

SNO-WAY®

SNOW & ICE CONTROL EQUIPMENT

OWNER'S, INSTALLATION & PARTS MANUAL

V-BOX ELECTRIC 16 GAUGE SPREADER UNITS

WITH SERIAL NUMBER AFTER:

8MSLWESC100000

8MSLWELC100000

8SSLWESC100000

8SSLWELC100000

8SSLWDESC100000

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TABLE OF CONTENTS

	Page
INTRODUCTION	2
SAFETY	3
GENERAL INFORMATION	4
INSTALLATION	5
Mounting the Spreader Onto the Vehicle.....	5
Spinner Chute Attachment and Chain Adjustment	5
Spinner Chute Attachment and Pulley Adjustment (Dual Electric Only).....	6
Wiring Harness and Cab Control Installation (On/Off Control)	6
Wiring Harness and Cab Control Installation (Dual Variable Control).....	9
Battery Safety	12
OPERATION.....	13
Freeing Up/Preventing Stuck Conveyor Chain	13
External Shield Adjustment	14
Electric Spreader - On/Off Control Operation	14
Electric Spreader - Dual Variable Control Operation.....	15
MAINTENANCE	17
General	17
Electric Motor Service	17
Metri-Pack™ Connector Repair	17
TORQUE SPECIFICATIONS	20
WIRING SCHEMATIC - ELECTRIC SPREADER (On/Off Control).....	21
WIRING SCHEMATIC - ELECTRIC SPREADER (Dual Variable Control)	22
SPREADER BODY	25
CHUTE/SPINNER ASSEMBLY.....	27
CONVEYOR DRIVE AND IDLER	29
DUAL MOTOR PLATE & DRIVE - ELECTRIC SPREADER	31
MOTOR PLATE & DRIVE - ELECTRIC SPREADER	33
ON/OFF CONTROL - ELECTRIC SPREADER	35
DUAL VARIABLE CONTROL - ELECTRIC SPREADER.....	36
DECAL AND DECAL LOCATION.....	37
NUMERICAL INDEX	39
DEALER CHECKLISTS.....	BACK COVER

INTRODUCTION

This manual was written for the assembly, installation and maintenance of your new Sno-Way® V-BOX ELECTRIC SPREADER. Most importantly, this manual provides an operating plan for safe use. Refer to the Table of Contents for an outline of this manual.

Please keep this manual with your machine at all times as reference material and so it can be passed on to the next owner if the machine is sold.

We require that you read and understand the contents of this manual COMPLETELY, especially the chapter on SAFETY, before attempting any procedure contained in this manual.



The Society of Automotive Engineers has adopted this SAFETY ALERT SYMBOL to pinpoint characteristics that, if NOT carefully followed, can create a safety hazard. When you see this symbol in this manual or on the machine itself, BE ALERT!, your personal safety and the safety of others, is involved.

• Defined in the next column, are the SAFETY ALERT messages and how they will appear in this manual.

 WARNING
Information, that if not carefully followed, can cause personal injury or death!

 CAUTION
Information, that if not carefully followed, can cause injury or damage to equipment!

NOTE: Additional information concerning the equipment or the procedure that may or may not be contained elsewhere in this manual.

BE AWARE! It is illegal to remove, deface or otherwise alter the safety decals mounted on this equipment.

Record the Spreader Serial Number and Spreader Model Number, in the space provided below as a handy record for quick reference. The Serial Number is located under the motor cover. This plate contains information that your Dealer needs, to answer questions, to order replacement parts, or to complete warranty work, if needed, for your unit.

NAME PLATE DATA	
SPREADER MODEL NUMBER	_____
SPREADER SERIAL NUMBER <small>(Located under Motor Cover)</small>	_____
(FILL IN)	

DEALER	
NAME	_____
ADDRESS	_____
CITY	STATE ZIP
PHONE ()-	_____
(FILL IN)	

ORIGINAL PURCHASER	
NAME	_____
ADDRESS	_____
CITY	STATE ZIP
PHONE ()-	_____
(FILL IN)	

We reserve the right to make changes or improve the design or construction of any part(s) without incurring the obligation to install such parts or make any changes on any unit previously delivered.

Sno-Way Products are built under one or more of the following patents:

5,524,368	5,832,637	5,894,688	5,987,785	6,154,986
6,691,435	6,701,646	6,702,208	6,775,933	6,778,932
6,860,039	6,860,040	2,121,948		

SAFETY

BEFORE ATTEMPTING ANY PROCEDURE IN THIS BOOK, READ AND UNDERSTAND ALL THE SAFETY INFORMATION CONTAINED IN THIS SECTION. IN ADDITION, ENSURE ALL INDIVIDUALS WORKING WITH YOU ARE ALSO FAMILIAR WITH THESE SAFETY PRECAUTIONS.

For your safety Warning and Information Decals have been placed on this product to remind the operator to take safety precautions. It is important that these decals are in place and are legible before operation begins. New decals can be obtained from Sno-Way or your local dealer.

REMEMBER The careful operator is the best operator. Most accidents are caused by human error. Certain precautions must be observed to prevent the possibility of injury to operator or bystanders and/or damage to equipment.

FIRST TIME OPERATION When running for the first time or after the unit has not been used for a long period of time, run and inspect the conveyor system without spinner and chute assembly attached.

NEVER operate spreader when under the influence of alcohol, drugs or other medications that could hamper your judgement and reactions. An accident may result in serious injury or death to other persons or yourself.

ALWAYS operate vehicle in a well-ventilated area. The carbon monoxide in exhaust gas is highly toxic and can cause injury or death.

NEVER wear wrist watches, rings or other jewelry when working on the vehicle or individual equipment. These things can catch on moving parts or cause an electrical short circuit that could result in personal injury.

ALWAYS wear safety goggles when working on the vehicle to protect your eyes from battery acid, gasoline, and dust or dirt from flying off of moving engine parts.

ALWAYS wear safety glasses with side shields when striking metal against metal! In addition, it is recommended that a softer (non-chipable) metal material be used to cushion the blow. Failure to heed could result in injury to the eye(s) or other parts of the body.

NEVER allow children or unauthorized person to operate this spreader.

NEVER exceed 45 m.p.h. when loaded spreader is attached to vehicle. Braking distances may be increased and handling characteristics may be impaired at speeds above 45 m.p.h.

ALWAYS lock the vehicle when unattended to prevent unauthorized operation.

ALWAYS check the job site for terrain hazards, obstructions and people.

ALWAYS check surrounding area for hazardous obstacles before operating this unit.

ALWAYS make sure personnel are clear of area being spread. Material is discharged from spreader at a high rate of speed and could injure bystanders.

NEVER leave materials in hopper for long periods of time. Remember salt is hygroscopic and will attract enough atmospheric moisture to cause it to “cake”.

NEVER work on the vehicle without having a fully serviced fire extinguisher available. A 5 lb or larger CO² or dry chemical unit specified for gasoline, chemical or electrical fires, is recommended.

NEVER smoke while working on the vehicle. Gasoline and battery acid vapors are extremely flammable and explosive.

ALWAYS make sure that all safety guards are in place before operating the spreader.

ALWAYS shut off the vehicle and spreader engines, place the vehicle transmission in “Park”, turn the vehicle and spreader ignition switches to “OFF” position and firmly apply the parking brake of the vehicle before servicing or making any adjustments to the spreader.

ALWAYS wait for all movement to stop before servicing or adjusting the spreader.

NEVER climb on or allow others to climb on the spreader.

ALWAYS reassemble any parts or hardware removed for cleaning or adjusting before operating the spreader.

ALWAYS remove any tools and other materials from the spreader before operating the spreader

ALWAYS use auxiliary warning lights, except when prohibited by law, when operating the spreader.

NEVER allow hands, hair or clothing to get near any moving part of the spreader. Never wear neckties or loose clothing when working on the spreader or the vehicle.

ALWAYS be aware of and avoid contact with hot surfaces such as engine and exhaust.

ALWAYS inspect the unit periodically for defects. Parts that are broken, missing or plainly worn must be replaced immediately. Never operate the unit when in need of maintenance.

REMEMBER it is the owner’s responsibility for communicating information on the safe use and proper maintenance of this machine.

GENERAL INFORMATION



WARNING

WARNING: Check the vehicle's load rating certification sticker for the maximum vehicle capacity, and **DO NOT** overload beyond the vehicle GVWR or GAWR. Overloading could result in an accident, or damage to the vehicle.

FAILURE TO HEED CAN RESULT IN INJURY OR DEATH.

IMPORTANT: This spreader is designed to spread snow and ice control materials. Do not use the spreader for purposes other than those specified in this manual

Use the following tables to calculate the vehicle payload whenever you place material in the spreader

BODY SIDE LENGTH	WIDTH (inches)	HEIGHT (inches)	OVERALL LENGTH (inches)	EMPTY WEIGHT (Lbs.)(No Screen or Battery)	CAPACITY (cubic yd.)	RECOMMENDED USE
8'	48	33	115	685	2.0	FULL SIZE HD TRUCKS

Side extensions are not recommended for the S.T. Model Spreader and will void all warranties

MATERIAL WEIGHTS

MATERIAL	LBS. PER CUBIC YD.	LBS. PER CUBIC FT.
# 1 Rock Salt	950	35
# 2 Rock Salt	1,215	45
Coarse Sand - Dry	2,565	95
Coarse Sand - Wet	3,240	120

NOTE: All references to "Left" and "Right" sides relates to equipment as viewed from the rear, and facing the normal direction of vehicle travel.

IMPORTANT: To help prevent a frozen conveyor chain, empty the spreader when not in use

ABBREVIATION KEY

ABBREVIATION KEY							
AR	As Required	CPLG	Coupling	15 Inch Wide	15 Inch Wide Series Spreader	STD	Standard
ASSY	Assembly	ELEC	Electric	REQ	Required	SV	Small V-Box
CB	Carriage Bolt	EV	Electric V-Box	SPKT	Sprocket	V	Standard Larger V-Box
CHMSL	Center High Mounted Stop Lights	HV	Honda Powered V-Box	SS	Stainless Steel	ZP	Zinc Plated
CONV	Conveyer	I.D.	Inside Diameter	10 Inch Wide	10 Inch Wide Series Spreader		

INSTALLATION

Mounting the Spreader Onto the Vehicle

NOTE: Refer to the Repair Parts Diagrams, which are in this manual, to help identify parts referenced in the following text.

1. Remove the tailgate from the truck.
2. Lift the spreader by hooking the loop or hole located on the rear cross channel which is inside the hopper. The loop or hole is located at the approximate balance point of the spreader. The balance point may vary with engine fluid levels, battery, top screen, or any residual material in the hopper.



WARNING

Before lifting, check that the hopper is empty of material. The lifting device must be capable of supporting the spreader's weight. See charts for spreader weights.

FAILURE TO HEED CAN RESULT IN INJURY OR DEATH.

3. Place lengths of lumber under the side ribs of the spreader. By elevating the spreader off the vehicle, it is easier to remove excess material that accumulates under the spreader. Center the spreader on the vehicle with the end of the rails 14" to the rear of the nearest vertical obstruction (e.g., bumper, trailer hitch, etc.).

4. Bolt the spreader to the vehicle frame using the holes located at each lower support leg. Use 1/2" hardware as required by vehicle application.

5. Using the Tie-down Chains, secure the spreader to the vehicle using the tabs located at the corners of the spreader and the vehicle's factory installed anchor points.

NOTE: Check the mounting devices every time the spreader is placed on the truck and loaded with material to make sure they are secure.

Spinner Chute Attachment and Chain Adjustment

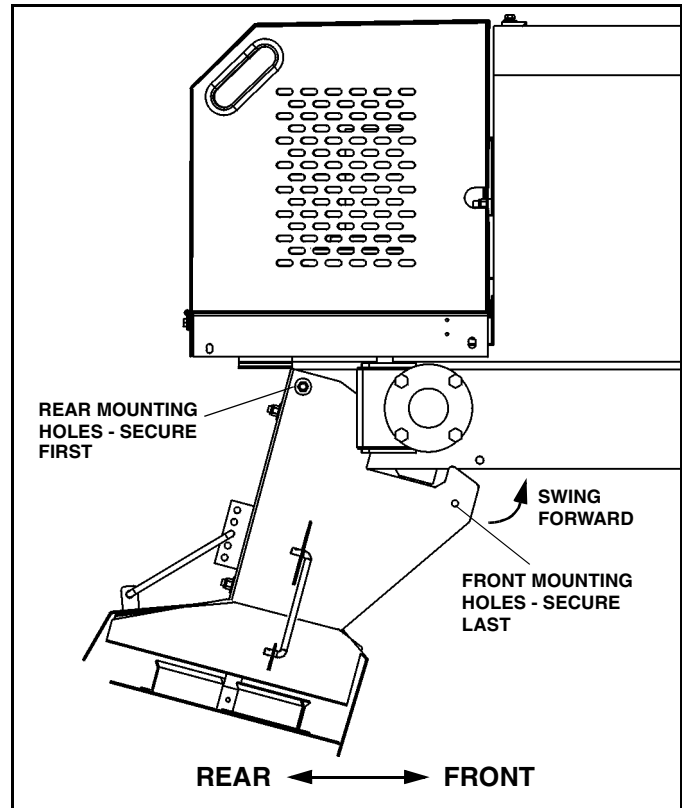


Figure 1-1

1. Loosely attach the two rear mounting holes of the Chute/Spinner Assembly using two 3/8" x 7/8" bolts, flat washers, and nylock nuts, with the heads of the bolts on the inside of the chute. Allow the Chute Assembly to hang, as shown. Do not tighten the bolts. (See Figure 1-1).

2. Swing the Chute/Spinner Assembly toward the front of the vehicle, and secure the two front mounting holes using two 3/8" x 7/8" bolts, flat washers, and nylock nuts, with the heads of the bolts on the inside of the chute.

3. Install the Roller Chain between the Spinner Shaft Sprocket and the Gear Case Sprocket. Check that the sprockets are in line. Check the setscrew for tightness. Install the Master Link.

4. To adjust roller chain tension, loosen the Spinner Shaft Bearing Bolts and move the Spinner Shaft away from the Gear Case. Maintain vertical position of the shaft and alignment of sprockets when tightening bearing fasteners. After adjusting, correct chain tension should allow a 5/16" deflection midway between the sprockets. Additional chain tension may be applied by pulling the Chute/Spinner Assembly toward the rear. Tighten all fasteners according to the torque chart on page 20.

5. Install the chain guard using 1/4" x 3/4" long hex cap screws, lock washers, and nuts.

Spinner Chute Attachment and Pulley Adjustment (Dual Electric Only)

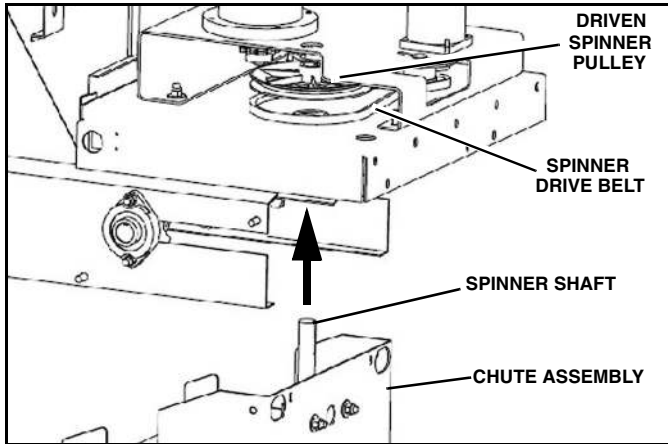


Figure 1-2

1. Place spinner drive belt between the motor mount and motor plate, and route it around the spinner motor pulley. Place the spinner drive pulley in its approximate operating position and allow it to rest on the drive belt. (See Figure 1-2).

2. Raise the chute assembly into position on the spreader, while an assistant aligns the driven pulley over the spinner shaft as the chute is being raised.

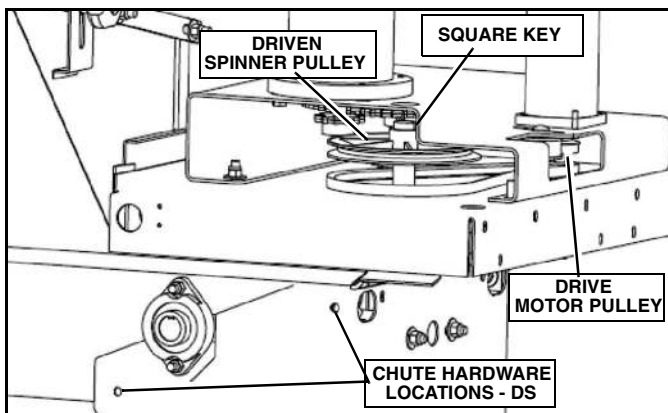


Figure 1-3

3. Secure the chute using four 3/8" x 7/8" bolts, flat washers and nylock nuts. (See Figure 1-3).

4. Install a square key in the spinner driveshaft/driven pulley and lift the pulley into alignment with the drive motor pulley. Tighten the pulley set screw securely.

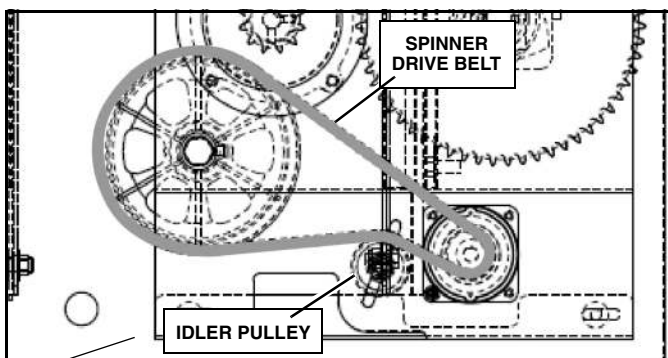


Figure 1-4

5. After installing the drive belt on the driven pulley, adjust the belt for 1/2" of deflection and tighten the idler pulley securely. Check the pulley alignment and belt tension again and adjust as required. (See Figure 1-4).

Wiring Harness and Cab Control Installation

REMEMBER After the Spreader is installed on the vehicle, the Pre-Delivery Check List and Delivery Check List must be completed.

Tool List

Safety Goggles	12 Volt Test Light
Wire Crimp Tool	Drill
Utility Knife	Drill Bit, 3/8"

On/Off Control

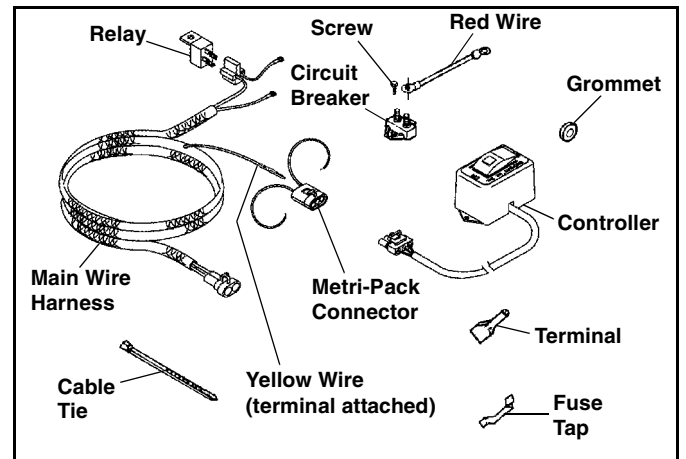


Figure 1-5

1. Locate the following parts:

- Controller
- Wire Harness, Main
- Circuit Breaker.
- Fuse Tap
- Terminal, Female
- Grommet
- Neoprene Seal
- Red Wire, Short
- Cable Tie, Plastic
- Self Tapping Screw
- Relay, 70A
- Metri-Pack Connector

(For reference to part numbers, see service parts listing page 35).

NOTE: Take the extra time needed to plan the routing of the wiring harness before drilling any holes or fastening the harness or control box in place. Read all the instructions carefully to ensure all the required conditions are met for a safe and professional installation.

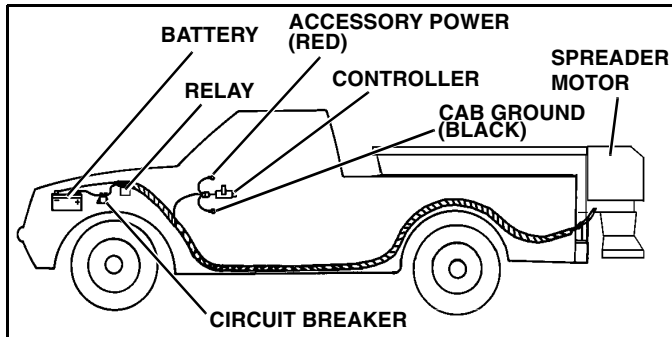



Figure 1-6

2. Uncoil the wiring harness and route the end of the harness with the short red and black wires (with ring terminals installed) from under the vehicle up into the engine compartment on the battery side.
3. Position the red and black wires (with terminals) near the battery and prepare to route the five foot section, with connector, into the vehicle operator compartment area.
4. Look for an existing hole, with rubber grommet, in the vehicle firewall. The hole must be 3/8" or larger.

 CAUTION
<p>DO NOT drill any holes until a thorough visual inspection is performed to determine that the area around the hole to be drilled, on both sides of the firewall, is clear of any obstacles such as brake lines, linkage or vehicle wiring.</p>


5. If an existing 3/8" hole is not available, look for an area to drill a 3/8" hole that satisfies these conditions;
 - Hole should be drilled on the same side of the vehicle firewall (left or right) as the vehicle battery.
 - **DO NOT** put a hole in such a spot that will force the wiring harness, when installed, to interfere or be routed behind accelerator pedal, brake pedal, clutch pedal, parking brake or associated linkage.
 - **DO NOT** drill any holes until a thorough visual inspection is performed to determine that the area around the hole to be drilled, on both sides of the firewall, is clear of any obstacles such as brake lines, linkage or vehicle wiring.

NOTE: If the hole has to be drilled through carpeting or insulation, reverse the direction of the drill until the carpet has been penetrated, remove the carpet from the hole saw then use the forward direction to continue drilling through the firewall, this should prevent "running" in the carpet.

6. Using a drill, make a 3/8" hole through the vehicle firewall.

 CAUTION
<p>Keep wiring harness away from moving parts, sharp edges and areas of extreme heat to avoid electrical failure and fire.</p>

7. Install the grommet into the firewall.
8. Feed the yellow wire (with connector terminal attached) through the grommet into the cab.
9. Inside the cab, insert the terminal on the yellow wire into the vacant slot in the back of the three-wire connector that has red and black wire leads already installed. Push the terminal fully into the connector until it locks in place.

 WARNING
<p>Mount the control box in an area that will not interfere with the legs during seat travel and that will not allow the knees to come in contact with it in an accident.</p> <p>FAILURE TO HEED CAN RESULT IN INJURY OR DEATH.</p>

10. Use hook and loop strips (Velcro®) to mount the control in an appropriate location.
11. Connect the vehicle harness, inside the cab, to the control box connector.
12. Remove the accessory fuse from the vehicle fuse box.

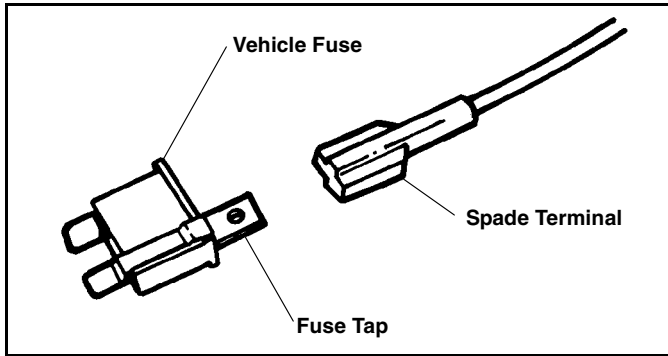


Figure 1-7

13. Using a test probe, determine the fused “Dead/OFF” side of the fuse and attach the A.T.O. fuse tap to that side of the fuse. (See Figure 1-7).

NOTE: Two fuse tap-ins are provided, one for standard (ATO/ATC) automotive blade fuses and one for mini-blade automotive fuses. Determine which type of fuse the vehicle uses. If the standard fuse is used, the fuse tap-in will require the provided 1/4” female spade terminal, if the mini-fuse is used, the fuse tap-in will require the provided 3/16” female spade terminal.

IMPORTANT: DO NOT use fuse designated for head lamp, tail lamp, stop lights, panel lights, or other critical fuses.

NOTE: If accessory fuse is not available in the fuse box use another fuse with a 10-15 amp designation, i.e. radio, lighter, etc.

14. Cut end of “Red” wire to length, strip end and install the appropriate female spade terminal onto wire.

15. Attach female spade terminal to appropriate fuse tap-in and re-install fuse.

IMPORTANT: The RED wire must be protected by a fuse. If it is not practical to attach this wire to a fused circuit in the vehicle fuse box an in line 10 amp fuse must be added to this wire.

16. Attach the controller ground wire (black with ring terminal) to a grounding point inside the vehicle cab.

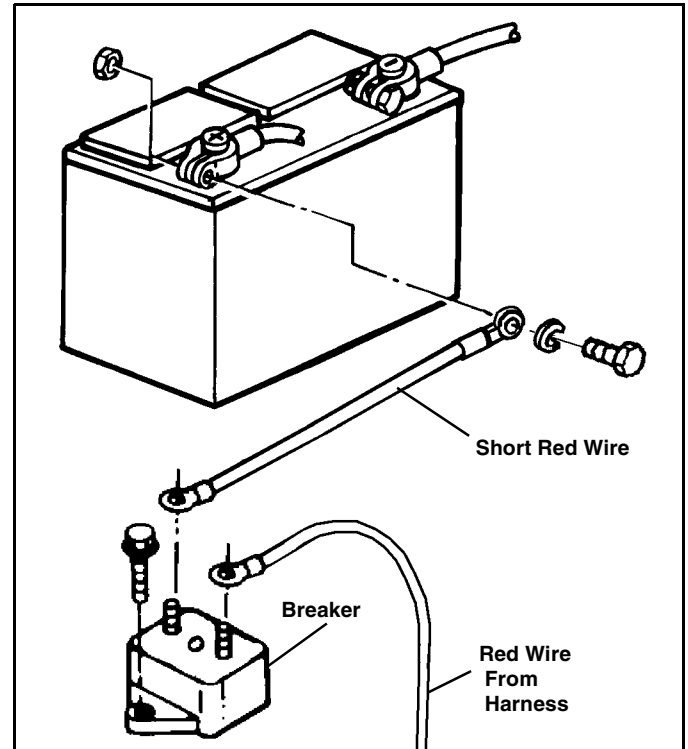


Figure 1-8

17. Locate short red wire (#96106728) with two ring terminals. Attach the small ring terminal to the copper colored post marked BAT on the breaker. Attach the other, large ring terminal to the battery positive terminal. (See Figure 1-8).

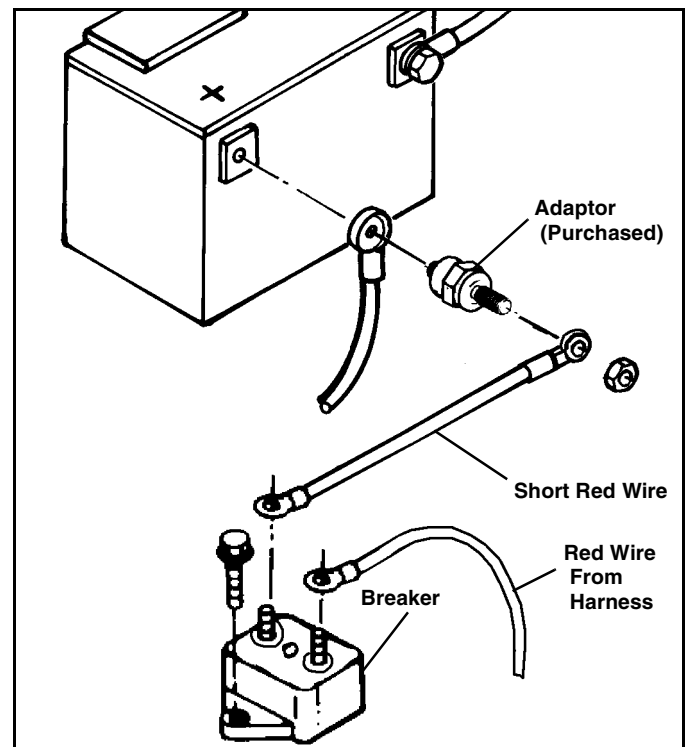


Figure 1-9

WARNING

Disconnect vehicle NEG. (-) battery cable while performing Steps 17-24 to avoid serious bodily injury from fire or explosion.

FAILURE TO HEED CAN RESULT IN INJURY OR DEATH.

NOTE: If the vehicle has a "side post" battery, it will be necessary to install adaptors (#96100773) to make connections at the vehicle battery (See Figure 1-9).

IMPORTANT: The circuit breaker must be placed in a location that will avoid excessive heat. DO NOT locate these parts near the engine exhaust manifold. A preferred location is one that will receive good air flow from the radiator fan, but be protected from excessive engine heat.

18. Mount the circuit breaker with two (2) #10 x 1" self-tapping screws (#98100037).

19. Assemble the relay (from the bag of parts) onto the relay connector plug on the main wire harness. Mount the relay, using the mounting tab on the relay and a #10 x 1" self-tapping screw (#98100037) near the circuit breaker in a location that will avoid excessive heat.

20. Attach the ring terminal of the positive (RED) wire of the wiring harness to the other terminal of the circuit breaker.

21. Attach the black harness negative wire to the vehicle battery NEG (-) post.

Dual Variable Speed Control

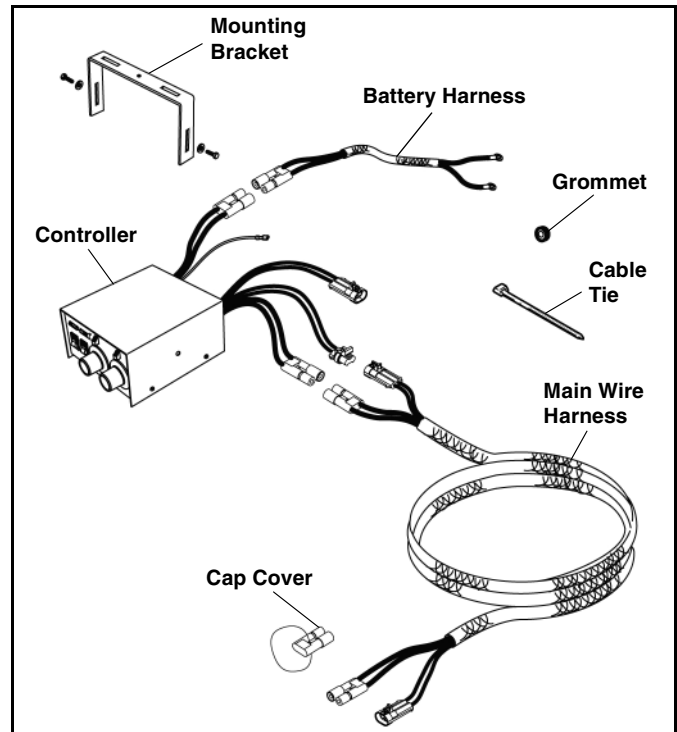


Figure 1-10

1. Locate the following parts:

- Controller
- Mounting Bracket
- Wire Harness, Main
- Wire Harness, Battery
- Grommet
- Cable Tie, Plastic
- Cap Cover

(For reference to part numbers, see service parts listing page 36).



CAUTION

Keep wiring harness away from moving parts, sharp edges and areas of extreme heat to avoid electrical failure and fire.

22. Route vehicle harness from engine compartment to rear bumper by the hitch receiver tube. Attach the harness assembly to the vehicle at different points in the cab and engine compartment and frame that will not allow the harness to come in contact with sharp edges, hot components and moving parts or mechanisms. Be sure the harness is supported and protected by the vehicle frame.

23. Fasten the main harness to the rear of the vehicle near the bumper. Leave enough slack in the harness so that the motor harness from the spreader can be connected easily and not be under tension.

24. Connect the motor harness from the spreader to the main wire harness.

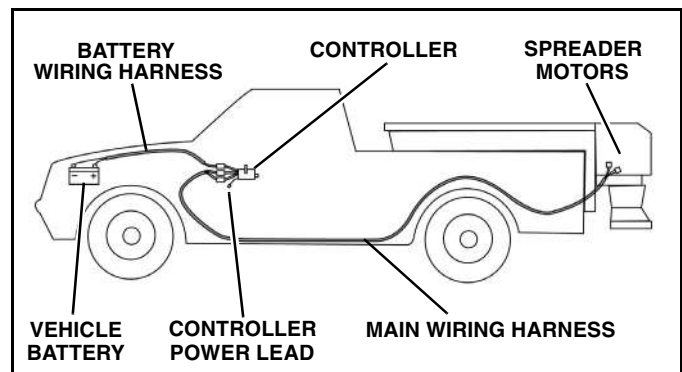



Figure 1-11

NOTE: Take the extra time needed to plan the routing of the wiring harness before drilling any holes or fastening the harness or control box in place. Read all the instructions carefully to ensure all the required conditions are met for a safe and professional installation.(See Figure 1-11).

2. Look for an existing hole, with rubber grommet, in the vehicle firewall. The hole must be 3/8" or larger.

	CAUTION
<p>DO NOT drill any holes until a thorough visual inspection is performed to determine that the area around the hole to be drilled, on both sides of the firewall, is clear of any obstacles such as brake lines, linkage or vehicle wiring.</p>	

3. If an existing 3/8" hole is not available, look for an area to drill a 3/8" hole that satisfies these conditions;

- Hole should be drilled on the same side of the vehicle firewall (left or right) as the vehicle battery.
- DO NOT put a hole in such a spot that will force the wiring harness, when installed, to interfere or be routed behind accelerator pedal, brake pedal, clutch pedal, parking brake or associated linkage.
- DO NOT drill any holes until a thorough visual inspection is performed to determine that the area around the hole to be drilled, on both sides of the firewall, is clear of any obstacles such as brake lines, linkage or vehicle wiring.

NOTE: If the hole has to be drilled through carpeting or insulation, reverse the direction of the drill until the carpet has been penetrated, remove the carpet from the hole saw then use the forward direction to continue drilling through the firewall, this should prevent "running" in the carpet.

4. Using a drill, make a 3/8" hole through the vehicle firewall.

5. Install the grommet into the firewall.


	CAUTION
<p>Keep wiring harness away from moving parts, sharp edges and areas of extreme heat to avoid electrical failure and fire.</p>	

6. Uncoil the battery wiring harness and route the end of the harness with the short red and black wires (with ring terminals installed) through the grommet and into the engine compartment. Position the red and black wires (with terminals) near the battery.

7. Uncoil the main wiring harness and route from the vehicle interior, through the grommet to the rear bumper by the hitch receiver tube. Attach the harness assembly to the vehicle at different points in the cab interior, engine compartment and frame that will not allow the harness to come in contact with sharp edges, hot components and moving parts or mechanisms. Be sure the harness is supported and protected by the vehicle frame.

8. Fasten the main harness to the rear of the vehicle near the bumper. Leave enough slack in the harness so that the motor harness from the spreader can be connected easily and not be under tension.

9. Connect the motor harnesses from the spreader to the main wire harness.

	WARNING
<p>Mount the control box in an area that will not interfere with the legs during seat travel and that will not allow the knees to come in contact with it in an accident.</p> <p>FAILURE TO HEED CAN RESULT IN INJURY OR DEATH.</p>	

10. Install the controller mounting bracket in the vehicle in a suitable location. Position the controller in the mounting bracket and secure with two flat washers and cap screws.

11. Connect the battery and main wiring harnesses inside the cab to the appropriate controller connectors.

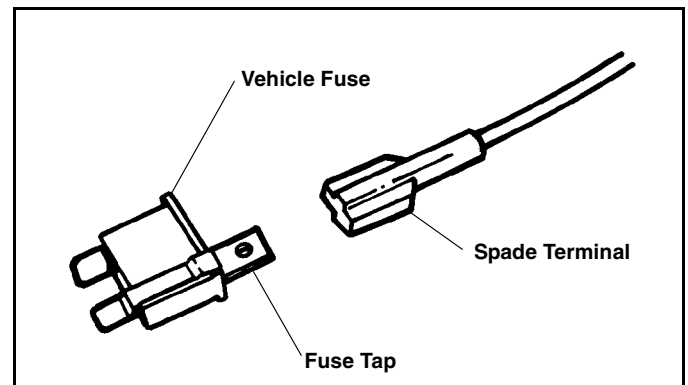


Figure 1-12


12. Using a test probe, determine the fused "Dead/OFF" side of the fuse. Remove the fuse and attach the A.T.O. fuse tap to that side of the fuse. (See Figure 1-12).

NOTE: Two fuse tap-ins are provided, one for standard (ATO/ATC) automotive blade fuses and one for mini-blade automotive fuses. Determine which type of fuse the vehicle uses. If the standard fuse is used, the fuse tap-in will require the provided 1/4" female spade terminal, if the mini-fuse is used, the fuse tap-in will require the provided 3/16" female spade terminal.

IMPORTANT: DO NOT use fuse designated for head lamp, tail lamp, stop lights, panel lights, or other critical fuses.

NOTE: If accessory fuse is not available in the fuse box use another fuse with a 10-15 amp designation, i.e. radio, lighter, etc.

IMPORTANT: The RED wire must be protected by a fuse. If it is not practical to attach this wire to a fused circuit in the vehicle fuse box an in line 10 amp fuse must be added to this wire.

	<h2 style="margin: 0;">WARNING</h2>
<p>Disconnect vehicle NEG. (-) battery cable while performing the following steps to avoid serious bodily injury from fire or explosion.</p>	
<p>FAILURE TO HEED CAN RESULT IN INJURY OR DEATH.</p>	

13. Ensure that both power switches on the controller are in the OFF position. Connect the single RED controller power lead to the fuse tap-in and reinstall the fuse in the vehicle.

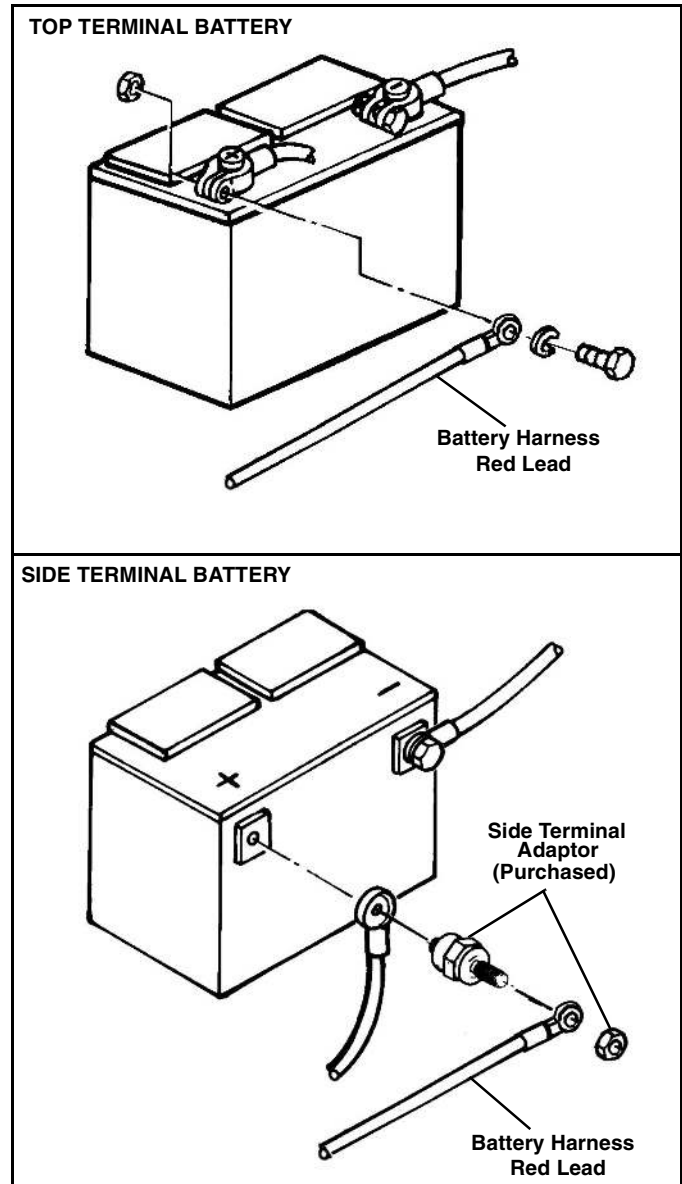


Figure 1-13

14. Attach the ring terminal of the positive (RED) wire of the battery wiring harness to the vehicle battery POSITIVE (+) post. (See Figure 1-13).

NOTE: If the vehicle has a side terminal (side post) battery, it will be necessary to install adaptors (#96100773) to make connections at the vehicle battery.

15. Attach the ring terminal of the positive (RED) wire of the battery wiring harness to the vehicle battery POSITIVE (+) post.

16. Attach the black battery harness negative wire to the vehicle battery NEG (-) post.

Battery Safety



WARNING

- **Never lay tools or equipment on the battery. You could accidentally ground the POSITIVE (+) battery terminal, resulting in electrical shock, burns or damage to equipment.**
- **Always disconnect the battery before removing or replacing electrical components such as the starter relay or battery cables.**

**FAILURE TO HEED CAN RESULT IN INJURY
OR DEATH.**

OPERATION

Freeing Up/Preventing Stuck Conveyor Chain

1. To help prevent a frozen conveyor chain, empty the spreader when not in use.
2. If the Conveyor Chain becomes "stuck" or "frozen", remove the material from the hopper and free the chain, or move the spreader to a warm area to thaw the material.
3. Do not attempt to free the chain by using a pipe wrench or any other tool on the output shaft of the gear case. The gear case is designed to accept torque from the output shaft only. Attempts to turn the output shaft will strip the gears and void any warranty.

Shield Adjustment

Spread pattern, and the amount of material dispensed, depends on engine RPM, gate position, and shield settings.

- *Decreasing* RPM, and/or gate-opening, will *decrease* the amount of material coming to the spinner.
- *Increasing* RPM, and/or gate opening, will *increase* the amount of material coming to the spinner.

External Shield Configuration

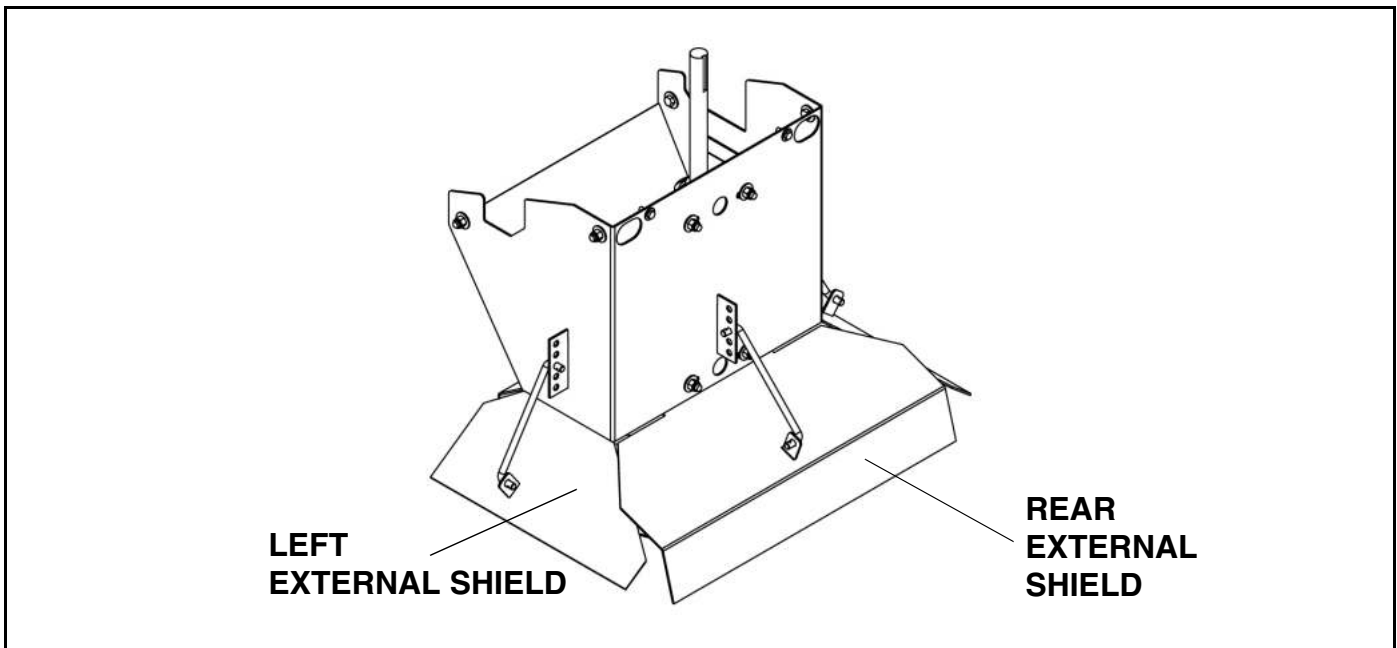


Figure 2-1

External Shield Adjustment

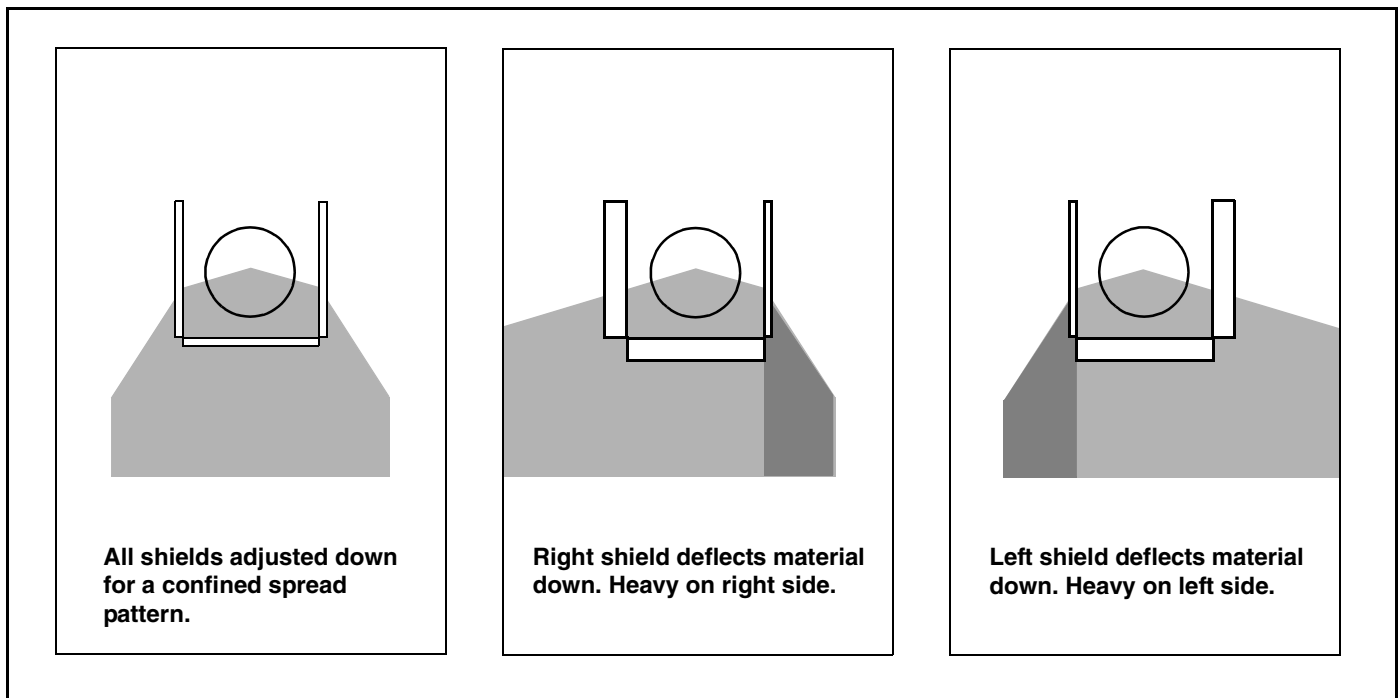



Figure 2-2

Electric Spreader - On/Off Control Operation



CAUTION

The controller input voltage must be a minimum of 11 volts DC for proper operation. Be sure the vehicle battery and alternator are in good operating condition and adequate to provide 11 volts DC to the salt spreader controller.

- Illuminating ON/OFF rocker switch—used to start or stop spinner motor. Switch is an illuminating, rocker type switch.

The motor controller controls the speed of the spinner drive motor by supplying set voltage and current to the spinner drive motor.

Current is supplied by a control power lead (RED wire) from the vehicle fuse block and must be protected by a fuse no greater than 15 amps. This control power lead must also be connected to the fuse block so that the controller receives current **ONLY** when the vehicle ignition is in the ACC position or RUN position. (See "On/Off Control" on page 6.)

The spinner drive motor is protected by a 40 amp circuit breaker installed in the wiring system near the vehicle battery.

Start:

The ON/OFF switch on the front of the control box is an illuminating rocker switch. When the ON side of the switch is depressed, current will be directed to the spinner drive motor and the indicator light behind the rocker switch will illuminate to indicate that power is ON to the spinner drive motor. Also, when the ON switch is depressed, the motor control will go to FULL.

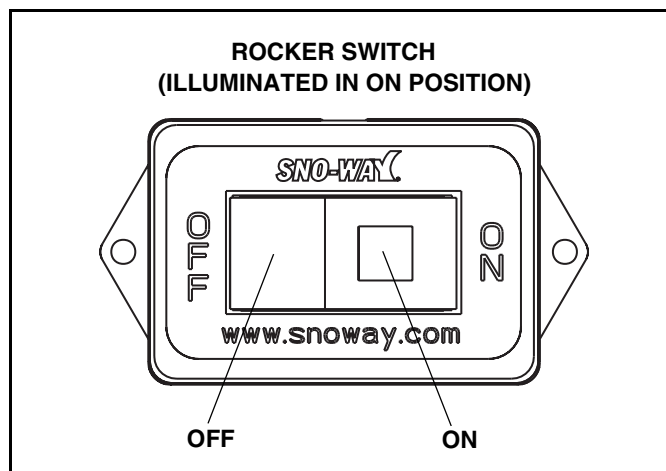


Figure 2-3

The following control and indicator is located on the face of the control box (See Figure 2-3):



WARNING

Make sure that the vehicle ignition switch is in the OFF position and key removed from the switch before inspecting the Spreader for cause of obstruction.

FAILURE TO HEED CAN RESULT IN INJURY OR DEATH.

If the spinner drive motor stalls, press the OFF side of the ON/OFF switch to shut off the power to the spinner drive motor. Turn off the vehicle ignition and remove the key from the ignition switch. Inspect the hopper and the spinner drive to determine the cause of the obstruction.

Correct the problem and test to make sure everything is clear, then restart the spinner drive motor.

Disconnect Protection:

The ground wire to the controller circuit must be connected to a good ground on the vehicle to insure proper controller function. In case the control ground is lost, by a disconnected ground wire or poor/improper ground, the controller will automatically shut down. If the ON/OFF switch is depressed (ON) and the switch **DOES NOT** illuminate, it will indicate an improper ground to the controller.

Ignition Switch Shutoff Procedures:

If the vehicle ignition switch is turned OFF while the spreader control is in the ON position, the spinner drive will shut off. When the vehicle ignition switch is then turned ON, the spreader control switch must be manually depressed to the ON position to restart the spinner drive.

MOTOR DUTY CYCLE:

Motor is not a continuous duty cycle motor. If the motor becomes hot to the touch, the motor is approaching heat limits. Be sure to allow adequate cooling of motor before using the spreader again.

Electric Spreader - Dual Variable Control Operation



CAUTION

The controller input voltage must be a minimum of 11 volts DC for proper operation. Be sure the vehicle battery and alternator are in good operating condition and adequate to provide 11 volts DC to the salt spreader controller.

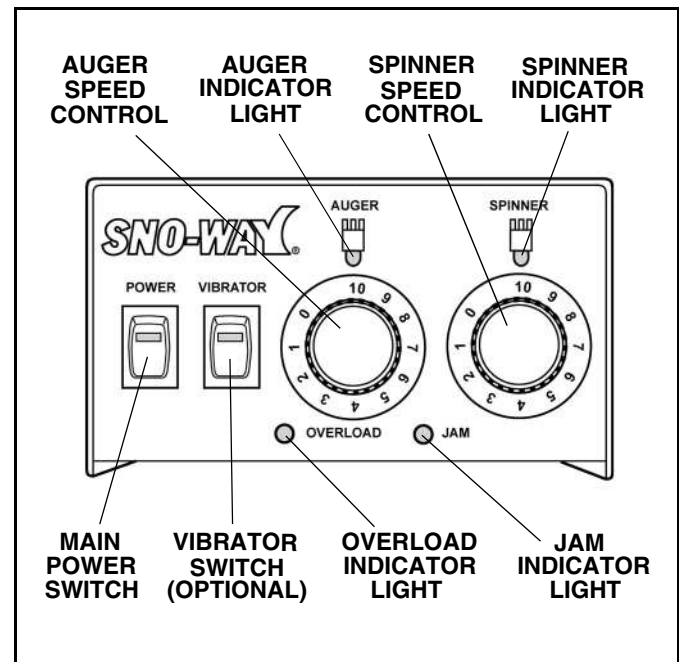


Figure 2-4

The following controls and indicators are located on the face of the controller (See Figure 2-4):

- Illuminating main power rocker switch—used to start or stop spinner and auger motors (and the optional vibrator motor if equipped).
- Illuminating vibrator motor rocker switch—used to start or stop the optional vibrator motor.
- Spinner speed control and indicator light - the dial is used to adjust the speed of the spinner. The indicator provides dial illumination.
- Auger speed control and indicator light - the dial is used to adjust the speed of the auger. The indicator provides dial illumination.
- Overload indicator light - This light will illuminate when the auger experiences excessive forces due to material blockage or freezing.
- Jam indicator light - This light will illuminate when the auger can no longer turn.

The motor controller controls the speed of the spinner and conveyor drive motors by supplying a variable voltage and current to the motors, as determined by their respective speed control settings.

Current is supplied by a control power lead (RED wire) from the vehicle fuse block and must be protected by a fuse no greater than 15 amps. This control power lead must also be connected to the fuse block so that the controller receives current **ONLY** when the vehicle ignition is in the ACC position or RUN position. (See "Dual Variable Speed Control" on page 9.)

The spinner and conveyor drive motors are protected by internal circuit breakers in the controller.

Start

The POWER switch on the front of the controller is an illuminating rocker switch. When the ON side of the switch is depressed, current will be directed to the auger and spinner drive motors and the indicator light behind the rocker switch will illuminate to indicate that power is ON.

Adjust the speed of the auger and spinner motors as desired.



WARNING

Make sure that the vehicle ignition switch is in the OFF position and key removed from the switch before inspecting the Spreader for cause of obstruction.

FAILURE TO HEED CAN RESULT IN INJURY OR DEATH.

If either drive motor stalls, press the OFF side of the ON/OFF switch to shut off the power to the drive motors. Turn off the vehicle ignition and remove the key from the ignition switch. Inspect the hopper and the spinner drives to determine the cause of the obstruction.

Correct the problem and test to make sure everything is clear, then restart the drive motors.

Ignition Switch Shutoff Procedures:

If the vehicle ignition switch is turned OFF while the spreader control power switch is in the ON position, the spinner and conveyor drive will shut off. When the vehicle ignition switch is then turned ON, the spreader control power switch must be manually depressed to the ON position to restart the spinner drive.

MOTOR DUTY CYCLE:

Motors are not continuous duty cycle motors. If a motor becomes hot to the touch, the motor is approaching heat limits. Be sure to allow adequate cooling of motor before using the spreader again.

MAINTENANCE

General

- Use Quaker State NYK-77 dielectric grease, PN3329 or an equivalent grease, on all electrical connections at the beginning and end of each season, and as required during the season.
- Grease the idler bearings on the Idler Shaft, flanged bearings on the Drag Shaft, and spinner shaft bearings every 10 hours of operation.
- Grease the input shaft bearing on the Gear Case every 50 hours of operation.

NOTE: Over-greasing may cause seal damage. The Gear Case must be filled to the oil level plug with SAE 90 gear-type lubricant. Keep the breather plug clean.

- Check the Conveyor Chain slack periodically. Check the tension by measuring the distance between the end of the rear rail and the point where the chain contacts the lower flange on the rail. The correct distance for adjustment is 26" to 30". (See Figure 3-1).

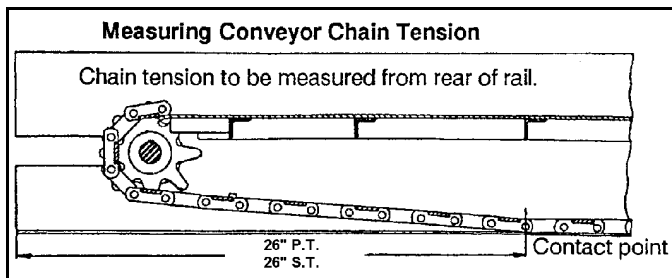


Figure 3-1

- Maintain electric motor-to-gear case roller chain tension. Correct chain tension allows 5/16" deflection midway between the sprockets. Oil this chain often, and at the end of each season.
- Maintain spinner shaft-to-gear case roller tension. Correct chain tension allows 5/16" deflection midway between the sprockets. To increase chain tension, loosen the bearing mounting hardware and adjust chain tension with 5/16" adjusting bolts. After adjusting, re-tighten bearing hardware. Make sure the Spinner Shaft is vertical and the sprockets are in line before re-tightening the fasteners. Oil this chain often, and at the end of the season.

NOTE: Over-tightening the roller chains may damage the bearings on the Gear Case, the electric motor, and the Spinner Shaft. Over-tightening will also shorten the life of the roller chain and of the sprockets.

- Empty the spreader when it is not in use to prevent frozen conveyor chain.
- Wash out the spreader when it is not in use. At the end of the season, oil or paint all bare surfaces after washing and prior to storing the unit.

Electric Motor Service

The electric motor is a non-service part, and is warranted for one year after the purchase of the spreader from a Dealer.

If the motor is not working properly, and all the harness connections have been checked thoroughly for good contact, a Sno-Way Dealer should check the spreader for service, and replace the motor if necessary.

Metri-Pack™ Connector Repair

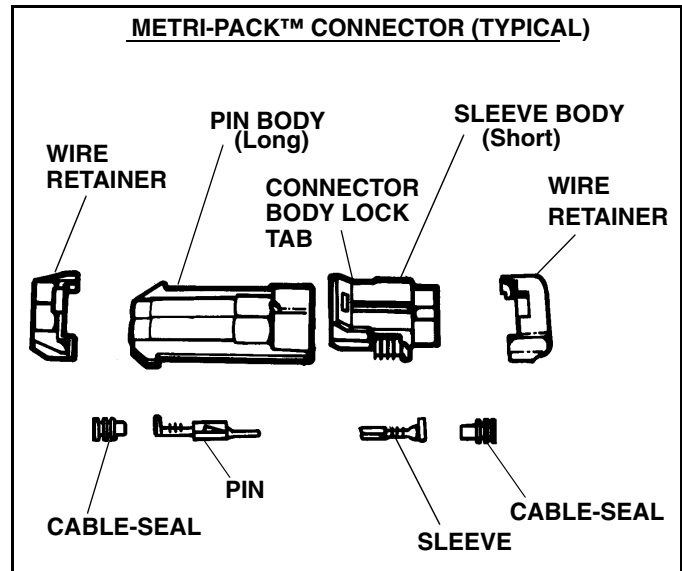


Figure 3-2

IMPORTANT: Identify wire number/color locations with connector terminal letters before disassembly.

Terminal Removal

1. Lift connector body lock tab and pull to separate connector halves.

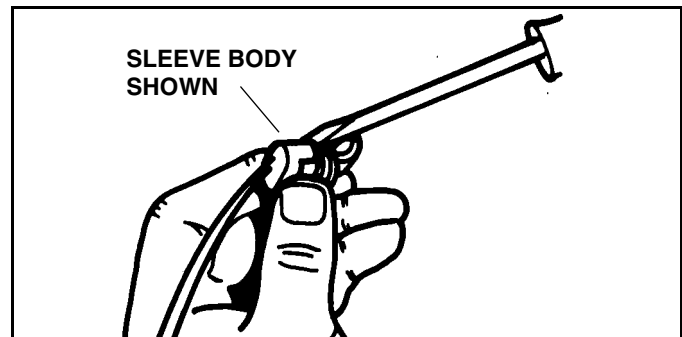


Figure 3-3

2. Remove wire retainer on sleeve body or pin body, as necessary, with a screwdriver and save for re-use (See Figure 3-3).

3. Push wire into connector as far as possible to release pressure on terminal locking tang.

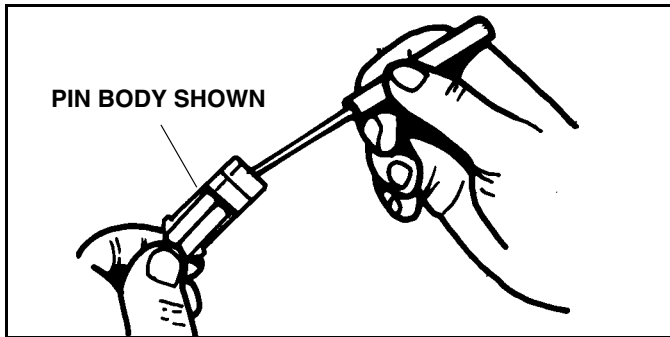


Figure 3-4

4. Locate the terminal lock tang in the connector cavity by looking into the connector from the mating end. Use Terminal Removal Tool (#96102499) to depress the lock tang and gently pull wire to remove wire and terminal from connector body. (See Figure 3-4).

Terminal Replacement

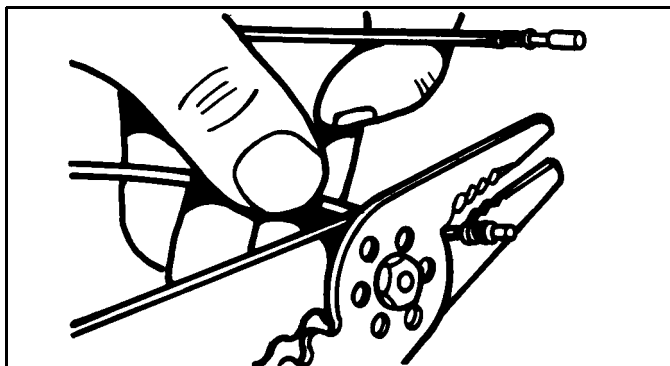


Figure 3-5

1. Cut wire as close as possible to old terminal and remove old cable seal. (See Figure 3-5).

IMPORTANT: METRI PACK™ connectors are keyed A, B, C, etc. for proper contact mating. Be sure contacts and wire colors/numbers match and are in proper alignment.

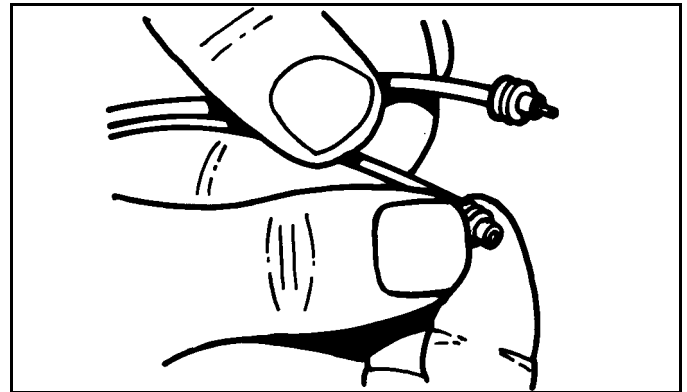


Figure 3-6

2. Install new correct size cable seal on wire.

Cable seals are available for three sizes of wire:

- Large - 1.0 mm (16 gauge) wire
- Medium - 0.8 mm (18 gauge) wire
- Small - 0.5 mm (20 gauge) wire

3. Strip insulation from wire to expose 6mm (1/4 in) and align cable seal with edge of insulation.

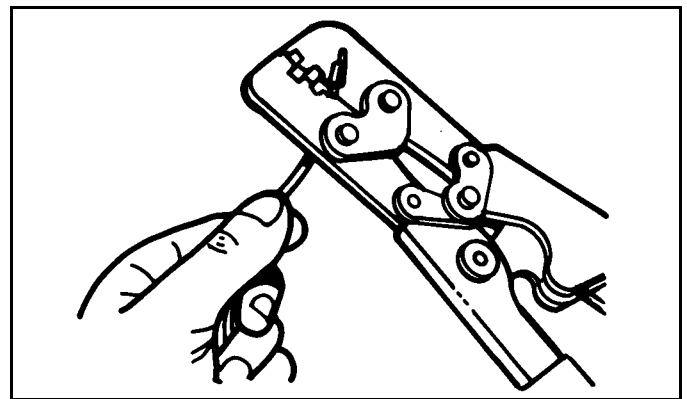


Figure 3-7

4. Place appropriate terminal on wire and use Crimper (#96102500) to secure contact in place with a “W” type crimp.

5. Use Crimper to secure cable seal to terminal.

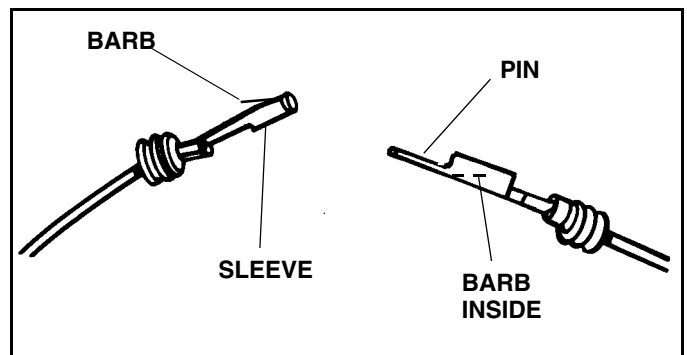


Figure 3-8

IMPORTANT: Proper barb location and orientation for installation of sleeve and pin is shown.

NOTE: Connector bodies are keyed for proper terminal mating. Be sure terminals are in proper alignment.

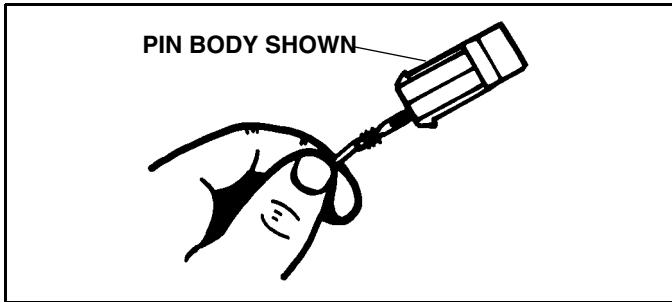


Figure 3-9

6. Push new terminal into connector body until fully seated.

7. Pull on wire slightly to be certain terminal is locked in place.

8. Install wire retainer.

9. Repeat as necessary to replace other terminals.

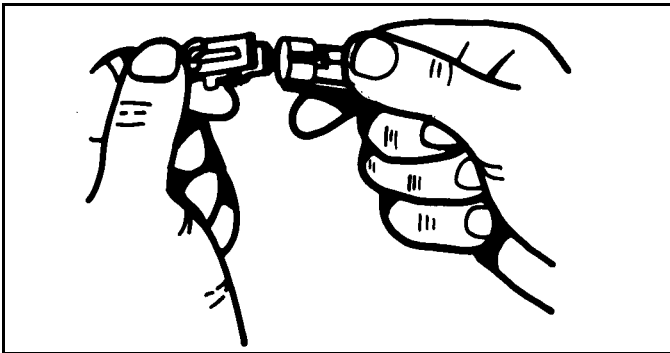








Figure 3-10

10. Close connector body.

TORQUE SPECIFICATIONS

SAE Grade and Head Markings	1 or 2 No Marks 	5 5.1 5.2 	8 8.2 
SAE Grade and Nut Markings	2 No Marks 	5 	8 

	Grade 1		Grade 2		Grade 5, 5.1 or 5.2		Grade 8 or 8.2	
	Lubricated ^a	Dry ^b	Lubricated ^a	Dry ^b	Lubricated ^a	Dry ^b	Lubricated ^a	Dry ^b
SIZE	lb-ft	lb-ft	lb-ft	lb-ft	lb-ft	lb-ft	lb-ft	lb-ft
10-24			21*	27*	32*	43*	45*	60*
1/4	2.8	3.5	4.5	5.5	7	9	10	12.5
5/16	5.5	7	9	11	15	18	21	26
3/8	10	13	16	20	26	33	36	46
7/16	16	20	26	32	41	52	58	75
1/2	25	31	39	50	63	80	90	115
9/16	36	45	56	70	90	115	130	160
5/8	50	62	78	100	125	160	160	225
	Metric Grade 8.8							
SIZE	lb-ft		SIZE	lb-ft				
M6	7		M12	60				
M8	17		M14	95				

DO NOT use these values if a different torque value or tightening procedure is given for a specific application.

Fasteners should be replaced with the same or higher grade. If higher grade fasteners are used, these should only be tightened to the strength of the original.

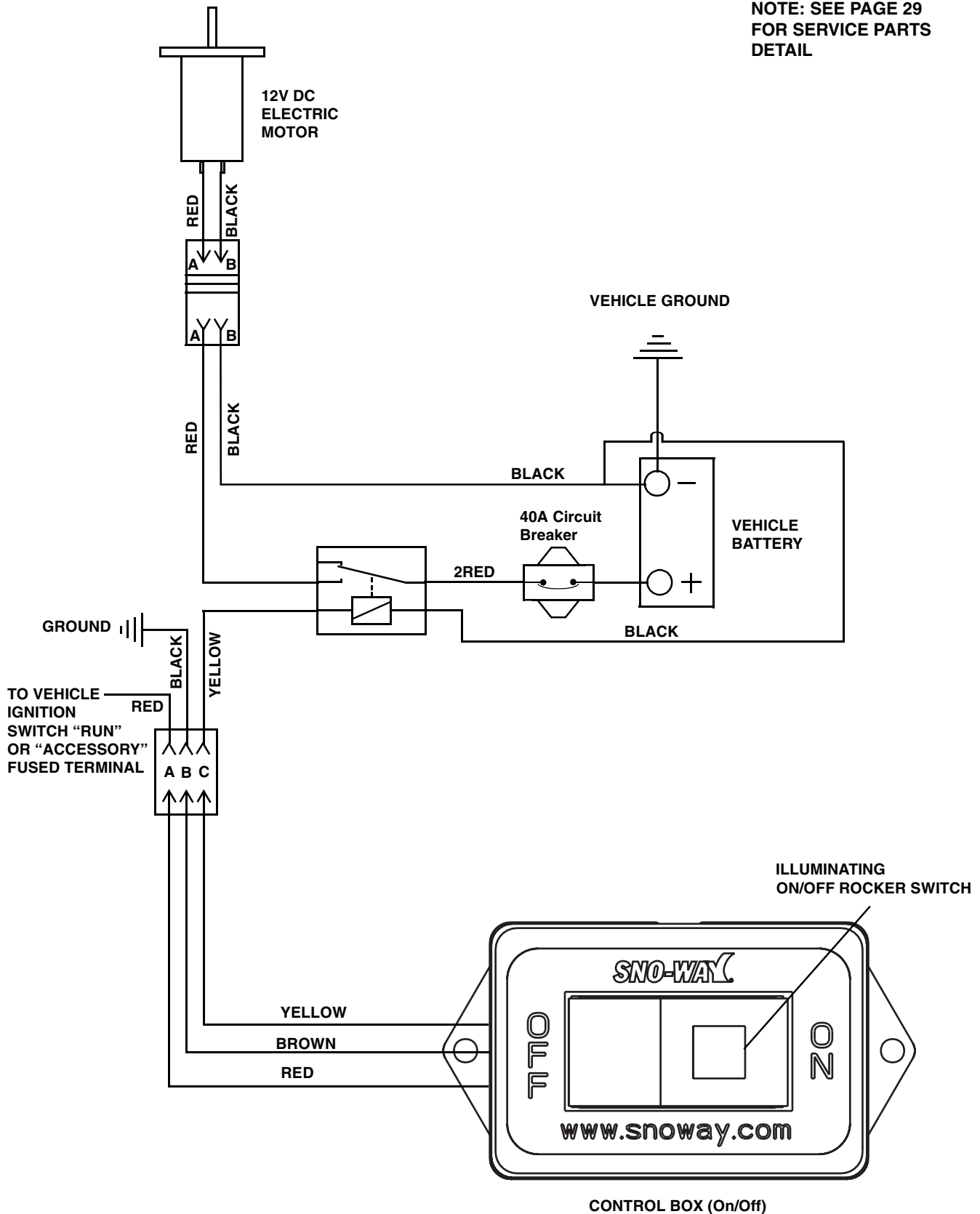
^a "Lubricated" means coated with a lubricant such as engine oil, or fasteners with phosphate and oil coatings.

^b "Dry" means plain or zinc plated without any lubrication

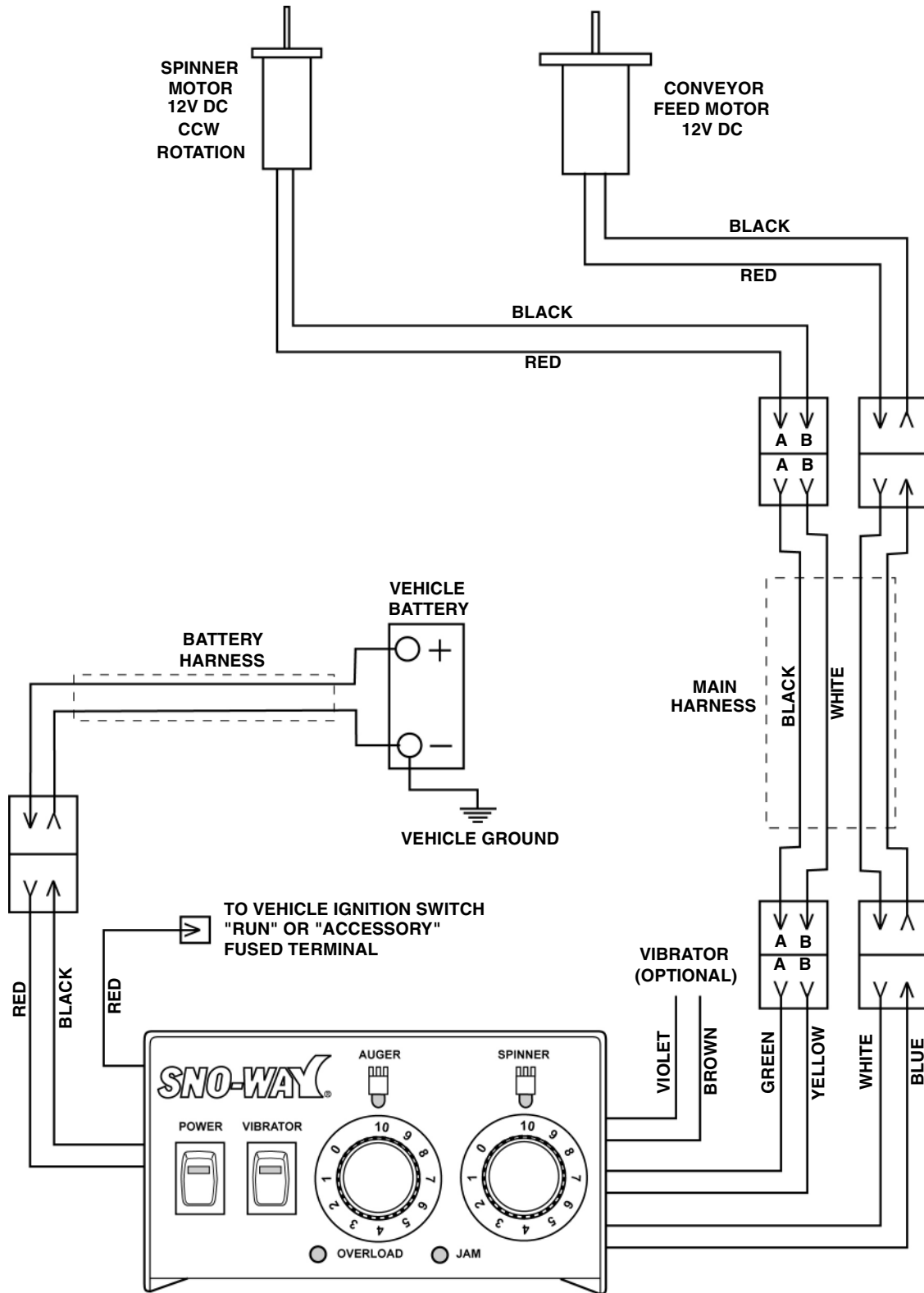
* Values with asterisk are in lb-in.

WIRING SCHEMATIC - ELECTRIC SPREADER (On/Off Control)

**NOTE: SEE PAGE 29
FOR SERVICE PARTS
DETAIL**



WIRING SCHEMATIC - ELECTRIC SPREADER (Dual Variable Control)



NOTES

PARTS LIST INTRODUCTION

Our dealership network stands by to provide you with any assistance you may require, including genuine Sno-Way service parts. All parts should be obtained from or ordered through your dealer. Give complete information about the part as well as the Model Number and Serial Number of your machine.

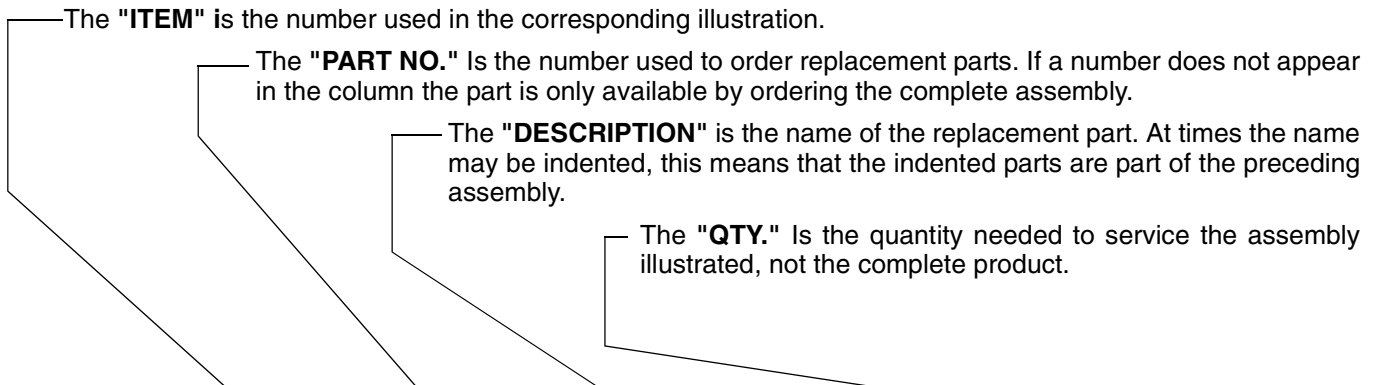
Record the Serial Number in the space provided in your Owner's Manual for quick reference. The Serial Number for the unit is on a plate located on the left frame gusset of the Hopper Frame.

"Right" and "Left" are determined from a position sitting on the Operators Seat of the vehicle.

We reserve the right to make changes or improvements in the design or construction of any part without incurring the obligation to install such changes in any unit previously delivered.

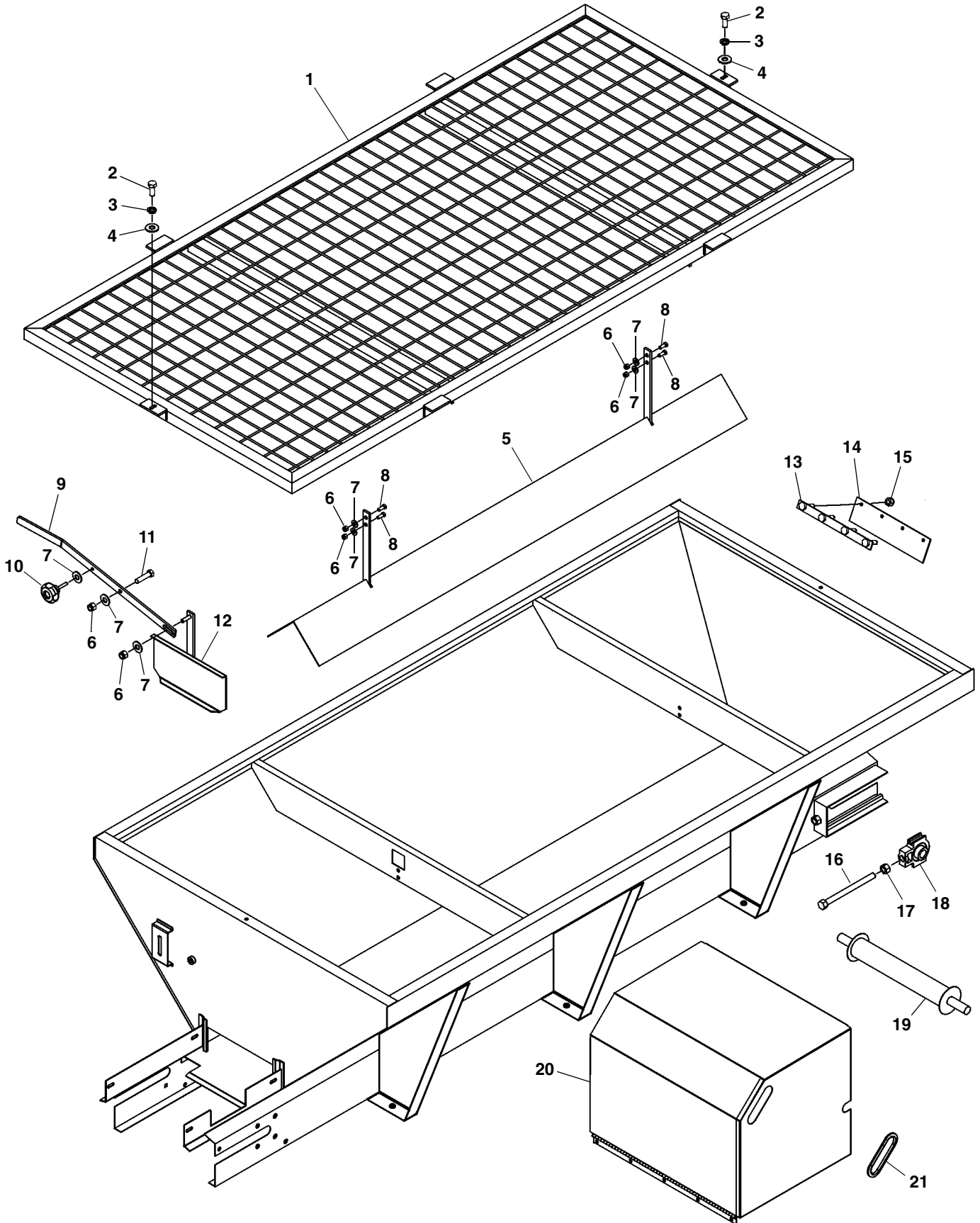
USING THIS PARTS LIST

Below is parts listing with four columns. The first column is the "ITEM", the second is the "PART NUMBER", The third is the "DESCRIPTION" and the fourth is the "QUANTITY".



ITEM	PART NO.	DESCRIPTION	QTY.
1	96100083	O-ring	1
2	96001529	Elbow	3
3	98100036	Capscrew, Hex.,3/8"-16NC x 7/8"	9

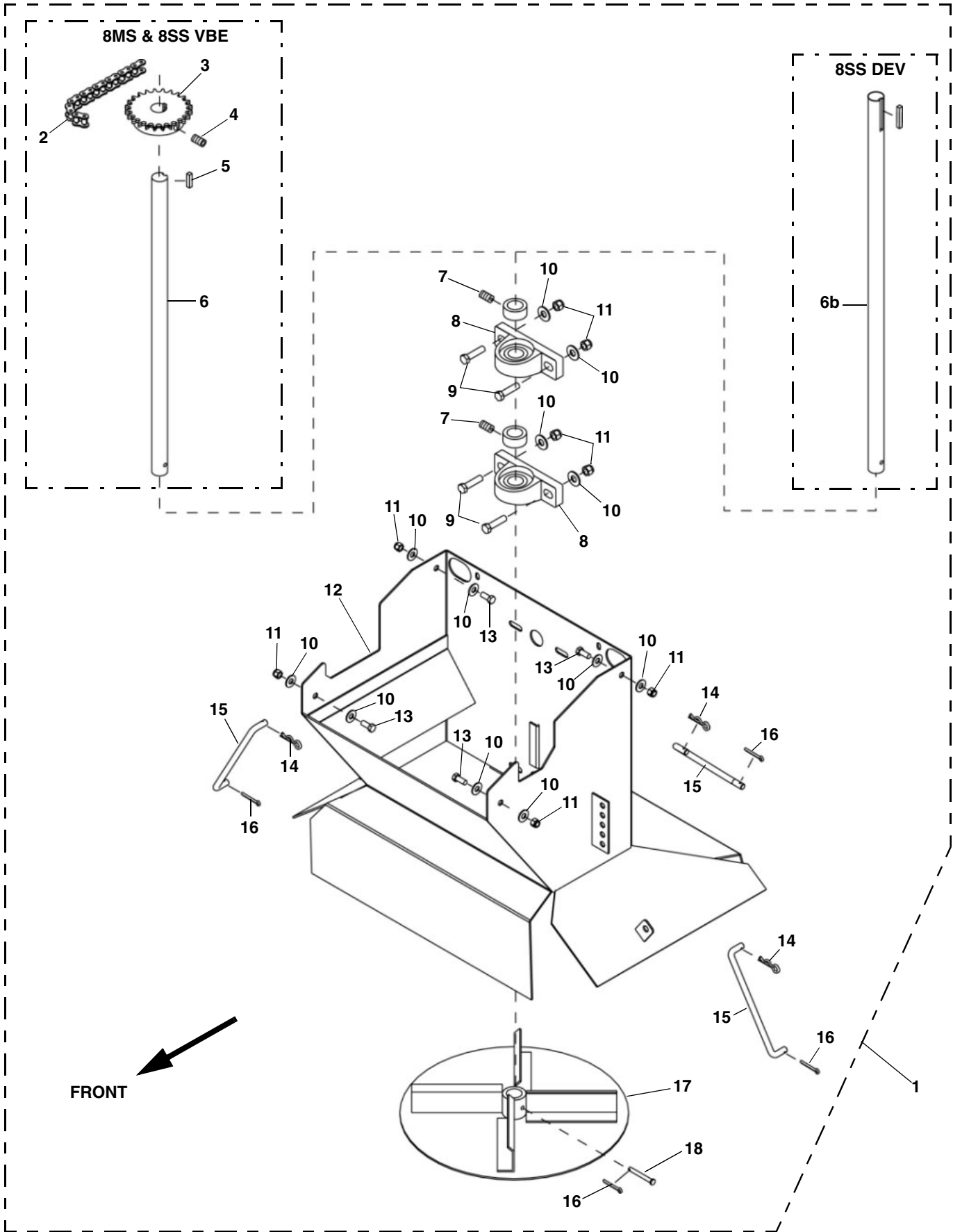
SPREADER BODY



SPREADER BODY

ITEM	PART NO.	DESCRIPTION	QTY.
1	99100429	Top Screen, 8 FT	1
2	98100112	Cap Screw, Hex Head, 5/16-18 x 3/4, SS	2
3	98100331	Washer, Lock, 5/16, SS	2
4	98100123	Washer, Plain, 5/16, SS	2
5	99100461	Inverted- Vee, 8 FT, SS (Includes Items 6-8)	1
6	98100339	Nut, Nylon Insert, 3/8-16, SS	6
7	98100124	Washer, 3/8, SS	7
8	98100357	Cap Screw, Hex head, 3/8-16 x 7/8, SS	4
9	96104748	Handle, Feed Gate, 15" Wide, SS	1
10	96104746	Knob, Locking	1
11	98100213	Cap Screw, Hex Head, 3/8-16 x 1-1/2, SS.	1
12	96110359	Feed Gate, 15" Wide, SS.	1
13	96104749	Plate, Mount, Wiper	1
14	96104750	Wiper, Rubber, 15" Wide	1
15	98100336	Nut, Nylon Insert, 1/4-20, SS	4
16	98100237	Cap Screw, Hex Head, 5/8-11 x 6", SS	2
17	98100220	Nut, Hex, 5/8-11, SS	2
18	96104762	Bearing, Take Up, 1" ID	2
19	96104751	Roller, Return, 15" Wide	1
20		Cover, SS, 15" Wide	1
21	96109186	Handle, Hood, V-Box	2

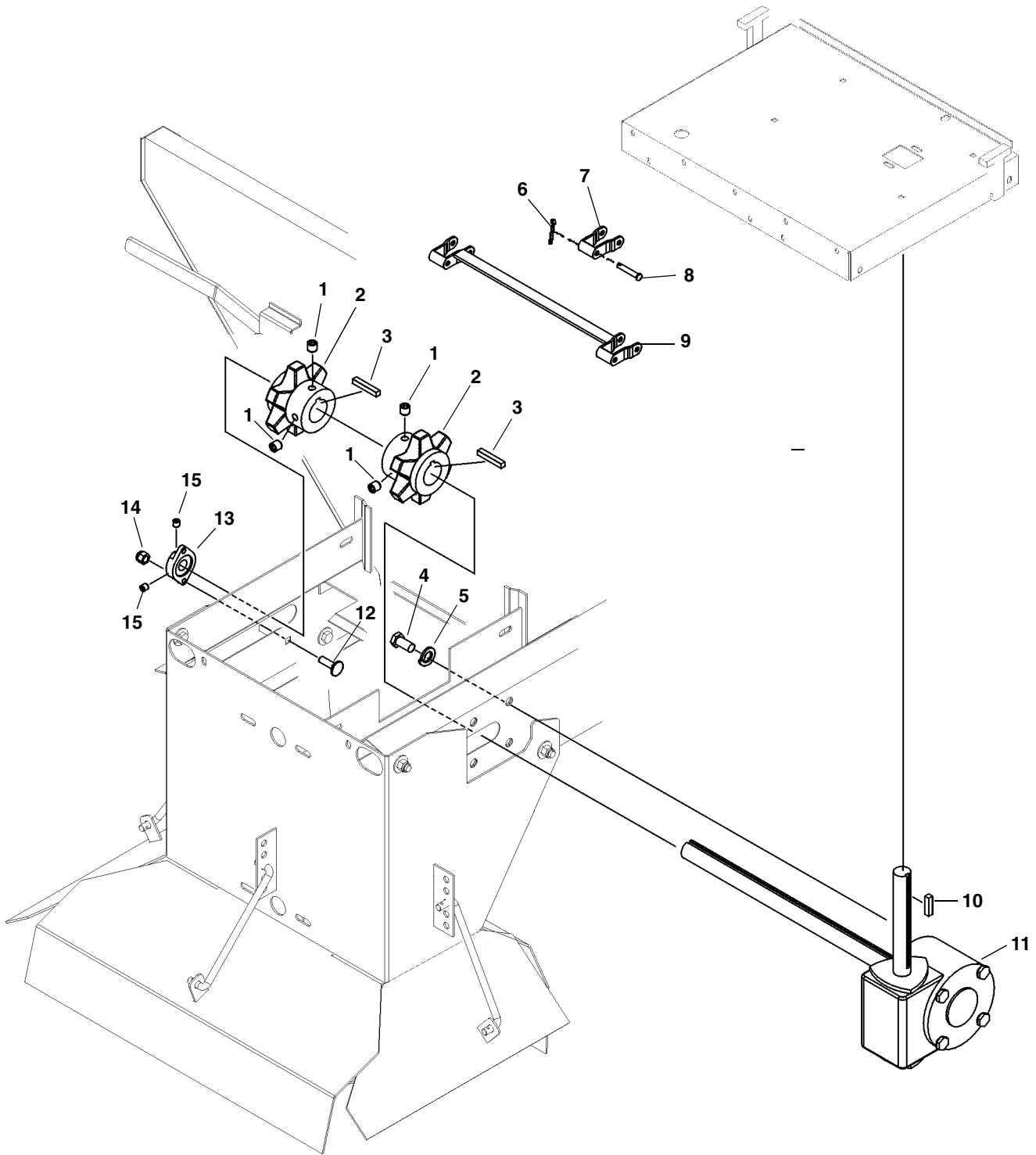
CHUTE/SPINNER ASSEMBLY



CHUTE/SPINNER ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QTY.
1	99100905	PKG, Chute, Short, SS, LGS	1
	99100907	PKG, Chute, Long, SS, LGS	1
	99101051	PKG, Chute, Short, SS, DE, LGS	1
2	96110353	Chain, #40, 68 Links (34 pairs)	1
3	96104634	Sprocket, 24 Tooth	1
4	98100354	Set Screw, Sprocket, 5/16-18 x 1/4	2
5	98100236	Keyway, 1/4 x 1/4 x 1	1
6	96109204	Shaft, Spinner, 24", Short Chute (8MS & 8SS VBE)	1
	96109223	Shaft, Spinner, 36", Long Chute (8MS & 8SS VBE)	1
6b	96113432	Shaft, Spinner (8SS DEV)	1
7	98100355	Set Screw, Bearing, 1/4-28 x 1/4	4
8	96104633	Bearing, Pillow Block, 1" I.D.	2
9	98100213	Cap screw, Hex Head, 3/8-16 x 1-1/2, SS	4
10	98100124	Washer, Plain, 3/8, SS	12
11	98100235	Nut, Hex Nylon Insert, 3/8-16, SS	8
12		Chute, SS, Short	1
		Chute, SS, Long	1
13	98100357	Cap Screw, Hex Head, 3/8-16 x 7/8, SS	4
14	98100205	Pin, Cotter, 3/32" x 2-1/4"	3
15	96104629	Rod, Control, Shield	3
16	98009159	Pin, Cotter, 3/32" x 1"	4
17	96104628	Spinner, Disk, SS	1
18	98100230	Pin, Clevis, 1/4" x 2" (Spinner Retainer)	1

CONVEYOR DRIVE AND IDLER

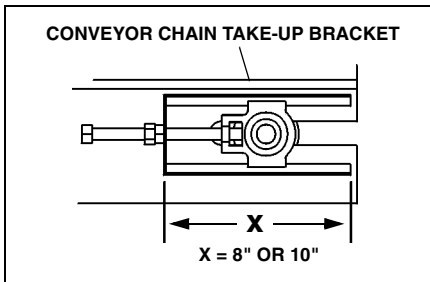


**NOTE: SEE FOLLOWING
PAGES FOR
MOTOR DRIVE DETAIL**

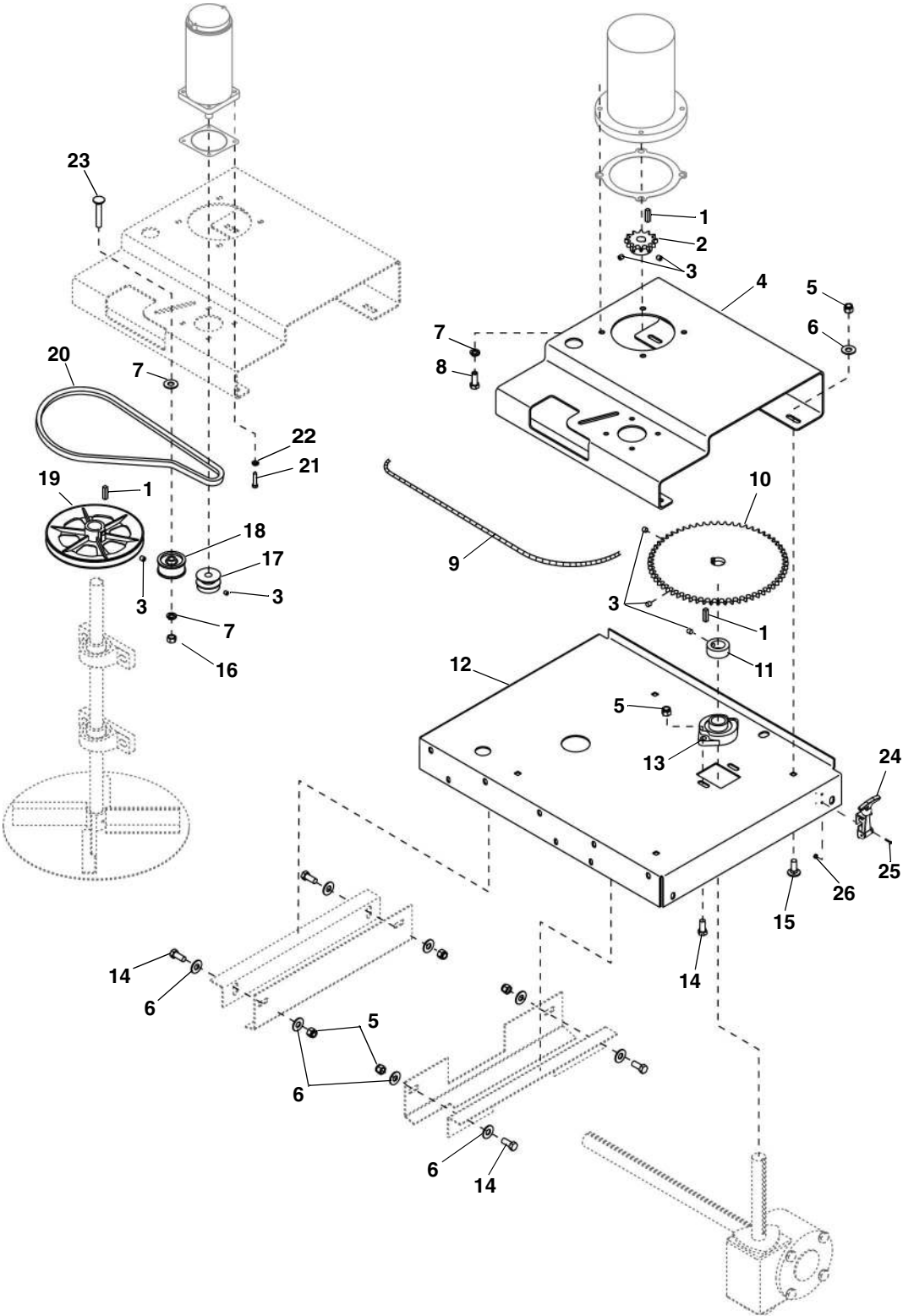
CONVEYOR DRIVE AND IDLER

ITEM	PART NO.	DESCRIPTION	QTY.
1	98100354	Set Screw, 5/16-18 x 3/8	6
2	96104644	Sprocket, 6 Tooth, Drag Chain	2
3	98100224	Keyway, 1/4 x 1/4 x 2-3/4	2
4	98100362	Bolt, Hex, 1/2-13 x 3/4, SS	4
5	98009012	Washer, Lock, 1/2, SS	4
6	98100389	Pin, Cotter, 3/32" x 3/4"	2
7	96107246	Link, Chain V-Box (includes item 6-qty 2 & item 8-qty 2)	1
8	96109229	Clevis Pin, .265 x 1.60	2
9	96106838	Kit, 15" Wide Chain, Master Link, V-Box (includes item 6-qty 4 & item 8-qty 4)	1
10	98100236	Keyway, 1/4 x 1/4 x 1.5	1
11	96108602	Gear Box, 50:1, 15" Wide	1
12	98100356	Bolt, Carriage, 3/8-16 x 1-1/4"	2
13	96104651	Bearing, Flanged, 1-1/8 ID	1
14	98100235	Nut, Nylock, 3/8-16, SS	2
15	98100355	Set Screw, 1/4-28 x 1/4	2
16*	96108750	Drag Chain, 8', 15" Wide, 119 Links, X=10"	1

* Not Shown



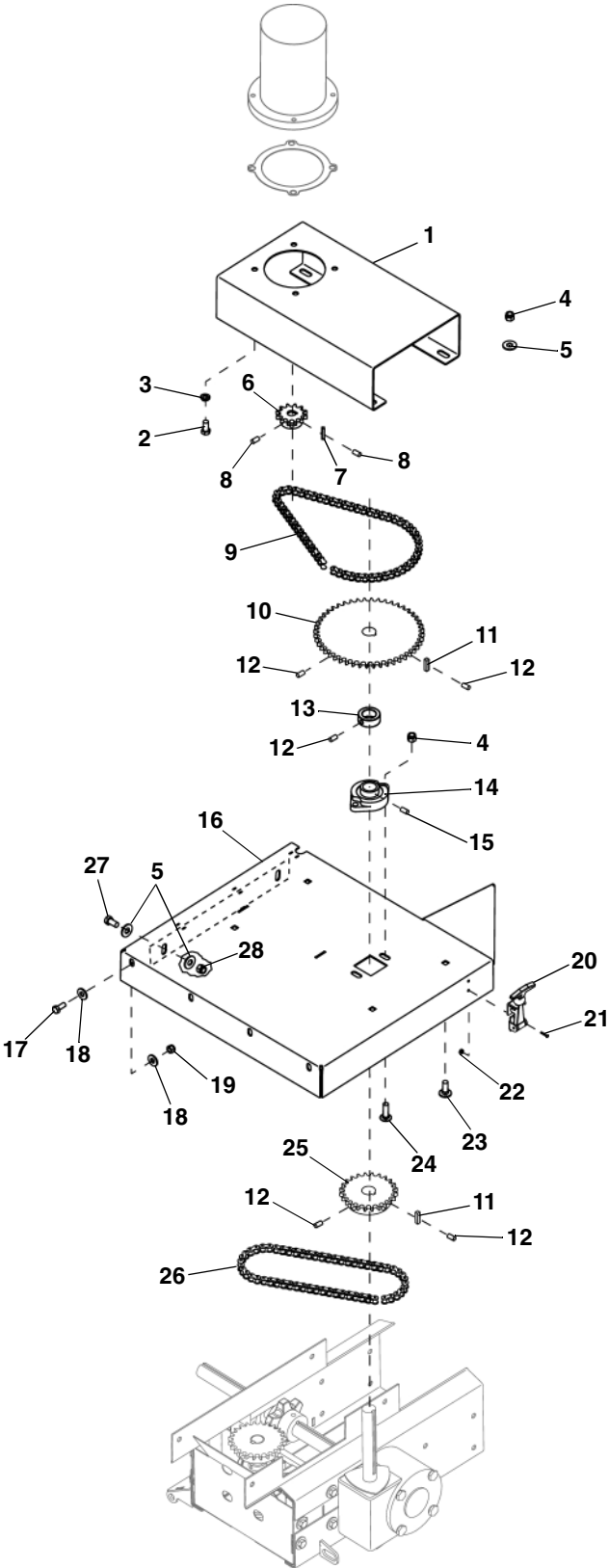
DUAL MOTOR PLATE & DRIVE - ELECTRIC SPREADER



DUAL MOTOR PLATE & DRIVE - ELECTRIC SPREADER

ITEM	PART NO.	DESCRIPTION	QTY.
1	98100236	Key, Square, 1/4" x 1"	3
2	96106732	Sprocket, 12 Tooth, 5/8" Bore.	1
3	98100354	Set Screw, 5/16-18 x 1/4".	7
4		Motor Plate, 15" Wide	1
5	98100235	Nut, Hex Nylock, 3/8-16, SS.	10
6	98100124	Washer, Plain, 3/8 A Wide, SS.	13
7	98100125	Washer, Lock, 3/8", SS.	5
8	98100214	Capscrew, Hex, 3/8-16 x 1"	4
9	96110354	Chain, 72 Links (36 pairs) [60 Tooth]	1
10	96110352	Sprocket, 60 Tooth, (8 Foot Electric V-Box Spreaders)	1
11	96104668	Collar, Locking, 1" I.D.	1
12		Mount, Electric Motor, 15 Inch Wide, SS, DE.	1
13	96104652	Bearing, Flanged, 1" I.D.	1
14	98100357	Capscrew, Hex, 3/8-16 x 7/8", SS	1
15	98100359	Bolt, Carriage, 3/8-16 x 1", SS	6
16	98100120	Nut, 3/8-16, SS.	1
17	96102016	Sheave, 1-1/2"	1
18	96102034	Pulley, 2" Idler.	1
19	96113413	Sheave, 7"	1
20	96112900	Belt, AX33, (1/2" x 35"	1
21	98100139	Bolt, Hex Washer Head, 1/4-20 x 1".	4
22	98009226	Washer, Lock, 1/4", SS.	4
23	98100128	CB, 3/8-16 x 2-1/4".	1
24	96114472	Kit, Strap, Rubber Hold Down (Includes items 21 & 22).	2
25		Pan Head Machine Screw, #6-32 x 5/8", SS	8
26		Nut, Hex Nylock, #6-32, SS	8

MOTOR PLATE & DRIVE - ELECTRIC SPREADER



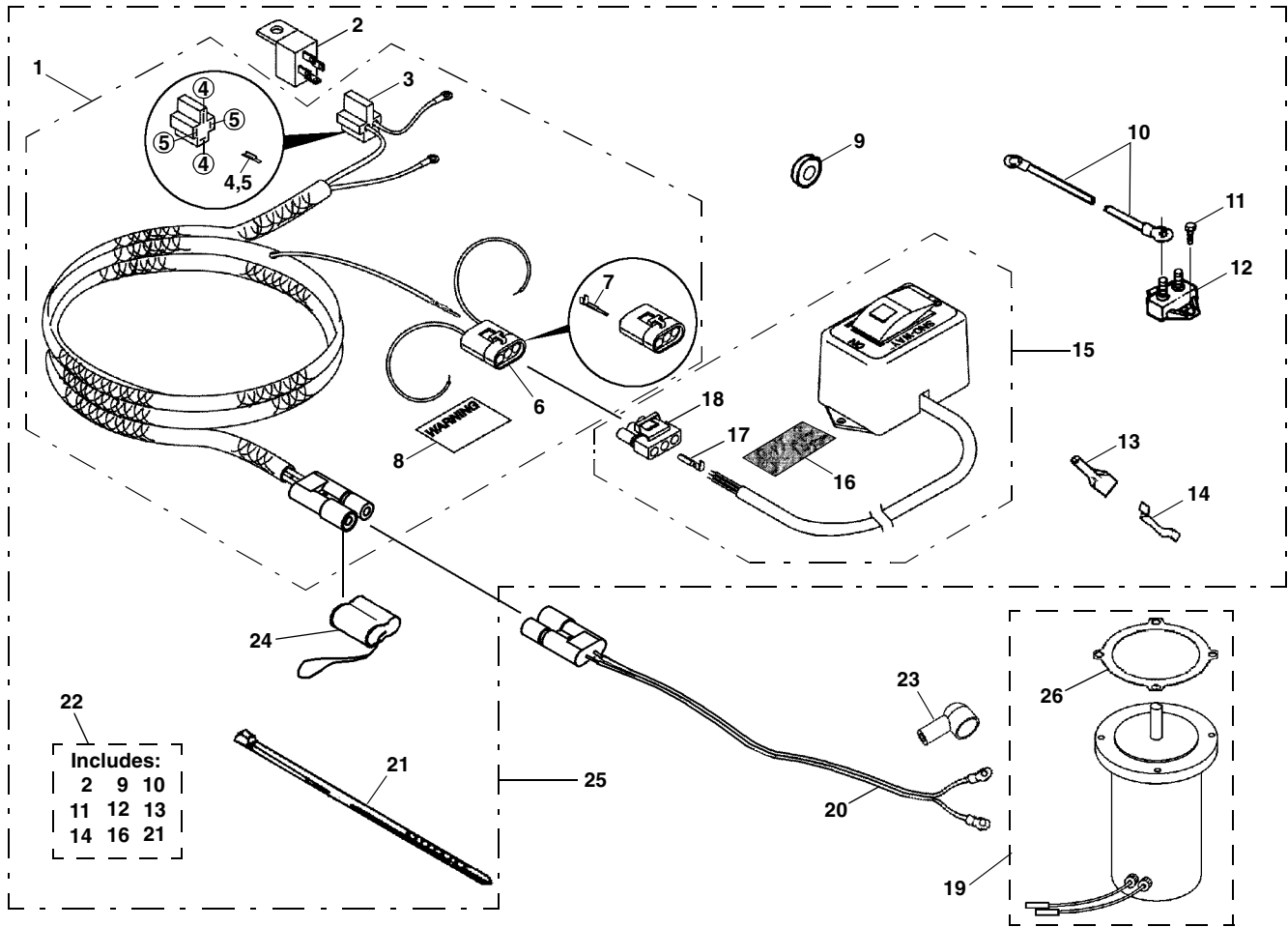
MOTOR PLATE & DRIVE - ELECTRIC SPREADER

ITEM	PART NO.	DESCRIPTION	QTY.
1	96106731	Electric Motor Plate, SS.	1
	96110357	Bracket, Electric Motor Mount (60 Tooth Sprocket)	1
2	98100214	Capscrew, Hex, 3/8"-16 x 3/4", SS	4
3	98100125	Washer, Lock, 3/8", SS	4
4	98100339	Nut, Hex Nylock, 3/8"-16, SS.	6
5	98100124	Washer, Flat, 3/8", SS	12
6	96106732	Sprocket, 12 Tooth, 5/8" Bore, (Includes item XX).	1
7	98100493	Key, Square, 3/8" x 1"	1
8	98100494	Set Screw, 1/4"-20 x 3/8".	2
9	96110436	Chain, Drive, Electric V-Box, (46 and 48 tooth Drives), #40 - 31.5 Link Pairs (64 total links) (May require link reduction on your application)	1
	96110354	Chain, Drive, Electric V-Box, (60 Tooth Drive Sprocket)	1
10*	96106734	Sprocket, 48 tooth (Includes items 12)	1
	96110352	Sprocket, 60 tooth (8 Foot Electric V-Box Spreaders)	1
11	98100236	Key, Square, 1/4" x 1"	2
12	98100354	Set Screw, 5/16"-18 x 3/8".	5
13	96104668	Collar, Locking, 1" I.D., (Includes item 12).	1
14	96104652	Bearing, Flanged, 1" I.D., (Includes item 15).	1
15	98100355	Set Screw, 1/4"-28 x 1/4	1
16		Mount, Electric Motor, 10 Inch Wide, SS	1
		Mount, Electric Motor, 15 Inch Wide, SS	1
17	98100112	Capscrew, Hex, 5/16"-18 x 3/4, SS	4
18	98100123	Washer, Plain, 5/16", SS	8
19	98100118	Locknut, Hex Nylon Insert, 5/16"-18, SS	4
20	96114472	Kit, Strap, Rubber Hold Down (Includes items 21 & 22)	2
21		Pan Head Machine Screw, #6-32 x 5/8", SS	8
22		Nut, Hex Nylock, #6-32, SS.	8
23	98100359	Bolt, Carriage, 3/8"-16 x 1, SS.	4
24	98100356	Bolt, Carriage, 3/8"-16 x 1-1/4", SS.	2
25	96104634	Sprocket, 24 Tooth, 1.00" Bore, (Includes items 12)	1
26	96110426	Chain, Drive, #40 - 58 Links	1
27	98100357	Capscrew, Hex, 3/8"-16 x 7/8", SS	4
28	98100235	Nut, Nylock, 3/8"-16, SS.	4
29**	96111777	Kit 60 Tooth Conversion.	1

* Item #10 used to be a 46 tooth sprocket. Due to design development changes, item #10 has changed to a 48 tooth sprocket. Spreaders with 46 tooth sprockets will require chain reduction to accommodate the smaller 46 tooth sprocket.

** If you have a 48 tooth, you can convert to a 60 tooth using this kit. This conversion will add greater torque to conveyor chain.

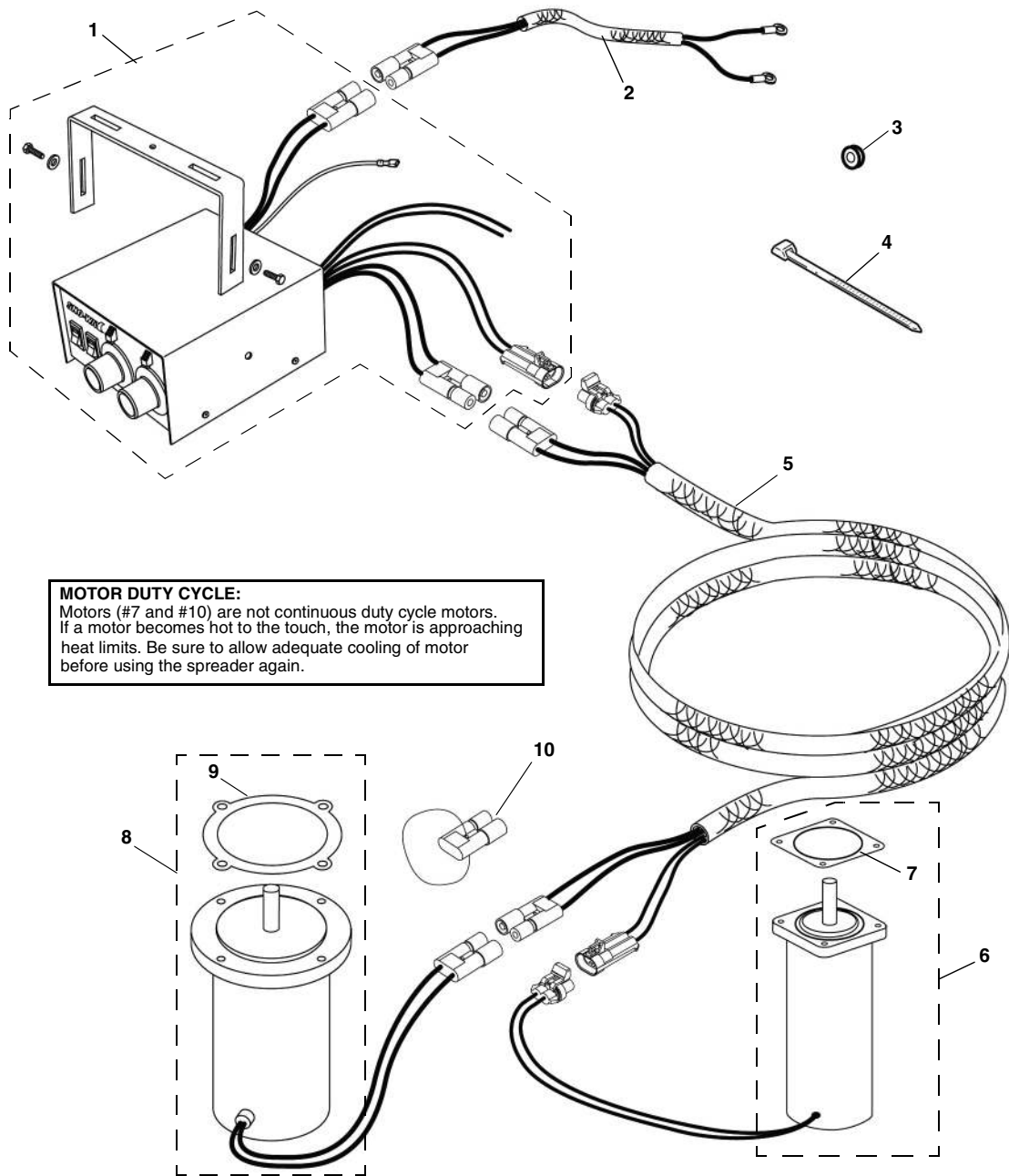
ON/OFF CONTROL - ELECTRIC SPREADER



22
Includes:
2 9 10
11 12 13
14 16 21

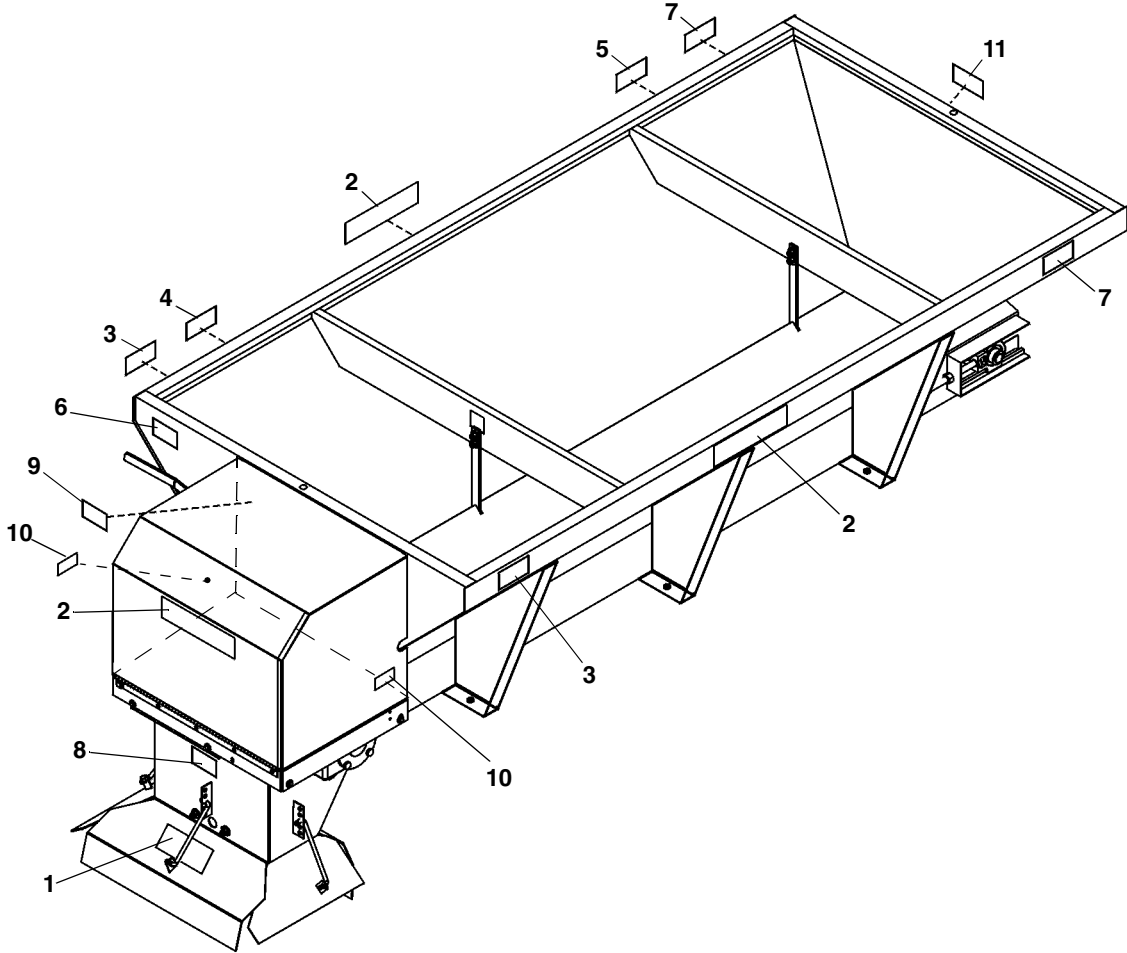
ITEM	PART NO.	DESCRIPTION	QTY
1	96106630	Harness, On/Off Control	1
2	96105891	Relay, 70A	1
3	96105946	Connector, Harness Relay	1
4	96105947	Terminal, Female, 10-12 AWG, Relay	2
5	96105948	Terminal, Female, 12-16 AWG, Relay	2
6	96105940	Connector, Male	1
7	96105942	Terminal, Male Pin	3
8		Decal, Warning	1
9	96104893	Grommet, 1/2" dia.	1
10	96106728	Wire, Power	1
11	98100037	Screw, Self Tapping #10 x 1"	2
12	96102344	Breaker, Circuit, 40A	1
13	96002085	Terminal, 1/4", Female Push-On	1
	96101845	Connector, Female	1
14	96002083	Tap, 1/4", ATC/ATO Fuse	1
	96101832	Tap, 1/4", Mini Fuse	1
15	96105793	Controller, On/Off	1
16		Strip, Hook and Loop Fastener	1
17	96105943	Terminal, Female	2
18	96105941	Connector, Female	1
19	96111764	Motor, Electric, 1/2 HP (Includes Gasket)	1
	96111355	Kit, Brush, Leeson Motor (Two (2) brushes in kit)	
	96109925	Kit, Brush, Canimex Motor (One (1) brush in kit)	
	96106628	Harness, Motor	1
20		Tie, Cable	5
21		Bag of Parts (On/Off Control)	1
22	96106729	Boot, Cable (use with ring terminal connection)	1
23	96106374	Cap Cover, Harness End	1
24	99100621	Package, Electric Spreader Harness	1
25		Gasket (Supplied with Motor, item #19)	1

DUAL VARIABLE CONTROL - ELECTRIC SPREADER



ITEM	PART NO.	DESCRIPTION	QTY
1	96113423	Control, Dual Electric, V-Box	1
2	96113421	Harness, Bat, DEVBX	1
3	96104893	Grommet	1
4		Tie, Cable	1
5	96113419	Harness, Main DEV	1
6	96113617	Motor, Electric, 1/3 HP (Includes Gasket)	1
7		Gasket (Supplied with Motor, item #6)	1
8	96111764	Motor, Conveyor Feed, 1/2 HP (Includes Gasket)	1
9		Gasket (Supplied with Motor, item #8)	1
10	96105082	Cap Cover, Harness End	1

DECAL AND DECAL LOCATION



ITEM	PART NO.	DESCRIPTION	QTY.
1		Decal, Warning.....	1
2		Decal, "Sno-Way".....	3
3		Decal, Warning.....	2
4		Decal, Important.....	1
5		Decal, Warning.....	1
6		Decal, Warning.....	2
7		Decal, Warning.....	1
8		Decal, Warning.....	1
9		Plate, Serial No.....	1
10		Decal, Warning.....	2
11		Decal, Warning.....	1
12		Decal, Warning.....	1
13*	96107040	Decal Kit, Electric.....	1

* Not Shown

NOTES

NUMERICAL INDEX

PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM	PART NO.	PAGE	ITEM
96002083	35	14	96106731	34	1	98100118	34	19
96002085	35	13	96106732	32	2	98100120	32	16
96101832	35	14		34	6	98100123	26	4
96101845	35	13	96106734	34	10		34	18
96102016	32	17	96106838	30	9	98100124	26	7
96102034	32	18	96107040	37	13		28	10
96102344	35	12	96107246	30	7		32	6
96104628	28	17	96108602	30	11		34	5
96104629	28	15	96108750	30	16	98100125	32	7
96104633	28	8	96109186	26	21		34	3
96104634	28	3	96109204	28	6	98100128	32	23
	34	25	96109223	28	6	98100139	32	21
96104644	30	2	96109229	30	8	98100205	28	14
96104651	30	13	96109925	35	19	98100213	26	11
96104652	32	13	96110352	32	10		28	9
	34	14		34	10	98100214	32	8
96104668	32	11	96110353	28	2		34	2
	34	13	96110354	32	9	98100220	26	17
96104746	26	10		34	9	98100224	30	3
96104748	26	9	96110357	34	1	98100230	28	18
96104749	26	13	96110359	26	12	98100235	28	11
96104750	26	14	96110426	34	26		30	14
96104751	26	19	96110436	34	9		32	5
96104762	26	18	96111355	35	19		34	28
96104893	35	9	96111764	35	19	98100236	28	5
	36	3		36	8		30	10
96105082	35	24	96111777	34	29		32	1
	36	10	96112900	32	20		34	11
96105793	35	15	96113413	32	19	98100237	26	16
96105891	35	2	96113419	36	5	98100331	26	3
96105940	35	6	96113421	36	2	98100336	26	15
96105941	35	18	96113423	36	1	98100339	26	6
96105942	35	7	96113432	28	6		34	4
96105943	35	17	96113617	36	6	98100354	28	4
96105946	35	3	96114472	32	24		30	1
96105947	35	4		34	20		32	3
96105948	35	5	98009012	30	5		34	12
96106374	35	23	98009159	28	16	98100355	28	7
96106628	35	20	98009226	32	22		30	15
96106630	35	1	98100037	35	11		34	15
96106728	35	10	98100112	26	2	98100356	30	12
96106729	35	22		34	17		34	24
						98100357	26	8
							28	13
							32	14
							34	27

NUMERICAL INDEX

PART NO.	PAGE	ITEM
----------	------	------

98100359	32	15
	34	23
98100362	30	4
98100389	30	6
98100493	34	7
98100494	34	8
99100429	26	1
99100461	26	5
99100621	35	25
99100905	28	1
99100907	28	1
99101051	28	1

PART NO.	PAGE	ITEM
----------	------	------

PART NO.	PAGE	ITEM
----------	------	------

SNO-WAY® INTERNATIONAL, INC.

SNO-WAY
SNOW & ICE CONTROL EQUIPMENT

Hartford, WI 53027 USA
Website: www.snoway.com
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DEALER PRE-DELIVERY CHECKLIST

The following inspections **MUST** be accomplished prior to delivering the SNO-WAY® V-BOX ELECTRIC SPREADER to the customer. Place an X ☒ in the box after accomplishing each item on the checklist.

CHECK THAT

- Parts have not been damaged in shipment. Repair or replace items that are loose, dented or missing.
- All covers, guards and decals are in place and attached securely.
- The drive chain and the conveyor chains are at the proper tension.
- Baffles can be adjusted to all positions.
- Controller and electrical wiring is properly installed.
- Electric drive motor is operating properly.
- Inverted V is installed properly (All Electric V-Box (EV) models).
- Chute has been lined up and spinner shaft - coupling interface mates properly.

Start the vehicle engine and place an X ☒ in the box after accomplishing each item.

CHECK THAT

- Unit does not start until **START** switch is depressed.
- Drive shaft and spinner rotate freely.
- Drive rotation is correct (clockwise from top of hopper).
- Listen for abnormal noises or vibrations; Repair or replace as necessary.
- Ignition switch safety shutoff functions correctly.

DELIVERY CHECKLIST

The following checklist is to be accomplished with the customer present, place an X ☒ in the box after accomplishing each item.

- After giving the customer his operating manual, instruct him to read it **PRIOR** to operating the spreader. If he has any questions or does not understand part(s) of the manual, ask him to contact the dealer for answers or explanations **BEFORE** operating the unit.
- Record the spreader serial numbers, date of purchase, purchaser's name and address, and the dealers name, address and phone number in the space provided on page 1 of the owner's manual.
- Explain spreader connect and disconnect procedures.
- Demonstrate controller operation and burst function.
- Fill out Warranty Registration Card and mail COPY 1 to the factory to validate Warranty. NO Warranty claims can be honored if the Warranty Card is not on file at the factory.

SNO-WAY® INTERNATIONAL, INC.

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SNOW & ICE CONTROL EQUIPMENT

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Website: www.snoway.com
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