# **CAROSPEED** menox

- INSTALLATIONSANVISNING S
- INSTALLATION INSTRUCTIONS GB
  - EINBAUANLEITUNG D

- MANUEL D'INSTALLATION (F)
- INSTRUCCIONES DE INSTALACIÓN (E)
- ISTRUZIONI PER L'INSTALLAZIONE
  - MONTERINGSANVISNING (N









# MANUFACTURER CERTIFICATE

The Manufacturer Certificate must follow the product and be accessible when the adaptation is being inspected.

# **PRIOR TO INSTALLATION**

Make sure the goods has not been damaged during transport and that it corresponds to your order.

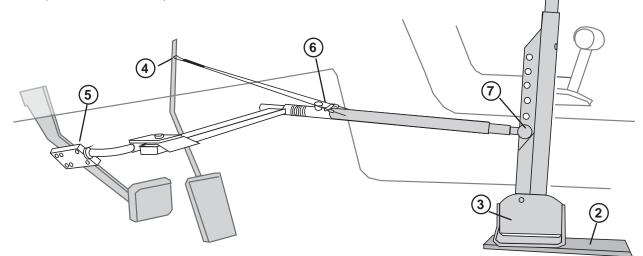
Read the User Instructions for Carospeed Menox and make sure you understand how it will be operated after the installation.

Make sure there is sufficient space for the installation.

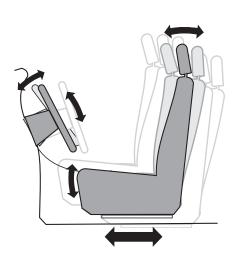
	_	pieces			pieces
0 0	Installation bar	1		M12x70 DIN 933 8.8	1
	1			M12x60 DIN 931 8.8	1
ం్ధింసంసంసంసంసంసంసంసం	Bracket 550	1		M12x25 DIN 933 8.8	1
	Wire	1	<u>]</u>	M8x60 DIN 933 8.8	2
		1	<u>[</u>	M8x40 DIN 933 8.8	4
	Brake plate 0330	·	<b>j</b>	M8x25 DIN 933 8.8	2
$\overline{+}$			<u> </u>	M6x40 DIN 933 8.8	2
	Brake plate 0340	1		M6x25 DIN 933 8.8	1
00			₽	M5x5 DIN 916	1
10 10	U-bracket	1	$\bigcirc$	M12 DIN 985	2
0			Ø	M8 DIN 985	2
	Ball- and fork joint	1+1	Ô	M8 DIN 934	2
			Ø	M6 DIN 985	3
-0	Cable shoe	1	0	A12 DIN 6798A	1
A			$\odot$	A8 DIN 9021	2
<i>순</i> 판판	Wire lock	1	0	A8 DIN 6798J	7

# INSTALLATION SEQUENCE

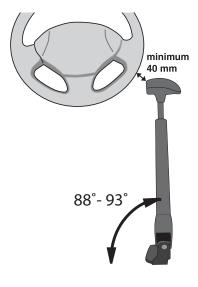
- 1. Determine the position.
- 2. Prepare the mounting bracket and mounting to the seat attachments.
- 3. Mount the lever on the mounting bracket and make adjustments.
- 4. Mounting to the accelerator pedal.
- 5. Mounting to the brake pedal.
- 6. Adjustment of hand control assembly
- 7. Installation of Hill-holder and other accessory features
- 8. Adjustments
- 9. Testing and test drive of installation.
- 10. New adjustments.
- 11. Customer test drive.
- 12. Adjustments needed by customer.



LOCATION



80°-85°



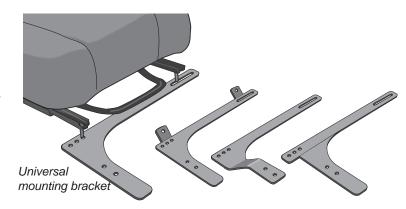
Adjust steering wheel and seat position according to user needs. Find a location for the hand control that is suitable for the customer. The handle may not be placed outside steering wheel surface (impact surface), marked with a dotted line. The inclination of the hand control shall be between **80°-85° towards the back**. The hand control may, according to rules, not be placed nearer to the steering wheel than 40 mm. It must however be near enough in order to reach the steering wheel and to be comfortable to use.



# **MOUNTING BRACKET**

#### Universal munting bracket

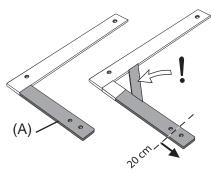
There is a universal mounting bracket available for Carospeed Menox. The Mounting bracket is fixed in the front attachments of the seat and can be adapted further to fit the specific vehicle. If the original seat bolts are replaced, these shall be of at least the same steel quality and sort, but 10 mm longer.



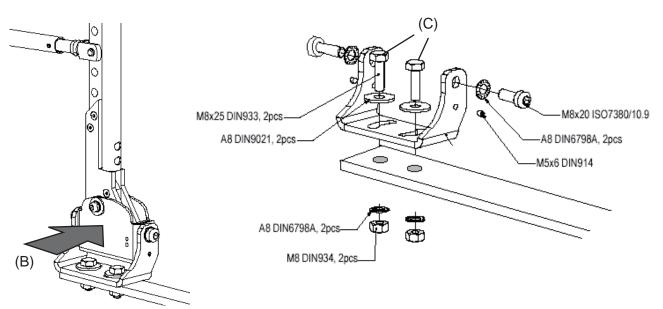
#### Mounting bracket fabricated by adaptation technician

A Carospeed Menox mounting bracket shall be fabricated in a steel quality between S235 and S355. Dimension shall be at least 30-40 mm x 6 mm. An installation bar (A), with drilled holes, is delivered in the package. This can be used as a start-up for the rest of the mounting bracket.

If the installation bar exceeds 20 cm, a cross reinforcement must be welded onto the bracket.



# **MOUNTING THE LEVER**



The Hill-holder housing (B) shall be mounted as near to the centre console as possible.

Leave the fastening bolts loose; tighten them only after the entire device has been assembled.

Tighten the bolts (C) with 45 Nm torque.

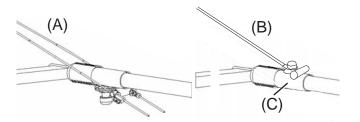


# MOUNTING TO ACCELERATOR PEDAL

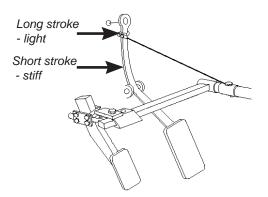
#### Mounting when using a wire

There are two options for mounting to the accelerator pedal; either use a wire (B) or use the pair of wires (A) delivered with Carospeed Menox.

The advantage of using alternative (A) is the adjustability and that the fixing is placed underneath the bar, thereby not risking to get stuck to the steering wheel cover.



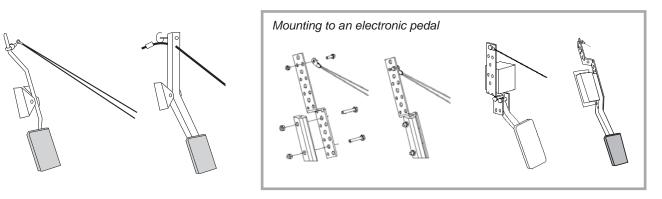
Tighten the accelerator so that there is no loose movement. This can be done by moving the accelerator carriage (C).



A good rule is to mount the accelerator as high as possible, making acceleration lighter.

#### NOTE!

Make sure that bar and wires do not risk getting entangled in anything while braking.



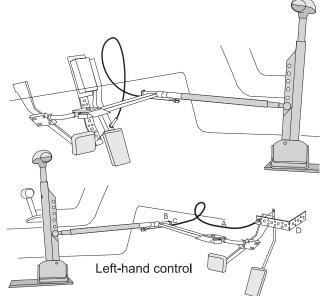
#### Mounting to accelerator pedal using the optional Wire kit

When it is not possible to extend the accelerator pedal upwards, a wire kit can be ordered as option. The wire and its covering is of high quality and extension plates are included.

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Art. No: 420315 "Wire pack for left side HC installation"

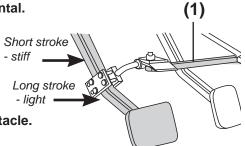
The wire kit can also be used for Installing the same Carospeed Menox to be used with the left hand.



# **GB** MOUNTING TO BRAKE PEDAL

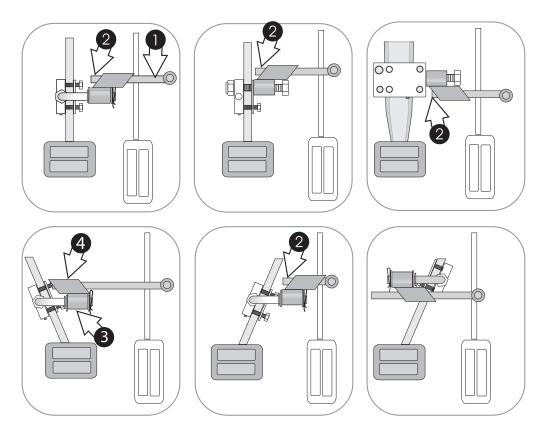
#### IMPORTANT! The angled brake bar (1) must be mounted horizontal.

The angled brake bar (1) should be placed as high as possible, not to be in the way for the brake pedal etc. Part 3 can either be mounted on top of or under part 4, depending on what is best for the installation.



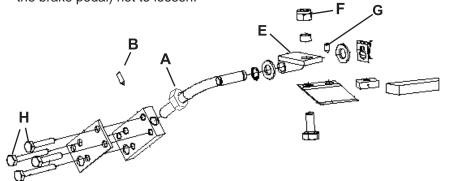
IMPORTANT! The leftover extra section of the angled bar (2) - <sup>lig</sup> that is sticking out from part 4 shall be cut off, not to be an obstacle.

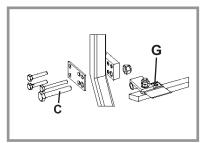
#### IMPORTANT! The stop screw (G) must be properly tightened (40 Nm)

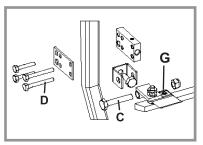


There are many types of brake pedals. The axle can be pointing straight up or be slanting to the side.

- Remember to tighten nut (A) and hexagon screw (B), these must be tightened.
- There is a long (C) and a short (D) screw for the mounting plates, Use the one that fits the best.
- Do not tighten nut (F) to much, part (E) must be able to move.
- Make sure no parts are in contact with the vehicle centre console when the steering wheel is rotated from one extreme to the other.
- The screws (H) must be tightened hard enough (without deforming the brake pedal) not to loosen.





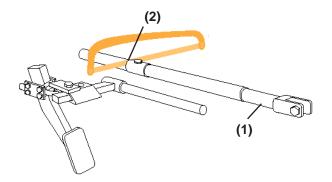


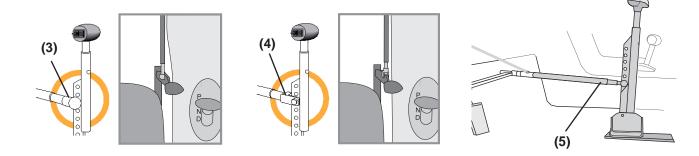


# ASSEMBLY AND ADJUSTMENT OF HANDLE

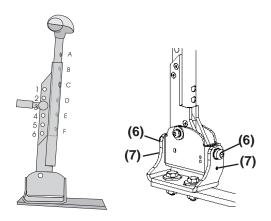
• Twist the adjustment bar (1) to make it go inside the connection axle. Cut the latter to the proper size (2). It may only be cut to 18 cm. If an extension is necessary this may only be 7 cm.

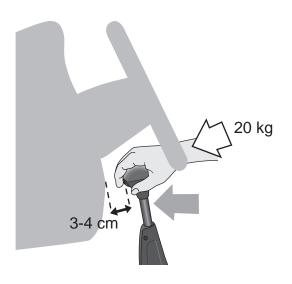
• Mount either a ball joint (3) or a fork joint (4) onto the connection axle. The ball joint is of advantage if the vehicle centre console widens in the front. Tighten the locking screw (5).





- Mount the connection axle onto the hand control, hole 1-6.
- Adjust the height of the handle by loosening the hexagon screw and moving between the holes A-F. Tighten hexagon screw.
- Adjust sideways by loosening screws (6) and (7). Adjust and tighten.





In Europe there is no comprehensive standard concerning the maximum amount of applied force a hand control must withstand before breaking.

For Carospeed Menox hand control a space of 3-4 cm must remain between the knob and the dashboard while braking with a force of 20 kg.

IMPORTANT! This must be tested while the engine is running!



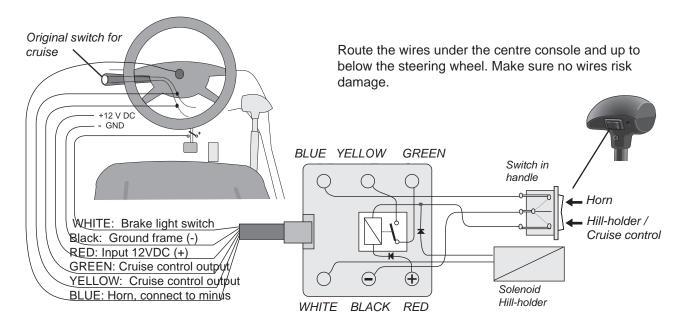
# INSTALLATION OF THE FUNCTIONS

#### Hill-holder:

Connect the red wire to a fused wire that switches off at the ignition switch. The brake wire, for example, can be used as the voltage cable. Black wire to frame ground (-). Connect white wire to brake light switch.

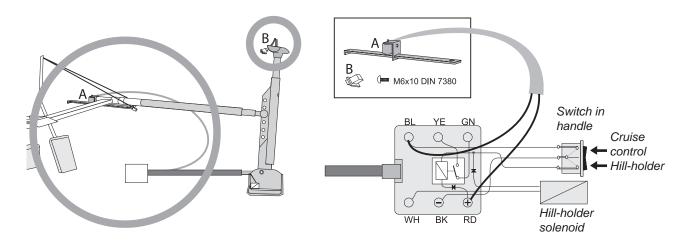
#### Cruise control:

Connect the parallel green and yellow wires to original set function for cruise control. If the cruise control has a resistor you must install a resistor of the same Ohm on the green wire.



### INSTALLATION OF THE OPTIONAL MECHANICAL CRUISE CONTROL

The optional mechanical cruise control does not affect the ability to brake or to accelerate, but moves along when the hand control is used.



• Replace the switch in the hand control knob with the switch (B) that is delivered in the package. One side of the new switch is a lock switch, for the purpose of not needing to press down the switch continuously while using the cruise control.

• Mount the cruise control (A) in the M6 drilled

hole placed by the angled brake bar. Use the M6 hexagon screw, delivered in the package.

• Pull the hand control to full acceleration and adjust the cruise control so that there is no extra play. **IMPORTANT!** The cruise control must however be able to move when accelerating and braking.

# **OPTIONAL PRIMARY ELECTRICAL FUNCTIONS**



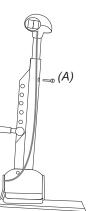
1. Cut away material from the top and bottom cover of the handle, according to the cast markings.

2. Loosen the height adjustment screw (A) and pull the flat, 6-channel cable up to the handle.



3. The wires are thin and must therefore be double folded before pinched inside the connectors.

**IMPORTANT!** This must be made very carefully.



White

Black

4. Push the connectors into the

switches. Make sure they do not

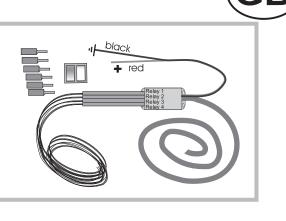
come in contact with each other.

Fuse

+12 Vdc

ON/OFF

Red Green Yellow Blue



Hill-holder Cruise control

> The switches can be used for activating for example:

3

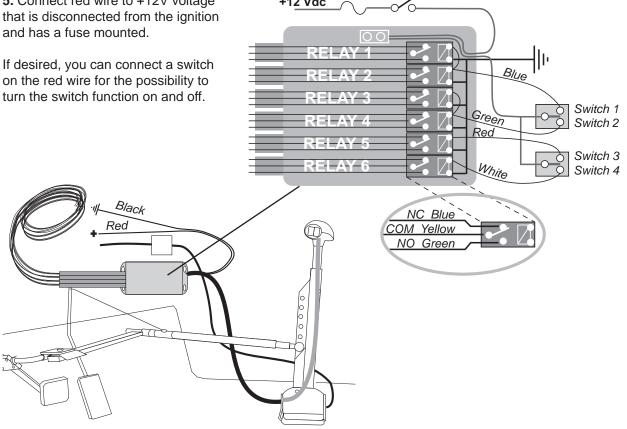
4

- indicators

2

- wipers
- headlight
- washer
- horn
- hazard lights
- +/- on automatic gear
  - box

5. Connect red wire to +12V voltage that is disconnected from the ignition





The connection instructions in the diagram are approximate. Car models have differences, for example functions may be minus or plus controlled.

The horn function or similar functions can be connected with parallel connections.

