

Spicer® Components



**SPICER®**

*Drivetrain Products*

# Dana Commercial Vehicle Warranty Manual

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**Rev. 3**

**July 2019**

## What Is the Dana Warranty Coverage for My Component?

Knowing and understanding Dana warranty is the responsibility of the vehicle owner. It is also the responsibility of the selling dealer to identify the Dana products in the vehicle and inform the purchaser of the warranty for those products, based on the vehicle vocation at the time of sale.

The combined use of the Dana Commercial Vehicle Warranty Manual and the Dana Commercial Vehicle Warranty Guide expresses Dana time and mileage warranty coverages for the Dana products. Dana warranty training is also available to assist dealers in understanding and identifying vocation coverage and warranty parameters. See your Dana Representative for details.

## Dana Commercial Vehicle Warranty Guide

Dana component warranty is identified using the Dana Warranty Guide. The Warranty Guide explains Dana vocation definitions, component time and mileage limits per vocation, aftermarket component / part warranties, and extended purchase warranty options.

How do I define my vocation coverage?

1. Review all the “Vocational Definitions” listed and select the one that most accurately describes the use and configuration of the vehicle.
2. Ensure your vehicle vocation is listed in the “Typical Vehicle Types” under the selected Vocational Definition.
3. Once the vocation is defined, refer to the “Product Time and Mileage Coverage Per Vocation” section.
4. Identify the component in question using the product model number for the time and mileage coverage.
5. Refer to and understand any notes that pertain to a specific coverage (i.e., lube requirements).
6. If you cannot determine coverage, contact your Dana Representative or call the Dana Call Center at the time of sale at 1-877-777-5360.

## Dana Commercial Vehicle Warranty Manual

**Note: Printed copies of this document are not controlled.** Please refer to the electronic copy on [www.dana.com](http://www.dana.com) for the most up-to-date information.

The Dana Warranty Manual documents the specifics of Dana product warranty. This manual includes:

- Product Warranty Statements for Commercial Vehicle Product Group of Dana
- Warranty terminology
- Warranty programs
- Claim procedures and claim information
- Important information regarding claim approval
- Component repair or replacement guidelines
- Labor hour guidelines (SRTs)
- Limits, exclusions, and requirements
- Other important resources

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# Dana Commercial Vehicle Product Group (OE)

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## Spicer® Axle and Brake Warranty Statement

### Warranty

Subject to the conditions stated herein, Dana Commercial Vehicle Product Group of Dana Incorporated (“Dana”) warrants to purchasers of its Spicer® axle and brake parts, components and assemblies (“Products”) sold as original equipment (“OE”) production or service parts that the Products shall be free from defects in material and workmanship and shall conform to Dana’s published specifications under normal use and proper maintenance for the warranty periods described in the “Warranty Periods” section below. This warranty extends to Dana’s OE production and service parts customers and their retail customers, and is transferable by the original retail purchaser to one subsequent owner of the vehicle in which the Product was installed as original equipment.

Product parts and components manufactured by others (such as wheel seals, slack adjusters, and tie rods) are warranted solely by their manufacturers and not by Dana.

Dana assumes no responsibility for the selection of any Product for a specific application absent its written approval of such application, and makes no general representations whatever in respect of any such selection.

### Remedy

If any Product fails to comply with this warranty during the applicable warranty period, Dana shall reimburse the cost of repair or of a replacement Product as provided below. All repaired and replacement Products shall be warranted hereunder for the unexpired portion of the original warranty period.

For Products sold as OE production parts, Dana shall reimburse (a) the cost of parts and labor (subject to pre-established prices and rates) to repair the Product or (b) the cost of the replacement Product, whichever is less. For Products sold as OE service parts, Dana shall reimburse (a) the cost of parts only (subject to pre-established prices) to repair the Product or (b) the cost of the replacement Product, whichever is less.

The following are not reimbursable under Dana’s warranty: (a) towing expenses, (b) meal and lodging expenses, (c) travel time or transportation expenses, and (d) downtime expenses.

Other exclusions are also listed in the Dana Commercial Vehicle Warranty Guide. In all cases Dana shall make the final determination as to the appropriate reimbursement for any warranty claim.

### Warranty Exclusions

Dana’s warranty does not cover normal wear and tear or extend to any Product that has been (a) used in any application contrary to Dana’s written recommendations; (b) improperly installed or maintained; (c) altered or modified; (d) damaged by casualty or due to accident, negligence, abuse, or misuse in shipping or use; (e) subjected to abnormal operating conditions; or (f) used with any lubricant not approved by Dana. Noise alone is not warrantable under Dana warranty. The noise exclusion does not apply if there is an actual failed component.

### Warranty Periods

The Product warranty periods are stated in the Dana Commercial Vehicle Warranty Guide. Warranty coverage for Products furnished for OE production commences on the vehicle in-service date. Warranty coverage for Products furnished as OE service parts commences on the date of retail sale.

If a non-warrantable failure occurs within the standard/extended warranty coverage period, and the customer purchases a new carrier exchange to complete the repair, warranty coverage shall be two years, unlimited mileage, from the date of the new carrier purchase.

# Dana Commercial Vehicle Product Group (OE)

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If a non-warrantable failure occurs within the standard/extended warranty coverage period, and the customer purchases original replacement parts to complete the repair, warranty coverage shall be one year from date of purchase and unlimited mileage on the replacement parts only. Non-warrantable failures due to abuse or neglect (i.e., overloading, shock load, spin-out, failure to maintain) will void the component warranty.

## Claims Procedure

Warranty claims may be made to the OE manufacturer through an authorized dealer or, at the option of the manufacturer, directly to Dana. All direct warranty claims shall be made in writing to: Dana Incorporated, Attention: Commercial Vehicle Warranty Department, 6515 Maumee Western Road, Maumee, OH 43537.

Dana's obligation to review any warranty claim is subject to the following conditions:

- a. The claim must be submitted as provided above no later than 90 days from the date of the failure and must include the following information: claim number, repair order number, in-service date of vehicle, failure date, mileage at time of failure, explanation of the failure and the repair, identification of the failed Product (including model and serial number), labor hours to complete repair, labor cost, cost of replacement parts, and total amount of claim;
- b. If requested by Dana, the Product shall be returned, freight collect, to Dana's Warranty Return Centers. All Warranty returns for Commercial Vehicle Axle Division component failures occurring in the USA are to be sent to:
  - Dana Incorporated - COTC2 Commercial Vehicle Drive Axle Warranty Return Center, 6515 Maumee Western Road., Maumee, OH 43537
- c. Warranty returns occurring in Canada will continue to be sent to:
  - Dana Canada Corp. - c/o Axiom Warehousing, 165 Orenda Road West, Brampton, Ontario L6W 1W3
- d. All failed Driveline Components (U-Joints, Driveshafts, Center Bearings, Yokes, and Steering Shafts) are to be returned to:
  - Dana Incorporated - COTC2, Attn: CVPG Driveshaft Warranty, 6515 Maumee Western Road, Maumee, OH 43537

Dana shall determine that none of the above warranty exclusions apply and that the Product was defective when originally delivered to the purchaser. Dana's determination of warranty coverage shall be final in all cases.

Dana reserves the right to reject a warranty claim for any or all of the following reasons:

- a. Original claim was filed after ninety (90) days from the date of failure
- b. Failure occurred beyond applicable warranty period
- c. Claim information is insufficient
- d. Product was not returned for inspection as requested
- e. Product inspection does not substantiate claim or indicate a failure

## Warranty Disclaimer

DANA'S WARRANTY HEREIN IS EXCLUSIVE AND GIVEN IN PLACE OF (a) ALL OTHER WARRANTIES FOR THE PRODUCTS, EXPRESS, IMPLIED OR STATUTORY, WHETHER WRITTEN OR ORAL, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE OR IMPLIED WARRANTIES ARISING FROM PERFORMANCE, COURSE OF DEALING OR USAGE OF TRADE, AND (b) ALL OTHER OBLIGATIONS, LIABILITIES, RIGHTS, CLAIMS OR REMEDIES RESPECTING THE PRODUCTS, INCLUDING, BUT NOT LIMITED TO, ANY RIGHTS IN CONTRACT, TORT, OR STRICT LIABILITY AND ANY RIGHT ARISING FROM DANA'S NEGLIGENCE, ACTUAL OR IMPUTED.

## Limitation of Liability

DANA'S OBLIGATIONS AND PURCHASER'S REMEDIES HEREIN ARE LIMITED TO THE REIMBURSEMENTS DESCRIBED ABOVE AND DANA SHALL NOT BE LIABLE FOR ANY INCIDENTAL, SPECIAL, CONSEQUENTIAL AND OTHER DAMAGES, INCLUDING, BUT NOT LIMITED TO, ECONOMIC LOSS, LOST REVENUE, LOST PROFITS, OR LOSS OF USE OR DAMAGE TO OTHER PROPERTY.

# Dana Commercial Vehicle Product Group (OE)

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## **Effective Date**

This warranty shall become effective and apply to Products sold on or after June 1, 2017, and applies only to Products sold for use in the United States or Canada. This warranty may not be changed, altered or modified in any way except in writing by Dana's authorized representative.

## **Service Support**

For service or support, call 1-877-777-5360 or visit our website at [www.dana.com](http://www.dana.com).

## **Governing Law**

This warranty shall be governed, interpreted and construed by and in accordance with, the laws of the State of Ohio and all proceedings to interpret or enforce this warranty shall be brought exclusively in a state or federal court in Ohio with jurisdiction.

## Spicer Driveshaft Warranty Statement

### Warranty

Subject to the conditions stated herein, Dana Commercial Vehicle Product Group of Dana Incorporated (“Dana”) warrants to purchasers of its Spicer® driveshafts, components and assemblies (“Products”) sold as original equipment (“OE”) production or service parts that the Products shall be free from defects in material and workmanship and shall conform to Dana’s published specifications under normal use and proper maintenance for the warranty periods described in the “Warranty Periods” section below. Dana driveshaft warranty is with, and administered through the vehicle manufacturer. Dana assumes no responsibility for the selection of any product for a specific application absent its written approval of such application, and makes no general representations whatever in respect of any such selection.

### Remedy

If any Product fails to comply with this warranty during the applicable warranty period, Dana shall reimburse the cost of repair or of a replacement Product as provided below. All repaired and replacement Products shall be warranted hereunder for the unexpired portion of the original warranty period.

For Products sold as OE production parts, Dana shall reimburse (a) the cost of parts and labor (subject to pre-established prices and rates) to repair the Product or (b) the cost of the replacement Product, whichever is less. For Products sold as OE service parts, Dana shall reimburse (a) the cost of parts only (subject to pre-established prices) to repair the Product or (b) the cost of the replacement Product, whichever is less.

The following are not reimbursable under Dana’s warranty: (a) towing expenses, (b) meal and lodging expenses, (c) travel time or transportation expenses, and (d) downtime expenses.

Other exclusions are also listed in the Dana Commercial Vehicle Warranty Guide. In all cases Dana shall make the final determination as to the appropriate reimbursement for any warranty claim.

### Warranty Exclusions

Dana’s warranty does not cover normal wear and tear or extend to any Product that has been (a) used in any application contrary to Dana’s written recommendations; (b) improperly installed or maintained; (c) altered or modified; (d) damaged by casualty or due to accident, negligence, abuse, or misuse in shipping or use; (e) subjected to abnormal operating conditions; (f) used with any lubricant not approved by Dana, or (g) modified and assembled by a third party.

The use of non-Dana components is not approved nor warranted for use in our driveshaft system (such as fasteners, bearings, seals, yokes, universal joints, or brackets).

### Warranty Periods

The maximum driveshaft product warranty periods are stated in the Dana Commercial Vehicle Warranty Guide. Each vehicle manufacturer determines the specific warranty period. Warranty coverage for Products furnished for OE production commences on the vehicle in-service date. Warranty coverage for Products furnished as OE service parts commences on the date of retail sale.

If a non-warrantable failure occurs within the warranty coverage period, and the customer purchases original replacement parts to complete the repair, warranty coverage shall be one year from date of purchase and unlimited mileage on the replacement parts only. Non-warrantable failures due to abuse or neglect (i.e., overloading, shock load, failure to maintain, or non-approved components in the driveline system) will void the component warranty.

# Dana Commercial Vehicle Product Group (OE)

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Driveshaft warranty claims must be made to the OE manufacturer through an authorized dealer.

Dana's obligation to review any warranty claim is subject to the following conditions:

- The claim must be submitted as provided above no later than 90 days from the date of the failure and must include the following information: claim number, repair order number, in-service date of vehicle, failure date, mileage at time of failure, explanation of the failure and the repair, identification of the failed product (including model and part number), labor hours to complete repair, labor cost, cost of replacement parts, and total amount of claim.
- If requested by Dana or OE manufacturer, the product shall be returned, pre-paid shipping, to Dana's Warranty Return Center.

All warranty returns for Commercial Vehicle Division driveshaft component failures are to be sent to:

Dana Incorporated, Commercial Vehicle Driveshaft Warranty, 6515 Maumee Western Road, Maumee, OH 43537

Dana shall determine that none of the above warranty exclusions apply and that the product was defective when originally delivered to the purchaser. Dana's determination of warranty coverage shall be final in all cases.

Dana reserves the right to reject a warranty claim for any or all of the following reasons:

- a. Original claim was filed after ninety (90) days from the date of failure
- b. Failure occurred beyond applicable warranty period
- c. Claim information is insufficient. In the event of missing paperwork or required parts, a 5 days grace period will be given until claim is closed as denied and any associated parts are scrapped
- d. Product was not returned for inspection as requested
- e. Product inspection does not substantiate claim or indicate a failure due to defect
- f. Failure was due to non-Dana components that were used in the driveshaft system

## Claim Procedures

- a. Provide the following information on or with the OEM claim:
  1. Complete 17-digit VIN
  2. Date in service
  3. Model, part number, and description of failed component (D/S serial # NA)
  4. Itemized Dana part numbers and prices
  5. Description of complaint, failure, fault code(s), dealer test results, cause, correction (repair)
  6. Date of failure and mileage at time of failure
  7. Hourly shop labor OEM approved warranty rate and number of labor hours requested
  8. OEM published labor code and hours
- b. File the claim through the vehicle OEM. If the vehicle has a different nameplate than the repairing dealer, before beginning work, obtain permission to perform a sublet repair through OEM of nameplate vehicle by contacting either the selling dealership or the local OEM dealer. Claim is to be filed as sublet repair through nameplate OEM. If permission is not obtained, dealer cannot perform OEM warranty repair.
- c. Failed parts must be retained by the customer, dealer, or repairing facility for 60 days after the date the claim is submitted, subject to possible inspection.
- d. The decision as to the warrantability of the failure will be made by Dana based upon the following:
  1. Review of the warranty claim
  2. Return and examination of failed parts
- e. Dana will determine the amount of the settlement based on the review of the warranty claim and failed parts. If required, certain deductions may be made from the amount claimed if standard OEM and Dana labor hours will be determined based upon published standard repair times.

## Component Return Requirements

Be certain the parts are properly identified.

- a. When shipping parts for several different claims together, **do not mix the parts in the same container, box, etc.** This causes confusion in performing a failure analysis, a delay in claim processing, and rejection of the claim.
- b. Dealer will identify parts disposition, return or scrap, for rejected claims with each claim by a parts disposition tag. The tag is to identify the following at a minimum:
  1. Dealer code
  2. Claim number
  3. Repair order number
  4. Repair date
  5. Primary failed part number
  6. Returned parts from warranty claims will be scrapped subsequent to evaluation for warrant-ability.
  7. If rejected, non-warrantable and non-Dana parts are to be returned. Per OE agreement, a return tag must provide return address and shipper account number to provide for coverage of cost of return. All such parts will be returned at dealer's expense. Parts/shipments over 70 lbs and/or requiring freight (pallet) need to be set up by the requested party within one week after claim response/disposition from Dana. Product over seven days will be subject to scrap.
- c. Returned parts from warranty claims will be scrapped subsequent to evaluation for warrantability.
- d. Package the parts carefully to avoid shipping damage which could distort or mask the true cause of the failure.
- e. Return all driveshaft parts pre-paid. Shipping charges may be included in claim. Failure to return requested parts to designated Dana location will result in rejection of the claim.
- f. If parts for more than one claim are shipped on the same pallet, list all claim numbers on the bill of lading or provide a detailed packing list. This will ensure proof of shipment for a specific claim if the parts are lost.
- g. Clearly print the claim number, and/or Dana authorization number, or repair order number on the bill of lading. All Dana parts associated with the claim must be returned for warranty consideration.
- h. Always include a copy of the claim and repair order in, or attached to, the container holding the parts for that particular claim. **Protect the copies from grease, oil, etc.**
- i. Parts lost from broken boxes, damaged shipping containers, negligence in packaging, or returned without proper claim identification will result in no reimbursement, as the parts were not received and shall be the responsibility of the dealer.
- j. Corrosion or rust that prevents proper inspection, or prevents identification of the primary failure, may result in a rejected claim.

# Dana Commercial Vehicle Product Group (OE)

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## **Effective Date**

This warranty shall become effective and apply to Products sold on or after June 1, 2017, and applies only to Products sold for use in the United States or Canada. This warranty may not be changed, altered or modified in any way except in writing by Dana's authorized representative.

## Warranty Terminology

**Warranty:** A statement of support offered by a manufacturer to promote customer confidence in a product. This support is generally provided in the form of reimbursement for repairs performed to correct qualified failures associated with defects in material and / or workmanship. A warranty is not necessarily an implication of a product's anticipated life expectancy or level of performance.

**Guarantee:** A statement of support offered by a manufacturer to promote customer confidence in a product. This support is generally provided in the form of reimbursement for qualified service procedures regardless of origin or source of failure cause. This support is limited only to the terms of the written guarantee and is not necessarily associated with failures due to defects in material or workmanship.

**Standard Warranty:** A manufacturer's published warranty is available to anyone who purchases the product. The base warranty coverage is offered to all purchasers of a product and is sometimes called the "OEM warranty period."

**Extended Warranty:** A warranty which extends the parameters of the standard coverage (time, mileage, hours). Normally, the same failure criteria applies, but some limitations may be placed on which parts or services are covered. A fee or surcharge may be required in some cases.

**Original Warranty:** The total warranty coverage for which a product is eligible. A combination of the Standard and Extended Warranty periods.

**Policy / Goodwill:** Goodwill support provided in cases where the manufacturer has no liability for service procedures performed to correct a failure / condition to a product. In these situations, no entitlement to reimbursement exists for the customer. Other support (i.e., parts for training, show exhibits, etc.) may be given to customer in appreciation for business enhancing activities as a negotiated settlement.

## OEM Warranty

### 1. OEM Warranty

- a. The OEM provides parts and labor coverage to cover the cost of certain expenses incurred for warrantable repairs to Dana components. The failures must be the result of verified and actual defects in material and / or workmanship and have occurred within the time and mileage limitations of the warranty coverage. Some expenses, even though related to the repair, are excluded from the coverage and are not recoverable under the terms of the Dana warranties.
- b. All OEM warranty repairs must be performed by the corresponding nameplate dealer only. Exceptions must have the approval of the nameplate OEM.

### 2. Administration of OEM Warranty Claims

- a. Repairing dealer will be responsible for following OEM policies and procedures in administering warranty claims.
- b. Filing for OEM warranty is the responsibility of the repairing dealer and OEM. Warrantability decisions are the responsibility of the vehicle OEM.
- c. Always refer to the OEM's Warranty Policies and Procedures manual for specific information and guidelines.
- d. Claims for repairs made as exceptions to item 1b. above must be submitted as sublet repairs through the nameplate OEM.

# Claim Procedures and Claim Information

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## Warranty Claim Procedures

### Aftermarket Parts and OEM Warranties

#### Claim Procedures

- a. Standard Warranty Coverage is available on all Dana products in approved applications.
- b. Claims Administration/Processing is handled through the OEM, per OEM warranty procedures.
- c. Refer to Standard Warranties – Base Coverages Section, in the Dana Commercial Vehicle Warranty Guide. Also, please refer to stated warranty coverages for specific OEM.
- d. Claims submitted must be for verifiable defects in material or workmanship.
- e. Claims must be submitted within ninety (90) days from the date on which the failure occurred.
- f. Claims submitted, which have been approved or authorized by a Dana field service / sales representative, must reference the corresponding claim number (Example: DAN123456.) Referencing the representatives' name is not sufficient to ensure claim payment.
- g. Provide the following information on or with the OEM claim:
  1. Complete 17-digit VIN
  2. Date in service
  3. Model, part number, and description of failed component (D/S serial # NA)
  4. Itemized Dana part numbers and prices
  5. Description of complaint, failure, fault code(s), dealer test results, cause, correction (repair)
  6. Date of failure and mileage at time of failure
  7. Hourly shop labor OEM approved warranty rate and number of labor hours requested
  8. OEM published labor code and hours

**Note:** It is recommended that “Important Information Regarding Claim Approval” be read, and understood, by all personnel at the location that are involved in any part of the warranty process.

- h. File the claim through the vehicle OEM.

If the vehicle has a different nameplate than the repairing dealer, before beginning work, obtain permission to perform a sublet repair through OEM of nameplate vehicle by contacting either the selling dealership or the local OEM dealer. Claim is to be filed as sublet repair through nameplate OEM. If permission is not obtained, dealer cannot perform OEM warranty repair.

- i. If the OEM or Dana requires material to be returned, see “Part Return Requirements” for part return details.

## Spicer® Extended Warranties

### Claim Procedures

- a. Prior to starting a repair, the repairing dealer must verify the vehicle is covered under an extended warranty by referring to the Dana Commercial Vehicle Warranty Guide and/or the purchased warranty guidelines. For clarification and pay-for-registration confirmation number, contact the Dana Call Center at 1-877-777-5360.
  1. The repairing dealer provides the 17-digit VIN and customer name. Component model and serial number may also be requested.
  2. Dana verifies vehicle registration and extended warranty coverage and provides registration confirmation number to the repairing dealer.
- b. For failures which are determined to be lube related, the customer is responsible for furnishing the following information to the repairing dealer:
  1. Proof of synthetic lube usage.
  2. Proof the synthetic lube was changed at the prescribed intervals.

**NOTE:** For further details about lube related failures, refer to “Limits and Exclusions to Dana Warranties” of this manual.
- c. If the failure is warrantable, the repairing dealer completes the repair and files a claim using one of the following options:

**Option 1:** If the OEM has decided to process Spicer® extended warranty claims, the claim should be submitted through the OEM. Some OEMs have adopted this approach. Please check with the OEM to confirm they are using this method.

**Option 2:** If the OEM has decided not to administer extended warranties, please contact either your Dana Representative or the Dana Call Center at 1-877-777-5360 for claim filing instructions, or refer to the “Claim Procedures” section at [www.dana.com](http://www.dana.com) under the “Warranty” tab.

**Option 3:** In some isolated cases, the dealer may decide to bill the customer for the entire repair, including parts and labor. The dealer should still file the claim to the OEM for warranty reimbursement according to Option 1 above or direct to Dana under Option 2.
- d. For claims submitted directly to Dana, a standard OEM / dealer repair order must accompany the claim. In all cases the following information must be provided:
  1. Spicer extended warranty registration confirmation number (only in the case of paid-for extended warranties)
  2. Date and mileage at time of failure
  3. Description of the complaint, failure, fault codes, dealer test results, cause, correction (repair)
  4. In-service date
  5. Vehicle 17-digit VIN
  6. Component model and serial number
  7. Itemized replaced parts list to include Dana part numbers and prices
  8. Total labor hours expended to complete the repair (reference OEM and Dana Labor Hour Guidelines). List published OEM codes and times, if known.

See “Important Information About Labor Hour Guidelines.”
  9. Hourly shop warranty rate (OEM approved warranty rate)
  10. Total cost of the repair / total amount of the claim
  11. Identify the party (name and mailing address) who should receive reimbursement for the claim
  12. Date of retail sale for service/replacement parts, and replacement components
  13. Vehicle vocation

# Claim Procedures and Claim Information

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- e. Failed parts must be retained by the customer, dealer, or repairing facility for 60 days after the date the claim is submitted, subject to possible inspection.
- f. The decision as to the warrantability of the failure will be made by Dana based upon the following:
  - 1. Review of the warranty claim
  - 2. Return and examination of failed parts, if required (see “Part Return Requirements”)  
**NOTE:** You may be required to return failed parts to Dana. You will be advised to return them to the appropriate Warranty Return Center shipped freight collect using shipping methods suggested by Dana:
- g. Dana will determine the amount of the settlement based on the review of the warranty claim and failed parts, if required. Certain deductions may be made from the amount claimed if standard OEM and Dana labor hour guidelines are not met.

## Part Return Requirements

Be certain the parts are properly identified.

- a. When shipping parts for several different claims together, **do not mix the parts in the same container, box, etc.** This causes confusion in performing a failure analysis, a delay in claim processing, and rejection of the claim.
- b. Dealer to identify parts disposition, return or scrap, for rejected claims with each claim by a parts disposition tag. The tag is to identify the following at a minimum:
  1. Dealer code
  2. Claim number
  3. Repair order number
  4. Repair date
  5. Primary failed part number
  6. Returned parts from warranty claims will be scrapped subsequent to evaluation for warrant-ability.
  7. If rejected, non-warrantable and non-Dana parts are to be returned per OE agreement a return tag must provide **return address & shipper account # to provide for coverage of cost of return.** All such parts will be returned at dealer's expense. Parts/shipments over 70 lbs and or requiring freight (pallet) need to be set up by the requested party within one week after claim response/disposition from Dana. Product over seven days will be subject to scrap.
- c. Package the parts carefully to avoid shipping damage which could distort or mask the true cause of the failure.
- d. **Return all driveshaft parts pre-paid**, shipping charges may be included in claim. Failure to return requested parts to designated Dana location **will** result in rejection of the claim.
- e. If parts for more than one claim are shipped on the same pallet, list all claim numbers on the bill of lading or provide a detailed packing list. This will ensure proof of shipment for a specific claim if the parts are lost.
- f. Clearly print the claim number, and/or Dana authorization number, or repair order (RO) number on the bill of lading. All **Dana** parts associated with the claim must be returned for warranty consideration.
- g. Always include a copy of the claim and repair order in, or attached to, the container holding the parts for that particular claim. **Protect the copies from grease, oil, etc.**
- h. Parts lost from broken boxes, damaged shipping containers, negligence in packaging, or returned without proper claim identification, will result in no reimbursement as the parts were not received and shall be the responsibility of the dealer.
- i. Corrosion or rust that prevents proper inspection, or prevents identification of the primary failure, **may** result in a rejected claim.

## Service Support

For service or support, call 1-877-777-5360 or visit our website at [www.dana.com](http://www.dana.com).

## Governing Law

This warranty shall be governed, interpreted and construed by and in accordance with, the laws of the State of Ohio and all proceedings to interpret or enforce this warranty shall be brought exclusively in a state or federal court in Ohio with jurisdiction.

## Warranty Disclaimer

DANA'S WARRANTY HEREIN IS EXCLUSIVE AND GIVEN IN PLACE OF (a) ALL OTHER WARRANTIES FOR THE PRODUCTS, EXPRESS, IMPLIED OR STATUTORY, WHETHER WRITTEN OR ORAL, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE OR IMPLIED WARRANTIES ARISING FROM PERFORMANCE, COURSE OF DEALING OR USAGE OF TRADE, AND (b) ALL OTHER OBLIGATIONS, LIABILITIES, RIGHTS, CLAIMS OR REMEDIES RESPECTING THE PRODUCTS, INCLUDING, BUT NOT LIMITED TO, ANY RIGHTS IN CONTRACT, TORT, OR STRICT LIABILITY AND ANY RIGHT ARISING FROM DANA'S NEGLIGENCE, ACTUAL OR IMPUTED.

## Limitation of Liability

DANA'S OBLIGATIONS AND PURCHASER'S REMEDIES HEREIN ARE LIMITED TO THE REIMBURSEMENTS DESCRIBED ABOVE AND DANA SHALL NOT BE LIABLE FOR ANY INCIDENTAL, SPECIAL, CONSEQUENTIAL AND OTHER DAMAGES, INCLUDING, BUT NOT LIMITED TO, ECONOMIC LOSS, LOST REVENUE, LOST PROFITS, OR LOSS OF USE OR DAMAGE TO OTHER PROPERTY.

# Claim Approval

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## Important Information Regarding Claim Approval

The following information is provided to help in the understanding of some very important facts about warranty claim processing. Please read it carefully.

Many claims are reduced or rejected because some or all of these requirements are not met. An improperly filed claim sometimes creates false expectations regarding payment approval. This can lead to confused and unhappy customers, not to mention the extra work it causes and the financial impact it has for the repairing facility.

In the following paragraphs, the term “supplier” will be used to indicate a manufacturer or supplier. The term “dealer” could be an OEM dealership or other repair facility.

The following is a list of some key items regarding warrantable failures and other conditions which can determine if a claim is to be paid. Examples of claim processing situations are given to clarify each point. These situations actually occur daily and result in reduced or rejected claims.

### **Item 1. Verifiable defect: This is the most important part of any warranty claim! Warranty is intended to cover verifiable defects in material or workmanship. If no defect can be shown, there is no reason to file a claim. The manufacturer did nothing wrong.**

***The inability to verify a failure is the primary reason for most claim rejections.***

There are many cases in which parts are returned for inspection and no failure can be found nor is there any indication or marking of what the repairing mechanic determined to be the cause of the failure. If the warranty analyst cannot verify any defect, the claim will be rejected. This happens quite often with claims for noise complaints.

**Example:** A claim is filed for a noisy drive axle. The mechanic noticed some slight discoloration on one of the bearing races and determined this was the cause of the failure. The mechanic did not mark the part to show the area of the race which he thought failed.

The supplier’s warranty analyst reviews the bearing race and, based on this expertise, finds no failure. He sees the discolored area of the race but recognizes it as normal wear and rejects the claim.

If the suspect area of the bearing race had been marked, the analyst might have been able to identify the condition which was considered a defect by the mechanic. If there was nothing wrong with the marked area, the analyst could initiate a request for training to help prevent similar claims from being filed in the future.

Manufacturers do extensive testing to determine the durability of their products. This testing is done both in the lab and on the road. In this process, conditions are deliberately induced to cause a variety of failure modes. The visual results of these failure modes are documented for future failure analysis. Additionally, the effects of other conditions, such as normal wear and contaminated lube, are recorded and studied.

The information learned from this testing is put into service and failure analysis manuals for use by field personnel and repair facilities. The information in these manuals helps people involved in the warranty process to make good decisions regarding defects.

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## **Item 2. Identifying root cause and responsibility for the failure: Once a defect or condition has been verified, identify the source of the failure.**

*Understanding the failure or condition and what caused it will determine who is responsible for payment of the repair.*

The part which failed is not always a “defective” part, nor is it necessarily the “causal” part. The failure might be the result of a driveline problem, driver error, or an improper prior repair. In any case, recognizing the cause of the failure determines to whom the repair should be charged.

## **Item 3. Dealing with wear items and normal maintenance.**

*Through normal use, components will eventually wear out. Do not mistake worn out parts for warrantable failures.*

Vehicle components have many moving parts. Some, such as gears, move internally. Other parts wear against each other, such as brake linings and brake drums. As this interaction occurs, it causes wear. It is a normal process in the life of a component.

*Normal wear is not a defect and is not warrantable unless specifically stated. The amount of normal wear can vary greatly depending on vehicle application and the habits of the driver.*

**Example:** A vehicle is being repaired for a warrantable failure to the drive axle. The vehicle has 290,000 miles on it. While doing the required rebuild, wear on the gears is noticed. Since the mechanic has already disassembled the carrier, he recommends the worn gears be replaced due to the mileage. Even though the labor would be covered under the warrantable repair, the gears are being replaced at the customer’s option. They did not fail. In this case, the customer is responsible for the cost of the gears which have not failed.

*Remember, warranty only covers verifiable defects in material or workmanship.*

## **Item 4. Over-repairs: Make every repair a quality repair but use good judgment in deciding when to replace or repair the failed component.**

*The unnecessary replacement of reusable parts and the swing of full components for minor failures are the two primary reasons for most claim reductions.*

*Warranty pays only for the most economical method to correct a failure, repair or replace, whichever is less.  
Warranty claim approval amounts are determined by these limitations.*

In some situations, manufacturers might sell kits containing groups of parts which are designed to renew a component. Remember, not all of these parts are necessarily warrantable, even though some parts from the kit might have been used to complete the repair. Only failed parts are covered.

# Claim Approval

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## **Item 5. Elective repairs: Initiating a product campaign or recall without authorization from the supplier creates a risk of not being paid for your claims.**

*Many claims are rejected because the repair was labeled a so-called “known problem” but the parts showed no evidence of a warrantable failure.*

**Example:** A customer owns a fleet of 30 vehicles which are all used in similar applications. The dealer noticed five of the vehicles have experienced failures to the same part. With good intentions to save the customer from unnecessary downtime, the dealer decides to replace this questionable part on every vehicle in the fleet. The dealer files warranty claims for all the repairs and forwards the parts to the supplier.

Upon inspection, the supplier’s warranty analyst finds no failure to 25 of the parts and rejects those claims accordingly.

Another situation which occurs is the parts have failed, but upon inspection, the failures are found to be caused by the customer. Now the dealer has the unpleasant task of presenting a possibly large invoice to the customer, an invoice the customer may have expected to be covered by warranty.

The correct method of handling a situation like this is to contact both the OEM and the Dana representative for your area, before starting any activity to repair vehicles which you suspect might have future failures.

Warranty claims are reviewed one at a time, each on its own merit, based on verifiable failures.

***If a repair facility does not have Dana’s, or the OEM’s written authorization to make repairs on vehicles which have not failed, it runs the risk of not getting paid for those repairs.***

A word of caution! Avoid making repairs or filing claims based on rumors a supplier has a “known problem.” That problem might be confined to a very limited amount of vehicles or component models. Before starting a repair solely based on this kind of information, contact the supplier to get all the facts.

Likewise, retrofit repairs to enhance or update a component to the latest technology are not warrantable unless approved in writing by Dana or the OEM. Warranty coverages are based on the technological knowledge at the time a component is designed. It would be unrealistic to expect older products to achieve performance standards which have been elevated by the latest technological advancements.

## **Item 6. Claim overcharges, undefined, and unidentifiable charges: Some charges are placed on warranty claims which do not apply to the failure or might not be covered under a supplier’s warranty.**

***A supplier reviewing a warranty claim must understand all charges being invoiced. Futhermore, the supplier must be able to verify each charge is related to the repair of his product.***

A supplier reviews a warranty claim in much the same manner as a person reviews a repair bill when getting a car out of the shop. If the car owner saw an unexplained charge, it would surely be questioned, especially if it had not been approved or discussed at the time the repair was estimated. A supplier reviews a claim to verify all charges are accurate and allowable under warranty coverage.

**Example:** A supplier’s warranty analyst is reviewing a claim. The claim shows a miscellaneous charge for \$55.00 but there is no explanation of the charge. The work order shows repairs to other systems on the truck and the warranty analyst is not sure if the charge is against his product. Since it is not clear, the \$55.00 is deducted. Further review of the claim shows an automatic shop supply charge of \$20.00. The analyst knows this type of charge is not covered under the warranty and deducts it. Finally, he notices a part price which is very high and determines the \$50.00 overcharge is due to the higher part mark-up than allowed by the warranty. The \$50.00 is also deducted from the claim, making the total reduction \$125.00.

***In order to prevent a similar situation from occurring, claims filed should only contain charges allowed by the warranty coverage. If the repairing facility chooses to charge amounts beyond warranty limitations, the difference should be billed to the customer or absorbed by the dealer.***

Suppliers' warranties offer various coverages. Likewise, they differ on how much will be paid on a warranty claim. Some pay for parts and labor, some pay parts only. Others have restrictions on the allowable part price mark-up or pay no mark-up at all. There might be occasions when some special circumstances apply to a repair. These cases are reviewed by the supplier on an individual basis.

***To avoid a claim being reduced or rejected, be sure to understand the limitations of the supplier's warranty coverage and only file for those items which are eligible.***

Remember, like the retail customer, a supplier paying the bill for a warranty claim is entitled to know all the facts about the invoice.

## **Item 7. Standard warranty versus extended warranties: What are the differences in the coverages?**

***Though the terms of warranty coverage might be longer in time, miles or kilometers, the limitations on reimbursement for extended warranty claims are typically the same as standard warranty coverage.***

Over the past few years, extended warranty coverages have become very popular. This is largely due to higher customer expectations and improved product performance through advanced technology.

Most of these extended warranties simply expand the time and mileage parameters to some greater limit. Some specify only certain parts are covered or limit coverages on maintenance items such as seals and gaskets. However, no additional allowances are made for parts pricing, parts mark-up, or labor. These remain consistent with the allowances used in the standard warranty. In addition, all exclusions apply (shockload, lack of lube, etc.).

**Example:** A vehicle with 250,000 miles on it is at the dealer. It has experienced a catastrophic failure to the rear-rear drive axle. The entire carrier must be replaced. A warranty claim is filed for the cost of the part, including the allowed mark-up, and 3.0 labor hours.

Another vehicle with 475,000 miles on it is at the dealer. This vehicle is older but is covered under an extended warranty. It has the same model drive axle as the first vehicle and has also experienced a catastrophic failure to the rear-rear. The same repair is required. The claim for this failure should be almost identical for the claim for the vehicle with 250,000 miles on it. Because it is a warrantable failure, all limitations on parts cost, mark-up, labor, and miscellaneous apply.

The supplier's warranty analyst will review both claims based on the type of failure and the allowable parts and labor to complete the repair.

## **Item 8. Component and vehicle information: Manufacturers need to know when and where failure activity is occurring in their products.**

***The requirement to provide component model and serial number exists because this information is vital to a supplier's ability to correct product problems.***

A supplier is certainly not happy when a product fails. It is a costly inconvenience to the customer and an expense to the supplier. Always trying to improve products by correcting failures and increasing durability, suppliers must gather as much information as possible. This information helps identify not only which parts are failing but which time frame the component was built. This data can link failures to engineering changes or problems with materials used in manufacturing.

Obviously, the faster the magnitude of a problem can be determined, the more quickly corrective action can focus on solving it.

***The component model and serial number information is some of the most important data on a warranty claim. By providing it, the dealer makes a valuable contribution to corrective action and ultimately helps his customer save downtime and money.***

# Claim Approval

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## Item 9. Coverage expiration time: When does warranty expire?

*Warranty coverage is based on a calendar year.*

**Example 1:** A component is covered by a five-year warranty with an in-service date of March 8, 2016. A product failure must occur on or before March 7, 2021, to be submitted on a warranty claim.

**Example 2:** A service part has a retail sale date of April 15, 2016. A product failure must occur on or before April 14, 2017, to be submitted on a warranty claim.

## Summary

The preceding information is provided to explain the steps required for proper claims filing. Though this information specifically applies to the Dana warranty system, other manufacturers and suppliers use similar programs. Dana hopes the information will benefit your other claims processing needs.

Remember: For the most timely processing and to maximize reimbursement of a claim, following these important steps:

- Verify the failure or condition was caused by a defect in material or workmanship.
- Identify the root cause of the failure.
- Understand all the terms and conditions of a supplier's warranty coverage; what is covered and what is not covered.
- Avoid over-repairs. Use the most economical method to correct the failure. File only for the repairs allowed under the warranty coverage.
- Provide all required information. This includes information on the vehicle, component models and serial numbers, correction of the failure, and invoices. Explain all charges. Be sure they are not only relative to the repair, but are covered under the warranty.
- If returning failed material to the supplier, be sure to include all parts replaced in the repair, not just some of them. Identify the parts by including a copy of the claim. If the failure seems questionable, mark the area suspected as the cause of the failure.
- Do not initiate a campaign without the prior written approval of the OEM and Dana.

# Repair or Replacement Guidelines

## Repair or Replacement Guidelines for Warrantable Failures

Warranty sometimes requires decisions regarding the most economical method to complete a repair. Should the component be repaired? Is the warrantable damage so extensive the component must be replaced?

Additionally, if replacement of the entire component is being considered, which level of component is the most logical to use?

Reimbursement for warranty claims is based on the cost to repair versus the cost to replace, whichever is less. Because of this, certain guidelines have been established to help a repairing facility decide which repair choice is best.

In the case of drive axle repairs, the options are usually more evident. If the total bench time repair labor cost, plus the cost of parts, exceeds that of an Exchange Carrier, the obvious choice is to use an Exchange Carrier.

The example shown below uses a drive axle Exchange Carrier to illustrate the formula for deciding whether to repair or replace. However, this formula also applies to transmissions.

Example:

REPAIR		REPLACE	
Total Parts	\$1,625.00	Exchange Carrier	\$2,100.00
Bench Time	750.00	Bench Time	NONE
R & R Labor	165.00	R & R Labor	165.00
Total	<u>\$2,540.00</u>	Total	<u>\$2,265.00</u>

Obviously, in this example, the proper choice would be to replace the component because the total is \$275.00 less to do so.

Warranty claims are paid according to these Repair or Replacement Guidelines. Please read them carefully. If you have any questions regarding them, contact the Dana Regional Service Office at 1-877-777-5360.

To continue warranty coverage, the purchased component model must be the same as the failed component model, unless substitution is authorized by Dana.

# Replacement Requirements

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## **Dana Non-warrantable Axle Replacement Requirements**

If a non-warrantable failure occurs within the standard/extended warranty coverage period, and the customer purchases a new exchange carrier to complete the repair, warranty coverage shall be two years, unlimited mileage, from the date of the new carrier purchase.

If a non-warrantable failure occurs within the standard/extended warranty coverage period, and the customer purchases original replacement parts to complete the repair, warranty coverage shall be one year from date of purchase and unlimited mileage on the replacement parts only. Non-warrantable failures due to abuse or neglect (i.e., overloading, shock load, spin-out, failure to maintain) will void the component warranty.

## Important Information About Labor Hour Guidelines

This section contains a schedule of labor hours allowed for performing warrantable repairs. The hours listed are the maximum amounts which will be paid on a warranty claim according to the latest update of this publication. To ensure a better understanding of its content, please have all personnel involved in warranty repair read the section thoroughly.

In general, these labor times are for the repair of a major component after it has been removed from the vehicle (bench time). However, some repair times (i.e., seals, synchronizers, air systems parts, etc.) are based on the repair being performed with the component remaining in the vehicle.

Because component removal times vary among different vehicle makes and models, refer to the labor repair times provided by the specific manufacturer of the vehicle being repaired.

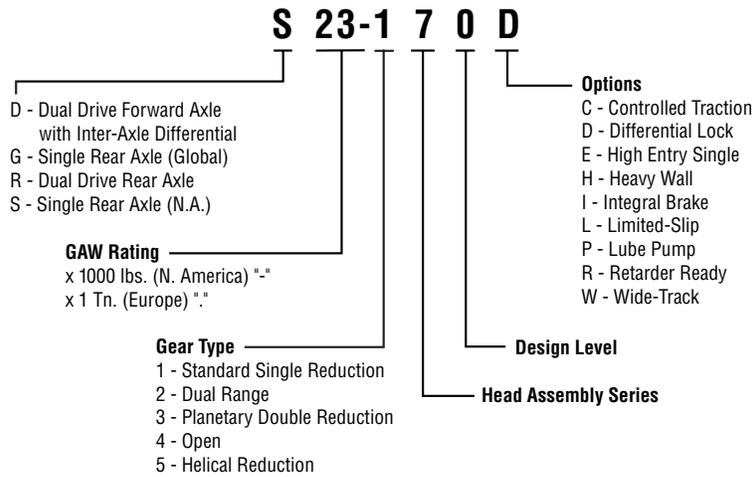
As stated above, this labor schedule has been revised. The revisions are a result of new product models being introduced or improvements in existing models. Some hours increased while others decreased. Additionally, operations which, in the past, have been somewhat vague or mixed with other repairs, are now separated and more specific.

Before making these changes, the repair times were studied carefully. Every attempt has been made to ensure the times are accurate and realistic.

If you find a repair time which seems incorrect, consult the appropriate service manual to be sure the most efficient repair method is being used. If this does not help, please contact your nearest Dana Regional Service Office at 1-877-777-5360.

# Rear Drive Axles

## Rear Drive Axles



R & R = Remove and Replace

## In-Chassis Repairs

**Note:** Labor times listed for in-chassis repairs apply when the part listed is the causal part and is done as a stand-alone operation. These times are not to be added to other labor operations. For example: The time to R & R a pinion seal is not to be added to the differential carrier overhaul time. The seal replacement is already included in the overhaul labor operation.

Repair	Standard Hours
Air Shift Assembly - R & R Add: Overhaul of air shift assembly	0.6 1.2
Electric Shift Unit - R & R Add: Overhaul of electric shift unit	0.8 1.2
Housing Breather Vent / Tube - R & R	0.2
Inter-axle Differential (Power Divider) - R & R (No parts replaced)	0.8
Inter-axle Differential (Power Divider) - Rebuild (Includes: Replacement of helical gears, spider, thrust washers, side pinions, add and refill with lube.) (Excludes: R & R of the Inter-axle Differential Assembly) <b>NOTE:</b> It is not necessary to remove the differential carrier to service the inter-axle differential assembly.	5.0
Input Shaft Bearing - R & R (Includes: R & R U-joint, yoke, seal, bearing, steam clean, clean seal surface, and add lube)	2.5
Lube Pump - R & R	2.0
Output Shaft Bearing - R & R (Includes: R & R U-joint, yoke, seal, bearing, steam clean, clean seal surface, and add lube)	2.0

Repair	Standard Hours
Rear Cover (Forward Carrier) - R & R (Includes: R & R U-joint, yoke and cover, steam clean, clean gasket surface, and add lube)	1.5
Seal, Carrier (Input, Output, Pinion) - R & R (Includes: R & R U-joint, yoke and cover, steam clean, clean seal surface, and add lube)	1.5
Seal, Wheel (one) - R & R (Includes: R & R wheel end equipment, seal, clean seal surface, adjust bearings, and add lube)	1.3

## Complete Axle R & R

Repair	Standard Hours
Differential Carrier Assembly - R & R Single Drive Front of Tandem Rear of Tandem (Includes: R & R differential carrier from housing, steam clean, drain, and refill lube) (Excludes: Replacement or adjustment of any parts)	3.0 3.5 3.0
Axle Housing (one) - R & R (Includes: R & R axle assembly from chassis, R & R carrier from housing, transfer of all parts and bracketry not furnished with new housing, adjust service brakes, and skid control sensor)	11.0

## Bench Service (Component Removed from Chassis)

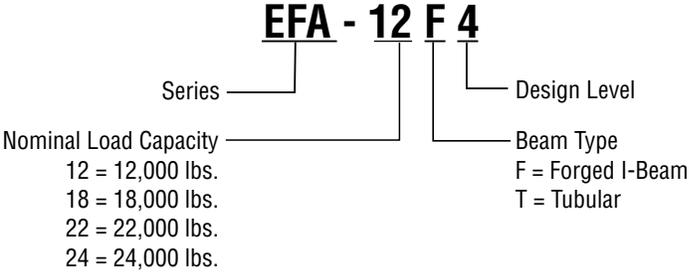
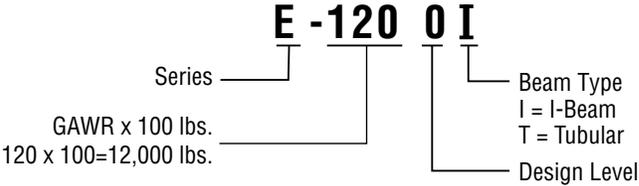
Repair	Standard Hours
Control Traction Differential - Overhaul <b>NOTE:</b> This repair operation is not warrantable for failures which occur after 3 years / 300,00 miles (480,000 km). (Includes: Steam clean, disassembly, inspection, replacement of parts as needed, adjustments, and refill with lube) (Excludes: R & R of the differential carrier)	7.0
Differential Carrier Assembly - Overhaul Single Drive Front of Tandem Rear of Tandem (Includes: Disassembly, parts inspection, perform required replacement and adjustment of all parts, gear set, and bearing replacement and set up) (Excludes: R & R of Carrier)	7.0 10.0 7.0

# Rear Drive Axles

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Repair	Standard Hours
Output Shaft Side Gear Bearing - R & R D404 Models D402 Models	1.5 1.0
Pinion Bearings - R & R See "Differential Carrier Assembly - Overhaul" above	

## Steering Axles



R & R = Remove and Replace

## In-Chassis Repairs

Repair	Standard Hours
Ackerman Arm (one) - R & R (Includes: Disconnect tie rod) Add: Set Toe-in	0.5  0.3
Cross Tube (Center Link) - R & R (Includes: R & R of both tie rod ends) Add: Set Toe-in	0.7  0.3
Steering Arm - R & R (Includes: Drag link R & R) Add: Reset Toe-in	0.7  0.3
Steering Arm Ball Stud (one) - R & R (Includes: Drag link R & R)	0.5
Steering Knuckle or Spindle (one) - R & R (Includes: R & R wheel, brake assembly, hub, knuckle pin, thrust bearing, shim(s), lubricate and adjust wheel bearings) Add: Set Toe-in Add: Knuckle pin bushing overhaul	2.5  0.3 1.0
Tie Rod / Tie Rod End (one) - R & R (Includes: R & R of one tie rod end) Add: Set Toe-in	0.5  0.3

Labor Hour Guidelines

# Steering Axles

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Repair	Standard Hours
Wheel Alignment - (When Required) Check Toe-in and Caster (does not include adjustment) Adjust Toe-in Adjust Caster (Camber is factory set; adjustment not allowed) <b>NOTE:</b> Wheel alignments, toe-in, and caster adjustments are only reimbursed when required to complete a warrantable repair.	0.3 0.3 0.5 N/A

## Complete Steering Axle R & R

Repair	Standard Hours
Axle "I" Beam - R & R (Includes: R & R entire axle assembly, transfer all parts to new "I" beam, lubricate all steering joints, R & R, and adjust all brake components and wheel end equipment.) (Excludes: Wheel alignment)	6.1
Wheel Alignment - (When Required) Check Toe-in and Caster (does not include adjustment) Adjust Toe-in Adjust Caster (Camber is factory set; adjustment not allowed) <b>NOTE:</b> Wheel alignments, toe-in, and caster adjustments are only reimbursed when required to complete a warrantable repair.	0.3 0.3 0.5 N/A

# Tire Inflation and Monitor System (TIMS)

## Tire Inflation and Monitor System (TIMS)

R & R = Remove and Replace

### Bench Service (Component Removed from Chassis)

**Note:** The following service procedures are performed with the component previously removed from the chassis.

Repair	Standard Hours
Diagnostic Time	0.5
Electronic Control Unit (ECU) - R & R (Includes: Disconnect trailer power, disconnect and unbolt ECU, connect and bolt new ECU, manual measurement of tire pressure, check adequate air supply, connect trailer power, and program target pressure)	0.2
Hubcap - R & R (Includes: Disconnect trailer power, disconnect tire hoses, fitting removal, marking hubcap, removal of jam nut and fasteners, hubcap drain, gasket removal, bulk head adapter removal, gasket installation, O-ring lube, adapter and jam nut installation, hubcap alignment, tire hose and fitting installation, connect trailer power, and testing connections for air leaks)	0.2
Inner or Outer Tire Hose - R & R (Includes: Disconnect trailer power, disconnect tire hoses, new hose installation, connect trailer power, and testing connections for air leaks)	0.1
Maintenance Controller Assembly - R & R (Includes: Air tank draining, disconnect connectors, disconnect and mark air hoses, bolt replacement, air fitting installation on new manifold, reconnect connectors, reconnect air hoses, air system recharge, manual measurement of tire pressure, programming of target pressure, and testing connections for air leaks)	0.3
Maintenance Manifold Assembly - R & R (Includes: Air tank draining, disconnect connectors, disconnect and mark air hoses, bolt replacement, air fitting and transducer installation on new manifold, manifold attachment to bracket, reconnect connectors, reconnect air hoses, air system recharge, vehicle power up, verify light operation, and testing connections for air leaks)	0.2
Spindle Plug and Inner Tire Hose - R & R (Includes: Tire hose and fitting removal, marking hubcap, removal of jam nut and fasteners, hubcap drain, rotary seal removal, spindle plug replacement, reinstall hose, reinstall seal, crimp hose, seal test, gasket installation, adapter and jam nut installation, tire hose and fitting installation, lube refill, and pressure and vent hose check)	0.3
Transducer - R & R (Includes: Disconnect trailer power, drain supply tank, disconnect transducer, sealant application, install transducer, check adequate air supply, connect trailer power, and verify light operation)	0.1
Wiring Harness - R & R (Includes: Disconnect connectors, unbolt from bracket, install connectors, reattach to bracket, and secure harness)	0.5

# Tire Pressure Control Systems

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## Tire Pressure Control Systems (TPCS)

R & R = Remove and Replace

**Note:** These guidelines reflect R & R times only. Components for this product are not serviceable or rebuildable.

### In-Chassis Repairs

Repair	Standard Hours
Diagnostic Time (Includes: Troubleshooting system problem and verification of correction after repair is completed)	1.0
Drive Seal - R & R Time applies to air or oil seal, either or both replaced. (Includes: R & R wheel hub, axle shaft, and adjust brakes)	2.5
Electronic Control Unit (ECU) - R & R	0.5
Hub Cap / Rotary Seal (non-drive axle) - R & R Add: R & R of hose assembly, if required	0.5 0.3
Inlet Tube - R & R	2.3
Operator Control Panel (OCP) - R & R	0.3
Pneumatic Control Unit (PCU) - R & R	0.5
Pressure Switch - R & R	0.3
Speed Sensor - R & R	0.3
Tire Hose (Control) - R & R	0.3
Tire Hose (Inner) - R & R	0.3
Tire Hose (Outer) - R & R	0.3
Tire Hose (Steering Axle) - R & R	0.3
Wheel Valve - R & R	0.5
Wiring Harness - R & R	2.5

### Bench Service (Component Removed from Chassis)

**Note:** The following service procedures are performed with the component previously removed from the chassis.

Repair	Standard Hours
Lamp (Operator Control Panel) - R & R	0.3
Pressure Transducer (PCU) - R & R	0.3

## Important Information About Warranty Exclusions

This section contains listings of various items which are not reimbursable under Dana's warranties. Some exclusions are based on failure mode (i.e., shockload); others are expenses which, due to their nature, are difficult to control or verify (i.e., downtime, meals, towing).

Many claims are received with unexplained charges or miscellaneous expenses which warranty does not cover. (See "Important Information Regarding Claim Approval" section.) These types of charges are typically not reimbursed by suppliers because they are not clearly defined or verifiable. Some are considered overhead charges which are included in the shop labor rate.

We recommend your warranty personnel reference the "Limits and Exclusions to Dana Warranties" when preparing claims. By doing so, it could reduce the number of unexpected claim reductions and chargebacks.

If there is a question as to whether an item is excluded from warranty, please contact the nearest Dana Regional Service Office at 1-877-777-5360.

# Limits and Exclusions

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## Limits and Exclusions to Dana Warranties

Coverage is **not provided** for the following failures or expenses:

### General Limits and Exclusions

- a. Failures resulting from abuse (i.e., shockload or spin out), neglect, or accidents.
- b. Failures due to lack of prescribed maintenance.
- c. Failures due to excessive vibration from engine, clutch, or drivelines. Failures due to improper driveline angles.
- d. Failures caused by the driver, such as clutch snubbing, fork wear, and twisted or broken shafts.
- e. Towing.
- f. Downtime, lodging, meals, and travel time or transportation.
- g. Troubleshooting / Diagnostics - except where allowed as indicated in the "Important Information About Labor Hour Guidelines."
- h. Secondary, progressive, or consequential damage.
- i. Freight for parts shipments.
- j. Non-genuine replacement parts void the component warranty when used to make a repair.
- k. Component damage due to failure of other chassis components.
- l. Parts and labor mark-up in excess of OEM / Dana approved guidelines.
- m. Undefined or unidentifiable miscellaneous charges.
- n. Failures due to product misapplication or Dana unapproved application.
- o. Failures due to unapproved alterations or modifications to the vehicle or the Dana component.
- p. Taxes of any kind except where mandated by law.
- q. Failures caused by improper installation or improper prior repair.
- r. Failures caused by excessive operating temperature.
- s. Failures resulting from non-Spicer approved lubricants.
- t. Daily rentals.
- u. Loss of revenue.
- v. Miscellaneous shop supplies and/or fees.
- w. Corrosion and rust.
- x. Re-rating the engine to exceed the torque capacity of a Dana component voids the warranty.
- y. Wear is not warrantable.
- z. Part premium charges or freight for direct ship parts.
- aa. Noise complaints when noise is the only complaint, with no failed component found.

## Specific Limits and Exclusions

### Drive Axles

- a. Seals, beyond 3 years / 350,000 miles (560,000 kilometers). (Pinion, input shaft, and output shaft seals.)
- b. Failures due to shockload or spin-out. See Drive Axle Failure Analysis AXSM-0020 for more information.
- c. Low lube burnouts.
- d. Wheel end equipment and wheel seals (if not installed by Dana).
- e. Yokes not installed by Dana.
- f. U-joints.
- g. Axle housing failures due to suspension bracketry weldments and / or mounting not provided by Dana.
- h. Failures of axle shafts used with no-spin differentials.
- i. No-spin differential coverage is limited to 1 year / 100,000 miles (160,000 kilometers).
- j. Noise and vibration.
- k. Routine preventative maintenance.
- l. Failures caused by water ingestion or other contamination resulting from the use of non-genuine Dana axle housing breathers which have been altered.
- m. Failures caused by rust and corrosion.
- n. Failure to use Dana approved breather on drive axles voids seal and leak warranty.
- o. Use of non-Dana yoke(s) on Dana drive axles voids seal and pinion bearing warranty.

### Steer Axles

- a. King pin / bushing wear beyond 3 years / 350,000 miles (560,000 kilometers). See Warranty Matrix.
- b. Tie rods / tie rod ends beyond 1 year / 125,000 miles (excluding Linehaul Vocation).  
Beyond 3 years / 350,000 miles (Linehaul Vocation).
- c. Tires.
- d. Front end alignments / adjustments (when not a part of a warrantable repair).
- e. Failures caused by rust and corrosion.

### Tire Pressure Control System

- a. Tires.
- b. Failures or malfunctions due to inadequate air system quality or contamination.
- c. Failures due to dirt, snow, or ice build-up.
- d. Failures caused by rust and corrosion.

### Wheel Seals

- a. Failures due to contamination.
- b. Improper installation (cocked, crushed, excessive end play).
- c. Insufficient lubrication.
- d. Misdiagnosis, incomplete claim information.
- e. Use of non-vented hub / axle.
- f. Brake lining.

### **IMPORTANT NOTICE:**

**THE USE OF ANY NON-SPICER APPROVED LUBRICANT FOR USE IN ITS COMPONENTS IS SUFFICIENT REASON TO DENY A WARRANTY CLAIM AND / OR VOID ALL FUTURE WARRANTY.**

**FOR SPECIFIC LUBRICATION REQUIREMENTS AND INFORMATION, PLEASE REFER TO THE SPICER LUBRICATION MANUAL - TCMT0021.**

For spec'ing or service assistance, call 1-877-777-5360 or visit our website at [dana.com/cv](http://dana.com/cv)

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**Application Policy**

Capacity ratings, features, and specifications vary depending upon the model and type of service. Application approvals must be obtained from Dana; contact your representative for application approval. We reserve the right to change or modify our product specifications, configurations, or dimensions at any time without notice.