



Bushtec Trailer Hitch for BMW K1200LT
Installation Instructions

READ ALL INSTRUCTIONS BEFORE YOU START

ATTENTION INSTALLER: THESE INSTRUCTIONS MUST BE
GIVEN TO THE END USER!!!

BMW NORTH AMERICA HAS NEITHER APPROVED OR ENDORSED BUSHTEC MFG. & SALES INC., ITS PRODUCTS, TRAILERS OR HITCHES. USE OF A TRAILER OR TRAILER HITCH ON ANY MOTORCYCLE COULD VOID YOUR WARRANTY AND MAY INCREASE YOUR CHANCES OF INJURY IN AN ACCIDENT SITUATION.

Important information is distinguished by the following notation:

NOTE: Provides key information to make procedures easier and clearer.

CAUTION: Indicates special procedures that must be followed to avoid damage to the motorcycle, trailer or accessories.

WARNING: Indicates special procedures that must be followed to avoid injury to a motorcycle operator or others.

WARNING: THIS TRAILER HITCH HAS BEEN EXCLUSIVELY DESIGNED FOR USE ONLY ON A STOCK BMW K1200LT, IT WILL NOT WORK ON ANY OTHER MOTORCYCLE. ANY MODIFICATION TO ANY PART OF THIS HITCH, INCLUDING BUT NOT LIMITED TO ALTERING THE SUPPLIED HARDWARE OR IMPROPER INSTALLATION COULD CAUSE INJURY OR DEATH AND IMMEDIATELY VOIDS ANY AND ALL WARRANTIES.

WARNING: INSTALLATION OF THIS HITCH SHOULD BE PERFORMED BY A QUALIFIED MECHANIC, THESE INSTALLATION PROCEDURES ARE ONLY A GUIDE AND SHOULD BE USED IN CONJUNCTION WITH THE FACTORY SERVICE MANUAL.

WARNING: THE END USER OF THIS PRODUCT ASSUMES ALL LIABILITY AND RESPONSIBILITIES THAT MAY ARISE DUE TO BUT NOT LIMITED TO, NEGLIGENCE FROM IMPROPER INSTALLATION OR USE, INCLUDING OVERLOADING, EXCEEDING THE RECOMMENDED LOAD LIMITS AND IMPROPER MAINTENANCE.

CONTENTS:

1	Hitch	2	3/8"-16 Nylock Nut
2	Rear Support Strut	2	8mm x 45mm SS Hex Head Bolt
1	Rear Support Plate	1	10mm x 80mm SS Hex Head Bolt
4	1/4"-20 x 1 1/2" U-bolt	2	Short Chrome Spacer (1/2")



4	U-bolt Back Plate	1	Long Chrome Spacer (1 3/8")
8	1/4"-20 Nylock Nut	1	Isolator Package (Hardware Included)
2	5/16"-18 x 3/4" Grade 8 Hex Head Bolt	1	.2oz Blue Loctite 242
2	5/16"-18 Nylock Nut	1	1/4" Safety Chain Quick Clip & Hitch Pin
2	3/8"-16 x 1" Grade 8 Hex Head Bolt		Adapter W/ Nut & Lock(Bushtec Only)

TOOLS NEEDED FOR INSTALLATION:

FACTORY SERVICE MANUAL

1/2" Wrench & Socket

9/16" Wrench & Socket

17mm Socket

13mm Socket

7/16" Socket

1 1/16" Socket (Hitch Pin Nut)

10mm socket

5mm Allen Head Socket

6mm Allen Head Socket

8mm Allen Head Socket

T25 TORX Wrench

3mm Allen Wrench

Ratchet w/ extensions

Torque Wrench

Pliers

Wire Cutters

Crimping Tool

Test Light or Multi-meter

3/4" Masking Tape (Hitch Pin Only)

Wire Ties (optional)

Electrical Tape (optional)

A Helping Hand (recommended)

Crescent Wrench

WARNING: THESE STEPS MUST BE PERFORMED IN THE FOLLOWING ORDER:

1. Place the motorcycle on its centerstand on level ground and lift the front seat. Remove the (2) bolts that hold the rear seat in place with a 5mm Allen wrench. Remove the seat and set it aside.
2. Lift the trunk lid and have your assistant hold it open, Remove the screw that hold the retractable cord in place and let the cord retract into its reel. **CAUTION: DO NOT LET THE LID FALL FORWARD, DAMAGE MAY OCCUR.**
3. Remove the liner in the bottom of the trunk and remove the (4) bolts that hold the trunk to the frame using the 5mm Allen wrench. Close and latch the trunk lid then locate and disconnect the (2) plugs that connect the trunk to the motorcycle. Lift the trunk off the motorcycle and set it aside.
4. Remove the (2) T25 TORX screws from the front and the (4) bolts (4mm Allen Socket) from the rear of the black panel that is covering the rear (top) of the motorcycle and set it aside.
5. Open both saddlebag lids and remove the (2) T25 TORX screws that hold the black license plate panel to the rear of the motorcycle then remove the plate panel and set it aside. Remove the (2) bolts that hold the taillight in place using a 10mm socket (located on the left and the right of the motorcycle just inside the saddlebags), and unplug and remove the taillight. Remove the (2) 3mm Allen head screws from the top of the rear panel and the (8) remaining T25 TORX screws (3 on either side and 2 under the license plate panel).
6. Disconnect the taillight plug from the rear panel and remove the panel. **NOTE: YOU WILL NEED TO PUSH THE RUBBER GROMMET OUT THE BACK OF THE PANEL TO COMPLETELY REMOVE IT.**
7. Install the rear support plate onto the frame using the supplied (8) 1/4"-20 Nylock nuts, (4) 1/4"-20 x 1 1/2" U-bolts and (4) U-bolt back plate. Place the (4) U-bolts around the frame as seen in photo #1 (it may be necessary to spread the U-bolts slightly to fit around the frame). Set the rear support plate onto the rear of the frame and run the U-bolts through it. Install the backing plates and 1/4"-20 Nylock nuts to each U-bolt as seen in photo #2. **DO NOT TIGHTEN AT THIS TIME.**



8. Remove the (2) 6mm Allen head socket bolts and (1) 8mm Allen head socket bolt located below and to the rear of the drivers foot peg. Photo #3
9. Run the (2) supplied 8mm hex head bolts (forward holes) and the (1) supplied 10mm hex head bolts (rear hole) through the hitch then slide the supplied chrome spacers onto the bolts. (short spacers onto the 8mm bolts and the long one onto the 10mm bolt) Photo #4
10. Lift the hitch into position and thread the three button head bolts into the motorcycle. Run these bolts down until their snug and support the weight of the hitch. **DO NOT TIGHTEN AT THIS TIME.**
11. Install the (2) rear support struts onto the rear of the support plate using the supplied 3/8"-16 x 1" bolts. **DO NOT TIGHTEN AT THIS TIME.**
12. Looking at the motorcycle from the rear, cross the left strut under the right strut and attach it to the rear of the right hitch tab using the supplied 5/16"-18 x 3/4" bolt and Nylock nut. Cross the right strut over the top of the left strut and attach it to the front of the left hitch tab using the remaining 5/16"-18 x 3/4" bolt. (photo #5) **DO NOT TIGHTEN AT THIS TIME.**
13. Tighten the (8) 1/4"-20 Nylock nuts on the rear support plate until there is an equal length of thread showing on each U-bolt. **CAUTION: DO NOT OVERTIGHTEN THESE NUTS, IT IS POSSIBLE TO CRUSH THE FRAME TUBING!**
14. Tighten the (2) 8mm and (1) 10mm hex head bolts on the front of the hitch. **CAUTION: THIS STEP IS NOT FINAL, THESE (3) BOLTS WILL BE REMOVED AGAIN LATER TO APPLY LOCTITE.**
15. Tighten the (2) 3/8"-16 x 1" (upper) and (2) 5/16"-18 x 3/4" (lower) strut bolts using a 9/16" socket and wrench for the upper bolts and a 1/2" socket and wrench for the lower bolts.
16. Check all the hardware on the rear of the hitch assembly for tightness. The three front bolts should not have been completely tightened yet. At the point, you will need to remove those bolts **ONE AT A TIME** and apply the supplied LOCTITE to the manufacture recommendation and re-torque the bolts to the specifications in the factory service manual.

Installation of the hitch is now complete. You will reassemble the motorcycle after the following hitch pin and wiring installation instructions. If you are using this hitch for anything other than a Bushtec trailer, you will need to purchase the appropriate size ball and safety chain plate for your application, which are available from your local parts store. Installation and maintenance of these parts should be performed in accordance with their manufacture instructions.

HITCH PIN ADAPTER INSTALLATION (AND STANDARD BALL)

WARNING: USE OF A TRAILER BALL ON THIS HITCH REQUIRES A SAFETY CHAIN PLATE, DO NOT ATTEMPT TO USE THE 5/16" SLOT ON THE REAR OF THE HITCH PLATFORM OR ANY OTHER AREA OF THE HITCH!

1. Install the appropriate size ball and safety chain plate to their manufactures recommendation.

WARNING: DO NOT EXCEED THIS HITCH'S MAXIMUM WIEGHT-RATING OF 500LBS GVWR AND 75LBS TONGUE WIEGHT!!!!

(BUSHTEC APPLICATION)

1. Wrap the base of the hitch pin adapter with 3/4" masking tape to avoid chipping the chrome plating.(several layer will be necessary)
2. Insert the adapter into the hole in the hitch platform. Tape the top of the platform to avoid scratching the hitch plating. (photo #6)



3. Install the hitch pin nut and tighten. Use a crescent wrench on the adapter and a 1 1/16" socket on the nut. **CAUTION: DO NOT ALLOW THE ADAPTER TO SPIN, TURN THE NUT ONLY TO HELP AVOID SCRATING THE PLATFORM.**
4. Install the 1/4" Safety Chain Quick Clip to the 5/16" slot in the rear of the platform. (photo #7)

Stainless steel lock: Place the key into the lock and turn 1/4 turn to the right, place the lock on top of the pin and turn the key to the left one 1/4 turn and remove the key. Lift up on the lock to insure lock is engaged on the pin. The supplied black cover is designed to keep the keyway free of debris.

WARNING: THE KEY IS REMOVABLE REGARDLESS IF THE LOCK IS ENGAGED OR NOT!

WARNING: BUSHTEC TRAILERS HAVE A GVWR OF 350LBS AND A LOADED TONGUE WEIGHT NOT TO EXCEED 55LBS. THIS INFORMATION IS LOCATED IN YOUR BUSHTEC TRAILER OWNERS MANUAL AND MUST NOT BE MISTAKEN FOR THE MAXIMUM WEIGHT-RATINGS OF THIS PARTICULAR HITCH!

WIRING INSTRUCTIONS

NOTE: The Isolator package you received with your new hitch comes with generic wiring instructions. The Instructions you are holding are more specific to the BMW K1200LT although wire routing, connections and isolator location is left up to the individual installer, These instructions will guide you through the process.

If you purchased this hitch with a new Bushtec trailer, you will have received a wire harness inside the trailer, If you need a new harness, they are available from the factory at an additional cost. If you are using this hitch with anything other than a Bushtec trailer, you will need to purchase the appropriate plug and sufficient wiring to reach the isolator package from your local parts store or your trailers manufacturer.

1. (BUSHTEC APPLICATION) Mount the plug body of the harness within 2-3 inches of the hitch pin adapter (photo #7) using wire ties, electrical tape or a fastener of your chose. Run the harness up the rear support struts and into the rear section of the motorcycle (under the seat). Fasten the harness so that it does not interfere with the movement of the trailer, exhaust pipe, rear tire or get in the way of reassembling your motorcycle.
2. Mount the Isolator in an area as free from moisture and heat as possible, keeping in mind that you will need to reach the battery with the red and black wires, and the trailer harness with the solid color wires stemming from the isolator.
3. Locate the motorcycle wiring that you unplugged from the taillight, connect the four stripped white wires of the isolator into that wiring according to the isolator instructions. Below are the appropriate color-coding for the K1200LT:

White / Yellow – Blue / Black of the motorcycle
White / Brown – Blue / Red of the motorcycle
White / Blue – Gray / Yellow of the motorcycle
White / Green- Gray / Black of the motorcycle

4. (BUSHTEC APPLICATION) The black wire of the trailer harness operates the interior light, Bushtec recommends combining the black wire and green wire so that the interior light operates only when running lights are functioning otherwise you may drain your battery if the light is left on. If you wish to be able to operate the interior light at any time, you will need to connect the black wire of the trailer harness directly to the positive (+) terminal of the battery with an the appropriate inline fuse. Connect the remaining wires according to the isolator package instructions.



5. Secure all the wiring making sure that nothing will affect the reassembly of the motorcycle.

CHECK ALL HARDWARE TO MAKE SURE ITS TIGHT. CHECK ALL YOUR ELECTRICAL CONNECTION.

YOU ARE NOW READY TO REASSEMBLE YOUR MOTORCYCLE. REFER TO YOUR FACTORY SERVICE MANUAL FOR THE PROPER PROCEDURES!

WARNING: DUE TO THE NATURE OF TOWING A TRAILER AND THE ENGINEERING INVOLVED WITH THIS HITCH OR ANY MOTORCYCLE HITCH, ALL HARDWARE MUST BE CHECKED BEFORE, DURING AND AFTER YOU TOW TO INSURE THE PROPER WORKING ORDER OF THIS PRODUCT!

500LBS. MAXIMUM GVWR
75 LBS. MAXIMUM TONGUE WEIGHT

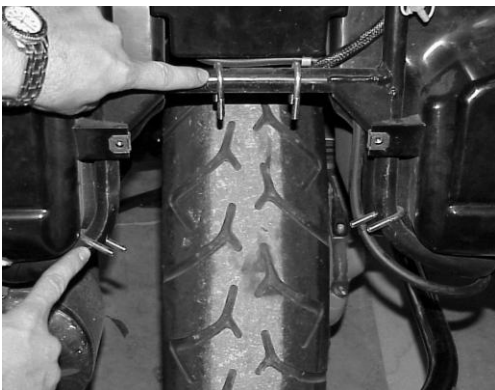


PHOTO # 1

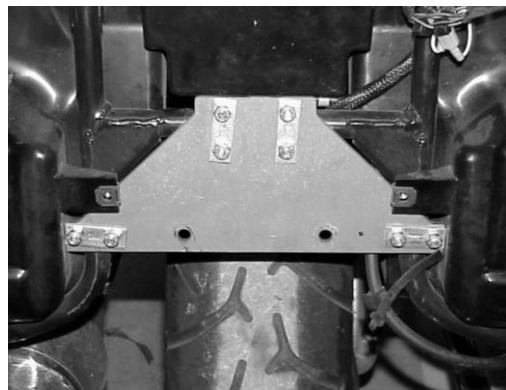


PHOTO # 2



PHOTO # 3



PHOTO # 4

BUSHTEC

Performance Sport Trailers

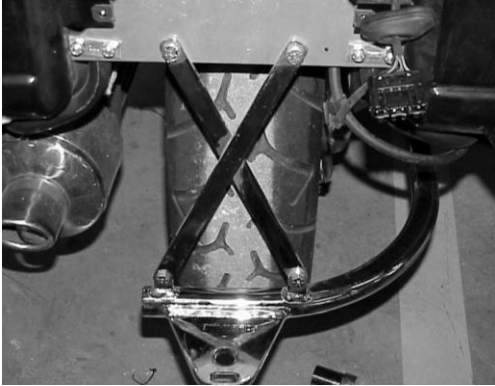


PHOTO # 5

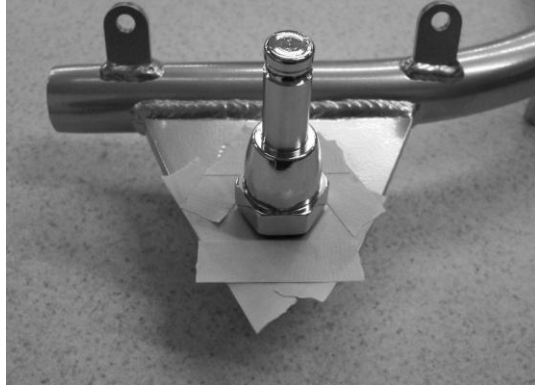


PHOTO # 6

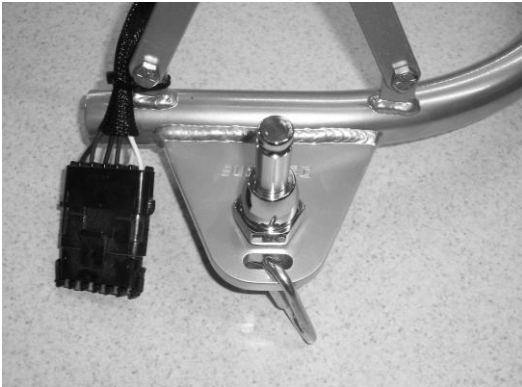


PHOTO # 7

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