



**Assembly
&
Installation Instructions**

FOR
SUBFRAME COMPONENTS PACKAGE 99100688

TO FIT
2004 - Later Nissan Titan



1. **THINK SAFETY, ALWAYS WEAR SAFETY GLASSES WHEN PERFORMING THE OPERATIONS PRESCRIBED IN THESE INSTRUCTIONS**
2. **READ ALL INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING INSTALLATION**
3. **BEFORE BEGINNING WORK MAKE SURE TO SET PARKING BRAKE AND CHOCK WHEELS**



MINIMUM VEHICLE RECOMMENDATIONS

Heavy Duty Alternator
 Heavy Duty Battery
 Manufacturer's Snow Plow Package

ASSEMBLY TOOLS NEEDED

Drill Bits 1/4", 17/32"
 Impact Sockets and Wrenches 7/16" – 1-3/8"
 Metric Impact Sockets and Wrenches 10mm - 19mm
 Center Punch and Hammer

NOTE: On some vehicles it may be necessary to use a form of load booster to decrease the vehicle's front suspension sag with the snow plow in place. This can be accomplished with the use of supplementary air bags, booster springs, or similar load boosting devices. Since there are different load boosting devices available, it will up to the customer/end user to decide and purchase the product to suit the application, and not the responsibility of Sno-Way International, Inc.

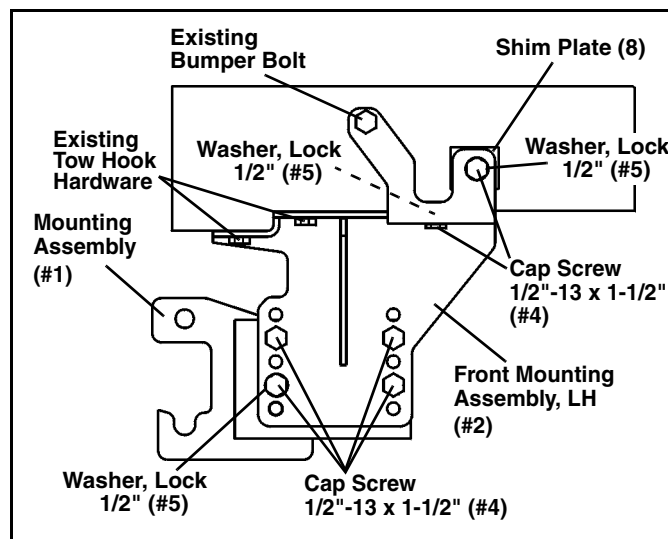
INSTALLATION NOTES

1. **Unless otherwise specified, mount all Subframe components to vehicle before tightening any hardware.**
2. **It is recommended that LOCTITE®, or similar thread locking product, be used on ALL mounting hardware (i.e. Nuts, Cap Screws, Bolts, etc.).**
3. Vehicle should be parked on a level surface with a normal vehicle load on the FRONT suspension.
4. Items in parentheses () refer to quantity required for this step. Items in parentheses with a pound sign (#) indicate the part number as found in the parts list on the last page of this document.
 Example: (10) Washer, Lock, 1/2" (#8).
5. It maybe necessary to relocate license plate holder. Check state and local laws for placement, if needed.

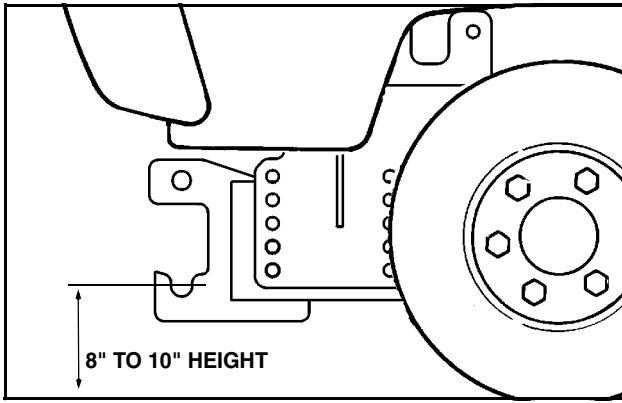
MOUNTING INSTRUCTIONS

1. Remove splash guard, if equipped. Next, remove tow hooks, retaining tow hook hardware for use in following step. Retain tow hooks for future use if plow Subframe is removed.
 Then remove the top rear bolt securing the bumper mounting bracket to each frame rail, for use in the following step.
2. Install Front Mounting Assembly, LH (#2) by aligning the two front holes in the horizontal plate of the bracket with the existing tow hook holes in the vehicle frame, securing with existing tow hook bolts. The front side hole should align with the existing bumper mounting bracket hole; secure using existing bolt, removed earlier.
 The remaining two holes need to be drilled, one on the side of the bracket and one on the horizontal piece that attaches to the bottom for the vehicle frame. Using these holes in the Front Mounting Assembly as a template, drill 1/4" pilot holes, then 17/32" holes

- through the one wall of the vehicle frame. Insert (2) Shim Plates (#8) between the frame rail and the side hole in the back of the Front Mounting Assembly. Secure through drilled holes using (2) 1/2"-13 x 1-1/2" Cap Screws (#4), (2) 1/2" Lock Washers (#5) and (2) Nut Plate Assemblies (#7), inserted through the access hole in the bottom of the vehicle frame.
3. Repeat procedure on other side to install Front Mounting Assembly, RH (#3).



4. Install Mounting Assembly (#1). Secure using (2) 1/2" x 1-1/2" Cap Screws (#4) and (2) 1/2" Lock Washers (#5) in the threaded holes and (6) 1/2" x 1-1/2" Cap Screws (#4) and (6) 1/2" Nylock Nuts (#6) in the remaining holes.
5. Using the torque specification chart provided, torque all bolts.



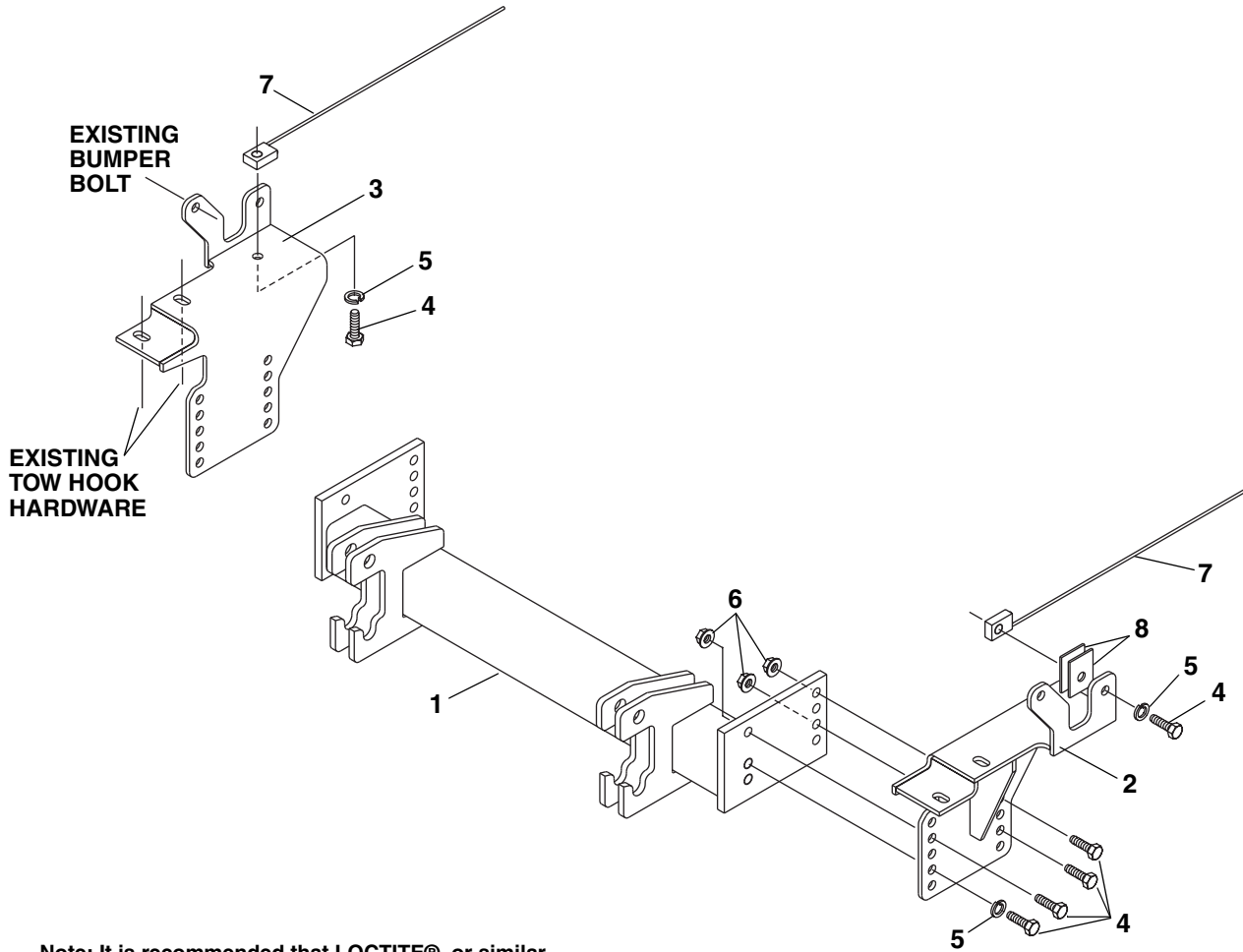
IMPORTANT: Height from the center of the lower plow mounting holes on the Subframe to the ground should be between 8" and 10" to insure proper operation.

TORQUE SPECIFICATIONS FOR STANDARD MACHINE HARDWARE					
Bolt Size	GR.2 Dry	GR.5 Dry	GR.8 Dry	Metric Size	GR.8.8 Dry
1/4"	66*	9	12	M8	17
5/16"	11	17	25	M10	35
3/8"	20	30	45	M12	60
7/16"	32	50	70	M14	95
1/2"	50	75	110	M16	155
9/16"	70	110	150		
5/8"	100	150	220		
3/4"	175	260	380		
7/8"	170	430	600		
1"	250	640	900		

Note: These torque values are to be used for all hardware. Unless otherwise specified, all torque values must meet this specification.
 Note: All torque values are in Ft.-Lbs unless otherwise stated
 Note: *In-Lbs

REMEMBER After 5 to 10 hours of snowplow usage, re-torque all Cap Screws!

PARTS LIST



Note: It is recommended that LOCTITE®, or similar thread locking product, be used on ALL mounting hardware (i.e. Nuts, Cap Screws, Bolts, etc.).

ITEM	PART NO.	DESCRIPTION	QTY.
1	96107399	Assembly, Mounting	1
2	96107404	Assembly, Front Mounting, LH	1
3	96107405	Assembly, Front Mounting, RH.....	1
4	98009010	Cap Screw, Hex head 1/2" - 13 x 1-1/2"	12
5	98009012	Washer, Lock, 1/2"	6
6	98009013	Nut, Nylock, 1/2" - 13	6
7	96103509	Assembly, Nut Plate	4
8	96103283	Plate, Shim	4

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