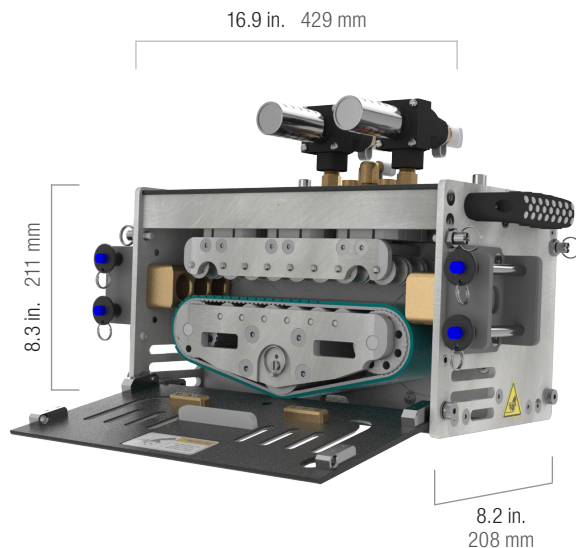


AUTOBOX ABX-3L

Automated Heat Exchanger Tube Cleaning



OVERVIEW

The StoneAge AutoBox ABX-3L is an automated system for hands-free tube bundle and Fin Fan heat exchanger cleaning applications. It is designed to **run triple, dual, or single** flex lance setups with an emphasis on portability, ease of setup, and safety. The ABX-3L can be used with any pressure rated hose ranging in size from 3/2 to 8/4.

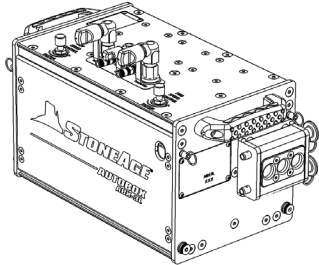
Paired with StoneAge Banshee rotary tube cleaning nozzles and our Lightweight Positioner, the ABX-3L offers safe and efficient tube cleaning in the harshest exchanger environments.

COMPETITIVE ADVANTAGES

- Run hoses from 3/2 to 8/4 without component changes
- Hose clamp pressure and feed rates can be quickly adjusted for repeatable, consistent cleaning
- Modular compact design is easy to transport and quick to set up — all components under 50 lbs
- Proven to operate reliably in corrosive environments
- High visibility guide tube assembly for easy indexing — no tools or adapters required for guide tube adjustment
- Cost of ownership is greatly reduced as compared to competitive equipment through simple maintenance and affordable replacement parts
- All parts are stocked and ready to ship same day to minimize work interruption
- Full line of accessories available to help you make the most of your investment

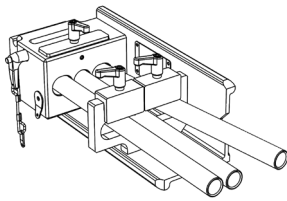
FEATURES	BENEFITS
<ul style="list-style-type: none">• Handles hose sizes from 3/2 to 8/4 without component changes	<ul style="list-style-type: none">• Minimize downtime when switching between hose sizes
<ul style="list-style-type: none">• Steel-reinforced drive belt with durable polyurethane cover	<ul style="list-style-type: none">• Reliable for hundreds of hours of operation• Replacement takes minutes and costs a fraction of competing drive systems
<ul style="list-style-type: none">• Triple, dual, or single lance operation	<ul style="list-style-type: none">• Easily adapt to specific application requirements
<ul style="list-style-type: none">• Independent forward/reverse speed control from 0.3–3.0 ft/sec	<ul style="list-style-type: none">• Consistent cleaning in both directions produces better results in less time
<ul style="list-style-type: none">• Remotely adjustable hose clamp	<ul style="list-style-type: none">• Adjust to changing conditions on the fly and minimize hose wear without interrupting workflow
<ul style="list-style-type: none">• Modular, lightweight positioner	<ul style="list-style-type: none">• System is easy to set up on different exchanger sizes and mounting options with no additional tools

AUTOBOX ABX-3L OVERVIEW



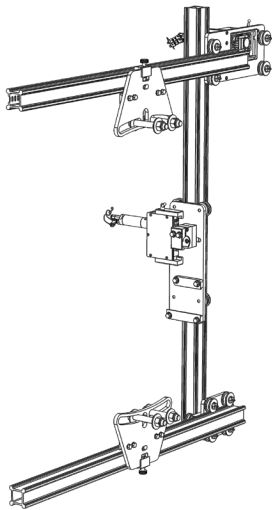
ABX-3L HOSE TRACTOR

- Accommodates full hose range from 3/2–8/4 – *no modifications or additional components required*
- Features long-life, low-cost belt drive system
- Maintains traction in difficult operating conditions
- Can be used in single, dual or triple lance applications
- Quick pin attachment to guide assembly
- Hinged side doors for easy access to belt and air motors
- Lightweight and compact design



GUIDE ASSEMBLY

- High visibility design for efficient indexing
- Turn knob control provides precise pitch adjustment
- Quick-change guide tubes are common material – *no adapters required*
- 17-4 SS hose stop collets for anti-withdrawal protection

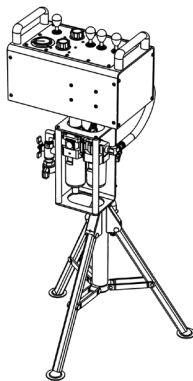


LIGHTWEIGHT POSITIONER

- Modular, lightweight design with quick install drive carriages
- Utilizes lightweight 2.5 in. (64 mm) box rail
- Durable stainless steel air motors
- Variety of clamp and bolt-on attachment options are available
- Compatible with full line of AutoBox systems (ABX-3L, ABX-2L, ABX-PRO)

CONTROL BOX

- Small, lightweight, ergonomic design that includes a portable stand and filter-regulator-lubricator assembly
- Controls forward/reverse hose feed, feed motor pressure selector, and clamp pressure
- Positioner controls: left/right and up/down
- Pneumatic dump control switch



TOOL SPECIFICATIONS

MODEL	ABX-3L-V3
Hose Feed Rate	0.3–3.0 ft/sec 0.09–0.90 m/sec
Hose Size	3/2–8/4
Max. Hose Crimp Ø	0.74 in. 19 mm
Hose Feed Rate	0.3–3.0 ft/sec 0.09–0.9 m/sec
Push/Pull Force	15–150 lb 6–68 kg
Pitch Adjustment	Dual: 0.6–5.0 in. 16–127 mm Triple: 0.6–2.5 in. 16–64 mm
Max. Air Pressure	125 psi 0.86 MPa
Operating Pressure	100 psi 0.70 MPa
Dimensions	8.3 in. H x 16.9 in. L x 8.2 in. W 211 mm x 429 mm x 208 mm
Tractor Weight	48 lbs 22 kg

ADDITIONAL INFORMATION

- **The ABX-3L is fitted with 2 motors**

Having 2 motors allows the ABX-3L to be optimized for feeding 1, 2 or 3 lances. The ABX-3L is designed to limit unnecessary wear and tear on the hoses and/or the drive belt. Two motors also translate to higher machine operational reliability, as the ABX-3L can function well with a single motor drive, although push/pull forces will be reduced.

The motors are plumbed in parallel so both motors are always operating. The overall force the motors can deliver is regulated (via motor exhaust) using the CB. Rental and Production versions of the CB will be annotated to show “optimal settings” for 1, 2 or 3 lance work. The early field test/demo units out now have a dial-type regulator (just like the clamp) that allows operators to adjust the motor torque by turning the regulator knob.

- **Compatible Banshee Models**

The ABX-3L system was designed to accommodate up to three simultaneous flex lances ranging in size from 3/2 to 8/4 matched with the appropriate size Banshee model tool. Compatible models are BN 9.5, BN13, BN15, and BN18.

- **Material type variances**

We offer two types of belts for use based on the material being removed – a “standard” belt for most applications, and an “oily” belt for applications where more traction is required.

- **Maintenance requirements**

Belt and roller life can vary significantly as a function of application and machine setup. The ABX-3L is designed to exceed 300 hours of maintenance-free operation with proper use.

Belt replacement is quick (appx. 2 minutes) and requires only a pair of needle nose pliers.

Tool manuals and training videos are available on our website:

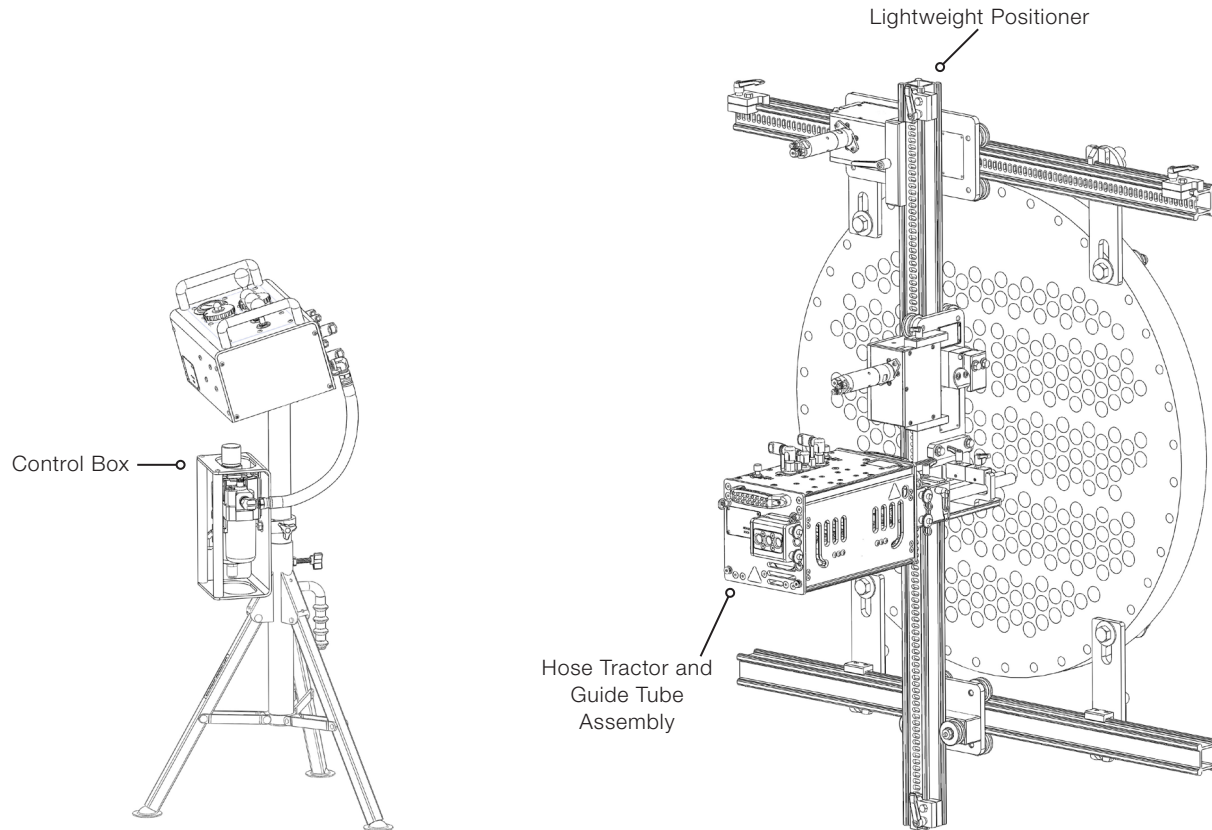
WWW.STONEAGETOOLS.COM

IMPORTANT!

The maximum crimp diameter that will fit through the ABX-3L is 0.74”.

No adjustments or component changes are required to use hoses sized between Ø 0.27” OD and 0.61”OD (3/2 to 8/4). However, **hose ends must be Blast Pro or Pro Lance** (reduced diameter sleeves for heat exchanger tube cleaning) to ensure hoses will fit through the machine.

AUTOBOX ABX-3L CONFIGURATION



To configure an AutoBox ABX-3L, the following information should be obtained:

- Size of rotary tool
- Size of hose
- Diameter of tube bundle (positioner window size)
- Length of guide tubes required – standard 12.5" and 36" lengths, custom lengths also available
- Preferred mounting clamp(s) for positioner

ORDERING THE AUTOPACK

StoneAge offers a complete package for the AutoBox ABX-3L that includes **all the available sizes of all component parts in a portable job box**. The ABX-3L AutoPack configuration is shown below:

PACKAGE PART ID		AUTO-3L-V2-LWP-PKG
QTY	DESCRIPTION	PART ID
1	Placeholder Kit, Y Manifold with Plugs and Glands	ABX 369-???-K
1	Kit, 12in Guide Tubes (3 ea ABX 115, 116, 117, 119)	ABX 631-12
1	Guide Assembly, 3L, High-Visibility	ABX-301
1	AutoBox, Belt Track Drive Assy 3 Lance	ABX-3L-V2
1	Control Box, Stand, FRL Assy, for ABX	CBX-ABX
1	Job Box, Set up for 3L, AE and LWP	GPT 067-3L-001
1	Kit, Hose Stop and Collet 3L	GPT 108
2	Tool Bag, 18in	GPT 310
1	Kit, Quick Clamp Assy (Clamp to flange, 4 Pcs.)	LWP 621
2	Kit, Plate Clamp Assy (Bolted to flange, 2 Pcs.)	LWP 622
1	Lightweight Positioner, 6ft, 48in/1220mm Flange	LWP-500-6-V2

??? - Specify manifold options

ORDERING THE COMPLETE PACKAGE

StoneAge offers a complete package for the AutoBox ABX-3L that includes **all the available sizes of all component parts**. The ABX-3L complete package configuration is shown below:

PACKAGE PART ID		ABX-3L-V2-1-PKG
QTY	DESCRIPTION	PART ID
1	AutoBox, Belt Track Drive Assy 3 Lance	ABX-3L-V2
1	Control Panel Assy, CBX	CBX-ABX
1	Guide Assembly, 3L, High-Visibility	ABX-301
1	Kit, Hose Stop Collets, 3L, (1ea size range ABX 171 .297-.625)	ABX 671
1	Kit, Hose Stops, (3ea size range HS 121-27-61)	HS 622
1	Kit, 12in Long Guide Tubes, (3 ea ABX 115, 116, 117, 119)	ABX 631-12
1	Lightweight Positioner, 6ft, 48in/1220mm Flange	LWP-500-6-V2
1	Kit, Quick Clamp Assy (Clamp to flange, 4 Pcs.)	LWP 621
1	Kit, Plate Clamp Assy (Bolted to flange, 2 Pcs.)	LWP 622
1	Placeholder Kit, Y Manifold with Plugs and Glands	ABX 369-???-K

??? - Specify manifold options

AUTOBOX ABX-3L CONFIGURATION

ORDERING THE BASE PACKAGE

StoneAge offers a base package for the AutoBox ABX-3L hose tractor. The ABX-3L base package is preconfigured for the most common applications to include: 1. AutoBox ABX-3L hose tractor, 2. Guide assembly, 3. Control box, 4. Backout collet, 5. Hose feed stops for specified hose size.

The base ABX-3L package can be configured to the specifications of your job with the addition of customized options. Fully custom solutions are possible by contacting StoneAge Customer Service.

The ABX-3L base package and standard options are shown below:

PACKAGE PART ID		ABX-3L-V2-PKG
QTY	DESCRIPTION	PART ID
1	AutoBox, Belt Track Drive Assy 3 Lance	ABX-3L-V2
1	Control Panel Assy, CBX	CBX-ABX
1	Guide Assembly, 3L, High-Visibility	ABX-301
1	Hose Stop Collet, .297, 3L	ABX 171-297
3	Hose Stop, Clamp Style, .34-.42", 8.6-10.7mm	HS 121-34-42

Base Package Options

QTY	DESCRIPTION	PART ID
3	Guide Tube, .546 ID, 12.5"/315.7 mm L (BN13)	ABX 116-12
1	Lightweight Positioner, 6' 48"/1220 mm Flange	LWP-500-6-V2
1	Kit, Plate Clamp Assembly (Bolted to flange, 2 Pcs.)	LWP 622
1	Placeholder Kit, Y Manifold with Plugs and Glands	ABX 369-???-K

??? - Specify manifold options

PACKAGE CONFIGURATION OPTIONS

MANIFOLD KIT OPTIONS

QTY	PRESSURE	DESCRIPTION	PART ID
1	22k psi 1500 bar	Y Manifold kit with Plugs and Glands, 22k psi/1500 bar	ABX 369-MP12-K
1	40k psi 2800 bar	Y Manifold kit with Plugs and Glands, 40k psi/2800 bar	ABX 369-H9-K

MANIFOLD ADAPTERS - INLET OPTIONS

DESCRIPTION	PART ID
Adapter, 1-12 Type-M x MP12	AF 063-MP12
Adapter, 7/8-14 Type-M x 9/16HP	AF 062-H9
Gland, 9/16 HP	AF 070-H9
Collar, 9/16 HP	AF 071-H9
Collar, M14x1.5 LH, HP	AF 071-HM14L
Adapter 3/4 MP(M) X M24 Cone(M)24 1500 bar	GP 255-MP12M24C
Adapter 3/4 MP(M) X M36 Cone(M)24 1379 bar	GP 255-MP12M36C
Adapter 3/4 MP(M) X 1/2 BSPP Cone(M)60 1379 bar	GP 255-MP12BSPP8C
Adapter 3/4 MP(M) X 3/4 BSPP Cone(M)60 1379 bar	GP 255-MP12BSPP12C

MANIFOLD ADAPTERS - OUTLET OPTIONS

DESCRIPTION	PART ID
Adapter, 9/16-18 Type-M x 3/8HP	AF 060-H6
Gland, 3/8 HP	AF 070-H6
Collar, 3/8 HP	AF 071-H6
Adapter 3/8 HP(M) X M24 Cone(M)24	GP 255-H6M24C
Adapter 9/16 MP(M) X M24 Cone(M)24 1500 bar	GP 255-MP9M24C
Adapter 9/16 MP(M) X 1/4 BSPP Cone(M)60 1500 bar	GP 255-MP9BSPP4C
Adapter 9/16 MP(M) X 3/8 BSPP Cone(M)60 1500 bar	GP 255-MP9BSPP6C

HOSE STOP OPTIONS

Hose stops are required safety mechanisms and come in collet and clamp styles. A working ABX-3L configuration requires one (1) backout collet and three (3) clamp-style hose stops.

HOSE OD	SPIR STAR	PARKER	COLLET SIZE	COLLET PART ID	CLAMP SIZE	CLAMP PART ID
0.27–0.41 in. 7–10 mm	3/2	2240D-02	0.297 in. 8 mm	ABX 171-297	0.27–0.34 in. 7–9 mm	HS 121-27-34
	3/4, 4/2	2240D-025, 2440D-02	0.328 in. 8 mm	ABX 171-328		
	3/6, 5/2	2240D-03	0.406 in. 10 mm	ABX 171-406	0.34–0.42 in. 9–11 mm	HS 121-34-42
0.44–0.50 in. 11–13 mm	4/4	2448D-025	0.438 in. 11 mm	ABX 171-438		
	4/6, 5/4, 6/2	2240D-04	0.460 in. 12 mm	ABX 171-460	0.42–0.50 in. 11–13 mm	HS 121-42-50
		2640D-025 2740D-025	0.484 in. 12 mm	ABX 171-484		
	6/4	2440D-04	0.516 in. 13 mm	ABX 171-516	0.50–0.56 in. 13–14 mm	HS 121-50-56
0.52–0.61 in. 13–16 mm	5/6, 8/2	2240D-05, 2740D-03	0.547 in. 14 mm	ABX 171-547		
	8/4		0.594 in. 14 mm	ABX 171-594	0.56–0.61 in. 14–16 mm	HS 121-56-61
		2440D-05	0.625 in. 15 mm	ABX 171-625		

The complete range of collet or clamp sizes can be purchased in a single kit:

DESCRIPTION	PART ID
Kit, Hose Stop Collets, ABX-3L, (1ea size range ABX 171 .297-.625)	ABX 671
Kit, Hose Stops, (3ea size range HS 121-27-61)	HS 622

AUTOBOX ABX-3L CONFIGURATION

LIGHTWEIGHT POSITIONER OPTIONS

RAIL LENGTH	DESCRIPTION	PART ID
48 in. 1219 mm	Lightweight Positioner, 4' 24"/610mm Flange	LWP-500-4-V2
72 in. 1829 mm	Lightweight Positioner, 6ft, 48in/1220mm Flange	LWP-500-6-V2
RAIL EXTENSIONS		
24 in. 610 mm	Box Rail, Slotted, Extension Kit, 2.5", 2'	LWP 580-2-001
	Box Rail Extension Kit, 2.5", 2'	LWP 581-2-001
	LWP Rail Extension Kit, 2' (2 Slotted Rail, 1 Box Rail)	LWP 582-2-V2
48 in. 1219 mm	Box Rail, Slotted, Extension Kit, 2.5", 4'	LWP 580-4-001
	Box Rail Extension Kit, 2.5", 4'	LWP 581-4-001
	LWP Rail Extension Kit, 4' (2 Slotted Rail, 1 Box Rail)	LWP 582-4-V2
72 in. 1829 mm	Box Rail, Slotted, Extension Kit, 2.5", 6'	LWP 580-6-001
	Box Rail Extension Kit, 2.5", 6'	LWP 581-6-001
	LWP Rail Extension Kit, 6'	LWP 582-6-V2

Please Note: Extension kits, maximum total rail length is 120" with standard clamps. Custom solutions available.

POSITIONER CLAMP OPTIONS

DESCRIPTION	PART ID
Kit, Quick Clamp Assy, Slotted (Bolted to flange, 4 Pcs.)	LWP 620
Kit, Quick Clamp Assy (Clamp to flange, 4 Pcs.)	LWP 621
Kit, Plate Clamp Assy (Bolted to flange, 2 Pcs.)	LWP 622
Kit, Positioner Clamp (3 sets of clamps)	LWP 625
Scaffold Quick Clamp Assy	LWP 554
Set of 4, Scaffold Quick Clamp Assy	LWP 554-K

BELT OPTIONS

BELT TYPE	DESCRIPTION	PART ID
Standard	Belt, 10mm, 50A, SIPE	ABX 305-50
Low Traction	Belt, 10mm, 70A, SIPE, green	ABX 305-70
Heavy Duty	Belt, 25mm, 80A, SIPE, black	ABX 305-80

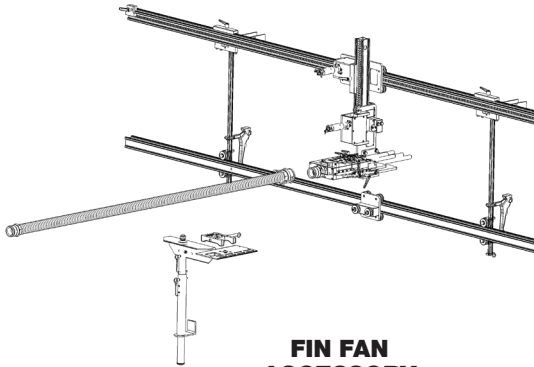
GUIDE TUBE OPTIONS

TUBE ID	TUBE LENGTH	DESCRIPTION	PART ID
0.46 in. 12 mm	12.5 in. 316 mm	Guide Tube, .459ID, L (BN9.5)	ABX 115-12
	36.0 in. 914 mm	Guide Tube, .459ID, 36"/914.4mm L (BN9.5)	ABX 115-36
0.55 in. 14 mm	12.5 in. 316 mm	Guide Tube, .546ID, 12.5"/315.7mm L (BN13)	ABX 116-12
	36.0 in. 914 mm	Guide Tube, .546ID, 36"/914.4mmL (BN13)	ABX 116-36
0.67 in. 17 mm	12.5 in. 316 mm	Guide Tube, .674ID, 12.5"/315.7mm L (BN15)	ABX 117-12
	36.0 in. 914 mm	Guide Tube, .674ID, 36"/914.4mm L (BN15)	ABX 117-36
0.75 in. 19 mm	12.5 in. 316 mm	Guide Tube, .745 ID, 12.5"/317.5mm L (BN18)	ABX 119-12
	36.0 in. 914 mm	Guide Tube, .745 ID, 36"/914.4mm L (BN18)	ABX 119-36
Multiple	12.5 in. 316 mm	Kit, 12in Guide Tubes, (3 ea ABX 115, 116, 117, 119)	ABX 631-12

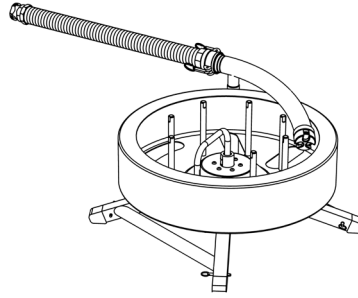
AUTOBOX ABX-3L CONFIGURATION

ACCESSORIES

The following accessory systems are available for the AutoBox ABX-3L:



**FIN FAN
ACCESSORY**



HCS-3L
Hose Containment System



AST-200
AutoStroke

DESCRIPTION	PART ID
Fin Fan Accessory Adapts system for fin fan exchanger cleaning – Direct mount dual lance cleaning	FF-280-2LR3L-10-PKG
Fin Fan Accessory Adapts system for fin fan exchanger cleaning – Snout mount dual lance cleaning	FF-280-2LS3L-10-PKG
Fin Fan Accessory Adapts system for fin fan exchanger cleaning – Snout mount triple lance cleaning	FF-380-3LS3L-10-PKG
Hose Containment System increases job site safety and prolongs hose life	HCS-3L
AutoStroke Extends nozzle life and increases productivity when cleaning plugged tubes	AST-200
Guide Tube Anti Twist Clamp Assy, .625	ABX 140-625
Guide Tube Anti Twist Clamp Assy, .840	ABX 140-840
Guide Tube Anti Twist Clamp Assy, .875	ABX 140-875
Crimp Collet Gauge w/engraving	ABX 005
Kit, Set Banshee Universal Wench BN9.5-BN24, w/Engraving, 2 Per Kit	BN 880-K

MAINTENANCE RESOURCES

DESCRIPTION	PART ID
ABX-3L Repair Kit, Belt Track Drive Assembly, Bottom	ABX 650
ABX-3L Repair Kit, Belt Track Drive Assembly, Top	ABX 660
UPGRADE KIT, ABX-3L to ABX-3L-V2	ABX-3L-V2-U

Tool manuals and training videos are available on our website:

WWW.STONEAGETOOLS.COM

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