User Manual

HD DIAGNOSTIC TOOL

(HD Code II)

CanDo

INTERNATIONAL, INC.

SAFETY PRECAUTIONS

Warning: Read and understand all instructions in this manual. Use appropriate personal safety equipment including hearing and eye protection when using the scanner in or near the vehicle engine compartment. Failure to comply with this manual may result in accidents involving fire, electrical shock, or serious personal injury, etc.

Electrical

* Do not allow any object to be pressed in the cable assembly; Do not allow the cable assembly to be pinched; Keep the cable assembly away from heat, oil, sharp edges, or moving parts; Replace damaged cables immediately; Damaged cables increase the risk of electrical shock; Do not disassemble the scanner; This manual is not for repairing units; Please properly dispose used batteries; Do not incinerate batteries; Consult your local waste authority for available recycling and/or disposal options.

Use and Care

* Stay alert, and pay attention to what you are doing. Use common sense when the scanner is operated. When some functions are to be tested, the engine should be running. Children and visitors should keep a safe distance from the work area.

* Keep the scanner dry, clean, and free from oil and grease. Use a mild detergent on a clean cloth to wipe the dirt off when necessary.

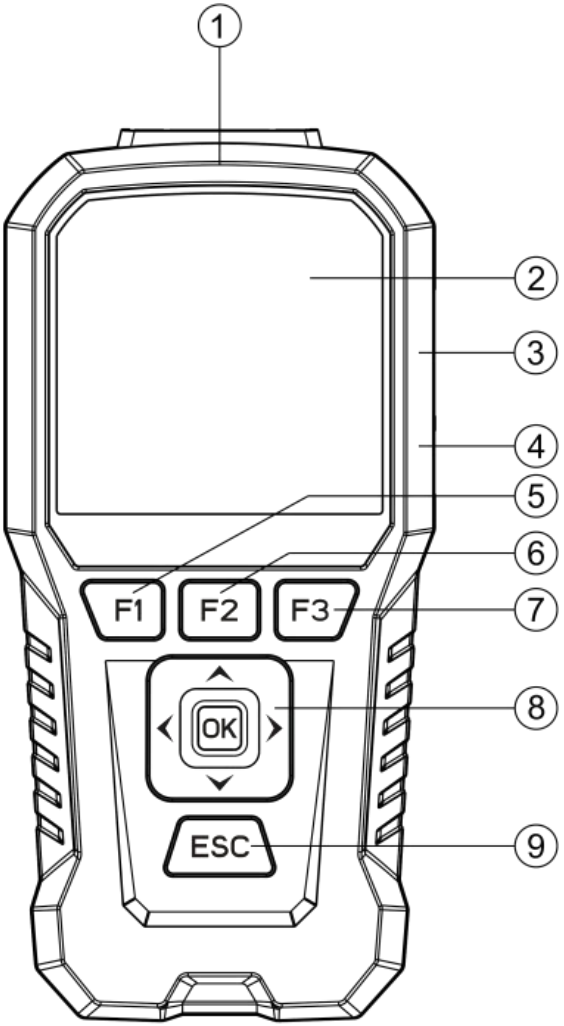
* Use accessories recommended by CanDo International, Inc. Only.

Service

Service must only be performed by repair technicians of CanDo International, Inc. Service & Maintenance by unqualified personnel may result in injury and damage to the unit, and may void your warranty. Refer to the Product Warranty Policy section of this manual.

INTRODUCTION

Appearance and Key Descriptions



Serial No.	Name	Application
①	Main Testing Cable	Connection interface connects vehicle communication cable during the vehicle diagnosis.
②	LCD	Display Interface
③	SD Card	Installation interface of SD card (vehicle testing diagnosis software is installed in the SD card)
④	USB Port	Use to connect an external printer (spare).
⑤	[F1]	Function key, for advanced function menu use
⑥	[F2]	Function key, for advanced function menu use
⑦	[F3]	Function key, for advanced function menu use
⑧	[UP] [DOWN] [LEFT] [RIGHT] [OK]	Buttons: Select up or down Turn to the previous page or the next page Confirm a selection of a menu list or button.
⑨	[ESC]	Button: cancel or return to the previous screen

Host Parameters

Hardware	Parameter	Type/Unit
CPU	120MHZ	LPC1788
Display	3.5 inch LCD	TFT LCD touch screen
Resolution Ratio	320x240	Dot matrix
SD Card Interface	2GB/4GB/8GB	National Standard
Diagnostic Interface	Main line	DB15
Operating Voltage	11~28V	V
Operating Current	< 500MA	MA
Storage Temperature	-30℃~85℃	℃
Dimension	211*101*28	mm

Functions

*Class 4-Class 8 truck coverage featuring "Automatic Protocol Search".

*HD J1708 and J1939 CAN, Engine, Transmission/ABS coverage, etc.

*CAT Support: CAT Truck/Bus, CAT Construction,

*CAT Power Equipment, CAT Agricultural, CAT Industrial, CAT On/Off Highway

*General Functions (Including Global OBD II coverage):

- Read ECU Information
- Read and Erase Fault codes
- Read Live Data
- Read Freeze Frame
- Graph Live Data
- Screenshot Function

* Graph live data such as:

- Engine speed
- Engine ECU temperature
- Percent acceleration pedal position
- Engine intercooler temperature
- Engine coolant temperature
- Battery volts
- Alternator volts
- Ambient air temperature
- Air inlet temperature

*Set measurement units in SAE English/Metric.

*Internet upgrade

Application

*Passenger cars and Business vehicles

*Tow trucks, recreational vehicles, cement trucks, dump trucks, garbage trucks, buses, step vans, municipal vehicles, refrigerated trucks, and conventional trucks.

Heavy-Duty Standard compliant construction, marine, agriculture, and other industrial machinery and equipment.

*Diesel power plant configurations

*CAT Support: CAT Truck/Bus, CAT Construction, CAT Power Equipment, CAT Agricultural, CAT Industrial, CAT On/Off Highway

*SAE J1850PWM, SAE J1850 VPW, IS0 14230-4, IS0 9141-2,IS0 15765-4,SAEJ1708,SAE J1939

NOTE: The purpose of this manual is to guide you to use the scanner successfully. It is not a repair manual for your vehicle. For specific information on troubleshooting your vehicle, please refer to the owner's manual or various other repair manuals.

OPERATION

Connect the scanner to your vehicle: HD Code II communicates with the computer in your vehicle through a main-line connection. One end of the cable is plugged into the connector on DB15 of HD Code II and the other end to the adaptor, which is plugged in to the diagnostic socket on your vehicle.

CAUTION: The operating voltage of HD Code II is within 11V-28V, please make sure the output voltage of the diagnostic socket on your vehicle is 11V - 28V.

Turn the vehicle ignition key to ON or start the engine, and then the HD Code II will automatically start.(Fig.1&Fig.2)

DIAGNOSTIC & OPERATING INTERFACE

Diagnose

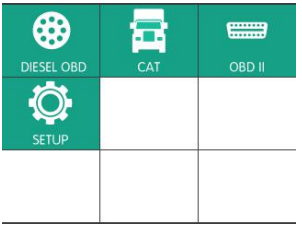
Select Menu: Select the [DIESEL OBD] and press (OK) button; The HD Code II includes categories of the software: SAE J1939, SAE J1708

Select Menu: Select the [CAT] and press (OK) button; The HD Code II includes categories of software: CAT Truck/Bus, CAT Construction, CAT Power Equipment, CAT Agricultural, CAT Industrial, CAT On/Off Highway

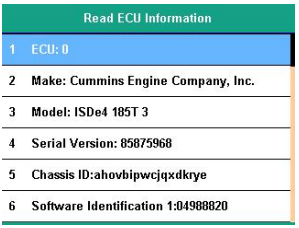
Select the [OBDII] and press (OK) button; The HD Code II includes categories of software: IS0 14230, IS015765, SAE J1850, IS0 9141-2, IOS 15765-4

Operating Interface

(Fig.1: Boot Screen)

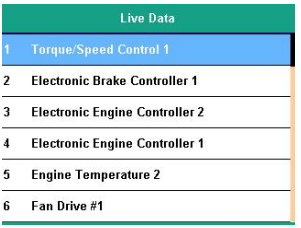


(Fig.2: Main Interface)



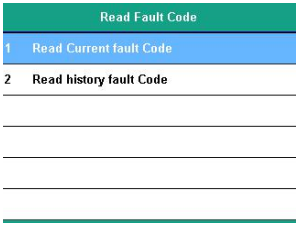
Read ECU Information	
1	ECU: 0
2	Make: Cummins Engine Company, Inc.
3	Model: ISDe4 185T 3
4	Serial Version: 85875968
5	Chassis ID:ahovbipwcjqxdkrye
6	Software Identification 1:04988820

(Fig.3: Read ECU Info)

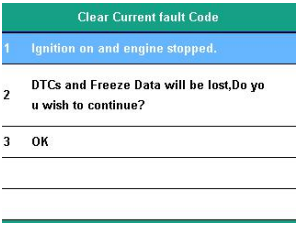


Live Data	
1	Torque/Speed Control 1
2	Electronic Brake Controller 1
3	Electronic Engine Controller 2
4	Electronic Engine Controller 1
5	Engine Temperature 2
6	Fan Drive #1

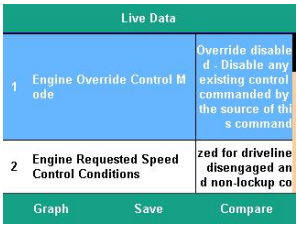
(Fig.4: Live Data View)



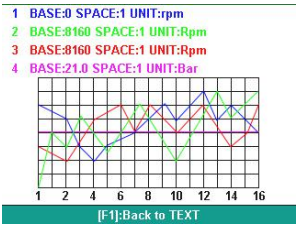
(Fig.5: Read Fault Code)



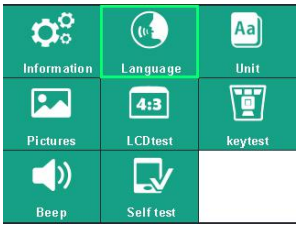
(Fig.6: Read Current Fault Code)



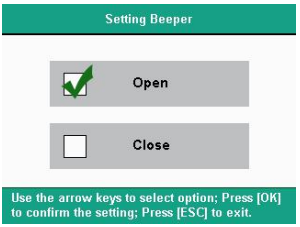
(Fig.7: Live Data View)



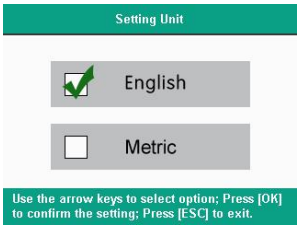
(Fig.8: Graph Live data)



(Fig.9: Setting Interface)



(Fig.10: Beeper On/Off)



(Fig.11: Unit sitting)

(Fig.12: Device Self-test)

CAUTION

Make sure the connector is firmly attached.

Keep the vehicle ignition key ON or the engine running.

Accessories connector:

OBD-16 pin connector supports J1708/J1587 or J1939 protocol.

DIESEL-9 pin connector supports J1708/J1587 protocol and J1939 protocol.

DIESEL-6 pin connector supports only J1708/J1587 protocol.

CAT-9 pin connector supports J1708/J1587 or J1939 protocol.

TROUBLESHOOTING GUIDE

If the HD Code II fails to connect to the vehicle:

1. Make sure the vehicle ignition key is in the ON position;
2. Make sure pins in connectors are not bent and contacted;
3. Make sure the cable connectors are plugged in firmly;
4. Make sure the diagnostics connector is clean.

How to self-test the HD Code II :

Connect the power interface of the main test line, and then connect it to the 12V DC power supply. The HD Code II starts and then enters the system settings/SELF-TEST to test if the HD Code II is normal or abnormal (refer to Fig.12).

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Certification

This product has been inspected and certified to meet the company's quality standards.

Product name	HD Code II
Product serial number	
Date of production	
Inspector	

Warranty card

Product name	HD Code II
Product serial number	
Purchase date	

Company name: _____

User address: _____

Contact person: _____

Contact number: _____