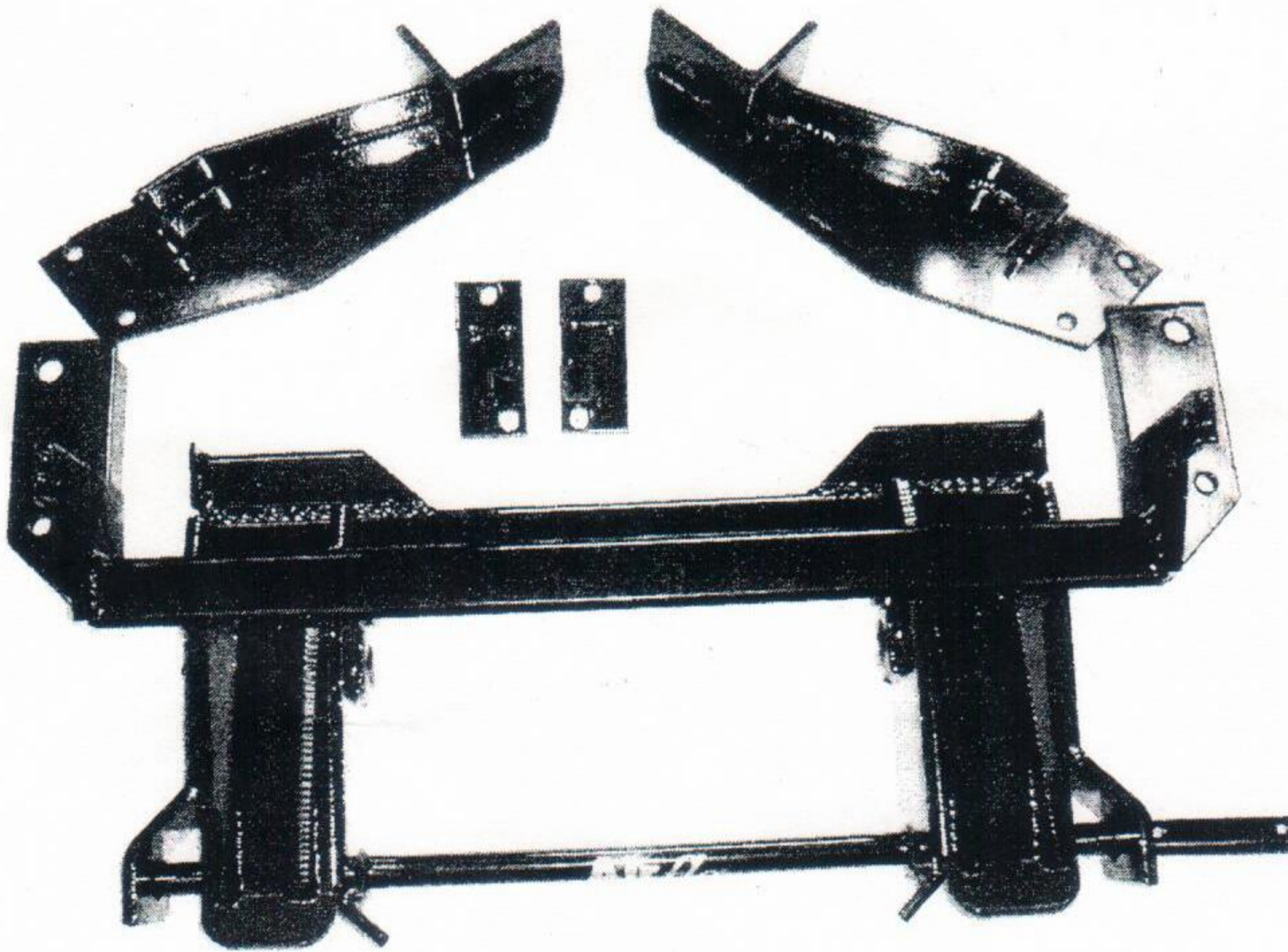




SNOW PLOW

Kit #51019


**Chevy/GMC K2500/3500
VEHICLE MOUNTING KIT PROCEDURE
('03-'07)
(4/WD W/SNOW PLOW PREP PKG ONLY)**





INSTALLATION MANUAL


SAFETY


Safety Precautions

 **CAUTION**
Read owners manual prior to operation or servicing plow.

 **WARNING**
To avoid serious personal injury: Lower blade when vehicle is parked. Be aware of temperature changes which can change hydraulic pressure. In turn, this can cause blade to drop unexpectedly. This may also cause damage to hydraulic components.

 **WARNING**
Including vehicle, blade, and ballast do not exceed GVWR or GAWR. The vehicle rating label is found on the drivers side vehicle door corner post.

 **WARNING**
Before placing vehicle on hoist, remove blade assembly.

 **CAUTION**
Plowing speed should not exceed 10mph and transport speed should not exceed 45mph. Speed should be reduced under adverse travel conditions.

For your personal protection:

-- Batteries produce explosive gases which can cause personal injury. Disconnect the battery before removing or replacing any electrical connections. Always use and wear protective equipment when working around batteries.

-- While operating snow plow airborne noise emission to be below 70 db.

For your personal protection:

-- Wear safety goggles to protect your eyes from gasoline, battery acid and other foreign matter.

-- While working on vehicle or snowplow, make sure clothing, hair or other articles do not become entangled in equipment.

-- Avoid touching hot surfaces such as exhaust pipes, hoses, engine and radiator.

-- Always have a BC rated fire extinguisher available for flammable liquids and electrical fires.

-- Gasoline is highly flammable and gasoline vapor is explosive. Keep all open flames away from gasoline tanks and lines. Clean up any spilled gasoline immediately.

-- Be aware that vehicle exhaust contains deadly carbon monoxide gas. Vent exhaust to outside if operating vehicle in enclosed area.

-- Always inspect hydraulic hoses and components before using snow plow. Replace damaged or worn parts immediately.

-- Do not use your hand to detect a hydraulic fluid leak as hydraulic fluid under pressure can cause skin infection injury. Use a piece of cardboard or wood to detect.

VEHICLE APPLICATION INFORMATION

VEHICLE APPLICATION REQUIREMENTS

- The snow plow when installed on the vehicle must comply with applicable Federal Motor Vehicle Standards (FMVSS).
- The snow plow when installed on the vehicle must comply with the vehicle manufacturers stated gross vehicle and axle weight ratings and front and rear weight distribution ratio.
Note: gross vehicle and axle weight ratings are found on the driver-side door corner post of the vehicle. rear ballast may be required to comply with these requirements in some cases. Refer to ballast requirements Section.
- Representative vehicle equipped with snow plow, all options, and front seat occupants must not exceed vehicle GVWR or GAWR.
- Additional limitations and requirements may apply in some cases.
- Installation, modification, and addition of accessories must comply with Air Flo instructions and recommendations. Loading the vehicle with additional cargo, other truck equipment, or installing snow plow accessories decreases the available capacity.
- The actual vehicle as configured must be weighed if there is any uncertainty to whether available capacity exists.

BALLAST REQUIREMENTS

- When qualifying vehicles for snow plow eligibility, ballast (additional weight) must be considered. To remain compliant with axle ratios and ratings as specified by the vehicle manufacturer, when necessary, rear ballast must be used.
- It is important if ballast is required, that it is secured properly behind the rear axle. Sand bags may be used as a ballast, but must be contained, using a retainer.

**NOTE: DUE TO VARIOUS BUMPER STYLES SOME
BUMPERS and/or AIR DAMS MAY REQUIRE
NOTCHING.**

AIR-FLO SNOW PLOW

MAINTENANCE PROCEDURES

! To reduce friction and wear between moving parts inspect the overall condition of complete snow plow on a regular basis.

- Lubricate all shafts, pivots, and cam lock hitches with low temperature grease.
- To ensure proper connection and conductivity, clean plow harness ends with brake cleaner and coat contacts with white lithium or dielectric grease. Also inspect all chassis plug ends where plow harness plugs into for cleanliness and lubrication. Air-Flo recommends this procedure be completed on the snow plow harness every 25 hours. All other connections need to be serviced every 100 hours.
- Hydraulic hoses, hose ends, connectors, cylinders, and wiring connectors need to be inspected periodically. Any excessive wear or damage requires replacement of all affected components.
- Before the start of each plowing season, it is recommended to change pump fluid using a Dexron automatic transmission fluid. Also installation of the plow and activation of the pump at least once during unused months is recommended.
- To avoid rust or corrosion, any paint chips on plow frame should be touched up with black paint.
- Check all hardware, including nuts, bolts, pins, springs, and spring hardware, making sure they are tight and in good condition. Replace any damaged, worn, or broken hardware or components immediately.
- Check pump reservoir for proper fluid level. Fluid level should be approximately 1/2" below bottom of filler neck. DO NOT OVERFILL.
- Periodically apply # 25004, Air-Flo dielectric grease to all electrical connections.

PRIOR TO INSTALLATION OF YOUR AIR-FLO SNOW PLOW

- ⇒ Read and understand this manual.
- ⇒ Check all cartons for parts prior to installation.
- ⇒ Work in an area large enough to accommodate vehicle, plow, and any movement needed for final attachment.
- ⇒ Have tools available prior to installation.

! CAUTION

When working with the vehicle side wiring, always disconnect vehicle battery.

! CAUTION

The plow assembly is made up of many heavy components. Handle with care and use proper material handling equipment and tools where needed.

* Certain steps require at least two people to complete. The "*" designation will appear when this requirement is essential.

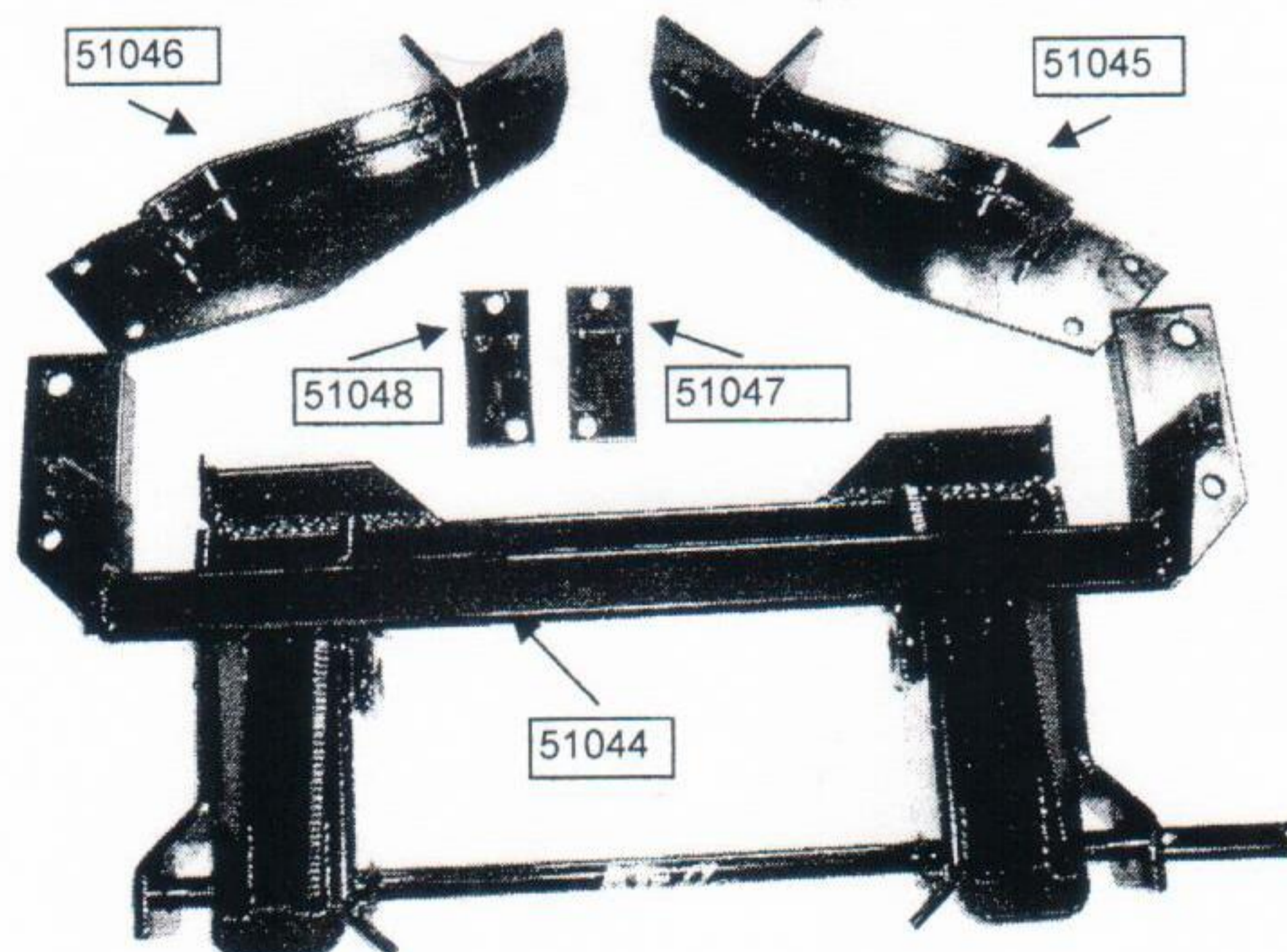
Required Tools:

9/16" Wrench	1/2" Drive Ratchet
15/16" Deep Socket and Wrench	3/8" Drive Ratchet
17/16" Socket and Wrench	Pliers or Vise Grips
3/4" Socket and Wrench	Wire Cutters
5/8" Wrench	Hammer or Mallet
Low Temperature Grease	10" Adjustable Wrench
Safety Glasses	

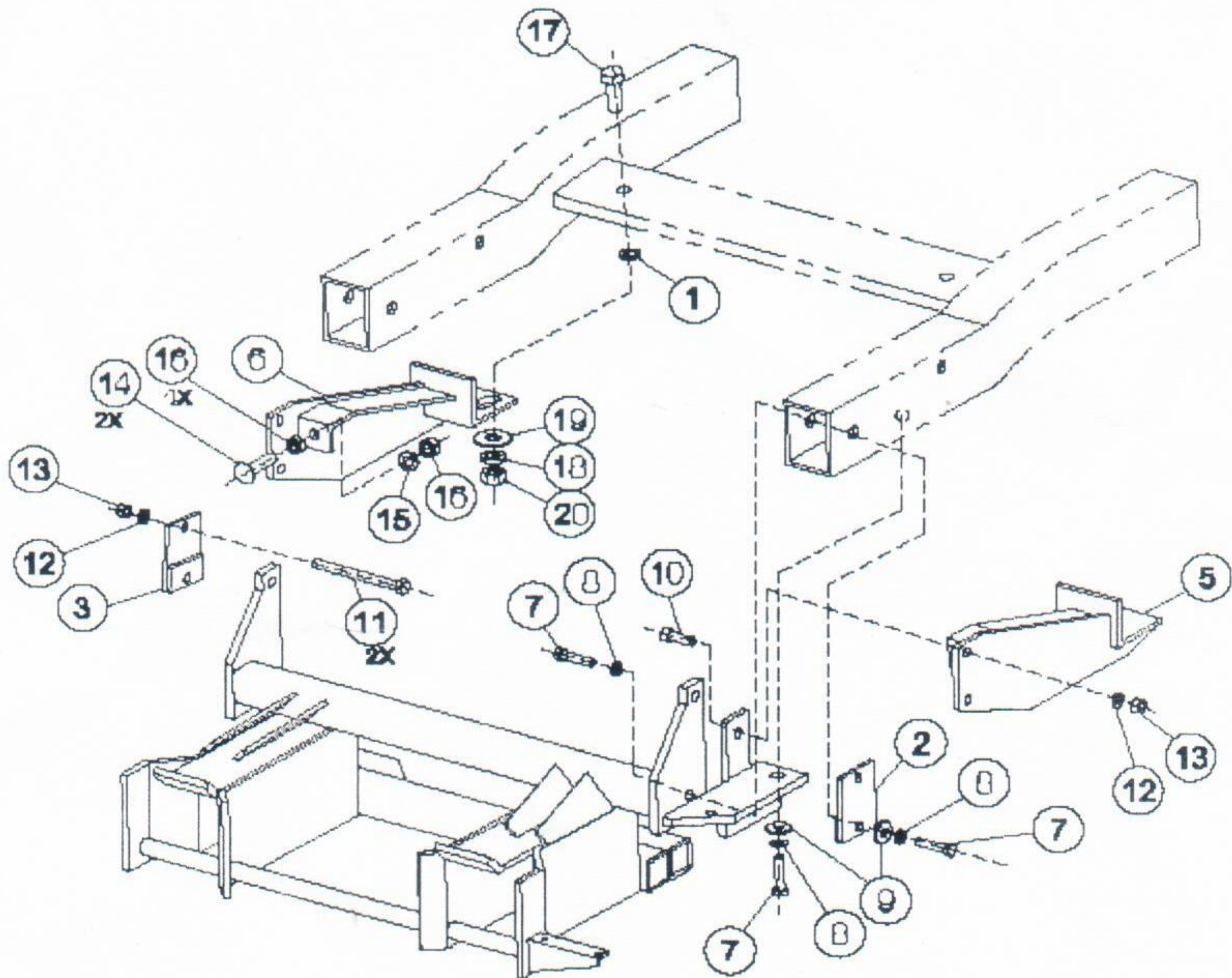
**Vehicle Mounting Kit
03-'07 Chevy/GMC K2500/3500
4WD W/SNOW PLOW PREP PKG.**

Kit #51019

Qty	Part #	Description
1	51044	GM Main Mount
1	51045	Left Side Bracket
1	51046	Right Side Bracket
1	51047	Left Side Bolt Bar
1	51048	Right Side Bolt Bar
1	07195	Headlight Adapter Kit - Chevy
2	01040	Shim Washer 1-1/8"od x 3/4"id x 1/8" thick
6	01027	M12-1.75 x 50 mm Hex Bolt
4	01033	M12 Lock Washer
6	01028	M12 Flat Washer
6	01130	1/2-13 x 1-1/2" Hex Bolt
2	01032	1/2-13 x 5-1/2 Hex Bolt
8	01050	1/2" Lock Washer
8	01078	1/2-13 Hex Nut
2	01029	5/8-11 x 2-1/2" Carriage Bolt
2	01108	5/8" Lock Washer
4	01503	5/8-11 Hex Jam Nut
2	01131	3/4-10 x 2" Hex Bolt
2	01038	3/4" Lock Washer
2	01036	3/4" Flat Washer
2	01039	3-4-10 Hex Nut



ITEM #	QTY	PART#	DESCRIPTION
1	2	01040	SHIM WASHER (1 1/8" OD X 3/4" ID X 1/8" THICK)
2	1	51047	LEFT HAND BOLT BAR SUPPORT
3	1	51048	RIGHT HAND BOLT BAR SUPPORT
4	1	51044	TRUCK MOUNT
5	1	51045	LEFT HAND MAIN BRACE
6	1	51046	RIGHT HAND MAIN BRACE
*7	6	01027	M12-1.75 X 50MM BOLT GT. 10.9, PLATED
*8	6	01028	M12 LOCK WASHER, PLATED
*9	4	01033	M12 FLAT WASHER, PLATED
*10	6	01130	1/2"-13X1 1/2" BOLT, GR. 5, PLATED
*11	2	01032	1/2"-13X5 1/2" BOLT, GR. 5, PLATED
*12	8	01050	1/2" LOCK WASHER, PLATED
*13	8	01078	1/2"-13 HEX NUT, PLATED
*14	2	01029	5/8"- 11 X 2 1/2" CARRIAGE BOLT, GR. 5 PLATED
*15	2	01108	5/8" LOCK WASHER, PLATED
*16	4	01503	5/8"-11 HEX JAM NUT, PLATED
*17	2	01131	3/4"-10 X 2" BOLT, GR.5, PLATED
*18	2	01038	3/4" LOCK WASHER, PLATED
*19	2	01036	3/4" FLAT WASHER, PLATED
*20	2	01039	3/4"-10 HEX NUT, PLATED



K2500 HD-K3500 (4X4 W/ VYU ONLY)
VEHICLE MOUNTING KIT PROCEDURE
PART# 51019

Properly ballasting the vehicle is a very important part of the operating process, making sure not to exceed the Gross Vehicle Weight Ratio (GVWR), AND Front or Rear Gross Axle Weight Ratings. No more than 62% of the total weight of the vehicle including ballast weight, snow plow, driver or any other cargo is to be placed on the front axle.

Step #1: Disconnect running lights and plastic plugs if applicable. Remove the plastic cover between vehicle grill and radiator. Remove vehicle grill and front bumper temporarily. All fasteners and pieces need to be saved to reinstall. To allow for proper installation of receiver trim the center lower plastic valance of the vehicle front bumper 32" long, and 2" down from the seam. Remove the plastic splash shield attached to the vehicle front suspension cross member and the OEM cross tube. Retain three (3) plastic splash shield metric bolts.

Refer to the diagram in installation instructions; trim the plastic splash shield accordingly. (Shield will be used in a later step). Remove (6) metric bolts which secure the tow hooks to the vehicle frame. These bolts will not be reused. Do not remove tow hooks from inside vehicle boxed frame rails. Insert a 3/4" - 10 x 2" bolt down through the outside hole in each end of the cross member of the vehicle front suspension. Thread a 5/8" - 11 hex jam nut the entire length of each of the 5/8" - 11 x 2 1/2" carriage bolts. Insert each carriage bolt/jam nut assembly into the ears on the rear main brace weldments. (Install carriage bolts with the head of each bolt facing toward the front of the vehicle). Install a 5/8"-11 hex jam nut and 5/8" lock washer on each carriage bolt assembly. Finger tighten only. Leave all components loosely secured until all parts have been installed unless instructed to do otherwise.

Step #2: Drivers' Side Main Brace: Place a 1 1/8" OD x 3/4" ID x 1/8" thick shim washer over the 3/4"-10 x 2" bolt down through the drivers' side front suspension cross member. Install the drivers' side main brace positioning the slotted hole of the rear angle bracket over the bolt. Secure using a 3/4" flat washer; 3/4" lock washer, and 3/4"-10 hex nut.

Step #3: Passengers' Side Main Brace: Following the same process used in installing the drivers' side main brace, install the passengers' side main brace.

***Step #4:** Truck Mount: Raise the mounting frame up onto the vehicle frame with vertical mounting brackets between the frame rails. Position the truck mount with the horizontal mounting brackets against the bottom flanges of the frame rails, making sure the rear cross beam is positioned between the two side plates of the rear main brace weldments. Align the lower holes in the vertical brackets with the inner horizontal tow hook bolt holes. Attach by threading 12 mm-1.75 x 50mm bolts with 12mm lock washers into the tow hook bolt holes. Insert a 1/2"-13 x 5 1/2" bolt through the upper hole of each vertical bracket and over the top of the frame rails. Position the upper holes of each bolt bar (drivers' side and passengers' side)

over the end of each ½"-13 x 5 ½" bolt. Secure using ½" lock washers and ½"-13 hex nuts. Align the lower holes of each bolt bar with the outer horizontal tow hook bolt holes. Secure by threading 12mm-1.75 x 50mm bolts (with 12mm lock washer and 12mm flat washers on bolts) into the tow hook bolt holes. Using ½"-13 x 1 ½" bolts, ½" lock washers, and ½"-13 hex nuts, secure the rear cross member of the front truck mount.

Step #5: Tightening and Drilling: Tighten the 12mm bolts that hold the front truck mount to the frame rails and tow hooks. Tighten the ½"-13 x 5 ½" bolts and hex nuts that hold the truck mount to the bolt bars. Tighten the 12mm bolts securing both side bolt bars to the frame rails and tow hooks. Observe the remaining holes in the horizontal mounting brackets. With these as markers, drill a ½" hole up through each frame rail. Place a ½"-13 x 1 ½" bolt into each hole. Secure and tighten using a ½" lock washer and ½"-13 hex nut. Tighten the ¾"-10 hex nuts supporting both main braces to the front suspension cross member of the vehicle. Tighten the ½"-13 hardware which holds the main braces to the rear cross beam of the truck mount. Using three (3) of the OEM metric fasteners, reinstall trimmed plastic splash shield. Using the 5/8"-11 jam nuts, adjust the 5/8"-11 x 2 ½" carriage bolts making sure the carriage bolt heads are secure against the back of the rear cross tube of the truck mount frame. Secure the 5/8"-11 x 2 ½" carriage bolts by tightening the rear 5/8"-11 jam

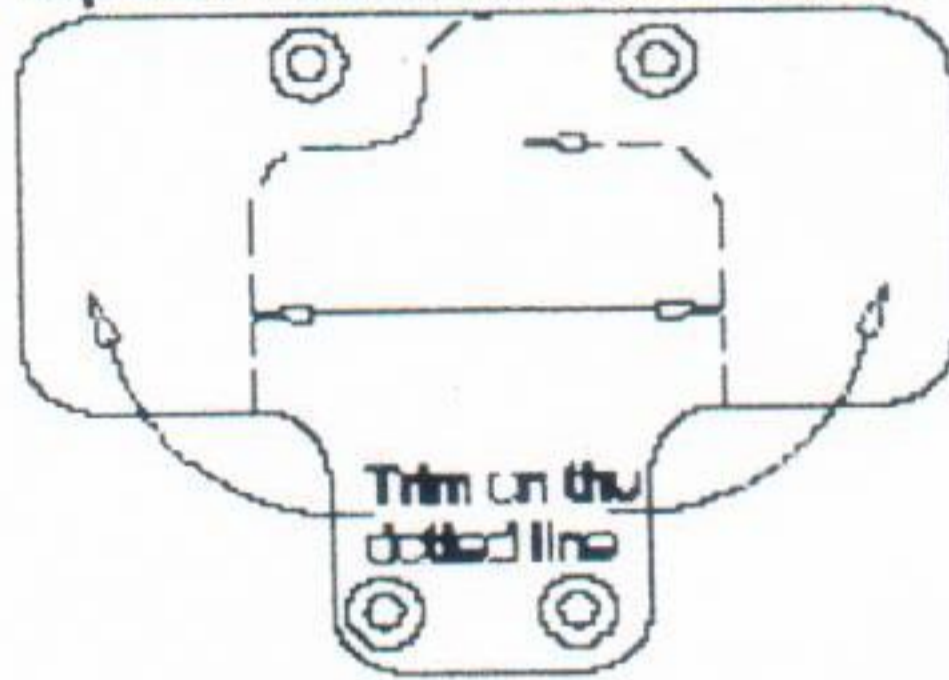
Step #6: Following enclosed instructions, install the vehicle side wiring harness and plow light adapters.

Step #7: Using OEM fasteners reinstall and secure front bumper grill and the plastic cover between the grill and the radiator.

Step #8: Final Inspection: Inspect all mounting attachments and fasteners to confirm they are in place and secure.

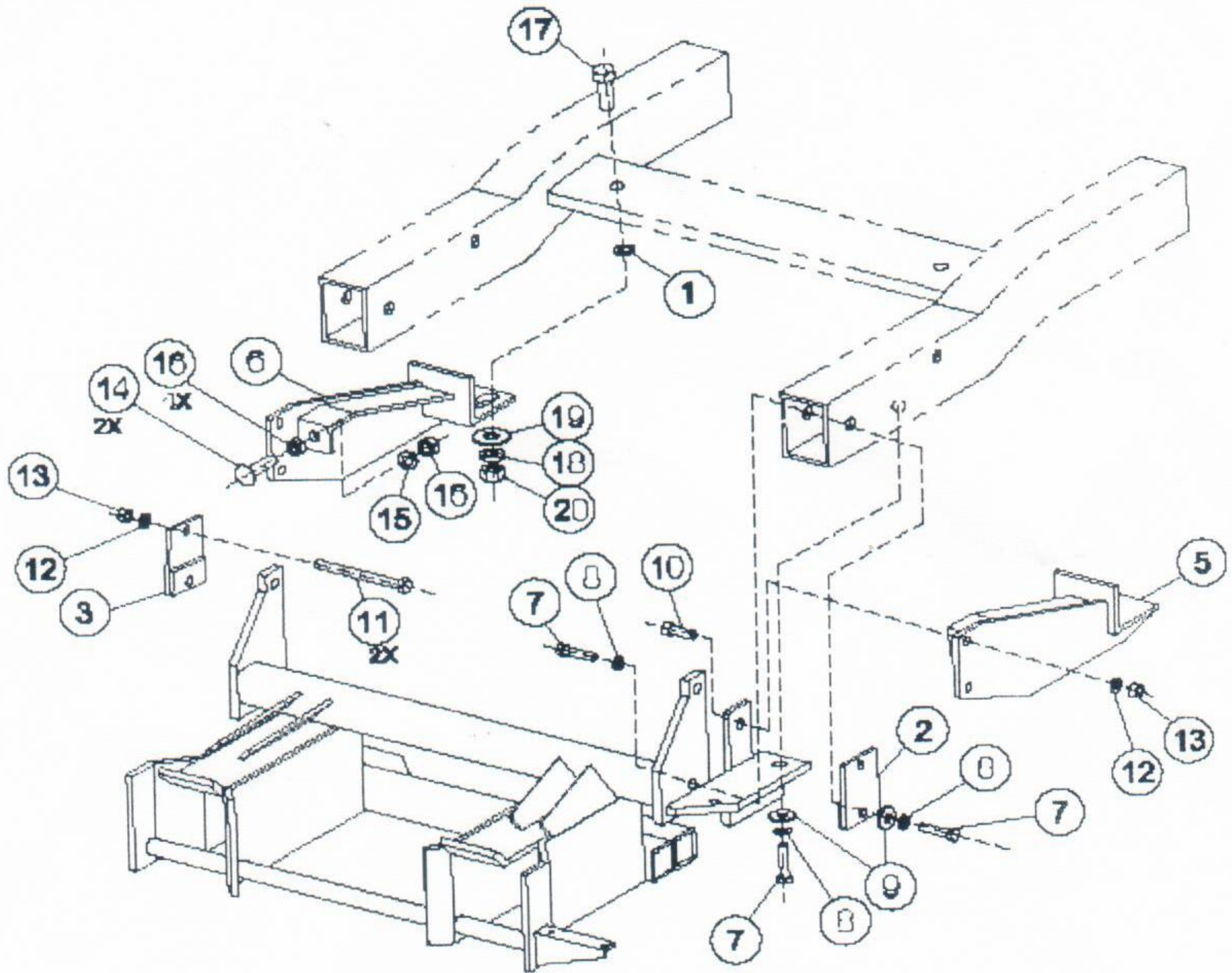
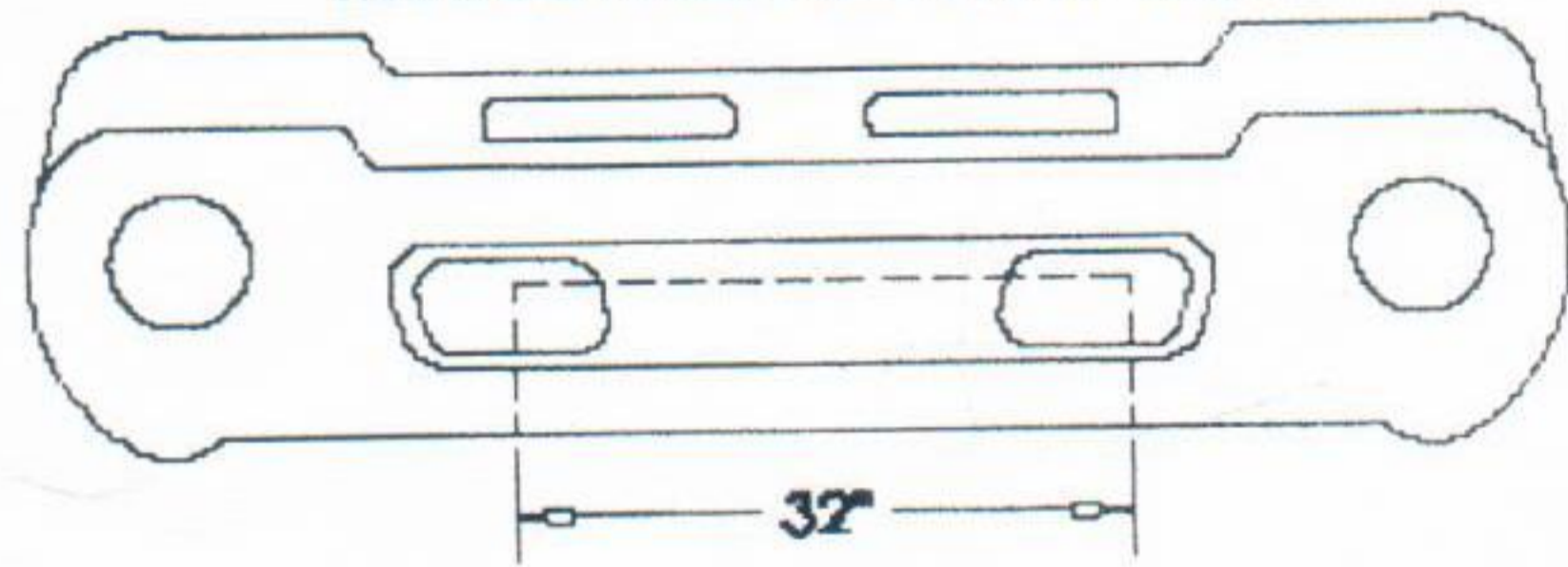
***Denotes two person procedure**

Splash Shield Installation



Lower Front Bumper Modification

Trim Lower Plastic Piece of Front Bumper



QUICKSILVER™ WIRING INFORMATION

- 1.) Use separate power wire (supplied) from battery to large solenoid terminal (one side).
- 2.) Take vehicle side harness- Red Power Wire to large solenoid terminal, opposite power from battery.
- 3.) Black ground wire to any available ground on motor.
- 4.) Connect male 4 prong connector to female 4 prong connector.
- 5.) Connect male 8 prong connector to female 8 prong connector.
- 6.) Connect red fused wire to power source in fuse box.
- 7.) Connect brown wire to small post on solenoid.
- 8.) Using headlight adapters (supplied) connect per instructions.
- 9.) Connect purple wire to drivers' side turning signal, using supplied connector/splice.
- 10.) Connect gray wire to drivers' side parking light, using supplied connector/splice.
- 11.) Connect pink wire to passenger side turning signal wire of truck, using supplied connector/splice.
- 12.) Using relays, (supplied) connect per plugging chart for relays.
- 13.) Take plow side harness, connect to vehicle side harness.
- 14.) Red power wire hook to power post on plow pump.
- 15.) Black ground wire, hook to ground post on plow pump.
- 16.) Connect left plow light to corresponding plug labeled L.
- 17.) Connect right plow light to corresponding plug labeled R.
- 18.) Using Deutsch Connectors, connect to plow pump coils, using coil plugging chart.
- 19.) Connect joystick controller to corresponding plug in vehicle side harness.

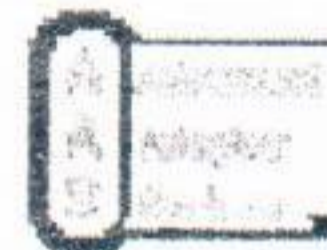
PLUGGING CHART FOR RELAYS

Relay #1 High			Relay #2 Low			Relay #3 Ground		
Pin #	Color	AWG	Pin #	Color	AWG	Pin #	Color	AWG
85	Green /Yellow	18	85	Green /Yellow	18	85	Green /Yellow	18
86	White/Black	18	86	White/Black	18	86	White/Black	18
30	Yellow	16	30	Green	16	30	White/Red	16
87	Yellow/Black	16	87	Green/Black	16	87	White	16
87A	Yellow/Red	16	87A	Green/Red	16	87A	N/A	18



P/N 07195

Headlight Adapter Kit



HEADLIGHT NUMBERS:
H9005, H9006

U.S. 6,396,210 B1

U.S. 6,504,306 B2

U.S. & INTL PATS. PENDING

INSTALLATION AND OPERATING INSTRUCTIONS FOR ADVANCED ADAPTER SYSTEM

ADAPTER INSTALLATION PROCEDURE:

Step #1: Remove existing vehicle headlight connector from the headlight.

Step #2: Plug in (AAS) headlight connector into the vehicle headlight receptacle.

NOTE: If more than one plug is present, match colors of connectors; i.e. Gray to Gray, Black to Black. In Chevy daylight running: Clear to Gray.

Step #3: Plug the existing vehicle headlight connector into the (AAS) headlight adapter.

Step #4: Plug in the Black five pin connector into the White five pin connector on the (AAS) harness.

Final Steps:

1. Check for proper operation of headlights.
2. Check that all wiring is secure.

Note: See your owner's manual for a more detailed description of harness layout.



