

Fig. 5: Loosening Belt Tension

Courtesy of VOLVO CARS CORPORATION

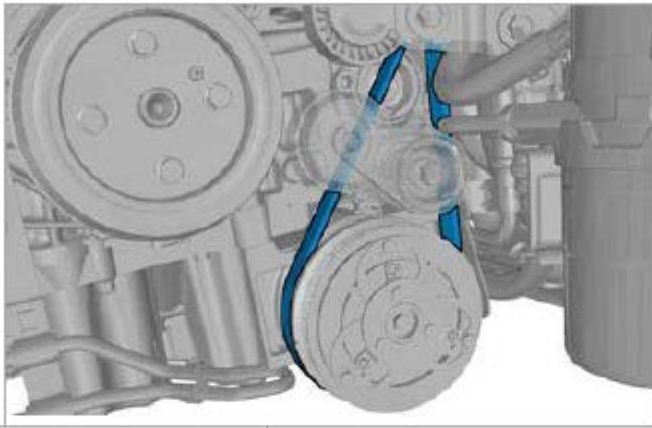


Fig. 6: Removing Belt

Courtesy of VOLVO CARS CORPORATION

INSTALLATION

To install, reverse the removal procedure.

ACCESSORY DRIVE BELT TENSIONING

REMOVAL

Remove the auxiliaries belt, see **ACCESSORY DRIVE BELT**

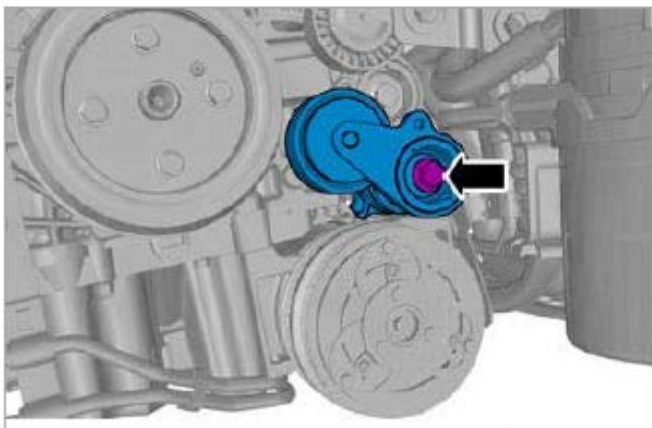
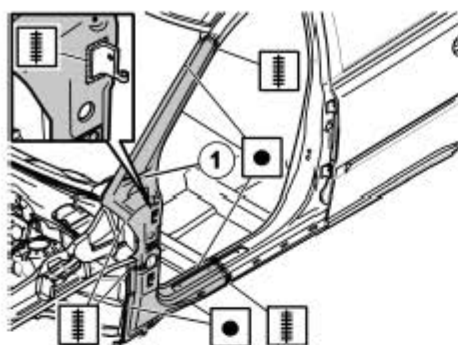


Fig. 7: Removing/Installing Tensioner Bolt

Courtesy of VOLVO CARS CORPORATION



Align the replacement part. See Windshield frame, alignment chart and Body side, alignment chart .
Secure the replacement part.
Weld into place.

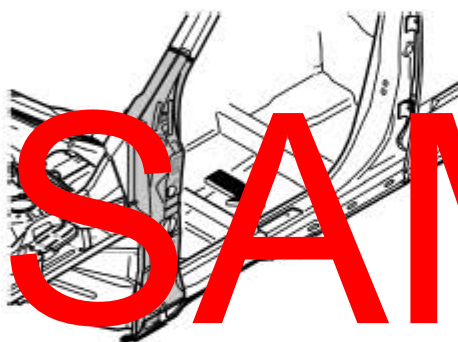
Install:

- the door hinges. See Hinges side door, replacing
- the cover for the upper side member. See Side member, upper, replacing .

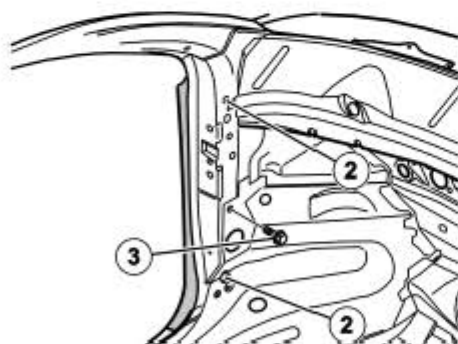
Seal according to Body seal .

**Replacing the
A-post
reinforcement**

**Removing the
A-post
reinforcement**



Remove the dashboard. See Dashboard, replacing .
Grind and drill off the A-post reinforcement.



Grind off the MAG welds on the inside (2) which hold the reinforcement section inside the A-post reinforcement.
Remove the screw holding the reinforcement (3).
Grind clean.
Apply welding primer.

**Installing the
A-post
reinforcement**

Install foam rubber replacement at (1).
Secure the replacement part using the bolt on the inside of the A-post.
Weld into place.

Install:

ACCESSORIES AND BODY, CAB

Bumpers And Mudflaps - Removal, replacement and installation

BUMPERS AND MUDFLAPS

COVER BUMPER FRONT (2007 - 2011 EARLY)

REMOVAL

VEHICLES EARLY VERSION

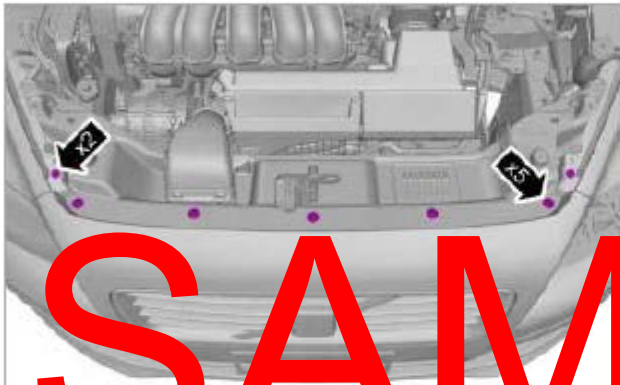


Fig. 1: Identifying Bumper Attachment Screws On Front Frame

Courtesy of VOLVO CARS CORPORATION



Fig. 2: Identifying Bumper Screws On Inner Front Fender

Courtesy of VOLVO CARS CORPORATION

VEHICLES WITH FRONT SIDE UNDERBODY AIR DEFLECTOR

1. With ECU connector still unplugged, turn ignition switch to the "ON" position. Jumper terminal No. 28 of ECU connector to ground.

NOTE: **Relay should not remain grounded for more than 2 seconds or damage to relay may occur.**

2. Hydraulic modulator should operate while jumper is installed. If hydraulic modulator does not function, check wiring from ECU connector to modulator. If wiring is not at fault, substitute a good relay and retest.

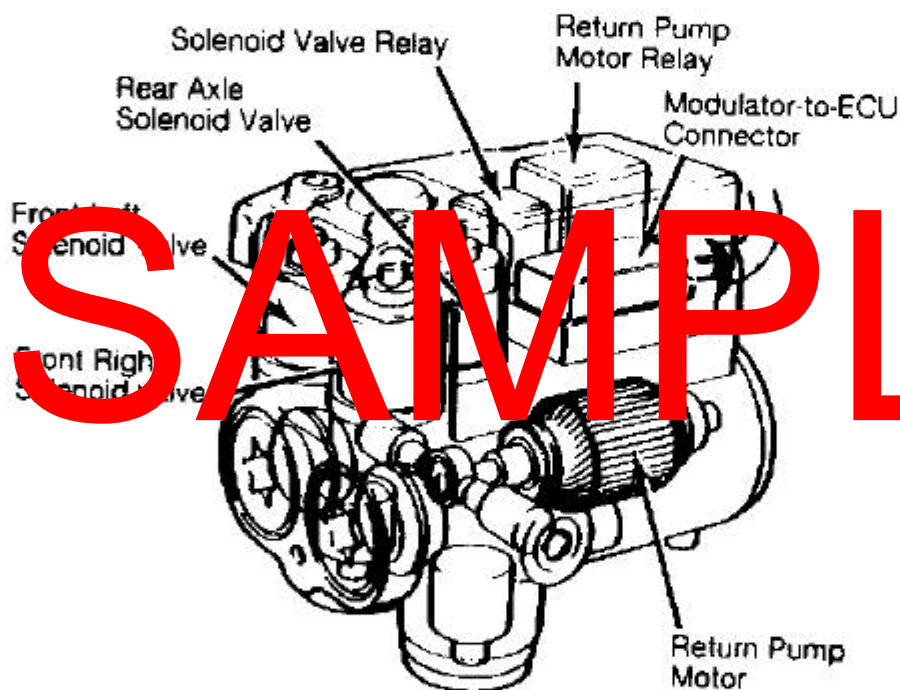


Fig. 5: Volvo ABS Hydraulic Modulator Assembly
Courtesy of VOLVO CARS OF NORTH AMERICA.

Solenoid Valve Relay

1. Turn ignition switch to the "ON" position. Connect voltmeter across ground and terminal No. 32 of ECU connector. Jumper terminal No. 27 of ECU connector to ground.
2. Solenoid valve relay should switch on and DVOM should register battery voltage. If solenoid valve is inoperative and DVOM does not read battery voltage, check wiring harness from ECU connector and

BRAKES

Brake Control System - Removal, Replacement And Installation

ANTI-LOCK BRAKE (ANTI-SKID)

ANTI-LOCK BRAKE SYSTEM MODULE (ABS)

REMOVAL

NOTE: Removal steps in this procedure may contain installation details.

Remove battery. See BATTERY.

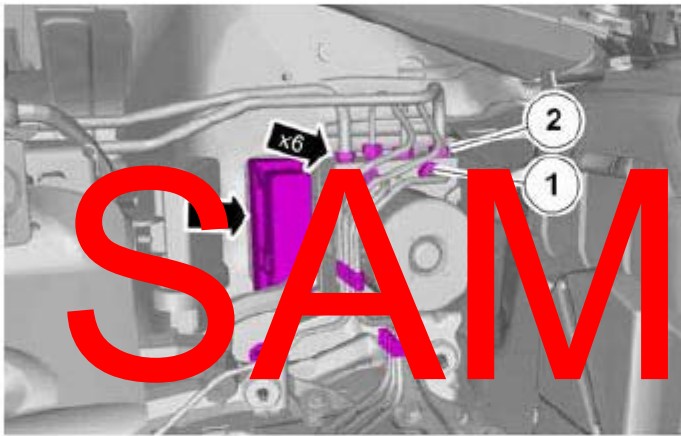


Fig. 1: Identifying Anti-Lock Brakes And Brake Pipe
Courtesy of VOLVO CARS CORPORATION

Install the following items:

1. Torque: Anti-lock brakes
14 Nm
2. Torque: Brake pipe M12 with wrench size 11mm
14 Nm

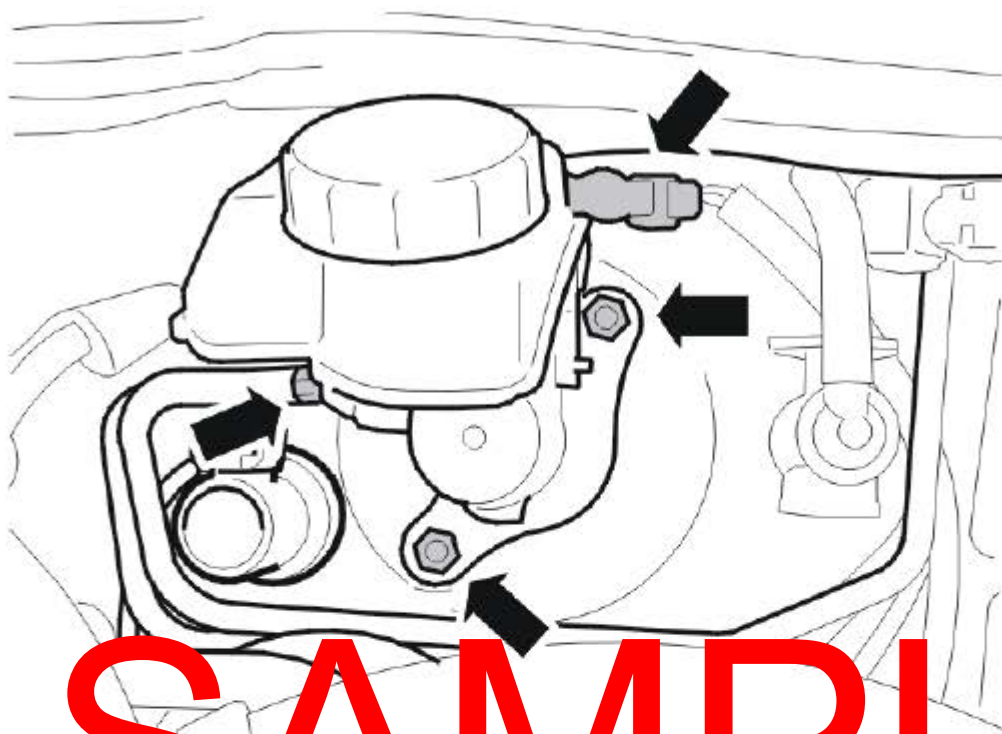


Fig. 3: Identifying Brake Fluid Reservoir
Courtesy of VOLVO CAR CORPORATION

NOTE: Clean the brake pipes' connection at the master cylinder and ABS unit. Place paper under the master cylinder as protection for the paintwork if brake fluid is spilled.

Remove:

- the connector on the brake fluid reservoir
- the 2 nuts
- the two brake pipes from the master cylinder. Install the plugs
- the master cylinder.

TRANSFERRING COMPONENTS

Transfer the brake fluid reservoir to the new master cylinder. See: **RESERVOIR, BRAKE FLUID**.

NOTE: Only use brake fluid to lubricate the O-rings in the brake system.

INSTALLATION



Caution! The operation must be performed on both sides of the seat.

Caution! No visible space may be seen between the rivet and end-plate.

In case of visible space between the rivet and end-plate, the rear end collision module for front seat should be replaced.

Refer to: Collision protection unit from behind front seat

Only applies to vehicle with foldable backrest.



Adjust the backrest angle until the unit is visible.

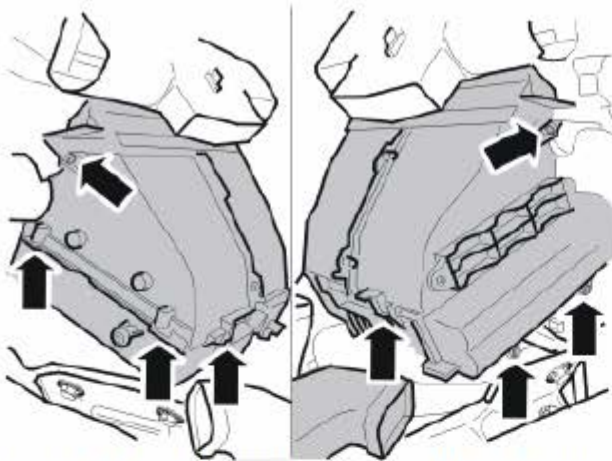


Fig. 95: Identifying Climate Control Unit Brackets, Air Duct And Screws
Courtesy of VOLVO CARS CORPORATION

Remove:

- the brackets on both sides of the climate control unit and the screws, 3 per bracket
- the air duct
- the 8 x screws for the cover.

Pull the cover at a angle downward backwards.

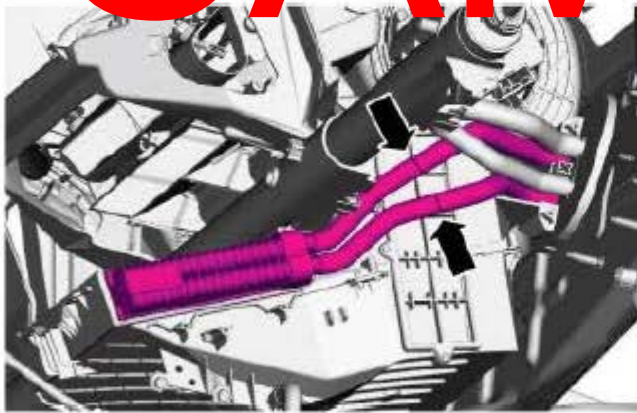


Fig. 96: Identifying Heat Exchanger Pipes
Courtesy of VOLVO CARS CORPORATION

NOTE: The heat exchanger has pipes that are factory integrated. These pipes must be cut in order to remove the unit. The heat exchanger in the service kit has separate pipes, however.

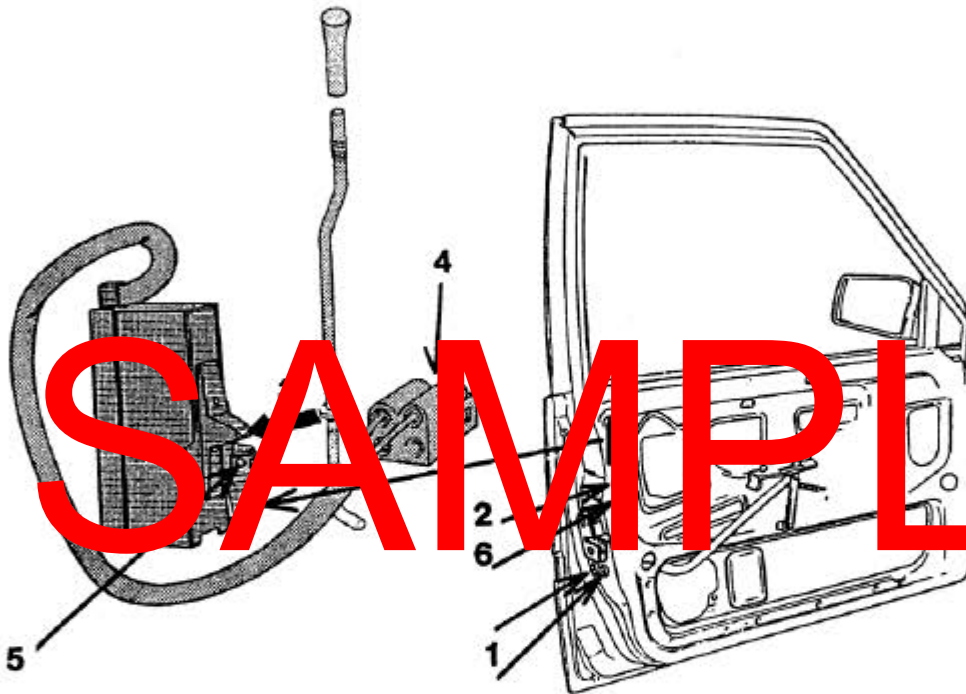
Place some paper below the pipe couplings to collect any spilled coolant.

ACCESSORIES & EQUIPMENT

Central Locking System - Volvo

REMOVAL & INSTALLATION

DRIVERS DOOR SWITCH



GG0048777

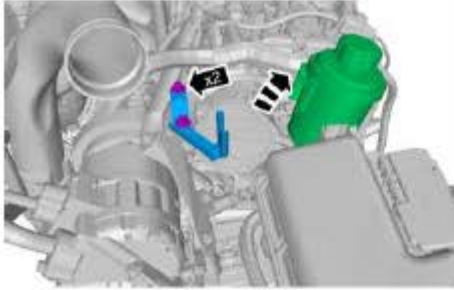
Fig. 1: Central Lock Driver's Door Diagram

Courtesy of VOLVO CARS OF NORTH AMERICA.

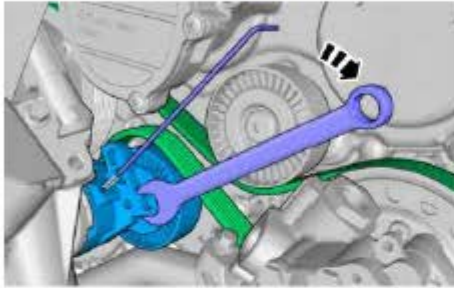
Removal & Installation

Remove drivers door switch components in the following order. Numbers in list refer to numbers in parentheses in illustration. See **Fig. 1**. To install, reverse removal procedure.:

- Door trim panel.
- Glass guide rail. Retained by 2 screws (1). Pull glass guide rail downward and move to one side.
- Switch retaining screws (2).
- Unhook link rod (3) from switch.
- Release cable harness from attachment and disconnect connector.



Torque: M6, 10 Nm



Slacken the tensioner.

Use: 19 mm fixed wrench

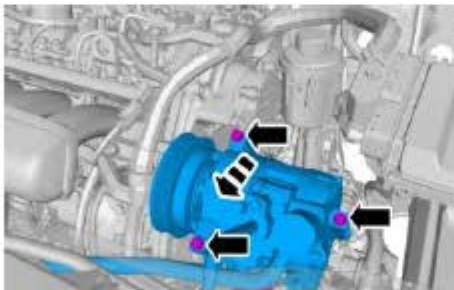
. Lock the tensioner in the slackened position.

Use: 3 mm pin



Torque: M8, 24 Nm

Torque: M10, 50 Nm



Torque: M8, 24 Nm

13 Nm





CAUTION: The fluid level must remain between the MAX and MIN marks.

For information about lubricants, engine. See LUBRICANTS, ENGINE

OIL COOLER

OIL COOLER, ENGINE

REMOVAL

NOTE: Removal steps in this procedure may contain installation details.

Drain engine oil. See ENGINE OIL (B5254T7; 2008-12), ENGINE OIL (B5244S4; 2007-11) or ENGINE OIL (B5254T3; 2007)

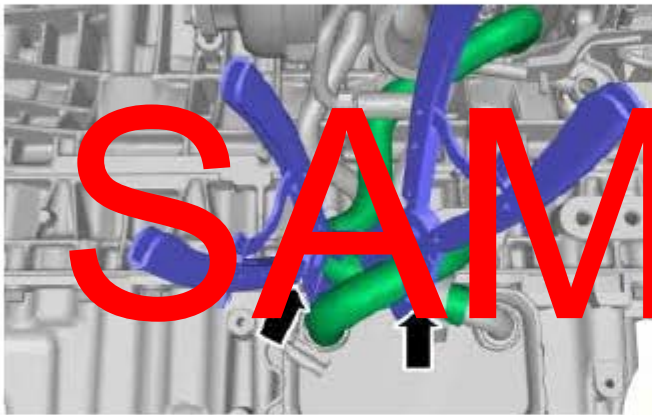
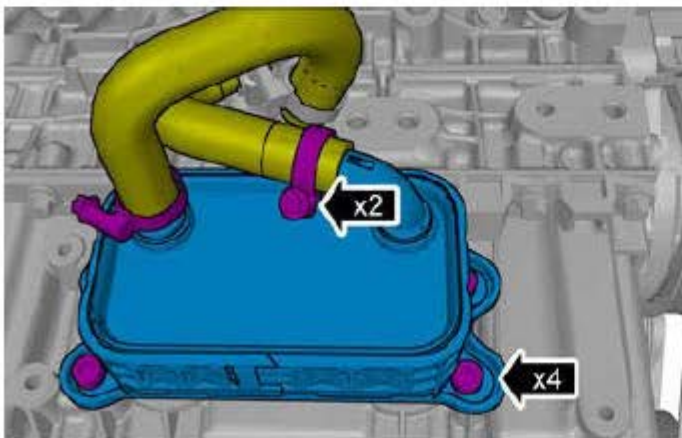


Fig. 96: Identifying Splash Panel Screws
Courtesy of VOLVO CARS CORPORATION



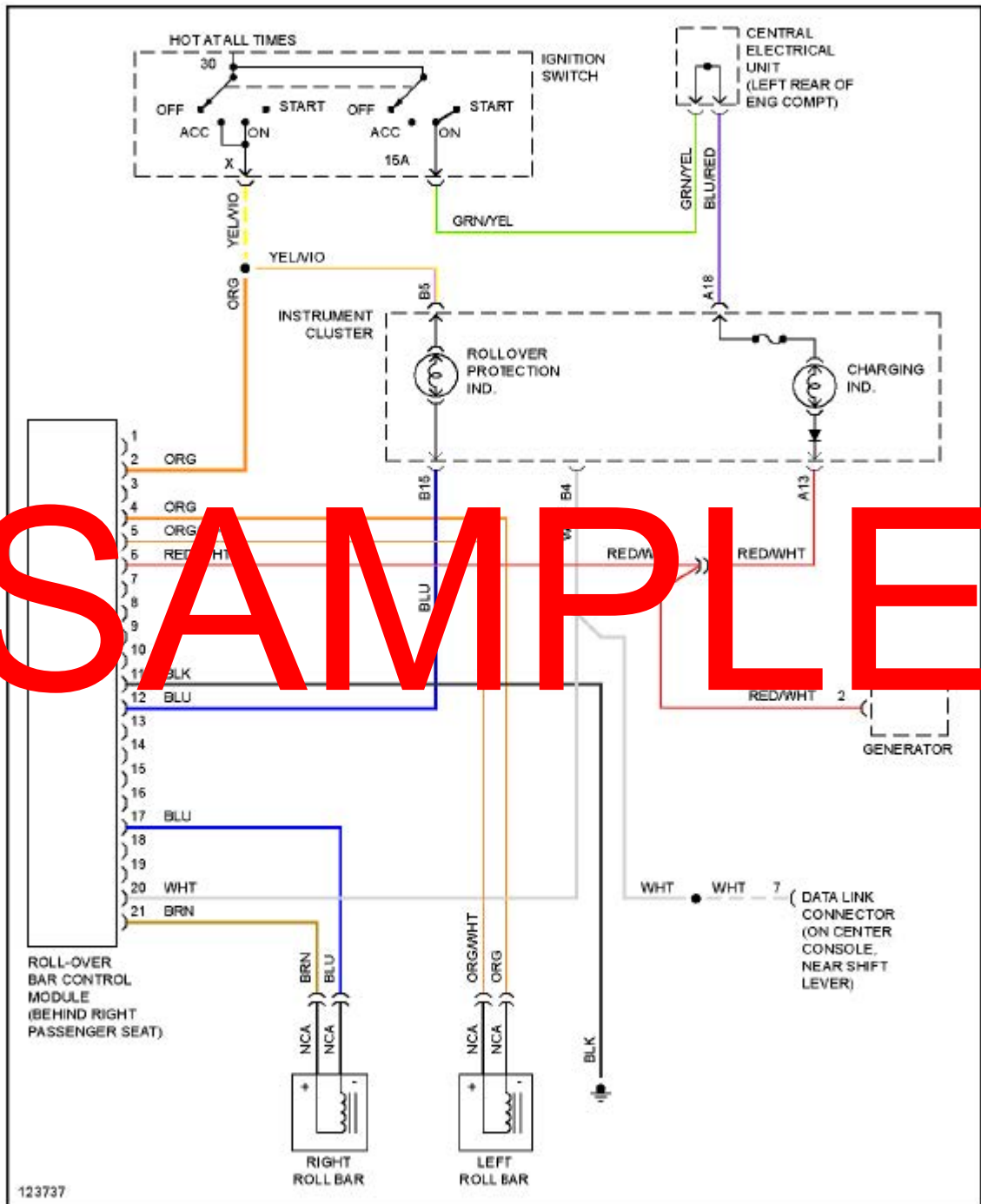
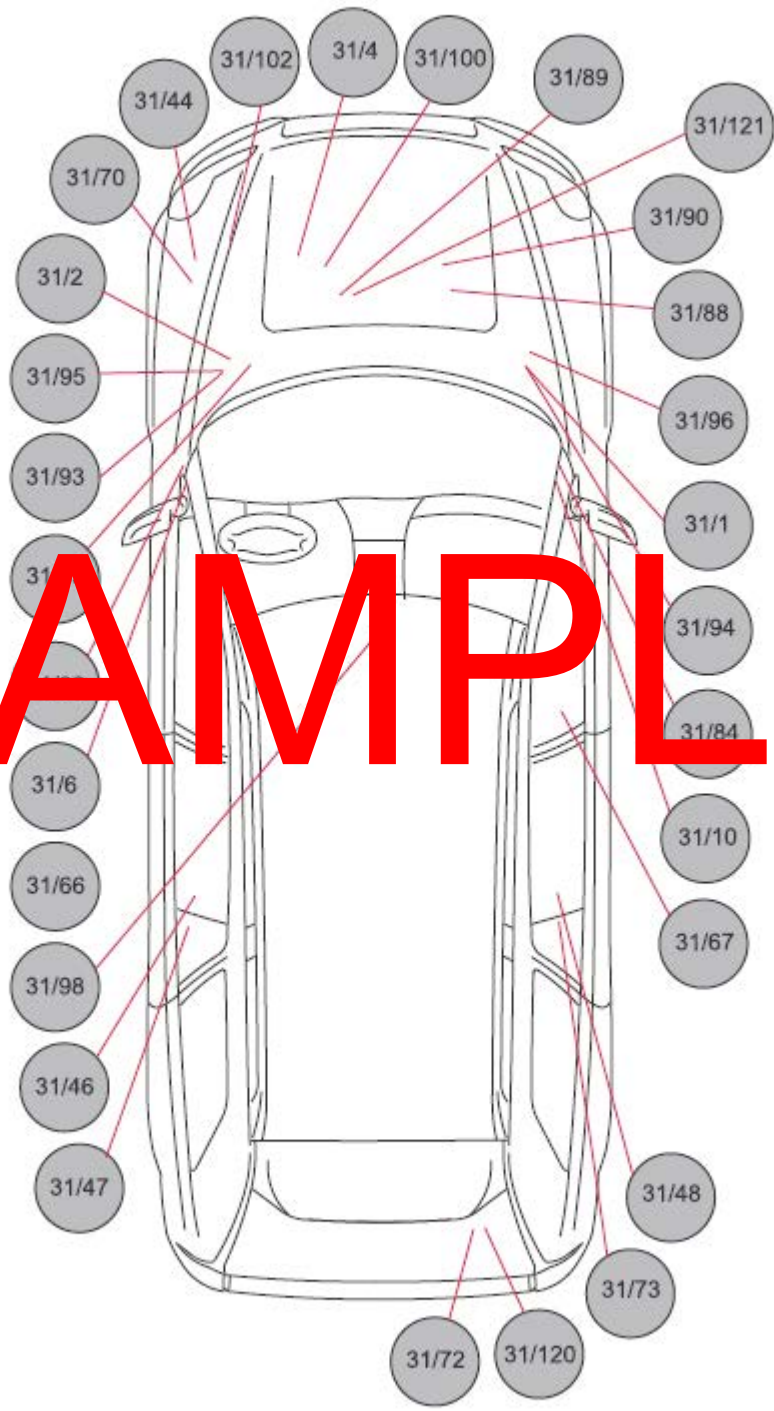


Fig. 1: Active Bodyworks Circuit, Convertible

Ground connections
Overview



SAMPLE

Ground connections

31/1 - 31/44

31/1	Right MacPherson strut tower
6/104	High pressure headlight washer motor
7/5	Washer fluid level sensor
16/10	Horn 1

31/2	Left MacPherson strut tower
4/46	Engine Control Module (ECM), 6-Cyl., 8-Cyl., Diesel
4/71	Cooling fan control module

31/4	Engine
31/44	Ground connection

31/6	A-post, left-hand side
2/240	Alcohol lock relay, wake-up, accessory
2/241	Alcohol lock relay, interior lighting, accessory
3/8	Switch, hazard warning flashers
3/117	Switch unit, ceiling light
4/31	Fan control module, RHD
4/56	Central Electronic Module (CEM), LHD
4/76	Remote control unit for garage door opener
10/1	Sunroof motor
10/29	Door-compartment lighting
10/114	Left-hand vanity mirror lighting
10/125	Left-hand front courtesy lighting
10/126	Right-hand front courtesy lighting
10/150	Rear reading light
10/172	Reading light, third row of seats
16/65	Antenna ring/ignition switch illumination
	Alcohol lock, accessory

31/10	A-post, right-hand side
4/31	Fan control module, LHD
4/56	Central Electronic Module (CEM), RHD
9/1	Outlet 12V front
9/25	Outlet 12V rear
16/45	Portable navigation system, accessory

31/44	Left-hand side member, lower engine compartment
31/4	Ground connection