



PERFORMANCE USA LLC

Jan 3, 2018

9" Ford 3rd Member Break-in Instructions



OIL REQUIREMENTS

For Tru Trac and Wavetrack posi units, use a quality petroleum/mineral based oil. **We do not recommend synthetic oil.** Friction additive/modifier is not required. Do not use any RedLine, Shockproof, Royal Purple or similar gear oils. Specifically any standard 75W 90 or 140 will work just fine.

OIL LEVEL

Many differentials are easy to fill with gear oil. However, the 9" Ford design can be difficult to fill completely. The location of the fill plug on the 9" Ford can cause oil to run back out before it is completely full. Most 9" housings hold at least 2 1/2 – 3 quarts of oil and sometimes as much as 5 quarts. It is important to take your time and be sure that the oil has settled into all the crevices and recheck the oil level to be certain that it is completely full before driving the vehicle.

BREAK IN

ANY OVERLOADING OR OVERHEATING WILL CAUSE THE GEAR OIL TO BREAK DOWN AND THE RING & PINION WILL FAIL.

All new gear sets require a break-in period to prevent damage from overheating. After driving the first 15 to 20 miles, it is best to stop and let the differential cool before proceeding. Dutchman's warranty requires at least 500 miles before towing. DMI also requires towing for very short distances (less than 15 miles) and letting the differential cool before continuing during the first 45 towing miles. This may seem unnecessary, but it is very easy to damage the differential by loading it before the gear set is completely broken in. DMI recommends changing the oil after the first

500 miles. This will remove any metal particles or phosphorus coating that has come from the new gear set. The greatest damage results when a new ring & pinion has been run for several miles during the first 500 miles and the oil is very hot. Any heavy use or overloading at this time will cause irreparable damage to the gear set that can be determined by inspection and will not be warranted by DMI.

CLUTCH TYPE "POSITRACTIONS"

Positraction chatter is normal for limited slip and clutch type positraction differentials. Both rear tires must measure the same circumference in order for the differential to function properly without premature wear. **Limited slip additive or friction modifier for limited slip differentials must be used with the oil to reduce positraction chatter in the event that the oil is changed.**

LOCKERS

Mechanical Locking differentials will bang and clunk during normal operation. Both rear tires must measure the same circumference in order for a locking differential to function properly.

GEAR NOISE

Care is taken to set up each rear gear set with as little gear noise as possible. Aftermarket (non OEM) gears are designed primarily for strength *and may be whiney/ noisy*. This noise is common and typically cannot be eliminated. **DO NOT** attempt to use synthetic oils hoping to quiet a noisy rear gear set.

SIGNS OF LUBRICATION FAILURE

When a gear runs low on oil, damage is sure to result. The cause of damage is not always obvious. When a differential runs low on oil, the oil volume may not be sufficient to keep the gear cool. Once the oil breaks down from contact with the hot gear, wear occurs very rapidly. Material will wear off the drive side of both the ring & pinion teeth and leave a feather like pattern on both surfaces. A gear that wears from friction due to lack of lubrication and excessive heat seldom experiences a color change from heat because any discoloration is worn off the

teeth during each contact. Ring & Pinion gears are heat treated separately so that the pinion, whose teeth make contact more often than the ring gear, is designed to be harder. To accomplish this, the two gears are heat treated separately and a soft gear will not cause both the ring & pinion to wear.

DUTCHMAN AXLE WARRANTY EXCLUSIONS

1. Any damage due to abuse, overloading, or lubrication failure (e.g. oil deterioration, water contamination, low oil level).
2. Any vehicles used off road or for competition.
3. Mini and mid-sized vehicles with tires over 31" tall will not be warranted due to the overloading caused by tall tires.

Most items are not warranted against abuse, overloading, or improper lubrication. All rear axle parts must be returned to DUTCHMAN'S shop freight prepaid for inspection and determination. We do not authorize and will not pay for outside repairs. ANY UNAUTHORIZED OUTSIDE REPAIRS OR MODIFICATIONS VOID THIS WARRANTY. We will not pay for labor, inconvenience, loss of time or revenue, telephone calls, commercial losses, or loss of perishable goods. This is our only warranty expressed or implied. All returned goods must be accompanied by copy of purchase invoice within 30 days and will be charged a 20% service charge for handling.

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Terms and Conditions of Sale

1. Effective January, 2008, supersedes all previous policy statements. Policies are subject to change without notice. Speed tech performance Ltd. is not responsible for printing errors.
2. Speed Tech Performance Ltd. does not endorse, nor recommend modification of vehicles for use on public highways, since warranty or government regulations may be violated. As an express condition of sale of any performance part, the buyer acknowledges and agrees to use the performance parts for the modification of vehicles in sanctioned OFF-ROAD competitive events and show purposes only. Customers should exercise their discretion on matters with regards to the purchase and installation of these products.
3. Speed Tech Performance Ltd. does not ensure the legal use of these products. We do not guarantee the fitment of these products for anything other than their intended application nor do we assume any responsibilities what so ever for the misuse or losses incurred by the use of any of these components. While every effort is made to provide technical information and assistance, we have no control over owner installation, modification, and unusual stress that performance parts are subject to.
4. The customer acknowledges that Speed Tech Performance Ltd. and its employees are not responsible for any mechanical failures due to the use of parts sold, supplied or installed not for their intended application. Speed Tech Performance Ltd will not be held liable for any damages which are incurred directly or indirectly on the vehicles or operators or passengers of the vehicle
5. Please consult your sales agent and/or technician prior to purchase of any of Speed Tech Performance Ltd. Products to ensure proper fit. The buyer assumes all responsibilities for determining the suitability of the product. All aftermarket products should always be installed by professionals only.

Warranty Claim:

1. Speed tech Performance Ltd. Warrants its products against materials and workmanship failure for the term of 12 months (1 year) from the date of purchase and only up to the amount paid with proof of purchase.
2. Seller's liability shall as limited to repairing or replacing, at its option, any defective product which is returned, freight prepaid to Seller, according to the Merchandise Return Procedure set forth in Section 3 below. Buyer shall bear all responsibility for shipping charges and risk of loss or damage during transit to Seller. Products which have been subjected to abuse, misuse, alteration, neglect or unauthorized repair or installation, as determined solely by Seller, are not covered by this warranty. Any alterations, addition, improvements or attachments to the product(s) not authorized in writing by the Seller shall be deemed to be a waiver of this warranty by Buyer and shall render this warranty null and void. Seller shall return repaired or replaced product(s) to Buyer, at its expense via regular ground service in Canada. Shipping charges by all other methods and to all other destinations shall be borne by Buyer.
3. Merchandise return procedure
 - A. If you purchased your Speed tech performance ltd product from us or from an authorized dealer, you are covered by the terms of this policy. All claims however, must be submitted directly to Speed tech performance Ltd.
 - B. Call the customer service representative at 1-888-467-1625.
 - C. Provide the invoice number, date of purchase and reason for return
 - D. You will be assigned a Returned Goods Authorization Number (RGA). The package you return must show the RGA on the outside of the package, include the original invoice and be shipped prepaid to our facility. The part has to be in its original packaging materials and be in a resellable condition. For parts presenting signs of use, only warranty claims will be accepted.
 - E. Ship to seller, freight pre-paid and insured for replacement cost in original packaging.
 - F. Replacement or repair decision will be made when merchandise is received by seller. No advance replacement is available.

How to File a Warranty Claim:

The answer to ALL the following questions should be YES before contacting our Customer Service Department.

Is the part appropriate to your application?

Did you carefully and thoroughly read the instructions provided along with the part?

Do you have the proof of purchase?

Are you the original purchaser?

Is the part unmodified and clean?

Is the return date within 3 months from the purchase date?

Is the reason for return a legitimate product defect?

If the answer to all these questions is YES, please contact our Customer Service Department at 1-888-467-1625. You will be given a Returned Goods Authorization Number (RGA) valid for 30 days. You will also be asked to ship the part prepaid to our facility. All shipments MUST be prepaid, include the original invoice and show the RGA on the outside of the package, otherwise it will be refused. Please include a brief explanation letter in order to expedite the warranty analysis process.

What doesn't this Warranty Cover?

The costs not covered by this warranty include but are not limited to:

- Removal, installation, shipment and insurance costs.
- Improper installation or maintenance
- Misuse or abuse, negligence
- Damage to related components
- Normal wear and tear.
- Costs incurred due to down time of vehicle
- Alterations on the original design or unauthorized repairs.

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