

IMPORTANT SERVICE INFORMATION FOR: ✓ SERVICE MANAGER ✓ SERVICE ADVISOR ✓ TECHNICIAN ✓ WARRANTY PERSONNEL BULLETIN NUMBER: IB18-X-001C

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GROUP: MISCELLANEOUS

ISUZU DTC ANALYZER (IDA) – PILOT PROGRAM INTRODUCTION

AFFECTED VEHICLES

- 2011-2020MY Isuzu N-Series Vehicles Equipped with 5.2L Diesel Engines
- 2011-2018MY Isuzu N-Series Vehicles Equipped with 3.0L Diesel Engines
- 2018-2020MY Isuzu FTR Vehicles

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

INFORMATION

WHAT IS IDA?

IDA is a pilot diagnostic program that provides two functions:

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 <u>www.IsuzuTruckService.com</u>, Isuzu dealer technicians will be able to click the IDA tab for their dealerships. Each supported DTC will have a recommended repair or procedure.

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 criterion 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 pilot tool. Therefore, IDA also includes a feedback process. The feedback provided during the pilot 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.

HOW LONG WILL IDA BE AVAILABLE AND WHEN SHOULD DEALERS USE IT?

The pilot program's initial one year period has been extended. Please continue utilizing IDA as much as possible until further notice. 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. Submit all documentation with the claim. Failure to provide details will delay claim payments.

NOTE: <u>Do not use IDA on vehicles that are "out of warranty."</u> As IDA is a pilot program, ICTA cannot guarantee the results will always lead to a correct repair. "Out of Warranty" vehicles should be diagnosed properly by the dealer technician to ensure the correct repair is made the first time.

This pilot program may end at any time based on ICTA's sole discretion.

SERVICE PROCEDURE

DIAGNOSE A DTC OR DPF REGENERATION ISSUE

 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 on the Repair Order.

- 2. Log into Isuzu Truck Service (<u>www.IsuzuTruckService.com</u>).
- 3. Click on the "IDA" tab located in the menu at the top of the screen. (See Figure

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.

elcome To IsuzuTruckServic							ome / IDA	
	alyzer (IDA)	on.						IDA Ta
DTC Records	Repair Confirmations							
T Filter Options							~	
Find VIN:								
Eind VIN:				1	€ Previous Page	Viewing records:	: 11-14	
	Date/Time	ECU		DIC	C Previous Page	Viewing records		
C Refresh Results		ECU SCR	P2214 5911 miles	DTCs P2224 15333 miles	Previous Page P2081 15333 milles	Early Warn		
2 Refresh Results	Data/Time 01/08/2020 9:06 AM			P2224	P2081	ALC: NOTICE A		

4. After the IDA page loads, locate vehicles with recently synchronized Health Reports by entering the 17 digit VIN 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.

Velcome To IsuzuTruckSe	rvice.com					
	Analyzer (IDA) nction, please click the Help butt	on.				Home / I
Q DTC Records	Repair Confirmations					
T Filter Options						~
Find VIN:						
😫 Refresh Results						
					Previous Page	Viewing records: 11-14
VIN	Date/Time	ECU		DTCs		Early Warning
		SCR	P2214	P2224	P20B1	
			5911 miles		15333 miles	-13
JALESW163H7	01/08/2020 9:06 AM		00172		92059	
JALESW163H7	01/08/2020 9:06 AM	ENG	P0172 156 miles	P0401 3800 miles	P20C9 15333 miles	
JALESW163H7 JALESW168K790163		ENG	156 miles P20EE	P0401		
			156 miles P20EE 11588 miles	P0401		
JALE5W168X790163	8 12/31/2019 4:09 PM		156 miles P20EE	P0401		
		SCR SCR	156 miles P20EE 11588 miles P20EE	P0401		
JALE5W168X790163	8 12/31/2019 4:09 PM	SCR	156 miles P2066 11588 miles P2066 9557 miles	P0401 3800 miles		
JALE5W168X790163	8 12/31/2019 4:09 PM	SCR SCR	155 miles P20EE 11588 miles P20EE 9957 miles P0172 26 miles P2000	P0401 3800 miles P0027 10096 miles P2214	15333 miles	
JALE5W168X790163	8 12/31/2019 4:09 PM 12/30/2019 9:56 AM	SCR SCR ENG	156 miles P20EE 11588 miles P20EE 9957 miles P0172 26 miles	P0401 3800 miles P0027 10066 miles	15333 miles	

Grey	Not Supported or Older than 2000 miles
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.

- 5. 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.)
- 6. 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."

Repair Information VIN: JALE5W165H7300731 Date: 02/13/2018 Time: 1:46 PM DTC: P205B Enter Repair Order Number: Cancel Continue	Repair Information VIN: JALE5W167E7901201 Date: 02/13/2018 Time: 12:44 PM DTC: U029E Enter Repair Order Number:	Repair Information VIN: JALB4W173B7400395 Date: 12/24/2019 Time: 9:43 AM Early Warning: Enter Repair Order Number: Cancel Continue
Figure 3	Figure 4	Figure 5

7. 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	122.866 mi	7
Distance		
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		
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 after the ignition switch is tuned 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 ig switch OFF. This delay time is about 3 minutes maximum and it is depending upon driving conditions.	
the health report downloa within onboard ECUs. The	use of DTC (above) is derived from a computer data base evaluation based upon the information contained in ded data. Other factors and causes not contained in the health report may contribute to any <u>DTCs existing</u> Iszuz DTC Analyzer program should not be relied upon exclusively when diagnosing DTCs or an o Manual and Isuzu Technical Assistance as necessary to obtain accurate diagnoses. Suggest DTC control DTC of the technical Assistance as necessary to obtain accurate diagnoses. DTCs or an DTC control DTC of the technical Assistance as necessary to obtain accurate diagnoses.	procedure to correct the
Figure 6		

Individual Early Warning Ana	lysis		
Criteria	Analysis		
Total Driving Distance	141,062 mi	1	
	140,595 mi		
Last 3 DPF Regeneration Intervals	140,580 mi		
	140,563 mi		
VIN	JALB4W173B7400395		
Suggested Action	Recent DPF regeneration intervals are getting shorter than normal condition. 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.	F	
report downloaded data. Othe ECUs. The Isuzu DTC Analyzer	e) is derived from a computer data base evaluation based upon the information contained in the health factors and causes not contained in the health report may contribute to any DTCs existing within onboard program should not be relied upon exclusively when diagnosing DTCs or any other ve schnical Assistance as necessary to obtain accurate diagnoses. Suggest action concern	to correct	t the DPF regenerat

PROVIDING IDA FEEDBACK

Important: Because the IDA system is a pilot program, 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 (<u>www.IsuzuTruckService.com</u>).
- 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.

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 PO401 according to the service manual
Select the appropriate s	tatement for feedback:
	ause repaired the vehicle. ause did NOT repair the vehicle. uire diagnosis.

Individual Early Warning Analysis					
Criteria	Analysis				
Total Driving Distance	185,273 mi				
	183,781 mi				
Last 3 DPF Regeneration Intervals	183,760 mi				
	183,735 mi				
VIN	JALE5W165B7301112				
Suggested Action	Recent DPF regeneration intervals are getting shorter than normal condition. 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.				
Select the appropriate sta	Select the appropriate statement for feedback:				
	○ The IDA estimated cause repaired the vehicle.				
	The IDA estimated cause did NOT repair the vehicle. This Early Warning did not require diagnosis.				
○ Other					
Submit Feedback	Submit Feedback				

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-004I 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.