

Big Bear Choppers

Service Bulletin

SAFETY RECALL

ATTENTION

Big Bear American Made Choppers, Inc. is conducting a Safety Recall on affected motorcycle models listed below, in order to inspect frame welds. Certain frame welds may not have sufficient strength where the neck is connected to the backbone and the down tube. There have also been instances where kit customers have:

- Modified their frames by adding holes
- Ground down welds for cosmetic purposes
- Not ensured the top motor mount is tight and torqued to the correct specification

In the worst case the weld could fail resulting in a separation of the neck from the frame. This could result in a crash. To date no serious injuries or fatalities have been reported.

AFFECTED UNITS

All 2004 Devil's Advocate Choppers
 All 2004 SLED Choppers
 All 2004 Venom Choppers
 VIN Identified 2004 Devil's Advocate Prostreets
 VIN Identified 2004 Venom Prostreets
 All 2005 Devil's Advocate Choppers
 All 2005 SLED Choppers
 All 2005 Venom Choppers
 VIN Identified 2005 Devil's Advocate Prostreets
 VIN Identified 2005 SLED Prostreets
 VIN Identified 2005 Venom Prostreets
 VIN Identified 2006 Devil's Advocate Choppers
 VIN Identified 2006 SLED Choppers
 VIN Identified 2006 Venom Choppers

CUSTOMER NOTIFICATION

Big Bear American Made Choppers, Inc. is sending a letter to the owners of model year 2004 and 2005 Devil's Advocate, SLED and Venom Chopper models, 2004 and 2005 **VIN Identified** Devil's Advocate, SLED and Venom Prostreets, 2006 **VIN Identified** Devil's Advocate, SLED and Venom Choppers advising them to contact a Big Bear American Made Choppers, Inc. dealer and schedule their motorcycle to have this Safety Recall procedure performed.

Your assistance is needed to ensure any of your customers with a recall model listed are informed of this Safety Recall. Please refer to Vehicle Identification Number list for all other Identified vehicles. A copy of the owner's letter sent is included at the end of this Service Bulletin.

CAMPAIGN VERIFICATION

Before you begin the recall procedure, check if the repair has been performed on the unit. If there is a $\frac{1}{8}$ " plate welded in the opening between the neck stem, down tube, and back bone the recall procedure has been performed.

- If the unit has been repaired no further action is required.
- If there is no plate in the opening proceed with the REPAIR PROCEDURE outlined in this Service Bulletin



Example of frame
Requiring the recall
procedure



Example of frame with
recall procedure
completed

VIN AND OWNER INFORMATION

IMPORTANT: ENTIRE SERVICE BULLETIN MUST BE READ BEFORE PROCEEDING, ANY QUESTIONS REGARDING THIS PROCEDURE MUST BE DIRECTED TO BIG BEAR AMERICAN MADE CHOPPERS, INC. 909-878-4340

VIN Number _____

Owners Name _____

Owners Address _____

CUSTOMER INFORMATION: The information in this Service Bulletin is intended for use only by skilled technicians who have the proper training, tools and equipment to correctly maintain your Big Bear American Made Choppers, Inc. motorcycle. These procedures should not be attempted by "do it yourselfers" or home kit builders.

REPAIR PROCEDURE OVERVIEW

The following provides an overview of the repair procedure.

- Pre inspect and document the inspection criteria on the included inspection sheet. (page 3)
- You will have to remove the fuel tank and front end of the motorcycle and roll the handlebars and controls away from the triple tree location and secure them on the seat. (page 4)
- **Gas tungsten arc welding (GTAW) TIG is the ONLY weld process approved for this repair**
- A certified TIG welder must then perform the frame weld repair per the instructions in this Safety Bulletin, (pages 5, 6 and 7)
- Once repaired the affected area of the frame needs to be painted prior to the reassembly (page 7)
- Upon completion of the painting of the affected areas the motorcycle needs to be re assembled, with new bearing races, followed by the installation of the triple tree/handle bar assembly, front end, fuel tank and testing of the motorcycle (page 8)
- Return this completed Service Bulletin to Big Bear Choppers American Made Choppers, Inc. with the PROCEDURE VERIFICATION and motorcycle photographs for warranty claim reimbursement (page 8)

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IMPORTANT: THIS DOCUMENT NEEDS TO BE RETURNED TO BIG BEAR CHOPPERS

You will use this Safety Recall Notice as:

1. As a working document to guide you in all the steps of this Safety Recall procedure.
2. As an Inspection log to document all observations and action taken during this procedure.
3. As part of your verification that all the work as been performed in accordance with this procedure.

NOTE: RECALL REPAIR CALIM WILL NOT BE REIMBURSED UNLESS THIS PAGE AND PAGES 5, 8, AND 11 ARE COMPLETED

PRE-INSPECTION PROCEDURE

A pre-inspection must be performed prior to any disassembly of the motorcycle to determine whether the owner has maintained the proper torque of the top motor mount or modified the frame in any manner.

1. Write the VIN Number and the customer name and address in the space allocated on the left hand side of page 1 of this Safety Bulletin.
2. Take a photograph of the motorcycle showing the full motorcycle RIGHT HAND SIDE. This photograph along with a second photograph showing the motorcycle after this Safety Recall procedure has been completed will need to be submitted to Big Bear Choppers American Made Choppers, Inc.
3. Using a calibrated torque wrench, test the torque of the single bolt that secures the top motor mount bracket (coil mount) to the frame (This will be on the RHS of the vehicle)
The requirement is 100 ft lbs. Document your findings below

Did the top motor mount bolt require a torque adjustment to attain the required torque setting?

Please circle

Yes

No

Signature _____

4. Using a calibrated torque wrench, test the torque of the two lower bolts that secure the top motor mount bracket to the motor. (They are located at the top of the motor on the LHS of the vehicle)
The requirement is 35 ft lbs. Document your findings below

Did the lower bolts require a torque adjustment to attain the required torque setting?

Please circle

Yes

No

Signature _____

5. Have any welds been ground down? *(See question on page 5 of 11)* _____

6. Have any holes been drilled in the frame or swing arm? _____

7. Visually inspect and note any obvious cracks around the neck, and top motor mount that is welded to the backbone _____

8. See questions on pages 5, 8 and 9 of 11. These must be completed

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DIASSAMBLY PROCEDURE (DETAILED)

- Position and secure the motorcycle on a lift where:
- The front end can be safely removed
- The motorcycle neck is accessible from both sides so the TIG welder can perform the repair on both sides of the frame
- The motorcycle can be transported to and from the location the frame is going to so the repair can be painted.



Recommended hand tools

1. Remove seat and disconnect battery.
2. Disconnect the fuel line from carburetor float bowl, drain the fuel into a gas can.
3. Remove front fender, 4 x 5/16 hex head bolts secure it to lower legs.
4. Remove front wheel.
 - A. Loosen 5/16 socket head pinch bolt, rear of left lower leg.
 - B. Remove axle cap using small pick.
 - C. Remove axle from the right lower leg.
 - D. Wheel is now free to be removed.
5. Disconnect front brake line from caliper, cap end of line or drain fluid.
6. Remove clutch cable from left side hand control.
 - A. Fully compress clutch cable adjustment.
 - B. Remove c-clip from rotation pin on hand control, pull pin, remove clutch lever and cable.
 - C. Pull clutch cable back under frame and secure.
7. Remove headlight and turn signals, pull away from front end and secure.
8. Remove legs.
 - A. On one side of front end loosen the two pinch bolts in rear of tree (do not fully remove pinch bolts).
 - B. With pinch bolts loosened leave hex key or socket in bolt, strike with dead blow hammer to free leg and remove.
 - C. Repeat for other side.
9. Gas tank removal
 - A. Disconnect cross over (if needed).
 - B. Disconnect vent hose from right side of tank.
 - C. Remove the 4 mounting bolts under tank.
 - D. Tank can now be removed.
10. Remove handlebars and trees.
 - A. Loosen neck stem set screw located in rear of lower tree
 - B. Remove stem nut, lower tree, and bearing
 - C. Remove top tree, bearing, and dust cap with handlebars and wiring still attached.
 - D. Pull top tree and bars over backbone and secure.
11. Remove both upper and lower neck race.
12. The motorcycle is now ready to proceed with the repair procedure.



The photograph sequence above shows the method to remove the handlebars, upper triple tree and neck stem as an assembly and secure the assembly on the seat.

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REPAIR PROCEDURE (DETAILED)



Recommended hand tools and gusset that will need to be trimmed

Take appropriate steps to fully protect ALL engine, frame and control components from grinding sparks, dust, and tools.

Ensure that the rear of the vehicle, seat, stored handlebars, and the rear fender are also protected.



Photograph showing protective covering on the motor and primary



Remove frame paint/powder coating from around the repair area



The grinder might not be able to reach all the areas for paint/powder removal



Use a file or hacksaw blade to remove any residual coating and finish with a stainless steel wire brush



After the stainless steel wire brush procedure, slowly cut into the tubing and the weld (not the neck)

1. Was there a crack in the base of the material?

YES

NO

2. If so, estimate how deep you ground down before you saw a crack on the base of the material? _____" (eg 1/16")

3. In your opinion was the penetration of the weld sufficient?

YES

NO

Welders Signature _____

REPAIR OF LOWER WELD FIRST – WORK ON ONE JOINT AT A TIME

Removal of weld around the neck and downtube



Using a thin grinding wheel remove the existing weld around the joint



Carefully remove the original weld. And prepare the joint per the illustration to the right

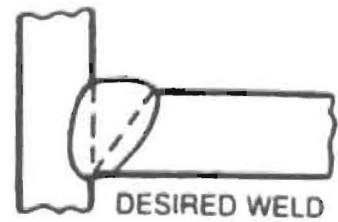


Illustration showing desired joint preparation and weld penetration

WELDING OF NEW ROOT PASS



Using TIG process and .045" ER70 rod weld a root pass



Completed root pass weld

The down tube is .156" wall
The neck is approx .400" thick
in the areas of the weld joint

WELDING SECOND COVER PASS (MANDATORY)



Using TIG process and 3/32" ER70 Rod weld a second pass



Photo of a concave/undercut 2nd Pass, requiring third weld pass

The second cover pass is mandatory
Upon completion of the second pass inspect the profile of the weld.
If the weld profile exhibits a concave form or is undercut, a third pass weld **MUST** be performed.

**ALLOW COOL DOWN PERIODS
IN BETWEEN THE WELDS TO
PREVENT OVERHEATING**

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WELDING THIRD PASS (IF REQUIRED)



Using TIG process and a .062" ER70 rod to complete the third pass



Finished lower weld with convex form

Upon completion of of this weld, the joint must exhibit a convex profile as depicted in the photograph to the left.

ALLOW COOL DOWN PERIODS IN BETWEEN THE WELDS TO PREVENT OVERHEATING

REPAIR OF UPPER WELD

Removal of weld around the neck and backbone

Complete the same steps for the upper joint (back bone to the neck) as described above in the "Repair of Lower Weld"

Using TIG process and .045" ER70 rod weld a root pass

ALLOW COOL DOWN PERIODS IN BETWEEN THE WELDS TO PREVENT OVERHEATING

Continue with welding the second pass with a 3/32" ER70 rod
Inspect the second pass as above
Perform a third pass weld if required using .062" ER70 rod

ALLOW COOL DOWN PERIODS IN BETWEEN THE WELDS TO PREVENT OVERHEATING



View showing upper joint ready for root weld pass



View of root pass completed



View showing the completion of the 3rd and final weld pass



View showing the two new welds

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NECK GUSSET UPGRADE – INSTALLATION – MANDATORY (NOT OPTIONAL)

To complete this safety recall procedure you will need to install a 1/4" plate gusset as described below.

Create a poster board template that fits inside the opening inside the frame behind the neck

The template should represent the opening along the centerline of the tubes.



Poster board template trimmed to fit in the frame opening.



Transfer the profile of the template to the 1/4" thick plate using a permanent marker as shown

EACH GUSSET MUST BE CUSTOM FIT TO WITHIN 1/32" (0.032") OF THE OPENING



Cut and grind the 1/4" plate so that it fits inside the frame opening. There should be no more than 1/32" gap all the way around the plate and the opening.

Proceed to tack weld the plate in place on both sides.

Completely weld the plate 100% of the perimeter on both sides.

ALLOW COOL DOWN PERIODS IN BETWEEN THE WELDS TO PREVENT OVERHEATING



Example of a trimmed plate ready to be welded into frame opening.



Position the plate in in the opening along the centerline of the tubes.



Completed weld



This picture shows a frame after the completion of this safety recall procedure.

WELDER INFORMATION

- Please complete the following and indicate who performed the weld repair

Name of Welding Company	Name of Welder	TIG (GTAW) Certificate Number

PAINTER INFORMATION

- Arrange to have the repaired weld area painted.
- Once the vehicle is repainted, proceed with the re-assembly procedure (page 8).
- Please complete the following to indicate who performed the paint repair.

Name of Paint Shop	Name of Painter	Telephone Number of Paint Shop

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MOTORCYCLE RE-ASSEMBLY PROCEDURE

- | | | |
|--------|--|---|
| Signed | Signature or initials is required on all tasks | |
| _____ | | 1. Install new races per standard industry practices |
| _____ | | 2. Reinstall top tree bearing and dust cap |
| _____ | | 3. Install lower bearing and tree using red locktite on the nut, (do not torque nut until complete assembly of front end) |
| _____ | | 4. Install legs into trees and snug pinch bolts |
| _____ | | 5. Install front wheel using anti-seize and 60 foot pounds of torque on axle |
| _____ | | 6. Torque axle pinch bolt to 20 ft lbs |
| _____ | | 7. Install front fender using red locktite on fasteners |
| _____ | | 8. Connect front brake line to caliper (re-bleed brake as needed) |
| _____ | | 9. Install clutch cable on left hand control (adjust cable accordingly) |
| _____ | | 10. Install headlight and turn signals |
| _____ | | 11. Torque top tree pinch bolts to 20 ft lbs |
| _____ | | 12. Torque main stem nut, 90 to 100 ft lbs (or until a 2 inch fall away is achieved) tighten stem nut pinch with red locktite applied |
| _____ | | 13. Torque lower tree pinch bolts to 20 ft lbs |
| _____ | | 14. Install gas tank using anti-seize on all fasteners |
| _____ | | 15. Reconnect fuel line, crossover, and vent line |
| _____ | | 16. Connect battery, torque to 60 inch lbs |
| _____ | | 17. Install seat using anti-seize on hardware |
| _____ | | 18. Verify that the top motor mount is properly torque |
| _____ | | 19. Torque the center bolt to 100 ft lbs & the side bolts to 35 ft lbs |
| _____ | | 20. Attach warning decal on top of the key housing. |
| _____ | | 21. Take a photograph of the motorcycle showing the full motorcycle RIGHT HAND SIDE after this Safety Recall procedure has been completed |

PROCEDURE VERIFICATION

- | | | |
|--------|------|---|
| Signed | Date | Signature is required on all tasks |
| _____ | | 1. Verify that the VIN number and owners name and address have been entered on page 1. |
| _____ | | 2. Verify that the VIN number entered on page 1 matches the VIN number on the motorcycle. |
| _____ | | 3. Verify that you have a photograph as required in item #2 on page 3. |
| _____ | | 4. Verify that inspection Item #3 on page 3 has been performed correctly. |
| _____ | | 5. Verify that inspection Item #4 on page 3 has been performed correctly |
| _____ | | 6. Verify that inspection Items #5, 6, and 7 on page 3 have been performed correctly. |
| _____ | | 7. Verify that the welder's information is recorded on page 7. |
| _____ | | 8. Verify that the painter's information is recorded on page 7. |
| _____ | | 9. Verify that the motorcycle assembly procedure has been completed and tasks are signed or initialed on page 8 |
| _____ | | 10. Verify that you have a photograph as required in item 21# on page 8 |

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PARTS INFORMATION

Big Bear American Made Choppers, Inc will be sending you one initial kit, others are available for ordering free of charge.

P/N Recall 2008-1 kit

This kit includes
¼" gusset (1)
Bearing race set (1)
Warning Decal (1)

WARRANTY TIMES

Disassembly time	45 minutes
Weld Repair time	2.0 hours
Paint/Transportation allowance	\$300.00
Re-assembly time	2 hours

WARRANTY CLAIM PROCESS

This Safety Recall will be in effect until all units have been repaired according to this Service Bulletin, regardless of the date of purchase.

Normal warranty claim submission requirements apply. After completion of the repair, submit one warranty claim per unit with the following information only:

Note: If the Big Bear Choppers Warranty department provides you with different claim filing instructions. Please file your claim per those instructions. Do not file two claims for the same unit.

Prior to being reimbursed you must complete and submit this Service Bulletin to Big Bear Choppers Pay special attention to the **PROCEDURE VERIFICATION** of this Safety Recall (page 8).

This is the end of the Service Bulletin Safety Recall Procedure

Page 11 is a copy of the letter sent to owners

December 18, 2008

IMPORTANT SAFETY RECALL NOTICE

Dear Big Bear Chopper Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

What is the reason for this notice?

Big Bear Choppers has decided that a defect, which relates to motor vehicle safety, exists in 2004 and 2005 Devil's Advocate, SLED and Venom Choppers. Also included are VIN IDENTIFIED 2004 and 2005 Devil's Advocate, SLED and Venom Prostreets and VIN IDENTIFIED 2006 Venom, Devil's Advocate and Sled Choppers that were manufactured prior to 12-31-05. Some vehicles may have inadequate weld penetration between the neck, backbone, and down tubes of the frame. High loads created when riding on rough road surfaces, and or structural modification made to the frame by owners, failure to maintain the specified torque setting of the top motor mount may cause the effected welds to crack. Worst case scenario, the welded area could break without warning resulting in neck separation and front end collapse. This could result in a crash.

To date, we have not had any serious injuries or fatalities associated with this defect, however, we believe the potential risk warrants this recall action

What should you do?

1. **STOP RIDING YOUR MOTORCYCLE IMMEDIATELY. YOU MUST NOT RIDE YOUR MOTORCYCLE UNTIL THIS RECALL HAS BEEN COMPLETED**
2. Please contact your Big Bear Choppers dealer as soon as possible to arrange a service date. Instructions for making this correction have been sent to your dealer and the parts necessary for the repair are available. A neck gusset will be installed as a basis for identifying bikes that have had the correction made. Labor time necessary to perform this service correction is approximately 5 hours, excluding paint time. Please ask your dealer if you wish to know how much additional time will be needed to schedule and process your vehicle. The inspection and any necessary repairs will be done *free of charge*. A paint allowance for the area affected by this Safety Recall procedure is included in the dealer Service Bulletin.

Who to contact if you experience problems.

Your Big Bear Choppers dealer is best equipped to obtain parts and provide service to ensure that your vehicle is corrected as promptly as possible. If, however, you take your vehicle to your dealer on the agreed service date, and they do not remedy this condition within seven (7) days, we recommend you contact the Big Bear Choppers factory by calling 909-878-4340.

After contacting your dealer and the Big Bear Choppers factory, if you are still not able to have the safety defect remedied without charge and within a reasonable time, you may write to:

Administrator National Highway Traffic Safety Administration
400 Seventh Street, SW Washington, DC 20590
Or call 1-888-DASH-2-DOT (1-888-327-4236)

What to do if you feel this notice is in error.

Our records show you are an owner of a model subject to this Safety Recall Notice. If this is not the case, and you have sold or traded your vehicle, please let us know by completing the enclosed postage paid information change card and returning it to us. We will then update our records.

If you have questions.

If you have any questions about this notice, or need assistance locating a Big Bear Choppers dealer, please call the Warranty Department at 909-878-4340. You may also go to our website www.bigbearchoppers.com and click on "Dealers" to locate the nearest Big Bear Chopper Dealer.

We apologize for any inconvenience we may have caused you, and are taking this action in the interest of your safety and continued satisfaction with our product.

Sincerely,

Big Bear American Made Choppers, Inc.

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