

Installation & Replacement of Pre-Cleaner Extension Tube

Description

The design of the pre-cleaner assembly, which is supplied as part of the dust collection system, has been changed. The changes have been made to more easily facilitate installation of an extension tube and address the problem of water being drawn into the dust collection system when the machine is operated in wet conditions (standing water) with a pre-cleaner extension tube installed.

Due to this change in pre-cleaner design, the design of the pre-cleaner extension tube has been changed to mate with the improved pre-cleaner assembly.

For customers with machines equipped with the new dust pre-cleaner, installation or replacement of the pre-cleaner extension is simple and straightforward (installation or replacement is outlined in this bulletin). However, customers still using the older style pre-cleaners have experienced difficulty in installing or replacing the pre-cleaner extension tube with extension tube that is now provided (installation or replacement is outlined in this bulletin).

Function

The purpose of this document is:

- to provide a means of identifying which pre-cleaner is installed on the machine (older, fabricated design or newer, cast design).
- to outline the procedure for installing or replacing the pre-cleaner extension tube (of new design) on pre-cleaner assemblies of the newer, cast design.
- to outline the procedure for installing or replacing the pre-cleaner extension tube (of new design) on pre-cleaner assemblies of the older, fabricated design.

Tools Needed

- Screwdriver
- Ruler
- Knife or Scissors
- Straight Edge
- Select and Use  Before Starting Job

Parts Needed

PART #	DESCRIPTION	QTY
553846	24" (60.96 cm) Extension Tube	1
	OR	
556807	48" (121.92 cm) Extension Tube	1
301472	Other Parts Required: See Figures 1 & 2	1

See text of instructions to determine extension tube required.

WARNING

Dust pre-cleaner cylinder linkage and butterfly valve present serious potential pinch points.

Remove power from the machine - lock and tag out power at the power center before working on or around the dust pre-cleaner assembly.

Serious injury can occur as a result of failure to de-energize the machine prior to inspecting or working on the dust pre-cleaner assembly.

⚠ WARNING

The pre-cleaner assembly, as well as the pre-cleaner extension tube, can contain potentially hazardous respirable dust.

Wear approved respiratory protection when working on the pre-cleaner.

Serious, long-term health problems can occur as a result of working around respirable dust without wearing proper breathing protection.

Machine Setup

1. Park the machine in a safe work location under permanent roof support.
2. Remove the power to the machine at the power center.
3. Lock and tag out power to machine at the power center.

Identification of (New) Cast Design Pre-Cleaner

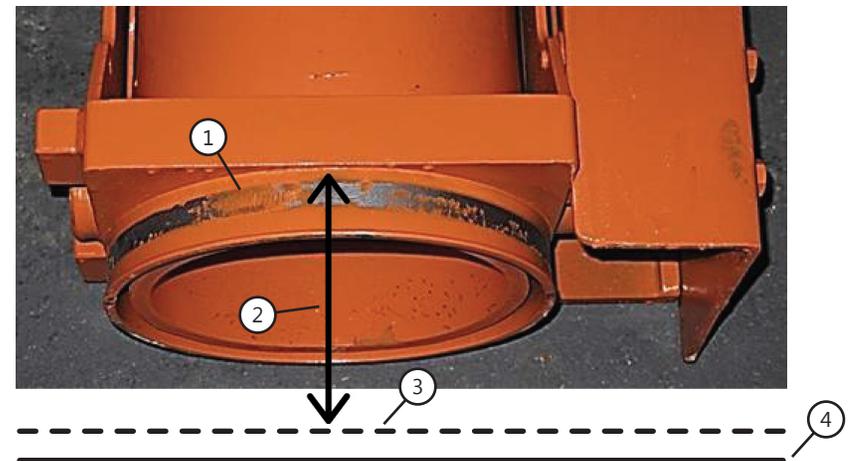


Determine Required Extension Tube Length for (New) Cast Pre-Cleaner Assembly

To be effective in operation, the bottom end of the extension tube should be located approximately one inch (2.54 cm) above the mine floor.

Measure the distance from the top of the extension tube mounting ring to the floor, then subtract one inch (2.54 cm) from this measurement to determine the required extension tube length. See Fig. 1.

Figure 1



Component Parts (Fig. 1)

ITEM	DESCRIPTION	QTY
1	Extension Tube Mounting Ring	-
2	Extension Tube Length Required	-
3	1" (2.54 cm) Above Mine Floor	-
4	Mine Floor	-

Removal Procedure for (New) Cast Design Pre-Cleaner

NOTICE

Wear approved respiratory protection while performing this task.

1. Using a screwdriver, loosen the hose clamp which secures the pre-cleaner extension tube to the pre-cleaner assembly.
2. Pull downward on the pre-cleaner extension tube, removing the extension tube and clamp from the pre-cleaner assembly.
3. Carefully (to create the least possible release of dust) place the old extension tube assembly into a container which can be sealed and disposed of properly (Dust Hazard).

Installation Procedure for (New) Cast Design Pre-Cleaner

1. Cut the extension tube to the required length. This can be done with scissors or a sharp knife. In either case, make sure the cut is square and clean.
2. Slip the top of the extension tube all the way upward onto the extension tube mounting ring.
3. While holding the extension tube in place, install the mounting clamp and tighten with a screwdriver.

Identification of (Old) Fabricated Design Pre-Cleaner

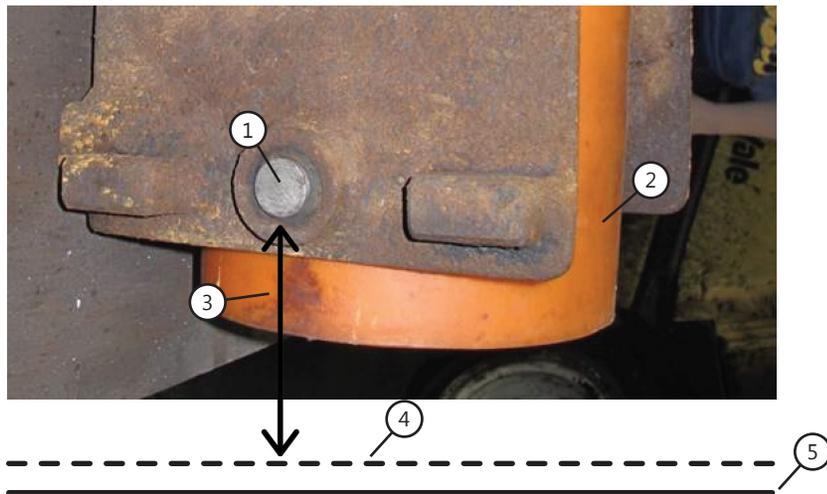


Determine Required Extension Tube Length for (Old) Fabricated Pre-Cleaner Assembly

To be effective in operation, the bottom end of the extension tube should be located approximately one inch (2.54 cm) above the mine floor.

Measure the distance from the bottom of the butterfly valve shaft to the floor, then subtract one inch (2.54 cm) from this measurement to determine the required extension tube length. See Fig. 2.

Figure 2



Component Parts (Fig. 2)

ITEM	DESCRIPTION	QTY
1	Butterfly Valve Shaft	-
2	Butterfly Valve Tube	-
3	Extension Tube Length Required	-
4	1" (2.54 cm) Above Mine Floor	-
5	Mine Floor	-

Removal Procedure for (Old) Fabricated Design Pre-Cleaner

NOTICE

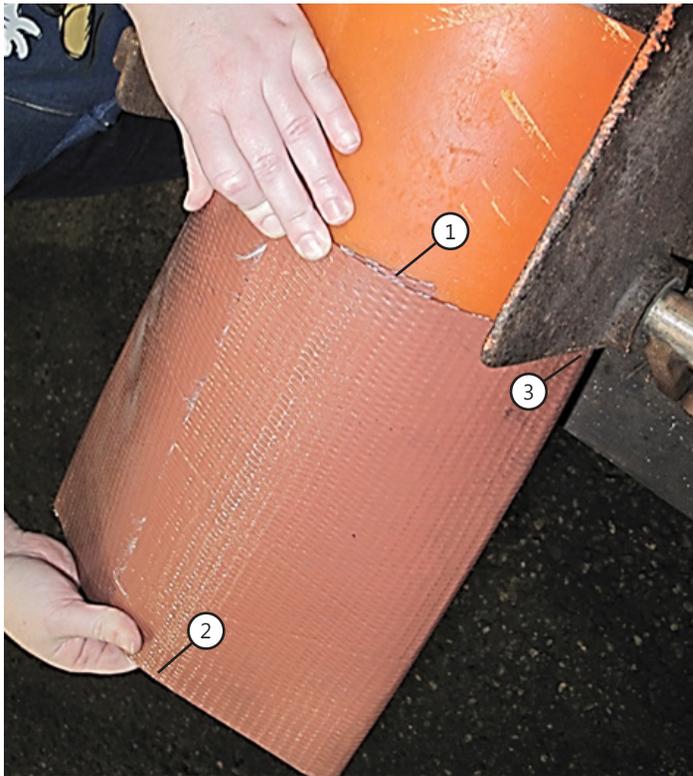
Wear approved respiratory protection while performing this task.

1. Using a screwdriver, loosen the hose clamp which secures the pre-cleaner extension tube to the pre-cleaner assembly.
2. Pull downward on the pre-cleaner extension tube, removing the extension tube and clamp from the pre-cleaner assembly.
3. Carefully (to create the least possible release of dust) place the old extension tube assembly into a container which can be sealed and disposed of properly (Dust Hazard).

Installation Procedure for (Old) Fabricated Design Pre-Cleaner

1. Cut the extension tube to the required length. This can be done with scissors or a sharp knife. In either case, make sure the cut is square and clean.
2. Make a straight cut along the length of the extension tube from top to bottom.
3. Place the top of the extension tube just below the bottom of the butterfly valve shaft and wrap the extension tube around the bottom of the butterfly valve housing tube (Fig. 3).
4. While holding the extension tube in position, install the clamp approximately 3/4 inch (1.905 cm) below the top of the extension tube.
5. Tighten the clamp.
6. If the machine will be operating in wet conditions (standing water on floor), cut eight vertical slits, three inches in length (7.62 cm), along the bottom of the extension tube.

Figure 3



NOTICE

The purpose of cutting vertical slits in the bottom of the extension tube is to prevent the vacuum from drawing water into the dust collection system. This measure is only required when using the (old) fabricated design pre-cleaner assembly. The (new) cast design pre-cleaner has provision built in to eliminate vacuum build up in the pre-cleaner extension tube.

Component Parts (Fig. 3)

ITEM	DESCRIPTION	QTY
1	Overlap Edges of Extension Tube	-
2	Keep Bottom Edges Even	-
3	Top of Extension Tube Against Bottom of Butterfly Valve Shaft	-

Extension Tube Installed - Ready for Operation in "Dry" Operating Conditions



Extension Tube Installed - Ready for Operation in "Wet" Operating Conditions (Slits Cut in Bottom of Extension Tube)

