

# **FOREDOM®** **AllSet®**

## **AK846 Sander/Planer Kit and AK845 GRS Adapter Instruction Handbook**



**The Foredom Electric Company**

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**FOREDOM®**



# FOREDOM® AllSet®

## Sander/Planer Kit Instruction Handbook

**Please Note:**

*A Foredom No. 30® Handpiece is Required to Operate this Kit.*

Sand, grind, polish and shape with ease using this compact, convenient and multi-purpose tool.

Precisely control not only the angle, but also the depth of your cut or finish.

Adjust quickly to any angle from 0° to 90°; three-position adjustable guides for setting up compound angles.

Save on fabrication time and avoid tedious hand-filing and sanding tasks.

Includes an easy-to-mount planer attachment that can be used with burs or sanding drums to cut or grind angles on virtually any material-platinum, gold, silver, wax and even on wood. Create your own bezel settings and custom designs.

Works with the Foredom® No. 30® handpiece and attaches easily to the GRS Benchmate™ mounting plate and AllSet® adapter (see page 10 for details and to order).

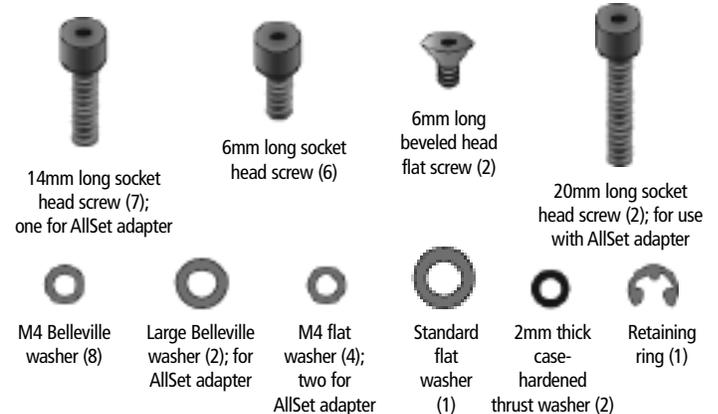
Quality-made in the USA of highly durable materials for a tool that stands up to multiple demands and frequent reconfigurations.

### Hardware Notes

1. The Belleville washers in this kit are dome-shaped and apply only partial tension so pieces like the rotator arm (page 3) can be attached securely but move freely. Once the screw is fully tightened, the arm is locked in place. When using Belleville washers, always place the domed side up and against the top of the screw head.
2. The long ends of the large and medium Allen wrenches are slightly rounded so the wrenches can be used at a slight angle, if necessary.
3. The 6mm long flat screws are measured from the top of the head to the bottom of the threading; the socket head screws are measured from the bottom of the head cap to the bottom of the threading.

### Hardware List

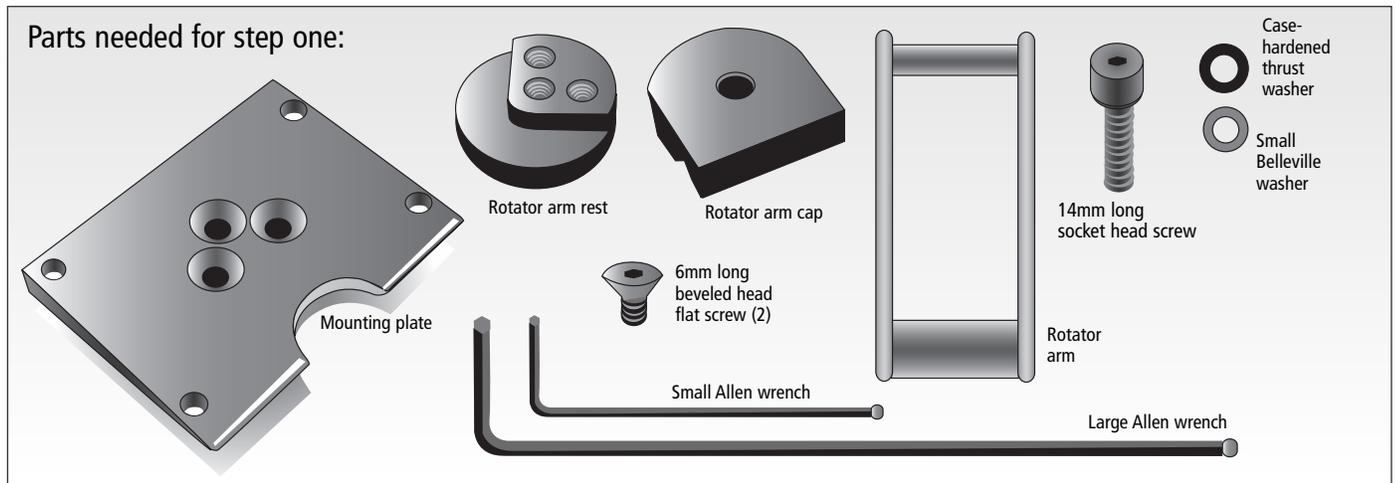
Your AllSet kit contains the following screws, washers and fasteners:



### Safety Notes

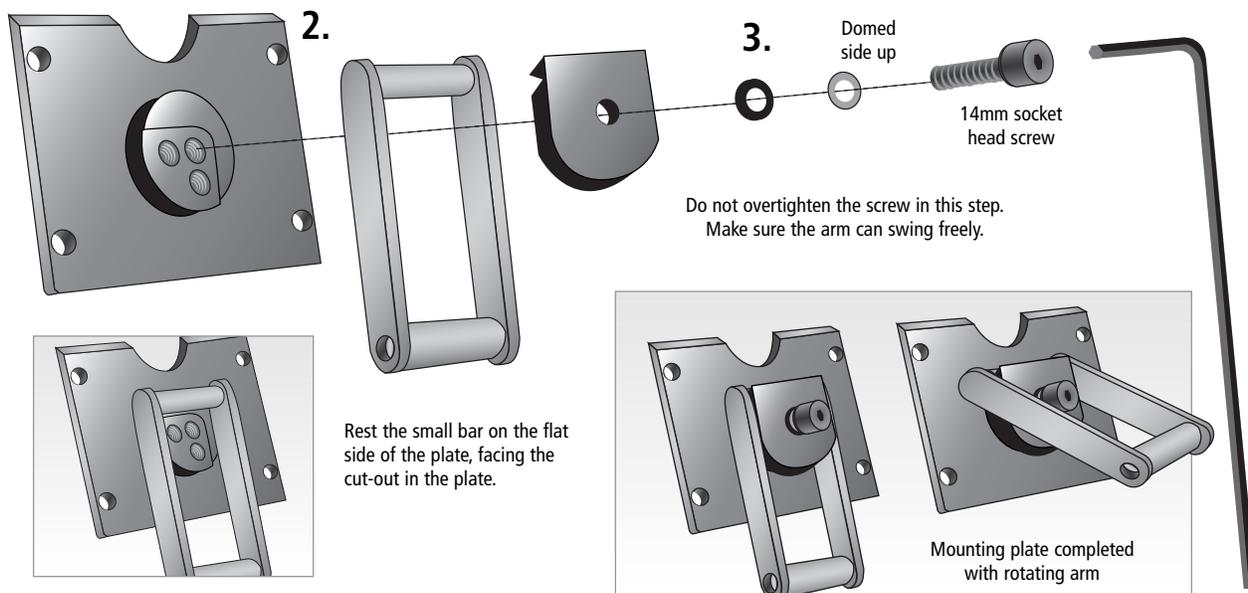
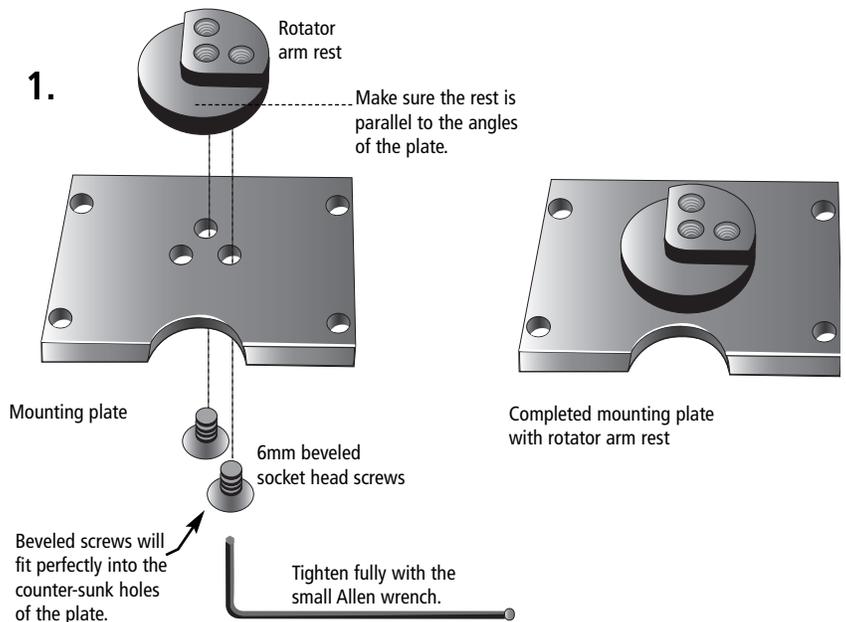
1. Always use eye protection when cutting prongs and channels with your AllSet Master Stone-Setting Kit or when using any power tool.
2. Wear a safety mask when using this tool to avoid inhaling sanding dust and oother fine particles.
3. Always allow the handpiece motor to come to a full stop before making any adjustments on the sander/planer.
4. For safety and effectiveness with any power tool, maintain a clean work surface and general work area.

# Assembly—step one

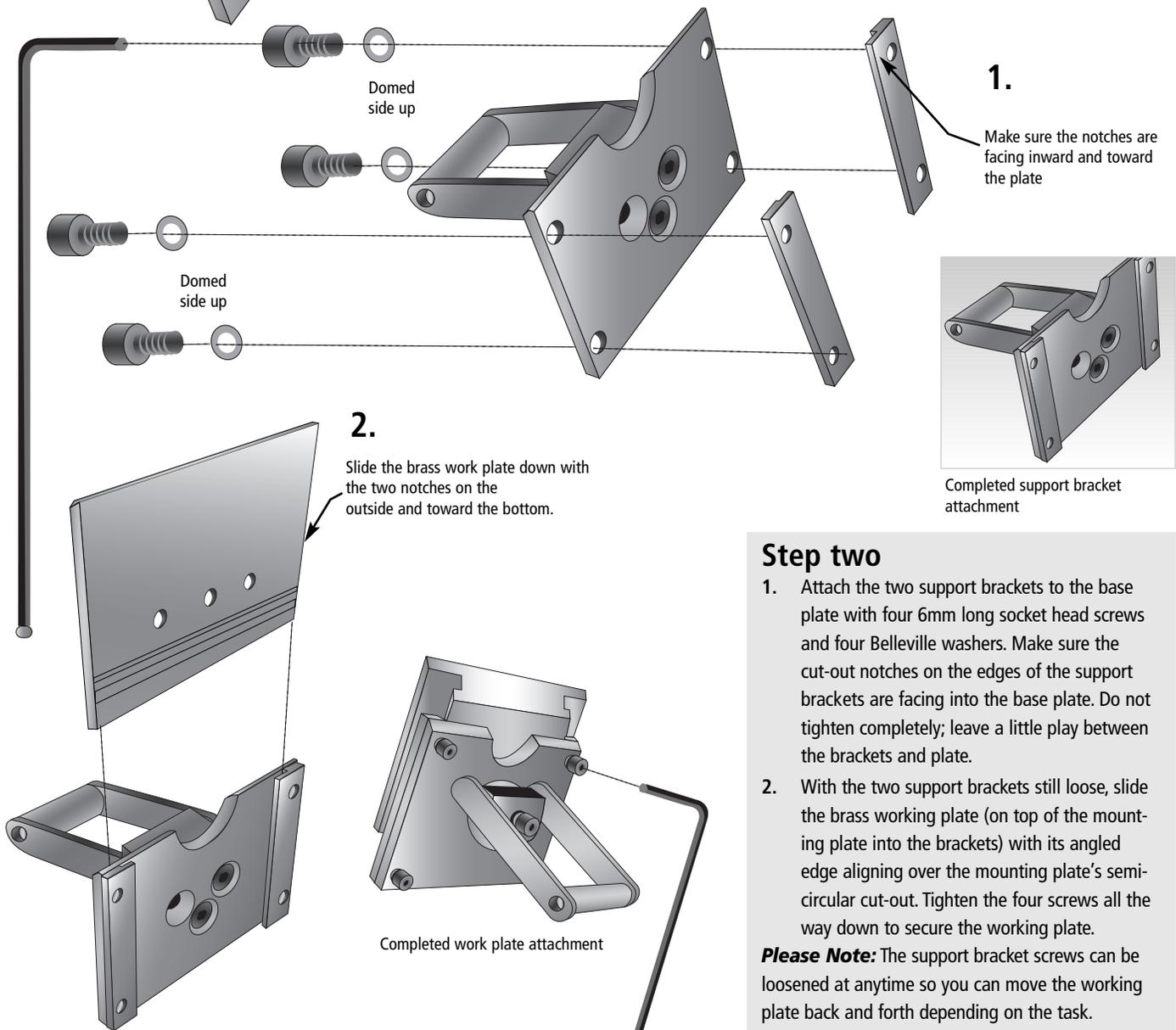
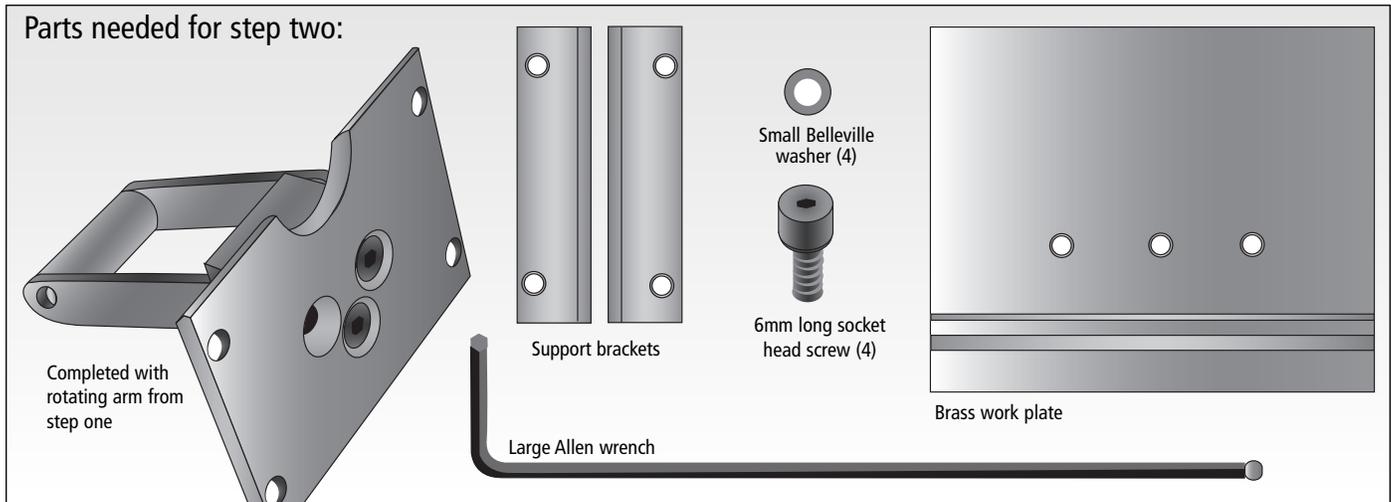


## Step one

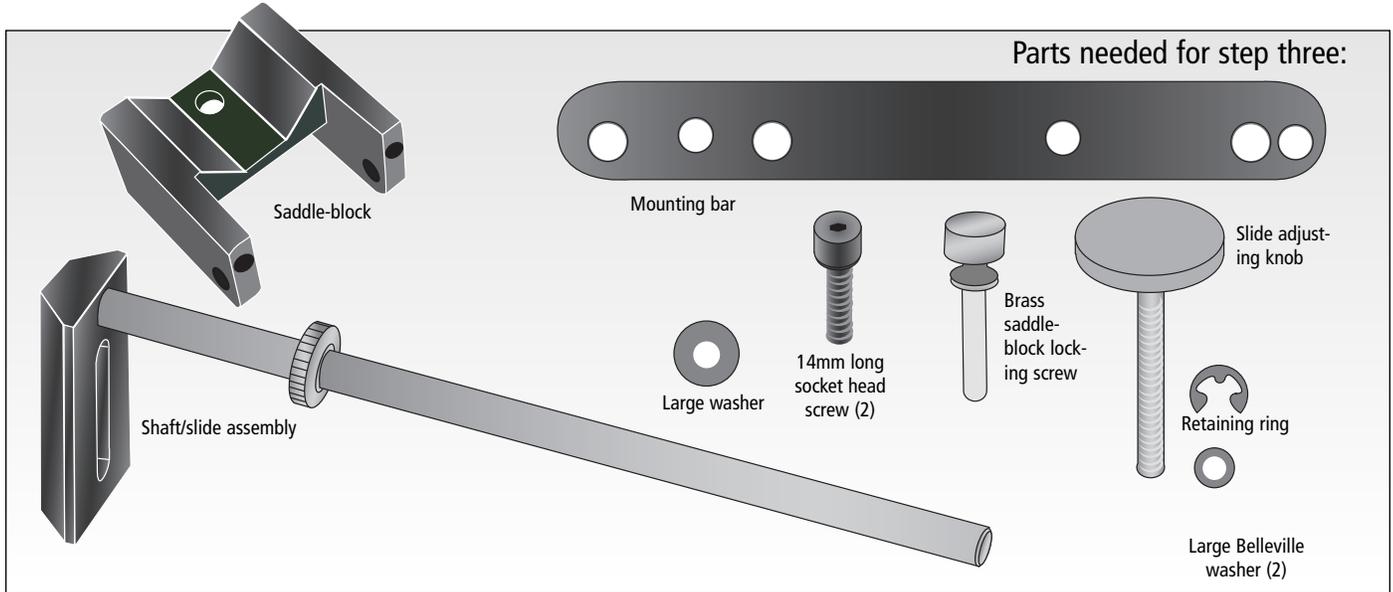
1. Attach the rotator arm rest to the mounting plate as shown, placing the two small, beveled socket-head screws in the top and right side screw holes. **Please Note:** The set-up shown is designed for handpieces with the more common clockwise rotation. If your handpiece rotates counter-clockwise, reverse the attachment of the arm rest using the top and LEFT screw holes.
2. Rest the smaller bar of the rotator arm (the bar without holes) over the arm rest facing the semi-circle cut-out of the base plate.
3. Place the rotator cap over the bar and hold the arm assembly in place. With one Belleville washer and one thrust washer, attach the cap with a 14mm long socket head screw. Do not tighten the screw completely; tighten only enough so the rotator arm is secure, but can swing freely with some pressure.



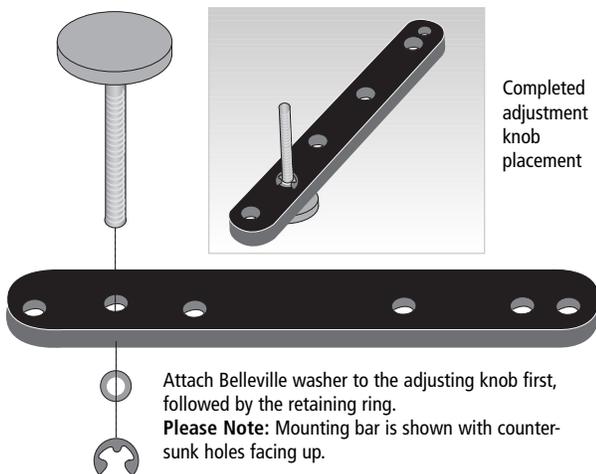
## Assembly (cont.)—step two



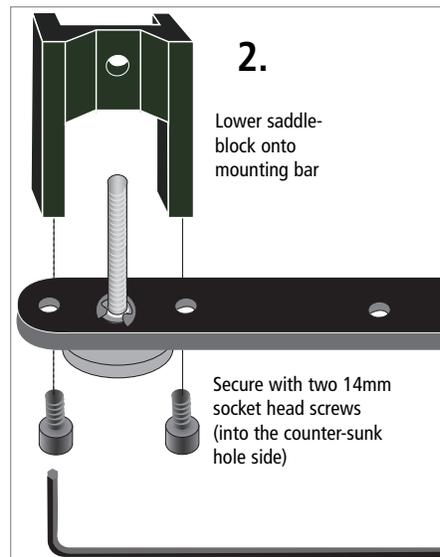
# Assembly (cont.)—step three



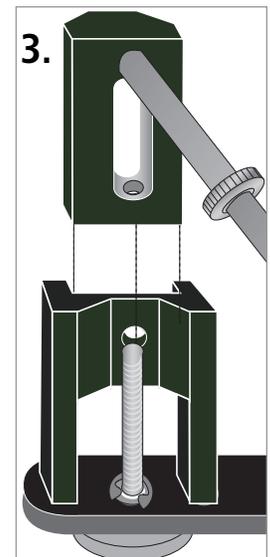
1.



2.



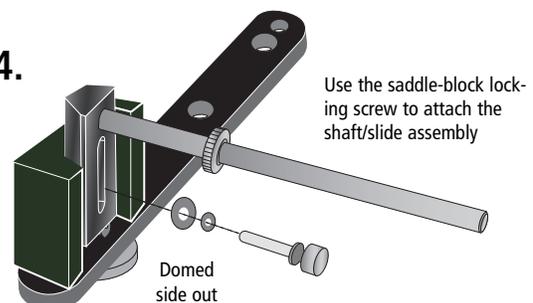
3.



## Step three

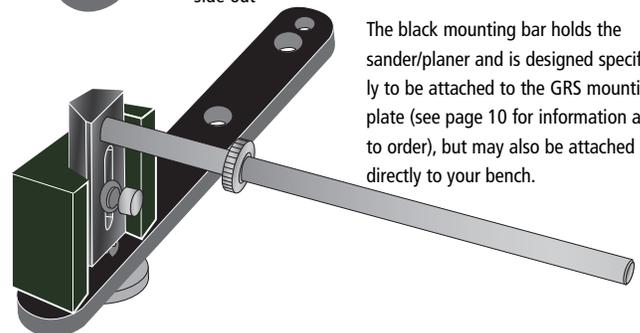
1. Feed the slide adjusting knob through the middle of three holes on the mounting bar (with counter-sunk holes facing up) as shown in the illustration. Secure the knob in place using one Belleville washer followed by the retaining ring.
2. Attach the saddle-block to the mounting bar using two 14mm long socket-head screws (screw heads go into counter-sunk holes). Do not tighten the screws until the shaft/slide assembly is in place (step 4, below).
3. Thread the end of the shaft/slide assembly into the saddle-block
4. Secure the shaft/slide in place using the brass saddle-block locking screw along with both the large and the Belleville washers. After the shaft/slide assembly is in place, completely tighten the two 14mm screws on the bottom.

4.



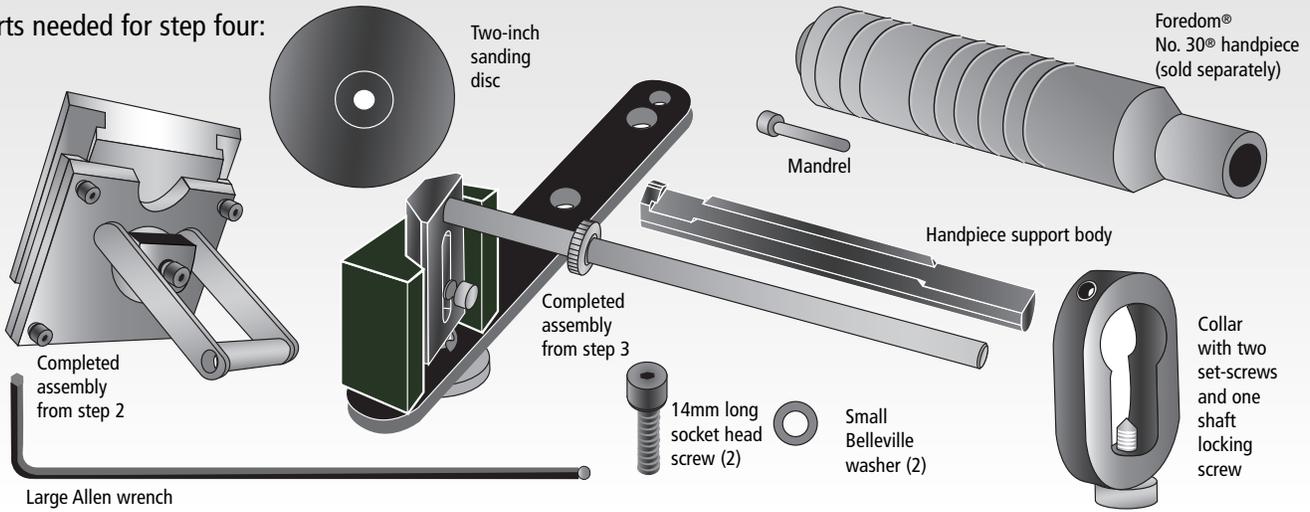
The black mounting bar holds the sander/planer and is designed specifically to be attached to the GRS mounting plate (see page 10 for information and to order), but may also be attached directly to your bench.

5



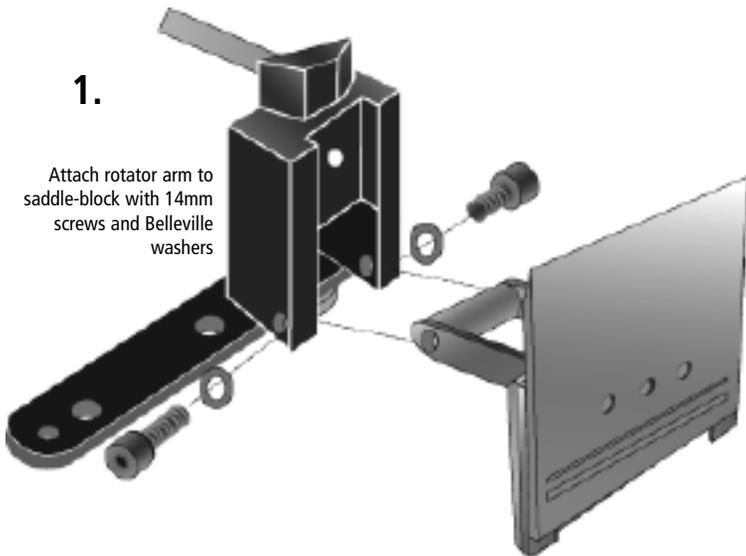
## Assembly (cont.)—step four

Parts needed for step four:



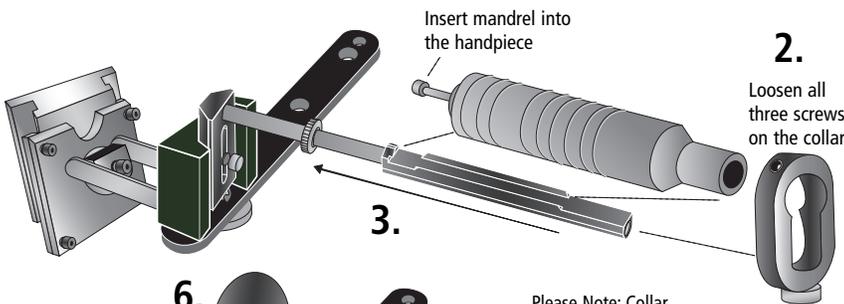
1.

Attach rotator arm to saddle-block with 14mm screws and Belleville washers



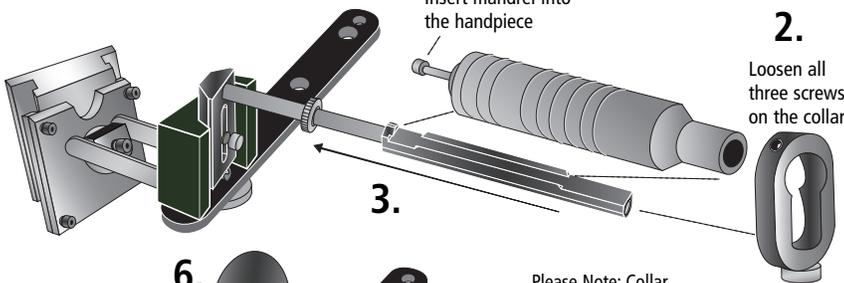
2.

Loosen all three screws on the collar



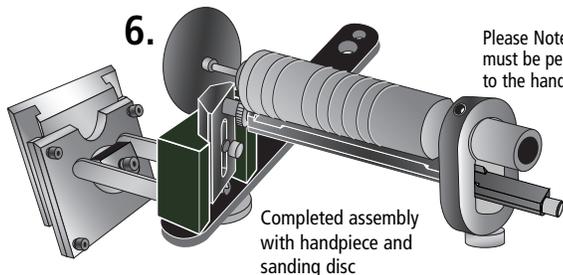
3.

Insert mandrel into the handpiece



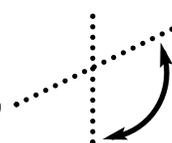
6.

Please Note: Collar must be perpendicular to the handpiece.



5.

Slide the collar over the handpiece and support body



### Step four

1. Attach the working plate assembly to the mounting assembly by aligning the two threaded holes of the rotator arm bar with the saddle-block and secure it with two 14mm socket head screws. Do not tighten the screws completely; leave enough slack so the rotator arm is free to swivel with light pressure.
2. Unscrew both set-screws and the shaft locking screw on the collar so none of them extend into the opening of the collar.
3. Slide the handpiece support body onto the completed shaft assembly, from step 3.
4. Hook the front handpiece support body over the front lip of the handpiece housing, opposite the chuck key opening. Lower the back of the support body until it is flat on the handpiece. **Please Note:** Be sure the front of the support body is hooked on an unbent, undamaged section of the housing lip.
5. Slip the collar over both the back of the handpiece and the support body, then push it to the front against the handpiece housing. Screw in the shaft locking screw just enough so that it is partially in the hole on the underside of the support body.
6. Making sure the handpiece lip remains hooked to the support body, tighten down the two set-screws until the collar is centered around the handpiece. Slide the support body with the attached handpiece onto the slide/shaft assembly.
7. Lastly, attach the sanding disc to the mandrel and place the mandrel into your No. 30® handpiece. Make sure the disc is sitting forward of and in front of the saddle-block assembly.

## Planer Attachment

Your AllSet® kit includes a planer attachment that assembles easily and changes out quickly with the brass working plate. With it, you can perform countless cutting, shaping, grinding, polishing and other finishing tasks with greater control and precision than ever before. You can even use it like a router for carving wax and shaping metal or wood. The biggest advantage is that you control both the angle and depth of the cut with absolute precision—almost impossible if you're working on pieces free-hand. See just two of the planer's countless applications on page 9.

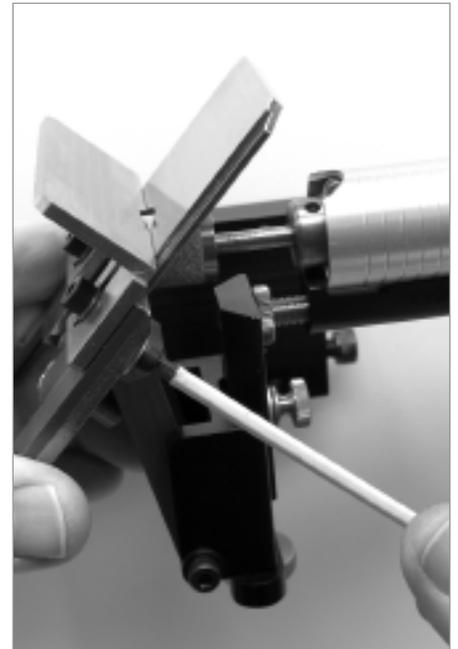
### Parts needed:

- Steel base plate
- Brass 90° fence
- 6mm socket head screw (2)
- Belleville washer (2)



### Step one:

To assemble the planer attachment, locate the steel base plate (with the horseshoe-shaped cut-out) and the brass 90° angle piece-holding fence. Use two 6mm socket head screws and two M4 flat washers to attach the rest to the base plate. Do not overtighten the screws—leave enough slack so the fence can move up and down. You will tighten the screws later, after the completed planer has been set up in the steel mounting plate (see step two).

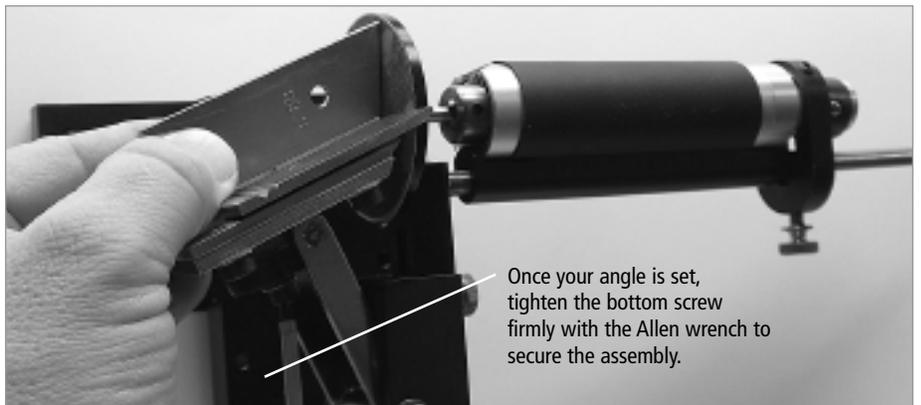
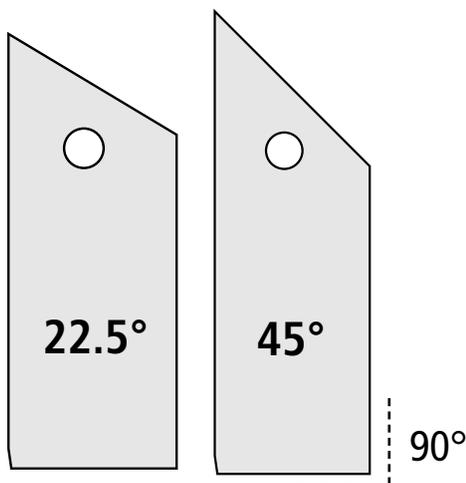


### Step two:

Slightly loosen the four screws holding the brass work plate to the bottom mounting plate. Remove the work plate and slide the planer attachment assembly (from step one) onto the plate in its place. The brass fence can be adjusted back and forth depending on your task. Position the brass fence where you need it and then tighten down the four screws.

## Angle Tools

The AllSet sander/planer adjusts quickly to any angle between 0° to 90°. Two stainless steel angle guides are included in the kit to give you accurate 22.5° and 45° angles when aligning the brass work plate against the sanding disc.



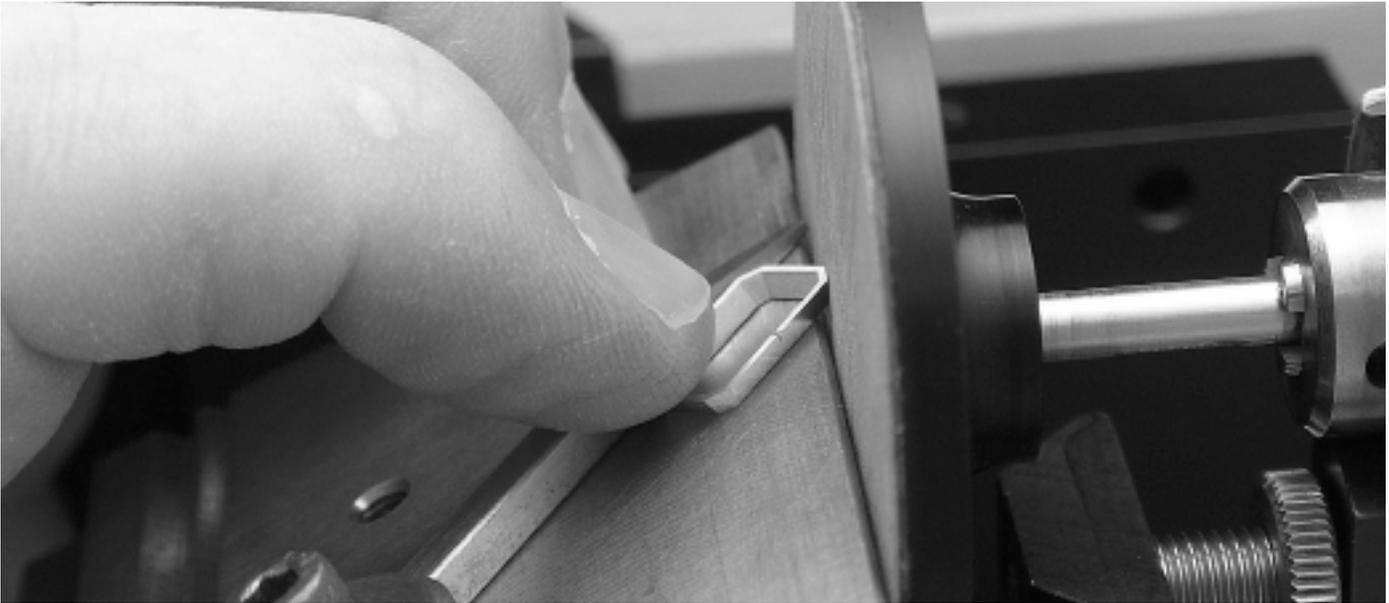
Once your angle is set, tighten the bottom screw firmly with the Allen wrench to secure the assembly.

### Step one:

To use your 22.5° and 45° angles, simply lay the angle on the work plate and place it against the sanding disc (see photo above).

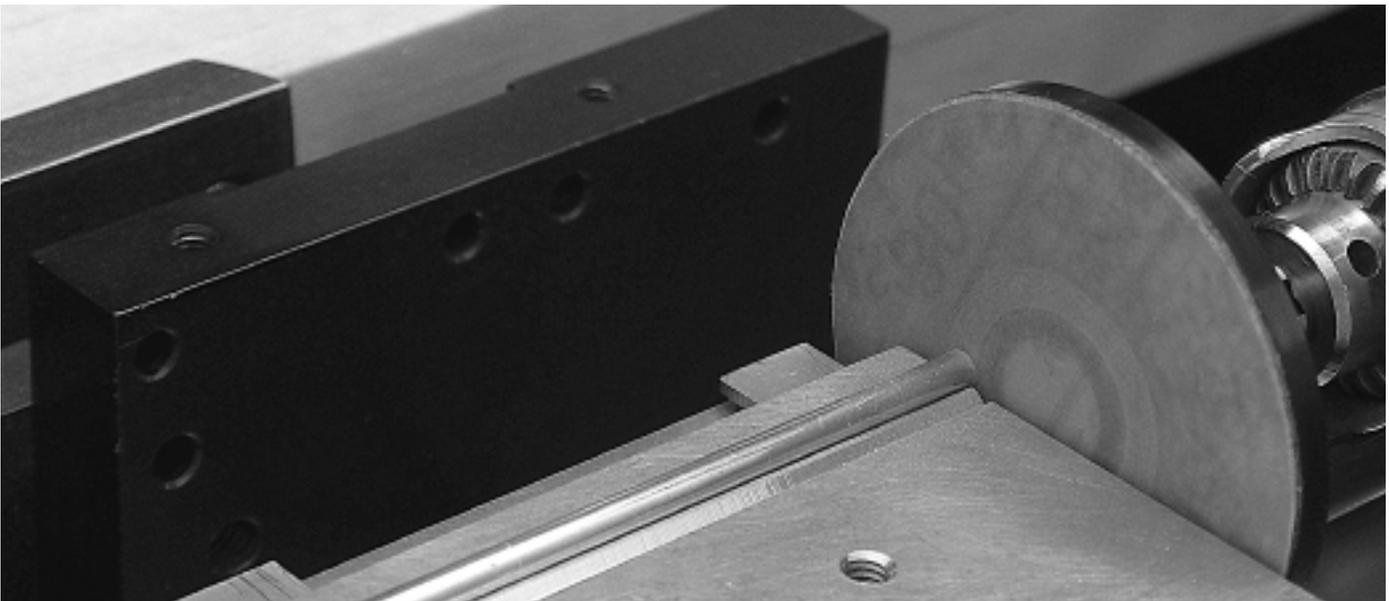
### Step two:

When the steel angle lies perfectly flush against the disc face, tighten the two screws holding the rotator arm all the way down. A perfect 90° angle can be achieved by simply using the end of either angle.



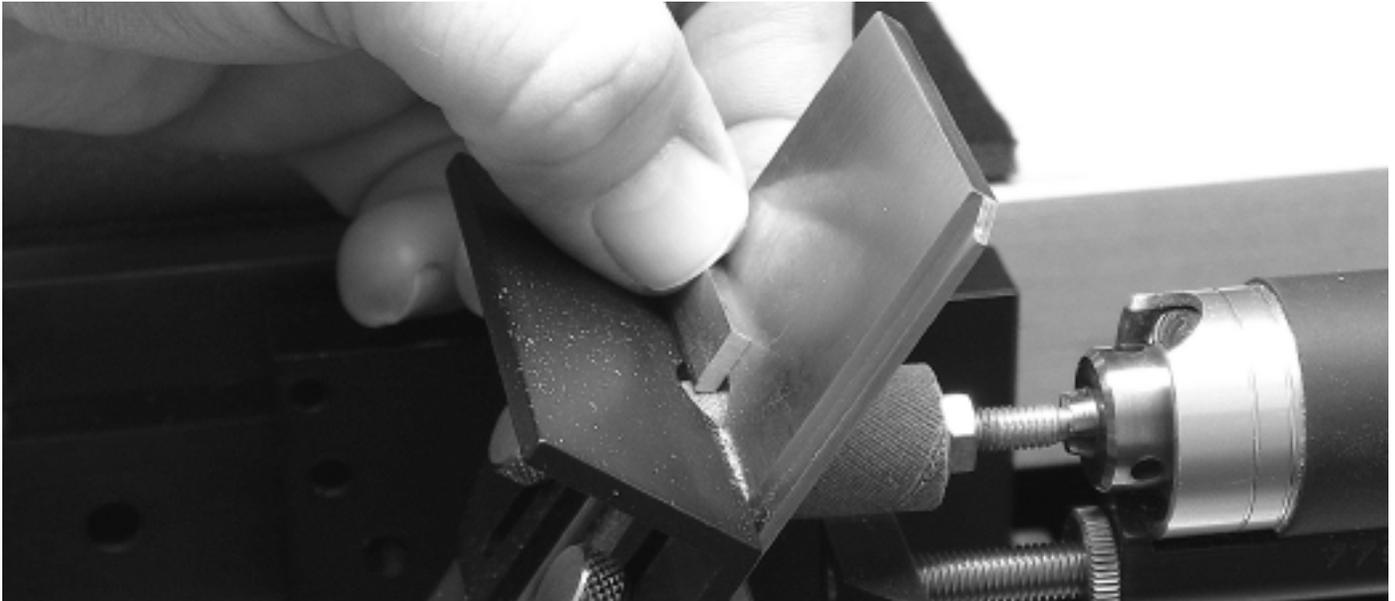
### Precision compound angle finishing

In this photograph, a compound angle is being worked onto an upper gallery platinum bezel setting. The stainless steel angle guide and its round brass holder that you see are included with the kit (secure with a 14mm socket head screw, 2mm case-hardened washer and small Belleville washer). The guide can be set at any angle to provide stable support for the workpiece and guarantee a precisely angled cut.



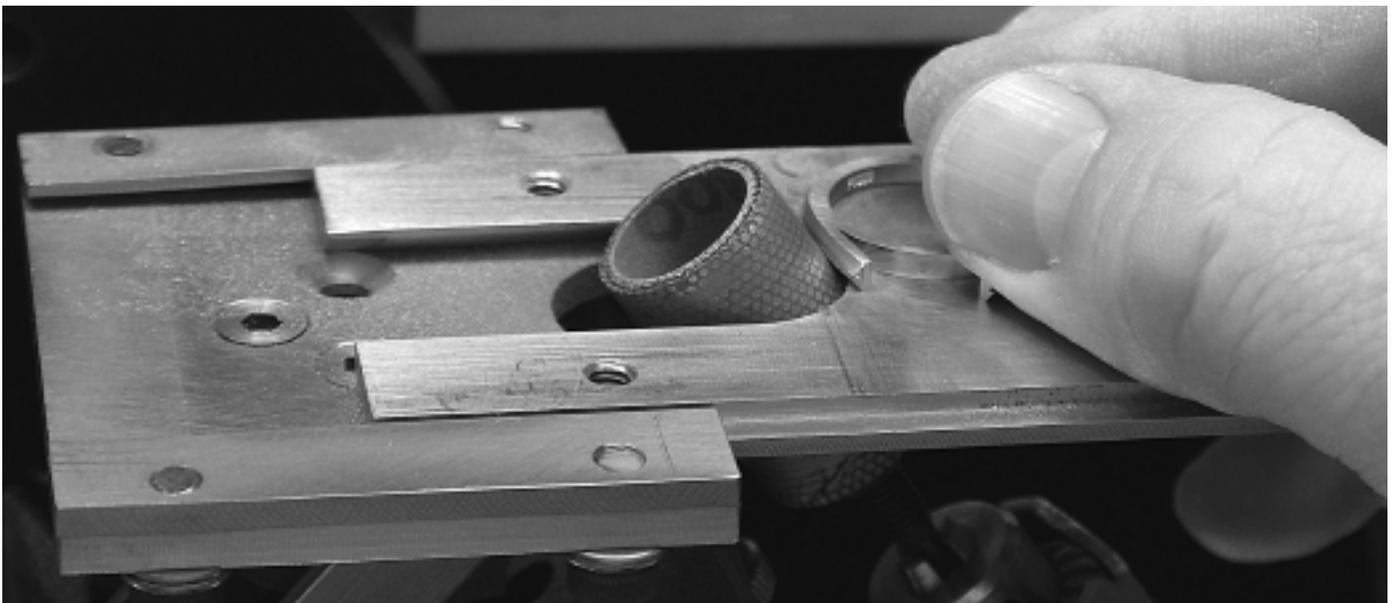
### Wire and tube finishing

Here, the brass working table is rotated 90° and one of the built-in V-shaped grooves is used to hold 14K gold tubing for perfectly flat end finishing. The sander is the ideal tool for creating absolutely flat surfaces (especially critical for sensitive alignments or in operations like tack-welding). To rotate the table, loosen the single screw below it, turn the table and retighten the screw.



## **Precision bezel-wire forming with the planer attachment**

In this photograph, 14K gold wire (glued beneath a brass holding piece) is being finished on an angle to create upper gallery bezel wire for seating gemstones. One enormous advantage of the planer attachment is that it not only controls the angle, but also the depth of the cut.

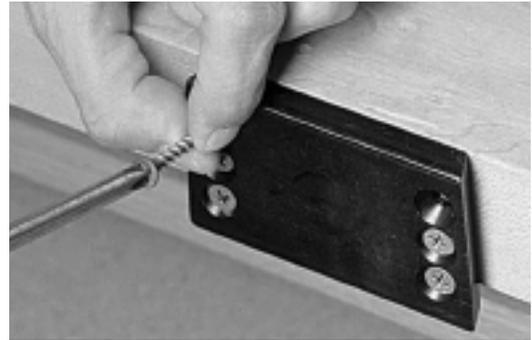


## **Free-hand finishing with the planer attachment (fence guide removed)**

Stable, free-hand finishing is made easy and accurate with the planer attachment. Here, a knife edge angle is applied to a platinum, center-grooved ring shank. As the shank is slowly turned, the angle is cut in precisely and consistently all the way around. At slower speeds, this is also excellent for carving angles into wax.

## GRS Benchmate™ and AllSet® Adapter

The GRS Benchmate™ Mounting Plate is available from your favorite distributor or directly from GRS.



Use the GRS Benchmate™ mounting plate and the AllSet® adapter together for easier, more efficient operation of your AllSet Sander/Planer.



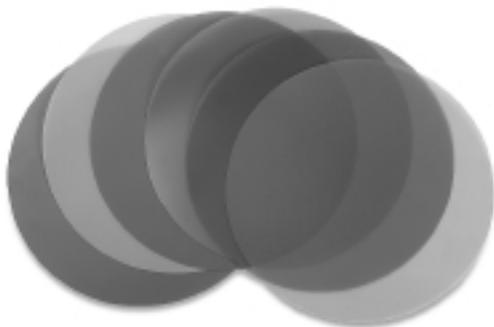
### AllSet® Adapter

Allows easy, hands-free operation for many configurations when used with the AllSet Sander/Planer. Easily adjusts to various angles, heights and positions for your comfort. Adapter slides into the GRS mounting plate.

*Description*  
AllSet Adapter

*Catalog No.*  
AK845

## 3M 2" Sanding Discs



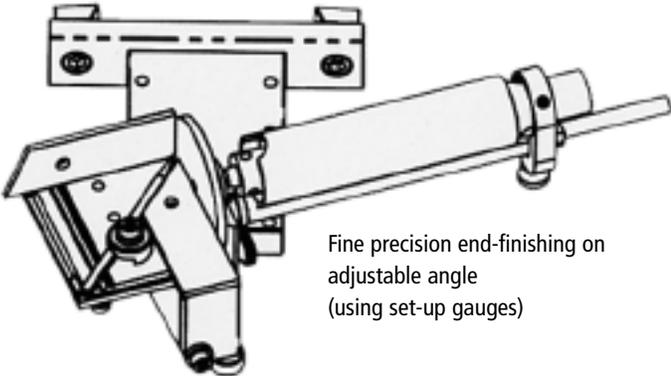
### 3M Sanding Discs for AllSet® Sander/Planer

<i>Description</i>	<i>Catalog No.</i>
60 micron; pkg/50	<b>4596-50</b>
40 micron; pkg/50	<b>4594-50</b>
30 micron; pkg/50	<b>4593-50</b>
15 micron; pkg/50	<b>4592-50</b>
9 micron; pkg/50	<b>4591-50</b>
Trizact™, A5; pkg/10	<b>5728-10</b>
Diamond, 3mil; pkg/5	<b>4583-5</b>

# AllSet Adapter Set-Up Variations

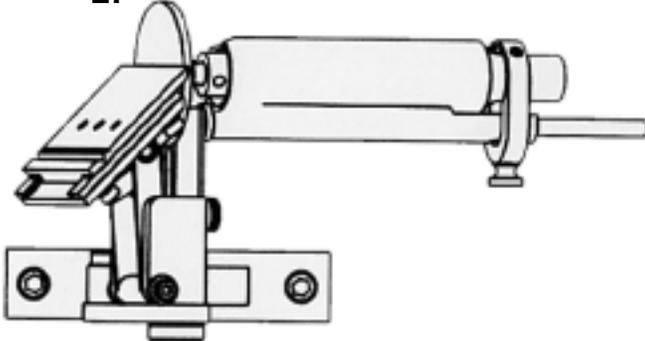
Please Note: Adapter can also be used with the AllSet® Milling Assembly

1.



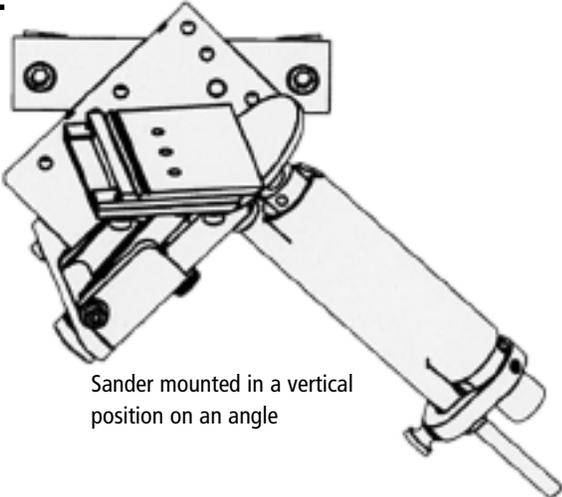
Fine precision end-finishing on adjustable angle (using set-up gauges)

2.



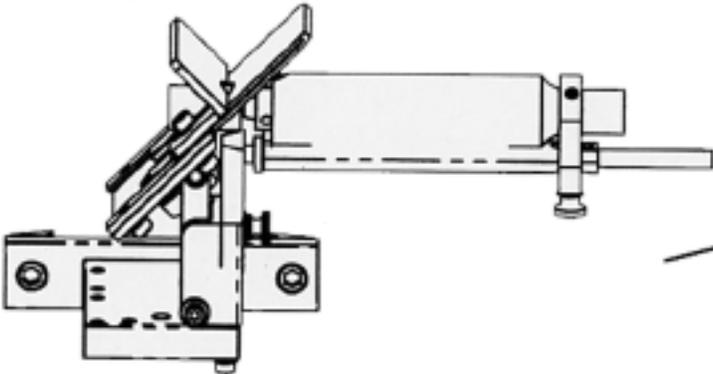
Sanding on an adjustable angle

3.



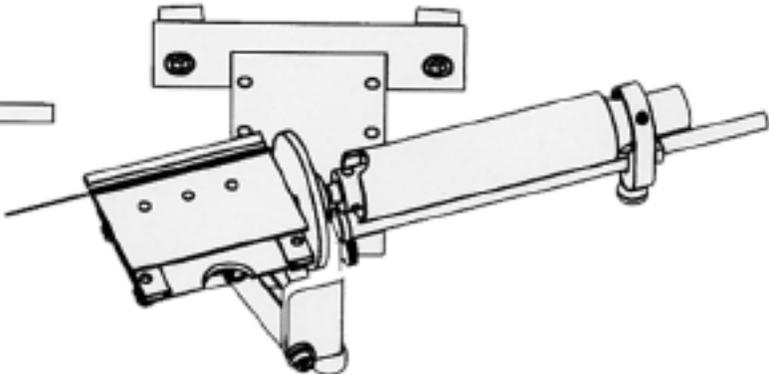
Sander mounted in a vertical position on an angle

4.



Planer attachment mounted on an adjustable angle for platinum, gold, silver, base metal or wax working

5.



Round wire or square stock end finishing on an adjustable angle

## Customize Your Own Setting Operation with Allset® Kits!



Customize your AllSet just the way you want it! Choose exactly what you need to maximize your efficiency and guarantee great results. If you already have a Foredom® handpiece or some of the equipment included in the kits, just add the AllSet components you want from the selection described below.



**Master Kit AK820**  
Quickly and easily achieve perfect results in all your stone-setting operations. Includes a No. 30® handpiece, AllSet handpiece attachments, complete set of guides and video.

**Master Kit AK825**  
Without Foredom No. 30 handpiece.

Master Kit



**Model-Maker's Milling Assembly AK842**  
This new multi-purpose milling accessory makes working in metal and wax markedly more efficient and convenient. Includes a No. 30® handpiece, and AllSet handpiece attachments.

Model-Maker's Milling Assembly



**Prong-Setting Kit AK826**  
Produce consistent settings nearly 10 times faster than by hand! Includes AllSet handpiece attachment for the No. 30® handpiece, 13 prong-setting guides, guide locking nut, Allen wrench and instructions—all in a fitted box.

**Prong Guides Only No. AK827**

Prong-Setting Kit



**Fence Assembly Kit AK844**  
Converts the milling assembly (top right) into a fully operational table saw and planer. Use with cutters and burs to cut, grind or plane gold, platinum, silver, wax and more. Positions within a 180° range and can be set in two different directions for maximum flexibility.

Fence Assembly Kit



**Channel-Setting Kit AK828**  
Cut perfect channels and maximize your production. Includes AllSet handpiece attachment for the No. 30®, three channel-setting guides, (small, large for baguette and knife-edge), guide locking nut, Allen wrench and instructions—in a fitted box.

**Channel Set Guides Only AK-829**

Channel-Setting Kit



**Sander/Planer Kit AK846**  
Grind, sand and polish with ease using this compact sander. Adjusts easily from 0° to 90° angle and has three-position guide for compound angles. Works with the No. 30® handpiece. Includes planer attachment and a complete set of 3M sanding/ lapping films and Trizact A5 disc.

Sander/Planer Kit



**Pavé-Setting Kit AK832**  
Allset handpiece attachment for the No. 30® handpiece, seven pavé guides (for setting a number of stones in a pattern to produce a field-of-stones effect), guide locking nut, Allen wrench and instructions—all in a fitted box.

**Pavé Set Guides Only No. AK833**

Pavé-Setting Kit



**Allset Adapter AK845**  
Get easy, hands-free operations for many configurations when used with the milling assembly (top right) or sander/planer (above). Adjusts to various angles, heights and positions. Slides into a GRS mounting plate (sold separately).

Allset Adapter



**Easy-Cut Prong Guide Kit AK847**  
Allset milling table, guide locking nuts, Allen wrench and instructions—in a fitted box. Handpieces and guides sold separately.

Easy-Cut Prong Guide Kit



**Quick-Change Adapter Kit AK840 for No. 52 Handpiece**  
Includes Allset threaded handpiece adapter, Easy-Cut prong guide and three channel setting guides: small, large (for baguette settings) and a knife-edge guide. No. 52 handpiece sold separately.

Kit for Foredom® No. 52 Handpiece



**Quick-Change Adapter Kit AK839 for No. 18 Handpiece**  
Includes Allset® threaded handpiece adapter, Easy-Cut prong guide and three channel setting guides: small, large (for baguette settings) and a knife-edge guide. No. 18 handpiece sold separately.

Kit for Foredom® No. 18 Handpiece



**Quick-Change Adapter Kit AK841 for No. 10 Handpiece**  
Includes Allset threaded handpiece adapter, Easy-Cut prong guide and three channel setting guides: small, large (for baguette settings) and a knife-edge guide. Handpiece No. 10 sold separately.

Kit for Foredom® No. 10 Handpiece

### The Allset Accessory Video

No. VID125

Allset co-inventor, award-winning jeweler and tool designer, Jeffrey Mathews, shows you how to use this revolutionary system to speed stone-setting and increase accuracy. VHS, 31 minutes.