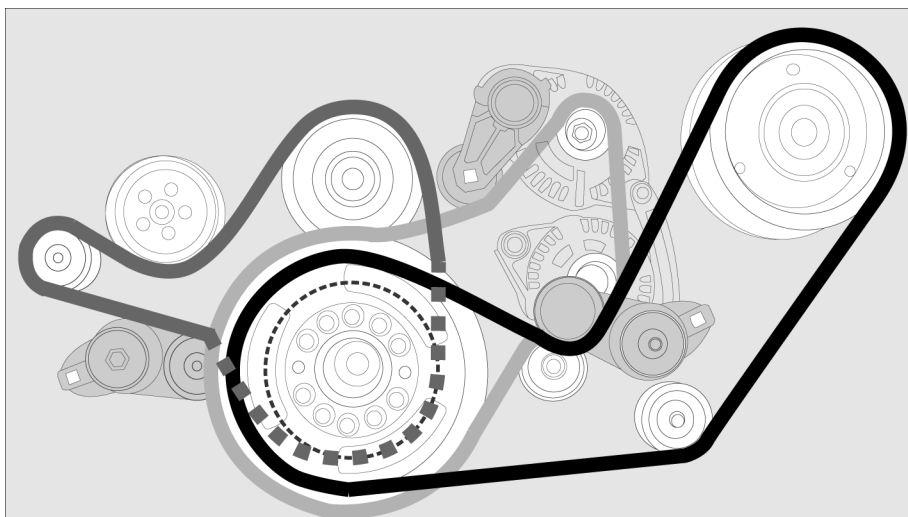


Driver's Handbook

Replacing Belts B13R



T0015452

VOLVO

Foreword

This manual contains information intended to help the driver in replacing the engine's belts (compressor, coolantpump, alternators), when one of them is broken or damaged. The information in this manual applies to vehicles built January 2009 and later. Please keep this manual in the vehicle at all times.

Note: Illustrations in this manual are used for reference only and may differ slightly from the actual vehicle. However, key components addressed in this document are represented as accurately as possible.

Volvo Bus Corporation

Göteborg, Sweden

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Safety Information

IMPORTANT: Before driving this vehicle, be certain that you have read and that you fully understand each and every step of the driving and handling information in this manual. Be certain that you fully understand and follow all safety warnings.

IT IS IMPORTANT THAT THE FOLLOWING INFORMATION BE READ, UNDERSTOOD AND ALWAYS FOLLOWED.

The following types of advisories are used throughout this manual:



DANGER

Danger indicates an unsafe practice that could result in serious personal injury or death. A danger advisory banner is in **white** type on a **black** background with a **black** border.



WARNING

Warning indicates an unsafe practice that could result in personal injury. A warning advisory banner is in **black** type on a **gray** background with a **black** border.



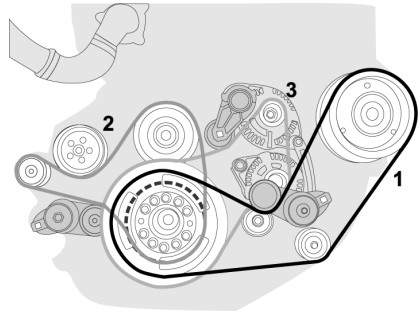
CAUTION

Caution indicates an unsafe practice that could result in damage to the product. A caution advisory is in **black** type on a **white** background with a **black** border.

Note: Note indicates a procedure, practice, or condition that must be followed in order for the vehicle or component to function in the manner intended.

Introduction

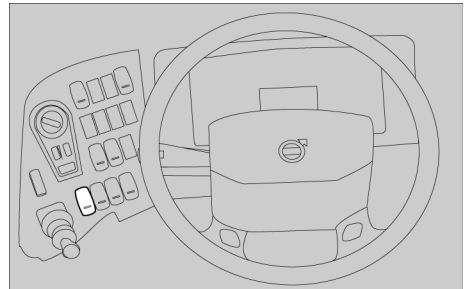
This manual contains information intended to help the driver in replacing the engine's belts (compressor, coolant pump, alternators), when one of them is broken or damaged. To change the alternators belt (3), it is necessary to remove the compressor belt (1) and the water pump belt (2). To change the water pump belt (2), first remove the compressor belt (1).



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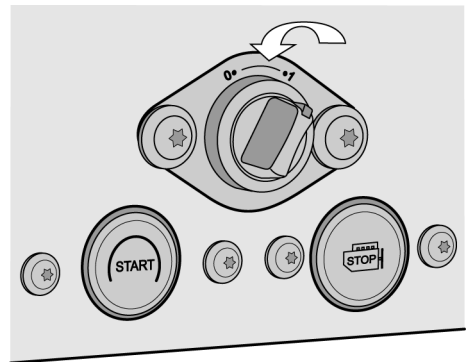
Compressor Belt, Removal

Turn off the power supply using the main switch



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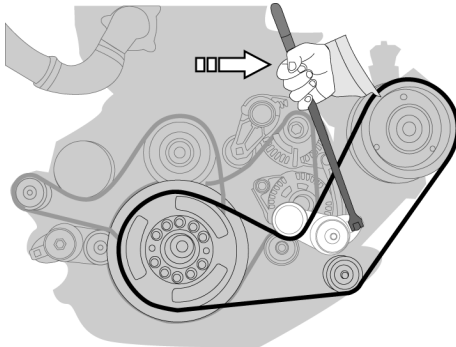
Place the "Start Enable Switch" to the 0 position.



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2 Replacing Belts

Place the breaker bar inside the hole of the belt tensioner and pull clockwise to release the belt.



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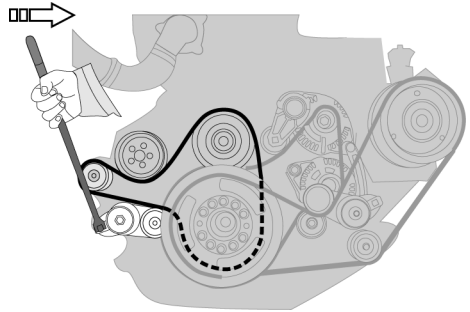
Pull outward to unhook the belt.



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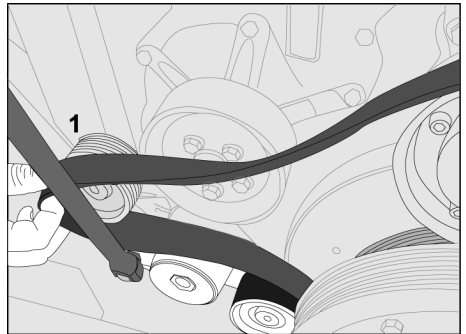
Water Pump Belt, Removal

Place the breaker bar inside the hole of the belt tensioner, pull clockwise to release the belt.



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Pull outward to free the belt from the pulley (1).



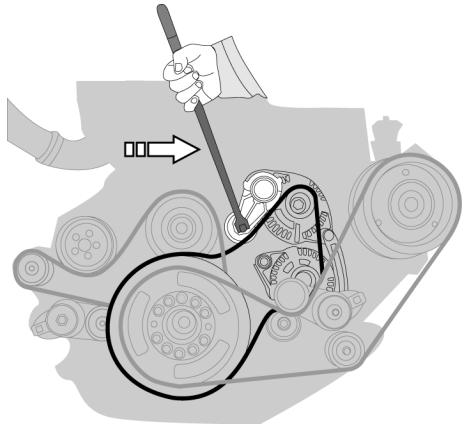
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Unhook the belt from the others pulleys and remove.

4 Replacing Belts

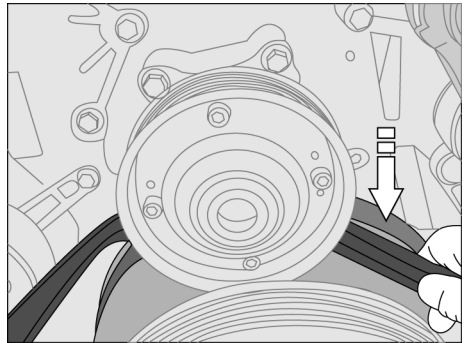
Alternators Belt, Removal

Place the breaker bar inside the hole of the belt tensioner, pull clockwise to release the belt. Pull the belt out from the upper and lower pulley's.



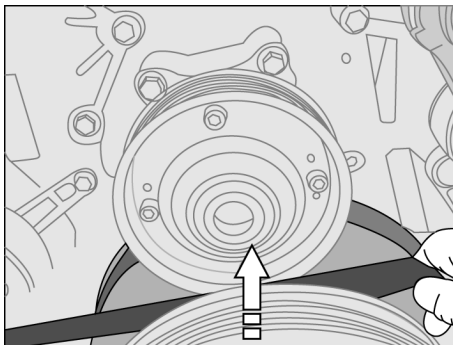
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Turn the belt and pass it through the damper and intermediate pulley, and pull down.



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Again, turn the belt and pass it through the intermediate and the crankshaft pulley and remove the belt.



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Engine Belts, Installation

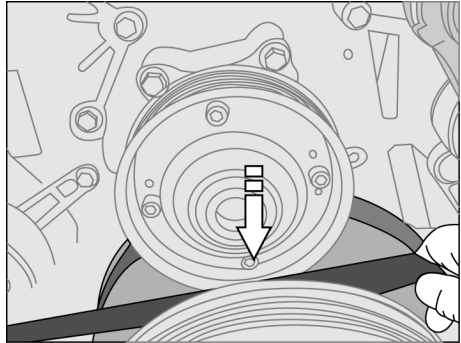
To install the belts, perform the following sequence:

- 1 Alternators belt,
- 2 Water pump belt,
- 3 Compressor belt.

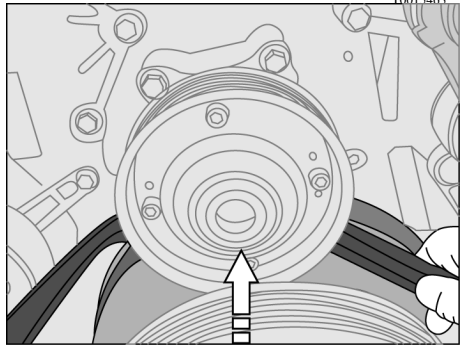
6 Replacing Belts

Alternators Belt, Installation

Pass the belt through the damper and intermediate pulley. Move inwards and pull the belt up to go through the intermediate and crankshaft pulley. Position the belt into the damper pulley groove.



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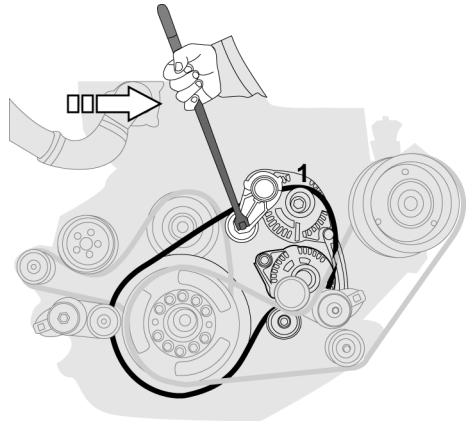
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Pull the belt towards the idler pulley (1) and position it over the pulley.



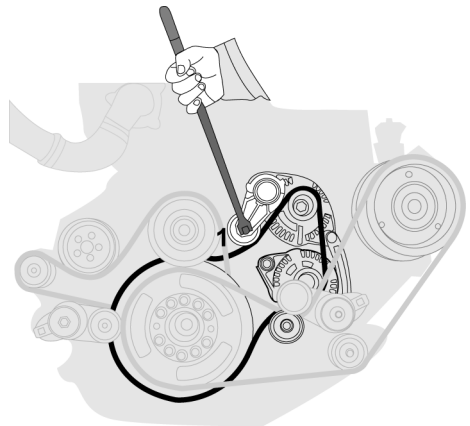
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Place the breaker bar inside the hole of the belt tensioner and pull clockwise. Position the belt over the upper alternator pulley (1).



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Check and verify that the belt is under the belt tensioner (1).

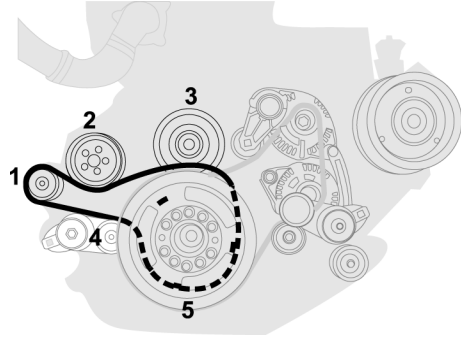


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8 Replacing Belts

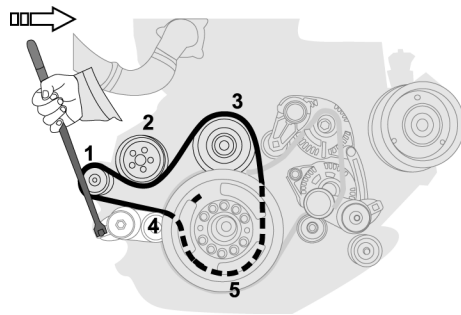
Water Pump Belt, Installation

Position the belt on the crankshaft pulley (1).



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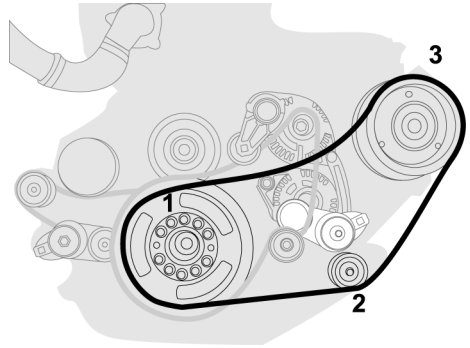
Pass the belt under the water pump pulley (2). Place the breaker bar into the hole of the tensioner belt (4) and pull the belt up to position it over the intermediate pulley (3).



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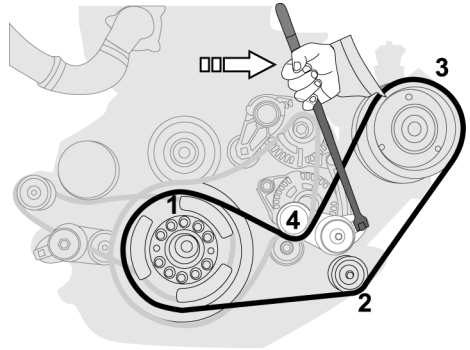
Compressor Belt, Installation

Position the belt over the crankshaft pulley (1), under the idler pulley (2) and place it around the compressor pulley (3).



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Place the breaker bar inside of the hole of the belt tensioner, pull clockwise and push the belt in to the belt tensioner (4).



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