

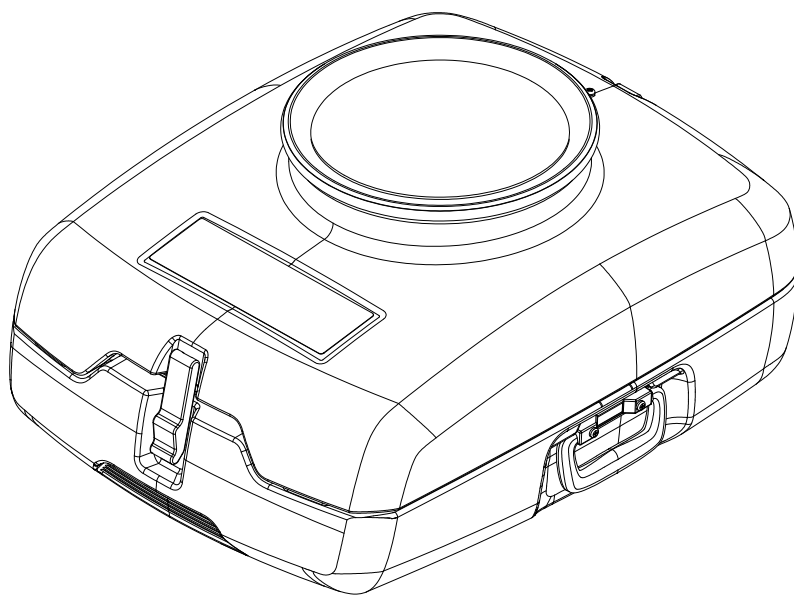
**PROCHEM.** **DRR**

# **TRIAD** **AFD**

**AIR FILTRATION DEVICE**

Operating instructions (ENG)

MODEL: 10079020



Read these instructions before using the machine.



|                       |       |
|-----------------------|-------|
| Model:                | _____ |
| Date of Purchase:     | _____ |
| Serial Number:        | _____ |
| Dealer:               | _____ |
| Address:              | _____ |
| Phone Number:         | _____ |
| Sales Representative: | _____ |

### **Overview**

The Triad AFD (Air Filtration Device) improves healthful air quality, removing particulates including mold and spores.

**Machine Data Label . . . . .2**  
    Overview . . . . .2  
**Table of Contents . . . . .3**

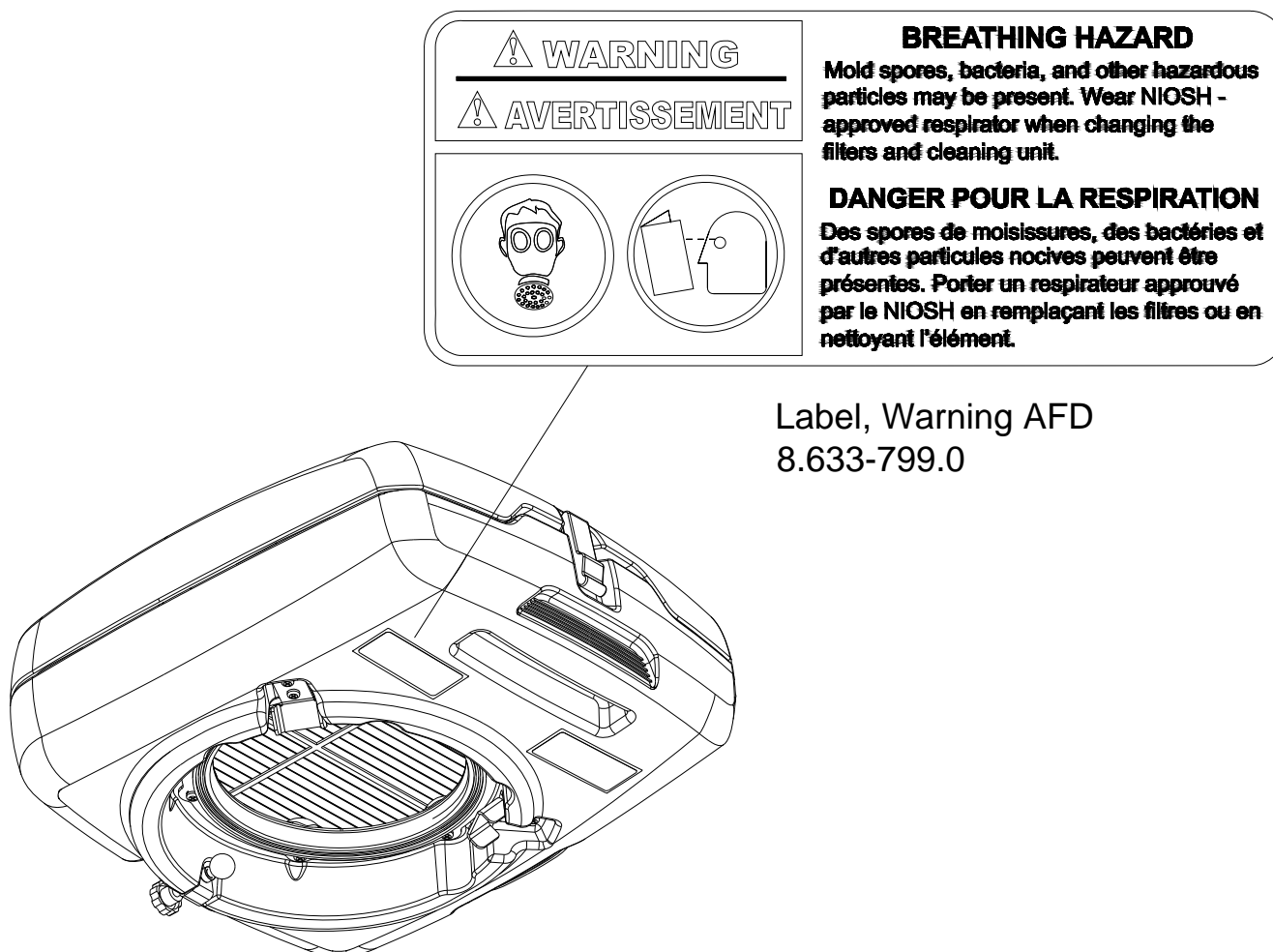
*Safety*  
    Safety Label Location . . . . .4

*Operation*  
    Technical Specifications . . . . .5  
    Installing AFD on the Triad Thruster Fan . . . . .6  
    Back Draft Prevention . . . . .6

*Maintenance*  
    Filter Replacement . . . . .7  
    Cleaning . . . . .8

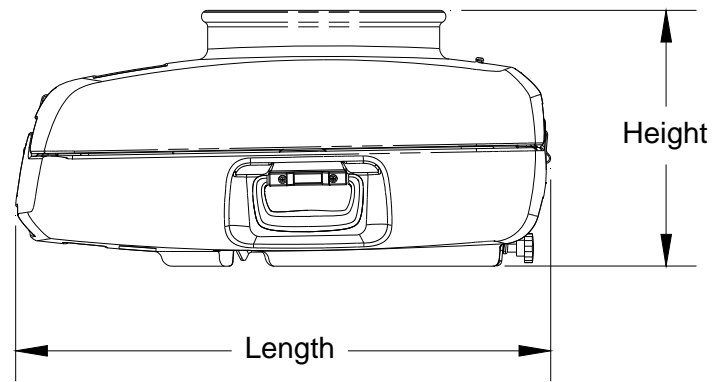
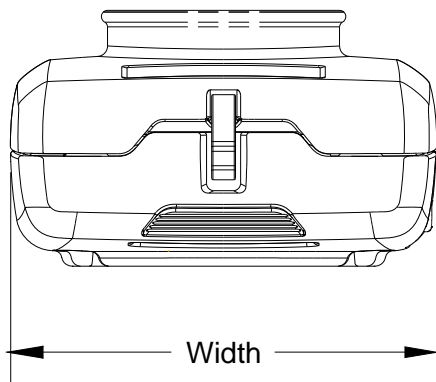
*Parts*  
    Lower Housing . . . . . 10  
    Upper Housing . . . . . 12  
    Suggested Spare Parts. . . . . 14  
    Serial Numbers . . . . . 15

## Safety Label Location



## Technical Specifications

| ITEM                         | SPECIFICATION                            |
|------------------------------|--|
| <b>Weight</b>                | 25.0 lbs.                                |
| <b>Length</b>                | 25.25"                                   |
| <b>Width</b>                 | 20.25"                                   |
| <b>Height</b>                | 12"                                      |
| <b>Construction</b>          | Durable Rotomold Body                    |
| <b>Duct Inlet Connection</b> | 12" Diameter Flex Duct                   |
| <b>Filters</b>               | 1st Stage - 1" Pleated                   |
|                              | 2nd Stage - 1" Pleated                   |
|                              | 2nd Optional Stage - 1" Activated Carbon |
|                              | 3rd Stage - 2" HEPA                      |
| <b>Triad Air Flow Rate</b>   | 450 CFM with filters at 1.48 amps        |



### Installing AFD on the Triad Thruster Fan

1. Remove all cords and ducting from fan's top intake nozzle.
2. Check all seals and gaskets for any damage. If required, only replace with Prochem factory parts.
3. Lift the AFD over the Triad fan.
4. Catch the fan's top intake flange with the AFD's 2 housing retention tabs, and let it rest on top of the fan.
5. Tighten the AFD's securing knob until the knob's ball is tightly under the fan's intake flange.

*NOTE: Attaching duct to the AFD intake is the same as attaching it to the Triad's intake.*

*NOTE: Cords can be stored around the intake nozzle of the AFD, like the Triad. Leave enough slack so the upper housing can be removed easily to change the filters.*

6. Switch Triad air mover to the 'on' position.
7. Remove the 'Containment Plug' from the inlet of the AFD.
8. Adjust the 'Restrictor Plate Assembly' if operating the AFD in a negative air ducting situation. If operating in an open room or if controlling airflow is not desired remove the 'Restrictor Plate Assembly'.
9. Prior to moving or transporting the AFD the containment plug should be re-installed. To do this, while the air mover is still operating install plug into inlet neck of the AFD. The suction of the air mover will pull the plug into the neck. This will seal the collected contaminants within the AFD during transit or relocation.

### Back Draft Prevention

#### **WARNING:**

**Exhausting too much air from a space with Open Combustion Devices ( e.g. furnace, fireplace or water heater) can cause those devices to back draft. This can contaminate the space with potentially fatal gases.**

Use the fan as a filtering unit only. Exhausting no air from the space and thus causing no negative pressure or back drafting.

#### **OR**

Exhaust a very limited amount of air, which does not cause back drafting.

The intake of the AFD has a rotating air flow limiting device.

#### **OR**

Direct one or more outlet ducts from the fan to the room with combustion devices. This will positively pressurize the room, thus preventing back drafting.

#### **WARNING:**

**When exhausting air from a space, always check Combustion Devices with the fan running to guarantee that back draft prevention measures are working.**

## Filter Replacement

1. Remove any cords wrapped around neck of AFD

### **WARNING:**

**The filters will have captured potentially dangerous mold spores that may have been in the air in the disaster restoration and remediation environment. Follow all standards and recommendations found in IICRC S500 and IICRC S520.**

2. Unlatch and remove the upper housing.
3. Flip the upper housing over.
4. Rotate the 4 filter retention tabs to clear the filters.
5. Remove the stage 2 filter, then the stage 1 filter.
6. Wipe out upper housing with disinfectant.

7. Replace the clogged filter(s) with new filter(s) with the air flow directional arrows on the filters pointing down.

*NOTE: When conditions necessitate the use of activated charcoal, the Charcoal Filter should be installed directly downstream of the stage #1 filter.*

8. Rotate the 4 filter retention tabs to hold the filters in place.

*NOTE: The AFD is designed to make the expensive HEPA filter last as long as possible by running the air through the pre-filters first. The upper housing's pre-filters will be replaced more frequently than the HEPA filter.*

9. Rotate the 8 filter retention tabs on the lower housing to clear the full HEPA filter.
10. Remove the full HEPA filter from the lower housing.
11. Wipe out the lower housing and the seal with disinfectant.
12. Insert a new HEPA filter into the lower housing with the air flow directional arrows on the filter pointing down.
13. Rotate the 8 filter retention tabs on the lower housing to hold the HEPA filter in place.
14. Place the upper housing on top of the lower housing and latch in place.

### Cleaning

Perform after each job.

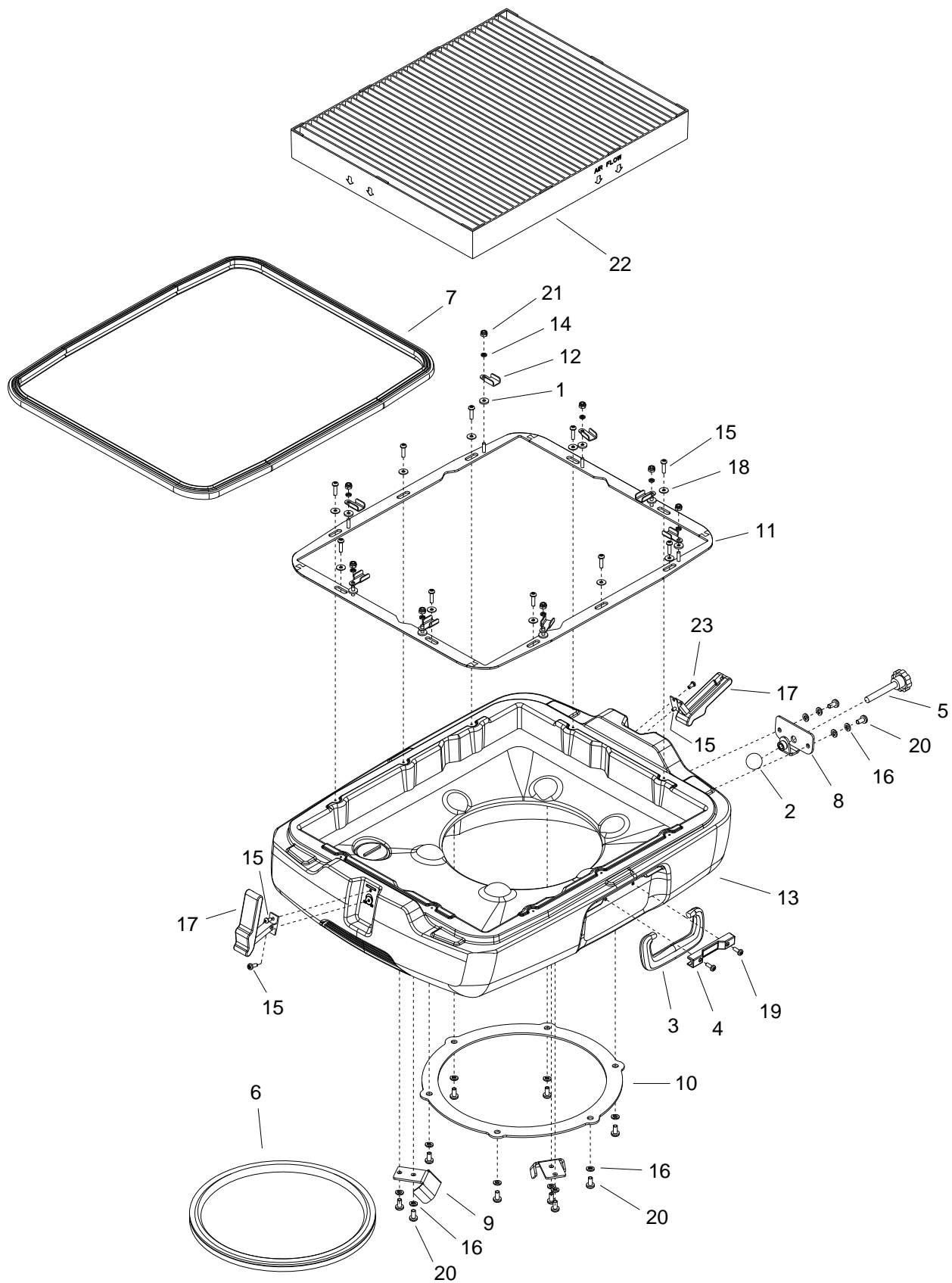
1. Dispose of all filters properly as per IICRC S520.
2. Disassemble the AFD and clean thoroughly as per IICRC S520.

*NOTE: The rotomold halves of the AFD can be sprayed with water since the AFD contains no electronics or other components that can not be wet.*

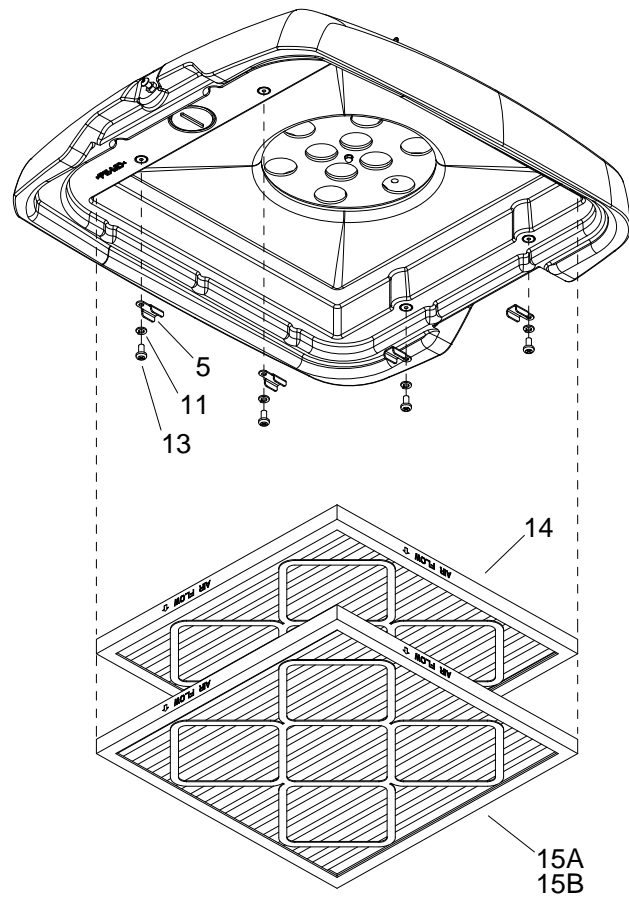
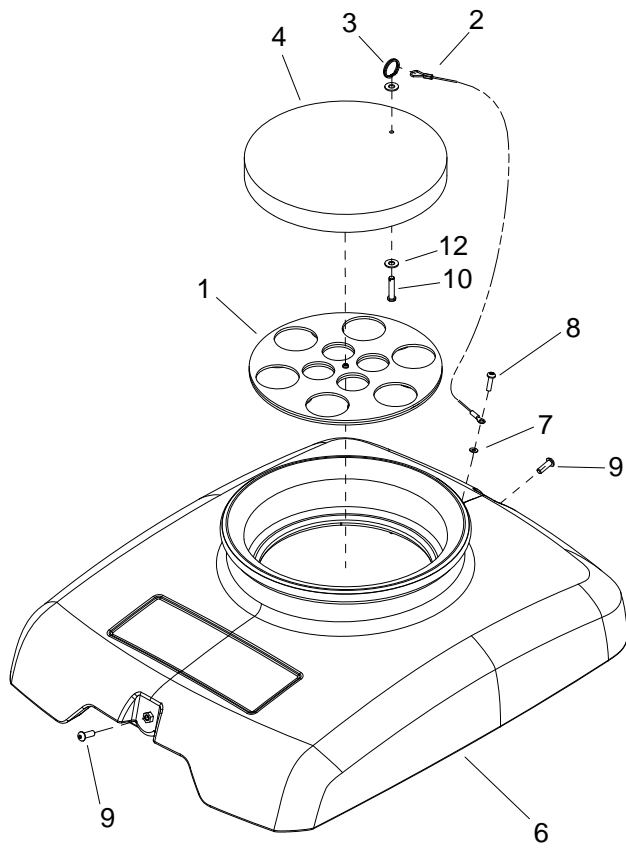
3. Towel dry parts or allow parts to air dry.
4. Install new filters.
5. Re-assemble AFD.
6. Place clean AFD into a bag and close bag until next use.



# PARTS



| REF | PART NO. | PRV NO.   | QTY | DESCRIPTION                         | SERIAL NO.<br>FROM | NOTES               |
|-----|----------|-----------|-----|-------------------------------------|--------------------|---------------------|
| 1   | 86341990 |           | 8   | SPACER, NYLON .219ID X .50D X .156H |                    |                     |
| 2   | 86338090 | -         | 1   | KNOB, BALL                          |                    |                     |
| 3   | 86338070 | -         | 1   | HANDLE                              |                    |                     |
| 4   | 86338060 | -         | 1   | BASE, HANDLE                        |                    |                     |
| 5   | 86338050 | -         | 1   | KNOB, 1.38OD X 3/8-16 X 2.50        |                    |                     |
| 6   | 86336590 | -         | 1   | SEAL, LOWER                         |                    |                     |
| 7   | 86336580 | -         | 1   | SEAL, UPPER                         |                    |                     |
| 8   | 86336560 | -         | 1   | ASM, THREADED RETENTION TAB         |                    |                     |
| 9   | 86336550 | -         | 2   | TAB, HOUSING RETENTION              |                    |                     |
| 10  | 86336540 | -         | 1   | PLATE, SEAL MNT                     |                    |                     |
| 11  | 86336530 | -         | 1   | ASM, AFD GASKET RING                |                    |                     |
| 12  | 86336520 | -         | 8   | TAB, FILTER RETENTION               |                    |                     |
| 13  | 86336250 | -         | 1   | HOUSING, AFD LOWER, TRIMMED         |                    |                     |
| 14  | 86279470 | 87165     | 8   | WASHER, #10 SPLIT                   |                    |                     |
| 15  | 86276290 | 70626     | 13  | SCR, #10 X 3/4 PPHST HI-LO BLK      |                    |                     |
| 16  | 86173340 | 87514     | 14  | WASHER, SPLIT LOCK, 1/4, SS         |                    |                     |
| 17  | 86161800 | 46-802531 | 2   | LATCH, CONCEALED KEEPER             |                    |                     |
| 18  | 86010650 | 87018     | 10  | WASHER, #10 X 9/16 FLAT             |                    |                     |
| 19  | 86006950 | 70532     | 2   | SCR, 10-32 X 1/2 PPHMS BLK          |                    |                     |
| 20  | 86345560 | -         | 12  | SCR, 1/4-20 X 5/8 PPHMS SS          |                    |                     |
| 21  | 86005640 | 57030     | 8   | NUT, 10-32 HEX NYLOCK               |                    |                     |
| 22  | 98409300 | -         | 1   | SET, 10 HEPA FILTER                 |                    | SOLD IN<br>SETS(10) |
| 23  | 86274520 | -         | 1   | SCR, 10 X 32 X .38 HI-LO            |                    |                     |



| REF | PART NO. | PRV NO. | QTY | DESCRIPTION                          | SERIAL NO.<br>FROM | NOTES                |
|-----|----------|---------|-----|--------------------------------------|--------------------|----------------------|
| 1   | 86338750 | -       | 1   | ASM, RESTRICTOR PLATE                |                    |                      |
| 2   | 86338080 | -       | 1   | LANYARD, 6.0 W/LOOP & EYE            |                    |                      |
| 3   | 86338040 | -       | 1   | RING, SPLIT, ID .802"                |                    |                      |
| 4   | 86338000 | -       | 1   | PLUG, CONTAINMENT                    |                    |                      |
| 5   | 86336520 | -       | 4   | TAB, FILTER RETENTION                |                    |                      |
| 6   | 86336240 | -       | 1   | HOUSING, AFD UPPER, TRIMMED          |                    |                      |
| 7   | 86278990 | 87017   | 1   | WASHER, #8 X 3/8 FLAT                |                    |                      |
| 8   | 86276290 | 70626   | 1   | SCR, #10 X 3/4 PPHST HI-LO BLK       |                    |                      |
| 9   | 86275460 | 70481   | 2   | SCR, 1/4-20 X 3/4 BHCS               |                    |                      |
| 10  | 86272620 | 80670   | 1   | PIN, CLEVIS                          |                    |                      |
| 11  | 86173340 | 87514   | 4   | WASHER, SPLIT LOCK, 1/4, SS          |                    |                      |
| 12  | 86010630 | 87013   | 2   | WASHER, 1/4 X 5/8 OD SS              |                    |                      |
| 13  | 86276160 | 70604   | 4   | SCR, 10-32X5/8 PPHMS BLK             |                    |                      |
| 14  | 98409540 | -       | 1   | SET, 12 STAGE 1 FILTER               |                    | SOLD IN SETS<br>(12) |
| 15A | 98409550 | -       | 1   | SET, 12 STAGE 2 FILTER               |                    | SOLD IN SETS<br>(12) |
| 15B | 86341690 | -       | 1   | FILTER, CARBON ACTIV, 16" X 16" X 1" |                    | OPTIONAL             |

## Suggested Spare Parts

| PART NO. | PRV NO.   | DESCRIPTION                        | SERIAL NO.<br>FROM | NOTES                |
|----------|-----------|------------------------------------|--------------------|----------------------|
| 98409300 | -         | SET, 10 HEPA FILTER                |                    | SOLD IN SETS<br>(10) |
| 98409540 | -         | SET, 12 STAGE 1 FILTER             |                    | SOLD IN SETS<br>(12) |
| 98409550 | -         | SET, 12 STAGE 2 FILTER             |                    | SOLD IN SETS<br>(12) |
| 86161800 | 46-802531 | LATCH, CONCEALED KEEPER            |                    |                      |
| 86338000 | -         | PLUG, CONTAINMENT                  |                    |                      |
| 86338750 | -         | ASM, RESTRICTOR PLATE              |                    |                      |
| 86336580 | -         | SEAL, UPPER                        |                    |                      |
| 86336590 | -         | SEAL, LOWER                        |                    |                      |
| 86338070 | -         | HANDLE                             |                    |                      |
| 86338060 | -         | BASE, HANDLE                       |                    |                      |
| 86336520 | -         | TAB, FILTER RETENTION              |                    |                      |
| 86341690 |           | FILTER, CARBON ACTIVE, 16 X 16 X 1 |                    | OPTIONAL             |

| REF.<br>NO. | MODEL: SERIAL # |
|-------------|-----------------|
| 1           | N/A             |