June 1, 2020 Lit. No. 72884, Rev. 01

33225 MOUNT KIT

John Deere Tractor 3033

2014–

Installation Instructions

Read this document before installing the snowplow.

See your sales outlet/website for specific vehicle application recommendations before installation. The online selection system has specific vehicle and snowplow requirements.

A DIVISION OF DOUGLAS DYNAMICS, LLC

SAFETY DEFINITIONS

A WARNING

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

ACAUTION

Indicates a potentially hazardous situation that, if not avoided, may result in minor or 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 snowplow and vehicle or other property. Other useful information can also be described.

Mount Caution Label

ACAUTION

Loader MUST be removed before attaching snowplow.

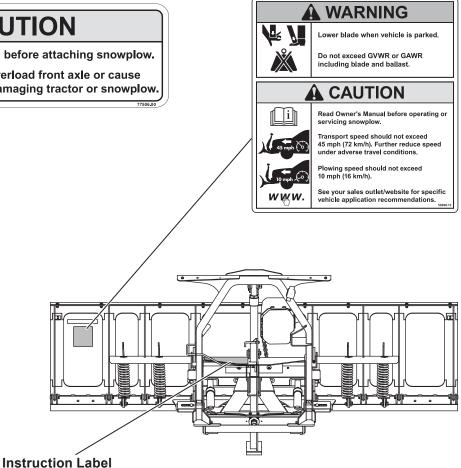
Failure to do so may overload front axle or cause equipment interference, damaging tractor or snowplow.

WARNING/CAUTION & INSTRUCTION LABELS

Become familiar with and inform users about the warning and instruction labels on the back of the blade.

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

Warning/Caution Label



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.

Lower the blade when vehicle is parked. Temperature changes could change hydraulic pressure, causing the blade to drop unexpectedly or damaging hydraulic components. Failure to do this could result in serious personal injury.

A WARNING

The driver shall keep bystanders clear of the blade when it is being raised, lowered, or angled. Do not stand between vehicle and blade or within 8 feet of a moving blade. A moving or falling blade could cause personal injury.

A WARNING

Keep hands and feet clear of the blade and A-frame when mounting or removing the snowplow. Moving or falling assemblies could cause personal injury.

To prevent accidental movement of the blade, always turn the control OFF whenever the snowplow is not in use. The power indicator light will turn OFF.

A WARNING

Remove blade assembly before placing vehicle on hoist.

A CAUTION

Refer to the online selection system for minimum vehicle recommendations and ballast requirements.

PERSONAL SAFETY

- Remove ignition key and set the vehicle parking brake to prevent others from starting the vehicle during installation or service.
- Wear only snug-fitting clothing while working on your vehicle or snowplow.
- 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.

NOISE

Airborne noise emission during use is below 70 dB(A) for the snowplow 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

ACAUTION

Read instructions before assembling. Fasteners should be finger tight until instructed to tighten according to the torque chart. Use standard methods and practices when attaching snowplow, 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		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
Metric Fasteners Class 8.8 and 10.9					
Size	Torque (ft-lb)			Torque (ft-lb)	
	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.					

INSTALLATION INSTRUCTIONS

NOTE: For easier assembly and installation, vehicle and all snowplow components should be on a smooth, level, hard surface, such as concrete.

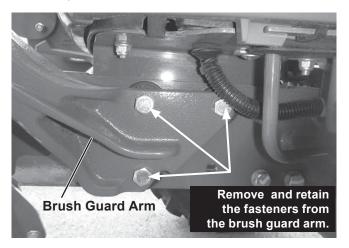
NOTE: The mount kit is designed to remain on the tractor while retaining use of the loader assembly. After installation of the mount, care must be taken when attaching and detaching the loader assembly. If the loader parking stand does not clear the mount, lower the loader assembly until the parking stand touches the ground, then slowly raise the loader again to reattach to the tractor.

Mount Installation

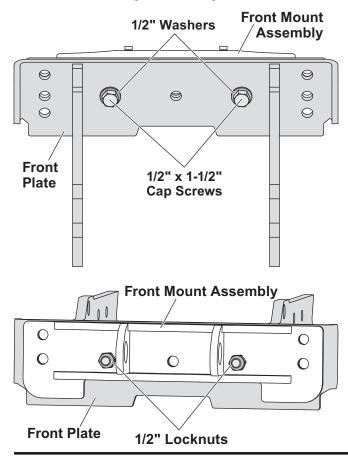
1. Remove the loader assembly (if equipped) per vehicle manufacturer's instructions.



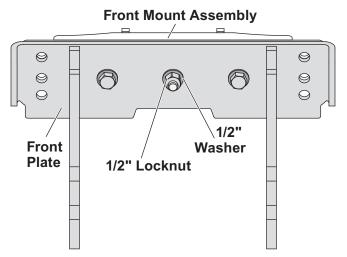
2. Remove the brush guard assembly (if equipped) by removing the fasteners from the brush guard arms. Save the fasteners for re-installation if the snowplow mount is removed.



3. Install the front mount assembly to the front plate of the tractor using two 1/2" x 1-1/2" cap screws and 1/2" washers. Place the washers on the cap screws, then insert the fasteners so the washers are contacting the vehicle frame. Secure with 1/2" locknuts. Tighten hand tight.

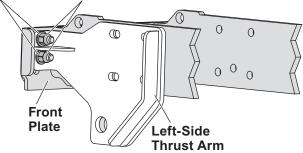


4. Insert a 1/2" x 1-1/2" cap screw through the center hole of the front mount assembly. Secure with a 1/2" washer and 1/2" locknut. Tighten hand tight.

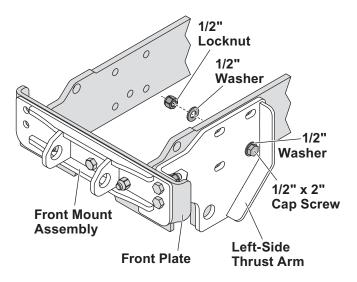


 Place the left-side thrust arm against the frame. Insert two 1/2" x 2" cap screws through the front mount assembly, tractor front plate, and left-side thrust arm. Secure with 1/2" washers and 1/2" locknuts. Tighten hand tight.

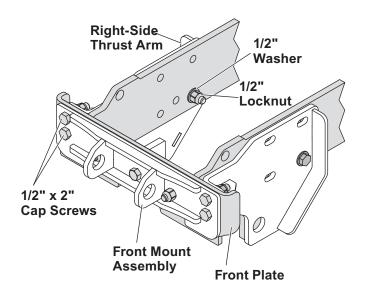
1/2" Washers 1/2" Locknuts



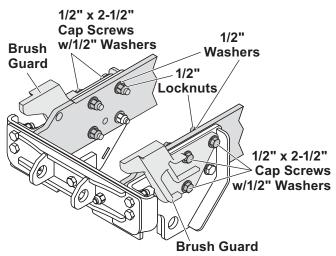
6. Place a 1/2" washer onto a 1/2" x 2" cap screw. Insert the cap screw and washer through the bottom rear hole of the left-side thrust arm. Secure with a 1/2" washer and 1/2" locknut. Tighten hand tight.



7. Repeat Steps 5–6 on the opposite side of the vehicle to install the right-side thrust arm.



8. If the vehicle is equipped with a brush guard, re-install the brush guard over the right- and left-side thrust arms. Insert 1/2" x 2-1/2" cap screws with 1/2" washers through the brush guard, thrust arms, and vehicle frame. Secure the fasteners with 1/2" washers and 1/2" locknuts. Tighten hand tight.



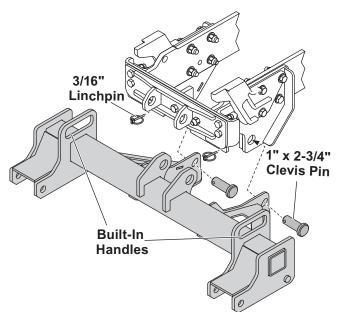
If the vehicle is not equipped with a brush guard, complete Step 8 using 1/2" x 2" cap screws in place of the 1/2" x 2-1/2" cap screws.

9. Tighten all fasteners according to the torque chart.

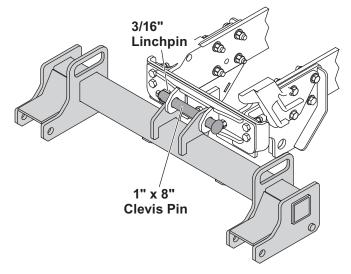
Push Beam Installation

NOTE: The push beam should only be installed when the loader assembly is not present on the vehicle. The push beam is designed to be easily attached and detached to and from the tractor, and should be stored on the snowplow headgear when not in use.

1. Install the 1" x 2-3/4" clevis pins through the push beam and thrust arms. Secure with the provided 3/16" linchpins.



2. Install the removable push beam by inserting the 1" x 8" clevis pin through the lugs of the push beam and front mount assembly. Secure the clevis pin with the 3/16" linchpin.



NOTE: After five to ten hours of snowplow usage, retorque all mount assembly fasteners.

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 snow removal. Do not exceed vehicle ratings with a snowplow. The company offers a limited warranty for all snowplows and accessories. See separately printed page for this important information.

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