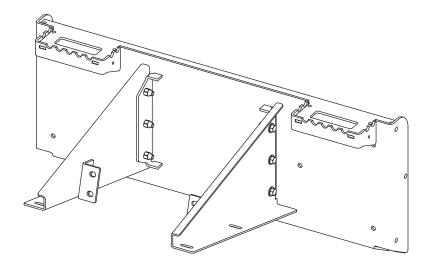


# Skid Steer Push Hitch Mount Kit

SSH-175-1

# **Installation Instructions**



# **A** CAUTION

Read Owner's Manual before operating or servicing spreader.

# SAFETY DEFINITIONS

# **A** WARNING

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

# A 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.

# **SAFETY PRECAUTIONS**

Park the vehicle on a level surface, place shift lever in PARK or NEUTRAL and set the parking brake. Turn OFF the engine and remove keys.

# **A 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 or spinner to stop, then lock out power.
- Do not climb into or ride on spreader.

# **A** 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.

# **A** 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.

# **A** CAUTION

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

# **A** 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.

### A CAUTION

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

#### A 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.

#### FIRE AND EXPLOSION

# **A** 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**

# **A 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**

# **A** 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 snowplow vibration does not exceed 2.5 m/s² to the hand-arm or 0.5 m/s² to the whole body.

# **TORQUE CHART**

# **A** 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)			Torque (ft-lb)			
	Grade 5	Grade 8	Size	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		
I	Metric Fasteners Class 8.8 and 10.9						
	Torque (ft-lb)			Torque (ft-lb)			
Size	Class 8.8	Class 10.9	Size	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.							

# WEIGHT/LOADING RESTRICTIONS

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

# **A** 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

#### **A** 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.

#### **CLASS IV RECEIVER HITCH**

The following table contains information regarding the Class IV receiver hitch.

Hitch Type	Max. Gross Trailer Wt. (lb)	Max. Tongue Wt. (lb)
Weight Distributing	10,000	15,000
Weight Carrying Ball Mount	10,000	15,000

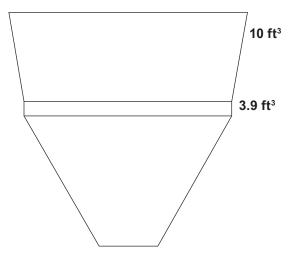
# **APPROXIMATE MATERIAL WEIGHTS**

# **A** CAUTION

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

Material	Density (lb/ft³)
Salt	80
Sand	100

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.



Salt = 80 lb/ft<sup>3</sup> (Average) 10 ft<sup>3</sup> x 80 lb/ft<sup>3</sup> = 800 lb

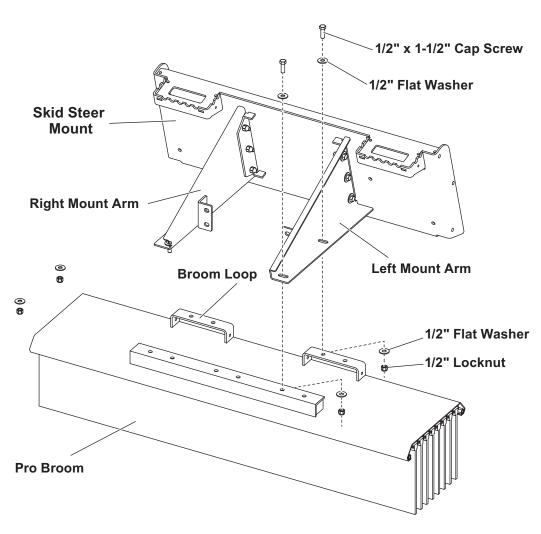
Sand = 100 lb/ft<sup>3</sup> 10 ft<sup>3</sup> x 100 lb/ft<sup>3</sup> = 1000 lb

# INSTALLATION INSTRUCTIONS

NOTE: This hitch/mount has been designed to be as universal as possible in regard to fitting a wide variety of skid steer-type machines. As with any attachment, practice safe usage and care when installing and operating this equipment. Refer to the skid steer owner's manual for all warning and safety precautions before using. If you have any questions or concerns before using, contact your local dealer for further information.

# **Pro-Broom Installation**

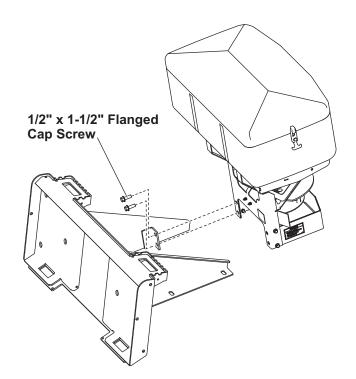
- Align and install supplied hardware to the right and left mount arms of the skid steer mount. Leave fasteners loose.
- 2. Using top mounting holes on broom hoops, line up the left and right mount arms.
- 3. Fasten the broom with supplied hardware, leaving hardware loose until all fasteners are in place, then tighten according to the torque chart.
- 4. Refer to the broom's owner's manual for operating instructions.

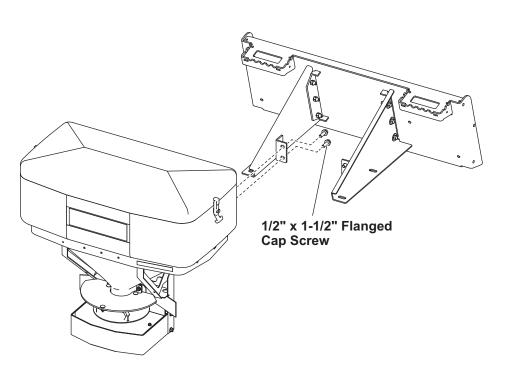


# **MOUNT INSTALLATION**

# **Salt Spreader Installation**

- 1. Remove the four rear mounting 1/2" fasteners on the spreader.
- 2. Line up the 4-hole fastener pattern with the spreader mounting angle brackets.
- Install cap screws through the spreader to the mount. Leave fasteners loose until all of them are in place, then tighten according to the torque chart.
- 4. Refer to the spreader owner's manual for operating instructions.







**A DIVISION OF DOUGLAS DYNAMICS, LLC** 

Copyright © 2017 Douglas Dynamics, LLC. All rights reserved. This material may not be reproduced or copied, in whole or in part, in any printed, mechanical, electronic, film or other distribution and storage media, without the written consent of TrynEx International. Authorization to photocopy items for internal or personal use by TrynEx International outlets or spreader owner is granted.

TrynEx International 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. TrynEx International or the vehicle manufacturer may require or recommend optional equipment for spreaders. Do not exceed vehicle ratings with a spreader. TrynEx International offers a limited warranty for all spreaders and accessories. See separately printed page for this important information. The following are registered (®) or unregistered (™) trademarks of Douglas Dynamics, LLC: SnowEx®, TrynEx®.

#### Printed in U.S.A.