DUST SUPPRESSION

SYSTEM
Importance of Dust Suppression System
Drilling cannot occur any faster than the rate at which cuttings are removed from the hole.
The Dust Suppression System must be designed, manufactured and maintained to limit the machine operator’s exposure to harmful dust.
Approval Requirements for Dust Suppression System
A Dust Suppression System Approval Plate must be installed on the machine.

**APPROVAL REQUIREMENTS - CERTIFICATION PLATE...**

Provides:
- Approval Number
- Minimum Blower Vacuum
- Relief Valve Setting

A Dust Suppression System Approval Plate must be installed on the machine.
NOTICE

J. H. FLETCHER & CO.: DUST COLLECTION SYSTEM

1. SHUT THE MACHINE OFF.
2. OPEN THE DUST BOX DOOR.

NOTE: IF MACHINE IS EQUIPPED WITH DUST BAG, REVIEW PROCEDURES IN OPERATOR’S MANUAL FOR ADDITIONAL INFORMATION.

3. LOOK AT THE DUST FILTER (DO NOT ATTEMPT TO CLEAN THE FILTER, AS THIS FILTER WILL CONTAIN A HIGH CONCENTRATION OF RESPIRABLE DUST.
4. IF THE DUST FILTER IS EXTREMELY CLOGGED, HAVE MAINTENANCE REPLACE THE FILTER WITH A NEW ONE. IF YOU ARE CHANGING THE FILTER, WEAR APPROPRIATE PPE PROTECTION.
5. PULL OUT THE HEAVIER DUST "FINES" WHICH HAVE GATHERED AT THE BOTTOM OF THE BOX. REMOVE THE FINES BY GRABBING THE TRAY AND PULLING OUT THE DUST "FINES".
6. WHEN YOU ARE REMOVING THE DUST, MAKE SURE YOU STAND ON THE SIDE OR END THAT IS PUSHING FRESH AIR AGAINST YOUR BACK SO THAT THE DUST "FINES" THAT COME OUT ARE BLOWN AWAY FROM YOU.
7. REPLACE THE TRAY IN THE TANK.

NOTE: TRAY NOT SUPPLIED IF DUST BAGS ARE USED.

8. USE A TOWEL/RAG TO REMOVE DUST FROM AROUND THE GASKET ON THE DOOR.
9. CHECK COMPLETE SYSTEM FOR LEAKS OR RESTRICTIONS.
10. SECURE THE DOOR.

SEE SERVICE AND PARTS MANUALS FOR INFORMATION ON THIS SYSTEM.

USE ONLY J. H. FLETCHER & CO. REPLACEMENT PARTS TO MAINTAIN MSHA DUST SYSTEM APPROVAL (30CFR PART 33).

J. H. FLETCHER & CO.

PART NO. 359126
All components must meet Dust Suppression System Approval specifications.
The Blower Vacuum Relief Valve Setting must meet Approval Requirement.
System Components
SYSTEM COMPONENTS - TYPICAL SYSTEM - RRII Layout Drawing

- DUST BOX
- PRE-CLEANER
- RH DRILL HEAD
- EXHAUST MUFFLERS
- RH BLOWER
- INTAKE FILTER
- INTAKE MUFFLER
- LH BLOWER
- LH DRILL HEAD
- DUST BOX
- PRE-CLEANER
SYSTEM COMPONENTS - DRILLHEAD AND CHUCK
SYSTEM COMPONENTS - DUST HOSE, FITTINGS AND CLAMPS
SYSTEM COMPONENTS - PRE-COLLECTORS
SYSTEM COMPONENTS - DUST BOXES AND FILTER ELEMENTS
SYSTEM COMPONENTS - BLOWERS AND RELIEF VALVES
SYSTEM COMPONENTS - COOLING AIR INTAKE FILTER AND MUFFLER

- COOLING AIR INTAKE FILTER
- COOLING AIR INTAKE MUFFLER
Inspection and Maintenance
INSPECTION AND MAINTENANCE - DRILLHEAD AND CHUCK

- Check Chuck for Cracks and Excessive Wear
- Check for Drill Head Seal Leakage
INSPECTION AND MAINTENANCE - DUST HOSE, FITTINGS AND CLAMPS

Check for and Fix Any Leaks

Check for Hose Wear and Replace if Required

Hose Clamps – Installed and Tight
Skirt on Pre-Cleaner
Inspection and Maintenance

Pre-Collectors

Warning

Operation of the Pre-Collector is controlled by other machine functions. Operation may occur at any time while machine is running.

Before performing any inspection, maintenance or repair on the Pre-Collector unit always remove the power to the machine at the power center, lock and tag out.

Serious injury can occur from failure to remove power, lock and tag out prior to performing inspection, maintenance or repair on the Pre-Collector Unit.
Butterfly Valve Sleeve
Cyclone Cap

MAKE SURE HOSES ARE CONNECTED CORRECTLY
AIRFLOW DIRECTION ARROWS
INSPECTION AND MAINTENANCE
DUST BOXES AND FILTER ELEMENTS...

Door Latches
Doors and Door Gaskets

- Doors not warped or bent
- All gaskets installed, in good condition and clean
Cyclone Separator Units

> Properly installed with clamps in place and tightened
> Check for leaks
Never attempt to clean filter elements.

Remove and properly dispose of dirty element.

Install new approved element when dust collection efficiency decreases to the point that drilling rate is reduced.

Make sure filter sealing surface is clean.

Hand tighten wing nut – do not over torque.
The belt tension is checked by applying moderate pressure midway between the sheaves - the belt deflection should be between 1/4” and 1/2”.

Horizontal Blower Mount

Vertical Blower Mount
Blower vacuum relief valve must be set to maintain the minimum vacuum level specified on the Dust System Approval Plate. However, do not set vacuum relief valve excessively high.

NOTE:
LOOSEN SET SCREW BEFORE ATTEMPTING TO ADJUST RELIEF VALVE
Check vacuum blower relief valve by installing vacuum gauge over drill head chuck.

Part No.: 132121
INSPECTION AND MAINTENANCE - MUFFLERS...
INSPECTION AND MAINTENANCE - COOLING AIR INTAKE AIR FILTER...

Replace Every 6 Months
DUST BAGS

Adaptable with most dust systems
### TABLE OF CONTENTS:
- MISCELLANEOUS
- ELECTRICAL
- PUMP SYSTEM
- TRAM SYSTEM
- DRILLING UNIT
- DUST COLLECTION
- SAFETY COMPONENT
- VALVES
- WATER (OPTIONAL)

### ORDER FORM

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### NOT SHOWN, NOT PART OF ASSEMBLY: 57302 DUST BAG

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**SHEET NO.**  SP-110  
**TITLE**  DUST BAG MOUNTING KIT  
**DATE**  10-31-00  
**J. H. FLETCHER & CO.**  402 HIGH STREET HUNTINGTON, WV
Water Box
“Our goal is to manufacture equipment for underground mining that increases safety and production through engineering innovation, quality control, experienced service and ownership stability”

- J. Robert Fletcher
   Chairman