Sojadis PLUG & DRIVE

CRÉATEUR d'aides à la conduite

Accel Bike with/without Mini Keypad
Accel Quad with/without Mini Keypad

Installation instructions

08/12/2021

Place du Maréchal Leclerc - Jallais - 49510 Beaupréau-en-Mauges - FRANCE + 33 2 41 64 09 57 sav@sojadispro.com www.sojadispro.com

SIRET 49365878500016 - Code APE 4520A - N° de TVA Intracommunautaire FR 58493658785

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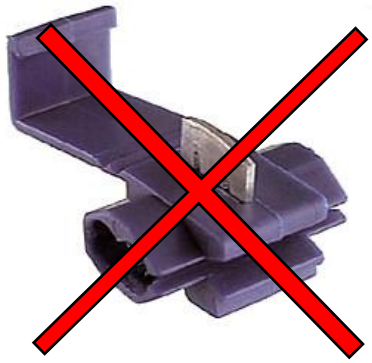
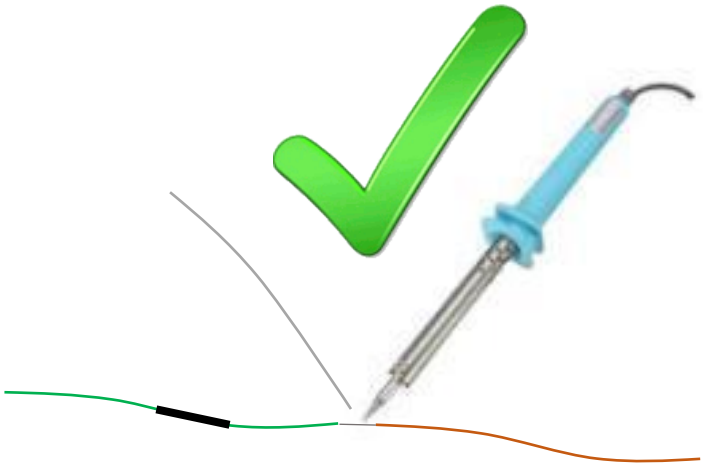
Recommendations concerning the electrical connections

It is forbidden to use quick coupler / rapid connector for your **electric wiring. Some examples below :**



It's imperative to disconnect the battery. Wels the wires amongst them.



If you do not follow these recommendations, SOJADIS won't be responsible for any malfunction.

Presentation of *ACCEL BIKE/ACCEL QUAD*

Localisation dans le véhicule

The ***ACCEL BIKE*** or the ***ACCEL QUAD*** are manual accelerator installed on the right or left side of the steering wheel. Fixed on a brake lever, they allow you to combine acceleration and braking of the vehicule.

Vehicles concerned

The ***ACCEL BIKE*** or the ***ACCEL QUAD*** can be installed on vehicles equipped with an automatic transmission and electric accelerator pedal.

Two possible choices of driving:

- Conventional *(with the accelerator pedal)*
- Manual *(with the **ACCEL BIKE** or the **ACCEL QUAD**).*

A power button enables the manual mode

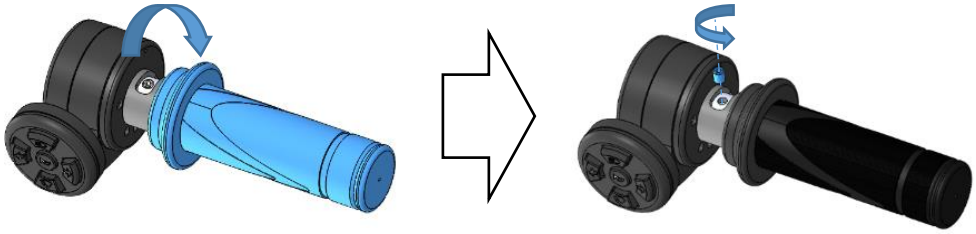
Désactivation of the speed limiter

The ***ACCEL BIKE*** or the ***l'ACCEL QUAD*** are equipped with an electronical kick-down allowing the deactivation of the speed limiter. Please refer to the following page *« Use of the **ACCEL BIKE** » or « Use of the **ACCEL QUAD** ».*

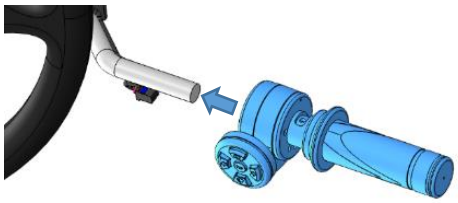
Installation instruction of *ACCEL BIKE/ACCEL QUAD*

ACCEL BIKE's mounting on brake lever.

Slightly remove the coating, then the cone-point screw.



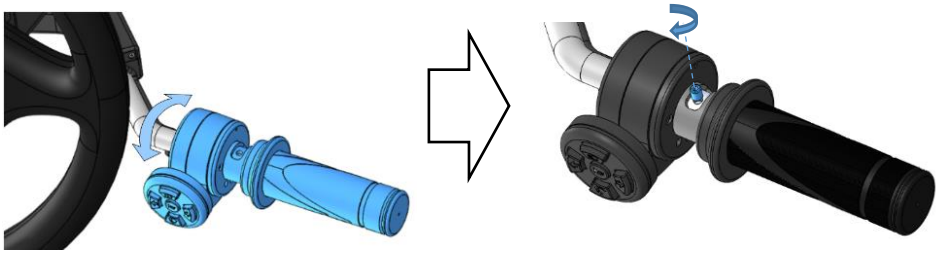
Insert the ***ACCEL BIKE*** up to the mechanical stop



To avoid any dammage during installation, please follow the recommendations below: :

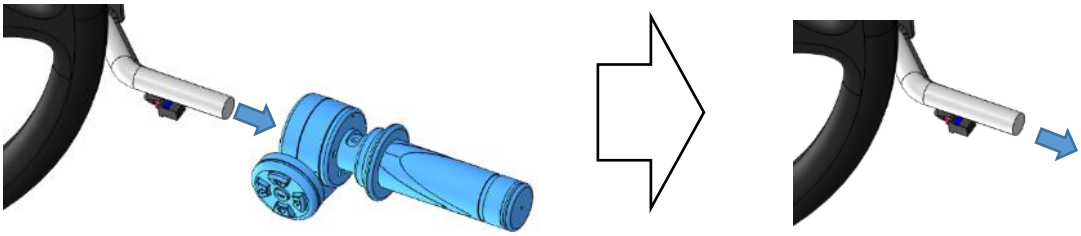
- If you have just heated the stainless steel rod to bend it, it is imperative that it is completely cooled before inserting the motorbike handle.
- In the area where the motorbike handle is inserted, the rod must be perfectly smooth and cylindrical.

Adjust the inclination of the mini keypad by rotating the handgrip. Then, screw the cone-point screw to identify the middle for the drilling.

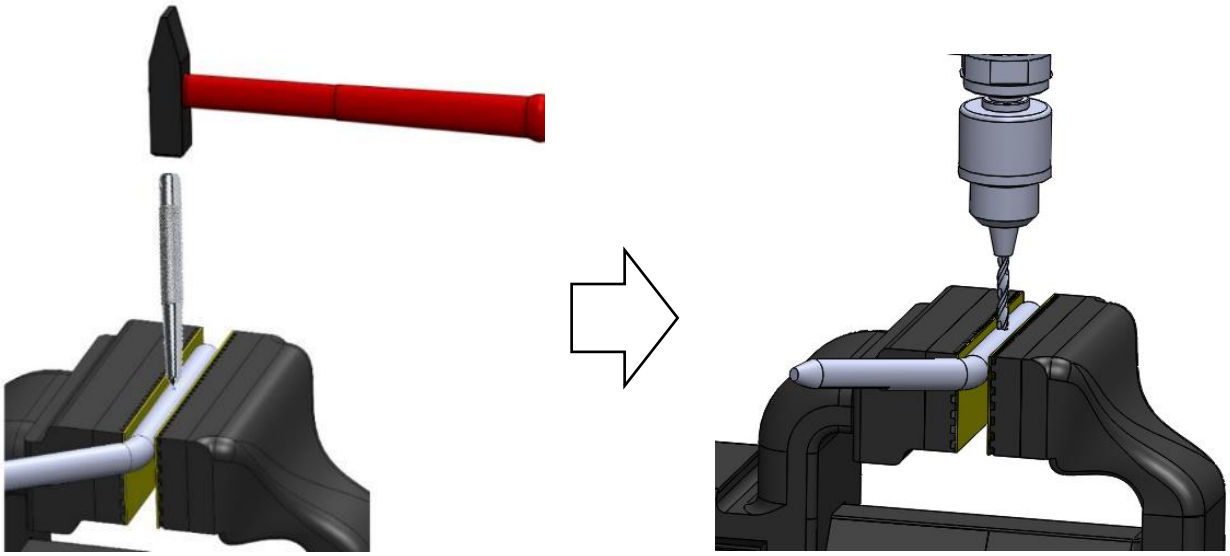


The end user must be to pass his hands between the steering-wheel and the manual brake when he turns his steering-wheel.

Remove the cone-point screw, the ***ACCEL BIKE*** and the brake rod.



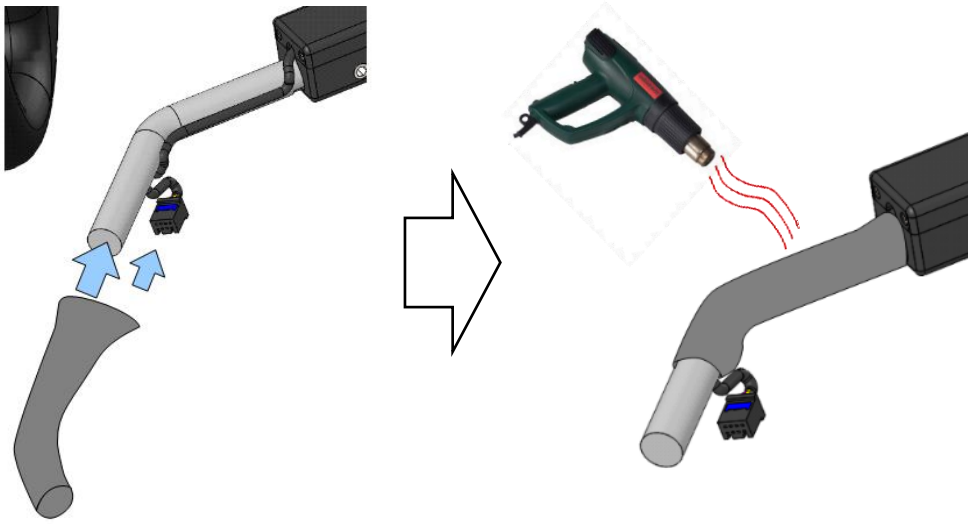
Make a mark with a cone tool on the trace left by the cone-point screw. Drill with a shaft of 4.2 mm drill under a depth corresponding to the height of the cone of the cone-point screw (about 2mm of depth).



-Advice: use a vice for drilling (if you have a drill column, please use it).

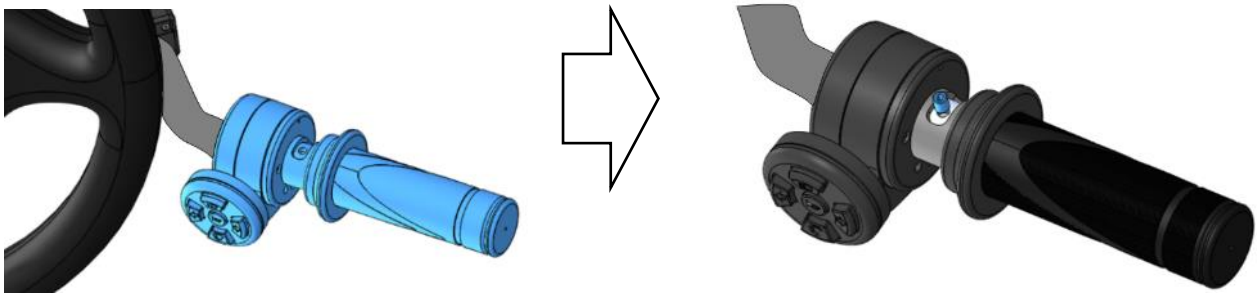
-Use a vice with smooth clamps or place some cardboard to prevent any damage while thightening.

Insert the brake rod, cut and position the thermoplastic material on the part, and then heat it with a thermal scraper (see below for the positioning into the thermoplastic material).

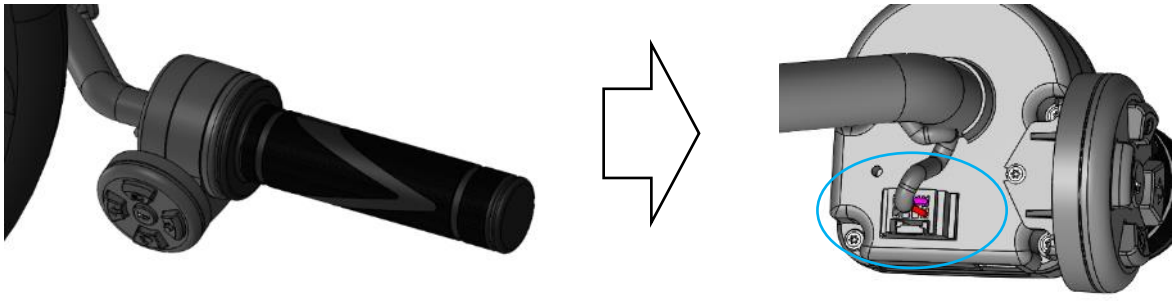


Please ensure not to orientate the thermal scraper towards the steering wheel or the dashboard in order to prevent any damages on these elements.

Insert the ***ACCEL BIKE*** then screw in and tighten the cone-point screw on the driling intitation.

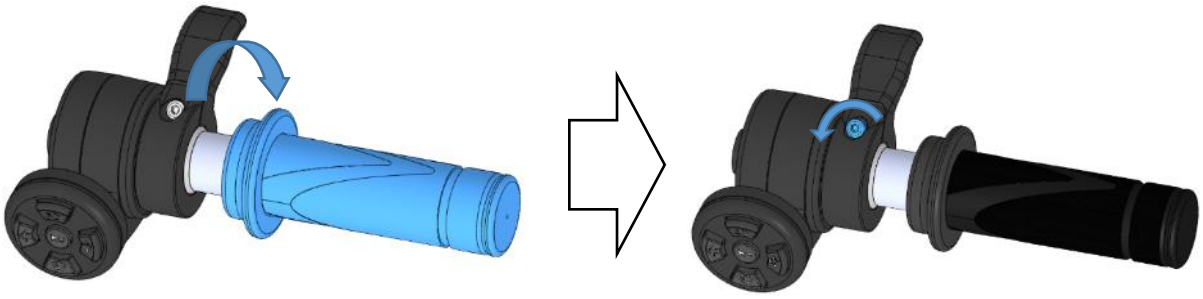


Relocate the coating part, then plug the harness in into the ***ACCEL BIKE***.

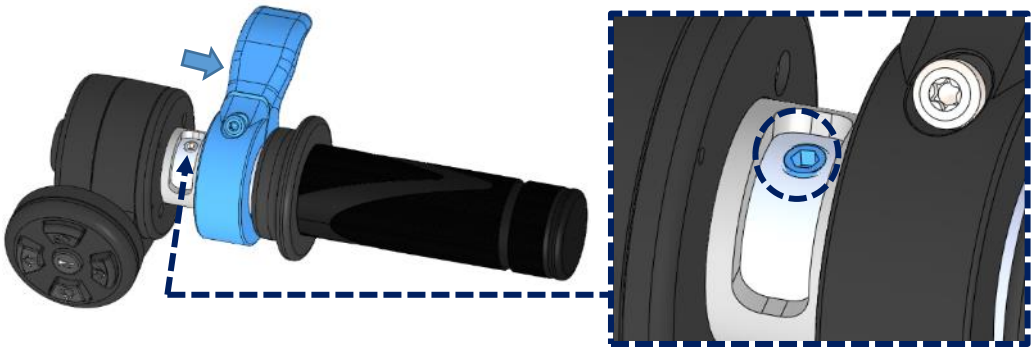


ACCEL QUAD's mounting on brake lever.

Slightly remove the coating, then loosening the screw of the trigger.

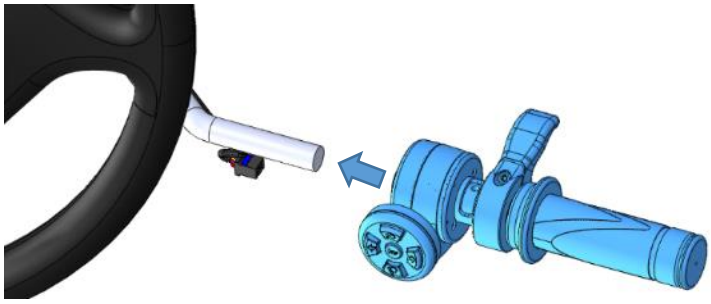


Offset the trigger to access the cone-point screw.

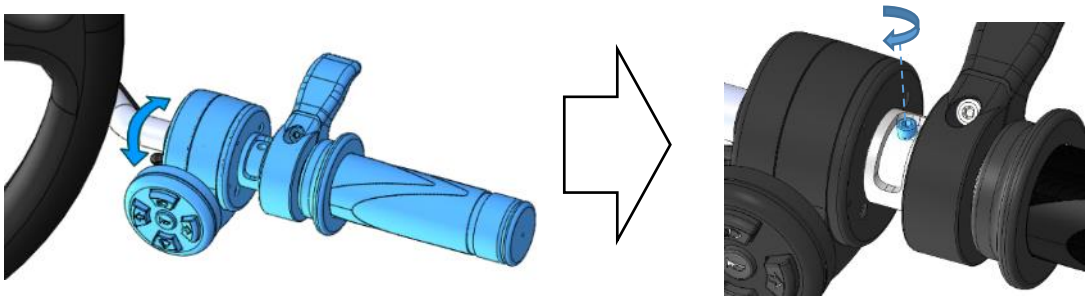


Remove the cone-point screw.

Insert the ***ACCEL QUAD*** up to the mechanical stop

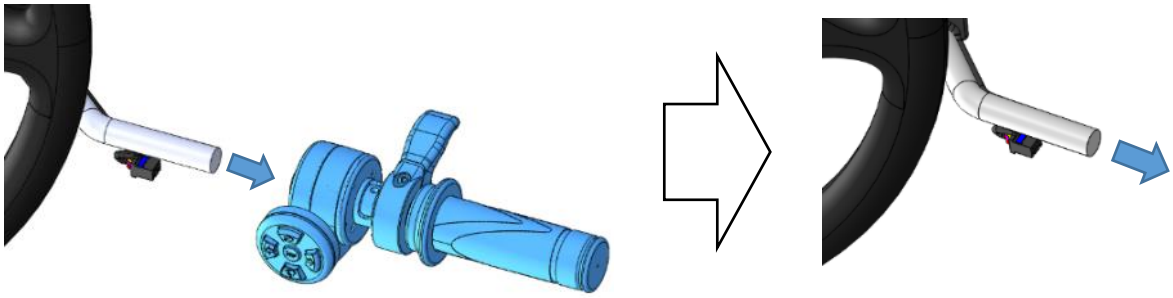


Adjust the inclination of the mini keypad by rotating the handgrip. Then, screw the cone-point screw to identify the middle for the drilling.

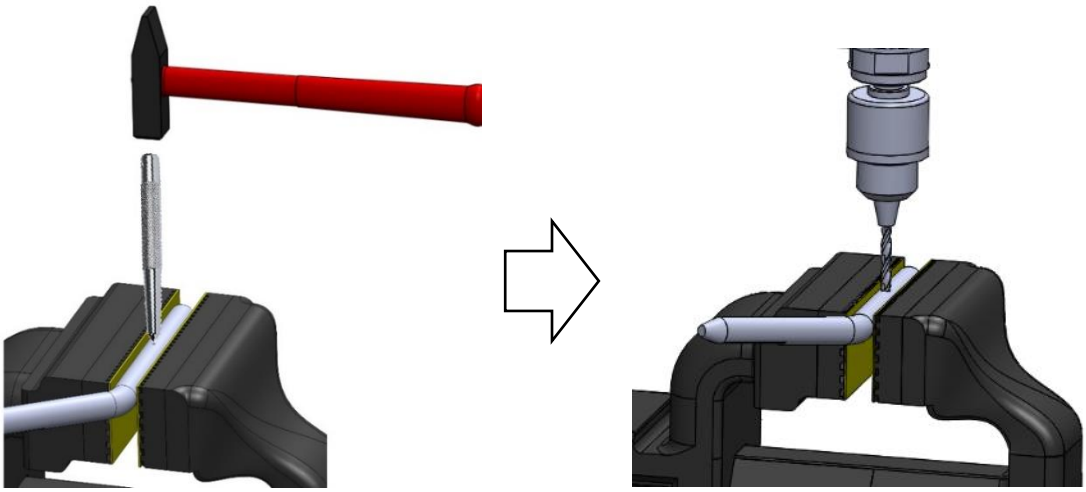


The end user must be to pass his hands between the steering-wheel and the manual brake when he turns his steering-wheel.

Remove the cone-point screw, the ***ACCEL QUAD*** and the brake rod.



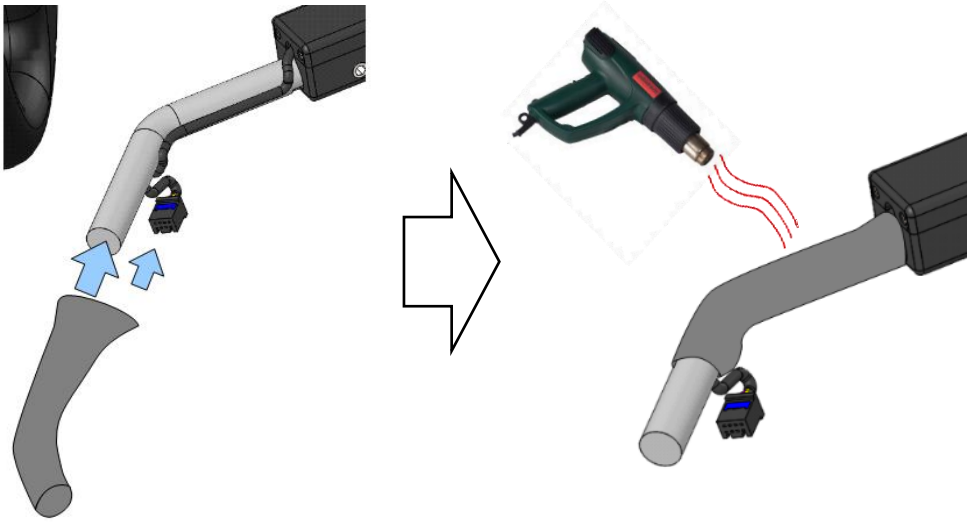
Make a mark with a cone tool on the trace left by the cone-point screw. Drill with a shaft of 4.2 mm drill under a depth corresponding to the height of the cone of the cone-point screw (about 2mm of depth).



-Advice: use a vice for drilling (if you have a drill column, please use it).

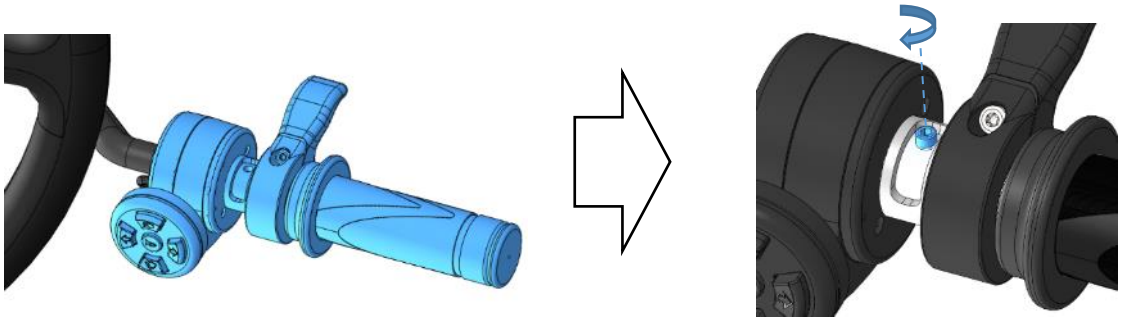
-Use a vice with smooth clamps or place some cardboard to prevent any damage while thightening.

Insert the brake rod, cut and position the thermoplastic material on the part, and then heat it with a thermal scraper (see below for the positioning into the thermoplastic material).

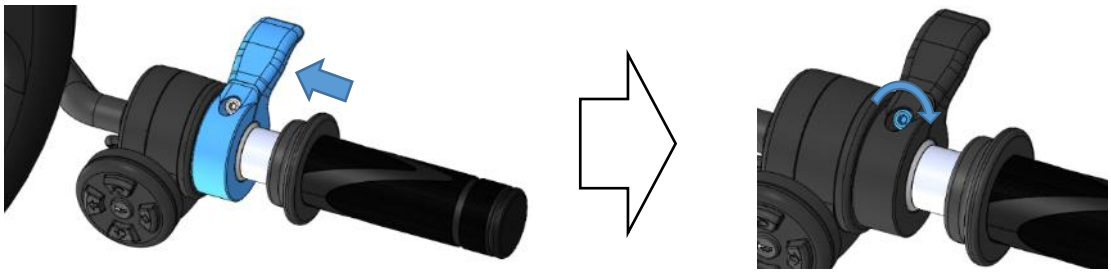


Please ensure not to orientate the thermal scraper towards the steering wheel or the dashboard in order to prevent any damages on these elements.

Insert the ***ACCEL QUAD*** then screw in and tighten the cone-point screw on the driling intitation.

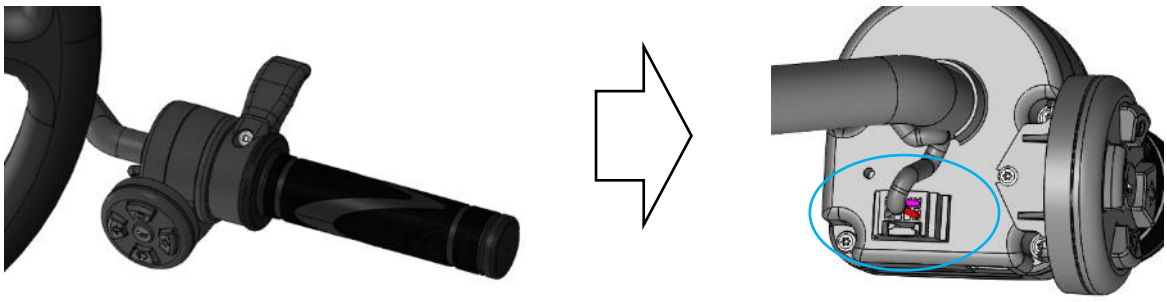


Reposition the trigger to the desired position and then tighten the screw.



Take care not to overtighten the screw, otherwise acceleration will be restricted.

Relocate the coating part, then plug the harness in into the ***ACCEL QUAD***.

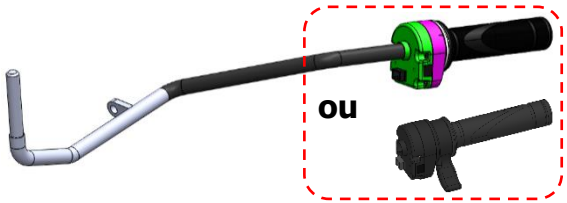
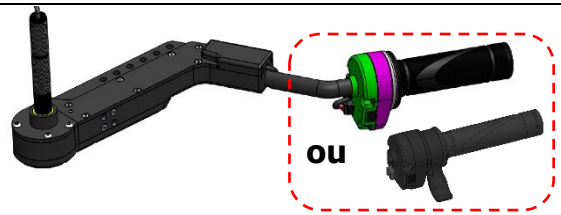
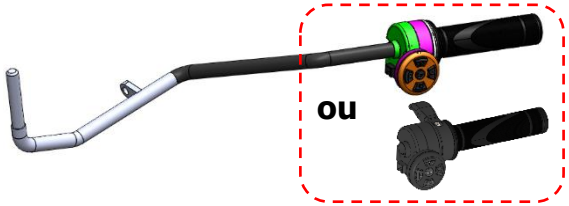
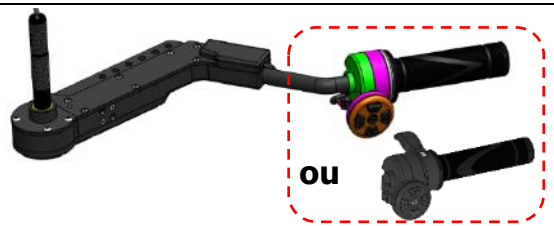


Accelerate with the trigger until the mechanical stop and then release:

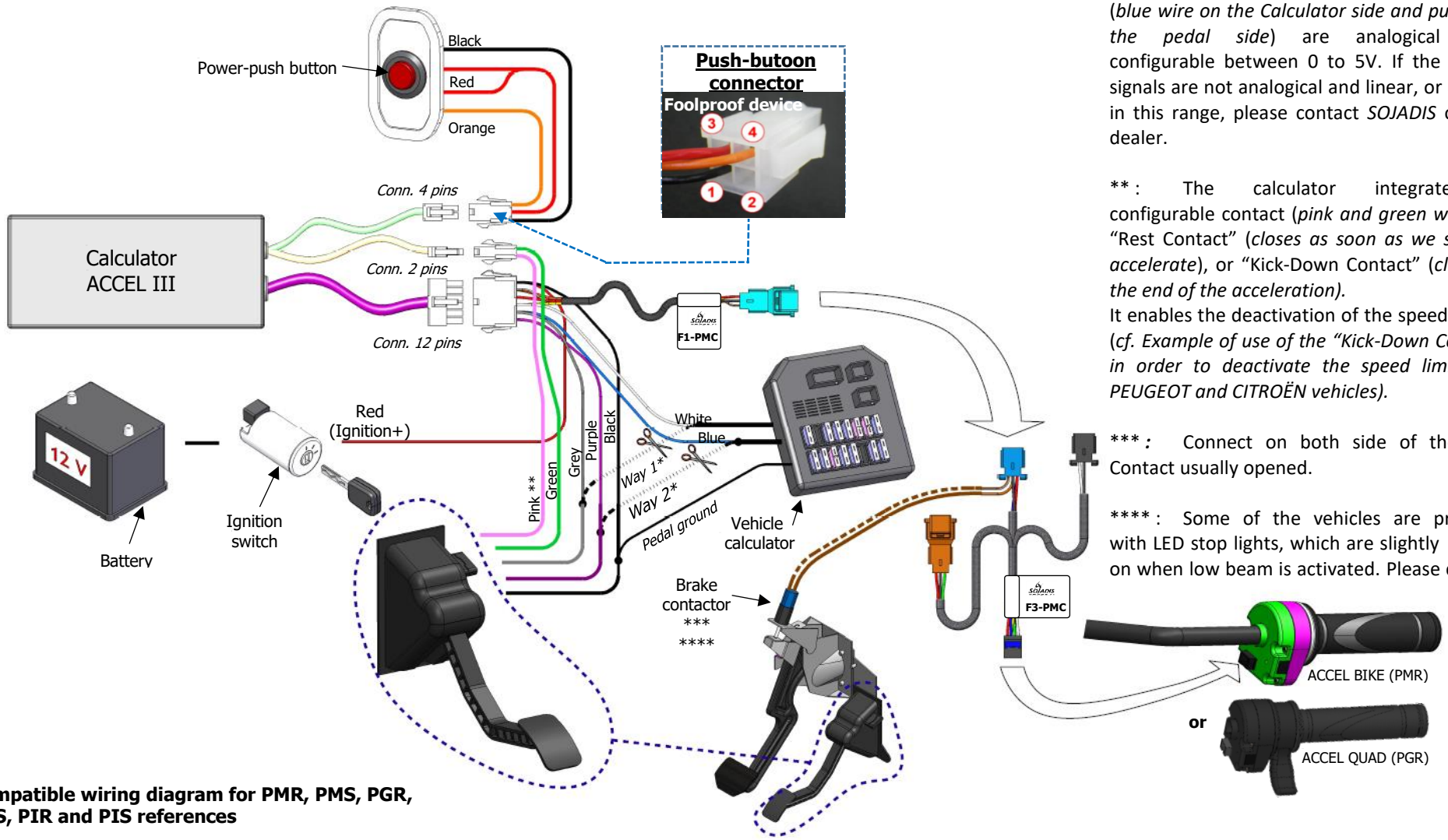
- The trigger must remain attached to the handle to which it is attached.
- There must be no mechanical constraint restricting the acceleration stroke.

Wiring configurations of the ACCEL BIKE/ACCEL QUAD

You have an ACCEL BIKE or ACCEL QUAD, with or without a MINI KEYPAD. Below, you will be able to find the configurations introduced in this manual.

Equipment	Visual of the equipmenton a STOPDIS (Equipment circled in red on the photograph)	Chapters concerned
ACCEL BIKE Or ACCEL QUAD		*Wiring of the ACCEL BIKE/ACCEL QUAD (mounting on **a brake excepted STOPDIS II**)* *Reference voltages of the ACCEL BIKE /ACCEL QUAD (mounting on **a brake excepted STOPDIS II**)* *Wiring of the brake switch (mounting on **a brake excepted STOPDIS II**)*
		*Wiring of the ACCEL BIKE/ACCEL QUAD (mounting with **STOPDIS II**)* *Reference voltages of ACCEL BIKE/ACCEL QUAD (mounting with **STOPDIS II**)*
ACCEL BIKE + MINI KEYPAD Or ACCEL QUAD + MINI KEYPAD		*Wiring of the ACCEL BIKE + MINI KEYPAD and ACCEL QUAD + MINI KEYPAD (mounting on **a brake excepted STOPDIS II**)* *Reference voltages of the ACCEL BIKE /ACCEL QUAD (mounting on **a brake excepted STOPDIS II**)* *Wiring of the brake switch (mounting on **a brake excepted STOPDIS II**)*
		*Wiring of the ACCEL BIKE + MINI KEYPAD and ACCEL QUAD + MINI KEYPAD (mounting with **STOPDIS II**)* *Reference voltages of ACCEL BIKE/ACCEL QUAD (mounting with **STOPDIS II**)*

Wiring of the ACCEL BIKE/ACCEL QUAD (mounting on a brake excepted STOPDIS II)



Compatible wiring diagram for PMR, PMS, PGR, PGS, PIR and PIS references

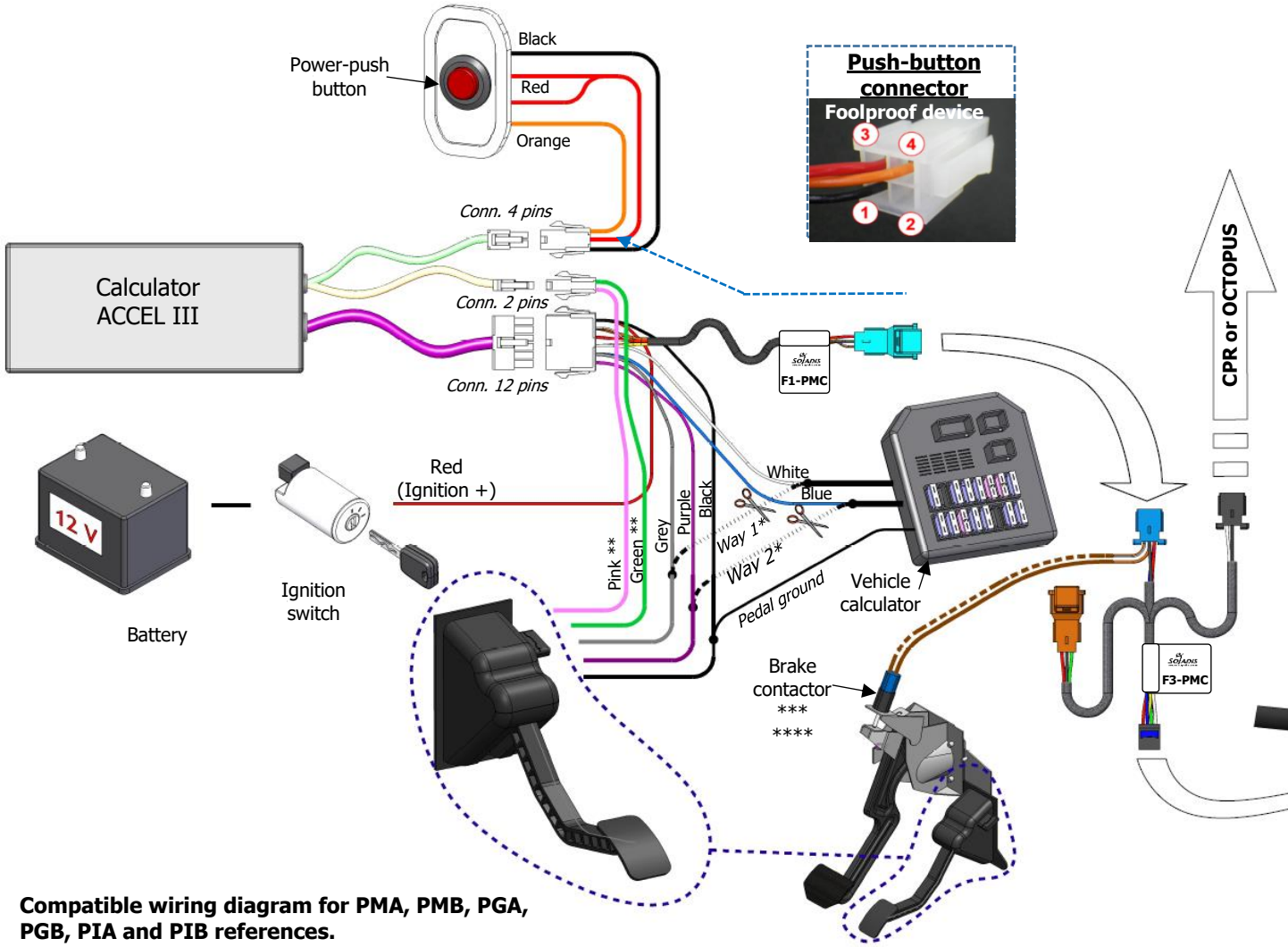
* : Way 1 (*white wire on the Calculator side et Grey on the pedal side*) and the way 2 (*blue wire on the Calculator side and purple on the pedal side*) are analogical ways configurable between 0 to 5V. If the vehicle signals are not analogical and linear, or are not in this range, please contact *SOJADIS* or your dealer.

** : The calculator integrates a configurable contact (*pink and green wires*) as "Rest Contact" (*closes as soon as we start to accelerate*), or "Kick-Down Contact" (*closes at the end of the acceleration).*
It enables the deactivation of the speed limiter (*cf. Example of use of the "Kick-Down Contact" in order to deactivate the speed limiter on PEUGEOT and CITROËN vehicles).*

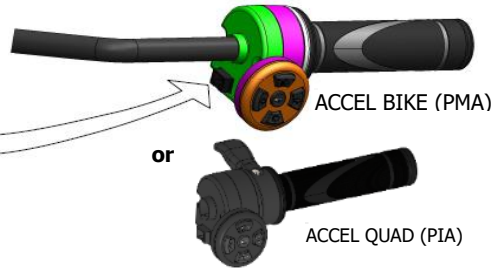
*** : Connect on both side of the Stop Contact usually opened.

**** : Some of the vehicles are provided with LED stop lights, which are slightly turned on when low beam is activated. Please contact

Wiring of the ACCEL BIKE+MINI KEYPAD and ACCEL QUAD+MINI KEYPAD (mounting on a brake excepted STOPDIS II)



Compatible wiring diagram for PMA, PMB, PGA, PGB, PIA and PIB references.



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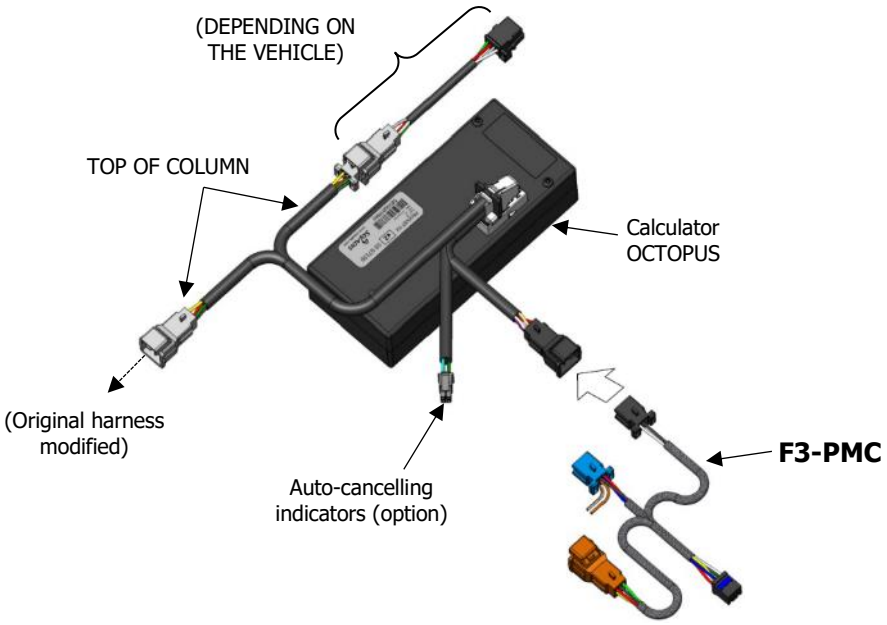
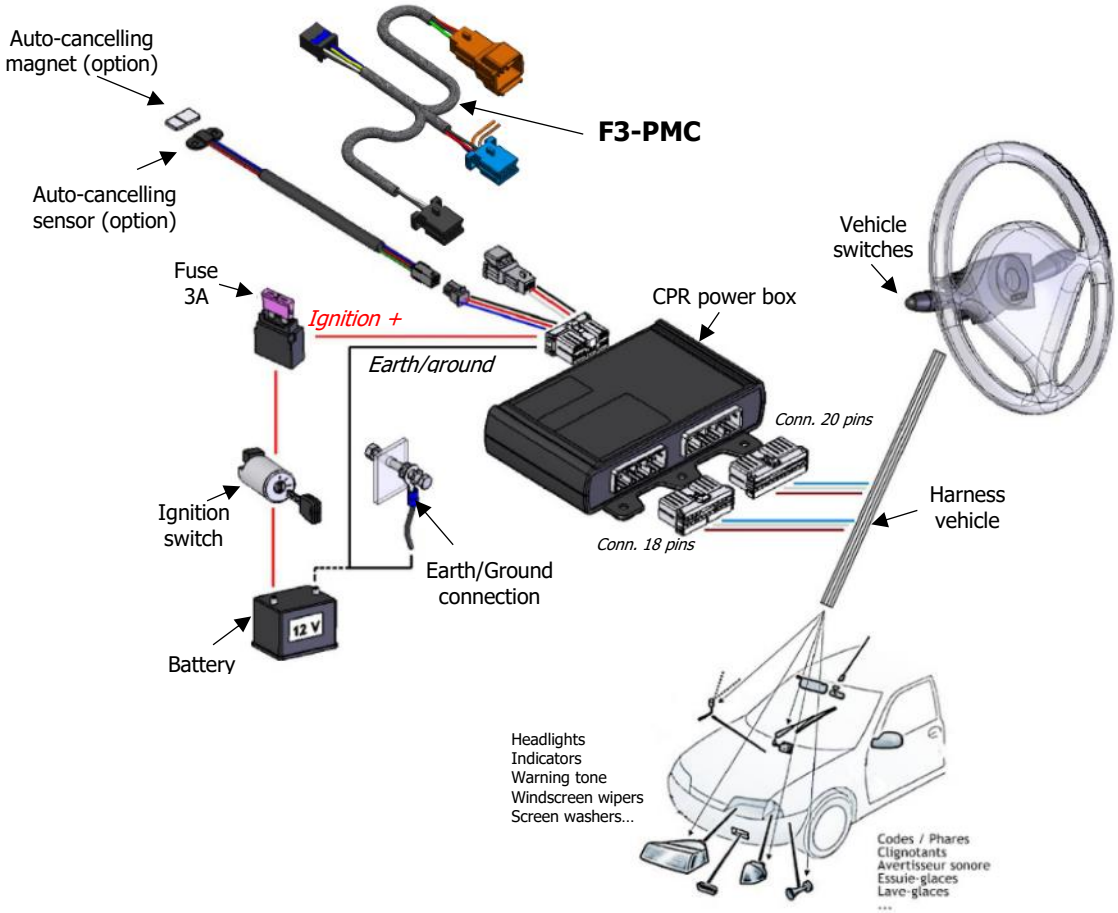
In order to install ACCEL BIKE + MINI KEYPAD or ACCEL QUAD + MINI KEYPAD, the F3-PMC harness' black connector is connected on the connector normally used for the infra-red receiver from COMDIS (please look at the following wiring).

Wiring on OCTOPUS
(mounting on a brake excepted STOPDIS II)



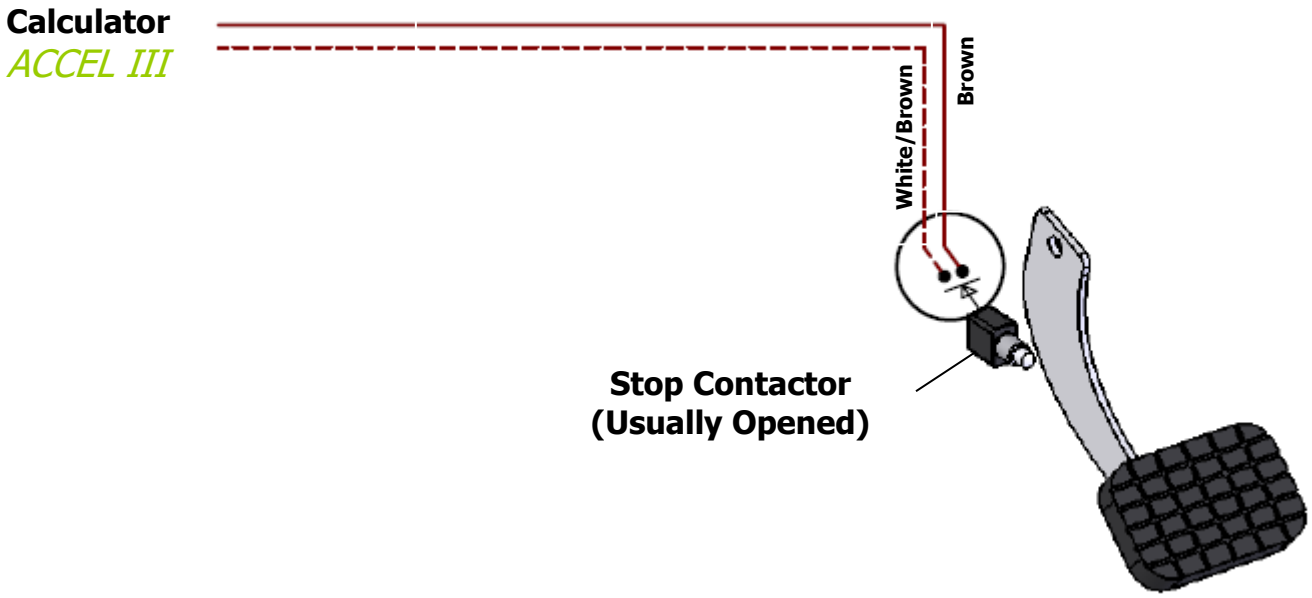
Wiring on CPR
(mounting on a brake excepted STOPDIS II)



Wiring of the brake switch (mounting on a brake excepted STOPDIS II)

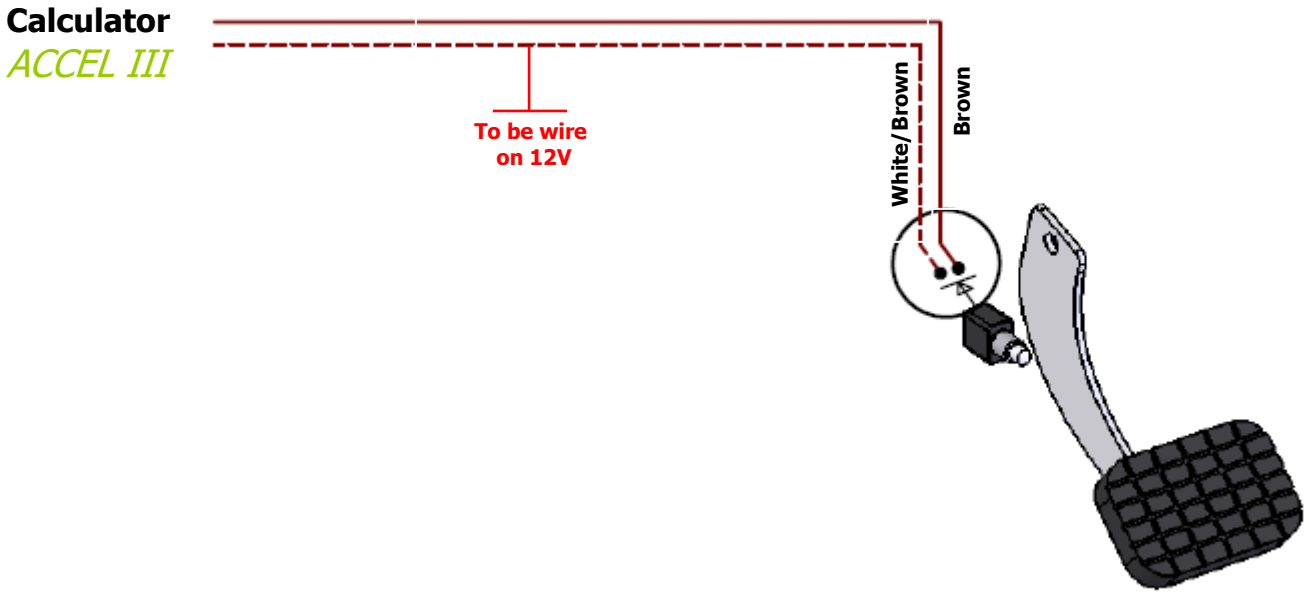
<u>Use of the original contactor</u> :

If the vehicle is equipped with a Stop Contactor Usually Opened and is not provided with LED stop lights, please wire the 2 brown wires on each side of the contactor.

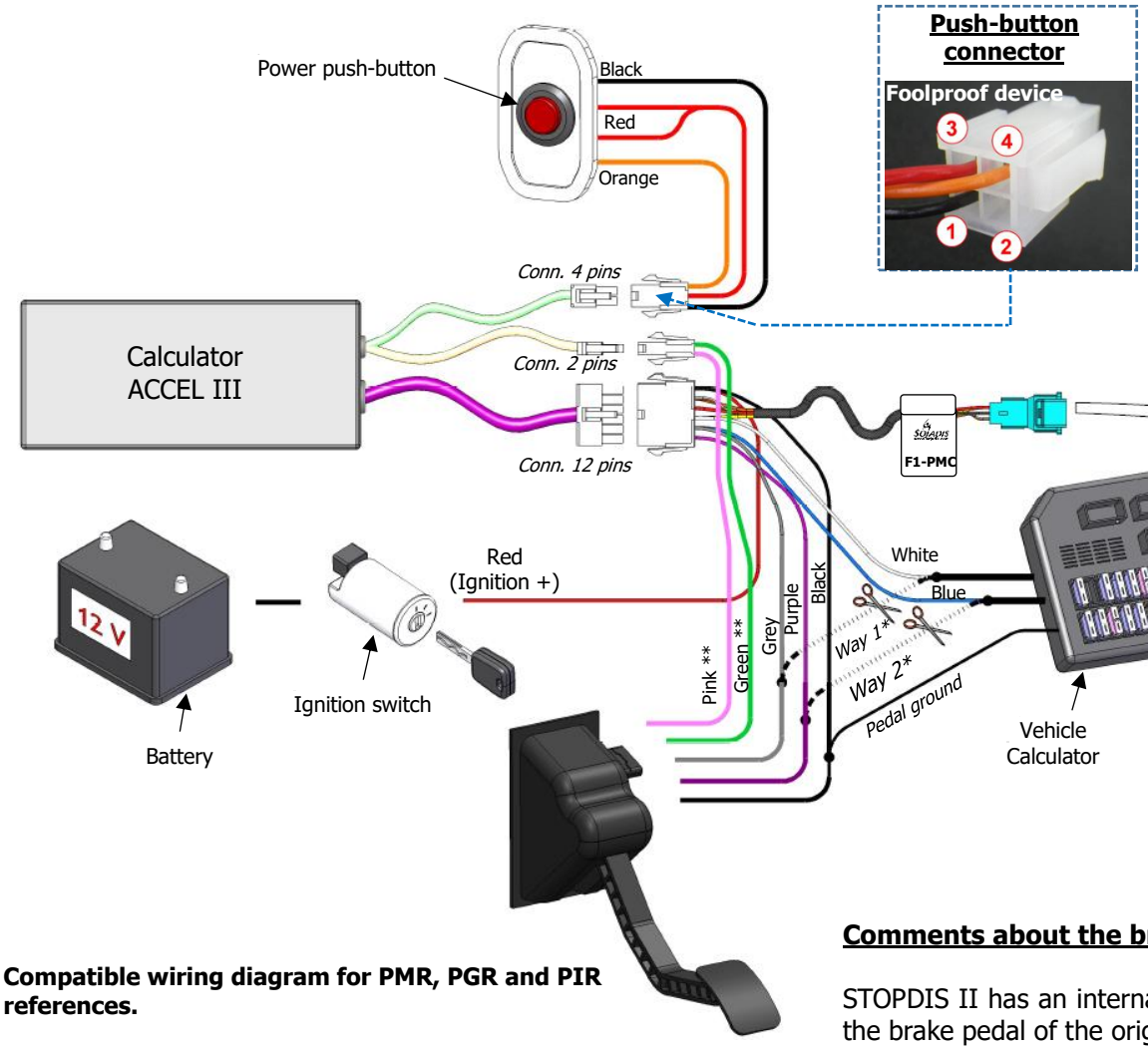


<u>Use of an extra contactor</u> :

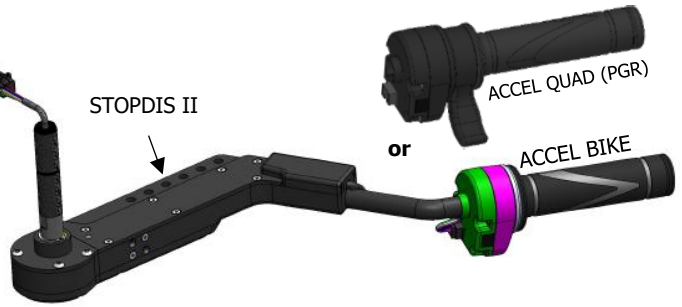
If the use of the original contactor is impossible, please position an extra calculator on the brake pedal and wire it according to the following schema.



Wiring of the ACCEL BIKE/ACCEL QUAD (montage with STOPDIS II)



Compatible wiring diagram for PMR, PGR and PIR references.



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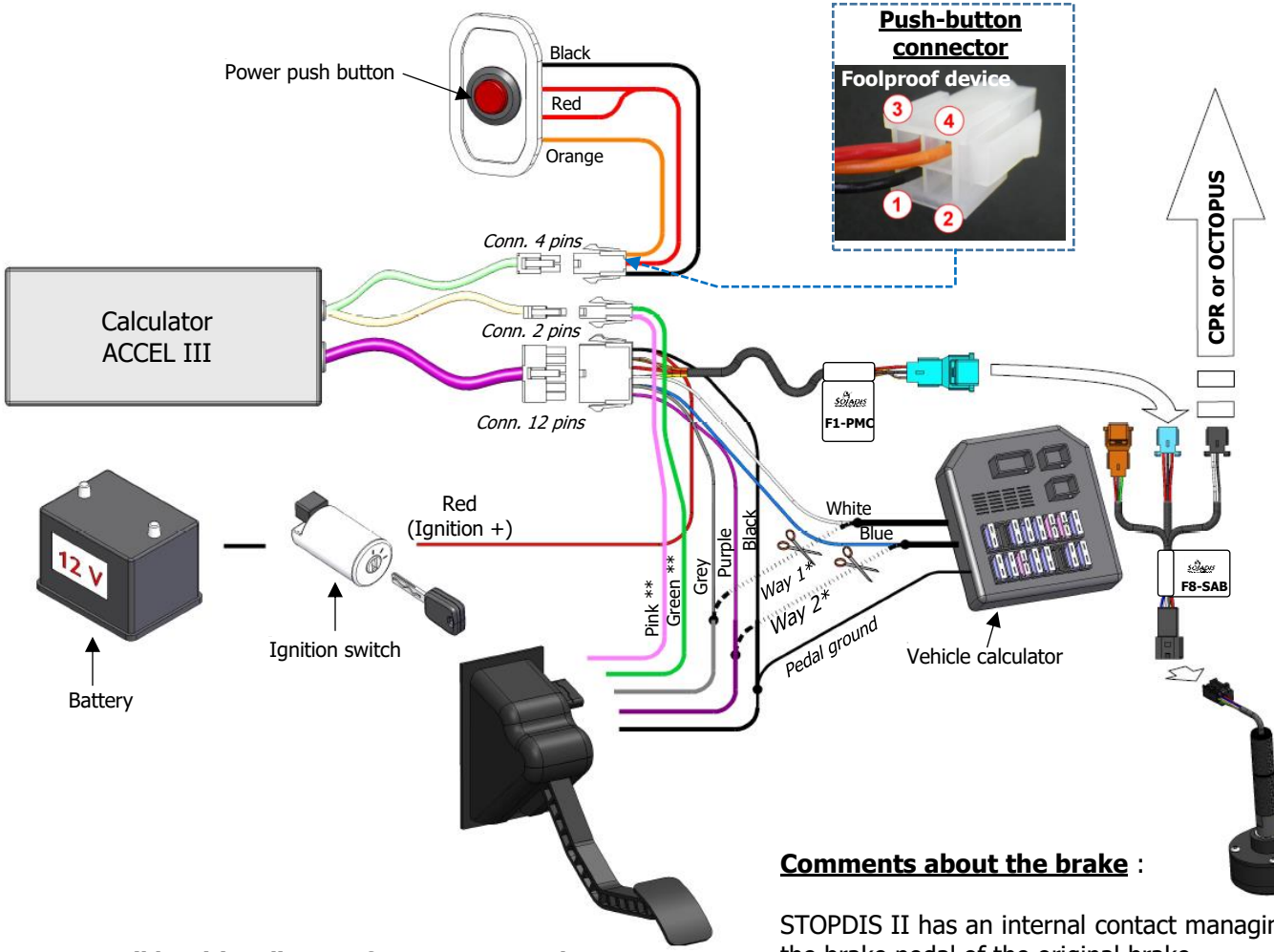
It enables the deactivation of the the speed limiter (*cf. Example of use of the "Kick-Down Contact" in order to deactivate the speed limiter on PEUGEOT and CITROËN vehicles).*

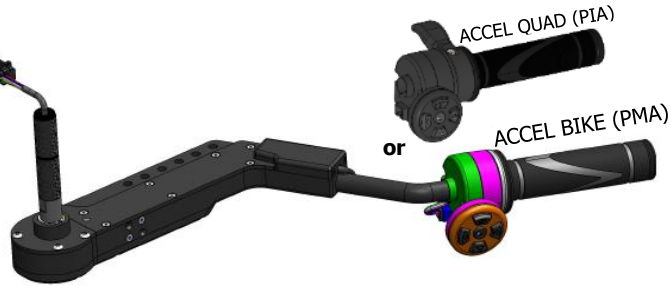
Comments about the brake :

STOPDIS II has an internal contact managing its own BRAKE info. You don't need to wire on the brake pedal of the original brake.
Concerning the adjustment on the info brake, please refer to the user manual of STOPDIS II.

Wiring of ACCEL BIKE+MINI KEYPAD and ACCEL QUAD+MINI KEYPAD (mounting with STOPDIS II)



Compatible wiring diagram for PMA, PGA and PIA references.



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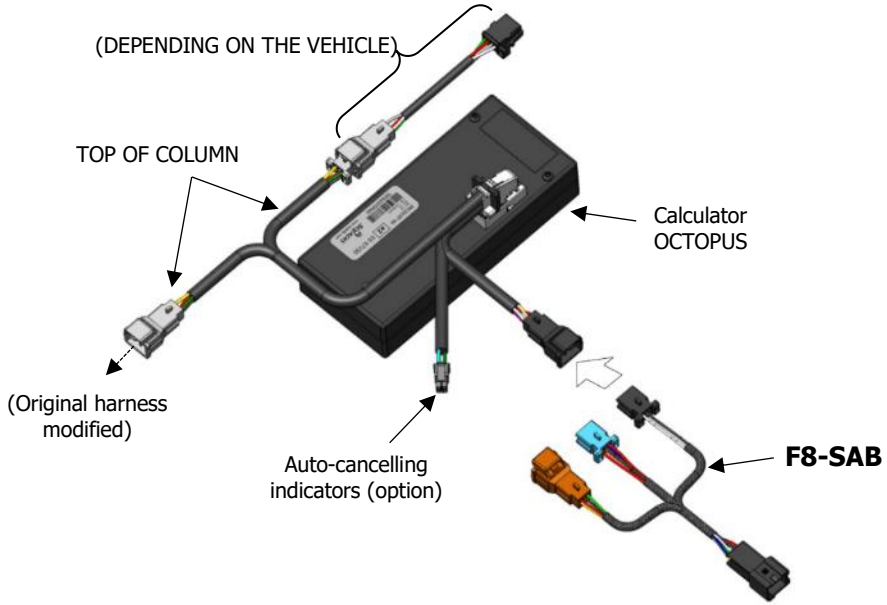
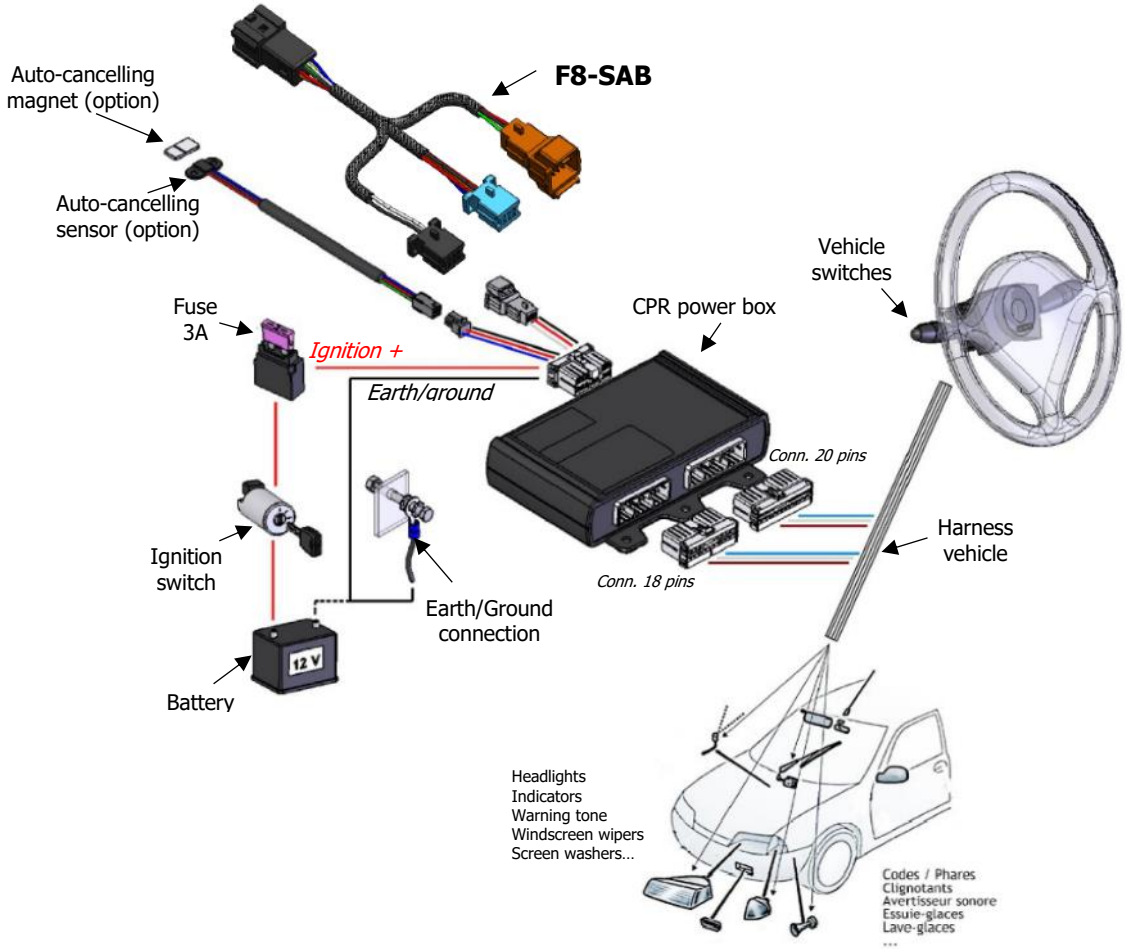
In order to install ACCEL BIKE + MINI KEYPAD or ACCEL QUAD + MINI KEYPAD, the F8-SAB harness' black connector is connected on the connector normally used for the infra-red receiver from COMDIS (please look at the following wiring).

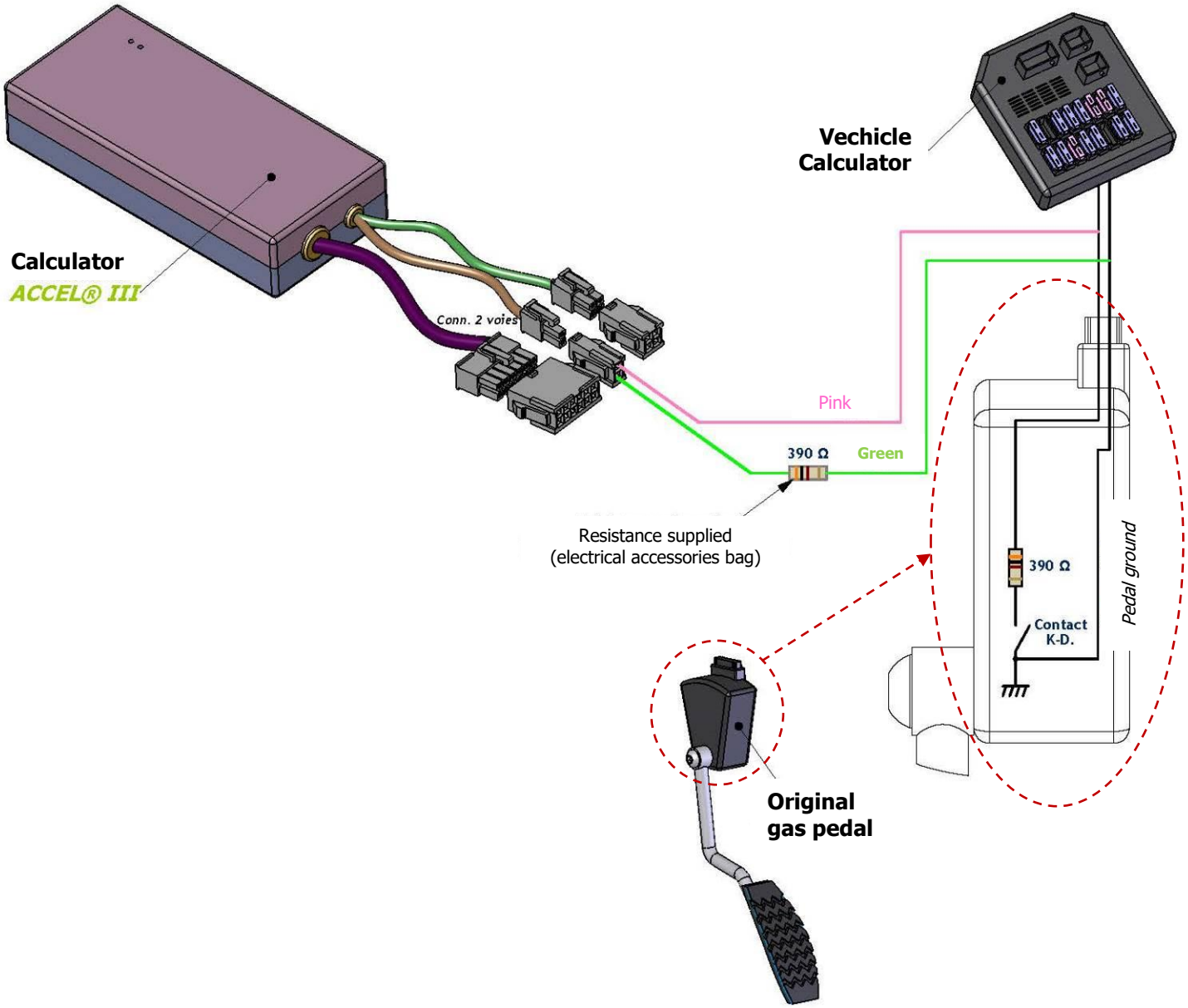
Wiring on OCTOPUS (mounting on a STOPDIS II)



Wiring on CPR (mounting on a STOPDIS II)



Example of use of the "Kick-Down Contact" in order to deactivate the speed limiter on PEUGEOT and CITROËN vehicles:



The "Kick-Down Contact" of the car closes up at the end of pedal's acceleration stroke allowing the driver to disable the speed limiting device if needed.

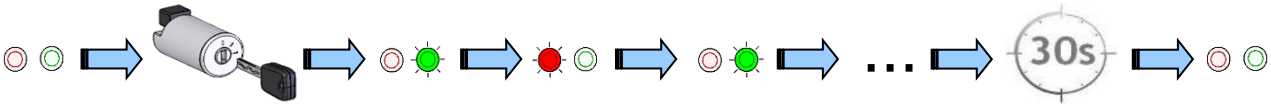
The ***ACCEL BIKE*** as well as ***ACCEL QUAD*** combined with the "Kick-Down Contact" activated and the 390 Ω electrical resistances, both wired as below, enable to deactivate the speed limiter by fully accelerating with the ***ACCEL BIKE*** *or the* ***ACCEL QUAD****.*

Repair of ACCEL BIKE/ACCEL QUAD

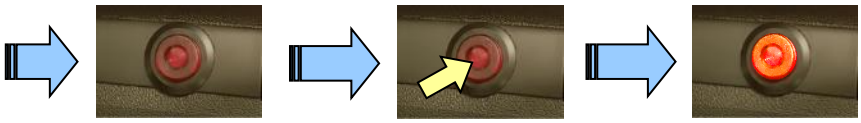
Rapid diagnosis of *ACCEL BIKE /ACCEL QUAD*

The red and green Led lights on the calculator enable to make a quick and simple diagnosis of the system.

System powering-up :



- From the moment the vehicle starts on, the red and green Led lights flash alternatively.
- *ACCEL BIKE* can be activated (by a pressure on the push-button) during the 30s following the starting of the vehicle.

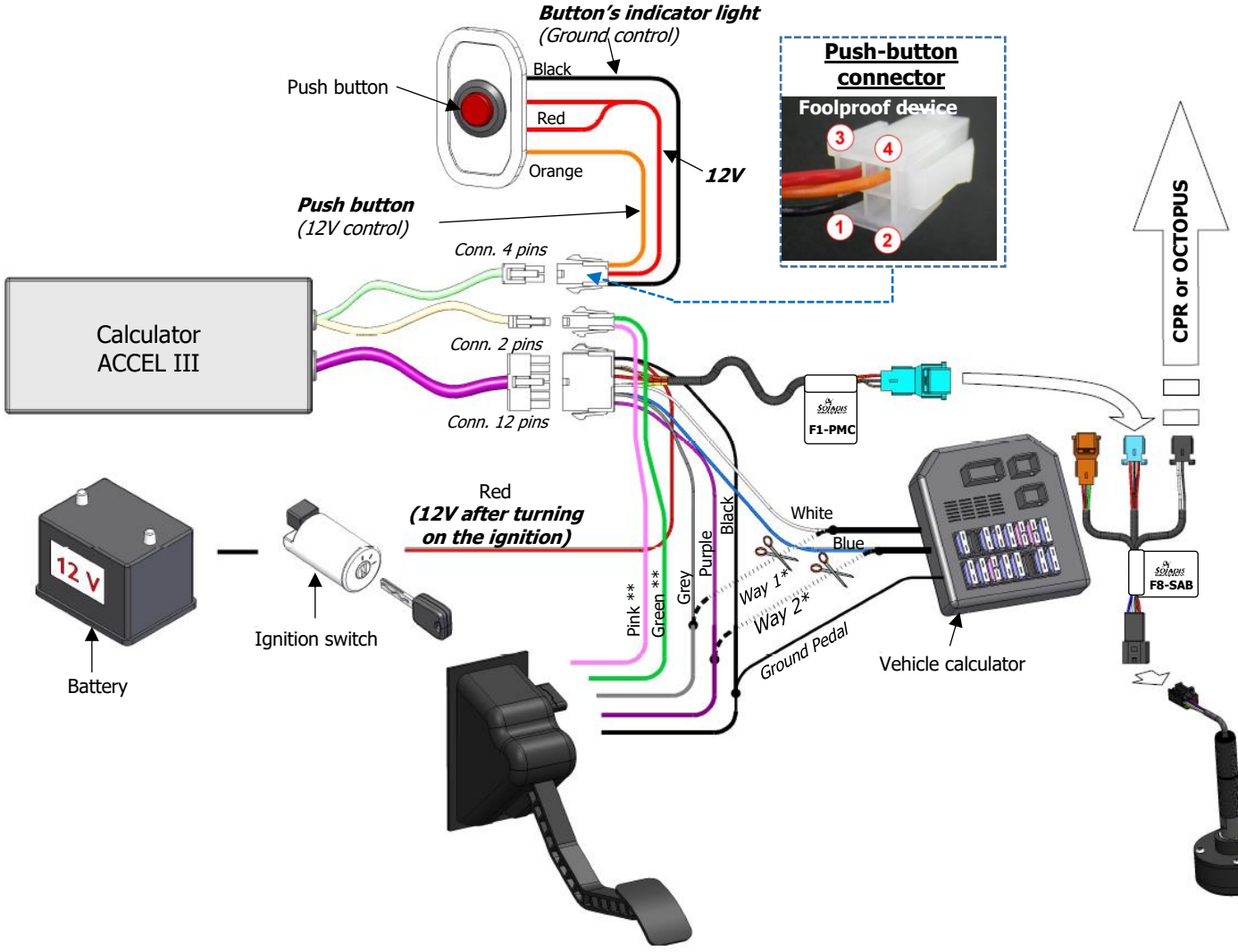


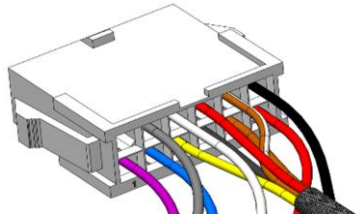
- After the activation, the push-button's red LED light lights up.
- If *ACCEL BIKE* is not activated within 30s, you must turn the ignition off and turn the contact back on to be able to activate it.

Diagnosis of *ACCEL BIKE/ACCEL QUAD*

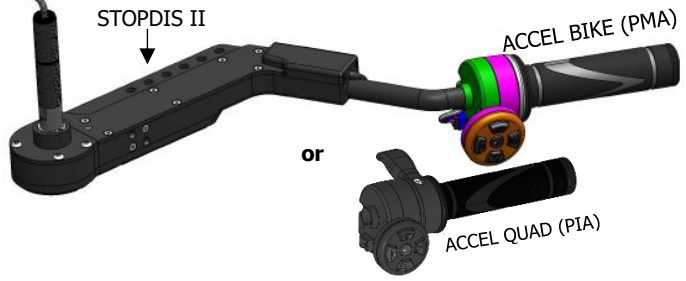
Function	Led lights	Indicator light
Contact turned off		
Contact switched on – 30 first seconds *Delay before activation of ACCEL BIKE or ACCEL QUAD*		
Contact switched on – after the 30 first seconds *Activation of ACCEL BIKE or ACCEL QUAD impossible*		
ACCEL BIKE or ACCEL QUAD released *(with ACCEL BIKE or ACCEL QUAD activated – Brake not activated)*		
ACCEL BIKE or ACCEL QUAD activated *(with ACCEL BIKE or ACCEL QUAD activated – Brake not activated)*		
ACCEL BIKE or ACCEL QUAD fully activated *(with ACCEL BIKE or ACCEL QUAD activated – Brake not activated)*		
Brake activated (*with ACCEL BIKE or ACCEL QUAD activated*)		

Voltage references of ACCEL BIKE/ACCEL QUAD (mounting with STOPDIS II)

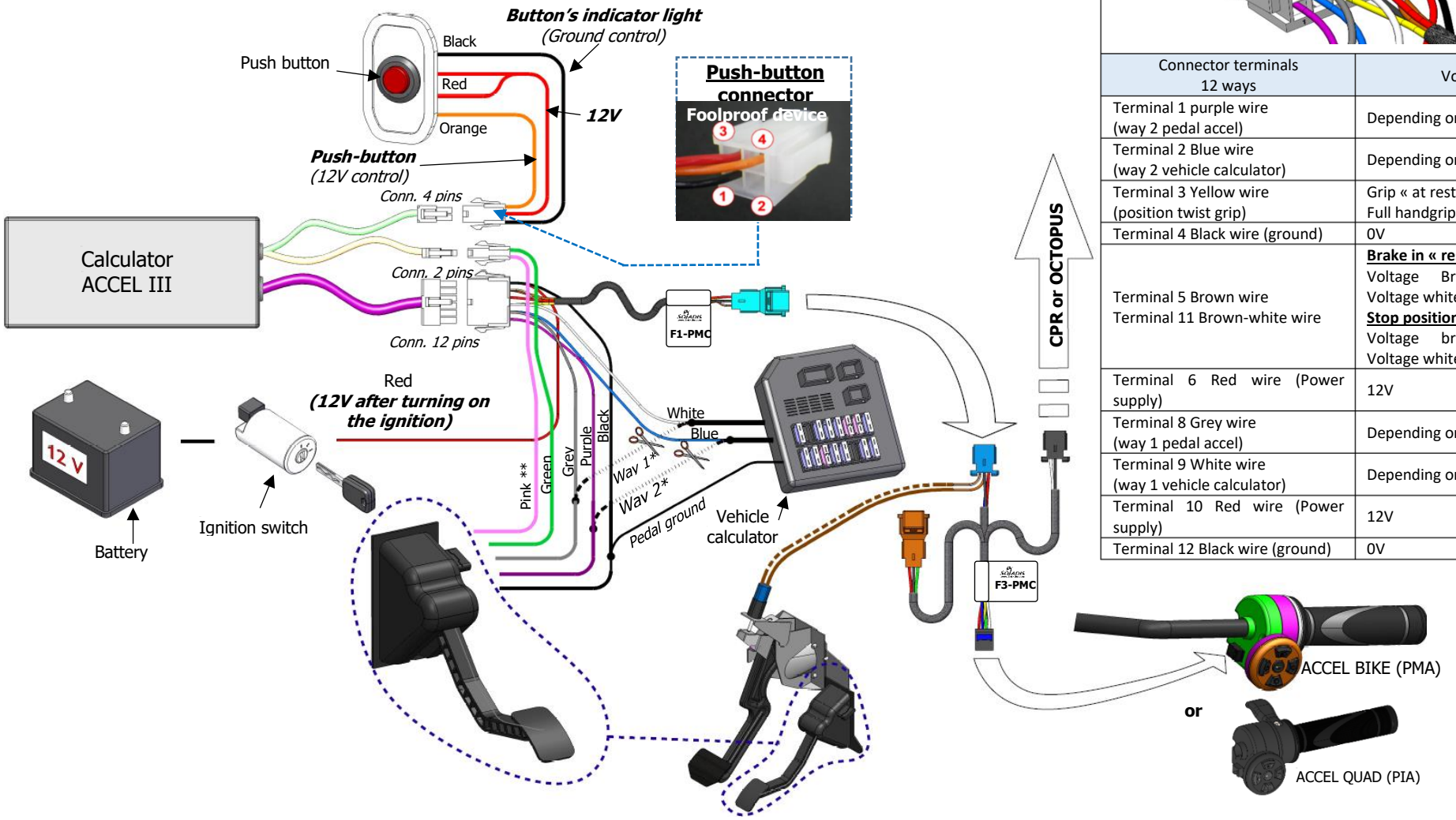


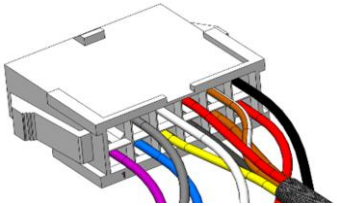


Connector terminals 12 ways	Voltage
Terminal 1 purple wire (way 2 pedal accel)	Depending on the vehicle
Terminal 2 Blue wire (way 2 vehicle calculator)	Depending on the vehicle
Terminal 3 Yellow wire (position twist grip)	Grip « at rest » : 0V to 0.35V Full handgrip : 2.5V to 2.85V
Terminal 4 Black wire (ground)	0V
Terminal 5 Brown wire (info stop)	Brake in « at rest » position = 0V Position « stop » = 12V
Terminal 6 Red wire (Power supply)	12V
Terminal 8 Grey wire (way 1 pedal accel)	Depending on the vehicle
Terminal 9 White wire (way 1 vehicle calculator)	Depending on the vehicle
Terminal 10 Red wire (Power supply)	12V
Terminal 11 Brown-white wire	12V
Terminal 12 Black wire (ground)	0V



Voltages reference of ACCEL BIKE/ACCEL QUAD (mounting on a brake excepted STOPDIS II)



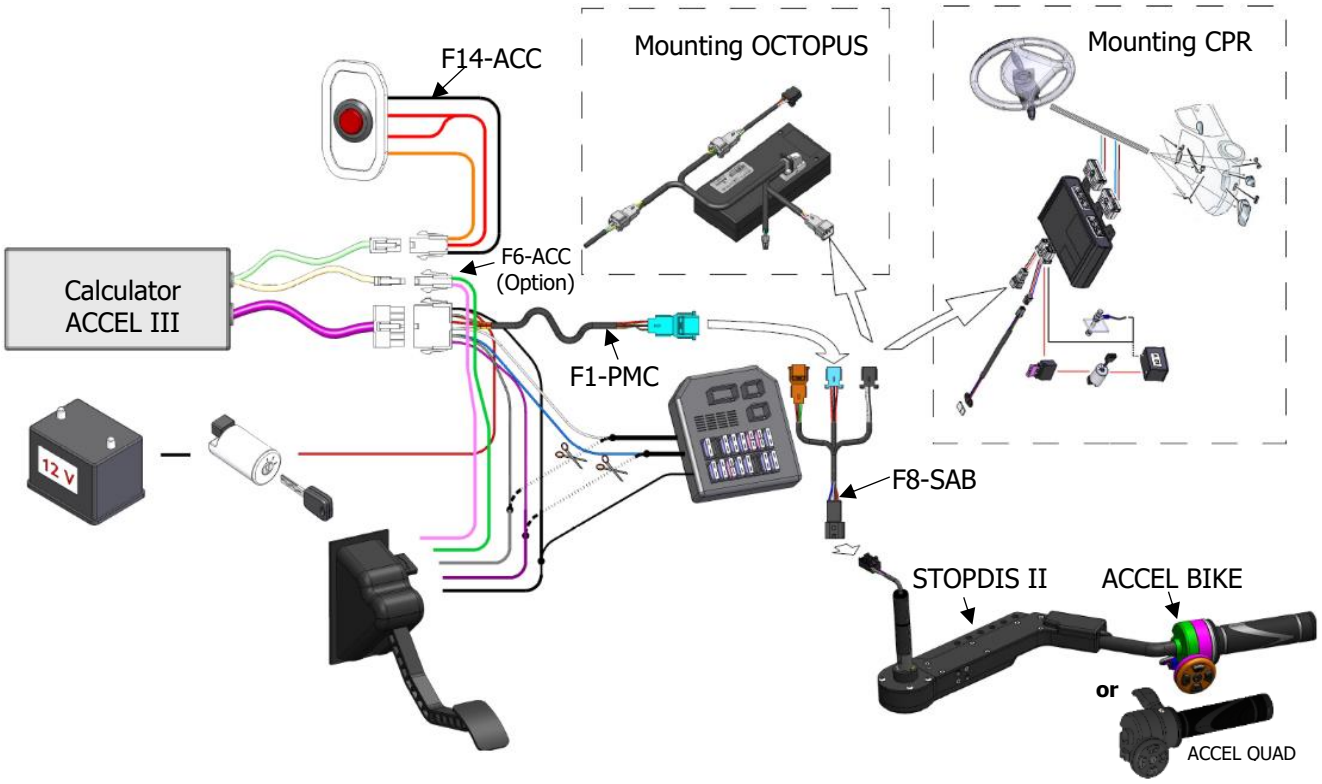


Connector terminals 12 ways	Voltage
Terminal 1 purple wire (way 2 pedal accel)	Depending on the vehicle
Terminal 2 Blue wire (way 2 vehicle calculator)	Depending on the vehicle
Terminal 3 Yellow wire (position twist grip)	Grip « at rest » : 0V to 0.35V Full handgrip : 2.5V to 2.85V
Terminal 4 Black wire (ground)	0V
Terminal 5 Brown wire Terminal 11 Brown-white wire	**Brake in « rest position"** : Voltage Brown wire ≠ Voltage white-brown wire **Stop position** : Voltage brown wire = Voltage white-brown wire
Terminal 6 Red wire (Power supply)	12V
Terminal 8 Grey wire (way 1 pedal accel)	Depending on the vehicle
Terminal 9 White wire (way 1 vehicle calculator)	Depending on the vehicle
Terminal 10 Red wire (Power supply)	12V
Terminal 12 Black wire (ground)	0V

Spare parts of ACCEL BIKE/ACCEL QUAD

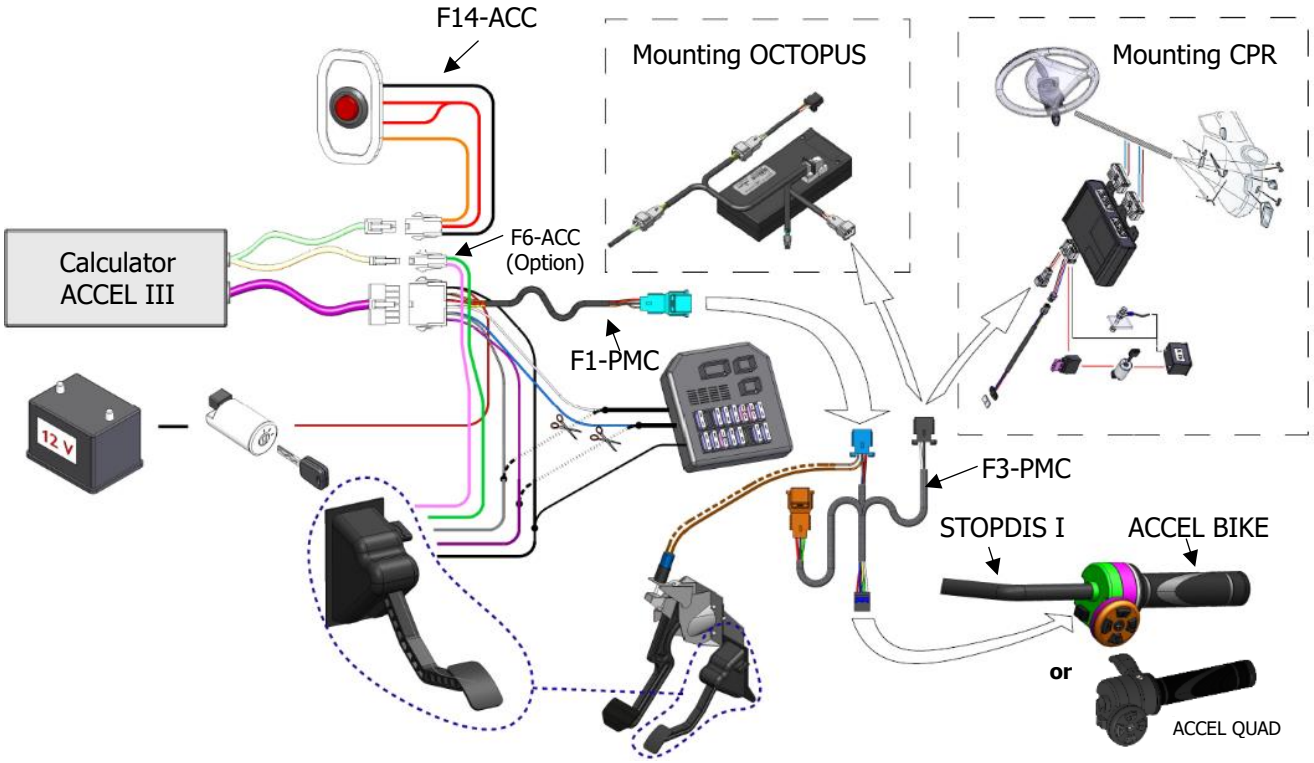
MOUNTING WITH STOPDIS II	
ACCEL BIKE/ACCEL QUAD	ACCEL BIKE + MINI KEYPAD or ACCEL QUAD + MINI KEYPAD
F1-PMC (Main harness (12 ways) for ACCEL BIKE)	F1-PMC (Main harness (12 ways) for ACCEL BIKE)
F14-ACC (Harness push-button / LED 4 ways)	F14-ACC (Harness push-button / LED 4 ways)
F6-ACC (Harness vehicle 2 ways)	F6-ACC (Harness vehicle 2 ways)
STOPDIS II(*)	STOPDIS II(*)
ACCEL BIKE or ACCEL QUAD	ACCEL BIKE + MINI KEYPAD or ACCEL QUAD + MINI KEYPAD
F8-SAB (Universal interface Accel-Bike <-> ACCEL & CPR/Octo)	F8-SAB (Universal interface Accel-Bike <-> ACCEL & CPR/Octo)
	Harness (**) + calculator CPR or OCTOPUS

(*) *2 versions available for STOPDIS II with locking system or STOPDIS without locking* system
(**) *Depending on the vehicle*



MOUNTING WITH STOPDIS I (or any other brake than STOPDIS II)	
ACCEL BIKE/ACCEL QUAD	ACCEL BIKE + MINI KEYPAD or ACCEL QUAD + MINI KEYPAD
F1-PMC (Main harness (12 ways) for ACCEL BIKE)	F1-PMC (Main harness (12 ways) for ACCEL BIKE)
F14-ACC (Harness push-button / LED 4 ways)	F14-ACC (Harness push-button / LED 4 ways)
F6-ACC (Harness vehicle 2 ways)	F6-ACC (Harness vehicle 2 ways)
F3-PMC (Accel-Bike Interface <-> hors STOPDIS II)	F3-PMC (Accel-Bike Interface <-> hors STOPDIS II)
STOPDIS I	STOPDIS I
ACCEL BIKE or ACCEL QUAD	ACCEL BIKE + MINI KEYPAD or ACCEL QUAD + MINI KEYPAD
	Harness (**) + calculator CPR or OCTOPUS

(**) *Depending on the vehicle*



Technical characteristics of the *ACCEL BIKE/ACCEL QUAD*

Operating temperature:

- Between – 40°C and + 85°C

Power:

- 12 V (between 10 and 16 V)

In compliance with regulation ECE 10R05

Simulation of the accelerator pedal's electronic information:

- 2 analogical linear ways, increasing or decreasing, configurable from 0 to 5 V.
- 1 configurable contact closable at the beginning or at the end of pedal travel.

⇨ For any vehicle needing different signals, please contact SOJADIS or your dealer.

Sojadis
PLUG & DRIVE

CRÉATEUR d'aides à la conduite

Place du Maréchal Leclerc - Jallais - 49510 Beaupréau-en-Mauges - FRANCE + 33 2 41 64 09 57 sav@sojadispro.com www.sojadispro.com

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