ATTENTION!

Hazard warning:

Improper installation or repair of Webasto heating may cause fire or lead to leakage of deadly carbon monoxide. This Ki-NEN serious injury or death caused.

For installation and repair Webasto heating and cooling systems are needed ei-Specialist company training, technical documentation, special tools and special equipment.

NEVER attempt to install Webasto heating or cooling systems, or not repaired-Center, if you have the company training not completed successfully and thereby acquired the necessary technical skills and necessary for proper equitable th installation and repair technical documentation, tools and equipment To be available.

ALWAYS carefully follow Webasto installation and repair instructions and heed all warnings.

Webasto rejects any liability for problems and damage, which are due to installation by untrained personnel.
### Table of Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Validity</td>
<td>2</td>
</tr>
<tr>
<td>Foreword</td>
<td>3</td>
</tr>
<tr>
<td>General Information</td>
<td>3</td>
</tr>
<tr>
<td>Notes to the Document</td>
<td>4</td>
</tr>
<tr>
<td>Legislative History</td>
<td>5</td>
</tr>
<tr>
<td>Tricks and tips</td>
<td>5</td>
</tr>
<tr>
<td>Heater / Installation Kit</td>
<td>6</td>
</tr>
<tr>
<td>Blower Control</td>
<td>7</td>
</tr>
<tr>
<td>Option Telestart</td>
<td>8</td>
</tr>
<tr>
<td>Preparation of the heater</td>
<td>10</td>
</tr>
<tr>
<td>Exhaust system</td>
<td>14</td>
</tr>
<tr>
<td>Water involvement</td>
<td>15</td>
</tr>
<tr>
<td>Combustion air integration</td>
<td>18</td>
</tr>
<tr>
<td>Fuel Connection</td>
<td>19</td>
</tr>
<tr>
<td>Battery baseplate modification</td>
<td>21</td>
</tr>
<tr>
<td>Final work</td>
<td>23</td>
</tr>
</tbody>
</table>

### Manufacturer and Tradenames

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Tradename</th>
<th>Type</th>
<th>EC Type Approval Number</th>
<th>ABE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DaimlerChrysler (USA) Cherokee</td>
<td>KJ</td>
<td></td>
<td>e4 * 98/14 * 0058 ...</td>
<td></td>
</tr>
</tbody>
</table>

### Engine Types

<table>
<thead>
<tr>
<th>Engine Type</th>
<th>Engine Type</th>
<th>Power in kW</th>
<th>Displacement in cc</th>
</tr>
</thead>
<tbody>
<tr>
<td>30C and 31C (ENR)</td>
<td>diesel</td>
<td>120</td>
<td>2776</td>
</tr>
</tbody>
</table>

Vehicle and engine types and equipment variants, which are not listed in these installation instructions have not been tested. Installation according to these installation instructions may be sein. Der installation of timer and summer / winter switch should be confirmed prior to installation with the customer!
Cherokee 2.8l CRD

Heater / Installation Kit

<table>
<thead>
<tr>
<th>amount</th>
<th>designation</th>
<th>Order No.:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Heater TTC-D with delivery</td>
<td>89244D</td>
</tr>
</tbody>
</table>

In addition:

<table>
<thead>
<tr>
<th>amount</th>
<th>designation</th>
<th>Order No.:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kit Chrysler Cherokee TTC-D from MJ05</td>
<td>90141 86A</td>
</tr>
</tbody>
</table>

NOTE: When installing the heater in vehicles of MJ 2005. Prod Date is earlier.
15/05/2005 (MDH 0515xx) after installation to the latest motor SG - It software fro's instructions to flash..

foreword
These installation instructions apply for the vehicles Chrysler Cherokee 2.8 CRD diesel
- Validity, see page 2 - from model year 2005 and later, when technical modifications to the vehicle do not affect installation, without any liability claims. Depending on the version and features of the vehicle may be necessary during installation with changes in relation to this "installation instructions".

In any case, however, the provisions of the "Installation Instructions" and "Operating and Wartungsan-instructions" for the Thermo Top C to befolgen.Die relevant codes of practice and any information provided by the vehicle manufacturer must be observed during installation.

General information
Installation is carried out in accordance with the generally accepted rules of technology. Unless otherwise described-ben, fasten hoses, lines and wiring harnesses with cable ties to driving-generating own lines and Kabelbäumen.Scharfe edges are to be fitted with edge protectors (split fuel hose)! Bare body parts, such as holes, are with corrosion wax (Tectyl 100K, Order no. 111529).

special tool
-Drehmomentschlüssel For 2.0 to 10 Nm
-Abklemmzangen
-Winkelbohrmaschine
Notes to the document

To give you a quick overview of the individual steps, you will find an identification mark on the outside edge of the top right of each page.

**Mechanical work**

**Electrical integration**

**water involvement**

**Fuel integration**

**exhaust system**

**combustion air**

Special features are highlighted by the following symbols:

- ![Alert](image1)
  - special risk of injury or death Un-cases

- ![Alert](image2)
  - particular risk of damage to components

- ![Alert](image3)
  - Special fire and explosion hazard

- ![Book](image4)
  - Reference to general installation instructions of Webasto component or to vehicle-specific documentation of the manufacturer

- ![Arrow](image5)
  - Recalling a technical feature

- ![Vehicle](image6)
  - The arrow in the vehicle icon shows the position on the vehicle and the Blickrichtung
Removing battery!
- Pressure Drain the cooling system!
transmitted - Fabriknummer the nameplate original on the nameplate duplicate
Dismantle - Motorabdeckung
Do not remove - The correct year from the duplicate label
Attach - Duplikatschild (nameplate) at a suitable location visible
-Sicherungskasten From holder unclip and harnesses back to the bulkhead klap-pen

Removing - Batteriegrundplatte
Dismantle headlights left
Removing radiator grille dry and remove clips at the top and grill pull upwards
Removing - Fußraumverkleidung driver's side
Open - Tankdeckel, aerate tank
close - Tankdeckel again

1 Clips of the grille mounting

1 heater
Electrical integration

Harness implementing

1 grommet

preselection

1 preselection

Fuse holder, K3 relay

1 K3 relay, tapping screw 5,5x9,5, Slice 2 Retaining plate, fuse holder, tapping screw

5,5x9,5, Slice

Option summer / winter switch

1 Summer / winter switch, bore Ø 12mm

Lay wiring harness dosing later along with burning fuel line along the traveling-generating own fuel lines on the underbody
blower control:

The vehicles tested in auxiliary heating operation was not tripped Innenraumüberwachung.Eine control / switching off the inner-area monitoring is therefore not vorgesehen!

Note for driving vehicles with interior space over-monitoring

The fan unit is controlled at the output (terminal 87) of the vehicle's own Geblä-serelais (1) at the fuse / relay carrier (PDC) in Motorraum.Verbindungen with connectors as shown in wiring diagram produced (Crimp and Schrumpfen)

1 Line rt from blower relay K3 / 87a2 Line sw from blower relay K3 / 30
3.4 Transmixers line green / red 5 Fuse / relay carrier

Fasten harness with cable ties
Circuit diagram

Webasto components
- F3: backup
- K3: fan relay

Components Cherokee
- M: blower motor

Colors and symbols
- rt: red
- ws: White
- sw: black
- br: brown
- gn: green

Legend
- X: separation point

Page 8th
Option telestart

Attach bracket to the existing hole of the steering column on befestigen.Empfänger holder and producing electrical-cal compounds.

1 holder
2 receiver
3 Screw M5x16, large washer,

Bundmutter

1 antenna

antenna mount
Cherokee 2.8l CRD

**prepare heater**

\[ a = 1020 \]
\[ b = 190 \]
\[ c = 940 \]

section X to dispose

**Cut Water hoses**

1. Connecting pipe 20/20, hose clamps
2. Flechtschutzschlauch

**Water Tubing-che prepare**

1. Flechtschutzschlauch
2. Rubber profile black

**Water Tubing-che prepare**

1. Abgasleitung
2. Abgasendstück

section X to dispose
Slide heat protection hoses for exhaust pipe and forms befestigen. Abgasleitung according image.

1 exhaust pipe 2 Heat protection tube (2x) 3 Refractory cable ties (4x)

Tabs bend 90 °

Tongue twisting 90 °

1 holder 2 Spacer nut 40mm 3 M6x20 bolt, spring washer
holder (4) with vehicle-own screw (3) loosely fix

1 transmitted hole pattern, thereby pierce the two matching other plates
2 Spacer 8mm
3 Transmixers screw
4 holder
5 transmitted Hole

1.2 drilling Ø7mm

Ejotschrauben, tightening torque 10 Nm!

1 Ejotschrauben (3x)

1 hose clamp
2 Connecting pipe
20/203 Hose clamp 10mm
4 hosepiece
A molded hose
installing heater

exhaust pipe (1) embarrassment between longitudinal beams and radiator down.

1 exhaust pipe

solve transmixers screw and holder (2) Forward ziehen.Bundmutter with needle-nose pliers to bore plat-decorate.

1 Collar nut M6

Heater with 3 M6x20 screws fasten-gen.

1 M6x20 bolt, spring washer2 Spacer 8mm3 exhaust pipe
exhaust system

1 Abgasendstück
2 hose clamp
3 Exhaust silencer
4 M6x20 bolt, flanged nut
5 angle

mounted exhaust silencer with vehicle own screw and connect exhaust pipe.

1 Transmixers screw
ATTENTION!
All hose clamps with 2.0 + 0.5 Nm tighten! Leaks cooling water is collected using an appropriate container! Embarrassed water hoses without any kinks! Unless stated otherwise, the attachment is with Ka-belbindern! Hose and hose clamps position so that no other tube can be beschädigt! The connection should be “inline” based on the following scheme:

All clamps are not designated hose clamps Ø 20-27mm!
1 A vehicle-onboard water hose from Motor outlet to the heat exchanger-a-enters

Vehicle own water hose (2) Turn the engine water outlet

1 Connecting pipe 15/20 (2x) 2 A vehicle-onboard water hose from Motor-water outlet
3 A vehicle-onboard water hose from Heat exchanger water inlet
4 Clamps Ø 22mm (2x)

1 hose clamp 2 Water hose "D"

1 cable ties 2 Rubber profile black 3 Hose clip Ø 27mm 4 Water hose "D"
A Molded hose "A"  1 hose clamp 
B Water hose "B"  2 hose clamp (3x)

B Water hose "B1" Hose clip Ø 27mm 
C Water hose "C"

Check valve 2 x 12 acc. Figure in line to the reservoir einsetzen. Achtung: Pay attention to flow of the check-valve!

1 Check valve 2 x 12  2 Hose clamp [2x]
Combustion air integration

1 Combustion air pipe
a = 300mm

section X to dispose

1 Brennluftansaugschalldämpfer
2 cable ties
3 combustion air intake
fuel Connection

CAUTION!
Open tank lid lock of the vehicle, vent the tank and close tank cap again!

Escaping fuel with an appropriate container!

Install fuel line and wiring harness dosing pump so that they are protected against falling rocks! Unless stated otherwise, always fasten using cable ties to sharp edges fuel line and wiring harness with chafing protection provided!

ATTENTION!
Laying the fuel line and wiring harness to the dosing pump is done according to scheme Kabelbaumver-interpretation.

Mecanyl fuel line with hose clamp 10mm at the heater plug.

1 Mecanyl fuel line

embarrassed Mecanyl fuel line and metering pump wiring harness under the brake booster and from there INTR-gen along the vehicle's own on the bulkhead down

Lay cables

angle (1) the long hole to Ø 10mm aufboh-ren

1 angle 2 Vibration mounts, flanged nut 3 metering pump 4 Rubber pipe clamp 5 Bundmutter

Dosing pump pre-mount
Cherokee 2.8l CRD

The tank in the picture is expanded only to documentation purposes! Fuel supply line (2) disconnect according image before coupling! Make sure that the Tank max. is filled to 3/4. Otherwise, previously taken in accordance with fuel.

1 Transmixers M10 screw the tank holder
2 Hose, hose clamps Ø10mm
3 Mecanyl fuel line (on pressure side the metering pump)
4 Harness dosing pump

1 Fuel supply line
2 Fuel pickup 8x5x8 metal
3 Hose clamps Ø10mm

1 Hose, hose clamps Ø10mm
2 Mecanyl fuel line (on the suction side the metering pump)
3 Hose, hose clamps Ø10mm
modify battery baseplate

cut base plate as shown in figure

Grundplatth modified decorate

Grundplatth modified decorate

Grundplatth modified decorate

Prepare holes-gen drill

1 Drilling Ø7mm (2x)

35mm

18mm

187mm
When mounting the base plate to ensure that the exhaust pipe is installed around the front support of the base plate in the form (see Figure 23). After installation reshape the base plate exhaust pipe and possibly align insulation.

1 Anti-vibration mounts (2x), collar nut (2x)
2 Spacer 5mm (2x)

1 Transmixers screw (3x) 2 baseplate

1 Flanged nuts (2x) 2 Modified base fuse holder
Final work

ATTENTION!
Spray removed parts in reverse order montieren. Alle hoses, hose spring and Caillau clamps, as well as all electrical connec-se prüfen. Alle tightness loose cables with cable ties sichern. Heizgerätkomponenten with corrosion wax (Tectyl 100K, Order no. 111329).

12

Connect battery
Start-Motor, coolant circuit venting according to the vehicle manufacturer, add coolant. Coolant circuit check for leaks by the manufacturer's instructions.
Set-Vorwahluhr
Set-Fahrzeugheizung with climate control and without automatic climate control under "Operating instructions for the end user"

Function of auxiliary heater check, see operating instructions / installation instructions
"Switch off the auxiliary heating system before refueling" - Aufklebeschild attach to the B-pillar, left.

Clip the fuse box in base to new Position, align harnesses and if necessary install befestigen. Batterie and secure.

1 Private Vehicle relay
2 cable ties
Operating instructions for the end user

Please refer to page and add to the vehicle operating instructions

Before parking the vehicle make the following settings:

1. Temperature control to “max./high”
2. Fan to position “1”, possibly “2”
3. Air outlet to “windscreen”