



DIVERSI-TECH inc.

Fred

OWNER'S MANUAL

MODEL FRED JR



IMPORTANT

This manual contains specific cautionary statements relative to worker safety. Read this manual thoroughly and follow as directed. Hazards of dust control equipment are not all listed in this manual. It is important that use of the equipment be discussed with a Diversi-tech Representative. Persons involved with the equipment or systems should be instructed to operate in a safe manner.

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Caution

Avoid mixing combustible materials, such as buffing lint, paper, wood, aluminum, and magnesium dust, and with dust generate from grinding ferrous metals due to the potential fire hazard caused by sparks in the dust collector.

All users of Diversi-tech Equipment should comply with all National and Local Fire Codes and / or other appropriate codes when determining the location and operation of dust control equipment.

Upon Arrival

The Fred JR portable is shipped on a crated skid. The skid should be inspected for any visible damage that may have occurred during shipment. If the Fred JR appears to have been damaged during shipping, please advise transport company as soon as possible.

Installations

Electrical Connection

The unit is equipped with a 6" diameter , 10' long capture arm, 15ft of electrical cord and a 120V/60Hz wall plug. This is to be inserted into a standard wall outlet. Electrical information can be found on the unit's serial # sticker and on the motor's nameplate. Please refer to wiring diagram attached with this manual.

Blower wheel's correct direction of rotation : Clockwise

Warning: Always disconnect power supply before servicing the blower wheel & motor or working with the unit for any reason.

Start Up

- 1) The unit is equipped with a rotary motor starter, located on top of the unit. To turn on the unit, switch the starter to the ON position.
- 2) Check amperage. Amperage should never exceed the rated motor amperage for more than a few moments.
- 3) Make sure that the filter cartridge is in the unit. Any other optional filters should be verified as well. If a manihelic gauge was ordered, make sure that the dial reads between 0" and 0.5" w.c (with clean filter cartridge)
- 4) Capture arm should be mounted and well secured to the top of the unit.

If all above is in order, Your Fred JR is ready to be put to use.

Maintenance

Filter Cartridges

The filter cartridge should be cleaned as required. This cleaning should take place when suction is insufficient.

In order to clean the cartridge, it must be removed. To do so, remove the door panel furthest from the inlet and release the latch on the cartridge locking mechanism located under the filter cartridge. The cartridge should then be turned horizontally and tapped lightly on a solid surface. (This can be done directly into a plastic garbage bag)

As second step the cartridge should be cleaned with compressed air. The air should travel radially inward (from the outside of the cartridge to the interior). It is recommended that this procedure be done outside or in a well ventilated area.

Warning

Cleaning should be carried out on water-soluble materials only. Hydrocarbons may not be removable. The use of solvents may attack certain components of the filter, thus consultation of the manufacturer is required. Do not attempt to clean filters containing hazardous materials, be aware that all sewage and waste ordinances have been followed. The filter is of paper-pleat material, do not attempt to wash the filters. Do not wet or clean the cartridge with any liquid, as it may cause the forming of unwanted blockage on the filter media. The cartridge may be weakened causing perforations to the media and ultimately damage of the blower. If after cleaning the filter cartridge the system rapidly loses performance again it might be a sign that the filter cartridge needs to be replaced. The cartridge life is estimated to be 6 to 12 months depending on the application and frequency of usage.

Carbon Filter

The carbon filter is located in the rear mesh door panel. This panel aids in absorbing most gases and odors out of the air stream. This panel needs to be replaced every 12-18 months or when the odors become apparent. As a good practice, this filter should be replaced every time the filter cartridge is replaced. To replace, remove mesh door from unit, tear out old carbon panel, and install new panel by applying a couple of dabs of contact cement or other glue on the outside edge of the panel facing the door. The glue is only necessary to hold up the panel when re-installing the mesh door.

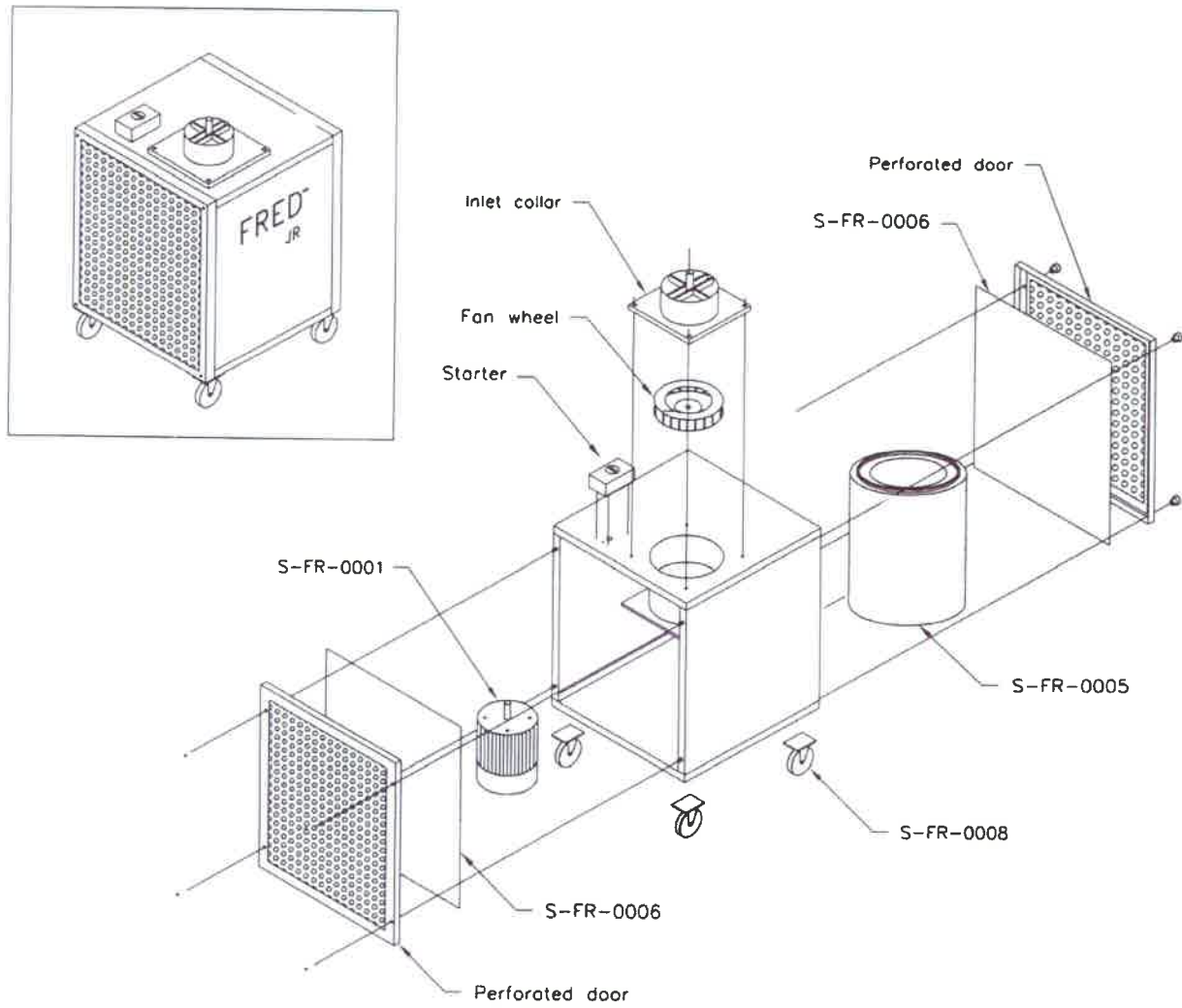
Capture Arm

Adjustment to arm friction joints can be made by tightening or loosening the bolts that fasten the pads to the aluminum frame. This will permit the arm to maintain its position.

HEPA Filter

For units equipped with a HEPA filter, it is necessary to pay attention to change in emissions to determine filter efficiency. The filter will need to be changed when its loading capacity will have been reached. This will be apparent when having poor suction at the capture arm even after going through a complete main cartridge cleaning cycle. To make a definite determination of the filter loading, remove the HEPA filter from the unit. If the performance improves, the HEPA filter is at fault. If not, the main cartridge is to be properly cleaned or replaced. **DO NOT CLEAN THE HEPA FILTER.** When completely loaded, this filter must be disposed of carefully. The particulate matter it contains should not be allowed to return back into the atmosphere.

EXPLODED VIEW



Options

<u>Part No.</u>	<u>Description</u>
O-FR-LK	Upgrade: Halogen Light Kit in Suction Hood
O-FR-PC	Pneumatic Castors 6" (with set of 4 spider legs)
O-FR-MNG	Minihelic Gauge (0-10" S.P.)
O-FR-HFM	H.E.P.A. Filter (99.97%@0.3micron) & frame
O-FR-CMG	Carbon Module: Impregnated Panel Type (4 panels)
O-FR-ARM13	Upgrade to 13' long capture arm
O-FR-ST	Spark Trap
O-FR-POLY	Upgrade to Polyester Spun Bond filter cartridge

Replacement Parts

<u>Part No.</u>	<u>Description</u>
S-FR-0001	1.5HP Motor (120v/1/60)
S-FR-0002	1.5HP Starter (120v/1/60)
S-FR-0003	1.5HP Blower Wheel
S-FR-0005	Standard 26" Filter Cartridge 350 ft ²
S-FR-0005-P	26" Polyester Filter Cartridge 350 ft ²
S-FR-0006	Activated Carbon Panel (set of 2)
S-FR-0007	Suction hood 6"
S-FR-0008	Castors (set of 4)
S-FR-0009	H.E.P.A. Filter 99.97%@0.3micron

Wiring Diagram for 1.5HP 120/1/60

