# **16-Series Shredders**

# owner's manual



16-S

Versatile shredding power in a rugged, compact design



We do everything possible to make our paper shredders safe to own and operate. Please do your part by complying with the recommended operating procedures and the following safety instructions. Safety is vital to all of us.

#### **OPERATIONAL SAFETY**

- 1. Do not place hands or any part of body in machine or on the conveyor.
- 2. Do not operate machine unless all guards and safety covers are in place.
- 3. Before reversing the machine for any reason, be certain that no one is at or near the output end.
- 4. Do not operate machine while wearing loose clothing, loose gloves, or long hair not held in place and covered.
- 5. Do not operate machine when under the influence of drugs, alcohol, or medication.
- 6. Keep a fire extinguisher nearby. Flammable materials may ignite while shredding.

#### MAINTENANCE SAFETY

- 1. Disconnect and lockout machine from power supply before performing maintenance or service (see OSHA 1910.147).
- Replace all guards and safety covers before reconnecting machine to power supply.
- For reasons of safety for yourself and others, use only service technicians authorized by Allegheny Paper Shredders Corporation.

Be cautious while using this machine. Never operate it in a careless fashion. Always keep safety foremost in your mind.

# Thank you for purchasing an Allegheny 16-Series Shredder

Your new Allegheny paper shredder is the product of more than 40 years of manufacturing excellence. Made in America and built to last, your Allegheny 16-Series Shredder will provide you with problem-free operation for many years to come.

Your Allegheny 16-Series Shredder is simple to operate and maintain. However, we do recommend that you familiarize yourself with the machine before using it by reading this owner's manual carefully.

## **Installation**

- 1. Carefully uncrate the paper shredder.
- 2. Remove the paper shredder from the wooden pallet.

We recommend lifting the machine a few inches using a forklift with a rated lifting capacity of 2,000 lbs. minimum, sliding out the wooden pallet, then lowering the machine onto its casters.

3. Move the paper shredder to its permanent

location. 4. Install the bagholder as follows:

- Loosen the set screws on the two steel collars at the ends of the bagholder arms.
  Remove the steel collars, but do not discard them.
- b. Place bagholder arms into the two holes located at the output end of the machine. (See Figure 1.)
- c. Replace steel collars onto ends of bagholder arms. (See Figure 2.) Tighten set screws.
- 5. Open a plastic bag and place it into the bagholder so that 4 to 5 inches of the plastic bag drape over the bagholder's rim. (See Figure 3.)
- 6. If your paper shredder is equipped with a feed table, security cart tipper, and/or an output

conveyor, refer to the separate installation instructions accompanying each piece of equipment.

Your paper shredder is equipped with a pull-out shelf for placement of material prior to shredding.

### **Electrical**

We recommend that you have the electrical instal lation of your Allegheny 16-Series Shredder completed by a qualified electrician. The electrical installation must be in accordance with the National Electrical Code and all applicable local codes and ordinances.

Your paper shredder is factory-wired for a 208, one control panel. 230, or 460 Volt, 3-phase, 60 cycle power supply (Model 16-75C has an option for 230 Volt, 1-phase, 1. First familiarize yourself with the controls. 60 cycle). Check the serial number plate (located on the output end of the machine) for the proper voltage and full-load amperage. (International voltages are 380 or 415 Volt, 3-phase, 50 cycle power supply or 575 Volt, 3-phase, 60 cycle power supply.)

Your paper shredder is equipped with a three-pole, four-wire locking type plug that connects to a matching receptacle supplied with your machine. Have an electri cian install the receptacle into your electrical system.

#### NOTE:

- 1. Your paper shredder is equipped with thermal over load relays for motor overload protection. For branch circuit protection, we recommend the use of dual element time-delay fuses.
- 2. An electrical diagram is located on the inside cover of the electrical enclosure on your paper shredder.

Bagholder



Figure 1



Figure 3

# **Operation**

Allegheny 16-Series Shredders are equipped with

#### **CAUTION!** Be sure no foreign objects (tools, screws, etc.) are on the input conveyor.

- a. Insert the key into the control panel's OFF/ ON switch. Turn the key to the "ON" posi tion. The amber indicator light next to the OFF/ON switch will illuminate.
- b. Depress the green FORWARD button.

The machine will engage into the shred ding operation.

NOTE: If the input conveyor is moving away from the feed opening rather than toward it, discontinue use of the paper shredder and notify qualified a electrician.

c. Depress the red Emergency STOP button. The machine will stop.

For safety, this is a two-position Emergency STOP button. Once the Emergency STOP button is depressed, the paper shredder cannot be started again until the Emergency STOP button is pulled out.

d. After pulling out the red Emergency STOP button, depress both yellow REVERSE buttons at the same time.

> IMPORTANT! To avoid damage to the drive train, allow the cutting assem bly to come to a complete stop before changing its direction.

The machine will reverse for as long as both REVERSE buttons are depressed. This is for clearing jams. When the REVERSE buttons are released, the machine will stop.

- 2. Begin shredding.
  - a. Depress the green FORWARD button.

- b. Proceed with moderate amounts of paper to get the feel of the machine.
- c. For optimum confidentiality, shred documents diagonally or across (perpendicular to) the lines of print.

After becoming familiar with the paper shredder, you will be able to judge the amount of material to feed into the machine for efficient shredding.

The Allegheny 16-Series Shredder will shred bound reports, file folders, stacks of computer printouts, type writer ribbons, audio cassettes, CDs, DVDs, and mul tiple sheets of microfiche.

It can also shred crumpled papers, paper cups, beverage cans, small boxes, and other wastebasket contents with no manual flattening or sorting required.

#### If a jam occurs...

1. Immediately depress the red Emergency STOP button.

NOTE: Owners of Model 16-150C: If a jam occurs, the paper shredder will stop automatically. Any jam or other overload condition resulting in a measurable increase in motor current will cause the AC current relay to open the forward contactor in the reversing starter. This stops forward operation of the paper shredder without tripping the overload protection relay. There is no need to reset the AC current relay, since it has an automatic 4 reset.

<u>CAUTION!</u> Do not under any circumstances attempt to clear a jam by placing your hand or any other part of your body into this machine while it is running or connected to the power supply.

- After a jam has occurred, the FORWARD button will not operate until both reverse buttons have been depressed for several seconds. This allows time for the materials to return to the operator so the jam can be cleared.
- Be sure to separate materials to clear the jam before pressing the FORWARD button again.

Attempting to clear the jam by repeatedly forcing the jam into the cutting assembly can damage the machine.

If the machine does not reverse, depress the manual RESET button (located on the cover of the machine's electrical enclosure).

If the RESET button has tripped, it will be nec essary to wait a few minutes before pressing it. This will allow the thermal overload relay to cool to its proper ambient temperature.

If you wait a few minutes and the machine still does not operate, refer to the "Troubleshooting" section on page 7 of this manual.

- 2. Depress both yellow REVERSE buttons.
  - 3. After the jam has been cleared, press the FORWARD button, and continue shredding.
  - 4. If jam reoccurs, repeat the reversing operation until the machine can shred materials as fed into it.
  - 5. If jam cannot be cleared as instructed above, **discon nect and lockout machine from the power supply** (see OSHA 1910.147) and manually remove the jam. Before restarting machine, make sure all guards and safety covers are properly secured. **Do not restart machine until operator is in a position of complete safety.**

# Preventive Maintenance



Disconnect and lockout machine from the power supply before performing maintenance or service (see OSHA 1910.147).

Replace all guards and safety covers before reconnect ing machine to the power supply.

You will gain the maximum return on your invest ment in an Allegheny paper shredder if you follow a program of regular preventive maintenance.

<u>NOTE</u>: Maintenance timetable is computed for a 6-8 hour day, 5 days per week. If your paper shredder is operated for shorter or longer periods,



Waste Drawer5

decrease or increase maintenance frequency proportionally.

#### Daily:

- 1. Disconnect and lockout machine from the power supply before performing maintenance or service (see OSHA 1910.147).
- 2. Remove the top safety cover over the cutting assembly (4 screws).
- 3. Remove the output chute (2 screws are located on the inside of the chute). NOTE: If your paper shredder is equipped with an output conveyor, remove the output safety guard (4 screws), if applicable.
- 4. Clean the entire cutting assembly of any excess shredded material.

To save time and effort, we recommend using a "wet and dry" shop vacuum and/or compressed air to clean material out of the cutting assembly. Also be sure to clean underneath the front of the cutting assembly

- 5. Spray the entire cutting assembly with LPS-1 spray lubricant (see "Shredding Supplies", page 9).
- 6. Replace and securely fasten the output chute or the output safety shield, and the top safety cover over the cutting assembly.
- 7. Remove accumulated shredded material from the waste drawer located under the cutting assembly (see photo at left).
- 8. Before operating the paper shredder:
- a. Properly replace and fasten all safety covers that were removed for performing maintenance.
- b. Make sure no foreign objects (tools, screws, etc.) are on the input conveyor.
- c. Reconnect machine to power supply and resume shredding.

**Monthly:** Model 16-75C (5 Hp.) & 16-150C only

- 1. Disconnect and lockout machine from the power sup ply before performing maintenance or service (see OSHA 1910.147).
- 2. Perform "Daily" preventive maintenance, steps #2 thru #7.
- 3. Before operating the paper shredder:
- a. Properly replace and fasten all safety covers that were removed for performing maintenance.
- b. Make sure no foreign objects (tools, screws, etc.) are on the input conveyor.
- c. Reconnect machine to power supply.
- 4. Depress the green FORWARD button. While machine is running, lubricate the spur/drive gears and the top and bottom bearings via the centralized lubrication system (located at the output end of the machine).

<u>NOTE</u>: To prevent contaminants, be sure to thoroughly clean each grease fitting before lubrication.

Use Chevron EP-2 grease lubricant (see "Shredding Supplies," page 9). Use 10-12 full pumps of a grease gun for the spur/drive gears and 4-6 full pumps of a grease gun for both the top and bottom bearings.

5. Resume shredding.

#### Once every three months:

- 1. Disconnect and lockout machine from the power sup ply before performing maintenance or service (see OSHA 1910.147).
- Perform "Daily" preventive maintenance, steps #2 thru #7.
  - 3. Remove control panel (2 screws), then remove both the right and left side safety covers of the machine.
- 4. Examine the entire machine for signs of abnormal wear or any leakage of oil. If found, discontinue use of the paper shredder and call for service. (Refer to "Service" section on page 9.)
- 5. For Model 16-75C (3 Hp.) Shredders only: Lubricate the chains on the torque limiters and the spur/drive gears.

Use Premium grease lubricant (see "Shredding Supplies," page 9). Be sure that the torque limiter chains and the spur/drive gears are well coated with grease lubricant.

 For Model 16-75C (5 Hp.) and Model 16-150C <u>Shredders only:</u> Lubricate the chains on the torque limiters.

Use Premium grease lubricant (see "Shredding

Supplies," page 9). Be sure that the torque limiter chains are well coated with grease lubricant.

7. Visually inspect the motor drive belts. If there are any signs of abnormal wear (fraying, etc.) or if the drive belt slips (squeals), call for service or ask for separate instructions:

#### SERVICE PROCEDURES:

#### Removal/Installation of Motor Drive Belt

When the drive belt is properly adjusted it will not slip. As with all new drive belts, the drive belt will stretch with use and will need to be readjusted. Do not allow the drive belt to become so loose that it slips (squeals). This will signifi

cantly reduce the life of the drive belt.

- 8. Check for bolt tightness in torque arm and bracket assembly. Tighten bolts if necessary.
- 9. Check tension and tracking of input conveyor belt (and output conveyor, if applicable).

If adjustment of conveyor belt is necessary, do the following:

Refer to Parts Diagram on page 11 for location of the conveyor belt idler roller adjuster assemblies.

#### To Adjust Tension of Conveyor Belt:

To tighten the conveyor belt, adjust the tensioning nuts so that the idler roller moves away from the conveyor frame. (If applicable, loosen the locking nuts on the backside of the adjuster assembly first.) Tension should be just enough to prevent slippage. The under side of the conveyor belt should have a slight amount of slack in it.

#### To Adjust Tracking of Conveyor Belt:

The conveyor belt should track in the center of the conveyor frame. To correct misalign ment, adjust one of the tensioning nuts so that the idler roller moves away from the conveyor frame assembly on one side only.

To move the conveyor belt to the right, turn the tensioning nut on the left side adjuster to extend the idler roller. To move the conveyor belt to the left, turn the tensioning nut on the right side adjuster to extend the idler roller.

One half turn per adjustment is all that is necessary.

10. When the conveyor belt has been adjusted, tighten the locking nuts on the backside of the adjuster assemblies (if applicable).

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- 11. Before operating the paper shredder:
  - a. Properly replace and fasten all safety covers that were removed for performing maintenance.
  - b. Make sure no foreign objects (tools, screws, etc.) are on the input conveyor.
  - c. Reconnect machine to power supply.
- 12. Allow the machine to run for a few minutes to verify proper tracking of the conveyor belt. If conveyor belt is not tracking in the center of the conveyor frame, repeat "Once every three months" preventive mainte nance, steps #1, #3, #9, #10, and #11.
- 13. For Model 16-75C (5 Hp.) and Model 16-15OC Shredders only: Press the green FORWARD button. While machine is running, lubricate the spur/drive gears and the following bearings via the centralized lubrication system (located at the output end of the machine).

<u>NOTE</u>: To prevent contaminants, be sure to thoroughly clean each grease fitting before lubrication.

Use Chevron EP-2 grease lubricant (see "Shredding Supplies," page 9). Lubricate the appropriate grease fitting with a grease gun as follows:

- a. Spur/drive gears: 10-12 full pumps.
- b. Outboard bearing: 3-4 full pumps.
- c. Top bearing (drive side): 4-5 full pumps.
- d. Bottom bearing (drive side): 4-5 full pumps.
- 14. Resume shredding.

#### Once a year:

- 1. Disconnect and lockout machine from the power supply before performing maintenance or service (see OSHA 1910.147).
- 2. Remove control panel mounting plate (2 screws), then remove right side safety cover of the machine.

3. Lubricate motor bearings via the two grease fittings located on opposite ends of the motor.

<u>NOTE</u>: To prevent contaminants, be sure to thoroughly clean each grease fitting before lubrication.

Use Chevron EP-2 grease lubricant (see "Shredding Supplies," page 9). Use 1-2 full pumps of a grease gun for each grease fitting.

- 4. For specific procedures for checking the oil level in the gear reducer, call for service. (Refer to "Service" section on page 9.)
- 5. Before operating the paper shredder:
  - a. Properly replace and fasten all safety covers that were removed for performing maintenance.
  - b. Make sure no foreign objects (tools, screws, etc.) are on the input conveyor.
  - c. Reconnect machine to power supply and resume shredding.

# **Troubleshooting**



Disconnect and lockout machine from the power supply before performing troubleshooting or service (see OSHA 1910.147).

Replace all guards and safety covers before reconnect ing machine to the power supply.

#### Problem:

# Machine will not operate in forward and/or reverse

#### Solutions:

- 1. Be sure that the red Emergency STOP button is pulled out.
- Check for proper operation of the control panel's OFF/ON switch. (The amber indicator light should be illuminated.)
- If indicator light is illuminated and the paper shred der still won't operate, depress the manual RESET button (located on the cover of the machine's electri cal enclosure).

If the thermal overload relay has tripped, it will be necessary to wait a few minutes before press ing the RESET button. This will allow the ther mal overload relay to cool to its proper ambient temperature.

4. Once you have reset the thermal overload relay, check for proper operation of the paper shredder. If machine still does not operate or if the motor 3. Check for required voltage at wall receptacle. hums,

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one leg of the 3-phase power supply is out (single phasing). Do the following:

- a. Check that the paper shredder is properly plugged into the electrical receptacle.
- b. Check for power at the branch circuit discon nect. Replace fuses if necessary.
- c. If there is no power at branch circuit discon nect, check your main electrical panel board for tripped circuit breaker or blown fuses. Reset main panel circuit breaker or replace fuses if necessary.
- 5. Check whether cutting assembly is free of shredded material. If necessary, refer to "Daily" maintenance in the "Preventive Maintenance"

section on page 5. **Problem:** 

#### Overload relay prematurely tripping (Model 16-150C only)

#### **Solutions:**

- 1. Check for required voltage at electrical receptacle.
- 2. Current sensing relay could be set too low. For specific procedure for readjusting current sensing relay, call for service. (Refer to "Service" section on page 9.)

#### **Problem:** Shredding capacity is low

#### Solutions:

- 1. Cutting assembly may need to be cleaned and oiled. If necessary, refer to "Daily" maintenance in the "Preventive Maintenance" section on page 5.
- 2. Visually inspect the motor drive belts. If there are any signs of abnormal wear (fraying, etc.) or if the drive belt slips (squeals), call for service or ask for separate instructions:

#### SERVICE PROCEDURES:

#### Removal/Installation of Motor Drive Belt.

When the drive belt is properly adjusted it will not slip. As with all new drive belts, the motor drive belt will stretch with use and will need to be readjusted. Do not allow the drive belt to become so loose that it slips (squeals). This will significantly reduce the life of the drive belt.

Shredding capacity may decrease if other equipment is operating on the same electrical circuit.

#### **Problem:**

#### The input and/or output conveyor belts are slipping, improperly tracking, or not moving at all.

#### Solutions:

- 1. Check if the paper shredder is running and the cutting assembly is turning.
- 2. Check that no foreign object is obstructing the conveyor belt.
- 3. Clean out any shredded materials that may have accumulated inside the conveyor belt.
- 4. Adjust the tension and tracking of the conveyor belt. (For proper adjustment of conveyor belts, Point #9 under "Once every three months" in the "Preventive Maintenance" section on page 6.)
- 5. If conveyor belts show signs of damage (torn lac ings, excessive wear, etc.), call for service. (Refer to "Service" section on page 9.)
- 6. Check that the lock nut on the torque limiter is firmly tightened. Be sure the friction disks are intact. The torque limiter may require adjustment or replace ment. For specific procedures, call for service or ask for separate instructions:

#### SERVICE PROCEDURES: Morse Torque Limiters.

7. Check whether the drive chains are intact.

If a drive chain is broken, discontinue use of machine and call for service. (Refer to "Service" section on page 9.)

#### **Problem:**

#### Crusher paddle does not rotate

#### Solutions:

1. Check that the lock nut on the torque limiter is firmly tightened. Be sure the friction disks are intact. The torque limiter may require adjustment or replace ment. For specific procedures, call for service or ask for separate instructions:

#### SERVICE PROCEDURES: Morse Torque Limiters.

 Check to see the whether drive chain is intact. If the drive chain is broken, discontinue use of machine and call for service. (Refer to "Service" section below.)

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# **Service**

If you have followed all troubleshooting instructions and your paper shredder still fails to operate properly — or if there are signs of abnormal wear, vibration, noise, or leakage of oil — call for service. Contact your authorized Allegheny dealer or the Allegheny Factory Service Department at:

(800) 245-2497

E-mail:

solutions@alleghenyshredders.com Website: www.alleghenyshredders.com

When calling for service or ordering parts, please specify:

- 1. The model number and serial number of your paper shredder.
- 2. The specific problem you are having with your paper shredder.

# Shredding Supplies

Contact your authorized Allegheny dealer for supplies or the Allegheny Factory as indicated above:

**Plastic Bags** for disposal of shredded material are made of tough, clear, 2 mil virgin polyethylene. Each 55 gallon bag measures 40"W x 48"H. Tested when full to with stand a 20 foot drop without breaking.

Plastic bags come in dispensing rolls

**Allegheny 16-Series Shredders** 

Diagram 1 diagram 2

— 100 bags or 250 bags per roll.

**LPS-1 Spray Lubricant** is for proper lubrication of the cutting assembly on all Allegheny paper shredders. It contains an environmentally safe, non-flammable propellant.

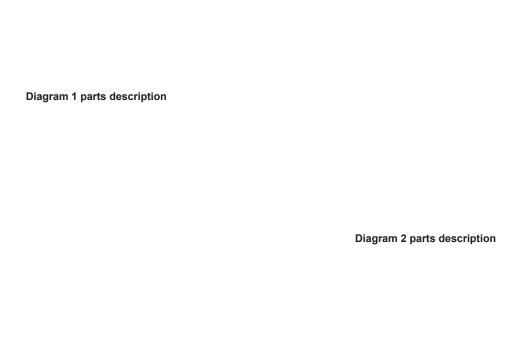
LPS-1 spray lubricant displaces moisture and leaves a thin dry lubricating film on the cutters. It does not collect dust and does not stain. LPS 1 allows your paper shredder to operate more quietly and efficiently, without the gummy buildup associated with conventional spray oils. (Available in 11 oz. spray cans.)

**Premium Grease Lubricant** is for proper lubrication of the torque limiter chains on all Allegheny conveyor fed shredders. Premium grease lubricant is also rec ommended for the spur/drive gears on the Allegheny Model 16-75C (3 Hp.) Shredder.

Premium grease lubricant is a moly-fortified, extreme pressure lubricant that protects against seizure and heat-freeze while lowering friction. Protects against rust, oxidation and corrosion. (Available in 16 oz. container with application brush.)

Chevron EP-2 Grease Lubricant is for proper lubri cation of the spur/drive gears, roller bearings, outboard bearing, and motor bearings on all Allegheny conveyor fed shredders.

Chevron EP-2 grease lubricant inhibits rust, prevents seizure, and extends the life of moving parts. (Available in 12 oz. cartridges for grease gun dispensing.)



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Allegheny 16-Series Shredders

	Diagran	n 4 parts description
Diagram 3 parts description		

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