

## TECHNICAL BULLETIN

Tuesday, December 22, 2015

GMC/Chevy 1500, 2016, the vehicle frame is the same as in the past (2007-2015), except the pipe sleeve protrusion - the end of the pipe is welded to the vehicle frame (see Picture #1).

There are two ways of installing mounting kit 53247 (made in period of 2007-2015) on the truck (vehicle frame):

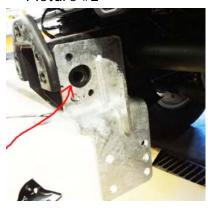
- 1) Due to variances in the vehicle frames, adding the washers under our mounting bracket, it MAY be enough to slide the spreader bar between the mounting brackets, or
- 2) Drilling 2" hole in the bracket (picture #2) to avoid pipe sleeve protrusion. (This modification will be implemented in the mounting kits in 2016).

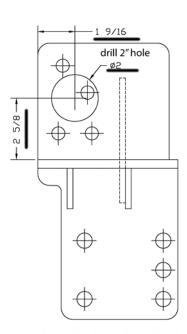
If you have any questions please contact us at: (866) 757-1243 or web@arcticsnowplows.com

Picture #1



Picture #2







# Mounting Kit 53247-MKPB-QLII

## K1500 Sierra/Silverado 4x4 2007-2015

**Models 2007-2013:** For the snowplow lights this kit requires: 800037 (or 800037AXV) Light kit, 800038 Relay Kit and Adapter

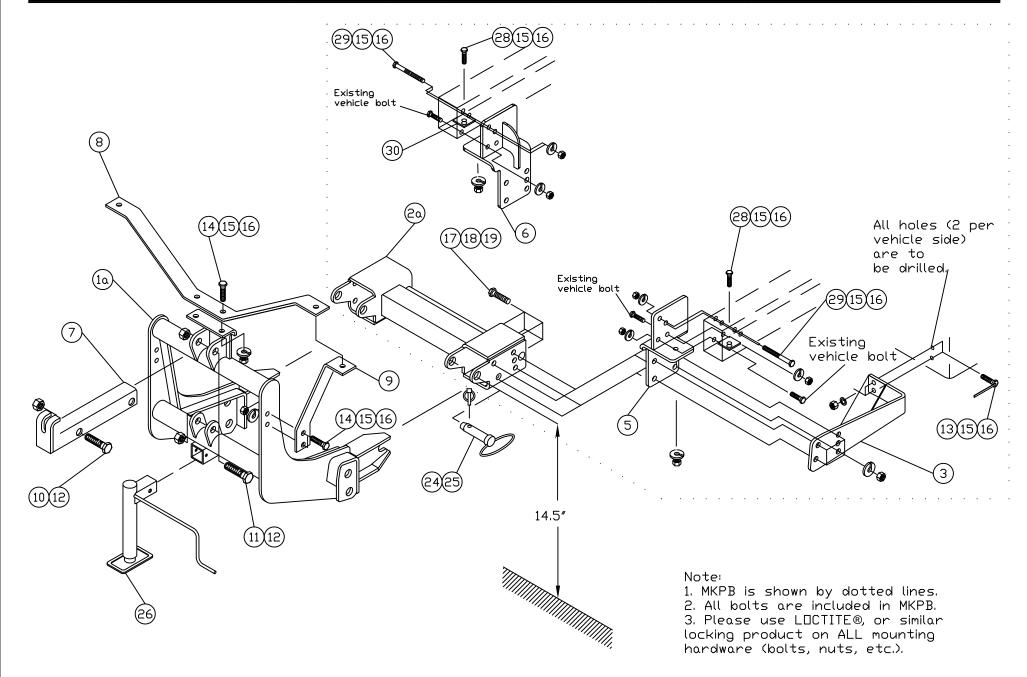
- 800034 (vehicle's bulb H13) GMC Yukon/Denali
- 800042 (vehicle's bulb H9005 (HB3) and H11) Chevy Silverado, Tahoe, Avalanche, Suburban, GMC Sierra)

For models 2014+ light kits: 800084, 800085 & 800086

**For models 2014 -2015 (multiplexing system):** 800081-MPX light adapter for underhood installation, & 800087-MPX for in the front under pump cover

**For model 2016 (multiplexing system):** 800090-MPX-1 light adapter for underhood installation, & 800090-MPX for in the front under pump cover







#### **A** Warning

Arctic Equipment Manufacturing Corporation (Arctic) does not assume liability for damage to your motor vehicle resulting from the attachment or use of an Arctic snowplow. The purchaser assumes all vehicle risk associated with the attachment and operation of this snowplow. The Arctic snowplow you purchase must be used only on vehicles equipped with the manufacturer's snow plow preparation packages. Snow plowing without the original plow preparation package may damage your vehicle. The added weight may impair the operation and control of your vehicle. Snow plowing with a vehicle not recommended for that purpose by the manufacturer may void your new vehicle warranty. If your vehicle is not equipped with an original snow plow preparation package, additional equipment may be necessary before snow plowing. Please consult your vehicle and snowplow dealers prior to the purchase and installation of the snowplow. The installation of such parts however is not a full substitute for the original equipment snowplow preparation package.

The loaded vehicle, including all aftermarket accessories, the snowplow, passengers and cargo, must not exceed the gross vehicle weight ratings (GAWR), front gross axle weight rating (FGAWR) or rear gross axle weight rating (RGAWR) specified on the Safety Compliance Certification Label located in the driver's side door opening. It is the operator's responsibility to verify that these rating are not exceeded. The use of rear ballast weight may be required to prevent exceeding the front GAWR.

To determine the Gross Axle Weights for your vehicle, including all aftermarket accessories, the snowplow, passengers and cargo, take your loaded vehicle and the snowplow to a scale. With the snowplow attached, place the front wheels of the vehicle on the scale to get the front gross axle weight (FGAW). To get the rear gross axle weight (RGAW), place the back wheels of the vehicle on the scale.



#### **Installation Instructions**

Before drilling any holes in the firewall or frame, move brake lines, fuel lines and/or electrical wiring from the path of the drill. Brake and fuel lines must also be clear of any fasteners.

Do not under any circumstances disable, remove or relocate any sensors or other components related to the operation of the air bags.

General order of installation:

- install all components (mounting bracket, thrust arm and spreader bar) and all fasteners finger tight (snug) through existing holes,
- use removable grade LOCTITE #242 on all bolts,
- drill necessary holes and
- tighten all hardware.

After first use, retighten all mounting bolts, thereafter check mounting bolt tightness periodically and at the start of the season.

Before proceeding, read instructions carefully and familiarize yourself with the components and hardware.

NOTE: It may be necessary, on some vehicles, to use a form of load booster to decrease the vehicle's front suspension sag when snowplows is attached to the vehicle. This can be done with the use of, booster springs, supplementary air bags or similar load boosting devices. It is up to the customer to choose and purchase the product that suits this application.

Arctic Equipment Manufacturing reserves the right, under its product improvement policy, to change construction, design details or specifications without notice or without incurring any obligation

#### **Bumper removal for 2014 and newer models**

1. Remove the "the air dam"





2. Remove the top cover from the of the engine compartment.



3. Remove 4 screws



4. Remove four screws attaching the grill to the rad support (4 screws are located under the bumper in approximate location shown on the picture).







5. Remove the two bumper cover screws (see picture below) located on the inside of each front wheel well. If the vehicle is furnished with fender trim, it will need to be displaced in order to access the screws.





6. Release the hidden locking tabs on each side of the vehicle and pull the bumper cover outward.



7. Pull the bumper cover assembly forward to disengage grille tabs and remove the grille.



- 8. Remove the four main bumper fasteners and the single fastener securing the bumper ends to the outer bumper supports. Remove the bumper.
- 9. Remove the center plastic part.





10. Cut inside steel support as shown below.



Inside steel support after.





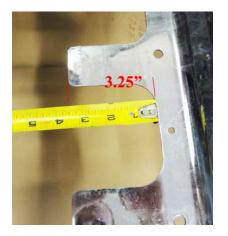
## 11. Cut bottom "Splash Guard" to clear Trust Arms





## 11. Cut a bumper as shown





## 12. Chevy





GMC





|      |              | 53247-MKPB-QLII                             |          |
|------|--------------|---|----------|
| Item | Part #       | Description                                 | Quantity |
| 1a   | 53170-D-GA   | Lift Frame, QUIK*LINK ® II Galvanized       | 1        |
| 1b*  | 53171-D-GA   | Lift Frame, QUIK*LINK ® II-HI<br>Galvanized | 1        |
| 2a   | 52363-C      | Spreader Bar QLII                           | 1        |
| 3    | 53252-01-B   | Thrust Arm, Driver Side                     | 1        |
| 4*   | 53252-02-B   | Thrust Arm, Curb Side                       | 1        |
| 5    | 53248-01-B   | Mounting Bracket, Driver Side               | 1        |
| 6    | 53248-02-B   | Mounting Bracket, Curb Side                 | 1        |
| 7    | 50069-C-GA   | Lift Channel Galvanized                     | 1        |
| 8    | 52209-B-GA   | Light Antler Galvanized                     | 1        |
| 9    | 52208-B-GA   | Light Brace Galvanized                      | 2        |
| 10   | HH-00972-149 | 3/4" x 2½" UNF Cap screw                    | 1        |
| 11   | HH-00972-153 | 3/4" x 3½" UNF Cap screw                    | 2        |
| 12   | HH-00973-007 | 3/4" UNF Thin Collar Lock nut               | 3        |
| 13   | 52575-A      | ½" bolt with 6" welded handle               | 4        |
| 14   | HH-00972-090 | 1/2-20x1.1/2 UNF Cap screw                  | 6        |
| 15   | HH-00460-002 | 1/2-20 Hex nut                              | 16       |
| 16   | HH-00457-001 | 1/2 Lock washer                             | 16       |
| 17   | HH-00972-130 | 5/8-18 x 2 UNF Cap screw                    | 8        |
| 18   | HH-00457-003 | 5/8 Lock washer                             | 8        |
| 19   | HH-00460-001 | 5/8-18 Hex nut                              | 8        |
| 20*  | HH-00293-006 | 1/4" x 1" Cap screw                         | 4        |
| 21*  | HH-00457-006 | 1/4" Lock washer                            | 4        |
| 22*  | HH-00341-002 | 1/4" Flat washer                            | 4        |
| 23*  | HH-00294-001 | 1/4" Hex nut                                | 4        |
| 25   | 52348-M      | Mounting Pin Ass'y                          | 2        |
| 26   | 52373-M      | Jack Assembly                               | 1        |
| 27*  | 50999-B      | Blade guides                                | 1        |
| 28   | HH-00972-091 | 1/2-20x1 3/4 UNF Cap screw                  | 2        |
| 29   | HH-00972-102 | ½-20 x 5 UNF Cap screw                      | 4        |
| 30   | 52569-A      | Frame Plate                                 | 2        |

#### **Installation Instructions**

1. For the bumper removal on 2014 and newer truck models only, refer to instructions above.

For models prior to 2014 models remove the bumper and bottom splash pan (skid plate). Do not remove tow hooks. Note: After installation of mounting kit and spreader bar,



- bumper is going to be reinstalled and bottom plastic part of bumper needs to be cut as shown on the picture below.
- 2. Loosen bolts that are holding tow hooks and remove bracket with two studs (this bracket is not going to be used). Bolts for tow hooks must be turned so that nut is inside. Install mounting brackets as shown using two existing vehicle bolts on driver side and one existing vehicle bolt on curb side. Instead of using bracket with two studs, use ½" x 5" bolts (29), ½" lock washers (15) and ½" hex nuts (16). Do not tighten any hardware until instructed to do so.
- 3. Insert the spreader bar (2a) between mounting brackets (5) and (6). Insert 5/8" x 2 " bolts (17) from inside spreader bar (2a) through mounting bracket holes.
- 4. Install thrust arm(3)(4) (note thrust arm must be installed as shown on the picture with gusset on the top of thrust arm) to the mounting bracket using 5/8" bolt (17), 5/8" lock washer (18) and 5/8" nut (19). Ensure that thrust arms are tight against cross member before drilling 17/32" hole, using 9/16"holes in thrust arm as guide. Insert ½" welded bolt (13) from inside the frame, through the thrust arm (3)(4). Secure using ½" lock washers (15) and ½" hex nuts (16).
- 5. Drill hole on the bottom of mounting bracket and install ½" x 1 3/4" (28) bolt. Before installing bolt insert frame plate (30). Secure bolt with ½" lock washer (15) and ½" hex nut (16). It will be necessary to remove front tow hook bolt to do so.
- 6. Torque all fasteners according to torque chart.
- 7. Reinstall the bumper. Do not reinstall a splash pan. Modify and reinstall a splash pan for 2014 and up models.
- 8. Install the lift frame (1a). Slide inside of spreader bar (2a). Insert mounting pin (25) in the top holes of the spreader bar (2a).
- 9. Install light antler (8) and light braces (9) using ½" x ½" bolts (14), ½" lockwashers (15) and ½" hex nuts (16). Install lights so that the light mounting stud goes through both antler (8) and the brace (9). Tighten all light mounting hardware.
- 10. Install lift channel (7) and front mount pump (from hydraulic kit) or hydraulic cylinder to lift frame (1a)(1b) using 3/4" x 3½" bolts (11) and 3/4" locknuts (12). Use 3/4" x 2½" bolt (10) and 3/4" lock nut (12) to attach lift channel (7) to front mount pump or hydraulic cylinder. Do not over tighten this assembly as it must be able to pivot.
- 11. Use 1/4"x1" bolt (20), 1/4" flat washer (21), 1/4" lock washer (22) and 1/4" hex nut (23) to fasten blade guides (27) to plow.



12. Return any unused items to the customer so that the vehicle can be returned to its original



| Suggested torque value for bolts |              |               |              |               |  |  |
|----------------------------------|--------------|---------------|--------------|---------------|--|--|
|                                  | Grade 5      |               | Grade 8      |               |  |  |
| Thread Size                      | Dry (ft. lb) | Oiled (ft.lb) | Dry (ft. lb) | Oiled (ft.lb) |  |  |
| 1/4-20                           | 8            | 6             | 12           | 9             |  |  |
| 1/4-28                           | 10           | 7             | 14           | 11            |  |  |
| 5/16-18                          | 17           | 13            | 24           | 18            |  |  |
| 5/16-24                          | 19           | 15            | 27           | 21            |  |  |
| 3/8-16                           | 31           | 24            | 44           | 34            |  |  |
| 3/8-24                           | 35           | 27            | 49           | 38            |  |  |
| 7/16-14                          | 49           | 38            | 70           | 54            |  |  |
| 7/16-20                          | 55           | 42            | 78           | 60            |  |  |
| 1/2-13                           | 75           | 58            | 105          | 82            |  |  |
| 1/2-20                           | 85           | 65            | 120          | 90            |  |  |
| 5/8-11                           | 150          | 115           | 210          | 165           |  |  |
| 5/8-18                           | 170          | 130           | 240          | 185           |  |  |
| 3/4-10                           | 270          | 205           | 375          | 290           |  |  |
| 3/4-16                           | 295          | 230           | 420          | 320           |  |  |
| 7/8-9                            | 395          | 305           | 605          | 455           |  |  |
| 7/8-14                           | 435          | 335           | 670          | 515           |  |  |
| 1-8                              | 590          | 455           | 905          | 695           |  |  |
| 1-14                             | 660          | 510           | 1030         | 785           |  |  |

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