

# IDST (Isuzu Diagnostic Service Tool) User Guide Table of Contents

- 1. Precautions
- 2. IDST Parts Battery Cable USB Cable Module and DLC
- Using the Tool

   Select Engine
   DTC Readout
   DTC Clear
   Set IDST Options
   Show Serial Number
   Show Battery Level
   Show Firmware Version

# 1. Precautions

#### Read and observe the following precautions while using the IDST:

- Always perform machine testing in an environment that is safe.
- ANSI standard safety glasses should be worn.
- Keep clothing, hair, hands, tools, test equipment, etc. away from all moving or hot engine parts.
- Exhaust gases are poisonous: Operate the vehicle in a well ventilated work area.
- If the machine is mobile, block the wheels and never leave the machine unattended while running tests.
- Do not connect or disconnect any test equipment while the ignition is on or the engine is running.
- Keep the IDST tool dry, clean, and free from oil/water or grease. Use a mild detergent on a clean cloth to clean the outside of the tool, when necessary.

# 2. IDST Parts

Battery Cable





IDST Module and DLC Connector (attached)



Full Kit



# 3. Using the Tool

- 1. Turn ignition power to "Off."
- 2. Locate the 16 pin Data Link Connector (DLC).

3. If the IDST display does not power on automatically, supply power with the battery connection cables, part number BJMP01.

4. The display will Illuminate and display the following 5 menu items:

- Select Engine
- Set IDST Options
- Show Serial Number
- Show Battery Level
- Show Firmware Version
- 5. Turn ignition to "On" for testing

### **Select Engine**

1. When Select Engine is selected from the menu with the SEL button, the applicable engine can be selected automatically, by communication type (ISO15765/J1939/KW2000), by engine type (4HK1, 6HK1, 6UZ1, etc.), or by engine year.

DTC readout and DTC clear will be covered in the next section.

A. Using the Auto Select function to make the engine selection.

Main Menu
Select engine
Set IDST options
Show battery level
Show serial number
Show Firmware version

# Choose Engine

Auto select engine

IS015765 engine type

J1939 engine type

KW2000 engine type

Select engine type

Select engine year

Return to startup

**Operation Notice:** 

Please be sure the

Ignition is on.

### Back

If there is an engine mismatch, or the unit is not connected correctly, the following screen will display.

An Error has Occurred

Engine Not Found

Back

In addition to the Auto Select Engine function, engines can be selected by communication protocol, engine type or engine year.

# **DTC Readout**

Choose Operation

## GetDTCs

#### Clear DTCs

Repeat to get DTCs

DoSCRforcedpurge

Show retrieved DTCs

Show engine info

Reset retrieved DTCs

Return to startup

### Choose Module:

ECU module

DCU module

All modules

Back

# 8 DTCs Reported

ECU -P0011-

ECU -U010E-

ECU -P0101'Current

- ECU -P0216 History
- ECU -P0217'Ignition
- ECU +C005'Current
- ECU -P0102°Current
- ECU -P0218 History

Entry description

Back

When a DTC is selected, the description for that DTC will be displayed.

P0011 description:

Follow the progression as listed above for engine selection. Once "Please be sure the Ignition is on." is selected, the screen displayed at left will appear.

"A" Camshaft	
Position – Timing	
Over-Advanced or	
System Performance	
(Bank 1)	

To return to the main menu, scroll down and press Back or the arrow on the left of the keypad.

## **DTC Clear**

Choose Operation
GetDTCs
Clear DTCs
Repeat get DTCs
DoSCRforcedpurge
Show retrieved DTCs
Show engine info
Reset retrieved DTCs
Return to startup

Choose Module:
ECU module
DCU module
Allmodules
Back

Operation Notice.	
Cleared DTCs	
Back	

Once Cleared DTCs is pressed, the user will be returned to the previous menu.

# **Do SCR Forced Purge**

The IDST is equipped with a function to initiate a Forced Purge for engines equipped with Selective Catalyst Reduction (SCR) emissions control. Under certain low-load, low ambient temperature operating conditions,

the SCR catalyst system may not reach temperature to fully purge or the engine may be shut down prior to completion.

Select "Do SCR Forced Purge"

Choose Operation
GetDTCs
Clear DTCs
Repeat get DTCs
Do SCR forced purge
Show retrieved DTCs
Show engine info
Reset retrieved DTCs
Return to startup

Confirmation of command success will be displayed

Display Parameters
Engine State: RUN
Eng.Speed: 1805 RPM
Coolant temp: 42 oC
DPD Mode :1
Do force purge
Back

The relevant data parameters will be displayed, including coolant temperature and DPD Mode. The purge will start when conditions are correct, including coolant temperature at 158°F. The timer will count up to 780,000ms. Purge complete. If the purge will not initiate or will not complete, the engine may require additional diagnostics or service.



The following functionality is also available with the Get DTCs and Clear DTCs functionality explained above. These functions include:

- Repeat get DTCs: Continuously repeats getting the DTCs (useful for trouble shooting).
- Show retrieved DTCs: Displays the DTCs that were captured during the last retrieval operation.
- Show engine info: Displays details for the selected vehicle module.

• Reset retrieved DTCs: Clears the DTCs that were captured during the last retrieval operation

## **Set IDST Options**

The functions found under IDST Options are primarily for engineering purposes and should only be used for that reason. They are not covered in this user guide.

## **Show Battery Level**

Displays the battery voltage level.

Main Menu Select engine Set IDST options Show battery level Show serial number Show Firmware version Battery voltage is: 10.9454999 volts

Back

### **Show Serial Number**

Displays the IDST unit serial number. This serial number can only be viewed. It cannot be changed.

Main Menu

Select engine

Set IDST options

Show battery level

Show serial number

Show Firmware version

IDST Serial Number:

IDST0002

Back

# Show Firmware Version

Displays the applicable firmware version.

Main Menu

Select engine

Set IDST options

Show battery level

Show Firmware version

Firmware version is:

12/15/2016 1.1.104.1

Back