

## Mounting Kit 53260-MKPB-QLIV

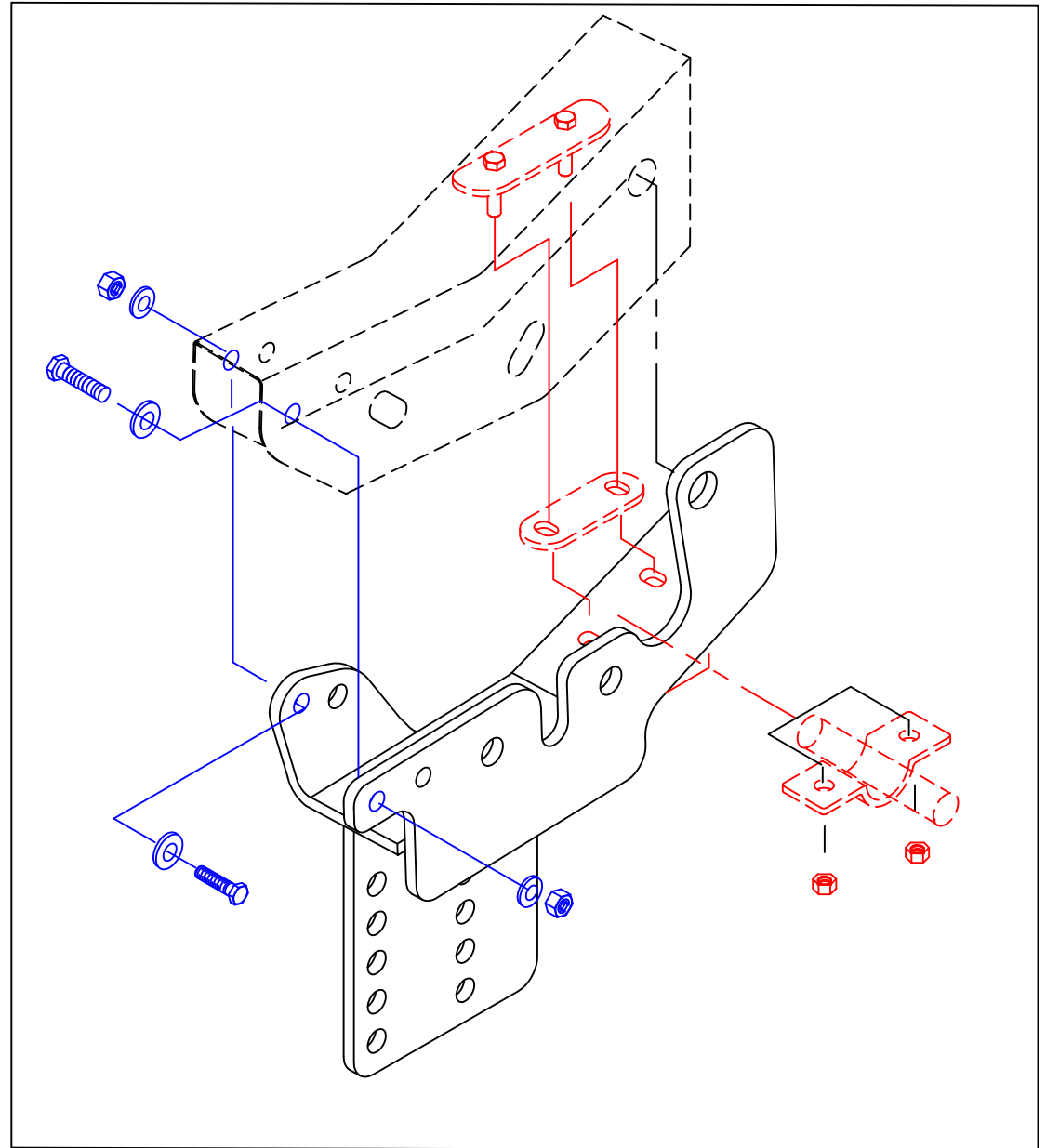
F250 Super Duty 4x4 2008-2016  
F350 Super Duty SRW 4x4 2008-2016  
F350 Super Duty DRW 4x4 2008-2016  
F450/550 Super Duty 2008-2016

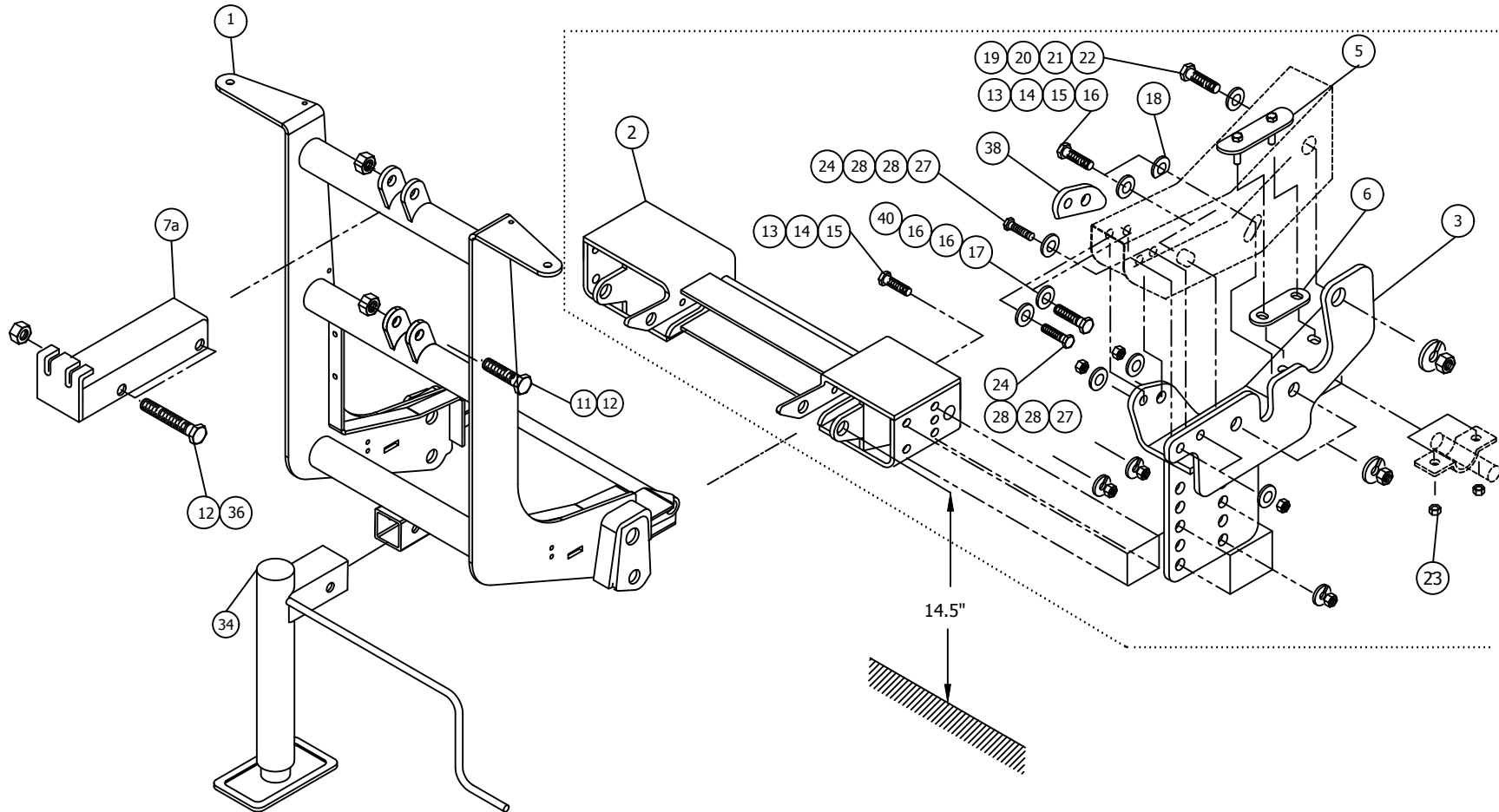
- For snowplow lights (2008-2015), this kit requires:  
800084, 800085 or 800086 light kit,  
53617-M wiring kit and 800034 Adapter kit (vehicle's headlamp bulb H13).
- For 2016, this kit requires:  
800084,800085 or 800086 Light kit,  
800034-MPX light adapter for Halogen bulb H13,  
800088-MPX light adapter for LED lights.

***See TECHNICAL BULLETIN on the last page for Snowplow Headlamp Control with Smart Junction Box –Ford Superduty 2008***

## First steps of installation:

1. Install  $\frac{1}{2}$ " **bolts** to swing the mounting bracket against the vehicle frame. Snug  $\frac{1}{2}$ " nuts.
2. Install **the inside plate** and **the spacer plate** between the mounting kit and the vehicle frame and secure it with  **$\frac{7}{16}$ " lock nuts**. **Snug** this assembly with the sway bar attached.
3. Install a spreader bar using 4 x  $\frac{5}{8}$ " bolts per side. Snug  $\frac{5}{8}$ " nuts.
4. **TIGHTEN**  $\frac{7}{16}$ " nuts (the sway bar bracket to the the mounting bracket).
5. Install rest of bolts as per instructions.





- Note:
- 1. MKPB is shown by dotted lines.
  - 2. All bolts are included in MKPB
  - 3. Please use LOCTITE®, or similar locking product on ALL mounting hardware (bolts, nuts, etc.).

53260-MKPB-QLIV			
Item	Part #	Description	Quantity
1	53517-D	Lift frame, QUIK*LINK®IV- Hi boy	1
1a*	53564-D	Lift frame, QUIK*LINK®IV- Low mount	1
1b*	53171-D-GA	Lift frame, QUIK*LINK® II-Hi boy	1
1c*	53424-D	Lift frame, QUIK*LINK® II- Low mount	1
2	53507-C	Spreader Bar QLIV	1
2a*	52364-C	Spreader Bar QLII	1
3	53261-B	Mounting Bracket DS	1
4*	53262-B	Mounting Bracket CS	1
5	53268-01-A	Inside Plate (with 7/16" Bolts)	2
6	53269-M	Spacer	2
7*	50069-C-GA	Lift Channel (1 1/2" cylinder)	1
7a	52612-B-GA	Lift Channel (2" cylinder)	1
8*	52209-B-GA	Light Antler	1
9*	52208-B-GA	Light Brace	2
10*	HH-00972-149	3/4" x 2 1/2" UNF Cap screw	1
11	HH-00972-153	3/4" x 3 1/2" UNF Cap screw	2
12	HH-00973-007	3/4" UNF Thin Collar Lock nut	3
13	HH-00972-130	5/8" x 2" UNF Cap screw	12
14	HH-00457-003	5/8" Lock washer	12
15	HH-00460-001	5/8" UNF Hex nut	12
16	HH-00341-008	5/8" Flatwasher	6
17	HH-00540-002	5/8" Lock nut, Nylon Insert	2
18	53272-A	5/8" Washer Modified	2
19	HH-00972-164	7/8" UNF x 2" Cap Screw	2
20	HH-00460-009	7/8" Hex Nut	2
21	HH-00341-010	7/8" Flatwasher	2
22	HH-00457-901	7/8" Lockwasher	2
23	HH-00540-099	7/16" Hex nut	4
24	HH-00972-090	1/2" x 1 1/2" UNF Cap screw	10
25*	HH-00457-001	1/2" Lock washer	6
26*	HH-00460-002	1/2" Hex nut	6
27	HH-00540-004	1/2" Lock Nut, Nylon Insert	6
28	HH-00341-006	1/2" Flat Washer	16
29*	HH-00293-006	1/4" x 1" Cap screw	4
30*	HH-00457-006	1/4" Lock washer	4
31*	HH-00341-002	1/4" Flat washer	4
32*	HH-00294-001	1/4" Hex nut	4
33*	52348-M	Mounting Pin Assembly	1
34	52373-M	Jack Assembly	1
36	HH-00972-155	3/4" x 4" UNF Cap screw	1
38	53267-01-B	Spacer	2
39*	HH-00972-089	1/2" x 1 3/4" UNF Cap Screw	2
40	HH-00972-129	5/8" x 1 3/4" UNF Cap screw	2

**⚠ 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, re tighten 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.

1. Remove bumper from truck. Remove four bolts that hold sway bar to the vehicle frame (these bolts/nuts will not be used - store in a safe place to return vehicle to stock settings after mounting kit is removed). Hoses and electrical lines must be moved away from the frame on curb side of the vehicle frame.

2. Insert inside plate (5) in a vehicle frame. Install a mounting brackets (3) (4) using front 1/2" bolts, lock nuts and flat washers (24, 28, 27). Snug 1/2" nuts. This will allow bracket to swivel up into place.

With spacer (6) installed between mounting bracket (3) (4) and vehicle frame, swing the mounting bracket into place. Reinstall sway bar and sway bar bracket and secure loosely with 7/16" lock nuts (23).

Note: If there is space between mounting bracket and vehicle frame use spacer (38).

3. Install spreader bar (2) using 8 x 5/8" bolts, nuts and lock washers (13, 14, 15). Snug 5/8" nuts. The spreader pin hole should be 14 1/2" (+/- 1/2") off of the ground.

4. Tighten 7/16" hex nuts (23) – the sway bar bracket to mounting bracket.

5. Install remaining bolts as shown on the drawing. Please note location of 5/8" flat washer modified (18) located inside of frame, one per side.

6. Install all bolts from the inside of vehicle frame and secured with nuts outside of frame.

7. Torque all fasteners according to torque chart.
8. Remove the plastic screw, that holds hoses and lines, and add three ½" washers over the screw (only curb side). Reinstall screw in the same hole and secure lines (wrap) with cable tie. See pictures below. Hose and lines must be away from the vehicle frame. If necessary, use silicone to avoid any interference between lines and vehicle frame.



9. Reinstall bumper. Install lift frame (1). Slide inside of spreader bar (2).
10. Install lift channel (7a) and hydraulic cylinder to lift frame (1) using ¾" x 3½" bolts (11) and ¾" locknuts (12). Use ¾" x 4" bolts (36) and ¾" lock nuts (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 ¼"x 1" bolt (29), ¼" flat washer (31), ¼" lock washer (30) and ¼" hex nut (32) to fasten blade guides to plow.
12. Return any unused items to the customer so that the vehicle can be returned to its original condition if the snowplow is removed.
13. See separate installation instructions for the hydraulic power unit, wiring and controls.



Suggested torque value for bolts				
Thread Size	Grade 5		Grade 8	
	Dry (ft. lb)	Oiled (ft.lb)	Dry (ft. lb)	Oiled (ft.lb)
¼-20	8	6	12	9
¼-28	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
½-13	75	58	105	82
½-20	85	65	120	90
5/8-11	150	115	210	165
5/8-18	170	130	240	185
¾-10	270	205	375	290
¾-16	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

Arctic Equipment Manufacturing Corporation reserves the right under its product improvement policy to change construction or design details and furnish equipment when so altered without reference to illustrations or specifications used herein.



# TECHNICAL REPORT



T07-11

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## SVE BULLETIN

### SPECIAL VEHICLE ENGINEERING – BODY BUILDERS ADVISORY SERVICE

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Bulletin: Q-155-R1

Date: February 28, 2007  
Revised: April 20, 2007

## Snowplow Headlamp Control with Smart Junction Box

**Addressed To:** Snowplow manufacturers and their suppliers of headlamp control systems.

**Models Affected:** 2008 Model Year F250/350/450/550

### **SPDJB: System Description**

Smart Power Distribution Junction Box (SPDJB or SJB) was incorporated in the 2008 model year F250/350/450/550. Its job is to provide protection against excessive current loads, typical of a short circuit, by shutting down circuit function. The "low-beam" circuit (or "auto-lamps" if so equipped) is protected by SPDJB integrated circuit strategy that shuts down headlamp function when it detects excessive, predetermined, current levels (i.e. larger than a 55-watt bulb load) or short-to-ground.

### **The Affect on Aftermarket Snowplow Headlight Systems**

The SJB strategy may interpret the switching between Ford headlamps and aftermarket snowplow headlamps, and vice-versa, as a short-to-ground, causing the power feeding a headlamp circuit through the SJB to be turned off. The following are examples of normal snowplow headlamp activity where this may occur.

- Disconnecting the snowplow headlamp connector for a functional-test during installation. If wired for "automatic" operation then the snowplow headlamp current is immediately diverted to the Ford headlamps. SPDJB interprets the immediate in-rush current to a cold Ford lamp as a short-to-ground.
- If wired for "manual" operation, identified by a separate aftermarket headlamp switch, then any switching between the Ford and snowplow headlamps after one headlamp system has already been illuminated through the SJB will trigger a shut-down.
- Normal daily snowplow hook-up if Ford headlamp is ON in "low-beam" (or "auto-lamps" active if so equipped).

### **The Effect of an SPDJB Shut-down Event**

- Full Ford headlamp function can be restored by turning the Ford headlamp switch off and back on again. However, a short-to-ground DTC code is flagged and will not clear until approximately 80 key-on ignition starts. The codes are B2A2F (right-front low-beam) and B2A31 (left-front low-beam). Also, the event is stored and after 200 events a Ford dealer will be required to clear codes and return normal headlamp switch function. This repeats at 400 events, and at 600 events the SJB will require replacement.
- Open circuits will not have an affect on SJB diagnostics during normal operation.

### **Solution**

On 04/23/07, customers may have their Ford dealer reprogram the Smart Junction Box (SJB) with a new calibration using Technical Service Bulletin TSB 07-09-01. After reprogramming no other operator intervention is required. New vehicles from KTP with "Snowplow Prep Package Option" (Order Code 473), or "Snowplow/Camper Prep Option", and with a build date of 4/18/07 or later, already have this new calibration included.

NOTE: Relay-driven functions such as the Ford high-beams or park-lamps are not monitored by SJB control strategy. Therefore, if required prior to applying the TSB, the snowplow can still be used because the SJB will not affect snowplow headlamp operations with the Ford headlamp switch in either the "OFF" position, or "ON" in park-lamp position, or "ON" with high-beams activated.

Originator: Mike Duvall/hduvall  
Q155R1.doc

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