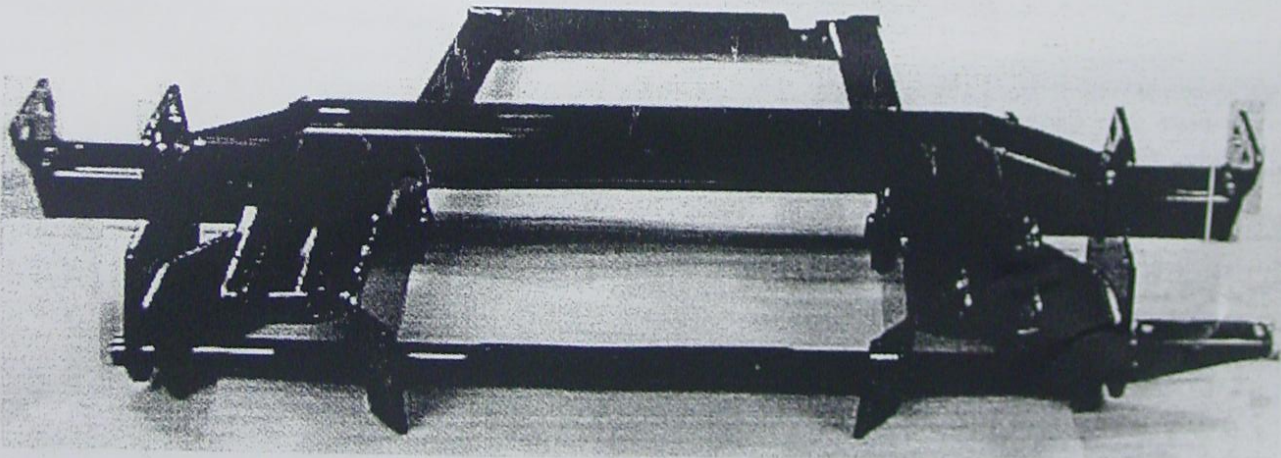




# SNOW PLOW


GM 1500 TRUCK AND TAHOE/YUKON 1500 (NEW STYLE)  
VEHICLE RECEIVER MOUNTING KIT PROCEDURE  
( '07-'08)





*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.

## 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.

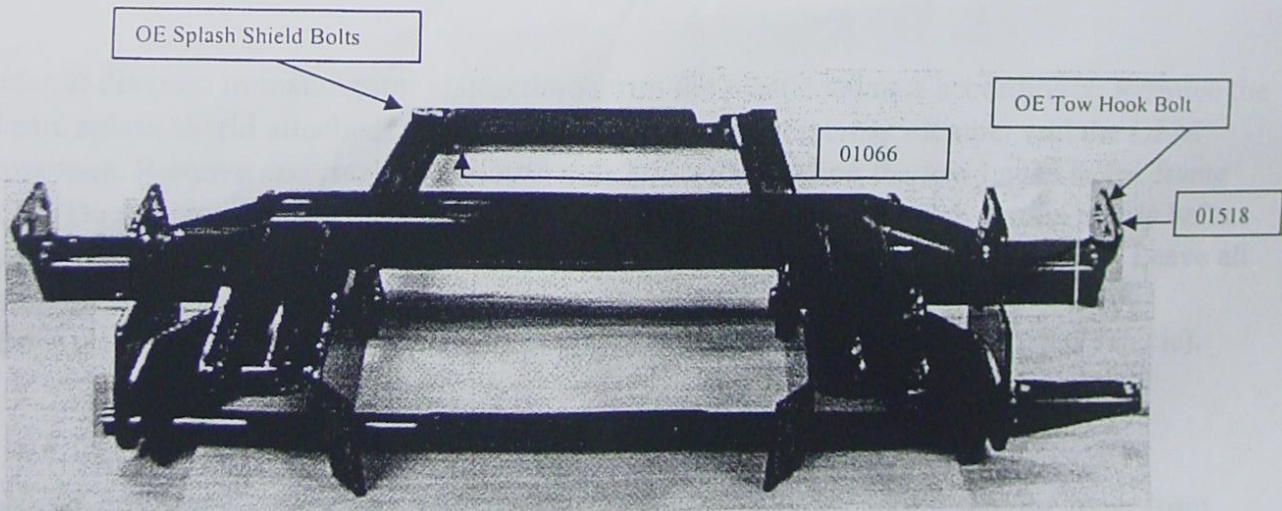
\* Certain steps require at least two people to complete. The "\*" designation will appear when this requirement is essential.

#### 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**  
**07-'08 GM 1500 TRUCK AND TAHOE/YUKON 1500**

Item #	Qty.	Part #	Description
1	2	1499	HEX BOLT 1/4"-20X 3/4"-GR8
2	2	1329	FLAT WASHER 1/4" ZINC
3	2	1042	LOCK WASHER 1/4" ZINC
4	2	1208	LOCK NUT 1/4" -20-GR8
5	2	1066	HEX BOLT 5/8" -11X7" GR5 ZINC
6	2	1108	LOCK WASHER 5/8" ZINC
7	2	1058	FLAT WASHER 5/8" ZINC
8	2	1059	HEX NUT 5/8"-11 ZINC
9	2	1518	HEX BOLT M12-1.75 X 130MM GR10.9Z
10	4	1028	FLAT WASHER M12 ZINC
11	2	1033	LOCK WASHER M12 ZINC
12	2	1521	HEX NUT M12-1.75 ZINC
13	1	7191	LIGHT ADAPTOR KIT

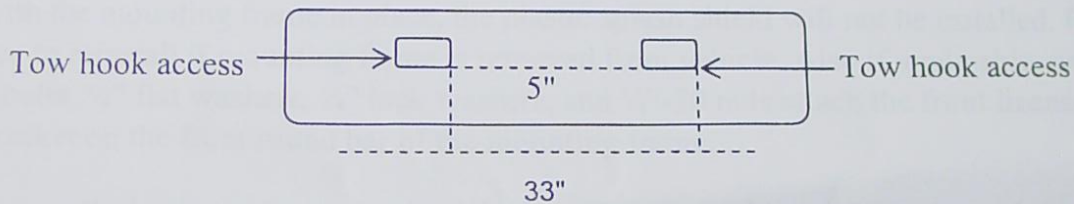


## 2007-GM (NEW STYLE) K 1500 TRUCK AND TAHOE/YUKON 1500 (4X4 W VYU ONLY) VEHICLE MOUNTING PROCEDURE PART# 51085

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 front valance, grill, and bumper cover assembly from the vehicle. 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 from bumper 33" long, and 5" down from the seam. (The section to be removed should line up with the area between the frame rails and up to the base of the steel bumper).

Note: notch is offset for plug mount access.



Refer to diagram in installation instructions; trim the plastic valance accordingly. Remove the plastic splash shield attached to the vehicle front suspension cross member and the OEM cross tube. Remove and retain the metric nuts and bolts holding the tow hooks to the frame rails. (Do not remove two hooks from inside vehicle boxed frame rails). Retain metric bolts as the plastic splash shield will not be reinstalled with the mounting frame in place. Leave all components loosely secured until all parts have been installed unless instructed to do otherwise. (Note: Reinstall plastic splash shield if receiver is ever removed from vehicle).

**Step #2:** \* Raise the front mounting frame up onto the vehicle making sure the inner front vertical ears are located between the vehicle frame rails, the outer vertical ears are located outside the vehicle frame rails and the rear cross angle is located up against the bottom surface area of the front suspension cross member. Align the front holes in the vertical ears

with the front horizontal tow hook bolt holes and insert a 12mm x 1.75 mm x 130mm bolt with 12mm flat washer through the outer ears, frame rails tow hooks, and inner ears on each side of the vehicle. Secure by installing a 12mm flat washer, a 12mm lock washer, and a 12mm x 1.75 nut on each bolt. Insert the original equipment short metric tow hook bolts through the vertical ears, the frame rail bracket and into the tow hook threaded holes. Using two of the original equipment metric splash shield bolts, insert one on each side through the front slotted holes in the rear angle of the mounting frame. These thread into the front suspension cross member through the rear slotted holes in the rear angle of the mounting frame, install a 5/8"-11x7" bolt with 5/8" flat washer. These go through the holes in the upper and lower front suspension cross member. Using a bolting bar, install over the threaded end of each bolt. Secure with 5/8" lock washers and 5/8"-11 nuts.

**Step #3:** Observe the positioning of the mounting frame to make sure it is up against the bottom of the vehicle frame rails and the front suspension cross member and the bolting bars are positioned across the width of the front suspension cross member. Tighten all fasteners including original equipment fasteners. Note: Do not over tighten the 5/8" fasteners as it may cause damage to the front suspension cross member. Also over tightening may result in stripped threads on fasteners.

**Step #4:** Using original equipment fasteners, reinstall the front valance/grill/bumper cover. Note: with the mounting frame in place, the plastic splash shield will not be installed. Retain this piece to reinstall if mounting frame is removed from vehicle. Also if applicable, using 1/4"-20x 3/4" bolts, 1/4" flat washers, 1/4" lock washers, and 1/4"-20 nuts attach the front license plate to the bracket on the front round bar of the mounting frame.

**Step #5:** Install plug into plug mounting bracket using fasteners provided with plug.

**Step #6:** Final inspection: Inspect all mounting attachments and fasteners to confirm they are in place and secure.

**\*Denotes two person procedure.**

with the front horizontal tow hook bolt holes and insert a 12mm x 1.75 mm x 130mm bolt with 12mm flat washer through the outer ears, frame rails tow hooks, and inner ears on each side of the vehicle. Secure by installing a 12mm flat washer, a 12mm lock washer, and a 12mm x 1.75 nut on each bolt. Insert the original equipment short metric tow hook bolts through the vertical ears, the frame rail bracket and into the tow hook threaded holes. Using two of the original equipment metric splash shield bolts, insert one on each side through the front slotted holes in the rear angle of the mounting frame. These thread into the front suspension cross member through the rear slotted holes in the rear angle of the mounting frame, install a 5/8"-11x7" bolt with 5/8" flat washer. These go through the holes in the upper and lower front suspension cross member. Using a bolting bar, install over the threaded end of each bolt. Secure with 5/8" lock washers and 5/8"-11 nuts.

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**Step #5:** Install plug into plug mounting bracket using fasteners provided with plug.

**Step #6:** Final inspection: Inspect all mounting attachments and fasteners to confirm they are in place and secure.

**\*Denotes two person procedure.**



**P/N 07191**

## **Headlight Adapter Kit**



HEADLIGHT NUMBERS:

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.

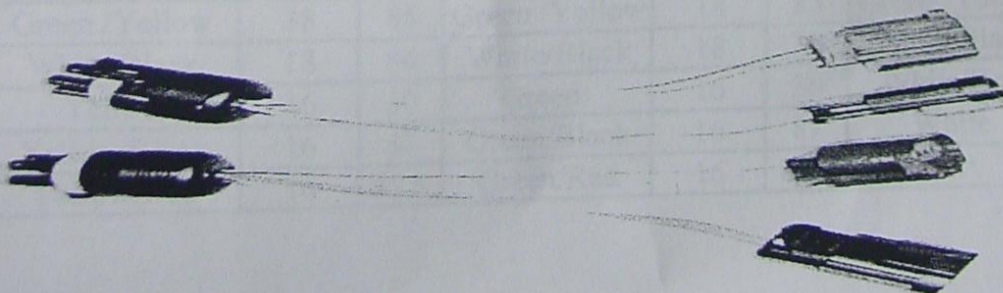
NOTE: If more than one plug is present, match colors of connectors; i.e. Gray to Gray, Black to Black. In Chevy daylight running: Clear to Gray.

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.



## 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