

2" BADGER

Rotary Cleaning for Small Pipes with Elbows



The 2" Badger is a self-rotating swivel designed for cleaning 2–4 in. (51–102 mm) pipes with bends and long radius elbows, such as U-Tubes and process lines.

The head design of the 2" badger has been updated, replacing the nozzle inserts with pre-drilled heads, which greatly simplifies jetting options and eliminates the need to repair inserts in the field while delivering the same cleaning performance and more durability.

COMPETITIVE ADVANTAGES

- **Price reduction due to production efficiency!**
Incomparable versatility, performance and safety at an unprecedented low price point
- Navigates pipes with bends as small as 2 inches (51 mm) in diameter
- Cost of ownership is reduced by eliminating the need to buy/replace inserts
- **Not a "throw-away" tool** — head can be replaced for minimal cost to prolong service life or swapped out quickly to change jet patterns for the unique demands of each job
- Only 2" rotary tool in the industry to feature a locking head that prevents detachment

FEATURES	BENEFITS
<ul style="list-style-type: none"> • Easily replaceable drilled head design 	<ul style="list-style-type: none"> • Eliminates the need to repair inserts in the field while delivering outstanding cleaning performance • Fast and easy head changes makes the tool last longer and more versatile for multiple applications • Patented head locking technology takes the abuse of challenging work and keeps the operator safe
<ul style="list-style-type: none"> • 3 head options 	<ul style="list-style-type: none"> • Simplified product configuration from hundreds of insert combinations to just a few choices for easy ordering and less confusion on the job
<ul style="list-style-type: none"> • Patented water bearing technology 	<ul style="list-style-type: none"> • No bearings, seals, or lubricants to replace • Very low leak rate in water bearing — cleans faster and wastes less water

2" BADGER TOOL OVERVIEW

CONSIDERATIONS

- What pressure and flow are you operating?
- What is the hose length, ID, and end fitting?
- Do you need an adapter?
- Do you need a backout preventer?
You should always use a backout preventer with high pressure pipe cleaning tools.
- Do you need a stinger?
A stinger or centering device is required when the ID of the pipe is 1.5 times larger the diameter of the tool being used, as described in the WJTA Recommended Guide.
- Do you need a fairing?
Optional fairing is available to streamline tool retrieval.
- Do you need a service kit?

OTHER INFORMATION

- The 2" Badger requires a special head removal tool to remove the head. See the manual for proper use to prevent damage to the tool.
- When changing head, inspect spiral retaining ring (**WV 010**) for damage, and replace if needed.

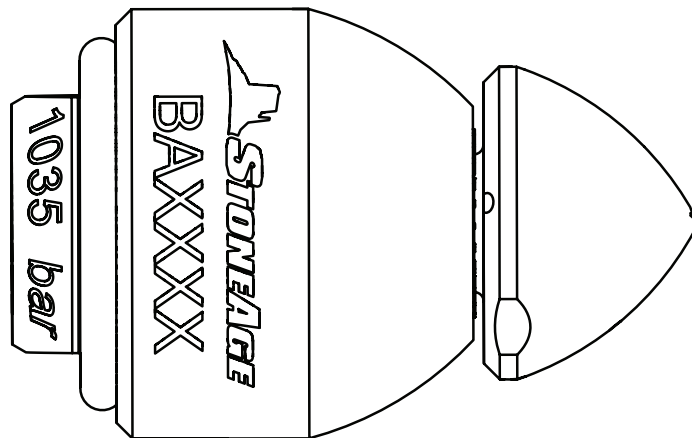
TOOL SPECIFICATIONS

MODEL	BA-LKD-P4 BA-LKD-BSPP4	BA-LKD-MP6R BA-LKD-MP9L BA-LKD-MP9R
Pressure Range	8–15k psi 552–1034 bar	15–22k psi 1034–1500bar
Flow Range	7-16 gpm 26–61 LPM	9.5-18.5 gpm 36–70 LPM
Rotation Speed	High Speed	High Speed
Inlet Connection	1/4 NPT, 1/4 BSPP	9/16 MP, 3/8 MP
Diameter	1.3 in. 33 mm	1.3 in. 33 mm
Length	2.0 in. 50 mm	2.0 in. 50 mm
Weight	0.45 lb 0.20 kg	0.45 lb 0.20 kg
Maximum Water Temperature	250 °F 120 °C	250 °F 120 °C

Visit our website for tool resources including operation and maintenance videos:

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2" BADGER TOOL CONFIGURATION



Tool Assembly with
drilled head

A complete 2" Badger tool configuration requires the following components:

1. Appropriate tool option for the working pressure

The following items may also be required:

- Backout preventer
- Fairing assembly
- Stinger

2" BADGER TOOL CONFIGURATION

ORDERING A STANDARD PACKAGE

StoneAge offers standardized 2" Badger tool packages for the most commonly used configurations. All 2" Badger tool packages come fully assembled specified to jetting.

The following table shows the configurations of standard 2" Badger tool packages:

PRESSURE	INLET	FLOW	PACKAGE CONTENTS	PACKAGE PART ID
8-15k psi 552-1034 bar	1/4 NPT Female	11-16 gpm 42-61 LPM	2 in. Badger assy w/ drilled locking head	BA-LKD-P4-A
		9-12.5 gpm 34-47 LPM	2 in. Badger assy w/ drilled locking head	BA-LKD-P4-B
		7-9.5 gpm 26-36 LPM	2 in. Badger assy w/ drilled locking head	BA-LKD-P4-C
	1/4 BSPP Female	11-16 gpm 42-61 LPM	2 in. Badger assy w/ drilled locking head	BA-LKD-BSPP4-A
		9-12.5 gpm 34-47 LPM	2 in. Badger assy w/ drilled locking head	BA-LKD-BSPP4-B
		7-9.5 gpm 26-36 LPM	2 in. Badger assy w/ drilled locking head	BA-LKD-BSPP4-C
15-22k psi 1034-1517 bar	3/8-24 RH Female	16-18.5 gpm 61-70 LPM	2 in. Badger assy w/ drilled locking head	BA-LKD-MP6R-A
		12-14.5 gpm 47-55 LPM	2 in. Badger assy w/ drilled locking head	BA-LKD-MP6R-B
		9.5-11 gpm 36-42 LPM	2 in. Badger assy w/ drilled locking head	BA-LKD-MP6R-C
	9/16-18 LH Female	16-18.5 gpm 61-70 LPM	2 in. Badger assy w/ drilled locking head	BA-LKD-MP9L-A
		12-14.5 gpm 47-55 LPM	2 in. Badger assy w/ drilled locking head	BA-LKD-MP9L-B
		9.5-11 gpm 36-42 LPM	2 in. Badger assy w/ drilled locking head	BA-LKD-MP9L-C
	9/16-18 RH Female	16-18.5 gpm 61-70 LPM	2 in. Badger assy w/ drilled locking head	BA-LKD-MP9R-A
		12-14.5 gpm 47-55 LPM	2 in. Badger assy w/ drilled locking head	BA-LKD-MP9R-B
		9.5-11 gpm 36-42 LPM	2 in. Badger assy w/ drilled locking head	BA-LKD-MP9R-C

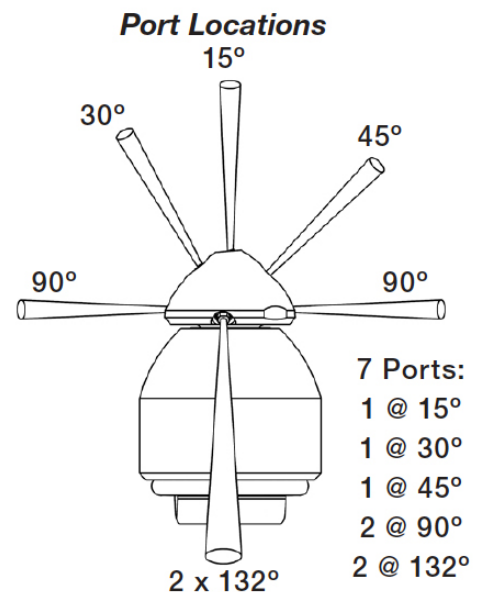
PACKAGE OPTIONS

2" Heads

PART ID	DESCRIPTION
BA 546-LKD-A	Head assembly, drilled A pattern
BA 546-LKD-B	Head assembly, drilled B pattern
BA 546-LKD-C	Head assembly, drilled C pattern

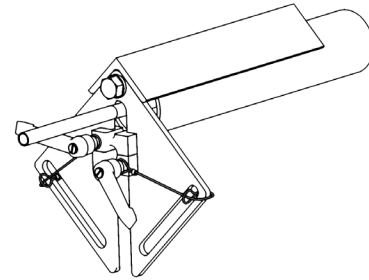
Accessories

PART ID	DESCRIPTION
BA 530	BA Fairing Set, for Badger, for 5 and 6mm hose
BA 080	Case, w/ Foam



BACKOUT PREVENTION

Backout preventers increase operator safety by keeping the tool from backing out of the pipe. Several options are available including fixtures for small diameter pipes, pipes with various flange bolt circle diameters, and adapters for pipes with no-flange entry.



PIPE SIZE	HOSE OD	BACKOUT PREVENTER	DESCRIPTION
2–6 in. 51–150 mm	0.3–0.7 in. 8–18 mm	BJ 305*	Backout preventer for small pipes

*Securing device not supplied

MAINTENANCE RESOURCES

For questions or help with a specific application, configuration or tool repairs, please contact your StoneAge Representative.

TOOL	KIT DESCRIPTION	KIT PART ID	KIT CONTENTS
2" Badger	Tool Kit	BA 612-LK	1 x BA 182 Head Removal Tool (for Locking Head) 1 x BA 185 Loctite, 262 Red .5mL 1 x PL 676 Insert, for BA 612-LK Tool Kit 1 x WV 010 Retaining Ring, SS Spiral Int 1.125 1 x WV 181 Tool, Socket Wrench for Locking Head

Tool maintenance and assembly videos are available on our website:

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