Art’s-Way Manufacturing Co., Inc.

Model 664 & 864
TOP-SPREAD Loader Mounted Bale Spreader

Operator’s Manual & Illustrated Parts List
650200

Issued May 2017
This symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED. The message that follows the symbol contains important information about your safety. Carefully read the message. Make sure you fully understand the causes of possible injury or death.

IF THIS MACHINE IS USED BY AN EMPLOYEE, IS LOANED, OR IS RENTED, MAKE SURE THAT THE OPERATOR UNDERSTANDS THE TWO INSTRUCTIONS BELOW.

BEFORE THE OPERATOR STARTS THE ENGINE:

GIVE INSTRUCTIONS TO THE OPERATOR ON SAFE AND CORRECT USE OF THE MACHINE.
MAKE SURE THE OPERATOR READS AND UNDERSTANDS THE OPERATOR’S MANUAL FOR THIS MACHINE.

⚠️WARNING⚠️

IMPROPER OPERATION OF THIS MACHINE CAN CAUSE INJURY OR DEATH.

BEFORE STARTING THE ENGINE, DO THE FOLLOWING:

1. READ THE OPERATOR’S MANUAL.
2. READ ALL SAFETY DECALS ON THE MACHINE.
3. CLEAR THE AREA OF OTHER PERSONS.
4. LEARN AND PRACTICE SAFE USE OF MACHINE CONTROLS IN A SAFE AND CLEAR AREA BEFORE YOU OPERATE THIS MACHINE ON A JOB SITE.

It is your responsibility to observe pertinent laws and regulations and to follow manufacturer’s instructions on machine operation and maintenance.

See your Authorized Art’s-Way Manufacturing Co., Inc. dealer or Art’s-Way Manufacturing Co., Inc. for additional operator’s manuals, illustrated parts catalogs, and service manuals.
TO THE OWNER

Congratulations on the purchase of your new Art's-Way TOP-SPREAD Loader Mounted Bale Spreader. You have selected a top quality machine that is designed and built with pride to ensure you have many years of efficient and reliable service.

Many people have worked on the design, production, and delivery of this TOP-SPREAD Loader Mounted Bale Spreader. The information in this manual is based on the knowledge, study, and experience through years of specializing in the manufacturing of farm machinery. This manual is designed to provide you with important information regarding safety, maintenance, and machine operation so you can and will get the best possible performance from your TOP-SPREAD Loader Mounted Bale Spreader.

Even if you are an experienced operator of this or similar equipment, we ask that you read this manual before operating this TOP-SPREAD Loader Mounted Bale Spreader. The way you operate, adjust, and maintain this unit will have much to do with its successful performance. Any further questions you may have about this product of Art's-Way equipment should be directed to your local Art's-Way dealer or to Art's-Way Manufacturing Co., Inc. Armstrong, Iowa, 50514, (712) 864-3131.

SPECIFICATIONS AND DESIGN ARE SUBJECT TO CHANGE WITHOUT NOTICE

Art's-Way Manufacturing Co., Inc. is continually making product improvements. In doing so, we reserve the right to make changes and/or add improvements to our products without obligation for the equipment previously sold.

Modifications to this TOP-SPREAD Loader Mounted Bale Spreader may affect the performance, function, and safety of its operation. Therefore, no modifications are to be made without the written permission of Art's-Way Manufacturing Co., Inc. Any modification made without the written permission of Art's-Way Mfg. Co. Inc. shall void the warranty of this product.

In the interest of continued safe operation of this TOP-SPREAD Loader Mounted Bale Spreader, pay particular attention to the safety alert symbol(s) throughout this manual.

Art's-Way Manufacturing Co., Inc. STATEMENT OF PRODUCT LIABILITY

Art's-Way Manufacturing Co., Inc. recognizes its responsibility to provide customers with a safe and efficient product. Art's-Way Manufacturing Co., attempts to design and manufacture its products in accordance with all accepted engineering practices effective at the date of design. This statement should not be interpreted to mean that our products will protect against the user's own carelessness or failure to follow common safety practices nor will Art's-Way Manufacturing Co., be liable for any such act. In addition, Art's-Way Manufacturing Co., assumes no liability for any altered product or any modified product by users or anyone other than an authorized dealer.

IMPORTANT WARRANTY INFORMATION

The warranty for this TOP-SPREAD Loader Mounted Bale Spreader appears on page 6 of this manual. In order to establish proper warranty registration, the Warranty Registration must be completed and returned to the factory. Failure to comply with this requirement will result in invalidating the warranty!

LIMITATIONS OF THIS MANUAL

This manual contains operating instructions for your 664 & 864 TOP-SPREAD Loader Mounted Bale Spreader only. Any mention of other machinery in this manual other than the 664 & 864 TOP-SPREAD Loader Mounted Bale Spreader is for reference only. This manual does not replace nor is it to be used for any machinery that may be attached to or used in conjunction with the 664 & 864 TOP-SPREAD Loader Mounted Bale Spreader.
PARTS & SERVICE

As the purchaser of your new bale spreader, it is very important to consider the following factors:

A. Original Quality

B. Availability of Service Parts

C. Availability of Adequate Service Facilities

Art’s-Way Manufacturing Co., Inc. has an excellent dealership network ready to answer any questions you may have about your bale spreader. Parts for your machine may be ordered through our dealers. When placing a parts order, please have the model and serial number ready. This will allow the dealer to fill your order as quickly as possible.

For your convenience, we have provided this space for you to record your model number, serial number, and the date of purchase, as well as your dealer’s name and address.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO THE OWNER</td>
<td>1</td>
</tr>
<tr>
<td>SPECIFICATIONS AND DESIGN ARE SUBJECT TO CHANGE WITHOUT NOTICE</td>
<td>1</td>
</tr>
<tr>
<td>Art’s-Way Manufacturing Co., Inc. STATEMENT OF PRODUCT LIABILITY</td>
<td>1</td>
</tr>
<tr>
<td>IMPORTANT WARRANTY INFORMATION</td>
<td>1</td>
</tr>
<tr>
<td>LIMITATIONS OF THIS MANUAL</td>
<td>1</td>
</tr>
<tr>
<td>PARTS &amp; SERVICE</td>
<td>2</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>3-5</td>
</tr>
<tr>
<td>LIMITED WARRANTY</td>
<td>6</td>
</tr>
<tr>
<td>SAFETY FIRST</td>
<td>7</td>
</tr>
<tr>
<td>NOTICES OF DANGER, WARNING, AND CAUTION</td>
<td>7</td>
</tr>
<tr>
<td>Safety Instructions</td>
<td>8</td>
</tr>
<tr>
<td>GENERAL</td>
<td>8</td>
</tr>
<tr>
<td>BEFORE OPERATING</td>
<td>9</td>
</tr>
<tr>
<td>DURING OPERATION</td>
<td>9</td>
</tr>
<tr>
<td>MAINTENANCE SAFETY</td>
<td>9</td>
</tr>
<tr>
<td>HYDRAULIC SAFETY</td>
<td>10</td>
</tr>
<tr>
<td>TRANSPORTATION SAFETY</td>
<td>10</td>
</tr>
<tr>
<td>STORAGE SAFETY</td>
<td>10</td>
</tr>
<tr>
<td>TIRE SAFETY</td>
<td>11</td>
</tr>
<tr>
<td>ASSEMBLY SAFETY</td>
<td>11</td>
</tr>
<tr>
<td>NAME</td>
<td>PAGE</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>GENERAL INFORMATION</td>
<td>14</td>
</tr>
<tr>
<td>SAFE OPERATING PROCEDURES</td>
<td>16</td>
</tr>
<tr>
<td>DEALING SAFELY WITH HYDRAULICS</td>
<td>18</td>
</tr>
<tr>
<td>ADJUSTING APRONS</td>
<td>21</td>
</tr>
<tr>
<td>SAFE MOUNTING PROCEDURES</td>
<td>22</td>
</tr>
<tr>
<td>SAFETY SIGNS</td>
<td>24</td>
</tr>
<tr>
<td>SPECIFICATIONS</td>
<td>28</td>
</tr>
<tr>
<td>MAINTENANCE</td>
<td>29</td>
</tr>
<tr>
<td>SERVICE</td>
<td>31</td>
</tr>
<tr>
<td>SCHEDULED MAINTENANCE</td>
<td>32</td>
</tr>
<tr>
<td>WIRING DIAGRAMS</td>
<td>33</td>
</tr>
<tr>
<td>UNIT OPERATION</td>
<td>34</td>
</tr>
<tr>
<td>ROTOR KNIFE MAINTENANCE</td>
<td>37</td>
</tr>
<tr>
<td>DOOR ASSEMBLY</td>
<td>40</td>
</tr>
<tr>
<td>GEAR ASSEMBLY</td>
<td>42</td>
</tr>
<tr>
<td>SHAFT ASSEMBLY</td>
<td>44</td>
</tr>
<tr>
<td>BEATER BEARING ASSEMBLY</td>
<td>46</td>
</tr>
<tr>
<td>BEATER ASSEMBLY</td>
<td>48</td>
</tr>
<tr>
<td>HYDRAULIC SCHEMATIC</td>
<td>50</td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
</tr>
</tbody>
</table>
LIMITED WARRANTY FOR NEW ART’S WAY MANUFACTURING CO. FARM MACHINERY
(U.S. ONLY)

A. GENERAL PROVISIONS: Art’s Way Manufacturing Co., Inc. (Art’s Way Mfg.) warrants the products it sells to be free from defects in material and workmanship for the periods of time set forth in the Warranty Table below. Art’s Way Mfg. obligation and liability under this limited warranty, is to repair or replace (at Art’s Way Mfg. option) any part(s) that upon manufacture were defective in material or workmanship. Warranty service shall be performed by an authorized Art’s Way Mfg. dealer or authorized service center and will be completed using Art’s Way Mfg. supplied parts. Parts supplied by Art’s Way Mfg. are shipped F.O.B. Art’s Way. The original purchaser shall be responsible for service calls and transportation of the farm machinery to and from their dealer or service center. The original purchaser is also responsible for any expedited repair charges (i.e., overtime and “next day air” deliveries) requested by the original purchaser. The original purchaser is also responsible for any repair service, parts, and labor on repairs made to the farm machinery at the time the warranty service was being performed.

B. SECURING WARRANTY SERVICE: The original purchaser must (1) contact their authorized dealer and report the break-down. (2) The authorized dealer shall provide objective evidence of the farm machinery’s warranty status to Art’s Way Mfg. (3) The authorized dealer shall provide all documentation to Art’s Way Mfg. which supports that the farm machinery was thoroughly inspected prior to set-up and delivery to the original purchaser. (4) The original purchaser shall make the farm machinery available to their Art’s Way Mfg. authorized dealer and/or Art’s Way Mfg. authorized service center within 30 days of the reported break-down. All parts or assemblies replaced under the limited warranty must be held for inspection for ninety (90) days, or until credit has been issued, or a claim has been returned to a dealer. When a claim is returned to a dealer with instructions to return and/or hold the part(s) for inspection, parts must be handled as instructed or the claim may be denied.

C. SPARE PARTS WARRANTY: Art’s Way Mfg. warrants that it will replace or repair (excluding labor) as Art’s Way Mfg. elects, without charge, any genuine spare part purchased from Art’s Way Mfg. which is defective in material or workmanship within ninety (90) days of the date of installation. This warranty applies to parts that, in Art’s Way Mfg. judgment, prove to be defective in either material or workmanship. All parts to be shipped F.O.B. Art’s Way Mfg. All spare parts replaced under the spare parts warranty must be held for inspection for ninety (90) days or until credit has been issued, or a claim has been returned to a dealer. When a claim is returned to a dealer with instructions to return and/or hold the part(s) for inspection, parts must be handled as instructed or the claim may be denied.

D. LIMITATIONS: Art’s Way Mfg. Limited Warranty does not extend coverage to product being used in a commercial application (i.e., rented equipment). Art’s Way Mfg. Limited Warranty does not extend to parts and elements not manufactured by Art’s Way Mfg., and which carry the warranty of another manufacturer. Art’s Way Mfg. makes no other warranty expressed or implied and makes no warranty of merchantability or fitness for any particular purpose beyond that expressly stated in this warranty. Art’s Way Mfg. liability is limited to the terms set forth in this warranty and does not include any liability for direct, indirect, incidental or consequential damages or expenses of delay and Art’s Way Mfg. liability is limited to the repair and replacement of defective parts as set forth herein. Any improper use and/or maintenance, including operation after the discovery of defective or worn parts, operation beyond the rated capacity, substitution of parts not approved by Art’s Way Mfg., or any alteration or repair by others than the authorized Art’s Way Mfg. dealer or authorized service center which affect the product materially and adversely, shall void the warranty. No dealer, employee or representative is authorized to change this warranty in any way or grant any other warranty unless such change is made in writing and signed by an officer of Art’s Way Mfg. Some states do not allow limitations on how long an implied warranty lasts or exclusions or limitations of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you the specific legal rights, and you may have other rights that vary from state to state.

NOTE: As of April 1, 2015, all previously distributed information concerning the limited warranty coverage of any Art’s Way Manufacturing Company, Inc. manufactured product is to be considered null and void and replaced by this document.

<table>
<thead>
<tr>
<th>Art’s Way Mfg. Farm Machinery</th>
<th>Warranty Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grinder / Mixer – Model 6520, 6530, 6140, 6105, and Portable and Stationary equipment</td>
<td>1 (one) Year from Date of Delivery to Original Purchaser</td>
</tr>
<tr>
<td>Manure Spreader</td>
<td>1 (one) Year from Date of Delivery to Original Purchaser</td>
</tr>
<tr>
<td>Graders and Land Planes</td>
<td>1 (one) Year from Date of Delivery to Original Purchaser</td>
</tr>
<tr>
<td>Beet Harvesting Machinery</td>
<td>1 (one) Harvest Season from Date of Delivery to Original Purchaser</td>
</tr>
<tr>
<td>Shredders – Model 180C and 240C</td>
<td>1 (one) Year from Date of Delivery to Original Purchaser</td>
</tr>
<tr>
<td>Plows</td>
<td>1 (one) Year from Date of Delivery to Original Purchaser</td>
</tr>
<tr>
<td>Forage Blowers – Model 1060 and 2060</td>
<td>1 (one) Year from Date of Delivery to Original Purchaser</td>
</tr>
<tr>
<td>Forage Boxes/Receivers – Model 5300 and 1250</td>
<td>1 (one) Year from Date of Delivery to Original Purchaser</td>
</tr>
<tr>
<td>Rakes</td>
<td>1 (one) Year from Date of Delivery to Original Purchaser</td>
</tr>
<tr>
<td>Dump Boxes</td>
<td>1 (one) Year from Date of Delivery to Original Purchaser</td>
</tr>
<tr>
<td>Augers</td>
<td>1 (one) Year from Date of Delivery to Original Purchaser</td>
</tr>
<tr>
<td>Running Gear</td>
<td>1 (one) Year from Date of Delivery to Original Purchaser</td>
</tr>
<tr>
<td>Snow Blowers</td>
<td>1 (one) Year from Date of Delivery to Original Purchaser</td>
</tr>
<tr>
<td>Harvester Reel</td>
<td>1 (one) Year from Date of Delivery to Original Purchaser</td>
</tr>
</tbody>
</table>

Manual No. 650200

Art’s-Way Manufacturing Co., Inc.

Effective 1 April 2015
SAFETY FIRST

“"A careful operator is the best insurance against an accident."” Quote from the National Safety Council.

Most accidents can be prevented if the operator:
1. Fully understands how the machine functions.
2. Can anticipate situations which may produce problems.
3. Can make necessary corrections before problems develop.

SAFETY INSTRUCTIONS

The American Society of Agricultural Engineers has adopted the Universal Safety Alert Symbol as a way to identify areas of potential danger if the equipment is not operated correctly. Please be alert whenever you see this symbol in the manuals or on your bale spreader.

Art’s-Way Manufacturing Co., Inc. strives to make our equipment as safe as possible. The Art’s-Way 664 & 864 TOP-SPREAD Loader Mounted Bale Spreader conforms to applicable safety standards at the time of manufacturing. A safety conscious equipment operator makes an effective accident-prevention program complete.

NOTICES OF DANGER, WARNING, AND CAUTION

Signal Words: Note the use of signal words DANGER, WARNING, and CAUTION on the bale spreader and in this manual. The appropriate signal word for each has been selected using the following guidelines:

- Universal Safety Alert Symbol

DANGER
Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING
Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION
Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE
NOTICE is used to address practices not related to physical injury.

Safety features and instructions for the bale spreader are detailed in the Safety Guidelines section of this Operator’s Manual. It is the responsibility of the owner to ensure that all operators read and understand the manual before they are allowed to operate the Loader Mounted Bale Spreader. (Occupational Safety and Health Administration (OSHA) regulations 1928.57).

Safety instructions (or equivalent) signs indicate specific safety-related instructions or procedures.

Note: Contains additional information important to a procedure and will be found within the regular text body of this manual.
SAFETY INSTRUCTIONS

GENERAL
Most work related accidents are caused by failure to observe basic safety rules or precautions. An accident can often be avoided by recognizing potentially hazardous situations before an accident occurs. As you operate and maintain the Loader Mounted Bale Spreader you must be alert to potential hazards. You should also have the necessary training, skills, and tools to perform any assembly procedure.

Improper operation and/or maintenance of this unit could cause a dangerous situation that results in injury or death. Do not use this unit until you read and understand the information contained in this manual. Do not use this equipment for anything other than its intended purpose.

Safety precautions and warnings are provided in this manual and on the unit. If these hazard warnings are not heeded, bodily injury or death could occur to you or to other persons.

Art’s-Way Manufacturing Co., Inc. cannot anticipate every possible circumstance that might involve a potential hazard. The warnings in this manual and on the product are, therefore, not all-inclusive. If a method of operation not specifically recommended by us is used, you must satisfy yourself that it is safe for you and for others. You should also ensure that the unit will not be damaged or be made unsafe by the methods that you choose.

The information, specifications, and illustrations in this manual are based on the information that was available at the time this material was written and can change at any time.

Safety Alert Symbols
This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

This manual contains DANGERS, WARNINGS, CAUTIONS, NOTICES, SAFETY INSTRUCTIONS, and NOTES which must be followed to prevent the possibility of improper service, damage to the equipment, personal injury, or death. The following key words call the readers attention to potential hazards.

Hazards are identified by the “Safety Alert Symbol” and followed by a signal word such as “DANGER”, “WARNING”, or “CAUTION”.

Remember: “The Best Operator is a Safe Operator”

CAUTION
Read and understand the operator’s manual and all the safety decals before operating the bale spreader. Review all safety instructions with all operators annually.
SAFETY INSTRUCTIONS

BEFORE OPERATING

Do not wear loose fitting clothing as it may catch in moving parts.

Make sure all guards and shields are installed, including the tractor power take-off (PTO) master shield, before starting or operating the bale spreader.

Be sure that the correct implement driveline parts are used and that they are properly secured.

Lower the lifter wheels when the bale spreader is not in use.

Install safety chain when attaching the bale spreader to the tractor.

Clear the area of bystanders, especially children, when making repairs, adjustments, or performing maintenance on the bale spreader.

Do not allow riders.

Put all tractor and machine controls in “neutral” and disengage the PTO before starting. Follow the starting instructions according to the OEM tractor manual.

Operate the bale spreader only while seated on the tractor seat.

Make sure the unit is adequately supported with safety blocks or safety stands when changing tires or performing maintenance.

DURING OPERATION

Entanglement Hazard
Keep hands, feet, hair, and clothing away from moving parts. Wait for all movement to stop before approaching equipment.

Before making adjustments:
1. Shut off the tractor,
2. Set parking brake,
3. Put machine in neutral, and
4. Remove key while making adjustments.

Keep all shields and guards in place and in good working condition.

Keep all bystanders, especially children, away from the bale spreader while in operation.

Do not allow riders while the bale spreader is in operation.

Do not attempt to unclog, clean, or adjust the bale spreader while it is running.

Stay away from overhead power lines. Electrocution can occur even without direct contact.

Keep all hydraulic lines, fittings, and couplers tight and free of leaks. (Refer to Safety Guidelines – Hydraulic Safety).

Use caution when ascending or descending on the bale spreader. Wet shoes or boots are slippery.

MAINTENANCE SAFETY

Before servicing, adjusting, repairing, or unclogging the machine, always make sure the tractor engine is stopped, key in your pocket, the machine is lowered to the ground, all controls are placed in neutral, the parking brake is set, and all the moving parts have stopped.

Use sufficient tools, jacks, and hoists that have the capacity for the job.

Use support blocks or safety stands when changing tires or performing maintenance.

Follow good shop practices of keeping the service area clean and dry, and use adequate light for the job at hand.

Before applying pressure to the hydraulic system, make sure all lines, fittings, and couplers are tightly secured and in good condition.

Make sure all shields/guards are in place and properly secured when performing maintenance.
HYDRAULIC SAFETY

Follow all operating, maintenance, and safety instructions found in this Manual.

Make sure components in the hydraulic system are kept clean and in good working condition.

Relieve pressure from the hydraulic system before servicing or disconnecting from the tractor.

Keep all hydraulic lines, fittings, and couplers tightly secured and free of leaks.

Replace any worn, cut, abraded, flattened, or cramped hoses.

Do not make any temporary repairs to the hydraulic lines, fittings, or hoses using tape, clamps, or cement. The hydraulic system operates under extremely high pressure and temporary repairs may fail suddenly and create a hazardous/dangerous situation.

Wear proper hand and eye protection when searching for a high-pressure hydraulic leak. Use a piece of wood or cardboard as a backstop instead of hands to identify and isolate a leak. If injured by a concentrated high-pressure stream of hydraulic fluid, seek medical attention immediately. Serious infection or toxic reaction can develop if hydraulic fluid penetrates the surface of the skin.

Before applying pressure to the system, make sure all components are tight and that the hydraulic lines, hoses, and couplings are not damaged.

TRANSPORTATION SAFETY

Follow all operating and safety instructions found in this manual when transporting this equipment.

Make sure the Slow Moving Vehicle (SMV) emblem and all lights and reflectors required by local highway and transportation authorities are properly in place, clean, and clearly visible to traffic.

Do not allow riders on any machinery during transport.

Make sure the bale spreader is securely attached to the tractor and install a safety chain to the bale spreader.

Make sure the tractor brake pedals are latched together.

Do not exceed 20 mph (32 km/h) when transporting the bale spreader. Always reduce speed on rough roads and surfaces, or when going down inclines.

Use caution when turning and always use the turn signals on the tractor to indicate your turning intentions to the other traffic.

The weight of the trailed machine should NEVER exceed the weight of the towing vehicle.

Check all clearances carefully whenever the machine is towed.

Lower the elevator into the transport position before transporting the bale spreader on the highway.

Stay away from overhead obstructions and power lines during transport. Electrocuton can occur even without direct contact.

STORAGE SAFETY

Follow all operating and safety instructions found in this manual when storing this equipment.

Store the bale spreader in an area away from human activity.

Do not permit children to play on or around the stored machine at any time.

Make sure that the bale spreader is stored in an area with a firm and level base to prevent the machine from tipping or sinking into the ground.

Block the wheels to prevent the machine from rolling.
TIRE SAFETY

Follow all operating and safety instructions found in this manual when working around tires.

Have only a qualified tire dealer or tire repair service perform tire repairs.

Do not attempt to install a tire on a wheel or rim unless you have the proper equipment and experience to do the job.

Do not substitute tires with a lesser road rating and/or capacity for the original equipment tires.

WARNING

Explosive Force Hazard
Tire replacement, repair, and/or maintenance should be done by a qualified tire dealer or qualified repair service.

Failure to follow proper procedures when installing a tire on a wheel or rim can produce an explosive force that will result in serious injury or death.

Do not attempt to install a tire without proper equipment and experience to perform the job.

ASSEMBLY SAFETY

Follow all assembly, operating, and safety instructions found in this manual when assembly this equipment.

Use adequate manpower to perform assembly procedures safely.

Assemble the bale spreader in an area with sufficient space to maneuver the largest components and allow easy access to all sides of the machine.

Use only forklifts, lift cranes, jacks, and tools with sufficient capacity for the loads.

Do not allow spectators, especially children, in the working area.
Thank You
For Purchasing Your New
TOP-SPREAD Loader Mounted Spreader

Top-Notch Machine has carefully designed and manufactured this spreader to give you many years of dependable service. It was designed to load and spread all types of waste material up to 1500 pounds (680 kg). The maximum length of the TOP-SPREAD models is 122” X 67” X 367” (310 cm x 170 cm x 170 cm).

You’ll find your spreader to be exceptionally versatile in a wide variety of agricultural applications. Here are just a few of the many jobs your TOP-SPREAD spreader can handle:

✓ Loading and spreading manure
✓ Laying windrows in open fields
✓ Filling feed bunks – fence line, circular, etc.
✓ Spreading forage for livestock bedding
✓ Spreading mulch over perennial plants such as strawberries and mushrooms

PURPOSE

The purpose of this manual is to assist you in safely assembling, mounting, operating and maintaining your spreader. You or any other person who will be assembling, operating, maintaining or working with this product are required to read and completely understand the information and instructions contained in this manual.
SECTION 1: OPERATOR’S MANUAL
GENERAL INFORMATION

The illustrations and data used in this manual were current at the time of printing, but due to possible engineering and/or production changes, your model may vary slightly in detail. The manufacturer reserves the right to redesign and/or change components as necessary without notification.

Keep this manual available for reference whenever this product is being handled or used. Provide this manual to any new owners and/or operators.

If anyone does not fully understand every part of this manual, please obtain further assistance by contacting the dealer from which this product was purchased or by contacting Top-Notch Machine at the telephone number or address listed on the back cover of this manual.

IMPORTANT NOTICE

This manual includes references to different components or areas of the spreader that are defined as follows:

**Right:** The engine-driven machine to which this product must be attached

**Left:** Directions which are determined in relation to the operator of the equipment when seated in the normal operating position

**Front:** Precautions that must be followed to prevent damage to equipment

**Rear:** Precautions that must be followed to prevent substandard performance.
**To Load the Unit**

- Load one bale at a time. If bales are frozen, put frozen side down to the table for better operation.
- Center the bale on the forks before loading on to the table. Slide forks lightly on the ground.
- Use caution when raising after loading. Objects could fall from spreader toward bystanders or the operator.
- Remove all foreign objects from spreaders

---

**DANGER**

Failure to obey the following procedure will result in death or serious injury.

Avoid contacting overhead wires.

---

**WARNING**

Failure to obey the following procedures could result in death or serious injury.

Never lift this product above the operator’s eye level

OR

to a height where visibility is obstructed, whichever is lower.

---

**NOTICE**

- Keep twine build - up to a minimum in order to reduce fire hazard and keep the machine in balance
- Adjust the discharge deflector to spread material at desired width.
- Refer to your power unit’s operator’s manual for safe operating limit and use of counterweights
- Operating power unit at maximum R.P.M. allows the spreader to do a better job of spreading the material.
- Before leaving the operator's seat, always lower the spreader forks; set the parking brake; stop the engine; remove ignition key and wait for all moving parts to stop.
WHEN YOUR POWER UNIT IS USED DURING ANY TYPE OF ASSEMBLY, OPERATION, MAINTENANCE OR OTHER WORK ON OR NEAR THIS PRODUCT:

- Before leaving the operator’s station or before beginning any type of work on this product, lower this product to the ground, apply your power unit’s parking brake, stop the engine, remove the starter key, wait for all moving parts to stop and then relieve all pressure in the hydraulic lines.

- Refer to your power unit’s operator’s manual for instructions on how to relieve hydraulic pressure in lines.

- Know your loader’s safe lifting and operating capacity and the weight of this product. See the specifications in this manual for the weight of this product and refer to your power unit’s and loader operator’s manuals for safe operating limits. Lift capacity may be reduced if using a quick-attach.

- Never allow anyone except the operator to be around the power unit or this product when either is in motion.

- Do not start up unless others are clear of the work area.

- Do not allow riders on this product or the power unit.

- Do not stand or climb on this product when raised.
MAKE SURE THAT ANYONE WHO WILL BE ASSEMBLING, MOUNTING, MAINTAINING, REPAIRING, REMOVING AND/OR STORING THIS PRODUCT:

- Do not use wood blocking that is warped, twisted or tapered.
- Never operate controls from the ground. Operate the controls only from the operator’s station.
- Never leave the equipment unattended with the engine running or with this product raised on the loader.
- Be aware of the added weight and width of this product. Reduce travel speeds accordingly, especially when traveling over rough ground.
- Keep this product close to the ground and under control when transporting.
- When transporting, be sure not to block the view of vehicle lights or the road.
- Do not place any part of your body under any part of this product unless this product is securely resting on adequate blocking or on the ground.
- Do not use blocking made of concrete blocks, logs, buckets, barrels or any other material that could suddenly collapse or shift positions.
- Do not use wood or steel blocking that shows any signs of material decay.
When dealing with hydraulics during any type of assembly, operation, maintenance or other work on or near this product:

- **Note:** Hydraulic fluid under pressure can penetrate the skin and cause serious injury or death. Hydraulic leaks under pressure may not be visible! If any fluid penetrates the skin, get immediate medical attention!

- Wear safety glasses, protective clothing and use a sound piece of cardboard or wood when searching for hydraulic leaks. Do not use your hands!

- Before connecting or disconnecting hydraulic hoses, read your tractor or power unit’s operator’s manual for detailed instructions on connecting and disconnecting hydraulic attachments.

- Make certain that all parts meet the specifications for this product when installing or replacing hydraulic hoses or fittings.
HYDRAULIC CONNECTIONS

- Disconnect the hydraulic hose quick couplers from one another and attach the quick couplers to your power unit as per the instructions in your power unit’s operator manual.
- Carefully raise the loader arm and cycle the tilt cylinders to check hose clearances and to check any interference.

AFTER CONNECTING HYDRAULIC LINES:

- Slowly and carefully raise the loader and cycle the rollback / dump cylinders to check hose clearances and to check for any interference.
- Operate the hydraulics on this product to check hose clearances and to check for any interference.
- Make certain that the hoses cannot interfere with or actuate the quick-attach mechanism.
- Make certain that hoses will not be pinched, or get tangled, in any equipment.

WARNING

Be sure to know how to operate your loader hydraulic controls. Failure to do so may lead to system back feeding and machine damage.

- Refer to your power unit’s operator’s manual and this manual for procedures and intervals, then inspect and maintain the entire hydraulic system to insure that:
  - The fluid remains clean
  - That all devices function properly
  - There are no fluid leaks
Refer to Dealing Safely with Hydraulics for proper Hydraulic Connections.
SECTION 1: OPERATOR'S MANUAL

ADJUSTING APRONS

✓ Apron chain should be adjusted to allow chain slack 3” (7.62 cm) from bottom of the frame.

✓ Adjust the apron chain at least after every 10 uses to insure proper chain movement.

**WARNING**

Not Adjusting the Apron chain prior to use may cause chain links to break. Failure to maintain chain tension could result in death or serious injury.
SAFE MOUNTING PROCEDURES

WHEN MOUNTING THIS PRODUCT TO YOUR POWER UNIT:

Refer to the operator’s manuals of your power unit, your loader and your quick-attach for special or detailed mounting instructions.

This product should fit onto the quick-attach or loader arms of your power unit the same as the original products that were designed by your loader / quick-attach manufacturer.

If this product does not fit properly, contact Top-Notch Machine before operating.

Never place your finger into the mounting plate or 3-point hitch or loader holes. A slight movement of the power unit or this product could cause serious injury.

Make certain that all safety signs are in place and legible.

Refer to the safety sign page in this manual for the placement of safety signs for this product.

Inspect driveline shield for free rotation.

Replace all damaged or excessively worn parts and hardware only with genuine Top-Notch Machine parts or with properly rated fasteners, hydraulic hoses or fittings.

Make certain that all locking pins, latches and connection devices are properly installed and secured.

Make certain that all shields are in place and secure.

Never use your spreader on a power unit that is not equipped with a cab or ROPS and operator restraints (seat belts or equivalent devices).

Make sure spreaders are free from foreign objects.

Drive slowly through gates and doors.

Know your loader’s safe operating weight limit and the weight of your loader attachment.

WARNING:

Obey all safety instructions listed in this section and throughout this manual. Failure to obey instructions in this section could result in death or serious injury.
WHEN MOUNTING THIS PRODUCT TO YOUR POWER UNIT:

- Place this product on a firm, level surface that is large enough to safely accommodate this product, your power unit and all workers involved in the mounting process. Be sure all connection points are properly secured.
- Refer to the operator’s manual(s) for your power unit, loader and quick-attach and follow the mounting instructions contained in the corresponding manual.
- Carefully raise the loader arms and cycle the tilt cylinders to check clearances and to verify that all mounting procedures have been successfully completed.

Think SAFETY! Work SAFELY!

WHEN ADJUSTING, SERVICING OR REPAIRING THIS PRODUCT:

- Make no modifications to your TOP-SPREAD spreader.
- When making repairs, use only genuine Top-Notch Machine parts or, for fasteners, hydraulic hoses or hydraulic fittings, use only properly rated parts.
- When replacing parts that had safety signs attached, you must order the appropriate safety sign by its part no. and attach it properly to the replacement part.

Whenever you use your TOP-SPREAD Spreader, think SAFETY! Work SAFELY!
**Safety Sign Maintenance**

Your new TOP-SPREAD spreader comes with all safety signage properly affixed. You are responsible for keeping all these safety signs clean and legible. If any safety signs become illegible, damaged or missing, you are responsible for ordering and replacing those signs before operating your spreader. Any replacement parts for parts with safety signs affixed must also have the proper safety sign attached. All safety signs are available free of charge from Top-Notch Machine or your dealer.

**How to Apply Safety Signs**

Clean the area of application with non-flammable solvent. Then, wash the same area with soap and water. Allow the surface to fully dry. Remove the backing from the safety sign, exposing the adhesive surface. Apply the safety sign to the position shown in the diagram and smooth out any bubbles.

**Ordering Signs**

When ordering replacement safety signs, use the correlating part no. for each sign required as shown below

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MP16.20181</td>
<td>ROTATING PARTS WARNING</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>NH9611750</td>
<td>DO NOT OPERATE W/O SHIELD WARNING</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>467450</td>
<td>MOVING PARTS HAZARD WARNING</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>582430</td>
<td>CREAM AND SILVER AW LOGO</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>MP16.20178</td>
<td>BEFORE OPERATING WARNING DECAL</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>608080</td>
<td>FLAG DECAL</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>K18534203</td>
<td>FEMA DECAL</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>605550</td>
<td>4 X 7 AW LOGO</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>MP21.09024</td>
<td>HIGH PRESSURE OIL WARNING</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>TOP-SPREAD DECAL</td>
<td>1</td>
</tr>
</tbody>
</table>
**WARNING**

ROTATING PARTS INSIDE. KEEP YOUR BODY AND CLOTHING AWAY.

FAILURE TO HEED COULD RESULT IN DEATH OR SERIOUS INJURY.

**WARNING**

MOVING PART HAZARD

To prevent serious injury or death from moving parts:

- Close and secure all guards and shields before starting equipment
- Keep hands, feet, hair, and clothing away from moving parts
- Disconnect and lockout power source before adjusting or servicing

**WARNING**

Moving parts can crush or dismember.

DO NOT OPERATE WITHOUT SHIELD IN PLACE.

Disconnect PTO before adjusting or servicing drives.

Failure to heed may result in serious injury.

**WARNING**

BEFORE YOU OPERATE THIS EQUIPMENT:

Read the operator’s manual and learn to operate this machine safely.

Keep children away.

Machines can be hazardous in the hands of an untrained operator.

Failure to follow safety, operating and maintenance instructions could result in death or serious injury.

If you have questions: contact your dealer.
WARNING

AVOID HIGH-PRESSURE FLUIDS

AVOID THE HAZARD BY RELIEVING PRESSURE BEFORE DISCONNECTING HYDRAULIC OR OTHER LINES. TIGHTEN ALL CONNECTIONS BEFORE APPLYING PRESSURE.

SEARCH FOR LEAKS WITH A PIECE OF CARDBOARD. PROTECT HANDS AND BODY FROM HIGH PRESSURE FLUIDS.
Proper Locations for Replacement Safety Signs

NOTE: Views of safety signs 1 through 7 are shown in reduced size with their corresponding part numbers
POWER UNIT SPECIFICATIONS

IMPORTANT: Exceeding any of the recommended power unit specifications CAN result in damage to your power unit and/or this product and WILL VOID all Top-Notch machine warranties.

<table>
<thead>
<tr>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 GPM at 2500 PSI</td>
<td>40 GPM at 3000 PSI</td>
</tr>
</tbody>
</table>

IMPORTANT: Exceeding any of the recommended power unit specifications CAN result in damage to your power unit and/or this product and WILL VOID all Top-Notch machine warranties.

Weight Bearing Requirements for power unit:

Minimum: 2800 lbs (Spreader and Material)
MAINTENANCE

Regular maintenance is the key to long equipment life and safe operation. It is very important that these maintenance functions be performed as described below.

SAFETY FIRST !!!
READ AND UNDERSTAND THE SAFETY INSTRUCTIONS BEFORE BEGINNING ANY MAINTENANCE OPERATION.

IMPORTANT: The flail tube on this machine is a fully balanced assembly. If for any reason the flails must be removed, they must be returned to the same position as originally installed. If this is not done, a balance problem will result, causing machine vibration. Number flails and inserts and their positions before you do any work.

BEFORE FIRST USE
✓ Inspect the attachment for shipping damage. If damage does exist, do not operate until the damaged parts have been replaced or repaired.

BEFORE EACH USE
✓ Check for loose or badly worn parts.
✓ Conveyor chain should be adjusted to allow chain slack 3” (7.62 cm).
✓ Make sure that all hydraulic fittings are tightened and that there are no leaks in any fittings or hoses.
✓ Inspect the rotor and all rotating parts for twine or wire build-up.
✓ Check for cylinder wear, broken flails and flail bracket wear. Replace with new “Balzer” flails to keep machine in balance.
✓ Make sure that all safety signs are in place, are clean, legible and in place (See the Safety Sign section

AFTER EVERY 10 HOURS OF OPERATION
✓ Grease all roller bearings (refer to diagram
✓ Inspect and tighten Allen screws on bearing.
Maintain Roller Bearings and 
Tighten Drive Sprockets 
Regularly

After 10 hours of operation, service the roller bearings of your TOP-SPREAD model.

Grease all roller bearings on each of the 2 sprockets on the drive shaft.

Inspect each sprocket on the driving shaft and tighten any loose Allen screws to make sure the sprockets are properly aligned and securely affixed to the shafts.
SAFETY FIRST !!!

READ AND UNDERSTAND THE SAFETY INSTRUCTIONS

BEFORE BEGINNING ANY MAINTENANCE OPERATION.

**WARNING:** Hydraulic fluid under pressure can penetrate skin, resulting in serious injury or death.

✓ Always relieve hydraulic pressure before disconnecting lines.
✓ Shut off engine, set parking brake and relieve hydraulic pressure before connecting or disconnecting hydraulic lines. Refer to your power unit’s manual for instruction on how to relieve hydraulic pressure in lines.
✓ Before applying pressure to the system, be sure that all connections are tight and be sure there are no damaged hoses, lines or fittings.
✓ Wear safety glasses and use metal or wood when searching for leaks. Do not use your hands.

**WARNING:** Before servicing the loader, remove the attachment and make certain the lift arms are lowered to their lowest position or that the arms are supported by the mechanical lock up devices (if the machine is so equipped).

✓ Steam-clean the power unit before any installation is made to the hydraulic system.
✓ Remove any attachment from the power unit and position on a level surface.

WORK SAFELY!

A CAREFUL OPERATOR IS THE BEST INSURANCE
SCHEDULED MAINTENANCE

**Weekly or more often as needed**

- ✓ Check drive chains tension
- ✓ Oil chains
- ✓ Check apron chain tension (3” slack from bottom of frame)
- ✓ Grease two bushings
- ✓ Grease four bearings

**Monthly**

- ✓ All weekly maintenance plus;
- ✓ Check apron for wear
- ✓ Check sprockets for wear
- ✓ Check cup knives for wear
- ✓ Replace when worn out.
- ✓ Check Hydraulics for:
  - ✓ Worn tips
  - ✓ Worn hoses
- ✓ Check electrical control cords:
  - ✓ Cracks
  - ✓ Pinched or broken wire
- ✓ Plug wear
- ✓ Switch operation
- ✓ Switch connections
- ✓ Check motor mount bolts to ensure they are tight
- ✓ Check hydraulic drive couplers
**Top-Spread Wiring Schematics**

Spool Valve

Female 14 Pin Plug

White (Ground)

Yellow

Green

John Deere (or Supplied Harness) 14 Pin Wiring
- White Ground to A
- Green to G
- Yellow to C

Most Other Brands:
- Ground: B
- Hot: C&D, E&F
- Do Not Plug into Bobcat!

**Wiring Harness Schematics**

Male 14 Pin Plug

- White (Ground)
- Yellow
- Green

21 ft. Wire

Connector

Momentary Switch

Skid Steer Battery

14 ft. Wire

Skid Steer Harness 14 Pin Wiring
- White Ground to A
- Green to G
- Yellow to C
UNIT OPERATION

After successfully mounting your spreader and connecting the hydraulic quick connects along with plugging in your electrical plug to match your loader’s needs, refer to your loader’s operating manual for instructions on how to engage the auxiliary hydraulics. This is usually accomplished by rolling a switch on your right hand joystick either forward or to the left. Start your hydraulics slowly to ensure they are running forward – the rotors are spinning clockwise toward the bed of the spreader. Once you have ensured proper hydraulic movement, check again to make sure there are no leaks, no hoses being pinched, etc from the mounting and safety instructions.

Engage your auxiliary hydraulics all the way on and then proceed to “Lock” them in. This is accomplished differently on different models of skid steers. All require the action of holding the roll button and one additional action. Usually by clicking the trigger button under the right hand joystick. In newer John Deere models, this is accomplished by pushing the bottom left button on the left hand joystick. In some Bobcat models, this feature is up above by the on/off controls.

Your apron feeder chain will only work if your hydraulics are engaged!

If you plugged your TOP-SPREAD into your skid steer using a 14 pin plug: The buttons on your right hand joystick should operate your apron chain movement forward and backward.

If your plugged your TOP-SPREAD into your Bobcat using a 7 pin Adapter: Your bottom toggles on either joystick will operate the apron chain.

Begin by bumping the switch to ensure you know which button operates which direction of movement.

Adjust apron speed with the installed flow control knob on the unit to the speed you desire for your material and situation.
Loading Material

Ensure your hydraulics are disengaged before loading material.

Bales should be placed on the ground flat side down on the end. If bales are not in this fashion, you are able to use the spreader legs to reach over the bale to tip it on end.

To load material, raise TOP-SPREAD using your loader arms and start to tilt over in front of you. Use the sight holes in the spreader to determine when your tines are level with the loading surface. The tines are not square with the spreader bed and will settle to level before the bed appears to be.

Lower the spreader so the tines are flat on the loading surface. Move your loader forward until the bale is all the way against the spreader floor. Use the sights in the floor to gage this progress.

Roll the spreader back up on to its legs as to avoid unnecessary pressure on your loader cylinders. Complete this rotation until the spreader is completely upright again resting on the ground. Your bale should be flat side facing you and round side toward the rotors as to unroll the bale while processing.

Some prefer to cut the net wrap at this time. If doing so, cut along both edges and peel off the top. The bottom will follow the apron chain out.

If bale is not square in spreader, use your loader movement to adjust bale placement.
Once your material is loaded squarely, slowly engage your auxiliary hydraulics while moving the apron chain away from the rotors. This will allow the rotors plenty of room to reach maximum speed. Once fully engaged and locked in, start bumping the button to feed the bale into the rotors.

Do not press and hold the feed button. This will overload the rotors.

Slowly feed your bale into the rotors. If bale is not being moved into the rotors, you may need to increase your flow control to allow more power for this action.

If you hear the knives “clanging” stop feeding and allow the rotors to catch up. If bogged down or wedged, simply reverse your apron chain and start processing again.

If your material is stuck and reversing the apron does not work, utilize your skid steer movements to get your material to fall backward away from the rotors and continue to process.

If you are spreading too far, simply throttle down your machine for less power.

It may take a few bales to be accustom to the operation, so we recommend practicing with the spreader empty and then easier material like dry cornstalks to gain confidence in an open area. Be aware of the spreader size and where you need to maneuver.

See our YouTube page for videos of other customers operating and how to load the bale, etc.
ART'S-WAY MANUFACTURING CO., INC.  
MANUAL NO. 650200

SECTION 1: OPERATOR'S MANUAL

ROTOR KNIFE MAINTENANCE

For most efficient operation, having clean rotors will go a long ways. We recommend cleaning the net wrap/twine off of your rotors every 5 bales. This will allow for free rotation of the knives for better cutting power.

This is accomplished with a regular utility knife, hot knife, etc. Most of the net wrap will end up on your bottom rotor.

Use EXTREME CAUTION when cleaning rotors to not harm yourself or others with the knives, rotors, hangers, or removal equipment.

When completing extended maintenance, remove rotor caps with a 9/16 drive and remove the built up net wrap and material from underneath to allow for free rotor movement and longer lasting bearing life.
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>650077</td>
<td>MAIN FRAME WLDT</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>650136</td>
<td>FRONT DOOR WLDT</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>650152</td>
<td>FRONT DOOR BRACE</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>650310</td>
<td>1/4&quot; SPACER</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>005200</td>
<td>WASHER, FLAT 1/2 STD</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>127890</td>
<td>HLNUT 0.5000-13-D-N</td>
<td>20</td>
</tr>
<tr>
<td>7</td>
<td>040900</td>
<td>PIN, ROLLER 3/16 X 1-5/8 ZN</td>
<td>1</td>
</tr>
</tbody>
</table>
GEAR ASSEMBLY

# PARTS LIST

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>650031</td>
<td>TENSION BOLT BLOCK</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>650130</td>
<td>60 X 14T 1.25 ID 1</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>650129</td>
<td>60 X 14T 1.25 ID 1</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>650131</td>
<td>15 TOOTH #60 IDLER</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>650132</td>
<td>60BS34 SPROCKET</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>605510</td>
<td>CLAMP, HYD HOSE</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>605520</td>
<td>COVER, HOSE CLAMP</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>033430</td>
<td>BOLT, CRG 3/8-16 x 3&quot;</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>E552044</td>
<td>NUT, NYLOC 3/8-16</td>
<td>16</td>
</tr>
<tr>
<td>10</td>
<td>650168</td>
<td>FENDER WASHER 2&quot;</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>021180</td>
<td>WASHER, LOCK 3/8</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>012260</td>
<td>BOLT, HHCS 3/8-16 X 1</td>
<td>24</td>
</tr>
<tr>
<td>13</td>
<td>650300</td>
<td>3/4 SPACER</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td>005370</td>
<td>WASHER, LOCK 1/2</td>
<td>4</td>
</tr>
<tr>
<td>15</td>
<td>990840</td>
<td>BOLT, HHCS 1/2-13 x 3&quot;</td>
<td>2</td>
</tr>
<tr>
<td>16</td>
<td>005200</td>
<td>WASHER, FLAT 1/2 STD</td>
<td>8</td>
</tr>
<tr>
<td>17</td>
<td>650166</td>
<td>BOLT, HHCS 1/2-13 X 5</td>
<td>2</td>
</tr>
</tbody>
</table>

**NOTE:** DO NOT SCALE MODEL UNLESS OTHERWISE SPECIFIED

**MACHINING DRAWINGS:** REMOVE ALL BURRS & SHARP EDGES.

**DIMENSIONS:**

- INCHES: ±0.060
- ONE PLACE: ±0.030
- TWO PLACE: ±0.010

**ANGLES:** ±1°

**TOLERANCES:**

- .X: ±0.010
- .XX: ±0.005
- .XXX: ±0.002

**REVISIONS:** EP# REV.

**MATERIAL:** LTR DESCRIPTION APPR. DATE E.C.N.
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>650031</td>
<td>TENSION BOLT BLOCK</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>650130</td>
<td>60 X 14T 1.25 ID</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>650129</td>
<td>60 X 14T 1.25 ID</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>650131</td>
<td>15 TOOTH #60 IDLER</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>650132</td>
<td>60BS34 SPROCKET</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>605510</td>
<td>CLAMP, HYD HOSE</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>605520</td>
<td>COVER, HOSE CLAMP</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>033430</td>
<td>BOLT, CRG 3/8-16 X 3&quot;</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>E552044</td>
<td>NUT, NYLOC 3/8-16</td>
<td>16</td>
</tr>
<tr>
<td>10</td>
<td>650168</td>
<td>FENDER WASHER 2&quot;</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>021180</td>
<td>WASHER, LOCK 3/8</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>012260</td>
<td>BOLT, HHCS 3/8-16 X 1</td>
<td>24</td>
</tr>
<tr>
<td>13</td>
<td>650300</td>
<td>3/4 SPACER</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td>005370</td>
<td>WASHER, LOCK 1/2</td>
<td>4</td>
</tr>
<tr>
<td>15</td>
<td>990840</td>
<td>BOLT, HHCS 1/2-13 X 3&quot;</td>
<td>2</td>
</tr>
<tr>
<td>16</td>
<td>005200</td>
<td>WASHER, FLAT 1/2 STD</td>
<td>8</td>
</tr>
<tr>
<td>17</td>
<td>650166</td>
<td>BOLT, HHCS 1/2-13 X 5</td>
<td>2</td>
</tr>
</tbody>
</table>
SHAFT ASSEMBLY

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>650148</td>
<td>FRONT APRON SHAFT</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>650149</td>
<td>REAR APRON SHAFT</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>650008</td>
<td>ADJUSTER APRON</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>650002</td>
<td>3/4&quot; x 1-1/4&quot; BUSHING</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>650003</td>
<td>1-1/4&quot; x 1-1/4&quot; BUSHING</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>650151</td>
<td>APRON CHAIN SPROCKET</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>650161</td>
<td>WELDED SPROCKET</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>103-2016-012-3dmodel</td>
<td>HYDRAULIC MOTOR</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>mp40.00229</td>
<td>SHAFT COUPLER</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>005200</td>
<td>WASHER, FLAT 1/2</td>
<td>8</td>
</tr>
<tr>
<td>11</td>
<td>650167</td>
<td>BOLT, HHCS 1/2-13 X 10</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>005360</td>
<td>NUT, HEX 1/2-13</td>
<td>2</td>
</tr>
</tbody>
</table>
### SECTION 2: ILLUSTRATED PARTS LIST

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>650148</td>
<td>FRONT APRON SHAFT</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>650149</td>
<td>REAR APRON SHAFT</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>650008</td>
<td>ADJUSTER APRON</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>650002</td>
<td>3/4&quot; X 1-1/4&quot; BUSHING</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>650003</td>
<td>1-1/4&quot; X 1-1/4&quot; BUSHING</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>650151</td>
<td>APRON CHAIN SPROCKET</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>650161</td>
<td>WELDED SPROCKET</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>103-2016-012-3DMODEL</td>
<td>HYDRAULIC MOTOR</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>MP40.00229</td>
<td>SHAFT COUPLER</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>005200</td>
<td>WASHER, FLAT 1/2 STD</td>
<td>8</td>
</tr>
<tr>
<td>11</td>
<td>650167</td>
<td>BOLT, HHCS 1/2-13 X 10</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>005360</td>
<td>NUT, HEX 1/2-13</td>
<td>2</td>
</tr>
</tbody>
</table>
BEATER BEARING ASSEMBLY

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>650130</td>
<td>60 X 14T 1.25 ID</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>010560</td>
<td>BEARING ASSEMBLY</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>021530</td>
<td>KEY, SQUARE 3/8 X 2</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>021180</td>
<td>WASHER, LOCK 3/8</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>012260</td>
<td>BOLT, HHCS 3/8-16 X 1</td>
<td>24</td>
</tr>
<tr>
<td>6</td>
<td>127890</td>
<td>HLNUT 0.5000-13-D-N</td>
<td>20</td>
</tr>
<tr>
<td>7</td>
<td>014770</td>
<td>BOLT, HHCS .50-13X1.50</td>
<td>16</td>
</tr>
</tbody>
</table>

NOTE: DO NOT SCALE MODEL UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN INCHES

MACHINING DRAWINGS: REMOVE ALL BURRS & SHARP EDGES.

- T. POOLE

LISTED

1:12

WEIGHT

2096.25

NEW RELEASE ON SOLIDWORKS

TSP

SOMETHING:

05/16/17

02/06/17
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>650130</td>
<td>60 X 14T 1.25 ID</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>010560</td>
<td>BEARING ASSEMBLY</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>021530</td>
<td>KEY, SQUARE 3/8 X 2</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>021180</td>
<td>WASHER, LOCK 3/8</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>012260</td>
<td>BOLT, HHCS 3/8-16 X 1</td>
<td>24</td>
</tr>
<tr>
<td>6</td>
<td>127890</td>
<td>HLNUT 0.5000-13-D-N</td>
<td>20</td>
</tr>
<tr>
<td>7</td>
<td>014770</td>
<td>BOLT, HHCS .50-13X1.50</td>
<td>16</td>
</tr>
</tbody>
</table>
### BEATER ASSEMBLY

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>650036</td>
<td>Rotor Tube</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>650074</td>
<td>Beater End, NonDrive</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>650075</td>
<td>Beater End, Drive Side</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>650017</td>
<td>Hammer Hanger</td>
<td>56</td>
</tr>
<tr>
<td>5</td>
<td>650159</td>
<td>Knife Sleeve</td>
<td>28</td>
</tr>
<tr>
<td>6</td>
<td>038560</td>
<td>Bolt, HHCS 1/2-13 X 4&quot;</td>
<td>28</td>
</tr>
<tr>
<td>7</td>
<td>127890</td>
<td>HLNUT 0.5000-13-D-N</td>
<td>28</td>
</tr>
<tr>
<td>8</td>
<td>650178</td>
<td>Beater Flap</td>
<td>28</td>
</tr>
</tbody>
</table>

**NOTE:** DO NOT SCALE MODEL UNLESS OTHERWISE SPECIFIED

- **MACHINING DRAWINGS:** REMOVE ALL BURRS & SHARP EDGES.
- **DIMENSIONS:** ARE IN INCHES
- **ANGLES:** ± 1°
  - .X: ±.060
  - .XX: ±.030
  - .XXX: ±.010
- **REVISIONS:**
  - **EP#**
  - **REV.**
  - **TSP**
  - **E.C.N.**
  - **LISTED**
  - **APP.**
  - **DATE**
  - **E.C.N.**
  - **02/02/17**
  - **05/17/17**

**Material:**
- **LTG DESCRIPTION**
- **APPR. DATE**
- **E.C.N.**
- **LISTED**
- **TSP**

**Drawing Information:**
- **DRAWING NO.** 650065 rotor assembly for manual
- **SIZE DRAWING NO.**
- **SCALE**
- **DATE**
- **TITLE**
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>650036</td>
<td>ROTOR TUBE</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>650074</td>
<td>BEATER END, NONDRIVE</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>650075</td>
<td>BEATER END, DRIVE SIDE</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>650017</td>
<td>HAMMER HANGER</td>
<td>56</td>
</tr>
<tr>
<td>5</td>
<td>650159</td>
<td>KNIFE SLEEVE</td>
<td>28</td>
</tr>
<tr>
<td>6</td>
<td>038560</td>
<td>BOLT, HHCS 1/2-13 X 4&quot;</td>
<td>28</td>
</tr>
<tr>
<td>7</td>
<td>127890</td>
<td>HLNUT 0.5000-13-D-N</td>
<td>28</td>
</tr>
<tr>
<td>8</td>
<td>650178</td>
<td>BEATER FLAP</td>
<td>28</td>
</tr>
</tbody>
</table>
NOTES:
NOTES:
Manuals are available from your local dealer or Art’s-Way Manufacturing Co., Inc. for the operation, service, and repair of your machine. For prompt convenient service, contact your local dealer for assistance in obtaining the manuals for your machine.

Your local dealer can expedite your order for operator manuals, illustrated parts catalogs, service manuals, and maintenance records.

Always give the Machine Name, Model, and Serial Number so your local dealer can provide the correct manuals for your machine.

Art’s-Way Manufacturing Co., Inc. reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to install them on units previously sold.

Except as expressly authorized, no part of this manual may be reproduced, copied, transmitted, disseminated, downloaded or stored in any storage medium, for any purpose without the express prior written consent of Art’s-Way Manufacturing Co., Inc.

ART’S-WAY MANUFACTURING CO., INC.
HWY 9 WEST - PO Box 288
Armstrong, IA. 50514 U.S.A