Spreaders for Snow & Ice Control

FOR MODEL

SP-2400
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Have a question or need assistance?

SnowEx Customer Service

(800) 725-8377

or (586) 756-6555

Monday through Friday 8:00 AM to 4:30 PM EST

Fax: (586) 427-0552

E-Mail: customercare@trynexfactory.com

Website: www.snowexproducts.com
This manual has been designed for your help. It will assist you and instruct you on the proper set-up, installation and use of this spreader. Refer to the table of contents for an outline of this manual.

We require that you read and understand the contents of this manual completely (especially all safety information) before attempting any procedure contained herein.

**THIS SIGN SHOULD ALERT YOU:**
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 below are the SAFETY ALERT messages and how they will appear in this manual:

**DANGER** (RED)
Information that, if not carefully followed, can cause death!

**WARNING** (ORANGE)
Information that, if not carefully followed, can cause serious personal injury or death!

**CAUTION** (YELLOW)
Information that, if not carefully followed, can cause minor injury or damage to equipment.
General Information

CONGRATULATIONS!

The spreader you have purchased is an example of snow and ice control technology at its finest! Your spreader's innovative, self-contained design is a trademark of all Trynex products. Here’s why...

SIMPPLICITY: Fewer moving parts manufactured of higher quality means minimal maintenance for your SnowEx spreader.

RELIABILITY: High impact linear low density polyethelyne hopper, state-of-the-art electronic dual variable speed control, custom engineered powder coated frame, maximum torque 12 volt motor coupled to a custom engineered transmission found only on SnowEx products.

VERSATILITY: Multi-use capabilities allows spreading of a variety of materials for snow and ice control.

WARRANTY: Best in the industry, hands down! 2 Years Standard and now a 5 Year Extended (optional).

The benefits you are about to recognize are that of time, money and effort.

We welcome you to the world of Trynex Performance.

Registration

Record the following information in this manual for quick reference.

Spreader Model Number ____________________________________________________________

Spreader Serial Number_________________________ Controller Serial Number_________________________

Date of Purchase ____________________________________________________________________________

Dealer Where Purchased ____________________________________________________________________________

When ordering parts, the above information is necessary. This will help to insure that you receive the correct parts.

At the right is a diagram of the ID tag. This tag on the spreader is located on the frame.

Please fill out the warranty card with all the necessary information to validate it. This will also give us a record so that any safety or service information may be communicated to you.
Before attempting any procedure in this book, these safety instructions must be read and understood by all workers who have any part in the preparation or use of this equipment.

For your safety warning and information decals have been placed on this product to remind the operator of safety precautions. If anything happens to mark or destroy the decals, please request new ones from Trynex, International.

**WARNING**

Unit must be strapped down and locked into position before operating vehicle.

**DANGER**

Never exceed the Gross Vehicle Weight Rating of vehicle. Failure to do so may limit a vehicle's handling characteristics.

**DANGER**

Never attempt to take a unit off a truck with material in it.

**WARNING**

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.

**WARNING**

Never allow children to operate or climb on equipment. Always check areas to be spread to be sure no hazardous conditions or substances are in the area. Always inspect unit for defects: broken, worn or bent parts, weakened areas on spreader or mount.

**WARNING**

Always shut off vehicle and power source before attempting to attach or detach or service spreader unit. Be sure vehicle/power source is properly braked or chocked.

**WARNING**

Always keep hands, feet, and clothing away from power-driven parts. Remember it is the owner's responsibility to communicate information on safe usage and proper maintenance of all equipment.

**WARNING**

Always make sure personnel are clear of areas of danger when using equipment. Maintain 60' distance from all bystanders when operating the spreader.

**WARNING**

Inspect the unit periodically for defects. Parts that are broken, missing, or worn out must be replaced immediately. The unit, or any part of it cannot be altered without prior written permission from the manufacturer.

**CAUTION**

Never use V-Maxx 2400 with foreign debris in the spreader. These units are designed to handle clean, free-flowing material.
Always inspect pins and latches whenever attaching or detaching spreader, and before traveling.

Never leave material in hopper for long periods of time. Be aware that all ice melters are hygroscopic and will attract atmospheric moisture and harden up.

Remember, most accidents are preventable and caused by human error. Exercising of care and precautions must be observed to prevent the possibility of injury to operator or others!

Never operate equipment when under the influence of alcohol, drugs, or medication that might alter your judgment and/or reaction time.

Before working with the spreader, secure all loose fitting clothing and unrestrained hair.

Always wear safety glasses with side shields when servicing spreader. Failure to do this could result in serious injury to the eyes.
Safety and Warning Labels
Model # SP-2400

DANGER

1. Do Not Remove Spreader With Material In Hopper
2. Install Spreader Using Supplied Mounting Instructions
3. Be Aware Of Your Surroundings While Body Is Raised Up
4. Read Owner's Manual For Important Operating Instructions
5. Tailgate Latches Must Be Fully Engaged Before Operating

WARNING

5. Do Not Stand On Spreader Hopper Or Frame
6. Do Not Splice Into Electrical Harness Or Control System
7. Inspect All Mounting Hardware After Each Use
8. Maintain Safe Distance From Buildings, Vehicles And People When Spreader Is Operating

SERIAL NUMBER
ON INSIDE OF COVER

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Component Assembly Views
Model # SP-2400

Spinner Drive Assembly

Auger Drive Assembly

Electrical System Assembly

Hopper Assembly

Frame Assembly
Front and Rear Views
Model # SP-2400
Auger Drive Assembly Parts Breakdown
Model # SP-2400

<table>
<thead>
<tr>
<th>Key</th>
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<th>Description</th>
<th>Qty.</th>
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<tbody>
<tr>
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<td>D5527</td>
<td>1&quot; Bearing</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>D6584</td>
<td>3/8&quot; Flange Nut</td>
<td>4</td>
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<tr>
<td>3</td>
<td>D6453</td>
<td>5/16&quot; x 1&quot; Serrated 18-8 SS</td>
<td>3</td>
</tr>
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<td>4</td>
<td>D5702</td>
<td>Bearing Cover</td>
<td>1</td>
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<tr>
<td>5</td>
<td>D5709</td>
<td>6&quot; Variable Pitch Auger</td>
<td>1</td>
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<tr>
<td>6</td>
<td>D5706</td>
<td>5/16&quot; Serrated Flange Nut</td>
<td>4</td>
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<tr>
<td>7</td>
<td>D6452</td>
<td>3/8&quot; Serrated HHCS</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>D6842</td>
<td>Love Joy Coupling</td>
<td>2</td>
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<tr>
<td>9</td>
<td>D6843</td>
<td>Urethane Spyder</td>
<td>1</td>
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<tr>
<td>10</td>
<td>D6873</td>
<td>3/16&quot; Key Stock</td>
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<tr>
<td>11</td>
<td>D6825</td>
<td>12 Volt Auger Motor</td>
<td>1</td>
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<tr>
<td>12</td>
<td>D6894</td>
<td>Auger Transmission</td>
<td>1</td>
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<td>13</td>
<td>D6789</td>
<td>Auger Shaft Hopper Washer</td>
<td>1</td>
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<td>14</td>
<td>D6792</td>
<td>Auger Shaft Hopper Collar</td>
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Auger Drive Assembly
# Spinner Drive Assembly Parts Breakdown

## Model # SP-2400

<table>
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<td>1/4-20 x 1” HWH Serrated</td>
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<tr>
<td>2</td>
<td>D6823</td>
<td>Urethane Spinner</td>
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<td>3</td>
<td>D5718</td>
<td>Spinner Mounting Hub</td>
<td>1</td>
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<tr>
<td>4</td>
<td>D6133</td>
<td>5/16-18 x 1/2” Hex Bolt</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>D6327</td>
<td>Spinner Deflector</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>D4121</td>
<td>3/8”-16 x 1” HHCS</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>D6131</td>
<td>1/4-20 x 1/2” SS HWH Serrated TCS</td>
<td>4</td>
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<tr>
<td>8</td>
<td>D6877</td>
<td>#8 x 3/4 Self Driller HWH</td>
<td>6</td>
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<td>9</td>
<td>D5721</td>
<td>Spinner Drive Enclosure</td>
<td>1</td>
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<tr>
<td>10</td>
<td>D4135</td>
<td>5/16 Hair Pin Clip</td>
<td>4</td>
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<td>11</td>
<td>D5739</td>
<td>Spinner Drive Pin</td>
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<td>12</td>
<td>D5741</td>
<td>Long Leveler Rod</td>
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<td>13</td>
<td>D5740</td>
<td>Short Leveler Rod</td>
<td>1</td>
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<tr>
<td>14</td>
<td>D6447</td>
<td>5/16” x 1” Self Driller</td>
<td>2</td>
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<tr>
<td>15</td>
<td>D5738</td>
<td>Leveler Mount Bracket</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>D5742</td>
<td>Spinner Motor</td>
<td>1</td>
</tr>
<tr>
<td>17</td>
<td>D6232</td>
<td>Motor Coupler</td>
<td>1</td>
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<tr>
<td>18</td>
<td>D5723</td>
<td>Spinner Transmission</td>
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<td>19</td>
<td>D5715</td>
<td>Spinner Motor Cover</td>
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<tr>
<td>20</td>
<td>D6172</td>
<td>#10-32 x 5/8” Serrated Flange Bolt</td>
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<tr>
<td>21</td>
<td>D4124</td>
<td>3/8” Lock Nut</td>
<td>2</td>
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<tr>
<td>22</td>
<td>D4125</td>
<td>3/8” Flat Washer</td>
<td>2</td>
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</tbody>
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![Complete Drive Assembly Diagram](image)

Complete Drive Assembly

D5707
# Hopper Assembly Parts Breakdown

**Model # SP-2400**

<table>
<thead>
<tr>
<th>Key</th>
<th>Part No.</th>
<th>Description</th>
<th>Qty.</th>
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<tbody>
<tr>
<td>1</td>
<td>D5710</td>
<td>Hopper Auger Motor Cover</td>
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<td>D6131</td>
<td>1/4-20 x 1/2&quot; SS HWH Serrated TCS</td>
<td>6</td>
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<tr>
<td>3</td>
<td>D5700</td>
<td>RTG Hopper</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>D5724</td>
<td>3/8-16 x 2-3/4 HHCS</td>
<td>9</td>
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<tr>
<td>5</td>
<td>D6515</td>
<td>Heavy Duty Vibrator</td>
<td>1</td>
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<tr>
<td>6</td>
<td>D4125</td>
<td>3/8&quot; Flat Washer</td>
<td>11</td>
</tr>
<tr>
<td>7</td>
<td>D4122</td>
<td>3/8-16 x 1-1/2 HHCS</td>
<td>4</td>
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<tr>
<td>8</td>
<td>D5711</td>
<td>Vibrator Link Arm</td>
<td>1</td>
</tr>
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<td>9</td>
<td>D5713</td>
<td>Short Baffle Plate</td>
<td>1</td>
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<tr>
<td>10</td>
<td>D5714</td>
<td>Long Baffle Plate</td>
<td>1</td>
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<td>11</td>
<td>D5712</td>
<td>Interior Main Baffle Support Frame</td>
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<td>12</td>
<td>D6133</td>
<td>5/16 x 1/2&quot; HHCS SS</td>
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<td>13</td>
<td>D6165</td>
<td>5/16 Flat Washer</td>
<td>3</td>
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<td>D4121</td>
<td>5/16-18 x 1&quot; HHCS SS</td>
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**Hopper Assembly**
## Frame Assembly Parts Breakdown

**Model # SP-2400**

<table>
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<th>Description</th>
<th>Qty.</th>
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<tr>
<td>1</td>
<td>D 5705</td>
<td>2400 Frame Weldment</td>
<td>1</td>
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<tr>
<td>2</td>
<td>D 5736</td>
<td>Upper Gusset</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>D 5728/29</td>
<td>Upper Pin Bracket 1.125 &amp; 1.0</td>
<td>2 ea.</td>
</tr>
<tr>
<td>4</td>
<td>D 4122</td>
<td>3/8-16 x 1-1/2 HHCS</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>D 5730/31/32</td>
<td>Lower Pin 1.25, 1.0, .750</td>
<td>2 ea.</td>
</tr>
<tr>
<td>6</td>
<td>D 5735</td>
<td>Right Hand Main Bracket</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>D 5734</td>
<td>Left Hand Main Bracket</td>
<td>1</td>
</tr>
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**Frame Assembly**

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8 — 17
Vehicle Harness Wiring Instructions

Model # SP-2400

Step 1: Take harness assembly and route from the rear of the vehicle to the front. Route harness along frame and attach to frame holes and frame supports. It is not recommended to attach to fuel or brake lines for obvious reasons. Do not route close to exhaust system or engine, even though Snowex uses high temperature wiring. It still could melt under extreme heat and short the spreader electrical system as well as the vehicle electrical system.

Step 2: Mount rear plug above hitch plate using supplied bolts, locate between hinges (important). Make sure wiring and plug are clear of dump body pinch points. Apply a small amount of dielectric grease to contacts.

Step 3: Secure harness from the rear to the front using heavy duty ty-wraps or frame clips along the frame and lighter duty ty-wraps everywhere else.

Step 4: Drill a 1-1/4 hole in the firewall or use existing access hole (check to make sure you are clear on the other side you intend to drill). Route connector and harness through hole. The power harness from control box to battery will need to be routed from the inside of the cab to the battery – this results from the large amperage connector. Route leads with lugs to battery, do not connect power at this time.

Step 5: Connect harness to the back of the controller and mount to a suitable location. NOTE: You may want to contact customer before mounting controller as some prefer not to have holes drilled into the dashboard. Ty-wrap loose controller harness and move to the engine compartment. Do not mount close to any heater vents.

Step 6: Connect power leads to the battery: Red + Positive, Black – Negative, always connect to the primary battery if using a dual battery system, secure loose loom to any other large or medium vehicle harness with medium duty ty-wraps; this will secure wiring harness.

Step 7: Push the ON/OFF button on the controller to check for power, when that has been confirmed turn power OFF. The electrical portion of the installation is complete.

Work Light Wiring Instructions

Step 1: Take light kit harness and route from the rear of the vehicle (left side) to the front. Follow main spreader wire route into vehicle cab and locate next to control mounting position.

Step 2: Mount rear power plug next to main spreader power plug. Install work light onto spreader (see fig. 1 below) and also connect harness adapter to light assembly. Do not connect light adapter to main vehicle harness at this point.

Step 3: Attach Vehicle harness (pos +) lead to supplied switch. Next attach (pos +) lead coming off main control input power lead to switch. The final connection will be to connect the (neg-) wire from the vehicle harness to the main control input power lead. Both the (pos +) and (neg -) connection points will be male/female insulated spade terminals.

Step 4: Connect work light adapter to vehicle plug, test work light by switching toggle on/off.

Fig 1.

IMPORTANT: Do not modify harness length. Any modifications will void warranty.
Electrical System Parts Breakdown
Model # SP-2400

<table>
<thead>
<tr>
<th>Key</th>
<th>Part No.</th>
<th>Description</th>
<th>Qty</th>
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<tbody>
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<td>D 5716</td>
<td>Spreader Speed Control</td>
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<td>2</td>
<td>D 6837</td>
<td>Control Power Harness</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>D 6836</td>
<td>Vehicle Harness</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>D 5708</td>
<td>Spreader Harness</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>D 6839</td>
<td>6 Ga. Breaker wire</td>
<td>1</td>
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<td>6</td>
<td>D 6851</td>
<td>100 Amp Resetable Breaker</td>
<td>1</td>
</tr>
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<td>7</td>
<td>D 6170</td>
<td>Anderson Connector With Leads</td>
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<td>8</td>
<td>D 6841</td>
<td>Vehicle Harness Dust Cap</td>
<td>1</td>
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</table>

**IMPORTANT:** Do not modify harness length. Any modifications will void warranty.

**IMPORTANT:** In the off season remove control and put in a cool dry place. The interior summer temperatures could damage circuit board and void warranty.
Controller Wiring Diagram

Model # SP-2400

**Key Part No. Description Qty.**
- 9 D 6837 Control Power Cable 1
- 11 D 6839 6 GA. Breaker Wire 1
- 12 D 6840 100 AMP Resetable Breaker 1

*NOTE:*
A) Leads must only be attached to battery.
B) 100 Amp breaker must be inserted.

**IMPORTANT:** In the off season remove control and put in a cool dry place. The interior summer temperatures could damage circuit board and void warranty.
Spreader Power Harness Circuit Diagram
Model # SP-2400

- Black Negative (-)
- Red Positive (+)
- Black Positive (+)

AUGER
- Red Positive (+)
- Black Negative (-)

SPINNER
- Red Positive (+)
- Black Negative (-)

VIBRATOR
- Red Positive (+)
- Black Negative (-)

MAIN POWER PLUG
- SPINNER
- SPINNER
- AUGER
- VIBRATOR
- SPINNER
- MAIN POWER PLUG

POWER PLUG
- SPINNER
- AUGER
- VIBRATOR
Vehicle Harness Circuit Diagram
Model # SP-2400

*NOTE: Reference Bumper Plug for Color Code*
Mounting System Exploded View
Model # UMK-175

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<td>D 5729</td>
<td>Upper Pin Bracket W/1.0 Hole</td>
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<td>D 5730</td>
<td>Lower Weld On Pin 1.250 Dia</td>
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<td>D 5731</td>
<td>Lower Weld On Pin 1.0 Dia</td>
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<td>6</td>
<td>D 5732</td>
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<td>9</td>
<td>D 5736</td>
<td>Upper Gusset</td>
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Central Lift Point
Mounting Instructions

Model # UMK-175

Step 1: Use centrally located lifting point on spreader frame. Hang spreader in center of dump body opening, (note) spreader opening must be level with dump floor.

Step 2: Using bolts provided in kit, mount left and right main angle to spreader frame.

Step 3: Mark and trim angles to appropriate width to match tailgate, remount angles to spreader frame.

Step 4: Using correct pin size provided in kit for lower latch pin, measure and cut pin to correct length. Clamping pins in correct location, tack weld pins to angles securely and lock lower hinge point.

Step 5: Using correct pin/ears provided for upper hinge point, measure and cut to correct length. Clamping ears in correct location, tack weld securely to the left and right main angles (see page 8-23) and secure upper hinge point.

Step 6: Double check that spreader will remove and install with ease.

Step 7: If using ears for upper hinge point support, upper gussets must be welded directly behind mounting ears. (see page 8-23)

Step 8: Complete welding pins and ears to angle fully.

Step 9: Remove angles from spreader for paint and reinstall.

Mounting Instructions for self leveling spinner bracket

Step 1: Secure long leveling rod D5741 to spinner enclosure through bottom hole in bracket with hair pin clip through hole in pin (see fig 1).

Step 2: Mount drive leveling bracket D5738 to frame rail 4” below center of hinge. Weld or bolt in place (see fig 2).

Step 3: Connect D5740 short leveling rod to drive leveling bracket with hair pin clip. Align both rods next to each other (see fig2) and weld together.
CONNECT TO MAIN CONTROL
INPUT POWER PLUG USING MALE/
FEMALE SPADE TERMINALS.

Key  Part No.  Description                  Qty.
1     D 6784  Work Light Assembly           1
2     D 5726  Work Light Adapter           1
3     D 5719  Vehicle Harness W/Switch      1

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SP-2400 INTERIOR BAFFLE and INVERTED-V INSTRUCTIONS

- The SP-2400 uses a multi-function baffle system over the auger area.
- This twin baffle design is used to reduce load on the auger drive train which controls amperage load to the electrical system. It must not be removed unless servicing the unit.
- There are two covers provided, one long and one short. They can be removed in different combinations depending on the material type or moisture content. Ultimately they aid in controlling material flow to the auger area; however for wet sand both baffles should be removed.
- The baffle system is also connected to the vibrator link arm assembly to assist with material flow. Make sure vibrator bolts and link arm hardware are tight before operating spreader.
- WARNING: Always disconnect power source before attempting to remove material baffle.
PREPARATION
CAUTION – Sweep area clear of foreign objects or obstacles that could cause personal injury. Keep other persons, children, or animals out of the area to be spread.

SPREADER LOADING
WARNING – Do not overload vehicle. Use chart below to calculate weight of material. Weights of material are an average for dry materials.

<table>
<thead>
<tr>
<th>Material</th>
<th>Weight Per Cubic Ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rock Salt</td>
<td>35-40 lbs.</td>
</tr>
<tr>
<td>Sand/Salt Mix</td>
<td>95-120 lbs.</td>
</tr>
</tbody>
</table>

• Be sure to comply with manufacturer’s maximum gross vehicle weight ratings.
• Warning- Never leave materials in hopper for long periods of time as salt is hygroscopic and will attract atmospheric moisture and harden up. When spreading sand mix, a 1:1 ratio for Sand/Salt mix is recommended to prevent the material from freezing.

SPREADING TIPS
• Never exceed 10 m.p.h. when spreading.
• For a wider pass, increase spinner speed.
• For a heavier pass, drive slower, or increase auger speed.
• Never operate spreader near pedestrians.
• Spread ice melters with the storm to prevent unmanageable levels of ice.
• Calculate spread pattern when near vegetation.

2400 CONTROL OPERATION
• The Dual Variable Speed Control has dual finger-tip dials for maximum performance, digital system status with warning protection and built-in Vibrator Switch.
• To start, press power switch on controller and spreader will accelerate to speed set on spinner and auger dials.
• To stop, press power switch on controller to off position.
• Speed of auger and spinner may be adjusted separately to get desired flow and spread distance from spreader.
• The Vibrator Switch is needed for dense material or to increase the flow to the auger. This eliminates bridging of material in hopper.
WARNING PROTECTION

• If audible beeping occurs, read display to identify problem. If display reads “OL” (overload) or “OH” (overheat), shut controller down and carefully clear jammed auger. If display reads “E1” this means there is a dead short in system. Do not use until problem is corrected. If display reads “E 0” this means that the motor is not getting any power. Check all connections if display reads “LB” the vehicle battery is extremely low (possibly caused by a poor or corroded connection) and could damage the system.

• If there are any problems while operating the spreader, refer to Troubleshooting Guide.

AUTO-REVERSE “AR” FUNCTION

• If your controller displays “OL” this could indicate a jammed auger.
• To engage the Auto-Reverse “AR” function:

  Step 1: Shut the Main Power Switch OFF for 3 seconds.
  Step 2: Turn the Main Power Switch ON. When the machine starts back up the “AR” sequence will automatically start and the auger will reverse for several rotations to clear the jam.

• After a pause of several moments, the auger will automatically return to correct rotation.
• If the jam is still not cleared, the controller will again display “OL”.
• You may repeat Steps 1 & 2 for a second and third time.
• If after the third try the controller displays “OL” — you must extract the material that is causing the problem.
• Follow all warning directions when clearing jams.
Troubleshooting
Model # SP-2400

Whenever service is necessary, your local SnowEx Dealer knows your Spreader best. Take your Spreader to your local dealer for any maintenance or service needs on your unit. If this is not possible, the Troubleshooting Guide below may assist you in identifying the problem.

Warning: First read all warning instructions and safety messages before servicing your spreader.

Preliminary Checks
- Be sure all electrical connections are tight and clean.
- Be sure nothing is jammed in the hopper.

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>POSSIBLE CAUSE</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor doesn’t run.</td>
<td>Loose electrical connections.</td>
<td>Check all connections.</td>
</tr>
<tr>
<td></td>
<td>Blown Fuse.</td>
<td>Replace fuse.</td>
</tr>
<tr>
<td></td>
<td>Motor Seized.</td>
<td>Replace motor.</td>
</tr>
<tr>
<td>Controller shuts down.</td>
<td>Jammed auger.</td>
<td>Carefully clear jammed material.</td>
</tr>
<tr>
<td></td>
<td>Poor electrical connections.</td>
<td>Clean or replace connectors. Use dielectric grease.</td>
</tr>
<tr>
<td></td>
<td>Electrical short.</td>
<td>Check electrical connections. Check for bare wires.</td>
</tr>
<tr>
<td></td>
<td>Controller failure.</td>
<td>Replace controller.</td>
</tr>
<tr>
<td>Material not flowing from hopper.</td>
<td>Empty hopper.</td>
<td>Fill hopper.</td>
</tr>
<tr>
<td></td>
<td>Wet material.</td>
<td>Replace with dry material.</td>
</tr>
<tr>
<td></td>
<td>Frozen or coarse material.</td>
<td>Replace material.</td>
</tr>
<tr>
<td></td>
<td>Spinner not turning.</td>
<td>Check drive assembly.</td>
</tr>
<tr>
<td></td>
<td>Auger loose on shaft.</td>
<td>Tighten locking bolt on the side of the auger. There is a flat machined on the driver shaft. Align the auger with this flat and tighten the bolt.</td>
</tr>
<tr>
<td></td>
<td>Vibrator not working.</td>
<td>Replace vibrator</td>
</tr>
</tbody>
</table>

Audible alarm beeping and display shows OL or OH.
- Jammed auger, overload shut down.
  - Turn off for three seconds, then restart. If shut down continues, turn off controller. Clear debris and lumps from auger areas.

Audible alarm beeping display shows E1.
- Short in system.
  - Turn off. Do not use until problem is corrected.

Audible alarm beeping display shows EO.
- Motor is not getting power.
  - Turn off. Check all connections.

Audible alarm beeping display shows LB.
- Vehicle battery is extremely low, or a poor connection exists.
  - Turn off. Charge battery.
Troubleshooting
Model # SP-2400

SPREADER DOES NOT RUN

1. JAMMED MATERIAL
   - Check with test kit
2. BAD MOTOR
   - Check with test kit
3. BAD TRANSMISSION
   - Check with test kit
4. CORROSION
   - Replace all corroded connections
5. BAD CONTROLLER
   - Check with test kit

SWITCH OFF & ON FOR AUTO-REVERSE FUNCTION

1. CLEAR JAM
2. DON'T FORGET USE DIELECTRIC GREASE

CONTROLLER TURNS ON BEEP SHUTS OFF DISPLAYS ERROR CODE

1. OL CODE
   - Definition: Amp draw too high
2. JAMMED MATERIAL
   - Test 4 to 20 Amp draw no load good
3. 20+ Amp draw no load bad
4. BAD TRANSMISSION
   - Check with test kit
5. TEST TURN SHAFT BY HAND SHOULD TURN FREELY
6. BAD CONTROLLER
   - Check with test kit

SPREADER UNPLUGGED

1. MOTOR POWER CORD DISCONNECTED INSIDE DRIVE ASSEMBLY
2. BREAK IN WIRING HARNESS
   - Check with test kit
3. REPLACE HARNESS

INSIDE DRIVE ASSEMBLY

1. BREAK IN WIRING HARNESS
   - Check with test kit
2. REPLACE HARNESS

DON'T FORGET

1. USE DIELECTRIC GREASE

EO CODE

1. OPEN CIRCUIT BETWEEN MOTOR AND CONTROLLER
2. SPREADER UNPLUGGED
3. MOTOR POWER CORD DISCONNECTED INSIDE DRIVE ASSEMBLY
4. OPEN ACCESS COVER AND PLUG TOGETHER
5. REPLACE HARNESS

LOAD TEST BATTERY

1. SHOULDN'T TURN FREELY

LOAD TEST BATTERY

1. REPLACE ALL CORRODED CONNECTIONS

TEST TURN SHAFT BY HAND SHOULD TURN FREELY

1. REPLACE

SWITCH OFF & ON FOR AUTO-REVERSE FUNCTION

1. CLEAR JAM
2. DON'T FORGET USE DIELECTRIC GREASE

DEFINITION: AMP DRAW TOO HIGH

1. OPEN CIRCUIT BETWEEN MOTOR AND CONTROLLER
2. BAD CONTROLLER
   - Check with test kit

CORROSION

1. REPLACE ALL CORRODED CONNECTIONS
2. TIGHTEN OR REPLACE

LOW BATTERY LESS THAN 12 VOLT OUTPUT

1. REPLACE BATTERY

DEAD SHORT IN MOTOR CIRCUIT

1. REPLACE AFFECTED COMPONENTS
2. BAD CONTROLLER
   - Check with test kit
3. REPLACE

ALL OTHER CODES

1. CHECK HARNESS FOR SPICED IN ACCESSORY
2. BAD CONTROLLER
   - Check with test kit
3. REPLACE

ON/OFF SWITCH LIGHTS NO DISPLAY

1. BAD CONTROLLER
   - Check with test kit
2. CHECK POWER SOURCE TO CONTROLLER
3. BAD CONTROLLER
   - Check with test kit
4. REPLACE

NOTHING HAPPENS NO DISPLAY ON/OFF SWITCH WILL NOT LIGHT UP

1. CHECK POWER SOURCE TO CONTROLLER
2. BAD CONTROLLER
   - Check with test kit
3. REPLACE

DEFINITION: OPEN CIRCUIT BETWEEN MOTOR AND CONTROLLER

1. BAD CONTROLLER
   - Check with test kit
2. REPLACE ALL CORRODED CONNECTIONS
3. TIGHTEN OR REPLACE

LOW BATTERY LESS THAN 12 VOLT OUTPUT

1. REPLACE BATTERY

DEAD SHORT IN MOTOR CIRCUIT

1. REPLACE AFFECTED COMPONENTS
2. BAD CONTROLLER
   - Check with test kit
3. REPLACE

ALL OTHER CODES

1. CHECK HARNESS FOR SPICED IN ACCESSORY
2. BAD CONTROLLER
   - Check with test kit
3. REPLACE
Troubleshooting Material Flow
Model # SP-2400

- **MATERIAL FREE FLOWS**
  - CHECK BAFFLE LENGTH
  - 18” CORRECT
  - 18” CORRECT
  - MATERIAL ISSUE

- **MATERIAL DOES NOT FLOW**
  - CHECK BAFFLE POSITION
  - SHOULD TOUCH HOPPER ON 3 SIDES
  - MATERIAL ISSUE
  - MATERIAL ISSUE
  - MATERIAL ISSUE
  - MATERIAL ISSUE
  - MATERIAL ISSUE
  - MATERIAL ISSUE

- **SLOW MATERIAL FLOW**
  - MATERIAL ISSUE
  - INCREASE AUGER SPEED
  - TURN ON VIBRATOR
  - TURN ON VIBRATOR

* Spreader capable of spreading most granular bulk material.
Spreader Maintenance  
Model # SP-2400

- **WARNING** – When servicing is necessary, perform it in a protected area. Do not use power tools in rain or snow because of danger of electrical shock or injury. Keep area well lighted. Use proper tools. Keep the area of service clean to help avoid accidents.

- **WARNING** – Disconnect electricity to spreader before servicing.

- **CAUTION** – The controller is a solid state electronic unit and is not serviceable. Any attempt to service will void warranty.

- **CAUTION** – There are no serviceable parts in the motor/transmission assembly. Any attempt to service will void warranty.

- **CAUTION** – When replacing parts use only original manufacturer's parts. Failure to do so will void warranty.

- Use dielectric grease on all electrical connections to prevent corrosion at the beginning and end of the season and each time plugs are disconnected.

- Gently wash unit after each use to prevent material build-up and corrosion.

- **CAUTION** – When pressure washing motor enclosure area, stay at least 36” away from all electrical items.

- Paint or oil all bare metal surfaces at the end of the season.

- Apply small amount of light oil to latches as needed.

- If motor cover is removed for any reason, use silicone sealant to ensure weather proofing of enclosure.

- Grease bearings after every 20 hour’s use.

- After first use, tighten all nuts and bolts on spreader and mount.

- **WARNING**: Never remove spreader with material in hopper.

- **ATTENTION**: Store control in cool dry place during the off season.

- **CAUTION** – Spinner motor is not designed for continuous duty. Allow motor to cool between long cycle times.

- **CAUTION** – Vibrator is not designed for continuous duty. Allow motor to cool between long cycle times.

- **CAUTION** – Do not modify vehicle or spreader wiring harness. Doing so will void product warranty.
### Determining Vehicle Payload

<table>
<thead>
<tr>
<th>Material Type</th>
<th>Example: Coarse Salt – Dry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment installed when vehicle was weighed</td>
<td>SP-2400</td>
</tr>
<tr>
<td>Front Gross Axle Weight Rating (RGAWR)</td>
<td></td>
</tr>
<tr>
<td>Rear Vehicle Weight Rating (GVWR) (lb.)</td>
<td>8600</td>
</tr>
<tr>
<td>Gross Vehicle Weight (GVW) (lb.) (empty)</td>
<td>6 500</td>
</tr>
<tr>
<td>Payload Available (lb.)</td>
<td>2 100</td>
</tr>
<tr>
<td>Material Weight (lb./cu. yd.)</td>
<td>1 431</td>
</tr>
<tr>
<td>Maximum Volume (cu. yd.)</td>
<td>1.47</td>
</tr>
<tr>
<td>Maximum Height (approximate) (in.)</td>
<td>24&quot;</td>
</tr>
<tr>
<td>Loaded Front Gross Axle Weight (FGAW) (lb.)</td>
<td></td>
</tr>
<tr>
<td>Loaded Rear Gross Axle Weight (RGAW) (lb.)</td>
<td></td>
</tr>
<tr>
<td>Loaded Gross Vehicle Weight (GVW) (lb.)</td>
<td></td>
</tr>
</tbody>
</table>

### Torque Chart

When tightening fasteners, refer to the Torque Chart below for the recommended fastener torque values.

<table>
<thead>
<tr>
<th>SIZE</th>
<th>SAE Grade 2</th>
<th>SAE Grade 5</th>
<th>SAE Grade 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4-20</td>
<td>6</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>5/16-18</td>
<td>11</td>
<td>18</td>
<td>28</td>
</tr>
<tr>
<td>3/8-16</td>
<td>19</td>
<td>31</td>
<td>46</td>
</tr>
<tr>
<td>3/8-24</td>
<td>24</td>
<td>46</td>
<td>68</td>
</tr>
<tr>
<td>7/16-14</td>
<td>30</td>
<td>50</td>
<td>75</td>
</tr>
<tr>
<td>1/2-13</td>
<td>45</td>
<td>75</td>
<td>115</td>
</tr>
<tr>
<td>9/16-12</td>
<td>66</td>
<td>110</td>
<td>165</td>
</tr>
<tr>
<td>5/8-11</td>
<td>93</td>
<td>150</td>
<td>225</td>
</tr>
<tr>
<td>3/4-10</td>
<td>150</td>
<td>250</td>
<td>370</td>
</tr>
<tr>
<td>7/8-9</td>
<td>202</td>
<td>378</td>
<td>591</td>
</tr>
<tr>
<td>1-8</td>
<td>300</td>
<td>583</td>
<td>893</td>
</tr>
</tbody>
</table>

**Metric Grade 8.8 (ft.-lb.)**

<table>
<thead>
<tr>
<th>SIZE</th>
<th>TORQUE</th>
<th>SIZE</th>
<th>TORQUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>M 6</td>
<td>7</td>
<td>M 12</td>
<td>60</td>
</tr>
<tr>
<td>M 8</td>
<td>17</td>
<td>M 14</td>
<td>95</td>
</tr>
<tr>
<td>M 10</td>
<td>35</td>
<td>M 16</td>
<td>155</td>
</tr>
</tbody>
</table>

These torque values apply to mount assembly fasteners except those noted in the instruction.

### Material Weights

Refer to the table below for the weight per cubic yard of common spreading materials.

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>WEIGHT (lb. per cubic yard)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fine Salt – Dry</td>
<td>2,025</td>
</tr>
<tr>
<td>Coarse Salt – Dry</td>
<td>1,431</td>
</tr>
<tr>
<td>Sand/Salt Mix – Dry (50/50)</td>
<td>2,700</td>
</tr>
<tr>
<td>Cinders</td>
<td>1,080</td>
</tr>
</tbody>
</table>
Limited Warranty

Snowex products are warranted for a period of two years from the date of purchase against defects in material or workmanship under normal use and service, subject to limitations detailed below. Warranty period of two years begins on the date of purchase by the original retail user.

The WARRANTY REGISTRATION CARD must be returned to the manufacturer for this warranty to become effective. This warranty applies to the original retail purchaser only. This warranty does not cover damages caused by improper installation, misuse, lack of proper maintenance, alterations or repairs made by anyone other than authorized Snowex dealers or Snowex personnel. Due to the corrosive properties of the materials dispensed by spreaders, Trynex does not warrant against damage caused by corrosion. Warranty claims by the user must be made to the dealer from where the product was purchased, unless otherwise authorized by Snowex. Snowex reserves the right to determine if any part is defective and to repair or replace such parts as it elects. This warranty does not cover shipping costs of defective parts to or from the dealer.

LIMITATION OF LIABILITY

Neither Snowex, nor any company affiliated with it, makes any warranties, representations for promise as to the performance or quality other than what is herein contained. The liability of Snowex to the purchaser for damages arising out of the manufacture, sale, delivery, use or resale of this spreader shall be limited to and shall not exceed the costs of repair or replacement of defective parts. Snowex shall not be liable for loss of use, inconvenience or any other incidental, indirect or consequential damages, so the above limitations on incidental or consequential damages may not apply to you.

NO DEALER HAS AUTHORITY TO MAKE ANY REPRESENTATION OR PROMISE ON BEHALF OF SNOWEX, OR TO ALTER OR MODIFY THE TERMS OR LIMITATIONS OF THIS WARRANTY IN ANY WAY.
Warranty Registration and Customer Survey

To initiate the warranty on your new SnowEx spreader and assure prompt warranty service, please complete the following warranty registration and customer survey, sign and mail it back to the factory within 30 days of purchase.

1) Date of Purchase: ________________________________

2) Name: __________________________________________
   Address: _________________________________________
   Phone: ___________________________________________

3) SnowEx Model Purchased: _________________________ Serial Number: ________________________________

4) Is this your first Trynex Spreader? □ Yes □ No

5) What type of vehicle are you using with your Spreader?
   Make __________________________ Model __________________________ Year ________________

6) What type of material are you using in your spreader? ____________________________________________

7) SnowEx Dealer Name: ____________________________
   SnowEx Dealer Address: ___________________________
   SnowEx Dealer Phone: ____________________________

8) Does your Trynex Dealer stock Trynex replacement Parts? □ Yes □ No □ I don’t know

9) Do you feel your Trynex Dealer sold you the correct product for your needs/application? □ Yes □ No

10) How would you rate your overall satisfaction with your SnowEx Dealer?
    □ Very Satisfied □ Satisfied □ Somewhat Satisfied □ Somewhat Dissatisfied □ Dissatisfied □ Very Dissatisfied

11) How would you rate your overall satisfaction with your SnowEx Product?
    □ Very Satisfied □ Satisfied □ Somewhat Satisfied □ Somewhat Dissatisfied □ Dissatisfied □ Very Dissatisfied

12) Would you purchase another Trynex Product? □ Yes □ No

13) If you would like to receive E-Mail ALERTS for new products, bulletins or special promotions please supply address:
    ______________________________________________________________________________________

14) Please use the space below to convey your comments and/or suggestions.
    ______________________________________________________________________________________
    ______________________________________________________________________________________
    ______________________________________________________________________________________

15) Owner’s signature: X ________________________________

NOTE: I have read the owner’s manual and all safety precautions and I understand that this equipment could be dangerous if not operated with care and under the proper conditions.

PLEASE FOLD AND SEAL WITH TRANSPARENT TAPE BEFORE MAILING.