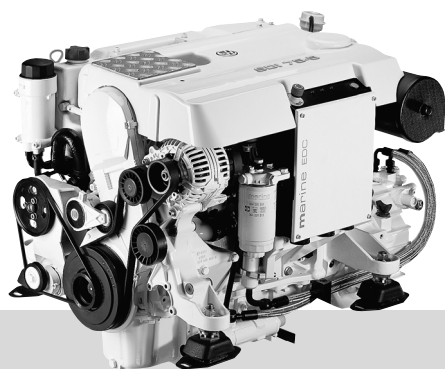


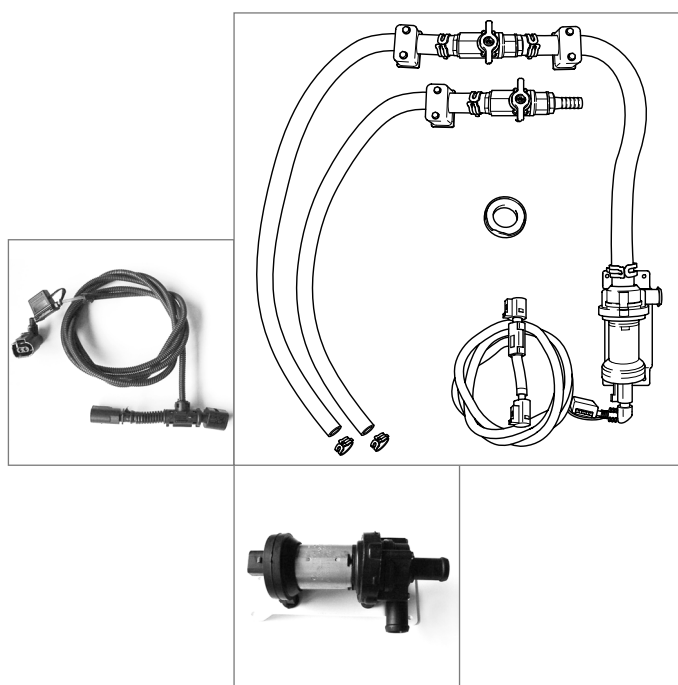


**Bootsmotoren von  
Volkswagen Marine**



**Anschluss-Kit für Warmwasserboiler/  
Motorbetriebene Heizung**

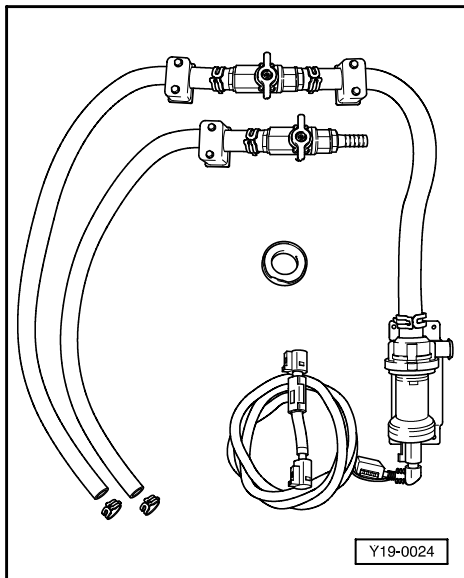
**Connection kit for hot-water boiler/  
engine-driven heating**



TDI 100-5  
TDI 120-5  
TDI 150-5  
TDI 150-5D

SDI 55-5  
SDI 75-5

## Connection kit for hot-water boiler / engine-driven heating



- ◀ This installation kit is required if you wish to operate a hot-water boiler or an engine-driven heating unit with your 5-cylinder Volkswagen Marine boat engine. It has been specially designed for this Volkswagen Marine engine.

When installing this device, an electrical auxiliary water pump must be installed in the coolant circuit to ensure safe operation. The auxiliary water pump should be fitted in the area of the engine if possible. The electrical connection cable (approx. 2 m long) is connected to the gear variant plug on the rear side of the engine.

### Notes on installation location:

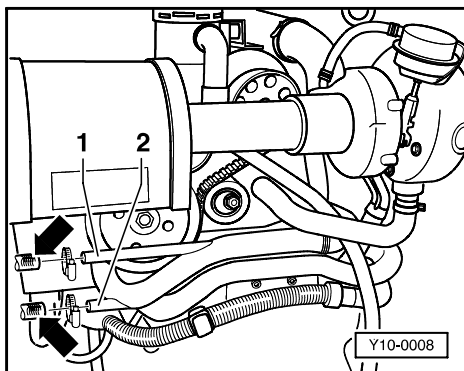
- ◆ The location for installing the hot-water boiler or engine-driven heating unit must be chosen so that it is lower than the level of the cooling water in the cap of the housing-radiator package.
- ◆ For the bracket of the auxiliary water pump, find an installation location which is in the immediate vicinity of the engine.

1

### General information:

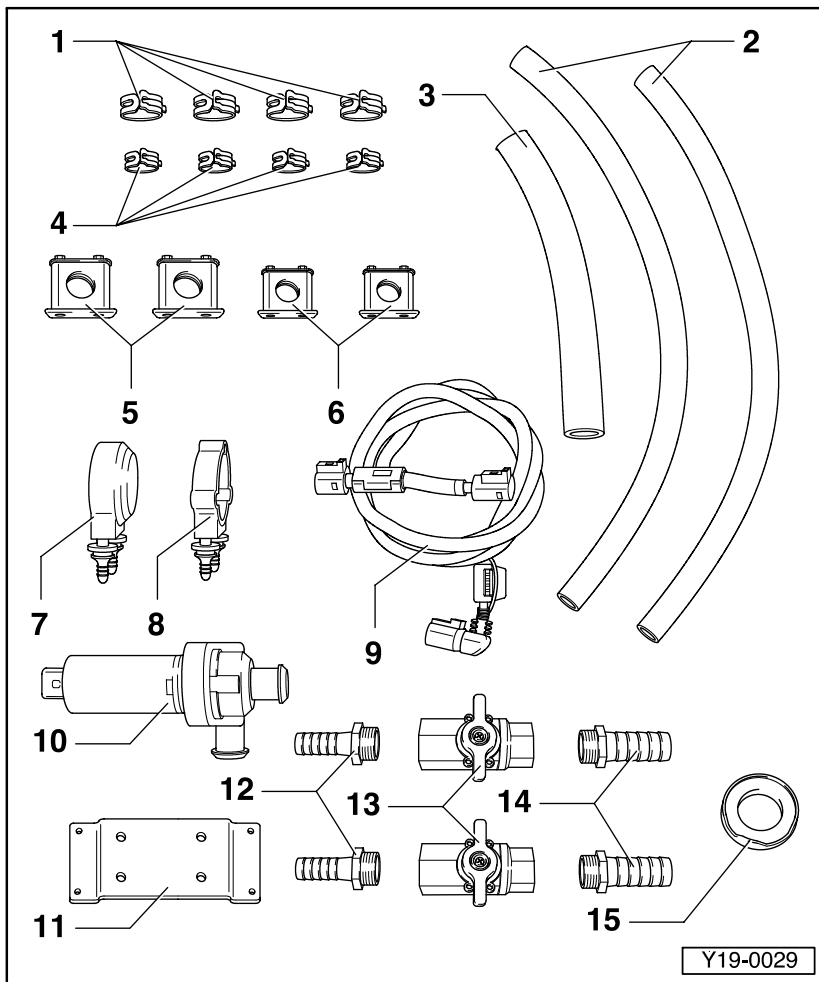
The coolant hoses supplied are pressure- and oil-resistant.

Thanks to a ready-for-connection wiring harness with an ISO plug, this installation can be performed quickly and safely.



- ◀ The coolant connections -1- (return) and -2- (supply) have been provided on the Volkswagen Marine boat engine for connection of a hot-water boiler or engine-driven heating unit.

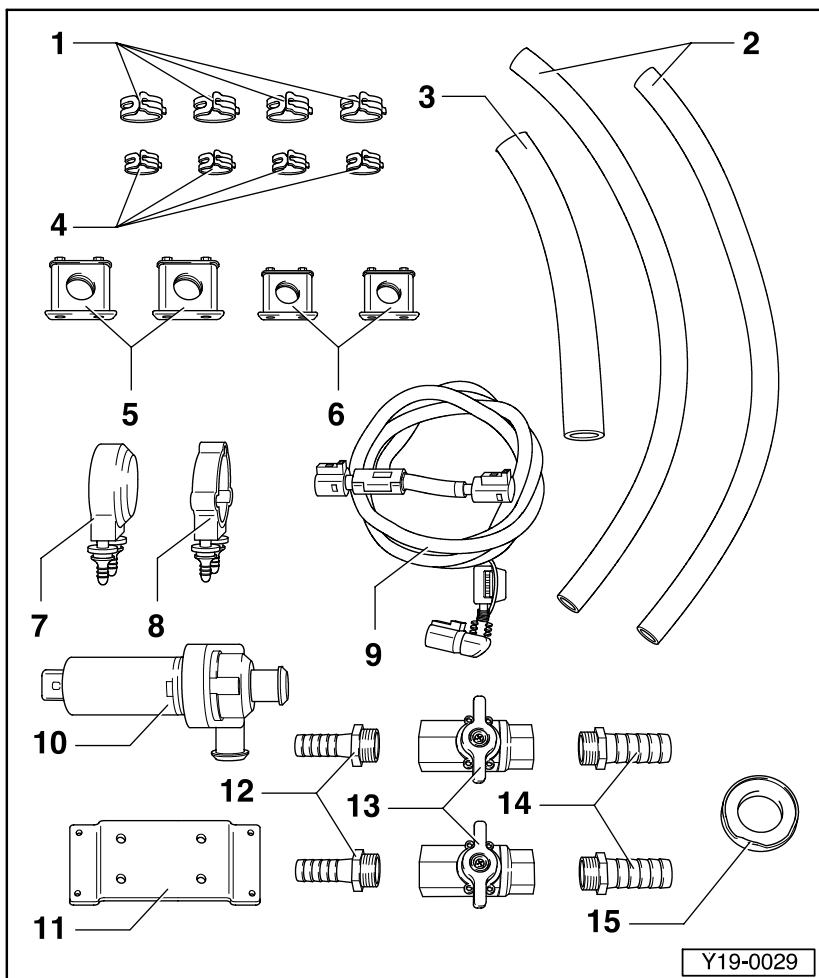
2



## Overview of scope of delivery

- 1 - Spring clip B 27x12**
- 2 - Coolant hose 16x3.5x1000**
  - ◆ Hose of equal quality is available in rolls (part number 2Y1 121 058)
- 3 - Coolant hose 20x3.5x500**
  - ◆ Hose of equal quality is available in rolls (part number 2Y1 121 058 A)
- 4 - Spring clip B 23x12**
- 5 - Hose bracket 28mm**
- 6 - Hose bracket 22mm**
- 7 - Rear rubber mount**
  - ◆ For auxiliary water pump

3



- 8 - Front rubber mount**
  - ◆ For auxiliary water pump
- 9 - Connection cable with plug and fuse holder**
- 10 - Auxiliary water pump**
  - ◆ Can be rotated into three positions
- 11 - Bracket**
  - ◆ Bracket can be glued, welded or screwed in place
- 12 - Hose adapter 1/2" x 16mm**
- 13 - Ball valve 1/2"**
- 14 - Hose adapter 1/2" x 20mm**
- 15 - Sealing tape (Teflon)**

4

**Scope of delivery:**

Quantity	Part number	Designation
1	1J0 965 561 A	Auxiliary water pump
1	065 121 079	Bracket
1	035 959 209 E	Front rubber mount
1	066 959 209	Rear rubber mount
1	065 970 282	Connection cable with plug and fuse 4A
2	2Y1 127 429	Ball valve 1/2"
2	2Y1 121 147	Hose adapter 1/2"x 16mm
2	2Y1 121 147 A	Hose adapter 1/2"x 20mm
2	2Y1 121 057	Coolant hose 16x3.5x1000
1	2Y1 121 057 A	Coolant hose 20x3.5x500
4	N 906 869 01	Spring clip B 23x12
4	N 906 870 01	Spring clip B 27x12

Quantity	Part number	Designation
2	2Y1 121 094	Hose bracket 22 mm, carrier plate and screws
2	2Y1 121 094 A	Hose bracket 28 mm, carrier plate and screws
1	2Y1 271 237	Sealing tape (Teflon)
1	065 100 829	Installation instructions

**May be ordered additionally:**

Quantity	Part number	Designation
-	G 012 A8D A1	Coolant additive G12
1	N 102 615 04	Fuse 4A for connection cable

## Installation instructions

### Notes:

- ◆ Connection hoses must have a diameter of at least 16 mm.
- ◆ All hose connections are secured with clips.
- ◆ The supply and return lines must not be interchanged.
- ◆ The coolant hoses should be laid so that they take the most direct route possible, and should be well-insulated.
- ◆ Points where hoses could become kinked, abraded or squeezed must be avoided during installation.
- ◆ Use only original parts from the retrofit kit.
- ◆ The level of antifreeze in the circuit must be 33%.
- ◆ The assembly tool VAS 5024 or the pliers V.A.G 1921 are recommended for fitting the spring clips.
- ◆ To fit the rubber mounts (with auxiliary water pump) onto the bracket, use silicone spray.

7

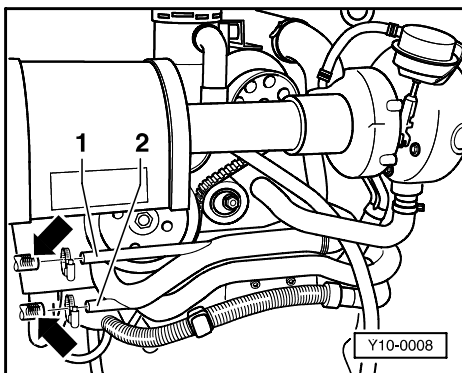
## Installation

### Special tools, workshop equipment, test and measuring equipment and accessories required

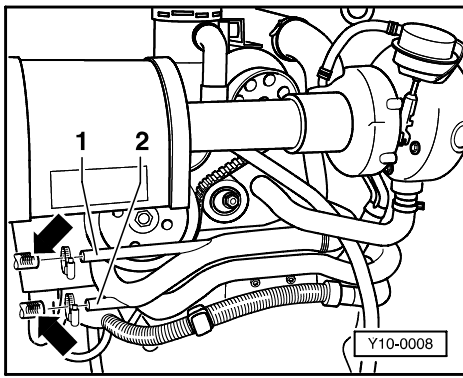
- ◆ VAS 5024 Assembly tool for spring clips

### Notes:

- ◆ The connection kit should be fitted when the engine is cold, if possible.
- ◆ Carefully unscrew the cap from the housing-radiator package and depressurise the system.
- Remove the dummy plugs from the connections on the engine for the hot-water supply.
- Collect any cooling water which may run out.
- For the bracket of the auxiliary water pump, find an installation location which is in the immediate vicinity of the engine.
- With the aid of the front and rear rubber mounts from the connection kit, fasten the auxiliary water pump onto the bracket, using silicone spray to do so.
- The auxiliary water pump bracket can be glued, welded or screwed in place.



8

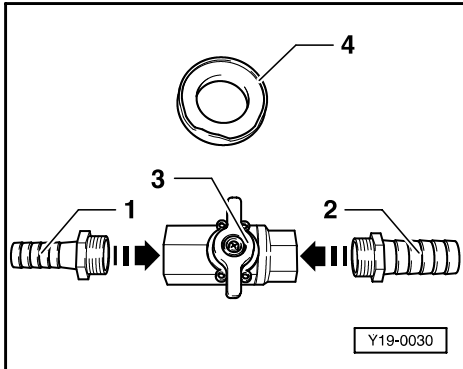


- ▶ - Connect the supply and return hoses -arrows- from the connection kit to the existing connecting lines -1- (return) and -2- (supply) on the engine.

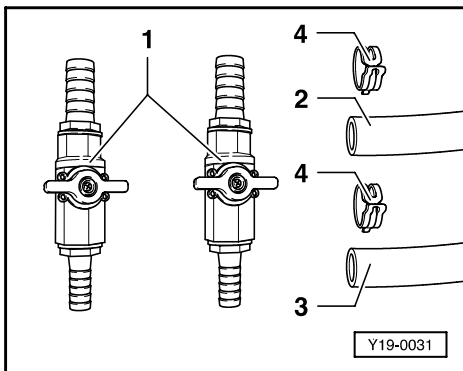
**Note:**

*The supply line -2- and the return line -1- must not be interchanged.*

- Use the accompanying spring clips from the connection kit.



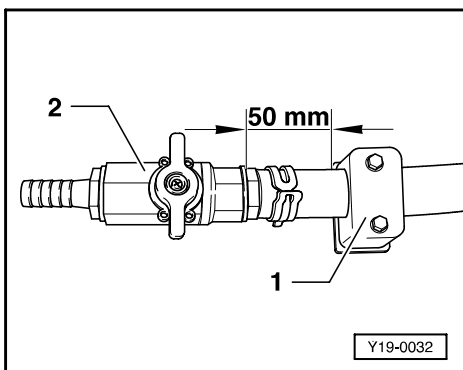
- ▶ - Seal the thread of the hose adapters -1- and -2- using the Teflon tape supplied -4-.
- Then screw the hose adapters 1/2" x 16 mm and 1/2" x 20 mm into the corresponding ball valves -3-.



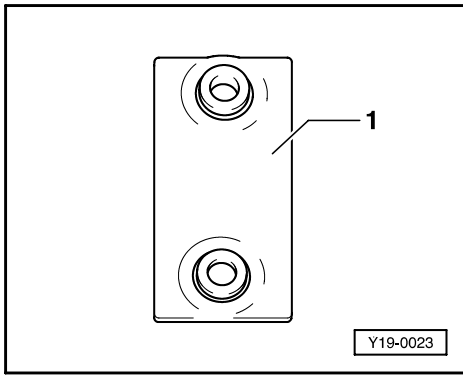
- ▶ - Install the completed ball valves -1- into the supply and return hoses -2- and -3- using the matching spring clips -4-.

**Note:**

*Push the spring clip over the hose before fitting the ball valve and then position it using assembly tool VAS 5024.*



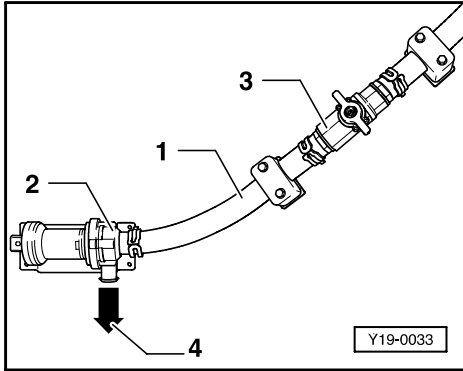
- ▶ - The hose brackets -1- should be at a distance of about 50 mm (see illustration) away from the ball valve -2- on either side.



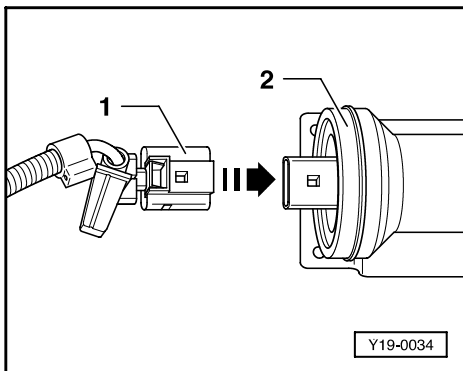
**Note:**

The carrier plates can be glued, welded or screwed in place.

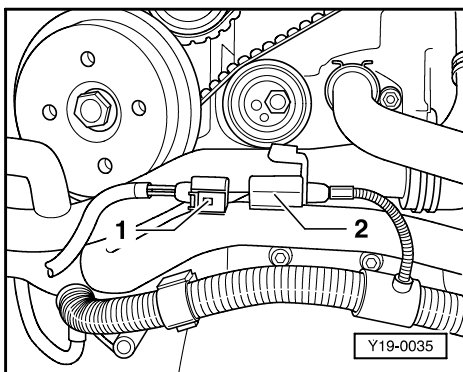
- ▶ - Mark off the distances and fasten the carrier plates -1- for the hose brackets.
- Then fasten the supply and return hoses, together with ball valve, by means of the hose brackets.



- ▶ - Connect the hose -1- (20x3.5x500) from the connection kit to the auxiliary water pump -2- and to the ball valve -3- on the supply line.
- The connection -4- on the auxiliary water pump -2- is for the hot-water boiler or engine-driven heating unit.
- Mark off the distance which the carrier plate must be from the ball valve (ca. 50 mm) and fasten the carrier plate.
- Then fasten the hose 20x3.5x500 by means of the matching hose bracket.



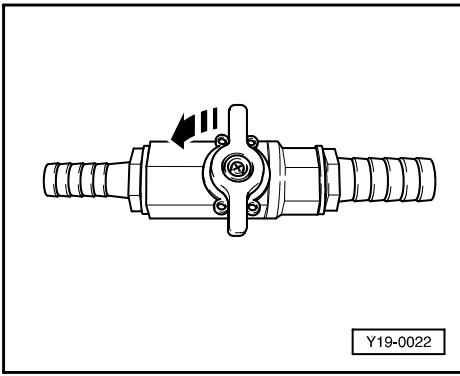
- Now connect the connections on the auxiliary water pump and the hot-water boiler / engine-driven heating unit using the original hose 20x3.5x500.
- The return line from the hot-water boiler / engine-driven heating unit is connected to the connection on the return line ball valve.
- ▶ - The electrical connection cable is connected to the plug-in contact -2- on the auxiliary water pump by means of the 2-pin plug -1-.



- ▶ - The connector plug is connected between the gear variant plug -1- and -2- on the rear side of the engine.

**Note:**

Lay and secure the connection cable properly using cable ties.



- ◀ - Fill the entire system with cooling water and open the ball valves for supply and return -open in direction of arrow- (illustration shows ball valve closed).

**Note:**

- ◆ *Do not use any coolant additive other than G 12 - in accordance with TL VW 774 D.  
Distinguishing characteristic: red colour*
- ◆ *The level of antifreeze in the circuit must be 33%.*
- To bleed the system, the ignition must be switched on and the auxiliary water pump must run.
- Replace cooling water as needed while bleeding. This procedure can last several minutes.
- Start the engine and check the entire system for leaks and that it is functioning correctly.



# Einbauanleitung EA01

## Installation Instruction EA01

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