April 1, 2020 Lit. No. 77341, Rev. 01

# **33230** MOUNT KIT

# **Kubota Grand L60 Series Tractor**

2018–

**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.

# 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 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** 

# **A**CAUTION

Loader <u>MUST</u> be removed before attaching snowplow.

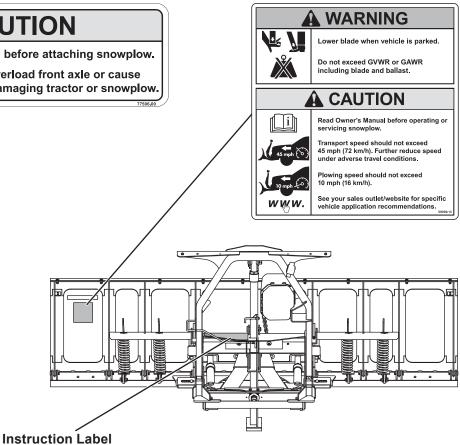
Failure to do so may overload front axle or cause equipment interference, damaging tractor or snowplow

#### 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.

#### A WARNING

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 the 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/s $^2$  to the hand-arm or 0.5 m/s $^2$  to the whole body.

# **TORQUE CHART**

#### **A** CAUTION

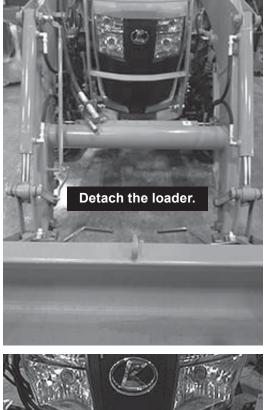
Read instructions before assembling. Fasteners should be finger tight until instructed to tighten according to the torque chart. Use standard methods and practices when attaching snowplow, including proper personal protective safety equipment.

| Recommended Fastener Torque Chart  |                |               |            |                |               |
|--|----------------|---------------|------------|----------------|---------------|
| Inch Fasteners Grade 5 and Grade 8   |                |               |            |                |               |
| Size   | Torque (ft-lb) |               |            | Torque (ft-lb) |               |
|  | Grade 5        |               | Size       | Grade 5        |               |
| 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<br>8.8   | Class<br>10.9 | Size       | Class<br>8.8   | Class<br>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

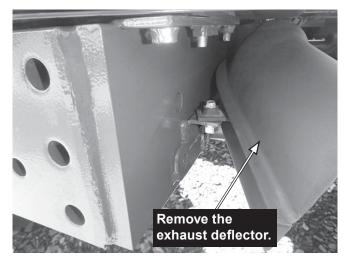
NOTE: For easier assembly and installation, the vehicle and all snowplow components should be on a smooth, level, hard surface, such as concrete.

1. Detach the loader from the vehicle, if equipped, then remove the brush guard. Save the brush guard and fasteners for reinstallation if the mount is removed.

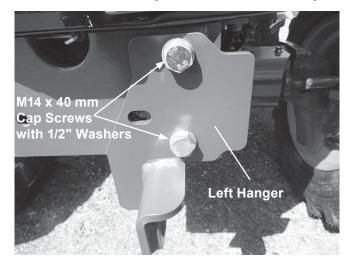




2. Remove the exhaust deflector; save for reinstallation.

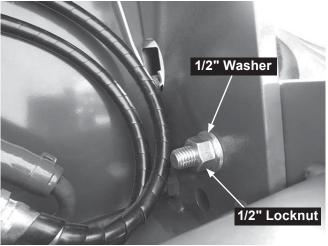


 Place 1/2" washers on two M14 x 40 mm cap screws. Place the left hanger against the front of the vehicle and install the cap screws through the locations shown. Tighten the fasteners hand tight.

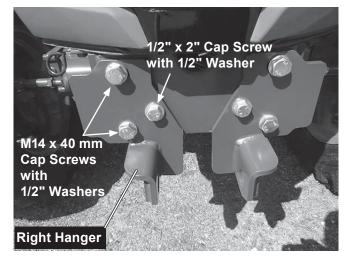


 Place a 1/2" washer on a 1/2" x 2" cap screw. Install the cap screw and washer through the location shown. Secure the fastener with a 1/2" washer and 1/2" locknut. Hand tighten the locknut.



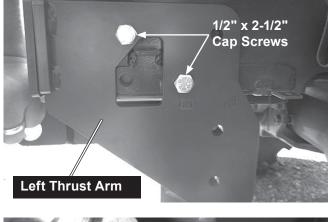


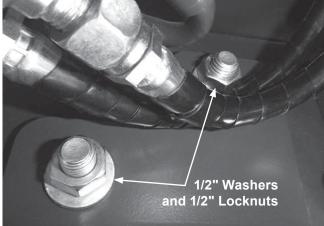
5. Repeat Steps 3 and 4 on the opposite side of the vehicle.



## For vehicles with existing holes in the frame:

 Place the left thrust arm against the frame of the vehicle as shown. Install two 1/2" x 2-1/2" cap screws through the thrust arm, frame, and hanger. Secure with 1/2" washers and 1/2" locknuts. Hand tighten the fasteners.

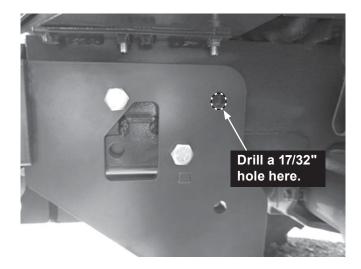




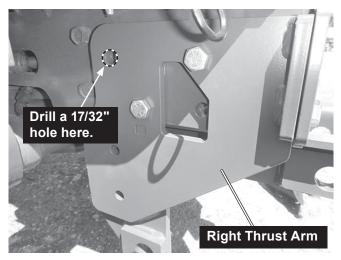
# 

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

7. Using the rear hole of the thrust arm as a guide, drill through the frame using a 17/32" drill bit. Use caution to avoid hitting the hydraulic hoses inboard of the frame.



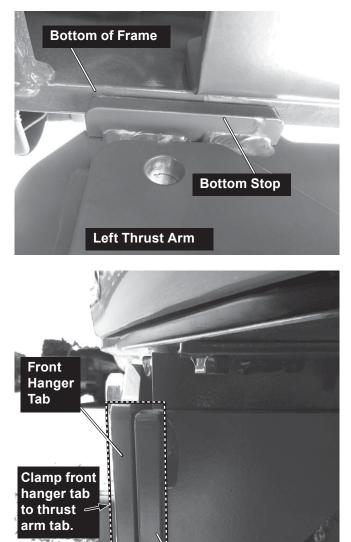
- 8. Install a 1/2" x 2" cap screw through the drilled hole. Secure with a 1/2" washer and 1/2" locknut.
- 9. Repeat Steps 6–8 on the opposite side of the vehicle.



10. Tighten all fasteners according to the torque chart.

#### For vehicles without existing holes in the frame:

6. Place the left thrust arm against the frame of the vehicle as shown. Ensure that the bottom stop of the thrust arm is tight against the bottom of the frame. Clamp the thrust arm tab to the front hanger tab.

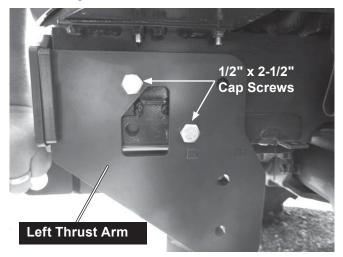


Thrust Arm Tab

# 

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

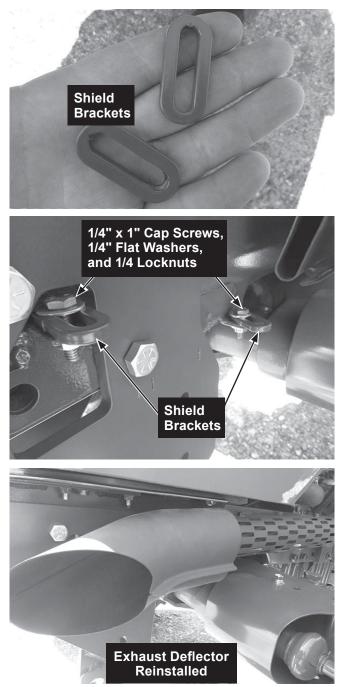
- 7. Using the three holes of the thrust arm as a guide, drill 17/32" holes through the frame. Use caution to avoid hitting the hydraulic hoses inboard of the frame.
- Install 1/2" x 2-1/2" cap screws through the front and middle holes as shown below. Secure each cap screw with a 1/2" washer and 1/2" locknut. Hand tighten the fasteners.



- Install a 1/2" x 2" cap screw through the rear hole of the thrust arm. Secure with a 1/2" washer and 1/2" locknut. Hand tighten the fasteners.
- 10. Repeat Steps 6–9 on the opposite side of the vehicle. Then, tighten all fasteners according to the torque chart.

# All vehicles:

11. Reinstall the exhaust deflector by attaching a shield bracket to each of the deflector connector tabs on the tractor. Loosely secure the shield brackets using the 1/4" fasteners supplied. Attach the deflector to the shield brackets using the original deflector fasteners, positioning the deflector and brackets as necessary to allow adequate distance between the deflector and thrust arm.



- Install the cross bar using four 1/2" x 1-1/2" cap screws. Secure with 1/2" washers and 1/2" locknuts.
- 13. Tighten all hardware according to the torque chart.
- 14. Install the mount beam using the 1" x 8" clevis pin and 3/16" linchpin.

Linchpin **Clevis Pin** Mount Beam

15. Install the 1" x 2-3/4" clevis pins through the mount beam and thrust arms. Secure with the provided linchpins. Install the removable mount beam using the 1" x 8" clevis pin through the front mount assembly and push beam, and secure with a provided 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.

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