July 15, 2019 Lit. No. 78510, Rev. 02

# **35138 MOUNT KIT**

Yamaha Viking

2014-

**Installation Instructions** 

#### **A** CAUTION

Read this document before installing the snowplow.

#### **A** CAUTION

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

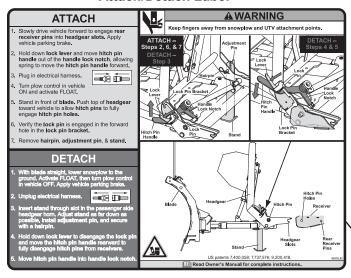
Indicates a potentially hazardous situation that, if not avoided, could result in death or serious personal injury.

#### **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.

#### Attach/Detach Label



### WARNING/CAUTION & INSTRUCTION LABELS

Become familiar with and inform users about the warning/caution 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

## Lower blade when vehicle is parked.

Do not exceed GVWR or GAWR including blade and ballast.

#### **A** CAUTION

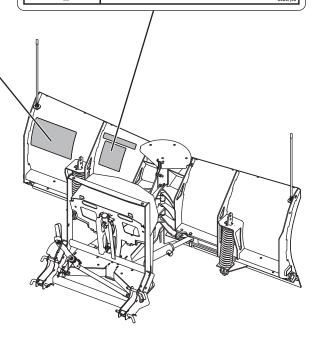


Read Owner's Manual before operating or servicing snowplow.

Transport speed should not exceed 20 mph (32 km/h). Further reduce speed under adverse travel conditions.

Plowing speed should not exceed 10 mph (16 km/h).

See your sales outlet/website for specific vehicle application recommendations.



#### SAFETY PRECAUTIONS

Follow all safety and operating instructions in your UTV Owner's Manual.

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

#### **A** WARNING

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 the vehicle and the 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

Do not exceed GVWR, GAWR, or maximum vehicle load capacity, including the blade and ballast.

#### **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 WARNING**

Vehicle mount reduces ground clearance. Use additional caution when driving vehicle with mount installed. Remove vehicle mount to restore original vehicle ground clearance at the end of the plowing season.

#### **A** CAUTION

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

#### PERSONAL SAFETY

- Remove the 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 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

#### 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 95 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**

#### **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	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
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.					

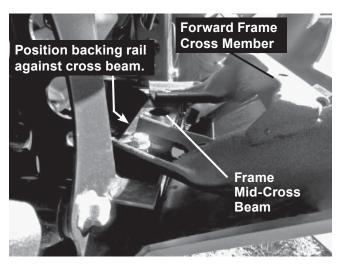
#### **INSTALLATION INSTRUCTIONS**

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

 Remove the plastic splash shield. If a winch is installed on the vehicle, it will have to be temporarily removed for snowplow mount installation and reinstalled after the snowplow mount plate is in place.



2. Install the mount backing rail against the vehicle frame mid-cross beam with its vertical face against the vertical face of the mid-cross beam. Insert a 3/8" x 1-1/4" cap screw through each outer hole in the backing rail and through the holes in the frame cross beam. Do not install washers and locknuts at this time.



3. Position the winch support plate between the vehicle's vertical frame members and install with a 3/8" x 1-1/4" cap screw, two 3/8" washers, and a 3/8" locknut in each of the four hole positions. Leave all fasteners loose until instructed to tighten them.



4. Position the skid plate assembly as shown below, making sure that the cap screws installed in Step 2 pass through the forward slots in the skid plate assembly. Install the assembly to the vehicle's rear cross member and rear vertical frame members using a 3/8" x 1-1/4" cap screw, two 3/8" washers, and a 3/8" locknut in each of the four hole positions. Secure the skid plate assembly to the backing rail using the two 3/8" washers and 3/8" locknuts on the 3/8" x 1-1/4" cap screws installed in Step 2.



5. Position the winch plate as shown below and install to the winch support plate and skid plate assembly using 3/8" x 1-1/4" cap screws and 3/8" locknuts in four places. Tighten all fasteners according to the torque chart.



6. If a winch is not being installed, insert 3/8" x 1-1/4" cap screws through the indicated holes in the winch plate and through the holes in the forward frame cross member. Secure with 3/8" locknuts.

If a winch is to be installed, check to see if the winch mounting holes align with the holes in the winch plate shown above.

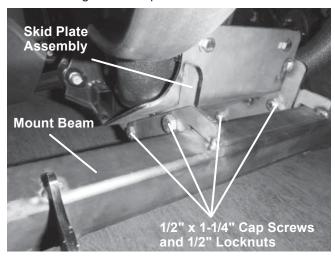
If the holes align, use the fasteners supplied with the winch in these hole locations to secure the winch plate and winch to the forward frame cross member. If the winch mounting holes do not align, insert 3/8" x 1-1/4" cap screws through the indicated holes in the winch plate and through the holes in the forward frame cross member and secure with 3/8" locknuts. Complete the winch installation using holes provided in the winch plate and fasteners supplied with the winch. Install the winch to the winch plate using the original winch fasteners in the appropriate predrilled holes in the winch plate.

It may be necessary to shim the winch up 3/16" if the indicated front cross member holes are not used, in order to provide clearance for the heads of the 3/8" x 1-1/4" cap screws previously installed through the forward frame cross member.

If none of the predrilled winch plate holes align with the winch mounting holes, use the winch mount as a template to mark locations for drilling new holes in the winch plate. Drill new mounting holes at the correct diameter to match the original winch fasteners. Shim the winch, if necessary, as described above.

- 7. Some winch installations may require installation of the supplied fairlead plate. Mount the fairlead plate on the front of the skid plate assembly using the 3/8" fasteners that secure the winch plate to the skid plate assembly. Attach the fairlead supplied with the winch to the fairlead plate according to the winch installation instructions. Additional holes may be drilled in the fairlead plate if needed.
- 8. Tighten all fasteners according to the torque chart.

9. Install the mount beam to the skid plate assembly as shown using four 1/2" x 1-1/4" cap screws and 1/2" locknuts. Ensure that the mount beam is level with the ground. Tighten these fasteners according to the torque chart.



not to scale

 Measure the distance between the mount beam rear hole and the ground. If it exceeds 11-1/2", install the accessory Height Adapter Plate Kit (PN 77555) to ensure optimum plowing performance

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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