**1 Connecting cable MS**

Câble de raccord MS

2 Inlet cable MK

Câble d'entrée MK

3 Battery Charger BL

Chargeur de batterie BL

4 Extension cable SK

Câble de rallonge SK

5 Multiple socket

Prise multiple

6 Engine heater

Chauffe-moteur

7 Cab heater

Appareil de chauffage pour automobile

8 Heat shield

Protecteur thermique

9 Pump

Pompe

Certified according to:



ASSEMBLY INSTRUCTIONS

INSTRUCTIONS D'ASSEMBLAGE

TYP US 485

EFFEKT: 550W / 110-120V ~



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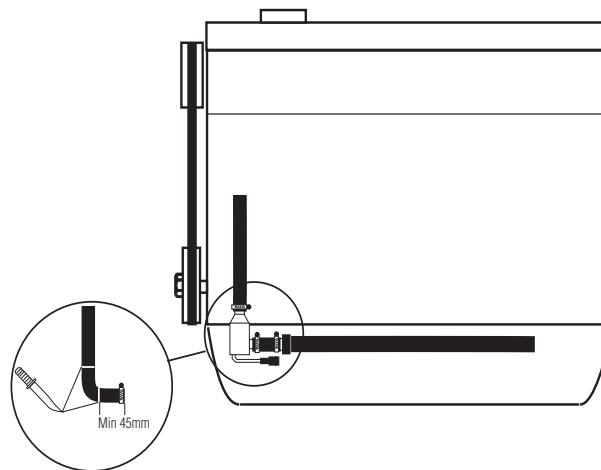
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US 485

ENGLISH

NOTE! If your vehicle/engine is missing in this assembly instruction:

- Check if an **assembly kit** is required for your vehicle. Information regarding which products to use is available on www.calix.se, "search product".
- Your vehicle has been added to the assembly instruction in a later edition, the latest edition is always available on www.calix.se.



LANDROVER

Freelander II 3.2 i6 HSE 2007-
VOLVO

S60 II T6 2010- ⚙ B6304T4

S80 3.0 T6 2007- ⚙ B6304T2

S80 3.2 2007- ⚙ B6324S

S80 II T6 2011- ⚙ B6304T4

V60 T6 2011- ⚙ B6304T4

V60 AWD T6 2011- ⚙ B6304T4

V70 3.0 T6 2008- ⚙ B6304T2

V70 3.2 2008- ⚙ B6324S

V70 III T6 2011- ⚙ B6304T4

XC60 T6 2010- ⚙ B6304T4

XC60 T6 2010- ⚙ B6304T2

XC70 T6 2010- ⚙ B6304T4

XC70 T6 2010- ⚙ B6304T2

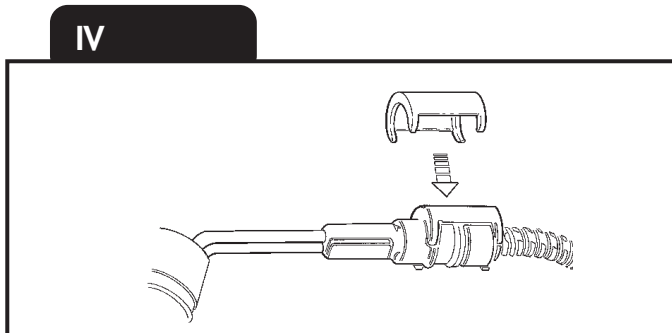
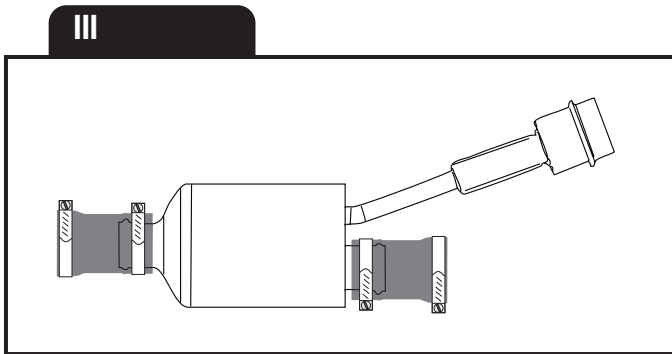
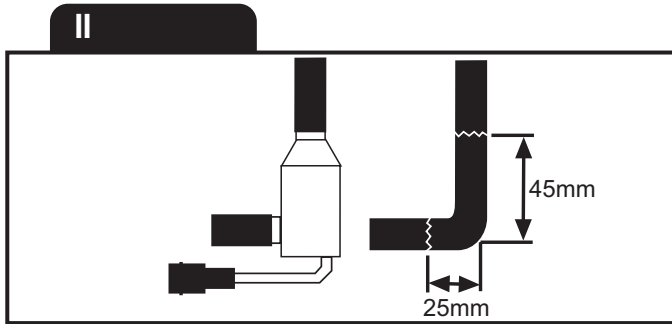
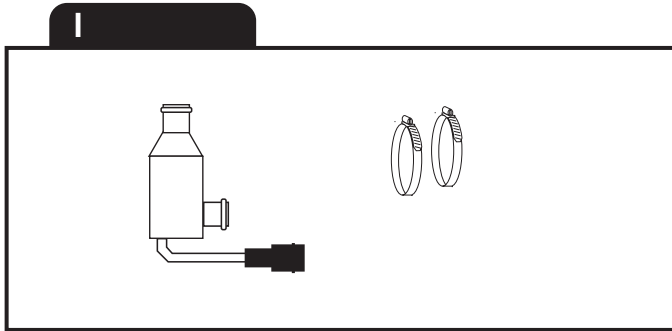
XC70 3.2 2008- ⚙ B6324S

XC90 3.2 2006- ⚙ B6324S

= Motortyp

⚙ = Moottorityyppi

= Engine model


ENGLISH

- A. Read all installation instructions thoroughly and completely. Check that all supplied parts, according to step I, are included. Overview illustrations, details not shown. NOTE! This heater requires an assembly kit in certain cases, see the Calix recommendation table or www.calix.se for more information.
- B. Installation of the heater
1. Drain the coolant.
 2. Install the engine heater on the hose shown in the figure. NOTE! This heater requires an assembly kit in certain cases, see the Calix recommendation table or www.calix.se for more information. Where exact measurements are missing by the engine figure, the hose is cut according to figure II. The figures next to the engine illustration show cutting of the hose. Make sure that the hose clamps end up completely inside of the raised parts on the pipe ends, figure III. NOTE! Make sure that the engine heater's housing is not in contact with the engine block or any other equipment.
 3. The cable with the inlet is routed into the engine compartment, and to the engine heater. Push together the quick-coupling between the engine heater and the cable, completely and until it bottoms, so that the O-rings seals tightly and no gap remains. NOTE! Apply a few drops of oil on the O-ring, this facilitates connecting. It is very important that the connection is performed in this manner.
 4. Fill up with coolant and vent the cooling system, see the instruction book. Run the engine and check that there is no leakage.
- C. Fitting of lead-in
See separate mounting instruction.
- D. Test-running
1. Check that the cooling system is full of coolant.
 2. Make sure that all air has been removed from the cooling system as the heater element will immediately burn out if surrounded by air.
 3. Check that all seals are tight even with the engine warm.
 4. Check the heater by connecting it to an earthed point. A low sizzling noise will be heard when the water on the surface of the heater element boils.
- E. Important
1. Always use anti-freeze in the cooling system.
 2. The engine heater must only be connected to an earthed point. There must always be a continuous internal earth connection running from the engine heater casing through the body and right up to the earthed point.
 3. Use only Calix MS kabel for connection to the mains network.
 4. Inspect the cable periodically for damage or ageing. A damaged cable must be replaced without delay.
 5. No parts of the installation must be allowed to come into contact with moving or hot parts of the engine. The distance to all parts of the exhaust system must be at least 50 mm (2"). (Also applicable for the turbo unit if any.) Otherwise Calix Heat Shield must be used.
- F. Warning
The heater element can be burnt out if:
- the heater is connected to intermittent (pulsating) voltage
 - the coolant is dirty
 - there is insufficient coolant
 - there is air in the system

- there is sludge in the cooling system
- radiator cement is added to the coolant

In such cases the warranty is not valid.

Improper installation procedures can cause serious personal injury. Installation should be performed only by a qualified technician.

- Read all instructions thoroughly before starting.
- Observe all safety precautions when working under a vehicle.
- Beware of sharp edges.
- Always wear safety glasses to help protect eyes.
- Always wear protective gear as gloves and use caution when using hand tools.

Improper use of the engine preheating may cause short circuits, fires and serious or fatal personal injury.

- Always connect the connecting cable to a grounded socket protected by a residual current breaker. The socket must be protected from water, moisture and other fluids.
- Never connect the engine preheating system to a conventional socket, regardless of whether the socket protected or not.

Using unsuitable or damaged Sockets and connecting cables and disregarding accepted safety practices may cause short circuits, accidents, and serious or fatal personal injury.

- Never use damaged sockets and connecting cables. Check connectors and cables for damage prior to each use.
- Never modify or repair electrical components.
- Never allow connectors to come into contact with water, moisture and other fluids.

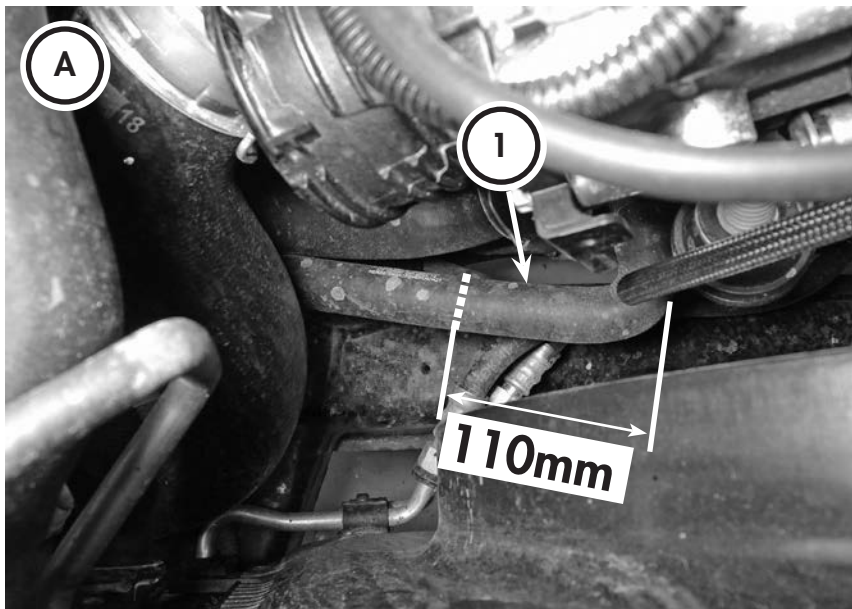
Rekommenderad inkopplingstid för motorvärmare					
Recommended connection period for engine pre-heater					
Empfohlene Einschaltdauer für Motorvorwärmer					
C°	-20 C°	-10 C°	-5 C°	0 C°	+10 C°
Hours	3	2	1,5	1	1

WARRANTY

Our products are covered by a 36-month warranty commencing on the date of purchase. The warranty applies to defects in material or manufacture. This warranty does not cover defects arising from incorrect assembly or installation, or from inappropriate use. In case of a claim under this warranty, return the defective item/part together with the receipted invoice, to your Calix dealer. All other claims are excluded from this warranty unless our liability is legally mandatory.

GARANTIE

Nos produits sont couverts par une garantie de 36 mois à partir de la date d'achat. La garantie s'applique aux défauts de matériau ou de fabrication. La garantie ne couvre pas les défauts causés par une installation ou un assemblage incorrect, ou par une utilisation inadaptée. Pour faire valoir cette garantie, renvoyez la pièce/l'élément défectueux accompagné de la facture à votre distributeur Calix. Toute autre demande est exclue de cette garantie, sauf si notre responsabilité est juridiquement imposée.



MERCEDES

E 350 CDI [W/S212] 2009- ⚙OM642

E 350 CDI 4matic [W/S212] 2009- ⚙OM642

GLK 320 CDI [X204] 2008- ⚙OM642

GLK 350 CDI [X204] 2008- ⚙OM642



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1. The heater is installed on the 19mm hose (1) connected to the waterpump.
2. Cut the hose appr. 110mm from the bend of the hose see picture A.
3. Loosen the hose from the waterpump and turn it downwards.
4. Fit the heater according to picture B. Secure the hose that the heater is installed in to the lower radiator hose with a cable tie.
5. Fill coolant and bleed all air from the cooling system. Run the engine and check to make sure that there are no leaks.

- = Motortyp
- ⚙ = Moottorityyppi
- = Engine model