



35139

UNDERCARRIAGE KIT

Toyota Tundra

2007 - ___

Installation Instructions

⚠ CAUTION

Read this document before installing the snowplow.

⚠ CAUTION

See your BLIZZARD® outlet/Web site for specific vehicle application recommendations before installation. The Undercarriage Selection Guide has specific vehicle and snowplow requirements.

SAFETY

SAFETY DEFINITIONS

⚠ WARNING

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

⚠ CAUTION

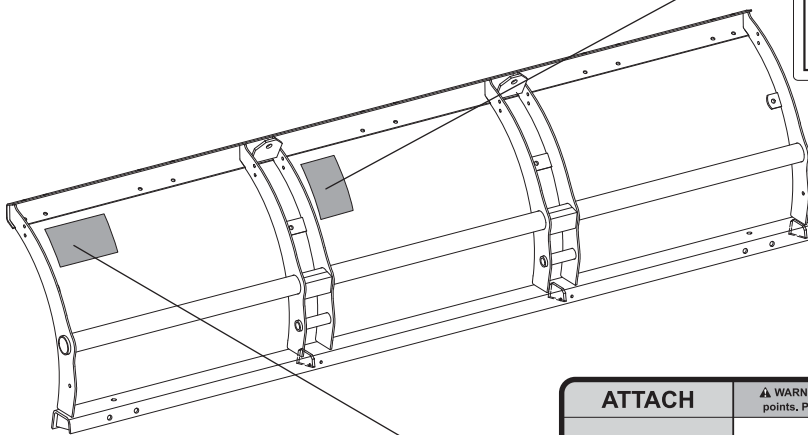
Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

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.

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

LOWER BLADE WHEN VEHICLE IS PARKED.
DO NOT EXCEED GVWR OR GAWR INCLUDING BLADE AND BALLAST.
REMOVE BLADE ASSEMBLY BEFORE PLACING VEHICLE ON HOIST.

⚠ CAUTION

READ *OWNER'S MANUAL* BEFORE OPERATING OR SERVICING SNOWPLOW.
TRANSPORT SPEED SHOULD NOT EXCEED 45 MPH. FURTHER REDUCE SPEED UNDER ADVERSE TRAVEL CONDITIONS.
PLOWING SPEED SHOULD NOT EXCEED 10 MPH.
SEE YOUR SALES OUTLET/WEB SITE FOR SPECIFIC VEHICLE APPLICATION RECOMMENDATIONS.

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ATTACH	⚠ WARNING: Keep fingers away from snowplow and truck attachment points, POWER HITCH™ arm raises behind undercarriage pushbeam.	DETACH
<ol style="list-style-type: none"> 1. Slowly drive vehicle forward to engage pushbeam into A-frame. 2. Turn power switch on light tower to center or "OFF" position. 3. Plug in electrical harnesses. 4. Pull A-frame latch pin and lower latch onto draw pin. 5. Push UP and hold both power and arm/blade operation switches. Arm will engage pushbeam and pull snowplow towards vehicle. 6. While pushing light tower toward vehicle, install both hitch pins and hair pin cotters. Hitch pin is fully engaged when stop is against A-frame. 7. While holding UP power switch, push DOWN and hold arm/blade operation switch. Arm will disengage pushbeam to relieve tension on A-frame latch. 8. Pull A-frame latch pin and draw pin. Lock latch in raised position. 9. Push UP and hold both power and arm/blade operation switches to slightly raise blade. Raise kickstand until kickstand pin seats into upper hole on pivot beam. 10. Turn power switch to down or "Plowing" position. 	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p style="text-align: center; font-size: small;">ATTACH – Steps 2, 5, 7, 9 & 10 DETACH – Steps 2, 3 & 5</p> </div> <div style="display: flex; justify-content: space-around; font-size: small;"> <div style="border: 1px solid black; padding: 2px;"> <p style="text-align: center;">ATTACH – Steps 4, 7 & 8</p> </div> <div style="border: 1px solid black; padding: 2px;"> <p style="text-align: center;">ATTACH – Steps 1 & 6 DETACH – Step 4</p> </div> </div> <p style="text-align: center; font-size: x-small;">Read Owner's Manual for Complete Instructions.</p>	<ol style="list-style-type: none"> 1. Lower snowplow onto ground with blade straight. Turn plow control in cab OFF. 2. Turn power switch on light tower to center or "OFF" position. 3. Push UP and hold both power and arm/blade operation switches to slightly raise blade. Lower kickstand until kickstand pin seats into lower hole on pivot beam. 4. While pushing light tower toward vehicle, remove both hair pin cotters and hitch pins. Store pins. 5. While holding UP power switch, push DOWN and hold arm/blade operation switch to fully lower arm. 6. Unplug electrical harnesses.
<p>U.S. Patents 5,420,480; 5,638,618; 5,899,007; 6,178,869; 6,263,470; 6,278,076; 6,393,737; 6,408,546; 6,412,109; 6,442,877; 6,615,513; 7,134,227; RE 35,700; 89986 CAN Patents 2,060,425; 2,184,922; 2,229,783; 2,259,508; 2,358,145; 2,358,354; 2,466,195; and other patents pending.</p>		

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

Lower 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.

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.

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.

WARNING

Do not exceed GVWR or GAWR including the blade and ballast. The rating label is found on the driver-side vehicle door cornerpost.

WARNING

To prevent accidental movement of the blade, always turn the ON/OFF switch to OFF whenever the snowplow is not in use. The control indicator light will turn off.

WARNING

Remove blade assembly before placing vehicle on hoist.

CAUTION

Refer to the Undercarriage Selection Guide for minimum vehicle recommendations and ballast requirements.

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 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.

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 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.

TORQUE CHART

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 (ft-lb)			
Size	 SAE Grade 2	 SAE Grade 5	 SAE Grade 8
1/4-20	6	9	13
5/16-18	11	18	28
3/8-16	19	31	46
3/8-24	24	46	68
7/16-14	30	50	75
1/2-13	45	75	115
9/16-12	66	110	165
5/8-11	93	150	225
3/4-10	150	250	370
7/8-9	150	378	591
1-8	220	583	893
Metric Grade 8.8 (ft-lb)			
Size	Torque	Size	Torque
M 6	7	M 12	60
M 8	17	M 14	95
M 10	35	M 16	155
These torque values apply to fasteners except those noted in the instruction.			

UNDERCARRIAGE INSTALLATION

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

1. Remove the tow hook fasteners and tow hooks. Remove the splash pan fasteners and splash pan. Retain tow hooks and splash pan for reinstallation if the snowplow is removed. Retain the fasteners for reinstallation in the following steps.
2. Attach the driver-side mount to the truck frame using the original tow hook fasteners. Tighten the fasteners so that the mount is firmly against the bottom of the frame, but do not fully tighten at this time.

⚠ CAUTION

Use caution not to pinch, cut or drill through any wires or hoses running along the frame rail.

3. Using the rear holes in the driver-side mount as guides, drill two 13/32" holes into the truck frame.

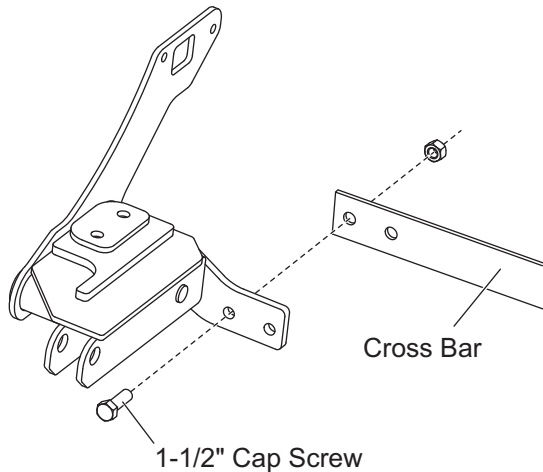


4. Insert two 3/8" x 1-1/4" cap screws with handles and 3/8" flat washers into the inside of the truck frame and out through the rear drilled holes. Attach a 3/8" locknut to each cap screw and hand tighten.

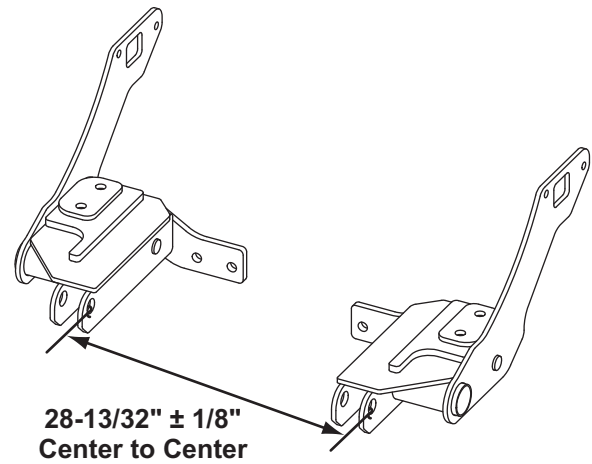


UNDERCARRIAGE INSTALLATION

- Repeat Steps 1–4 on the passenger's side of truck.
- Install the cross bar using four 1/2" x 1-1/2" cap screws and 1/2" locknuts as shown. Hand tighten fasteners.



- Tighten all fasteners according to the torque chart after achieving the appropriate dimensions.



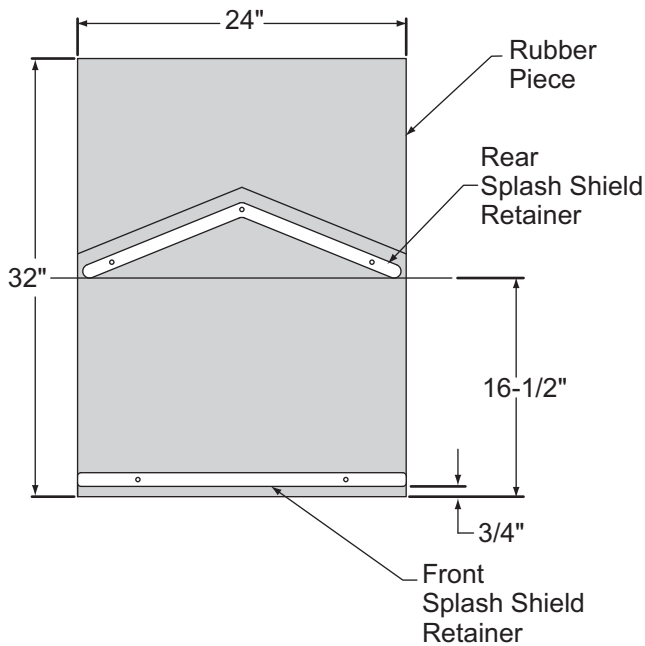
NOTE: When attaching the Mount Adapter to the Mount, use the enclosed 3/4" x 2-3/16" clevis pin instead of the 3/4" x 4-3/8" clevis pin included in the blade crate.

- Check for a U-bracket distance of $28\text{-}13/32" \pm 1/8"$. Take a second measurement farther back on the mounts to ensure that they are parallel. If the U-bracket distance is not within $28\text{-}13/32" \pm 1/8"$, then loosen the tow hook fasteners on one or both mounts and shift the mount(s) in the appropriate direction to obtain the desired dimension.

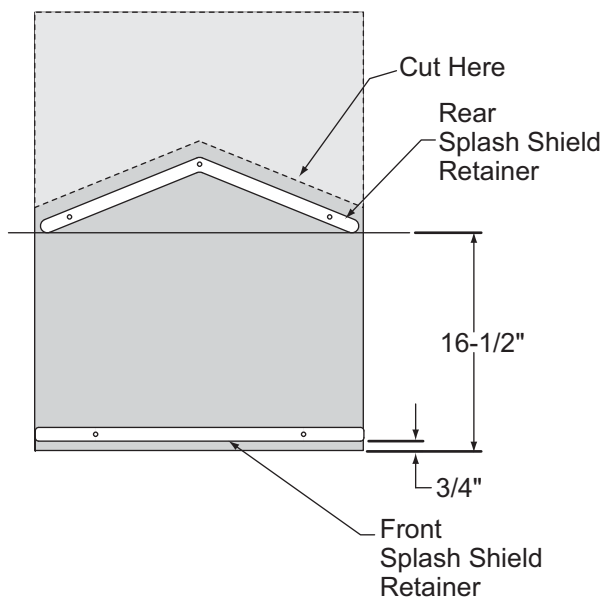
SPLASH SHIELD INSTALLATION

Splash Shield Installation

1. Lay the rubber material on a flat surface. Place the front and rear splash shield retainer bars on the rubber as shown. Using the holes in the retainer bars as a guide, drill five 5/16" holes through the rubber.



2. Cut the material as shown below.



3. Position the splash shield on the vehicle so that the tapered end with three holes is toward the rear of the truck and the shield is on top of the cross bar. Using the vehicle splash pan fasteners, place two fasteners up through the front splash shield retainer bar, rubber shield, and into the original splash pan fastener holes at the front. Place three fasteners up through the rear splash shield retainer bar, rubber shield, and into the original splash pan fastener holes toward the rear.

NOTE: Make sure rubber shield is on top of the mount cross bar.

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

NOTE: Customer, changing the oil on this vehicle requires the temporary removal of the rear splash shield retainer bar. Once the oil is changed, re-install and tighten all fasteners according to the torque chart.



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