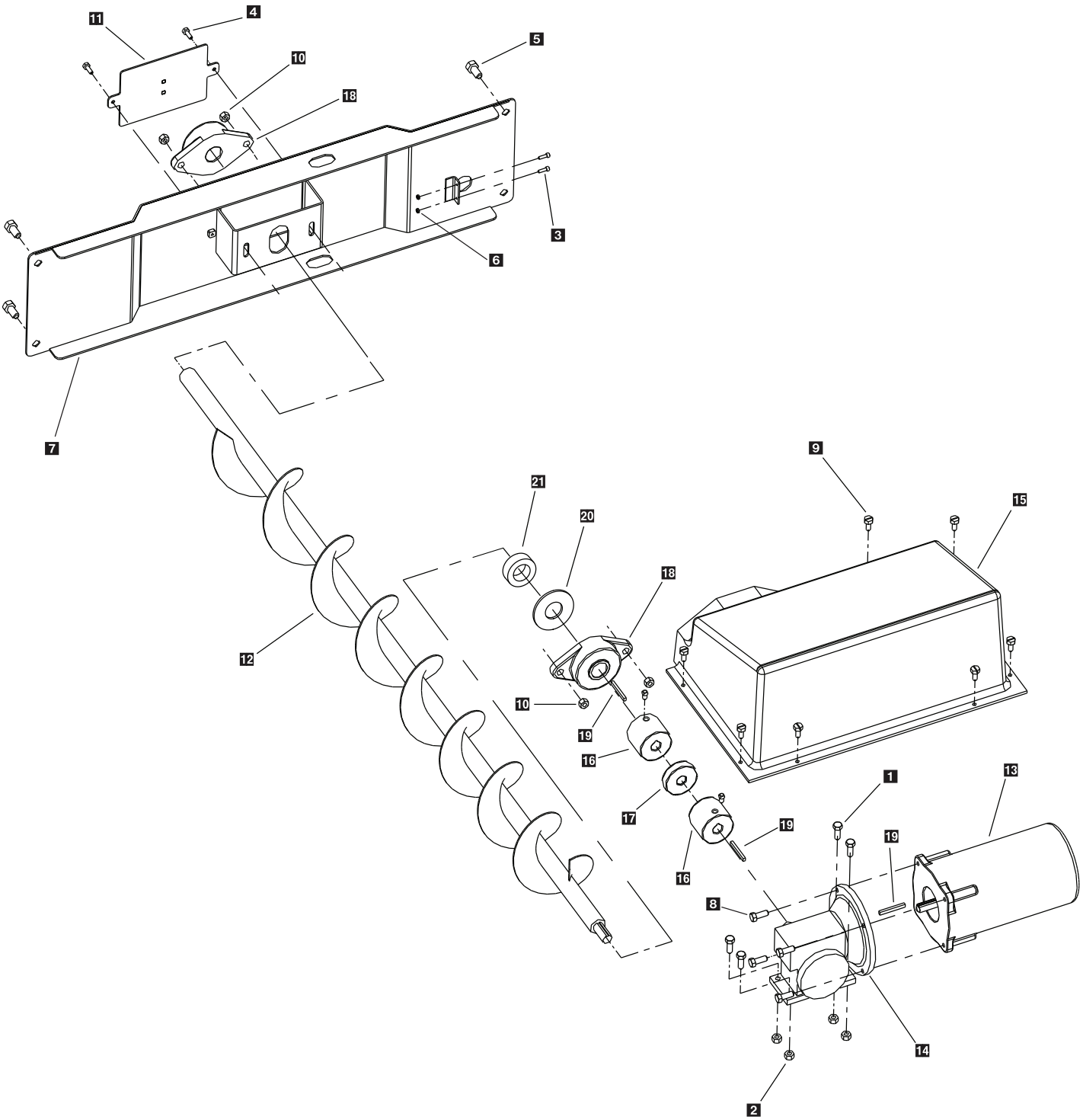
Auger Drive Assembly Parts Breakdown

Model # SP-8500

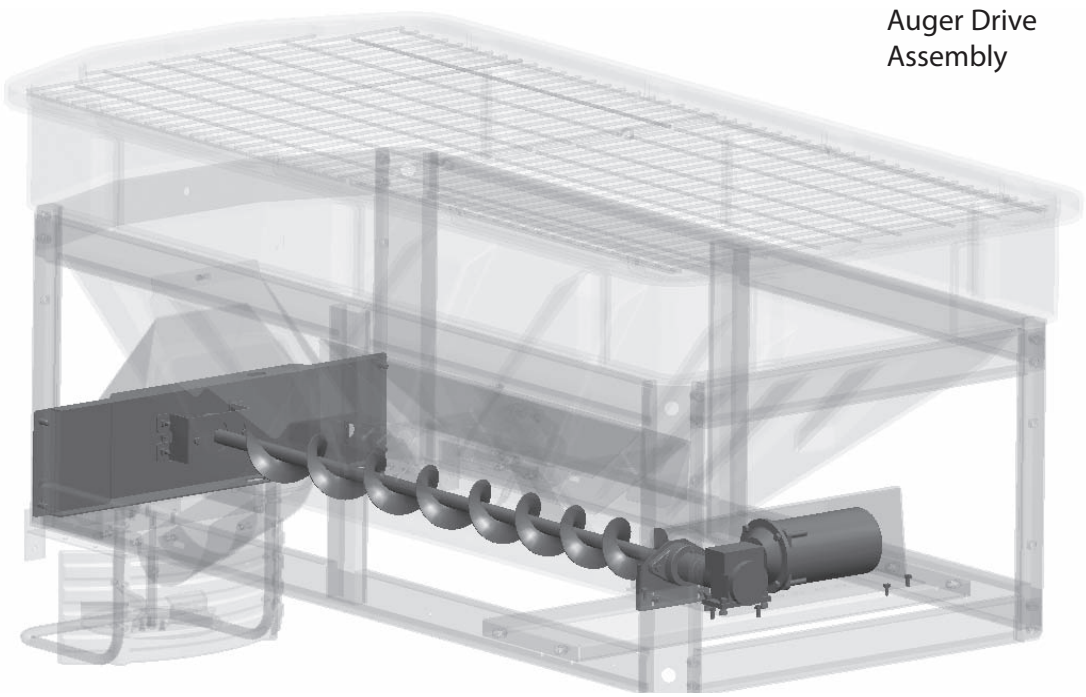


Auger Drive Assembly Parts Breakdown

Model # SP-8500

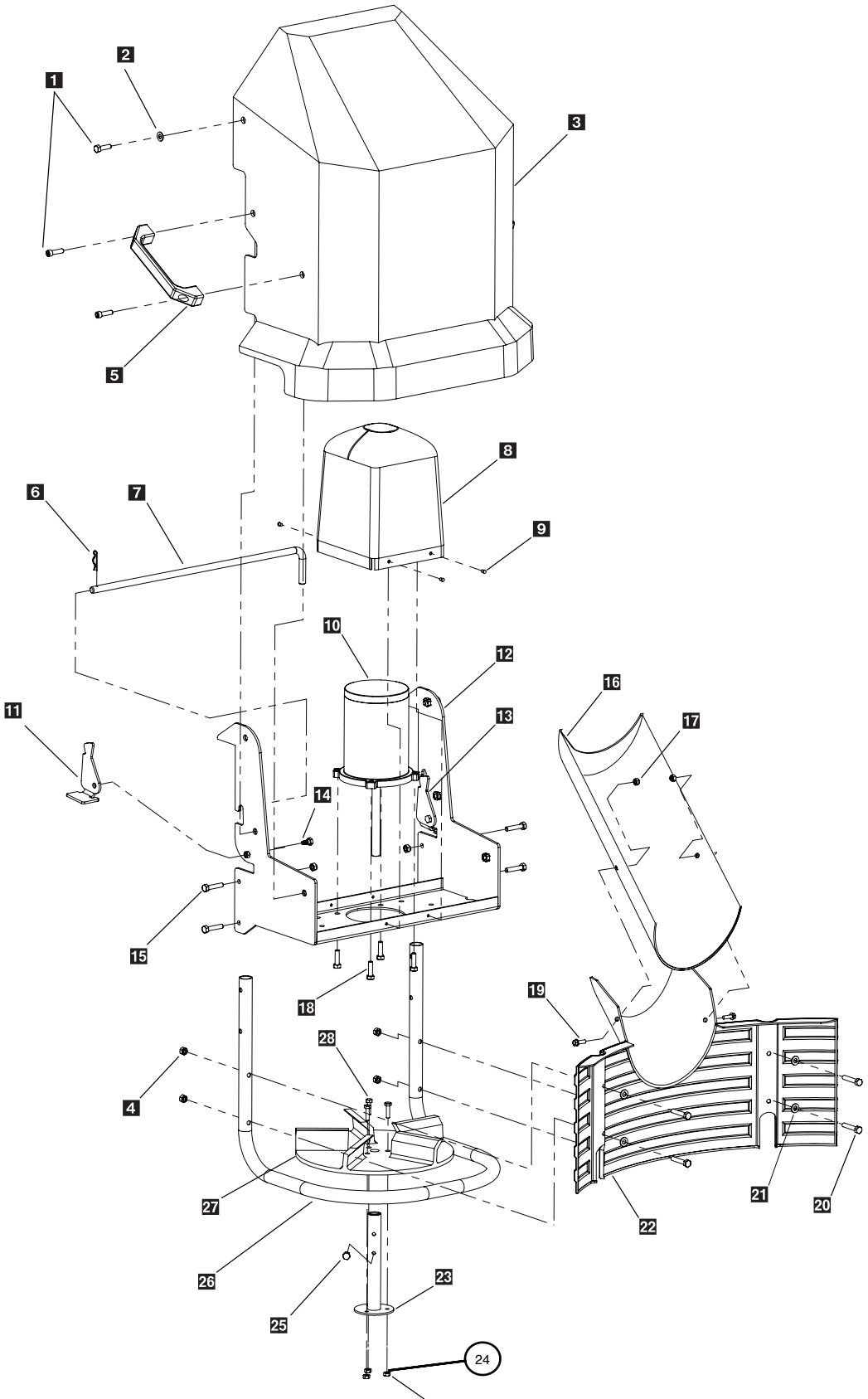
Key	Part No.	Description	Qty.
1	D 4122	3/8"-16 x 1- 1/2" Hex Bolt	4
2	D 6584	3/8" Serrated Flange Nut	4
3	D 6159	10-32 x 2" HH Machine Screw	2
4	D 6132	1/4"-20 x 3/4" Hex	2
5	D 6528	1/2"-13 Serrated Hex Head	4
6	D 6158	10-32 Lock Nut	2
7	D 6803	Rear Rail Assembly	1
8	D 4121	3/8"-16 x 1" HH TCS	4
9	D 6877	#8 x 3/4 Self Drilling HWH	7
10	D 5535	1/2-13 Serrated Flange Nut	4
11	D 6814	Bearing Cover	1
12	D 6816	Variable Pitch Auger	1
13	D 6825	12 Volt High Output Motor	1
14	D 6826	80:1 Auger Transmission	1
15	D 6831	Auger Motor Cover	1
16	D 6842	Trans/Auger Drive Coupler With Locking Hex Bolt	2
17	D 6843	Urethane Spyder	1
18	D 6845	Auger Bearing	2
19	D 6873	3/16" Key Stock	3
20	D 6789	Auger Shaft Hopper Washer	1
21	D 6792	Auger Shaft Hopper Collar	1

Auger Drive Assembly



Spinner Drive Assembly Parts Breakdown

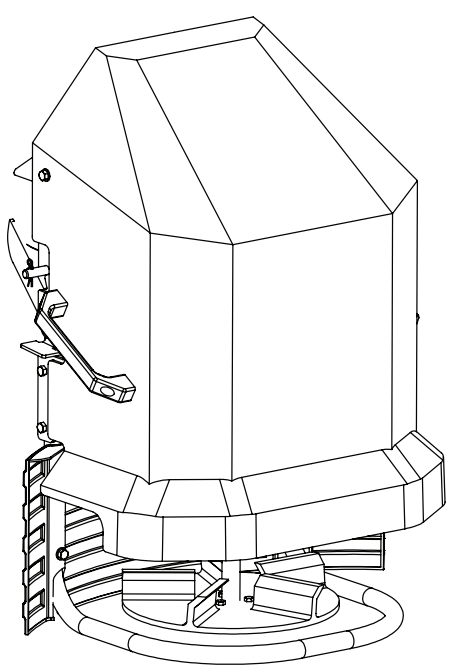
Model # SP-8500



Spinner Drive Assembly Parts Breakdown

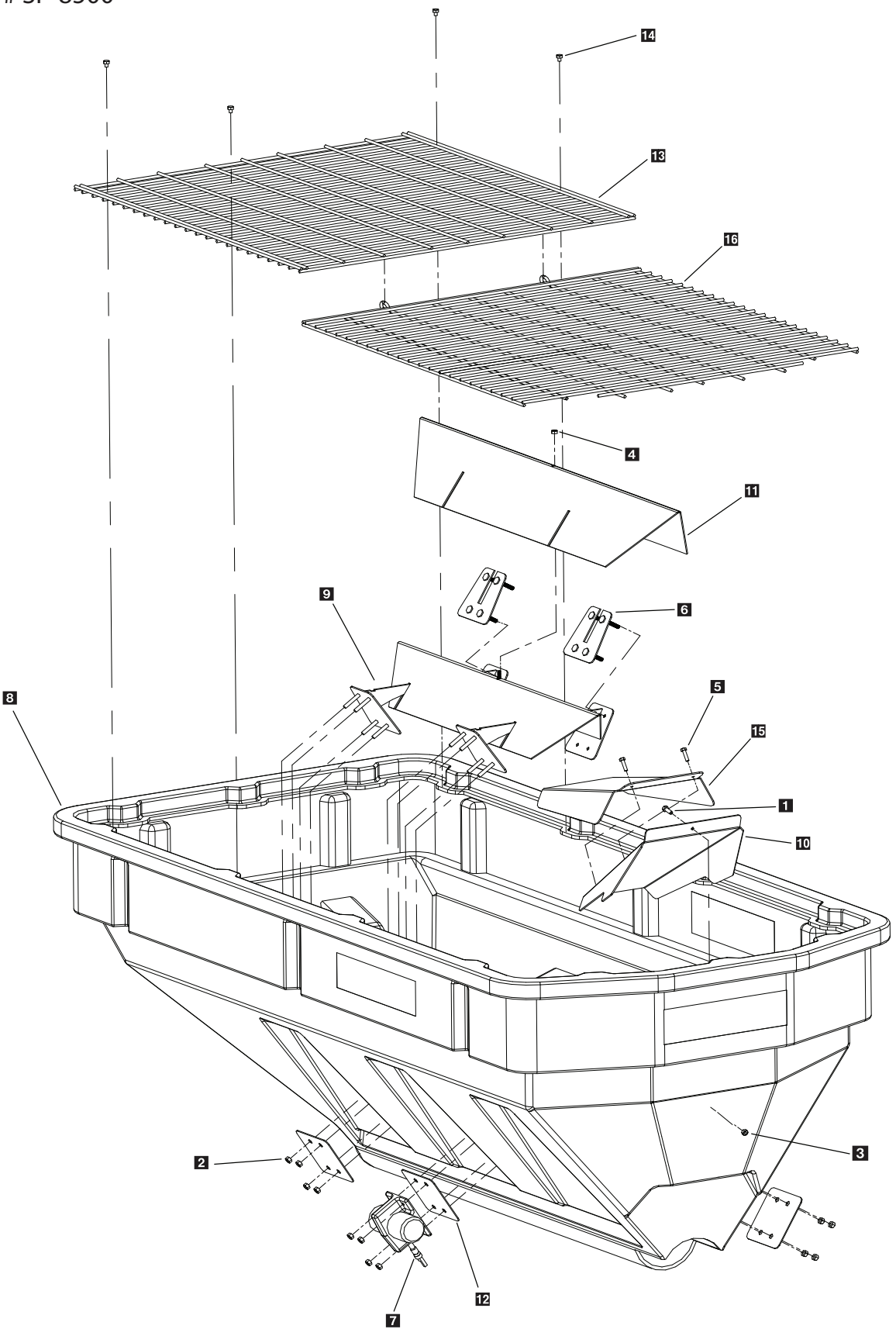
Model # SP-8500

Key	Part No.	Description	Qty.
1	D 5293	5/16-18 x 1-1/8 Socket Head Cap Screw	6
2	D 5249	5/16 Flat Washer	2
3	D 5349	Spinner Shroud	1
4	D 6138	5/16-18 Nylox Zinc	4
5	D 5248	Plastic Handle	2
6	D 4135	Hair Pin Clip	1
7	D 6563	Drive Pin	1
8	D 5346	Spinner Motor Cover	1
9	D 6333	Long Rivet	4
10	D 6887	Drive Motor	1
11	D 5343	Left Hand Latch	1
12	D 5344	8550 Spinner Drive Enclosure	1
13	D 5342	Right Hand Latch	1
14	T15038	Shoulder Bolt	2
15	D 6462	5/16-18 x 1-3/4 Hex Head Bolt	8
16	D 6833	Plastic Deflector	1
17	T 15016	1/4-20 Nylox Stainless	6
18	D 6452	3/8-16 x 1Serrated Flange Bolt	4
19	D 6132	1/4-20 x 3/4 Serrated Flange Stainless	4
20	D 6462	5/16-18 x 1-1/8	4
21	D 6165	5/16 Flat Washer	4
22	D 6833	Plastic Deflector	1
23	D 6824	Spinner Hub Weldment	1
24	D 4289	1/4" Nylox Nut Zinc	3
25	D 6133	5/16-18 x 1/2 Hex Head	1
26	D 5347	Tubular Spinner Guard	1
27	D 6823	Urethane Spinner	1
28	D 6854	1/4-20 x 1 Serrated Flange	3



Hopper Assembly Parts Breakdown

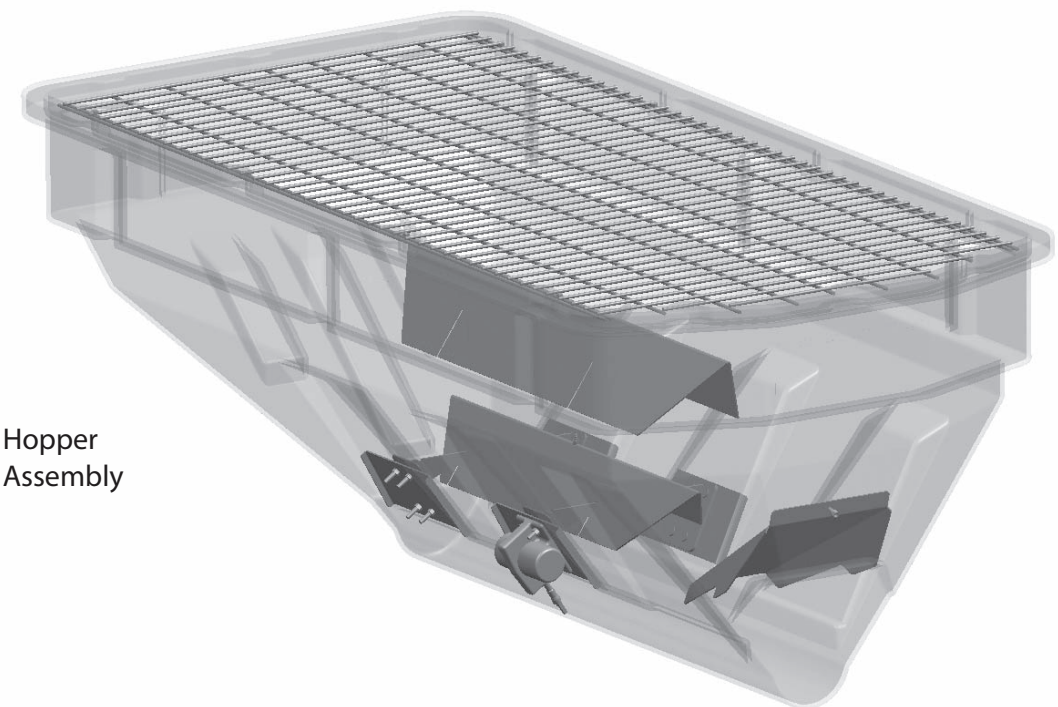
Model # SP-8500



Hopper Assembly Parts Breakdown

Model # SP-8500

Key	Part No.	Description	Qty.
1	D 6576	5/16-18 x 1-1/4 HHCS	1
2	D 6584	3/8 Serrated Flange Nut	17
3	D 6165	5/16" Flat Washer	1
4	D 6138	5/16" Nylock Nut	10
5	D 6874	#14 1-1/2" Tek w/Neo Washer	2
6	D 6815	Bolt Plate	2
7	D 6515	Heavy Duty Vibrator	1
8	D 6800	V-Maxx Hopper	1
9	D 6808	Inverted V Assembly	1
10	D 6807	Discharge Baffle	1
11	D 6809	Salt Baffle	1
12	D 6811	Inverted V Backing Plates	4
13	D 6848	Front Top Screen	1
14	D 6874	#14 x 1.5" HWH Self Driller	4
15	D 6847	Baffle Extension	1
16	D 6849	Rear Top Screen	1



Hopper
Assembly

Vehicle Harness Wiring Instructions

Model # SP-8500

Step 1: Take harness assembly and route from the rear of the vehicle to the front. Route harness along frame and attach to frame hole 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 on bumper using supplied bolts, locate towards the center of the bumper to reduce the amount of debris the tires will throw to the rear. Important: Apply a small amount of dielectric grease to the plug. Also try to mount so plug faces upward to help keep plugs tightly sealed.

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: Layout harness portion that connects to the battery along the fire wall and fender well. Do not connect power leads to battery yet. Drill a 3/4" hole in the fire wall, or use existing access hole, for the control portion of the harness and route connector and harness through hole. Be sure to check the area on the other side of the fire wall to make sure you are not drilling into the vehicle harness or a control module. Generally you can drill on either side of the steering wheel for a good location.

Step 4A: 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 high amperage connector. Route leads with lugs to battery — do not connect power at this time.

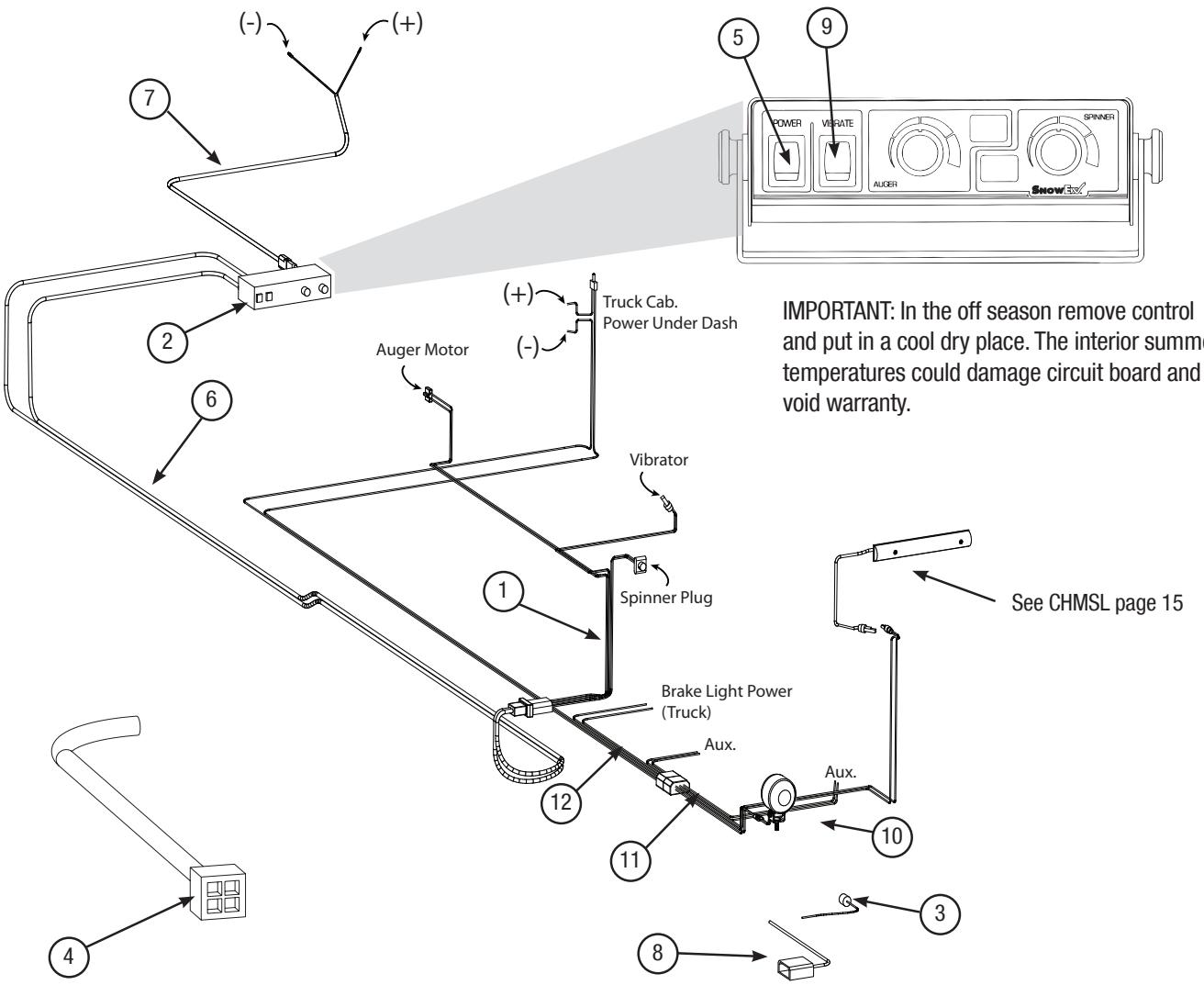
Step 5: Connect harness to the back of the controller and mount to a suitable location. NOTE: You may want to contact customer before mounting controller as some prefer not to have holes drilled into the dashboard. Ty-wrap loose controller harness and move to the engine compartment. Do not mount close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

Control and Harness Diagram

Model # SP-8500



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.

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

Special Notes:

1) All external connections must have dielectric grease.

2) Read lead labels before attaching to power source or ground.

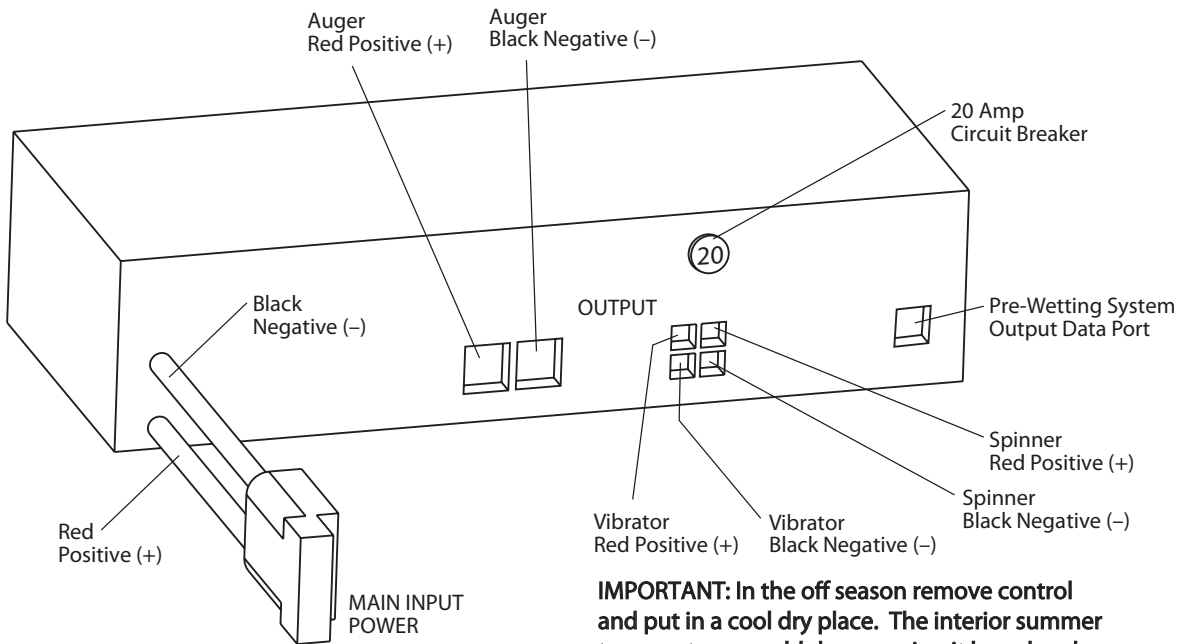
3) No other devices may be spliced into wiring harness.

4) Any repairs to wiring harness must be done with heat shrink butt connectors.

Key	Part No.	Description	Qty
1	D6838	Spreader Harness	1
2	D5716	Spreader Control	1
3	D6118	Dust Cover | Standard	1
4	D6170	Connector Adapter | 6" Anderson	1
5	D6237	Power Switch | 5 Terminal	1
6	D6836	Vehicle Harness	1
7	D6837	Control Power Cable	1
8	D6343	Dust Cover	2
9	D6354	Vibrator Switch | 3 Terminal Red	1
10	D6784	Utility Work Light	1
11	D6785	Light Kit Spreader Harness	1
12	D6786	Light Kit Vehicle Harness	1

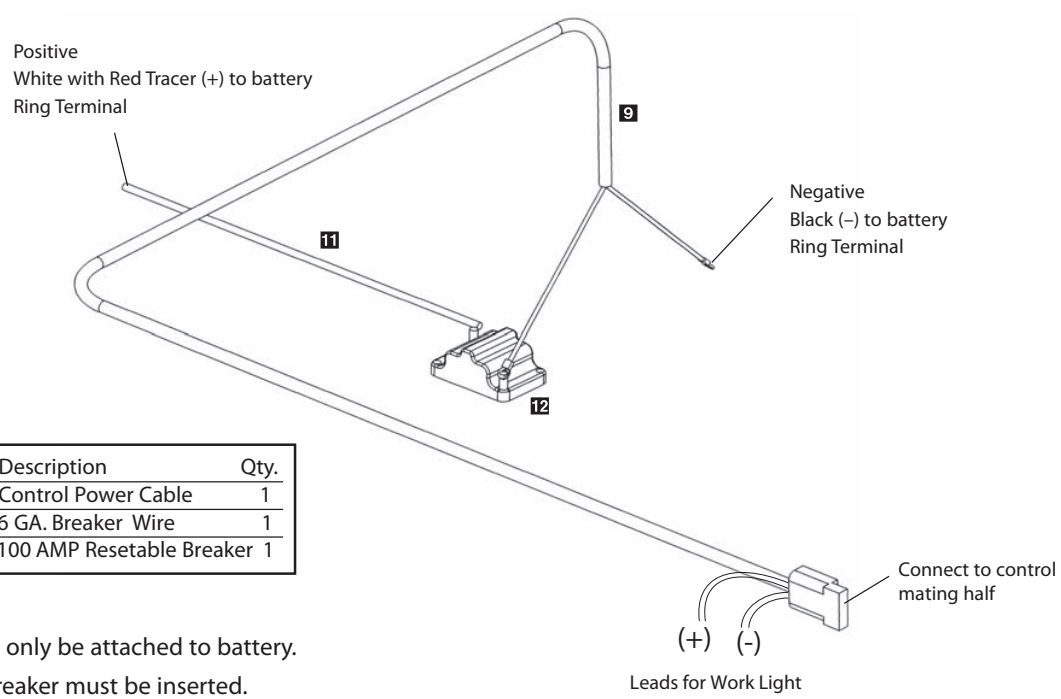
Controller Wiring Diagram

Model # SP-8500



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.

D6837 Control Power Cable with D6840 Breaker



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

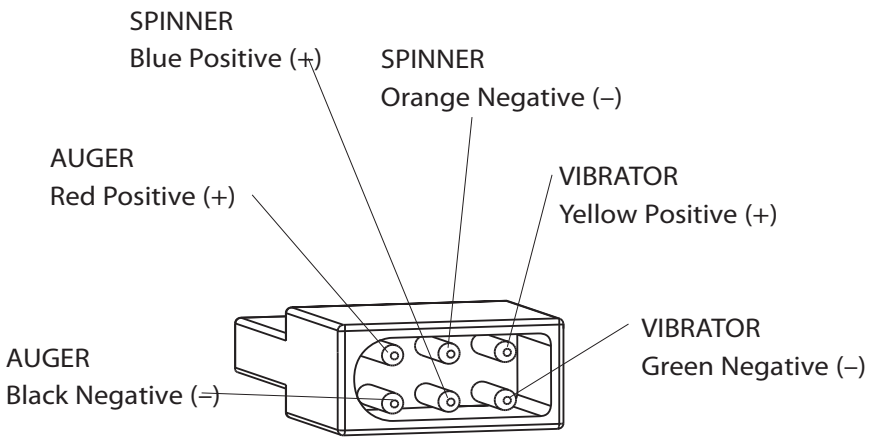
* NOTE:

A) Leads must only be attached to battery.

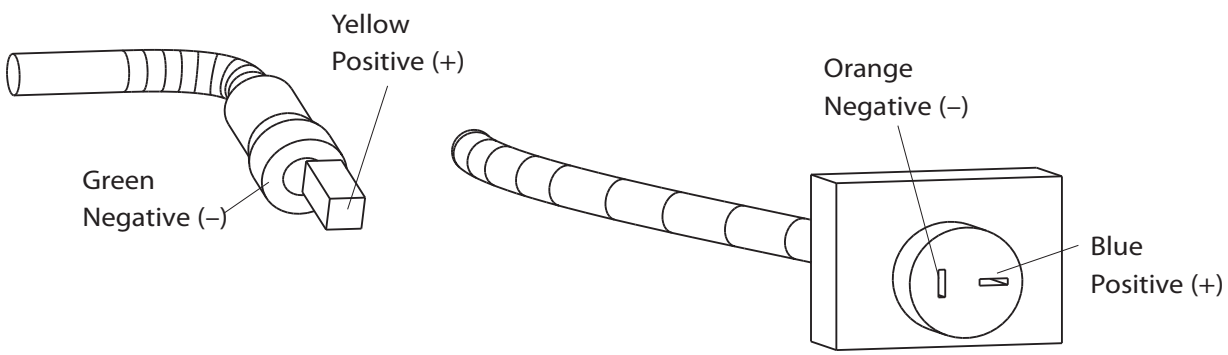
B) 100 Amp breaker must be inserted.

Spreader Power Harness Circuit Diagram

Model # SP-8500



MAIN POWER PLUG
SPREADER

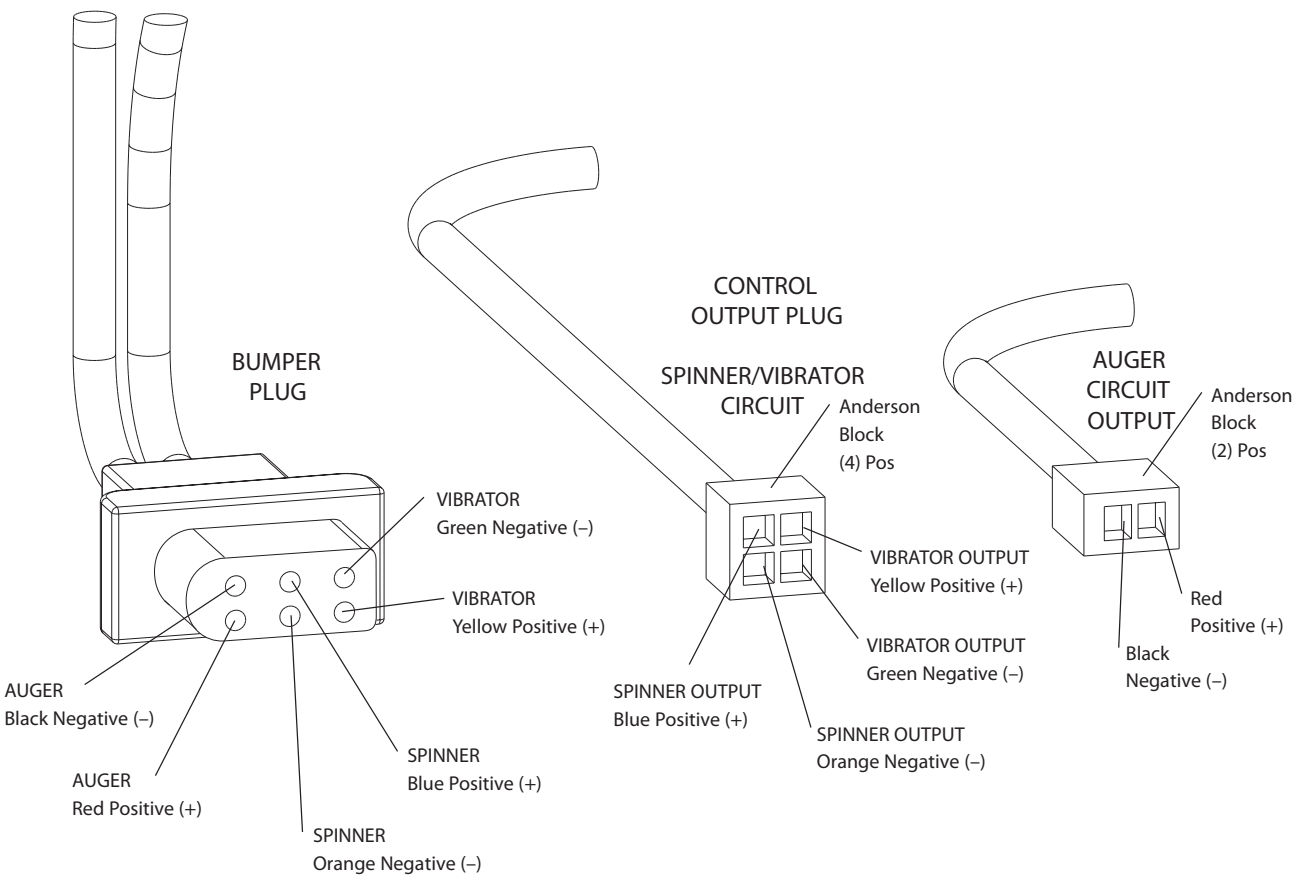


VIBRATOR
POWER PLUG

SPINNER
POWER PLUG

Vehicle Harness Circuit Diagram

Model # SP-8500



* NOTE: Reference Bumper Plug for Color Code

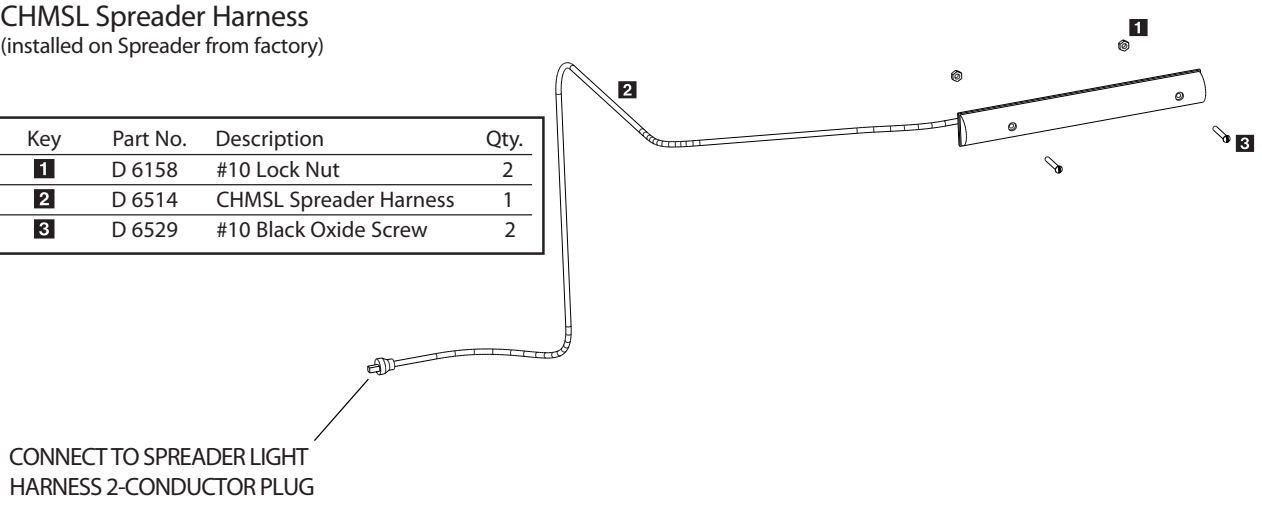
Center High Mount Stop Lamp (CHMSL)

Model # SP-8500

- With spreader mounted on vehicle, plug vehicle (CHMSL) harness into spreader stop lamp harness.
- Using supplied harness clamps and screws, route harness along side wall lower corner or so that harness will be out of the way when spreader is in use.
- Locate vehicle ground wire and stop lamp power wire at rear of vehicle. Use supplied wire taps to connect harness to vehicle electrical system. Once wire taps are installed, check to make sure stop lamp works when brake pedal is pressed. Properly complete installation by tying up any loose wires with ty-wraps, also add electrical tape over both connections to insure a solid electrical connection. Some newer trucks have auxiliary stop lamp power leads already at the rear for these types of applications.

CHMSL Spreader Harness
(installed on Spreader from factory)

Key	Part No.	Description	Qty.
1	D 6158	#10 Lock Nut	2
2	D 6514	CHMSL Spreader Harness	1
3	D 6529	#10 Black Oxide Screw	2



Mounting System Strapping Techniques

Model # SP-8500

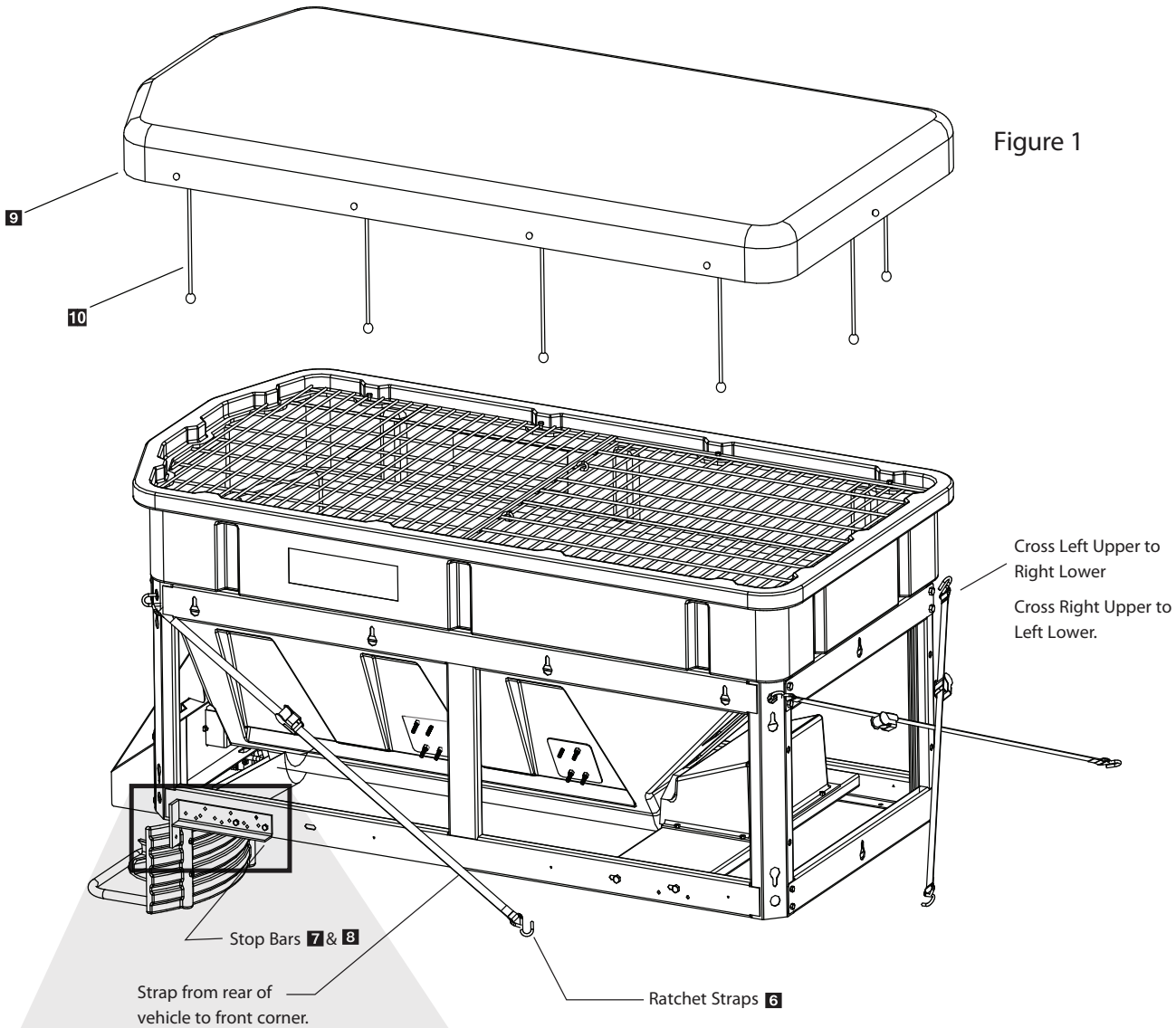
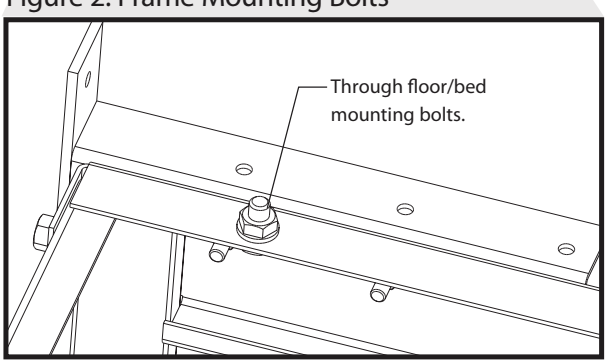


Figure 1

Figure 2: Frame Mounting Bolts



Key	Part No.	Description	Qty.
1	D 4116	1/2" - 13 x 1-1/2" Hex Bolt	4
2	D 4119	1/2" Flat Washer	4
3	D 4120	1/2" Lock Nut	4
4	D 4121	3/8 - 16 x 1" Hex Bolt	4
5	D 4124	3/8" Lock Nut	4
6	D 6856	Ratchet Strap	4
7	D 6536	Adj. Stop Bracket RT	1
8	D 6537	Adj. Stop Bracket LT	1
9	D 6855	Tarp	1
10	D 6522	Bungie Straps (13 Per Pkg)	1

Mounting Instructions

Model # SP-8500

Step 1: Remove tailgate from pickup bed.

Step 2: Load spreader on to truck bed and mount spinner assembly.

Step 3: Slide spreader forward until deflector/chute assembly makes contact with vehicle. Then, slide spreader back approx. 1" to allow for proper clearance.

Step 4: Install stop bars using supplied hole patterns (see Fig.2). To achieve the best position, you may need to drill additional holes in bracket in order to properly position spreader.

Step 5: Now that the spreader is positioned front to back, you will now center it left to right. Looking at the inside front and rear corner of the lower frame area, you will notice (4) holes in the bottom of the frame. Using a paint pen or similar marking device, mark hole locations.

Step 6: Before drilling holes, look beneath the approximate area where each hole will be located. Make sure there are no vehicle components that will be in the path of the drill before doing this step. If there are interferences, you can relocate holes as needed making sure there are at least two forward and two rearward of the front to back centerline.

Step 7: Install and tighten all (4) bolts.

Step 8: Install ratchet straps (see V-Maxx 8500 Mounting System: Strapping Techniques). It is very important for everyone's safety this strapping method be used as the standard mounting procedure. (Do not use ratchet straps exclusively.)

Step 9: Connect the spreader power cord to vehicle main power plug mounted at rear of vehicle (see electrical installation).

Step 10: Connect Center High Mount Stop Lamp (CHMSL) cord from the spreader to mating half attached to vehicle (See electrical installation).

Troubleshooting

Model # SP-8500

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.

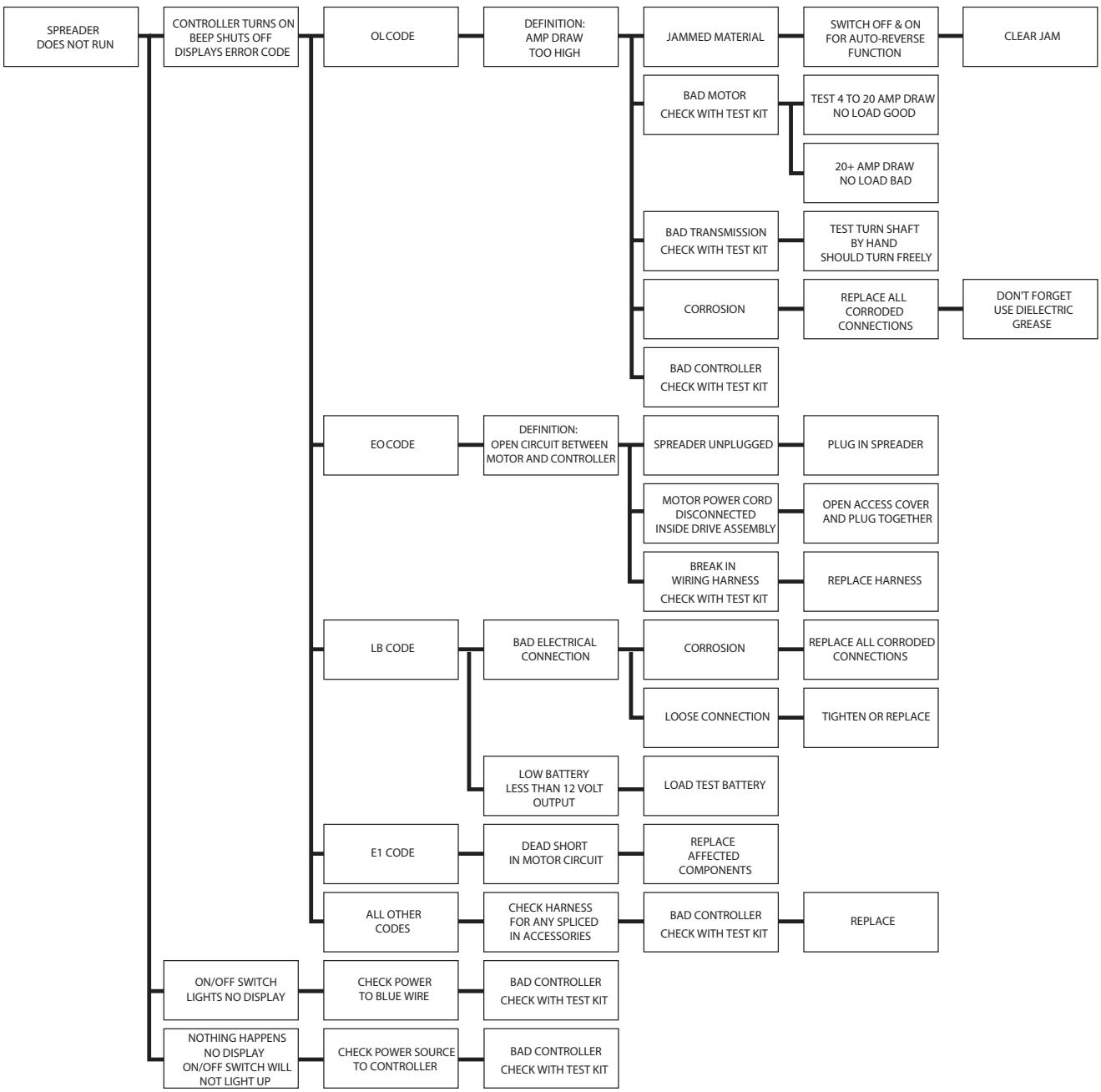
Warning: First read all warning instructions and safety messages before servicing your spreader.

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

PROBLEM	POSSIBLE CAUSE	SOLUTION
Motor doesn't run.	Loose electrical connections.	Check all connections.
	Blown Fuse.	Replace fuse.
	Motor Seized.	Replace motor.
Controller shut down.	Jammed auger.	Carefully clear jammed material.
	Poor electrical connections.	Clean or replace connectors. Use dielectric grease.
	Electrical short.	Check electrical connections. Check for bare wires.
	Controller failure.	Replace controller.
Material not flowing from hopper.	Empty hopper.	Fill hopper.
	Wet material.	Replace with dry material.
	Frozen or coarse material.	Replace material.
	Spinner not turning.	Check drive assembly.
	Auger loose on shaft.	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.
	Vibrator not working.	Replace vibrator
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.

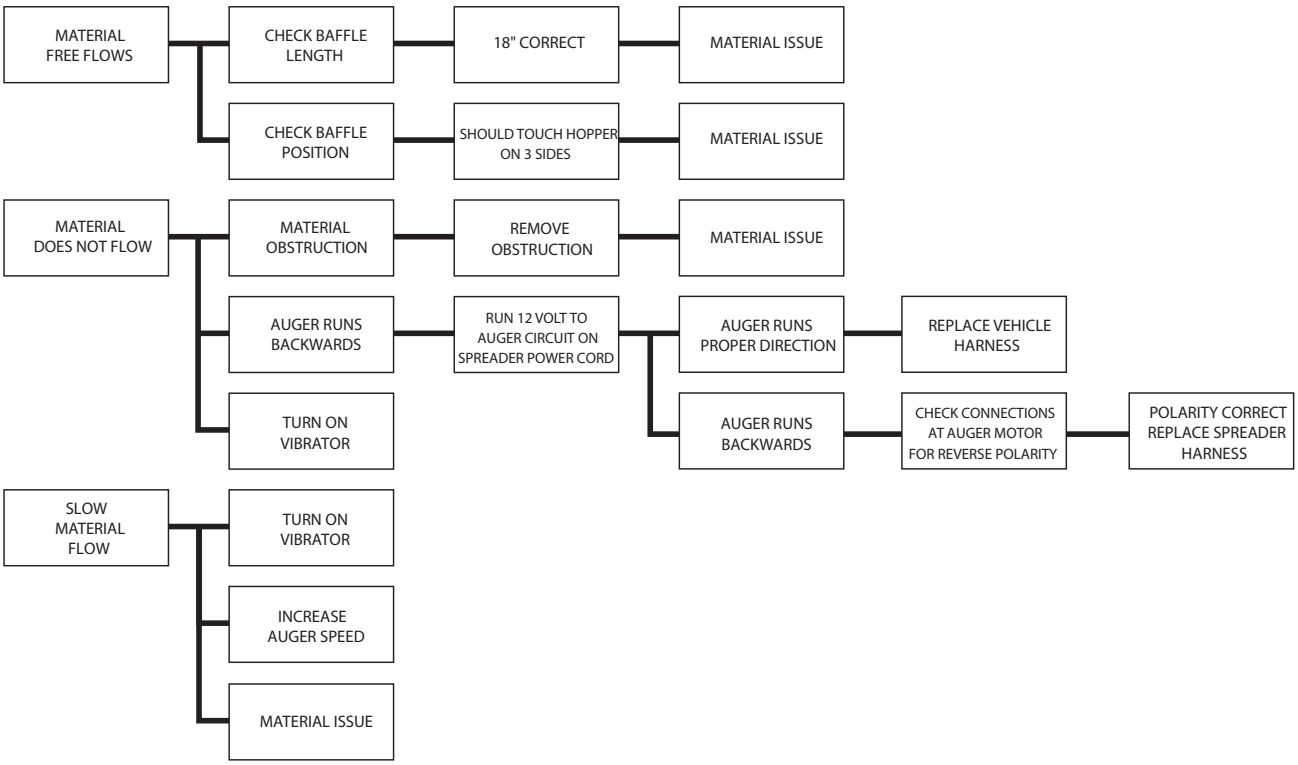
Troubleshooting

Model # SP-8500



Troubleshooting Material Flow

Model # SP-8500



Useful Formulas

Model # SP-8500

Determining Vehicle Payload

Material Type	Example: Coarse Salt – Dry				
Equipment installed when vehicle was weighed	SP-8500				
Front Gross Axle Weight Rating (RGAWR)					
Rear Vehicle Weight Rating (GVWR) (lb.)	8600				
Gross Vehicle Weight (GVW) (lb.) (empty)	– 6500	–	–	–	–
Payload Available (lb.)	= 2100	=	=	=	=
Material Weight (lb./cu. yd.)	÷ 1431	÷	÷	÷	÷
Maximum Volume (cu. yd.)	= 1.47	=	=	=	=
Maximum Height (approximate) (in.)	24"				
Loaded Front Gross Axle Weight (FGAW) (lb.)					
Loaded Rear Gross Axle Weight (RGAW) (lb.)					
Loaded Gross Vehicle Weight (GVW) (lb.)					

Torque Chart

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

Recommended Fastener Torque Chart (ft.-lb.)			
SIZE	SAE Grade 2	SAE Grade 5	SAE Grade 8
1/4-20	6	9	13
5/16-18	11	18	28
3/8-16	19	31	46
3/8-24	24	46	68
7/16-14	30	50	75
1/2-13	45	75	115
9/16-12	66	110	165
5/8-11	93	150	225
3/4-10	150	250	370
7/8-9	202	378	591
1-8	300	583	893

Metric Grade 8.8 (ft.-lb.)			
SIZE	TORQUE	SIZE	TORQUE
M 6	7	M 12	60
M 8	17	M 14	95
M 10	35	M 16	155

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.

MATERIAL	WEIGHT (lb. per cubic yard)
Fine Salt – Dry	2,025
Coarse Salt – Dry	1,431
Sand/Salt Mix – Dry (50/50)	2,700
Cinders	1,080

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.

_____

_____

_____

_____

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.

15) Owner's signature: X _____

PLEASE FOLD AND SEAL WITH TRANSPARENT TAPE BEFORE MAILING.