

05 September 2025
Version 1.6



Ice **STRIKER™**

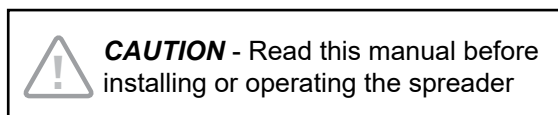


OWNER'S MANUAL

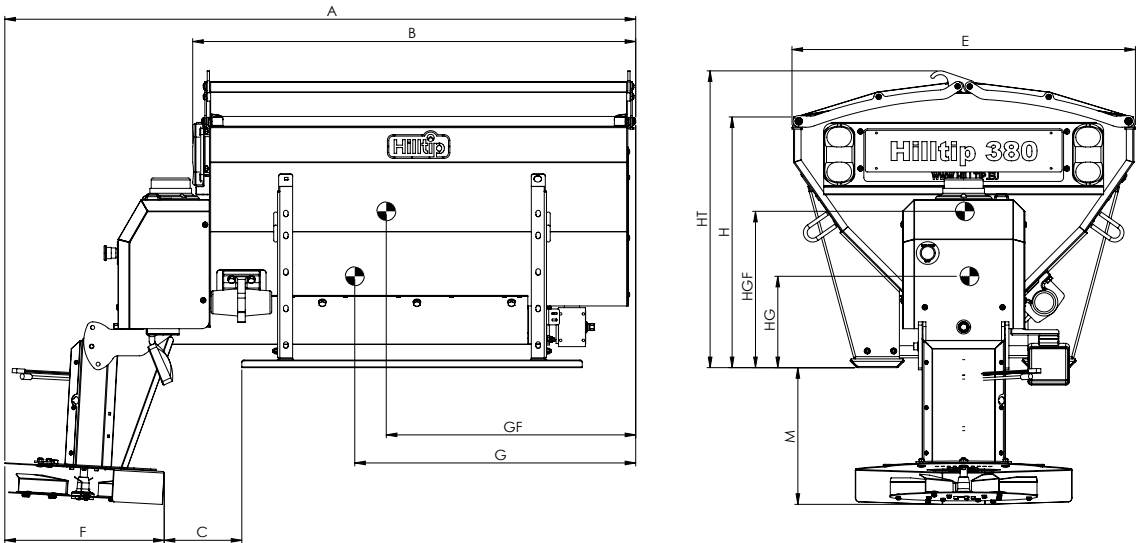
380 LITER STAINLESS STEEL SPREADER

This manual replaces all editions with an earlier date.

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Spreader specifications



KEY SPREADER SPECIFICATIONS		IceStriker 380
A	Total length	1670
B	Maximum hopper length	1170
C	Distance between chute and rail	205
E	Maximum external width (with tarp mounted)	910
F	Total length of spreading group (disc + chute)	425
G	Distance from the centre of gravity to the front of the hopper (empty)	743
GF	Distance from the centre of gravity to the front of the hopper (full)	660
H	Height of the hopper from the loading surface of the carrying vehicle	665
HG	Height of the centre of gravity from the loading surface of the carrying vehicle (empty)	242
HGF	Height of the centre of gravity from the loading surface of the carrying vehicle (full)	414
HT	Total height of the hopper from the loading surface of the carrying vehicle	785
M	Distance between spreading disc and loading surface of the carrying vehicle	short chute = 360 long chute = 610


DESCRIPTION	IceStriker 380
Hopper volume, struck (H-level)	350 liter
Hopper volume, rounded (HT-level)	380 liter
Empty spreader weight	120 kg
Full loaded spreader (H-level)	680 kg
Full loaded spreader (HT-level)	730 kg


Technical specifications


	TECHNICAL SPECIFICATIONS	IceStriker 380
Drive line	Auger motor with encoder, IP65	320W
	Auger wormgear, IP65	YES
	Spinner motor, IP65	250W
	Spinner planet gear, IP65	YES
	Salt liquid pump, (Optional) IP65	30-35l/min
Electrical	Controlbox 12V	Canbus
	Controller	Yes
	Main fuse	80A
	Amperage Draw Regular use	30-45A
	Vibrator, 90 kg force	15A
	Beacon light (optional)	LED
	Rear light w. licens plate kit (optional)	2x30 LED
	Work light LED X 5 (Option)	5 x LED
Software	Programs for different materials	Yes
	USB Connection to controller	Yes
	GPS & Manual controller	Yes


Safety instructions


Incorrect installation and operation can lead to serious personal injury and/or damage your equipment and property. Note and ensure that you understand this manual and all the labels before installing, operating or making adjustments to the spreader.


 **WARNING**
Observe these safety precautions before, during and after operating the spreader. You can prevent injury to persons and damage to the spreader by following these precautions.

 **WARNING**
Wait for auger and spinner to stop and lock out power before servicing the spreader.

 **NOTE**
Use a good quality multi-purpose grease to lubricate grease fittings after each use.

 **WARNING**
Always keep bystanders a minimum of 10 meters away when operating the spreader.

 **CAUTION**
Empty and clean the hopper after each use. Unused spreading material left in hopper could freeze or solidify, causing the spreader to not work properly.

 **NOTE**
The noise caused by the running spreader does not exceed 70 dB.

Safety guidelines

1. Read this manual before operating the spreader.
2. Before operating, make sure all the equipment is securely mounted into place.
3. Check that there are no persons within the spreader spray area when starting and operating this spreader.
4. Do not exceed your vehicle total weight beyond payload limits.
5. Always turn off the spreader before cleaning, lubricating or unclogging material jams.
6. Never climb or ride on or in the spreader.
7. Ensure that you have fastened the spreader to the vehicle according to descriptions in this manual.
8. A spreader in need of repairs or maintenance should not be operated.
9. Before removing or replacing any electrical components, always disconnect the battery.
10. Do not keep gasoline or other flammable liquids on the vehicle bed while spreader is mounted on the bed.

Personal safety

- To prevent accidents, secure long hair and do not wear jewelry or necktie, only wear tight-fitting clothes while working on your spreader or vehicle.
- Protect your eyes with safety goggles to avoid damage from battery acid, gasoline, dirt and dust.
- Always handle the solid and liquid materials carefully. Wear safety goggles, mouth mask, gloves and protecting clothes to protect yourself from spattering material.

Emergency stop

The spreader has an emergency stop button located at the driver side of the spinner assembly. All spreader functions will immediately stop by pushing this button.



Warning and caution labels

Please become familiar with warning and caution labels on the spreader.

Warning - Handling of abrasive and chemical material can cause injury.



- Visible when removing the spinner assembly.

Warning - Rotating auger! Keep hands clear. Wrench might slip when working with auger.



- Located on the chute.

Warning - Keep away from spinner and spreader in motion. Stay clear of turning spinner. Moving parts can crush and cut.



Control placement

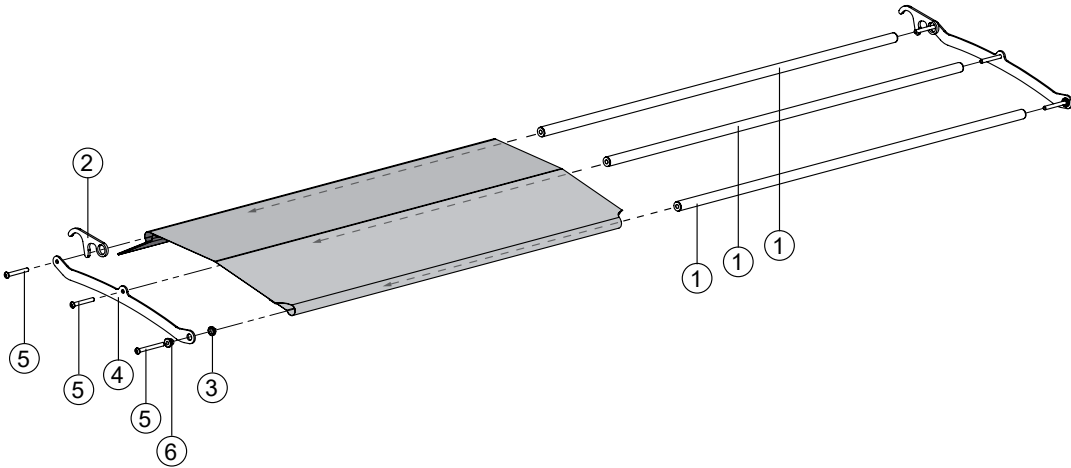
The controller should be mounted in a place where it can easily be reached and doesn't interfere with the access to vehicle controls or other equipment. Make sure that the spreader control panel doesn't block the vehicle airbag area. Protect the controller from water, dirt and dust.



Accessory cables

- Red** = Emergency stop (standard)
- Black** = Water pump
- Yellow** = Beacon light
- Blue** = Camera power feed
- White** = LED worklight

Mounting the tarp cover assembly



Instructions:

- Insert the three pipes ① into the horizontal openings in the tarp (center pipe goes under the tarp)
- Place the hook ② and the washer ③ between the bracket ④ and the pipes
- Secure the bracket to the pipes using head bolts ⑤ (place a bush ⑥ between the bracket and the head bolt on the outer edge of the bracket)
- Repeat on the other side.



NOTE

Hooks only on one of the two tarp assemblies.

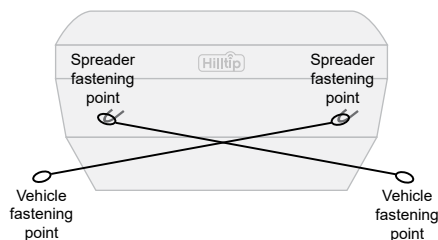
Mounting the spreader



CAUTION

Grip spreader properly when mounting or removing the unit to avoid dropping.

1. Remove tailgate from vehicle.
2. Check the vehicle bed and remove sharp debris or foreign objects to protect the spreader from damage. Also remove gasoline or other flammable liquids.
3. Lift and place spreader on the vehicle. Fasten tensioning straps in the corners of the hopper, cross them and secure the other end to the vehicle (see illustration to the right). Check the tension, and make sure that the spreader is still securely fastened before every use.



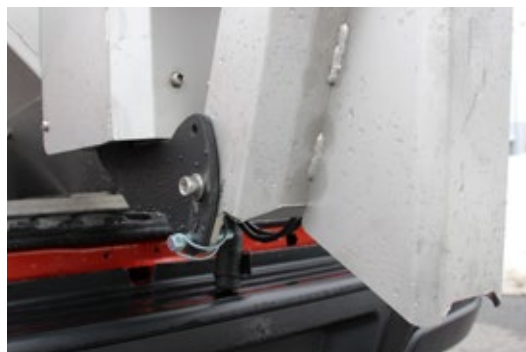
Flipping up the chute



- 1 Remove cotter pins on both sides of the chute



- 2 Flip up the chute

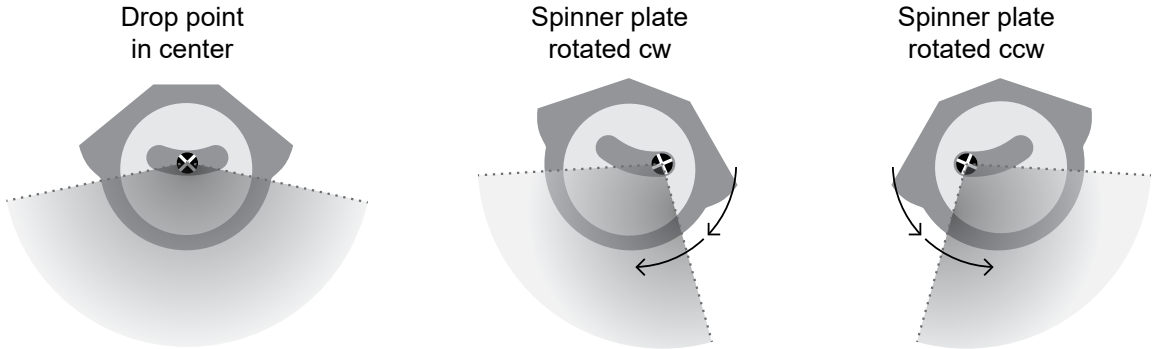


- 3 Put back the cotter pins

Adjust spreading pattern

Rotate the spinner plate to position the material drop point and change spreading pattern.

⊗ = material drop point



Rotate jammed auger manually

If the error code “Auger jammed” appears, the auger can be rotated by hand to release any solidified material or rocks. Always turn off the spreader before servicing it. Use a 17 mm socket wrench or similar tool to turn the auger screw.



Rotate auger manually by turning it clockwise

Average material weights

Material	Weight (kg/m ³)
Fine salt - dry	1201
Coarse salt - dry	721
Coarse sand - dry	1602
Coarse sand - wet	1922

Please see your local dealer for proper vehicle applications.



WARNING

Do not overload your vehicle beyond GVWR or GAWR, overloading could result in accident or damage.



CAUTION

These material weights are only guidelines, for more precise data, read and adhere to the manufacturer's ice-control material package labeling, including Material Safety Data sheet requirements.

Removing the spreader



CAUTION

Grip spreader properly when removing or mounting the unit to avoid dropping.



NOTE

The hopper should always be emptied before removing the spreader.



NOTE

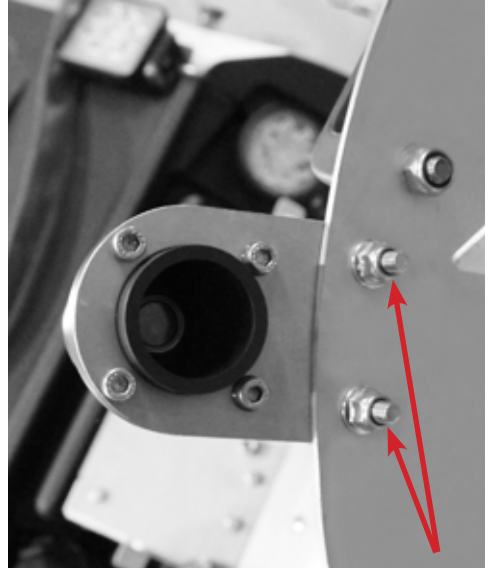
Always close hopper lids to avoid moisture build-up. Do not let spreader sit idle with material in the hopper for a longer time. This could lead to compact material, reduced or blocked material flow and cause damage to the hopper.

End of material sensor (Optional)

Use the optional “End of Material” (EOM) sensor to detect when no material is coming out from the spreader.



The EOM sensor’s led light lights orange when no material is coming and turns off when material is coming.



The sensor is bolted on the spinner frame.



Make sure you unscrew the cable from the sensor when removing the chute.

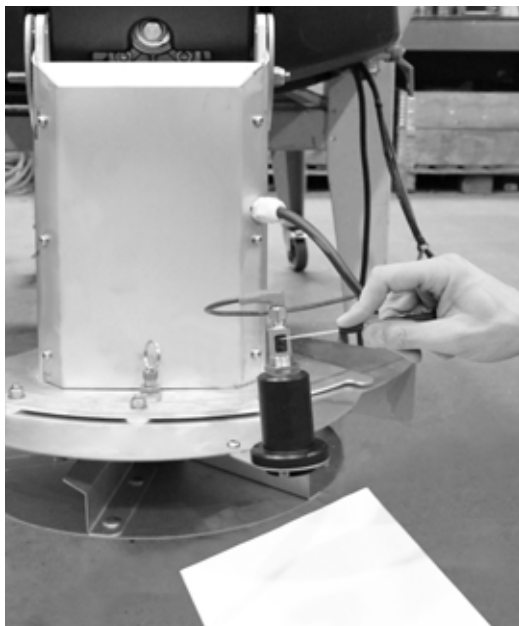


When there is no material coming out from the spinner, you see the message “spreader empty” on the controller. The message disappears when material is coming out from the spinner.

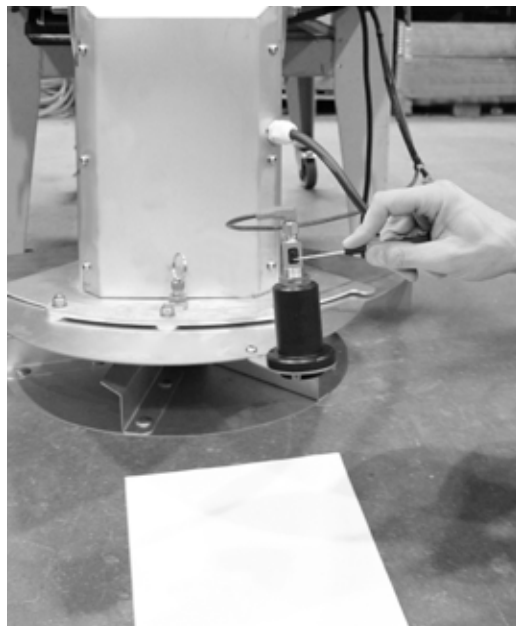
Calibration of end of material sensor

If EOM sensor is not working properly, do a new calibration.

How to calibrate:



1. Hold a white piece of paper at the same height as the spinner assembly and press the upper button until the orange LED light starts flashing.



2. Place the white paper on the ground and press the lower button once. Now the led light is constant orange and the sensor is calibrated.

Electrical installation of end of material sensor

Connect the sensor cable to the spreader module:

- Blue - to ground terminal
- Black - to pin nr 29
- Brown - to pin nr 35

Spreader maintenance

**WARNING**

Power should always be shut off before and during service or maintenance of the spreader.

**WARNING**

Never remove spreader with material in hopper

**NOTE**

You must follow all the steps in these maintenance checklists for warranty to be valid.

**CAUTION**

- Do not operate a damaged spreader or a spreader in need of maintenance
- Spreader should be emptied and cleaned after each use. Left over material could freeze or solidify in the hopper causing the spreader to not work properly.

Periodical maintenance checklist (check weekly in high-season)

Clean the hopper carefully inside and out with water. Avoid spraying water into bearings, motor and electrical connections.

Check that all screws and fasteners are tight enough. If you notice any missing or damaged fasteners or other parts, replace immediately.

Check that all installations and parts are still securely fastened to the spreader assembly.

Apply dielectric grease on all electrical connections.

Lubricate grease fittings with a good quality multipurpose grease.

Yearly maintenance checklist (e.g. before or after putting your spreader away for storage)

Change gearbox oil: Remove the plug in the bottom of the gearbox, remove and discard the old oil properly. Put back the bottom plug. Unplug the plug from the top of the gearbox, insert new oil (0,9 dl), and put back the plug. See recommended oils in the table on next page.

Clean the hopper carefully inside and out with water, before putting it in storage. Avoid spraying water into bearings, motor and electrical connections.

Clean and apply dielectric grease on all electrical plugs and connectors. Clean and install all dust caps before placing your spreader in storage

Lubricate grease fittings with a good quality multipurpose grease.

Check condition of bearings, replace if needed.

Cover the spreader with a tarp during storage, to protect it from sun fading and other weather conditions and circumstances.

Recommended gearbox oils:

CASTROL	SHELL	VALVOLINE	MOBIL
SYNTRAX 75W90 GL-5	SPIRAX S75W90 GL-5 SYNTHETIC	HD SYNTHETIC 75W90 GL-5	MOBILUBE SHC 75W90 GL-5

IMPORTANT:

It is strongly recommended and of great importance that you regularly apply dielectric grease on all electrical connections and protect them with caps when not in use to prevent corrosion.



Always keep caps on when the cables are not connected or in use.



To prevent corrosion, use dielectric grease on electrical connectors before connecting them.



While cables are connected, also connect matching caps to protect them from dirt and dust.

Maintenance of stainless steel

- All stainless-steel parts used in the production of this unit consist of classification 304.
- Continuous cleaning and waxing is necessary to maintain the surface of the stainless-steel in a fine and clean condition. There is a large number of different waxes on the market but a carnauba based wax is a good alternative due to its eco-friendliness and easy to apply.
- Superficial rust can occur if continuous maintenance is not upheld. This due to external impurities and contaminations such as road dust and other particles that consist iron and causes superficial rust spots on the surface.
- Hilltip recommend to remove all superficial rust immediately if occurred. This is easily done with a steel brush or steel wool. By hand or by appropriate machine.
- **Superficial rust caused by external impurities must not be mistaken for damages to the stainless-steel itself.**

Storage

Apply to these recommendations before placing your spreader in off-season storage to maintain it in a good condition.

- Cover your spreader using a tarp during storage periods
- Apply a protective compound such as dielectric grease on all electrical connectors and use caps for protection before storage.
- Disconnect and remove the control unit from your vehicle. Store it in a dry and cool place, and protect it from heat and moisture.
- Empty the hopper, remove all kinds of debris and clean the hopper from dirt before storage.
- Protect the hopper from excessive heat during storage periods.

WARRANTY INFORMATION

This warranty replaces all previous warranties

Warranty

Thank you for your interest in the products and services of Oy Hilltip Ab. This Limited Warranty applies to snowplows, spreaders, sweepers and other products and parts (from now on referred to as the "Product") purchased from Hilltip or an authorized dealer.

What does this limited warranty cover?

This Limited Warranty covers any defects in material or workmanship under normal use during the Warranty Period.

During the Warranty Period, Hilltip, or an authorized dealer will repair or replace, at no charge, products or parts of a product that proves defective because of improper material or workmanship, under normal use and maintenance.

How long does the coverage last?

The Warranty Period for the product purchased from Hilltip, or an authorized dealer is two (2) years from the date of purchase. The warranty period for a replacement part is one (1) year from the date of replacement or repair.

How to obtain warranty on your product?

Make sure your dealer has registered your product. In order to obtain service under this warranty the product must be registered with the end user's contact details (name, address, e-mail address and phone number).

What does this limited warranty not cover?

- Improperly installed parts.
- Damage caused by usage that is not in accordance with product instructions.
- Modification of the product, and/or the vehicle, is entirely at the purchaser's risk.
- This warranty does not include compensation for the drive to the service spot.
- Any damage in transit will be the responsibility of the carrier or at the risk of the purchaser.
- Hilltip will not provide replacement equipment or cover rental costs while your equipment is out of service.

This Limited Warranty does not cover any problem that is caused by:

- Misuse, neglect, accident, improper installation, maintenance or storage, or repair or alternation by anyone except Hilltip or an authorized dealer.

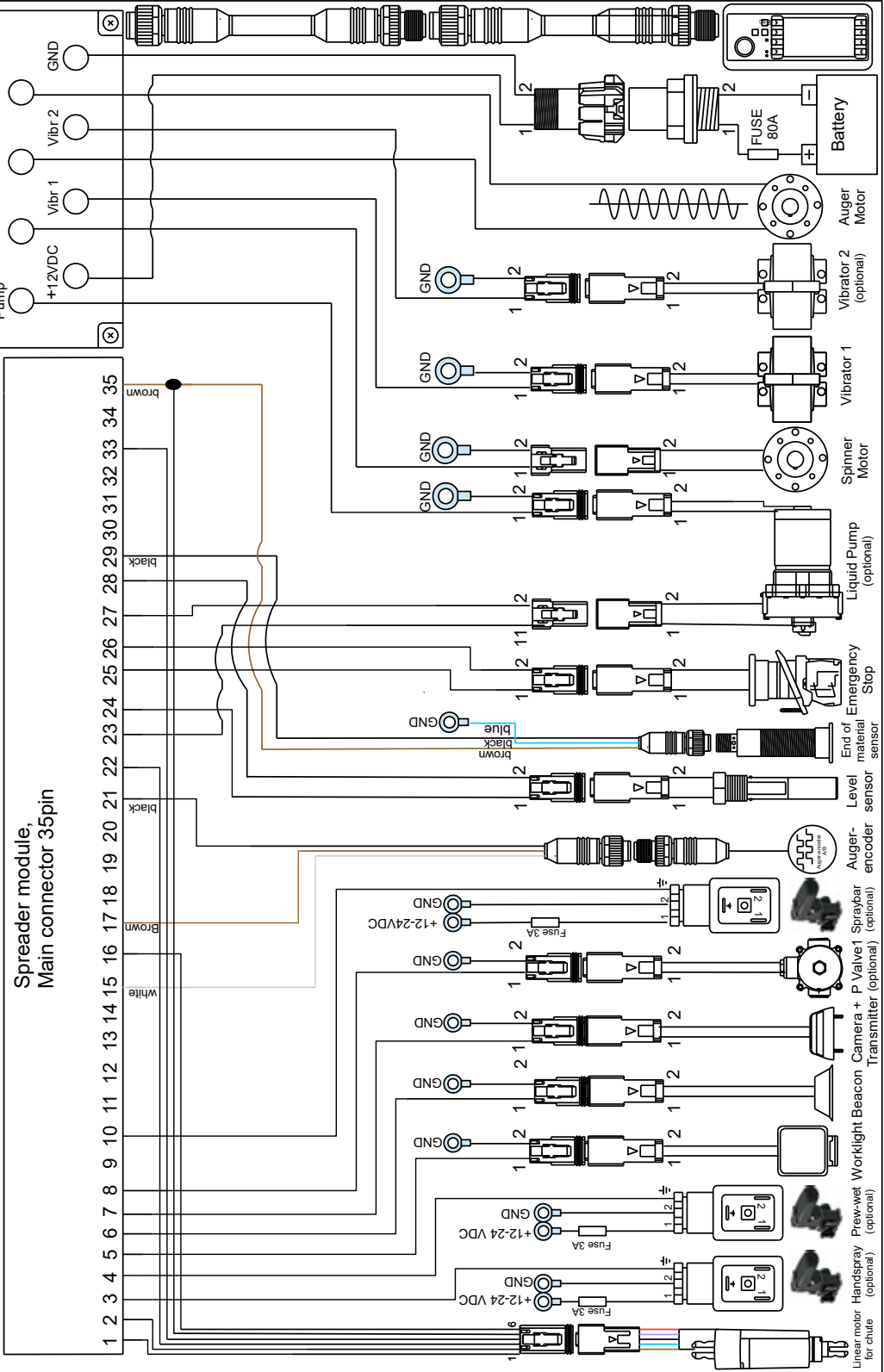
What do you have to do?

To obtain warranty service, you must first contact us or your authorized dealer. The purchaser must notify Hilltip or an authorized dealer within ten (10) days after any defect in the product becomes known during the warranty period.

What will we do to correct problems?

Hilltip, or an authorized dealer will repair or replace the part at no charge using either new or refurbished replacement parts.

Electrical schematics - IceStriker™ 380





DECLARATION OF CONFORMITY

Manufacturer's & Assambler's Name: **Oy Hilltip Ab**

Manufacturer's & Assambler's Address: **Pukkisaarentie 6, FIN-68600 Pietarsaari, Finland**

Equipment Description: Hilltip Electric Stainless steel spreader, 380 liter

Equipment Model Designation: Hilltip IceStriker™ Stainless steel 380

Equipment applications: Pickup, UTV, Municipal vehicles

The equipments specified above are manufactured, where applicable, in conformity with provisions of the normative document according to the following directives and standards, in addition to relevant Road Traffic Regulations in European countries:

- 2006/42/EC

- EN 15597-1

- ECE R10

I, the undersigned, hereby declare that the equipments specified above, that have been assembled by Oy Hilltip Ab, conforms to the above directives and standards

Pietarsaari, 04 February 2025

Signature:

Printed Name: Tom Mäenpää

Title: CEO

Installer's Name:

Installer's Address:

Type:

Serial number:

Year of installation:

I, the undersigned, hereby declare that the equipment installation to the vehicle specified above conforms to the directive 2006/42/EC and relevant Road Traffic Regulations.

DATE:

Signature:

Printed:

Title:



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Construction, specifications and other details are subject to change without notice.