IMPORTANT SERVICE INFORMATION FOR:
✓ SERVICE MANAGER
✓ SERVICE ADVISOR
✓ TECHNICIAN
✓ PARTS DEPARTMENT
✓ WARRANTY PERSONNEL

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GROUP:
MISCELLANEOUS

INTRODUCTION TO NQR NRR Gas

AFFECTED VEHICLES

- 2022 MY Isuzu NQR and NRR vehicles with 6.0L gasoline engine

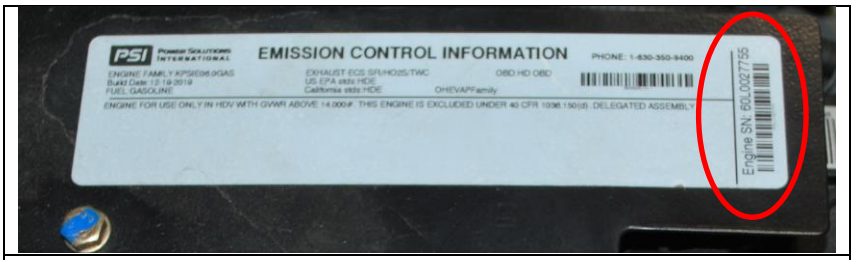
This bulletin supersedes information bulletin IB21-X-002. This bulletin is being revised to update content. Please disregard previous bulletin IB21-X-002.

INFORMATION

The information below is provided to help technicians better understand common vehicle operations that may be incorrectly perceived as an issue. Additionally, diagnostic scan tool connection requirements are outlined for easier technician diagnosis.

Possible Complaint	Normal Condition Description
Harsh shifting in all gears during initial operation.	The Allison transmission will operate in “learning mode” for the first 30 – 50 miles of operation. Shift quality will improve after this initial period.
Transmission holds first gear longer.	Due to different mechanical ratios, the Allison transmission may remain in 1st gear for a longer time before making the shift to 2nd gear when compared to the 6L90 transmission utilized in previous model years.
Gear Shift Lever requires high effort to move through the Gear Selection Range	The shift detents on the Allison transmission are stronger than the 6L90 transmission utilized in previous model years.
Sound from Starter area after Engine is started	The design of this vehicle keeps the starter motor momentarily engaged after the engine starts. This will create a brief whirring noise, which is normal.

The Diagnostic Trouble Codes (DTC) are unfamiliar.	The ECM and Powertrain Interface Module (PIM) utilize a SPN/FMI DTC structure. The IDSS DTC display for this vehicle will consist of a two to four digit number, followed by a dash, and then another one to two digit number. A written definition of the DTC will also be displayed. (Example: 3673-17 System Voltage Low – Main Relay) Refer to the Workshop Manual for more information.
PTO will not engage while the vehicle is moving.	The PTO can only be utilized while the vehicle is stationary.
Are any Special Service Tools needed to service the rear disc brakes and rear axle hubs?	Special Service Tools Unique to this vehicle: • J-8433 Two Jaw Puller • J- 24427 Bearing Cup Installer • J-43412 Bearing Cup Installer • OTC 8013 Threaded Adapter Special Service Tools already in inventory: • J-35012 Hub Bearing Nut Adjuster • J-35013 Rear Hub Puller • J-35030 Puller Pilot ***IMPORTANT: For a picture and description of each tool, refer to the Isuzu Special Service Tool website - https://www.isuzutruckservice.com/bosch_sso.php***
Cannot locate the Engine Serial Number	The correct engine serial number is 10 characters long and is printed on a label installed on the front of the right cylinder head. (See Figure 1.)  Figure 1 An engine serial number is also located on the Emissions Control Label on top of the intake manifold. (See Figure 2.)

	This is a secondary number and should only be used after verifying the engine serial number shown in Figure 1.  Figure 2

ISUZU DIAGNOSTIC SYSTEMS SERVICE (IDSS) COMMUNICATION

No.	Description	ECUs	IDSS Interface/Scan Tool
1.	The metal case IDSS interface will **NOT** communicate with the NQR/NRR 6.0L gas engine ECUs.		
2.	The IDSS Tablet will communicate with all onboard ECUs. The interface cable with double red ends is required for complete communication with all onboard ECUs when using this device.	ECM TCM PIM Electronic Brake Control Module (EBCM)	

3.	The plastic case IDSS interface will communicate with all onboard ECUs. The interface cable with double red ends is required for complete communication with all onboard ECUs when using this device.	ECM TCM PIM Electronic Brake Control Module (EBCM)	
4.	The MX2-TW IDSS interface will communicate with all onboard ECUs. The interface cable with a blue end is required for complete communication with all onboard ECUs when using this device.	ECM TCM PIM Electronic Brake Control Module (EBCM)	
5.	The DLC interface cable with double red ends is required for complete communication with all onboard ECUs when using 2 and 3 above Do not use this cable w/new IDSS interface module (MX2-TW)	ECM TCM PIM Electronic Brake Control Module (EBCM)	

6.	The DLC interface cable with a blue end is required for complete communication with all onboard ECUs when using the MX2-TW device.	ECM TCM PIM Electronic Brake Control Module (EBCM	
7.	The USB interface Y-cable is also required for complete communication with all onboard ECUs when using any IDSS device.	ECM TCM PIM Electronic Brake Control Module (EBCM)	
8.	IDSS HDOBD Adapter Cable This cable can be used without the Y-cable if ABS data is not required. Remove the Y-cable when programming the ECM.	ECM	

9.	IDSS Software will only display existing TCM DTCs. All other TCM data can only be retrieved using Allison DOC Software. IDSS currently does not support Allison DOC Software.

This illustration displays three of the cables described above linked in series to obtain complete communications with all onboard ECU's.

IDSS Connections