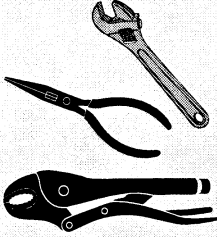


<h1>VOLVO</h1> <h2>SPECIAL TOOLS BULLETIN</h2> 	Title: MODEL YEAR 2004.5 S40 AND V50 MANDATORY TOOLS	No. 143	Page 1 of 12
		Car Market: NORTH AMERICA	
		Date: YEAR MONTH DAY 2004 02 06	

Thirty one new tools have been developed for the All New S40, Model Year 2004.5. The new tools will also apply to the V50 which will be introduced later this year. All tools have been classified as mandatory and will be allocated by SPX in two shipments during February and March 2004.

PART NUMBER	DESCRIPTION	PART NUMBER	DESCRIPTION
9512896	Fuel suction hose	9997090	Press tool
9512897	Jaw	9997091	Wrench
9512899	CEM Adapter	9997093	Wrench
9512900	DDM/PDM Adapter	9997101	Attachment
9512901	DIM/ICM Adapter	9997102	Lifting eye
9512902	ECM Adapter	9997103	Support bar engine
9512903	SRS Connector	9997104	Clamping ring
9512904	TCM Adapter	9997105	Socket
9512908	Protection tube	9997106	Wrench
9512909	Quick coupling	9997108	T-pipe
9512945	Extractor	9997109	Spanner
9512955	Cap	9997113	Wrench
9512957	Coolant fluid refiller	9997114	Conical drill
9512958	BCM Adapter	9997116	Wrench
9997088	Expander	9997117	Guide pins
9997089	Guide pin - 2 required		

"Fixed Right — First Time"

Service Personnel: read and initial.	SERVICE MANAGER	PARTS MANAGER	WORKSHOP FOREMAN	SERVICE TECHNICIANS												

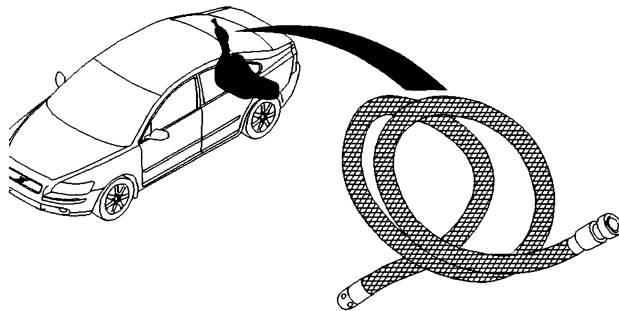
**951 2908**
951 2909**VOLVO**
951 2896

illustration 0801800

9512896 Hose

Hose for draining fuel from the fuel tank via the tank filler pipe.

This hose is specially developed for insertion in the tank filler pipe and passes through the "Spitback" valve.

Used together with approved fuel draining equipment for fuel driven cars, protective pipe 9512908 and quick release connector 9512909.

Tool Board Location

Tool Group: 23 (Engine)

Hook: 22

9512911

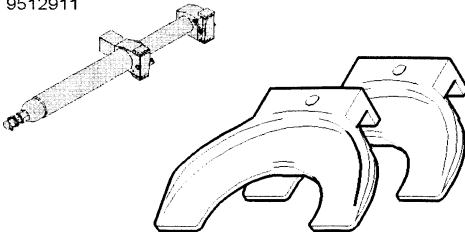
**VOLVO**
951 2897

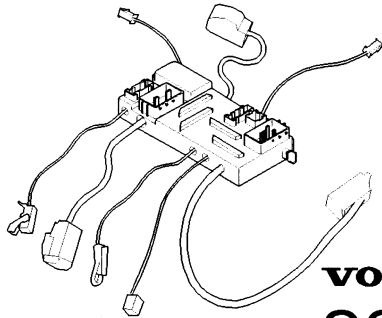
illustration 0801801

9512897 Jaw

These jaws are used for R&I of rear springs on the new S40 and V50. Packed in pairs, the Jaws are used with hydraulic spring compressor 9512911 and hydraulic press tool kit 9512564 (See Special Tool Bulletin 96 and 96-C).

The jaws come with 2 protective inserts, necessary to prevent damage to the special anti-rust coating on the springs. These inserts have the same specifications as Klann Insert KL-1503-S.

Note! These jaws replace earlier jaws 951 2897. Jaws 9512897 are necessary to carry out the method correctly.



VOLVO
951 2899

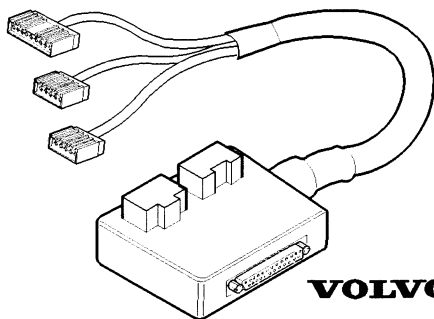
illustration 0801803

9512899 C EM-Adapter

Breakout box adapter for fault-tracing in the central electronic module (CEM). 256 pins divided on 8 connectors.

Tool Board Location

Electronic Tool Storage Cabinet,
Part # 9512255



VOLVO
951 2900

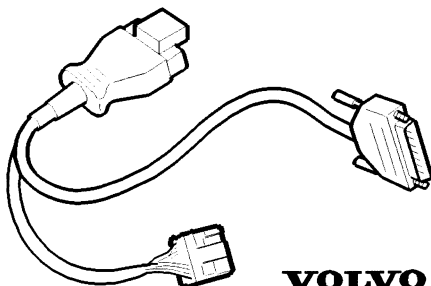
illustration 0801804

9512900 DDM/PDM-Adapter

Breakout box adapter for fault-tracing the driver's door and passenger door control modules (DDM/PDM).

Tool Board Location

Electronic Tool Storage Cabinet,
Part # 9512255



VOLVO
951 2901

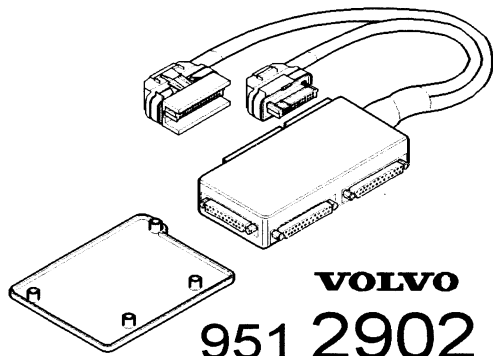
illustration 0801805

9512901 DIM/ICM-Adapter

Breakout box adapter for fault-tracing in the driver information module (DIM) and "infotainment" control module (ICM).

Tool Board Location

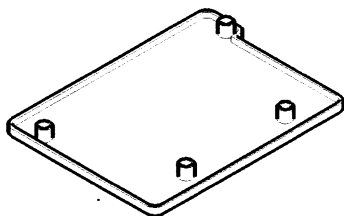
Electronic Tool Storage Cabinet,
Part # 9512255



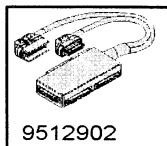
VOLVO
951 2902

illustration 0801806

Spare Part: Not mandatory



VOLVO
998 9778



9512902

illustration 0801839

9512902 ECM-Adapter

Breakout box adapter and cover plate for fault-tracing in the engine control module (ECM). The cover plate seals against the air intake and prevents dirt and dust from entering when fault-tracing.

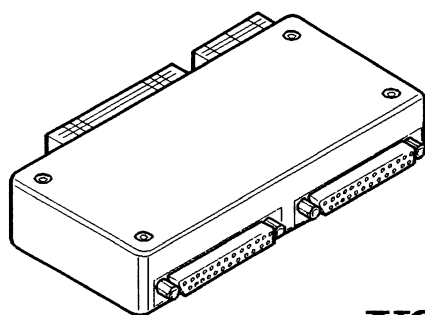
The cover plate is also available as replacement part 9989778.

Tool Board Location

Electronic Tool Storage Cabinet,
Part # 9512255

9989778 Cover Plate

Replacement part; Cover plate for ECM-adapter 9512902.



VOLVO
951 2903

illustration 0801807

9512903 SRS-Connector

Connector when fault-tracing the cable harness for the supplemental restraint system (SRS).

Tool Board Location

Electronic Tool Storage Cabinet,
Part # 9512255

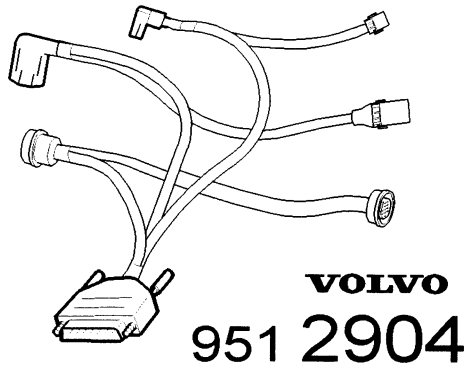


illustration 0801808

9512904 TCM-Adapter

Breakout box adapter for fault-tracing in the transmission control module (TCM).

Tool Board Location

Electronic Tool Storage Cabinet,
Part # 9512255

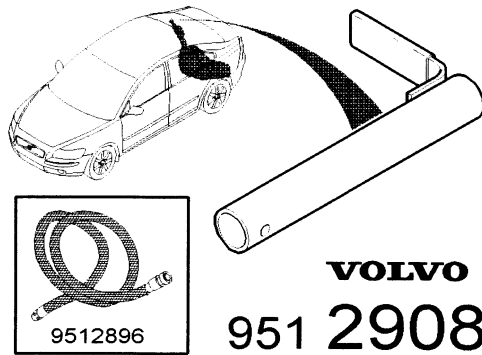


illustration 0801840

9512908 Protective Pipe

Used as protection to prevent hose 9512896 getting trapped when installing and removing the tank filler pipe.

Used together with hose 9512896.

Tool Board Location

Tool Group: 23 (Engine)

Hook: 01

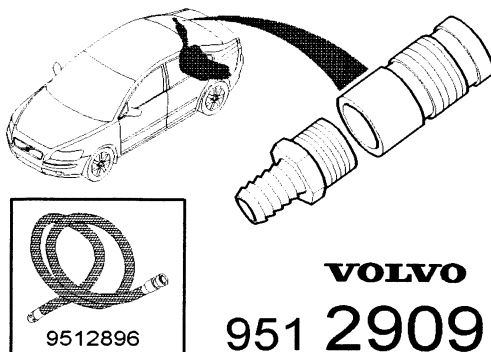


illustration 0801841

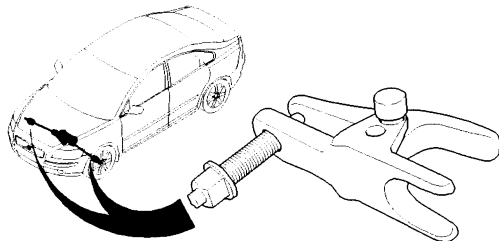
9512909 Quick-release Connector

Used as quick-release connector between approved gasoline draining equipment and hose 9512896.

Tool Board Location

Tool Group: 23 (Engine)

Hook: 01



VOLVO
951 2945

illustration 0801809

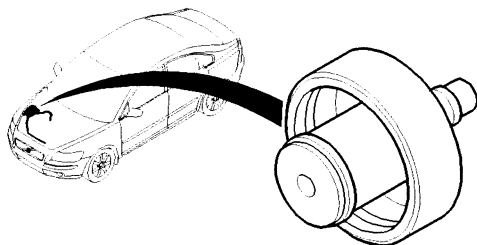
9512945 Puller

For removing the tie rod/ball joint from the wheel spindle.

Tool Board Location

Tool Group: 61 (Wheels, Suspension)

Hook: 80



VOLVO
951 2955

9512957

illustration 0801811

9512955 Cover

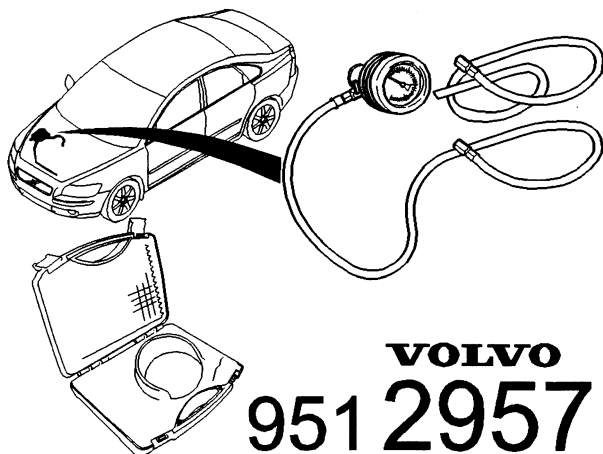
This cover connects to the cooling system expansion tank and is used together with coolant filler 9512957.

The cover is also used when pressurizing the cooling system.

Tool Board Location

Tool Group: 26 (Engine)

Hook: 22



VOLVO
951 2957

illustration 0801813

9512957 Coolant Filler

When filling coolant in the cooling system.

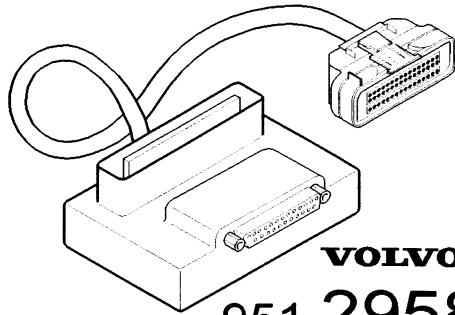
The vacuum based coolant filling tool is necessary for complete bleeding of the cooling system. The tool also reduces coolant filling time.

Use with cap 9512955.

Tool Board Location

Tool Group: 26 (Engine)

Hook: 24 x 2



VOLVO
951 2958

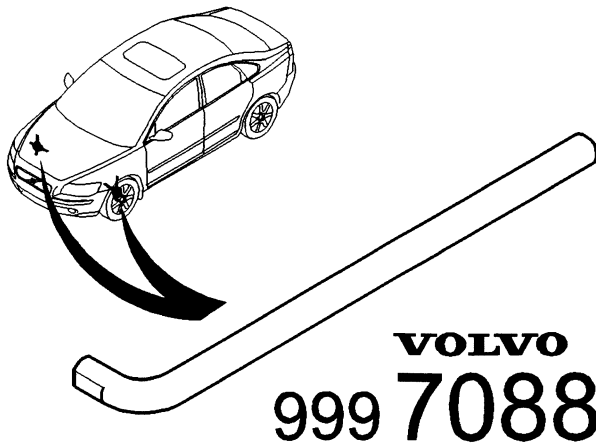
illustration 0801842

9512958 BCM-Adapter

Breakout box adapter for fault-tracing brake control module (BCM).

Tool Board Location

Electronic Tool Storage Cabinet,
Part # 9512255



VOLVO
999 7088

illustration 0801815

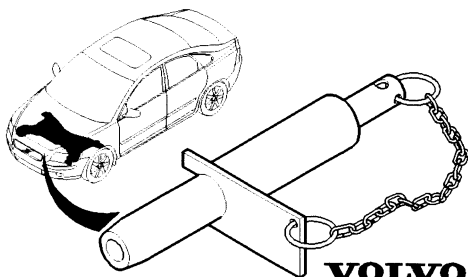
9997088 Expander

To expand the mounting in the spindle housing when removing and installing the front shock absorbers.

Tool Board Location

Tool Group: 61 (Wheels, Suspension)

Hook: 81



VOLVO
999 7089

illustration 0801816

9997089 Adjustment Tool

The adjustment tools are used to align the subframe to the correct position when installing the subframe.

2 tools are required for each method.

Tool Board Location

Tool Group: 21 (Engine)

Hook: 20

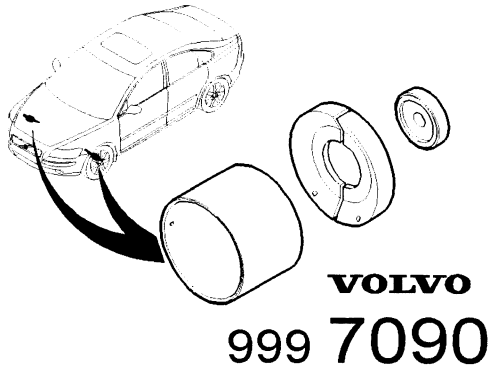


illustration 0801817

9997090 Press Tool

For removing and installing the front wheel bearings in the wheel spindle.

Used together with hydraulic press.

Tool Board Location

Tool Group: 77 (Wheels, Suspension)

Hook: 03, 21, 22

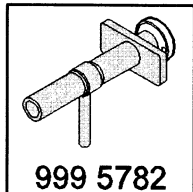
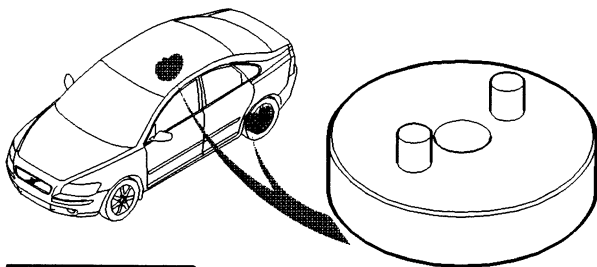


illustration 0801818

9997091 Wrench

To reset the rear brake caliper pistons when replacing the rear brake shoes. Used together with press tool 9995782.

The existing "wrench" is removed from existing tool 9995782 and replaced with 9997091.

Note! The existing wrench is locked in press tool 9995782 using locking fluid.

Tool Board Location

Tool Group: 50 (Brakes)

Hook: 21

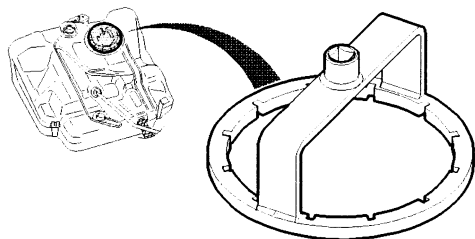


illustration 0801819

9997093 Wrench

Used when removing and installing the fuel pump (FP)/level sensor nut on the fuel tank.

Tool Board Location

Tool Group: 23 (Engine)

Hook: 21

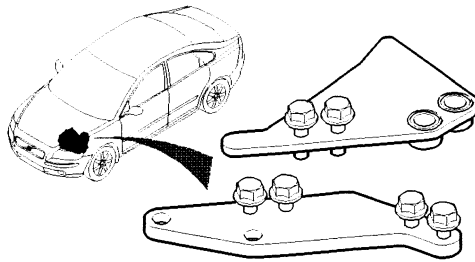
**VOLVO**9995972
9995463**999 7101**

illustration 0801820

9997101 Mounting

Used together with fixture 9995463 and 9995972 when removing and installing automatic transmission AW55-50.

Tool Board Location

Tool Group: 43 (Transmission)

Hook: 02

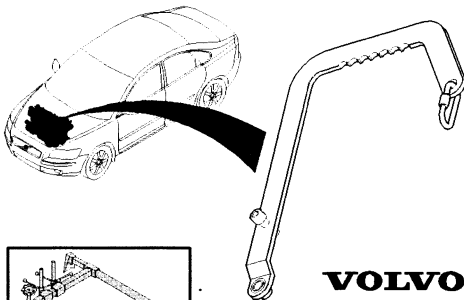
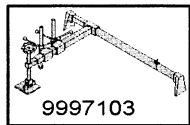
**VOLVO****999 7102**

illustration 0801821

9997102 Lifting Yoke

The lifting yoke is used at the rear edge of the engine, for example, when removing and installing transmissions.

The lifting yoke is necessary to keep the engine at the correct position and balance.

Used together with lifting beam 9997103.

Tool Board Location

Tool Group: 21 (Engine)

Hook: 20 (2x)

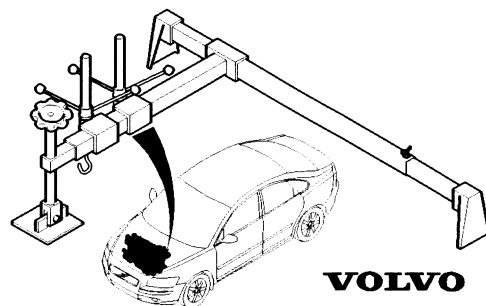
**VOLVO****999 7103**

illustration 0801822

9997103 Lifting Beam

Used to hold the engine, for example, when removing and installing the transmission and timing belt.

Store on Tool Trolley 9512829

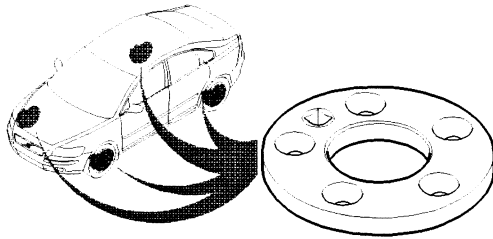
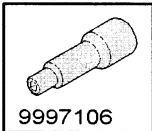
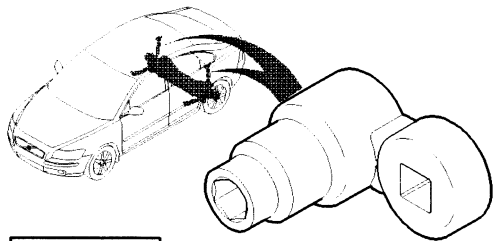
9995418B
9995773B**VOLVO**
999 7104

illustration 0801823

9997104 Clamp Ring

The clamp ring is used together with measuring tool kit 9995418B and holder dial test indicator 9995773B when measuring the runout on the brake discs.

The tool must be stored in the storage box for 9995418. (See STB 51)



9997106

VOLVO
999 7105

illustration 0801824

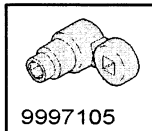
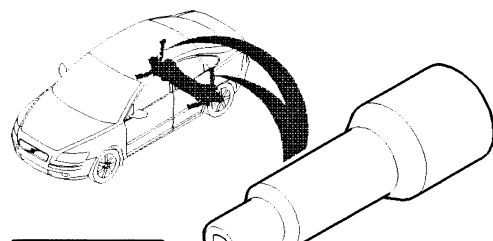
9997105 Socket

Used when removing and installing rear shock absorbers together with wrench 9997106.

Tool Board Location

Tool Group: 76 (Wheels, Suspension)

Hook: 22



9997105

VOLVO
999 7106

illustration 0801825

9997106 Wrench

Used when removing and installing rear shock absorbers together with wrench 9997105.

Tool Board Location

Tool Group: 76 (Wheels, Suspension)

Hook: 85

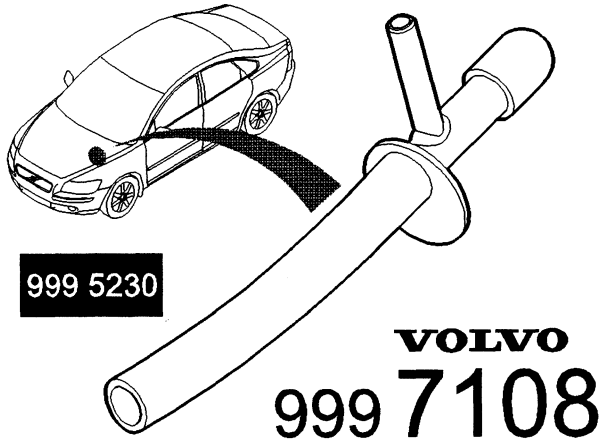


illustration 0801827

9997108 T-pipe

Used with pressure gauge 9995230 when measuring the vacuum in the brake servo system.

Tool Board Location

Tool Group: 50 (Brakes)

Hook: 81

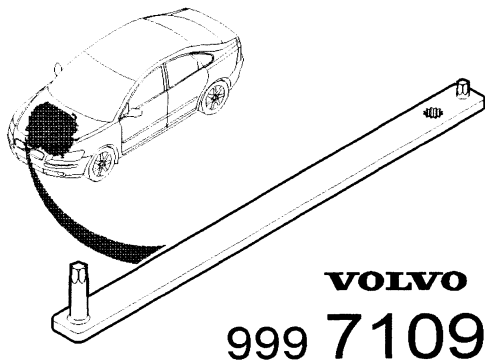


illustration 0801828

9997109 Wrench

Used to release the belt tensioner when removing and installing the auxiliaries belt.

Tool Board Location

Tool Group: 26 (Engine)

Hook: 21

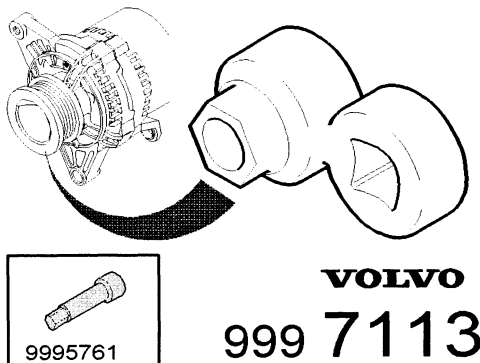


illustration 0801831

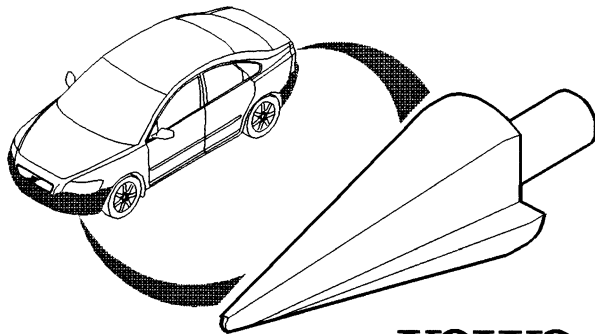
9997113 Wrench

Used for removing and installing the pulley on the generator (GEN), together with 9995761. (STB 121-C)

Tool Board Location

Tool Group: 20 (Engine)

Hook: 21



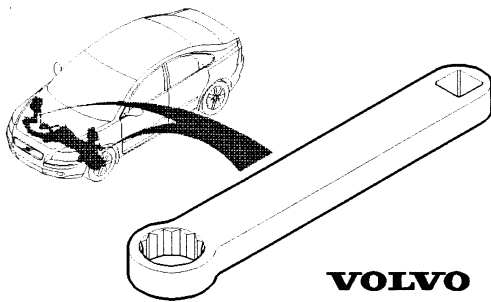
VOLVO
999 7114

illustration 0801832

9997114 Conical Drill

For making holes when installing front and rear parking sensors. The tool is necessary to make the correct size of holes and to prevent paintwork damage on the bumper.

Tool Board Location
Tool Group: 86 (Body)
Hook: 87



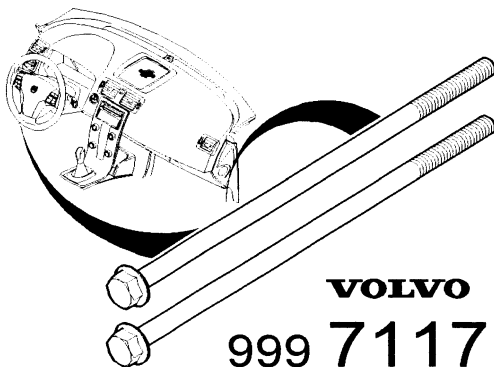
VOLVO
999 7116

illustration 0801833

9997116 Wrench

For removing and installing the front ball joint nuts together with torque wrench.

Tool Board Location
Tool Group: 61 (Wheels, Suspension)
Hook: 21



VOLVO
999 7117

illustration 0801834

9997117 Locating Pins

To hold a loose dashboard when working with cable harnesses and to guide when installing. 2 Locating pins are included for each P/N.

Tool Board Location
Tool Group: 80 (Body, Interior)
Hook: 60