

ELECTRONIC INTEGRATED DIAGNOSTIC SCAN TOOL

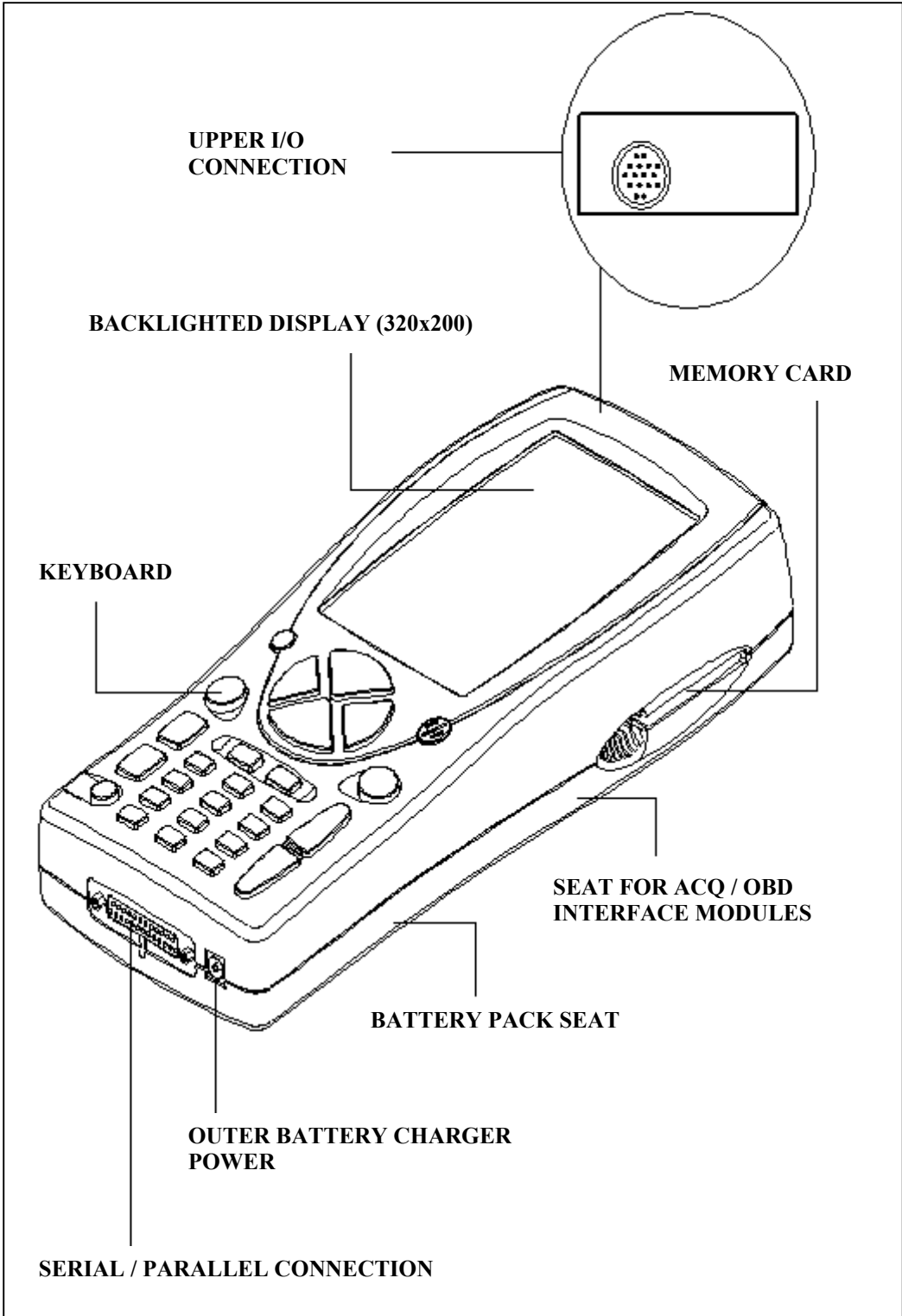
AXONE 2000

SHORT USER'S GUIDE

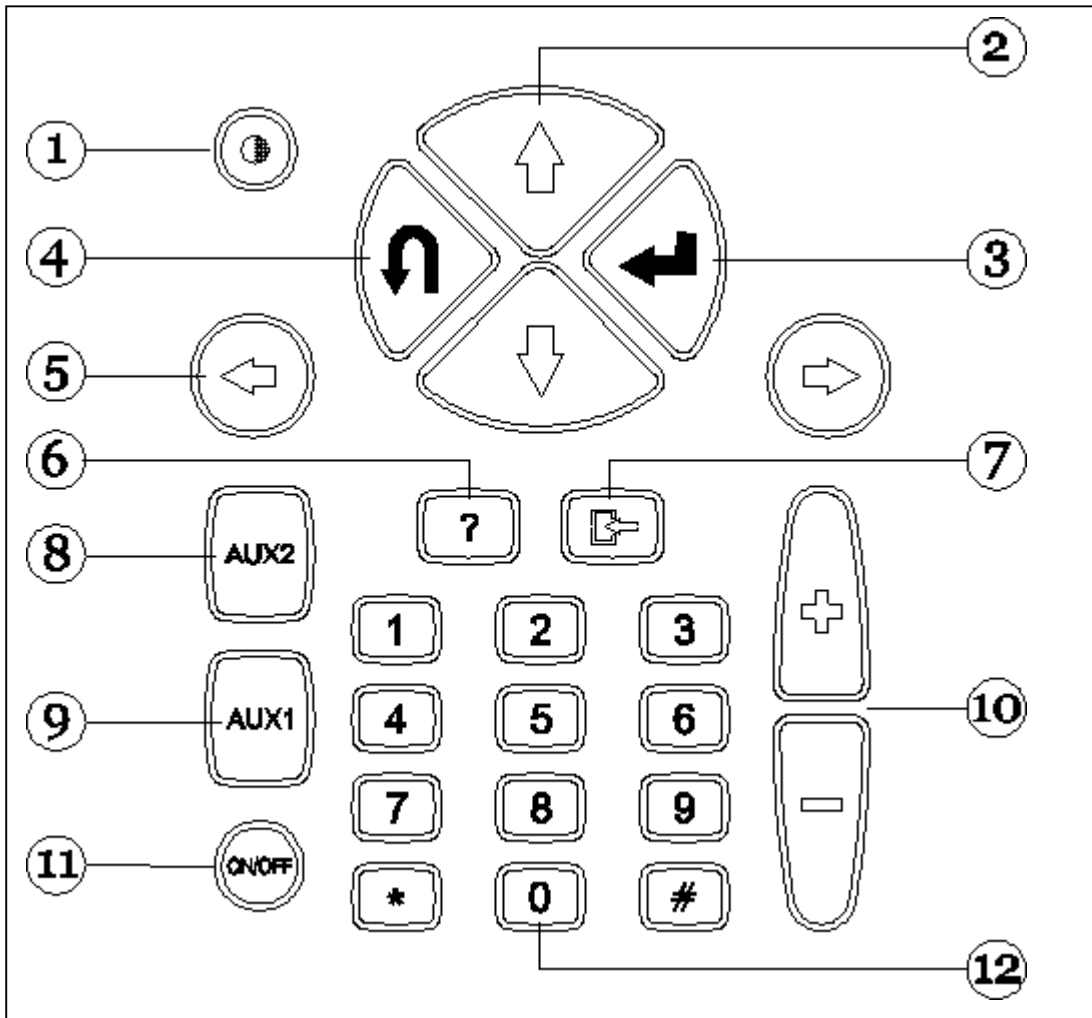
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DESCRIPTION of AXONE 2000 Scan Tool

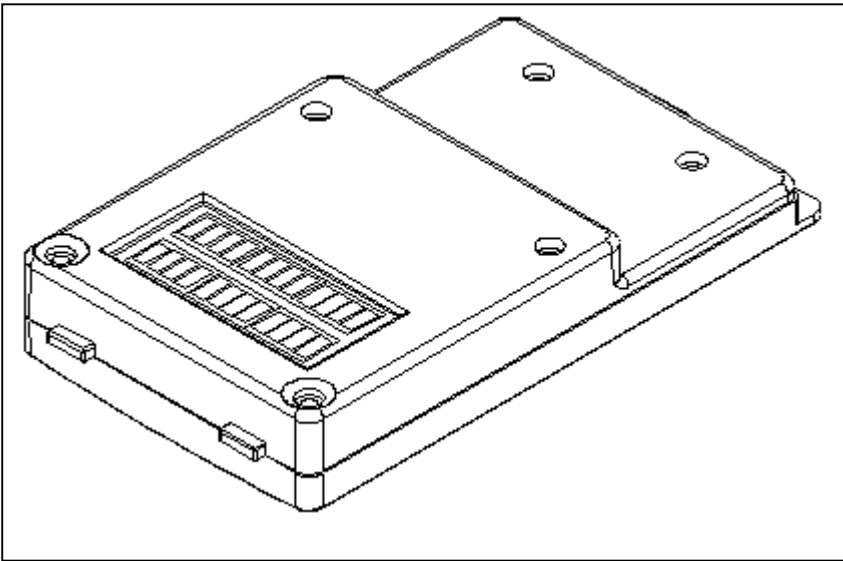


KEYBOARD:



1. Contrast control (in combination with up/down direction keys)
2. Up/down direction keys (shift cursor up/down)
3. ENTER key (confirms entry)
4. CANCEL/EXIT key (returns to previously enabled function)
5. Left/right direction keys (shift cursor to the left/right)
6. HELP key (displays online guide, if available)
7. DELETE key (deletes single stored error)
8. AUX 2 key (auxiliary functions)
9. AUX 1 key (auxiliary functions, error alarm silencing)
10. SCROLL UP/DOWN keys (scroll up/down displayed pages)
11. ON/OFF key
12. Numeric keyboard

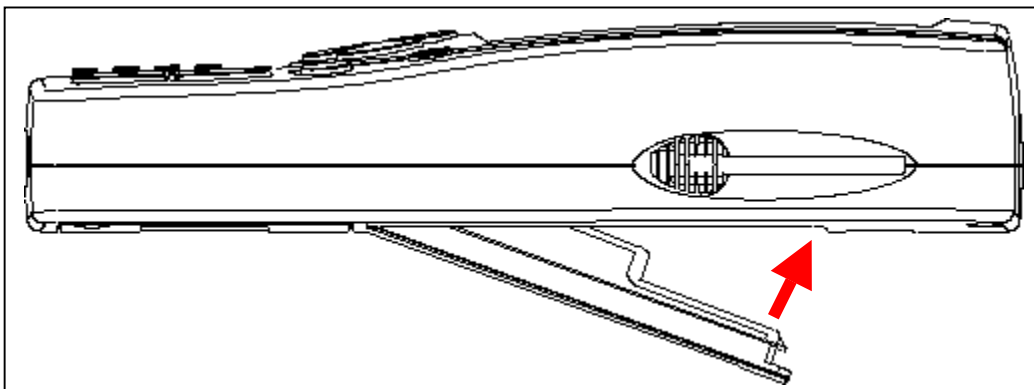
INTERFACE MODULES



AVAILABLE MODULES:

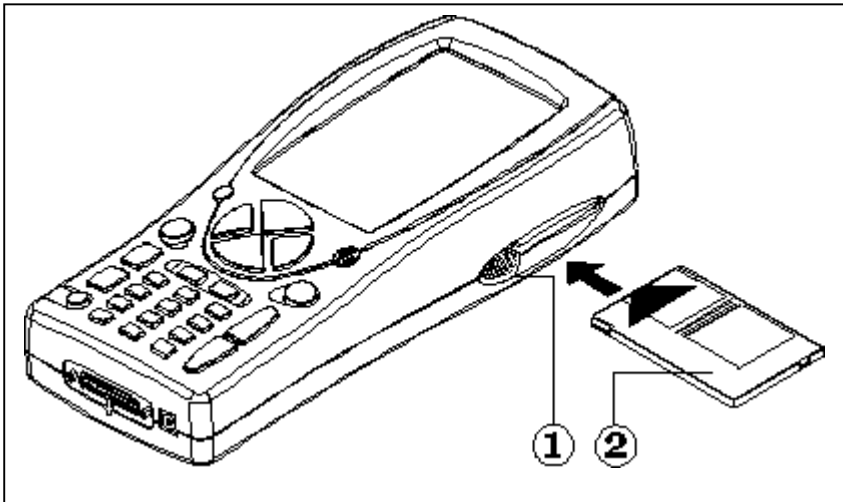
- OBD (On Board Diagnosis)** - self-diagnosis module
- ACQ (Acquisition)** – classic / multimeter / oscilloscope diagnosis module
- MDM 56 (MODEM)** - AXONE updating system via the Internet

AXONE2000 communication system is controlled through the upper connector.
Module installation (when AXONE 2000 Scan Tool is OFF)



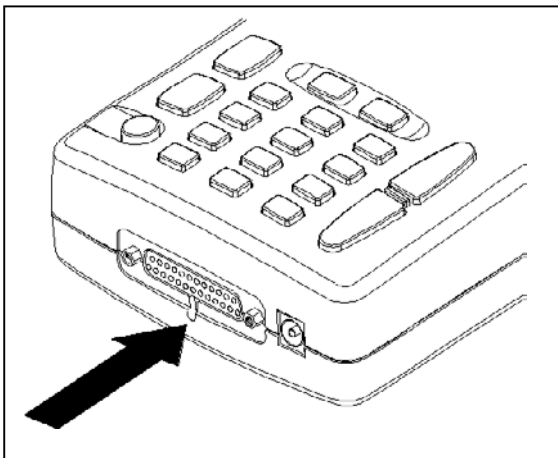
MEMORY CARD

16 MB FLASH-ROM card for software and stored data
(to be installed when AXONE2000 Scan Tool is OFF)

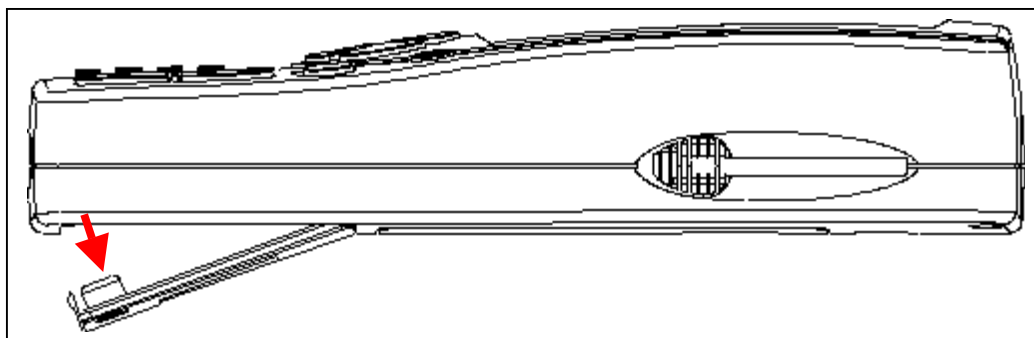


POWER SUPPLY

Input voltage: 12-15 V D.C.
Absorbed power: 10 W
Inner Ni-MH battery pack: (operating range: 2 hours)



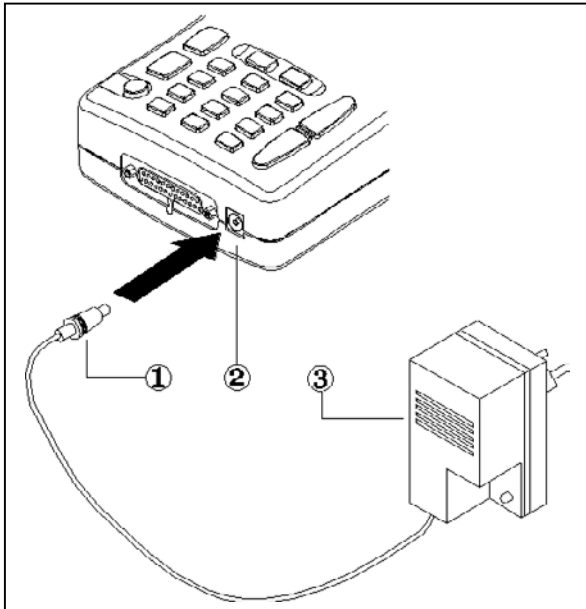
Opening the battery cover:
insert a screwdriver bit where
shown and release the tab. The
battery cover will open.



RECHARGING THE BATTERY PACK:

Connect the battery charger (transformer) to a 220V outlet.

Never use AXONE2000 Scan Tool when under recharge. Battery charger must only be used to recharge the battery.

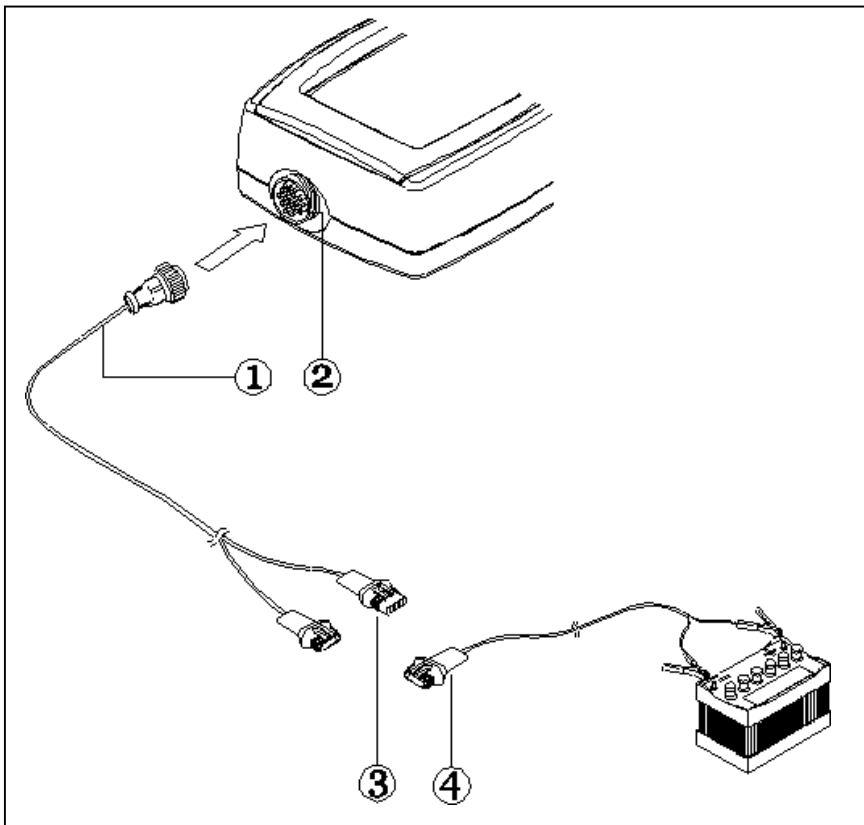


NOTE ON BATTERY PACK RECHARGE

1. **The first two charges of the battery pack must last at least 12 hours.**
2. The battery charger will turn automatically off after a complete charging cycle.
3. AXONE2000 Scan Tool must be recharged only at room temperature (20°C)

AXONE2000 SCAN TOOL POWER SUPPLY VIA VEHICLE BATTERY

NOTE: CONNECT AXONE2000 SCAN TOOL TO COMMUNICATE WITH OBD MODULE: THE SCAN TOOL CAN COMMUNICATE WITH THE MODULE ONLY IF CONNECTED TO THE MODULE GROUND REFERENCE, I.E. BATTERY NEGATIVE POLE



1. Connection cable
2. AXONE2000 Scan Tool connector
3. Connector
4. Connection cable to battery

NOTE: when AXONE2000 Scan Tool is power supplied via vehicle battery, the scan tool battery pack is also charged.

How to activate AXONE 2000 Scan tool

Before asking the activation code, check the presence of all the components here listed: in case you don't find a component, please send a fax to **+39 0422 791465** or an E-mail to **gpivetta@texa.it**
After the Axone activation it's implicit that you accept the content of the package.

AXONE SUITCASE and KIT CONNECTOR (code 3210/AP2)

- Axone suitcase



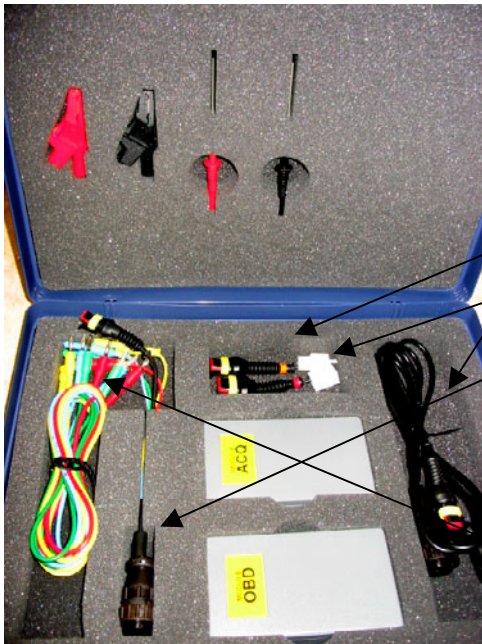
1. **3210NAP1**: Axone 2000 Aprilia
2. **3220MC1/API**: Memory card Axone 2000 Aprilia
3. **51831210**: Power supply 12VDC 1,0A
4. **7200052**: Battery feeding cable Axone2000
5. **CD3210/API1**: CD including multilanguage operating manua
6. **74200100**: Battery Axone2000

- Kit connector's box



7. **3223/01NT**: MDM56 module
8. **72400100**: Phone cable
9. **36070002**: Phone plug 3 poles RJ11

AXONE INTERFACES' SUITACASE (code 3250/1AP1)



1. **3222/02:** ACQ module
2. **3221/01:** OBD module
3. **3151/AP01:** Main cable and Marelli Axone Aprilia
4. **3151/AP02:** Cable SAGEM system Axone Aprilia
5. **3151/AP03:** Cable DITECH system Axone Aprilia
6. **72031224:** Extension cable low tension kit
7. **36321110:** cable UNIP. BANANA M-M 4mm L=150 cm RED
8. **36321114:** Cable UNIP. BANANA M-M 4 mm L=150 cm BLUE
9. **36321116:** Cable UNIP. BANANA M-M 4 mm L=150 cm GREEN
10. **36321118:** Cable UNIP. BANANA M-M 4 mm L=150 cm YELLOW
11. **36438102:** Crocodile twizeer ATT BANANA F4mm BLACK
12. **36438100:** Crocodile twizeer ATT BANANA F4mm RED
13. **3633261302:** Ferrules ATT BANANA F4mm L=157 BLACK
14. **3633261300:** Ferrule ATT BANANA F4mm L=157 RED

APRILIA AXONE 2000 SCAN TOOL ACTIVATION REFERENCE DATA

SERIAL NUMBER (on the back side of the scan tool: on the black label)	s/n T.....
SOFTWARE VERSION (Instrument ON. The number displayed at the left top)	
LANGUAGE VERSION	
FIRST AND LAST NAME of the OWNER	
COMPANY NAME	
ADDRESS	
PHONE NUMBER	
FAX NUMBER or E-MAIL address	

Send by fax to **+39 0422 707458** or
e-mail as attachment to **gpivetta@texa.it**

OBD module updating procedure (FIRMWARE)

OBD module (FIRMWARE) of AXONE2000 scan tool should be updated from memory card when using it for the first time.

- ❑ Power AXONE Scan Tool ON and select the icon "SERVICE" through the direction keys.
- ❑ Press ENTER.



- ❑ Select the option "Update firmware" through the direction keys.
- ❑ Press ENTER



Press ENTER to confirm firmware updating.

(Press BACK for no updating).



Updating will last approx. 4 minutes:
press ENTER to start and wait.



Do not hit any keys when updating.



OK (thumb up): OBD module successfully updated. Press ENTER to quit.





SELF-DIAGNOSIS

3



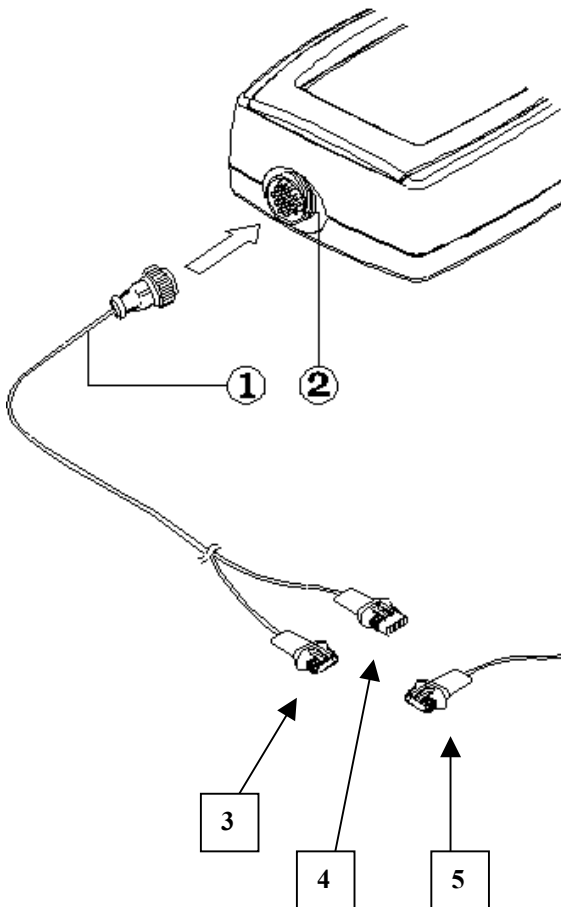
The black triangle highlights the selected function: position the cursor to SELF-DIAGNOSIS and press ENTER. OBD MODULE IS NEEDED. Power AXONE2000 Scan Tool off and install the OBD module.

THE ECU CONNECTION CABLE IS NEEDED. THE BATTERY CONNECTION CABLE MUST BE ABSOLUTELY CONNECTED TO THE VEHICLE BATTERY AND NEVER TO AN OUTER BATTERY.

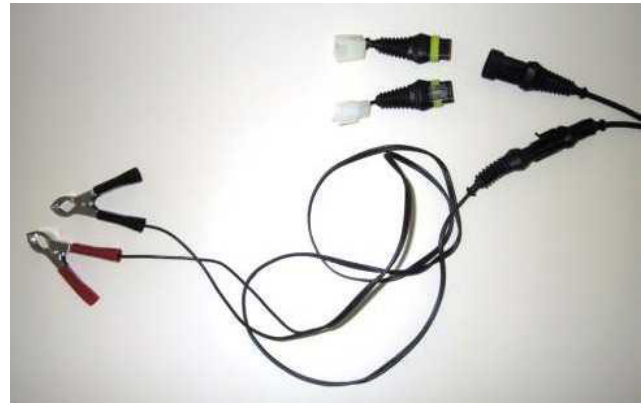
The self-diagnosis system reads all information by communicating directly with the vehicle ECU.

It is possible to:

- read operating parameters of all devices connected to the control unit
- automatically acquire diagnostic trouble codes, if any
- modify some engine control parameters.



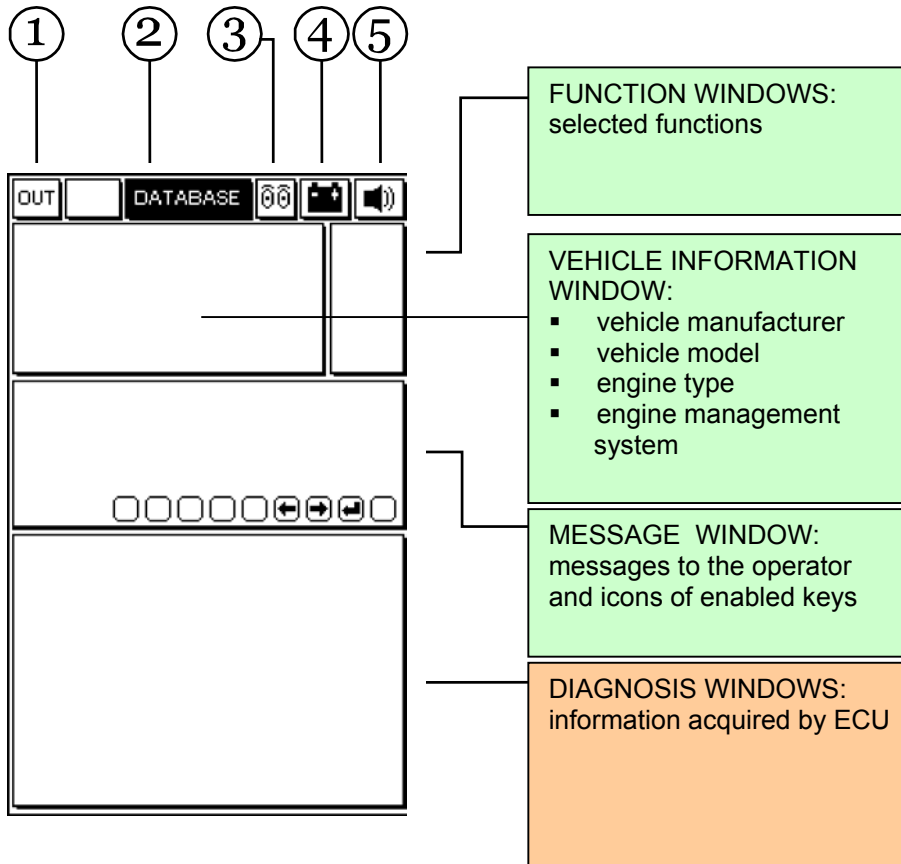
1. ECU connection cable
2. AXONE2000 connector
3. Motorcycle ECU connector
4. Power connector
5. Battery connection cable



ADAPTER
To be used with ETV Capo Nord and RST Futura

GENERAL SCREEN FEATURES

Screen profile



1. Exit Key: return to main menu
2. DATABASE menu: vehicle selection
3. Animated Icon: communication status between AXONE2000 Scan Tool and vehicle ECU. When communicating, the icon is a flashing bulb.
4. Battery Pack Icon: slow flashing: battery pack nearly flat – fast flashing: battery pack is flat and AXONE2000 Scan Tool will automatically turn off after 20 seconds.
5. Beep Icon: enable/disable Scan Tool beeper

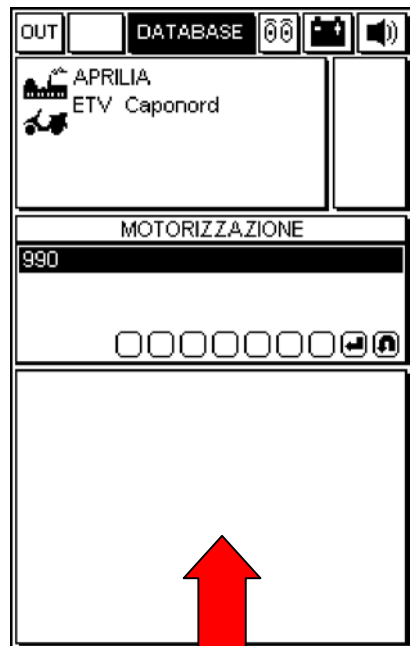
The following are VIDEO PAGES for SELECTING the CONNECTION to the vehicle; these pages are stored in Axone Scan Tool and not in the control module.



SELECT VEHICLE MAKE
Press ENTER



SELECT MODEL
Select one of the available models through up/down direction keys.
Press ENTER



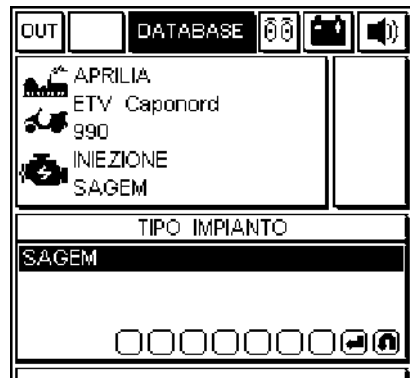
SELECT ENGINE
Press ENTER



SELECT OPERATION:
1. INJECTION = **SELF-DIAGNOSIS** of the injection system
2. REPROGRAM = remap ECU with mappings which can be stored in the memory card
Press ENTER



FIRST 5 DIGITS OF THE FRAME NUMBER
Press ENTER



INJECTION SYSTEM MANUFACTURER
Press ENTER



ECU AND DIAGNOSIS CONNECTION POSITION



TYPE OF CONNECTOR TO CONNECT AXONE2000 SCAN TOOL TO ECU



CONNECT AXONE2000 SCAN TOOL TO VEHICLE BATTERY



Active communication between AXONE2000 Scan Tool and ECU is signaled by a flashing bulb icon.

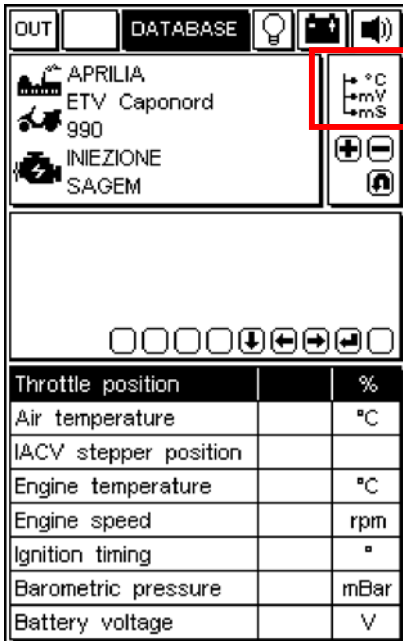
If a trouble code is detected in the ECU or a trouble code is stored in ECU, AXONE2000 Scan Tool will beep. Please refer to [Trouble Code Page](#) in case of troubles.

The first page shows **ECU IDENTIFICATION DATA**. If communication fails the message: **"COMMUNICATION INTERRUPTED. START AGAIN?"** will show.

OPERATING PAGES (connection with the control unit is ensured if the bulb symbol is flashing)

PRESS “+” AND “-“ TO SCROLL PAGES UP/DOWN

PAGE SUBJECT IS SYMBOLIZED BY THE ICON IN FUNCTION WINDOWS AT TOP RIGHT.

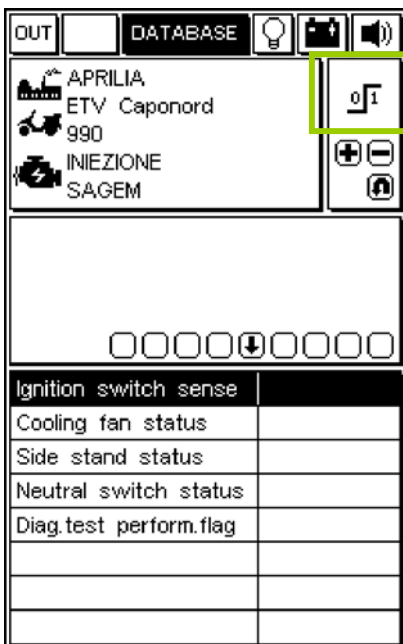


ENGINE PARAMETERS READING

To read a parameter:

1. select the required parameter through the UP/DOWN direction keys
2. Press ENTER to confirm

Only eight parameters can be displayed on each video page. To replace a displayed parameter with another one, select the required parameter through the RIGHT/LEFT direction keys and then press ENTER to confirm.



DEVICES STATUS

The status of some devices connected to ECU is shown. Status may be expressed with certain values.



MODIFY PARAMETERS

To modify a parameter:

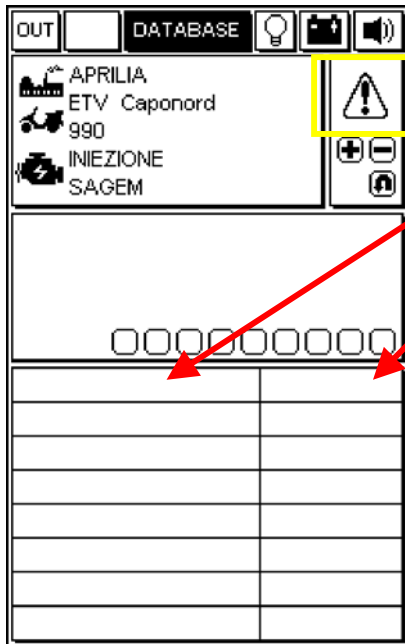
1. select the required parameter through the UP/DOWN direction keys
2. press ENTER to start the procedure



ENABLE DEVICES (IF FITTED)/DELETE DIAGNOSTIC TROUBLE CODES

Press ENTER to confirm deletion of all stored diagnostic trouble codes.

Press ENTER to enable the selected actuator, if fitted.



DIAGNOSTIC TROUBLE CODES (DTCs)

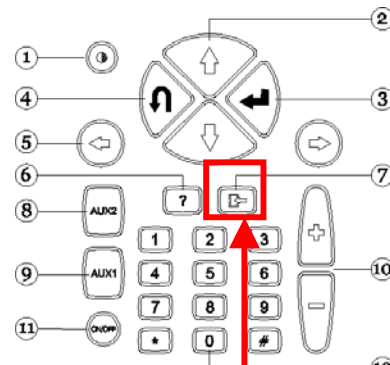
When the ECU detects a DTC, the window below will show.

DTC status is displayed on the right.

status	description	alarm
ACT	trouble code currently active	ON
MEM	stored trouble code not necessarily active	ON
STO	trouble code deleted from ECU memory. Trouble codes are no longer displayed after AXONE2000 is disconnected from ECU.	OFF

DELETION OF SINGLE DIAGNOSTIC TROUBLE CODES

SELECT SINGLE DTCs THROUGH THE UP/DOWN DIRECTION AND PRESS "DELETE".



DELETE KEY

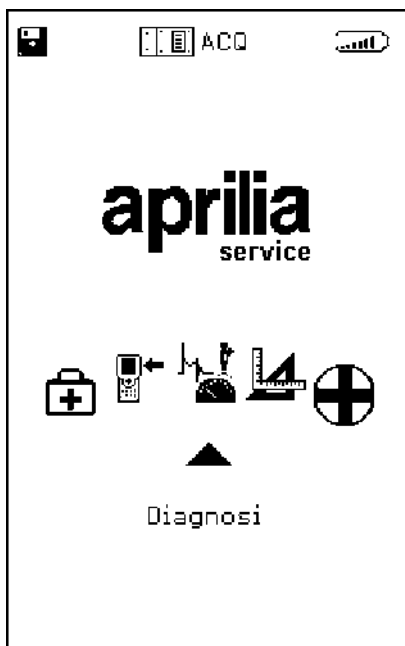
EXITING PROGRAM AND POWERING AXONE2000 SCAN TOOL OFF

- ❑ TO RETURN TO THE MAIN MENU FROM ANY PAGE: PRESS EXIT UNTIL **CONFIRM EXIT** IS DISPLAYED
- ❑ PRESS ENTER
- ❑ PRESS EXIT UNTIL STARTING PAGE IS DISPLAYED (EMPTY PAGE)
- ❑ SELECT **OUT** ICON WITH DIRECTION KEYS (TOP LEFT)
- ❑ PRESS ENTER
- ❑ POWER OFF AXONE2000 SCAN TOOL.



DIAGNOSIS

4



ACQ MODULE NEEDED. Power AXONE2000 Scan Tool off and install the ACQ module.

DIAGNOSIS allows classic diagnosis procedure, i.e. the physical analysis of signals from all devices connected to the control unit: sensors (input signals) and actuators (output signals).

The operator is guided online through the operations for all **Aprilia** models.

Available models:
HABANA 50
LEONARDO 125
RSVMille
SCARABEO 50
SR 50 DITECH
SR 50 air cooled
SR 50 L.C.

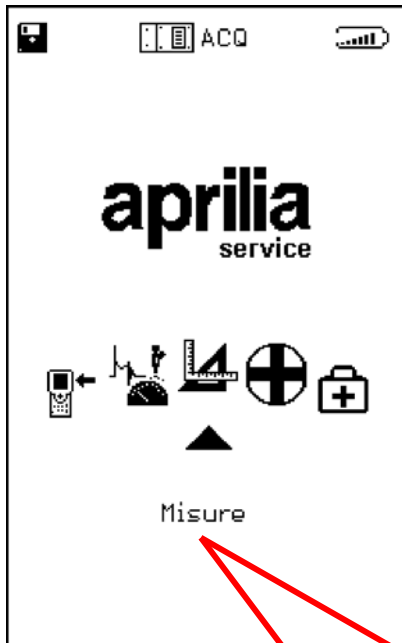


Select the icons at the top through the ← → direction keys.
Press ENTER to enable the function.

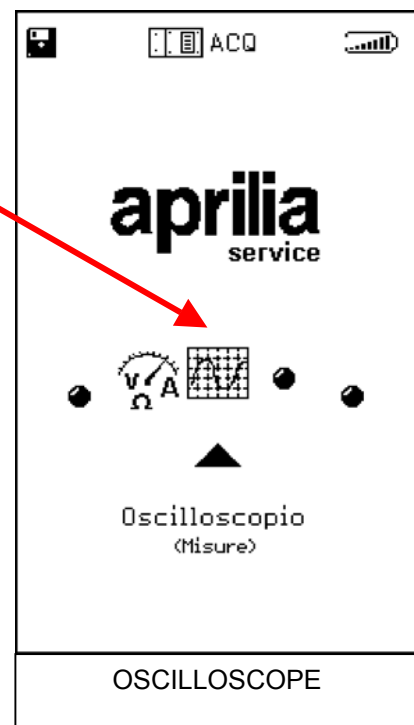
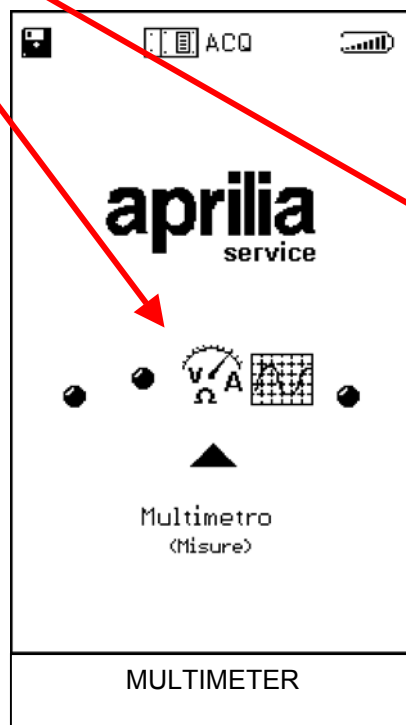
ICONS – LEGEND

1. OUT = return to MAIN MENU
2. CHEQUERED FLAG= flashing during the test
3. OPTIONS = available TESTS
4. CLOCK = pointers move when the program is active
5. BATTERY = flashing if scan tool battery pack is nearly flat
6. BEEP = enable/disable scan tool beeper
7. OPTIONS WINDOW = available options
8. ECU ICON = selected injection system
9. MODEL ICON = selected vehicle model
10. FACTORY ICON = selected vehicle manufacturer

For further details please refer to Axone2000 user's guide on CD-ROM (included in Axone2000 Scan Tool package).



INSTALL THE ACQ MODULE WHEN AXONE SCAN TOOL IS OFF.
< Select "Test" icon shown on the side



For further details please refer to Axone2000 user's guide on CD-ROM (included in Axone2000 Scan Tool package).

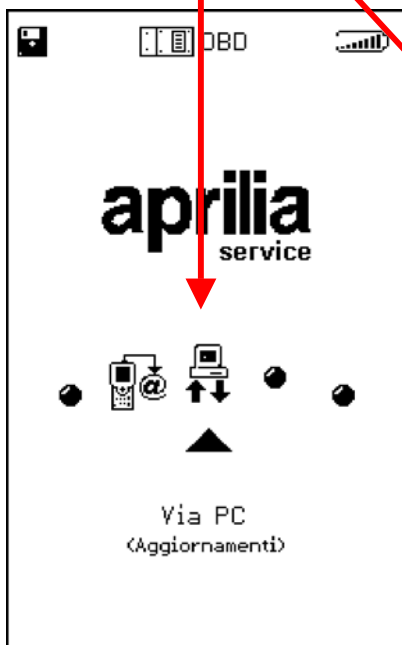


UPDATING

6

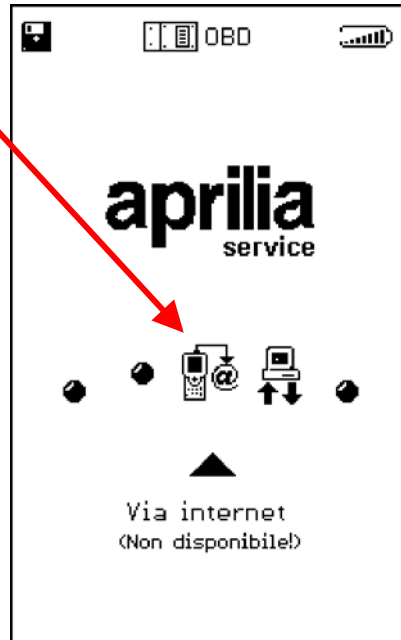


- Scroll options and select "UPDATING"
- Press ENTER to confirm



VIA PC

Connect to a PC via serial cable. The memory card can be updated via PC.



MODEM MDM 56 MODULE NEEDED

This MEMORY CARD updating system requires the installation of the MODEM module supplied with Axone Scan Tool to establish a connection through the telephone line in dial-up mode.

For further details please refer to Axone2000 user's guide on CD-ROM (included in Axone2000 Scan Tool package).