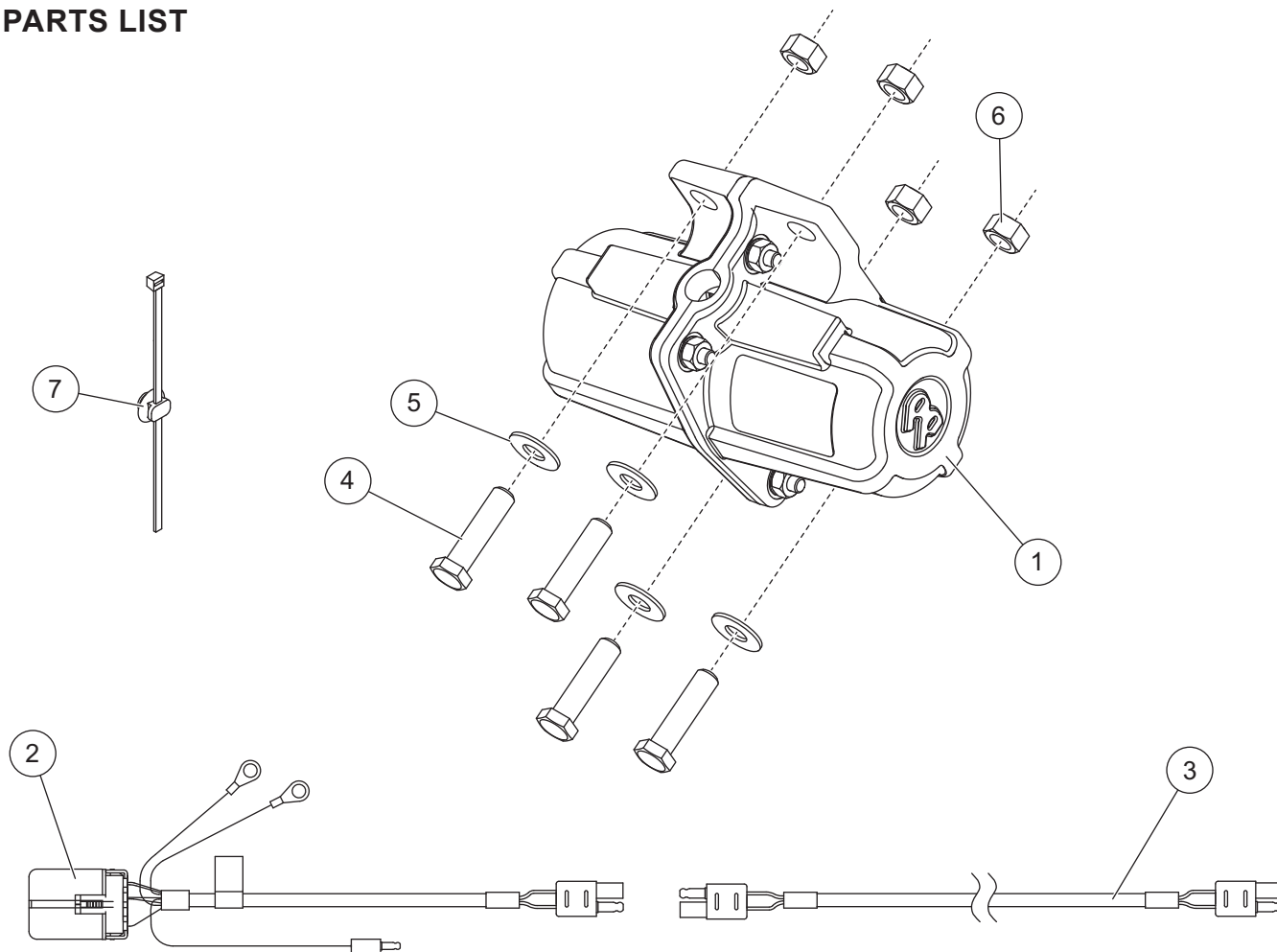


Vibrator Kit

HELIXX™ Stainless Steel Hopper Spreaders with FLEET FLEX Electrical System

PARTS LIST



Not drawn to scale.

85459 Vibrator Kit							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	75673	1	Vibrator	5		4	3/8 Flat Washer SS
2	78382	1	Relay/Fuse Harness Assembly	6		4	3/8-16 Hex Locknut GB SS
3	83712	1	Harness Assy – Vibrator Extension	7		4	Fir Tree Mount w/Cable Tie
4		4	3/8-16 x 1-1/2 Hex Cap Screw SS	ns	61536	10	Cable Tie – Long
			ns = not shown				G = Grade
							SS = Stainless Steel

INSTALLATION INSTRUCTIONS

⚠ WARNING

Do not exceed GVWR or GAWR ratings as found on the driver-side vehicle door cornerpost.

⚠ CAUTION

Read this document before installing the vibrator kit.

⚠ CAUTION

Use standard methods and practices when attaching spreader and installing accessories, including proper personal protective safety equipment.

⚠ CAUTION

Contact with a vibrating surface can cause numbness, tingling, and loss of dexterity. Users should take breaks and wear gloves to limit vibrating exposure.

⚠ CAUTION

Plants can be damaged when exposed to vibrating surface.

REMOVING THE 0.35 yd³ and 0.7 yd³ SPREADER

Remove the chute before lifting the spreader. If necessary for installation, the spreader may be removed from the vehicle.

1. Disconnect the spinner motor harness.
2. Remove the lock pins and cotter pins that secure the spinner drive assembly to the chute supports.

NOTE: After removing the fasteners, the spinner drive assembly will no longer be attached to the spreader. Use caution to avoid causing personal injury and/or damaging the spinner drive assembly.

3. Carefully set the spinner drive assembly on the ground.

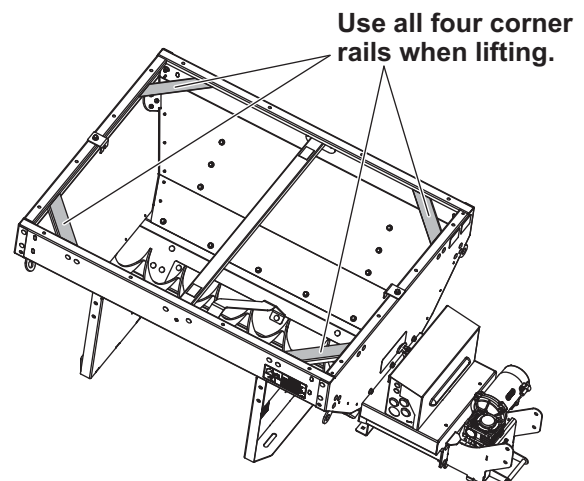
REMOVE 0.35 yd³ and 0.7 yd³ HOPPER FROM VEHICLE:

1. Disconnect the vehicle-side harness from the hopper-side harness.
2. Secure the spinner drive assembly in the storage position, as described in the Steps 1–3 in Removing the 0.35 yd³ and 0.7 yd³ Spreader section.
3. Remove the frame spacer from in front of the hopper and set it aside.
4. Remove the hopper mounting hardware from the frame mounting holes and tie-down straps.

⚠ CAUTION

Before lifting, verify that the hopper is empty of material. The lifting device must be able to support the spreader's weight as shown in the Spreader Specifications table in the Owner's Manual.

5. Lift the spreader and remove it from the vehicle. Remove the top screen. Using slings or chains, lift the spreader by the four diagonal corner rails.



6. Use blocking to ensure that the spreader is stable.

REMOVING 1.5, 2.0, 3.0, 4.5, and 6.0 yd³ SPREADERS

If necessary for installation, the spreader may be removed from the vehicle.

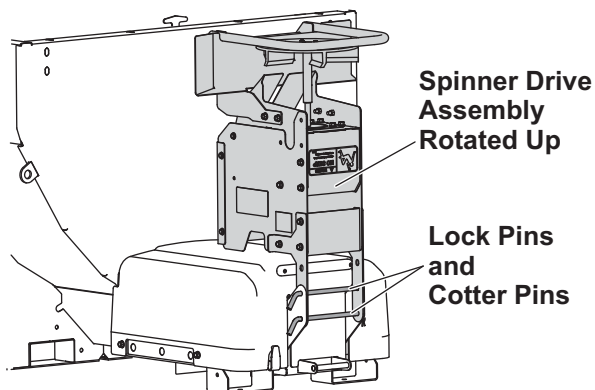
Secure Spinner Drive Assembly in Storage Position

To move the spinner drive assembly from the operating position to the storage position:

1. Disconnect the spinner motor harness.
2. Remove the lock pins and cotter pins that secure the spinner drive assembly to the chute supports.

NOTE: After removing the fasteners, the spinner drive assembly will no longer be attached to the spreader. Use caution to avoid causing personal injury and/or damaging the spinner drive assembly.

3. Carefully set the spinner drive assembly on the ground. Orient it into storage position as shown.
4. Lift the spinner drive assembly into position above the drive enclosure, align it with the chute supports, and reinstall the lock pins and cotter pins.



REMOVE 1.5, 2.0, 3.0, 4.5, and 6.0 yd³ HOPPERS FROM VEHICLE

1. Disconnect the vehicle-side harness from the hopper-side harness.
2. Secure the spinner drive assembly in the storage position, as described in the Steps 1–3.
3. Remove the frame spacer from in front of the hopper and set it aside.
4. Remove the hopper mounting hardware from the frame mounting holes and tie-down straps.

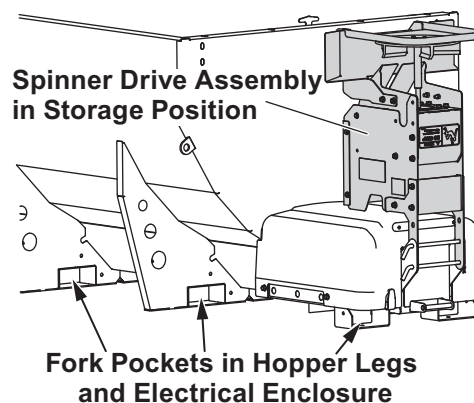
⚠ CAUTION

Before lifting, verify that the hopper is empty of material. The lifting device must be able to support the spreader's weight as shown in the Spreader Specifications table in the Owner's Manual.

5. Lift the spreader and remove it from the vehicle using one of the following procedures:

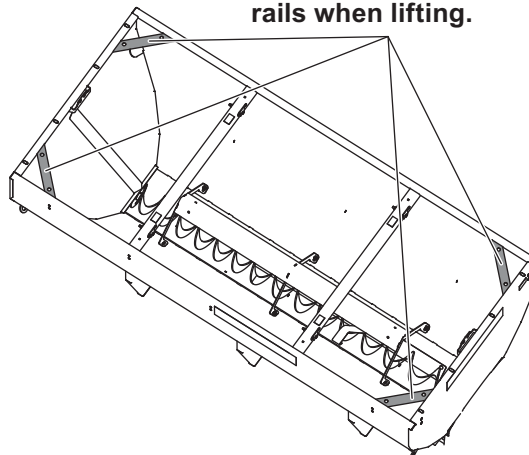
- a. Use a forklift equipped with fork extensions. Verify that the fork extensions slide through the fork pockets on the electrical enclosure and the hopper legs.

At least two fork pockets (per side) must be used when lifting 1.5 and 2.0 yd³ hoppers, and at least three fork pockets (per side) must be used when lifting 3.0, 4.5, and 6.0 yd³ hoppers.



- b. Remove the top screen. Using slings or chains, lift the spreader by the four diagonal corner rails.

Use all four corner rails when lifting.

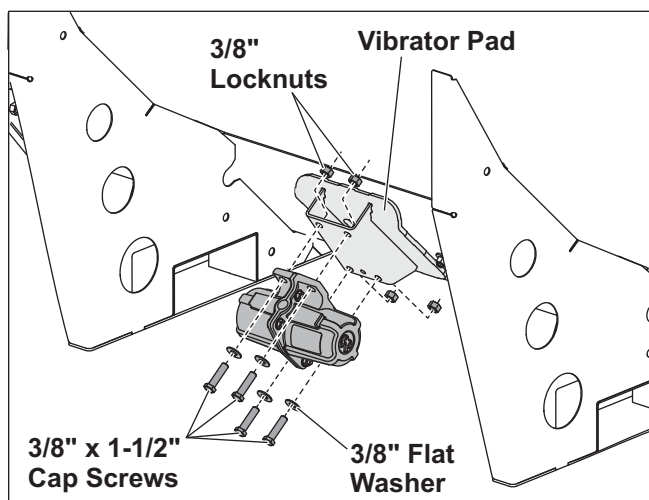


6. Use blocking to ensure that the spreader is stable.

VIBRATOR INSTALLATION

The vibrator relay/fuse assembly will be installed in the existing electrical enclosure.

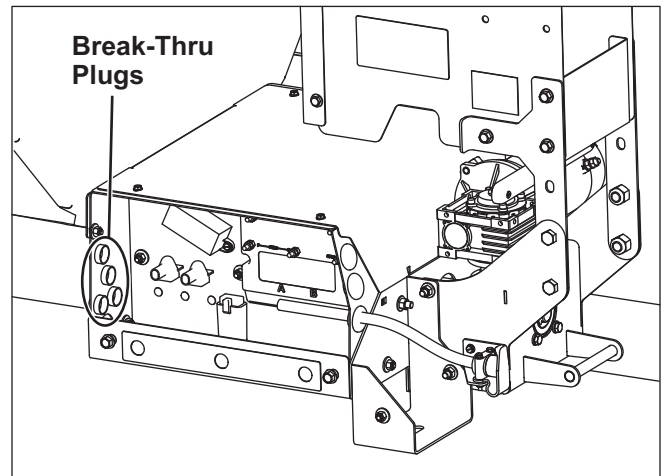
1. If the spreader is in the vehicle, park the vehicle on a smooth, level, hard surface, such as concrete. Turn the vehicle ignition to the "OFF" position and remove the key.
2. Attach the vibrator to its mounting location using the supplied 3/8" x 1-1/2" cap screws, 3/8" flat washers, and 3/8" locknuts.



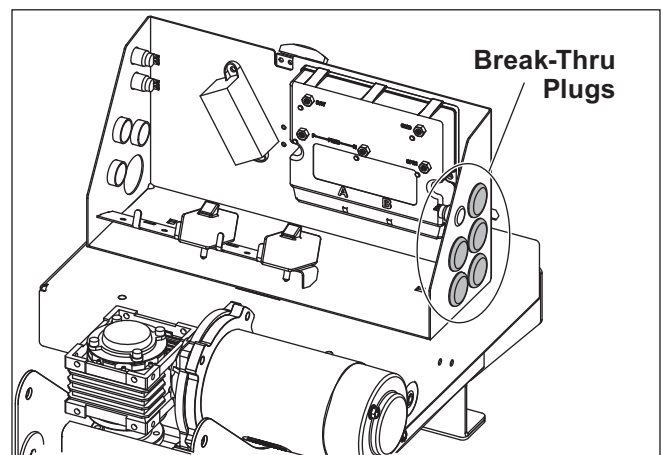
3. Route the vibrator extension harness through the openings in the hopper legs and along the sill trough. Plug the harness into the vibrator lead.

ELECTRICAL CONNECTIONS

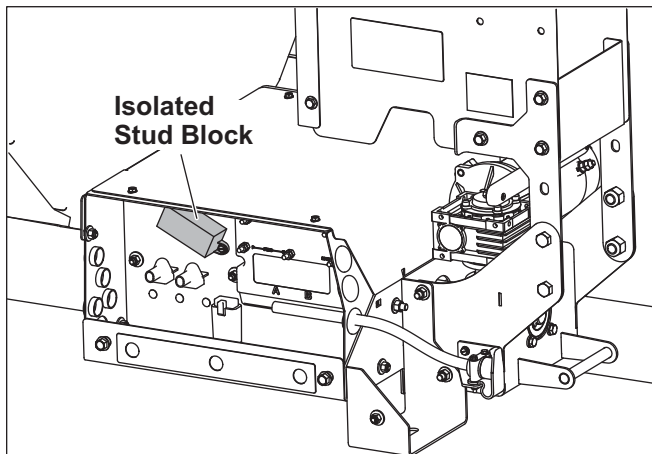
1. Cut a hole in one of the break-thru plugs and feed the vibrator extension harness into the enclosure. The hole should be sized to form a tight seal around the harness.



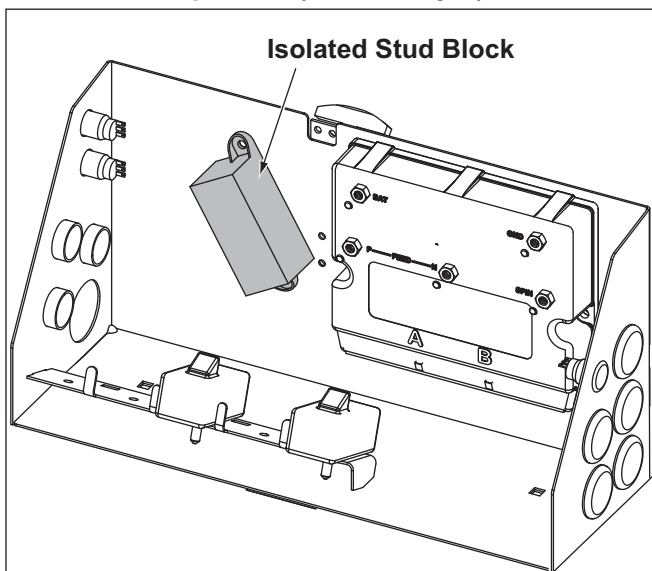
0.35 & 0.7 yd³ Hopper Spreaders



- Remove the cover from the isolated stud block. Connect the red wire from the relay/fuse assembly harness to the POSITIVE (+) terminal and the black wire to the NEGATIVE (-) terminal of the isolated stud block.



**Stainless Steel Hopper
Spreader (0.35 & 0.7 yd³)**



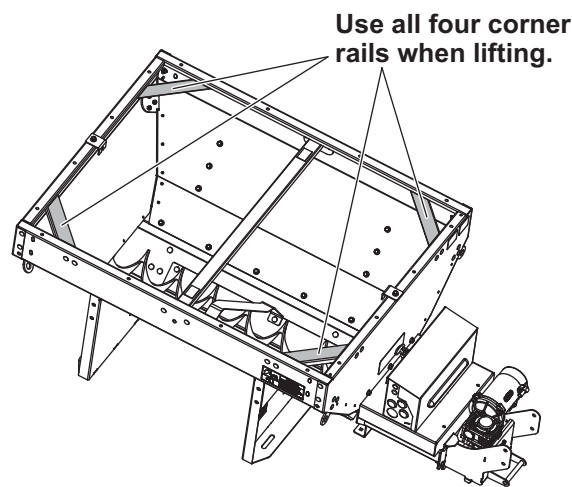
- Replace the isolated stud block cover, being careful not to pinch any wires. (On spreader installations with multiple accessories, it may be necessary to notch the sides of the isolated stud block cover to accommodate all the wires.)
- Connect the single-pin terminal on the relay/fuse assembly harness (blue wire) to the blue wire coming from port A of the spreader module.

INSTALL 0.35 yd³ and 0.7 yd³ HOPPERS IN VEHICLE BED

⚠ CAUTION

Before lifting, verify that the hopper is empty of material. Lifting device must be able to support the spreader's weight as shown in Spreader Specifications table in the Owner's Manual.

- The spinner drive assembly should be attached to the spreader in the storage position. If it is not, see Removing the Spinner section of the instructions.
- Remove the hopper top screens and clear any debris from inside the hopper. Remove the vehicle tailgate.
- Lift the spreader and remove it from the vehicle. Remove the top screen. Using slings or chains, lift the spreader by the four diagonal corner rails.



⚠ WARNING

Spreader shall be bolted to vehicle frame. Do not rely on tie-down chains or straps alone to hold spreader in vehicle.

- Shift the spreader position as needed to align the holes in the bottom of the hopper legs with the mounting holes in the vehicle bed.

If mounting holes are not already drilled in the vehicle bed, refer to the spreader Installation Instructions for drilling instructions.

NOTE: Pay special attention when drilling or clamping dissimilar metals to aluminum bodies. Galvanic corrosion can occur if not handled properly. Contact vehicle manufacturer for recommended attachment practices.

INSTALL 1.5, 2.0, 3.0, 4.5, and 6.0 yd³ HOPPERS IN VEHICLE BED

⚠ CAUTION

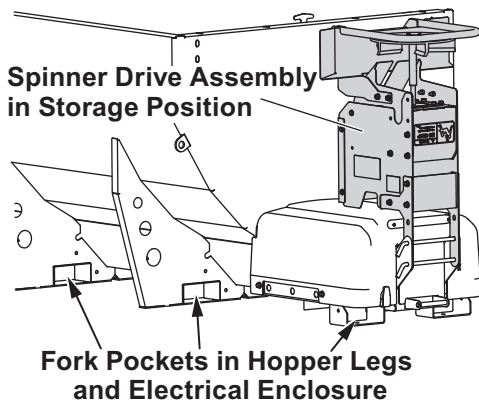
Before lifting, verify that the hopper is empty of material. Lifting device must be able to support the spreader's weight as shown in Spreader Specifications table in the Owner's Manual.

1. The spinner drive assembly should be attached to the spreader in the storage position. If it is not, see Removing the Spinner section of the instructions.
2. Remove the hopper top screens and clear any debris from inside the hopper. Remove the vehicle tailgate.
3. Lift the spreader into the vehicle bed, making sure to center it from side to side.

To lift the spreader, use one of the following procedures:

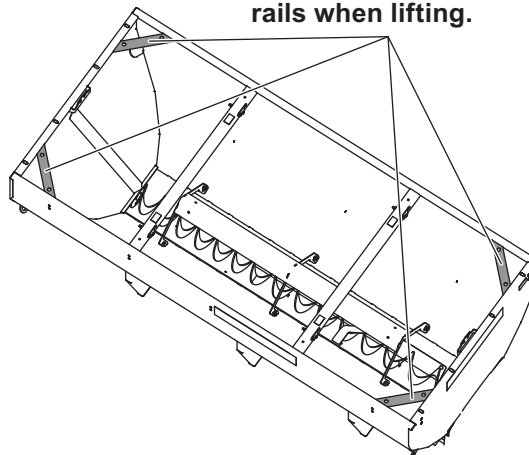
- a. Use a forklift equipped with fork extensions. Verify that the fork extensions slide through the fork pockets on the electrical enclosure and the hopper legs.

At least two fork pockets (per side) must be used when lifting 1.5 and 2.0 yd³ hoppers, and at least three fork pockets (per side) must be used when lifting 3.0, 4.5, and 6.0 yd³ hoppers.



- b. Use slings or chains to lift the spreader by the four diagonal corner rails and move it into the vehicle bed. Always remove the top screens before lifting via the corner rails.

Use all four corner rails when lifting.



⚠ WARNING

Spreader shall be bolted to vehicle frame. Do not rely on tie-down chains or straps alone to hold spreader in vehicle.

4. Shift the spreader position as needed to align the holes in the bottom of the hopper legs with the mounting holes in the vehicle bed.

If mounting holes are not already drilled in the vehicle bed, refer to the spreader Installation Instructions for drilling instructions.

NOTE: Pay special attention when drilling or clamping dissimilar metals to aluminum bodies. Galvanic corrosion can occur if not handled properly. Contact vehicle manufacturer for recommended attachment practices.

5. Secure the spreader to the vehicle bed using 1/2" hardware as required by the vehicle application. Use at least one fastener for each hopper leg.

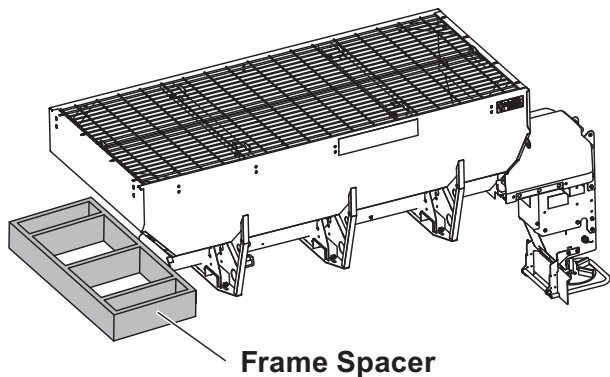
NOTE: If the mounting holes are not directly over the vehicle box supports, the vehicle bed must be braced to the frame to prevent buckling or deforming the vehicle bed.

6. Reinstall the top screens, if they were previously removed.

⚠ CAUTION

Failure to install the frame spacer could result in damage to the spreader and/or vehicle.

7. Install the frame spacer between the end cap of the hopper trough and the front of the vehicle bed.



If you do not have a frame spacer, refer to the hopper spreader Installation Instructions for directions on building one.

8. Connect the vehicle-side harness to the hopper-side harness.

REINSTALLING THE SPREADER

Move Spinner Drive Assembly to Operating Position

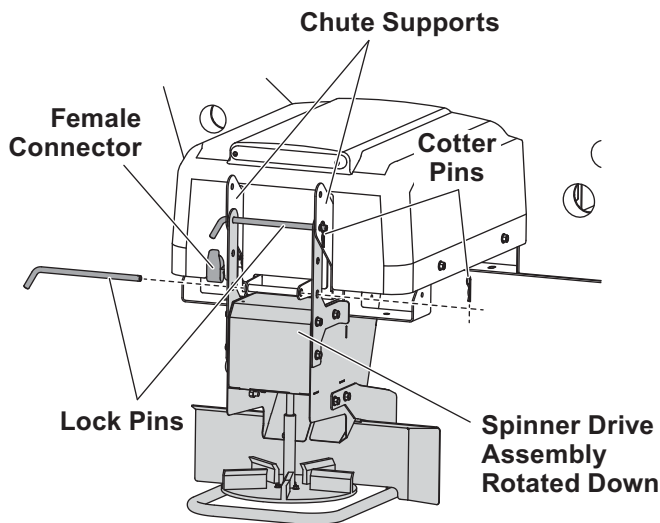
To move the spinner drive assembly from storage position to operating position:

1. Remove the lock pins and cotter pins securing the spinner drive assembly to the chute supports.

NOTE: After removing the fasteners, the spinner drive assembly will no longer be attached to the spreader. Use caution to avoid causing personal injury and/or damaging the spinner drive assembly.

2. Carefully set the spinner drive assembly on the ground. Orient it in operating position as shown.
3. Reinstall the lock pins to attach the spinner drive assembly to the chute supports as shown. *Install the top lock pin first*, using the lower holes in the chute supports. Secure each lock pin with a cotter pin.
4. Connect the spinner motor harness to the female connector extending from the rear of the hopper.

Operating Position



Install Tie-Down Straps

Run straps from the tie-down loops from the spreader hopper diagonally outward to the vehicle frame.

NOTE: Periodically throughout the snow and ice control season, verify that mounting devices are secure.

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