

TDB023 RF MODULE TESTER OPERATING MANUAL



The Diagnostic **BOX**.com

CONTENTS

CONTENTS	
INTRODUCTION	PAGE 3
APPLICATIONS LIST	PAGE 4
GENERAL OPERATION	PAGE 5
RF MODULE LOCATIONS	PAGE 9
SPECIFICATION	PAGE 17
DECLARATION OF CONFORMITY	PAGE 18

INTRODUCTION

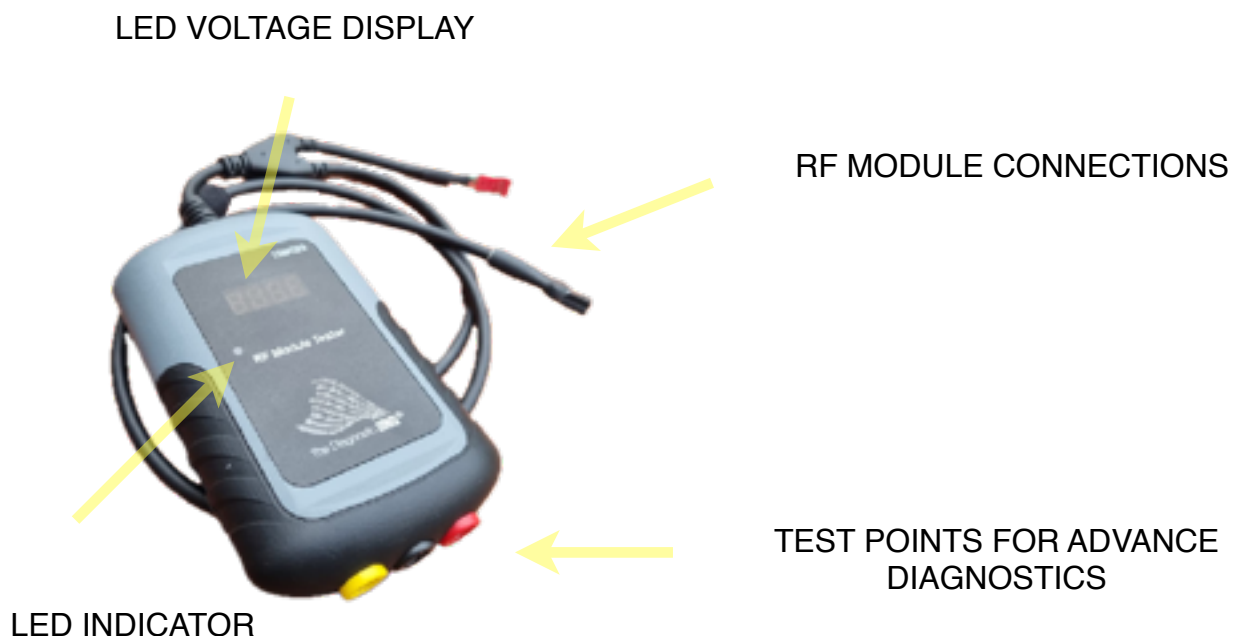
The TDB023 RF Module Tester is specifically designed to verify the operation and functionality of a wide range of RF modules used in automotive electronic systems.

This versatile diagnostic tool can confirm whether an RF module is successfully receiving signals, ensuring reliable communication within the vehicle system.

In addition to signal verification, the TDB023 also allows technicians to test input signals being sent to the RF module. These include:

- Door Switches
- Sliding Door Switches
- Brake Pedal Switches
- Remote Control Key Signals

By monitoring these inputs, the TDB023 helps identify faults in signal transmission or hardware failures, streamlining diagnostics and reducing time spent on troubleshooting RF-related issues.



APPLICATIONS

MANUFACTURER	MODEL	YEARS
FORD	B-MAX	2003 - 2019
FORD	C-MAX	2012 - 2017
FORD	ECOSPORT	2013 - 2017
FORD	FIESTA	2008 - 2019
FORD	FOCUS	2008 - 2019
FORD	GALAXY	2006 - 2015
FORD	KUGA	2008 - 2020
FORD	MONDEO	2007 - 2014
FORD	S-MAX	2006 - 2015
FORD	TRANSIT	2006 - 2019
FORD	TRANSIT CUSTOM	2012 - 2016
JAGUAR	XF (X250)	2009 - 2015
JAGUAR	XK (X150)	2006 - 2014
LAND ROVER	FREELANDER 2 (L359)	2006 - 2014

GENERAL OPERATION



LOCATE THE RF MODULE WITHIN
THE VEHICLE



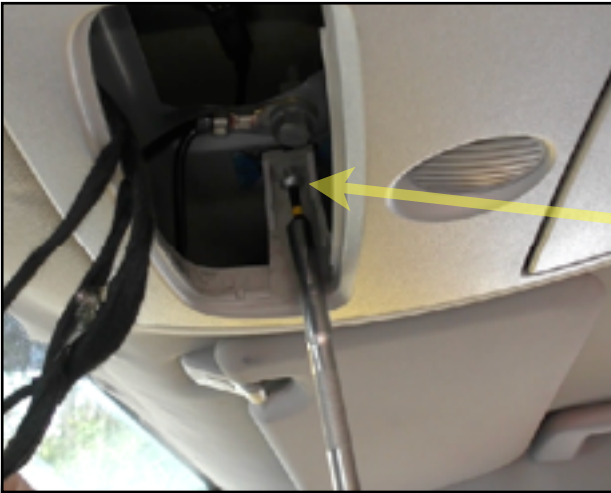
USING A TRIM REMOVAL TOOL,
GENTLY EASE THE PANEL FROM
IT'S POSITION



USING A TRIM REMOVAL TOOL,
GENTLY EASE THE PANEL FROM
IT'S POSITION



GENERAL OPERATION



NOW REMOVE THE 2 SCREWS AS SHOWN

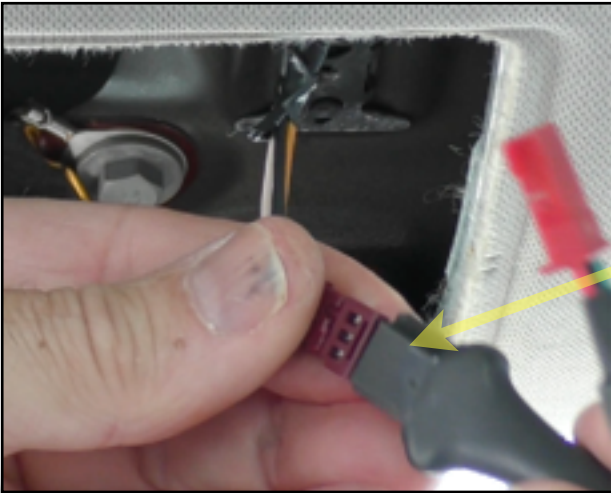
LOCATE THE RF MODULE



PULL THE RF MODULE FROM IT'S LOCATION AND DISCONNECT THE CONNECTOR



GENERAL OPERATION



CONNECT THE BLACK CONNECTOR ON THE TDB023 TO THE HARNESS CONNECTOR ON THE VEHICLE

THE TDB023 WILL DISPLAY THE VOLTAGE AT THE CONNECTOR AS SHOWN



TEST 1 : PRESS THE START BUTTON AND THE TDB023 WILL SOUND AND FLASH WHEN THE SIGNAL IS RECEIVED

GENERAL OPERATION



TEST 2 : PRESS THE BRAKE PEDAL AND THE TDB023 WILL SOUND AND FLASH WHEN THE SIGNAL IS RECEIVED

NOTE : AUTOMATIC VEHICLES USE THE BRAKE PEDAL SWITCH AND MANUAL VEHICLES USE THE CLUTCH SWITCH TO SEND A SIGNAL TO THE RF MODULE.



TEST 3 : OPEN AND CLOSE THE DOOR AND THE TDB023 WILL SOUND AND FLASH WHEN THE SIGNAL IS RECEIVED



TEST 4 : NOW CONNECT THE RF MODULE TO THE RED CONNECTOR OF THE TDB023.

PRESS ANY BUTTON ON THE WORKING KEY AND THE TDB023 WILL SOUND AND FLASH WHEN THE SIGNAL IS RECEIVED FROM THE RF MODULE



RF MODULE LOCATIONS



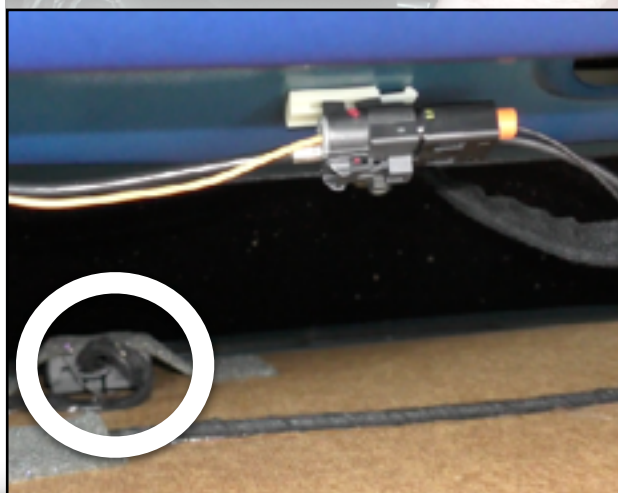
FORD MONDEO

RF MODULE LOCATED INSIDE THE
ROOF LINING TO THE LEFT SIDE OF
THE INTERIOR LIGHT FITTING



FORD C-MAX

RF MODULE LOCATED IN THE ROOF
LINING AT THE BACK OF THE
VEHICLE

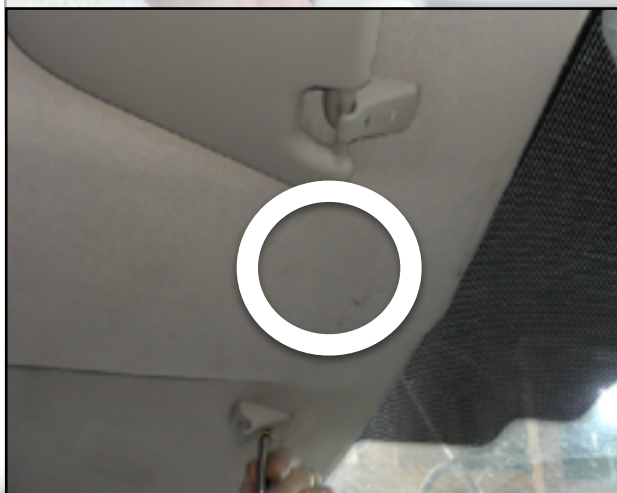


RF MODULE LOCATIONS



FORD FOCUS

RF MODULE LOCATED INSIDE THE ROOF LINING TO THE RIGHT SIDE OF THE INTERIOR LIGHT FITTING



FORD TRANSIT CUSTOM

RF MODULE LOCATED IN THE ROOF LINING AT THE FRONT OF THE VEHICLE. IT IS NOT POSSIBLE TO PULL THE CONNECTOR HARNESS OUT, SO YOU MUST CONNECT THE TDB023 IN THE ROOF LINING



FREELANDER 2

RF MODULE LOCATED IN THE ROOF LINING AT THE FRONT OF THE VEHICLE TO SIDE OF INTERIOR LIGHT FITTING

RF MODULE LOCATIONS



FORD FOCUS 2017 ID47

RF MODULE LOCATED INSIDE THE ROOF LINING TO THE RIGHT SIDE OF THE INTERIOR LIGHT FITTING



FORD KUGA

RF MODULE LOCATED INSIDE THE ROOF LINING TO THE RIGHT SIDE OF THE INTERIOR LIGHT FITTING



FORD ECOSPORT

RF MODULE LOCATED INSIDE THE ROOF LINING TO THE LEFT SIDE OF THE INTERIOR LIGHT FITTING

RF MODULE LOCATIONS



FORD FIESTA

RF MODULE LOCATED INSIDE THE ROOF LINING TO THE RIGHT SIDE OF THE INTERIOR LIGHT FITTING



FORD TRANSIT (BLUE KEY)

RF MODULE LOCATED INSIDE THE ROOF LINING



RF MODULE LOCATIONS



FORD FIESTA

RF MODULE LOCATED INSIDE THE
ROOF LINING TO THE RIGHT SIDE
OF THE INTERIOR LIGHT FITTING

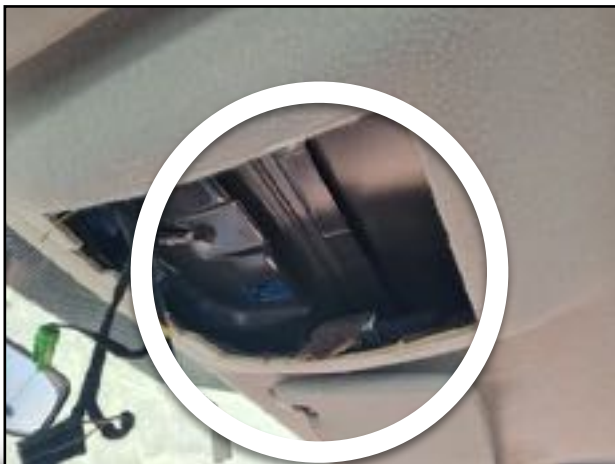


FORD TRANSIT (LARGE FULL SIZE)

RF MODULE LOCATED INSIDE THE
FRONT STORAGE POCKET

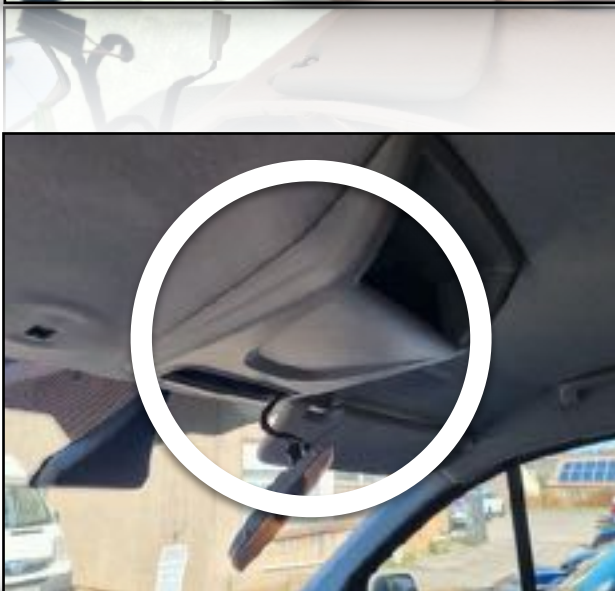


RF MODULE LOCATIONS



FORD S-MAX

RF MODULE LOCATED INSIDE THE ROOF LINING TO THE RIGHT SIDE OF THE INTERIOR LIGHT FITTING



FORD TRANSIT CUSTOM (WITH POCKET)

RF MODULE LOCATED INSIDE THE FRONT STORAGE POCKET



RF MODULE LOCATIONS



FORD KUGA (PANORAMIC ROOF)

RF MODULE LOCATED INSIDE THE
ROOF LINING AT FRONT OF GLASS
ROOF



RF MODULE LOCATIONS



JAGUAR XF
JAGUAR XJ



RF MODULE LOCATED INSIDE THE

SPECIFICATION

OPERATING VOLTAGE	12 VOLTS DC
AUTO POWER OFF	1 MINUTES
BATTERIES	
OPERATING CURRENT	20mA
WEIGHT	114 Grams
SIZE	84 mm (W) x 140 mm (H) x 29 mm (D)
FREQUENCY RANGE	
OPERATING TEMPERATURE RANGE	0 to 50 DEGREES C



DECLARATION of CONFORMITY

DECLARATION OF CONFORMITY

Manufacturer's Name: The Diagnostic Box

Manufacturer's Address: Diagnostic Box House
East Allington
Totnes
TQ9 7FA
United Kingdom

Product Name: RF MODULE TESTER

Product Model: TDB023

Conforms to: Specifications
EN 55022:1998, A1: 2000 + A2: 2003
EN 55024:1998, A1: 2001 + A2: 2003

Following the Provisions of EMC Directive: 204/108/EEC

TDB023 September 2025

Product conforms to class A emission standards

Signed : G CHAMBERS

Signed on behalf of The Diagnostic Box

