

Fuel extraction for Light Commercial Vehicles for information guidance purposes only

- *ThermoTop C Motorcaravan*
- *AirTop 2000ST, EVO 3900, EVO 5500*
- *DualTop RHA 100, 101, 102*
- *Dieselcooker X100*



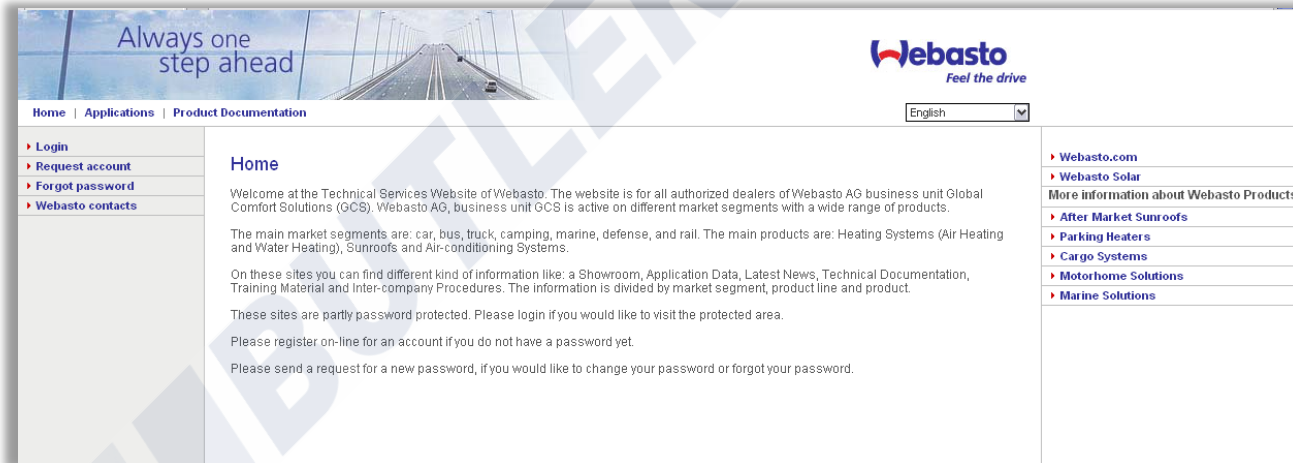


Before proceeding if unsure about the method of fuel integration on any specific vehicle please contact the vehicle manufacturer for available methods before hand.



The Webasto Dealer Portal

After registration is approved, you will be able to gain access to the central information platform of Webasto, where a wide range of information is available for all our products. Please note that references to specific vehicle installations are included within this document – all of which can be downloaded from our dealer portal.



Click on a Vehicle Manufacturer

[FIAT / CITROEN / PEUGEOT](#)

[MERCEDES](#)

[FORD](#)

[IVECO](#)

[VOLKSWAGEN](#)

[RENAULT](#)

[VAUXHALL](#)

Link to - [General Webasto Fuel Integration Methods & Part Number List](#)

Click on a Vehicle Model

www.butlertechnik.com

to see Fuel Integration Method

FIAT CITROEN / PEUGEOT

Fiat Ducato 1999-2002



Fiat Ducato 2003-2006



Fiat Ducato since 2006
2,3l and 3,0l



Fiat Ducato since 2006
option X250



Fiat Scudo/ Citroen Dispatch
2008/09



Fiat X250 3.0 UK RHD



Fiat X250 2.3 UK RHD



Fiat Ducato since 2006



Click on a Vehicle Model

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to see Fuel Integration Method

Mercedes

Mercedes Sprinter 2006 on



Mercedes Sprinter 2006 on
with dedicated fuel extractor



Mercedes Vito v8 2009



Mercedes Vito 2004
Model 111CDI



BUTLERTECHNIK

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www.butlertechnik.com

to see Fuel Integration Method

Ford



Click on a Vehicle Model

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to see Fuel Integration Method

Iveco

Iveco Daily 1998-2006



Iveco Daily since 2006



BUTLER TECHNIK

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to see Fuel Integration Method

Volkswagen

VW T4 1990-2003



VW T5 2004-2010



VW T5 since 2010



VW Crafter 2010



Click on a Vehicle Model

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to see Fuel Integration Method

Renault

Renault Master since 2004



Renault Master since 2010



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to see Fuel Integration Method

Vauxhall

Vauxhall Vivaro from 2007



Vauxhall Movano from 2010

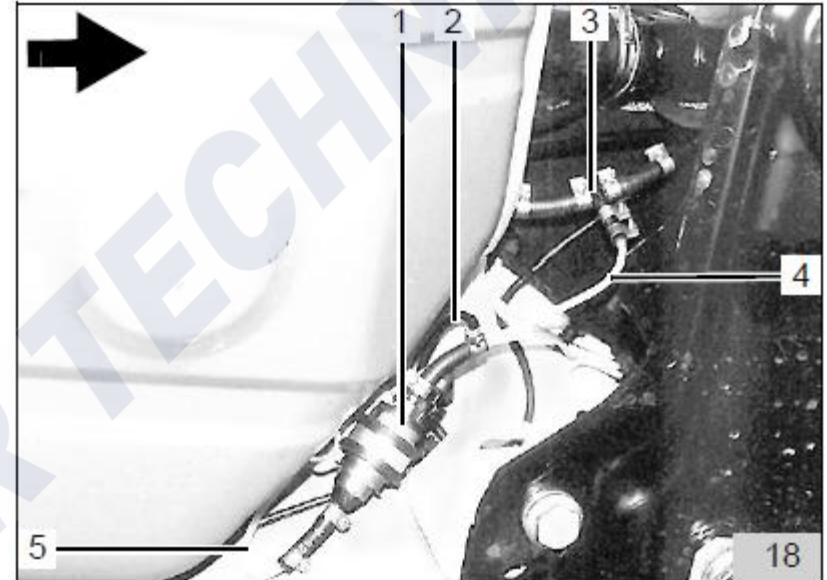


BUTLER TECHNIK

Fiat Ducato 1999-2002

Please use the Webasto fuel extractor 8x5x8 (Nr. **1310368A**) for all Fiat Ducato build between 1999 and 2003. The extractor is connected to the vehicle return line.

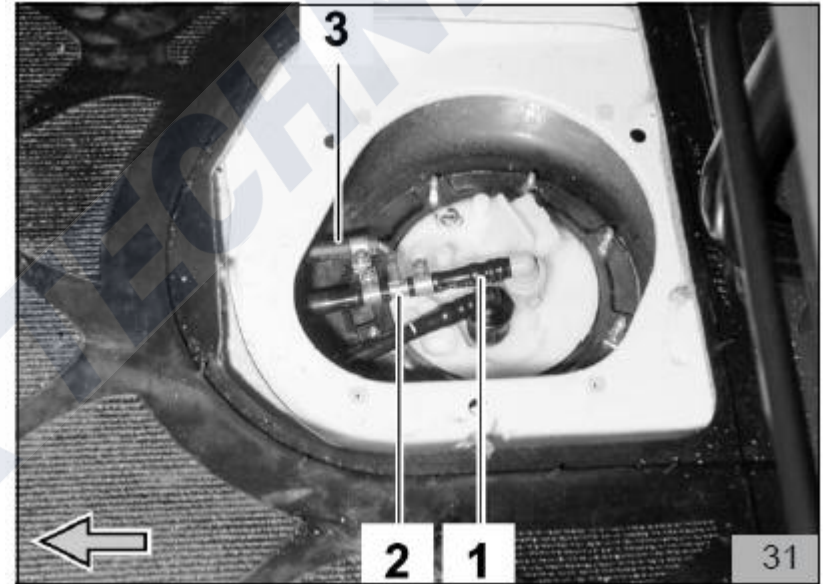
A detailed description can be found in the Webasto installation proposal Nr. **776374**. You may find it at the Webasto dealer portal <http://dealers.webasto.com>.



Fiat Ducato 2003-2006

Please use the Webasto fuel extractor 8x5x8 (Nr. **1310368A**) for all Fiat Ducato build between 2003 and 2006. The extractor is connected to the vehicle return line.

A detailed description can be found in the Webasto installation proposal Nr. **9008075**. You may find it at the Webasto dealer portal <http://dealers.webasto.com>.



Please use the Webasto fuel extractor 6x5x6 (Nr. **1310367A**) for all Fiat Ducato build since 2006. The extractor is connected to the vehicle return line.

This method is valid for diesel engines with 120, 130, 150 or 160 hp.

A detailed description can be found in the Webasto installation proposal Nr. **9015695**. You may find it at the Webasto dealer portal <http://dealers.webasto.com>.

Please note:

Fiat is installing a shorter return line in the 2,2l engine version (100 hp). Due to this fuel extraction is only possible with a tank extractor.

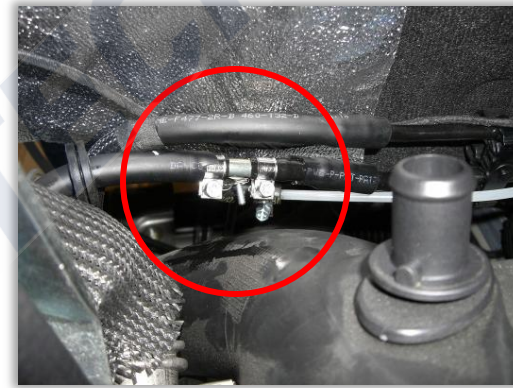
Fiat Ducato continued on next pages.

Fiat Ducato since 2006 2,3l and 3,0l

A reasonable place for the fuel extraction when installing the Webasto ThermoTop C Motorcaravan would be directly in the engine compartment.



2,3l engine



3,0l engine

For all other Webasto products like DualTop, AirTop and Diesel Cooker fuel extraction can be installed near the fuel tank.



Fiat Ducato since 2006 – Option X250

Motorhome manufacturers do have the possibility to order their chassis with the option X250. With this option the chassis comes with a preinstalled tank extractor.

In this case fuel can be taken directly from the preinstalled tank extractor.

Factory order code: **52X**



Citroen Jumper / Fiat Ducato / Peugeot Boxer from 2006

www.butlertechnik.com

Please use the Webasto tank extractor (Nr. **RMB7654A**)

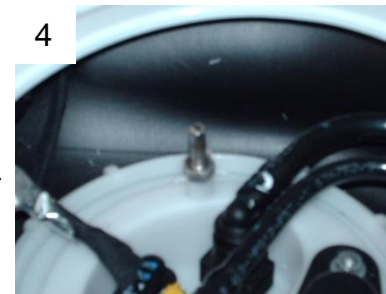
A detailed description can be found in the Webasto installation proposal Nr. **1311344**. You may find it at the Webasto dealer portal <http://dealers.webasto.com>.



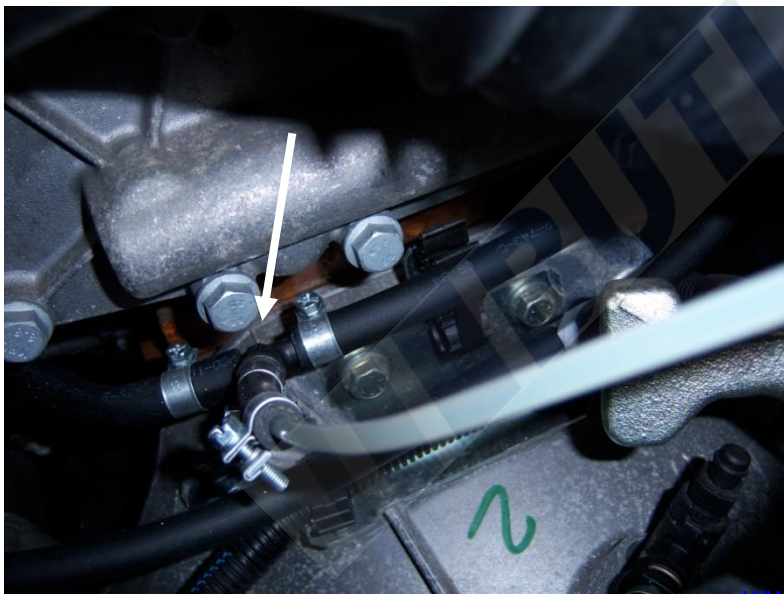
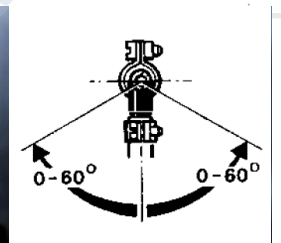
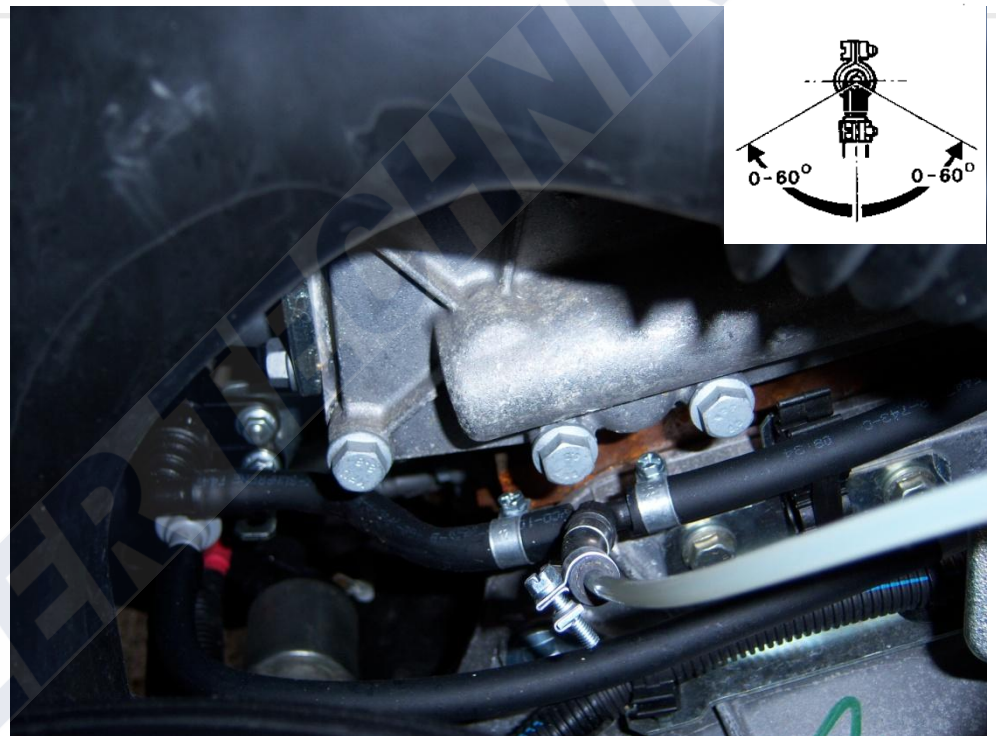
With extreme care drill a pilot hole exactly central down this stub with a D.4,25 mm drill.
Ensure no drillings/fillings or swarf enter into the tank.



Thread the stainless steel tube in this hole, but remember to install the gasket washer between the two material; screwing until the setback, **do not overtighten**

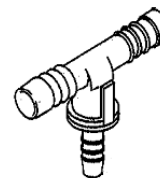


Fiat Ducato X250 3.0 UK RHD Fuel Integration



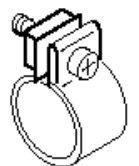
- Remove the air filter (Photo 1) in the engine bay to gain access to the fuel pipes
- T into the return line using 8x5x8 T Piece & 2 x 10mm Fuel Hose Clips.
- Ensure that the T outlet points downwards to aid bleeding.

9001344B
8x5x8



+

330027 10mm
hose clip x 2



Fiat Ducato X250 2.3 UK RHD Fuel Integration

The picture shows the fuel extraction on the 2.3 litre version

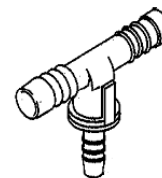
This is viewed from the engine bay looking inwards to the right of the engine to the rear



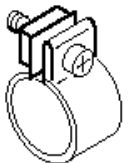
Note the return is the lower pipe.

Use 8x5x8 T piece c/w 2 x 10mm fuel pipe clips

9001344B
8x5x8

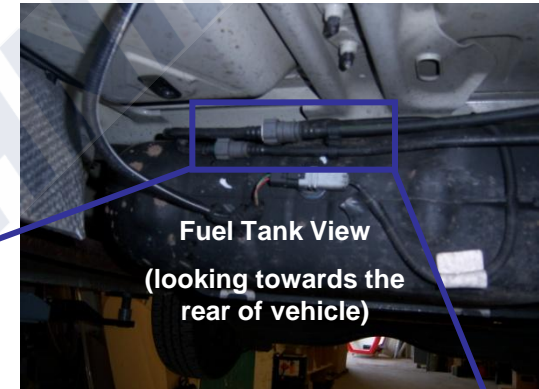


330027 10mm
hose clip x 2

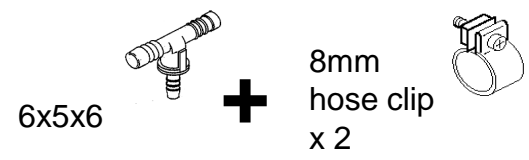
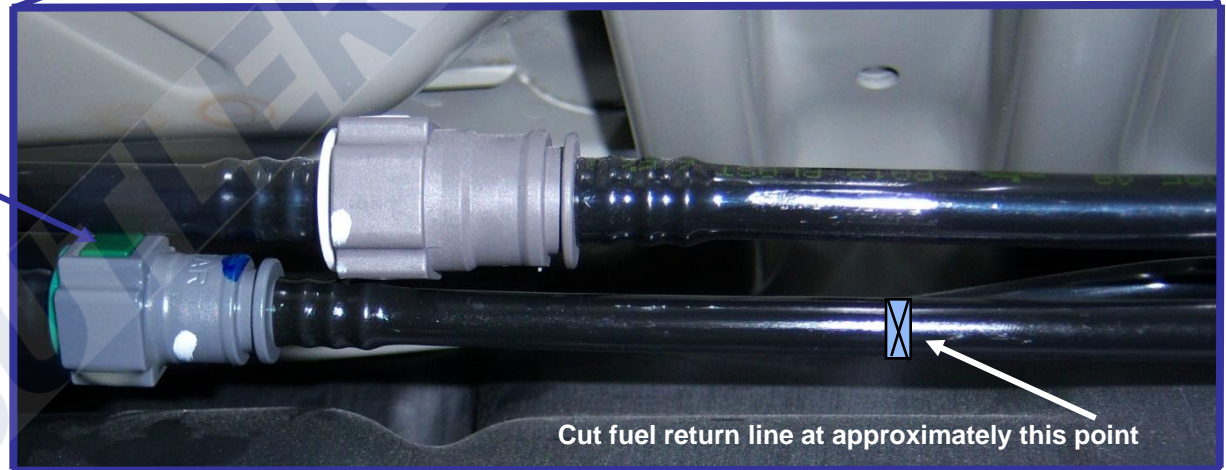


Fiat Scudo/ Citroen Dispatch 2008/09

Identify the fuel return hose, distinguished by the 'green' coloured fitting. Cut the plastic fuel hose at approximately the position shown using a proprietary tubing cutter. Place one 10mm fuel hose clip on each half of the previously cut fuel return line. Insert the 6x5x6mm fuel line 'T' fitting and secure the two hose clips securely. Fit a 5mm rubber fuel hose connector to the 5mm outlet pipe on the 'T' fitting and secure using a 10mm fuel line hose clip. Connect the heater fuel line to the rubber fuel hose connector ensuring that it is inserted fully. Finally secure using a 10mm fuel hose clip.



Green Connector



Mercedes Sprinter since 2006

Please use the Webasto tank extractor Nr. **41S45017A**) for all Mercedes Sprinter since 2006.

A detailed description can be found in the Webasto installation proposal Nr. **9016210**. You may find it at the Webasto dealer portal <http://dealers.webasto.com>.

A fuel extractor integration into vehicles feed or return line is not possible at the moment.



Mercedes Sprinter – with dedicated Fuel Extractor

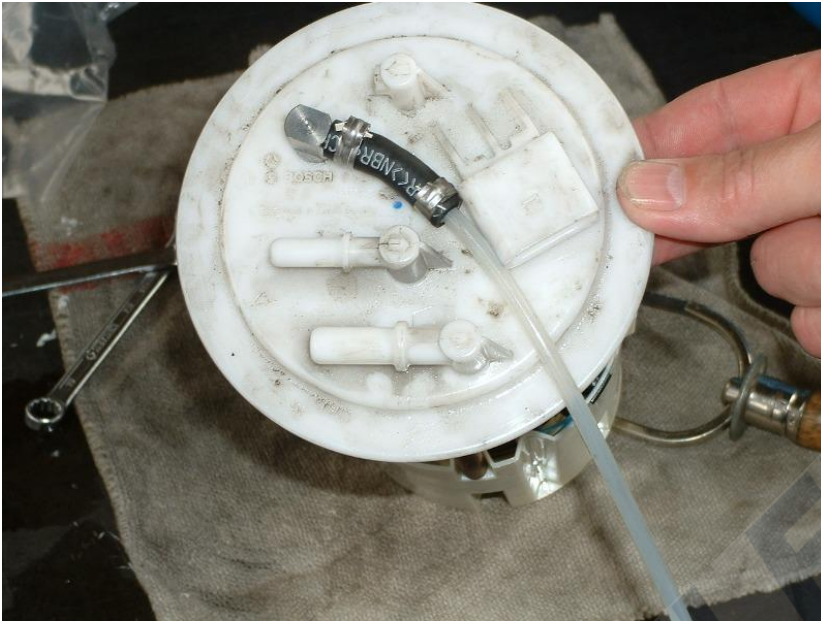


It may be found that chassis cab versions of the 2009 MY Sprinter have a dedicated fuel extractor port. If this is present then fuel can be extracted using a dedicated extractor pipe.

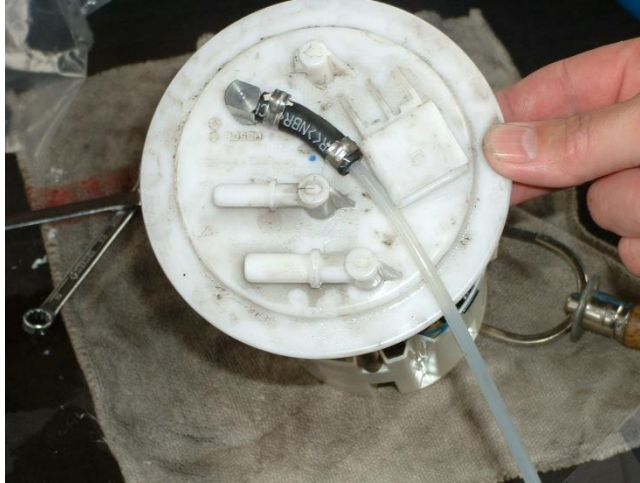
You can then simply use a push fit pipe connector.

Tip – ensure there is a dip tube under the sender which is in contact with the fuel & the spigot end is clear





Remove fuel sender, mount pipe standpipe 41S45017A



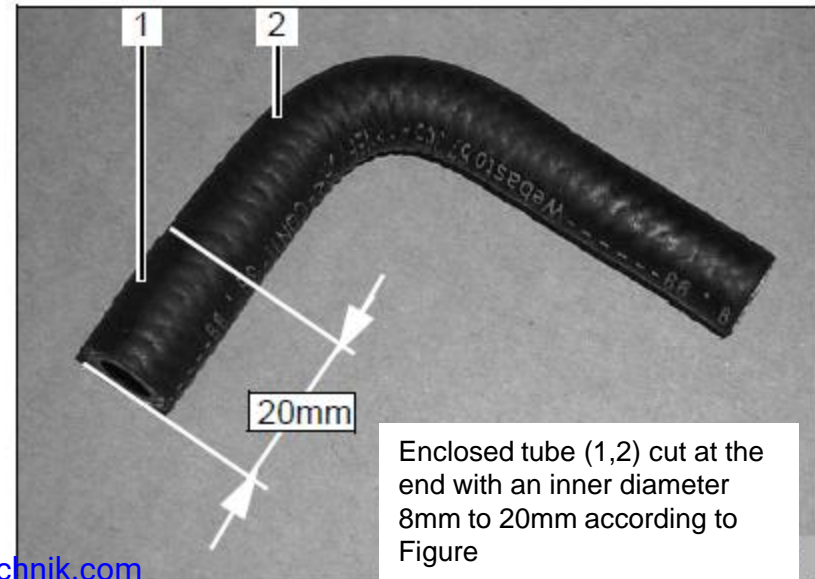
Remove fuel sender, mount pipe standpipe 41S45017A

Ford Transit 2002-2006

Please use the Webasto bend hose (Nr. **67365A**) for all Ford Transit build between 2002 and 2006. The pipe is connected to the standpipe installed in the vehicle.

A detailed description can be found in the Webasto installation proposal Nr. **1301170**. You may find it at the Webasto dealer portal <http://dealers.webasto.com>.

To be used with fuel 4mm pipe 4157903 4mm (which feeds through the elbow and into the sender.) Also to be used with 31380B rubber reducer 4mm to 5mm (to step back up to standard fuel hose size)

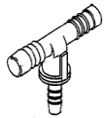


Enclosed tube (1,2) cut at the end with an inner diameter 8mm to 20mm according to Figure

Option 1

Please use the Webasto fuel extractor 10x5x10 (Nr. **66946A**) for all Ford Transit since 2006. The extractor is connected to the vehicle feed line.

A detailed description can be found in the Webasto installation proposal Nr. **9016222**. You may find it at the Webasto dealer portal <http://dealers.webasto.com>.



10x5x10 - 66946A x 1



12mm clips - 379670 x 2

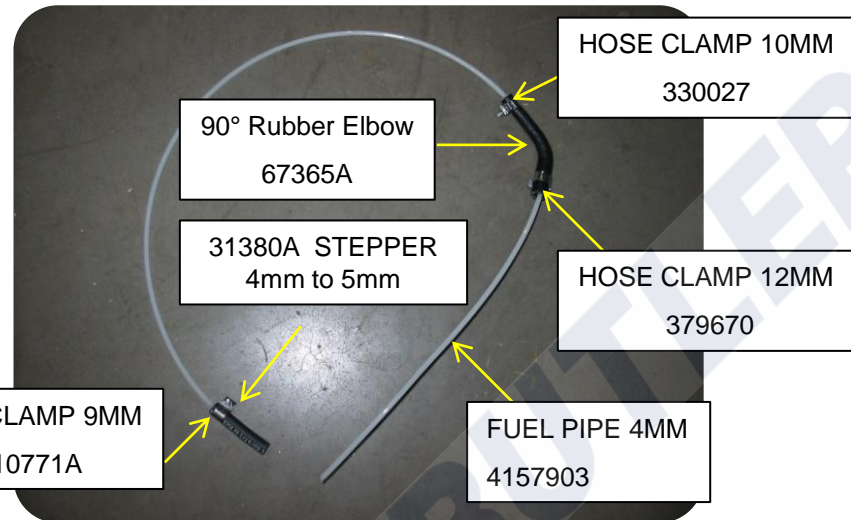
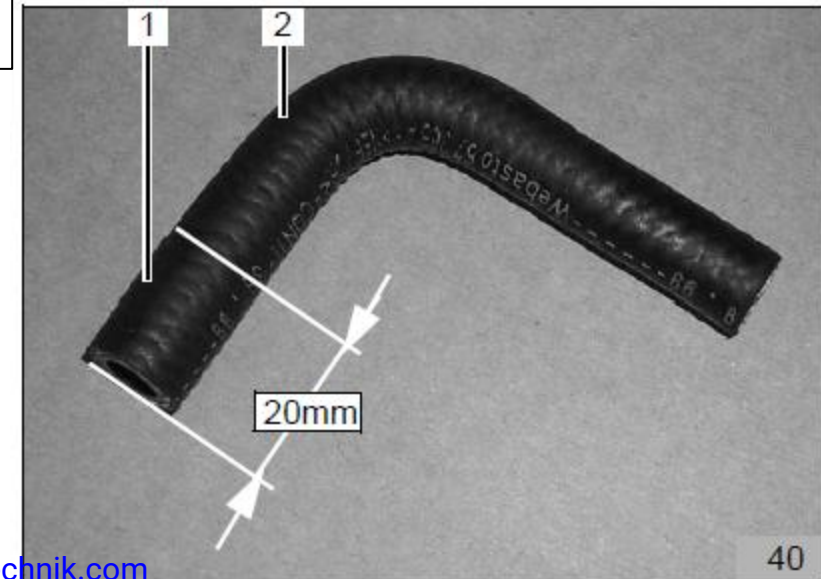
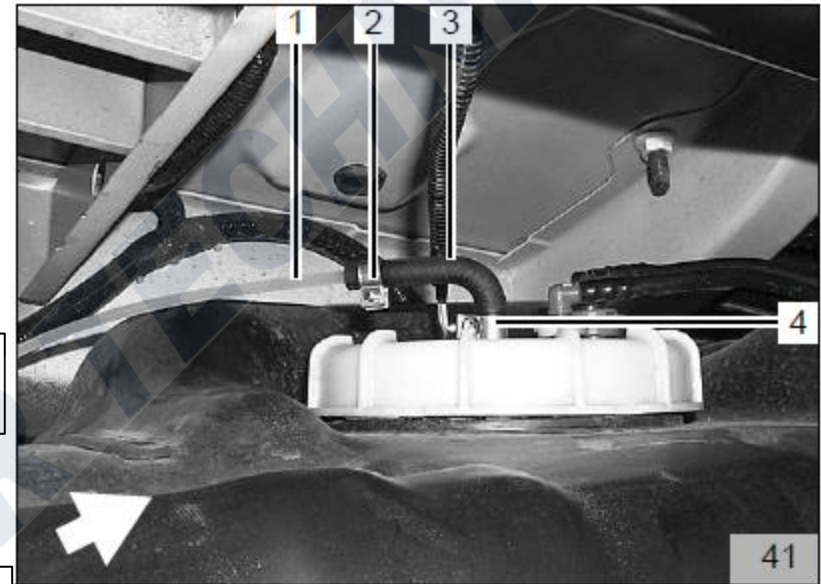
example for connection in engine compartment



See next page for option 2

Option 2

Please use the Webasto Kit (Nr. **4112213A**) for all Ford Transit build between 2002 and 2006. The pipe is connected to the standpipe installed in the vehicle.



To be used with fuel 4mm pipe 4157903 4mm (which feeds through the elbow and into the sender.) Also to be used with 31380B rubber Stepper 4mm to 5mm (to step back up to standard fuel hose size)

Ford Transit since 2006 (Only OEM Chassis)

Since June 2009 it is possible for motorhome manufacturers to order chassis with a preinstalled additional fuel pipe.

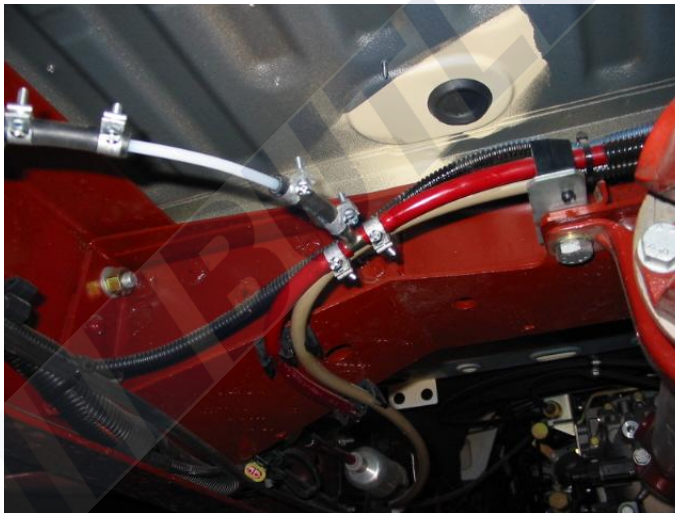
In this case fuel extraction can be done with a connection with this pipe.



Iveco Daily 1998-2006

Please use the Webasto fuel extractor 8x5x8 (Nr. **1310368A**) for all Iveco Daily between 1998 and 2006. The extractor is connected to the vehicle feed line.

A detailed description can be found in the Webasto installation proposal Nr. **9016374**. You may find it at the Webasto dealer portal <http://dealers.webasto.com>.



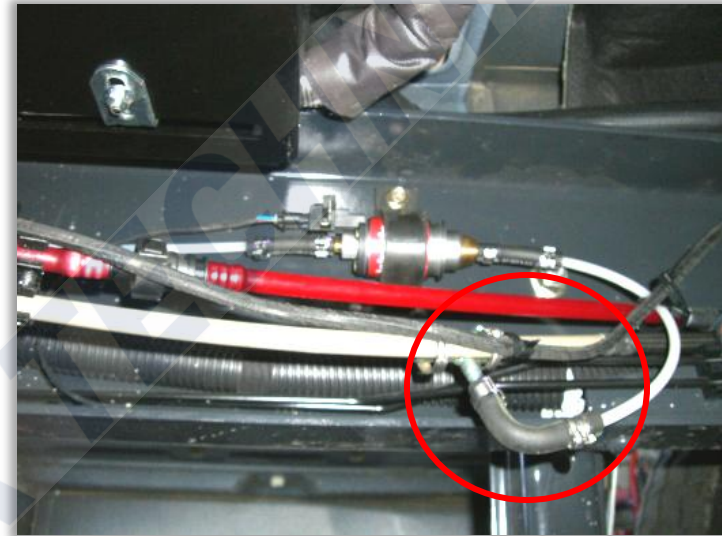
Iveco Daily since 2006

Please use the Webasto fuel extractor 8x5x8 (Nr. **1310368A**) for all Iveco Daily since 2006. The extractor is connected to the vehicle return line.

A detailed description can be found in the Webasto installation proposal Nr. **9016374**. You may find it at the Webasto dealer portal <http://dealers.webasto.com>.

Please note:

Iveco installs only grey fuel lines since 2009. You can identify the return line by a missing quick connector (green arrow).



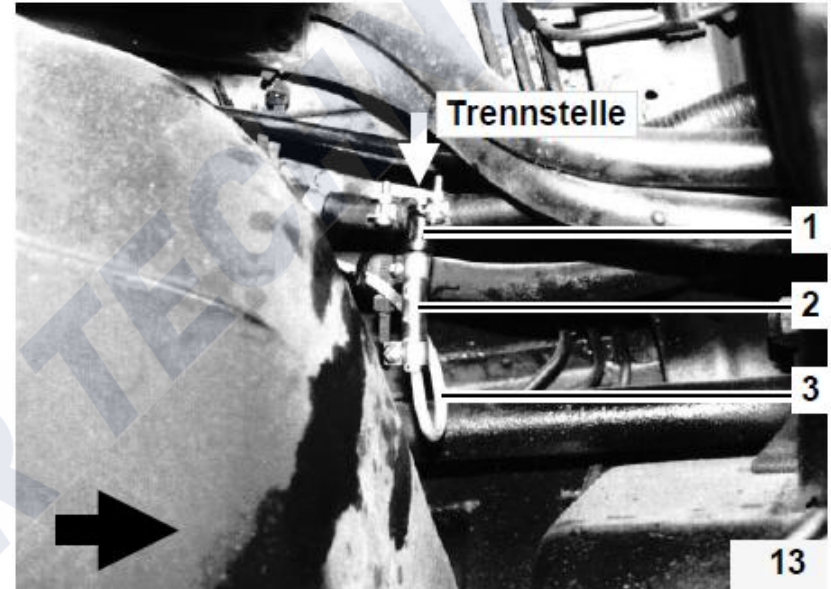
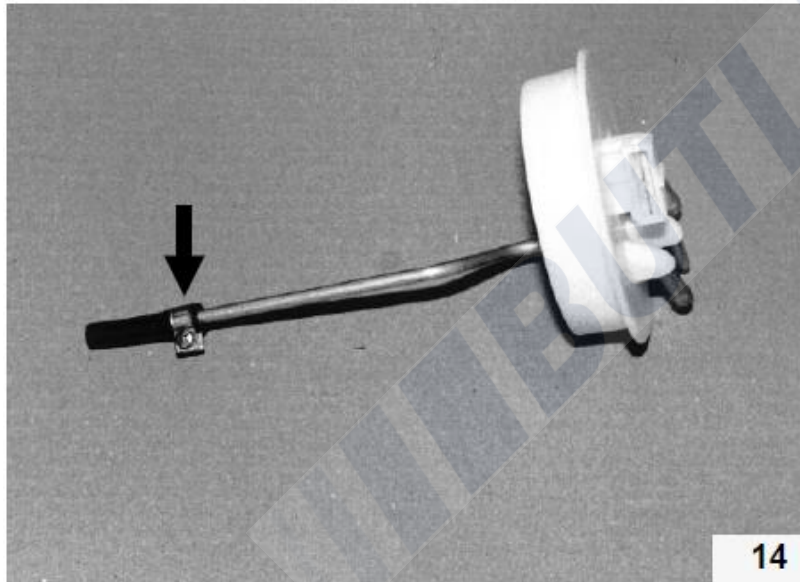
VW T4 1990-2003

DIESEL (FIG 13)

Please use the Webasto fuel extractor kit (Nr. **31277B**) for all VW T4 build between 1990 and 2003.

Fuel supply line to the vehicle in FIG 13

A detailed description can be found in the Webasto installation proposal Nr. **776948**. You may find it at the Webasto dealer portal <http://dealers.webasto.com>.



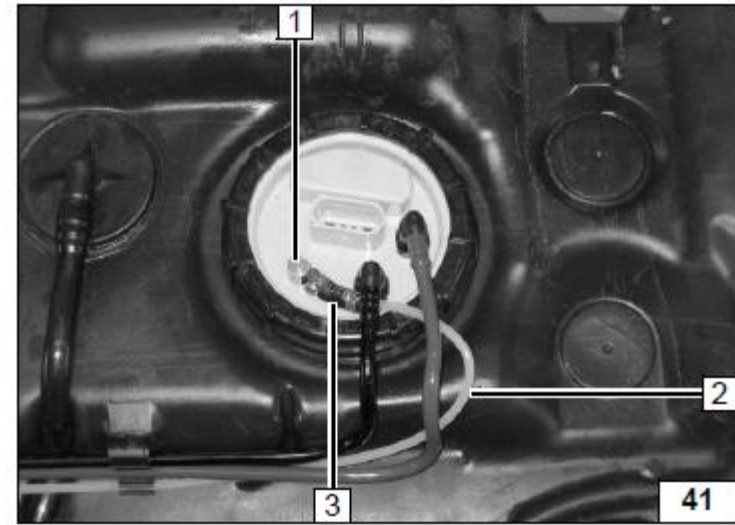
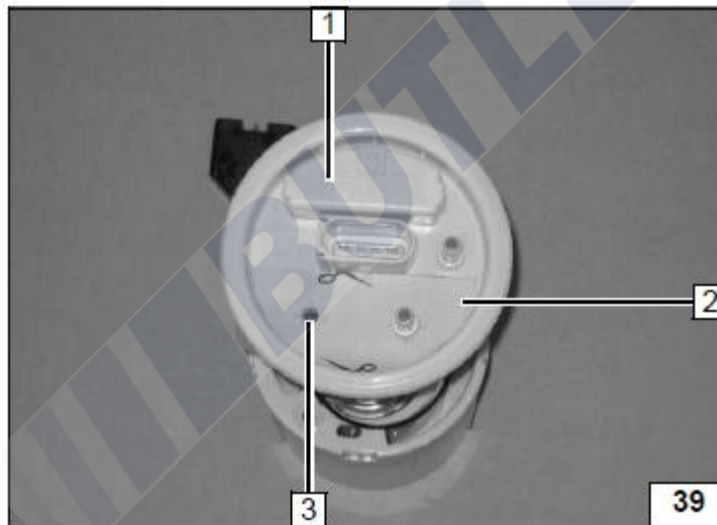
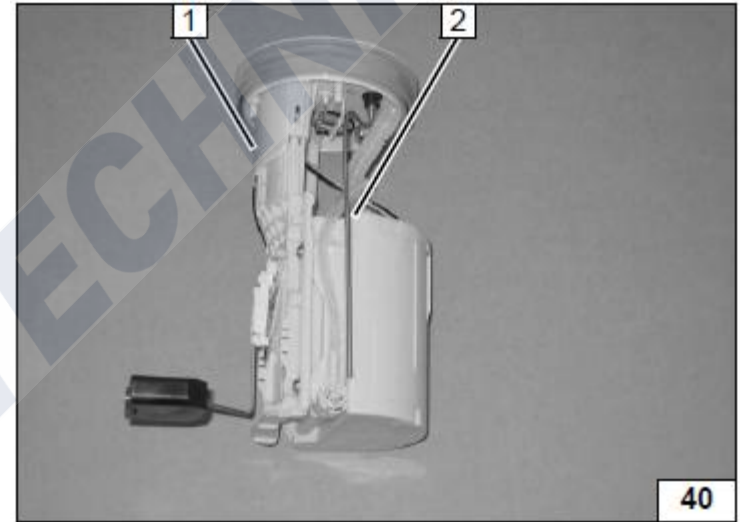
PETROL (FIG 14)

Intake on Sender (VW original parts) with rubber tubing (50 mm) and hose clamp Extend (Fig. 14)

A detailed description can be found in the Webasto installation proposal Nr. **776948**. You may find it at the Webasto dealer portal <http://dealers.webasto.com>.

Please use the Webasto tank extractor (Nr. **41S45017A**) for all VW T5 build between 2004 and 2010.

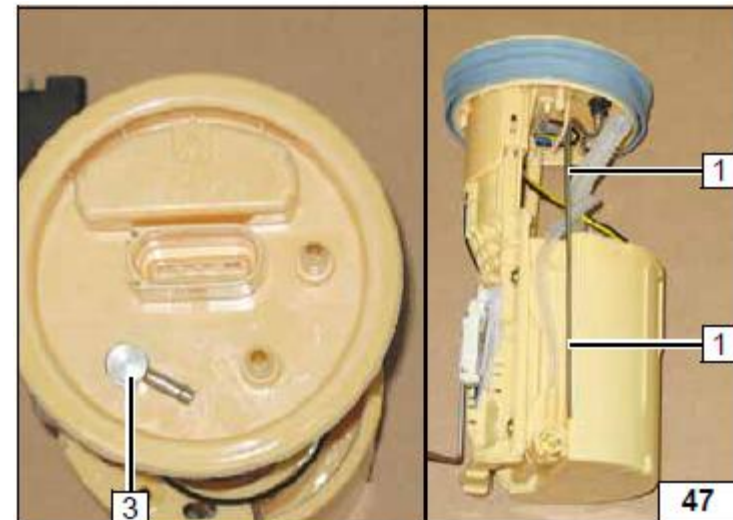
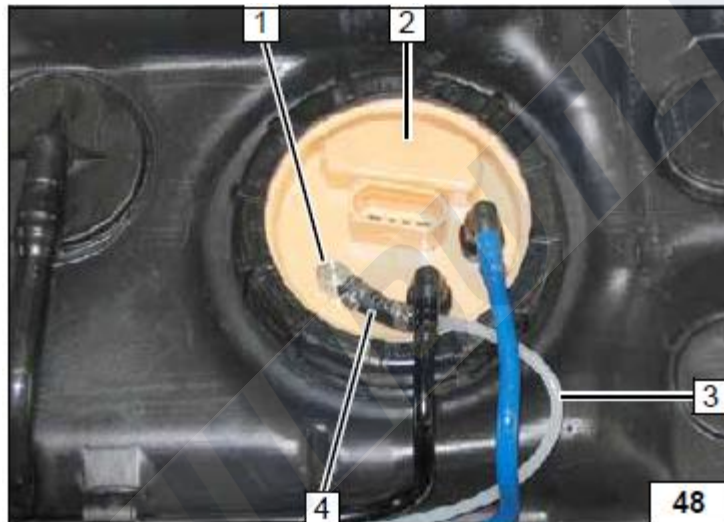
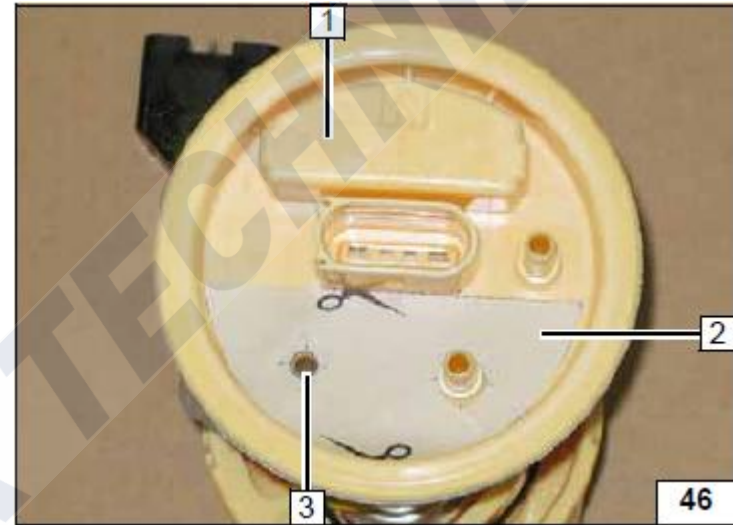
A detailed description can be found in the Webasto installation proposal Nr. **9014132**. You may find it at the Webasto dealer portal <http://dealers.webasto.com>.



VW T5 since 2010

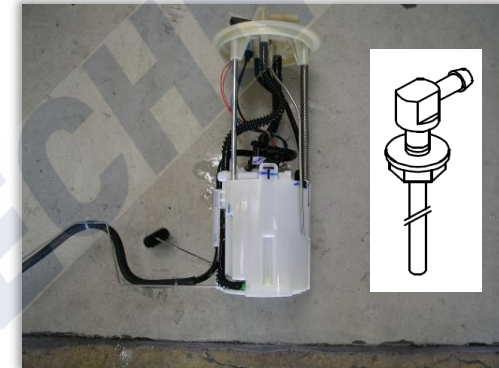
Please use the Webasto fuel extractor (Nr. **41S45017A**) for all VW T5 since 2010.

A detailed description can be found in the Webasto installation proposal Nr. **1315559**. You may find it at the Webasto dealer portal <http://dealers.webasto.com>.



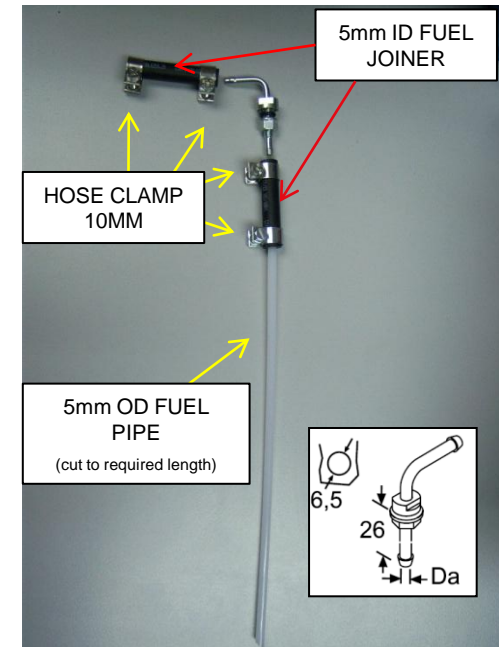
OPTION 1

Fuel is extracted from the vehicles own fuel tank using a Webasto Danish Fuel Standpipe part number **41S45017A**



OPTION 2

Fuel is extracted from the vehicles own fuel tank using a Webasto Fuel Standpipe **9003497C**



OPTION 3

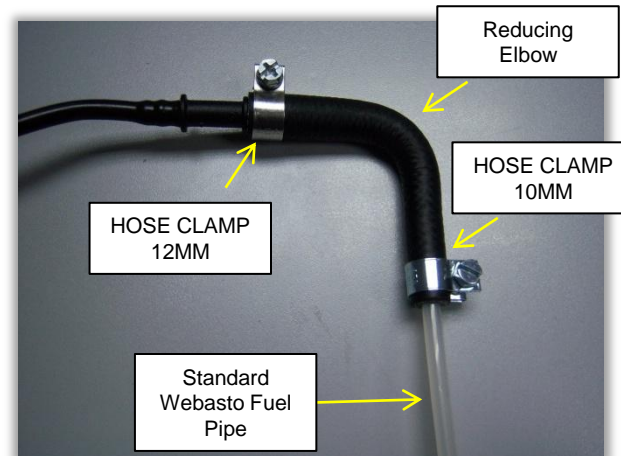
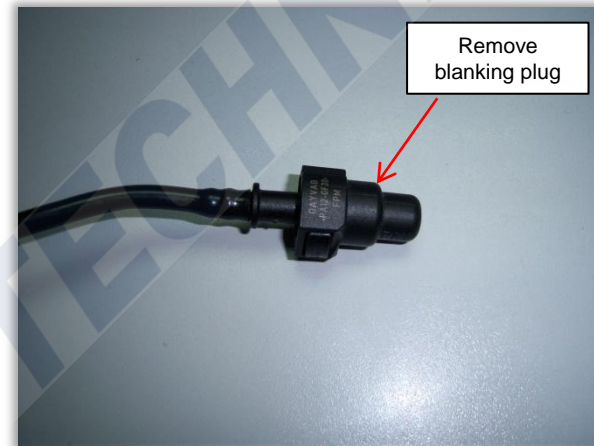
It maybe found that there is a dedicated fuel extractor pipe that is already connected to the vehicle sender unit. If this is present then fuel can be extracted Using this pipe.

Method

Remove the blanking plug and simply replace this with the Webasto 90° rubber reducer (67365A) securing with the fuel clips listed below

Parts required:

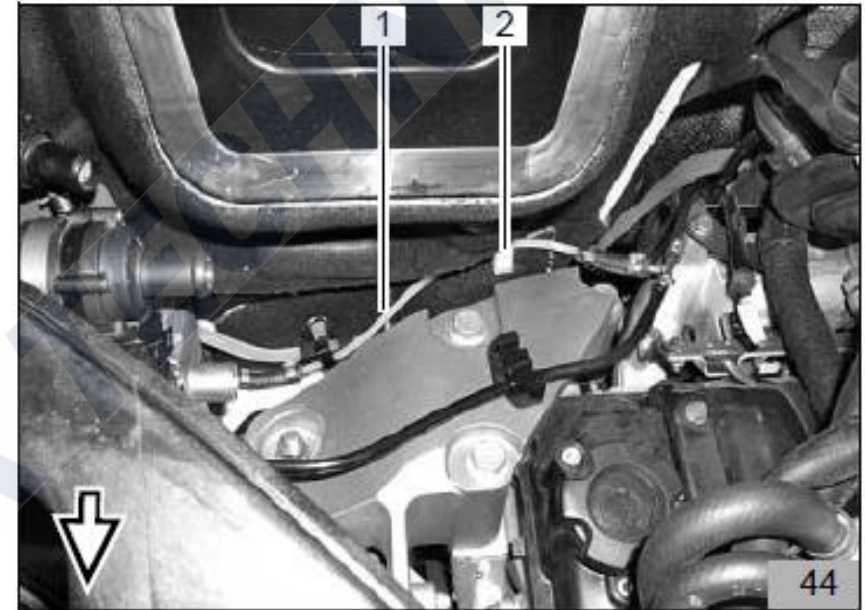
- 1 x 379670 12mm Fuel Clip
- 1 x 330027 10mm Fuel Clip
- 1 x 67365A Fuel Elbow Reducer



Renault Master 2004

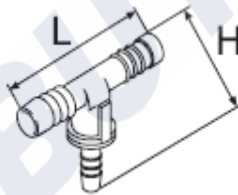
Please use the Webasto fuel extractor 6x5x6 (Nr. **66944A**) for all Renault Master build since 2004. The extractor is connected to the vehicle return line.

A detailed description can be found in the Webasto installation proposal Nr. **9012134**. You may find it at the Webasto dealer portal <http://dealers.webasto.com>.



Use - T Piece 6x5x6 66944A

L = 50; H = 36



2 x 8mm Fuel pipe clips p/no 439673

1 x 348.59B 90 Fuel elbow

Renault Master from Model Year 2010

Version 1

Fuel extraction is dependent on vehicle equipment. In case of vehicles with hand pump 1 (without pre-feed pump in the tank), the fuel extraction is conducted using a T-piece in the supply line. - variant 1.

In case of vehicles without a hand pump 1 (with pre-feed pump in the tank), the fuel extraction is conducted using the fuel standpipe in the fuel-tank sending unit. - variant 2.

Cut off fuel feed line 1 at Position 2!

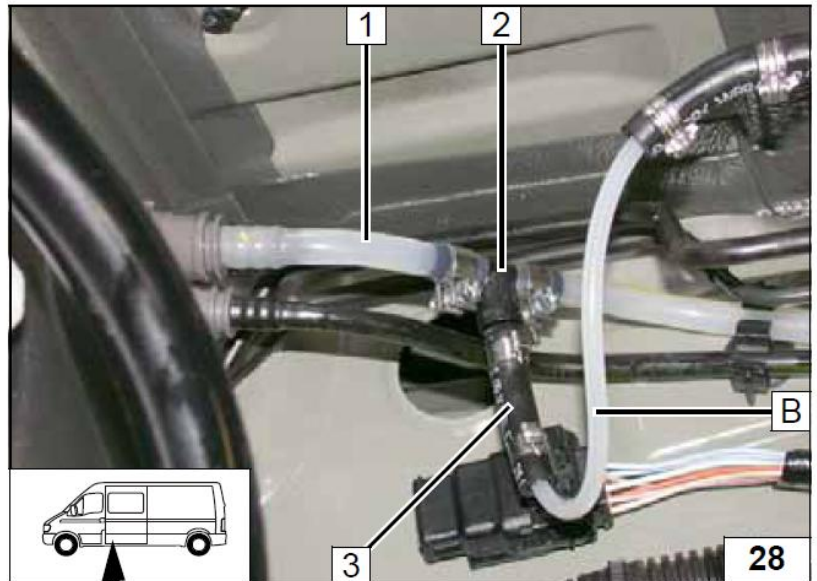
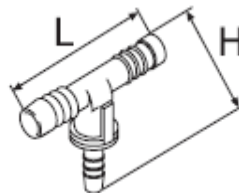
Check the position of the components; adjust if necessary.

Check that they have free clearance.

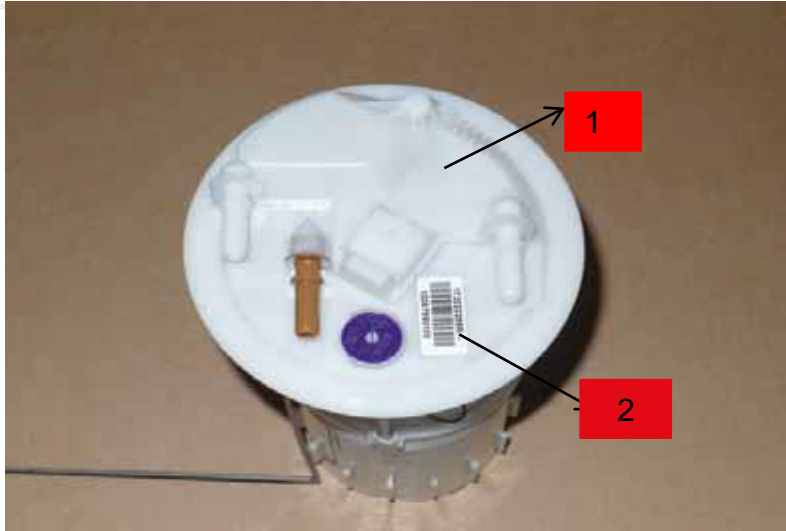
(2) 8x5x8 fuel T-Piece,

(3) Hose section, 10 mm dia. clamp [2x]

10 mm dia. Clamp [2x]



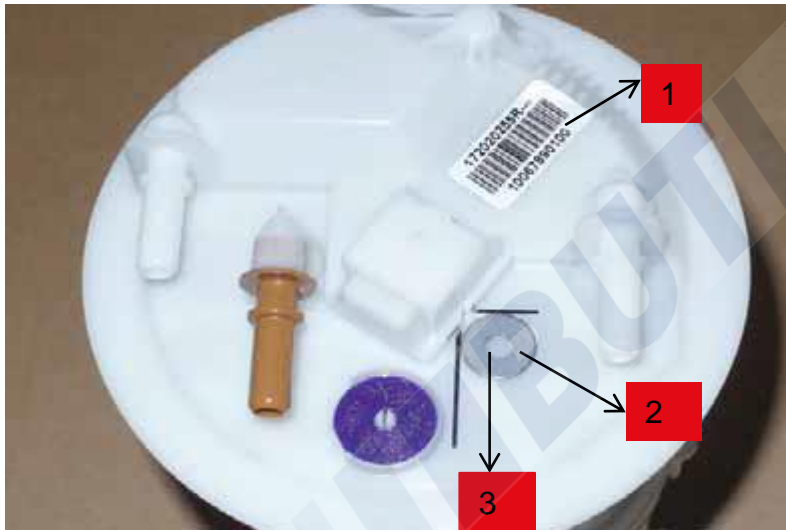
Vauxhall Movano Renault Master from Model Year 2010 Cont'd



Version 2

Remove fuel tank according to manufacturer's instructions. Remove fuel-tank sending unit **1** in accordance with manufacturer's instructions.

2 Remove bar code label



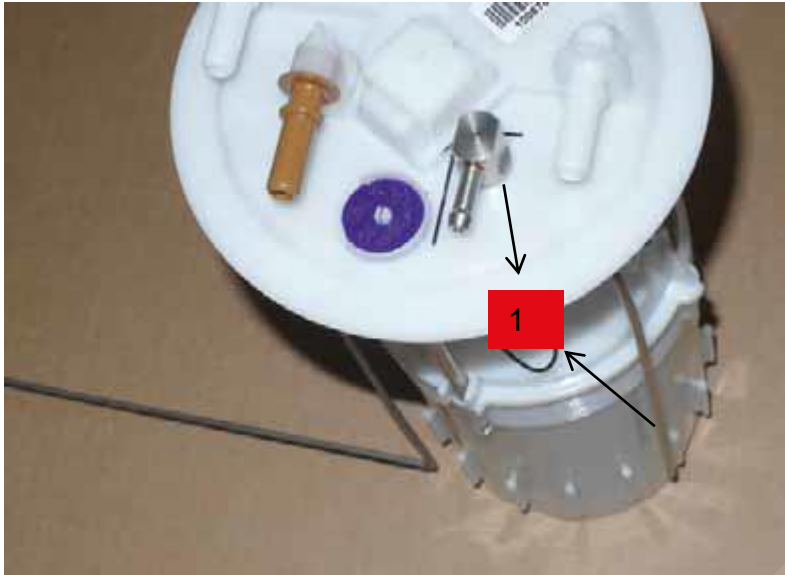
Place washer outer dia. = 14.6mm **2** on the edges (see markings).

1 Glue bar code label on again

3 Copy hole pattern, 6 mm dia. hole

Renault Master from Model Year 2010

Cont'd

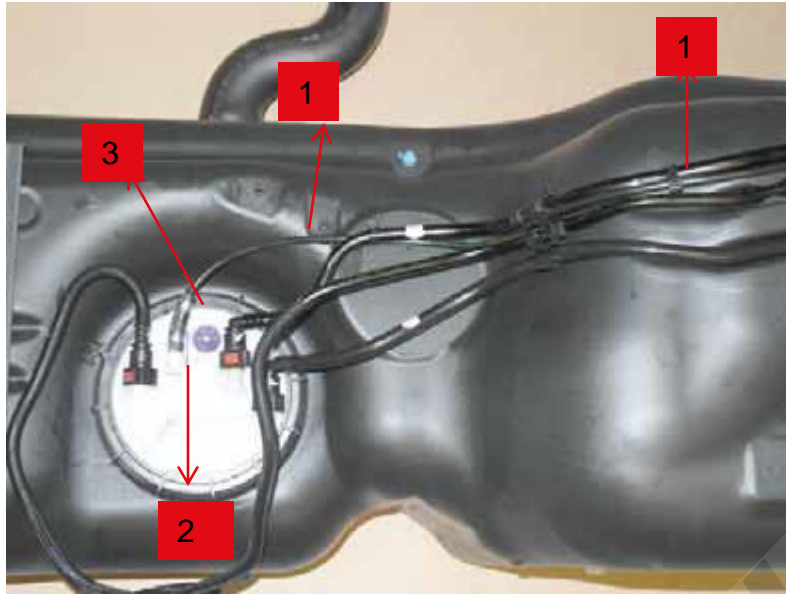


Shape fuel standpipe **1** according to template, cut to length and install.



Insert three washers with outer dia. = 12mm as height compensation at position **1**.

2 Fuel standpipe



Install fuel-tank sending unit according to manufacturer's instructions. Mount fuel-tank according to manufacturer's instructions after installation.

1 Fuel line of fuel standpipe

2 Fuel standpipe

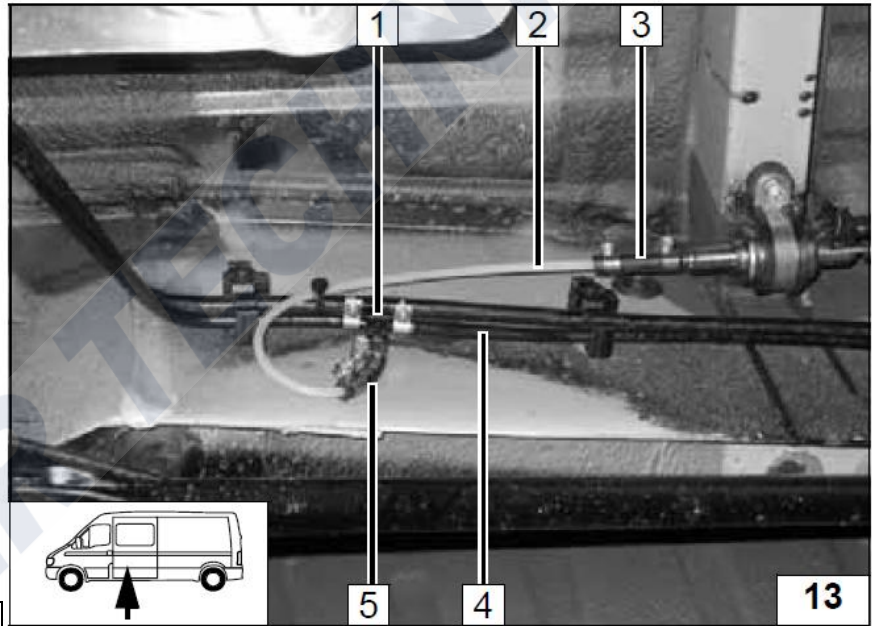
3 Hose section, 10 mm dia. clamp [2x]

Renault Master 3 installation manual 1316167C/1316146C are available the dealer portal which include the full fuel install process.

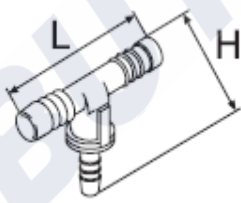
Vauxhall Vivaro from Model Year 2007

Please use the Webasto fuel extractor 6x5x6 (Nr. 66944A)

A detailed description can be found in the Webasto installation proposal Nr. **9012134**. You may find it at the Webasto dealer portal <http://dealers.webasto.com>.



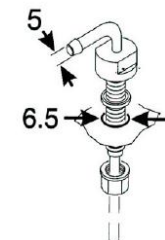
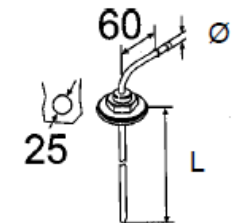
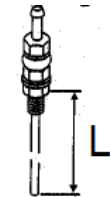
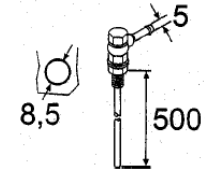
Use - T Piece 6x5x6 66944A
L = 50; H = 36



2 x 8mm Fuel pipe clips p/no 439673
1 x 348.59B 90 Fuel elbow

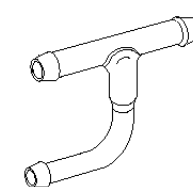
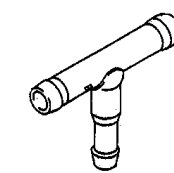
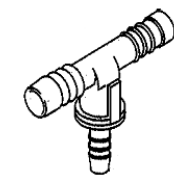
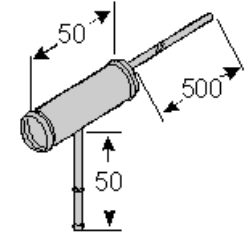
General Webasto Fuel Integration Methods & Part Number List

Part Number	Item	Description
25908B	Fuel Tank Fitting	with copper gasket for metal tank fitting
98605B	Fuel Stand Pipe	with dowty washer for plastic and metal tank fittings
41S45017A	Fuel Stand Pipe - Danish Version	Fuel Tank Standpipe low profile 495mm lg 8.5mm hole
1300823B	Fuel Stand Pipe	Tank Extractor 90 Deg Access 459mm lg 6.5mm hole
83813A	Fuel Stand Pipe	to fit Ø8.5mm hole, 170mm long, with flat rubber seal, BMW E36
1300496A	Fuel Stand Pipe	to fit Ø6.5mm hole, 457mm long, C/W 90° Fuel Hose Elbow
1300494A	Fuel Stand Pipe	to fit Ø6.5mm hole, 470mm long, C/W 90° Fuel Hose Elbow
4154304	Fuel Stand Pipe	to fit Ø8.5mm hole, 700mm long
RMB7654A	Fuel Stand Pipe (Self Threading)	to fit Ø4.5 Self Threading Standpipe used on Citroen and Fiat
353205	Fuel Stand Pipe	500mm long, Ø5mm
35320A	Fuel Stand Pipe	650mm long, Ø5mm
4154300	Fuel Stand Pipe	700mm long, Ø5mm
353213	Fuel Stand Pipe	500mm long, Ø8mm
4154301	Fuel Stand Pipe C/W Return	700mm long, Ø8mm comes with fuel return inlet
41K0028	Twin Fuel Stand Pipe	500mm long, 2 x Ø8mm
9003497C	Fuel Extractor Low Profile	with 'O' rings for plastic and metal tank fittings Can use with Connector – 82202C (Ø3.5mm x Ø4.5mm x 140mm long)



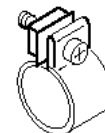
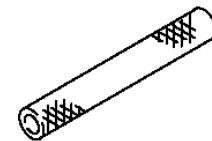
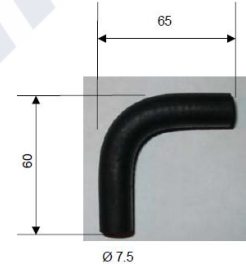
General Webasto Fuel Integration Methods & Part Number List

Part Number	Item	Description
86277A	Fuel extractor	Ø15mm (for insertion into tank breather hose)
86379A	Fuel extractor	Ø18mm (for insertion into tank breather hose)
67435A	Fuel extractor	Ø20mm (for insertion into tank breather hose)
66944A	Fuel T-Piece	Plastic 6x5x6
9001344B	Fuel T-Piece	Plastic 8x5x8
66946A	Fuel T-Piece	Plastic 10x5x10
98052A	Fuel T-Piece	Plastic 12x5x12
1310349B	Fuel T-Piece	Metal 6x5x6
1310350B	Fuel T-Piece	Metal 8x5x8
1310351A	Fuel T-Piece	Metal 10x5x10
1310352A	Fuel T-Piece	Metal 12x5x12
492876	Fuel T-Piece	Metal 15x5x15
1310367A	Fuel T-Piece (J Shape)	Metal 6x5x6 - J Shape
1310368A	Fuel T-Piece (J Shape)	Metal 8x5x8 - J Shape
1310369A	Fuel T-Piece (J Shape)	Metal 10x5x10 - J Shape
1310370A	Fuel T-Piece (J Shape)	Metal 12x5x12 - J Shape



General Webasto Fuel Integration Methods & Part Number List

Part Number	Item	Description
67365A	Fuel elbow reducer	<p>Ø7.5mm to 4.5mm Reducer <i>can be used with fuel 4mm pipe 4157903 4mm (which feeds through the elbow and into the sender.) Also to be used with 31380A rubber reducer 4mm to 5mm (to step back up to standard fuel hose size)</i></p>
41K0041	Push-fit 'T' Piece	T Piece (Ø12mm x ¼ BSP)
41K0040	Push-fit 'T' Piece	T Piece (Ø10mm x ¼ BSP)
41K0039	Push-fit 'T' Piece	T Piece (Ø8mm x ¼ BSP)
41K0043	Push-fit 'T' Piece	T Piece (Ø6mm x ¼ BSP)
41K0042	Adapter to fit any of the above 'T' Pieces which accepts Ø5mm Webasto fuel hose push-fit	Connector (5mm x ¼ BSP)
484032	Fuel Hose Connector	Ø5mm
462535	Fuel Hose Connector	462535
31380B	Fuel Hose Connector	31380B
379662	Hose Clip	9mm
330027	Hose Clip	10mm
379670	Hose Clip	12mm



If you encounter problems or you did not find sufficient information in this documentation/
the recommended documentation please contact Butler Technik.

