

Low-Profile Tailgate Spreaders SWING AWAY® Mount

Not for Use on Ford F-250/350/450 2017 – ___
Installation Instructions

▲ CAUTION

Read this document before installing or
operating spreader.

SAFETY

SAFETY DEFINITIONS

WARNING

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious personal injury.

CAUTION

Indicates a potentially hazardous situation that, if not avoided, may result in minor to moderate injury. It may also be used to alert against unsafe practices.

NOTE: Indicates a situation or action that can lead to damage to your spreader and vehicle or other property. Other useful information can also be described.

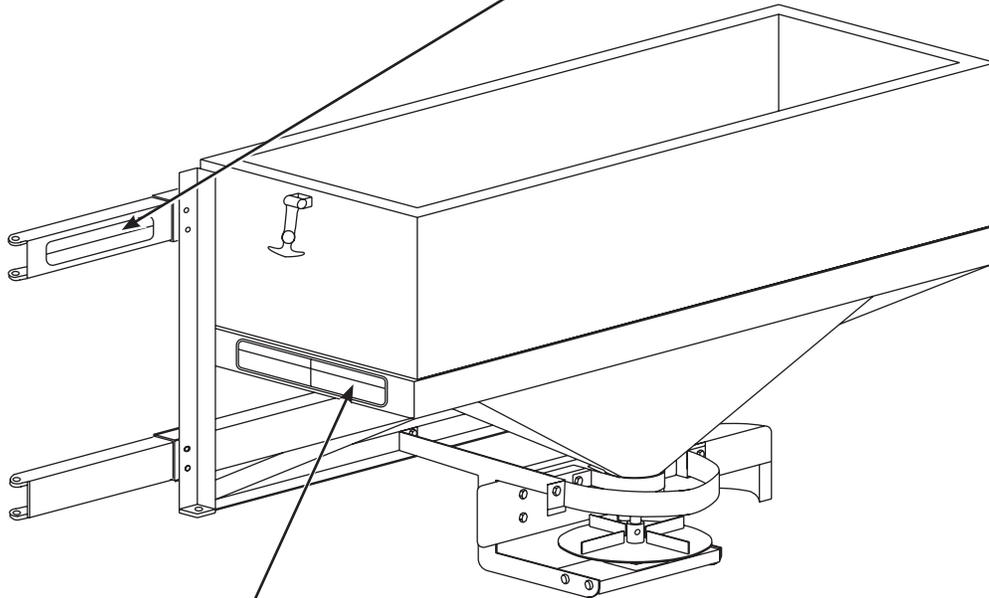
WARNING/CAUTION LABELS

Become familiar with and inform users about the warning and caution labels on the spreader.

NOTE: If labels are missing or cannot be read, see your sales outlet.

Caution Label
(located on both sides,
SWING AWAY® mount only)

 **CAUTION**
Do not swing spreader
with material in the hopper.



Warning/Caution Label
(located on both sides)

	<h3> WARNING</h3>		<h3> CAUTION</h3>
	<ul style="list-style-type: none"> • DO NOT exceed GVWR or GAWR with spreader and load. • Turn spreader OFF before filling, adjusting or cleaning. • Bystanders to stay a minimum of 25 feet away from operating spreader. • DO NOT climb into or ride on spreader. • Keep hands, feet and clothing away from moving conveyor and spinner. 		<ul style="list-style-type: none"> • Read Owner's Manual before operating or servicing spreader. • Empty and clean spreader after every use.

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SAFETY

SAFETY PRECAUTIONS

Improper installation and operation could cause personal injury and/or equipment and property damage. Read and understand labels and the Owner's Manual before installing, operating, or making adjustments.

⚠ WARNING

- Driver to keep bystanders minimum of 25 feet away from operating spreader.
- Before working with the spreader, secure all loose-fitting clothing and unrestrained hair.
- Before operating the spreader, verify that all safety guards are in place.
- Before servicing the spreader, wait for conveyor, auger, or spinner to stop.
- Do not climb into or ride on spreader.

⚠ WARNING



Overloading could result in an accident or damage. Do not exceed GVWR or GAWR ratings as found on the driver-side vehicle door cornerpost. See Loading section to determine maximum volumes of spreading material.

⚠ WARNING

Vehicles <10,000 lb GVWR: Obstructing the visibility from the vehicle's rear camera could result in serious injury or damage. An auxiliary camera system shall be installed if the vehicle's rear camera is removed or blocked.

⚠ CAUTION

If rear directional, CHMSL light or brake stoplights are obstructed by the spreader, the lights shall be relocated, or auxiliary directional or brake stoplights shall be installed.

⚠ CAUTION

During the hopper installation we recommend the addition of an OSHA compliant Backup Alarm. This alarm is required for OSHA governed employers.

⚠ CAUTION

- Do not operate a spreader in need of maintenance.
- Before operating the spreader, reassemble any parts or hardware removed for cleaning or adjusting.
- Before operating the spreader, remove materials such as cleaning rags, brushes, and hand tools from the spreader.
- While operating the spreader, use auxiliary warning lights, except when prohibited by law.
- Tighten all fasteners according to the Torque Chart. Refer to Torque Chart for the recommended torque values.

⚠ CAUTION

Disconnect electric and/or hydraulic power and tag out if required before servicing or performing maintenance.

⚠ CAUTION



DO NOT leave unused material in hopper. Material can freeze or solidify, causing unit to not work properly. Empty and clean after each use.

NOTE: Lubricate grease fittings after each use. Use a good quality multipurpose grease.

PERSONAL SAFETY

- Remove ignition key and put the vehicle in PARK or in gear to prevent others from starting the vehicle during installation or service.
- Wear only snug-fitting clothing while working on your vehicle or spreader.
- Do not wear jewelry or a necktie, and secure long hair.
- Wear safety goggles to protect your eyes from battery acid, gasoline, dirt, and dust.
- Avoid touching hot surfaces such as the engine, radiator, hoses, and exhaust pipes.
- Always have a fire extinguisher rated BC handy, for flammable liquids and electrical fires.

SAFETY

FIRE AND EXPLOSION

⚠ WARNING

Gasoline is highly flammable and gasoline vapor is explosive. Never smoke while working on vehicle. Keep all open flames away from gasoline tank and lines. Wipe up any spilled gasoline immediately.

Be careful when using gasoline. Do not use gasoline to clean parts. Store only in approved containers away from sources of heat or flame.

CELL PHONES

A driver's first responsibility is the safe operation of the vehicle. The most important thing you can do to prevent a crash is to avoid distractions and pay attention to the road. Wait until it is safe to operate Mobile Communication Equipment such as cell phones, text messaging devices, pagers, or two-way radios.

VENTILATION

⚠ WARNING

Vehicle exhaust contains lethal fumes. Breathing these fumes, even in low concentrations, can cause death. Never operate a vehicle in an enclosed area without venting exhaust to the outside.

BATTERY SAFETY

⚠ CAUTION

Batteries normally produce explosive gases, which can cause personal injury. Therefore, do not allow flames, sparks, or lit tobacco to come near battery. When charging or working near a battery, always cover your face and protect your eyes, and also provide ventilation.

- **Batteries contain sulfuric acid, which burns skin, eyes, and clothing.**
- **Disconnect the battery before removing or replacing any electrical components.**

NOISE

Airborne noise emission during use is below 70 dB(A) for the spreader operator.

VIBRATION

Operating spreader vibration does not exceed 2.5 m/s² to the hand-arm or 0.5 m/s² to the whole body.

TORQUE CHART

⚠ CAUTION

Read instructions before assembling. Fasteners should be finger tight until instructed to tighten according to torque chart. Use standard methods and practices when attaching spreader, including proper personal protective safety equipment.

Recommended Fastener Torque Chart					
Inch Fasteners Grade 5 and Grade 8					
Size	Torque (ft-lb)		Size	Torque (ft-lb)	
	 Grade 5	 Grade 8		 Grade 5	 Grade 8
1/4-20	8.4	11.9	9/16-12	109	154
1/4-28	9.7	13.7	9/16-18	121	171
5/16-18	17.4	24.6	5/8-11	150	212
5/16-24	19.2	27.3	5/8-18	170	240
3/8-16	30.8	43.6	3/4-10	269	376
3/8-24	35.0	49.4	3/4-16	297	420
7/16-14	49.4	69.8	7/8-9	429	606
7/16-20	55.2	77.9	7/8-14	474	669
1/2-13	75.3	106.4	1-8	644	909
1/2-20	85.0	120.0	1-12	704	995
Metric Fasteners Class 8.8 and 10.9					
Size	Torque (ft-lb)		Size	Torque (ft-lb)	
	 Class 8.8	 Class 10.9		 Class 8.8	 Class 10.9
M6 x 1.00	7.7	11.1	M20 x 2.50	325	450
M8 x 1.25	19.5	26.9	M22 x 2.50	428	613
M10 x 1.50	38.5	53.3	M24 x 3.00	562	778
M12 x 1.75	67	93	M27 x 3.00	796	1139
M14 x 2.00	107	148	M30 x 3.50	1117	1545
M16 x 2.00	167	231	M33 x 3.50	1468	2101
M18 x 2.50	222	318	M36 x 4.00	1952	2701
These torque values apply to fasteners except those noted in the instructions.					

LOADING

These instructions cover vehicles that have been recommended for carrying the spreader. Please see your sales outlet for proper vehicle applications.

⚠ WARNING

Overloading could result in an accident or damage. Do not exceed GVWR or GAWR ratings as found on the driver-side cornerpost of vehicle. See Loading section to determine maximum volumes of spreading material.

CERTIFICATION

⚠ WARNING

New untitled vehicle installation of a spreader requires National Highway Traffic Safety Administration altered vehicle certification labeling. Installer to verify that struck load of snow or ice control material does not exceed GVWR or GAWR rating label and complies with FMVSS.

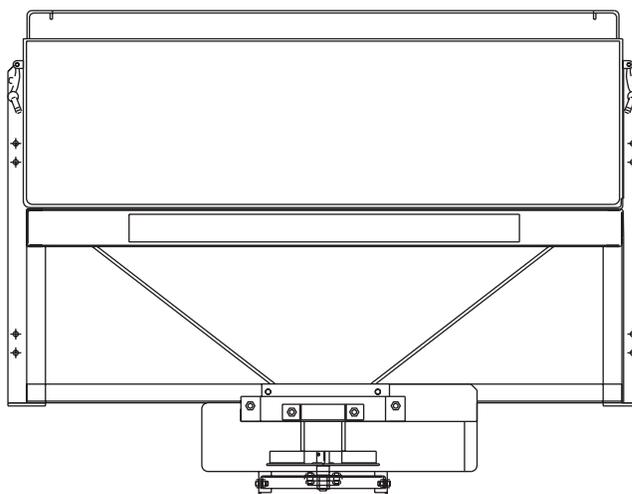
⚠ CAUTION

Read and adhere to manufacturer's ice-control material package labeling including Material Safety Data Sheet requirements.

MATERIAL WEIGHTS

Material	Density		
	(lb/ft ³)	(lb/yd ³)	(kg/m ³)
Salt	80	2160	1282
Sand	100	2700	1602

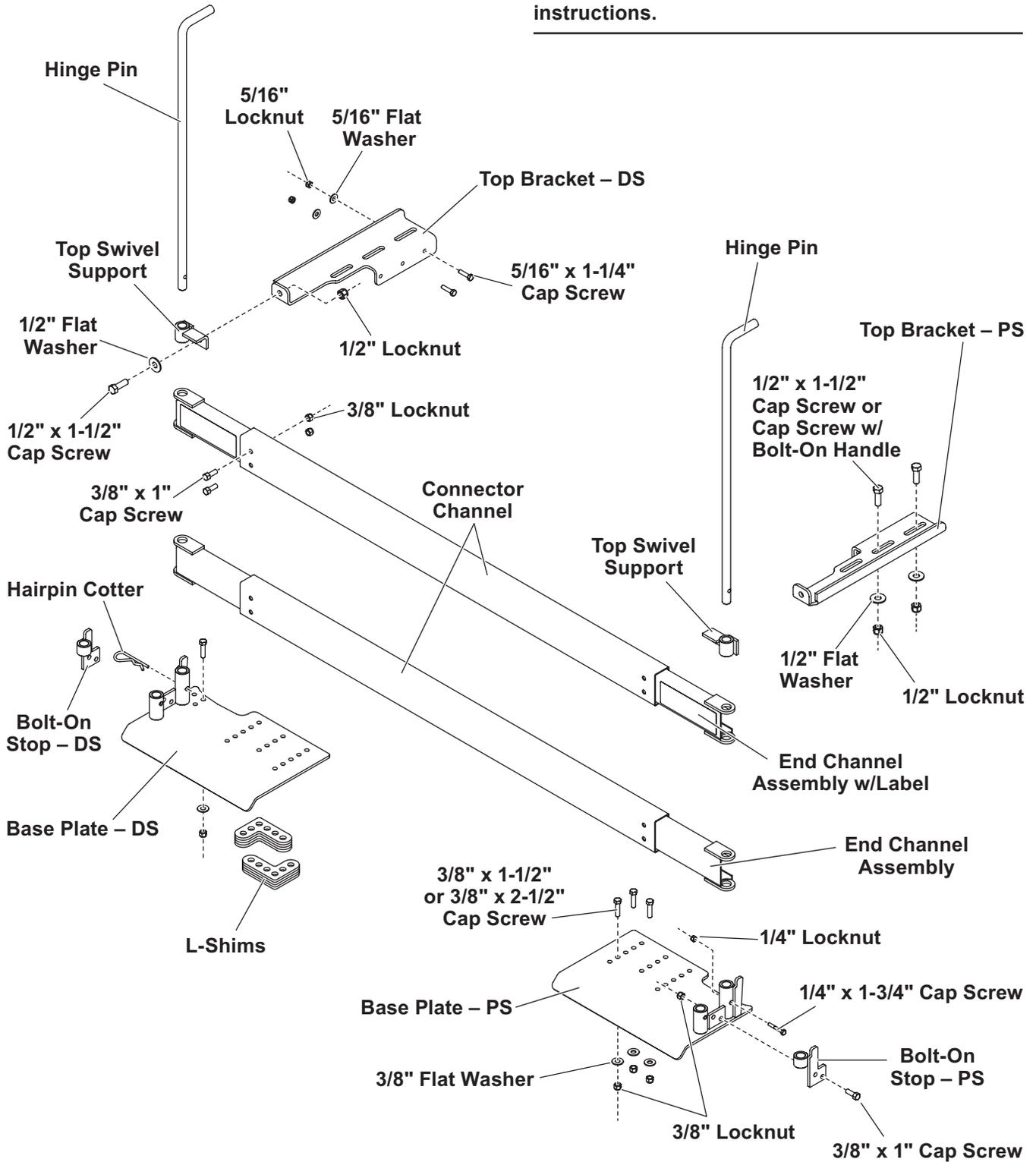
Material densities are approximate and are based on dry loose material. It is the responsibility of the operator to know the weight of the material to be spread and the vehicle carrying capacity.



SWING AWAY® MOUNT INSTALLATION

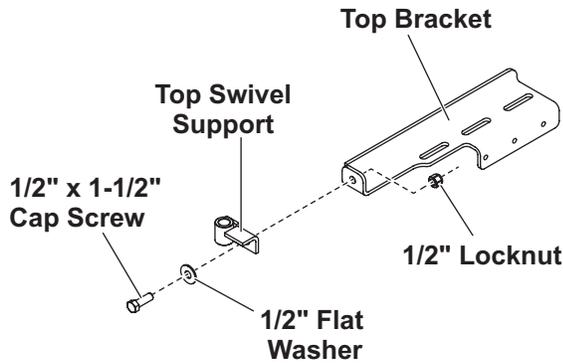
SWING AWAY® Mount Installation

NOTE: Remove any existing trailer hitch and other after-market equipment that may interfere with the installation of this product according to these instructions.

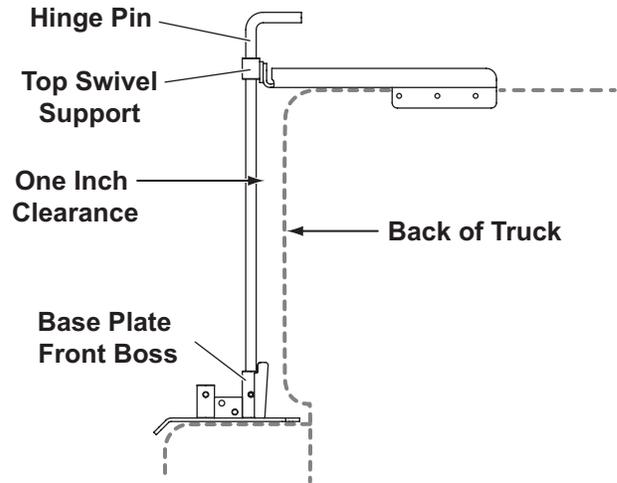


SWING AWAY® MOUNT INSTALLATION

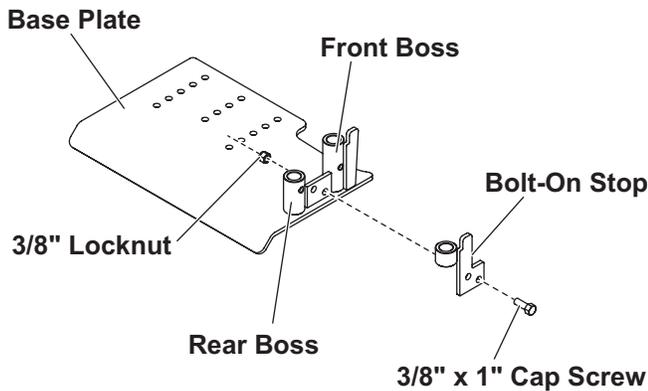
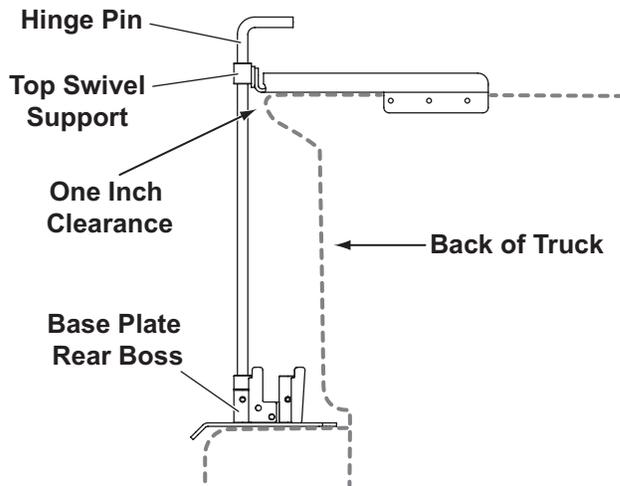
1. Shut vehicle OFF and remove key from ignition.
2. Remove all mount assembly parts and hardware from the shipping carton.
3. Attach the top swivel supports to the top brackets with one 1/2" x 1-1/2" cap screw, one 1/2" flat washer, and one 1/2" locknut per side. Hand tighten the fasteners.



7. Adjust the base plates and top bracket assemblies to provide at least one inch of clearance between the hinge pins and any point of the truck. The pins must also be positioned vertically.



4. Set the base plates on the bumper in the approximate positions where they will be installed. Use L-shims to compensate for bumpers that are stepped or not completely flat.
5. Set the top bracket assemblies on the truck bed rail and clamp them in place.
6. Drop the hinge pins into place through the top swivel support and down to the base plate, aligning the lower end of the pins with either the front or rear boss position (see Step 7 diagrams). If using the rear boss position, install the bolt-on stops as shown below.



NOTE: The pins must be vertical and the bracket bosses must be aligned with each other. Any misalignment will create difficulty in removal of the pins. Use shims as required to align parts.

SWING AWAY® MOUNT INSTALLATION

- Use the large slots in the top of the brackets as guides to locate and mark two holes on each side. Check under the bed rails for any obstructions before choosing the hole locations. Remove the vehicle tail lamps, if necessary, to locate the rearmost holes.

⚠ CAUTION

Before drilling holes, check to be sure that no vehicle wiring or other components could be damaged.

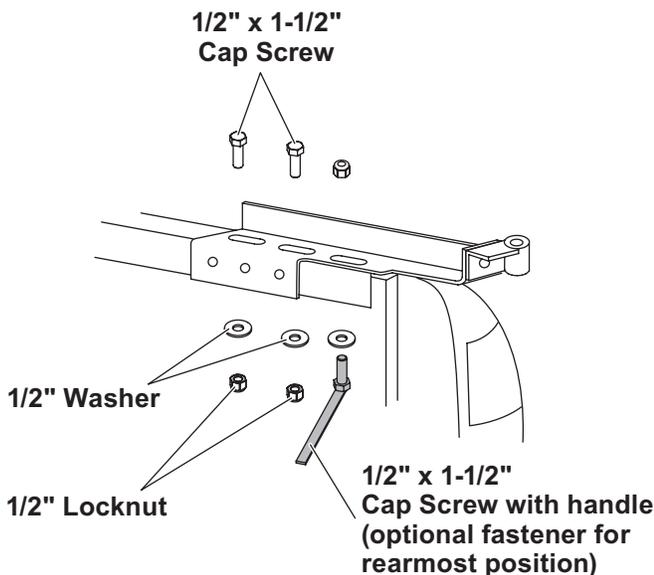
- Remove the hinge pins and top brackets. Center punch and drill 17/32" diameter holes through the bed rail in the marked positions (2 per side).

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.

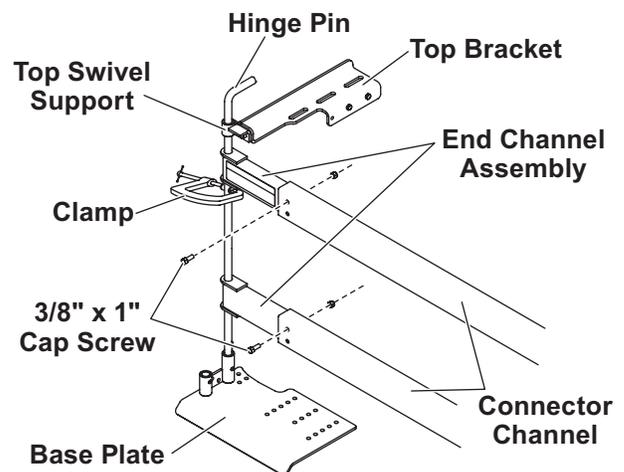
- Replace the top bracket and install it with two 1/2" x 1-1/2" cap screws, two flat washers, and two locknuts.

If it is not possible to install the rearmost cap screw from above, remove the vehicle tail lamp and install the optional 1/2" x 1-1/2" cap screw with handle, inserting it from below.

Hand tighten the fasteners.



- Replace the hinge pins through the top supports and into the base plates.
- Readjust the baseplates if necessary to ensure vertical alignment with the top brackets and clearance to the vehicle. Verify that the hinge pins do not bind when inserted in the top bracket and the base plate.
- Use the 5/16" pre-punched holes in the top bracket as a template to center punch and drill two 11/32" diameter holes in the inside flanges of each side of the truck bed. Check behind the bed rail for any obstruction before choosing holes.
- Install two 5/16" x 1-1/4" cap screws, two flat washers, and two locknuts through the bracket and inside flanges on each side of the truck bed.
- Slide one end channel assembly into each end of the connector channels.
- Carefully lift the hinge pins from the base plates.
- Install the end channel assemblies onto the hinge pins, making sure that the caution labels on the top end channel assemblies are right side up.
- Slide the top end channel assemblies up the hinge pins and attach clamps to the hinge pins below the end channel assemblies to prevent them from sliding down the pins.



SWING AWAY® MOUNT INSTALLATION

- Center the connector channels between the end channel assemblies.

⚠ CAUTION

Before drilling holes, check to be sure that no vehicle wiring or other components could be damaged.

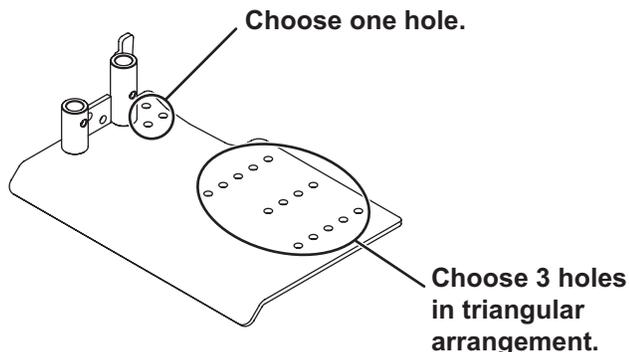
- Use the pre-punched holes in the connector channel as a guide to drill two 13/32" diameter holes through each end channel (8 holes total).

NOTE: Place a piece of wood behind the drilling area to protect the tailgate from the drill bit as it breaks through.

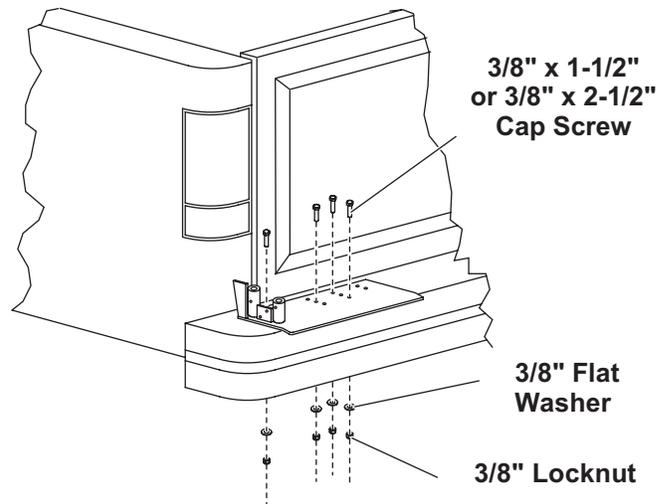
- Install one 3/8" x 1" cap screw and 3/8" locknut in the end of each end channel to temporarily hold the mount arm assemblies together.
- Adjust the base plates to be aligned with the bumper, and verify that the hinge pins are vertical and parallel with each other.
- Use the pre-punched holes in the base plates to locate and mark four holes on the top of the bumper for each base plate. Three of the holes should form a triangle, with two holes in one of the rows and one hole in another row. For the fourth hole, choose one of the three pre-punched holes near the front boss.

Check under the bumper for any obstructions before choosing holes.

If L-shims are used, at least one fastener should pass through each set of shims.



- Outline the position of the base plates on the bumper using a pencil.
- Remove the clamps, hinge pins, and mount arm assemblies from the truck.
- Center punch and drill four 13/32" diameter holes in each side of the bumper as previously marked.
- Loosely install the base plates to the bumper with four 3/8" x 1-1/2" cap screws (or 3/8" x 2-1/2" cap screws, if using L-shims beneath the base plate), 3/8" flat washers, and 3/8" locknuts.



- Reinstall the mount arm assemblies and hinge pins on the truck. Verify that the caution labels on the top end channels are right side up.
- Recheck all alignments of the mount arm assemblies and hinge pins, and tighten the base plate hardware according to the torque chart.

Spreader Installation

⚠ CAUTION

During removal or mounting, securely grip spreader to avoid dropping.

1. Remove the 3/8" x 1" cap screws fastening the connector channels to the channel assemblies.
2. Place the spreader on the base plates.

NOTE: If the spreader obstructs the view of the license plate, check for any local regulations that may apply.

3. Slide the top and bottom mount arm assemblies up the hinge pins, and align the holes in the spreader angle frame with the holes in the mount arm assemblies. Secure the spreader to the mount arm assemblies with four 3/8" x 1" cap screws and 3/8" locknuts per mount arm assembly.
4. Tighten all eight cap screws according to the torque chart.

5. Verify that all other fasteners are torqued to the proper specifications.

⚠ CAUTION

Do not operate the spreader or the vehicle without securing the hinge pin into the base plate.

6. Choose which way the spreader will swing and fix the hinge side by installing one 1/4" x 1-3/4" cap screw and 1/4" locknut through the hole in the base plate boss and hinge pin.
7. Remove the latch-side hinge pin and swing the spreader assembly. When returning the spreader to the bumper, it may be necessary to lift the spreader onto the base plate. Shim the top brackets and base plates as required to prevent the hinge pin from binding.
8. On the latch side, install the 3-3/4" hairpin cotter through the plate boss and hinge pin to secure the mount in the closed position.

The company reserves the right under its product improvement policy to change construction or design details and furnish equipment when so altered without reference to illustrations or specifications used. This equipment manufacturer or the vehicle manufacturer may require or recommend optional equipment for spreaders. Do not exceed vehicle ratings with a spreader. The company offers a limited warranty for all spreaders and accessories. See separately printed page for this important information. The following is a registered (®) trademark of Douglas Dynamics, LLC: SWING AWAY®.

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