



Operation Instructions

Smart Snake A/C Drain Cleaner Safety

Always wear leather gloves and goggles.

When drain cleaning; chemicals, bacteria or toxins may be present so be sure to wear rubber or latex gloves under the leather gloves with a face shield to prevent splashing on the face or eyes.

Do not wear loose clothing or jewelry.

Keep your hair away from moving parts.

Only use a cordless variable speed drill.

Do not exceed 100 RPMS.

DO NOT USE THE PVC-75 IN 3/4" FLEXIBLE DRAIN TUBING - Flexible drain tubing is not consistently round, especially when it is bent to change direction. The cutting tip will get stuck in the smaller diameter tubing.

The **BLK-50** is recommended for flexible tubing and larger PVC piping. However, it may not pass through some 90 degree elbows.

The **BLK-50** may not pass through areas where tubing is extremely bent or kinked. **DO NOT FORCE** or allow the cutting tip to jam or stop turning. This can cause kinking of the flexible shaft or damage to the cutting tip.

Loading & Removing Flexible Shaft

The flexible shaft should be installed by laying the flexible shaft out on the floor. (Do not try to load from a tangled coil, it will not feed correctly into the housing.) Then push the flexible shaft into the housing while rotating the housing in the counterclockwise direction. Once the flexible shaft has been started into the housing, the rotation of the housing can be stopped and the rest of the flexible shaft can be pushed into the housing by hand, until the cutting tip reaches the housing.

To remove, slowly pull the flexible shaft out of the housing, the shaft should come completely out of the housing. If it does not, do not force it. Open the housing and untangle the flexible shaft so it will come out.

Operation

Always use a good quality wet vacuum to remove debris loosened by the Smart Snake.

Install the Smart Snake arbor into the chuck of the cordless drill.

The Smart Snake should be rotated in the counterclockwise direction. **A "clockwise" rotation will increase the chance of tangling the flexible shaft inside of the housing.** Should you reach an obstruction, a brief pulse clockwise or at high speed or should help rattle the clearing tip through the obstruction. (We do not recommend operating in excess of 100 RPMs for normal operation.) Keep the Smart Snake operating in counterclockwise rotation.

Do not allow the cutting tip to stop turning or jam while the drill is rotating. This can cause kinking of the flexible shaft and/or damage to the cutting ball.

When using the Smart Snake to clear a vertical drain line, **BE CAREFUL THE FLEXIBLE SHAFT CAN COME COMPLETELY OUT OF THE HOUSING AND FALL INTO THE VERTICAL DRAIN LINE. A WHITE WARNING BAND WILL SHOW THERE IS ONLY 3' LEFT IN THE HOUSING.**

Opening Housing

Open the housing for regular cleaning or if the flexible shaft gets tangled. With a small pocket screwdriver, raise the tabs on both sides over the locking pins and separate both halves. The housing halves will snap back together.

Care

Clean any debris from the flexible shaft and housing as needed. (Dirty and/or greasy flexible shaft and/or housing will cause flexible shaft to slip in the housing).

Inspect the Smart Snake for any conditions which may be unsafe.

Do not use the Smart Snake until unsafe conditions have been corrected.

Inspect your Smart Snake prior to each use to prevent injury.

SMART SNAKES

IF THE DRAIN OUTLET IS ACCESSIBLE:

Smart Snake from drain outlet toward air handler

A good quality wet vacuum should be used to clear the A/C drain line from outside toward the air handler, using the drain adapter. The drain adapter will allow the wet vacuum to be operating while using the Smart Snake.

Install the drain adapter ("D" connection) to the drain line. It can be used on 3/4" or 1" drain line. (It can also be designed in the field, to connect to a different line size.)

Attach wet vacuum to "V" connection on drain adapter.

By hand, push the cutting tip into the top of the drain adapter. ("S" connection)



Drain Adapter

Once the cutting ball is started into the drain adapter, place the slotted 3/4" PVC cap around flexible shaft and push down onto the short piece of 3/4" PVC pipe.

Turn on the wet vacuum and, with gloved hands, start gently pushing the flexible shaft while rotating it with the cordless drill into the A/C drain.

Starting from the air handler first may cause the broken up debris to back up in the drain line that has not already been cleared.

Once the outside drain has been cleared, Remove the drain adapter and connect the wet vacuum directly to A/C drain outlet.

Smart Snake from air handler (If wet vacuum can be connected to accessible drain outlet)

Locate a good spot to insert Smart Snake into the A/C drain line leaving the air handler. (Cut the drain line if necessary.)

Then proceed, with gloved hands, to gently push the Smart Snake cutting ball into the A/C drain line from the air handler to the outside while rotating it with a cordless drill and the wet vacuum is operating. When reaching a fitting gentle "gradually" increase pushing pressure.

SMART SNAKES

IF DRAIN OUTLET IS NOT ACCESSIBLE:

A good quality wet vacuum should be used to clear the A/C drain line from the air handler, using the drain adapter. The drain adapter will allow the wet vacuum to operate while using the Smart Snake.

Install the drain adapter ("D" connection) to the drain line. It can be used on 3/4" or 1" drain line. (It can also be designed in the field, to connect to a different line size.)

Attach wet vacuum to "V" connection on drain adapter.

By hand, push the cutting tip into the top of the drain adapter. ("S" connection)



Once the cutting ball is started into the drain adapter, place the slotted 3/4" PVC cap around flexible shaft and push down onto the short piece of 3/4" PVC pipe.

Turn on wet vacuum and proceed, with gloved hands, to gently push the Smart Snake cutting ball into the A/C drain line from the air handler while rotating it with a cordless drill and the wet vacuum is operating. When reaching a fitting gentle "gradually" increase pushing pressure.

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www.smartsnakes.com**