

1 INTRODUCTION

Congratulations on your choice of an AgriMetal Front Mount Leaf Blower to complement your operation. This equipment has been designed and manufactured to meet the needs of a discerning turf care industry.

Safe, efficient and trouble free operation of your AgriMetal Leaf Blower requires that you and anyone else who will be operating or maintaining the machine, read and understand the Safety, Operation, Maintenance and Trouble Shooting information contained within the Operator's Manual.



Manual



Electric

This manual covers the Model BW 2500-F Kubota Front Mount Leaf Blower manual and electric chute positioning used with the Kubota 80 series tractor. Use the Table of Contents or Index as a guide to locate required information.

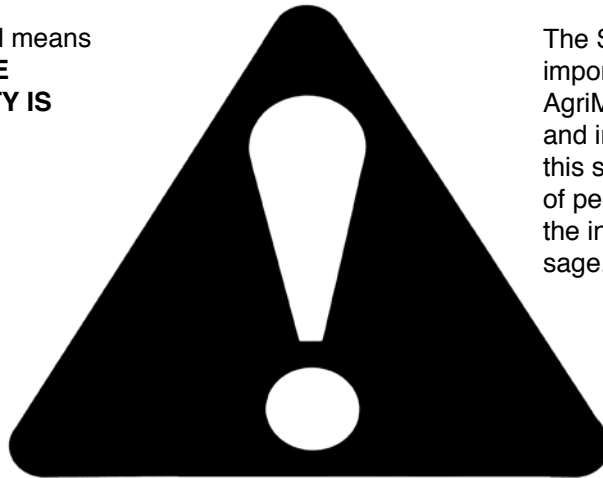
Keep this manual handy for frequent reference and to pass on to new operators or owners. Call your Agri-Metal Dealer if you need assistance, information or additional copies of the manuals.

OPERATOR ORIENTATION - The directions left, right, front and rear, as mentioned throughout this manual, are as seen from the tractor driver's seat and facing in the direction of travel.

2 SAFETY

SAFETY ALERT SYMBOL

This Safety Alert symbol means
**ATTENTION! BECOME
ALERT! YOUR SAFETY IS
INVOLVED!**



The Safety Alert symbol identifies important safety messages on the AgriMetal Front Mount Leaf Blower and in the manual. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.

Why is SAFETY important to you?

3 Big Reasons

Accidents Disable and Kill
Accidents Cost
Accidents Can Be Avoided

SIGNAL WORDS:

Note the use of the signal words **DANGER**, **WARNING** and **CAUTION** with the safety messages. The appropriate signal word for each message has been selected using the following guide-lines:

**SI NO LEE INGLES, PIDA AYUDA
A AIGUIEN QUE SI LO LEA PARA
QUE LE TRADUZCA LAS
MIDIDAS DE SEGURIDAD.**

DANGER - Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations typically for machine components which, for functional purposes, cannot be guarded.

WARNING - Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

CAUTION - Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

If you have any questions not answered in this manual or require additional copies or the manual is damaged, please contact your dealer or AgriMetal Inc., 1006 Rue Principale, Wickham, Quebec, Canada, J0C 1S0. Phone (819) 398-6883 or fax (819) 398-5311.

SAFETY

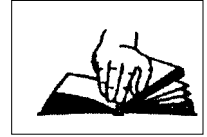
YOU are responsible for the SAFE operation and maintenance of your AgriMetal Front Mount Leaf Blower. **YOU** must ensure that you and anyone else who is going to operate, maintain or work around the Leaf Blower be familiar with the operating and maintenance procedures and related **SAFETY** information contained in this manual. This manual will take you step-by-step through your working day and alerts you to all good safety practices that should be adhered to while operating the Leaf Blower.

Remember, **YOU** are the key to safety. Good safety practices not only protect you but also the people around you. Make these practices a working part of your safety program. Be certain that **EVERYONE** operating this equipment is familiar with the recommended operating and maintenance procedures and follows all the safety precautions. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

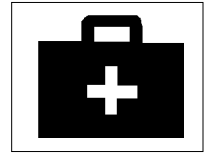
- Leaf Blower owners must give operating instructions to operators or employees before allowing them to operate the machine, and at least annually thereafter.
- The most important safety device on this equipment is a SAFE operator. It is the operator's responsibility to read and understand ALL Safety and Operating instructions in the manual and to follow these. Most accidents can be avoided.
- A person who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes himself and bystanders to possible serious injury or death.
- Do not modify the equipment in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the equipment.
- Think SAFETY! Work SAFELY!

2.1 GENERAL SAFETY

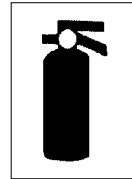
1. Read and understand the Operator's Manual and all safety signs before operating, maintaining, adjusting or unplugging the Leaf Blower.



2. Have a first-aid kit available for use should the need arise and know how to use it.



3. Have a fire extinguisher available for use should the need arise and know how to use it.



4. Do not allow riders.

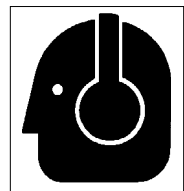
5. Wear appropriate protective gear. This list includes but is not limited to:

- A hard hat
- Protective shoes with slip resistant soles
- Protective glasses or goggles
- Heavy gloves
- Wet weather gear
- Hearing protection
- Respirator or filter mask



6. Install and secure all guards before starting.

7. Wear suitable ear protection for prolonged exposure to excessive noise.




8. Place all controls in neutral, stop engine, set park brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
9. Clear the area of people, especially small children, before starting the unit.
10. Review safety related items annually with all personnel who will operating or maintaining the Leaf Blower.

2.2 EQUIPMENT SAFETY GUIDELINES

1. Safety of the operator and bystanders is one of the main concerns in designing and developing a machine. However, every year many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. You, the operator, can avoid many accidents by observing the following precautions in this section. To avoid personal injury or death, study the following precautions and insist those working with you, or for you, follow them.
2. In order to provide a better view, certain photographs or illustrations in this manual may show an assembly with a safety shield removed. However, equipment should never be operated in this condition. Keep all shields in place. If shield removal becomes necessary for repairs, replace the shield prior to use.
3. Replace any safety sign or instruction sign that is not readable or is missing. Location of such safety signs is indicated in this manual.
4. Never use alcoholic beverages or drugs which can hinder alertness or coordination while operating this equipment. Consult your doctor about operating this machine while taking prescription medications.
5. **Under no circumstances should young children be allowed to work with this equipment. Do not allow persons to operate or assemble this unit until they have read this manual and have developed a thorough understanding of the safety precautions and of how it works.** Review the safety instructions with all users annually.
6. This equipment is dangerous to children and persons unfamiliar with its operation. The operator should be a responsible, properly trained and physically able person familiar with machinery and trained in this equipment's operations. If the elderly are assisting with work, their physical limitations need to be recognized and accommodated.
7. Never exceed the limits of a piece of machinery. If its ability to do a job, or to do so safely, is in question - **DON'T TRY IT.**
8. Do not modify the equipment in any way. Unauthorized modification result in serious injury or death and may impair the function and life of the equipment.
9. In addition to the design and configuration of this implement, including Safety Signs and Safety Equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training of personnel involved in the operation, transport, maintenance, and storage of the machine. Refer also to Safety Messages and operation instruction in each of the appropriate sections of the power unit, engine and machine Manuals. Pay close attention to the Safety Signs affixed to the power unit and the machine.

2.3 SAFETY TRAINING

1. Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be wiped out by a single careless act of an operator or bystander.
2. In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of this equipment.
3. It has been said, "The best safety feature is an informed, careful operator." We ask you to be that kind of an operator. It is the operator's responsibility to read and understand ALL Safety and Operating instructions in the manual and to follow these. Accidents can be avoided.
4. **Working with unfamiliar equipment can lead to careless injuries. Read this manual, and the manual for your power unit, before assembly or operating, to acquaint yourself with the machines. If this machine is used by any person other than yourself, or is loaned or rented, it is the machine owner's responsibility to make certain that the operator, prior to operating:**
 - a. **Reads and understands the operator's manuals.**
 - b. **Is instructed in safe and proper use.**
5. Know your controls and how to stop power unit, engine, and machine quickly in an emergency. Read this manual and the one provided with your power unit.
6. Train all new personnel and review instructions frequently with existing workers. Be certain only a properly trained and physically able person will operate the machinery. A person who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes himself and bystanders to possible serious injury or death. If the elderly are assisting with work, their physical limitations need to be recognized and accommodated.

2.4 SAFETY SIGNS

1. Keep safety signs clean and legible at all times.
2. Replace safety signs that are missing or have become illegible.
3. Replaced parts that displayed a safety sign should also display the current sign.
4. Safety signs are available from your Dealer Parts Department or the factory.

How to Install Safety Signs:

- Be sure that the installation area is clean and dry.
- Be sure temperature is above 50°F (10°C).
- Determine exact position before you remove the backing paper.
- Remove the smallest portion of the split backing paper.
- Align the sign over the specified area and carefully press the small portion with the exposed sticky backing in place.
- Slowly peel back the remaining paper and carefully smooth the remaining portion of the sign in place.
- Small air pockets can be pierced with a pin and smoothed out using the piece of sign backing paper.

2.5 PREPARATION

1. Never operate the push vehicle and machine until you have read and completely understand this manual, the Push Vehicle Operator's Manual, and each of the Safety Messages found on the safety signs on the power unit and machine.

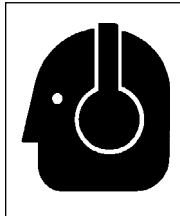
2. Personal protection equipment including hard hat, safety glasses, safety shoes, and gloves are recommended during as-



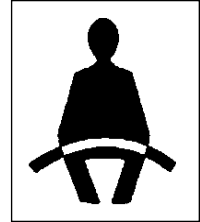
sembly, installation, operation, adjustment, maintaining, repairing, removal, or moving the implement. Do not allow long hair, loose fitting clothing or jewelry to be around equipment.

3. **PROLONGED EXPOSURE TO LOUD NOISE MAY CAUSE PERMANENT HEARING LOSS!**

Push vehicles with or without equipment attached can often be noisy enough to cause permanent, partial hearing loss. We recommend that you wear hearing protection on a full-time basis if the noise in the Operator's position exceeds 80db. Noise over 85db on a long-term basis can cause severe hearing loss. Noise over 90db adjacent to the Operator over a long-term basis may cause permanent, total hearing loss. **NOTE:** Hearing loss from loud noise (from tractors, chain saws, radios, and other such sources close to the ear) is cumulative over a lifetime without hope of natural recovery.



4. Operate the machine only with a tractor equipped with an approved Roll-Over-Protective Structure (ROPS). Always wear your seat belt. Serious injury or even death could result from falling off the tractor ---particularly during a turnover when the operator could be pinned under the ROPS or the tractor.
5. Clear working area of stones, branches or hidden obstacles that might be hooked or snagged, causing injury or damage.
6. Operate only in daylight or good artificial light.
7. Be sure machine is properly mounted, adjusted and in good operating condition.
8. Ensure that all safety shielding and safety signs are properly installed and in good condition.



2.6 OPERATING SAFETY

1. Please remember it is important that you read and heed the safety signs on the Blower. Clean or replace all safety signs if they cannot be clearly read and understood. They are there for your safety, as well as the safety of others. The safe use of this machine is strictly up to you, the operator.
2. All things with moving parts are potentially hazardous. There is no substitute for a cautious, safe-minded operator who recognizes potential hazards and follows reasonable safety practices. The manufacturer has designed this Leaf Blower to be used with all its safety equipment properly attached, to minimize the chance of accidents. Study this manual to make sure you have all safety equipment attached.
3. If a safety shield or guard is removed for any reason, it must be replaced before the machine is again operated.
4. When the use of hand tools is required to perform any part of assembly, installation, adjustment, maintaining, repairing, removal, or moving, be sure the tools used are designed and recommended by the tool manufacturer for that specific task.
5. Personal protection equipment including hearing protection, hard hat, safety glasses, safety shoes, and gloves are recommended during assembly, installation, operation, adjustment, maintaining, repairing, removal, or moving. Do not allow long hair, loose fitting clothing, or jewelry to be around moving parts.
6. Always use two people to handle heavy, unwieldy components during assembly, installation, removal or moving.
7. Never place any part of your body where it would be in danger if movement should occur during assembly, installation, operation, maintaining, repairing, removal or moving.
8. Never place yourself between the push vehicle and machine while implement is in operation.
9. Place all controls in neutral, stop engine, set park brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
10. Use extreme care during travel. Slow down on turns and watch out for bumps.
11. Never use alcoholic beverages or drugs which can hinder alertness or coordination while operating this equipment. Consult your doctor about operating this machine while taking prescription medications.
12. Do not allow riders on the machine or push vehicle at any time. There is no safe place for any riders.
13. Before you operate the machine, check over all pins, bolts, and connections to be sure all are securely in place. Replace any damaged or worn parts immediately.
14. Do not allow anyone who is not familiar with the safety rules and operation instructions to use this machine.
15. Never allow children to operate or be around this machine.
16. Do not reach into blower openings when the engine is running. Keep others away also.
17. Clear the work area of objects which might be picked up and snagged or entangled in the machine.
18. Keep hands, feet, hair, jewelry, and clothing away from all moving and/or rotating parts.
19. Do not direct the air stream toward people, animals or buildings to prevent injury or damage.
20. Do not place hands, feet or other body parts into air stream.

2.7 TRANSPORT SAFETY

1. Comply with state and local laws governing highway safety and movement of machinery on public roads.
2. The use of flashing amber lights is acceptable in most localities. However, some localities prohibit their use. Local laws should be checked for all highway lighting and marking requirements.
3. At all times when driving the push vehicle and equipment on the road or highway under 20 mph (32 kph), use flashing amber warning lights and a slow moving vehicle (SMV) identification emblem. Do not exceed 20 mph (32 kph). Reduce speed on rough roads and surfaces.
4. Plan your route to avoid heavy traffic.
5. Use a mounting pin with provisions for a retainer. Install the retainer.
6. Do not drink and drive.
7. Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc. Watch for traffic when operating near or crossing roadways.
8. Never allow riders on either push vehicle or machine.

2.8 STORAGE SAFETY

1. Store the unit in an area away from human activity.
2. Do not permit children to play on or around the stored machine.
3. Store the unit in a dry, level area. Support the frame with planks if required.

2.9 MAINTENANCE SAFETY

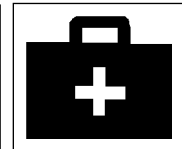
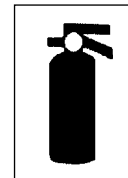
1. Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.
2. Follow good shop practices.

- Keep service area clean and dry.
- Be sure electrical outlets and tools are properly grounded.
- Use adequate light for the job at hand.



3. Make sure there is plenty of ventilation. Never operate an engine in a closed building. The exhaust fumes may cause asphyxiation.
4. Before working on this machine, shut off the engine, set the brakes, and remove the ignition keys.
6. Never work under equipment unless it is blocked securely.
7. Always use personal protection devices such as eye, hand and hearing protectors, when performing any service or maintenance work.
8. Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your equipment to original specifications. The manufacturer will not be responsible for injuries or damages caused by use of unapproved parts and/or accessories.

9. A fire extinguisher and first aid kit should be kept readily accessible while performing maintenance on this equipment.



10. Periodically tighten all bolts, nuts and screws and check that all cotter pins are properly installed to ensure unit is in a safe condition.
11. When completing a maintenance or service function, make sure all safety shields and devices are installed before placing unit in service.

2.10 SIGN-OFF FORM

AgriMetal follows the general Safety Standards specified by the American Society of Agricultural Engineers (ASAE) and the Occupational Safety and Health Administration (OSHA). Anyone who will be operating and/or maintaining the Front Mount Leaf Blower must read and clearly understand ALL Safety, Operating and Maintenance information presented in this manual.

Do not operate or allow anyone else to operate this equipment until such information has been reviewed. Annually review this information before the season start-up.

Make these periodic reviews of SAFETY and OPERATION a standard practice for all of your equipment. We feel that an untrained operator is unqualified to operate this machine.

A sign-off sheet is provided for your record keeping to show that all personnel who will be working with the equipment have read and understand the information in the Operator's Manual and have been instructed in the operation of the equipment.

SIGN-OFF FORM

[illegible]

3 SAFETY SIGN LOCATIONS

The types of safety signs and locations on the equipment are shown in the illustrations that follow. Good safety requires that you familiarize yourself with the various safety signs, the type of warning and the area, or particular function related to that area, that requires your SAFETY AWARENESS.

- Think SAFETY! Work SAFELY!



A



CAUTION

1. Read Operator's Manual before starting.
2. Keep guards and shields in place and access doors closed.
3. Keep hands, feet, hair and clothing away from moving parts.
4. Stop engine, place all controls in neutral, set park brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging the machine.
5. Do not climb on the machine or place hands in any opening when the engine is running.
6. Keep people and pets a safe distance from the machine.
7. Do not smoke when refuelling.
8. Block up machine securely before working under it.
9. Keep all electrical wires and connections dry and in good repair.
10. Do not direct discharge chute or hose toward people, animals or property to prevent being hit by fast moving objects. Always wear appropriate safety gear during operation.
11. Review safety instructions annually.



ATTENTION

1. Lire attentivement le manuel d'opération avant la mise en marche.
2. Garder tous les écrans protecteurs in place.
3. Garder les mains, pieds, cheveux et vêtements éloignés des éléments mobiles.
4. Arrêter le moteur, placer tous les contrôles à la position "neutre", enlever la clé du contact et attendre que toutes les places soient au point mort avant de faire tout ajustement, réparation ou de débloquer la machine.
5. Ne pas grimper sur la machine et ne jamais se placer les mains dans toute ouverture lorsque celle-ci est en marche.
6. Garder les gens et les animaux à une distance sécuritaire de la machine.
7. Ne jamais fumer lors du plein d'essence.
8. Immobiliser la machine de façon sécuritaire avant de travailler sous celle-ci.
9. Garder toute connexion et fil électrique au sec et en bonne condition.
10. Afin d'éviter tout risque d'accident grave, ne jamais souffler en direction des gens, animaux ou vers les propriétés. Le port des équipements de sécurité est obligatoire lorsque vous opérez la machine.
11. Réviser annuellement le manuel d'opération.

NC13-33-0108




REMEMBER - If safety signs have been damaged, removed, become illegible or parts replaced without safety signs, new signs must be applied. New safety signs are available from your authorized dealer.

The types of safety signs and locations on the equipment are shown in the illustrations that follow. Good safety requires that you familiarize yourself with the various safety signs, the type of warning and the area, or particular function related to that area, that requires your SAFETY AWARENESS.

- Think SAFETY! Work SAFELY!



B

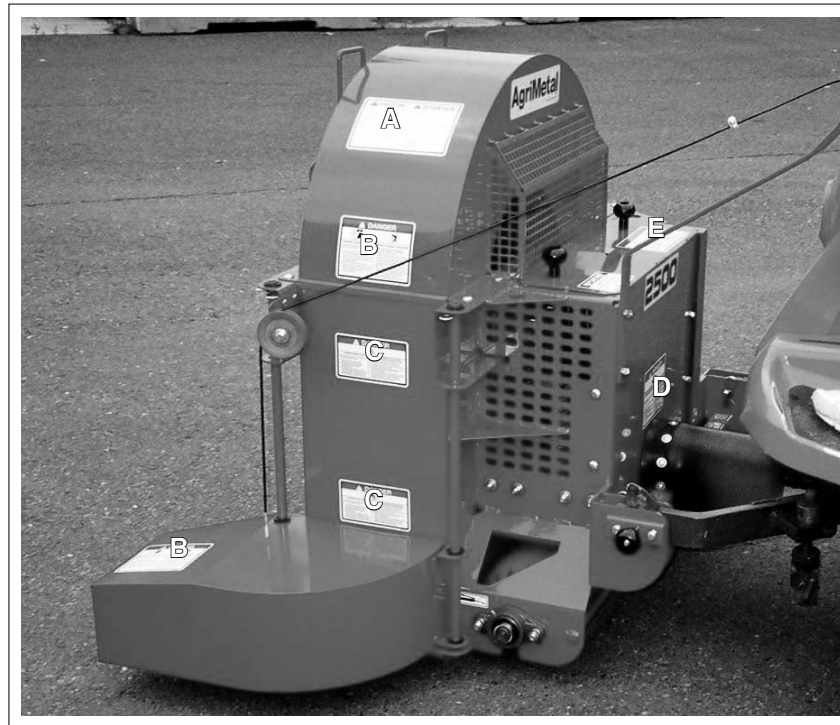
 DANGER	
	
THROWN OBJECT HAZARD To prevent serious injury or death from a thrown object: <ol style="list-style-type: none"> 1. Stop engine, place all controls in neutral, set park brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging machine. 2. Do not direct discharge chute toward people, animals or property. Always wear appropriate safety gear. Keep hands and feet out of discharge openings. 3. Keep others away. 	RISQUE D'OBJETS PROJÉTÉS À défaut de suivre ces instructions, cela pourrait entraîner de sérieuses blessures ou même la mort. <ol style="list-style-type: none"> 1. Arrêter le moteur, placer tous les contrôles à la position "neutre", enlever la clé du contact et attendre que toutes les places soient au point mort avant de faire tout ajustement, réparation ou de débloquer la machine. 2. Afin d'éviter tout risque d'accident grave, ne jamais souffler en direction des gens, des animaux ou vers les propriétés. Le port des équipements de sécurité est obligatoire lorsque vous opérez la machine. 3. Garder les gens éloignés de la machine.

NC-13-33-0110



REMEMBER - If safety signs have been damaged, removed, become illegible or parts replaced without safety signs, new signs must be applied. New safety signs are available from your authorized dealer.

The types of safety signs and locations on the equipment are shown in the illustrations that follow. Good safety requires that you familiarize yourself with the various safety signs, the type of warning and the area, or particular function related to that area, that requires your SAFETY AWARENESS.

- Think SAFETY! Work SAFELY!



C



 DANGER	
	
<p>BLOWER BLADE HAZARD</p> <p>To prevent serious injury or death from blower blade hazard:</p> <ol style="list-style-type: none"> 1. Do not open blower access doors when the engine is running. 2. Stop engine, place all controls in neutral, set park brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging machine. 3. Do not operate with access doors removed. 	<p>PROPULSEUR EN ROTATION RISQUE DE BLESSURE GRAVE</p> <p>À défaut de suivre ces instructions, cela pourrait entraîner de sérieuses blessures ou même la mort.</p> <ol style="list-style-type: none"> 1. Ne jamais ouvrir les portes d'accès du souffleur lorsque le moteur est en marche. 2. Arrêter le moteur, placer tous les contrôles à la position "neutre", enlever la clé du contact et attendre que toutes les places soient au point mort avant de faire tout ajustement, réparation ou de débloquer la machine. 3. Ne jamais opérer sans portes d'accès. <p style="text-align: right; font-size: small;">NC13-33-0112</p>

REMEMBER - If safety signs have been damaged, removed, become illegible or parts replaced without safety signs, new signs must be applied. New safety signs are available from your authorized dealer.





The types of safety signs and locations on the equipment are shown in the illustrations that follow. Good safety requires that you familiarize yourself with the various safety signs, the type of warning and the area, or particular function related to that area, that requires your SAFETY AWARENESS.

- Think SAFETY! Work SAFELY!

D

 WARNING	
	
<p>ROTATING DRIVELINE HAZARD KEEP AWAY</p> <p>To prevent serious injury or death from rotating driveline:</p> <ol style="list-style-type: none"> 1. Keep all guards in place when operating. 2. Operate at 540 RPM. 3. Keep hands, feet, hair and clothing away from moving parts. 4. Keep U joint angles equal and small as possible. 5. Do not exceed driveline manufacturer's recommended operating length. 	<p>PRISE DE FORCE IN ROTATION RESTER ÉLOIGNÉ</p> <p>À défaut de suivre ces instructions, cela pourrait entraîner de sérieuses blessures ou même la mort.</p> <ol style="list-style-type: none"> 1. Garder tous les écrans protecteurs en place. 2. Operer à 540 Tours/minute. 3. Garder les mains, pieds, cheveux et vêtements éloignés des éléments mobiles. 4. Garder les angles de joint en U égales et le plus petit possible. 5. Ne pas excéder la longueur d'opération de la prise de force recommandé par le fabricant. <p style="text-align: right;">01-60-0125</p>

E

 WARNING	 AVERTISSEMENT
	
<p>ROTATING PART HAZARD KEEP AWAY</p> <p>To prevent serious injury or death from rotating parts:</p> <ol style="list-style-type: none"> 1. Place all controls in neutral or off, stop engine or motor, set park brake, remove ignition key or disable power source and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging. 2. Install and secure all guards before operating. 3. Do not operate with rotating parts exposed. 	<p>PIÈCES EN MOUVEMENT RESTER ÉLOIGNÉ</p> <p>À défaut de suivre ces instructions, cela pourrait entraîner de sérieuses blessures ou même la mort.</p> <ol style="list-style-type: none"> 1. Arrêter le moteur, placer tous les contrôles à la position "neutre" enlever la clé du contact et attendre que toutes les places soient au point mort avant de faire tout ajustement, réparation ou de débloquer la machine. 2. Installer tous les écrans protecteurs avant de mettre la machine en fonction. 3. Ne jamais opérer la machine sans écran protecteur. <p style="text-align: right;">01-60-0115</p>

REMEMBER - If safety signs have been damaged, removed, become illegible or parts replaced without safety signs, new signs must be applied. New safety signs are available from your authorized dealer.

The types of safety signs and locations on the equipment are shown in the illustrations that follow. Good safety requires that you familiarize yourself with the various safety signs, the type of warning and the area, or particular function related to that area, that requires your SAFETY AWARENESS.

- Think SAFETY! Work SAFELY!

F

WARNING		AVERTISSEMENT	
MISSING SHIELD HAZARD		GARDE ABSENT	
To prevent serious injury or death from exposed hazard:		À défaut de suivre ces instructions, cela pourrait entraîner de sérieuses blessures ou même la mort.	
<ol style="list-style-type: none"> 1. Install and secure shields before operating. 2. Keep hands, feet, hair and clothing away from moving parts. 		<ol style="list-style-type: none"> 1. Installer les gardes de façon sécuritaire avant la mise en marche de la machine. 2. Garder les mains, pieds, cheveux et vêtements éloignés des éléments mobiles. 	
		NC13-33-0113	

REMEMBER - If safety signs have been damaged, removed, become illegible or parts replaced without safety signs, new signs must be applied. New safety signs are available from your authorized dealer.

4 ASSEMBLING

4.1 MACHINE ASSEMBLY (Manual Model)

The machine is shipped from the factory in a partially disassembled configuration and attached to a pallet that provides for easy moving and handling. Always use tools, equipment and forklifts of appropriate size and capacity for the job. Always use 2 men when lifting, moving and assembling the machine.

When the machine is shipped, follow this procedure when preparing for the customer:

1. Clear the area of bystanders especially small children before starting.
2. Remove the pallet tie-downs.
3. Use a forklift to lift the pallet/machine from the truck. Carry the load close to the ground as it is moved to the assembly area and positioned.
4. Cut strapping and remove screws holding components to pallet.



Fig. 1 SHIPPING CONFIGURATION



Strapping



Strapping Removed

Fig. 2 LOOSENING

5. Use a forklift, crane or hoist to raise machine off of pallet.



Attaching

6. Move machine away from pallet.



Removing

Fig. 3 LIFTING

7. Lower to the ground and remove lifting components.



Lowering



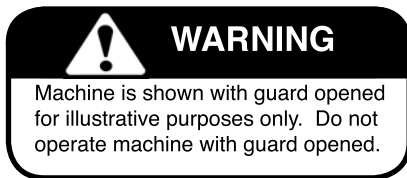
Unhooked

Fig. 4 PALLET REMOVED

8. **Mount the control cable stand (Manual Chute Model Only):**

- a. Remove the nuts from the stand rod bolts.

- b. Open the guard over the belt drive compartment.
- c. Remove the mounting bolts from inside the belt drive compartment.



- d. Mount the rod into the frame and install the nuts.

- e. Tighten nuts to their specified torque.
- f. Close guard.



Stand



Opened



Attaching



Attaching

Fig. 5 CONTROL CABLE STAND

9. **Prepare Chute Lift Cable:**

- a. Cut plastic ties holding cable for shipping.



Shipping



Cut

- b. Lay cable over blower to keep it out of the way.

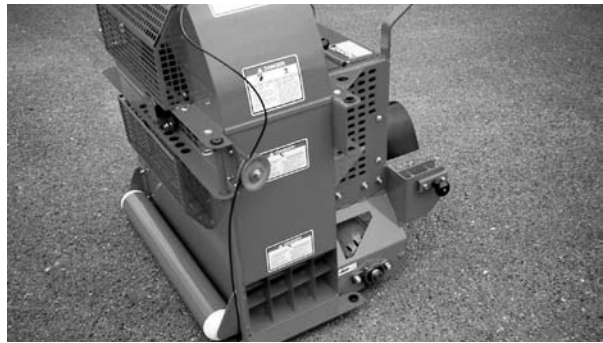


Lay-Out

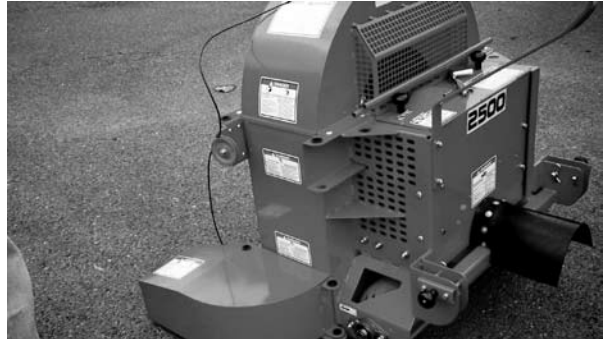
Fig. 6 CHUTE LIFT CABLE

10. Mount the air chute:

- a. Remove the front mounting rod.
- b. Remove the rear mounting rod.
- c. Move the chute into position and install the rear rod with its hair clip retainer.
- d. Move the chute into position and install the front rod with its hair clip retainer.



Front Rod



Rear Rod / Chute



Rear Rod



Front Rod

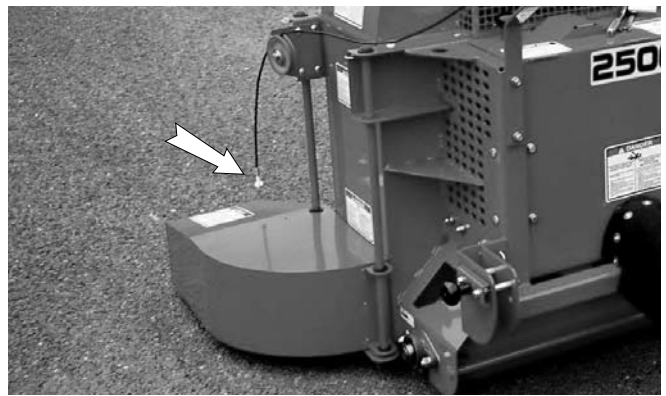


Retainers

Fig. 7 AIR CHUTE

11. Install the cable to the chute:

- a. Place cable in the "down" position on stand.
- b. Remove anchor nut from end of the cable.
- c. Install cable into mounting hole in chute.
- d. Tighten anchor nut to its specified torque.



Anchor Nut



Cable Inserted



Tightening



Installed

Fig. 8 CABLE INSTALLATION

12. Pull belting guard back from input shaft.
13. Slide yoke from driveline onto input shaft.



Fig. 9 INSTALLING YOKE

14. Install clamping bolt.



Clamping Bolt

15. Tighten clamping bolt to its specified torque.



Tightening

16. Pull belting guard down to cover input shaft.



Installed

17. Attach power unit to start work.

Fig. 10 CABLE INSTALLATION

4.2 MACHINE ASSEMBLY (Electric Model)

The machine is shipped from the factory in a partially disassembled configuration and attached to a pallet that provides for easy moving and handling. Always use tools, equipment and forklifts of appropriate size and capacity for the job. Always use 2 men when lifting, moving and assembling the machine.

When the machine is shipped, follow this procedure when preparing for the customer:

1. Clear the area of bystanders especially small children before starting.
2. Remove the pallet tie-downs.
3. Use a forklift to lift the pallet/machine from the truck. Carry the load close to the ground as it is moved to the assembly area and positioned.
4. Cut strapping and tie downs holding components to pallet.

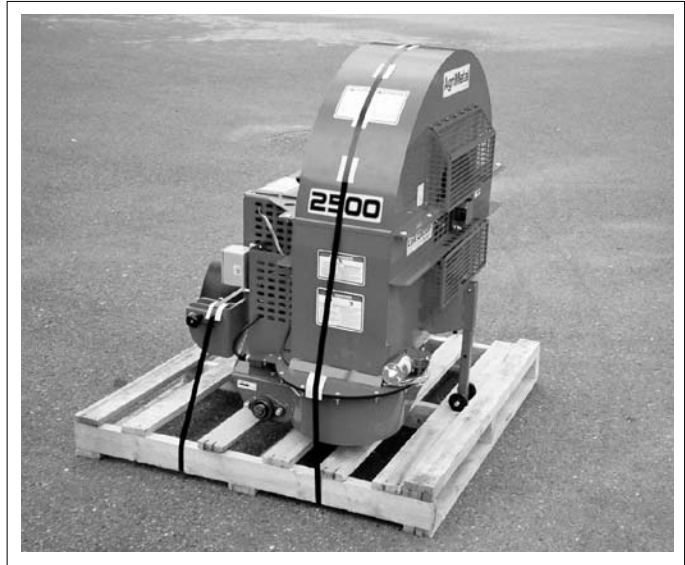


Fig. 11 SHIPPING CONFIGURATION



Cut



Removed

Fig. 12 STRAPPING

5. Use a forklift, crane or hoist to raise machine off pallet.



Raising

6. Remove pallet.



Pallet Removed

Fig. 13 LIFTING

7. Attach the driveline to blower:

- a. Pull the belting guard over input shaft back to expose shaft.



Guard

- b. Slide yoke over shaft.
- c. Install clamping bolt.
- d. Tighten clamping bolt to its specified torque.



Yoke

- e. Push belting guard back over input shaft.



Bolt

Fig. 14 DRIVELINE INSTALLATION

8. Drive power unit up to machine.
9. Align arms with mounting balls on lift arms.



Aligning

10. Remove anchor pins.



Right

11. Install anchor pins and secure.



Left

Fig. 15 LIFT ARMS

12. Attach the driveline to power unit:

- a. Lift the bottom floorboard of the power unit.
- b. Align yoke with shaft.
- c. Slide collar on yoke back to retract lock pin.



Floorboard

- d. Slide yoke on shaft until lock pin seats in its groove.
- e. Pull on yoke to be sure lock pin is engaged.



Installed

Fig. 16 DRIVELINE TO POWER UNIT

- f. Lower and close floorboard.

13. Remove the switch assembly from its stowed shipping position.

- a. Pull wiring harness out of frame pocket.



Frame Pocket

- b. Cut plastic tie holding switch assembly to frame.



Cut

Fig. 17 SWITCH ASSEMBLY

14. Open power unit console:

- a. Remove screws on console.



Right Side



Left Side

- b. Pull the front plastic housing off and lay on frame.



Cover Removed

Fig. 18 POWER UNIT CONSOLE

15. Disconnect connector in switch harness.

16. Provide power to chute switch:

- a. Disconnect connector on back side of ignition switch.
- b. Install connector clip across power wire (red with white stripe) to ignition switch wiring harness to chute switch harness.
- c. Plug the connector back into the back of the ignition key.



Ignition Switch

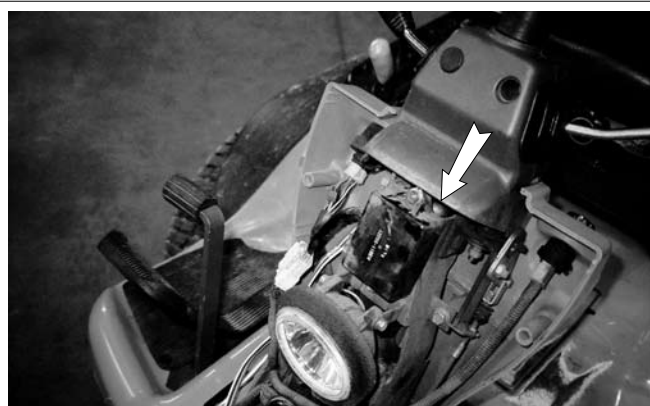


Connector Clip

Fig. 19 POWER CONNECTION

17. Install chute switch assembly:

- a. Remove fastener through top console.
- b. Replace with longer fastener.
- c. Secure switch mounting bracket with longer fastener.
- d. Route switch harness between console segments.
- e. Tighten mounting fastener to its specified torque.



Fastener



Installed

Fig. 20 CHUTE SWITCH ASSEMBLY

18. Connect green ground wire to grounded frame member.

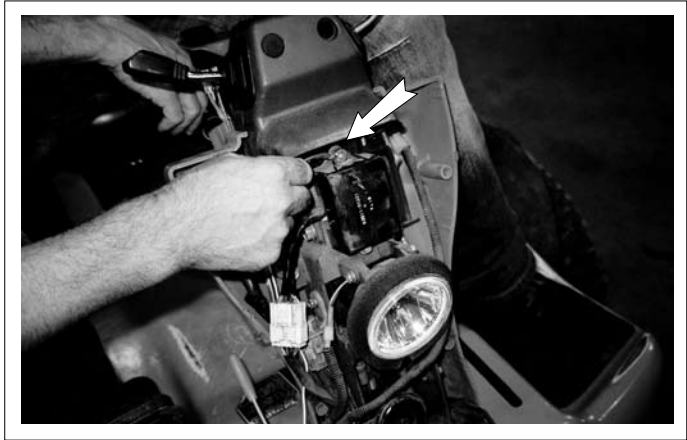


Fig. 21 GROUND WIRE

19. Route the switch wiring harness down through the steering column assembly.

NOTE

Disconnect wiring harness connector.



Fig. 22 WIRING HARNESS

20. Secure harness to front of frame.
21. Reconnect harness.

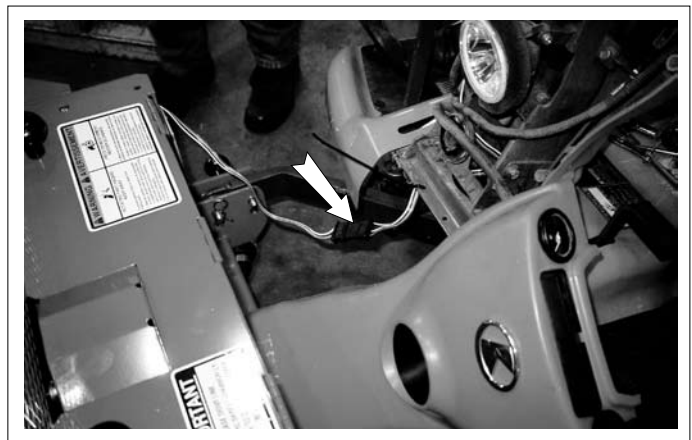


Fig. 23 FRONT OF FRAME

22. Install and secure front of console.



Fitting



Installed

Fig. 24 FRONT CONSOLE

23. Open fuse holder.

24. Check that it contains a 10 amp fuse.



Fig. 25 FUSE HOLDER

5 OPERATION



OPERATING SAFETY

- Please remember it is important that you read and heed the safety signs on the Leaf Blower. Clean or replace all safety signs if they cannot be clearly read and understood.
- If a safety shield or guard is removed for any reason, it must be replaced before the machine is again operated.
- Always use two people to handle heavy, unwieldy components during assembly, installation, removal or moving.
- Place all controls in neutral, stop engine, set park brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
- Do not allow riders on the machine or push vehicle at any time. There is no safe place for any riders.
- Do not allow anyone who is not familiar with the safety rules and operation instructions to use this machine.
- Never allow children to operate or be around this machine.
- Do not reach into blower openings when the engine is running. Clear the work area of objects which might be picked up and snagged or entangled in the machine.
- Clear the work area of objects which might be picked up and snagged or entangled in the machine.
- Do not reach into blower openings when the engine is running. Keep others away also.
- Keep hands, feet, hair, jewelry, and clothing away from all moving and/or rotating parts.
- Do not direct the air stream toward people, animals or buildings to prevent injury or damage.
- Do not place hands, feet or other body parts into air stream.

5.1 TO THE NEW OPERATOR OR OWNER

AgriMetal Front Mount Leaf Blowers are designed to quickly and efficiently, blow away leaves, cuttings and other debris. The material is conveyed on a stream of high velocity air to remove it from the area of concern. When the material is removed, it gives a neat, professional look to the working area.

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment. It is the responsibility of the owner or operator to read this manual and to train all other operators before they start working with the machine.

Follow all safety instructions exactly. Safety is everyone's business. By following recommended procedures, a safe working environment is provided for the operator, bystanders and the area around the worksite. Untrained operators are not qualified to operate the machine.

Many features incorporated into this machine are the result of suggestions made by customers like you. Read this manual carefully to learn how to operate the machine safely and how to set it to provide maximum field efficiency. By following the operating instructions in conjunction with a good maintenance program, your Front Mount Leaf Blower will provide many years of trouble-free service.

5.2 MACHINE COMPONENTS

The AgriMetal Front Mount Leaf Blower is a large blower mounted on a frame for moving debris on a stream of air. The air stream can be directed to the right or straight ahead depending on the chute position. The power unit powers the blower through a driveline under the frame. The chute position cable is located on an umbilical cord for the manual model that extends to the pushing vehicle and moves the chute to the desired position. A switch is mounted on the power unit to move the chute on the electric model.

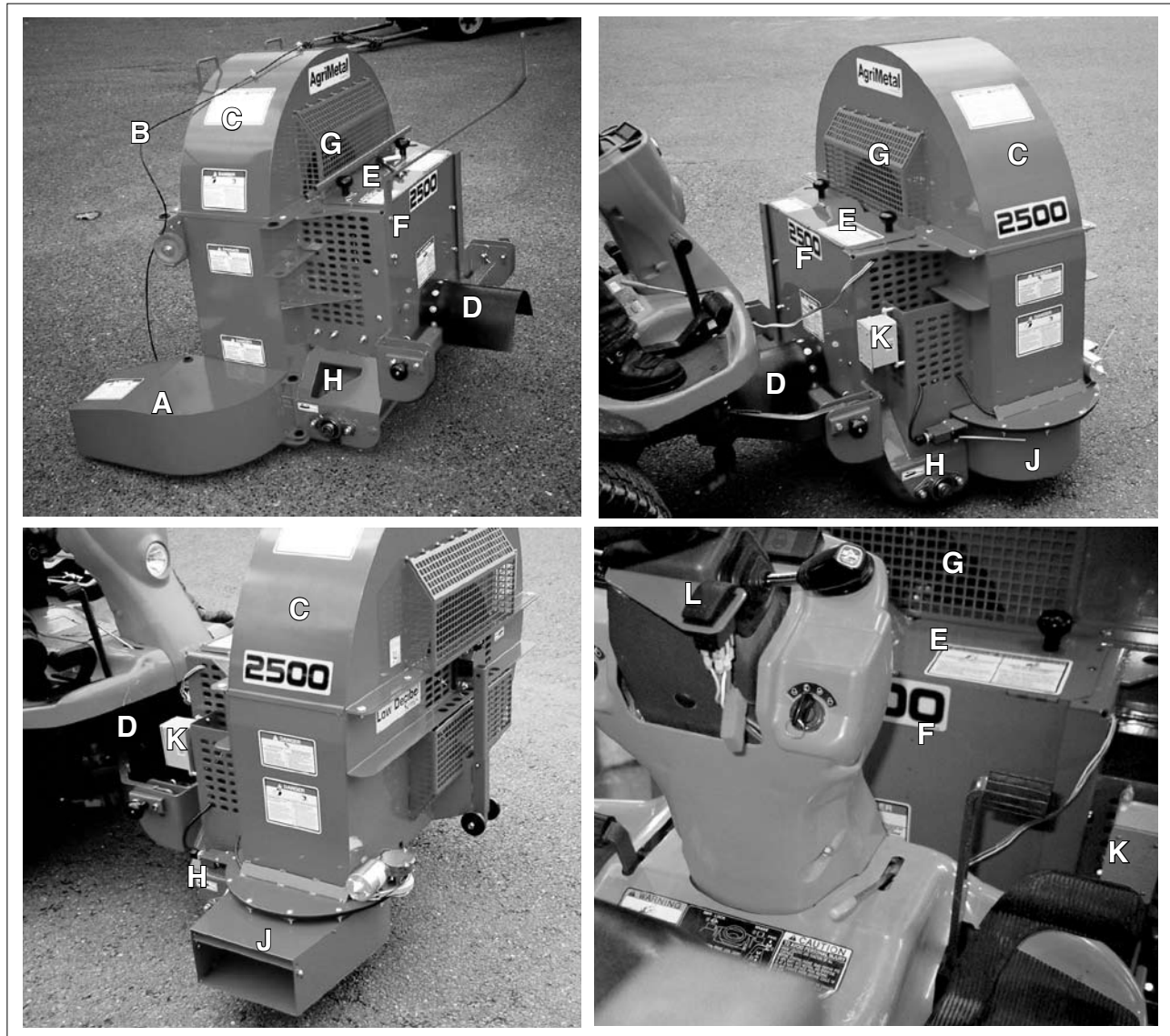


Fig. 26 PRINCIPLE COMPONENTS

- A Discharge Chute
- B Chute Position Cable
- C Blower
- D Input shaft
- E Belt Drive
- F Belt Drive Compartment
- G Blower Air Intake
- H Roller
- J Electric Chute
- K Control Junction
- L Position Switch

5.3 BREAK-IN

Although there are no operational restrictions on the Blower when it is used for the first time, it is recommended that the following mechanical items be checked:

A. After operating for 1 hour:

1. Torque all fasteners and hardware.
2. Check condition of blower bearings.
3. Check the electrical components to be sure all are in good condition.

B. After operating for 10 hours:

1. Repeat steps 1 and 2 listed above. (Section A).
2. Go to the normal servicing and maintenance schedule as defined in the Maintenance Section.

5.4 PRE-OPERATION CHECKLIST

Efficient and safe operation of the AgriMetal Front Mount Leaf Blower requires that each operator reads and understands the operating procedures and all related safety precautions outlined in this section. A pre-operation checklist is provided for the operator. It is important for both personal safety and for maintaining the machine in good mechanical condition that this checklist be followed.

Before operating the Blower and each time thereafter, the following areas should be checked off:

1. Lubricate the machine per the schedule outline in the Maintenance Section.
2. Check that all bearings turn freely. Replace any that are rough or seized.
3. Make sure that all guards and shields are in place, secured and functioning as designed.
4. Clean the screen over the blower intake.
5. Check the condition of the electrical components. Replace any that are damaged or broken.

5.5 CONTROLS

Before starting to work, all operators should familiarize themselves with the location and function of the controls.

1. Chute Position Cable:

The blower is designed with a manually positioned cable that places the air chute in its desired position.

Place the cable clamp in the first position for the chute to be down and the air is directed straight ahead. Place in the second position and the air is moved to the right side.



Forward



Left Side

Fig. 27 CHUTE POSITION CABLE

2. Chute Position Switch:

This 3 position spring-loaded-to-center-neutral switch controls the electrical power to the position actuator. Depress and hold the top portion of the switch to turn the chute clockwise/ Depress and hold the bottom portion of the switch to turn counter-clockwise. Release the switch and the chute will stop moving.



Fig. 28 CHUTE POSITION SWITCH

5.6 ATTACHING/UNHOOKING

The Blower is designed to fit on the front of a Kubota 3800 Series mower. Follow this procedure when attaching blower:

1. Clear the area of bystanders, especially small children.
2. Position the Blower with enough space and clearance for the power unit to drive up to the machine.



Machine



Aligning

Fig. 29 POSITIONING

3. Remove the driveline from the mower.
4. Install the driveline to blower input shaft:
 - a. Clean the splines on the input shaft and the yoke.

NOTE

Be sure the input shaft can telescope freely before installing it.

- b. Loosen the yoke clamping bolt.
- c. Slide the yoke over the input shaft.
- d. Tighten clamping bolt to specified torque.



Guard



Tightening Bolt



Installed

Fig. 30 DRIVELINE INSTALLATION

5. **Attach the power unit to the blower:**

- a. Move the power unit up to the blower.
- b. Remove the mounting pin retainer and mounting pin.



Aligning

- c. Move power unit forward until arms slide into lift frame.
- d. Install the anchor pins through each arm.



Right



Left

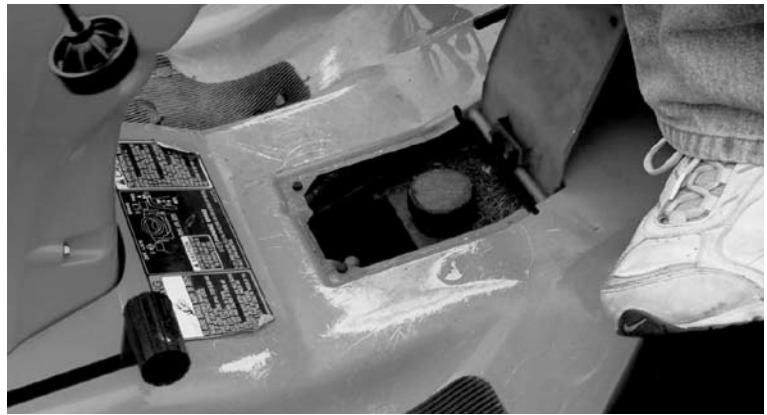
Fig. 31 ATTACHING

6. Raise power unit floorboard.
7. Raise the driveline and position it over the front axle.

NOTE

Lift the floorboards of the mower to access power shaft.

8. Retract the lock pin and slide over the power shaft. Pull on it to be sure the lock pin seats in its groove.



Access



Driveline

Fig. 32 DRIVELINE INSTALLATION

9. Close the floorboard.
10. Install the mounting pins and retainers.



Fig. 33 MOUNTING PIN RETAINERS

- 11 Connect the wiring harness if you have the electric control model.

NOTE

Review "Assembly" section of manual to install control switch to power unit if it has not been installed yet.



Chute Position Switch



Machine

Fig. 34 WIRING HARNESS

12. Reverse the above procedure when unhooking.

NOTE

Remove driveline from Blower and use for next machine application.

5.7 FIELD OPERATION



OPERATING SAFETY

- Please remember it is important that you read and heed the safety signs on the Leaf Blower. Clean or replace all safety signs if they cannot be clearly read and understood.
- If a safety shield or guard is removed for any reason, it must be replaced before the machine is again operated.
- Always use two people to handle heavy, unwieldy components during assembly, installation, removal or moving.
- Place all controls in neutral, stop engine, set park brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
- Do not allow riders on the machine or push vehicle at any time. There is no safe place for any riders.
- Do not allow anyone who is not familiar with the safety rules and operation instructions to use this machine.
- Never allow children to operate or be around this machine.
- Do not reach into blower openings when the engine is running. Clear the work area of objects which might be picked up and snagged or entangled in the machine.
- Clear the work area of objects which might be picked up and snagged or entangled in the machine.
- Do not reach into blower openings when the engine is running. Keep others away also.
- Keep hands, feet, hair, jewelry, and clothing away from all moving and/or rotating parts.
- Do not direct the air stream toward people, animals or buildings to prevent injury or damage.
- Do not place hands, feet or other body parts into air stream.

Although the Leaf Blower is easy to use, each operator should review this section to familiarize himself with the detailed safety and operating procedures. When using the machine, follow this procedure:

1. Clear the area of bystanders, especially small children.
2. Review and follow the Pre-Operation Checklist (see Section 5.4).
3. Attach the machine to the power unit (see Section 5.6). Be sure the frame is level.
4. Transport to the working area (refer to Section 5.8).

5. **Starting:**

- a. Clear the area of bystanders, especially small children.
- b. Place all controls in neutral or turn off.
- c. Start the mower engine.
- d. Set the engine RPM at low idle.
- e. Engage the PTO.
- f. Slowly increase the engine speed and bring to the desired level.
- g. Proceed with the work.

6. **Stopping:**

- a. Decrease RPM to low idle.
- b. Disengage the clutch.
- c. Stop engine and remove ignition key.

7. **Emergency Stopping:**

If an emergency occurs and the blower must be shut down, disengage PTO clutch or turn engine off. Correct condition before resuming work.



Starting



Stopping



Manual

Fig. 35 STARTING/STOPPING

8. Use the cable to set the position of the air chute.
9. **Travel Speed:**
Set the travel speed appropriate for the job being done. Travel faster if all the debris is being blown away. Slow down if some debris is not being removed.



Straight Ahead



To Left



Diagonal

Fig. 36 WORKING

10. Air Chute (Manual):

The Blower is designed with a cable controlled moveable air chute that can be used to direct the air to the right, or straight ahead. Use the cable position to change and set the chute position.



Straight Ahead

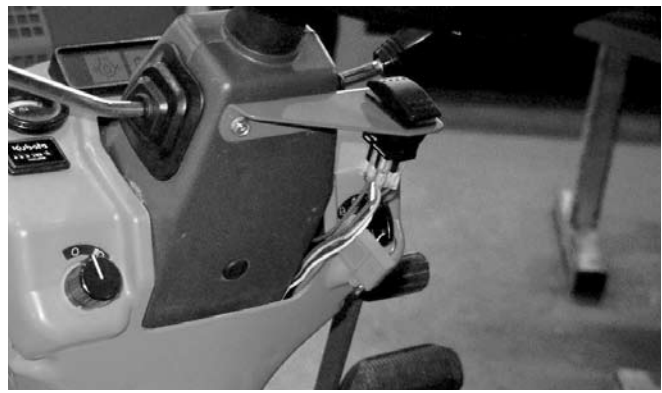


Left

Fig. 37 CHUTE POSITION (Manual)

11. Air Chute (Electric):

The Blower is designed with a remote control switch which mounts to the steering column of the power unit and positions the chute at the appropriate angle. Depress and hold the upper part of the switch to turn the chute clockwise. Depress and hold the lower part of the switch to turn counter-clockwise. Release the switch to stop the chute from turning.



Controller



Diagonal



Straight Ahead



Left

Fig. 38 CHUTE POSITION (Electric)

12. **Roller:**

The Blower is designed with a roller on the back of the frame to minimize the chance of scalping.



Manual



Electric

Fig. 39 ROLLER

13. **Blower Operating RPM:**

Run the tractor engine at a fast enough speed to get the job done.

14. Clean the intake screen as required to insure ample flow of air to the fan.

15. Always try to blow with the wind. Blowing against the wind can result in lifting the material into the wind and having it blown over a wider area.



Manual



Rear - Electric



Front - Electric

Fig. 40 SCREENS

16. **Chute Down:**

The 'Chute Down' position can be used to clear debris from bushes, shrubs, trees and along fences. Run fast enough to dislodge and move the debris.



Fig. 41 CHUTE DOWN (Typical)

17. Application Hints:

- a. Cleaning fairways or large open areas:
 - i. When moving the material to one side, start at the opposite side and blow toward the receiving side.
 - ii. When moving the material to all sides, start in the middle and move outward toward the edges while going around. Raise the chute to allow the air to move to the right.
- b. Drying wet areas:
 - i. Determine the area to be dried.
 - ii. Drive slowly past the area that is wet.
 - iii. Repeat the drive-by until the moisture is gone.



Fig. 42 WORKING

**DANGER**



THROWN OBJECT HAZARD
To prevent serious injury or death from a thrown object:

- 1. Stop engine, place all controls in neutral, set park brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging machine.
- 2. Do not direct discharge chute toward people, animals or property. Always wear appropriate safety gear. Keep hands and feet out of discharge openings.
- 3. Keep others away.

RISQUE D'OBJETS PROJÉTÉS
À défaut de suivre ces instructions, cela pourrait entraîner de sérieuses blessures ou même la mort.

- 1. Arrêter le moteur, placer tous les contrôles à la position "neutre", enlever la clé du contact et attendre que toutes les places soient au point mort avant de faire tout ajustement, réparation ou de débloquent la machine.
- 2. Afin d'éviter tout risque d'accident grave, ne jamais souffler en direction des gens, des animaux ou vers les propriétés. Le port des équipements de sécurité est obligatoire lorsque vous opérez la machine.
- 3. Garder les gens éloignés de la machine.

5.8 TRANSPORTING



TRANSPORT SAFETY

- Comply with state and local laws governing highway safety and movement of machinery on public roads.
- The use of flashing amber lights is acceptable in most localities. However, some localities prohibit their use. Local laws should be checked for all highway lighting and marking requirements.
- At all times when driving the push vehicle and equipment on the road or highway under 20 mph (32 kph), use flashing amber warning lights and a slow moving vehicle (SMV) identification emblem. Do not exceed 20 mph (32 kph). Reduce speed on rough roads and surfaces.
- Plan your route to avoid heavy traffic.
- Use a mounting pin with provisions for a retainer. Install the retainer.
- Do not drink and drive.
- Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc. Watch for traffic when operating near or crossing roadways.
- Never allow riders on either push vehicle or machine.

When transporting the machine, review and follow these instructions:

1. Clear the area of bystanders, especially small children.
2. Insure that the machine is securely attached to the push vehicle with mechanical retainers through the mounting pins.
3. Do not allow riders on blower.
4. Never exceed a safe travel speed. Never travel faster than 32 kph (20 mph) The ratio of the push vehicle weight to the machine weight plays an important role in defining acceptable travel speed. The following table summarizes the weight ratio to travel speed.
5. Always shift to a lower gear when going down hill to use the engine as a restraining force.
6. Apply the brakes carefully to prevent losing control.
7. Never disengage push vehicle drivetrain and coast down hills. Always keep push vehicle in gear.

Table 1 Travel Speed vs. Weight Ratio

Road Speed	Weight of fully equipped or loaded implement(s) relative to weight of push vehicle
Up to 32 km/h (20 mph)	1 to 1, or less
Up to 16 km/h (10 mph)	2 to 1, or less
Do not push	More than 2 to 1



Manual



Electric

Fig. 43 TRANSPORTING

5.9 STORAGE



STORAGE SAFETY

- Store the unit in an area away from human activity.
- Do not permit children to play on or around the stored machine.
- Store the unit in a dry, level area. Support the frame with planks if required.

At the end of the season, the machine should be thoroughly inspected and prepared for storage. Repair or replace any worn or damaged components to prevent any unnecessary down time at the beginning of the next season. Follow this procedure:

1. Thoroughly wash the machine with a pressure washer or water hose to remove all dirt, mud, debris or residue.
2. Make sure all the water drains out of the blower and chute compartments.
3. Lubricate all grease points to remove any water residue from washing.
4. Remove any material that has become entangled around any moving part.
5. Run the machine for a couple of minutes at low RPM to dry the inside of the blower and chute.
6. Touch up all paint nicks and scratches to prevent rusting.
7. Move the machine to its storage area.
8. Store in a dry, level spot.
9. Store in an enclosed building if possible. If space is not available, cover with a water-proof tarpaulin and tie down securely.
10. Unhook from the push vehicle (see Section 5.6).
11. Place planks under the frame or rollers for added support if required.
12. Store in an area away from human activity.
13. Do not allow children to play around the stored unit.



Manual



Electric

Fig. 44 STORED

6 SERVICE AND MAINTENANCE



MAINTENANCE SAFETY

- Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.
- Follow good shop practices.
 - Keep service area clean and dry.
 - Be sure electrical outlets and tools are properly grounded.
 - Use adequate light for the job at hand.
- Make sure there is plenty of ventilation. Never operate an engine in a closed building. The exhaust fumes may cause asphyxiation.
- Before working on this machine, shut off the engine, set the brakes, and remove the ignition keys.
- Never work under equipment unless it is blocked securely.
- Always use personal protection devices such as eye, hand and hearing protectors, when performing any service or maintenance work.
- Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your equipment to original specifications. The manufacturer will not be responsible for injuries or damages caused by use of unapproved parts and/or accessories.
- A fire extinguisher and first aid kit should be kept readily accessible while performing maintenance on this equipment.
- Periodically tighten all bolts, nuts and screws and check that all cotter pins are properly installed to ensure unit is in a safe condition.
- When completing a maintenance or service function, make sure all safety shields and devices are installed before placing unit in service.

6.1 SERVICE

6.1.1 FLUIDS AND LUBRICANTS

1. **Grease:**
Use an SAE multipurpose high temperature grease with extreme pressure (EP) performance. Also acceptable is an SAE multipurpose lithium base grease.
2. **Storing Lubricants:**
Your machine can operate at top efficiency only if clean lubricants are used. Use clean containers to handle all lubricants. Store them in an area protected from dust, moisture and other contaminants.

6.1.2 GREASING

Use the Maintenance Checklist provided to keep a record of all scheduled maintenance.

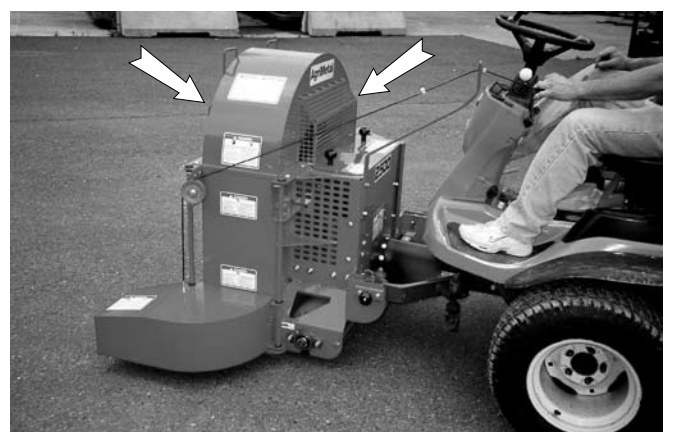
1. Use a hand-held grease gun for all greasing.
2. Wipe grease fitting with a clean cloth before greasing, to avoid injecting dirt and grit.
3. Replace and repair broken fittings immediately.
4. If fittings will not take grease, remove and clean thoroughly. Also clean lubricant passageway. Replace fitting if necessary.

6.1.3 SERVICING INTERVALS

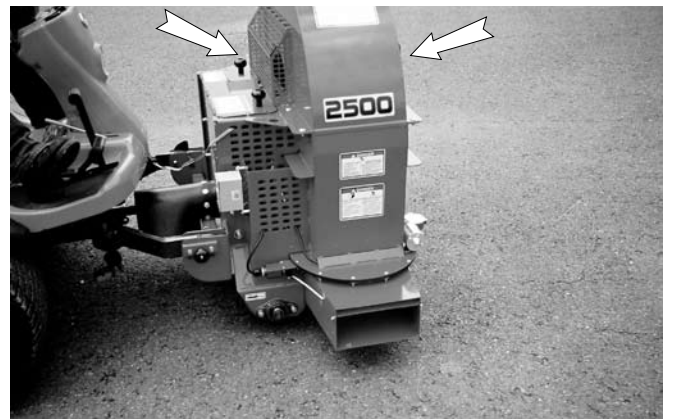
The period recommended is based on normal operating conditions. Severe or unusual conditions may require more frequent lubrication or oil changes.

8 Hours or Daily

1. Clean blower air intake screens.



Manual



Electric

Fig. 45 AIR INTAKE SCREENS

2. Grease PTO Driveline (3 locations).

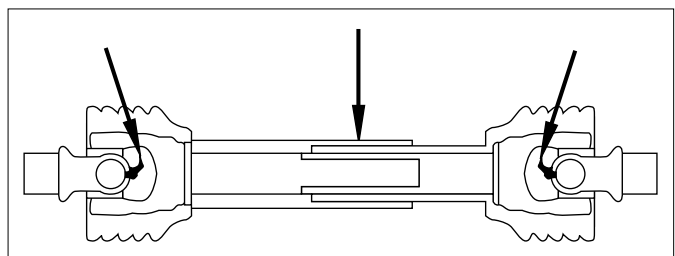
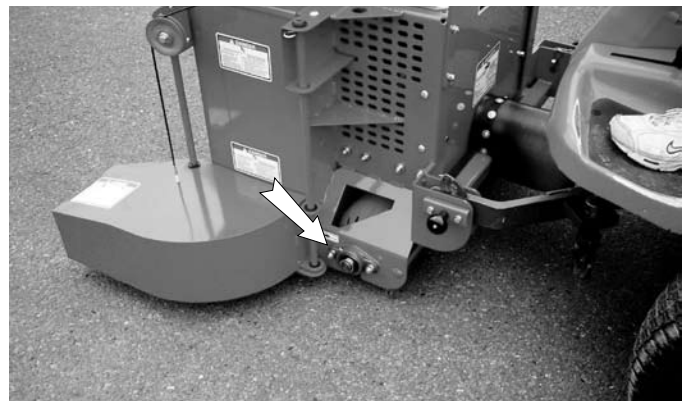


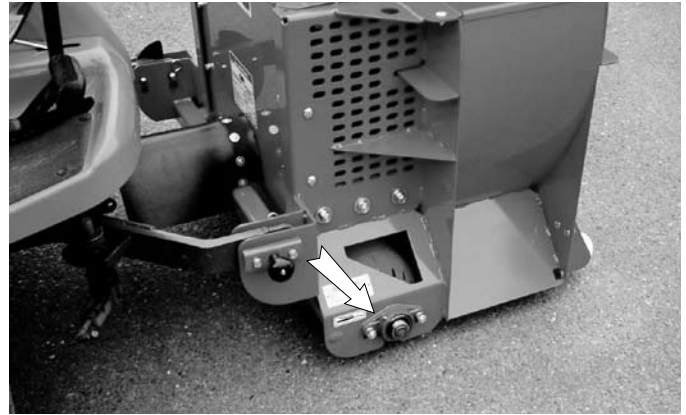
Fig. 46 PTO DRIVELINE

50 Hours

1. Grease roller bearings (Manual).



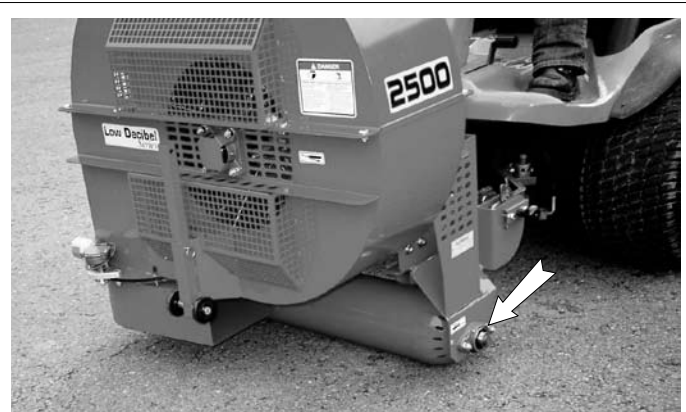
Right



Left

Fig. 47 ROLLER BEARINGS (Manual)

2. Grease roller bearings (Electric).



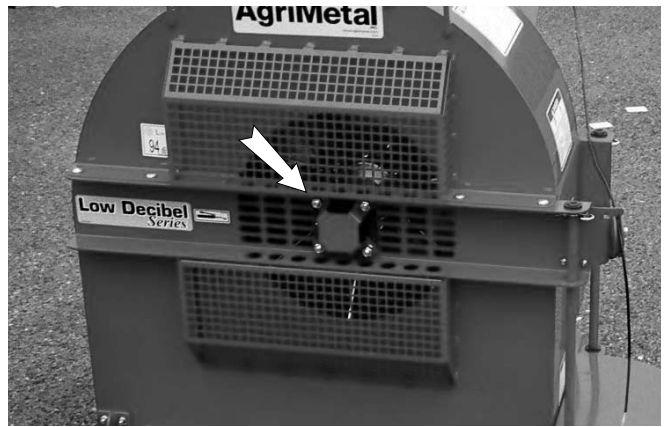
Right



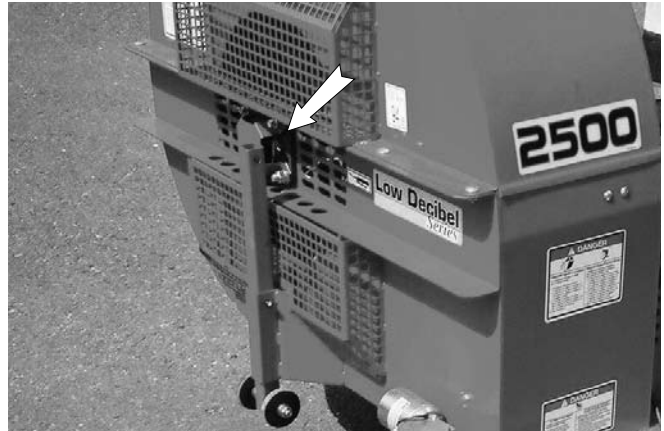
Left

Fig. 47 ROLLER BEARINGS (Electric)

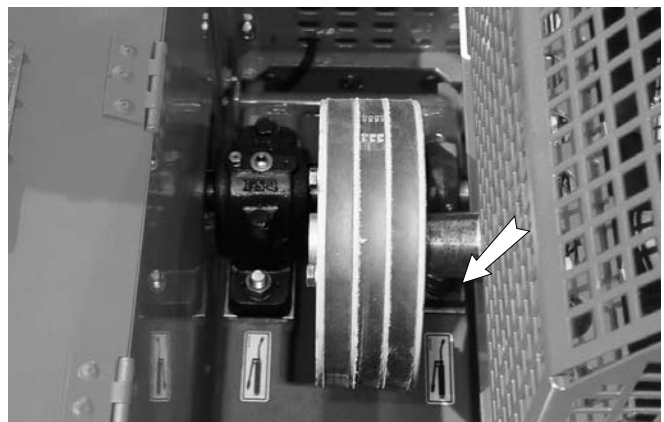
3. Grease blower shaft bearings.



Front - Manual



Front - Electric



Rear (Typical)

Fig. 49 BLOWER SHAFT BEARINGS

3. Grease input shaft bearings.

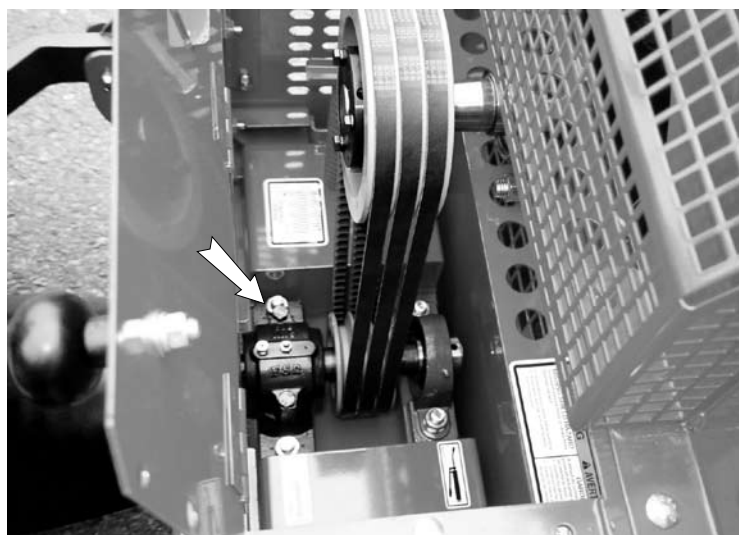


Fig. 50 INPUT SHAFT BEARINGS (Typical)

Annually

1. Clean machine.



Manual



Electric

Fig. 51 MACHINE

6.1.4 SERVICE RECORD

See Lubrication and Maintenance sections for details of service. Copy this page to continue record.

ACTION CODE: CL CLEAN
G GREASE

[illegible]

6.2 MAINTENANCE

By following a careful service and maintenance program for your machine, you will enjoy many years of trouble-free service.

6.2.1 BLOWER DRIVE BELT TENSION AND ALIGNMENT

A set of V belts transmits rotational power to the blower. They must be kept properly tensioned and the pulleys aligned to obtain the expected performance and life.

To check the tension and alignment, follow this procedure:

1. Clear the area of bystanders, especially small children.
2. Place all controls in neutral, stop engine, set park brake, remove ignition key and wait for all moving parts to stop before dismounting.
3. Measure the length of the compression spring. It should be adjusted at 7" (176 mm).
4. Open guard over belt, release tensioner and replace belt when required.

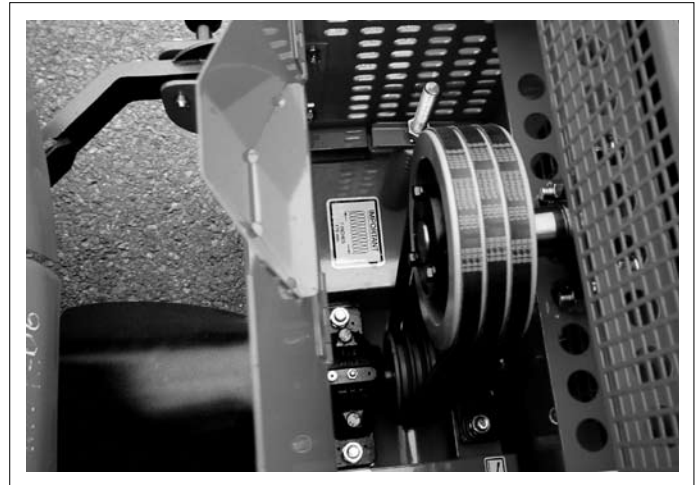
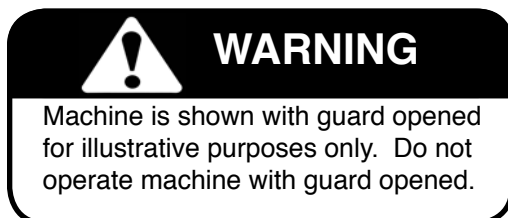


Fig. 52 DRIVE BELTS (Typical)

5. **To replace belt:**
 - a. Loosen tension spring to its loosest position.
 - b. Remove belts from the top pulley.
 - c. Loosen and remove bolts from the input shaft bearing housings. Only raise the first bearing and slide belt underneath it.
 - d. Raise shaft and remove belt.
 - e. Install new belt.
 - f. Tighten input shaft bearing housing bolts.
 - g. Mount over the top pulley.
 - h. Install tension spring and set dimension.
6. Lay a straight edge across the pulley faces to check the alignment. Use the pulley hub to adjust alignment if pulley faces vary more than 7 mm (1/32 inch).
 - a. Loosen hub mounting bolts.
 - b. Move hub to align pulleys.
 - c. Tighten mounting bolts to their specified torque.
7. Close and secure guard.



7 TROUBLE SHOOTING

The AgriMetal BWT 2500 Kubota Front Mount Leaf and Debris Blower can be used to blow leaves, grass clippings, trash and debris. It is a simple system that requires minimal maintenance.

In the following Trouble Shooting section, we have listed many of the problems, causes and solutions that can help you to solve the problems that you might encounter.

If you encounter a problem that is difficult to solve, even after having read through this trouble shooting section, please call your dealer. Before you call, please have this Operator's Manual and the serial number of your machine at hand.

PROBLEM	CAUSE	SOLUTION
Fan doesn't turn.	Belts slipping.	Adjust belt tension.
	Belts broken.	Replace belts.
<hr/>		
No air flow.	Fan doesn't turn.	See solutions listed above.
		Failed PTO clutch. Have tractor checked by your local dealer.
	Fan turns.	Air intake restricted. Clean expanded metal mesh.
<hr/>		
Machine vibrates.	Driveline dry.	Remove driveline and grease inner telescoping section, re-assemble and install.
	Out-of-balance.	Have your dealer check fan. Repair or replace as required.
	Driveline angle too large.	Level machine to minimize driveline joint angle.
	Driveline out-of-phase.	Detach driveline from tractor. Take apart. Rotate ends 90° and reassemble. Repeat procedure until vibration gone.
	Drive belt not tight.	Tighten drive belts.
<hr/>		
Chute doesn't move.	No power.	Check and verify there is power to the actuator.
	No power to controller.	Check and verify controller connections.

8 SPECIFICATIONS

8.1 MECHANICAL

Front Mount Leaf Blower BW 2500-F		
Specifications	Manual	Electric
No of blades	7	7
Impeller size	28" x 11" (71cm x 33cm)	28" x 11" (71cm x 33cm)
Flow Rate	7800 cfm	7800 cfm
Air flow speed	165MPH (265km/hr)	165MPH (265km/hr)
Decibels	94	94
Outlet size	7 1/2" x12" (19cm x 30cm)	7 1/2" x12" (19cm x 30cm)
Chute rotation	90°	160°
Drive system	3-5/8 v belt	3-5/8 v belt
PTO shaft	Not included	Not included
Minimum HP recommended	28 HP	28 HP
Length	45" (114cm)	45" (114cm)
Width	49" (124cm)	49" (124cm)
Height	45" (114cm)	45" (114cm)
Machine weight	447 lbs (215kg)	447 lbs (215kg)

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

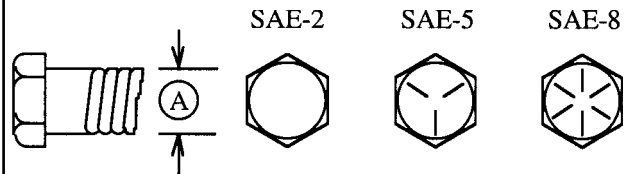
8.2 BOLT TORQUE

CHECKING BOLT TORQUE

The tables shown below give correct torque values for various bolts and capscrews. Tighten all bolts to the torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt torque chart as a guide. Replace hardware with the same strength bolt.

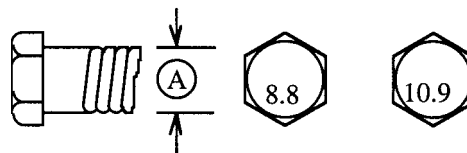
ENGLISH TORQUE SPECIFICATIONS

Bolt Diameter "A"	Bolt Torque *					
	SAE 2		SAE 5		SAE 8	
	N.m	(lb-ft)	N.m	(lb-ft)	N.m	(lb-ft)
1/4"	8	(6)	12	(9)	17	(12)
5/16"	13	(10)	25	(19)	36	(27)
3/8"	27	(20)	45	(33)	63	(45)
7/16"	41	(30)	72	(53)	100	(75)
1/2"	61	(45)	110	(80)	155	(115)
9/16"	95	(70)	155	(115)	220	(165)
5/8"	128	(95)	215	(160)	305	(220)
3/4"	225	(165)	390	(290)	540	(400)
7/8"	230	(170)	570	(420)	880	(650)
1"	345	(225)	850	(630)	1320	(970)



METRIC TORQUE SPECIFICATIONS

Bolt Diameter "A"	Bolt Torque*			
	8.8		10.9	
	(N.m)	(lb-ft)	(N.m)	(lb-ft)
M3	.5	.4	1.8	1.3
M4	3	2.2	4.5	3.3
M5	6	4	9	7
M6	10	7	15	11
M8	25	18	35	26
M10	50	37	70	52
M12	90	66	125	92
M14	140	103	200	148
M16	225	166	310	229
M20	435	321	610	450
M24	750	553	1050	774
M30	1495	1103	2100	1550
M36	2600	1917	3675	2710



Torque figures indicated above are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or capscrews unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

* Torque value for bolts and capscrews are identified by their head markings.

9 INDEX

A	PAGE
Assembling.....	15
Machine Assembly (Electric).....	22
Machine Assembly (Manual).....	15
 I	
Introduction.....	1
 O	
Operation.....	31
Attaching/Unhooking.....	35
Break-In.....	33
Controls.....	34
Field Operation.....	40
Machine Components.....	32
Pre-Operation Checklist.....	33
Storage.....	49
To the New Operator or Owner.....	31
Transporting.....	48

S	PAGE
Safety.....	2
Equipment Safety.....	4
General Safety.....	3
Maintenance Safety.....	8
Operating Safety.....	7
Preparation.....	6
Safety Signs.....	5
Safety Training.....	5
Sign-Off Form.....	9
Storage Safety.....	8
Transport Safety.....	8
Safety Sign Locations.....	10
Service and Maintenance.....	50
Maintenance.....	56
Blower Drive Belt Tension & Align.....	56
Service.....	50
Fluids and Lubricants.....	50
Greasing.....	50
Service Record.....	55
Servicing Intervals.....	51
Specifications.....	59
Bolt Torque.....	60
Mechanical.....	59

T

Trouble Shooting.....	61
-----------------------	----