

USB POWER SUPPLY TYPE-C

#80399 (17213) 1PORT (ACC)

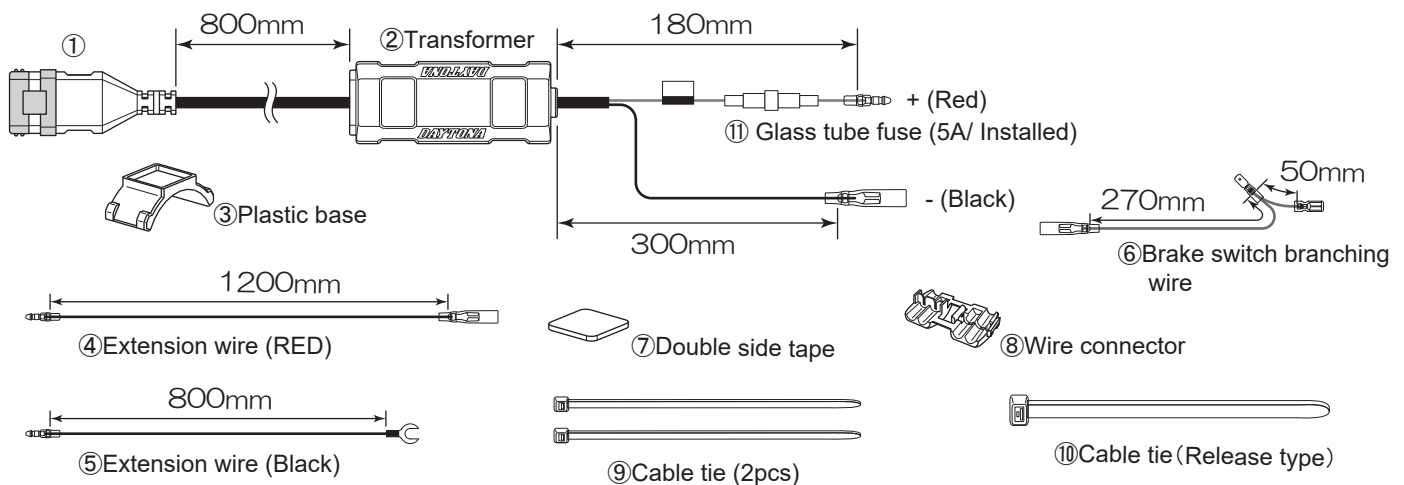
PRODUCT FEATURES

- Dedicated 12 V DC automotive device.
- The thin body of this USB power supply provides a sleek fit to the vehicle.
- The USB power supply has an output of 5V/3A, 9V/2A, 12V/1.5A
- Easily connect the wiring with the included brake switch branching wire .
(※ Except for some switches)
- The clamp is compatible with handlebar diameters of 16 mm - 32 mm.
- Safe design with 5A fuse.
- Overcurrent protection feature.
- Reversed-connection prevention feature. (fuse blows and input current is cut)
- Supported USB PD3.0 (POWER DELIVERY3.0) (MAX Power 18W)
※USB PD is one of the power supply standards compatible with this USB Type-C terminal.
It automatically recognizes the USB PD compatible smartphone or other device to be charged and provides optimal charging.

COMPONENTS

No.	Part name	Size (mm)	Qty	No.	Part name	Size (mm)	Qty
①	USB power supply body		1	⑥	Brake switch branching wire	270	1
②	Transformer ※ Installed		1	⑦	Double side tape	12x12	1
③	Plastic base (Φ16 ~ Φ32mm)		1	⑧	Wire connector (※1)		1
④	Extension wire (RED)	1200	1	⑨	Cable tie	150	2
⑤	Extension wire (BLACK)	800	1	⑩	Cable tie (Release type)	150	1
				⑪	Glass tube fuse (※2) ※ Installed	5A	1

※1. Compatible wires: 18–14 AWG, 0.75–2 sq ※sq = (JIS) Cross-sectional area (mm²)



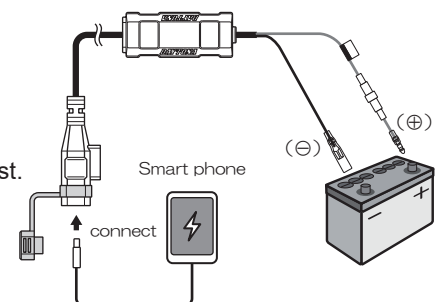
INSTALLATION

【 Precautions 】

- For details on removing and installing vehicle parts, etc., refer to the service manual published by the vehicle manufacturer.
- Secure the vehicle on a stable location so that it will not fall over while being worked on, and ensure the safety of your environment while working.
- Before starting work, refer to the following diagram and check the operation of this product.
- Disconnect the cable from the negative battery terminal on the vehicle.

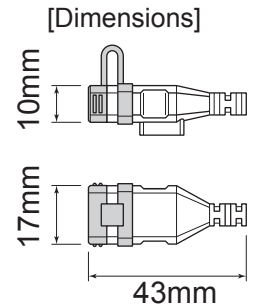
[Pre-installation check]

- Connect +(Red) wire to the positive post of the battery and -(Black) wire to the negative post. Then check that this product operates correctly.
- ※ Be careful, the reversed-connection prevention feature will cause the fuse to blow.



【 Installing USB power supply body ① on $\Phi 22.2$ mm handlebar 】

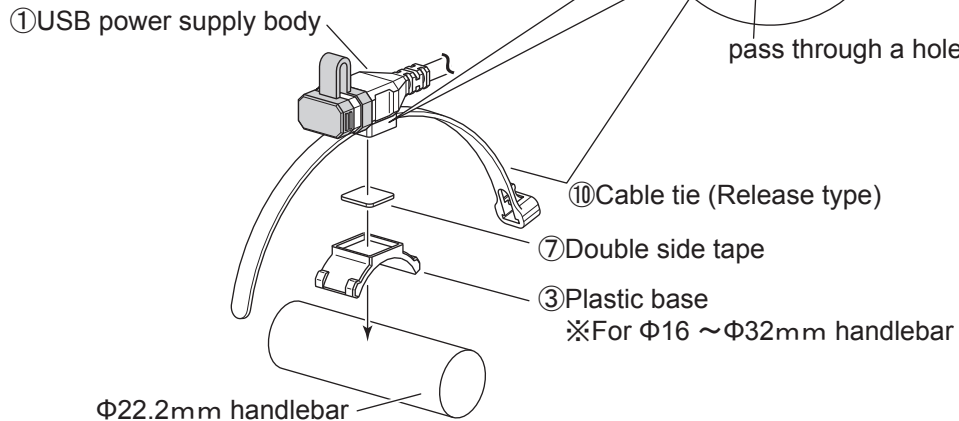
01. Secure a space on the handlebar where the USB power supply body ① shown in the figure on the right can be installed.



02. Pass the cable tie (Release type) ⑩ through the slit on the USB power supply body ①.

03. Using the figure below as a reference, tie the USB power supply body ① to the handlebar using the plastic base ③, double side tape ⑦ and cable tie (Release type) ⑩.

[Assembling the USB power supply body]



※ Turn the handlebar to the left and right to check that the wires are not pulled.

【 Connecting power supply wires 】

When using the brake switch branching wire ⑥ to supply + power

04. This can be used if the connector of the wire connected to the brake switch is L-shaped as shown in the diagram.

※ This cannot be used if the connection is made with a coupler. In that case, skip to step 15.

05. Connect the cable to the negative battery terminal. Of the two wires connected to the brake switch, use a tester to identify the wire that carries 12 V when the ignition switch is turned on. After confirming, turn off the ignition switch and disconnect the cable from the negative battery terminal.

※ If incorrect connections are made, abnormal operation, such as power being supplied only when the brake is applied, will occur.

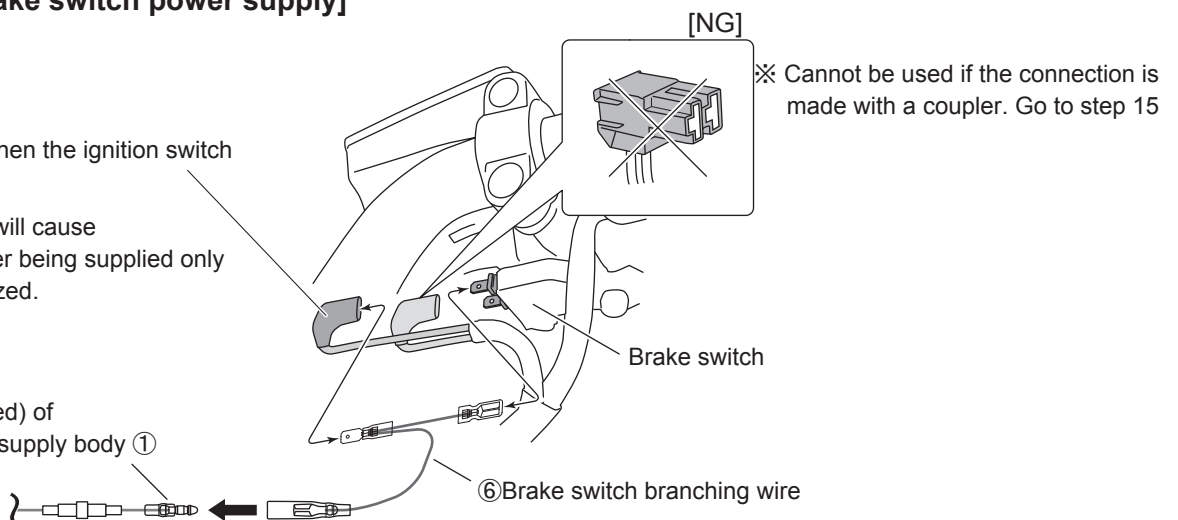
06. Refer to the diagram next page and connect the brake switch branching wire ⑥ to the wire identified in step 05.

【 Branching the brake switch power supply 】

Wire that carries 12 V when the ignition switch is turned ON.

※ Incorrect installation will cause symptoms such as power being supplied only when the lever is squeezed.

To the + wire (red) of the USB power supply body ①

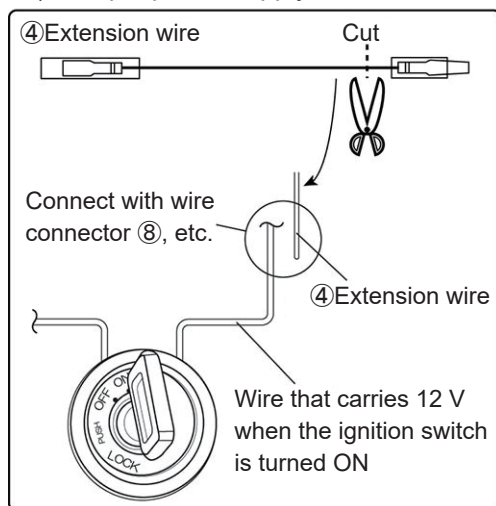


07. Connect the + wire (red) of the USB power supply body ① to the brake switch branching wire ⑥.
If the + and – wires of the USB power supply body ① are reversed, the reversed-connection prevention feature will cause the fuse to blow. If the fuse blows, replace the fuse.
08. Connect the cable to the negative battery terminal. Use a tester to identify the location where the – battery cable (ground) is connected to the vehicle with an M6 or smaller bolt. After identifying the ground, disconnect the cable from the negative battery terminal.
※ The location of the – battery cable (ground) is where the resistance is nearly 0 Ω.
09. Fasten both the – wire (black) of the USB power supply body ① and the – battery cable (ground) identified in step 08 with the bolt.
10. Use a cable tie ⑨ to secure the transformer ② to the vehicle.
11. Connect the cable that was disconnected before performing the work to the negative battery terminal.
12. Install any vehicle parts that were removed before performing the work.
13. Turn the handlebar to the left and right to check that the fuse holder wires are not pulled and that no parts come into contact with the product.
※ A pulled wire can lead to problems such as sudden operation failure.
14. Check that there are no abnormalities; if there are no problems, the work is completed.

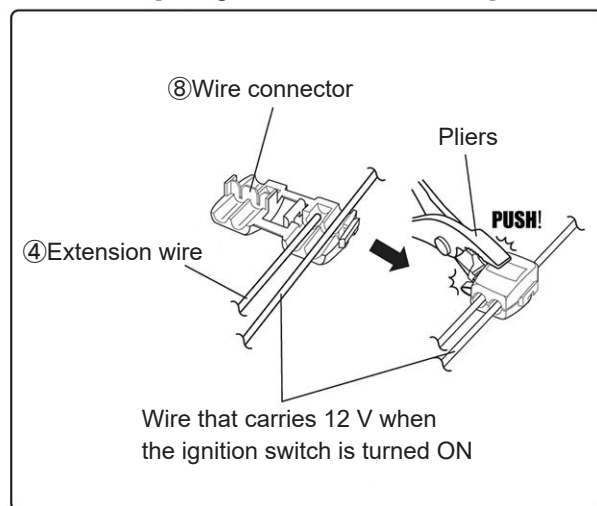
When the brake switch branching wire ⑥ cannot be or is not used

15. Connect the cable to the negative battery terminal. Use a tester to identify the wire that carries 12 V when the ignition switch is turned ON. After confirming, turn off the ignition switch and disconnect the cable from the negative battery terminal.
16. Cut the male connector end of the extension wire ④ to adjust its length.
17. Use the wire connector ⑧ to connect the extension wire ④ to the wire identified in step 15.
※ For details on using the wire connector ⑧, refer to the diagram below.

Ex.) Sample power supply wire connection



[Using the wire connector ⑧]



18. Connect the + wire of the USB power supply body ① to the extension wire ④.
If the + and – wires of the USB power supply body ① are reversed, the reversed-connection prevention feature will cause the fuse to blow. If the fuse blows, replace the fuse.
19. Connect the cable to the negative battery terminal. Use a tester to identify the location where the – battery cable (ground) is connected to the vehicle with an M6 or smaller bolt. After identifying the ground, disconnect the cable from the negative battery terminal.
※ The location of the – battery cable (ground) is where the resistance is nearly 0 Ω.
20. Fasten both the – wire (black) of the USB power supply body ① and the – battery cable (ground) identified in step 19 with the bolt.
21. Use a cable tie ⑨ to secure the transformer ② to the vehicle.
22. Connect the cable that was disconnected before performing the work to the negative battery terminal.
23. Install any vehicle parts that were removed before performing the work.
24. Turn the handlebar to the left and right to check that the fuse holder wires are not pulled and that no parts come into contact with the product.
※ A pulled wire can lead to problems such as sudden operation failure.
25. Check that there are no abnormalities; if there are no problems, the work is completed.

【 Troubleshooting 】

Symptom	Cause	Solution
Not charging	No power is supplied.	Make sure that 12 V DC is supplied at the + wire connection.
		Make sure that the – wire is connected to the ground.
	There is improper contact with wires of other parts.	Check the wire connections of each part.
	A wire of a part or the USB cable is bent at a sharp angle.	If a wire or cable is held in place bent at a sharp angle, the electric current may not flow correctly. Reroute the wire to provide sufficient slack.
	The fuse blows.	Make sure that the power supply wires are not reversed.
		If the fuse blows immediately after being replaced, the main unit may be damaged. Gather your purchase information and consult your retailer.
		In rare cases, the fuse may blow if the product is supplied with high-voltage power. Consult with the vehicle retailer to make sure that there are no problems with the electrical system of the vehicle.
	Charging is slow	A power delivery compatible cable is required. Check the USB Type-C cable.
	A wrong type of USB cable is used.	Certain mobile phones may not charge unless a communication cable is used. Check the USB cable.
	The USB cable is damaged.	Make sure that the USB cable is not damaged.
There is improper contact at the USB port.	Make sure that there is no improper contact at the USB port or in the USB connection with the connected device.	
The transformer is exposed to interference.	Is the transformer installed near a noise-generating part? The transformer may be malfunctioning due to interference. Take measures against noise such as changing the installation location of the transformer or wrapping it with aluminum tape that is grounded.	
Charging may stop.	There is improper contact with wires of other parts.	Check the wire connections of each part for improper contact.
	The fuse holder wires are subjected to strong tension.	Make sure that the fuse holder wires are not pulled when the handlebar is operated or while riding. In case of tension, reroute the wire.
	The voltage drops when the engine is started.	Certain mobile phones may interpret the voltage drop that occurs when the engine is started to be abnormal and stop charging. Connect the electronic device to the USB port after starting the engine.
	The transformer becomes hot.	If the transformer is installed near a heat-generating source, the operating temperature will be exceeded and output may stop. Change the installation location of the transformer.
	The USB cable is damaged.	Make sure that the USB cable is not damaged.
	There is improper contact at the USB port.	Make sure that there is no improper contact at the USB port or in the USB connection with the connected device.
	The transformer is exposed to interference.	Is the transformer installed near a noise-generating part? The transformer may be malfunctioning due to interference. Take measures against noise such as changing the installation location of the transformer or wrapping it with aluminum tape that is grounded.
The charging indicator is on, but the charge does not increase or decrease.	The connected electronic device is hot.	Is your electronic device abnormally hot? If software is used at the same time that the device is being charged, a protection function on some devices may be activated to reduce the charging current. Temporarily stop using the device. ※This is likely to occur when the electronic device is used in midsummer and exposed to direct sunlight.
	A wire of a part or the USB cable is bent at a sharp angle.	If a wire or cable is held in place bent at a sharp angle, the electric current may not flow correctly. Reroute the wire to provide sufficient slack.
	The transformer becomes hot.	If the transformer is installed near a heat-generating source, the operating temperature will be exceeded and output may stop. Change the installation location of the transformer.
The battery charge drops quickly during long-term storage.	The power supply wire is connected to an unswitched wire.	This product consumes a small amount of standby power, even when no electronic device is connected to a USB port. The consumption is small, but battery depletion will be faster than usual if the battery is weak or during long-term storage. Connect the + wire to the wire that carries 12 V when the ignition key is turned on.