



**IMPORTANT SERVICE
INFORMATION FOR:**

- ✓ SERVICE MANAGER
- ✓ SERVICE ADVISOR
- ✓ TECHNICIAN
- ✓ WARRANTY PERSONNEL

BULLETIN NUMBER:
IB18-X-001F

ISSUE DATE:
JUNE 2023

GROUP:
MISCELLANEOUS

ISUZU DTC ANALYZER (IDA)

AFFECTED VEHICLES

- 2011-Current Isuzu N-Series Vehicles Equipped with 5.2L Diesel Engines
- 2011-2018MY Isuzu N-Series Vehicles Equipped with 3.0L Diesel Engines
- 2018-2021MY Isuzu F-Series Vehicles

This bulletin supersedes information bulletin IB18-X-001E. The purpose of this bulletin is to update content. Please discard previous bulletin IB18-X-001E.

INFORMATION

WHAT IS IDA?

IDA is a diagnostic program that provides:

1. DTC Analysis: IDA analyzes DTCs (currently 35) and then provides quick and easy-to-understand repair solutions. Utilizing data captured during an Isuzu Mimamori ECU (Health Report) download and accessible from www.IsuzuTruckService.com, Isuzu dealer technicians will be able to click the IDA tab for their dealerships. Each supported DTC will have a recommended repair or procedure.

The following chart provides the DTCs that are currently available for analysis on IDA:

| Vehicle Application | ECM | DCU |
|--|---|--|
| 2018-2021MY F-Series 2011-2024MY N-Series Equipped with 5.2L 4HK1 Engine | P0172, P244B, P2463, P0045, P003A, P0171 | P1490 (P207F), P2000 (P20EE), P2201, P208E, P242B, P242D, P205D, P203D, P20A0, P204D, P208A, P2224, P2207, U029D, U029E, P1464, P20E8, P205B, P1035, U0100, P2214 (P229F), P2216 |
| 2011-2024MY N-Series Equipped with 5.2L 4HK1 Engine | P0093, P0087, P0299, P0420, P0401, P111E, P2199, P1078 | |
| 2011-2018MY N-Series Equipped with 3.0L 4JJ1 Engine | None | |

2. DPF Early Regeneration Warning: IDA also reviews the three latest DPF regeneration odometer readings in the Health Report of the applicable VIN on IDA. IDA then analyzes the distances between the three regenerations. If the average of these distances is less than 55 km for a 4HK1 (5.2L) engine, or less than 70 km for a 4JJ1 (3.0L) engine, an alert will be shown on the IDA page in the form of a red regeneration icon. This is an early warning indication that a problem may be forming in the DPF

regeneration cycle. However, if the enabling criteria shown above are not met, a regeneration icon will not appear on the IDA for that particular VIN.

Detailed instructions on how to use IDA are included in this bulletin.

HOW CAN DEALERS HELP ISUZU IMPROVE IDA?

It is vital for Isuzu to be able to evaluate the performance of this tool. Therefore, IDA also includes a feedback process. The feedback provided during the program will demonstrate IDA's level of effectiveness and also help improve the IDA program. Completing the feedback portion of the IDA process after repairing a vehicle is an integral part of utilizing IDA and must be done for each IDA-suggested repair.

WHEN SHOULD DEALERS USE IT?

Isuzu Commercial Truck of America (ICTA) is requesting Isuzu dealers to use IDA for all DTC-related repairs on vehicles that are still under warranty. When making a repair suggested by IDA, please print a copy of the IDA-suggested repair and attach it to the repair order. If the IDA recommendation does not repair the vehicle, ICTA will reimburse the dealer for performing the suggested repair. Complete the feedback process within IDA before submitting a claim. Please review the Warranty Information section below, which provides directions for claim submission requirements related to IDA. Failure to follow the instructions will delay claim payments.

NOTE: Do not use IDA on vehicles that are “out of warranty.”

SERVICE PROCEDURE

DIAGNOSE A DTC OR DPF REGENERATION ISSUE

1. Perform an Isuzu Health Report Download. If the synchronization process was not completed, connect to the internet and complete the synchronization process. The vehicle's data will be reflected on IDA within 10 minutes of synchronization.

Note: The IDA program *cannot* analyze *any* DTCs or DPF regeneration issues unless the Health Report has been synchronized for that vehicle. Health Report data older than 30 days will be omitted from the IDA program.

Note: Record the vehicle's current ECM and SCR (DCU) Calibration part numbers, if any, on the Repair Order.

2. Log into Isuzu Truck Service (www.IsuzuTruckService.com).
3. Click on the “IDA” tab located in the menu at the top of the screen. (See Figure 1.) IDA is also accessible from the dropdown menu of the “Service” tab.

Advice: If internet is available, utilize the same device to access IDA that you used to perform the Health Report download.

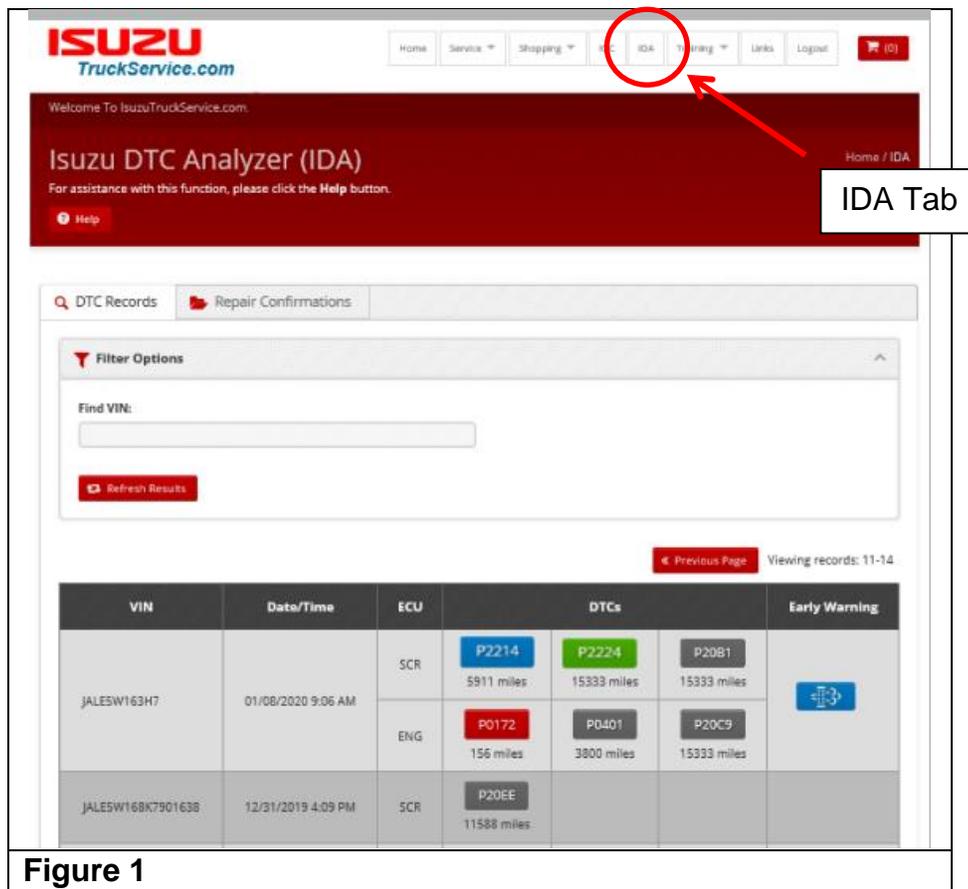


Figure 1

- After the IDA page loads, locate vehicles with recently synchronized Health Reports by entering the 17-digit VINs and clicking “Refresh Results” or by scrolling down through all the VINs that have been associated with your dealership. (See Figure 2.)

Advice: To more easily enter data into IDA when using the IDSS Tablet, toggle the “Keyboard” button as necessary.

Note: DTCs are separated by module type (ECM or SCR) and color-coded to reflect status. Refer to Chart 1 for each color’s meaning.

Note: A reduced interval DPF regeneration icon appears in the “Early Warning” column and is color-coded to reflect status. Refer to Chart 1 for each color’s meaning.

Note: DTCs show the vehicle’s mileage when the code was set. An analysis will not be available for any DTC that was set more than 2000 miles earlier.

IMPORTANT: If all reporting DTCs are grey, IDA is not able to provide a diagnosis. Continue diagnosis by following the DTC diagnostic chart in the appropriate Service Manual.

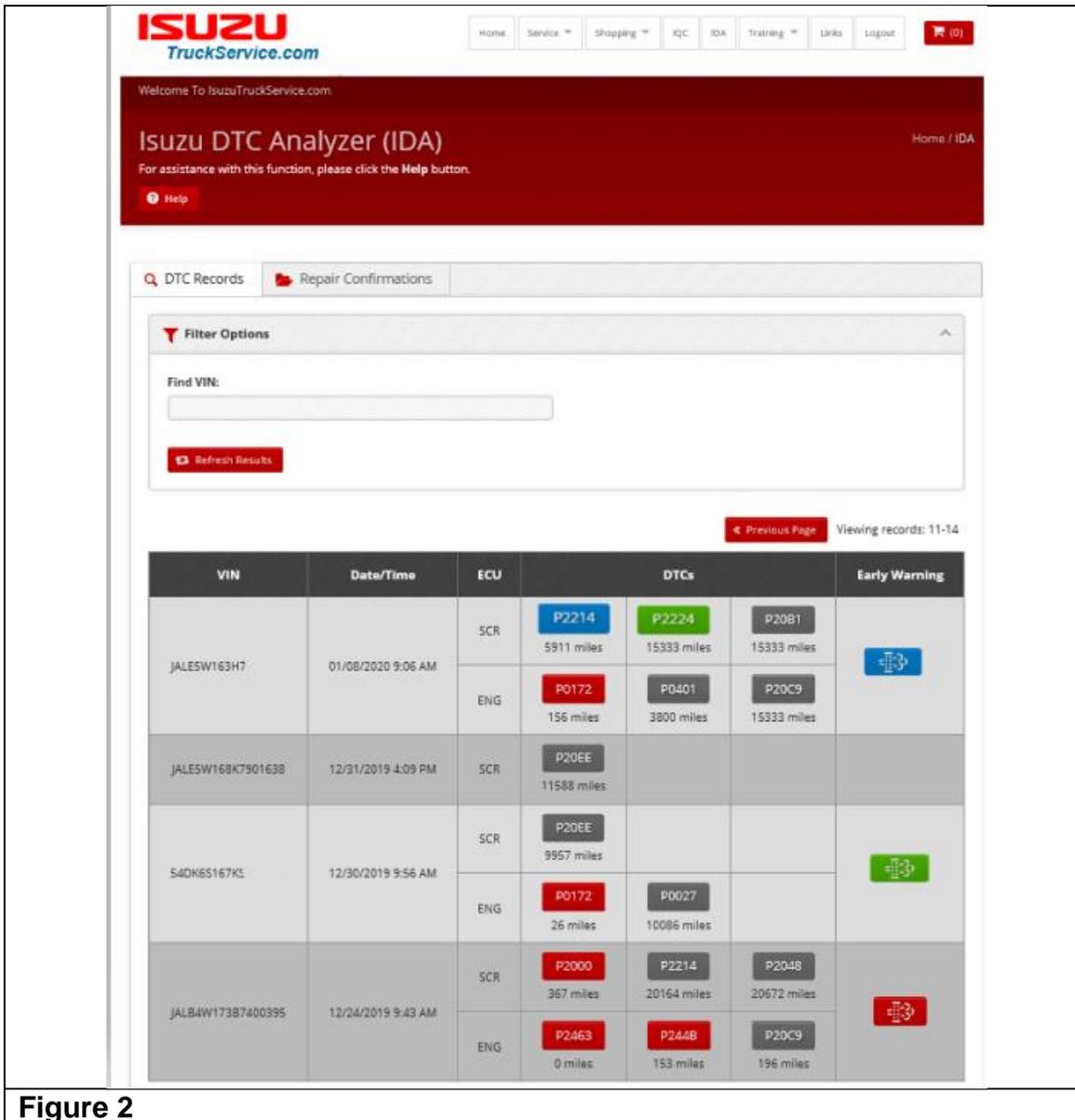
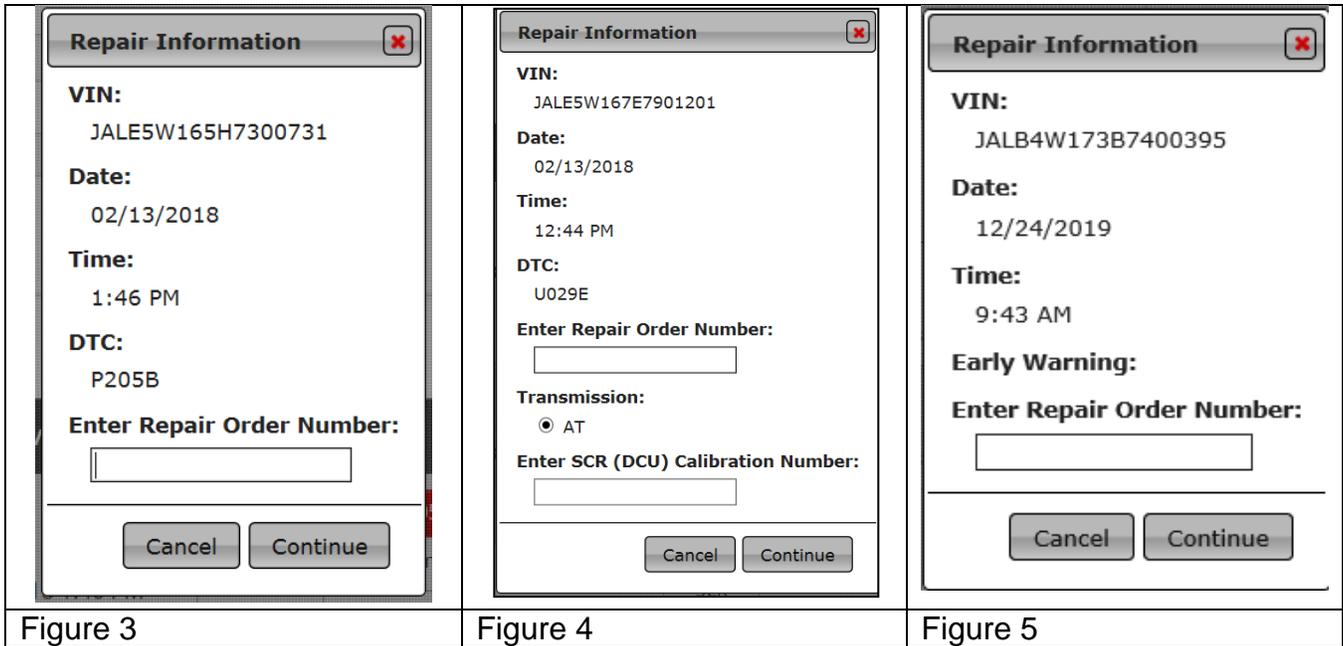


Figure 2

| | |
|----------------|---|
| Grey | Older than 2000 miles or no suggested repair available (Perform analysis for the DTC according to the Service Manual) |
| Red | Not User-Reviewed |
| Blue | User-Reviewed |
| Green | User-Reviewed and feedback given |
| Chart 1 | |

Important: Before clicking on a DTC “button” you should still perform a preliminary diagnosis to determine which DTC is the primary cause of fault. Not all “red” DTCs necessarily need to be diagnosed or repaired. When determining which DTC is the primary DTC, you should consider the customer’s complaint, the vehicle’s performance, past repairs, etc. Also, perform a search for Isuzu Bulletins that address the same concern.

- Click on the desired “red” DTC button for the desired DTC analysis. Enter the Repair Order Number in the “Pop-up” that appears. (See Figure 3.) If requested, also enter the SCR (DCU) Calibration Number that was recorded earlier. (See Figure 4.)
- Click on any existing “red” DPF early warning buttons for DPF regeneration analysis for the applicable VIN. Enter the Repair Order Number in the ‘Pop-up’ that appears. (See Figure 5.) Then click “Continue.”



- Perform the suggested repair or procedure. (See Figures 6 and 7.) As part of this process, you should verify that the repair or procedure was effective in eliminating the cause of the DTC.

| | |
|--|--|
| Total Driving Distance | 122,866 mi |
| Driving Distance at Time of DTC | 122,819 mi |
| VIN | JALC4W161F7K01167 |
| DTC | P1464 (Main Relay Performance (Relay stuck ON error)) |
| Condition for Setting the DTC | Relay Stuck ON Error •The DEF control module detects that the main relay does not turn OFF when the relay is commanded OFF. Control Module Shutdown Error •The DEF control module detects a shutdown condition when the main relay is commanded ON. |
| Vehicle Control After DTC Sets | |
| Estimated Cause | Check the battery and the battery cables. DEF control module has lost the power supply under main relay ON condition. Battery cable might be disconnected just after the ignition switch is turned OFF. Check the history of battery cable disconnection. Note that the main relay in the DEF control module is de-energized after a certain length of time passed from the ignition switch OFF. This delay time is about 3 minutes maximum and it is depending upon driving conditions. |
| Warning: The Estimated Cause of DTC (above) is derived from a computer data base evaluation based upon the information contained in the health report downloaded data. Other factors and causes not contained in the health report may contribute to any DTCs existing within onboard ECUs. The Isuzu DTC Analyzer program should not be relied upon exclusively when diagnosing DTCs or an issue. Utilize the Workshop Manual and Isuzu Technical Assistance as necessary to obtain accurate diagnoses. | |

Suggested repair or procedure to correct the DTC concern

Figure 6

Back

Individual Early Warning Analysis

| Criteria | Analysis |
|-----------------------------------|--|
| Total Driving Distance | 141,062 mi |
| Last 3 DPF Regeneration Intervals | 140,595 mi |
| | 140,580 mi |
| | 140,563 mi |
| VIN | JALB4W173B7400395 |
| Suggested Action | <p>Recent DPF regeneration intervals are getting shorter than normal condition.</p> <ol style="list-style-type: none">1. Check the DPF filter maintenance is properly performed. Filter cleaning must be performed every 100,000 mi Or 3,000 hours.2. Observe DTC Information. If a fuel system DTC is Set during recent driving history, diagnose that DTC first.3. Refer To 'DPF System Emergency Regeneration Too Frequent' chart Or 'DPF System In Regeneration Too Long' chart under the Symptoms - Engine Control In the IDSS To inspect related components. |

Warning: The Suggested (above) is derived from a computer data base evaluation based upon the information contained in the health report downloaded data. Other factors and causes not contained in the health report may contribute to any DTCs existing within onboard ECUs. The Isuzu DTC Analyzer program should not be relied upon exclusively when diagnosing DTCs or any other vehicle concerns. Refer to the Workshop Manual and Isuzu Technical Assistance as necessary to obtain accurate diagnoses.

Suggest action to correct the DPF regeneration concern

Figure 7

PROVIDING IDA FEEDBACK

Important: Isuzu will be relying on receiving accurate information regarding the success rate of the developed Estimated Cause and procedures. Furthermore, accurate feedback will allow Isuzu to make the necessary corrections to the IDA database in order to have a more effective and reliable tool.

1. Again, log into Isuzu Truck Service (www.IsuzuTruckService.com).
2. Click on the “IDA” tab located in the menu at the top of the screen. (See Figure 1.) IDA is also accessible from the dropdown menu of the “Service” tab.
3. After the IDA page loads, locate the vehicle you repaired by entering the VIN in the “Find VIN” box and clicking “Refresh Results”. (See Figure 2.)

Advice: To more easily enter data into IDA when using the IDSS Tablet, toggle the “Keyboard” button as necessary.

4. Click on the DTC or DPF regeneration button for which you are providing feedback. The buttons should be blue, indicating that they were previously reviewed.
5. Select the statement that most accurately reflects whether or not the information provided by IDA repaired the vehicle. (See Figures 8 and 9.) If additional selections “pop up” please choose the most appropriate option. If a text box “pops up”, type in a description of the work performed that actually repaired the vehicle.

Important: It is critical that this feedback be completed accurately. Please enter accurate and detailed information in any text boxes that “pop up” describing what repair ultimately fixed the vehicle.

| Individual DTC Analysis (P0401) | |
|--|---|
| Criteria | Analysis |
| Total Driving Distance | 40,871 mi |
| Driving Distance at Time of DTC | 40,058 mi |
| VIN | JALE5W168H7901714 |
| DTC | P0401 (Exhaust Gas Recirculation (EGR) Flow Insufficient) |
| Set Conditions | • The ECM detects that the difference between the actual mass air flow and the target mass air flow is less than the predetermined range for 3 seconds. This indicates insufficient amount of EGR flow. |
| Vehicle Control after DTC Sets | MIL: ON 2trips |
| Estimated Cause | Perform 'MAF Sensor Relearn Procedure' according to the service manual Perform Step 4 of analysis of P0401 according to the service manual |
| Select the appropriate statement for feedback: | |
| <input checked="" type="radio"/> The IDA estimated cause repaired the vehicle. | |
| <input type="radio"/> The IDA estimated cause did NOT repair the vehicle. | |
| <input type="radio"/> This DTC did not require diagnosis. | |
| <input type="radio"/> Other | |
| <input type="checkbox"/> Submit Feedback | |

Figure 8

| Individual Early Warning Analysis | |
|---|---|
| Criteria | Analysis |
| Total Driving Distance | 185,273 mi |
| Last 3 DPF Regeneration Intervals | 183,781 mi |
| | 183,760 mi |
| | 183,735 mi |
| VIN | JALE5W165B7301112 |
| Suggested Action | <p>Recent DPF regeneration intervals are getting shorter than normal condition.</p> <p>1. Check the DPF filter maintenance is properly performed. Filter cleaning must be performed every 100,000 mi Or 3,000 hours.</p> <p>2. Observe DTC Information. If a fuel system DTC Is Set during recent driving history, diagnose that DTC first.</p> <p>3. Refer To 'DPF System Emergency Regeneration Too Frequent' chart Or 'DPF System In Regeneration Too Long' chart under the Symptoms - Engine Control In the IDSS To inspect related components.</p> |
| <p>Select the appropriate statement for feedback:</p> <p><input type="radio"/> The IDA estimated cause repaired the vehicle.</p> <p><input type="radio"/> The IDA estimated cause did NOT repair the vehicle.</p> <p><input type="radio"/> This Early Warning did not require diagnosis.</p> <p><input type="radio"/> Other</p> | |
| <p><input checked="" type="checkbox"/> Submit Feedback</p> | |

Figure 9

6. Click the “Submit Feedback” button.

Note: Once the feedback has been input and submitted, the DTC or DPF regeneration button for that code will turn green to indicate that the process is complete.

WARRANTY INFORMATION

Refer to bulletin IB10-X-004K to submit for reimbursement for performing a Mimamori ECU (Health Report) Download.

- Submit a warranty claim after completing the suggested repair.
- Attach a copy of the IDA estimated cause page as evidence of the repair direction.
- Failure to provide a copy of the estimated cause page will delay claim payments.