each are listed in accessory descriptions.

AK6905 Metal Working Kit 38pc.



Maximum Speeds for each are listed in accessory descriptions.



A-10041 PSA Velcro Discs Velcro loop fabric surface on one side and PSA adhesive on the other hold PSA backed abrasive discs listed here to the velcro-type hook surface of the A-69222 Disc Mandrel or velcro Sanding Heads. **This combination is required** to use the Foedom Angle Grinder with a PSA backed abrasive disc. It insulates the disc, holds it tight and allows removal and reuse of sanding discs.

PSA discs for Fine Polishing, Sanding and Microfinishing on stone, glass and metals



A-4591 A-4592 A-4593 A-4594 A-4596 A-4598

2" Imperial Microfinishing Film Disc with (PSA) Pressure Sensitive Adhesive Backing

Max. Speed 10,000 RPM Use 3M Imperial Microfinishing Film PSA discs dry on metal and wet on stone. High strength polyester film backing coated with premium, micron graded aluminum oxide particles provides greater cutting efficiency and is resin bonded for increased durability. This fast-cutting abrasive provides gentle, contoured polishing.

10-Packs	Grit / Micron	10-Packs	Grit / Micron
A-4591-10	1200 / 9	A-4594-10	320 / 40
A-4592-10	600 / 15	A-4596-10	220 / 60
A-4593-10	400 / 30	A-4598-10	180 / 80



2" Flexible Diamond Sanding Discs with (PSA) Pressure Sensitive Adhesive Backing

Max. Speed 10,000 RPM 3M Flexible Diamond discs are made from a 2-ply polyester backing film evenly coated with diamond filled nickel plated dots. Grind, sand, and smooth wet or dry on glass, carbide, composites, plastic, enamels, stone, steel, exotic alloys, gypsum, ceramics, wood, bone, chrome cobalt, painted or plated surfaces. When working with gemstone, rock, ceramics, bone and glass they should be used wet.

2" Flexible Diamond Sanding Discs Part Nos. and Grits:

A-5750 5pc. Assortment with 1 of each disc listed below.		
A-5752 60 grit	A-5754 220 grit	A-5758 800 grit
A-5753 120 grit	A-5756 400 grit	



A-4452 A-4453 A-4454 A-4455 A-4456 A-4457 A-4583

2" Diamond Microfinishing Sanding Disc and Diamond Lapping Film Disc with (PSA) Pressure Sensitive Adhesive Backing

Max. Speed 10,000 RPM 3M Diamond Microfinishing abrasives have flexible film backing for metal working and lapidary applications. They are effective on stone, glass and hard to work on stainless steel and titanium. Use them wet when working with gemstone, rock and glass. Use 3M Imperial™ Diamond Lapping Film Disc (A-4583) for lapidary and metalworking. Use wet to reduce heat buildup and loading. The strong, flexible 3-mil backing adheres to A-10041 PSA Velcro Disc attached to a mandrel or sanding head.

AK4400 7pc. Assortment with 1 of each disc listed below.

Part No.	Micron Grade	Grit	Part No.	Micron Grade	Grit
A-4452	125	120	A-4456	20	800
A-4453	74	220	A-4457	9	1200
A-4454	45	320	A-4583	3	4000
A-4455	30	400			



USE WITH short hub

A-69212 5mm Short Hub

2" Sanding Flap Wheels 3/8" Diameter Arbor Hole

Max. Speed 10,000 RPM Aluminum oxide sanding flap wheels made of high-grade mineral and a bonding system which reduces shelling of the mineral, mounted on a solid surface are economical abrasives for fast clean-up and pre-polishing.

Part No.	Grit	Part No.	Grit
AK2200 Assortment, 1 ea. 60, 120, 240, 320 & 600 grit.		A-2204	320
		A-2205	600



Velcro® & Foam Sanding Heads
3/8" Diameter Arbor Holes

No Arbor hole
Velcro® surfaces

P/N	A-10043	A-10044	A-10045	A-10046	A-10047	A-10048
Density	Xtra Firm	Firm	Medium	Soft	Soft	Soft
Thick	3/16"	5/16"	3/8"	5/8"	1/4"	1/2"



A-69212L 8mm Long Hub



A-10041 PSA Velcro disc

Max. Speed 20,000 RPM Sanding Heads can vary the firmness of pressure from an abrasive disc. Use PSA Velcro® Disc A-10041 to attach sanding discs to sanding heads. Heads with arbor holes have a velcro hook surface and mount onto the Angle Grinder with the 8mm Long Hub (A-69212L). Sanding Heads with no arbor holes attach to A-3705 Screw-Lok Disc backs with Velcro Hook fronts, attach to a A-69225 Screw-Lok Mandrel (shown below) or onto A-69222 Velcro Hook Surface Mandrel so that they can mount onto the Angle Grinder.

For Sanding Heads and Discs with No Arbor Hole
USE WITH



A-3705 Screw-Lok Disc with Velcro Hook surface

A-69225 Screw-Lok Disc Mandrel



2" Screw-Lok Aluminum Oxide Sandpaper Discs with 6 holes

Max. Speed 10,000 RPM

Part No.	Grit
A-3601	24
A-3602	40
A-3603	80
A-3604	120
A-3606	240
A-3607	320
A-3608	400
A-3609	600

These discs screw into the Screw-Lok Mandrel – at right. The 2" discs overhang the plastic backing for smooth sanding edges and flexibility on sanding contours. 40, 80, 120 and 240 grit discs are included with the Angle Grinder. Assortments and other grits are listed.



A-69225 Screw-Lok Disc Mandrel

Assortments

AK3600	2 ea. 24, 40, 80, 120, 240, 320, 400 & 600 grit 16 pc.
AK3610	2 ea. 24, 40, 80, & 120 grit 8pc.
AK3620	2 ea. 240, 320, 400 & 600 grit.

Tough blending, smoothing and finishing on metals, plastics & composites

2" Screw-Lok Abrasive Pads **Max. Speed 10,000 RPM**

Long lasting, aggressive discs for tough blending and finishing. Ideal for deburring, oxide and fire scale removal, cleaning, blending, and smoothing. Layered, durable unitized or non-woven disc construction with Screw-Lok backing for secure and easy attachment to Screw-Lok Disc Mandrel (A-69225).



A-3512 **A-3514** **A-3522** **A-3524** **A-3526** **A-3527**

6pc. Assortment **AK3500** includes 1 of each listed below.

Part No.	Thick"	Color	Grit	Type
A-3512	9/16	black	ultra rough	unitized
A-3514	19/32	purple	rough	unitized
A-3522	5/32	brown	80	non-woven
A-3524	5/32	red	120	non-woven
A-3526	5/32	green	240	non-woven
A-3527	5/32	blue	320	non-woven



A-10055 Unitized Wheel 1/4" thick



A-69212L 8mm Long Hub with 14mm screw



ARFWAGSE Square Edge 3/4" thick



A-KE6 Knife Edge for polishing grooves



A-3402 Screw-Lok Backed Felt Wheel

Blending and Smoothing metals and composites

A-10055 2" Unitized Wheel with 3/8" Diameter Arbor Hole

Max. Speed 30,000 RPM Only use dry. Made of coarse non-woven fiber coated in aluminum oxide. Ideal for deburring, oxide and fire scale removal, cleaning, blending, and smoothing. **Use on edge, NOT flat side.**

Polishing and Lapping metals, plastics and wood

2" Felt Wheels with 3/8" Diameter Arbor Hole **Max. Speed 20,000 RPM**

Made from hard density, tightly compressed, top quality wool felt, felt wheels are used for polishing and lapping on metals, plastics wood and other materials. They hold an edge for working in angles and corners and are used with polishing compounds such as those listed below.

2" Screw-Lok Felt Wheel 5/16" thick **Max. Speed 10,000 RPM**

Made from medium hard, top quality wool felt, felt wheels are for polishing and lapping on metal, plastic, wood and other materials. The softer edge provides a flexible surface for contours. It is used with polishing compounds.



Polishing Compounds

Three of Freedom's most popular polishing compounds:
Tripoli (Brown) for general cutting down and scratch removal on non-ferrous metals. (**A-4002** -4.5 oz. bar)
Platinum White is for final polishing. Produces a deep luster on metals and plastic. (**A-4006** -5.75 oz. bar)
Carnauba is the hardest natural wax available. It is good for producing a high luster on wood. (**A-4008** -2 oz. bar)

Grinding, Deburring, Smoothing and Cleaning metals, stone, diestone, plastics, and other materials fiberglass, diestone, plastics, and other materials



A-10054 cup wheel **A-10062** taper **A-10063** **A-10068** **A-10064** **A-10065** cup wheel

2" Abrasive Wheels with 3/8" Diameter Arbor Hole

Max. Speed should not exceed 15,000 RPM Aluminum Oxide wheels are used on high tensile, tough materials including stone, porcelain, glass, steel and other hard metals. They hold their geometry well.

A-10054 Aluminum Oxide 150 grit Cup Wheel – for medium to fine finishing.

A-10062 Aluminum Oxide 120 grit Tapered Wheel – for medium to fine finishing. **Use on edge, NOT flat side.**

A-10063 Aluminum Oxide 400 grit –for extremely fine cutting. **Use on edge, NOT flat side.**

A-10068 Silicon Carbide 100 grit –for grinding, rough finishing, deburring, smoothing, and cleaning low-tensile, brittle or "smeary" type materials such as aluminum, brass, stainless steel, glass, stone, and non-metals. **Use on edge, NOT flat side.**

A-10064 and **A-10065** - 1/2" thick cup working face CeramCut Blue 120 grit – for faster material removal, cooler running with a unique ceramic and aluminum oxide abrasive grain structure that lasts 3 to 5 times longer than standard abrasives. Can be used on hardened and mild steel, steel alloys, chrome cobalt, titanium, platinum, other ferrous metals and wood. Non-impregnating and non-contaminating. **Use A-10064 only on edge, NOT flat side.**

Use A-10065 on 1/2" edge or 5/8" flat side.



A-69212L 8mm Long Hub with 14mm screw

A-69224 Right Angle Adapter mounts on the Angle Grinder Attachment for Foredom H.30®, H.30H, or H.30SJ to convert it into a right angle handpiece



- Fits into tight spaces and adds versatility to Foredom's Angle Grinder Attachment
- Comes with 2 collets for 3/32" and 1/8" shank accessories
- Requires a Foredom H.30®, H.30H, or H.30SJ handpiece, angle grinder attachment and flex shaft machine
- Can also use 1/16" and 3mm collets

Contact your favorite Foredom® dealer to order it.

For video instructions go to: www.foredom.net



Carving, Texturing, Cleaning, Finishing, Blending, Burnishing, Pre-polishing and Polishing all precious & non-precious metals, hard & soft wood, acrylics, and ceramics

6-packs of 2" Radial Bristle Discs



Yellow	White	Red	Blue	Pink	Peach	Lt. Green
A-4542-6	A-4543-6	A-4544-6	A-4545-6	A-4546-6	A-4547-6	A-4548-6
80 grit	120 grit	220 grit	400 grit	1,200 grit Pumice	3,000 grit 6 micron	14,000 grit 1 micron

Scotch-Brite™ 2" Radial Bristle Discs

Max. Speed 10,000 RPM 3/8" Diameter Arbor Hole Max.

Scotch-Brite™ patented radial bristle discs are molded plastic discs embedded with a blend of patented 3M Cubitron™ and aluminum oxide mineral. Cubitron is a tough, long lasting ceramic aluminum oxide mineral with sharper edges than regular aluminum oxide. The abrasive filled bristles apply a continuous fresh supply of mineral to the work piece eliminating the need for compounds. The flexible bristles will reach into grooves and contours on irregular surfaces or work on flat areas. They can remove dirt, rust, and oxidation without damage to the underlying surface. They run cool and will not load up with removed material. Because no compounds are needed these discs generate far less dust. Varying the speed allows you to obtain different surface textures and finishes.



A-69212 5mm
Short Hub with
8mm screw



A-69212L 8mm
Long Hub with
14mm screw

Depending on number of discs
USE WITH Short or Long Hub



Installing 2" Radial Bristle Discs

3/8" Diameter Arbor Hole Max.

1. You can mount up to 2 Radial Bristle Discs on the 5mm Short Hub (A-69212) and 4 Radial Bristle Discs on the 8mm Long Hub (A-69212L).

2. **Mount the discs so that the bristles curve clockwise from the base to the tip.**

3. Remove 5mm Short Hub with 8mm wheel mounting screw from flap wheel and mount radial bristle discs as shown above in Step 1. **Important note:** Always ensure that the Hub extends 1/32" or 1 mm from the bottom of the accessory into the inner wheel arbor (A-69213) to prevent excessive run-out.

**Motor
Rotation
shown in
Forward**



**2 Discs:
Use A-69212
SHORT
(5mm) Hub**

**Motor
Rotation
shown in
Forward**



**4 Discs:
Use A-69212L
LONG
(8mm) Hub**

Scotch-Brite™ 2" Roloc End Brushes

Max. Speed 10,000 RPM

Part No. Grit Color

A-4504 36 green

A-4505 80 yellow

A-4506 120 white

Mount with **A-69225**
Screw-Lok Mandrel.



USE WITH