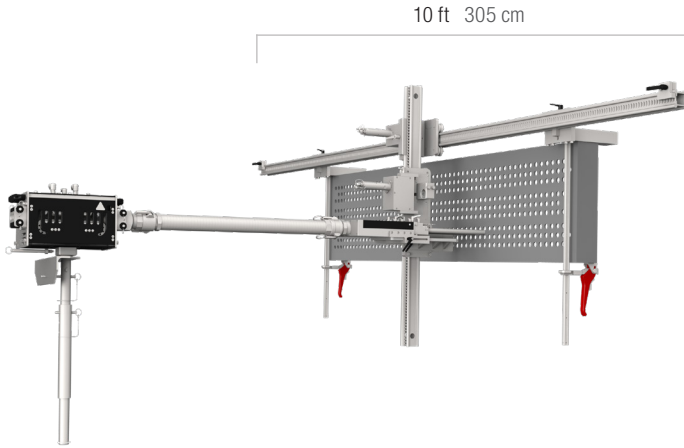


FIN FAN ACCESSORY

Designed for On-site Aerial Heat Exchanger Tube Cleaning



OVERVIEW

The StoneAge Fin Fan Accessory is a specifically engineered accessory for the AutoBox hose tractor family. The Fin Fan Accessory adapts AutoBox hose tractors for easy mounting to a Fin Fan header box for efficient tube cleaning.

The included scaffold mount allows AutoBox hose tractors to be attached to the catwalk railing—keeping hoses clear of the walkway for easy setup and operation. The Fin Fan Snout and Guide assemblies provide anti-withdrawal protection and precise tube pitch adjustment.

FEATURES	BENEFITS
<ul style="list-style-type: none"> Compatible with the AutoBox series of hose tractors (ABX-2L, ABX-3L, ABX-PRO) and Lightweight Positioner (LWP-500-V2) 	<ul style="list-style-type: none"> Increases utilization rates for owners of StoneAge tube cleaning equipment Provides controlled and adjustable feed rates for highest quality cleaning in both “in” and “out” directions Eliminates hand-held flex lancing of Fin Fans, demonstrates commitment to automated, hands-free cleaning
<ul style="list-style-type: none"> Light weight positioning system 	<ul style="list-style-type: none"> Easy to set up and assemble in tight locations Customizable to fit most fin fan exchangers
<ul style="list-style-type: none"> Hose snout and tube guide assembly 	<ul style="list-style-type: none"> Accurate lance control and indexing Built-in backout prevention increases safety Adjustable pitch, up to 6” dual-lance Maintains parallel guide tubes throughout the full pitch adjustment range
<ul style="list-style-type: none"> Scaffold mount 	<ul style="list-style-type: none"> Simple mounting of AutoBox tractor on existing structures

SPECIFICATIONS	
Horizontal Positioner*	Full Length: 10 ft 3048 mm Allowance: 30 in. 9144 mm
Vertical Positioner*	Full Length: 3.5 ft 1067 mm Allowance: 18 in. 457 mm
Hose Size	3/4–8/4
Pitch Adjustment	0.6–6.0 in. 15–153 mm

*Additional allowance required to complete travel distance. Custom lengths available.

FIN FAN ACCESSORY CONFIGURATION

To configure the Fin Fan Accessory, the following information should be obtained:

DRIVE TRACTOR AND CARRIAGES

- **Will the Fin Fan Accessory be used with an existing AutoBox and Lightweight Positioner?**

This product is offered as an accessory to the AutoBox family of hose tractors. *The required AutoBox tractor and drive carriages are sold separately.* If customer owns the Lightweight Positioner or is purchasing one, the stops, horizontal and vertical carriages can be used for the Fin Fan Accessory. If the customer does not own a Lightweight Positioner, the carriages and stops will need to be added as optional items.

RAIL SELECTION

- **What is the width of the fin fan exchanger?**

The horizontal rail will need to be a minimum of 30 inches (76 cm) longer than the fin fan unit to allow the drive carriage to travel the complete distance of the exchanger face.

- **What is the height of the fin fan exchanger?**

The vertical rail will need to be a minimum of 18 inches (46 cm) longer than the fin fan unit is in height.

HOSE COLLET STOP SELECTION

- **What is the hose (flex lance) size to be used?**

The appropriate hose stop collet/collets (FF 121-XXX) will be required.

GUIDE TUBE SELECTION

- **What is the ID of the tubes being cleaned? What size Banshee tools will be used?**

The appropriate size guide tube will be required.

STINGERS/COUPLERS

- **What is the depth of the header box (distance from outside surface to tube sheet)?**

The guide tube length will need to be approximately 6–8 inches (15–20 cm) longer than the depth of the header box. The nipple/stinger will need to be about 2 inches (5 cm) shorter than the header box depth.

- **What is the hose end fitting size, type, and thread?**

ADDITIONAL INFORMATION

- Make sure the hoses (flex lances) to be used are at least 13 ft (4 m) longer than the fin fan heat exchanger to be cleaned.

ORDERING A FIN FAN ACCESSORY PACKAGE

The Fin Fan Accessory is offered in six packages to accommodate different configurations. The table below illustrates different package options:

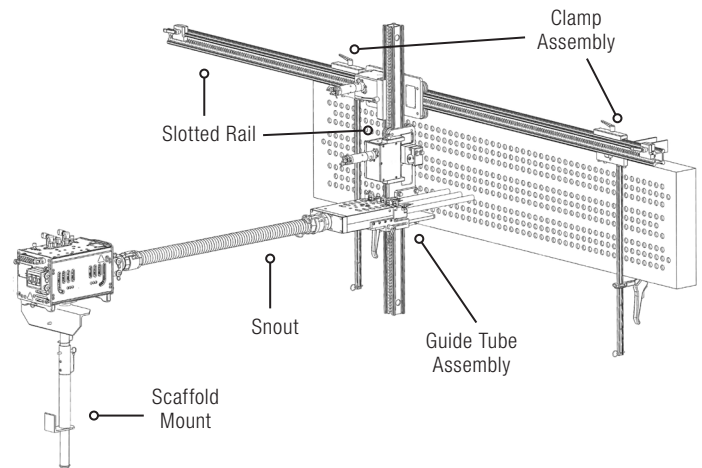
NUMBER OF LANCES	MOUNTING	AUTOBOX SYSTEM	PACKAGE PART ID
3 - Triple lance cleaning	Snout mount	ABX-3L	FF-380-3LS3L-10-PKG
2 - Double lance cleaning	Snout mount	ABX-3L	FF-280-2LS3L-10-PKG
		ABX-2L	FF-280-2LS2L-10-PKG
	Direct Mount	ABX-3L	FF-280-2LR3L-10-PKG
		ABX-2L	FF-280-2LR2L-10-PKG
1 - Single lance cleaning	Snout mount	ABX-3L	FF-380-3LS3L-10-PKG or FF-280-2LS3L-10-PKG
		ABX-2L	FF-280-2LS2L-10-PKG
	Direct mount	ABX-3L	FF-280-2LR3L-10-PKG
		ABX-2L	FF-280-2LR2L-10-PKG
		ABX-PRO	PRO-675-PKG + LWP-500-X-V2

FF-380-3LS3L-10-PKG / ABX-3L, 3 LANCE CLEANING, SNOUT MOUNT

This package accommodates 3-lance cleaning for an AutoBox ABX-3L hose tractor mounted off the positioner and utilizing a snout. Scaffold mount included.

QTY	PART ID	DESCRIPTION
3	ABX ???-16*	Guide Tube
1	BOP 103-07-2.0MCL-2.0FCL	Snout, Interlock, 2inMCL - 2.0inFCL, 7ft
1	BR 006-2.5-001	2.5" Splice Tube
2	BR 008-2.5-001	2.5" Wedge Bolt Assembly
2	BU 002-4-001	Box Rail, Slotted, 2.5", 4', w/round holes
1	BU 002-6-001	Box Rail, Slotted, 2.5", 6', w/round holes
2	FF 102	Fin Fan Clamp Assembly, 30"
1	FF 104	Scaffold Mount Assembly
1	FF 105-3L-K	Kit, ABX-3L to Fin Fan
3	FF 121-??? *	Hose Stop, Collet Style
1	FF 200-S	ABX Snout, Fin Fan, 3-Lance
1	HCS 310	Adapter, Weldment 3L Snout
3	HS 121-??? *	Hose Stop, Clamp Style

*??? - Specify full part ID based on hose/nozzle size



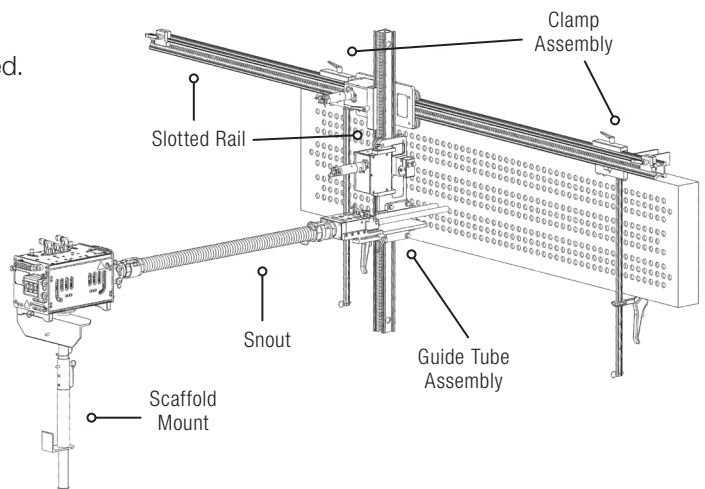
FIN FAN ACCESSORY CONFIGURATION

FF-280-2LS3L-10-PKG ABX-3L, 2 OR 1 LANCE CLEANING, SNOOT MOUNT

This package accommodates double or single lance cleaning for an AutoBox ABX-3L hose tractor mounted off the positioner and utilizing a snout. Scaffold mount included.

QTY	PART ID	DESCRIPTION
2	ABX ???-16*	Guide Tube
1	BOP 103-07-2.0MCL-2.0FCL	Snout, Interlock, 2inMCL - 2.0inFCL, 7ft
1	BR 006-2.5-001	2.5" Splice Tube
2	BR 008-2.5-001	2.5" Wedge Bolt Assembly
2	BU 002-4-001	Box Rail, Slotted, 2.5", 4', w/round holes
1	BU 002-6-001	Box Rail, Slotted, 2.5", 6', w/round holes
2	FF 102	Fin Fan Clamp Assembly, 30"
1	FF 104	Scaffold Mount Assembly
1	FF 105-3L-K	Kit, ABX-3L to Fin Fan
2	FF 121-???*	Hose Stop, Collet Style
1	FF 200-S	ABX Snout, Fin Fan
1	HCS 310	Adapter, Weldment 3L Snout
2	HS 121-???*	Hose Stop, Clamp Style

?? - Specify full part ID based on hose/nozzle size

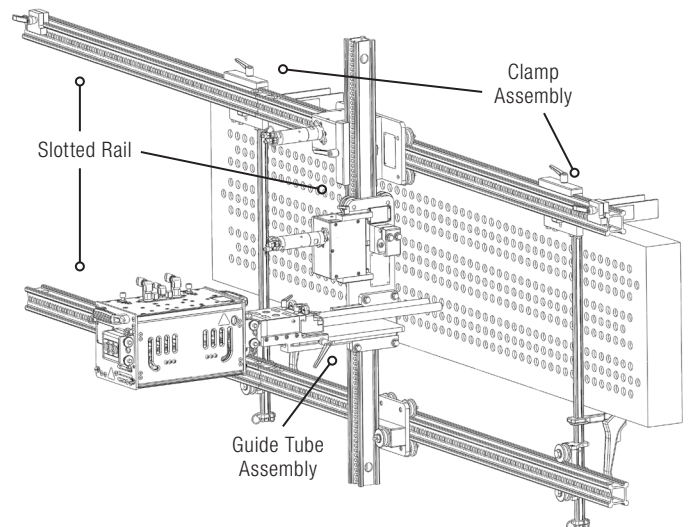


FF-280-2LR3L-10-PKG ABX-3L, 2 OR 1 LANCE CLEANING, DIRECT MOUNT

This package accommodates double or single lance cleaning for an AutoBox ABX-3L hose tractor directly mounted to the positioner frame.

QTY	PART ID	DESCRIPTION
2	ABX ???-16*	Guide Tube
2	BR 006-2.5-001	2.5" Splice Tube
4	BR 008-2.5-001	2.5" Wedge Bolt Assembly
3	BU 002-4-001	Box Rail, Slotted, 2.5", 4', w/round holes
2	BU 002-6-001	Box Rail, Slotted, 2.5", 6', w/round holes
2	FF 102	Fin Fan Clamp Assembly, 30"
2	FF 121-???*	Hose Stop, Collet Style
2	FF 160	Lower Support Bracket Assembly
1	FF 200-3LR	ABX-3L Rigid Mount Guide Tube Assembly
2	HS 121-???*	Hose Stop, Clamp Style

?? - Specify full part ID based on hose/nozzle size

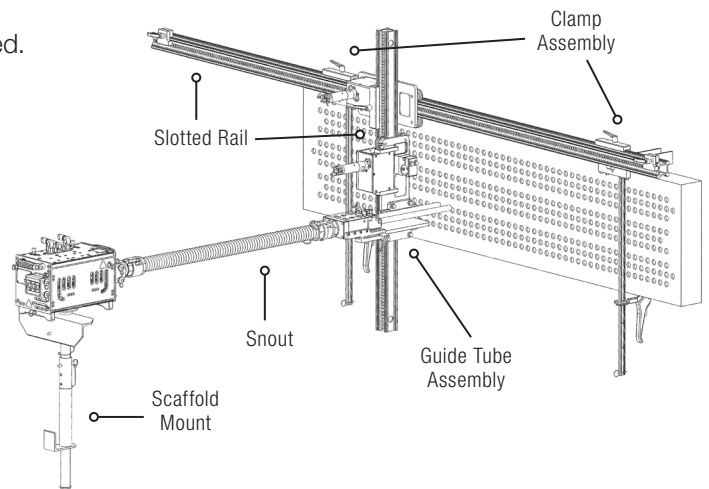


FF-280-2LS2L-10-PKG
ABX-2L, 2 OR 1 LANCE CLEANING, SNOOT MOUNT

This package accommodates double or single lance cleaning for an AutoBox ABX-2L hose tractor mounted off the positioner and utilizing a snout. Scaffold mount included.

QTY	PART ID	DESCRIPTION
2	ABX ???-16*	Guide Tube
1	ABX 210	Plate, Bottom
1	BOP 103-07-2.0MCL- 2.0FCL	Snout, Interlock, 2inMCL - 2.0inFCL, 7ft
1	BR 006-2.5-001	2.5" Splice Tube
2	BR 008-2.5-001	2.5" Wedge Bolt Assembly
2	BU 002-4-001	Box Rail, Slotted, 2.5", 4', w/round holes
1	BU 002-6-001	Box Rail, Slotted, 2.5", 6', w/round holes
2	FF 102	Fin Fan Clamp Assembly, 30"
1	FF 104	Scaffold Mount Assembly
1	FF 105-RK	Retrofit Kit, (ABX-2L to FinFan)
2	FF 121-???*	Hose Stop, Collet Style
1	FF 200-S	ABX Snout, Fin Fan
2	HS 121-???*	Hose Stop, Clamp Style

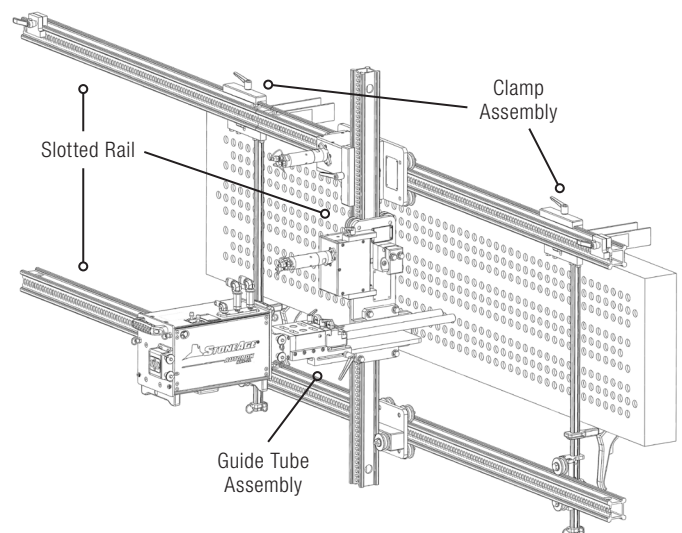
*??? - Specify full part ID based on hose/nozzle size


FF-280-2LR2L-10-PKG
ABX-2L, 2 OR 1 LANCE CLEANING, DIRECT MOUNT

This package accommodates double or single lance cleaning for an AutoBox ABX-2L hose tractor directly mounted to the positioner frame.

QTY	PART ID	DESCRIPTION
2	ABX ???-16*	Guide Tube
2	BR 006-2.5-001	2.5" Splice Tube
4	BR 008-2.5-001	2.5" Wedge Bolt Assembly
3	BU 002-4-001	Box Rail, Slotted, 2.5", 4', w/round holes
2	BU 002-6-001	Box Rail, Slotted, 2.5", 6', w/round holes
2	FF 102	Fin Fan Clamp Assembly, 30"
2	FF 121-???*	Hose Stop, Collet Style
2	FF 160	Lower Support Bracket Assembly
1	FF 200-2LR	ABX-2L Rigid Mount Guide Tube Assembly
2	HS 121-???*	Hose Stop, Clamp Style

*??? - Specify full part ID based on hose/nozzle size



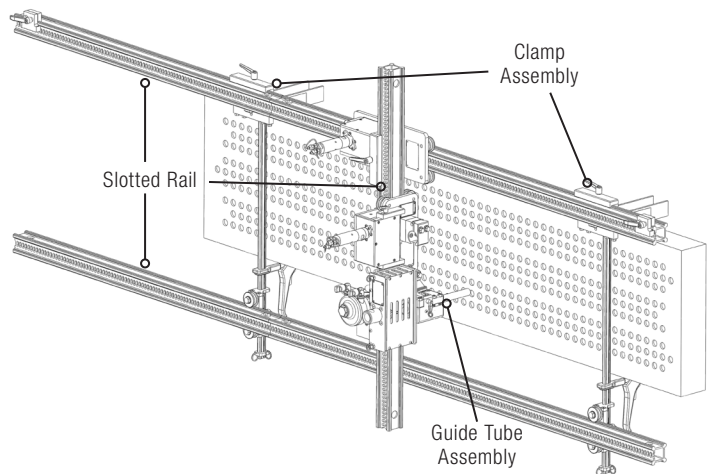
FIN FAN ACCESSORY CONFIGURATION

PRO-675-PKG ABX-PRO, 1 LANCE CLEANING, DIRECT MOUNT

This package accommodates single lance cleaning for an AutoBox ABX-PRO hose tractor directly mounted to the positioner frame.

QTY	PART ID	DESCRIPTION
1	BOP 035-???	Guide Tube Collet Block Assembly
1	BOP 048	Hose Stop Adaptor, ABX-PRO
1	ABX ???-???	Guide Tube (Size and Length)
1	FF 121-???	Hose Stop, Collet Style
1	HS 121-???	Hose Stop, Clamp Style
1	LWP-500-???-V2*	Lightweight Positioner (Specify Length)

*Positioner is not included in PRO-675-PKG and must be ordered separately



PACKAGE CONFIGURATION OPTIONS

The Fin Fan Accessory can be configured to specified requirements. Configuration options are described below:

Rail Options

The Fin Fan Accessory and Lightweight Positioner utilize 2.5" slotted rail for horizontal and vertical framing. Rail lengths are customizable and can be spliced together to accommodate many different exchanger sizes. Standard lengths are listed below:

RAIL LENGTH	DESCRIPTION	PART ID
2.00 ft 610 mm	Box Rail, Slotted, 2.5", 2', w/round holes	BU 002-2-001
3.50 ft 1067 mm	Rail, 3.5', 2.5" Slotted w/round holes	BU 002-3.5-001
3.75 ft 1143 mm	Rail, 3.75ft, 2.5in Slotted w/round holes	BU 002-3.75-001
4.00 ft 1219 mm	Box Rail, Slotted, 2.5", 4', w/round holes	BU 002-4-001
6.00 ft 1823 mm	Box Rail, Slotted, 2.5", 6', w/round holes	BU 002-6-001
10.0 ft 3048 mm	Rail, 10', 2.5" Slotted w/round holes	BU 002-10-001
15.0 ft 4572 mm	Rail, 15', 2.5" Slotted w/round holes	BU 002-15-001
EXTENSION KITS		
2.00 ft 610 mm	Box Rail, Slotted, Extension Kit, 2.5", 2'	LWP 580-2-001
4.00 ft 1219 mm	Box Rail, Slotted, Extension Kit, 2.5", 4'	LWP 580-4-001
6.00 ft 1823 mm	Box Rail, Slotted, Extension Kit, 2.5", 6'	LWP 580-6-001

Hose Stop Collet and Clamp Options

Appropriate size collet selection is **CRITICAL** to ensuring proper backout prevention of the tool.

HOSE OD	SPIRSTAR	PARKER	COLLET SIZE	COLLET PART ID	CLAMP SIZE	CLAMP PART ID
0.26–0.38 in. 7–10 mm	3/2	2240D-02	.297 in. 8 mm	FF 121-297	0.27–0.34 7–9 mm	HS 121-27-34
	3/4, 4/2	2240D-025, 2440D-02	.328 in. 8 mm	FF 121-328		
	3/6, 5/2	2240D-03	.406 in. 10 mm	FF 121-406	0.34–0.42 9–11 mm	HS 121-34-42
0.39–0.50 in. 11–13 mm	4/4	2448D-025	.438 in. 11 mm	FF 121-438	0.42–0.50 11–13 mm	HS 121-42-50
	4/6, 5/4, 6/2	2240D-04	.460 in. 12 mm	FF 121-460		
		2640D-025, 2740D-03	.484 in. 12 mm	FF 121-484	0.50–0.56 13–14 mm	HS 121-50-56
	6/4	2440D-04	.516 in. 13 mm	FF 121-516		
0.51–0.61 in. 13–16 mm	5/6, 8/2	2240D-05, 2740D-03	.547 in. 14 mm	FF 121-547	0.56–0.61 14–16 mm	HS 121-56-61
	8/4		.594 in. 14 mm	FF 121-594		
			2440D-05	.625 in. 15 mm	FF 121-625	
HOSE STOP COLLET KITS						
0.26–0.61 in. 7–16 mm	Kit (Extended), Hose Stop Collets, (2ea .297 - .625)			FF 622		

Guide Tube Options

Custom lengths are available. Contact StoneAge Customer Service about your application.

TUBE LENGTH	BANSHEE MODEL	TUBE SIZE	TUBE PART ID
16 in. 406 mm	BN9.5	.459 in. 12 mm	ABX 115-16
	BN13	.546 in. 14 mm	ABX 116-16
	BN15	.674 in. 17 mm	ABX 117-16
	BN18	.745 in. 19 mm	ABX 119-16
	BN24	1.01 in. 25 mm	ABX 125-16
	BN24 , BN27	1.12 in. 28 mm	ABX 126-16
	BN33	1.38 in. 35 mm	ABX 127-16

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

WWW.STONEAGETOOLS.COM