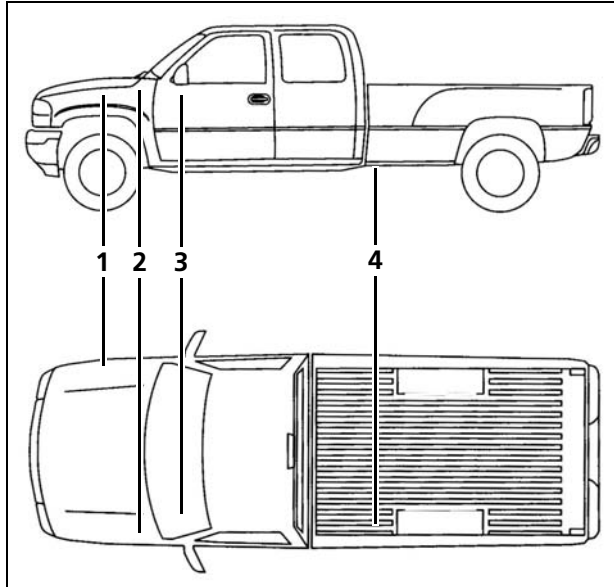


## Thermo Top



**Beginning Model Year: 2003 - All Listed**

### **Cadillac EXT / Escalade**

6.0 Liter Gasoline

### **Chevrolet Avalanche**

5.3 Liter Gasoline

### **Chevrolet Silverado 1500 / 2500**

4.8 / 5.3 / 6.0 Liter Gasoline

### **Chevrolet Suburban / Tahoe**

5.3 Liter Gasoline

### **GMC Sierra 1500 / 2500**

4.8 / 5.3 / 6.0 Liter Gasoline

### **GMC Yukon / Yukon XL**

5.3 Liter Gasoline

### **GMC Yukon Denali**

6.0 Liter Gasoline

### Legend

- 1 BlueHeat Coolant Heater, Exhaust Muffler, and Combustion Air Intake Silencer
- 2 Fuse Holder and Resistor
- 3 Timer Control
- 4 Fuel Pump

### Special Tools

- Hose Clamping pliers
- Torque Wrench (1/4' Drive)

## Table of Contents

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- Improper installation or repair of Webasto heating and cooling systems can cause fire or the leakage of deadly carbon monoxide leading to serious injury or death.
- Installation and repair of Webasto heating and cooling systems requires special Webasto training, technical information, special tools and special equipment.
- NEVER attempt to install or repair Webasto heating or cooling system unless you have successfully completed the factory training course and have the technical skills, technical information, tools and equipment required to properly complete the necessary procedures.
- ALWAYS carefully follow Webasto installation and repair instructions and heed all WARNINGS.
- Webasto rejects any liability for problems and damage caused by the system being installed by untrained personnel.

**Foreword**

**Parts List**

Quantity	Part	Part Number
1	Heater Kit	5000516C
1	Installation Kit	5000847C

**Vehicle Information**

Manufacturer	Model	Year	Engine Type
Chevrolet	Silverado 1500 / 2500	Beginning Model Year: 2003 - All Vehicles Listed	4.8 / 5.3 / 6.0 Liter Gasoline
Chevrolet	Suburban / Tahoe		5.3 Liter Gasoline
Chevrolet	Avalanche		5.3 Liter Gasoline
Cadillac	EXT / Escalade		6.0 Liter Gasoline
GMC	Sierra 1500 / 2500		4.8 / 5.3 / 6.0 Liter Gasoline
GMC	Yukon / Yukon XL		5.3 Liter Gasoline
GMC	Denali		6.0 Liter Gasoline

This installation requires special expertise from a Webasto training course to install a Webasto Thermo Top C/Z, which means that it may only be installed by a specially trained workshop or dealership. Webasto cannot accept any liability for faults and damage caused by the system being installed by untrained personnel.

**Scope and Purpose**

These non-binding installation instructions are intended to support authorized Webasto trained distributors, dealers and personnel in the installation of the Thermo Top C/Z and BlueHeat Coolant Heaters.

These non-binding installation instructions apply to the vehicles listed on the front cover of this installation document unless technical modifications on the vehicle influence the installation, excluding all liability claims. Depending on the version and equipment in the vehicle, changes may be required to the installation work set out in these installation instructions. In any event, however, the directives in the "installation manual" and "operating manual" Thermo Top C/Z must be followed. Acknowledged engineering conventions must be observed for the installation work.

**CAUTION**

*Location of heater, installation of coolant lines, fuel system and components, wiring and control devices are important for proper operation. Failure to comply with the installation instructions provided may result in poor operation or damage to heater and vehicle components.*



**ATTENTION**

*All relevant state and provincial licensing regulations if any, governing the installation and use of auxiliary heating devices must be observed!*



### Symbol Identification

Symbols that define sections in manual



Mechanical Preparation



Fuel



Electrical



Exhaust



Coolant



Combustion Air Intake

### General Symbol Descriptions



Warning



Refer to Webasto or Manufacturer Manual



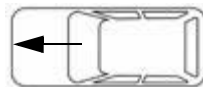
Caution



Attention



Flammable or Combustible



Part Location on Vehicle

### General References

- Bare body parts, for example around drilled holes, must be treated with anti-corrosive coating.
- Secure hoses, cables and wiring harnesses with cable ties and fit protective hoses around them at chafing points.
- Fit edge protectors (opened fuel hose) to sharp edges.

### Preparation

#### Heater Kit

- Verify and identify all contents of kit.

#### Vehicle

- Verify fuel content in tank.

#### CAUTION

*For reasons of safety due to the possibility of fuel spillage during the installation of a fuel standpipe, it is recommended there be no more than 1/4 tank of fuel present. If fuel quantity is greater than 1/4 of capacity, make provisions to reduce quantity of fuel.*



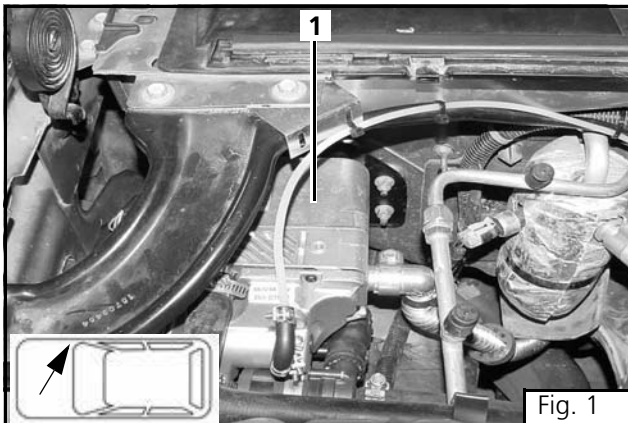
### Heater Installation Site

#### ATTENTION

*The Webasto Auxiliary Coolant Heater is to be mounted to the lower fender support bracket near right rear of vehicle bulkhead as shown.*



- (1) Webasto Auxiliary Coolant Heater Mounting Location





### Installation

#### Electrical - Overview (SUV)

##### ATTENTION

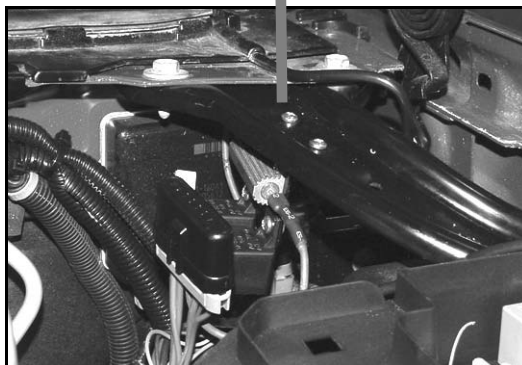
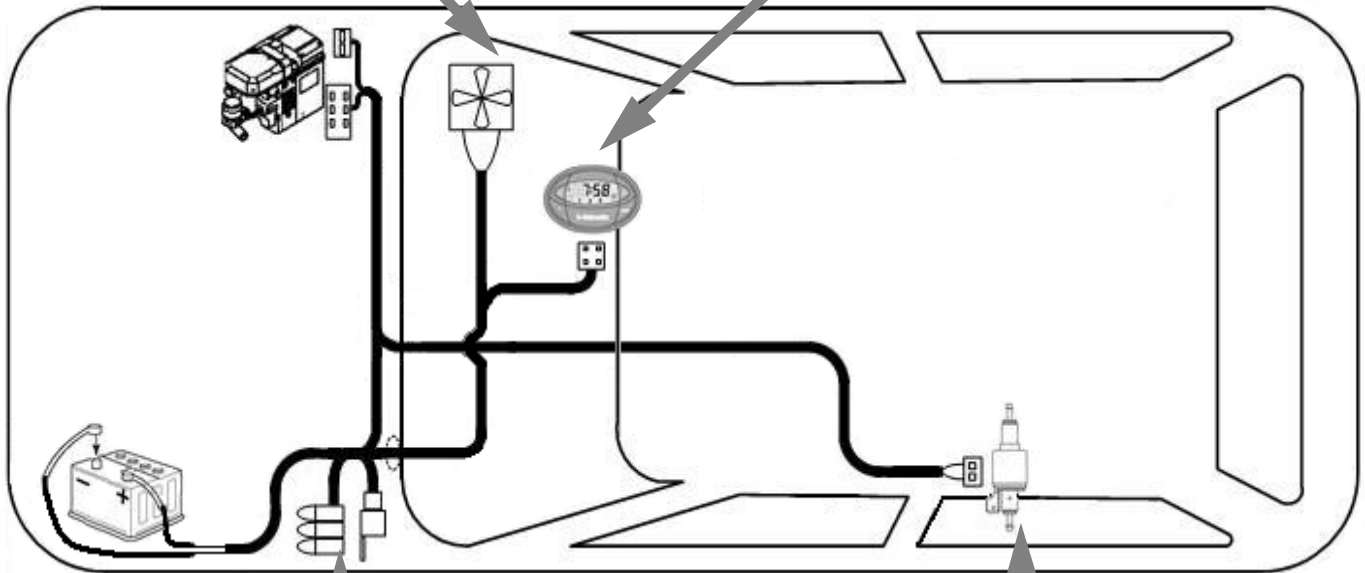
*The timer control location is a recommendation only. Please consult with the customer before mounting.*



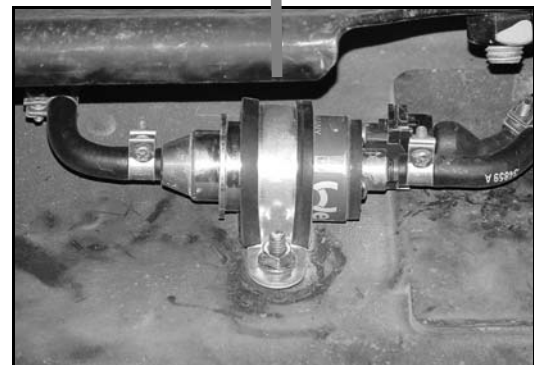
**Vehicle HVAC Blower Motor**



**Timer Control Location**



**Webasto Blower Relay**



**Webasto Heater Fuel Pump**



### Installation

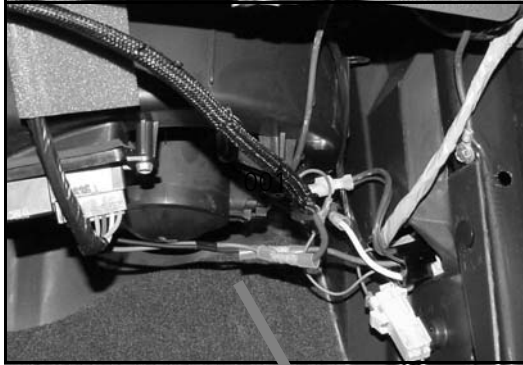
#### Electrical - Overview (LT Truck)

##### ATTENTION

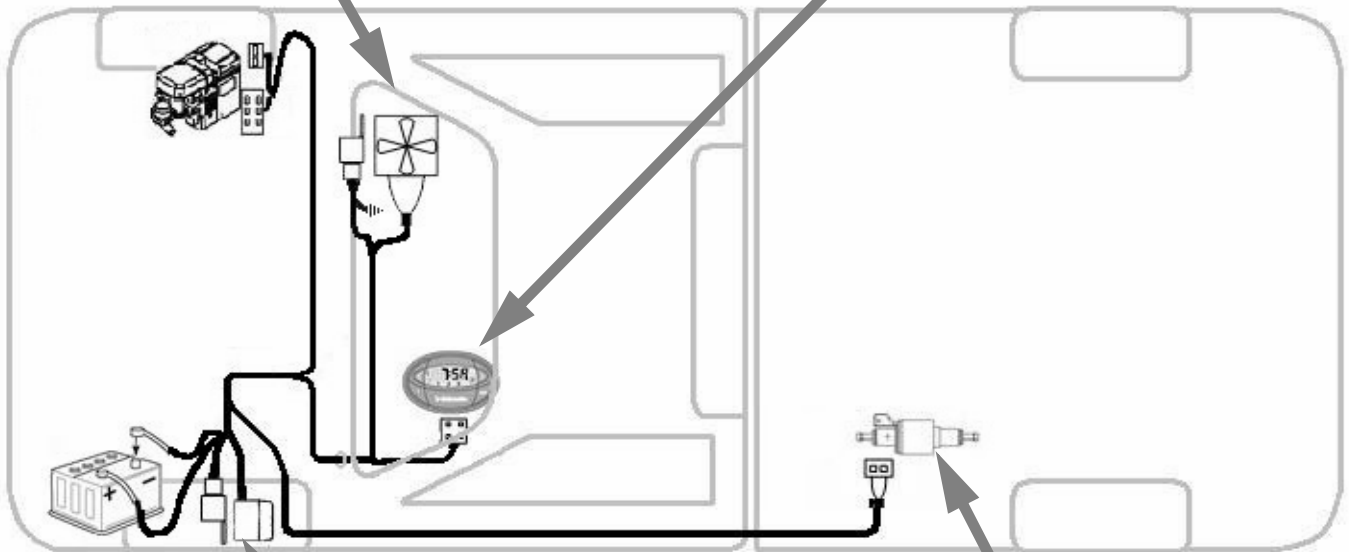
*The timer control location is a recommendation only. Please consult with the customer before mounting.*



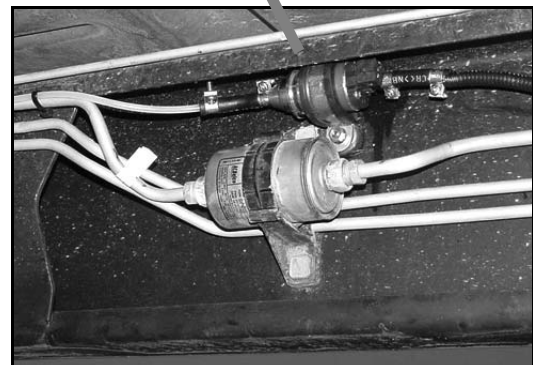
**Vehicle HVAC Blower Motor**



**Timer Control Location**



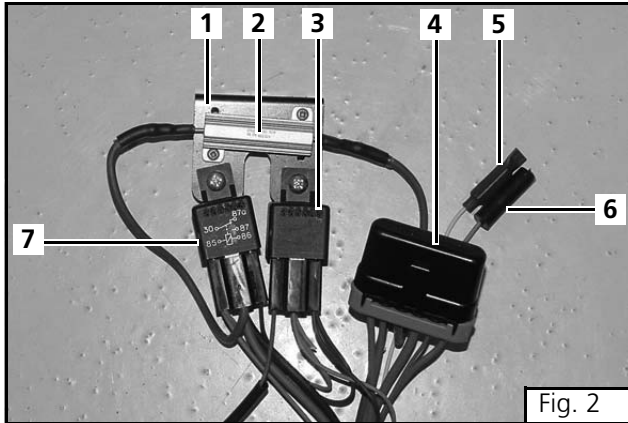
**Webasto Blower Relay**



**Webasto Heater Fuel Pump**

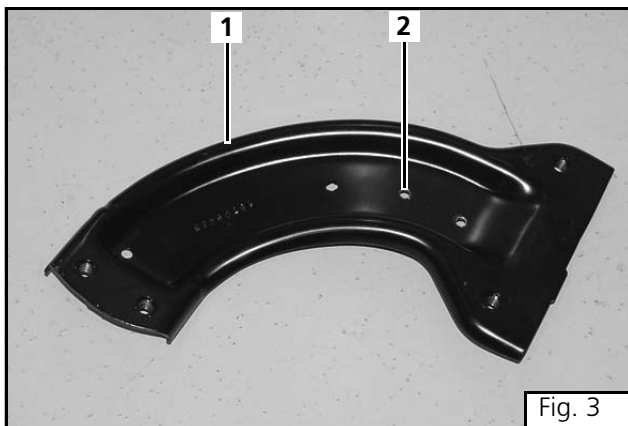


### Electrical Harness

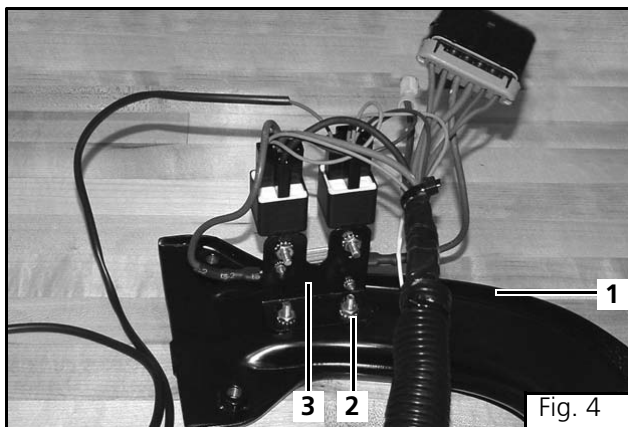


Assemble electrical components as shown in Figure 2.

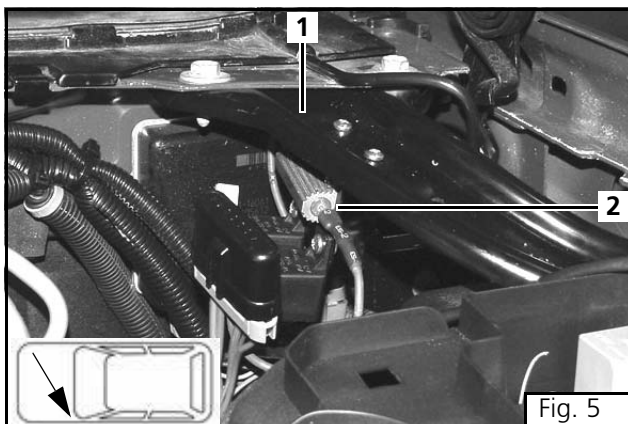
- (1) Mounting Bracket
- (2) Resistor
- (3) K1 Relay
- (4) Fuse Holder
- (5) Diagnostic Connector (Unused)
- (6) Supplemental Heat Connection (Option)
- (7) K2 Relay



- (1) Fender Support Bracket
- (2) Bore two 5 mm (3/16 in.) holes using mounting bracket as a template.



- (1) Fender Support Bracket
- (2) 10-32x5/8 Screws, Lockwashers, and Nuts
- (3) Mounting Bracket



- (1) Fender Support Bracket Installed
- (2) Webasto Fuse Holder, Resistor, and Relays

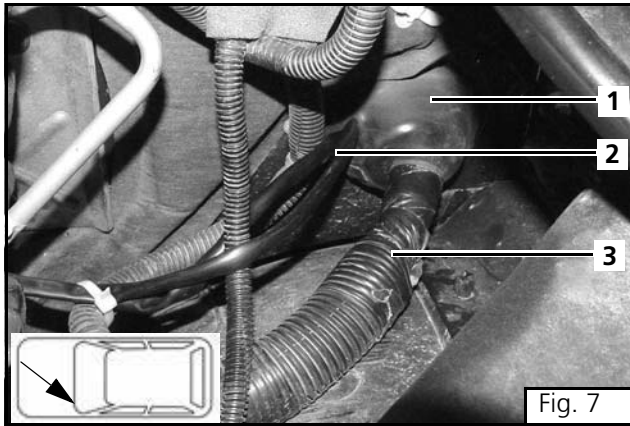




**CAUTION**

Tap into the "fused" output side of the selected fuse. Fuse must remain hot with the ignition in the "ON" position only.

- (1) Heater Ignition ON Lead
- (2) Underhood Fuse Block

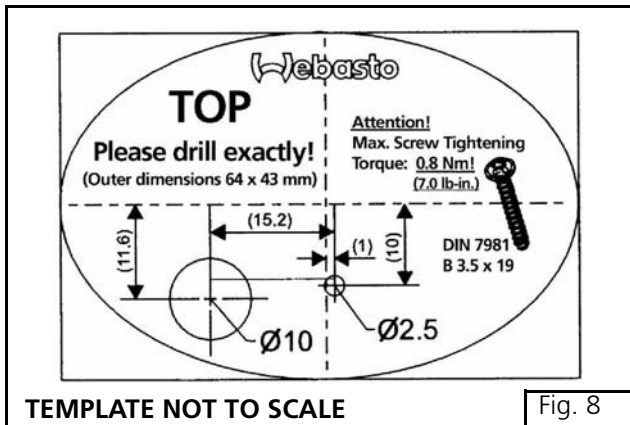


**CAUTION**

Before drilling into any panels, ensure there are no hidden components behind the panel that may be damaged.

Route Blower and Timer Harnesses into vehicle by cutting a 1 in. slit in left side of bulkhead grommet or by drilling a 3/4 in. hole through the bulkhead and using the supplied grommet.

- (1) Bulkhead Grommet
- (2) Blower and Timer Harness
- (3) Vehicle Harness



**CAUTION**

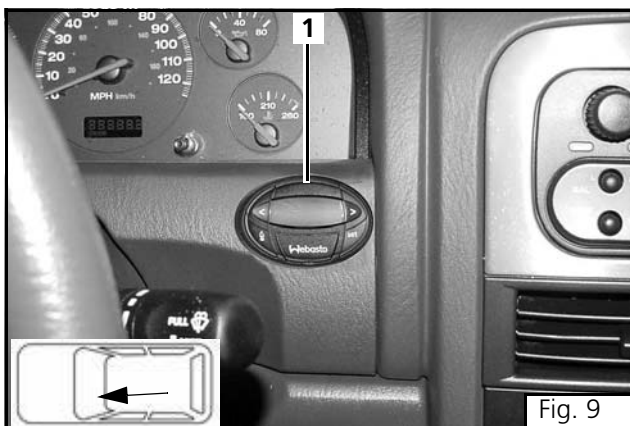
Before drilling into any panels, ensure there are no hidden components behind the panel that may be damaged or interfere with the timer installation!

**ATTENTION**

Before installing the timer, please confirm the installation site with your customer.

**ATTENTION**

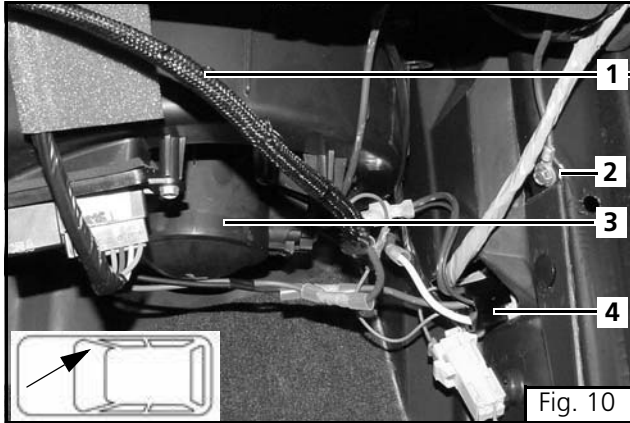
DO NOT OVER TIGHTEN MOUNTING SCREW!  
Maximum torque - 0.8 Nm (7.0 lb-in.).



- (1) Timer Control (Mounting example only)

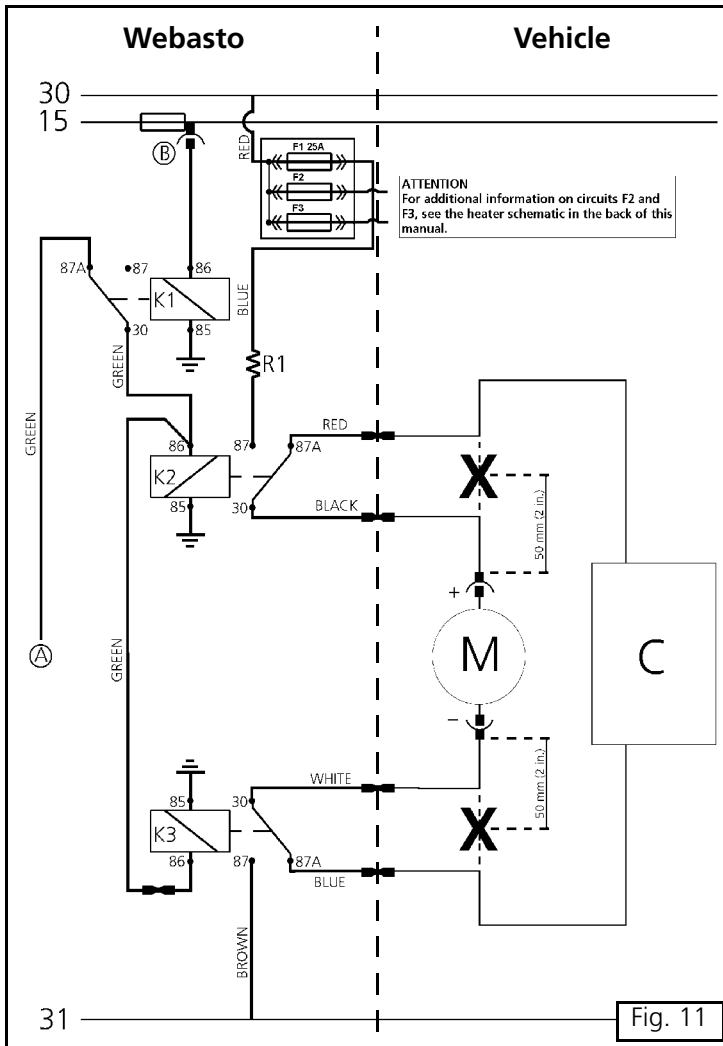


### HVAC Harness Connections



- (1) Webasto Blower Control Harness
- (2) Auxiliary Control Harness Ground
- (3) Vehicle Blower Motor (Passenger Footwell)
- (4) Webasto Auxiliary Control Harness K3 Relay

Fig. 10



#### ATTENTION

Check your wiring! Ensure that all connections have been done in accordance with the wiring diagram shown (Fig. 11). Sensitive electronic controls can be damaged if wired incorrectly!



#### ATTENTION

Secure HVAC blower control wiring to vehicle structures with nylon wire ties (Image not available)



#### Legend for Figure 11

- A** From Webasto Heater X1
- B** 12 VDC Ignition 'On' Fuse Tap
- C** HVAC Control Module
- M** HVAC Blower Motor
- X** Cut wire at 50 mm (2 in.) from motor
- F1** Fuse - Blower Circuit 25 Amp.
- K1** Relay - Ignition 'On' Interrupt
- K2** Relay - Positive Side of Blower Motor Circuit
- K3** Relay - Negative Side of Blower Motor Circuit
- R1** Resistor - Blower Speed Control



**Integration into Fuel System**

**CAUTION**

For reasons of safety due to the weight of fuel and the tank, it is recommended that there be no more than 1/4 tank fuel present. If fuel quantity is greater than 1/4 of capacity, make provisions to reduce quantity of fuel.

**ATTENTION**

Using an appropriate jack and safety stands, lower the fuel tank and remove the fuel sender unit according to the vehicle manufacturers servicing instructions.

**ATTENTION**

Fuel sending units may differ slightly depending on vehicle model.

Locate hole for standpipe in an area of the fuel sender that is flat on the top and bottom and free from obstructions.

- (1) Bottom View of Fuel Sender
- (2) Recommended Hole Location

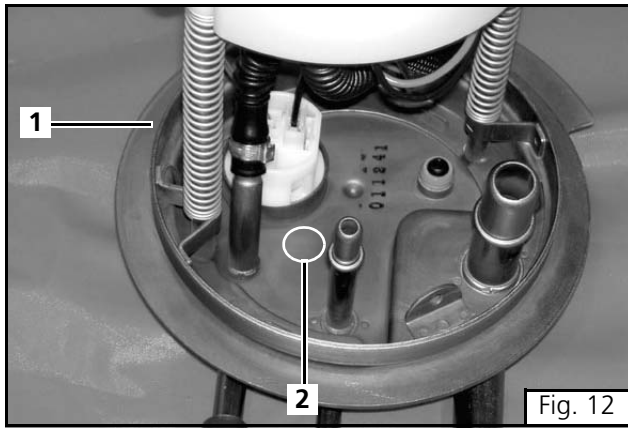


Fig. 12

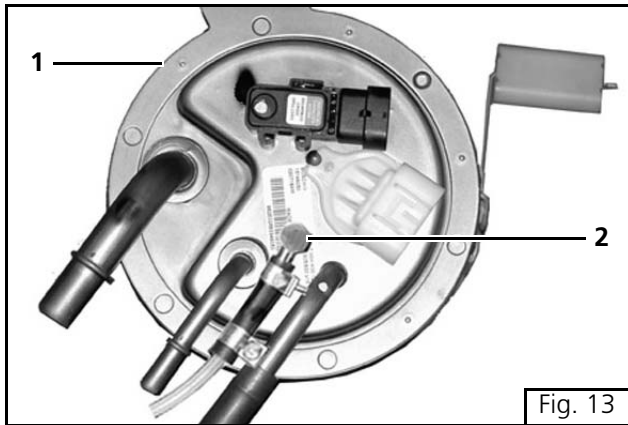


Fig. 13

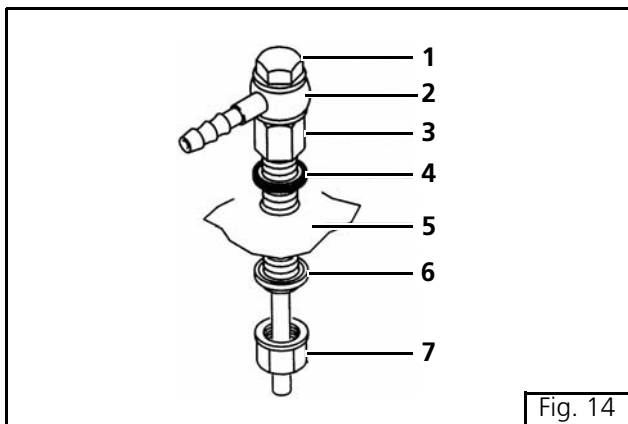


Fig. 14

**ATTENTION**

To prevent fuel leakage, remove burrs from both sides of sending unit before installing standpipe.

Drill a 8.5 mm (21/64 in.) hole through the fuel sender. See Figure 13 for recommended location.

Cut standpipe, at a 45 degree angle, to a length approximately 25.4 mm (1 in.) from the bottom of the sending unit.

Install standpipe as shown in Figure 14.

- (1) Fuel Sending Unit
- (2) Recommended Standpipe Location

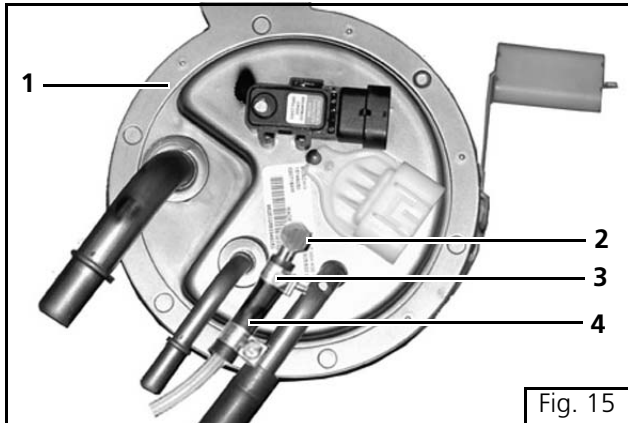
**ATTENTION**

Refer to figure 14 for banjo fitting installation sequence. Tighten locknut to 9.0 - 9.5 Nm (80 - 84 lb.-in.)

**Legend for Figure 14**

- 1 Banjo Bolt
- 2 Banjo Fitting
- 3 Standpipe
- 4 Upper Sealing Washer
- 5 Fuel Tank Sending Unit
- 6 Lower Sealing Washer
- 7 Lock Nut



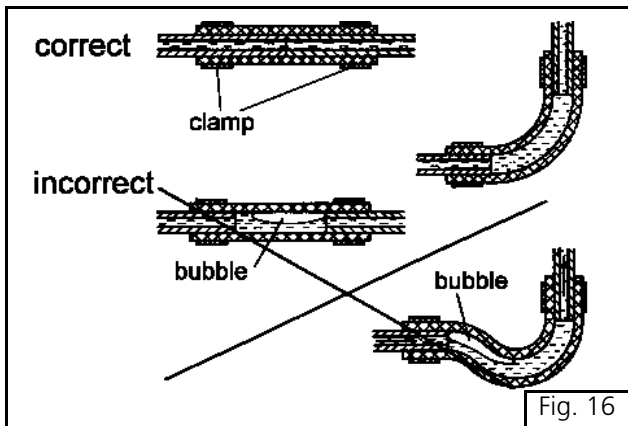


**ATTENTION**

Tighten all fuel line clamps to 1.0 - 1.4 Nm (8.8 - 12.4 lb-in.).

Install fuel line connector and fuel line on standpipe and tighten clamps.

- (1) Fuel Sender
- (2) Standpipe
- (3) Fuel Line Clamp
- (4) Fuel Line Connector



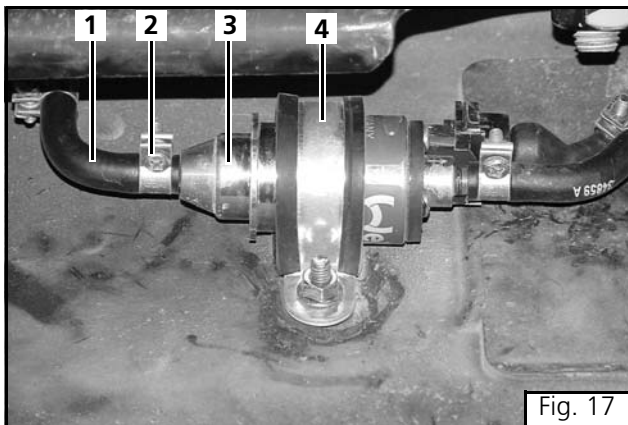
**CAUTION**

Always cut fuel line with a sharp razor knife or razor. DO NOT cut with side cutters, scissors, or similar tools as doing so will cause a restriction inside the fuel line.

**ATTENTION**

Ensure the fuel lines are fully seated within the line connectors and any 90 degree bends are not buckled. Refer to fig. 16.

Tighten all fuel line clamps to 1.0 - 1.4 Nm (8.8 - 12.4 lb-in.).

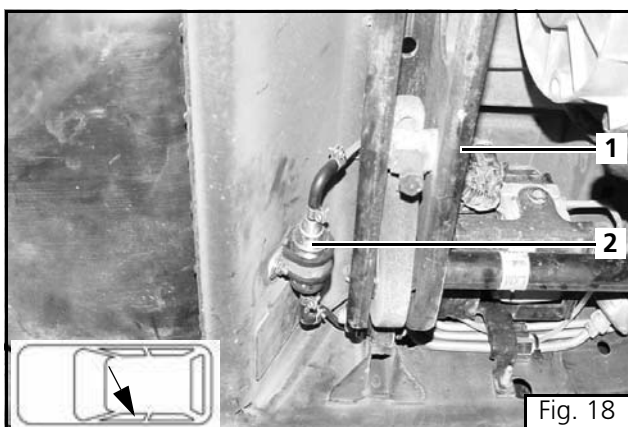


**Fuel Pump Installation (GM SUV)**

Pre-assemble fuel line connectors on fuel pump before installing on vehicle.

Install the Webasto fuel pump in front of the fuel tank on the left side of the vehicle.

- (1) 90 Degree Fuel Line Connector
- (2) Hose Clamp
- (3) Webasto Fuel Pump
- (4) P-clamp



**ATTENTION**

Route heater fuel line (connected from fuel standpipe) over fuel tank and over vehicle cross member for installation to fuel pump.

- (1) Torsion Bar Cross Member
- (2) Webasto Fuel Pump



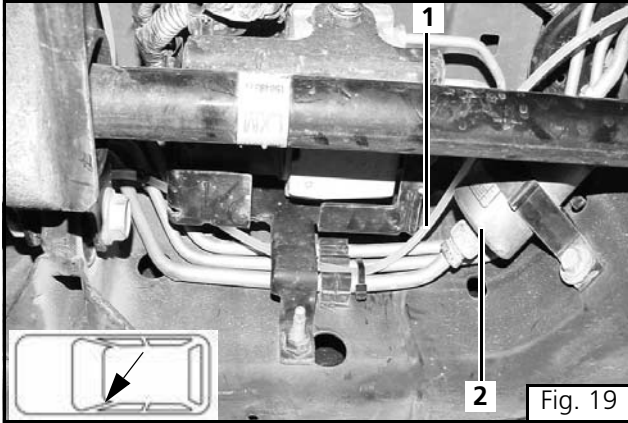


Fig. 19

**ATTENTION**

Route fuel line from fuel pump outlet along existing fuel lines to heater location.

- (1) Webasto Fuel Line
- (2) Vehicle Fuel Line

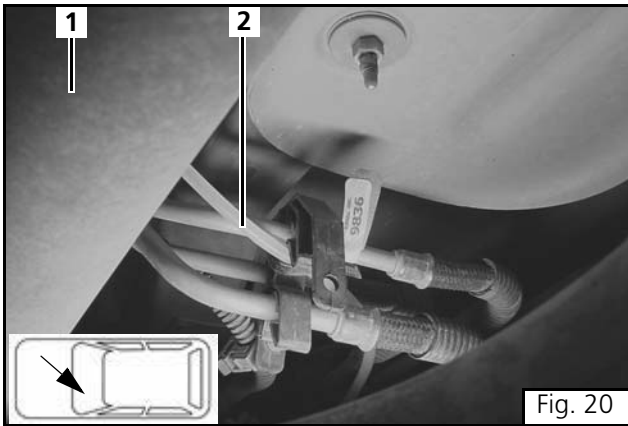


Fig. 20

- (1) Front Driveshaft
- (2) Webasto Fuel Line

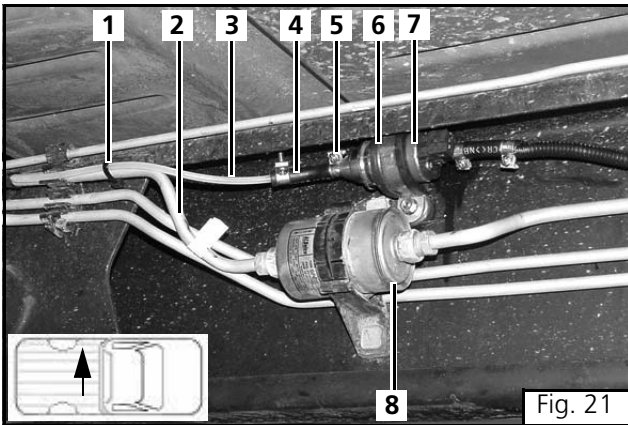


Fig. 21

**Fuel Pump Installation (GM LT Truck)**

**ATTENTION**

Route heater fuel line (connected from fuel standpipe) to fuel pump.

- (1) Nylon Wire Tie
- (2) Vehicle Fuel Line
- (3) Heater Fuel Line
- (4) Fuel Line Adapter
- (5) Hose Clamp (2 ea.)
- (6) P-clamp
- (7) Heater Fuel Pump
- (8) Vehicle Fuel Filter

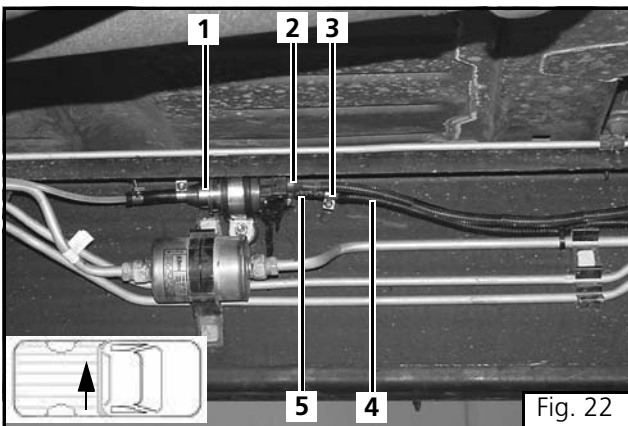


Fig. 22

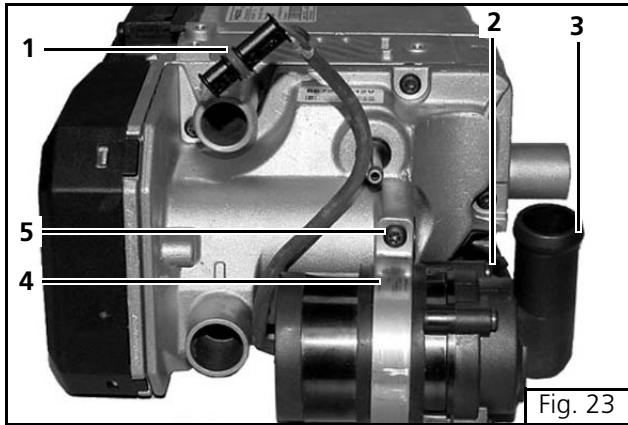
**ATTENTION**

Route fuel line from fuel pump outlet along existing fuel lines to heater location.

Route fuel pump wiring harness from engine compartment along vehicle fuel line to heater fuel pump location.

- (1) Heater Fuel Pump
- (2) Fuel Pump Electrical Harness
- (3) Hose Clamp (2 ea.)
- (4) Heater Fuel Line Covered With Plastic Loom
- (5) Fuel Line Adapter





### Heater Preparation and Installation

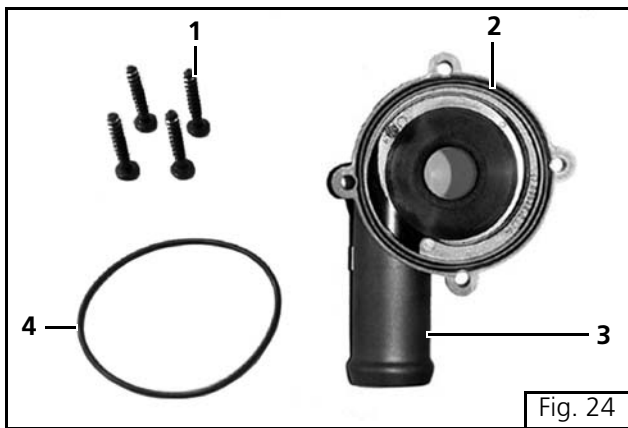
Unplug coolant pump harness connector and remove harness from groove in side of heater.

Slide hose clamp back on coolant hose.

Remove T20 screw, retaining clip, and coolant pump from heater.

Remove four T10 screws and pump housing from coolant pump. Retain T10 screws.

- (1) Coolant Pump Electrical Connector
- (2) T10 Screws (4 ea.)
- (3) Pump Housing
- (4) Retaining Clip
- (5) T20 Screw



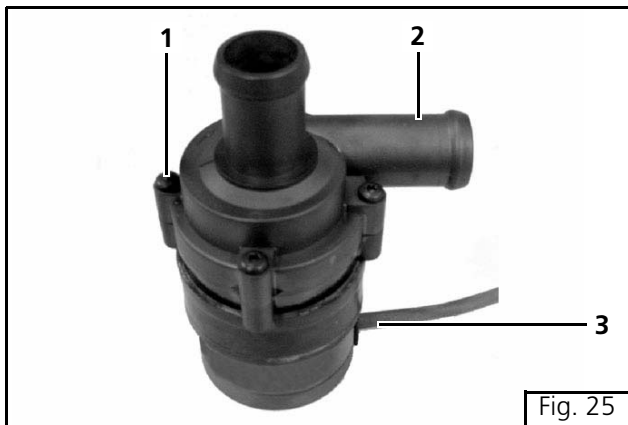
### CAUTION

Ensure the O-ring seal is properly seated in the groove of the replacement housing and it is underneath the plastic projections on the 4 bases for the screws.

Install O-ring seal in groove of replacement housing.

Discard silver screws found in bag.

- (1) Silver Screws
- (2) Groove in Housing
- (3) Replacement Housing
- (4) O-ring Seal



### ATTENTION

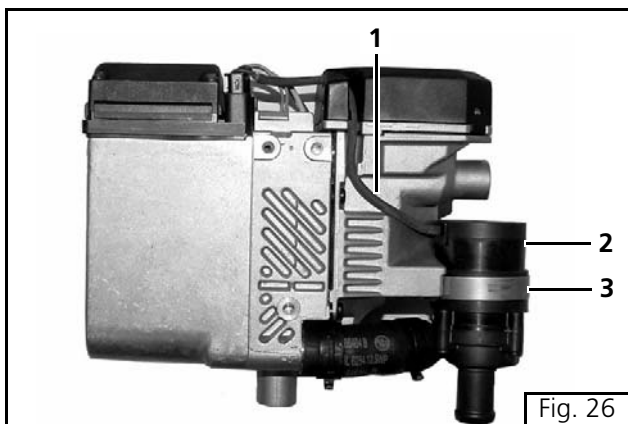
Align coolant pump housing outlet with electrical harness.

Slowly turn each of the T10 mounting screws counter-clockwise until the screw drops into the original threads in the pump.

Tighten each of the T10 mounting screws in a criss-cross pattern to 1.0-1.5 N/m (8.9-13.3 lb-in.)

Install replacement pump housing on pump with T10 screws saved during disassembly.

- (1) T10 Mounting Screws
- (2) Coolant Pump Housing Outlet
- (3) Electrical Harness



### ATTENTION

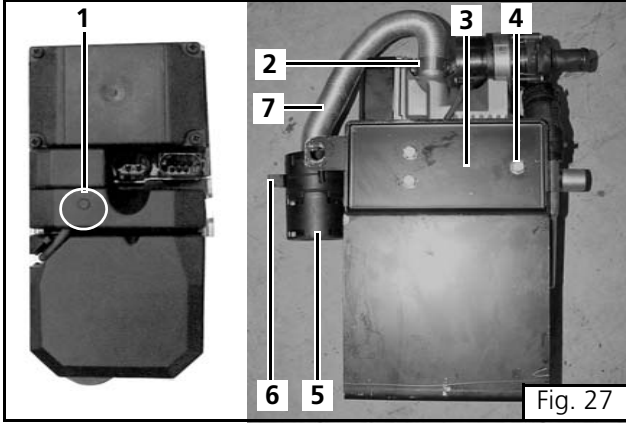
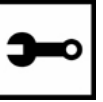
Ensure there is not a gap between the pump and the pump housing prior to installation.

Install coolant pump with retaining clip and T20 screw. Position hose clamp on pump.

Plug electrical harness into heater and push harness into the slot in the side of the heater.

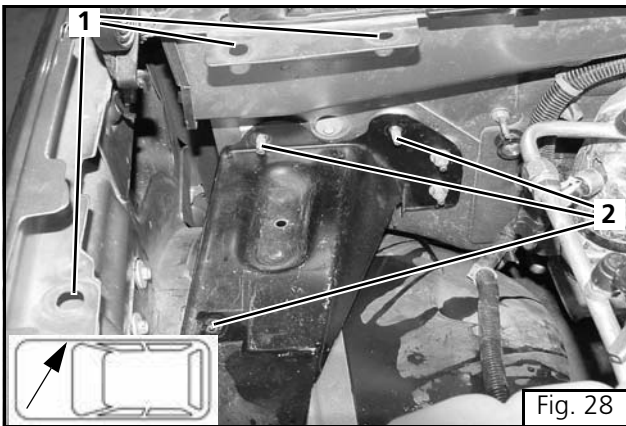
- (1) Electrical Harness
- (2) Coolant Pump
- (3) Retaining Clip





Remove knock out on heater cover as shown.  
 Connect air intake silencer to air intake tube and install on heater using knock out previously removed and clamps provided.  
 Install heater mounting bracket with EJOT screws provided.

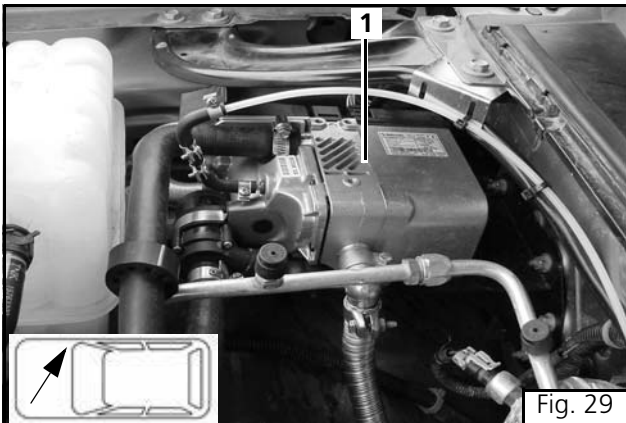
- (1) Circular Heater Knock Out
- (2) Air Intake Tube Clamp
- (3) Heater Mounting Bracket
- (4) EJOT Screws
- (5) Air Intake Silencer
- (6) Air Intake Silencer Clamp
- (7) Air Intake Silencer Tube



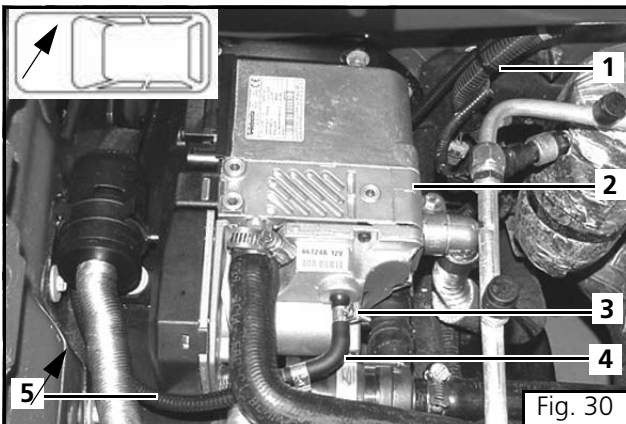
**ATTENTION**

*Mount heater and bracket assembly on vehicle using existing retaining nuts and studs.*

- (1) Upper Fender Bracket Retaining Bolts Removed
- (2) Lower Fender Bracket Retaining Nuts Removed



- (1) Webasto Coolant Heater Installed



**Connecting the Fuel Line to Heater**

**ATTENTION**

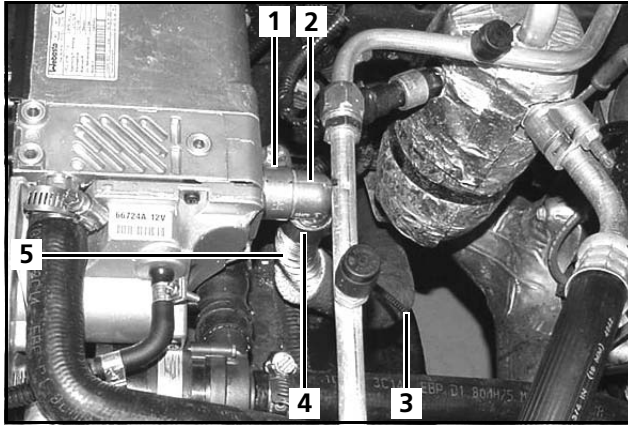
*Route fuel line along wiring harness over to the right inner fender as shown.*

- (1) Wiring Harness
- (2) Webasto Heater
- (3) Hose Clamp (2 ea.)
- (4) 90 Degree Fuel Line Adapter
- (5) Heater Fuel Line Covered With Plastic Loom





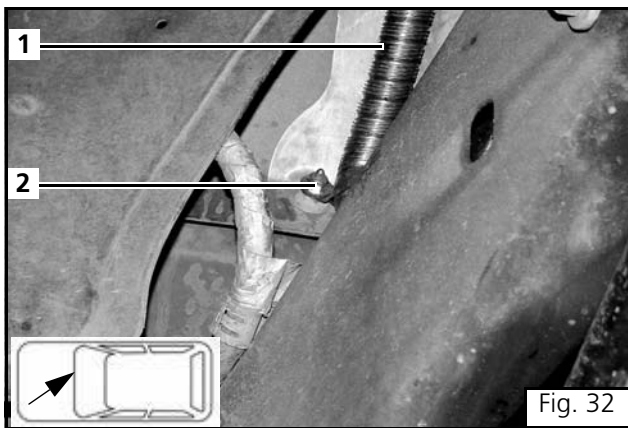
### Exhaust Routing and Installation



**ATTENTION**

*Install heat insulating sleeve over exhaust tube and route to underside of vehicle as shown.*

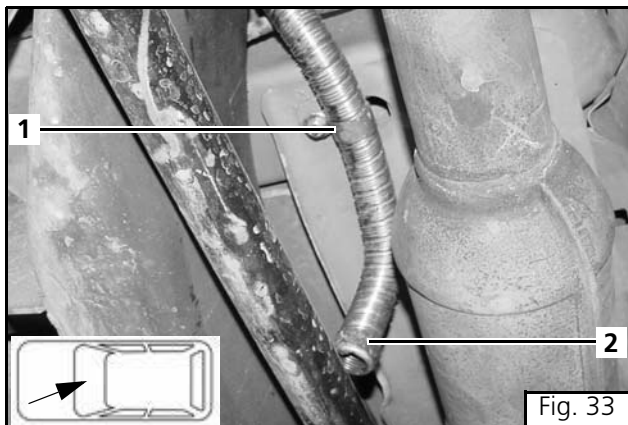
- (1) Exhaust Clamp
- (2) 90 Degree Exhaust Fitting
- (3) Heat Insulating Sleeve
- (4) Exhaust Clamp
- (5) Exhaust Tube



**ATTENTION**

*Use an exhaust P-clamp and nut to attach exhaust pipe to base of A/C accumulator drip shield as shown.*

- (1) Exhaust Tube
- (2) Mounting Location



**CAUTION**

*Ensure the exhaust tube is securely mounted away from heat sensitive vehicle components, i.e., the oxygen sensor and wiring.*

**ATTENTION**

*Ensure the tail pipe is positioned downward.*

- (1) Exhaust Clamp
- (2) Exhaust Tailpipe







Integration into Coolant System

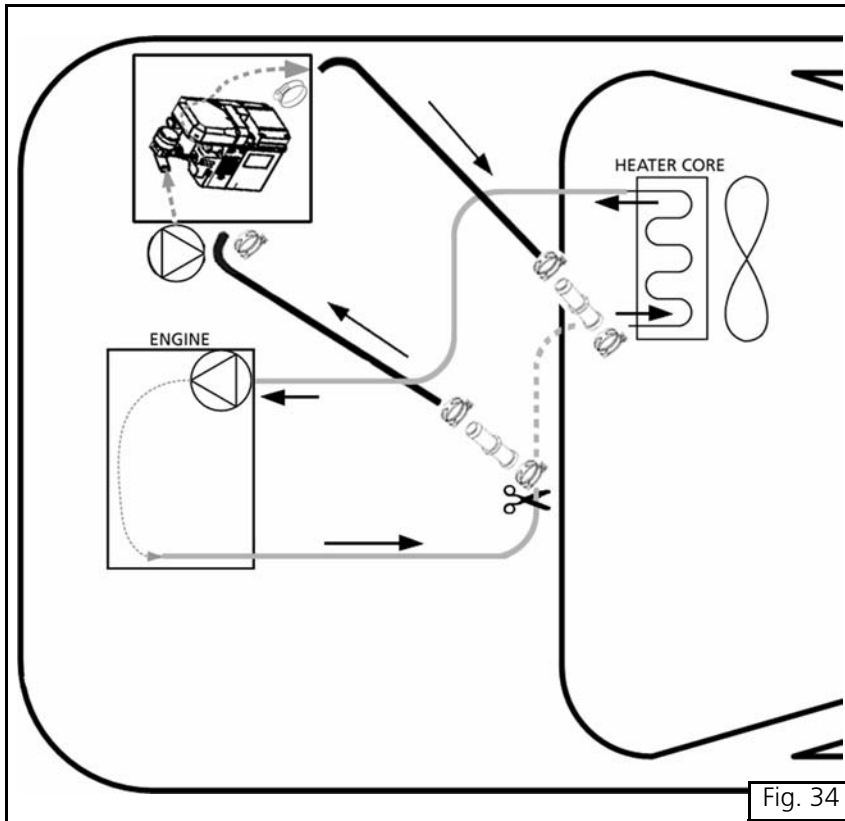


Fig. 34

**ATTENTION**

Fig. 34 displays the integration of the Webasto Coolant Heater into the vehicles cooling system.

**ATTENTION**

Torque all hose clamps to 2.0 - 2.5 Nm (18 - 22 lb.-in.).

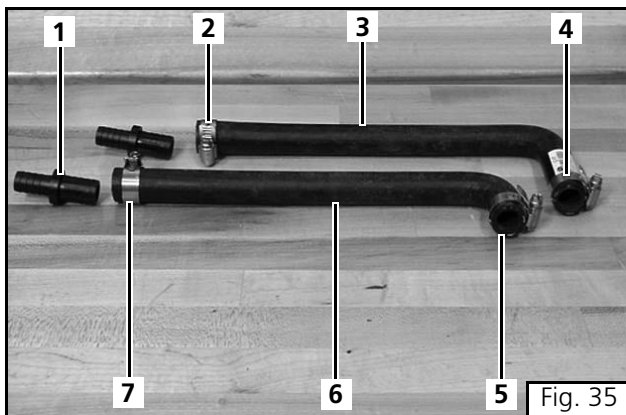


Fig. 35

**ATTENTION**

Cut provided coolant hose according to fig. 35.

- (1) Coolant Hose Adapter (2 ea.)
- (2) Connect to Cut Hose at Heater Core Inlet
- (3) Coolant Hose from Heater Outlet to Heater Core Inlet
- (4) Connect to Heater Outlet
- (5) Connect to Heater Inlet
- (6) Coolant Hose From Engine Block to Heater Inlet
- (7) Connect to Cut Hose from Engine Block

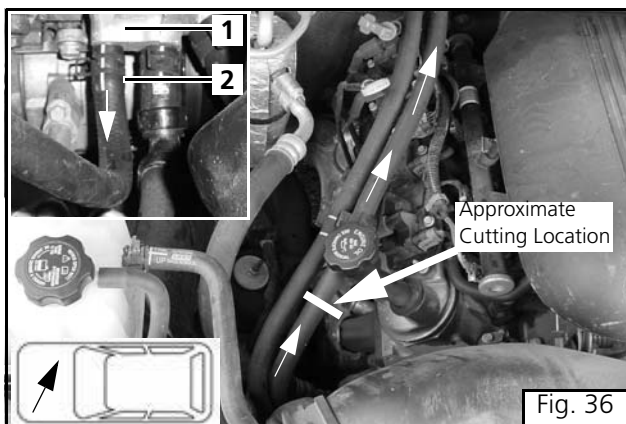


Fig. 36

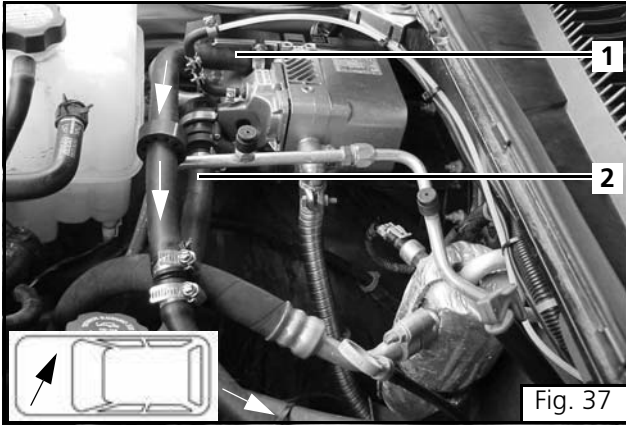
**ATTENTION**

Verify coolant flow (as shown in Figure 36) before cutting hose.

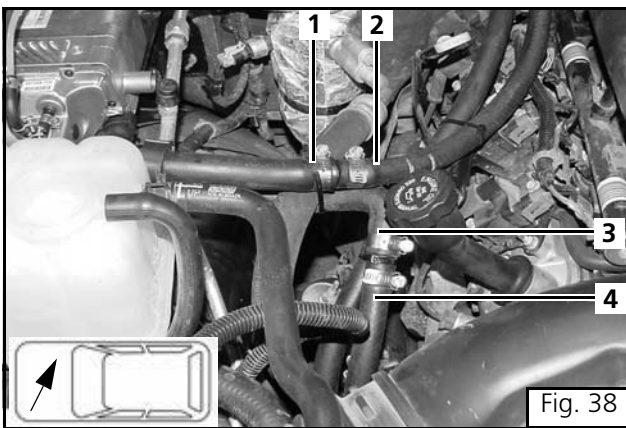
Cut vehicle heater core inlet hose 18 inches from bulkhead as shown in Figure 36.

- (1) Engine Block
- (2) Heater Core Inlet Hose





- (1) Webasto Heater Outlet Hose
- (2) Webasto Heater Inlet Hose



**ATTENTION**

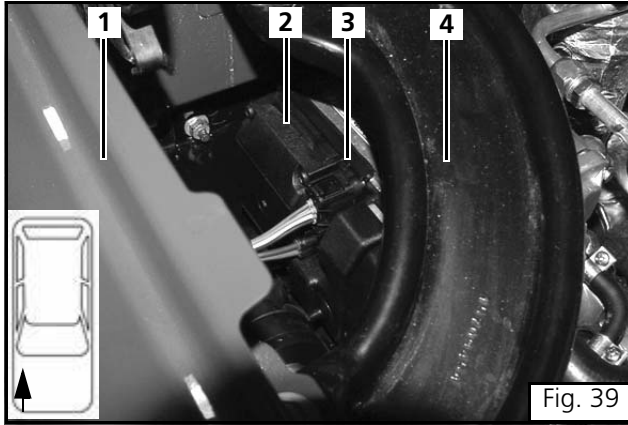
Secure coolant lines to available components with nylon wire ties. Keep lines away from hot exhaust and turbo components.

- (1) Webasto Heater Outlet Hose
- (2) Heater Core Side Inlet Hose
- (3) Webasto Heater Inlet Hose
- (4) Engine Side of Heater Core Inlet Hose

**NOTE:**

Also see the plumbing schematic in the back of this manual for a general outline of the coolant circuit arrangement.



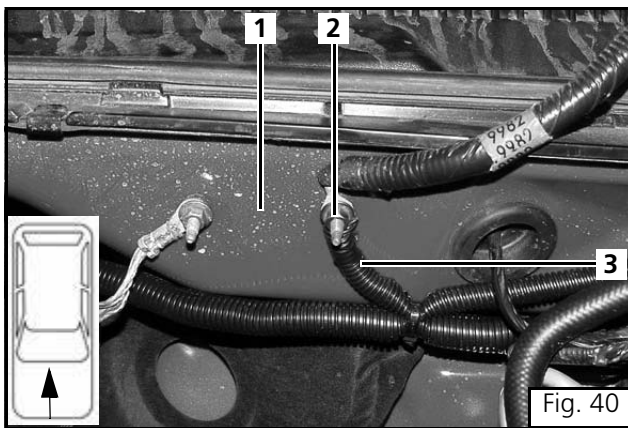


**Connecting the Control Harness to Heater**

**ATTENTION**

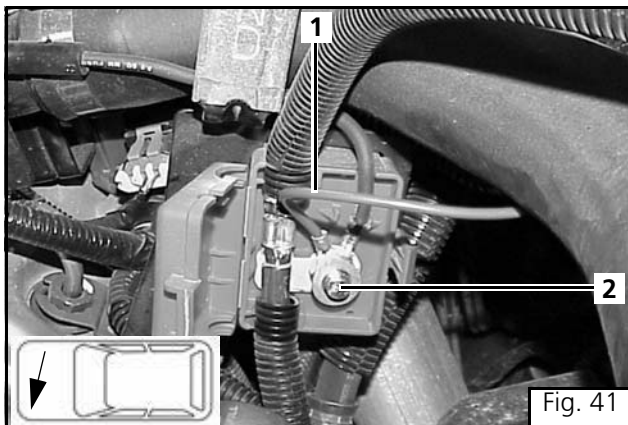
*Route heater control harness along vehicle wiring harness over to the right inner fender as shown.*

- (1) Right Fender
- (2) Webasto Heater
- (3) Heater Control Harness
- (4) Fender Support Bracket



**Power and Ground Connections**

- (1) Vehicle Bulkhead
- (2) Vehicle Ground Stud
- (3) Webasto Heater Ground



**ATTENTION**

*Connect red power lead to existing power stud underhood. Reconnect battery ground cable.*

- (1) Webasto Power Lead
- (2) Vehicle Power Stud



**Concluding Work**

- Install all vehicle parts, panels and components removed during heater installation.
- Check that all hose lines, hose clamps, pipe clips and electrical connections are secure.
- Secure all loose lines and cables with nylon cable ties.
- Spray the heater components and electrical connections with an anti-corrosive wax coating.



## Final Inspection and Initial Start-up

### Final Inspection

Inspect installation for:

- Loose fasteners.
- Exhaust system routing and clamp tightness.
- Combustion air intake tube routing and clamp tightness.
- Loose coolant line clamps.
- Pinched coolant lines.
- Routing of coolant lines and coolant lines securely tied and protected against chafing and related damage.
- Loose fuel line clamps.
- Routing of fuel lines and fuel lines securely tied and protected against chafing and related damage.
- Loose wiring connections and battery connections.
- routing of wiring harness and wiring harness securely tied and protected against chafing and related damage.
- Check operation of vehicle heater fan with Webasto heater OFF.

### Initial Start-up

1. Top off cooling system with coolant per engine/vehicle manufacturers recommendations.
2. Set interior heater control to maximum heat position (hot) and switch off air conditioning system.
3. Start the vehicle engine and run on fast idle for 5 minutes to purge any remaining air from the Webasto heater and coolant system. While the engine is running check:
  - Hose connections for leaks.
  - Coolant level in expansion tank. (Add coolant as needed)
4. Switch off the engine.



### ATTENTION

*More than one start-up attempt of the heater may be required to purge air from fuel system before heater will start. Cycle heater Off and On after each failed start attempt until heater starts successfully. After 3 consecutive unsuccessful start attempts, the webasto control unit enters into Heater lockout. See Heater Lockout section for reset instructions.*



5. Switch on the Webasto heater by means of the instant heat button on timer and check:
  - Timer panel and instant heat indicator illuminates.
  - Circulating pump in operation.
  - Initiation of start-up sequence.
  - Successful start-up and operation.
6. Allow heater to run for 20 minutes or until coolant is heated to temperature. Re-tighten all hose clamps.

### ATTENTION

*Engine coolant temperature gauge may read lower than actual Webasto heater output temperature. This is due to the location of the temperature gauge sensor on engine.*





### Heater Lockout Reset Procedure

The BlueHeat is designed with a lockout safety feature built into the control unit. After 3 consecutive unsuccessful startup attempts, the heater will lock itself out from any further start attempts. The heater may also enter the lockout mode after experiencing an overheat condition.

Reset Heater "Lockout" mode by performing the following procedure:

1. Ensure timer or switch is in the "OFF" position. Turn timer or switch to the "On" position. Remove main fuse F2 (20 Amp), reinsert after 5 seconds.
2. Cycle timer or switch off and then back on once more. Remove fuse F2 once again and reinsert after 5 seconds. Heater should attempt to start after inserting fuse.

### ATTENTION

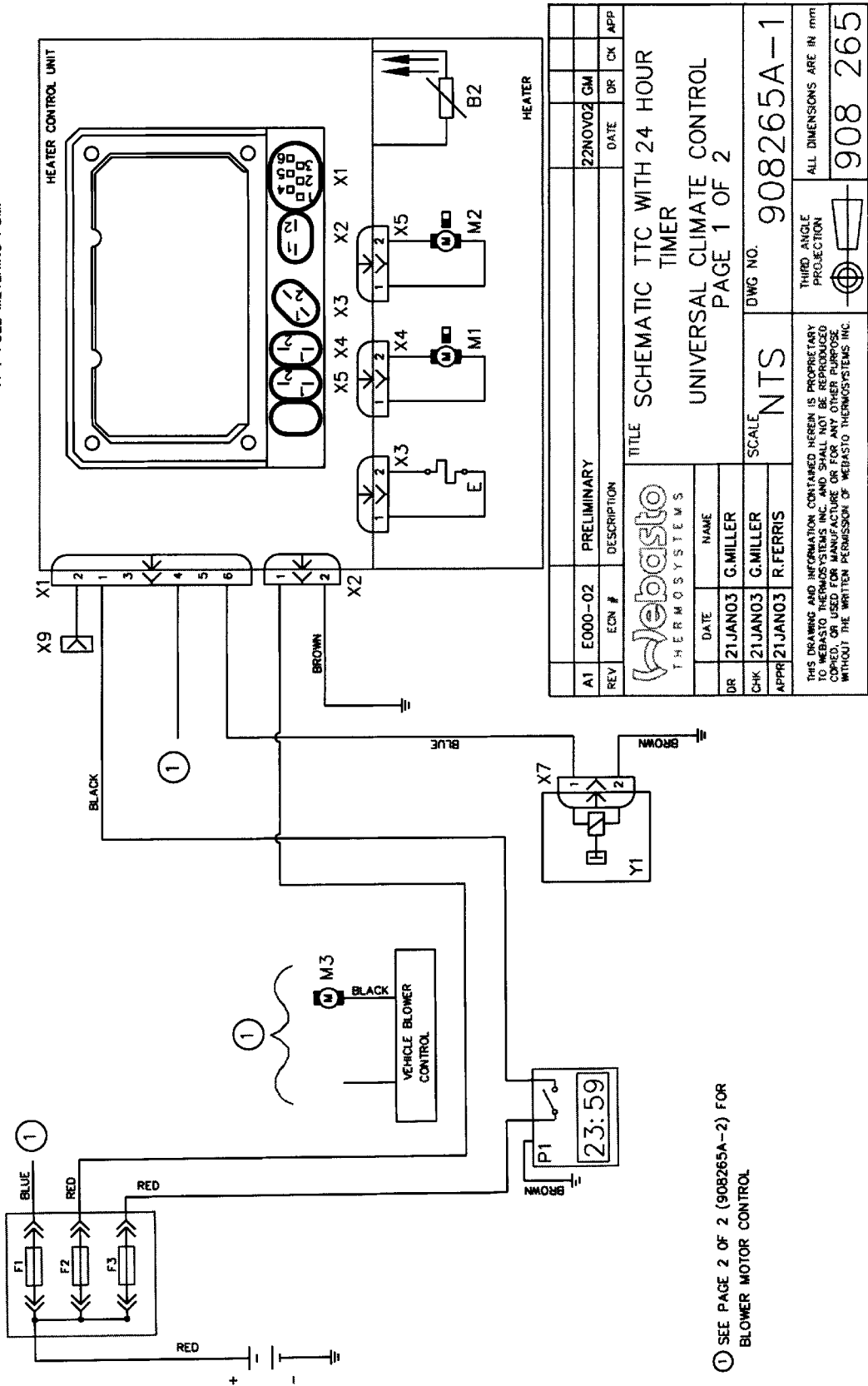
- Coolant temperature must be below the lower threshold before heater will attempt to start.
- The engine coolant must reach 86 °F (30 °C) before the Webasto heater will attempt to start vehicles blower fan.
- Should the heater fail to start or operate correctly, call your Webasto technical representative at:  
**1-800-555-4518**





Wiring Schematic Part 1 - Heater Control

- B2 : TEMPERATURE SENSOR - COOLANT
- E : CERAMIC IGNITOR / FLAME DETECTOR
- F1 : 25A BLOWER INTERLOCK
- F2 : 20A HEATER
- F3 : 2A TIMER
- K1 : IGNITION BLOWER CONTROL RELAY
- K2 : BLOWER RELAY 1
- K3 : BLOWER RELAY 2
- M1 : COMBUSTION AIR FAN
- M2 : COOLANT CIRCULATING PUMP
- M3 : VEHICLE BLOWER HTR/AC
- P1 : TIMER 24 HOUR
- R1 : RESISTOR 10HM/50W
- X9 : DIAGNOSTIC LINK
- Y1 : FUEL METERING PUMP



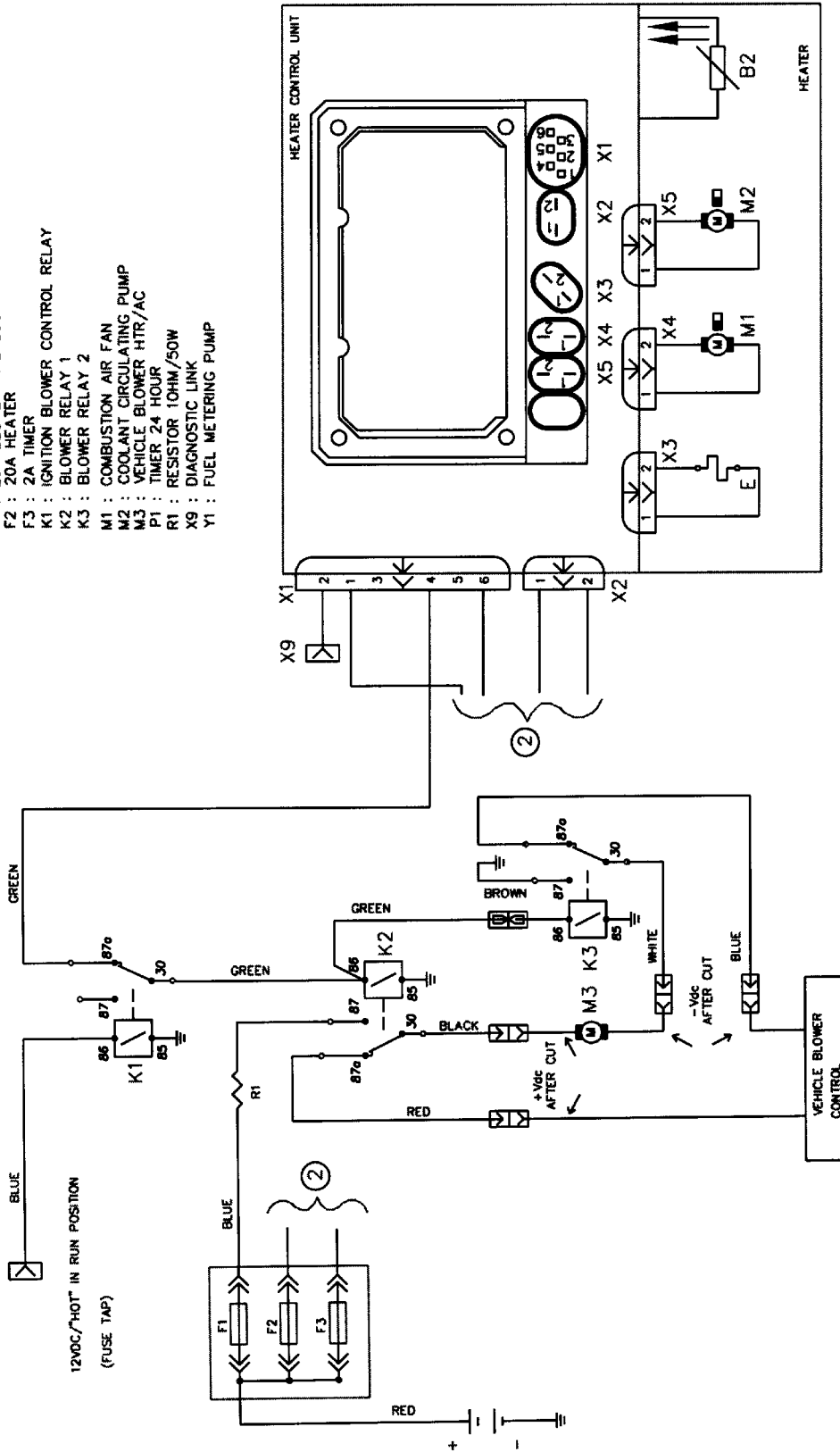
REV	ECN #	DESCRIPTION	DATE	DR	CK	APP
A1	E000-02	PRELIMINARY	22NOV02	GM		
TITLE SCHEMATIC TTC WITH 24 HOUR TIMER UNIVERSAL CLIMATE CONTROL PAGE 1 OF 2						
DR	21JAN03	G.MILLER				
CHK	21JAN03	G.MILLER				
APPR	21JAN03	R.FERRIS				
SCALE NTS			DWG NO. 908265A-1			
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① SEE PAGE 2 OF 2 (908265A-2) FOR BLOWER MOTOR CONTROL



Wiring Schematic Part 2 - Blower Control

- B2 : TEMPERATURE SENSOR - COOLANT
- E : CERAMIC IGNITOR / FLAME DETECTOR
- F1 : 25A BLOWER INTERLOCK
- F2 : 20A HEATER
- F3 : 2A TIMER
- K1 : IGNITION BLOWER CONTROL RELAY
- K2 : BLOWER RELAY 1
- K3 : BLOWER RELAY 2
- M1 : COMBUSTION AIR FAN
- M2 : COOLANT CIRCULATING PUMP
- M3 : VEHICLE BLOWER HTR/AC
- P1 : TIMER 24 HOUR
- R1 : RESISTOR 10HM/SOW
- X9 : DIAGNOSTIC LINK
- Y1 : FUEL METERING PUMP



FUNCTION : WHEN HEATER IS SWITCHED ON AND COOLANT REACHES 60°C (140°F) THE WEBASTO HEATER SENDS A SIGNAL THROUGH K1 TO K2 AND K3 VEHICLE BLOWER WILL COME ON AT LOW SPEED IF A VEHICLE IGNITION SIGNAL IS PRESENT AT K1, THE VEHICLE RETURNS TO NORMAL HVAC/OPERATOR CONTROLS

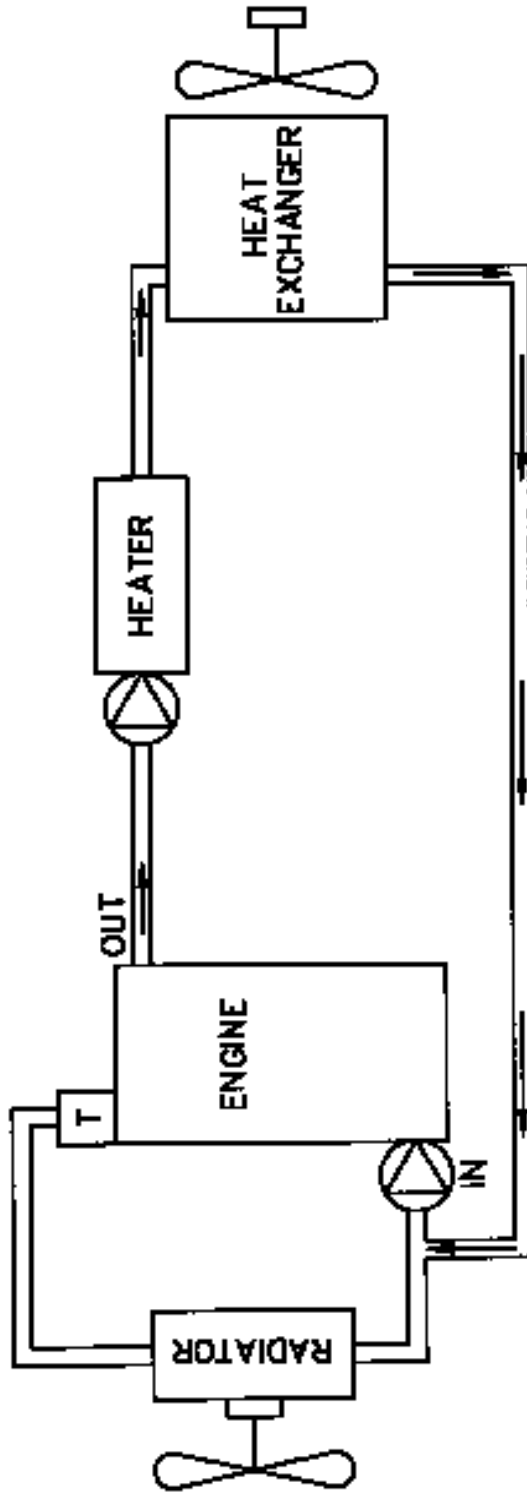
② SEE PAGE 1 OF 2 FOR ALL OTHER HEATER CONTROLS


		TITLE SCHEMATIC TTC WITH 24 HOUR TIMER UNIVERSAL CLIMATE CONTROL PAGE 2 OF 2	
DR	21JAN03	NAME	G.MILLER
CHK	21JAN03	SCALE	NTS
APPR	21JAN03	DWG NO.	908265A-2
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			ALL DIMENSIONS ARE IN mm 908 265




Heater Plumbing Schematic - Inline Method

WEBASTO THERMO TOP C INLINE COOLANT SCHEMATIC



 = THERMOSTAT

 = COOLANT PUMP (2 PLC'S)



**NOTES:**



**Webasto Product N.A., Inc.**

Technical Assistance Hotline

USA: (800) 555-4518

Canada: (800) 667-8900