



Temporary Repair Practice

TRP Number: t7020	Revision: H	Released Date: 30-Jul-2026
X15 Nozzle Replacement on Fuel Injectors US Focus TRP		Expiration Date (U.S. and Canada): 15-Dec-2028
		Expiration Date (International): 15-Dec-2028

Attention

- U.S. / Canadian Dealers
- U.S. / Canadian Distr./Branches and Div. Offices (Automotive)

This is to revise and replace TRP 7020-G, dated 19-Mar-2026. This revision is to:

1. Update Action Section.

If additional information is required, please contact your Cummins Warranty Operations Group Leader.

Description

This TRP is being issued to repair degraded fuel injectors with guidance from TSB230162 on certain X15 CM2450 X134B and X142B certified engines. Where authorized, the full set of injectors will be replaced addressing a potential concern for fuel injector degradation, avoiding excessive regeneration or excessive soot accumulation in DPF that leads to an engine light for associated fault codes listed below. This field action authorizes certified repair locations to remove and replace the fuel injectors with renozzled and improved fuel injectors as received from a certified ReNozzle center. Completion of TSB230162 is required by all Distributor and Dealer Channels for repairs claimed to this TRP.

Note : For Guidance on Timing and TRP Flow, please review Attachment B, FAQ Section, page 4.

Action

In order to qualify for repair under this field action, an engine:

1. **must** be within coverage limits for a valid warranty or extended coverage certificate covering fuel injector and,

2. **must** record one or more of any of the following symptoms or fault codes; FC1921, FC1922, FC1981, FC2639, FC3375, FC3376, Regeneration Excessive, and
3. **must** complete TSB230162, through the completion and submission of the authorization form detailed in the TSB230162, and
4. **must** be directed to this TRP by troubleshooting guidance or receive Cummins Care Instruction to continue with TRP7020, and
5. **must** show as OPEN on QuickServe® Online for this field action.

Note : The ESN list is attached for reference.

Note : Where appropriate, for engines that do not have a valid warranty or an extended coverage certificate can file an Admin Only claim to remove the engine from eligibility.

After verifying that the engine meets the above requirements, perform the following actions:

1. Complete the relevant instructions received following the completion and submission of the requisite form detailed in TSB230162. Do not proceed unless authorized to do so.

Note : No authorization is required for those utilizing Guidanz as part of their service repair.

2. Order the Packaging Box, Part #6520055.
3. Please refer to the appropriate Service Manual. Follow procedure 006-026 in Section 6 for Injector, proceed to remove all 6 fuel injectors.
4. ALL removed injectors **MUST** be cleaned prior to packaging. Complete the cleaning procedure for the injectors. Please refer to Attachment B, Pre-Shipping Cleaning Procedure for detailed instructions.
5. Once ALL injectors have been removed, follow instructions as outlined in Attachment B to ensure proper packaging. To ensure appropriate component labels, print and fill out Attachment C. This should be placed inside the box as illustrated in Attachment B.
6. The Service provider **MUST** use the shipping label as indicated in Attachment B. A QR Code has been provided for your convenience. Complete the information as required and submit the form. Generate the label and affix to the packaging box. As an alternative, the actual url link has been provided.

Note : The Shipping Label will auto populate to the nearest fuel injector renozzle location. If FedEx is not the official shipping entity for Shipments, this field action limits to 1-way shipping cost of \$55.50 and can be filed in Other Claimables section as "Campaign Supplies". Renozzle location addresses can be found in the Attachment B.

7. If FC1922 is present, perform the DPF cleaning. Referring to Owner's Manual Section 564-101-047, choose the cleaning method that best fits the application. Costs associated with third-party support for DPF cleaning, including the transfer and return of the DPF, can be claimed in the Other Claimables section, summarized as "Campaign Supplies".

Note : In the claim narrative, please include DPF Cleaning Method, and related costs. If the DPF is damaged, or otherwise deemed unusable, take appropriate

steps to replace the DPF and claim to the existing coverage supporting the FIAS Fail Code.

8. Once Fuel Injectors have been returned from ReNozzle center, proceed to install fuel injectors per procedure 006-026. All required seals and additional components for installation will be included within the returned packaging box.
9. Once installation is completed, and if any of the fault codes, 1921, 2639, 3375, 3376 are logged, proceed to perform the Aftertreatment Diesel Particulate Filter (DPF) Regeneration.

Note : The DPF Regeneration is intended to clean the Aftertreatment System and clear any remaining Fault Codes related to this issue. Please claim the SRT 99-901, QTY of 1 for Regeneration reimbursement.

10. Perform the Injector Performance Test (IPT) to verify appropriate functionality of all 6 fuel injectors.

Note : Replace any fuel injectors that fail to pass the IPT Test with a ReCon injector, Cummins P/N 651358900PX or the ReCon equivalent. All failed injectors **MUST** be returned to Cummins ReCon.

Note : All fuel injectors replaced with part number 651358900PX or the ReCon equivalent are subjected to audit based on IPT results and can **ONLY** be claimed against existing warranty coverage. Replacement of renozzled fuel injectors should be considered **ONLY** if IPT results register as FAILED.

Material Disposition

Where applicable, items removed should be returned to ReCon for core credit. Unless otherwise indicated, items with no core liability can be scrapped.

Reimbursements

Parts

Note : Parts listed are OPTIONAL, and should **ONLY** be used if the provided renozzled injectors fail the Injector Performance Test (IPT). Failed injectors should be returned to Cummins ReCon.

The following parts are covered under this field action:

Part Number	Quantity	Description
651358900	1	KIT,INJ (RECON, POST IPT - INFO ONLY)
651358900PX	1	KIT,INJ (RECON, POST IPT - INFO ONLY)
652005500	1	KIT,PTS DST CENTER

Note : SRTs to gain access that are required to complete the repair, that are sufficiently explained in the claim narrative, may also be claimed on this action.

Note : All SRTs listed are OPTIONAL. Select **ONLY** the appropriate SRTs for the repair performed.

Labor Using Applicable Access Code and Time

SRT Code	Description	Time (hrs)
00-90F	Technician Administrative Time - Field Action Service Events (OPTIONAL)	
06-0XP	Injector - Remove and Install, All - X15 CM2450 X134B (OPTIONAL)	
06-1Y9	Injector - Remove and Install, All - X15 CM2450 X142B	
11-0ZU	Aftertreatment System, (Vertical) - Remove and Install - X15 CM2450 X134B (OPTIONAL)	
11-0ZV	Aftertreatment System, (Horizontal) - Remove and Install - X15 CM2450 X134B (OPTIONAL)	
11-23T	Aftertreatment System, (Vertical) - Remove and Install - X15 CM2450 X142B	
11-23U	Aftertreatment System, (Horizontal) - Remove and Install - X15 CM2450 X142B	
14-006	Injector - Performance Test , One or All (Electronic Service Tool) (OPTIONAL)	
99-00D	DPF CLEANING (OPTIONAL - QTY 1) (OPTIONAL - QTY 1)	
99-901	Aftertreatment Diesel Particulate Filter (DPF) - Regeneration (CMI) (QTY 1)	
99-902	PRE-PACKAGING INJECTOR CLEAN UP (OPTIONAL - QTY 1)	

SRT Code	Description	Time (hrs)
99-008	TSB230162; ECM Image - Obtain and Submit (OPTIONAL - QTY 1)	

Travel

Travel is **not** covered under this field action Towing is **not** covered under this field action.

Other Claimables

Consumables are covered under this field action.

Note : Additional non-Cummins parts, such as o-rings, gaskets and fasteners, that are required to complete the repair, but **not** listed, may be claimed in Other Claimables. Please consolidate all consumables and claim them as one line item in Other Claimables titled CAMPAIGN SUPPLIES or other appropriate selections. Please include brief summaries on the details of items claimed. A lack of documentation in the narrative may result in a reduction in claim reimbursement or claim denial.

Claim Instructions

For Cummins Dealers, claims for this TRP **must** be filed via **RAPIDSERVE™** Web (rsw.cummins.com). For information regarding **RAPIDSERVE™** Web, please reference the "Warranty" tab in QuickServe® Online. If there are additional questions, please contact your local Cummins Distributor.

Claim Codes	
Description	Code
Account Code:	65
Pay Code:	North America Distributor = X
Pay Code:	North America Dealer = D
Pay Code:	International Distributor = I
Pay Code:	International Dealer = R
Failure Code:	WFIAS3

Attachments

[Click here to see t7020_esn-list-a.xlsx](#)

(/service/english/attachments/t7020_esn-list-a.xlsx) [Click here to see t7020_attachment-b.pdf](#)

(/service/english/attachments/t7020_attachment-b.pdf) Click here to see t7020_attachment-c.pdf

(/service/english/attachments/t7020_attachment-c.pdf)

Engine Family	Fuel System
ISX, QSX15 ISX15	
ISX, QSX15 ISX15	
Design Application	Market Application
Automotive	Automotive
Automotive	Automotive

Document History

Date	Details
	Document Created; 06-Jun-2024
	Update the Action; 13-Jun-2024
	Update the Action, SRT list; 02-Jul-2024
	Update the Description, update the Action, update the Material Disposition, update the Reimbursements; 03-Sep-2024
	Update the Action and Parts Description, update the ESN list; 31-Oct-2024
	Extend the Expiration date, update the Action, update the Material Disposition, update the Reimbursements, update Attachment B; 12-Jun-2025
	Update narrative; 10-Jul-2025
	Extend expiration date to 15-Dec-2028, Update Action and Update Other Claimables; 19-Mar-2026
	Update Action Section; 28-Jul-2026



TRP7020, Attachment B

**X15 Fuel Injector Nozzle
Replacement US Focus**

Revision: 8/07/2025

X15 Fuel Injector Nozzle Replacement TRP US Focus

1. Overview
2. Timing and TRP Flow FAQ
3. Pre-Shipping Cleaning Procedure for Fuel Injectors
4. Packaging Instructions
5. Shipping Label to Rebuild Center.

1. Overview

TRP T7020 provides authorization for certified repair locations to remove, ship, and reinstall fuel injectors while completing repairs for certain engines according to TSB 230162.

The following pages detail the cleaning procedure and packaging instructions along with details to obtain a Shipping Label to ship injectors to the nearest Rebuild Center.

2. TRP Timing and Flow FAQ

X15 Injector Field Action Usage and Interaction

- Cummins has released 2 Field Actions to support the X15 Fuel Injector Nozzle Replacement process. This program will ensure your engine has the most-up-to-date injector hardware to prevent frequent regenerations and certain aftertreatment fault codes. Both Field Actions will show as OPEN on QSOL for an eligible engine, but authorized Service Providers diagnosing and repairing the engine should ignore TRP7019.
- TRP7020 was released to allow Cummins authorized Service Providers to diagnose an issue with fuel injectors based on TSB230162, send the fuel injectors to a rebuild location for repair, and reinstall the upgraded injectors. The engine must be within coverage for a fuel injector failure for TRP7020 to apply. Please follow all instructions in this TRP exactly to ensure the work performed is covered by the program.
- TRP7019 applies to authorized Injector Repair Facilities ONLY and allows them to claim parts and labor for the work they are doing to support TRP7020. TRP7019 only applies to certain locations and no other Service Providers are allowed to do this work. Ignore this Action if you are not an authorized Injector Repair Facility.

Customer Communication

- The X15 Fuel Injector Nozzle Replacement process ensures that your engine has the most up-to-date injector hardware. This updated hardware will prevent future downtime related to Aftertreatment failures and/or frequent regeneration.
- Cummins has worked closely with the Injector Repair Facilities to ensure they are adequately equipped and have the capacity to keep up with demand. The cycle time to update the nozzle hardware for the injector is expected to take **2 days for overnight shipping** and goal of a **1-day turnaround at the Injector Repair Facility**. Shipping times can vary pending geographical location.
- While there are some exceptions, this process should align with the same amount of cycle time that an injector replacement repair would take.

3. Pre-Shipping Cleaning Procedure for Fuel Injectors

The following procedure requires to work 1-injector at a time. Process to be repetitive for all 6-Injectors.

1. Use Isopropyl Alcohol or Contact Cleaner to rinse any fuel or oil residual from injectors
2. To protect injectors, ensure to rinse with HPC port faced down and away from rinsing nozzle.

Note: Do not rinse into HPC Port.

3. Use air nozzle to blow dry.



Step 1,2.



Step 3.

4. Packaging Instructions - CAUTION



Issues to Avoid:

- Avoid oil-wetness on cardboard (FEDEX may refuse delivery if box is wet)
- Do NOT wipe parts over-top of the ship box
- Avoid dislodged parts (leave cardboard stiffening pieces in place)

Step 1: Wipe oil from the outside of injector.



- Use a lint free cloth
- Blow dry with air-nozzle if necessary
- Avoid direct contact with the side feed inlet

Step 2: Place Injectors into bags



- Insert into clean bag
- Insert needle end first
- Fold the top of the bag over
- 12 Bags are provided. Please “double-bag” each injector.



Step 3: Place Injectors in the Shipping Box



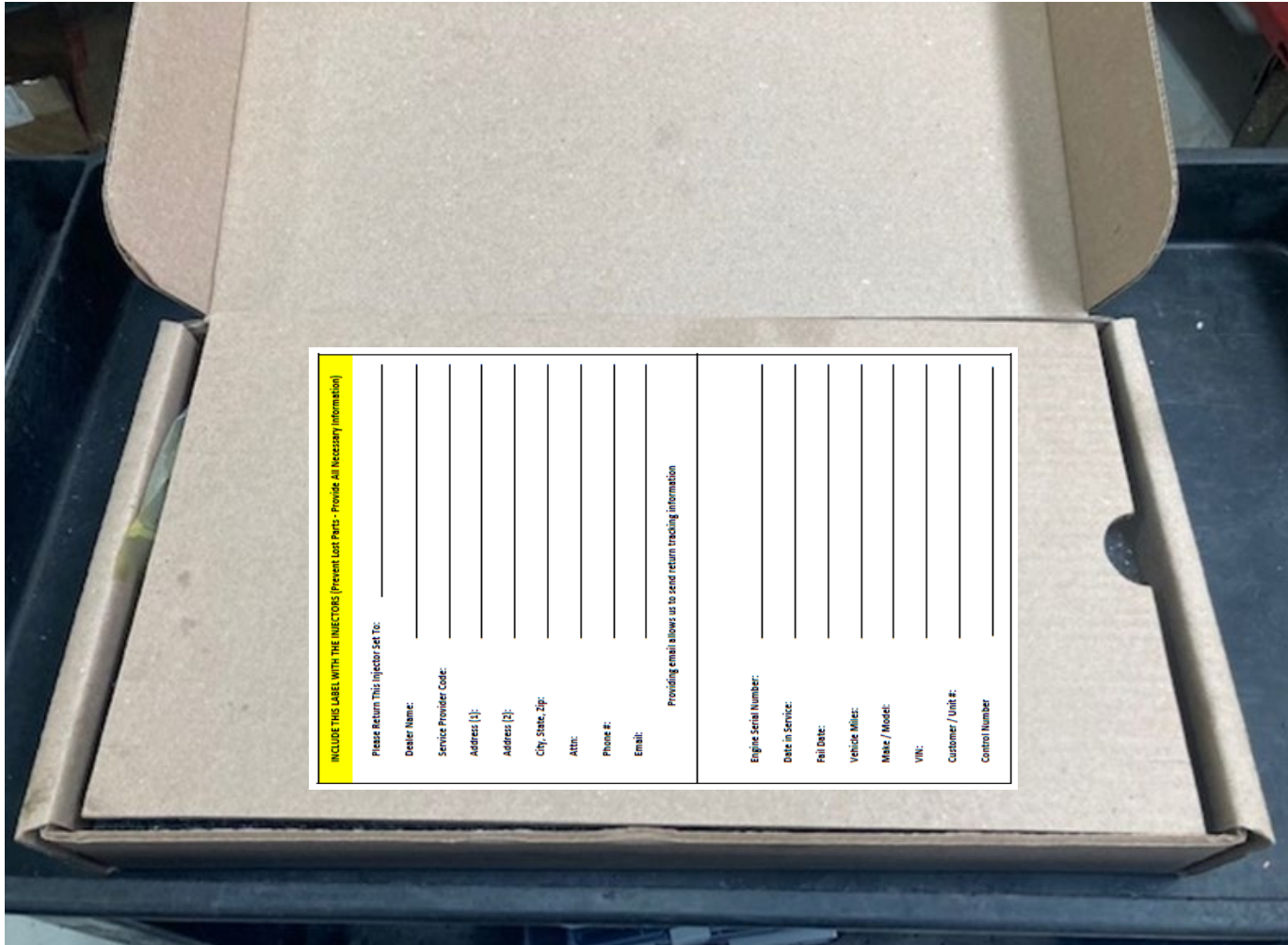
Nozzle End

- Load the double-bagged injectors into the foam slots
- The nozzle end goes into the smaller slot nearest the lid
- Leave the six (6) cardboard stiffeners in place
 - Note: these slots will have new HPCs installed when the injectors are returned.



Solenoid End

Step 4: Fully packed for shipment.



- Place the large cardboard stiffening piece over the injectors.
- Print out and complete the identification form (next page – Attachment C) and include it prior to closing the lid.

Identification Form (Attachment C):

*Image for Reference
Only! Please refer to
Attachment C.*

INCLUDE THIS LABEL WITH THE INJECTORS (Prevent Lost Parts - Provide All Necessary Information)	
Please Return This Injector Set To:	_____
Dealer Name:	_____
Service Provider Code:	_____
Address (1):	_____
Address (2):	_____
City, State, Zip:	_____
Attn:	_____
Phone #:	_____
Email:	_____
Providing email allows us to send return tracking information	
Engine Serial Number:	_____
Date in Service:	_____
Fail Date:	_____
Vehicle Miles:	_____
Make / Model:	_____
VIN:	_____
Customer / Unit #:	_____
Control Number	_____

Step 5: Apply packaging tape



- Apply packaging tape at five (5) places to close the box
- Attach the shipping label

5. Shipping Label to Rebuild Center

The following instructions are required to ensure appropriate shipping of degraded fuel injectors.

1. Either by scanning the QR Code below or copying link to any Internet Browser, fill the point of contact details along with ESN details and submit information.

Note: Based on your location, the shipping label will be auto populated to the nearest Rebuild Center.

2. Once submitted, a PDF will be ready to download with all details. Proceed to print.
3. To further protect shipping label information that will be used to send injectors back to Primary Service Provider, place the shipping label on top of the box and a layer of clear tape.



Alternative Link to Shipping Label

https://fulfillment.fedex.com/web/commerce/rma-web?customerId=2557761&token=eyJjdHkiOiJKV1QiLCJlbmMiOiJBMTI4Q0JDLUhTMjU2liwiYWxnIjoIZGlyIn0..nSC5TC o4UfREERm5Lul0Tw.zatHXaZwnTBAqtqfnEx_Rf6byoP8PBZEd5BghxIteX4LyFTv6-8IAocmdVx_gQEVb8UxjvUSyND3wJ-0sZ9p2GLnHj4Mc8yfdIMGEz7a5_TZGYETxw3dXt4F1Uo-Rjmo0gJhFIhS7y1xZd9Lwl16M35w7x8ov5op6YePdHCpWOzYtbyQpbeJrPJZyBm7c6-rCT-Fy7tCCCvsXF_pKFObSn7A2c2YOUWAFJokkOBT45n-ERMI2v3BI4W6oIUHf1niBsYDZKM08M-L0KDAzutuwGLPTaO-eLkloJ07vA868_4zhcNeQVnh4VlpodrC7KDtkrMkVw2Kngg6KZp93vC5RwVzwdnQTmr4Ibqp_1LNzWvSJilOQQe8X_rGD b-COtZqMly-fgMs6BtIFsZj2-xNVA.s98xVKtKrX63F-vEwf-uSQ

Addendum: Renozzle Locations

US Renozzle Locations

- East - Harrisburg, PA: 03750
4499 Lewis Road
Harrisburg, PA 17111
717-564-1344
- Rocky Mountain - West Valley: 02881
2167 South 5370 West
West Valley City, UT 84120
801-355-6500
- Gulf - Fort Worth, TX: 04970
3250 North Freeway
Forth Worth, TX 76111
817-624-2107



INCLUDE THIS LABEL WITH THE INJECTORS (Prevent Lost Parts - Provide All Necessary Information)

Please Return This Injector Set To: _____

Dealer Name: _____

Service Provider Code: _____

Address (1): _____

Address (2): _____

City, State, Zip: _____

Attn: _____

Phone #: _____

Email: _____

Providing email allows us to send return tracking information

Engine Serial Number: _____

Date in Service: _____

Fail Date: _____

Vehicle Miles: _____

Make / Model: _____

VIN: _____

Customer / Unit #: _____

Control Number _____