



500

Owner's manual

Owner _____
S/N _____
Dealer _____

**Please file Owner's copy of the Warranty
Registration in the pouch on the back cover**

FORGE INDUSTRIES, 40 EAST 1ST STREET, CORSICA, SD 57328
PHONE (605) 946-5479 www.forge-ind.com

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Farm Aid Equipment, Inc.

Original Purchaser's Limited Warranty

1) Extent and Duration of this Warranty:

Subject to sections 2 through 7 of this warranty, your Farm Aid Equipment, Inc. mixer is warranted to be free from defects in materials and workmanship under normal use and service for a period of 1 year after date of purchase by the original (first) retail owner, or until it is resold or transferred by you, the original owner.

Tires and Scales Components are not included in this warranty. Scales are warranted by the manufacturer against defects in materials and workmanship.

2) Manufacturer and Warrantor of Equipment (Excluding scales and tires):

Farm Aid Equipment, Inc..

40 East 1st Street

Corsica, SD 57328 (605) 946-5479

The manufacturer and warrantor of the scales has its name permanently marked into the scale. We can file a claim on your behalf for the scale component with the manufacturer or you may seek warranty through one of their authorized service centers.

3) Repair or Replacement Procedure:

If your Farm Aid Equipment, Inc. mixer develops a defect (excluding scales and/or tires) during the warranty period, promptly notify Farm Aid Equipment, Inc. Until such notice is received, Warrantor will not be responsible for any repair or replacement.

Upon receipt of notice from you, Warrantor will in its sole discretion choose one of the following options to satisfy the warranty:

- a. Warrantor may elect to ship a new part to its dealer to be exchanged free of charge for the defective part returned by you to Farm Aid Equipment. Any defective part will be repaired or replaced and returned to you free of charge. Any part returned to Warrantor and found not to be defective will be returned to you freight collect with an explanation; or
- b. Warrantor may elect to ship a new part to its dealer to be exchanged free of charge for the defective part returned by you to the dealer; or
- c. Warrantor may elect to ship or deliver a replacement part to your address.

4) Limitations on Warranty Coverage:

Coverage under this warranty will be effective only when a copy of the original invoice or warranty registration sheet, showing the date and location of purchase, accompanies any claim for warranty.

Warrantor has no liability whatsoever and this warranty is null and void if any Farm Aid Equipment, Inc. mixer has been subjected to neglect, negligence, misuse, accident, or operated in any way contrary to the operating and maintenance instructions as specified in the Farm Aid Owner's Manual for that mixer. This warranty does not cover any Farm Aid equipment that has been altered or modified so as to affect adversely the Farm Aid equipment's operation, performance or durability, or that has been altered or modified to change the intended use of the Farm Aid equipment. In addition, the warranty does not extend to repairs made necessary by normal use or by the use of parts, accessories or other equipment which in the sole judgment of Warrantor, are either incompatible with the Farm Aid equipment, or adversely affect its operation, performance or durability. This warranty does not cover:

- a. Normal wear and tear (V belts/all poly/sweep belt/chains/bolts for poly)
- b. Road film or gravel damage to paint
- c. Paint
- d. Rust damage
- e. Damage to mixer if loaded in excess of load limit. Load limits are printed on the Loading label.
- f. Damage to machine due to "slugging" while adding roughage. For example, putting too much roughage too fast wedging roughage between the spiral and the mixing body.

Warrantor has a policy of continuous product improvement. We reserve the right to change or improve the design of any Farm Aid Equipment, Inc. mixer without assuming any obligation to modify any Farm Aid Equipment previously manufactured.

5) Exclusion of Implied Warranties:

The only warranty provided for this product is the limited warranty contained in section 1, above. All implied warranties are expressly excluded, of which include but are not limited to implied warranties of merchantability, implied warranties of fitness for a particular purpose, and any implied warranties arising from course of dealing or usage of trade. There are no warranties that extend beyond the description on the face of this warranty.

Some states do not allow limitations on implied warranties and this limitation may not apply to you.

6) Limitation on Consequential Damages:

Warrantor's responsibility under this warranty extends only to repair or replacement of your Farm Aid Equipment, Inc. mixer and its component parts. Warrantor does not assume responsibility for, nor shall be liable for, any special, incidental or consequential damages.

Warrantor assumes no responsibility to the owner for loss of use of the Farm Aid equipment, loss of time, inconvenience or other damage consequential or otherwise, including, but not limited to, loss of income or revenue, additional operating expenses, expense for gasoline, expense of transporting the Farm Aid equipment to the dealer and expense of returning the Farm Aid equipment, travel time, telephone charges, road service/towing charges, rental of another mixer during the time that warranty repairs are being performed, travel, lodging, dealer travel charges, loss or damage to personal property.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you.

7) Exclusive Warranty:

This is the only express warranty made by Farm Aid Equipment, Inc. on your Farm Aid Equipment, Inc. mixer and only the plant manager and/or a corporate officer of Farm Aid Equipment, Inc. is allowed to change or add to this warranty.

OPERATOR QUALIFICATIONS

This mixer should only be operated by an experienced and competent person. Working with or around any mixer requires good common sense.

Considerations of who is qualified to operate the mixer:

1. All who operate this power machine are required to read and understand this manual.
2. Current OSHA/CCOHS regulations generally require that operators of machinery must be trained before initial operation and annually at a minimum. Please review their recommendations at <https://www.osha.gov/laws-regs/regulations/standardnumber/1928>
3. Local regulations may specify the minimum age, often sixteen (16) years or older to operate power machinery. You must know what regulations apply to you.
4. Unqualified persons are to not operate the equipment and should stay a safe distance away.
5. In general the minimum qualification for operating this implement is a responsible adult familiar with farm equipment who has read this manual.

SAFETY DECAL CARE:

- Keep safety decals and signs clean and legible at all times.
- Replace safety decals and signs that are missing or have become illegible.
- Safety decals or signs are available from your dealer or the Farm Aid manufacturing plant.

HOW TO INSTALL SAFETY DECALS:

Be sure that the installation area is clean and dry. Decide on the exact position before you remove the backing paper. Remove the smallest portion of the split backing paper. Align the decal over the specified area and carefully press the exposed sticky backing in place. Slowly peel back the remaining paper and carefully smooth the remaining portion of the decal in place.

SAFETY LABELS:

**-ATTENTION! -BECOME ALERT!
-YOUR SAFETY IS INVOLVED!**

KEY WORDS: The safety labels start with a key word. The key words used are:

DANGER: Indicates an imminently hazardous situation that, if not avoided, will result in serious injury or death.

WARNING: Indicates a potentially hazardous situation that, if not avoided, will result in serious injury or death.

CAUTION: Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury.

Here are the safety labels on your machine. Take the time to review them so that when you see them on your machine you will be knowledgeable about the risk.



⚠ WARNING

HIGH PRESSURE



FLUID HAZARD

TO PREVENT SERIOUS INJURY OR DEATH.

- RELIEVE PRESSURE ON HYDRAULIC SYSTEM BEFORE SERVICING OR DISCONNECTING HOSES.
- WEAR PROPER HAND AND EYE PROTECTION WHEN SEARCHING FOR LEAKS.
- USE WOOD OR CARDBOARD INSTEAD OF HANDS.
- KEEP ALL COMPONENTS IN GOOD REPAIR.

⚠ WARNING

MOVING PART HAZARD



TO PREVENT SERIOUS INJURY, OR DEATH FROM MOVING PARTS:

- CLOSE AND SECURE GUARDS AND SHIELDS BEFORE STARTING.
- KEEP HANDS, FEET, HAIR, AND CLOTHING AWAY FROM MOVING PARTS.
- DISCONNECT AND LOCKOUT POWER SOURCE BEFORE ADJUSTING OR SERVICING.
- DO NOT STAND OR CLIMB ON MACHINE WHEN OPERATING.

⚠ WARNING

TO PREVENT SERIOUS INJURY OR DEATH.

- READ AND UNDERSTAND OPERATORS MANUAL BEFORE USING. REVIEW ALL SAFETY PRECAUTIONS ANNUALLY.
- PLACE ALL CONTROLS IN NEUTRAL, STOP TRACTOR ENGINE, SET PARK BRAKE AND WAIT FOR ALL MOVING PARTS TO STOP BEFORE SERVICING, ADJUSTING, REPAIRING, OR UNPLUGGING IMPLEMENT.
- DO NOT ALLOW RIDERS.
- SECURELY ATTACH TO TOWING UNIT USING A HARDENED PIN WITH A RETAINER AND AN AUXILIARY ATTACHING DEVICE.
- BE SURE ALL GUARD AND LOCKS ARE IN PLACE BEFORE STARTING.
- KEEP HANDS, FEET, HAIR, AND CLOTHING AWAY FROM MOVING PARTS.
- BE SURE REFLECTORS AND SMV ARE VISIBLE BEFORE TRANSPORTING.
- DO NOT EXCEED A SAFE TRANSPORT SPEED.
- USE HAZARD FLASHERS ON TRACTOR WHEN TRANSPORTING.
- WHEN REPAIRING OR SERVICING IMPLEMENT, REFER TO OPERATORS MANUAL.

⚠ WARNING



KEEP ALL SHIELD IN PLACE. KEEP HANDS AWAY FROM MOVING PARTS TO PREVENT SERIOUS INJURY OR DEATH.

EQUIPMENT SAFETY GUIDELINES

TAKE NOTE! THIS SAFETY ALERT SYMBOL SHOWN BELOW AND FOUND THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY AND THE SAFETY OF OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN INJURY OR DEATH. THIS SYMBOL MEANS



**-ATTENTION!
-BECOME ALERT!
-YOUR SAFETY IS INVOLVED!**

THE SYMBOL SHOWN BELOW AND FOUND THROUGHOUT THIS MANUAL IS USED TO INSTRUCT YOU IN WAYS THAT WILL MAKE YOUR MACHINE LAST LONGER, WORK BETTER, AND PREVENT DAMAGE TO IT. THIS SYMBOL MEANS



**TAKE NOTE
UNDERSTAND
LEARN**

Safety of the operator is one of the main concerns all equipment manufacturers. It is considered in the design and development of a new piece of equipment. In spite of this, many accidents occur which could have been avoided by the operator being more careful. The operator, You, can avoid most if not all accidents by observing and following the instructions in the manual. Use common sense and require those working with you do the same.

SAFETY FIRST

- ▲ Do not allow personnel other than the qualified operator near the machine.
- ▲ Never start a machine until all guards and safety shields are in place.
- ▲ Do not lubricate, clean or adjust the machine while it is in motion or under power.
- ▲ Before starting the tractor be sure the PTO shields turn freely.
- ▲ If any WARNING or DANGER label is damaged, obscured or missing replace it. Do not paint over any labels. The location of all safety related labels are in the first few pages of the parts portion of this manual.
- ▲ Do not attempt to operate this equipment under the influence of drugs or alcohol.
- ▲ Have all operators review the safety instructions annually.
- ▲ Keep all children and bystanders a safe distance away from this machine it is dangerous to the uninformed. The discharge elevator can be remotely lowered or raised suddenly. The discharge chain can start remotely. These are controlled by the operator in the cab of the truck or tractor who may not be able to see all sides of the elevator.
- ▲ The limits of the machine are noted on the yellow loading instruction label on the front of the machine. Do not exceed them.
- ▲ This machine is designed to mix roughage and food supplements for ruminating animals. Do not use it for any other purpose.
- ▲ This machine is equipped with reflectors and a slow moving vehicle marking. It is your responsibility to add additional lights as needed or required by law. A US DOT compliant stop-tail -turn lighting kit is available as an option.
- ▲ Disconnect PTO driveline before removing shields for maintenance, adjustment or service.
- ▲ Never enter a mixer/feeder while in operation.
- ▲ Keep transmissions in gear when traveling downhill.
- ▲ Wear close fitting clothing. Keep a safe distance from the PTO shaft.
- ▲ If your machine is equipped with a battery keep sparks, lighted matches, and open flame away from the top of battery. Battery gas can explode. Never check battery charge by placing a metal object across the posts. Do not charge a frozen battery; it may explode. Warm battery to room temperature before charging.
- ▲ Escaping fluid under pressure can penetrate the skin causing serious injury or death. Avoid the hazard by relieving hydraulic pressure before disconnecting any lines. Tighten all connections before applying pressure. Search for leaks with a piece of cardboard or wood. Protect hands and body from high pressure fluids. If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result.

PREPARING TRACTOR FOR MIXER

PTO:

- ▲ **IMPORTANT:** Mixers are designed to operate at a maximum of either 540 or 1,000 rpm. The PTO shafts are different for the different configurations. The 540 RPM configuration has 6 protruding teeth in the PTO connection while the 1,000 RPM configuration has 21. Only install what fits the tractor you are powering the mixer with. Do not use an adapter.

DRAW BAR/HITCH ADJUSTMENT:

- If featured with an offset drawbar, turn down.
- Adjust drawbar length so that from the end of the PTO shaft to the center of the hitch pin hole it is 14" on a 540 RPM or a 1,000 RPM PTO.
- With mixer attached to the tractor determine if the hitch needs to move to a higher or lower position to make the mixer frame approximately parallel with the ground.
- If the hitch needs adjustment, then using the jack, support the empty mixer, remove the hitch pin, move the tractor forward, and adjust the height of the hitch.

▲ REMEMBER

Your best assurance against accidents is a careful and responsible operator. If there is any portion of this manual or function you do not understand, contact your dealer or Farm Aid Equipment.

BEFORE OPERATION:

- ▲ Carefully study and understand this manual.
- ▲ Do not wear loose-fitting clothing which may catch in moving parts.
- ▲ Always wear protective clothing and substantial shoes.
- ▲ Keep wheel lug nuts or bolts tightened to specified torque.
- ▲ Make sure the tires are inflated properly.
- ▲ Give the unit a visual inspection for any loose bolts, worn parts or cracked welds, and make necessary repairs. Follow the maintenance safety instructions included in this manual.
- ▲ Do not use the unit until you are sure that the area is clear of people, especially children and animals.
- ▲ Practice operation of your mixer/feeder and its attachments. Completely familiarize yourself and other operators with its operation before using.
- ▲ Do not allow anyone to stand between the tongue or hitch and the towing vehicle when backing up to the mixer/feeder.
- ▲ Be sure all shields are in place before operation.

LOADING THE MACHINE:

- Empty mixer of any standing water in it by removing the clean out bung in the end of the mixer. Raise the front of the machine so water will exit. Water can soak the hay causing it to mix differently, possibly causing the machine to bind.
- Before starting the towing vehicle make sure the mixer is empty. Zero out the scale.
- ▲ Be sure that there are no tools lying on or in the mixer/feeder.
- ▲ Beware of bystanders, animals and, particularly children!
- ▲ Always look around to make sure that it is safe before starting the engine of the towing vehicle. It is hard to hear people with the newer quiet cabs.
- Do not add side board extensions to the mixer.
- Mixer must be rotating while feed is added to the mixer.
- Do not overload the mixer! Mixer capacity can be reached by weight or volume. The maximum weights are as follows:
 - 340 model 7,000 Pounds
 - 430 model 9,000 Pounds
 - 500 model 10,500 Pounds
 - 560 model 12,500 Pounds
 - 680 model 15,500 Pounds
- Lower density commodities (hay/silage) decrease the capacity of the mixer. The maximum height of feed in the mixer is one foot less than the top of the spiral. Generally the highest point is above the discharge door. When overloaded, certain high roughage rations may bunch up and “barrel roll” resulting in poor mixing.
- Do not "Dump" commodities into the mixer, especially roughage. This can cause the roughage to bind between the reel/spiral and the mixer wall. Wet or stringy hay is more prone to this. It can damage the mixer. The belt should slip if the machine starts to wedge. Do not tighten the main drive belt if this happens. Instead remove the wedged roughage.
- Load feed starting with the lightest and then the heavier commodities. Example: Ground hay, Silage, Distillers grains, then corn. Loading corn first may result in the mixer “kicking” it in the air. Loading hay last may result in damage to mixer.
- However, when adding minute supplements or medication in non liquid form load these first in the mixer.
- Damage to the mixer springs will occur if Liquid feed and Corn/Distillers grains are put in the mixer before roughage.
- Load from the auger side of the mixer. Loading from the other side may result in damage to the machine. The top of the spiral moves from the high side to the low side. If the loader bucket touches the spiral/reel it is less likely to damage the spiral/reel loading from the high side. It is more likely to damage the spiral/reel if it comes in contact with the spiral/reel if loading from the low side.
- Loading on the high side will result in faster/better mixing. Feed that falls out closer to the loader will get caught in the return auger and most feed will interact

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with the reel breaking up clumps. Stringy hay clumps can get caught between the spiral/reel and the mixer body potentially damaging the mixer.

- Wet hay mixes very differently than dry hay. Wet hay bunches up. It can get caught between the reel and the tank wedging the machine. Use caution and add this commodity very carefully.
- Do not fill the mixer and allow the feed to settle before feeding. Filling the mixer the night before and parking the mixer may result in damage to the mixer or work for the owner. Certain rations will settle and bind together resulting in a locked up machine. It is not unusual to open the feed door on a mixer that has had a ration sitting in it overnight being so bound up that it does not fall out of the mixer onto the elevator chain.

OPERATION:

- ▲ **NO PASSENGERS ALLOWED** - Do not carry passengers in or on the tractor or equipment.
- ▲ Keep hands and clothing clear of moving parts.
- ▲ Do not clean, lubricate or adjust your mixer/feeder while it is moving or in operation.
- ▲ Be especially observant of the operating area and terrain - watch for holes, rocks or other hidden hazards. Always inspect the area prior to operation.
- ▲ Do not operate near the edge of drop-offs or banks.
- ▲ Do not operate on steep slopes as overturn may result.
- ▲ Operate up and down (not across) intermediate slopes.
- ▲ Avoid sudden starts and stops.
- ▲ Pick the most level route when transporting across fields. Avoid the edges of ditches or gullies and steep hillsides.
- ▲ Maneuver the tractor or towing vehicle at safe speeds.
- ▲ Avoid overhead wires or other obstacles. Contact with overhead lines could cause serious injury or death.
- ▲ Be alert to the length of the machine when towing it. Take care to prevent it from "cutting the corner short" and striking another object.
- ▲ Keep all bystanders, pets and livestock clear of the work area.
- ▲ Operate the towing vehicle from the operator's seat only.
- ▲ Never leave running mixer/feeder unattended.
- Turn off the PTO when making a turn to prevent damage to the mixer.
- Lower the discharge elevator before opening the feed door.
- Open the feed door only as much as is needed to get a steady supply of feed. Do not fully open at the start.

HIGHWAY AND TRANSPORT OPERATIONS:

- ▲ Adopt safe driving practices.
- ▲ Keep the brake pedals latched together at all times. Never use independent braking with machine in tow as loss of control and/or upset of unit can result.
- ▲ Always drive at a safe speed relative to local conditions and ensure that your speed is low enough for an emergency stop to be safe and secure.
- ▲ Reduce speed prior to turns to avoid the risk of overturning.

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- ▲ Avoid sudden uphill turns on steep slopes.
- ▲ Always keep the tractor or towing vehicle in gear when going downhill. Do not coast.
- ▲ Do not drink and drive.
- Comply with state and local laws governing highway safety and movement of farm machinery on public roads.
- ▲ Use approved accessory lighting flags and necessary warning devices to protect operators of other vehicles on the highway during daylight and nighttime transport.
- ▲ Local laws should be checked for all highway lighting and marking requirements.
- ▲ When driving the tractor and mixer/feeder on the road or highway under 20 MPH (40 KPH) use flashing amber warning lights and a slow moving vehicle (SMV) identification emblem.
- ▲ Plan your route to avoid heavy traffic.
- ▲ Be a safe courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc.
- ▲ Be observant of bridge loading ratings. Do not cross bridges rated lower than the gross weight at which you are operating.
- ▲ Watch for obstructions overhead and to the side while transporting.
- ▲ Always operate mixer/feeder in a position to provide maximum visibility at all times. Make allowances for increased length and weight of the mixer/feeder when making turns, stopping the unit, etc.

FOLLOWING OPERATION:

- Make sure that you have emptied the machine. The jack is not intended to support the mixer full of feed.
- ▲ Following operation, or when unhitching, stop the tractor or towing vehicle, set the brakes, disengage the PTO and all power drives, shut off the engine and remove the ignition keys.
- ▲ Store the unit in an area away from human activity.
- Do not park equipment where it will be exposed to livestock for long periods of time. Damage and livestock injury could result.
- ▲ Do not permit children to play on or around the stored unit.
- ▲ Make sure parked machine is on a hard, level surface and engage all safety devices.
- ▲ Wheel chocks may be needed to prevent unit from rolling.

PERFORMING MAINTENANCE:

- ▲ Make sure there is plenty of ventilation. Never operate the engine of the towing vehicle in a closed building. The exhaust fumes may cause asphyxiation.
- ▲ Before working on the mixer/feeder, stop the towing vehicle, set the brakes, disengage the PTO and all power drives, shut off the engine and remove the ignition keys.
- ▲ Be certain all moving parts on attachments have come to a complete stop before attempting to perform maintenance.
- ▲ Always use a safety support and block the wheels. Never use a jack to support the machine.
- ▲ Always use the proper tools or equipment for the job at hand.
- ▲ Never use your hands to locate hydraulic leaks on attachments. Use a small piece of cardboard or wood. Hydraulic fluid escaping under pressure can penetrate the skin. When disconnecting hydraulic lines, shut off hydraulic supply and relieve all hydraulic pressure. Openings in the skin and minor cuts are susceptible to infection from hydraulic fluid. If injured by escaping hydraulic fluid, see a doctor at once. Gangrene can result. Without immediate treatment, serious infection and reactions can occur.
- ▲ Replace all shields and guards after servicing and before moving.
- ▲ After servicing, be sure all tools, parts and service equipment are removed.
- ▲ Do not allow grease or oil to build up on any step or platform.
- ▲ Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your equipment to original specifications. Farm Aid Equipment will not claim responsibility for use of unapproved parts and/or accessories and other damages as a result of their use.
- ▲ If equipment has been altered in any way from original design, Farm Aid Equipment does not accept any liability for injury or warranty.
- ▲ A fire extinguisher and first aid kit should be kept readily accessible while performing maintenance on this mixer/feeder.

SHEAR PIN:

The machine is equipped with a 1/4" sized bolt as a shear pin to limit the torque input by shearing if the peak torque is exceeded. This protects the chains, the spiral and, potentially, the mixer box.

Bolts come in 4 levels of strength or hardness;

Grade 0- no marks on the top of the head (Weakest)

Grade 5- three marks on the head

Grade 8- 5 marks on the head

Socket head screw- the head is cylindrical with a hex shaped pocket (Strongest)

A 1,000 RPM machine should have a grade 5 bolt, nothing stronger.

A 540 RPM machine should have a grade 8 bolt. A Socket head screw may be used.

CHAINS TENSION / CHAIN OIL:

The chains should be checked/adjusted one to two weeks after initial use. The chains and their oil should then be checked twice a year.

The chains should be adjusted so that they can be moved freely approximately 2" at the center of the span.

The oil should be up to the pin, halfway up on the very lowest chain link. The oil is straight 30 weight and may be mixed with any other similar type and weight oil.

➤ Do not overtighten the bolts that hold on the front cover. 60 inch-pounds max. Do not let an electric driver rattle.

LUBRICATION

Weekly or every 12 hours of operation:

- Grease the PTO front cross bearing, rear cross bearing and telescoping member with 2 pumps.
- Grease the PTO cross bearing next to the mixer with 2 pumps.

Monthly:

- Wheel bearings 3 pumps
- The front bearing on the input shaft 2 pumps
- Both bearings on the back end with 2 pumps
- The 7 nipples on the sides and front of the chain case and the bearing at the front PTO mount with 3 pumps.

POLY LINER CARE:

The poly liner will grow or shrink dependant on temperature. Excessive heat combined with sunlight can cause the liner to warp or bulge. All engineered polymers are adversely affected by harmful ultraviolet light, decreasing the life of the liner. Park inside or in a shaded area to increase the life of your poly liner.

The liner will outlast the bolts that hold it in place. The feed is abrasive and wears the heads. Inspect the large headed fasteners that hold the poly liner. If they are not round or not larger than the size of a quarter they are worn and need replacing. Bolt failure will lead to premature failure of the liner. The bolts will last about 1/3 to 1/5 the life of the liner and are easier and much less expensive to replace.

WELDING ON THE MACHINE:

- When welding on your mixer/feeder, do not allow the current to flow through the ball bearings or the roller chains. Ground directly to the item being welded.
- Always disconnect the scale from the weigh bars. Be sure the current does not pass through weigh bars, load cells or scale indicator.
- Disconnect the power wire from the scale or the junction block.