



**Assembly
&
Installation Instructions**

**FOR
SUBFRAME COMPONENTS PACKAGE 99100067
AND
SUBFRAME NOSE PIECE PACKAGE 96103002
OR
SUBFRAME NOSE PIECE PACKAGE 96103001
TO FIT**

1988 & LATER CHEVROLET & GMC WT1500, 1500, 2500, & 3500 PICKUP 4x4

1992 & LATER CHEVROLET 1500 BLAZER, 1500 & 2500 SUBURBAN 4x4

1992 & LATER GMC 1500 YUKON, 1500 & 2500 SUBURBAN 4x4



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 Torsion Bars
 Heavy Duty Battery
 Manufacturers Snow Plow Package

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.

ASSEMBLY TOOLS NEEDED

Drill Bits 21/32"
 Sockets 7/16" – 1-1/8"
 Wrenches 7/16" – 1-1/8"
 Torque Wrench
 Center Punch and Hammer
 Hacksaw

INSTALLATION NOTES

1. **Unless otherwise specified, mount all Sub-Frame 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: (2) 5/8" - 11 x 1-1/2" Cap Screws (#11).
5. It may be necessary to relocate license plate holder. Check state and local laws for placement, if needed.

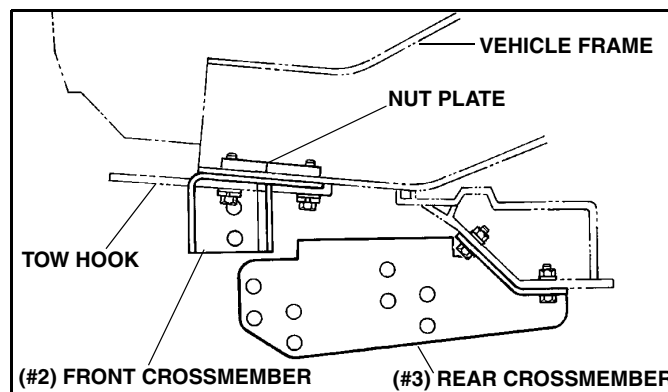
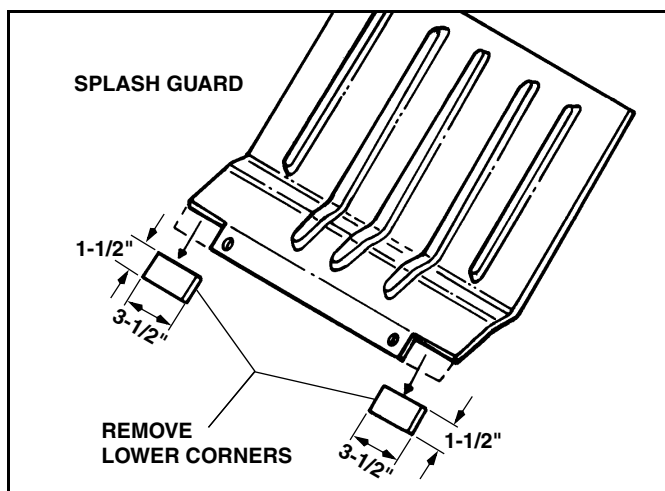
4. Install the Tow Hooks with the Front Crossmember (#2). Align the Front Crossmember against the vehicle frame with the holes for the Tow Hooks. Position the Tow Hooks below the Front Crossmember and attach by using the (4) 1/2"-13 x 2-1/4" Cap Screws (#8), Lock Washers (#10), Flat Washers (#9) and (2) Nut Plates (#4).

NOTE: If holes for mounting Rear Crossmember are not present in vehicle frame the Sub-Frame Assembly will have to be mounted to the Front Crossmember first (see note below). Then Rear Crossmember must be mounted to Sub-Frame Assembly and two 21/32" holes will have to be drilled though vehicle frame using Rear Crossmember as a template.

5. Position Rear Crossmember (#3) on vehicle frame crossmember and attach through the two outer mounting holes with (2) 5/8"-11 x 2" Cap Screws (#5), Flat Washers (#6) and Nylock nuts (#7). Re-install splash Shield removed in step 3.

MOUNTING INSTRUCTIONS

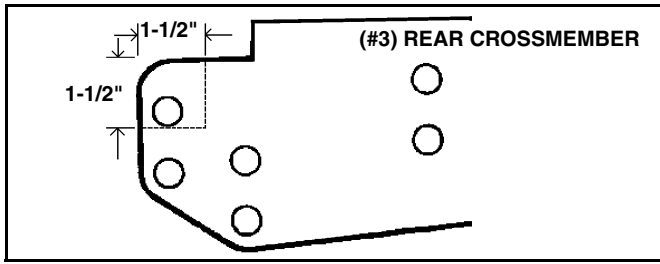
1. Remove air dam from front of vehicle. (Retain with hardware for future use).
2. Remove tow hooks. Retain for re-installation in step 4.
3. Remove splash shield from underside of vehicle, retain hardware and remove corners for clearance. Retain for re-installation in step 5.



NOTE: Vehicle will be equipped with either a light or heavy duty frame. Determine which frame the vehicle has and proceed to the proper installation instruction.

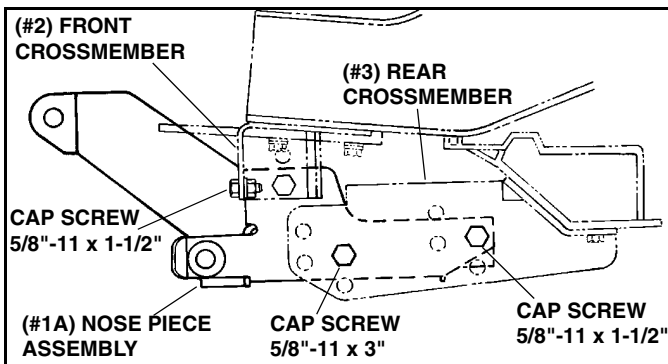
97 GMC YUKON & 97 CHEVY TAHOE

1. A modification may be required if there is interference between the Front and Rear Crossmembers.
2. Cut a 1-1/2" x 1-1/2" notch in the Rear Crossmember side plates as shown in the diagram.



INSTALLATION - LIGHT DUTY VEHICLE FRAME (6 LUG WHEELS)

1. Install Nose Piece Assembly (#1A) to Front Crossmember with (4) 5/8"-11 x 1-1/2" Cap Screws (#11), Flat Washers (#6) and Nylock Nuts (#7).
2. Using The Torque Specification Chart provided torque all Cap Screws starting at the rear and working forward.

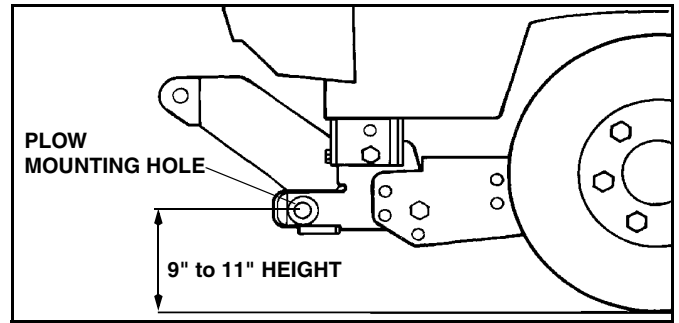
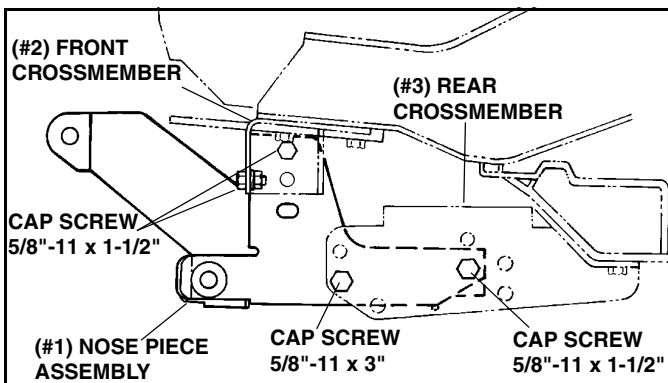


INSTALLATION - HEAVY DUTY VEHICLE FRAME (8 LUG WHEELS)

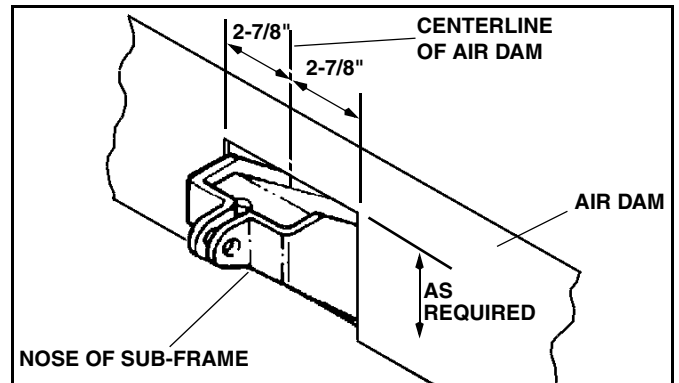
1. Install Nose Piece Assembly (#1) to Front Crossmember with (4) 5/8"-11 x 1-1/2" Cap Screws (#11), Flat Washers (#6) and Nylock Nuts (#7).

IMPORTANT: The Cap Screws securing the Nose Piece to the Front Crossmember must be staggered with the bolts being positioned in a lower set of holes than the side bolts. (Unless the holes are in the lowest possible position.)

2. Using The Torque Specification Chart provided torque all Cap Screws starting at the rear and working forward.



IMPORTANT: Height from the center of the lower Plow Mounting holes on the Sub-Frame to the ground should be between 9" and 11" to insure proper operation.



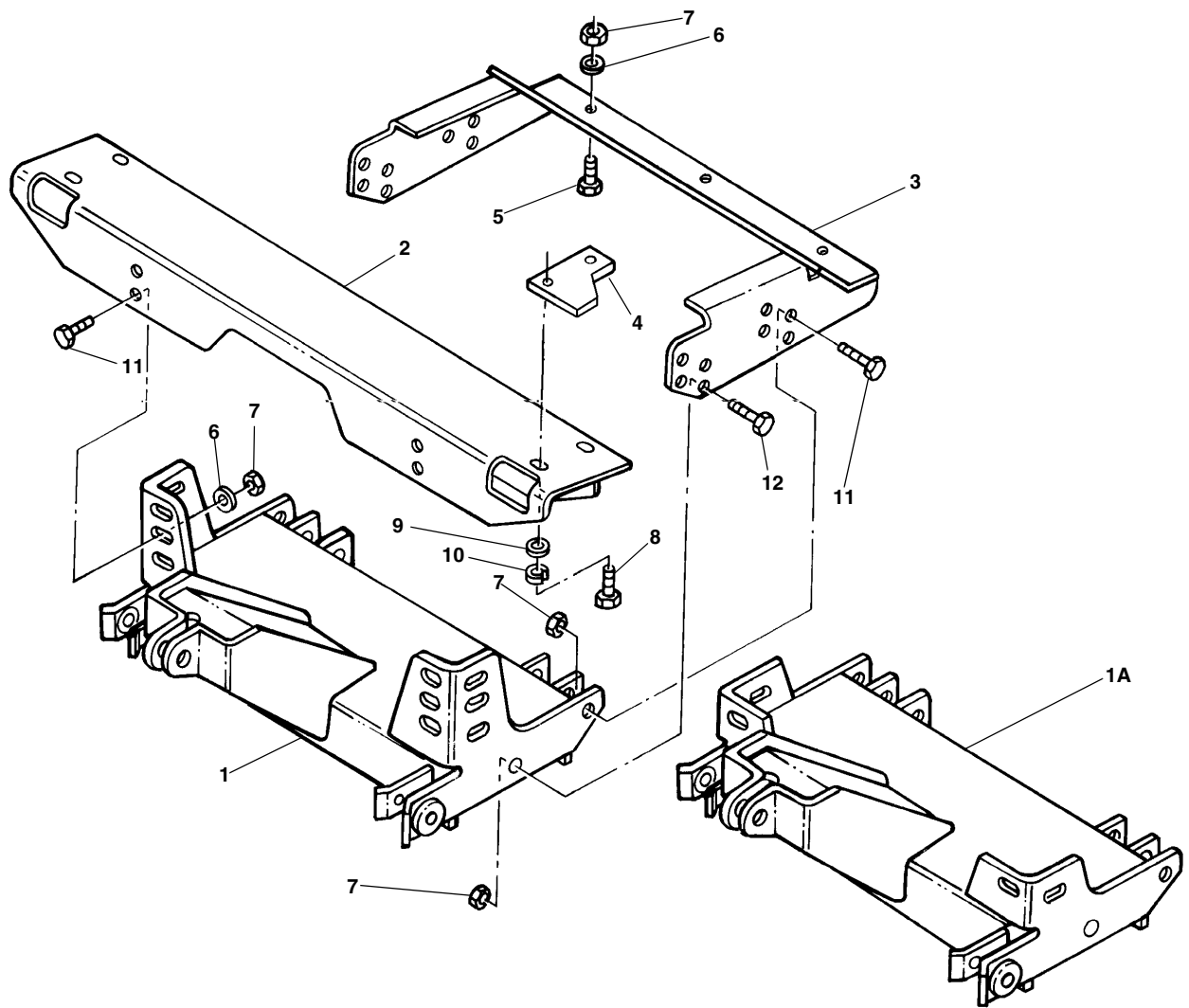
NOTE: Front air dam can be modified to clear subframe by cutting dam to allow clearance for nose of Subframe. To modify air dam measure 2-7/8" from each side of center and remove a section as required from between the marked areas to provide clearance for nose of subframe.

NOTE: In the event of vehicle engine overheating while traveling with the plow attached the CLUTCH FAN ASSEMBLY should be checked by a General Motors Dealer' Service Department per Chevrolet Service Bulletin 6B.

REMEMBER After 5 to 10 hours of snowplow usage, re-torque all cap screws.

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		

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



ITEM	PART NO.	DESCRIPTION	QTY.
1	96103002	Sub-Frame, Nose Piece (96102896)	1
1A	96103001	Sub-Frame, Nose Piece (96102924)	1
2	96100965	Crossmember, Front	1
3	96103429	Crossmember, Rear	1
4	96101691	Plate, Nut.....	2
5	98009041	Cap Screw, Hex Head, 5/8"-11 x 2".....	2
6	98009039	Washer, Flat, 5/8"	6
7	98009038	Nut, Hex, 5/8"-11 Nylock	10
8	98100062	Cap Screw, Hex Head, 1/2"-13 x 2-1/4"	4
9	98009011	Washer, Flat, 1/2"	4
10	98009012	Washer, Lock, 1/2"	4
11	98009115	Cap Screw, Hex Head, 5/8"-11 x 1-1/2"	6
12	98009217	Cap Screw, Hex Head, 5/8"-11 x 3".....	2

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