

USER'S GUIDE

TURBO TIMER

Ultra Compact Design

Thank you for purchasing PIVOT "TURBO TIMER".
Please read these instructions carefully before installing or using this device.
Please do not lose this user's guide, as you will held liable for the cost of reissuing it.

Before installing !

NOTE Please be sure to check that "TURBO TIMER" operates properly before installing it in the car or drilling holes for installation.

CAUTION

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

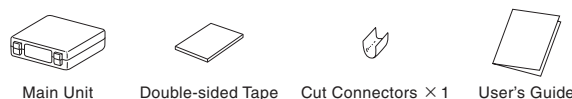
- Be careful to turn off power switch of timer before locking the steering wheel. Using the timer with the lock on could be dangerous, if the car begins to move.
- To ensure that no accidents occur while others are using your car, be sure to turn off the power switch of the timer.
- Especially do not use if small children may be left alone in car while parked.
- Installing or using "TURBO TIMER" in places where ventilation is poor may result in an to humans due to vehicle exhaust emission poisoning or fire.
- During installation be sure to remove the minus cable from the battery so as to prevent fire and damage resulting from the shorting of circuits, etc...
- Please be careful that the cable dose 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.
- Because, it is very dangerous if, while in use, the product falls off and interferes with braking, please securely fasten it to a stable place.
- It is very dangerous to pull tangled wires by force or allow tangled wires to interfere with driving. So, please be sure to store bundle away all wires with tape, etc...
- Operating or checking the display during driving may cause an accident; please use with the utmost consideration for safety.

NOTE

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

- When installing this product, we recommend that if technical knowledge becomes necessary please consult a qualified mechanic.
- This product is for DC12V cars; installation cannot be carried out on cars with other voltage batteries.
- 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.
- Do not, in any manner, process, take apart, or make changes to this product.
- Do not install "TURBO TIMER" in any place subject to high temperature or any place where water may be splashed.
- When double-sided tape is used for an installation be warned that when hot the tape temporarily losses adhesiveness so no strong pressure should be applied.
- Make sure to replace all screws and parts that were removed during installation to their original place.

Please check the contents of the package



Ultra Compact Design!

Easy-to Install, Simplified, Low-cost Turbo Timer

1. Auto Mode

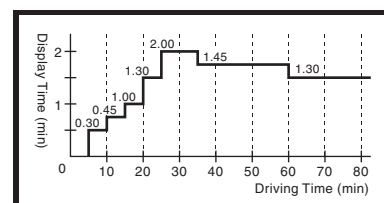
Auto setting of idling time in accordance to running time. (see right figure)

2. Manual Mode

Idling Time can be set in 10-second increments from 0 seconds to 9 minutes, 50 seconds.

3. Heating Mode

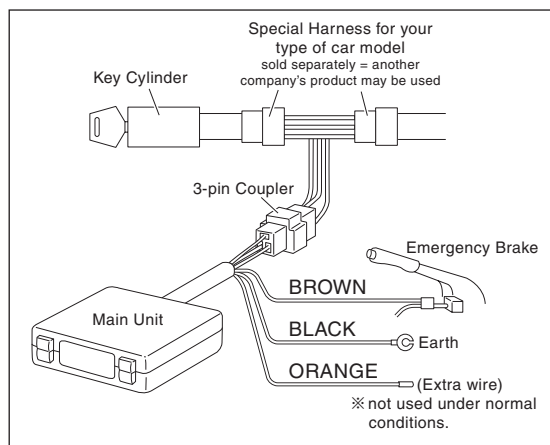
Heating Time can be set in 10-second increments from 10 minutes to 19 minutes, 50 seconds.



BASIC WIRING

NOTE

- For safety purposes always wire to the emergency brake.
- Be sure to check all unit operations before installing.
- For safety purposes disconnect the ⊖ terminal of the battery while installing.
- When checking the connection, be sure to reconnect the ⊖ terminal.
- If for some reason it is impossible to connect to the emergency brake make sure to earth the BROWN wire.



Connecting the Wires

※When wiring use a special harness for your type of car model. (Another company's product may be used.)

Disconnect the harness of the key cylinder and between 2 cords connect the special harness. Connect the 3-pin coupler cable of the special harness to the 3-pin coupler cable of the main unit. The BLACK wire must be connected with the screw on the car body. Connect the BROWN wire to the emergency brake; make sure to securely fasten it either by soldering or by using the cut connector included in the kit.

Explanation of Wires from Main Unit

- RED = Normally (Key Switch OFF) ⊕12V
- YELLOW = IG 1 (Key Switch ON) ⊕12V
- BLUE = ACC or IG 2 ⊕12V
- BLACK = Body Earth
- BROWN = Emergency Brake Switch
- ORANGE = (Extra wire)

Checking the Emergency brake Connection Spot

With the key switch ON (but not the engine) pull up to cut voltage and push down to engage ⊕12V power.



[REFERENCE] How to use the cut connectors

Method 1 Connecting a new wire to the middle of another wire.	
1	Peel off about 10mm of the vinyl cover at connection.
2	Peel off about 10mm of the vinyl cover at the end of the product's wire.
3	Twist the uncovered wires.
4	Close tightly with cut connector.

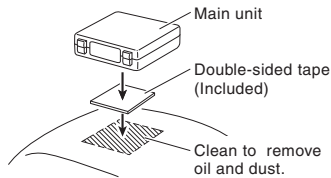
Method 2 Connecting two wires at their ends.	
1	Peel off about 10mm of the vinyl covers at the end of the wires to be connected.
2	Twist the uncovered wires.
3	Close tightly with cut connector.

※ Use a crushing tool to press the cut connector, if you do not have such a tool, use pliers or such to fold and crush the connector together for a secure contact.
※ After covering, make sure to insulate properly with vinyl tape.

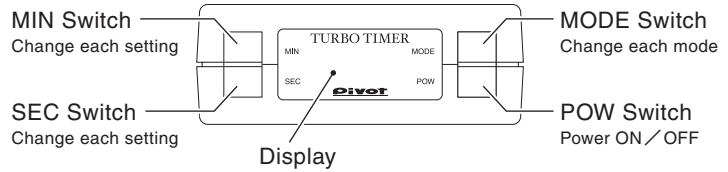
METER INSTALLATION

Clean oil and dust from the main unit and from the area where you wish to affix it. Make sure to securely affix it with the double-sided tape provided in the kit.

⚠ Do not reuse the tape; it will lose adhesiveness.



PART NAMES



BASIC OPERATIONS

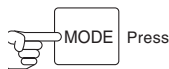
- 1** ▶ Key ON
(Engine not running)



- 2** ▶ Turn power on by pressing the POW switch

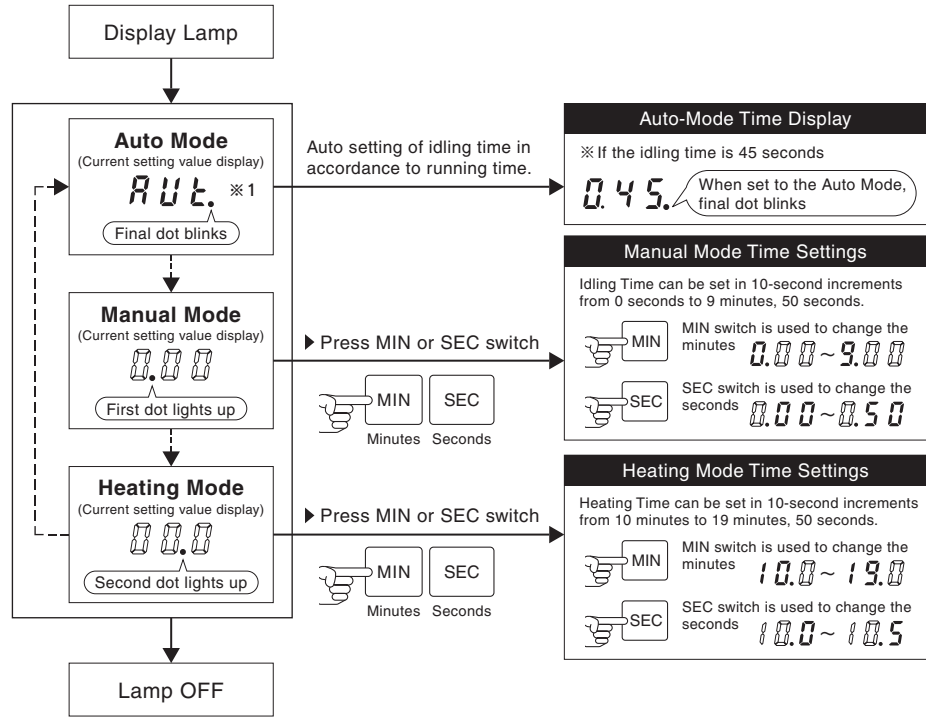


- 3** ▶ The mode will change with each pressing of the MODE switch



NOTE

- ※1 When in Auto-Mode and idling time is zero seconds the display will show *AUL.* (final dot will blink).
- ※2 When set to the Auto Mode, final dot blinks during display, and turns off when set to the Manual and Heating Mode.
- ※3 While the Timer is operating, if you release the emergency brake, - P - in the display will go off.
- ※4 If the POW switch is pressed while the timer is in operation the display will turn off and the engine will stop.



- 4** ▶ Pressing the POW switch turns the power OFF



TROUBLESHOOTING

(TROUBLESHOOTING FOR SOME SPECIAL CAR MODELS)

Model of Car	Trouble	Possible Causes	Possible Solutions
New SUBARU models equipped with anti-theft devices (LEGACY BL5 · BP5, etc)	The security system does not work after using the Timer.	This is because the security system does not operate while the engine is running.	After stopping the engine (after idling has finished), lock the car door and activate the security system.
TOYOTA ARISTO (Later JZS161 models)	The door lock function cannot be used while using the Timer.	This is because the immobilizer and the door lock system are interconnected.	After stopping the engine (after idling has finished), lock the car door.
Some of the K-car	The timer operates but the engine stalls.	The polarity of the special harness is incorrect.	Switch the YELLOW and BLUE wires on the 3-pin coupler coming out from the Turbo Timer.
		※1 In some special harnesses the IG1 (YELLOW) and IG2 (BLUE) positions are reversed. If this is the case, try switching the YELLOW and BLUE wires of the 3-pin coupler coming out from the Timer. ※2 Note, that doing this in other car models will render the Timer inoperative, so please return the wires to their original connection positions.	<p>(Present Condition) → (After Fixing)</p>
		The timer will not operate properly if the during idling torque is too weak.	In order to increase the torque, increase the engine rotation to 1200-1500 rpm and turn off the key switch to start the timer operation.

Trouble	Possible Causes	Possible Solutions
With key switch ON, POW switch was pushed, but no display appears.	Contact failure of BLACK wire.	Check the BLACK wire connections or conditions.
	An improper harness for your car model has been used.	Make sure you are using the proper harness for your car model.
The timer operates but the engine stalls.	An improper harness for your car model has been used.	Make sure you are using the proper harness for your car model.
The timer display reads - P - and doesn't operate.	The emergency brake has not been pulled up far enough.	Make sure to pull up the emergency brake.
	Contact failure of BROWN wire.	Check the BROWN wire connections or conditions.

Cars with Automatic Light Controller

When using the Timer in a car equipped operating with an auto light control system, the lights may not turn off when using the Timer even after the engine has stopped. If this is the case, when using the Timer make sure to not use Auto Mode for the light control system.