

# CONNECT

OCTOBER 2022

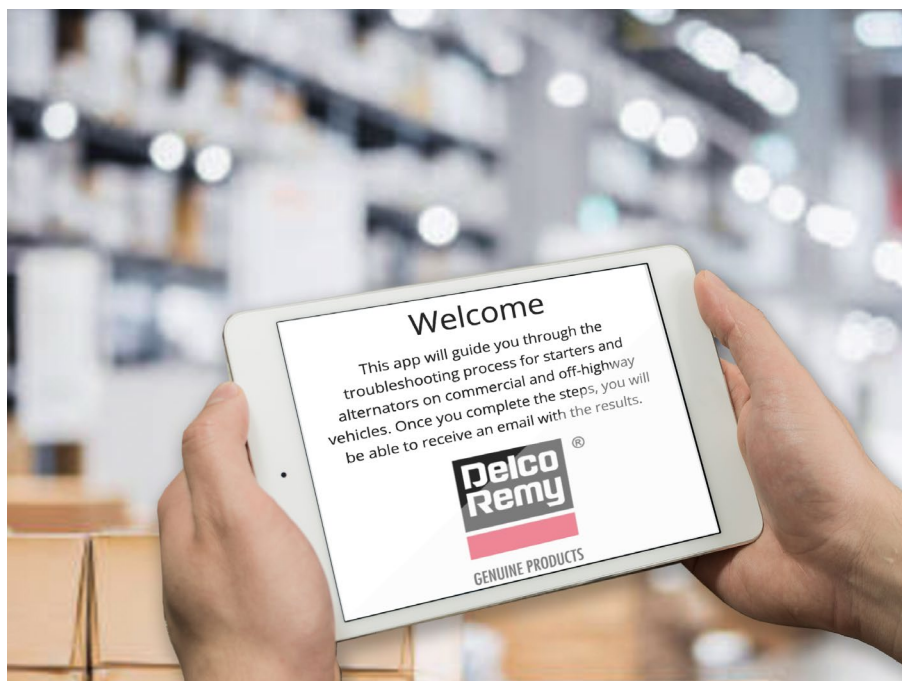
## New Digital Resources: Troubleshooting & Training

Your jobs are busy—with constant diagnostics and training needs.

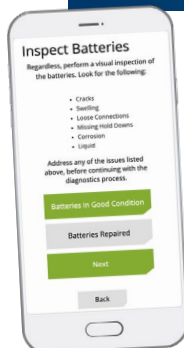
That's why we're excited to announce two new tools that will make your job easier, help your staff be more informed, and ensure you can respond to any service needs quickly.

### Delco Remy Starter and Alternator Troubleshooting App

When you have a component with service issues, you need to resolve it quickly to get vehicles back on the road as soon as possible. We've got the perfect solution—one that's available to technicians 24/7. The Delco Remy Starter and Alternator Troubleshooting App is a web-based tool that guides you through the troubleshooting process for starters and alternators on commercial and off-highway vehicles. The app is able to be used on smartphones, tablets and computers.



### To use the troubleshooting app



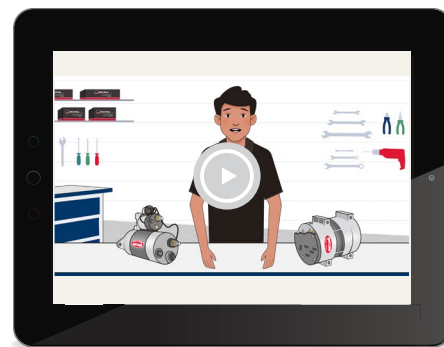
- 1› Visit [www.borgwarner.com/troubleshooting](http://www.borgwarner.com/troubleshooting) and create an account.
- 2› Input the vehicle information before starting the diagnostic process.
- 3› Go through the diagnostic process by following the on-screen prompts.
- 4› Once you complete the steps, you'll receive an email with the results.

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## 101 Educational Videos

Like many industries, ours is one where we're seeing the influx of new talent.

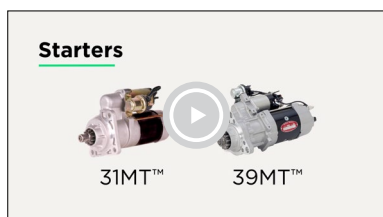
With highly specialized products, you need everyone on your team to have a base understanding of starters and alternators and their various components and features. If you need help bringing new employees up to speed, you can use our new 101 videos that explain these products in very easy-to-understand ways.



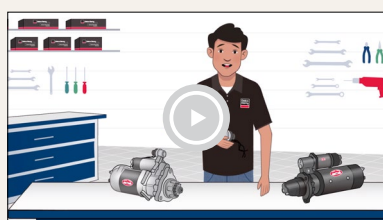
Watch these videos now  
on [delcoremy.com](https://www.delcoremy.com)



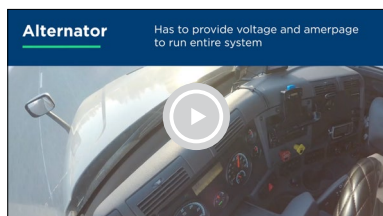
**Key Electrical Systems:** Learn the “need-to-knows” of a heavy duty electrical system, including the batteries, cables, wiring and switches, and the starter and alternator.



**Starter Basics:** Get the 101 on starters, including their main purpose and how they work.



**Starter Differences:** Understand the differences among starting motors—and why they matter. This video highlights differences in tooth count, starter design, the starter relay, over crank protection and the mounting flange.



**Alternator Basics:** In this video, you'll get the basics of an alternator—including its purpose and how it works.



**Alternator Differences:** This deeper dive video highlights the key differences of alternators, including the various mounting styles, the difference between brush versus brushless alternators, and amp output.

# Top 3 Claims Not Covered by Warranty

No one likes having to file a warranty claim, so we've done our best to make it fast and easy—and that starts with helping you understand what's covered and what's not. To help, we asked Tim Stevens, Manager, Reliability Center, to list the top three claims that are regularly denied because they are not covered by warranty.

## Denied Claim #1: Trouble Not Found

When a product is sent to our facility for a warranty claim, we perform up to three tests to assess performance and functionality. If it passes these tests, then we inspect the electrical connections.

Tim says that many times, when it's a "trouble not found" result, the failure has been incorrectly attributed to the starter or alternator—meaning it's been improperly diagnosed, and the cause is elsewhere in the vehicle.



### TIM'S RECOMMENDATION:

Check the batteries and voltage drop in the cabling/connections, and make sure there's no unusual corrosion, dirt, contamination or loose connections.

Correct any issues found prior to testing the alternator/starter.

## Denied Claim #2: Prolonged Power Applied/Extended Abutment

This is another failure mode that is not covered by warranty.

"It occurs when power is applied to the solenoid switch in an attempt to engage the engine ring gear for an extended period of time. This causes the solder at the solenoid switch terminal connection to reflow," Tim explains. It's caused by lower system voltage and pinion to ring gear abutment due to tooth damage.



### TIM'S RECOMMENDATION:

Use fully charged batteries and make sure there's no excessive voltage drop. Additionally, visually inspect the ring gear for tooth damage, and replace it if damage is found.

## Denied Claim #3: External Circuit Control Issues

External factors are also sometimes the culprit of the malfunction. These include:

- Loose or improper connections
- Wire routing that can damage the wire insulation
- Vehicle control system issues that send power to the integrated magnetic switch and cause severe milling of the drive pinion
- Vibration and corrosion
- Temperature changes
- Wiring performance
- Secondary components



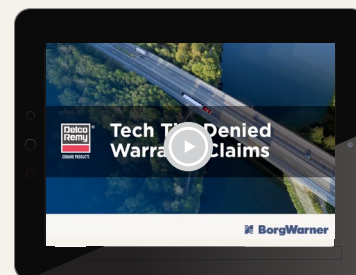
### TIM'S RECOMMENDATION:

Inspect for evidence of loose electrical connections—broken, stripped or cross-threaded terminals. Also conduct preventative maintenance to the control circuit and wiring to reduce risk of engagement into rotating ring gear.

## Unsure if Claim is Covered?

If you're not sure if the problem you're experiencing is due to a faulty starter or alternator or the result of something else, it's best to start with these resources, which are available at [delcoremy.com](https://delcoremy.com) under the Support tab:

- [Diagnostics Manual](#)
- [Warranty Guide](#)
- Tech Line: [800.372.0222](tel:800.372.0222) or [drts@borgwarner.com](mailto:drts@borgwarner.com)



**Learn more in our most recent tech tip video.**

# OE Applications for DTNA

We have you covered for all your Freightliner truck starter and alternator needs! Our products are very interchangeable with all competitive brands that may be installed on a truck. This means we can help you consolidate your inventory to meet a variety of applications. Plus, you benefit from the premium quality of the reliable Delco Remy brand—not to mention superior service in the field for all of your technical and customer inquiries. When you need to keep your Freightliner truck on the road, count on Delco Remy heavy duty starters and alternators to keep you moving.



## DTNA Starter Applications

Starter Product Description	Freightliner P/N	Delco Remy P/N	All-Makes P/N
29MT, 12V	DR 19011403	19011403	61006208
29MT, 12V	DR 8200103	8200103	61006208
38MT, 12V	DR 19026035	19026035	8200075
38MT, 12V	DR 8200075	8200075	8200075
29MT, 12V	DR 8200571	8200571	61006211
29MT, 12V	DR 8200989	8200989	61006209
29MT, 12V	DR 8200796	8200796	61006209
29MT, 24V	DR 8200745	8200745	8200745
38MT, 12V	DR 8200077	8200077	8200077
38MT, 12V	DR 8200078	8200078	8200078
38MT, 12V	DR 8200005	8200005	8200433
39MT, 12V	DR 8200691	8200691	8200433
39MT, 12V	DR 8200688	8200688	8200433
39MT, 12V	DR 8200625	8200625	8200433
39MT, 12V	DR 8200659	8200659	8200433
39MT, 12V	DR 8200653	8200653	8200433
39MT, 12V	DR 8200783	8200783	8200433
39MT, 12V	DR 8200928	8200928	8200433
39MT, 12V	DR 8200929	8200929	8200433
39MT, 12V	DR 8200623	8200623	8200308
39MT, 12V	DR 8200662	8200662	8200308
39MT, 12V	DR 8200654	8200654	8200308

Starter Product Description	Freightliner P/N	Delco Remy P/N	All-Makes P/N
39MT, 12V	DR 8200829	8200829	8200308
39MT, 12V	DR 8200628	8200628	8200308
39MT, 12V	DR 8200661	8200661	8200308
39MT, 12V	DR 8200657	8200657	8200308
39MT, 12V (DUAL INPUT IMS SWITCH)	DR 61007435	61007435	61013765
39MT, 12V (DUAL INPUT IMS SWITCH)	DR 61000944	61000944	61013765
39MT, 12V (DUAL INPUT IMS SWITCH)	DR 61000945	61000945	61013765
50MT, 12V	DR 10479338	10479338	10479338
39MT, 12V	DR 8200624	8200624	8200287
39MT, 12V	DR 8200660	8200660	8200287
39MT, 12V	DR 8200690	8200690	8200287
39MT, 12V	DR 8200687	8200687	8200287
39MT, 12V	DR 8200116	8200116	8200287
39MT, 12V	DR 8201022	8201022	8200434
39MT, 24V	DR 8200735	8200735	8200436
39MT, 12V	DR 8201004	8201004	61008898
39MT, 12V	DR 61000704	61000704	61008898
39MT, 12V	DR 61008897	61008897	61008898
39MT, 12V	DR 61012343	61012343	61008898

**DTNA Alternator Applications, See Page 5**



Continued from Page 4

## DTNA Alternator Applications

Alternator Product Description	Freightliner P/N	Delco Remy P/N	All-Makes P/N
24SI, 12V, 160A, HINGE MOUNT	DR 8600068	8600068	8600142
35SI, 12V, 135A, PAD MOUNT	DR 19011258	19011258	8600066
35SI, 12V, 135A, QUAD MOUNT	DR 19011261	19011261	8600065
35SI, 12V, 135A, HINGE MOUNT	DR 19011264	19011264	8600064
35SI, 12V, 135A, PAD MOUNT	DR 19011268	19011268	8600066
36SI, 12V, 160A, PAD MOUNT (REMOTE SENSE)	DR 8600203	8600203	8600127
36SI, 12V, 160A, HINGE MOUNT (REMOTE SENSE)	DR 8600427	8600427	8600126
36SI, 12V, 160A, QUAD MOUNT (REMOTE SENSE)	DR 8600428	8600428	8600125
28SI, 12V, 160A, PAD MOUNT (REMOTE SENSE & CONNECTOR PLUG)	DR 8600645	8600645	8600201
28SI, 12V, 160A, PAD MOUNT (REMOTE SENSE & CONNECTOR PLUG)	DR 8600201	8600201	8600201

Alternator Product Description	Freightliner P/N	Delco Remy P/N	All-Makes P/N
28SI, 12V, 160A, HINGE MOUNT (REMOTE SENSE & CONNECTOR PLUG)	DR 8600424	8600424	8600424
28SI, 12V, 180A, PAD MOUNT (REMOTE SENSE & CONNECTOR PLUG)	DR 8600078	8600078	8600078
28SI, 12V, 200A, PAD MOUNT (REMOTE SENSE & CONNECTOR PLUG)	DR 8600253	8600253	8600253
38SI, 12V, 215A, PAD MOUNT (REMOTE SENSE)	DR 8600552	8600552	8600707
40SI, 12V, 240A, PAD MOUNT	DR 8600338	8600338	8600338
40SI, 12V, 275A, PAD MOUNT	DR 8600094	8600094	8600094
40SI, 12V, 300A, PAD MOUNT	DR 8600298	8600298	8600298
40SI, 12V, 320A, PAD MOUNT	DR 8600628	8600628	8600628

## OptiCat: Data Fast, Free and Formatted to Your Needs

We understand that you need parts data quickly and in a format that works for your systems, so we've partnered with OptiCat to give you just that—parts data that is accurate, near-real-time and organized exactly how you request.

OptiCat can serve as your one-stop shop for reliable parts data about Delco Remy starters and alternators. You can be assured that the data will be presented in the format you prefer, ensuring it processes quickly and smoothly into your cataloging system. Best of all, there's no cost to you. It's simply another way we support our customers.

## Delco Remy 24SI™ and 35SI™ Change to Standard Packaging

We don't want to catch you off guard when you receive your next order of 24SI and 35SI alternators. While the packaging for these products looks different, you can be assured that nothing has changed with the alternators in the box—they're still the same premium quality products you know and trust!

Current Design



New Standard Design



**BorgWarner Inc. | 13975 BorgWarner Drive, Noblesville, IN 46060**

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