

# LIGHT TRUCK MATERIAL SPREADER MODELS 825, 815, 625, 615

# **OPERATOR'S MANUAL**

DO NOT USE OR OPERATE THIS EQUIPMENT UNTIL THIS MANUAL HAS BEEN READ AND THOROUGHLY UNDERSTOOD

PART NUMBER 79202499 Rev. C

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# TO THE PURCHASER

This product is designed and manufactured to give years of dependable service, when properly maintained and used for the purpose for which it is intended. Never allow anyone to operate this equipment until they fully understand the complete contents of this manual. It is the responsibility of owners who do not operate this equipment to ensure the operator is properly instructed and understands the contents of this manual. It is also the owner's responsibility to ensure that anyone operating this equipment is mentally and physically capable of so doing.

Important information is contained in this manual to help ensure safe and efficient operation.

If you have any questions about this manual, or the equipment discussed herein, contact your Hiniker dealer.

This is the safety alert symbol. It alerts an operator to information concerning personal safety. Always observe and heed these instructions, otherwise death, or serious injury can result!

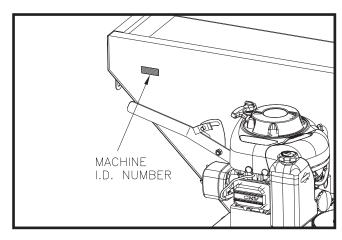
All references to LEFT or RIGHT mean viewing the spreader from the rear and facing the truck.

This Operator's manual is shipped with this equipment. Contact your Hiniker dealer for additional copies.

Always obtain original Hiniker service parts. Substitute parts could adversely affect equipment performance and warranty.

Check that your dealer has forwarded the Hiniker delivery report copy and the machine serial number to maintain maximum service and warranty benefits. This does not put you on any mailing list and information thereon is not available to others.

Your spreader's identification number plate is at the location shown below.



DWG. NO. 6018

| Record the following information for later reference when obtaining service parts: |
|--|
| Purchase Date  |
| Purchaser's Name   |
| Dealer's Name  |
| Machine Serial No  |

# SAFETY

This is the safety alert symbol. It alerts an operator to information concerning personal safety. Always observe and heed these instructions, otherwise death or serious injury can result!

Operator safety is a principle concern in equipment design and distribution. However, many accidents occur because a few seconds of thought, and a more careful approach to handling, were ignored.

Accidents can be avoided by knowing and following the precautions cited in this manual.

#### **GENERAL SAFETY**

- Read this manual thoroughly. Make sure the operator understands it and knows how to operate this equipment safely. This equipment can kill or injure an untrained or careless operator and bystanders. If you sell this equipment, ensure the new owner acknowledges receipt of this manual.
- Make sure the engine cover is securely fastened to the spreader before starting the engine and operating the spreader.
- Do not attempt to handle or service this equipment, or direct others to do the same, unless you know how to do it safely and have the proper tools for the job.
- Keep hands, feet, hair, and clothing away from moving parts. Flying material can cause bodily injury. Wear eye protection.
- Do not alter the equipment to the extent of compromising safety or performance.
- Material to be spread can be dangerous. Improper selection, application, use or handling may be a hazard to persons, vehicle or other property. Follow instructions and precautions given by the material manufacturer.
- Do not over-load your vehicle beyond payload limits. If there are any questions, contact the vehicle manufacturer.
- Do not use side extensions on your spreader to increase salt storage capacity. Using side extensions may damage hopper and cause injury to personnel.

- Do not drive motor vehicle with swing away chute open or unlatched. Make sure swing away chute is fully engaged in its working position or damage to your spreader chute may occur.
- 10. Make sure the spreader is securely fastened to the vehicle in accordance with this manual.

#### **BEFORE OPERATION**

- Discipline yourself to visually check for worn, damaged or cracked parts before starting use. Replace these with genuine Hiniker parts.
- Check all controls and operating functions of the machine in a safe area before starting to work.
- Do not lubricate, adjust or clean the machine while it is running. After making adjustments, check machine thoroughly for loose parts, hardware and tools.

#### **DURING OPERATION**

- Drive carefully and always wear seat belts when operating a motor vehicle.
- Ensure everyone is clear of the machine, especially away from blind areas of the operator, before starting or operating this equipment.
- Stay out of hopper when conveyor power source is engaged. If machine becomes blocked, do not attempt to remove blockage until machine has been shut off and conveyor and spinner movement have stopped.
  - Use a shovel or other long-handled tool to reach inside the hopper. Never attempt to break up material inside the hopper with hands or feet.
- Do not ride in any part of spreader while vehicle is in motion.
- Set the brakes and stop the truck's engine before adjusting or servicing your spreader.

#### AFTER OPERATION

- Inspect the spreader for components that have become excessively worn or damaged and must be repaired or replaced.
- Develop a regular maintenance schedule to ensure safe, dependable spreader operation.

# **OPERATING PROCEDURES**

#### **GENERAL INFORMATION**

Hiniker spreaders are capable of dispersing a variety of dry materials for control of ice on roadways, walkways and parking lots.

Vehicle load carrying capacity limits the maximum load that can be safely transported, which could be less than the volumetric capacity of the spreader. Check the vehicle's load rating certification sticker and DO NOT overload the vehicle beyond its Gross Vehicle Weight Rating (GVWR) or its Gross Axle Weight Rating (GAWR). Spreaders are recommended to be mounted on trucks over 8,500 lb. GVWR.

Use the following tables to calculate vehicle payload when material is loaded in the spreader.

# VOLUMETRIC CAPACITY: (Cubic Yards, Approx.)

|                     | LEVEL | HEAPED |
|---------------------|-------|--------|
| Standard 8' Box     | 1.8   | 2.27   |
| Standard 6 1/2' Box | 1.5   | 1.84   |

## **WEIGHT:** (Pounds, Approx.)

| 8' SS Standard Box                  | 537 |
|-------------------------------------|-----|
| 8' Standard Box                     | 602 |
| 6 1/2' SS Standard Box              | 494 |
| 6 1/2' Standard Box                 | 550 |
| Short Spinner Kit                   | 33  |
| Long Spinner Kit                    | 42  |
| Hinged Hopper Grids, 8' Box         | 55  |
| Hinged Hopper Grids, 6 1/2' Box     | 45  |
| Adjustable Inverted "V", 8' Box     | 26  |
| Adjustable Inverted "V", 6 1/2' Box | 20  |

# MATERIAL WEIGHTS: (Pounds Per Cubic Yard, Approx)

| Very Coarse Rock Salt | 950   |
|-----------------------|-------|
| Coarse Rock Salt      | 1,215 |
| Coarse Sand - Dry     | 2,565 |
| Coarse Sand - Wet     | 3,240 |

Calculate total material weight by multiplying pounds per cubic yard by cubic yards of material.

Local, state and federal regulations may require flashing lights, center high mounted stop light, or other additional equipment for operation on public roadways. It is the owners responsibility to know and follow laws as they apply in his area.

Always examine the spreader for worn or damaged components prior to operation. During operation, listen for unusual noise from the spreader that might indicate component failure. Never run a machine in need of repair.

Start the spreader for a short period of time before loading material to test for proper function of moving parts.

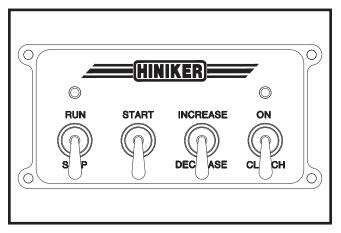
After loading, run the spreader in an isolated area, clear of people, to become familiar with the controls and to verify the correct spread pattern. Adjust deflectors on the discharge chute to achieve the desired spread.

WARNING: Stop the conveyor and set the vehicle parking brake before leaving the vehicle to make adjustments.

If loading the hopper the night before an impending snowfall or ice storm, park the spreader indoors, if possible, to help prevent freeze-up of material before morning.

#### **Sander Control Box**

The spreader cab control consists of a power/ kill switch, a start switch, a throttle speed control switch, and a clutch on/off switch.



DWG. NO. 3184

Before starting the engine, check that the clutch switch is in the OFF position.

To start the engine, first turn the power switch to RUN, then hold the throttle control switch at INCREASE for 3 seconds to choke the engine. Hold the start switch at START until the engine is runnina.

IMPORTANT: Do not hold the start switch for longer than 15 seconds at a time when attempting to start the engine. Allow the starter motor to cool for 2 minutes between attempts.

Once the engine has started, move the throttle control switch to DECREASE until the engine runs at the desired speed.

IMPORTANT: Prolonged operation of the engine at full or partial choke may cause premature engine wear or failure due to gasoline diluted oil or fouled spark plug.

The engine can also be started by using the recoil starter with the power switch in the RUN position.

CAUTION: If the battery has been removed and machine is to be hand started, be sure the positive cable (red) at the battery end has the terminal taped to prevent sparking to ground when the engine is running.

The electric clutch can be engaged or disengaged at any engine speed. However, since engagement time and torque is almost instantaneous, to prevent premature spinner chain failure and chain tension loss, it is recommended that the electric clutch be engaged at the lowest possible engine speed without killing the engine.

Burnishing the clutch is necessary to achieve rated torque capacity. Never perform burnishing while drive is loaded. New clutches and clutches that have not been used for a long time, should be burnished before full load operation by the following procedure:

- Rotate the clutch and check for rubbing or interference. Reinstall chain, do not over tighten.
- Run at 50% throttle.
- Engage and disengage the clutch 25 times. (10 seconds on/10 seconds off).
- 4. Increase to 75% throttle.
- Engage and disengage the clutch 25 times. (10 seconds on/10 seconds off).

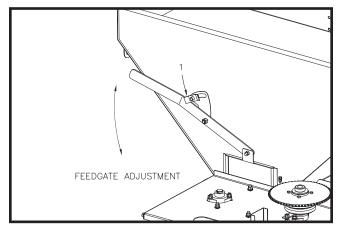
Disengage the clutch and move the power switch to the STOP position when done using the spreader.

#### SPREAD CONTROL

Thickness of material cover is controlled by four variables:

#### 1. Feedgate Setting:

Raising or lowering the feedgate will increase or decrease the amount of material delivered to the spinner for any given conveyor speed. Gate openings range from 3/8" to 4 1/4".



DWG. NO. 6019

To set the feedgate position loosen the nut at location 1. Use the feedgate handle to move the feedgate into the desired position. Lock the handle into position by retightening the nut.

## 2. Conveyor Speed:

A faster conveyor speed will deliver more material to the spinner.

## 3. Truck Speed:

The slower the vehicle travels, the more material covers the ground.

#### 4. Width of Spread:

A wide spread pattern produces a thinner material cover.

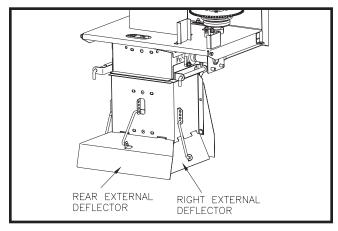
Spread width is controlled by two variables:

Spinner Speed (determined by conveyor speed):

A faster spinner speed produces a wider pattern.

#### 2. Deflector Positions:

The three external deflectors control the size of the spread.

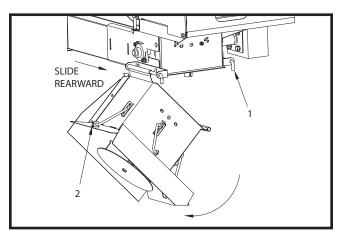


DWG. NO. 6020

Raising any of the three external deflectors at the bottom of the discharge chute will produce a wider, thinner distribution of material to that same side. Adjust the various speeds and settings one at a time to produce the desired spread pattern.

#### **SWING AWAY CHUTE**

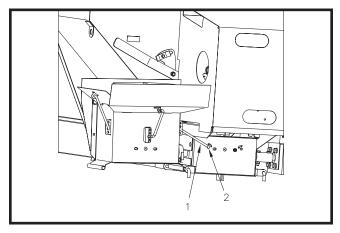
Hiniker spreaders are equipped with a swing away chute making cleaning of the hopper and storage much easier. The swing away chute is for clean out and storage only. Do not drive motor vehicle with swing away chute open or not fully engaged in its working position.



DWG. NO. 6021

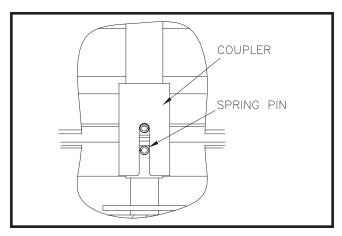
#### SHORT SPINNER OPERATION

To utilize this option pull the pin at location 1 and allow the chute to swing open. This disengages the spinner from the spreader. The spinner may need to be rotated slightly to fully disengage the spinner. Slide the chute rearward about 1 1/2 inches. Pull the hair pin cotter at location 2. Disengage the deflector pin from the hole in the deflector



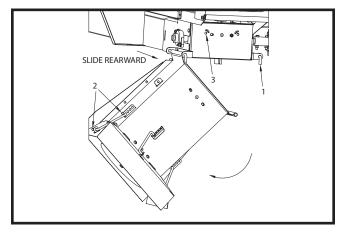
DWG. NO. 6022

Rotate the chute assembly approximately 180 degrees. Insert the pin (arrow 1) from the external deflector into the hole of the top chute mount at location 2. Insert the hair pin cotter into the pin behind the top chute mount to secure the chute in this position.



DWG. NO. 6023

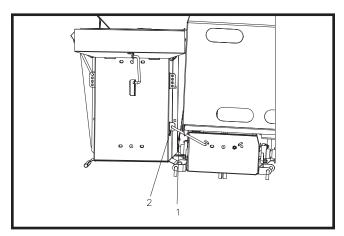
To realign the shafts for spreading, reverse the above steps. When the chute has been secured to the spreader, check that the coupler has fully engaged the spring pin on the spinner shaft. If it is not engaged turn the spinner shaft until the spring pushes the coupler over the spinner shaft and the coupler engages the spring pin. A fully engaged spinner will look like the above drawing.



DWG. NO. 6024

#### LONG SPINNER OPERATION

To utilize this option pull the pin at location 1 and allow the chute to swing open. This disengages the spinner from the spreader. The spinner may need to be rotated slightly to fully disengage the spinner. Slide the chute rearward about 1 1/2 inches. Pull the (2) hair pin cotters at location 2. Remove the left deflector pin from the chute assembly. Insert one end of the pin into the hole in the top chute mount at location 3. Insert the hair pin cotter into the pin hole behind the top chute mount to secure the pin in position.



DWG. NO. 6025

Rotate the chute assembly approximately 180 degrees. Insert the other end of the pin (arrow 1) from the external deflector into the formed tab of the spinner assembly at location 2.

Insert the hair pin cotter to secure the chute assembly in position.

To realign the shafts for spreading, reverse the above steps. When the chute has been secured to the spreader, check that the coupler has fully engaged the spring pin on the spinner shaft. If it is not engaged turn the spinner shaft until the spring pushes the coupler over the spinner shaft and the coupler engages the spring pin. A fully engaged spinner will look like drawing 6023.

#### **STORAGE**

Store the spreader in a dry protected area when it will not be used for an extended period of time. Perform the following maintenance procedures at the end of the season to ensure that the machine remains in good operating condition.

- Disconnect and remove the battery from the spreader. Apply a light coat of dielectric grease to all electrical terminals, and cap or tape loose terminals to prevent damage or corrosion.
- 2. Wash the spreader to flush out any remaining material.
- 3. Inspect for worn or damaged components. Repair or replace as needed.
- 4. Grease all bearings. Grease points are identified in the Maintenance & Service section of this manual.
- 5. Oil conveyor and roller chains.

Maintain the spreader engine according to the Briggs & Stratton owner's manual that is shipped with the spreader. Engine warranty is described in the Briggs & Stratton manual.

If service or repair is required, contact an authorized Briggs & Stratton service center. The service center will ask for the model, type and code number of the engine.

Locate the nearest service center in the "Yellow Pages" or use the dealer locator at www.briggsandstratton.com.

# **MAINTENANCE & SERVICE PROCEDURES**

Dependable spreader operation is the result of following good maintenance procedures. Inspect your spreader frequently to ensure that all parts are working smoothly, and develop a schedule for maintenance at required intervals.

#### **GENERAL**

Prior to operation of a new spreader, or one that has been stored, inspect all hardware and verify proper torque on all bolts and nuts in accordance with the recommended torque specifications.

#### GRADE 5 TYPE B & F LOCKNUT TORQUES

| Diameter | Ft-Ibs. | N-m     |
|----------|---------|---------|
| 1/4"     | 6-10    | 8-13    |
| 5/16"    | 13-18   | 17-25   |
| 3/8"     | 23-33   | 31-44   |
| 7/16"    | 38-54   | 51-73   |
| 1/2"     | 58-82   | 79-112  |
| 5/8"     | 117-165 | 158-223 |
| 3/4"     | 206-292 | 280-396 |

## **SET SCREW SEATING TORQUE**

| Socket<br>Head | Torque<br>InIbs.<br>(Ft-Ibs) | Torque<br>N-m |
|----------------|------------------------------|---------------|
| #8             | 20 (1.6)                     | 2.25          |
| #10            | 36 (3)                       | 4             |
| 1/4            | 87 (7.25)                    | 9.8           |
| 5/16           | 165 (13.5)                   | 18.6          |
| Square<br>Head |                              |               |
| #10            | 100 (8.8)                    | 11.3          |
| 1/4            | 212 (17.7)                   | 24            |
| 5/16           | 420 (35)                     | 47.5          |

Loose bolts can cause hole elongation and part failure resulting in dangerous operating conditions and equipment breakdown.

Check all hardware periodically during operation and keep tightened to specified torques. Replace worn bolts and locknuts with Grade 5 bolts and equivalent type B or F locknuts. Type B locknuts are plain hex; type F locknuts are flanged hex.

Fill electrical connectors with dielectric grease to prevent corrosion of contacts when the connectors are unplugged, and to make connecting and disconnecting plugs easier.

Wash salt and dirt off the spreader before storage.

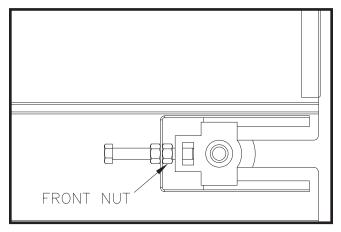
Maintain the spreader engine according to the Briggs & Stratton owner's manual that is shipped with the spreader. Engine warranty is described in the Briggs & Stratton manual.

If service or repair is required, contact an authorized Briggs & Stratton service center. The service center will ask for the model, type and code number of the engine.

Locate the nearest service center in the "Yellow Pages" or use the dealer locator at www.briggsandstratton.com

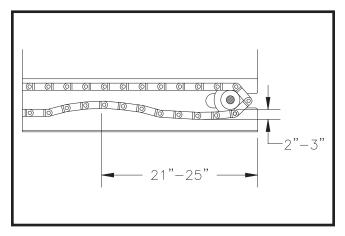
#### **CHAIN TENSION**

Tighten the conveyor chain periodically to compensate for the chain stretching. Adjust both sides the same amount to equalize the load on the chain.



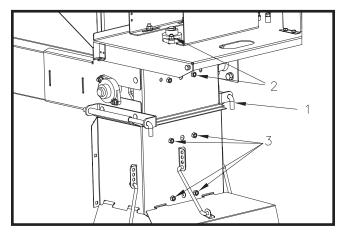
DWG. NO. 6026

Loosen the front nut, then turn the adjustment bolt to take up the slack.



DWG. NO. 6596

Retighten the front nut after the chain is adjusted. A properly tensioned chain can be pulled up 2-3 inches about 24 inches from the back of the spreader side rails. A chain that is too tight will cause excess stress on drive components.

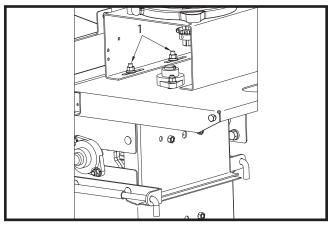


DWG. NO. 6027

To adjust tension in the roller chain between the gearbox and the spinner shaft first pull the pin at location 1 and allow the spinner to swing open. Loosen the (4) nuts, at location 2, that secure the upper bearings which hold the upper spinner shaft. Slide the top spinner shaft away from the gearbox to tighten the chain. Make sure the shaft is vertical before retightening the hardware.

Rotate the chute assembly and reinsert the pin at location 1. Loosen the (4) nuts, at location 3, that secure the bearings which hold the bottom spinner shaft. Slide the bottom shaft until it is aligned with the top shaft.

When the shafts are aligned, the coupler on the upper shaft will slide over the bottom shaft and the spring pin will engage the slot in the coupler. The bottom shaft may need to be rotated slightly to align the slot in the coupler with the spring pin. Make sure the bottom shaft is vertical before retightening all hardware.

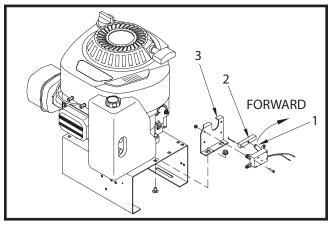


DWG. NO. 6028

Tighten the engine drive chain by loosening the four nuts (arrow 1)holding the engine plate, then slide the entire engine assembly. Retighten nuts to secure the engine plate

#### THROTTLE CONTROL ACTUATOR

Reassemble the throttle actuator as follows:



DWG. NO. 6040

- 1. Assemble the actuator on the bracket.
- 2. Advance the actuator arm (arrow 1) forward with a 9V battery until the arm is stopped by the bracket.
- Place the plastic block (arrow 2) on the actuator arm and loosely bolt the bracket (arrow 3) on the engine plate.
- Slide the governor control rack on the engine fully ahead, then pin to the plastic block.
- Fully tighten the bracket to the engine plate.
- Cycle the actuator to verify that the arm is stopped by the bracket, not by the engine mechanism.

#### **LUBRICATION**

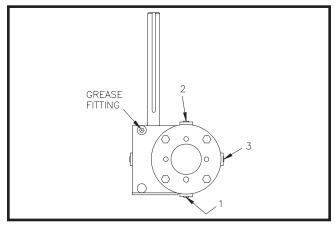
CAUTION: Do not lubricate, adjust or clean the machine while it is running. Death or serious injury can result.

Prior to operation of a new machine, or one that has been stored, grease all bearing points with a high quality SAE multi-purpose grease and oil the roller chains.

Throughout the season, grease bearings at about 10 hour intervals and oil roller chains often.

NOTE: Over-greasing may cause seal damage to bearings. Use only one pump of grease per fitting.

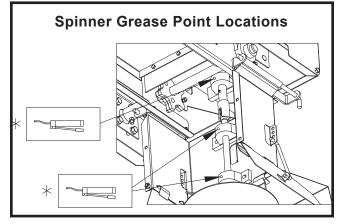
Replace gear box oil annually with SAE 90 gear lubricant. Prevent debris from entering the gear box by cleaning dirt from plug area and wiping plugs prior to reinstallation.



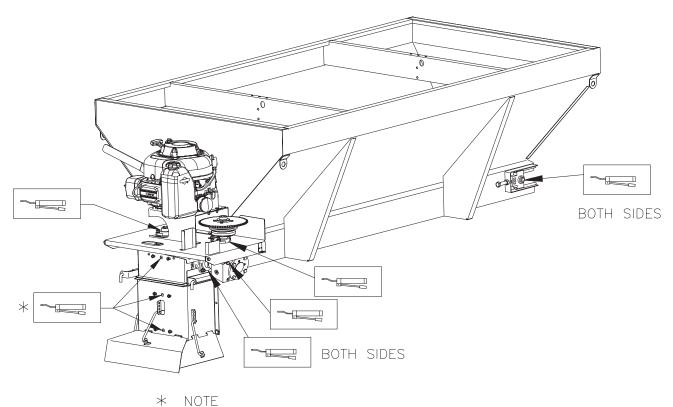
DWG. NO. 6031

Remove the drain plug at location 1 to drain old oil into a quart or larger container and discard. Reinstall the drain plug and remove the breather at location 2 and the oil level plug at location 3. Fill the gearbox through the breather port until oil appears at the level port. Reinstall the oil level plug, add another 1/4 quart then reinstall the breather. Capacity is about 5/8 quart (0.6 liters).

# **GREASE POINT LOCATIONS**



DWG. NO. 6030



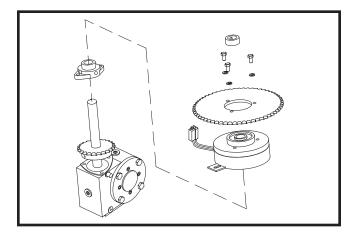
\* NOTE
DEPENDING ON MANUFACTURING DATE OF SANDER, GREASE ZERK
WILL BE AT ONE OF THESE (2) LOCATIONS.

DWG. NO. 6029

#### **ELECTRIC CLUTCH**

The following procedures are recommended to maximize the life of the electric clutch:

- Remove and clean the electric clutch at the end of the snow season.
- After cleaning the clutch, coat both mating surfaces with oil or light grease.
- Remove oil and grease before using the clutch the following season.



DWG. NO. 6041

When servicing worn clutch components, the rotor and armature must be replaced as a pair.

#### TROUBLESHOOTING CLUTCH PROBLEMS

## A. Symptom: Clutch will not Engage

| PROBLEM              | POSSIBLE CAUSES  |
|----------------------|--|
| - Low voltage supply | <ul><li>Defective battery</li><li>Faulty charging system</li><li>Bad wiring or connectors</li></ul>          |
| - Zero voltage       | <ul><li>Broken lead wire</li><li>Open clutch coil, check<br/>coil resistance</li><li>Faulty switch</li></ul> |

## B. Symptom: Noisy Clutch

| PROBLEM  | POSSIBLE CAUSES   |
|--|---|
| - Failed bearing                                 | <ul> <li>Loose mounting</li> <li>Operating Temperature<br/>above 250° F</li> <li>Bearing Preloaded Axially</li> </ul> |
| - Adapter plate rattles against antirotation pin | - Some noise is normal: to reduce noise level, isolate antirotation pin from frame with rubber.                       |

## C. Symptom: Clutch Slips

| PROBLEM                                  | POSSIBLE CAUSES   |
|--|---|
| - Low voltage<br>supply                  | <ul><li>Defective battery</li><li>Faulty charging system</li><li>Bad wiring or connectors</li></ul> |
| - Contaminat-<br>ed friction<br>surfaces | - Oil or grease on clutch   |
| - Clutch loose<br>on shaft               | - Eccentric collar not locked onto the shaft  |
| - Clutch not<br>mounted<br>square        | <ul><li>Mounting shoulder not square</li><li>Clutch integral key hitting end of keyway</li></ul>    |
| - Broken rivet<br>joints                 | - Loose mounting<br>Replace clutch  |

# INSTALLATION INSTRUCTIONS

#### **GRADE 5 TYPE B & F LOCKNUT TORQUES**

| Diameter | Ft-lbs. | N-m     |
|----------|---------|---------|
| 1/4"     | 6-10    | 8-13    |
| 5/16"    | 13-18   | 17-25   |
| 3/8"     | 23-33   | 31-44   |
| 7/16"    | 38-54   | 51-73   |
| 1/2"     | 58-82   | 79-112  |
| 5/8"     | 117-165 | 158-223 |
| 3/4"     | 206-292 | 280-396 |

#### SET SCREW SEATING TORQUE

| Socket<br>Head | Torque<br>InIbs.<br>(Ft-Ibs) | Torque<br>N-m |
|----------------|------------------------------|---------------|
| #8             | 20 (1.6)                     | 2.25          |
| #10            | 36 (3)                       | 4             |
| 1/4            | 87 (7.25)                    | 9.8           |
| 5/16           | 165 (13.5)                   | 18.6          |
| Square<br>Head |                              |               |
| #10            | 100 (8.8)                    | 11.3          |
| 1/4            | 212 (17.7)                   | 24            |
| 5/16           | 420 (35)                     | 47.5          |

#### MOUNTING THE SPREADER

Remove the tailgate from the truck according to instructions from the vehicle manufacturer.

WARNING: Never attempt to lift a spreader with material in the hopper. Verify that the lifting device is capable of handling at least 1,000 LB. loads before trying to lift the spreader.

2. Lift the spreader by hooking the slot in the rear-most (toward rear of the truck) hopper cross member.

The lifting slot is placed at the approximate balance point of the spreader. Residual material, gasoline, oil, battery, top screen, inverted vee may affect this balance point.

Center the spreader on the truck with the rear rails extending about 12-14 inches behind the furthest point of interference (back of the truck, bumper, trailer hitch, etc.) Verify the rear legs of the spreader rest securely on the bed of the truck.

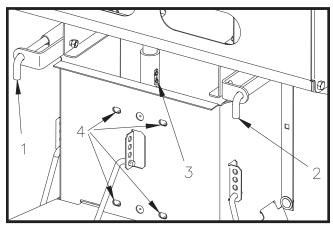
Place lumber as needed between the back of the truck cab and the front of the spreader to help hold the sander in position and protect the truck from damage due to shifting of the spreader.

Attach the sander to the truck bed using 3/8" hardware through the slot in the sanders (4) legs. Ratchet tie-down straps must be used to secure the spreaders (4) tie down eyes located at each corner of the spreader to the vehicles factory installed anchor points.

Ratchet tie down straps must be used to properly secure hopper to vehicle. Do not use cam buckle or other forms of straps where adequate tension to secure hopper against load shifting cannot be achieved.

**NOTE:** Inspect hold-downs and tie down straps periodically for wear or loosening, and retighten or repair as required.

#### **CHUTE ASSEMBLY**



DWG. NO. 6032

Attach the chute assembly to the spreader by inserting the long pin through the clevis and chute hinge at location 1.

Rotate the chute assembly and insert the pin at location 2. Check and see if the two shafts are aligned. The slot on the coupler should be pointing toward the side of the machine for ease of assembly.

When the shafts are aligned the coupler on the upper shaft will slide over the bottom shaft and the spring pin, at location 3, will engage the slot in the coupler. The bottom shaft may need to be rotated slightly to align the slot in the coupler with the spring pin.

If the shafts are not aligned, loosen the (4) nuts at location 4 holding the lower spinner shaft bearings to the chute. Slide the bottom shaft until it is aligned with the top shaft and the coupler engages the spinner shaft spring pin.

Again, when the shafts are aligned, the coupler on the upper shaft will slide over the bottom shaft and the spring pin will engage the slot in the coupler. The bottom shaft may need to be rotated slightly to align the slot in the coupler with the spring pin.

Check that the bottom shaft is vertical before retightening all hardware.

## **INSTALLATION OF CAB CONTROL & ELECTRICAL WIRING**

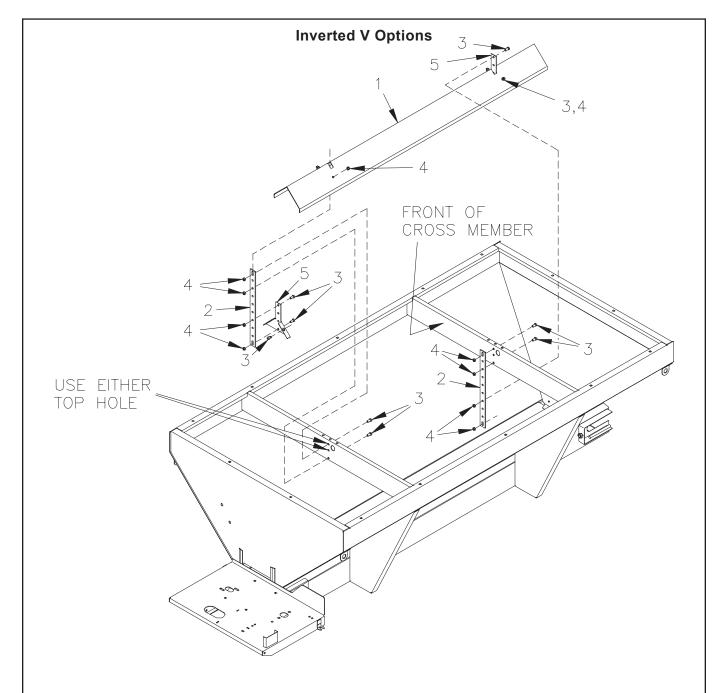
Use the bracket and hardware provided to mount the cab control box at a convenient location for the operator.

Connect the extension cable to the engine harness. Route the extension cable along the RH side of the hopper.

Determine the best location for running the extension cable into the truck cab. If a hole must be drilled to pass the cable through the cab wall, protect wires from sharp edges around the hole with a grommet.

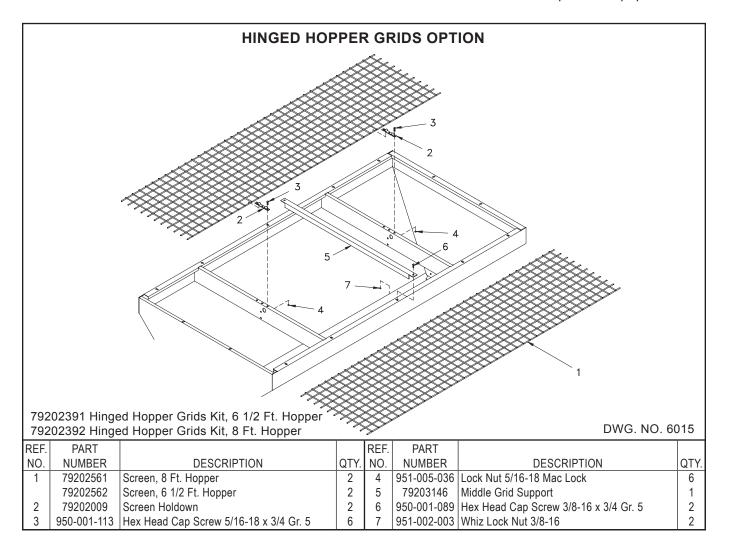
Connect the cab control box cable to the extension cable for operation of the spreader.

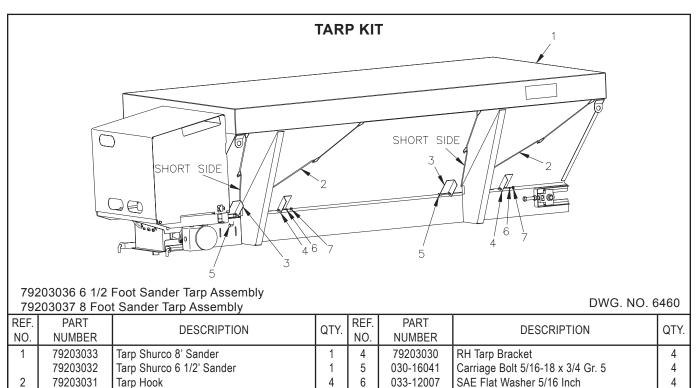
# **OPTIONAL EQUIPMENT**



Adjustable Inverted V Kit No. 79202394 6 1/2 FT. Hopper, SS Adjustable Inverted V Kit No. 79202042 8 FT. Hopper

| Ad   | justable Inv | erted V Kit No. 79202395 8 FT. Hopp | DWG. NO. 6 | 305  |             |                                    |      |
|------|--------------|-------------------------------------|------------|------|-------------|------------------------------------|------|
| REF. | PART         |                                     |            | REF. | PART        |                                    |      |
| NO.  | NUMBER       | DESCRIPTION                         | QTY.       | NO.  | NUMBER      | DESCRIPTION                        | QTY. |
| 1    | 79201998     | Inverted V, 8' Hopper               | 1          | 3    | 950-001-089 | Hex Head Cap Screw 3/8-16 x 3/4    | 12   |
|      | 79202566     | Inverted V, 8' Hopper SS            | 1          |      |             | Hex Head Cap Screw 3/8-16 x 3/4 SS | 12   |
|      | 79202135     | Inverted V, 6 1/2' Hopper           | 1          | 4    | 951-005-003 | Lock Nut 3/8-16 Nylon Insert       | 12   |
|      | 79202567     | Inverted V, 6 1/2' Hopper SS        | 1          |      | 951-003-013 | Lock Nut 3/8-16 Nylon Insert SS    | 12   |
| 2    | 400-15052    | Strap                               | 2          | 5    | 79202743    | Inverted V Gusset                  | 2    |
|      | 79202565     | Strap SS                            | 2          |      | 79202744    | Inverted V Gusset SS               | 2    |



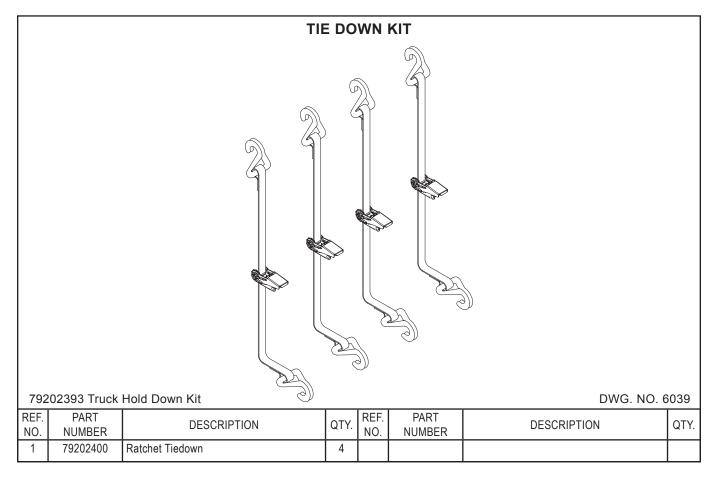


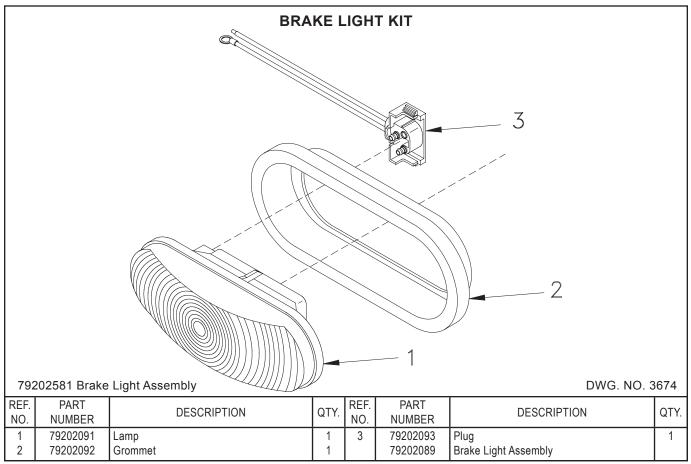
951-005-036

Mac Lock Nut 5/16-18

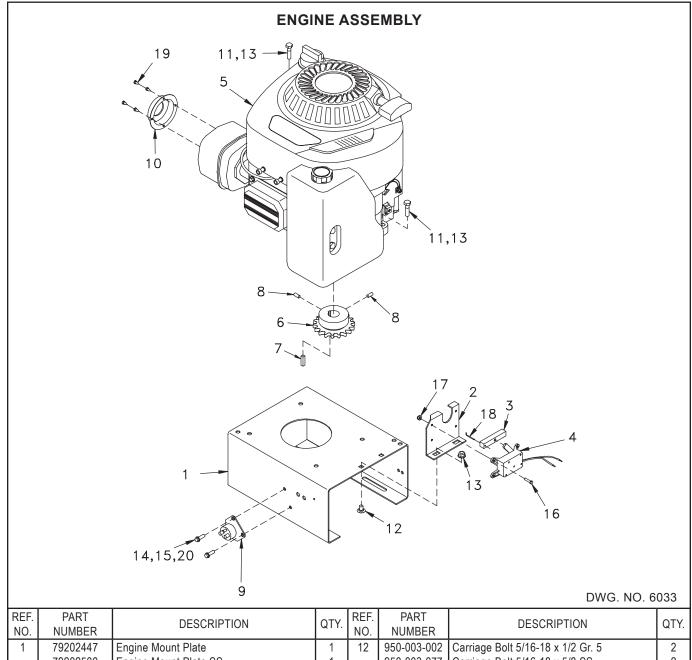
79203029

LH Tarp Bracket

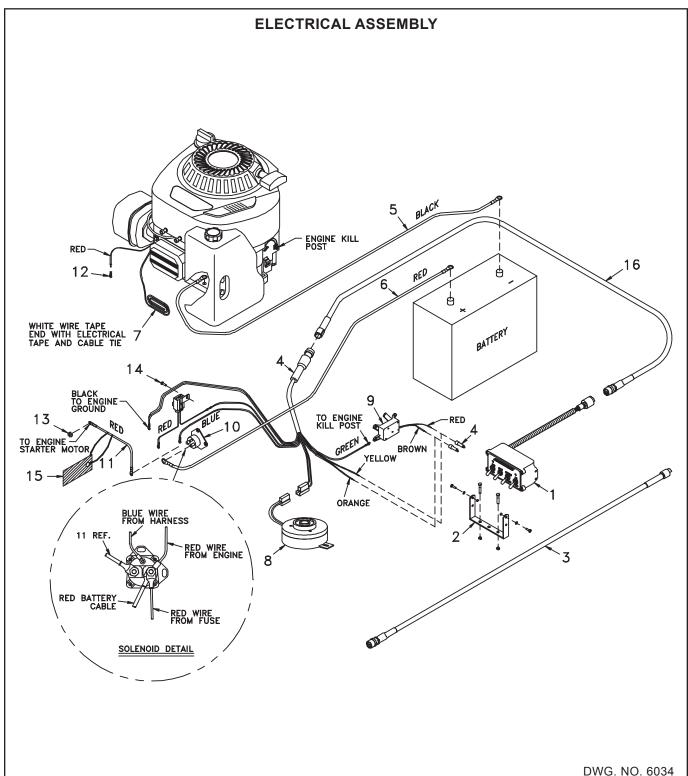




# **PARTS BREAKDOWN**

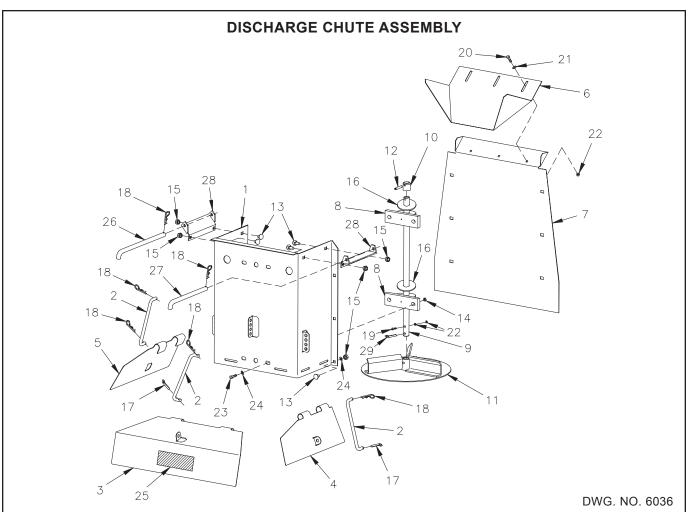


| $\overline{}$ |             |  |      |      |             |   |      |
|---------------|-------------|--|------|------|-------------|---|------|
| REF.          | PART        | DESCRIPTION                              | QTY. | REF. | PART        | DESCRIPTION                             | QTY. |
| NO.           | NUMBER      | DESCRIPTION                              | 3    | NO.  | NUMBER      | DESCINITION                             | QTI. |
| 1             | 79202447    | Engine Mount Plate                       | 1    | 12   | 950-003-002 | Carriage Bolt 5/16-18 x 1/2 Gr. 5       | 2    |
|               | 79202500    | Engine Mount Plate SS                    | 1    |      | 950-003-077 | Carriage Bolt 5/16-18 x 5/8 SS          | 2    |
| 2             | 79201997    | Throttle Control Bracket                 | 1    | 13   | 951-005-036 | Mac Lock Nut 5/16-18                    | 6    |
|               | 79202501    | Throttle Control Bracket SS              | 1    |      | 951-003-015 | Lock Nut 5/16-18 Nylon Insert SS        | 6    |
| 3             | 79201996    | Throttle Control Arm                     | 1    | 14   | 950-002-003 | Whiz Lock Bolt 1/4-20 x 3/4             | 6    |
| 4             | 79202397    | Throttle Control Actuator                | 1    |      | 950-001-345 | Hex Head Cap Screw 1/4-20 x 3/4 SS      | 4    |
| 5             | 50000514    | Engine 10.5 HP                           | 1    | 15   | 060954      | Lock Nut 1/4-20 Nylon Insert            | 2    |
| 6             | 50205013    | Sprocket 12 Tooth, #40                   | 1    |      | 061605      | Lock Nut 1/4-20 Nylon Insert SS         | 2    |
| 7             | 702-53004   | Straight Key 1/4 x 1                     | 1    | 16   | 950-004-031 | Machine Screw #8-32 x 3/4               | 3    |
| 8             | 950-008-015 | Socket Head Set Screw 1/4-20 x 1/4       | 2    | 17   | 951-003-011 | Lock Nut #8-32 Nylon Insert             | 3    |
| 9             | 79202084    | Starter Solenoid                         | 1    | 18   | 79201995    | Pin                                     | 1    |
| 10            | 79202445    | Muffler Deflector                        | 1    | 19   | 950-005-027 | Hex Head Self Tapping Screw #8-18 x 3/8 | 4    |
| 11            | 950-001-200 | Hex Head Cap Screw 5/16-18 x 1 1/4 Gr. 5 | 4    | 20   | 952-003-010 | Flat Washer 1/4 SAE                     | 2    |
|               | 950-001-343 | Hex Head Cap Screw 5/16-18 x 1 1/4 SS    | 4    |      | 952-004-062 | Flat Washer 1/4 SS                      | 2    |

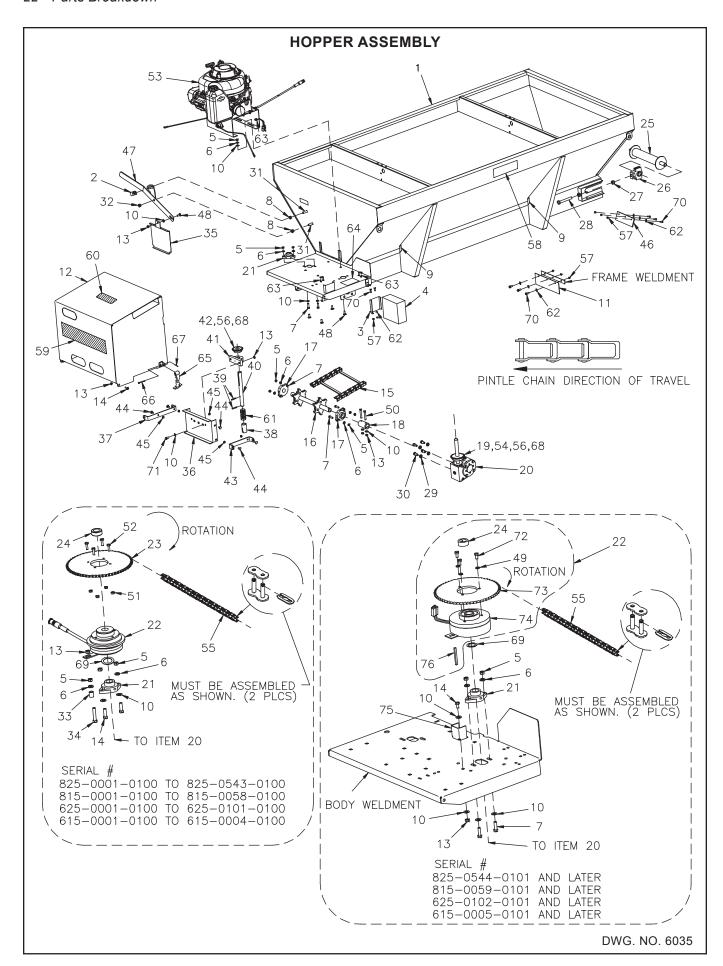


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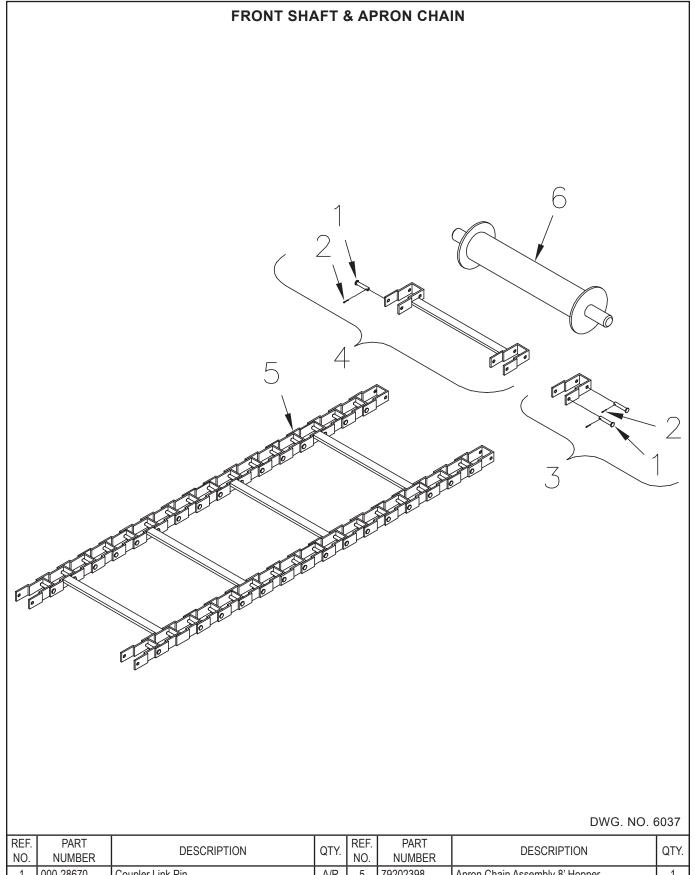
| REF.<br>NO. | PART<br>NUMBER | DESCRIPTION                          | QTY. | REF.<br>NO. | PART<br>NUMBER | DESCRIPTION                                 | QTY. |
|-------------|----------------|--------------------------------------|------|-------------|----------------|---|------|
| 1           | 36112004       | Sander Control Box Assembly          | 1    | 9           | 79202397       | Electrical Actuator                         | 1    |
| 2           | 79201729       | Control Box Bracket Kit              | 1    | 10          | 79202084       | Starter Solenoid                            | 1    |
| 3           | 38812017       | 5 Foot Console Extension             | 1    | 11          | 38812023       | Cable Assembly Solenoid To Starter          | 1    |
| 4           | 38812028       | Wiring Harness Engine 3'             | 1    | 12          | 300-14002      | Terminal Ring, 5/16"                        | 1    |
| 5           | 38812022       | Wire Assembly Negative Battery Black | 1    | 13          | 951-001-003    | Hex Nut 1/4-20                              | 1    |
| 6           | 38812021       | Wire Assembly Positive Battery Red   | 1    | 14          | 392-010-028    | Self Tapping Screw #8-32 x 1/2 Shw Head T23 | 1    |
| 7           | 367-001-014    | 8" Cable Tie                         | 2    | 15          | 715-02536      | Caution Battery Tag                         | 1    |
| 8           |                | See Page 22                          | 1    | 16          | 38812016       | Cable, Console To Engine 23'                | 1    |



| REF.<br>NO. | PART<br>NUMBER | DESCRIPTION                                | QTY. | REF.<br>NO. | PART<br>NUMBER | DESCRIPTION                            | QTY. |
|-------------|----------------|--|------|-------------|----------------|--|------|
| 1           | 79202511       | Long Discharge Chute SS                    | 1    | 14          | 951-005-003    | Hex Mac Lock Nut 3/8-16                | 4    |
|             | 79202503       | Short Discharge Chute SS                   | l 1  |             | 951-003-013    | Lock Nut 3/8-16 Nylon Insert SS        | 4    |
|             | 79202497       | Long Discharge Chute                       | 1    | 15          | 951-005-036    | Hex Mac Lock Nut 5/16-18               | A/R  |
|             | 79202484       | Short Discharge Chute                      | 1    |             | 951-003-015    | Lock Nut 5/16-18 Nylon Insert SS       | A/R  |
| 2           | 79202502       | Adjustment Rod SS                          | 3    | 16          | 79202483       | Bearing Shield                         | 2    |
|             | 79202056       | Adjustment Rod                             | 3    | 17          | 701-35103      | Cotter Pin 3/32 x 1 7/8                | 2    |
| 3           | 79202504       | Rear Deflector SS                          | 1    | 18          | 953-005-005    | Pin-Hair Cotter 3/32 x 1 7/8           | 6    |
|             | 79202485       | Rear Deflector                             | 1    | 19          | 950-001-296    | Hex Head Cap Screw 1/4-20 x 2 Gr. 8    | 1    |
| 4           | 79202194       | RH Side Deflector SS                       | 1    |             | 950-001-315    | Hex Head Cap Screw 1/4-20 x 2 SS       | 1    |
|             | 79202058       | RH Side Deflector                          | 1    | 20          | 950-001-117    | Hex Head Cap Screw 1/4-20 x 3/4 Gr. 5  | 3    |
| 5           | 79202193       | LH Side Deflector SS                       | 1    |             | 950-001-319    | Hex Head Cap Screw 1/4-20 x 1/2 316 SS | 3    |
|             | 79202059       | LH Side Deflector                          | 1    | 21          | 952-002-011    | Flat Washer 1/4 Wrt                    | 3    |
| 6           | 79202505       | Inner Deflector SS                         | 1    |             | 952-004-062    | Flat Washer 1/4 SS                     | 3    |
|             | 79202486       | Inner Deflector                            | 1    | 22          | 951-005-089    | 2-Way Lock Nut 1/4-20                  | 5    |
| 7           | 79202512       | Long Chute Deflector SS                    | 1    |             | 061605         | Lock Nut 1/4-20 SS                     | 5    |
|             | 79202496       | Long Chute Deflector                       | 1    | 23          | 950-002-014    | Whiz Lock Bolt 3/8-16 x 1 1/4 Gr. 5    | 4    |
|             | 79202506       | Short Chute Deflector SS                   | 1    |             | 950-001-344    | Hex Head Cap Screw 3/8-16 x 1 1/4 SS   | 4    |
|             | 79202493       | Short Chute Deflector                      | 1    | 24          | 952-002-003    | Flat Washer 3/8                        | A/R  |
| 8           | 79202742       | Pillow Block Bearing (Exposed Grease Zerk) | 2    |             | 952-002-013    | Flat Washer 3/8 SS                     | A/R  |
| 9           | 79202495       | Lower Spinner Shaft (Long)                 | 1    | 25          | 715-04017      | Decal Warning-Moving Parts             | 1    |
|             | 79202487       | Lower Spinner Shaft (Short)                | 1    | 26          | 79202518       | Chute Pin Long SS                      | 1    |
| 10          | 79202488       | Bushing                                    | 1    |             | 79202516       | Chute Pin Long                         | 1    |
| 11          | 79202507       | Spinner Weldment SS                        | 1    | 27          | 79202517       | Chute Pin SS                           | 1    |
|             | 79202489       | Spinner Weldment                           | 1    |             | 79202515       | Chute Pin                              | 1 1  |
| 12          | 953-003-003    | Pin Slotted Spring 1/4 x 1 3/4 Zinc Plated | 1    | 28          | 79202716       | Chute Hinge SS                         | 2    |
| 13          | 950-003-060    | Carriage Bolt 5/16-18 x 5/8 Gr. 5          | A/R  |             | 79202715       | Chute Hinge                            | 2    |
|             | 950-003-080    | Carriage Bolt 5/16-18 x 3/4 SS             | A/R  | 29          | 035-42063      | Cotter Pin 1/4 x 1 1/4                 | 1    |



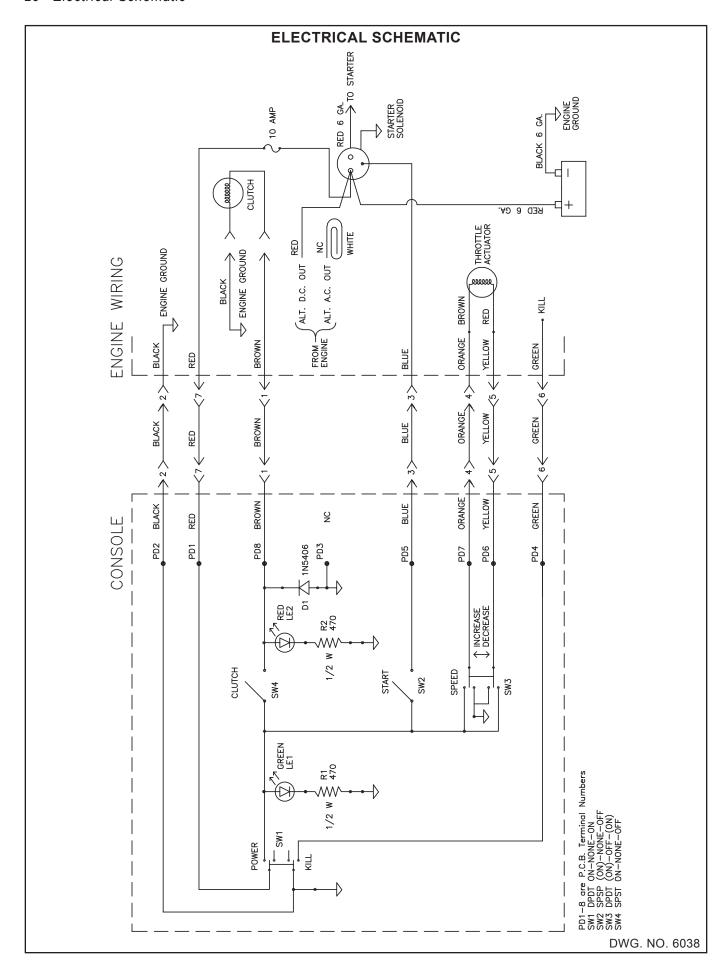
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|-------------|----------------|---|----------|-------------|----------------|--|------|
| REF.<br>NO. | PART<br>NUMBER | DESCRIPTION   | QTY.     | REF.<br>NO. | PART<br>NUMBER | DESCRIPTION                                | QTY. |
| 1           | 79202532       | 6 1/2 Ft SS Hopper Weldment                           | 1        | 37          | 79202523       | Chute Pivot SS                             | 1    |
|             | 79202439       | 6 1/2 Ft Steel Hopper Weldment                        | 1        |             | 79202455       | Chute Pivot                                | 1    |
|             | 79202416       | 8 Ft SS Hopper Weldment                               | 1        | 38          | 79202456       | Shaft Coupler                              | 1    |
|             | 79202415       | 8 Ft Steel Hopper Weldment                            | 1        | 39          | 953-003-003    | Slotted Spring pin 1/4 x 1 3/4             | 2    |
| 2           | 79202554       | Lever Nut SS  | 1        | 40          | 79202464       | Top Spinner Shaft                          | 1    |
|             | 79202451       | Lever Nut   | 1        | 41          | 79202741       | Pillow Block Bearing (Exposed Grease Zerk) | 1    |
| 3           | 79202521       | Battery Bracket SS                                    | 1        | 42          | 79202474       | Sprocket 40B18                             | 1    |
|             | 79202452       | Battery Bracket                                       | 1        | 43          | 79202519       | Clevis SS                                  | 1    |
| 4           | 79202401       | Battery   | 1        | "           | 79202454       | Clevis                                     | 1    |
| 5           | 951-001-005    | Hex Nut 3/8-16  | A/R      | 44          | 030-16041      | Carriage Bolt 5/16-18 x 3/4 Gr. 5          | 6    |
|             | 061910         | Hex Nut 3/8-16 SS                                     | A/R      |             | 950-003-080    | Carriage Bolt 5/16-18 x 3/4 SS             | 6    |
| 6           | 952-001-007    | Lock Washer 3/8 Med Split SAE                         | A/R      | 45          | 951-005-036    | Mac Lock Nut 5/16-18                       | 6    |
|             | 033-29011      | Lock Washer 3/8 Med Split SS                          | A/R      |             | 951-002-011    | Whiz Lock Nut 5/16-18 SS                   | 6    |
| 1 7         | 950-001-106    | Hex Head Cap Screw 3/8-16 x 1 1/4 Gr 5                | A/R      | 46          | 79202458       | Front Wiper                                | l 1  |
|             | 950-001-344    | Hex Head Cap Screw 3/8-16 x 1 1/4 SS                  | A/R      | 47          | 79202524       | Lever Weldment SS                          | 1    |
| 8           | 951-001-007    | Hex Nut 1/2-13  | 2        |             | 79202466       | Lever Weldment                             | 1    |
|             | 061923         | Hex Nut 1/2-13 SS                                     | 2        | 48          | 950-003-029    | Carriage Bolt 3/8-16 x 1 Gr. 5             | 5    |
| 9           | 79202477       | Trim 1 1/2 Inch                                       | 2        |             | 950-003-067    | Carriage Bolt 3/8-16 x 1 SS                | 5    |
| 10          | 952-003-006    | Flat Washer 3/8 SAE                                   | A/R      | 49          | 952-001-002    | Lock Washer 5/16 Med Split SAE             | A/R  |
|             | 061916         | Flat Washer 3/8 SAE SS                                | A/R      |             | 061917         | Lock Washer 5/16 SS                        | A/R  |
| 1 11        | 79201694       | Chain Wiper   | 1        | 50          | 031-06113      | Hex Head Cap Screw 3/8-16 x 3 Gr. 5        | 2    |
| 12          | 79202527       | Cover Weldment SS                                     | 1        |             | 950-001-349    | Hex Head Cap Screw 3/8-16 x 3 SS           | 2    |
|             | 79202440       | Cover Weldment  | 1        | 51          | 951-005-089    | 2-Way Hex Nut 1/4-20 Gr. A                 | 4    |
| 13          | 951-005-051    | Lock Nut 3/8-16                                       | A/R      | 52          | 031-06005      | Hex Head Cap Screw 1/4-20 x 7/8 Gr. 5      | 4    |
|             | 951-003-013    | Lock Nut 3/8-16 Nylon Insert SS                       | A/R      | 53          | 79202446       | Engine Assembly SS                         | 1    |
| 14          | 950-001-105    | Hex Head Cap Screw 3/8-16 x 1 Gr. 5                   | A/R      |             | 79202449       | Engine Assembly                            | 1    |
|             | 950-001-286    | Hex Head Cap Screw 3/8-16 x 1 SS                      | A/R      | 54          | 79202475       | Roller Chain #40 77 Links                  | 1    |
| 15          | 79202399       | Apron Chain Assembly 6 1/2'                           | 1        | 55          | 79202476       | Roller Chain #40 81 Links                  | 1    |
|             | 79202398       | Apron Chain Assembly 8'                               | 1        | 56          | 031-23016      | Hex Socket Set Screw 1/4-20 x 3/8 Cup      | 4    |
| 16          | 79202469       | Drive Shaft Weldment                                  | 1        | 57          | 951 -005-089   | 2-Way Nut 1/4-20 Gr. A                     | 8    |
| 17          | 79202405       | 2-Bolt Flange 206-18                                  | 2        |             | 061605         | Lock Nut 1/4-20 Nylon Insert SS            | 8    |
| 18          | 79202453       | Coupler   | 1        | 58          | 85501786       | Hiniker Decal                              | 2    |
| 19          | 79202472       | Sprocket 40B24  | 1        |             | 81004136       | Hiniker Decal (SS Model)                   | 1    |
| 20          | 79202396       | Gearbox   | 1        | 59          | 79202024       | Hiniker Decal `                            | 1    |
| 21          | 79202404       | 2-Bolt Flange 205-16                                  | 2        |             | 71505163       | Hiniker Decal (SS Model)                   | 1    |
| 22          | 79203165       | Replacement Clutch Kit Includes Items (24, 49, 72-76) | 1        | 60          | 715-04016      | No Step Decal                              | 1    |
| 23          | 50205016       | Sprocket #40 60T                                      | 1        | 61          | 79202480       | Compression Spring                         | 1    |
| 24          | 79203147       | Shaft Locking Collar 1" Bore                          | 1        | 62          | 952-002-011    | Flat Washer 1/4 Wrt                        | 8    |
| 25          | 79202459       | Idler Weldment  | 1        |             | 952-004-062    | Flat Washer 1/4 SS                         | 8    |
| 26          | 79202406       | Take Up Bearing 205-16                                | 2        | 63          | 367-001-014    | Cable Tie, Black 8 Inch                    | 3    |
| 27          | 951-001-008    | Nut-Hex 5/8-11  | 2        | 64          | 71504138       | Decal Warning, Rotating Parts              | 1    |
|             | 061937         | Nut-Hex 5/8-11 SS                                     | 2        | 65          | 720-02126      | Latch, Rubber                              | 2    |
| 28          | 950-001-199    | Hex Head Cap Screw 5/8-11 x 6 Full Thread             | 2        | 66          | 720-02127      | Pin Hood Latch                             | 2    |
|             | 950-001-346    | Hex Head Cap Screw 5/8-11 x 6 Full Thread SS          | 2        | 67          | 720-02128      | Cotter Pin 1/16 x 1/2                      | 2    |
| 29          | 952-001-004    | Lock Washer 1/2 Med Split SAE                         | 4        | 68          | 702-53004      | Key 1/4 x 1/4 x 1                          | 2    |
|             | 061925         | Lock Washer 1/2 SS                                    | 4        | 69          | 952-004-052    | Machine Bushing 1 1/32 x 1 1/2 x .048      | 1    |
| 30          | 950-001-231    | Hex Head Cap Screw 1/2-13 x 1 Gr. 5                   | 4        | 70          | 950-001-117    | Hex Head Cap Screw 1/4-20 x 3/4 Gr. 5      | 8    |
|             | 950-001-288    | Hex Head Cap Screw 1/2-13 x 1 SS                      | 4        |             | 950-001-345    | Hex Head Cap Screw 1/4-20 x 3/4 SS         | 8    |
| 31          | 950-001-125    | Hex Head Cap Screw 1/2-13 x 1 1/2 Gr. 5               | 2        | 71          | 950-001-108    | Hex Head Cap Screw 3/8-16 x 1 1/2 Gr. 5    | 2    |
|             | 950-001-347    | Hex Head Cap Screw 1/2-13 x 1 1/2 SS                  | 2        |             | 950-001-314    | Hex Head Cap Screw 3/8-16 x 1 1/2 SS       | 2    |
| 32          | 10304          | Lock Nut 1/2-13                                       | 1        | 72          | 950-001-232    | Hex Head Cap Screw 5/16-18 x 5/8 Gr. 5     | 3    |
|             | 951-003-012    | Lock Nut 1/2-13 Nylon Insert SS                       | 1        |             | 950-001-350    | Hex Head Cap Screw 5/16-18 x 5/8 SS        | 3    |
| 33          | 79202457       | Spacer  | 1        | 73          | 79203162       | Sprocket 60T #40 Clutch                    | 1    |
| 34          | 950-001-242    | Hex Head Cap Screw 3/8-16 x 2 Gr. 5 Full Thread       | 1        | 74          | 79203161       | Electric Clutch                            | 1    |
| 35          | 79202520       | Feed Gate SS  | 1        | 75          | 79203159       | Clutch Stop                                | 1    |
|             | 79202463       | Feed Gate   | 1        |             | 79203163       | Clutch Stop SS                             | 1    |
| 36          | 79202522       | Top Chute Mount SS                                    | 1        | 76          | 79203160       | Key 1/4 x 1/4 x 2 9/16 Long                | 1    |
|             | 79202465       | Top Chute Mount                                       | 1        |             |                |  |      |
|             |                |   |          |             |                |  |      |
|             |                |   |          |             |                |  |      |
|             |                |   |          |             |                |  |      |
|             |                |   |          |             |                |  |      |



| RE<br>NO | <b>I</b>    | DESCRIPTION                                   | QTY. | REF.<br>NO. | PART<br>NUMBER | DESCRIPTION                        | QTY. |
|----------|-------------|---|------|-------------|----------------|------------------------------------|------|
| 1        | 000-28670   | Coupler Link Pin                              | A/R  | 5           | 79202398       | Apron Chain Assembly 8' Hopper     | 1    |
| 2        | 953-001-016 | Cotter Pin, 1/8 x 1/2 Long                    | A/R  |             | 79202399       | Apron Chain Assembly 6 1/2' Hopper | 1    |
| 3        | 000-28666   | Chain Link With Pins (Repair Only)            | A/R  | 6           | 79202459       | Idler Shaft Weldment               | 1    |
| 4        | 79202570    | Slat With Welded Links And Pins (Repair Only) | A/R  |             |                |                                    |      |

# **SPECIFICATIONS**

| DIMENSIONS:                       | 8 FT. HOPPER                              | 6 1/2 FT. HOPPER         |  |  |  |  |  |
|-----------------------------------|---|--------------------------|--|--|--|--|--|
| Length Inside                     | 95 3/8 In.                                | 77 3/8 ln.               |  |  |  |  |  |
| Length Overall                    | 115 ln.                                   | 97 In.                   |  |  |  |  |  |
| Width                             | 50 1/2 ln.                                | 50 1/2 ln.               |  |  |  |  |  |
| Height                            | 32 1/4 In                                 | 32 1/4 ln.               |  |  |  |  |  |
| CAPACITY: Cubic Yards             |   |                          |  |  |  |  |  |
| Level                             | 1.8                                       | 1.5                      |  |  |  |  |  |
| Heaped                            | 2.27                                      | 1.84                     |  |  |  |  |  |
| Weight: Model 825 Hopper Only     | 537 lbs. (Approximately)                  |                          |  |  |  |  |  |
| Weight: Model 815 Hopper Only     | 602 lbs. (Approximately)                  |                          |  |  |  |  |  |
| Weight: Model 625 Hopper Only     |   | 494 lbs. (Approximately) |  |  |  |  |  |
| Weight: Model 615 Hopper Only     |   | 550 lbs. (Approximately) |  |  |  |  |  |
| CONVEYOR:                         |   |                          |  |  |  |  |  |
| Trough Width:                     | 13 Inches                                 |                          |  |  |  |  |  |
| Flight Bars:                      | 3/16" X 3/4" on 11 9/16 Inch Ce           | enters                   |  |  |  |  |  |
| MODELS 825,815, 625 & 615: 8' & 6 | 6 1/2' Engine - Mechanical Driv           | ve .                     |  |  |  |  |  |
| 10.5 HP A                         | Air Cooled 4 Cycle OHV Gasolin            | e Engine                 |  |  |  |  |  |
| 12                                | Volt Electric Starter with Alterna        | tor                      |  |  |  |  |  |
|                                   | 3 Quart Fuel Tank                         |                          |  |  |  |  |  |
|                                   | Electric Throttle Control                 |                          |  |  |  |  |  |
|                                   | 1600 RPM to 3600 RPM                      |                          |  |  |  |  |  |
| Elect                             | Electric Clutch Rated @ 110 Ft-lbs Torque |                          |  |  |  |  |  |
|                                   | 100:1 Gear Reduction                      |                          |  |  |  |  |  |
| SPINNER:                          |   |                          |  |  |  |  |  |
| Disc Diameter:                    | 12 Inches                                 |                          |  |  |  |  |  |
| Shaft Diameter: 3/4 Inch          |   |                          |  |  |  |  |  |



# HINIKER WARRANTY

#### HINIKER SPREADER LIMITED WARRANTY

The only warranty Hiniker Company (Hiniker) gives and the only warranty that any Hiniker dealer is authorized to give on behalf of Hiniker is as follows: (NO EMPLOYEE OR REPRESENTATIVE IS AUTHORIZED TO CHANGE THIS WARRANTY IN ANY WAY OR GRANT ANY OTHER WARRANTY.)

Hiniker warrants to the original purchaser of a Hiniker spreader that Hiniker will repair or replace any defects in material and workmanship that occur within two years from date of retail delivery except the following items: Hiniker warrants that it will repair or replace any defects in materials or workmanship with respect to the paint finish, any accessories, and service parts and components for a period of one year from date of retail delivery.

Hiniker's obligation and liability under this warranty is expressly limited to repairing or replacing, at Hiniker's option, at an authorized Hiniker dealer location, the defective parts at no charge to the original purchaser. HINIKER MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED AND MAKES NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE.

HINIKER'S OBLIGATION UNDER THIS WARRANTY SHALL NOT INCLUDE ANY TRANSPORTATION CHARGES TO OR FROM THE AUTHORIZED HINIKER DEALER LOCATION OR ANY LIABILITY FOR INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGE OR DAMAGES OF ANY KIND FOR LOST PROFITS **OR DELAY.** If requested by Hiniker, products or parts for which a warranty claim is made are to be returned freight prepaid to our factory. Any improper use, operation beyond rated capacity, substitution of parts not approved by Hiniker Company, or any alteration or repair in such manner as in our judgment affects the product materially and adversely shall void this warranty.

Hiniker reserves the right to make improvements or changes to any of it's products without notice. Such improvements or changes shall not trigger any obligation by Hiniker to update, modify or change any products previously sold by Hiniker.

HINIKER does not warrant the following:

- 1. The engine. (The engine warranty is the responsibility of the engine manufacturer.)
- Used products.
- 3. Any product that has been repaired, modified or altered in a way not approved by Hiniker Company.
- 4. Depreciation or damage caused by normal wear, lack of reasonable and proper maintenance, failure to follow Operators Manual Instructions, misuse, lack of proper protection during storage, or accident.
- 5. Parts replacement and service necessitated by normal wear or maintenance including, but not limited to, conveyor chain, drive chain, bearings and spinner disc.
- 6. Paint finish damage caused by normal wear.

Hiniker does not assume any liability for any damage to a motor vehicle resulting from the attachment or use of a Hiniker spreader. Compliance with applicable motor vehicle regulations is the responsibility of the installer. Attachment of a Hiniker spreader to a motor vehicle is at the risk of the purchaser.

It is the responsibility of the original spreader purchaser to verify the original date of purchase.

A DELIVERY REPORT FORM must be filled out and received by Hiniker with 30 days of retail delivery at the address below to initiate the warranty coverage.

> HINIKER COMPANY 58766 240th St. P.O. Box 3407 MANKATO, MN 56002-3407 PHONE (507) 625-6621 -- FAX (507) 625-5883 www.hiniker.com