

USER'S MANUAL (Product Number: 3DL-VW / 3DL-BM)

Throttle Controller

3-drive · LIGHT

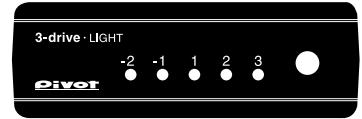
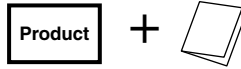
For Audi & VW

For BMW & MINI

Thank you for purchasing PIVOT product.

Please read this manual carefully and keep it for future reference.

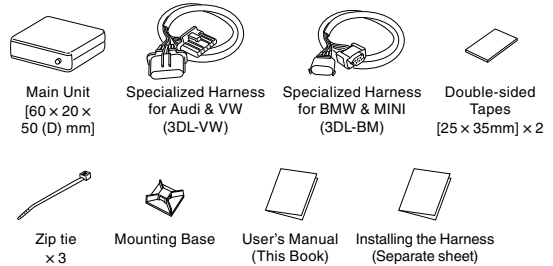
If this product is given to another user, make sure to include this User's Manual.



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Please check the contents of the package



After installation, make sure to carry out "Initial Settings".

After having installed this product, make sure to make settings for your car's special characteristics by carrying out the "Initial Settings" on page 3. If the "Initial Settings" are not carried out, a **Check Engine Light** may go on. Also, the unit will remain in **NORMAL Mode** even if the Mode is switched.

Worried about Installation?

If you are worried about carrying out wiring or other installation procedures please consult your dealer.

Only use 3-drive Specialized Harness.

Using another type of harness will cause troubles and failure; use only the 3-drive specialized harness.

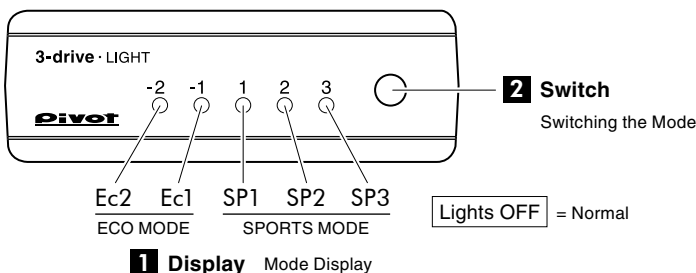
Set to NORMAL Mode upon Removal of Product.

When uninstalling the product, make sure to return it to **NORMAL Mode** before carrying out any work. Reconnecting this product in a different mode may cause the Check Engine Light to come on.

Modifying this Product is Forbidden.

Under no circumstances should modifications or changes be made to this product. Doing so may cause damage not only to the product, but to the car and the operation of the car in which it is installed.

Part Names



Turning off the Display

This product is interlocked with the ECU (engine computer) power. Depending on the model of car, the display may remain on for up to 15 minutes even after the ignition has been turned to the OFF position; this is normal.

Features

SPORTS & ECO

Easy Direct-to-Accelerator Connection

Special Euro-Design model for Audi, VW, BMW and MINI comes with specialized harness.

Select the kind of response to match your driving.

3-drive · LIGHT enables changing the response for electronic throttle car models and gives you, the driver, the freedom to select the type of acceleration response you need or desire: quick acceleration for speedy driving to slower acceleration for ECO-driving.

Basic Features

Easy Installation

Simply connect specialized harness cable to accelerator cable and 6-pin connector to Controller.

Low-current Circuitry For Stable Operation

The 7mA circuitry gives stabilized control by preventing trouble from voltage drops.

Adjustable Response To Match Driving

Choose from 5 types of response to fit your driving situation: 2 for ECO Mode and 3 for SPORTS Mode.

Set To Prevent Malfunction

Making accelerator characteristic settings for each type of model car prevents malfunction and provides high precision control.

Digital Control

Digital control prevents trouble from heat and effects from noise.

Compact All-in-one Body

Compact all-in-one body is simple to install.

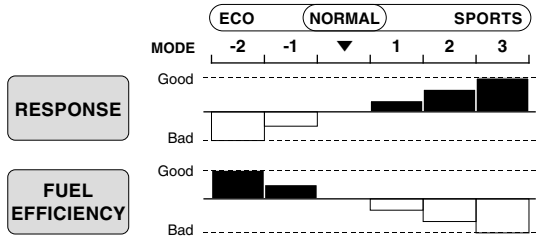
Specialized Harness

Includes specialized harness for each type of car model.

Safety

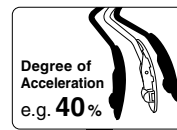
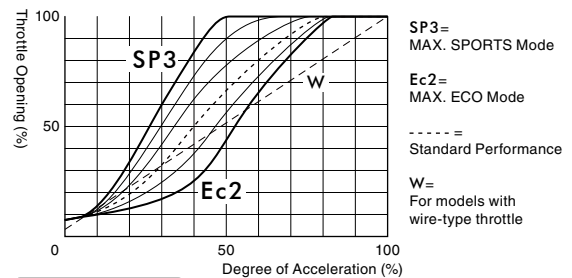
1. Prevents sudden starts by reverting to same response as under normal setting.
2. Returns to Normal in case of faulty wiring or circuitry.
3. Discrete 2 Signal Control for Safety.

The response of SPORTS Mode is good and ECO Mode is bad. Fuel efficiency will be good on ECO mode and bad on SPORTS mode.

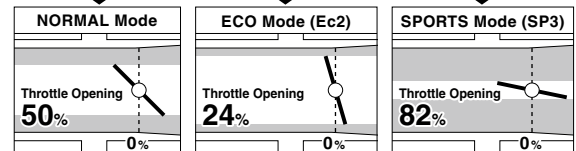


Note: Even in ECO Mode, if rapid acceleration is carried out over and over again fuel efficiency will not increase.

Examples of Throttle Opening



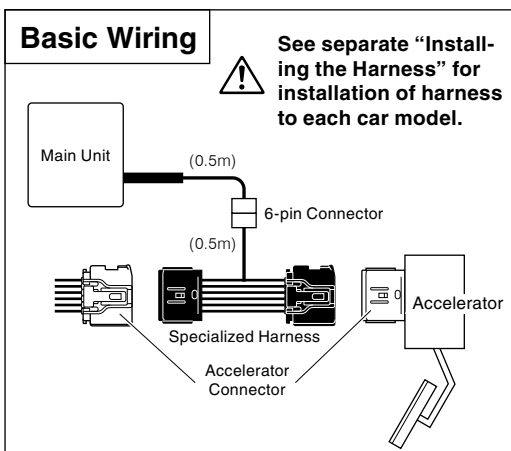
■ = Air Intake
○ = Throttle Valve



Note: Fine tune control with 3 steps for SPORTS Mode and 2 for ECO Mode. And In some car models with a Valvemate engine, control is carried out by the exhaust valve rather than the throttle valve.

procedure 1

Connecting The Wires



procedure 2

Installing The Product



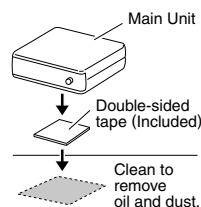
Do not use magnetic holders, such as for a smartphone, to prevent malfunction.



Please be sure to bundle away all wires with tape not to get damaged by any steel plate or screws as this may cause short circuit.

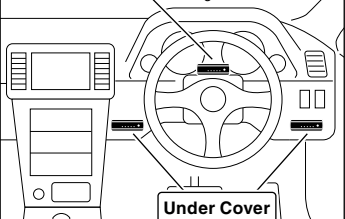
(How to Install)

Affix with double-sided tape to a position which is easy to see and which allows for easy operation.



(Example of Installation)

On the steering column cover
Note: Use extension cable (separately sold) for BMW and MINI if installing on the steering column cover



procedure 3

Initial Settings (Degree of Acceleration Setting)

Make sure to carry out these settings.

When installing for the first time



Initial Settings

When installing into a different car



Initial Settings

- This operation sets the car's accelerator characteristics into the controller unit.
- If the "Initial Settings" are not carried out, the unit will remain in NORMAL Mode even if the mode is switched.
- If this settings have been improperly made a Check Engine Light may go on.
- After having finished settings and the battery or wires have been disconnected, it's not necessary to carry out "Initial Settings".

Before making the "Initial Settings"

1. Make settings only after having completed all wiring (connector installation).
2. Make settings with the **ignition in the ON position (engine not running)** and the gear in **P** (Parking) or **N** (Neutral).

[Making the Settings]



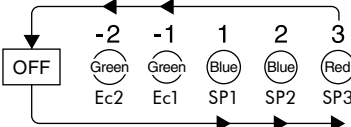
| Operational Procedure | Main Unit Display Area | Operational Procedure | Main Unit Display Area |
|--|--|--|---|
| <p>1 Turn the ignition to the ON position. Engine not running.</p> <p>Without braking, press down twice</p> | <p>-2 -1 1 2 3 ○ ○ ○ ○ ○</p> <p>All LEDs are off (NORMAL)</p> <p>Note: If LED has lit other than NORMAL mode, press the switch to turn off all LEDs (change to NORMAL mode).</p> | <p>6 With the accelerator at 100%, press the switch.</p> <p>Press Set to 100%</p> | <p>-2 -1 1 2 3 ☀ ○ ○ ○ ☀</p> <p>Both ends will light</p> |
| <p>2 Press the switch for 10 seconds to light 2 LEDs on left side.</p> <p>Press for 10 seconds</p> | <p>-2 -1 1 2 3 ☀ ☀ ○ ○ ○</p> <p>Light off from left to right after all LEDs lit, and 2 LEDs on left side will light.</p> <p>2 LEDs on left side will light</p> | <p>7 Release the accelerator. (Release the accelerator to 0%)</p> <p>0%</p> | <p>-2 -1 1 2 3 ☀ ○ ☀ ○ ○</p> <p>Left and center will light</p> |
| <p>3 Pedal is not pressed down. (Release the accelerator to 0%)</p> <p>0%</p> | <p>-2 -1 1 2 3 ☀ ☀ ○ ○ ○</p> <p>2 LEDs on left side will light</p> | <p>8 Check the Settings.</p> <p>Do not press in on pedal. Press down on pedal.</p> <p>0% 100%</p> | <p>PASS</p> <p>-2 -1 1 2 3 ☀ ○ ☀ ○ ○</p> <p>Left and center will light</p> <p>-2 -1 1 2 3 ○ ○ ○ ○ ☀</p> <p>Both ends will light</p> |
| <p>4 Press the switch.</p> <p>Press Set to 0%</p> | <p>-2 -1 1 2 3 ○ ○ ○ ☀ ☀</p> <p>2 LEDs on right side will light</p> | <p>FAIL</p> <p>-2 -1 1 2 3 ☀ ☀ ☀ ○ ○</p> <p>3 LEDs on left side will light</p> <p>-2 -1 1 2 3 ○ ○ ☀ ☀ ☀</p> <p>3 LEDs on right side will light</p> <p>This means you failed degree of acceleration setting, start again from step 1 above.</p> | <p>-2 -1 1 2 3 ○ ○ ○ ○ ○</p> <p>All LEDs will be off</p> <p>Setting Completed</p> |
| <p>5 Pedal is completely pressed down. (Press in on the accelerator to 100%)</p> <p>100%</p> | <p>-2 -1 1 2 3 ○ ○ ○ ☀ ☀</p> <p>2 LEDs on right side will light</p> | <p>9 After settings confirmed, press the switch.</p> <p>Press</p> | <p>-2 -1 1 2 3 ○ ○ ○ ○ ○</p> <p>All LEDs will be off</p> <p>Setting Completed</p> |

How to Operate



After completing operations, do not turn the ignition to the OFF position for at least two seconds. The settings will not be saved.

Switching the Mode

| | | |
|--|--|--|
| <p>1 Engine START</p>  | <p>2 The mode will change with each pressing of the switch.</p>  |  |
|--|--|--|

Note: Please refer to "Features" on page 2 for characteristic of each setting.

Troubleshooting

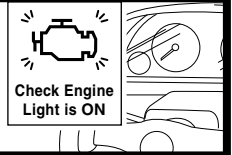
| Trouble | Possible Causes | Possible Solutions |
|---|--|---|
| The ignition is set to the ON position but the display will not light up. | Poor connection of Specialized Harness . | Please reconfirm whether wiring and connections are correct or not. |
| The display will not light up by pressing the switch. | Poor connection of Specialized Harness . | Please reconfirm whether wiring and connections are correct or not. |
| | The "Initial Settings" have not been properly carried out. | Make the "Initial Settings" (See page 3 of this manual). |
| A Check Engine Light in vehicle has gone on. | The accelerator connector or Specialized Harness was disconnected with the ignition in the ON position or within 15 minutes after having turned the ignition to the OFF position. | Re-connect the disconnected connector and turn off the Check Engine Light (See page 4 of this manual). |
| | The "Initial Settings" have not been properly carried out. | Make the "Initial Settings" (See page 3 of this manual) and turn off the Check Engine Light (See page 4). |
| LED will not light up properly during making "Initial Settings". | The "Initial Settings" have not been properly carried out. | Make the "Initial Settings" (See page 3 of this manual). |
| Even if the mode is changed, the changes cannot be felt. | | |
| The engine seems to stall easily. | The change ratio under ECO Mode is too great. | Set the change ratio under ECO Mode to a smaller value. |
| The mode and/or the setting can not be saved. | The ignition has been turned to the OFF position immediately after having finished the settings or changing the mode. | After having made settings or changing the mode, wait for at least two seconds before turning the ignition to the OFF position. |
| The ignition has been turned to the OFF position but the display remain on. | This product is interlocked with the ECU (engine computer) power. Depending on the model of car, the display may remain on for up to 15 minutes even after the ignition has been turned to the OFF position; this is normal. | |

Note

How to Turn Off the Check Engine Light.

If the Check Engine Light comes on due to some operational mistake, please follow the directions below to turn it off.

1. Under normal conditions, start and stop the engine several times.
2. If that does not turn off the lamp, disconnect the cable from ⊖ terminal of the battery for about 10 minutes.
3. If that does not turn off the lamp, please consult your local car dealer and have them turn it off.



WARNING

Improper use or disregard of these warnings may result in the injury or death of people.

- When making initial settings make sure to stop the engine and place in Parking or Neutral. It is dangerous to carry out these settings while the engine is running.
- Do not work in areas where there is excessive exhaust. Due to vehicle exhaust emission poisoning or fire may result in a damage to humans.
- Do not crush the cable. Please be careful that the cable does not get crushed by the seat rail or car door steel plate, nor cut by any sharp steel plate as this may cause a poor connection or an electric short leading to fire or other danger.
- While driving DO NOT operate switches or pay prolonged attention to the display; it is extremely dangerous.
- Make sure that all wiring and fastening down of the product does not interfere with driving nor be done in such a way as to cause poor connections.

CAUTION

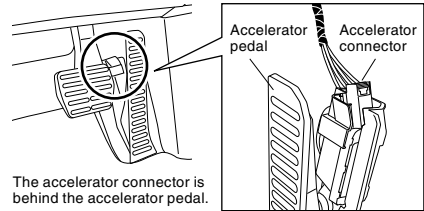
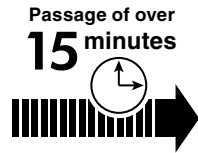
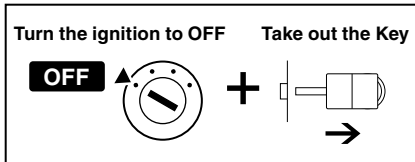
Improper use or disregard of these warnings may cause injury to persons, damage the product and/or other things.

- PIVOT Corporation accepts no responsibility, in any manner whatsoever, for damage and/or trouble to your vehicle or product, nor for any accidents that are the result of the misuse of this product.
- Please confirm that the type of vehicle you wish to install into is listed in the "List of Specialized Harnesses by Car Model for 3-drive · LIGHT".
- When installing this product, we recommend that if technical knowledge becomes necessary please consult a qualified mechanic.
- If the device is improperly installed or settings have been improperly made a Check Engine Light may go on.
- Do not use electrotap.
- Wiring should be carried out using the attached "cut connector" or by soldering, make sure to securely insulate all wiring parts with insulation tape, and confirm that no wires are sticking out.
- Please wipe with a soft dry cloth (a lens cloth).
- Please do not use alcohol or benzine. This may cause damage to the painted surface or cracks in the plastic.
- Do not, in any manner, process, take apart, or make changes to this product.

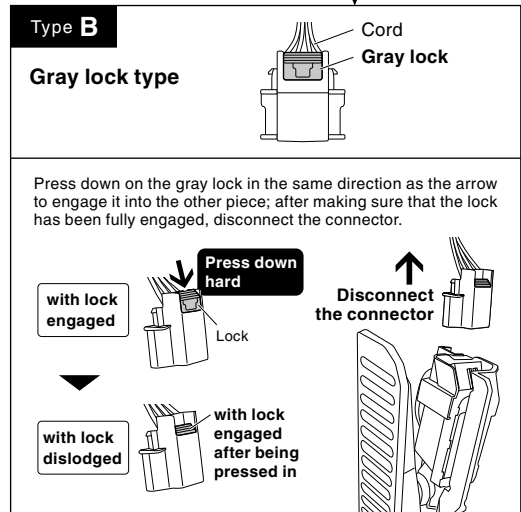
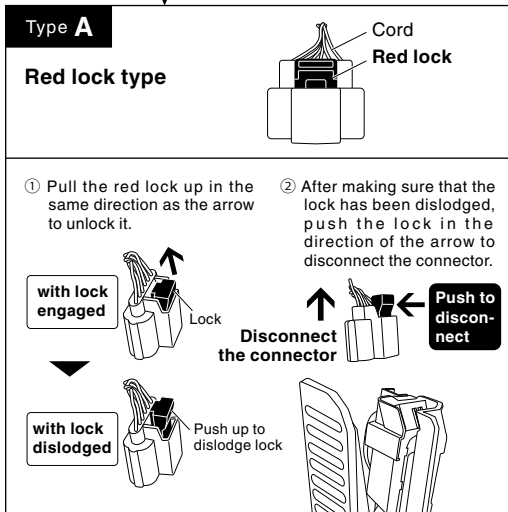
- (Note)**
- Our products have already been recognized as our Industrial Property or are in the process of receiving Industrial Property status.
 - We plan in the near future to take all possible legal measures to protect against unfair competition from look-alike products using similar designs, regulating characteristics, circuitry and circuitry layout.
 - We strictly prohibit the unlicensed use of the PIVOT trademark and the unauthorized use of PIVOT User's Manual.

Audi & VW Installing the Specialized Harness

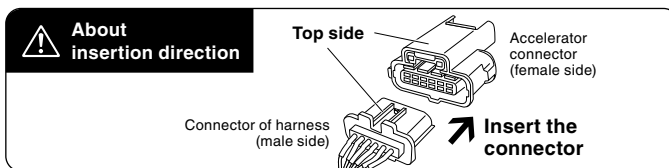
1 Only disconnect the accelerator connector after having waited at least fifteen minutes from the time that the ignition turned to the OFF position



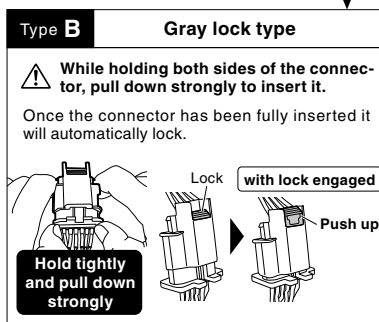
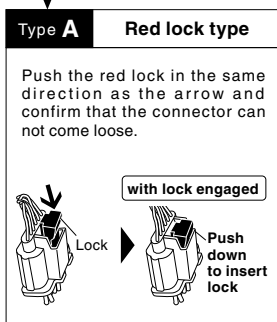
There are two types of accelerator connector; check which one you have before carrying out any work.



2 Insert the male side of the specialized harness into the female side of the accelerator connector

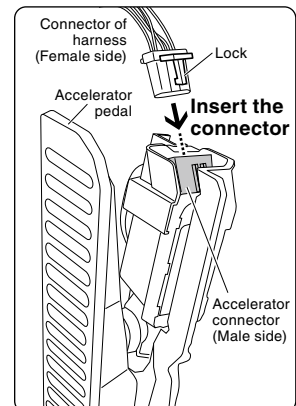


To prevent accidental disconnection, after insertion make sure to lock the connector.



3 Insert the female side of the specialized harness into the male side of the accelerator connector

With the lock position of the specialized harness (female connection) as shown in the figure make sure to insert the connector fully.

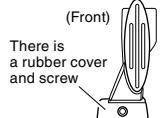
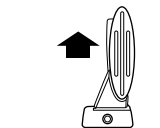
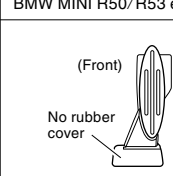
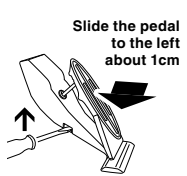
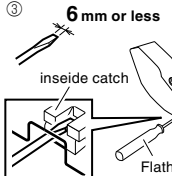
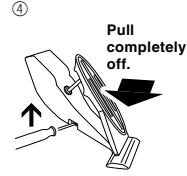


BMW & MINI Installing the Specialized Harness

1 Turn the ignition to the OFF position and remove the accelerator pedal

To ensure that the specialized harness is installed properly, make sure to only carry out the installation after the accelerator pedal has been disconnected. (See below for details)

Common Example of How to Remove Accelerator Pedal Note: If different from shown below, contact your dealer for advice.

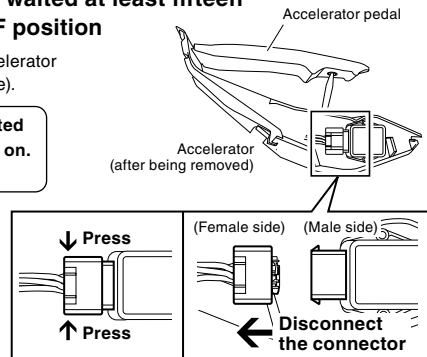
| Type A | Type B |
|--|---|
| <p>Examples of Car Models; BMW E85/E87/E60, BMW MINI R56 etc.</p> <p>① Remove the rubber cover from the bottom of the accelerator pedal and unscrew the screw.</p>  <p>(Front) There is a rubber cover and screw</p> <p>② Pull off towards the top.</p>  | <p>Examples of Car Models; BMW E46, BMW MINI R50/ R53 etc.</p> <p>① Dislodge the catch on the left side of the accelerator pedal with a wide (7mm or above) flathead screwdriver.</p>  <p>7 mm or above Accelerator pedal Inside catch Flathead screwdriver (Large)</p> <p>② Lift up with the screwdriver and slide the pedal to the left about 1 cm.</p>  <p>Slide the pedal to the left about 1cm</p> <hr/> <p>③ With a thinner flathead screwdriver (6mm or less), insert into the same place as in ①.</p>  <p>6 mm or less Accelerator pedal inside catch Flathead screwdriver (Small)</p> <p>④ Lifting up as in ② with the screwdriver, slide the pedal further to the left and then pull completely off.</p>  <p>④ Pull completely off.</p> |

2 Only disconnect the accelerator connector after having waited at least fifteen minutes from the time that the ignition turned to the OFF position

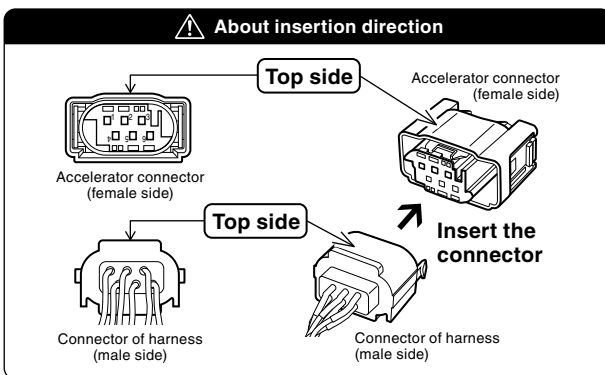
After the engine has been stopped for at least fifteen minutes, pull off the accelerator connector by pressing on the hooks on the sides of the connector (female side).



Depending on the type of vehicle, if the connector is disconnected before the ECU power is switched OFF, the Check Lamp may go on.
⇒ How to turn off the Check Lamp (Page 4 of the User's Manual)



3 Insert the male side of the specialized harness into the female side of the accelerator connector



4 Insert the female side of the specialized harness into the male side of the accelerator connector

