REV 1

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1 INTRODUCTION

This document contains the information necessary to properly receive, assemble, install, operate, and maintain the AAF® ArrestAll® filter system and filters. The purchaser, installer, and operator of the filter system MUST read and comply with this document in its entirety prior to installation of the equipment and its operation. Failure to comply with the requirements of this manual may void the product warranty. The information and guidelines contained in this manual are not exhaustive, and additional or different precautions, measures, training, etc. may be needed depending on the specific circumstances.

CAUTION

These instructions are specific to the AAF ArrestAll filter system and filters. All ancillary tasks including, but not limited to, electrical and mechanical work, equipment handling, and safety procedures must be performed in accordance with industry accepted practice and all relevant local, state, and federal government codes, laws, and policies.

2 SAFETY

2.1 Safety statement

The air cleaning equipment supplied by AAF International ranges from very large multiple-component assemblies which require significant and complex, rigging, handling and assembly on-site, to small compact assemblies that are easily handled and maneuvered. In addition to size, many of the dust collectors will require electrical connections, compressed air connections, and will feature high speed rotating equipment.

At all times, when dealing with industrial equipment such as dust collection equipment personnel safety must be the highest priority of all involved, from riggers, installers, operators, users, and maintenance personnel. Those responsible on-site shall review the details of the equipment beforehand and develop a plan for dealing with all stages of the installation from receipt of the equipment on-site to start-up, commissioning, and hand-over. All applicable health, safety, and environmental (“HSE”) rules, regulations and legislation shall be fully complied with at all times.

2.2 Safe working practices and staff training

AAF International is fully committed to the safety of its employees and those of its customers. In this spirit the following guidelines are offered for the consideration of those responsible:

All personnel shall receive safety training specific to the site, the task, and the conditions under which the work will be conducted.

All personnel shall be equipped with appropriate safety apparel and equipment, such as clothing, footwear, hard-hats, gloves, ear protection, eye protection, and safety harness.

All personnel involved in any stage of the process shall have been trained for the tasks in which they will be involved and at all times shall be under the direct supervision of experienced supervisors and managers.

All personnel shall be equipped with appropriate tools and equipment to safely and efficiently complete their task.

Adequate lighting shall be supplied at all times while work is being conducted.

A work perimeter shall be set up to define the limits of the area within which the work will be conducted and outside which there will be no threat to the safety of personnel or plant. The perimeter shall be taped-off and marked appropriately to prevent accidental ingress of uninvolved personnel or equipment. When the work area impedes into existing access ways or traffic routes for which no practical alternative is available, barriers, wardens and flaggers shall be employed to safely control crossing traffic and personnel.

At any time only those personnel directly involved in completing the task at hand shall be allowed within the work perimeter.

2.3 Dust explosions
Dust explosions constitute a serious industrial hazard and may result in death, serious injury, and/or devastating property damage. It is the responsibility of the user to identify the nature of the dust and whether or not it poses an explosive hazard and to properly mitigate this hazard. Except as otherwise expressly provided in writing, AAF makes no representation or warranty in connection with explosion hazard equipment, including, but not limited to, the necessity or effectiveness of explosion hazard equipment or to the design, installation, operation, and performance of such equipment. The basic standard for dealing with explosive dust applications is from the National Fire Protection Agency ("NFPA"), NFPA 69: Standard on Explosion Prevention Systems. This standard applies to the design, installation, operation, maintenance, and testing of systems.
for the prevention of explosions by means of various methods. The user shall be fully conversant with the provisions of NFPA 69 and shall comply in full with all of its requirements.

By its very nature AAF equipment is intended to be used to capture airborne particulate matter, otherwise known as dust. There are various methods for dealing with a dust explosion in a dust collector. These can include, but are not limited to, the use of properly designed explosion vents, explosion suppression systems, or flameless vents. The user shall understand which method is being used and who is responsible for the design and supply of the equipment required. When an explosive dust has been properly identified to AAF, the dust collector may be structurally designed to withstand the internal pressure generated during the explosive event and fitted with an explosion vent, or with multiple vents, designed to safely discharge the pressure and the resulting fireball. The user shall review the purchase order and the documents referenced within it to determine if explosion protection equipment has been supplied by AAF International. Where this is the case, review the appropriate sections of this manual that deal with the installation, operation and maintenance of the equipment ordered.

When explosion protection systems are supplied by multiple vendors, it is the responsibility of the user to coordinate between suppliers to ensure that the equipment supplied by each vendor will work together to achieve the required protection. For instance, if an explosion suppression system is being supplied by parties other than AAF, it is incumbent on the user to ensure that the dust collection equipment has been ordered to resist the internal pressure defined by the suppression equipment supplier.

Dust collectors fitted with explosion vents must not be located indoors, unless properly designed in accordance to NFPA regulations. The equipment shall be oriented so that the vent will discharge to an unoccupied zone. Such a zone will be prohibited to personnel and shall not include critical equipment or services such as fuel storage tanks, flammable materials, fire hydrants, power distribution or electrical control equipment, or similar. If the vent(s) is located on the side(s) of the equipment the vent discharge area shall be isolated with barriers erected to prevent the parking of vehicles, pedestrian use, or use of the area for temporary storage. Warning signs shall be posted. Include diagrams showing the distribution of a typical dust explosion discharge.
2.4 Electrical hazards

Before doing any work on the AAF equipment make sure that all potential electrical hazards have been identified and that all electric current connected to the equipment, and to any connected or associated equipment, has been properly disconnected and securely locked-out to prevent accidental reconnection prior to completion of the work. All electrical work shall be done in full accordance with the current edition of NFPA 70, the National Electrical Code, and all other applicable laws, rules, and regulations. All electrical work shall be performed by a licensed electrician. Only original AAF parts shall be used as replacements for ongoing maintenance and repair.

2.5 Rotating equipment

The ArrestAll can include a fan which is installed on the top of the dust collector, either on top of the collector or as an integral fan. The fan wheel rotates at a nominal speed of 3,600 rpm and has the potential to cause severe injury. The fan wheel could be accessed from inside the cabinet through the air inlet and from outside the cabinet through the fan discharge. All due care should be exercised to avoid any contact with the operating fan. Under no circumstances should the fan ever be allowed to operate when any of the access panels on the dust collector, or the silencer, have been removed. The fan must be disconnected and locked out prior to the performance of any maintenance work, see paragraph 2.4.

2.6 Safety guards

The dust collector cabinet prevents access to the fan inlet. All access panels shall remain bolted in place while the fan is operating. Prior to the removal of any access panels, the electrical power to the collector shall be disconnected and locked out, see paragraphs 2.4 and 2.5. After electrical power is disconnected, the fan wheel will continue to rotate for a period of time before coasting to a stop. Do not access the fan until the fan wheel has come to a complete stop.

3 GENERAL PRODUCT INFORMATION

3.1 Description

The ArrestAll self-contained dust collector is a compact and efficient unit designed to control intermittent, low to medium volume, dry, dust sources. It is cleaned off-line, meaning that it cleans once the fan is turn off. The unit includes an air mover and can be relocated as required.

Each collector is furnished with fan assembly, housing, filter cartridge(s), and an automatic shaker mechanism for filter cleaning. Based on size, they are
available as a bin vent, flat bottom, cart bottom, and funnel bottom arrangements. The size range is from 1,000 to 12,000 ACFM.

3.2 Purpose and intended use
The ArrestAll is intended for intermittent dust collection and is best suited for dry free flowing dusts. Examples of such applications would be woodworking shops, small sanding booths, cement, clay, etc. It is not intended for dust collection that is continuous, heavy dust loads, or for small particulate.

3.3 Normal Operation
Dust laden air is drawn into the inlet where it turns vertically 90 degrees, causing the heavier particles to fall into the collection container below. The fine particles are drawn to the fabric pockets and trapped on the surface, forming a dust cake which increases efficiency. The clean air flows from the pockets into the fan and is discharged. The collected dust is periodically removed from the fabric pockets by an automatic shaker system.

3.4 Sizes
There are 12 unique ArrestAll sizes, ranging from an AR1-3 through an AR6-25. The first number in the name designation is the number of filters in the unit, the second number is the fan horsepower. This means an AR4-20 has 4 filters and a 20HP fan.

The standard funnel bottom design is available on all unit sizes, as is the bin vent design. The Dust Drawer design is only available on the AR1-3 as a standard design. The Dust Cart is only available on the AR1-3 through the AR3-15L as a standard design.

The following page is the fan performance curve for each size unit. Contact AAF International for assistance in sizing the right ArrestAll for your application.
*15L and 15H are both 15HP fan motors but have different wheel widths
3.5 Filter elements

The ArrestAll filter has been designed to maximize airflow and efficiency. The pocket and separator geometry minimizes differential pressure (see Figure 1). The one-piece construction adds strength and sealing integrity to achieve up to 99+% efficiency on general industrial dust by weight.

Figure 1. ArrestAll filter design

The ArrestAll filter design minimizes internal turbulence and differential pressure. Air flows vertically inside the filter pockets, guided by the corrugated spacers. This produces a laminar flow into the horizontal fan inlet cone.
### 3.6 Weights

Fan weight not included. See Sales Drawing for full weight.

<table>
<thead>
<tr>
<th>Model</th>
<th>Style*</th>
<th>No. of Cartridges</th>
<th>Approx. Weight</th>
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*Style = Funnel Bottom (FB), Bin Vent (BV), Dust Drawer (DD), Dust Cart (DC)
4 PRODUCT SHIPMENT
4.1 How the product ships
The AR ArrestAll collector is packaged for domestic transit and shipped FOB factory. The AR ArrestAll funnel bottom units are shipped as three major components: the fan, the funnel bottom section, and the cartridge housing section. The bin vent, cart bottom, and the dust drawer units ship as two major components: the fan and the complete housing assembly.

4.2 Items that ship separately
To save the customer money, AAF International may ship items separately. The customer will be notified which equipment ships separately when the order is placed. Items that ship separately should be set aside in an area that is clean, dry, and in a place where damage to the equipment will not occur.

5 PRODUCT RECEIPT AT THE DESIGNATED DELIVERY POINT
5.1 Responsibilities of the customer or customer’s agent
Ensure all loading/unloading equipment and safety equipment is on site at the time of delivery. Safe and efficient operation of the collector depends on proper installation.Know proper laws, codes and regulations before installation starts.

5.2 Receiving
Remove crates, tarps, shipping straps, etc. along with any loose items or equipment before unloading the AAF ArrestAll.

5.3 Inspection on arrival
The AAF ArrestAll is normally shipped by truck and should be checked for damage that may have occurred in route. Compare the collector(s) received to the description and/or drawing of the collector(s) ordered. Immediately report any differences or missing items from the order to AAF International. Remove loose items or components before lifting the collector from the truck.

A qualified installation and service company should complete installation of the collector and accessories.

5.4 Damaged goods
If there is any visible damage to the packaging or the equipment notify the carrier and AAF before proceeding further and, if appropriate, file an immediate
claim with the carrier against such damage. Be aware that damage to packaging may indicate hidden damage to the product that is not immediately discernable.

Digital color photographs must be taken of any damage to the packaging and the equipment immediately on discovery. The nature of any damage must also be documented in writing. Adequate documentation will be critical to support any claims.

Contact AAF International for claim filing procedure.

5.5 Missing goods
Any missing goods should be noted on the delivery receipt, and the carrier and AAF notified immediately. Contact AAF International for claim filing procedure.

6 UNLOADING AND HANDLING
6.1 Unloading
Failure to lift the collector correctly can result in severe personal injury, property damage, or even death.

- Use clevises, not hooks, on lifting sling.

- Use of spreader bars is recommended on all lifting slings.

- Check the drawings of the specific ArrestAll ordered for dimensions and weights to ensure proper lifting and installation equipment.

- All units are shipped in an upright position. Lifting lugs are provided on the cartridge section as well as the fan for ease of handling (Figure 2). Spreader bars should be used on the housing. Fork truck handling should be sufficient for the funnel section.

- All lifting operations must be made in compliance with the relevant HSE legislation.
7 STORAGE AND PROTECTION

DO NOT store the ArrestAll dust collector outdoors prior to installation. Items that ship separately should be set aside in an area that is clean, dry, and in a place where damage to the equipment will not occur.

8 SITE PREPARATION

8.1 Locating equipment

The dust collector site location must take into account the wind and seismic loadings. See collector specifications to ensure proper site location.

Ensure local laws, codes and regulations are followed for the materials being collected. Noise levels should be considered when selecting the proper location of the ArrestAll.

Locate the ArrestAll in a location so that maintenance to the collector can be handled easily. See collector drawing for cartridge clearance.

In the case of hazardous dust, consult your local authorities, laws, codes, or regulations for the location of the unit. Unit location will be determined by system design, space availability, and access requirements. Access to the front of the unit is necessary for dust removal and cartridge replacement. Top access is required.
for motor, fan, and ancillary component service. Side access is required for shaker motor and control access.

Explosion vents, if furnished, are located on the side opposite the access door. It is recommended per NFPA that the vent(s) be ducted outside and away from any area containing personnel or equipment. Duct flanges can be match drilled to the collector housing wall, but they must be supported separately from the unit.

The unit can be located indoors or outdoors. Rain hoods are included in the design of the ArrestAll to prevent water from gathering on the top of the door gasket.

8.2 Foundations

The foundation must be level and adequate to support the collector’s operating weight including dust load, discharge devices, wind load if applicable, plus any auxiliary equipment if applicable.

8.3 Anchoring

The AR ArrestAll collector is designed for installation on a flat surface. Units must be suitably anchored.

Anchor holes are provided at the base of the support legs on the funnel bottom units (Figure 3), and anchor clips are provided on the cart bottom (Figure 4). Flat bottom units can be installed by drilling holes in the bottom of the units. Holes drilled in the flat bottom base should be gasketed or caulked to prevent air bypass.

Figure 3. Anchoring – Funnel Bottom  
Figure 4. Anchoring – Cart Bottom
9 ASSEMBLY AND INSTALLATION

9.1 Introduction
Safe and efficient operation of the ArrestAll depends on proper installation.

AAF recommends that the ductwork going into the collector be as straight as possible, with at least 5 diameters of straight run recommended.

Authorities with jurisdiction should be consulted before installing the ArrestAll to ensure local installation laws, codes, regulations and procedures are followed.

A qualified installation and service agent must complete installation and service of the dust collector and equipment.

Ensure all covers from shipping and loose materials are removed from the collector before installation. Failure to do so can result in failure of the dust collector.

Ensure the hardware on the dust collector assemblies are properly installed and tight before installation.

9.2 Assembling and installing the structure

9.2.1 Funnel Bottom Units
Self-tapping screws and caulk are provided for installation of the funnel bottom section to the cartridge section (Figure 5). Assemblies can be bolted-up from the outside of the unit; interior access is not required. See the field installation drawing for additional detail. The fan is bolted to the top of the unit using the provided hardware. Fan discharge orientation can be varied to suit owner’s requirements. See the fan installation drawing for additional detail.
9.2.2 Flat and Cart Bottom Units
These units are fully assembled at the factory except for the fan. Fan discharge orientation can be varied to suit owner’s requirements. See the fan installation drawing for additional detail.

9.2.3 Bin Vent Units
To prevent possible damage to the unit from ponding water, it is recommended that curbing be used on any bin vent installation (Figure 6).
9.2.4 Installation of the filter elements
To change the primary filters, follow these steps:

1. Open cartridge access door. (Door may be lifted off for easier access.

2. Loosen the shaker comb adjustment bolt and pry apart the shaker comb locking channel (Picture 1).

3. Release the cartridge locking levers (2 per cartridge) by pushing each toward the center of the unit (Picture 2).
4. Remove the complete cartridge assembly from the unit (Picture 3).

5. Inspect gasket on septum for damage. It is recommended that the gasket be replaced whenever new cartridges are installed. Glue the gasket to the underside of the septum around the edges of the opening. The gasket splice should be located to the front of the unit.

6. Remove the shaker comb, retainer, and insert assemblies from the old cartridge assembly. Inspect for damage. Do not throw these items away. You will need them to assemble the new cartridge.

7. Remove the old pocket assembly from the frame assembly. Discard the old pocket assembly.
8. Assemble the new cartridge as shown in Figure 7 using the existing frame and pocket inserts.

9. Assemble the shaker comb to the bottom center of the cartridge assembly. Make sure each pocket with insert is set into the shaker comb finger (Pictures 4 & 5).

10. After the pockets are set into the shaker comb, install the retainer on top of the inserts (Picture 6).

11. Install the cartridge assembly into the ArrestAll by reversing steps 1 through 4.
9.2.5 Installation of accessories

When accessories, such as sprinklers and airlocks, are ordered with the ArrestAll, separate installation instructions will be provided with the collector. For complete information, see the most current installation drawing or separate IOM.

9.2.5.1 Final Filter

If ordered, the final or secondary filter option consists of a filter enclosure with sealing mechanism and the final filter cartridge. The filter enclosure is
shipped installed over the dust cartridge section. The final filters are shipped separately for field installation. Refer to the installation drawing for additional information. There are two filters that can be used- HEPA rated and 95% ASHRAE filters. Contact AAF International for assistance in filter application.

9.2.5.2 Hopper Discharge Devices

Funnel bottom units come standard with a barrel top adapter. The barrel top adapters are field installed on the bottom of the funnel bottom (Figure 8). Slide gates are optional and are shipped loose for field installation.

![Figure 8. Barrel Top Adaptor – Slide Gate Installation.](image)

9.2.6 Electrical connections

All wiring should comply with NEC and applicable local codes.

Refer to the fan installation kit assembly drawing and the wiring diagram furnished with the equipment for proper wiring of the control panel. The major electrical components are the fan motor and automatic shaker motor and control. Factory wiring is standard on all units with the only exception being the fan motor. Use the wiring kit provided to make the final electrical connection on the unit. See the fan installation drawing for additional detail.
The control should be connected to the power source through a fused disconnect. Check the fan rotation against the rotation arrow for correct motor connections. **Fan rotation should always be clockwise when looking down from the top of the motor.**

If incorrect, change the motor leads as indicated on the motor wiring instructions. Provide adequate grounding of the unit.

**9.2.7 Compressed air connections**
There are no compressed air requirements for the ArrestAll.

**9.2.8 Ductwork Installation**
The AR ArrestAll dust collector is not designed to support inlet and/or outlet ductwork. The duct(s) should be connected to the collector with flexible connections to eliminate vibration transmission.

Close coupling a duct elbow to the collector inlet may result in an uneven velocity profile. This condition could cause previously collected material to be re-entrained. Three to four duct diameters of straight run will give an even airflow distribution at the inlet.

**10 EXPLOSION VENTS**
The following only applies to AAF-supplied explosion vents. Additional and/or different steps, equipment, etc. may be needed for vents and other equipment not supplied by AAF. Further, the following is a non-exhaustive list of recommendations, and users must carefully read, among other things, the manufacturer’s explosion vent guide for further instructions.

**10.1 Installation of the explosion vent**
The optional explosion vents are factory installed. A guard to contain and prevent damage from a rapidly opening vent is also provided as a separate item for field installation (Figure 9).

Explosion vents should be installed in accordance with local, national, and all other applicable codes.
10.2 Servicing
Explosion vents should be inspected regularly to confirm physical and operational condition. Replace any damaged or worn parts immediately.

10.3 Safety distance
The material discharged during a vented explosion must be directed outdoors.

Locating equipment with explosion vents outdoors is always recommended.

Measures should be taken to reduce the risk to personnel and equipment from the effects of fireball temperature and pressure. In the event of a vented explosion, use the guidance detailed in NFPA 68 to determine the maximum width and height of the flame.

11 START-UP & OPERATION
11.1 Start-up checklist
1. Check the bag header(s) to assure they are in sealed position in the collector. (The headers can be shipped installed but not sealed). Close the door(s) and secure tightly.

2. Be sure that the hopper discharge device(s) is operating properly.

3. Energize the control panel. Ensure that it is working correctly.
4. BEFORE INTRODUCING ANY DUST TO THE COLLECTOR, TURN THE POWER OFF TO THE CONTROL PANEL.

5. Start the fan with the fan damper or duct blast gates partially open. At the same time observe the differential pressure of the control. This gauge indicates the pressure drop across the dust cake and fabric. Rising pressure on the gauge shows that dust is being collected on the bag. When the gauge shows 1” to 3” w.g., the fan damper or duct blast gates may be opened to the full normal position. Simultaneously, the power should be turned on to the control panel.

11.2 Normal operation

The primary function of the AR ArrestAll dust collector is to move air, and thus create suction and remove the dust from the air. As a dust cake develops on the fabric surface of the filter, differential pressure will rise and airflow will be reduced. The unit must be shaken with sufficient frequency to preclude significant loss of suction.

Frequency of the dust removal from the bin should be determined from experience and an appropriate maintenance cycle established. Because of the intensity of shaking, it is imperative that the door be properly latched to prevent leakage.

With the hand-off-auto switch, the frequency of shaking can be controlled by the owner. It is recommended that shaking be minimized to extend the life of the filter cartridge and mechanical components. This is especially pertinent to installations where the unit might be turned on and off numerous times during the day, such as a school woodworking shop. In the “AUTO” position, the unit shakes every time the unit is turned off. In the “OFF” position, shaking can be actuated anytime the switch is pushed toward the “HAND” position. The fan must always be turned off before shaking.

The duration of the shaking process is adjustable from 0.6 to 60 seconds (recommended time set at approximately 15-20 seconds) with an initial fan coast delay which is adjustable from 0.6 to 20 seconds (recommended time factory set at 20 seconds).

For cold weather applications, it is especially important to allow the collector to operate for an extended period of time before shaking.
12 MAINTENANCE

12.1 Record Keeping
It is suggested that a record is kept of operational data and that all servicing maintenance is recorded. Maintenance data to be recorded should include details of inspections and any parts replaced.

12.2 Fan and Motor Replacement
Fan and/or motor replacement requires removal of the fan from the top plate. Lock out electrical power to the motor. Remove the mounting bolts and lift the fan assembly away. By removing the appropriate bolts, the fan wheel can be removed and replaced. The fan wheel must be removed for motor replacement. A wheel puller may be required for replacement of the fan wheel.

To replace the Shaker Motor, follow the following steps: (Figure 9)
1. Remove motor terminal cover and disconnect wires. Remove cable connector and wires from the motor.
2. Loosen bearing locking collar as follows:
   a. Loosen set screw.
   b. Rotate bearing so that the hole without the set screw faces you. Place a punch in hole and sharply tap punch in a CCW direction. If collar doesn’t loosen, sharply tap in a CW direction to loosen. (Repeat if necessary.)
3. Loosen and remove motor mounting bolts.
4. Lift and remove motor. Eccentric (on motor shaft) should disengage from bore of bearing. Bearing will remain in flanges.
5. Remove eccentric from shaft by loosening two (2) set screws.
To reinstall, reverse above procedure.
NOTE: Install motor with electrical terminals accessible.

After reinstalling all parts, rotate bearings several turns by hand to ensure equally free movement throughout rotation.
Figure 10. Shaker Motor Replacement.

13 TROUBLESHOOTING

Visible Discharge

- Improperly Installed Cartridge- Ensure the cartridge is properly locked and sealed in position.

- Check for worn or torn pockets and replace cartridge if required.

- Check for possible damage to the cartridge sealing gasket.
Insufficient Suction or Exhaust

- High Differential Pressure- See cartridge problems.

- Fan Direction of Rotation- The incorrect fan rotation will not provide sufficient static pressure or volume and could cause motor overload.

- Leaks- Infiltration of air from leaking ductwork, access doors, explosion vents, dust discharge devices, or housing will cause insufficient suction. Seal any leaks.

- Closed Air Passages- Clogged ducts or closed dampers or gates will shut off or reduce the airflow.

- Undersized Ducts- Duct size should be per the design specification. Undersized ducts produce high static pressure, restricting the airflow.

- Improper Shaker Cycle- Check the electrical components of the automatic shaker for correct operation. Adjust shake time if required (normally 15-20 seconds). Check for mechanical restrictions, which could hinder the performance of the shaker.

Cartridge Problems (Blinding, Poor Life, Failure, etc.)

- Check actual operating temperature of system against design temperature.

- Check for high operating humidity, free moisture, etc. Check for low relative humidity and static electricity.

- Check for shrinkage or stretching.
- Review physical and chemical characteristics of collected dust, gas stream, and fabric.
- Check for material bridging in bin. Material build-up into cartridge area can overstress the element.

- Incorrect cartridge installation can cause wear by allowing friction between adjacent elements or between outside elements. Adjust as required.

- Check for system design changes in air volume, dust loadings, etc. Adjust as required

**Electrical**

Shaker Motor Does Not Operate - Verify that the shaker motor is operable. If it is, make the following electrical checks:

1. Confirm that the selector switch (SS) is in "HAND" or "AUTO" position.

2. Verify line voltage at Terminals 1L1, 1L2, and 1L3 and control voltage (115 volts) from control transformer.

3. Check that shaker overload 2OL is not tripped.

4. Check that shaker motor fuses F4, F5, and F6 are not blown.

5. If selector switch 'SS' is in the "AUTO" position, verify that fan starter (1M) Aux N.C. contact is closed and there is power at terminal 4. If selector switch ‘SS’ is in the "HAND" position, check for power at terminal 4.

6. If all of the above steps check out okay, the next check is for a faulty shaker timer (SSTM). A faulty shaker timer (SSTM) may be determined by disconnecting wire numbers ‘4’, ‘7’, and ‘N’ from the timer. Place a jumper between wire numbers ‘7’ and ‘N’. If shaker motor energizes, shaker timer (SSTM) should be replaced.
14 RECOMMENDED SPARE PARTS LIST

The following is a list of recommended AR ArrestAll replacement parts. For multiple collector systems, the quantities of each spare part should be adjusted accordingly. If needing equipment other than what is listed, please call AAF International or your local AAF Representative with a control number and/or serial number.

<table>
<thead>
<tr>
<th>ArrestAll Size</th>
<th>Cartridge</th>
<th>Shaker Module</th>
<th>Wide Spacing</th>
<th>Extra Wide Spacing</th>
<th>Cartridge Retainer</th>
<th>Cartridge Frame Assembly</th>
</tr>
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<tbody>
<tr>
<td>AR-1</td>
<td>1</td>
<td>1</td>
<td>16</td>
<td>8</td>
<td>1</td>
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<tr>
<td>AR-2</td>
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<td>32</td>
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<tr>
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<td>24</td>
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<tr>
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<td>32</td>
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<tr>
<td>AR-5</td>
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<td>1</td>
<td>96</td>
<td>48</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
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