

# 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.

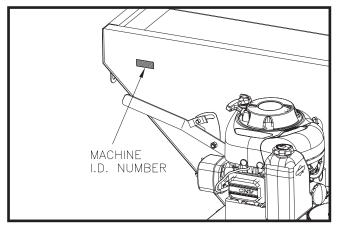
This is the safety alert symbol. It alerts an operator to information concerning personal safety. Always observe and heed these instructions, otherwise death, or serious injury can result!

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.

#### 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**

- 1. 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.
- 2. Make sure the engine cover is securely fastened to the spreader before starting the engine and operating the spreader.
- 3. 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.
- 4. Keep hands, feet, hair, and clothing away from moving parts. Flying material can cause bodily injury. Wear eye protection.
- 5. Do not alter the equipment to the extent of compromising safety or performance.
- 6. 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.
- 7. Do not over-load your vehicle beyond payload limits. If there are any questions, contact the vehicle manufacturer.
- 8. Do not use side extensions on your spreader to increase salt storage capacity. Using side extensions may damage hopper and cause injury to personnel.

- 9. 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**

- 1. Discipline yourself to visually check for worn, damaged or cracked parts before starting use. Replace these with genuine Hiniker parts.
- 2. Check all controls and operating functions of the machine in a safe area before starting to work.
- 3. 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**

- 1. Drive carefully and always wear seat belts when operating a motor vehicle.
- 2. 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.

- 4. Do not ride in any part of spreader while vehicle is in motion.
- 5. Set the brakes and stop the truck's engine before adjusting or servicing your spreader.

#### AFTER OPERATION

- 1. Inspect the spreader for components that have become excessively worn or damaged and must be repaired or replaced.
- 2. 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.

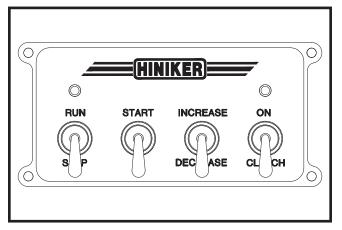
After loading, run the spreader in an isolated area, clear of people, to become familiar with the controls and to verify the correct spread pattern. Adjust deflectors on the discharge chute to achieve the desired spread.

#### 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 running.

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:

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

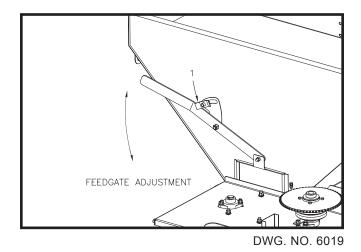
Disengage the clutch and move the power switch to the STOP position when done using the spreader.

#### 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".



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.

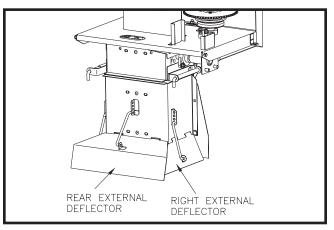
2. Conveyor Speed:

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

- Truck Speed: The slower the vehicle travels, the more material covers the ground.
- 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.  Deflector Positions: The three external deflectors control the size of the spread.

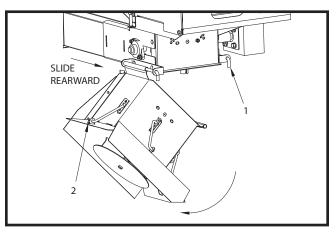


DWG. NO. 6020

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

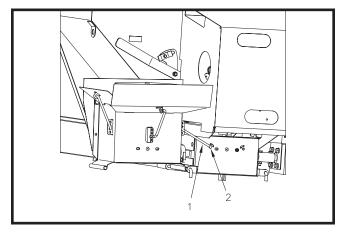
Hiniker spreaders are equipped with a swing away chute making cleaning of the hopper and storage much easier. The swing away chute is for clean out and storage only. Do not drive motor vehicle with swing away chute open or not fully engaged in its working position.



DWG. NO. 6021

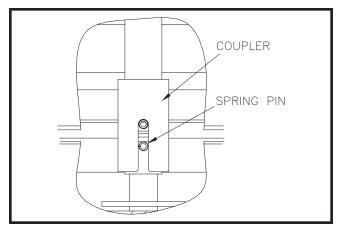
#### SHORT SPINNER OPERATION

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



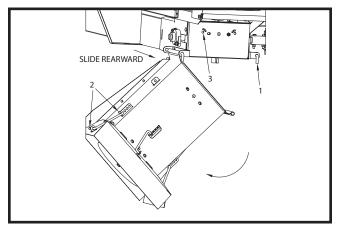
DWG. NO. 6022

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

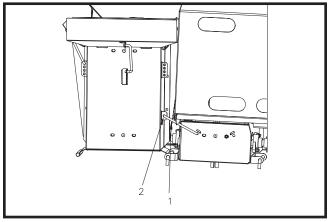
To realign the shafts for spreading, reverse the above steps. When the chute has been secured to the spreader, check that the coupler has fully engaged the spring pin on the spinner shaft. If it is not engaged turn the spinner shaft until the spring pushes the coupler over the spinner shaft and the coupler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

#### 8 Operating Procedures

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.

- 1. 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.

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

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

SET SCREW SEATING TORQUE

Socket Head	Torque InIbs. (Ft-Ibs)	Torque 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 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.

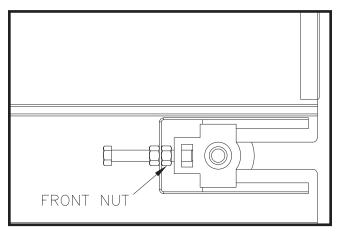
Maintain the spreader engine according to the Briggs & Stratton owner's manual that is shipped with the spreader. Engine warranty is described in the Briggs & Stratton manual.

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

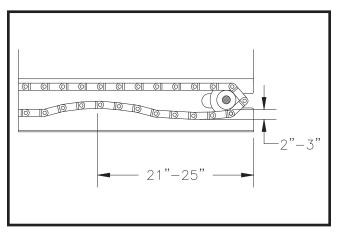
#### **CHAIN TENSION**

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



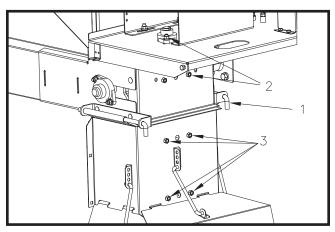
DWG. NO. 6026

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.

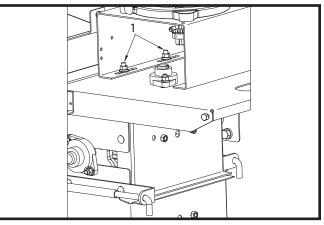


DWG. NO. 6027

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.

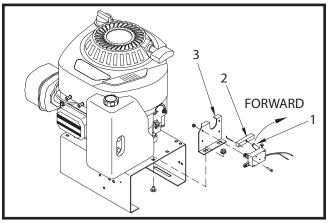


DWG. NO. 6028

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.
- 3. Place the plastic block (arrow 2) on the actuator arm and loosely bolt the bracket (arrow 3) on the engine plate.
- 4. Slide the governor control rack on the engine fully ahead, then pin to the plastic block.
- Fully tighten the bracket to the engine 5. plate.
- Cycle the actuator to verify that the arm is 6. stopped by the bracket, not by the engine mechanism.

#### LUBRICATION



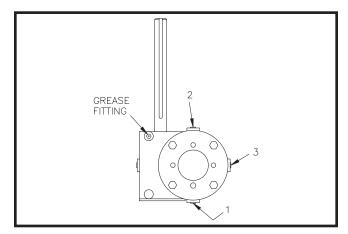
CAUTION: Do not lubricate, adjust or clean the machine while it is running. Death or serious injury can result.

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.

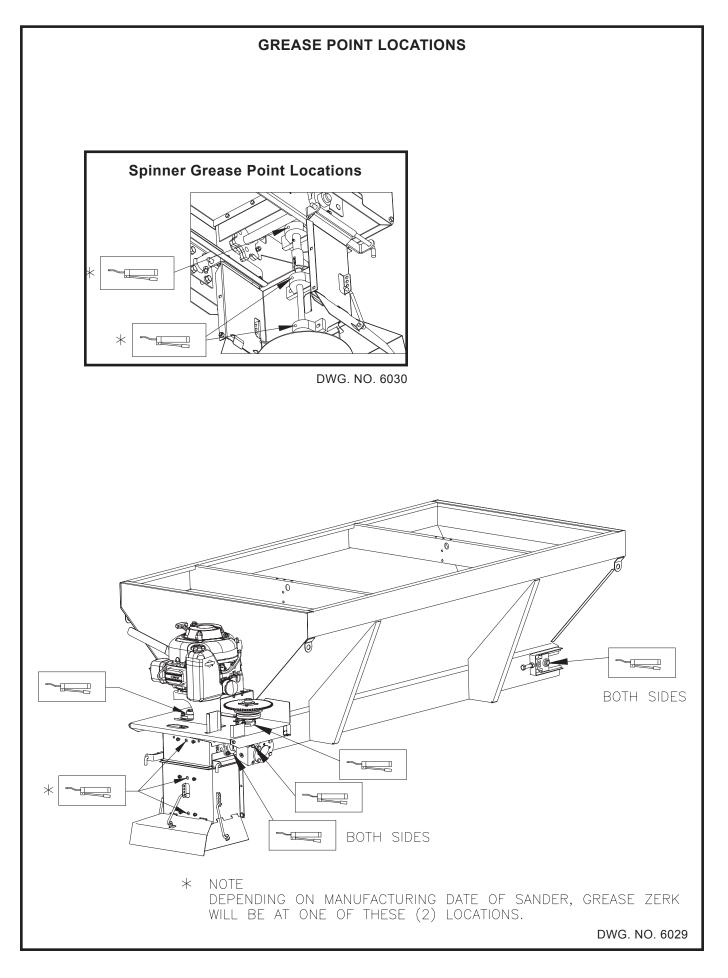
NOTE: Over-greasing may cause seal damage to bearings. Use only one pump of grease per fitting.

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 guart then reinstall the breather. Capacity is about 5/8 quart (0.6 liters).

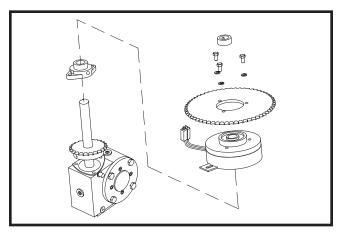


#### ELECTRIC CLUTCH

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
<ul> <li>Low voltage supply</li> </ul>	<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 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 above 250° F</li> <li>Bearing Preloaded Axi- ally</li> </ul>
<ul> <li>Adapter plate rattles against antirotation pin</li> </ul>	<ul> <li>Some noise is normal: to reduce noise level, iso- late antirotation pin from frame with rubber.</li> </ul>

#### C. Symptom: Clutch Slips

PROBLEM	POSSIBLE CAUSES
- Low voltage supply	<ul> <li>Defective battery</li> <li>Faulty charging system</li> <li>Bad wiring or connectors</li> </ul>
- Contaminat- ed friction surfaces	- Oil or grease on clutch
- Clutch loose	<ul> <li>Eccentric collar not locked</li></ul>
on shaft	onto the shaft
- Clutch not	<ul> <li>Mounting shoulder not</li></ul>
mounted	square <li>Clutch integral key hitting</li>
square	end of keyway
- Broken rivet	- Loose mounting
joints	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 Head	Torque InIbs. (Ft-Ibs)	Torque 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 Head		
#10	100 (8.8)	11.3
1/4	212 (17.7)	24
5/16	420 (35)	47.5

#### MOUNTING THE SPREADER

1. 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. 3. 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.

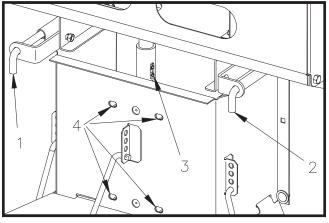
Place lumber as needed between the back of the truck cab and the front of the spreader to help hold the sander in position and protect the truck from damage due to shifting of the spreader.

4. 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

1. 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.

2. 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

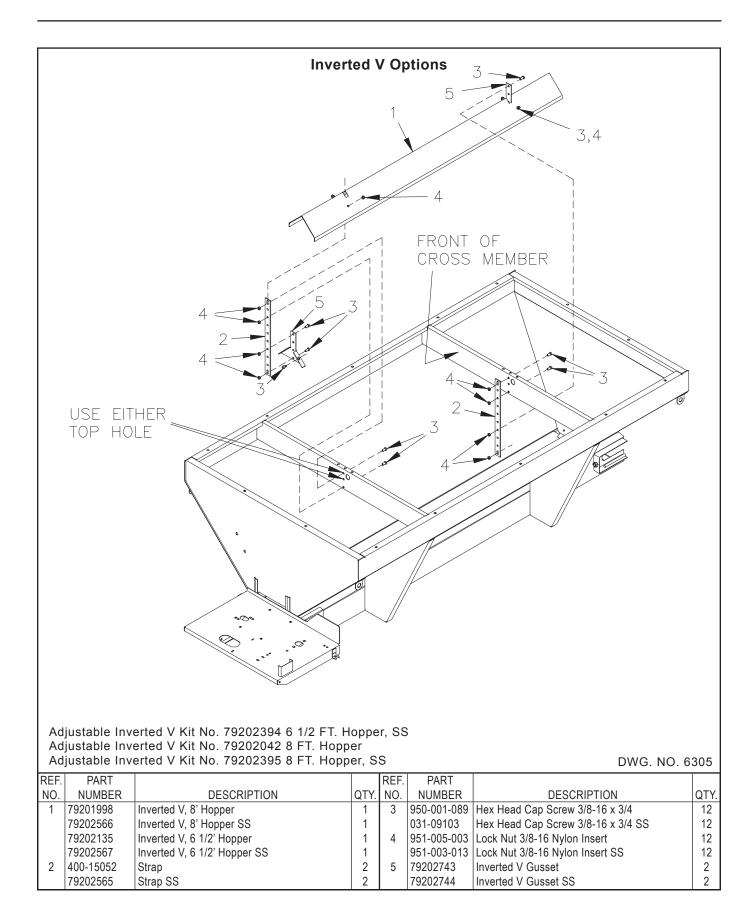
Use the bracket and hardware provided to mount the cab control box at a convenient location for the operator.

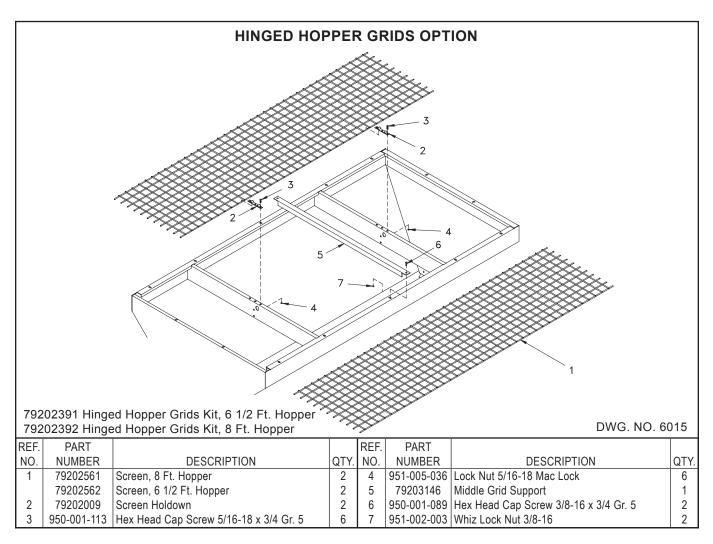
Connect the extension cable to the engine harness. Route the extension cable along the RH side of the hopper.

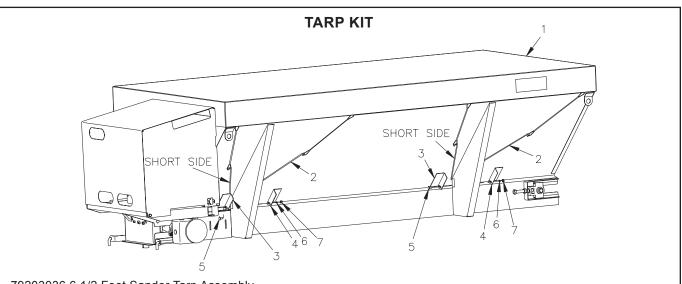
Determine the best location for running the extension cable into the truck cab. If a hole must be drilled to pass the cable through the cab wall, protect wires from sharp edges around the hole with a grommet.

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

### **OPTIONAL EQUIPMENT**





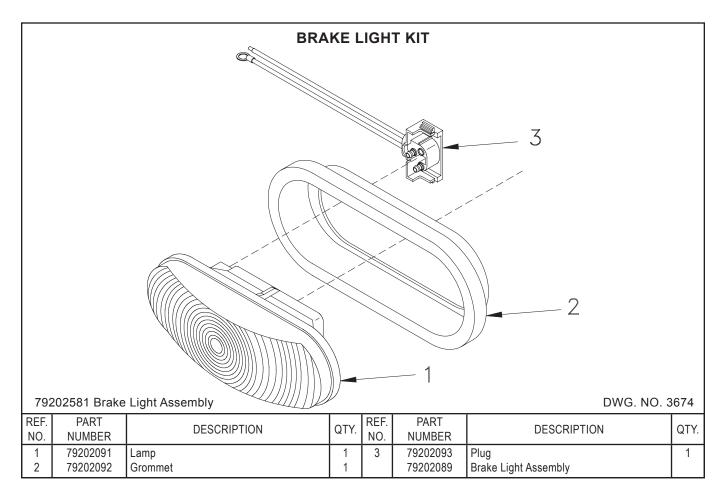


#### 79203036 6 1/2 Foot Sander Tarp Assembly 79203037 8 Foot Sander Tarp Assembly

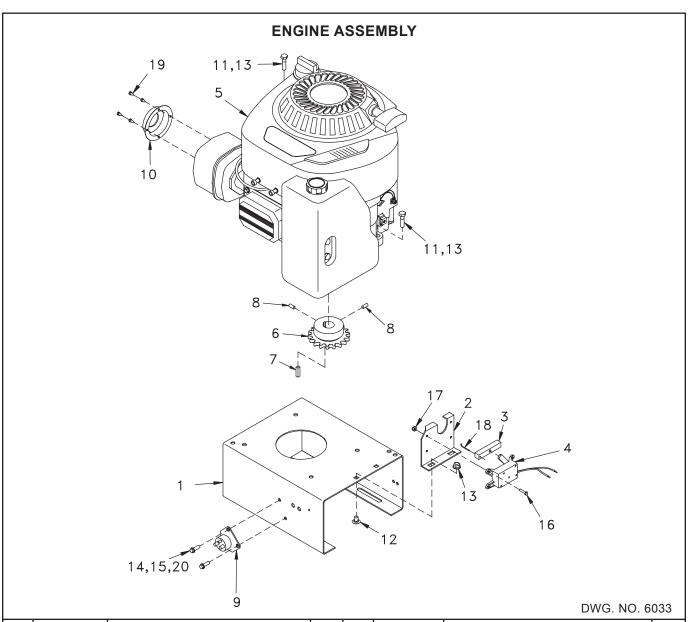
REF.	PART	DESCRIPTION	QTY.	REF.	PART	DESCRIPTION	QTY.
NO.	NUMBER			NO.	NUMBER		
1	79203033	Tarp Shurco 8' Sander	1	4	79203030	RH Tarp Bracket	4
	79203032	Tarp Shurco 6 1/2' Sander	1	5	030-16041	Carriage Bolt 5/16-18 x 3/4 Gr. 5	4
2	79203031	Tarp Hook	4	6	033-12007	SAE Flat Washer 5/16 Inch	4
3	79203029	LH Tarp Bracket	4	7	951-005-036	Mac Lock Nut 5/16-18	4

DWG. NO. 6460

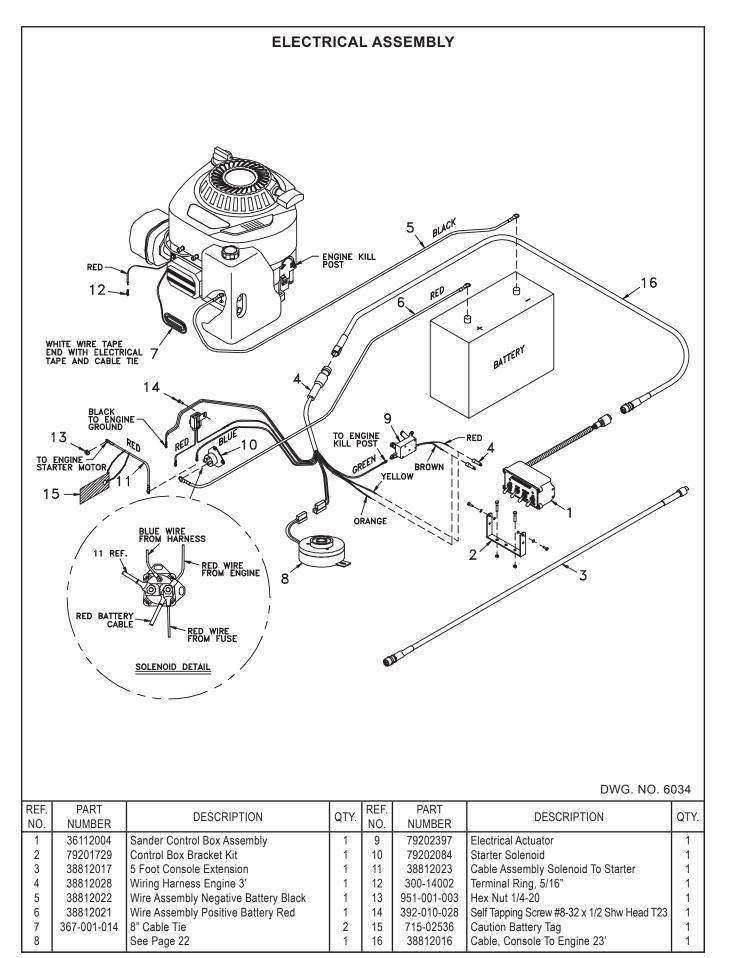
TIE	E DO	WN	КІТ		
79202393 Truck Hold Down Kit				DWG. NO.	6039
REF. PART DESCRIPTION	QTY.	REF. NO.	PART NUMBER	DESCRIPTION	QTY.
1 79202400 Ratchet Tiedown	4				

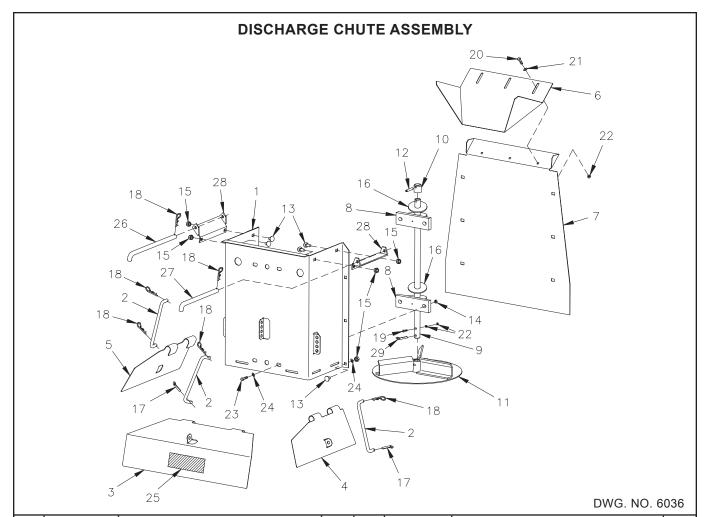


### PARTS BREAKDOWN

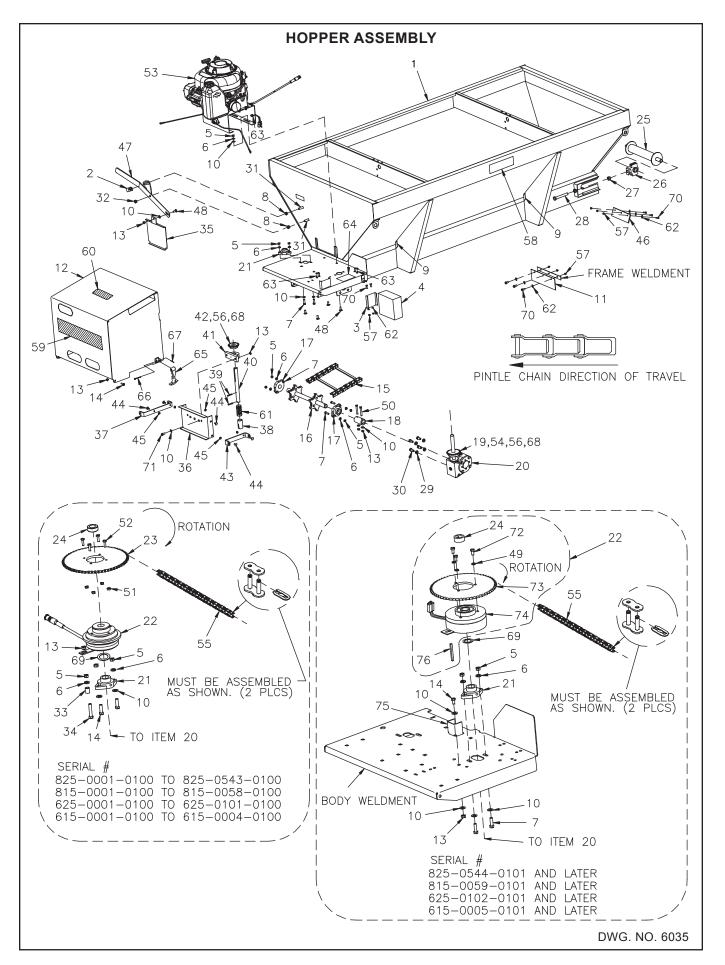


REF.	PART	DESCRIPTION	QTY.	REF.	PART	DESCRIPTION	QTY.
NO.	NUMBER	DESCRIPTION	QII.	NO.	NUMBER	DESCRIPTION	QTT.
1	79202447	Engine Mount Plate	1	12	950-003-002	Carriage Bolt 5/16-18 x 1/2 Gr. 5	2
	79202500	Engine Mount Plate SS	1		950-003-077	Carriage Bolt 5/16-18 x 5/8 SS	2
2	79201997	Throttle Control 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

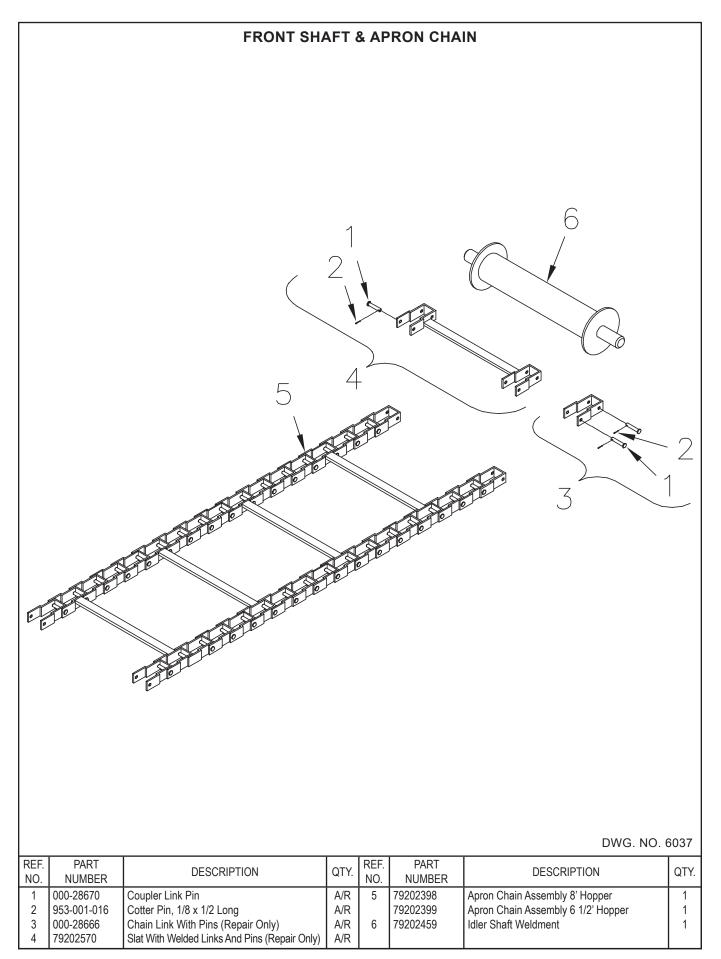




REF. NO.	PART NUMBER	DESCRIPTION	QTY.	REF. NO.	PART NUMBER	DESCRIPTION	QTY.
1	79202511	Long Discharge Chute SS	1	14	951-005-003	Hex Mac Lock Nut 3/8-16	4
	79202503	Short Discharge Chute SS	1		951-003-013	Lock Nut 3/8-16 Nylon Insert SS	4
	79202497	Long Discharge Chute	1	15	951-005-036	Hex Mac Lock Nut 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
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

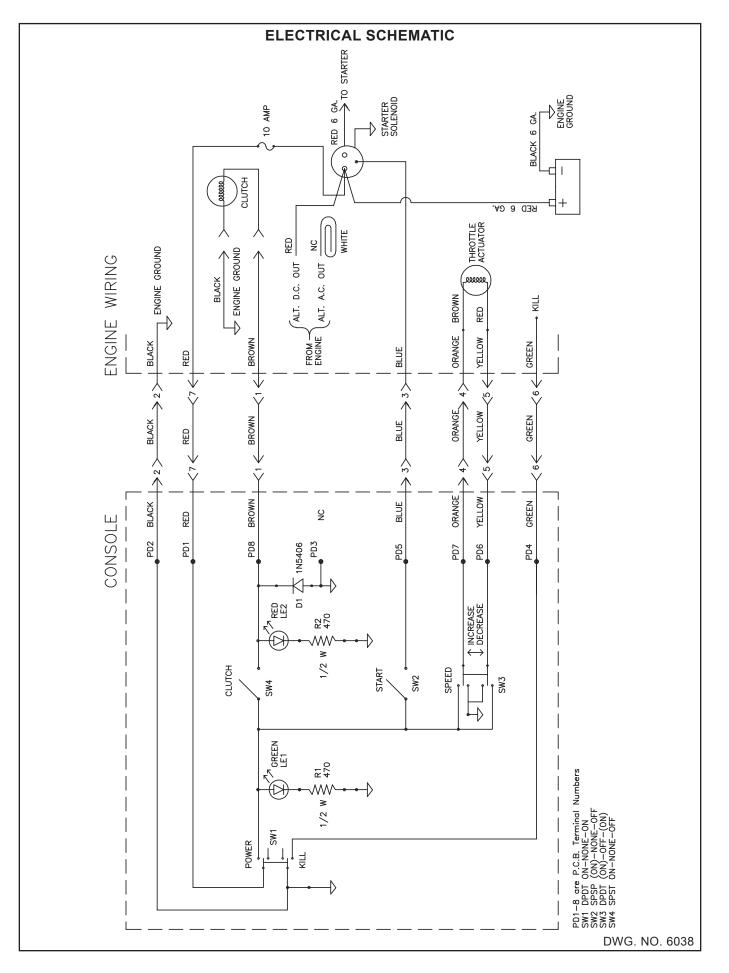


REF.	PART	DECODIDITION		REF.	PART	DECODIDITION	
NO.	NUMBER	DESCRIPTION	QTY.	NO.	NUMBER	DESCRIPTION	QTY.
1	79202532	6 1/2 Ft SS Hopper Weldment	1	37	79202523	Chute Pivot SS	1
	79202439	6 1/2 Ft Steel Hopper Weldment	1		79202455	Chute Pivot	1
	79202416	8 Ft SS Hopper Weldment	1	38	79202456	Shaft Coupler	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
Ĭ	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
Ŭ	033-29011	Lock Washer 3/8 Med Split SS	A/R		951-002-011	Whiz Lock Nut 5/16-18 SS	6
7	950-001-106	Hex Head Cap Screw 3/8-16 x 1 1/4 Gr 5	A/R	46	79202458	Front Wiper	1
'	950-001-344	Hex Head Cap Screw 3/8-16 x 1 1/4 SS	A/R	47	79202524	Lever Weldment SS	
8	951-001-007	Hex Nut 1/2-13	2	<sup>4</sup> ′	79202324	Lever Weldment	
0	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	40	950-003-029		5
	952-003-006		Z A/R	49		Carriage Bolt 3/8-16 x 1 SS	
10		Flat Washer 3/8 SAE		49	952-001-002 061917	Lock Washer 5/16 Med Split SAE	A/R
	061916	Flat Washer 3/8 SAE SS	A/R	-		Lock Washer 5/16 SS	A/R
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
20	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
00	950-001-231	Hex Head Cap Screw 1/2-13 x 1 SS	4		950-001-117	Hex Head Cap Screw 1/4-20 x 3/4 GI. 5	8
31	950-001-288	Hex Head Cap Screw 1/2-13 x 1 33 Hex Head Cap Screw 1/2-13 x 1 1/2 Gr. 5	2	71	950-001-345	Hex Head Cap Screw 3/8-16 x 1 1/2 Gr. 5	2
	950-001-125	Hex Head Cap Screw 1/2-13 x 1 1/2 SI	2	' '	950-001-108	Hex Head Cap Screw 3/8-16 x 1 1/2 SS	2
20			2	70			2
32	10304	Lock Nut 1/2-13	-	72	950-001-232	Hex Head Cap Screw 5/16-18 x 5/8 Gr. 5	
22	951-003-012	Lock Nut 1/2-13 Nylon Insert SS	1	70	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		79203161	Electric Clutch	
35	79202520	Feed Gate SS	1	75	79203159	Clutch Stop	
	79202463	Feed Gate	1		79203163	Clutch Stop SS	
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				



### **SPECIFICATIONS**

DIMENSIONS:	8 FT. HOPPER	6 1/2 FT. HOPPER							
Length Inside	95 3/8 In.	77 3/8 In.							
Length Overall	115 In.	97 In.							
Width	50 1/2 ln.	50 1/2 In.							
Height	32 1/4 In	32 1/4 In.							
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:	Trough Width: 13 Inches								
Flight Bars:3/16" X 3/4" on 11 9/16 Inch Centers									
MODELS 825,815, 625 & 615: 8' & (	6 1/2' Engine - Mechanical Driv	/e							
10.5 HP Air Cooled 4 Cycle OHV Gasoline Engine									
12	Volt Electric Starter with Alterna	tor							
	3 Quart Fuel Tank								
	Electric Throttle Control								
	1600 RPM to 3600 RPM								
Electric Clutch Rated @ 110 Ft-Ibs Torque									
100:1 Gear Reduction									
SPINNER:									
Disc Diameter:	Disc Diameter: 12 Inches								
Shaft Diameter:	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.)
- 2. 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