BLUEPRINTED FRONT WHEEL HUB Mazda Miata 1989-2005 with Nut - DFR-1001044 / HUB404-1

Dfuser motorsports wheel bearing and hub assemblies are built using high quality components for driven and non-driven applications. These hub assemblies are made to exact OEM specifications to ensure the finished product is reliable, durable and performs better or equal to the original.

Features:

- Made to exact OEM specifications
- Ready to install No modification required

Installation Tips

- Use an Axle nut Socket to remove the axle nut
- After removing the brake caliper, suspend it using a Caliper Hanger to avoid damage to the brake hose
- During installation, use a Torque Wrench to tighten the axle nut to the manufacturer's specification. **Do not use an impact wrench as it is easy to over tighten the axle nut and damage the bearing race cage.** The torque specification can be found in your owner's manual. ~145 to 155 lbs of torque
- Pin the nut so it does not loosen.
- Re-torque after testing.

Symptoms Of A Failing Wheel Bearing & Hub

Wheel hub units are low maintenance parts, but that doesn't mean they last forever. Uneven road surfaces, heavy driving conditions (such as towing or racing), and under-inflated tires put extra strain on the hub bearing and can lead to premature failure. Common signs of a bad hub unit include:

- A humming, rumbling or growling noise that increases with acceleration
- A loud constant whining or grinding noise when the vehicle is in motion
- Excessive play in the steering wheel
- Steering wheel vibration that changes with the vehicle speed or as the vehicle turns

How To Identify The Faulty Wheel Bearing & Hub

It is often difficult to pinpoint which hub unit has gone bad while driving because noise and vibration travels through the frame of the vehicle. Here are two tests you can do to help identify which hub unit has gone bad:

To safely perform these tests, you need to elevate your vehicle off the ground using a Jack and support it with Jack Stands. Never rely on only the jack to support your vehicle.

Shake Test: Identifying Play or Looseness

- 1. Lift your vehicle so the wheel is off the ground
- 2. Place your hands on the sides of the tire and try to shake the wheel
- 3. Now place your hands on the top and bottom of the tire and try to shake the wheel again
- 4. If you feel movement in **both directions**, you have play in your bearing and it needs to be replaced
- 5. <u>Note:</u> If you feel movement when shaking the wheel left to right, but not top to bottom, you could have a worn-out tie rod end. Similarly, if you have movement top to bottom, but not left to right, you may have a worn-out ball joint.

Spin Test: Identifying Noise or Grinding

- 1. Lift your vehicle so the wheel is off the ground and can spin freely
- 2. Spin the wheel, in either direction, and listen for a grinding or howling noise
- 3. If you hear a loud grinding or howling noise, that increases with the speed of the wheel, you have a failed bearing that needs to be replaced
- 4. <u>Note:</u> It is best to test both front or both rear bearings at the same time so you can compare the difference between the two sides. If you have a failed bearing, there will be a noticeable difference in the amount of noise you hear during this test

Attention California Customers - WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

Warranty: 90 days/3,000 miles from day of purchase.

THIS IS A HIGH PERFORMANCE PRODUCT. USE AT YOUR OWN RISK.

Do not use this product until you have carefully read the following agreement.

This sets forth the terms and conditions for the use of this product. The installation of this product indicates that the BUYER has read and understands this agreement and accepts its terms and conditions

DISCLAIMER OF LIABILITY

Dfuser.com and its distributors, jobbers, and dealers (hereafter **SELLER**) shall in no way be responsible for the product's proper use and service. <u>THE **BUYER**</u> <u>HEREBY WAIVES ALL LIABILITY CLAIMS</u>.

The **BUYER** acknowledges that he/she is not relying on the **Seller's** skill or judgment to select or furnish goods suitable for any particular purpose and that there are no liabilities which extend beyond the description on the face hereof and the **BUYER** hereby waives all remedies or liabilities, expressed or implied, arising by law or otherwise, (including without any obligations of the **SELLER** with respect to fitness, merchantability and consequential damages) or whether or not occasional by the **Seller's** negligence.

The **BUYER** is responsible to fully understand the capability and limitations of his/her vehicle according to manufacturer specifications and agrees to hold the **SELLER** harmless from any damage resulting from failure to adhere to such specifications.

The SELLER disclaims any warranty and expressly disclaims any liability for personal injury or damages. The BUYER acknowledges and agrees that the disclaimer of any liability for personal injury is a material term for this agreement and the BUYER agrees to indemnify the SELLER and to hold the SELLER harmless from any claim related to the item of the equipment purchased. Under no circumstances will the SELLER be liable for any damages or expenses by reason of use or sale of any such equipment.

The **BUYER** is responsible to obey all applicable federal, state, and local laws, statutes, and ordinances when operating his/her vehicle, and the **BUYER** agrees to hold **SELLER** harmless from any violation thereof.

The SELLER assumes no liability regarding the improper installation or misapplication of its products. It is the installer's responsibility to check for proper installation and if in doubt, contact the manufacturer.

The **SELLER** recommends that the **BUYER** temporarily remove this product from his/her vehicle when having the vehicle serviced by a dealership or other service facility. Failure to do so may cause erroneous diagnostic readings or misdiagnosis of vehicle problems. The **SELLER** assumes no liability for failure to do so.

LIMITATION OF WARRANTY

Dfuser.com (hereafter "SELLER") gives Limited Warranty as to description, quality, merchantability, fitness for any product's purpose, productiveness, or any other matter of Seller's product sold herewith. The SELLER shall be in no way responsible for the product's open use and service and the BUYER hereby waives all rights other than those expressly written herein. This Warranty shall not be extended or varied except by a written instrument signed by SELLER and BUYER.

The Warranty is Limited to ninety (90) days from the date of sale and limited solely to the parts contained within the product's kit. All products that are in question of Warranty must be returned shipping prepaid to the **SELLER** and must be accompanied by a dated proof of purchase receipt. All Warranty claims are subject to approval by Dfuser.com.

Under no circumstances shall the SELLER be liable for any labor charged or travel time incurred in diagnosis for defects, removal, or reinstallation of this product, or any other contingent expenses.

Under no circumstances will the SELLER be liable for any damage or expenses insured by reason of the use or sale of any such equipment.

IN THE EVENT THAT THE BUYER DOES NOT AGREE WITH THIS AGREEMENT: THE BUYER MAY PROMPTLY RETURN THIS PRODUCT, IN A NEW AND UNUSED CONDITION, WITH A DATED PROOF OF PURCHASE, TO THE PLACE OF PURCHASE WITHIN TEN (10) DAYS FROM DATE OF PURCHASE FOR A FULL REFUND.

THE INSTALLATION OF THIS PRODUCT INDICATES THAT THE BUYER HAS READ AND UNDERSTANDS THIS AGREEMENT AND ACCEPTS ITS TERMS AND CONDITIONS.

AFTERMARKET PRODUCTS AND YOUR VEHICLE'S WARRANTY

Many of our customers ask, "Will your product void my vehicle manufacturer's warranty?" While the answer is straightforward from a legal standpoint, we also want to educate our customers (and aftermarket Consumers) on some industry realities and offer some common sense precautions to minimize your risk.

Consumers of aftermarket products are protected by The Federal Magnusson-Moss Warranty Act. The Act states that if something breaks on your car and you take it in for warranty repair, the dealer must honor your warranty unless they can prove that whatever modifications you have added to your car actually caused the problem.

While as a consumer, you have strong legal protection with regards to your vehicle's warranty, there is also a practical reality that different automotive manufacturers and dealers have greatly varying views on aftermarket products, in particular those that produce horsepower, such as performance enhancement chips, modified intake manifolds, or aftermarket exhaust systems. There are dealers and manufacturers out there that will use the presence of a horsepower upgrade to void your vehicle's warranty. They will do this regardless of whose product you are using. Any aftermarket company that does not acknowledge this is misleading you.

The bottom line is that while the law protects the consumer and provides for enforcement of the warranty, it is very difficult for most people to hire an attorney and fight a voided warranty. Dfuser.com recommends that you always disconnect and remove your module and monitor when you take your vehicle to a dealer for warranty work in order not to interfere with Diagnostic equipment.



	Inches	Millimeters
Flange Dia.: Offset:	4.788	121.6
Wheel Bolt/Studs:	4 x M12-1.5	
Bolt Circle:	3.937	99.9
Spline /Hub ID:	1.101	27.9
Brake Pilot:	2.160	54.8
Wheel Pilot:	2.120	53.8
Inner Mount Pilot:	2.397	60.8
Mounting:	Spindle	
Weight:	3.36 Lbs.	1.53 Kgs.

Notes: Retaining holes 2x M8-1.25

Questions: Send email to <u>Support@dfuser.com</u> Visit us on the web: <u>http://www.dfuser.com</u> dfuser.com, 13701 Ranch Road 2338, Georgetown, TX 78633