AUTOSTROKE

Automatic Blockage Sensor for AutoBox ABX-2L



OVERVIEW

The AutoStroke AST-100-2L is designed to increase efficiency and simplify the operation of the ABX-2L in applications with plugged heat exchanger tubes.

The AutoStroke senses when a Banshee nozzle has hit a plug and activates an automatic forward and reverse pecking motion that allows the jets to effectively break through obstructions without operator intervention.

By automatically retracting the Banshee tool from the blockage, the AST-100-2L allows the tool to maintain maximum jet rotation to clear the blockage. This produces optimal cleaning and saves wear on your Banshee tools.

KEY FEATURES

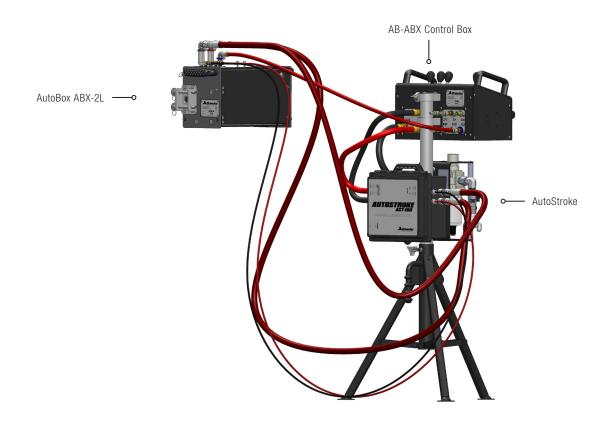
- Quick install to your existing ABX-2L
- Automated forward and reverse tool motion to clear obstructions
- Adjustable sensitivity for changing job conditions
- Adjustable retract distance allows nozzle to regain rotation

SPECIFICATIONS

| PART ID | AST-100-2L |
|-----------------------|--|
| Dimensions | 11.5 x 10.5 x 7.5 in 351 x 320 x 229 cm |
| Weight | 10 lb 4.5 kg |
| Umbilical Hose Length | 25 ft 762 cm |
| Hose Force | 0-60 lb 0-27 kg |
| Retract Time | 0.05-1.1 sec |



AUTOSTROKE OVERVIEW



A complete AutoStroke package includes the following components:

- 1. AST-100 AutoStroke automatic blockage sensor
- 2. Manifold assembly
- 3. Two ½ inch air lines
- 4. Two ¼ inch tubing lines in a nylon sheath

The following items are required for operation:

- 1. AutoBox ABX-2L
- 2. CB-ABX Control Box

Ordering:

| PART ID | DESCRIPTION |
|------------|-------------------------------|
| AST-100-2L | AutoStroke ABX-2L Upgrade Kit |

FREQUENTLY ASKED QUESTIONS

• How will the AutoStroke help me be more productive? The AutoStroke is helpful if you clean heat exchangers with plugged tubes and are experiencing reduced roller or belt life on your ABX-2L. By automatically retracting the Banshee nozzle from a blockage, the AutoStroke allows the tool head to maintain maximum jet rotation to clear the blockage without operator intervention. This saves wear on ABX-2L components and Banshee tools.

• Is the AutoStroke a stand-alone product?

No, the AutoStroke is an AutoBox ABX-2L accessory. It can be used with any size drive rollers and any hose type or size capable of operating with the ABX-2L.

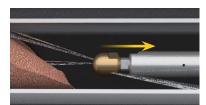
How does the AutoStroke work?

The AutoStroke detects pressure drop across the air motor and compares it to the value that the operator sets with the sensitivity knob. Certain conditions, such as bends in the tubing, may require more push force before engaging the auto-stroke mechanism.

- If higher push forces are required, the operator can decrease sensitivity.
- If less push force is required, the operator can increase sensitivity.
- The retract timer can be adjusted to retract the hoses for a specified time once the established push force is exceeded. This allows the nozzles to regain rotation.



BANSHEE HEAD CONTACTS BLOCKAGE AND STOPS ROTATING



AUTOSTROKE 'SENSES' BLOCKAGE AND PULLS HOSE BACK SIGHTLY TO REGAIN HEAD ROTATION



HEAD REGAINS NORMAL ROTATION AND HOSE FEED CONTINUES

PRIMARY MAINTENANCE REQUIREMENTS

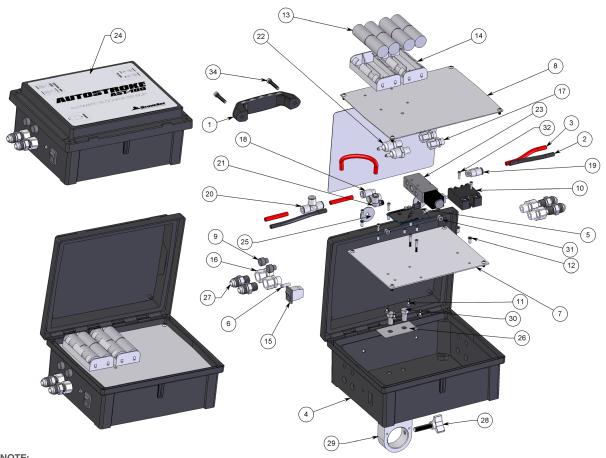
- Keep airline ends clean and capped.
- Keep spare batteries on hand. Batteries should last 1-2 weeks at minimum.
- Keep AutoStroke indoors when not in use.

Visit our website for more information, including tool videos and manuals:

WWW.STONEAGETOOLS.COM



AUTOSTROKE COMPONENT VIEW



NOTE:

- 1. APPLY LOCTITE THREADSEALANT 567 OR EQUIVALENT TO
- 2. APPLY BLUE LOCTITE 242 OR EQUIVALENT TO THREADS OF ALL THREADED FASTENERS UNLESS NOTED OTHERWISE.
- 3. LISTED MATERIAL OR EQUIVALENT ROHS COMPLIANT MATERIAL TO BE USED FOR ALL ITEMS.

| # | PART NUMBER | QTY. |
|----|---------------------------------|------|
| 1 | ABX 215 PULL HANDLE RUBBER GRIP | 1 |
| | GREY | |
| 2 | ABX 268-BK BLACK TUBE 8MM | 1 |
| 3 | ABX 268-R RED TUBE 8MM | 1 |
| 4 | AST 205 HINGED ENCLOSURE | 1 |
| 5 | AST 206 MICROCONTROLLER | 1 |
| 6 | AST 207 LED INDICATOR | 1 |
| 7 | AST 208 BACK PANEL | 1 |
| 8 | AST 209 FRONT PANEL | 1 |
| 9 | AST 210 ROTARY POTENTIOMETER | 2 |
| 10 | AST 211 SOLID STATE RELAY | 1 |

| 11 | AST 212 SNAP IN STANDOFF | 4 | 23 | AST 235 SOLENOID VALVE | 1 |
|----|----------------------------------|---|----|-------------------------------------|---|
| 12 | AST 213 RIVET NUT, 6-32 | 8 | 24 | AST 250 AUTOSTROKE GRAPHIC | 1 |
| 13 | AST 214 C BATTERY | 8 | 25 | AST 251 FENDER WASHER | 2 |
| 14 | AST 215 BATTERY HOLDER | 2 | 26 | AST 252 WASHER PLATE | 1 |
| 15 | AST 216 ROCKER SWITCH | 1 | 27 | CB 122 FITTING, OUTLET P6J8 | 4 |
| 16 | AST 220 BULKHEAD PL5 P6F | 4 | 28 | CB 314 3-LOBE KNOB | 1 |
| 17 | AST 221 BULKHEAD PL4 P4F | 2 | 29 | CB 328 POLE MOUNT | 1 |
| 18 | AST 223 FTG, ROUND BODY, P2M PL5 | 1 | 30 | GB 337-03 BOLT, HEX .37-16 X .75 SS | 2 |
| 19 | AST 224 FTG, ROUND BODY, P4M PL5 | 3 | 31 | GN 325-L NYLOK NUT SS (TB 044.1) | 2 |
| 20 | AST 225 FTG, TEE PL5 | 1 | 32 | GS 313-02 SHCS .138-32 X .50 SS | 6 |
| 21 | AST 226 FTG, ELBOW P2M PL5 | 1 | 33 | GS 313-05 SHCS .138-32 X 1.25 SS | 2 |
| 22 | AST 230 PRESSURE TRANSDUCER | 2 | 34 | GS 325-05 SHCS .25-20 X 1.25 SS | 2 |
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