

**PART 573 Defect and Noncompliance Report**

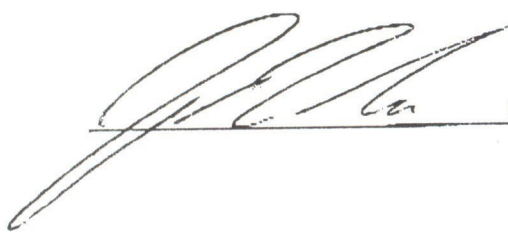
On May 10, 2006 Irbit Motorworks of America, Inc decided that a defect witch relates to motor vehicle safety exist in the motor vehicles listed below, and is furnishing notification to the National Highway Safety Administration in accordance with 49 CFR Part 573.

**Report prepared on:** 5/10/2006  
Recall code: N/A  
Irbit Motorworks of America, Inc  
15411 N.E. 95<sup>th</sup> ST.  
Redmond, WA 98052

06V-172  
(9 pages)

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**Report Prepared by:**  
Jason Rae  
V.P. Operations and Product Support

  
\_\_\_\_\_  
Date 5-10-2006

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OFFICE OF DEFECTS  
INVESTIGATION

### Vehicle models Involved in the Recall

**Make:** Ural      **Model Years Involved:** 2003-2005      **Models:** Retro and Retro Solo  
**Production Dates Beginning:** 8-1-2003      **Ending:** 9-9-2005  
**Vin Range Beginning:** 210888      **Ending:** 215544 (Note: Only motorcycles whose first 8 VIN characters are X8JMH036 or X8JMH236 are affected and are applicable to the VIN range (last 6 of VIN) above)  
**Vehicle Type:** Ural Motorcycle      **Body style:** Retro sidecar and Retro Solo

This recall includes all Ural Retro and Retro Solo models equipped with hydraulic rear and/or sidecar brakes systems. All models without hydraulic rear and/or sidecar brakes systems are excluded from this recall.

This recall is 100% of all Retro and Retro Solo models manufactured between 8-1-2003 and 9-9-2005 by Irbit Motorworks of America, INC.

### Recall Population

| <u>Model</u>    | <u>Year</u> | <u>Number Potentially Involved</u> |
|-----------------|-------------|------------------------------------|
| Retro Solo      | 2003        | 12                                 |
| Retro w/sidecar | 2003        | 7                                  |
| Retro w/sidecar | 2004        | 21                                 |
| Retro Solo      | 2005        | 11                                 |
| Retro w/sidecar | 2005        | 38                                 |

**Total Number Potentially Affected by the Recall:** 89 units

The recall population was determined by recalling all Retro models equipped with hydraulic rear and/or sidecar brake systems. All Retro models with the hydraulic brakes were manufactured between 8-1-2003 and 9-9-2005.

### Defect Description

The known defect is specific to the rear brake system and sidecar brake system. The rear master cylinder and/or wheel cylinders do not provide consistent braking power.

The cause of this defect is wheel cylinders with limited travel and master cylinders that move to little fluid when actuated. The brakes are adjusted very tight to compensate for the limited travel.

Possible consequence of this defect can include rear and/or sidecar wheel lock up, brake components over heating, final drive fluid loss due to excessive heat produced by brake drag and potential loss of control due to wheel lock up.

Possible warning might be an overheated rear final drive, server fluid loss, or brake drag during normal operation.

### Chronological Summary

4-17-2006 Irbit Motorworks received a warranty claim for defective rear brakes on a 2005 Retro w/sidecar. The rear wheel had overheated and locked up at slow speed. No damage or injury occurred. Replacement parts were installed and the claim was finalized.

5-2-2006 A second warranty claim was filed for another Retro with defective rear brakes. The wheel had not locked up but was overheating and dragging excessively. New rear brake components were sent for installation. No damage or injury, the dealer was able to repair the defect prior to failure.

5-3-2006 Jason Rae (Operations and Product Support) contact several dealers to determine if any other unclaimed brake failures had occurred. After speaking with several active dealers it was determined that a few owners had made complaints about the rear brakes overheating and causing oil leaks. At this point it was clear

there is a potential defect with the rear brake and/or sidecar brake systems on all 2003-2005 Retro and Retro Solo equipped with hydraulic brake systems.

5-5-2006 The decision was made to move forward with a recall. Irbit Motorworks and the Ural Factory technical staff began working on possible solutions and repair procedures for this recall.

5-10-2006 Jason Rae (Operations and Product Support) started the filing procedures for recalls following the guidelines provided by NHTSA. The technical department presented their solution for review.

### Remedy

The factory has developed a new brake system that uses a larger master cylinder and wheel cylinders with more travel. The defective master cylinders and wheel cylinders had a limited amount of travel, the brakes had to be set at a very tight (minimal gap) to compensate for the lack of travel. The new master cylinder moves more fluid volume and allows the rear brakes to be set-up with a larger gap. The new wheel cylinders have a greater range of movement providing more stopping power without overheating due to insufficient clearance between brake shoes and the wheel hub. The new brake system has been test with great results.

All Retro models produced after 9-9-2005 are 2006 model year bikes equipped with mechanically operated rear and sidecar brake systems. The hydraulic rear brake system is no longer used on any production model offered by Irbit Motorworks, Inc and is discontinued.

### Recall Schedule

By 5-17-2006 Irbit Motorworks will notify all Ural dealers of the recall by mail, e-mail, and dealer web board update (see attached dealer notification letter). A letter with replacement instructions will be mailed and e-mailed to the dealers to prepare them for recall replacement.

By 5-19-2006 notifications will be mailed to all registered Retro owners concerning this recall (see attached retail owner notification letter). The owners will be instructed to contact their local dealer for a service appointment. All labor and parts will be covered by warranty; no charges will apply to the customer or dealer for this recall.

Dealers will be required to provide the Vin number for any Retro model to be serviced by this recall. The replacement parts will then be sent to the dealer by next day air service free of charge. This will allow us to monitor the recall progress and insure all affected units are repaired.



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### Vehicle Recall Service Bulletin

TO: All Ural Dealers

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle which is subject to a recall campaign of this type must be adequately repaired within a reasonable time after the owner has tendered it for repair. Failure to repair within sixty (60) days after tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within a reasonable time, the owner may be entitled to an identical or reasonable equivalent vehicle at no charge or to a refund of the purchase price less a reasonable allowance for depreciation.

To avoid having to provide these burdensome solutions, every effort must be made to promptly schedule an appointment with each owner and to repair their vehicle as soon as possible. As you will see in reading the attached copy of the letter that is being sent to owners, the owners are being instructed to contact the [MFR] customer service if their dealer does not remedy the condition within three (3) days of the mutually agreed upon service date. If the condition is not remedied within a reasonable time, they are instructed on how to contact the National Highway Traffic Safety Administration.

### Defect Involved

Irbit Motorworks has determined that a defect, which relates to motor vehicle safety, exists in certain 2003-2005 Ural Retro and Retro solo models. These vehicles have defective rear and/or sidecar hydraulic brake systems. The defective brakes can overheat causing possible rear and/or sidecar wheel lock up. Overheated brake systems will result in insufficient braking power. Wheel lock up may result in a loss of control and/or motor vehicle accident

This recall will involve replacement of rear and/or sidecar hydraulic brake systems. All required components and instructions are readily available. The parts kit will include new master cylinders and wheel brake cylinders as well as all necessary hardware for installation.

### Vehicles Involved

Involved are certain Retro and Retro Solo models equipped with hydraulic rear and/or sidecar brake systems built within the following VIN breakpoints: **Production Dates Beginning: 8-1-2003 Ending: 9-9-2005**  
Vin Range Beginning: 210888 Ending: 215544 (Note: Only motorcycles whose first 8 VIN characters are X8JMH036 or X8JMH236 are affected and are applicable to the VIN range (last 6 of VIN) above)

Involved vehicles have been identified by Vehicle Identification Number Computer Listings. Computer listings contain the complete Vehicle Identification Number, owner name and address data, and are furnished to involved dealers with the recall bulletin. Owner name and address data furnished will enable dealers to follow-up with owners involved in this recall.

Sincerely,  
Jason Rae  
V.P. Operations and Product Support  
[Jason@imz-ural.com](mailto:Jason@imz-ural.com)  
(425) 702-8484 ext. 105

## Instructions for Replacement of Master Cylinders and Wheel Cylinders on Retro and Retro Solo Motorcycles

### Brake replacement on motorcycle

1. Remove rear wheel from the motorcycle.
2. Drain brake fluid from brake system – disconnect and remove brake hose from brake fluid reservoir to master cylinder.
3. Disconnect brake hose from the master cylinder and wheel brake cylinders.
4. Remove brake pads before removing rear wheel brake cylinder from the final drive case.
5. Remove main brake cylinder by unscrewing two fastening bolts and disconnecting push rod from the brake pedal.
6. Install new rear wheel brake cylinder (the cylinder can be found in parts package № 123630038 and it is marked with “1”); fasten it with two bolts to the final drive case. Install brake pads.
7. In the enclosed parts package find the bracket for fastening the new master cylinder. Fasten this bracket with two screws to the motorcycle frame in place of the removed (defective) master cylinder.
8. Install new master cylinder on the bracket that was attached to the frame (as shown in Photo 1).
9. Attach one end of the bracket (bracket consisting of two plates with two holes) to the lever of the master cylinder, the other end - to the brake pedal.
10. Find a short brake hose in the parts package. Attach one end of the hose to the wheel brake cylinder and the other end (that has bended tip or very curved end) to the master cylinder. When attaching the hose make sure to use the bolts with new sealing washers and fasten it securely.
11. Connect brake fluid reservoir to the master cylinder.
12. Fill up motorcycle brake system with DOT 3 or DOT 4 brake fluid.
13. Install rear wheel of the motorcycle.
14. Bleed the brake system to completely remove air bubbles from the system.

### Brake replacement on sidecar

1. Remove rear sidecar wheel.
2. Disconnect brake hose from brake fluid reservoir and master cylinder.
3. Disconnect brake hose from the sidecar wheel cylinder and the sidecar master cylinder.
4. Remove brake pads. Then remove brake cylinder from supporting sidecar wheel brake plate.
5. Remove master cylinder from sidecar frame, by unscrewing the fastening bolts.
6. In the enclosed parts package (parts package marked “№ 103630039”) find the bracket for fastening the new master cylinder. Fasten this bracket with two screws to the sidecar frame in place of the removed (defective) master cylinder.
7. Install master cylinder on the bracket that was attached to the sidecar frame (as shown in Photo 2).

8. Fasten wheel brake cylinder (from package № 103630039 marked "2") to the supporting sidecar wheel brake plate
9. Install brake pads
10. Install brake hose between master cylinder and wheel brake cylinder. Use new sealing washers and fasten securely
11. Install sidecar wheel
12. Install the bracket with the adjusting bolt by fastening one end of it to the sidecar brake pedal bracket and the other end (with oval slots) to the master cylinder bracket
13. Connect brake fluid reservoir to the master cylinder.
14. Fill up the brake system with DOT 3 or DOT 4 brake fluid.
15. Bleed the brake system to completely remove air bubbles from the system.
16. Synchronize motorcycle and sidecar brake mechanisms by changing the length of adjusting bracket (as shown in Photo 3)
17. Perform a road test at slow speeds in a safe are. The motorcycle should not pull to the left or to the right. Adjust the bracket as necessary.

## All Info List

| Make | Model         | Model Year | VIN        |
|------|---------------|------------|------------|
| URAL | Retro-Solo    | 2003       | X8JMH23683 |
| URAL | Retro-Solo    | 2003       | X8JMH236X3 |
| URAL | Retro-Solo    | 2003       | X8JMH23663 |
| URAL | Retro-Solo    | 2003       | X8JMH23683 |
| URAL | Retro-Solo    | 2003       | X8JMH236X3 |
| URAL | Retro-Solo    | 2003       | X8JMH23613 |
| URAL | Retro-Solo    | 2003       | X8JMH23633 |
| URAL | Retro-Solo    | 2003       | X8JMH23653 |
| URAL | Retro-Solo    | 2003       | X8JMH23673 |
| URAL | Retro-Solo    | 2003       | X8JMH23693 |
| URAL | Retro-Solo    | 2003       | X8JMH23603 |
| URAL | Retro-Solo    | 2003       | X8JMH23623 |
| URAL | Retro-SideCar | 2003       | X8JMH03693 |
| URAL | Retro-SideCar | 2003       | X8JMH03603 |
| URAL | Retro-SideCar | 2003       | X8JMH03623 |
| URAL | Retro-SideCar | 2003       | X8JMH03643 |
| URAL | Retro-SideCar | 2003       | X8JMH03603 |
| URAL | Retro-SideCar | 2003       | X8JMH03623 |
| URAL | Retro-SideCar | 2003       | X8JMH03643 |
| URAL | Retro-SideCar | 2004       | X8JMH03674 |
| URAL | Retro-SideCar | 2004       | X8JMH03654 |
| URAL | Retro-SideCar | 2004       | X8JMH03694 |
| URAL | Retro-SideCar | 2004       | X8JMH03604 |
| URAL | Retro-SideCar | 2004       | X8JMH03624 |
| URAL | Retro-SideCar | 2004       | X8JMH03644 |
| URAL | Retro-SideCar | 2004       | X8JMH03624 |
| URAL | Retro-SideCar | 2004       | X8JMH03644 |
| URAL | Retro-SideCar | 2004       | X8JMH03664 |
| URAL | Retro-SideCar | 2004       | X8JMH03664 |
| URAL | Retro-SideCar | 2004       | X8JMH03684 |
| URAL | Retro-SideCar | 2004       | X8JMH036X4 |
| URAL | Retro-SideCar | 2004       | X8JMH03614 |
| URAL | Retro-SideCar | 2004       | X8JMH03634 |
| URAL | Retro-SideCar | 2004       | X8JMH03654 |
| URAL | Retro-SideCar | 2004       | X8JMH03674 |
| URAL | Retro-SideCar | 2004       | X8JMH03614 |
| URAL | Retro-SideCar | 2004       | X8JMH03634 |
| URAL | Retro-SideCar | 2004       | X8JMH03654 |
| URAL | Retro-SideCar | 2004       | X8JMH03674 |
| URAL | Retro-SideCar | 2004       | X8JMH03694 |
| URAL | Retro-SideCar | 2005       | X8JMH03685 |
| URAL | Retro-SideCar | 2005       | X8JMH03675 |
| URAL | Retro-SideCar | 2005       | X8JMH03695 |
| URAL | Retro-SideCar | 2005       | X8JMH03605 |
| URAL | Retro-SideCar | 2005       | X8JMH03625 |
| URAL | Retro-SideCar | 2005       | X8JMH03695 |
| URAL | Retro-SideCar | 2005       | X8JMH03695 |
| URAL | Retro-SideCar | 2005       | X8JMH03625 |

All Info List

|      |               |      |              |
|------|---------------|------|--------------|
| URAL | Retro-SideCar | 2005 | X8JMH03635U2 |
| URAL | Retro-SideCar | 2005 | X8JMH03685U2 |
| URAL | Retro-SideCar | 2005 | X8JMH036X5U2 |
| URAL | Retro-Solo    | 2005 | X8JMH236X5U2 |
| URAL | Retro-Solo    | 2005 | X8JMH23615U2 |
| URAL | Retro-SideCar | 2005 | X8JMH03685U2 |
| URAL | Retro-SideCar | 2005 | X8JMH036X5U2 |
| URAL | Retro-SideCar | 2005 | X8JMH03685U2 |
| URAL | Retro-SideCar | 2005 | X8JMH036X5U2 |
| URAL | Retro-SideCar | 2005 | X8JMH03605U2 |
| URAL | Retro-SideCar | 2005 | X8JMH03665U2 |
| URAL | Retro-SideCar | 2005 | X8JMH03635U2 |
| URAL | Retro-SideCar | 2005 | X8JMH03665U2 |
| URAL | Retro-SideCar | 2005 | X8JMH03635U2 |
| URAL | Retro-SideCar | 2005 | X8JMH03625U2 |
| URAL | Retro-SideCar | 2005 | X8JMH036X5U2 |
| URAL | Retro-SideCar | 2005 | X8JMH03635U2 |
| URAL | Retro-SideCar | 2005 | X8JMH03655U2 |
| URAL | Retro-SideCar | 2005 | X8JMH03675U2 |
| URAL | Retro-SideCar | 2005 | X8JMH03665U2 |
| URAL | Retro-SideCar | 2005 | X8JMH03685U2 |
| URAL | Retro-SideCar | 2005 | X8JMH036X5U2 |
| URAL | Retro-Solo    | 2005 | X8JMH23685U2 |
| URAL | Retro-Solo    | 2005 | X8JMH23645U2 |
| URAL | Retro-SideCar | 2005 | X8JMH03605U2 |
| URAL | Retro-Solo    | 2005 | X8JMH23685U2 |
| URAL | Retro-SideCar | 2005 | X8JMH03645U2 |
| URAL | Retro-Solo    | 2005 | X8JMH23655U2 |
| URAL | Retro-SideCar | 2005 | X8JMH03655U2 |
| URAL | Retro-SideCar | 2005 | X8JMH03675U2 |
| URAL | Retro-SideCar | 2005 | X8JMH03695U2 |
| URAL | Retro-Solo    | 2005 | X8JMH23645U2 |
| URAL | Retro-Solo    | 2005 | X8JMH23665U2 |
| URAL | Retro-Solo    | 2005 | X8JMH23685U2 |
| URAL | Retro-Solo    | 2005 | X8JMH236X5U2 |
| URAL | Retro-Solo    | 2005 | X8JMH23615U2 |
| URAL | Retro-SideCar | 2005 | X8JMH03655U2 |
| URAL | Retro-SideCar | 2005 | X8JMH03675U2 |
| URAL | Retro-SideCar | 2005 | X8JMH03695U2 |
| URAL | Retro-SideCar | 2005 | X8JMH03605U2 |
| URAL | Retro-SideCar | 2005 | X8JMH03625U2 |



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**Vehicle Recall Owner Notification Letter**

Dear Ural Retro model owner:

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

**Reason For This Recall**

Irbit Motorworks has determined that a defect, which relates to motor vehicle safety, exists in certain Retro and Retro Solo model Ural motorcycles. These vehicles have defective rear and/or sidecar hydraulic brake systems. The defective brakes can overheat causing possible rear and/or sidecar wheel lock up. Overheated brake systems will result in insufficient braking power. Wheel lock up may result in a loss of control and/or motor vehicle accident.

**What We Will Do**

All defective rear and/or sidecar brake components will be replaced free of charge at your servicing dealer. Replacement parts include new master cylinders and improved wheel brake cylinders. These improved brake components provide increased stopping power and safer operation.

**What You Should Do**

Please contact your nearest Ural dealer as soon as possible to arrange a service appointment and so the dealer may order the necessary parts for the repair. You may be asked to provide your VIN (vehicle identification number) for confirmation of recall. Instructions for making this repair have been sent to your dealer and the parts are available. The labor time to perform this service correction is approximately 3 ½ to 4 hours. Please ask your dealer if you wish to know how much additional time may be needed to schedule and process your vehicle.

Your Ural 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 on that date or within three (3) days, we recommend you contact Ural customer service by calling 1-888-990-8484.

After contacting your dealer and Ural customer service, if you are still not able to have the safety defect remedied without charge and within a reasonable time, you may wish to write the Administer, National Highway Traffic Safety Administration, 400 Seventh Street, SW, Washington, DC 20590 or call 1-888-DASH-2-DOT (1-888-327-4236). (Washington DC residents use 1-202-366-0123).

The enclosed owner reply card identifies your vehicle. Presentation of this card to your dealer will assist in making the necessary correction in the shortest possible time. If you have sold or traded your vehicle, please let us know by completing the postage paid reply card and returning it to us.

We are sorry to cause this inconvenience; however, we have taken this action in the interest of your safety and continued satisfaction with our products.

Sincerely,  
Irbit Motorworks of America, Inc.