

1. INTRODUCTION

1.1. INTRODUCTION

- **EASYKEY overview:** it is the easy tool for electronic key programming. It has manufactured by DTDAuto Technology Center in 2019. It will save time and money when you solve problems relate to lost all of the keys and adding new key. You also can call this one is a best SCU tool for Motorbike Smart key.
- **EASYKEY user object:**
 - + Customers are electronic key locksmiths
 - + Customers are Smart key motorbike repairers
 - + Support many automatic program features to make all of cases of smart keys direct to SCU without vehicles.

2. FUNCTION



PIAGGIO



YAMAHA



SUZUKI

2.1. SMART KEY FUNCTION FOR HONDA, YAMAHA, SUZUKI (for standard & full package)

- Read all KEYID# and ECMID directly from vehicle SCUs
- Program all cases about Smart Key System such as adding keys, losing all of the keys, syncing SCU-ECM: ON VEHICLE, ON SIMULATOR & Fast automatic programming direct to SCU & ECM (without vehicles) as following: :
 - + Register more FOB# for all of cases
 - + Register FOB# when lost all of the FOB#
 - + Quick key registration with KEYID and PN (don't need to read KEYID in SCU) for SCU types of codes:
K01| K29| K35| K36| K77| K96| K97| K0R| MKHD0| MKTD0| MKRD1
 - + Delete KEYID in SCU memory
 - + Synchronize SCU & ECM for all cases
 - + Write ECMID code into SCU (HONDA, YAMAHA, SUZUKI)

- + Inactivate FOB# code in SCU when lost FOB#
- + Check FOB# & SCU
- + Display the status of KEY (ON/OFF)
- + Display SCU information
- Restore SCU data from sample data for HONDA, YAMAHA, and SUZUKI (this function is used to repair software inside SCU when SCU data is faulty)
- Copy data from source SCU to destination SCU for all motorbikes that have Smart key system: HONDA, YAMAHA, SUZUKI (This function is used to repair, and swap SCU when SCU hardware/software faults)
- Quick sync SCU & ECM (without FOB) for HONDA: SH, PCX, X-ADV... and equivalent vehicles

2.2. KEY PROGRAMMING FUNCTION FOR PIAGGIO, VESPA (for standard & full package)

- Read KEYID from IC/ ECM
- RESET TO NEW immobilizer system
- Register more keys for all cases
- Register a new key when lost all of the keys
- Check the current key via the antenna (for vehicles ECM : PGQ16)
- Support to make key for Motorcycles with ECM codes:
 - + ACI100, ACI500 / ACI501 / ACI502 / ACI503 / ACI504
 - ACI600 / ACI601 / ACI602 / ACI603 / ACI604 / ACI605 /
 - ACI606, ACII / AC2I / AC5I / AC8I / AC13I / AC21I / AC23I,
 - AC19I / AC20I / AC27I, AC24I / AC25I / AC32I MIU1, MIU2,
 - MIU4, MIU G3, RIU1, PGN04, PGS02, PGS05, PGS06
 - + PGU0X*, PGT1X*, PGR0X*, PGQ16* (MEDLEY)... (ECM codes marked with '*' only supports the full package)

2.3. KEY PROGRAMMING FOR YAMAHA TMAX (2017-2024) (only support for full package)

- + Register more FOB
- + Register FOB# when lost all of the FOB#
- + Inactivate/Activate FOB# in SCU
- + Read KEYID# in SCU
- + Delete KEYID# in SCU memory

- + Copy SCU data
- + Check KEYID
- + Check FOB & SCU

2.4. HONDA ON/OFF SMART KEY FUNCTION (only support for full package)

Smart key is a security system for anti-theft by electronic system with 02 layers combined:

- First security layer between FOB & SCU
- Second security layer between SCU & ECM

When the Engine can start need to bypass 02 layers.

However, some case ECM lost ECMID, cannot found then cannot bypass second security layer and cannot start Engine. Normally, the technician must buy a new ECM for replace and lost many money.

But, when EASYKEY support this OFF Smart key function to ECM by Remap method inside ECM then it will do not check second security layer and automatic bypass second security layer.

So, now smart key will only use first security layer also can start engine with old ECM as normal that do not need to buy a new ECM.

However, the level of security of the anti-theft will be reduced 50% but can accept it.

5. RENEW AND READ ECMID FOR HONDA ECMs (Keihin and Shindengen types) (only support for full package)

- Renew ECMID inside the ECM for Shindengen ECMs
- Read ECMID inside the ECM for Shindengen ECMs
- Read ECMID inside the ECM for Keihin ECMs

6. ODOMETER CORRECTION FUNCTION (only support for full package)

ODO value correction, restore original ODO data, read ODO value to repair ODO system for HONDA, YAMAHA, PIAGGIO, VESPA

Compatible vehicle ODO list:

- **HONDA:** AIR BLADE (2013-2019), AIR BLADE (2020-2021), AIR BLADE (2022-2024), CB150R (2017-2019), CB300R (2017-

2019), CB650R (2019-2021), CBR250, CBR650R (2019-2021), CB650F (2019-2021), CBR650F (2019-2021), CB500X (2019-2021), CBR500R (2019-2021), CB500F (2019-2021), CBR 50RR (2019-2021), CBR 150R (2019-2021), FUTURE NEO Fi, FUTURE X Fi, GENIO (2019-2021), LEAD (2013-2019), LEAD (2020-2021), LEAD (2022-2024), PCX (2008-2013), PCX (2014-2017), PCX 2018, PCX HYBRID, PCX 150 (2021-2024), PCX 160 (2021-2024), SH 300i, SH MODE (2013-2019), SH MODE (2021-2024), SH 125/150/125D/150D/SM (2013-2017), SH 125/150/125D/150D/SM (2018-2019), SH 125/150/125D/150D/SM (2020-2024), SCOOPY-I (2017-2020), SCOOPY 2021, SUPER CUP 125 (2021-2021), MSX, GENIO (2019-2021), VISION 2021-2024, VARIO 150, WINNER, WINNER X, X-ADV, DYLAN, ZOOMER X (2013-2017), ZOOMER X (2018-2020), SONIC, WAVE 110 2021, WAVE 125 (2003-2005), WAVE 125i (2021-2024), CLICK (2012-2014), CLICK (2014-2017) CLICK (2018-2020), VARIO (2014-2017), VARIO (2018-2020), BEAT (2020-2023), DUNK (2017-2023), SUPRA GTR 150 (2014-2018), FORZA, MSX 125 (2019-2020), SUPRA GTR 150 (2019-2023), CLICK (2021-2023), VARIO (2021-2023), X-ADV 2018

- **YAMAHA:** QBIX, ACRUZO , AEROX (2017-2019), AEROX (2020-2023), LEXI S, LATTE, FREGO, NVX (2017-2019), NVX (2020-2023), NMAX (2017-2020), NMAX (2021-2023), NMX (2017-2020), NMX (2021-2023), M-SLAZ (2016-2019), MT-03 (2015-2019), MT-15 (2016-2021), MT-25 (2015-2019), JANUS, TFX, EXCITER (2014-2018), EXCITER (2019-2020), FZ 150, FZ 150i, GRANDE, NOUVO SX, NOUVO LX, YZF-R3 (2014-2018), YZF-R25 (2014-2018), R15, XMAX 300 (2017-2018), TMAX (2001-2003), TMAX (2004-2007), TMAX (2008-2011), TMAX 500 (2008-2011), TMAX 2013, TMAX 2015, Grand Filano, QBIX, XMAX(2017-2019)

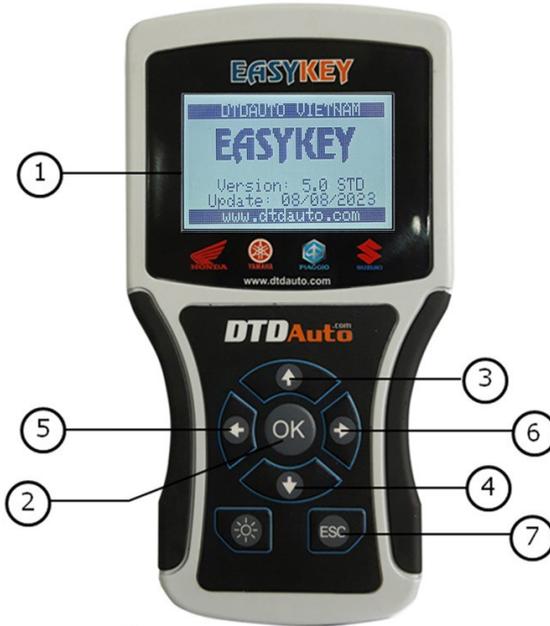
- **PIAGGIO:** MEDLY 125, MEDLY 150, MEDLY 125 ABS, MEDLY 150 ABS, LIBERTY ABS, LIBERTY 125 3V PGN04, LIBERTY 150 3V PGN04, LIBERTY 125 3V PGT01, LIBERTY 150 3V PGT01, LIBERTY 125 3V PGS02, LIBERTY 150 3V PGS02, LIBERTY ABS PGS06

- **VESPA:** PRIMAVE 125 PGN04, PRIMAVE 150 PGN04, SPRINT 125 3V PGN04, SPRINT 150 3V PGN04, SPRINT 125 3V PGT01, SPRINT 150 3V PGT01, SPRINT 125 3V PGS02, SPRINT 150 3V PGS02
- **SUZUKI:** RAIDER (2017-2021), SATRIA (2017-2023), GSX 150R (2017-2023)



Standard package image

2. FUNCTION KEYPADS



No	COMPONENT	FUNCTION DESCRIPTION
1	LCD Main display	Display all information for the using
2	"Enter/OK" button	Perform a command menu follow selection
3	"Shift Up" button	Shift cursor to Up to select function
4	"Shift Down" button	Shift cursor to Down to select function
5	"Shift Left" button	Shift cursor to Left to enter KEY ID
6	"Shift Right" button	Shift cursor to Right to enter KEY ID
7	"Exit/Cancel" button	Exit or cancel the function

3. SMART KEY PROGRAMMING INSTRUCTIONS

3.1 PROGRAM FOR HONDA, YAMAHA, SUZUKI

This function used for automatic registration steps directly with SCU that do not need to connect SCU to vehicle. When you use this function, you need choose the right cable for vehicle.

BRANDS	MODELS	CABLE TYPE
	PCX 2015-2019, PCX Hybrid, SH MODE, SH 125 ESP, SH 150 ESP, SH 300i ABS, SCOOPI-I ESP, X-ADV, ADV, SUPER CUP	 <p>EK07-SP01</p>
	Vehicles before 2021: AIR BLADE 125, CLICK-I 125, LEAD 125, VARIO 150, VISION ESP, SCOOPI	 <p>EK07-LV01</p>
	Vehicles after 2020: AIR BLADE 125, ADV, CLICK-I 125, LEAD 125, VARIO 150, VISION ESP, PCX, SCOOPI, WINNER X, SH MODE, SH 125/150, SH 350i, SUPER CUB	 <p>EK07-VS02</p>
	AEROX, FREEGO S, LATTE, LEXI, GRANDE, GRAND FILANO, JANUS, NVX, Qbix, X-Max, NMAX, SMAX...	 <p>EK07-YS01</p>
	TMAX (use for EASYKEY TMA option)	 <p>EK07-TM01 (use to read KEYID)</p>

		 <p>EK07-TM02 (use to programming SCU)</p>
	<p>GSX R150</p>	 <p>EK07-YS01</p>

Step 1: Select “**Key programming**” from main screen then press “**Select/OK**”, the screen display list of manufacturers:





Step 2: Select “Honda smart key” and press “Select/OK” button, the screen display list of models. Use “Shift Down” button to select model (example: PCX hybrid), then press “Select/OK”:



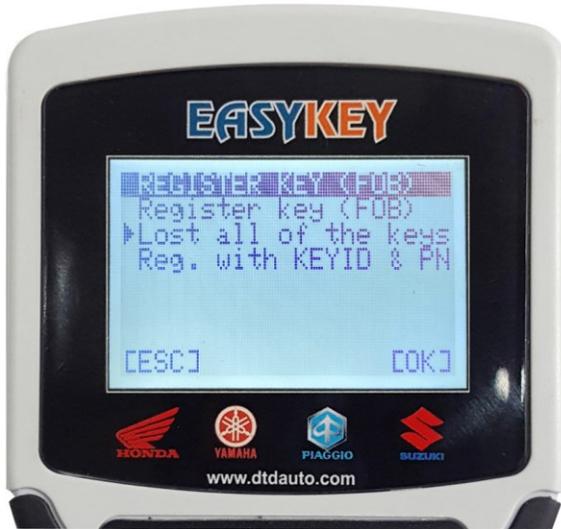
Step 3: Select “Programming SCU” and press “Select/OK” button



Step 4: Select cable as instruction on screen (example: **HONDA EK07-SP01** cable) then press “Select/OK” button, the screen displays the function table:



Step 5: Use “Shift Down” button to select function (example: **Lost all of the keys**) then press “Select/OK” button. You view and execute as instructions on the screen until the result screen shows.



You view and execute as instructions on the screen until the result screen shows.









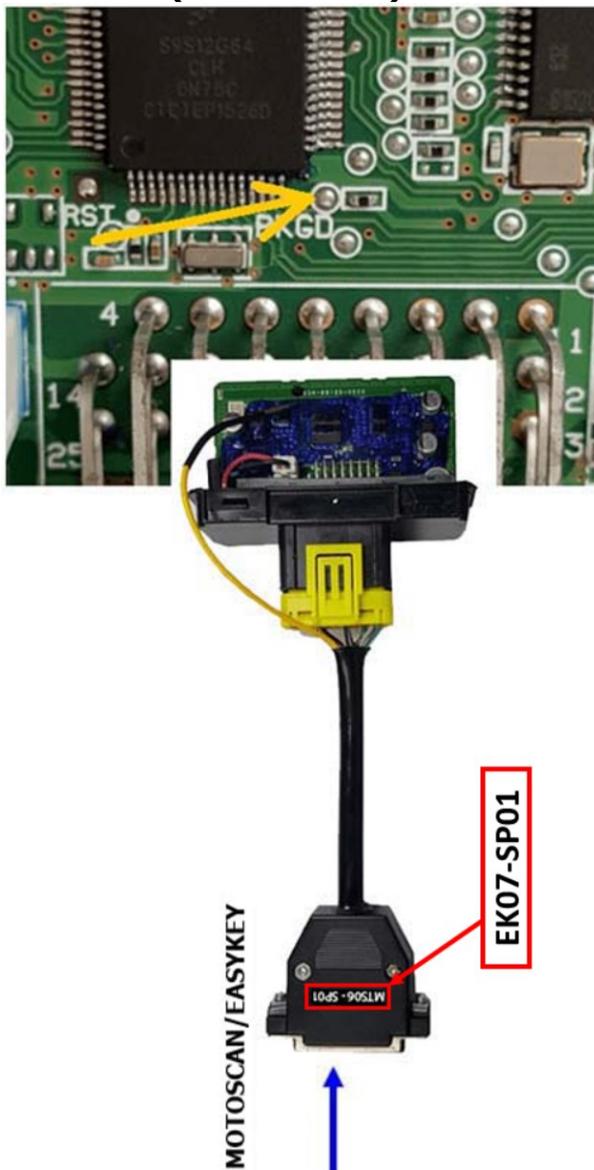
3.2 READ KEYID/ECM ID FROM SCU FOR HONDA, YAMAHA, SUZUKI

This function used to read KEYID/ECMID from SCU for HONDA, YAMAHA, and SUZUKI

***Important note:**

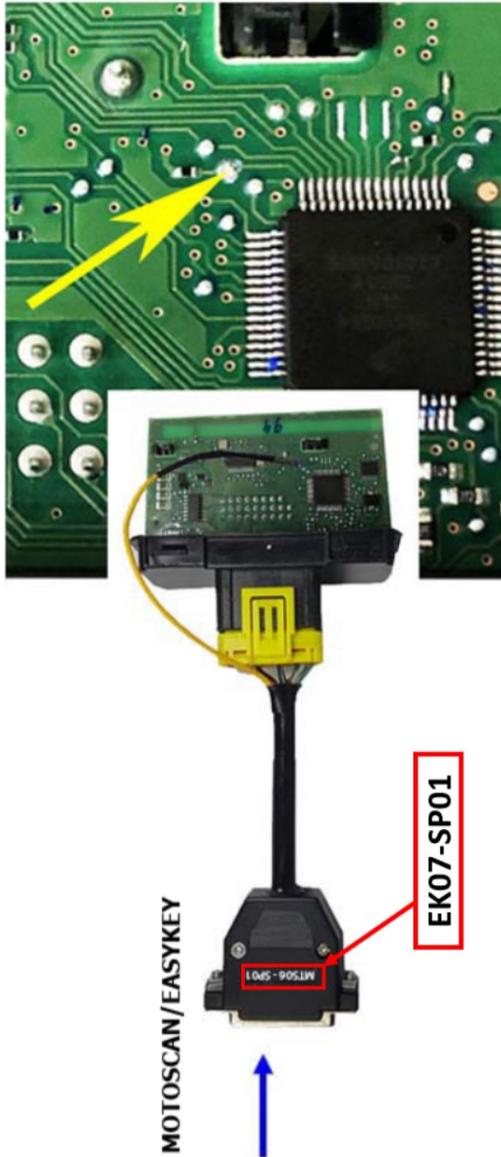
- Check that the wire and footprint soldering is correct according to the guide diagram at "**ID SMART KEY**" item of MOTODATA software.
- Good soldering contact, good connector, not wrong, short-circuits with other points by welding.

WIRING DIAGRAM FOR HONDA SH, PCX, X-ADV (before 2020)



Please look up connection diagram on MOTODATA software

WIRING DIAGRAM FOR HONDA SH, PCX, X-ADV (2020)



Please look up connection diagram on MOTODATA software

WIRING DIAGRAM FOR HONDA LEAD, AIR BLADE, VISION (2018-2019)



Please look up connection diagram on MOTODATA software

**WIRING DIAGRAM FOR HONDA VARIO, CLICK, LEAD,
AIR BLADE, SCOOPY (2020-2021)**



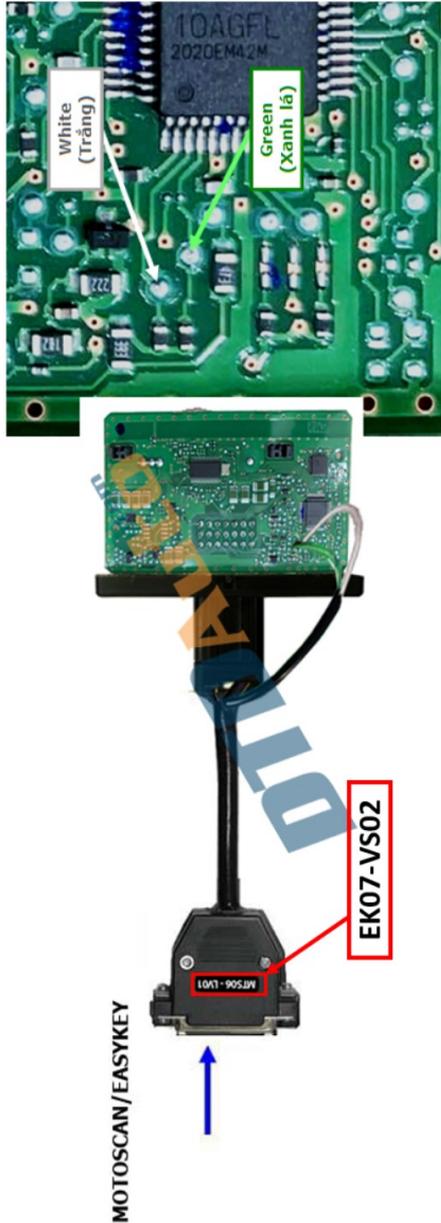
Please look up connection diagram on MOTODATA software

**WIRING DIAGRAM FOR HONDA VISION, PCX 2021
(SCU K2CD / K2CJ0 / K2CV1)**



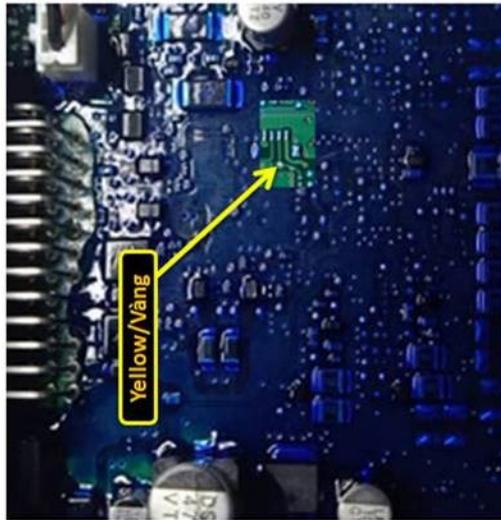
Please look up connection diagram on MOTODATA software

WIRING DIAGRAM FOR HONDA VISION 2021, PCX 2021 (K1YK0/ K1YD1)

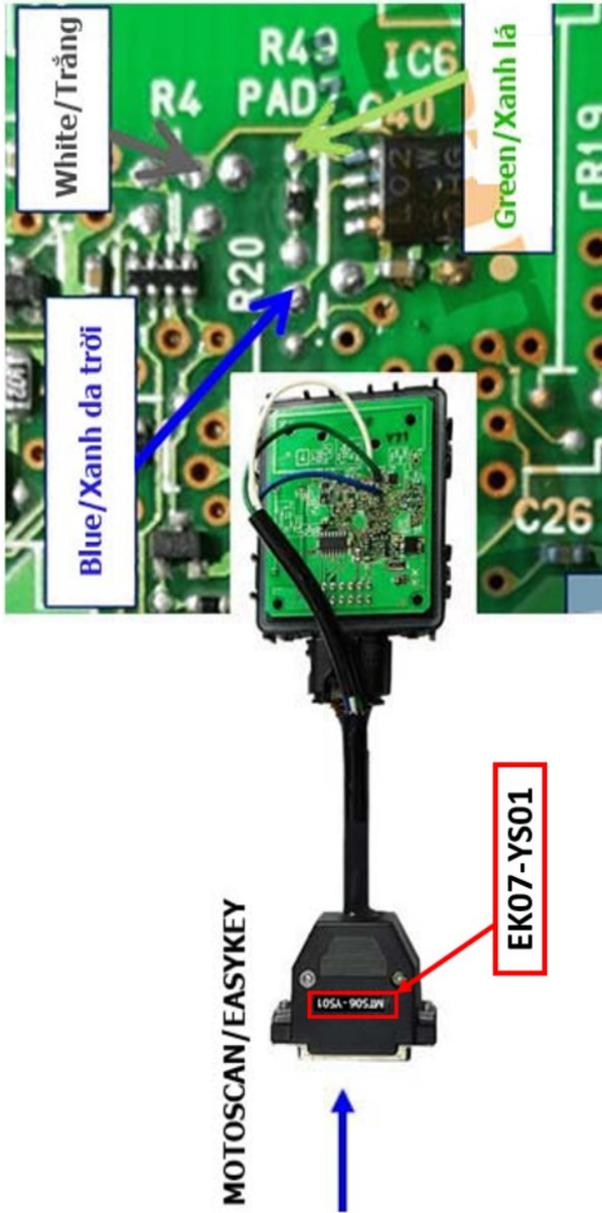


Please look up connection diagram on MOTODATA software

**WIRING DIAGRAM FOR HONDA X-ADV (2021-2023),
FORZA (2021-2023), CBR 1000R (2021-2023)
(MKTD0/ MKHD0...)**

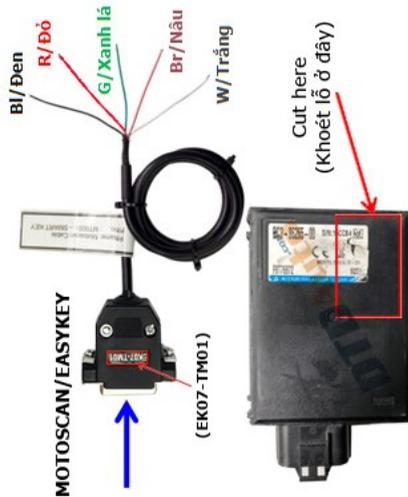
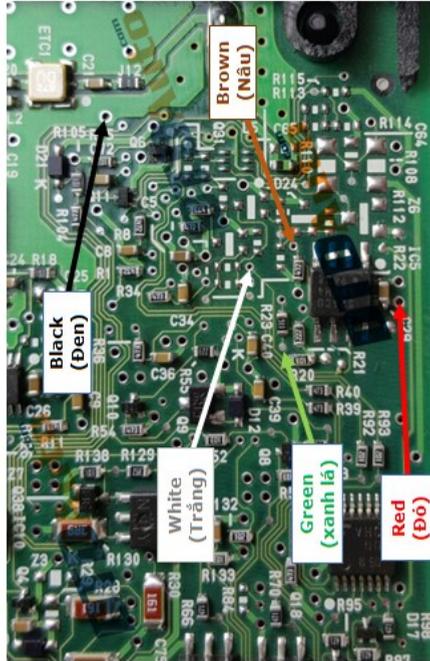


WIRING DIAGRAM FOR YAMAHA, SUZUKI



Please look up connection diagram on MOTODATA software

**WIRING DIAGRAM FOR YAMAHA TMAX TO READ KEYID
(USE EK07-TM01 CABLE)**



Please look up connection diagram on MOTODATA software

Step 1: Select "HONDA SMART KEY" function as 4.1

Step 2: Use "Shift Down" button to select "Read KEYID# from SCU" function, then press "Select/OK" button:

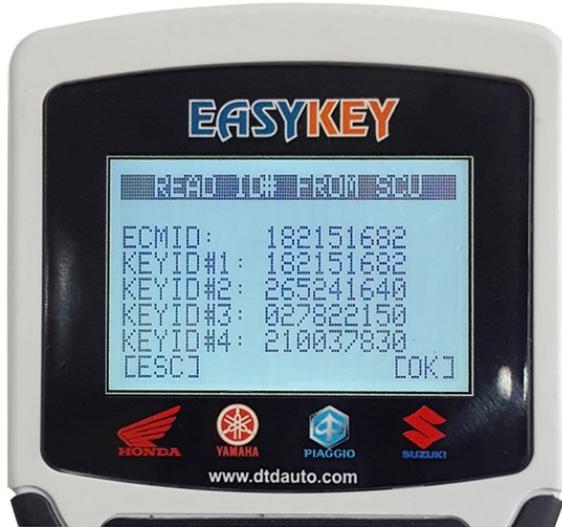


Step 2: You choose true cable (example: EK07-SP01) and connect EASYKEY to SCU as diagram wiring:



Step 3: Press “**Select/OK**” button to read KEYID. You view and execute as instructions on the screen until the result screen shows:

If reading is successful then the screen display KEYID/ECMID information:



If reading is unsuccessful, then please check connection, wire or SCU then do it again.

3.3 FIND ECMID FROM ECM

Please wait update for the next version

3.4 DELETE KEYID IN SCU

This function used to delete KEYID# in SCU when SCU full registered 04 FOBs.

From function table use "**Shift Down**" button to select "**Delete KEYID in SCU**" function, then press "**Select/OK**" button:



You view and execute as instructions on the screen until the result screen shows.

3.5 RESTORE SCU DATA

From function table, press "**Shift Down**" button to select "**Restore data SCU**" function, then press "**Select/OK**" button:



You look up and execute as instructions on the screen until the result screen shows.

3.6 COPY DATA FROM RESOURCE SCU TO DESTINATION SCU

From function table use “**Shift Down**” button to select “**Copy data SCU -> SCU**” function, then press “**Select/OK**” button:



You view and execute as instructions on the screen until the end result screen shows.

3.7 PROGRAM IMMOBILIZER FOR PIAGGIO/VESPA

This function used for key programming of PIAGGIO/ VESPA that have IC types are: AC13I, AC191, AC19I, AC20I, AC21I, AC23I, AC24I, AC25I, AC27I, AC32I, AC5I, AC8I, ACI600, AC601, ACI602, ACI603, ACI604, ACI605, ACI606, ACII, AC2I, AC5I, AC8I, AC13I and ECM types are: MIU1, MIU2, MIU G3/RIU1, MIU4, PGU09, PGN04/PGS02/PGT01 in the following cases:

- Read KEYID# from ECM
- Register more slave key when have master key to ECM
- Register new key when lost all keys (master and slave key)
- Reset to new immobilizer in the ECM for MIU G3, G2...
- Replace ECM

- Unsubscribe key and reset immobilizer

Note:

- Use **"EK07-PG"** cable for programming key of PIAGGIO/VESPA (MIU1, MIU2, MIU G3/RIU1, MIU4, PGN0X/PGS0X, AC13I, AC191, AC19I, AC20I, AC21I, AC23I, AC24I, AC25I, AC27I, AC32I, AC5I, AC8I)



- Use **"EK07-ACI6"** cable for programming key of PIAGGIO/VESPA that has ACI type is ACI6xx (ACI600, ACI606 vv...)



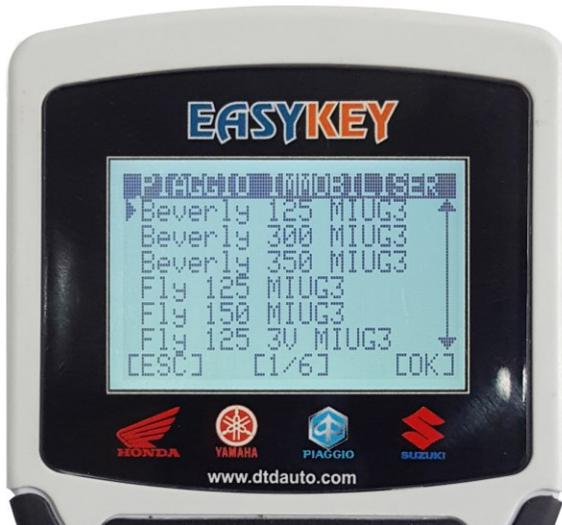
- Use **"EASYKEY ADAPTER"** and **"DLC03"** cable for programming key of PIAGGIO/VESPA that has ECM type is PGU0X, PGT1X, PGR0X, PGQ16 (MEDLEY)



Notes:

- Use the power supply cable (cable code: BATT POWER) to connect to the vehicle battery
- Connect the power supply cable on the side of the DLC03 cable

Step 1: From **"KEY PROGRAMMING"** screen, you select vehicle (example: Piaggio Beverly)



Step 2: Press "Select/OK" button, the screen displays function table



Use "**Shift Down**" button to select function that you want to operate. You view and execute as instructions on the screen until the result screen shows.

4. REMAP TO ON/OFF SMART KEY

This function used for HONDA ACG ECM.

Smart key is a security system for anti-theft by electronic system with 02 layers combine:

- First security layer between FOB & SCU
- Second security layer between SCU & ECM

The engine only can start when bypassing 02 layers. However, some case ECM lost ECMID, cannot found then cannot bypass second security layer and cannot start Engine.

Normally, the technician must buy a new ECM for replace and lost many money.

However, when EASYKEY support this OFF Smart key function to ECM by Remap method inside ECM then it will do not check second security layer and automatic bypass second security layer.

So, now smart key will only use first security layer also can start engine with old ECM as normal that do not need to buy a new ECM.

However, level of security of the anti-theft will reduce 50% but can accept.

Step 1: Select “**Remap ECM**” from main screen then press “**Select/OK**”.

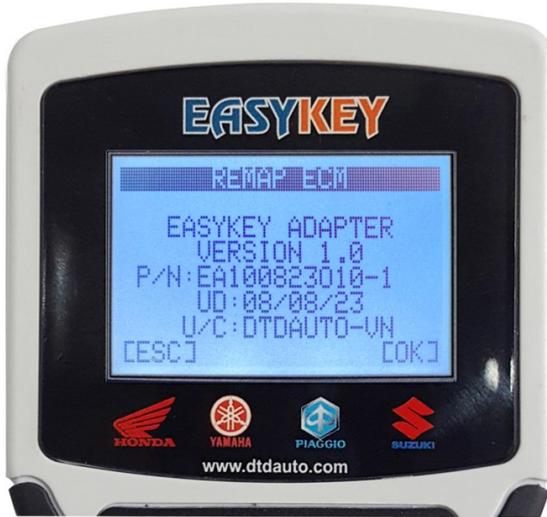


Step 2: Use “**EASYKEY ADAPTER**” cable to connect with EASYKEY and ECM ACG. Press “**Select/OK**” button to continue:





Step 3: The screen displays version of EASYKEY ADAPATER. Press **"Select/OK"** button to continue:



Step 4: Turn ON the ignition key as instruction on the screen then press "**Select/OK**" button to continue:



Step 5: The screen displays ECM software information, press "**Select/OK**" button to continue:



Step 6: The screen displays function table. You select function that you want (example: OFF SMART KEY) then press “**Select/OK**” button to continue.





Step 7: The screen displays the progress. Please wait until done



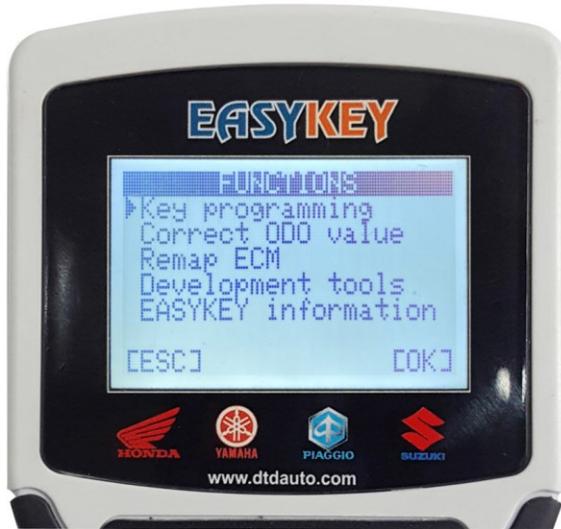


If the execution fails, please check the connection then try again.

5. RENEW AND READ ECMID FOR HONDA ECMs (Keihin and Shindengen types)

- Renew ECMID inside the ECM for Shindengen ECMs
- Read ECMID inside the ECM for Shindengen ECMs
- Read ECMID inside the ECM for Keihin ECMs

Step 1: Select "Key programming" then press "Select/OK"



Step 2: Select “Honda smart key” and press “Select/OK” button, the screen display list of models. Use “Shift Down” button to select model (example: AIR BLADE 2018-2020), then press “Select/OK”:

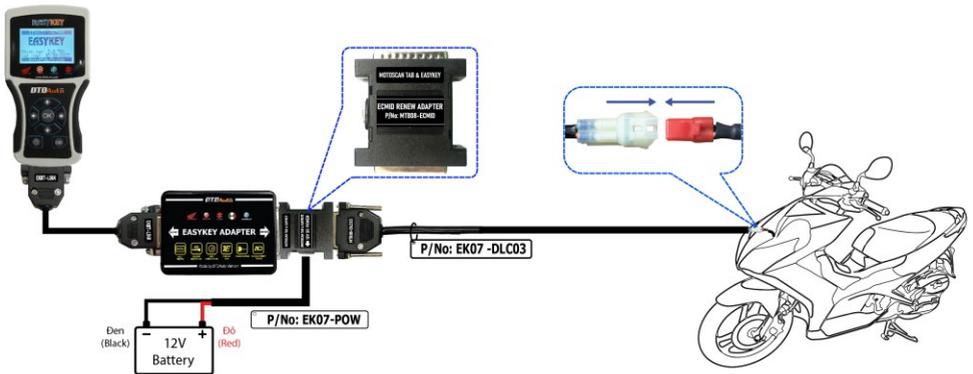




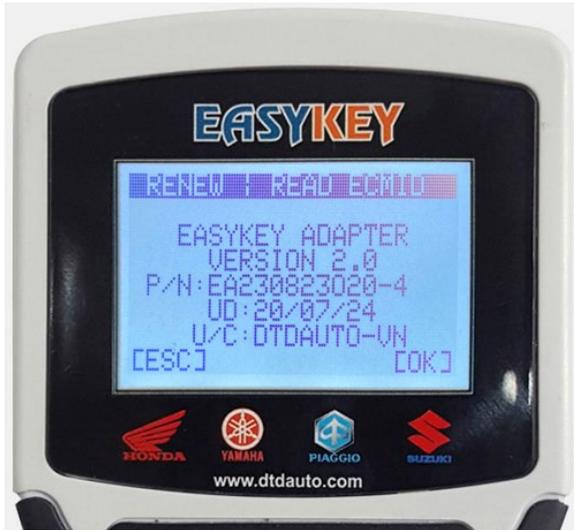
Step 3: Use "Shift Down" button to select "Renew ECMID (ECM)" then press "Select/OK":



Step 4: Use "EASYKEY ADAPTER" cable to connect with EASYKEY and vehicle. Press "Select/OK" button to continue:



Step 5: The screen displays version of EASYKEY ADAPATER. Press **"Select/OK"** button to continue:



Step 6: Select the function you want to perform then follow the on-screen instructions until finished.





6. CORRECT ODOMETER VALUE

This function used to adjust the Odometer value on the LCD screen when you replace a new dashboard or the odometer is faulty and you need to edit a new Odometer value equivalent to the old Odometer value to follow the motorcycle using time and maintenance time.

Step 1: Use "Shift/Down" to select "Correct ODO value" then press "Select/OK"



Step 2: Select "EASYKEY ADAPTER" then press "Select/OK"

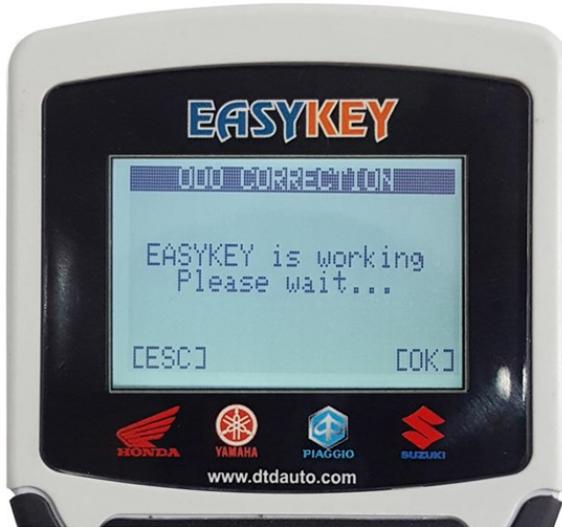


Step 3: Select vehicle to correct ODO value (example: SH 150ESP 2017-2019) then press "Select/OK" button



Step 4: Use **"EASYKEY ADAPTER"** cable to connect with EASYKEY and odometer. Press **"Select/OK"** button to continue:

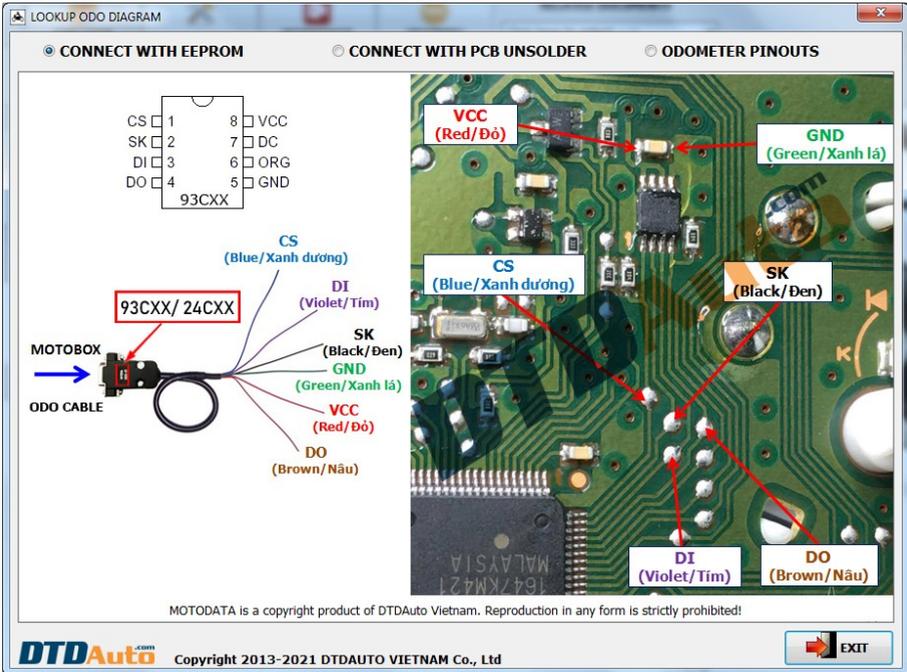




You view and execute as instructions on the screen.



The screen display IC type of odometer (ex: IC type is 93C66). You must soldering lines to dashboard; determine position of weld points on circuit board as guide image at MOTODATA software:



Step 5: Press "Select/OK" button, the screen display functions:



- When you check odometer value, if you see clockwise do not change or meter can be fail, you need use "**Write original data**" function to repair data in odometer
 - When you replace a new dashboard or odometer is fault that you need edit new ODO value equivalent with ODO value to follow motorcycle using time and maintenance time you need to "**Correct ODO value**" function.
- Use "**Shift Up/Down**" button to select function that you want to operate. You view and execute as instructions on the screen until the end the result screen shows.

7. UPDATE, UPGRADE EASYKEY PRODUCT

7.1 PREPARE UPDATE GUIDE

- Connect your computer (Windows operating system) to internet
- Connect EASYKEY to computer via USB port by **EK07-UPDATE** cable

7.2 PERFORM STEPS

- Download and install "**DTDAUTO UPDATE CENTER**" application. Click link here: <https://dtdauto.com/UPDATE-EN>

DTDAUTO UPDATE CENTER

DTDAuto.com **DTDAUTO UPDATE CENTER** Version: 3.4
Update: 25/07/2024

SELECT EQUIPMENT TO UPDATE

MOTOSCAN 7



VERSION: 7.0 PRO
LAST UPDATE: 12/12/2023

MOTOSCAN 7 PRO (pay fees) **New!**

MOTOSCAN 7F

MOTOSCAN 7M

MOTOSCAN 7HY

MOTOSCAN 7HS

MOTOSCAN 7PG

MOTOSCAN 7H

MOTOSCAN 7Y

MOTOSCAN 7S

MOTOSCAN TAB



VERSION: 2.7
LAST UPDATE: 20/06/2024

MOTOSCAN TAB

EASYKEY



VERSION: 6.0
LAST UPDATE: 20/07/2024

EASYKEY EASYKEY ADAPTER

MOTOBOX



VERSION: 3.0
LAST UPDATE: 12/12/2023

MOTOBOX 3.0 (for MOTOSCAN 7 PRO)

MOTOBOX 2.3

MOTOSCAN CE



LAST UPDATE: 22/07/2024

MOTOSCAN CE

Note: Please check updated day of your equipment and above updated day. If time is the same then you needn't update product

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SELECT EXIT

- Select "**EASYKEY**" and update as instruction on software
- Contact with DTDAuto (WhatsApp: +84913555416; +84912216555 or Gmail: dtdauto@gmail.com) to support.

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