



INSTRUCTIONS

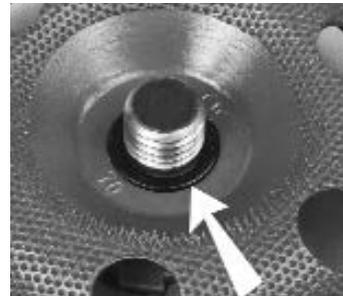
Congratulations! You have just become the proud owner of a **Holey Galahad®**. This unique series of shaping discs incorporate “See-Through” technology that enables you to see where you’re going and where you’ve been - the spinning disc opens a “Window To Your Work.” To maximize your enjoyment, refer to these instructions to answer simple questions on fitting your **Holey Galahad®** to your grinder. Note our cleaning tips to extend the use of your new shaping accessory.



King Arthur's Tools® Universal Nut (part #13750 for 5/8” center shafts and part #14000 for 7/8” 22mm center shafts) has a recess in the base that allows any angle grinder in the world to accept the **Holey Galahad®** – this specifically solves mounting the round **Holey Galahad®** models.

Why We Created An IMPROVED Universal Nut: Angle grinder manufacturers are not consistent in the height of the raised round arbor shoulder over which **Holey Galahad®** is seated, nor in the width of their locknuts, which have varying diameters. This caused problems we were able to overcome with the design of our newest Universal Nut. The flat **Holey Galahad®** body is slightly thicker than the round model and, in most cases, when seated over the arbor, will be level with, or rise slightly over the arbor. In this case using the angle grinder

manufacturer’s locknut will tighten and secure **Holey Galahad®**. The round profile **Holey Galahad®** has an inner wall design and slightly thinner metal thickness that is not compatible with most grinder



RAISED SHOULDER prevents correct tightening with manufacturer’s nut. IMPROVED UNIVERSAL NUT securely tightens the disc.

locknuts used to tighten the disc. When the disc is seated, it falls below the arbor shoulder, not allowing standard lock nuts to secure the disc. This causes the discs to spin freely. Always use the optional

KAT Universal Nut

to securely attach discs to the grinder.

Using our **KAT Universal Nut**, you can seat any style **Holey Galahad®**, but especially the round profile, over the arbor and tighten using a 21mm spanner or our Universal wrench over the hexagonal head nut. The depression in the nut seats over the arbor and securely tightens the disc. The improved **Universal Nut** also seats snugly into the deep well center of **Holey Galahad®**.

Cleaning The Discs: Over time and use, a section of the disc will



CORRECT Nut Use



INCORRECT Nut Use

eventually fill with wood, resin or other material. Clogging caused by resinous or fibrous wood can be brushed out or burned off without damaging the teeth. The tungsten carbide has been brazed on at 2800° Fahrenheit, so standard burn-off temperatures aren’t going to affect it at all.

Make sure you wear gloves and use vise grips or pliers to keep your hand from the heat when applying a propane torch to the burrs - they transfer heat very quickly. Always make sure the angle grinder is disconnected from main power source.

Burning

Use a small propane burner (e.g camping burner) and apply to disc. Let sit until cool and use a brass or bronze wire brush to remove loosened debris and residue.

1. You will not damage the disc. Common sense dictates that you remove the disc from the angle grinder and place it on a non-flammable surface prior to burning.

2. Another preferred method is to apply paraffin to the disc first, then burn and brush clean as described above.

Applying Oven Cleaner

Spray “Easy Off” oven cleaner (or similar product) to disc. You can apply directly to the disc while fitted to the disconnected angle grinder but beware, you’ll probably also spray the safety guard. It can get a little messy. Better still, remove the disc, lay on newspaper then spray on oven cleaner. Let sit for about half an hour and remove residue with a brass or bronze wire brush. Repeat as necessary.

SAFETY INSTRUCTIONS BEFORE, DURING AND AFTER USE

- Recommended for use with disc/angle grinders equipped with constant pressure switch (paddle, dead man or kill switch.)
- Unplug power source from grinder when assembling, cleaning, sharpening or removing the tool. Grinder switch must be OFF before connecting power.
- **It is EXTREMELY IMPORTANT the safety guard is RESET to the ‘CORRECT’ position as detailed in these instructions. DO NOT REMOVE SAFETY GUARD OR AUXILIARY HANDLE.**
- Always ensure work piece is securely held in a vise. Do not grip or support the work piece with hands, feet or other body parts.
- Work gloves and footwear are highly recommended.
- At all times, use both hands to operate the grinder.
- Always use safety glasses and/or a full face visor during operation.
- Inspect and remove all nails, staples and wire obstructions from lumber before carving.
- Never start the grinder when the disc is in contact with stock material.
- Never put the grinder down until it has stopped completely. Failure to do so could cause the grinder to ‘walk’, causing injury or damage. Similarly, do not ram the disc into wood to stop it turning prematurely once the power switch is turned off.
- Regularly clean the disc grinder’s on/off switch and remove wood shavings and dust. Accumulated debris around and under the switch could clog the mechanism, making it hazardous in operation.
- Only operate Holey Galahad and Galahad discs at a safe distance from others.
- Let the cutting tools do the work. They are fully capable. Do not force tools into the work or apply excessive pressure.
- Keep hands away from Holey Galahad’s face and edge during operation. Do not reach underneath work or attempt to remove material while discs are rotating.
- Keep discs clean and sharp by burning the residue with a small propane burner or using oven cleaner and wire brush.
- Read these instructions in conjunction with the disc grinder owner’s manual for additional user instructions and safety rules.

Frequently Asked Questions (FAQ'S)

Question: What is the major difference between **Holey Galahad** and **Galahad CG**?

Answer: **Holey Galahad** has openings in the surface that allow you to "see through" to the item being sanded. **Galahad CG** has a solid surface and is 1/2" (13mm) larger in diameter. **Holey Galahad** has been shown to increase productivity by 10-15%.

Question: What are the size differences?

Answer: **Holey Galahad** is 4" (100mm) diameter and has 7/8" (22mm) centers but will fit angle grinders worldwide using our **Universal Flange and Nut Set**. **Galahad CG** is 4-1/2" (115mm) in diameter and is available with 5/8" (16mm) or 7/8" (22mm) center holes.

Question: What Angle Grinders fit **Holey Galahads**?

Answer: They're designed to fit most 4-1/2" (115mm) and European 125mm angle grinders. Maximum 14,000 RPM. All **Holey Galahad** discs are 4" (100mm) in diameter with 7/8" (22mm) center hole size to suit angle grinders worldwide by being seated on the manufacturer's 7/8" (22mm) arbor. This is a spacer located at the bottom of the center shaft and the 7/8" (22mm) arbor is a raised round shoulder as an integral part of the spacer/washer. If your flange at the base of your grinder is missing we have replacements available in either 5/8" or 14mm.

Question: Are they made in the USA?

Answer: Very proudly, yes! This is US technology, patented worldwide and made in the USA.

Question: How many different shapes or profiles are available for the **Holey Galahads**?

Answer: Two, rounded and flat. The rounded profile is extremely suitable for round, concave and contoured surfaces like the inside of bowls or scalloping out chair seats. The flat profile is most useful in smoothing out notches on logs, removing large amounts of bark or smoothing out large, predominantly flat surfaces like doors, beams and mantle pieces. Either the flat or round profiles will do any job above. The above applications are recommendations based on experience and are a guide for you to determine the best profile for your application.

Question: What models are **Holey Galahad** available in?

Answer:

- 1) Model #47851 **RCB Round Coarse Blue 90 Grit**
Rapid removal with smooth, coarse finish. Great for rounded, concave and contoured shapes.
- 2) Model #47852 **RMR Round Medium Red 70 Grit**
Rapid removal with medium to fine finish. Great for rounded, concave and contoured shapes.
- 3) Model #47853 **RFG Round Fine Green**
Doesn't need much to finish sanding. Great for rounded, concave and contoured shapes.
- 4) Model #47871 **FCB Flat Coarse Blue**
Rapid removal with smooth, coarse finish. Great for long, flat surfaces.
- 5) Model #47872 **FMR Flat Medium Red**
Rapid removal leaving medium to fine finish. Great for long, flat surfaces.
- 6) Model #47873 **FFG Flat Fine Green**
Doesn't need much to final finish. Great for long, flat surfaces.

Note: The coarser the grit, the more aggressive and less cleaning is required. Each model leaves a different finish.

Question: What is your **Universal Wrench, Flange and Nut Set** used for?

Answer: The **KATools Universal Wrench, Flange and Nut Set** that allows you to attach disc accessories to any make or model power tool with a 5/8" or 14mm spindle thread shaft. The unique recessed hexagonal nut and flange back allow universal fit, so you can easily secure and tighten any type of accessory from any manufacturer.

Question: Should I remove the safety guard?

Answer: No! No! and Heck No! Please do not work without a safety guard for any reason. It's a hazard to your health and safety. Any foreign objects in the wood or material will be deflected away by the guard versus coming toward you.



Round Profile



Flat Profile

Should you hit an immovable object and you lose control of the angle grinder, you're much safer with the guard on.

Question: What happens if I hit a nail, wire or foreign object in the wood? Or what if I drop the **Holey Galahad** or **Galahad CG** disc on the ground?

Answer: You will more than likely lose some carbide grits or cones where you made contact with the obstruction or dropped it. This isn't a big deal and you can easily continue working – unless you lose so many it affects your finish and production – then you need a replacement.

Question: Why are they so expensive?

Answer: Because the grits consist of tungsten carbide needles and manufacturing is an intense 5 stage patented process. Actually, these high quality discs have proven longevity and can be used over and over again, saving hundreds of dollars in sandpaper, time, labor and effort.

Question: What is the best angle to position the safety guard?

Answer: **Holey Galahad** discs are designed to cut with the safety guard set between 23 degrees to 45 degrees. The angle of adjustment for the safety guard varies with each disc grinder manufacturer.



THE MAIN CRITERIA IS THAT THE BOTTOM OF THE SAFETY GUARD MUST BE AS LEVEL AS POSSIBLE WITH THE BOTTOM OF THE BODY OF THE DISC GRINDER.

In this position, the **SAFETY GUARD WILL ADJUST BETWEEN THE (APPROXIMATE) ANGLES OF 23° and 45 °.**

SAFETY FIRST: Why Safety Guard Use Is A Requirement'

1. Safe and efficient operation: **Holey Galahad** discs were designed to shape and carve with the bottom and partially exposed left side peripheral edge as well as on their face.

With the safety guard rotated to the correct position as stated in these instructions, it opens up the bottom surface of these discs near the bottom of the grinder. This is where a considerable amount of the main shaping and carving is done and is:

- A) A vital part of the tools's versatility
- B) Allows for optimum carving use in a comfortable and safe position.

2. Direction of Waste: With the safety guard properly adjusted, direction of wood shavings and sawdust will be angularly deflected over the top of **Holey Galahad**, hitting the top of the work piece and away from the operator's hands and face.

If the guard is retained at 90 degrees, the full left face, including the nose (or front tip) of the **Holey Galahad** will be exposed. In this position **Holey Galahad** will not carve smoothly or effectively and poses a potential hazard to the user by jerking to either side. You don't want to ruin your work piece nor run the risk of a violent motion with the grinder being jerked sideways.

We absolutely do not recommend moving or retaining the safety guard at 90° or even close to this vertical position.



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