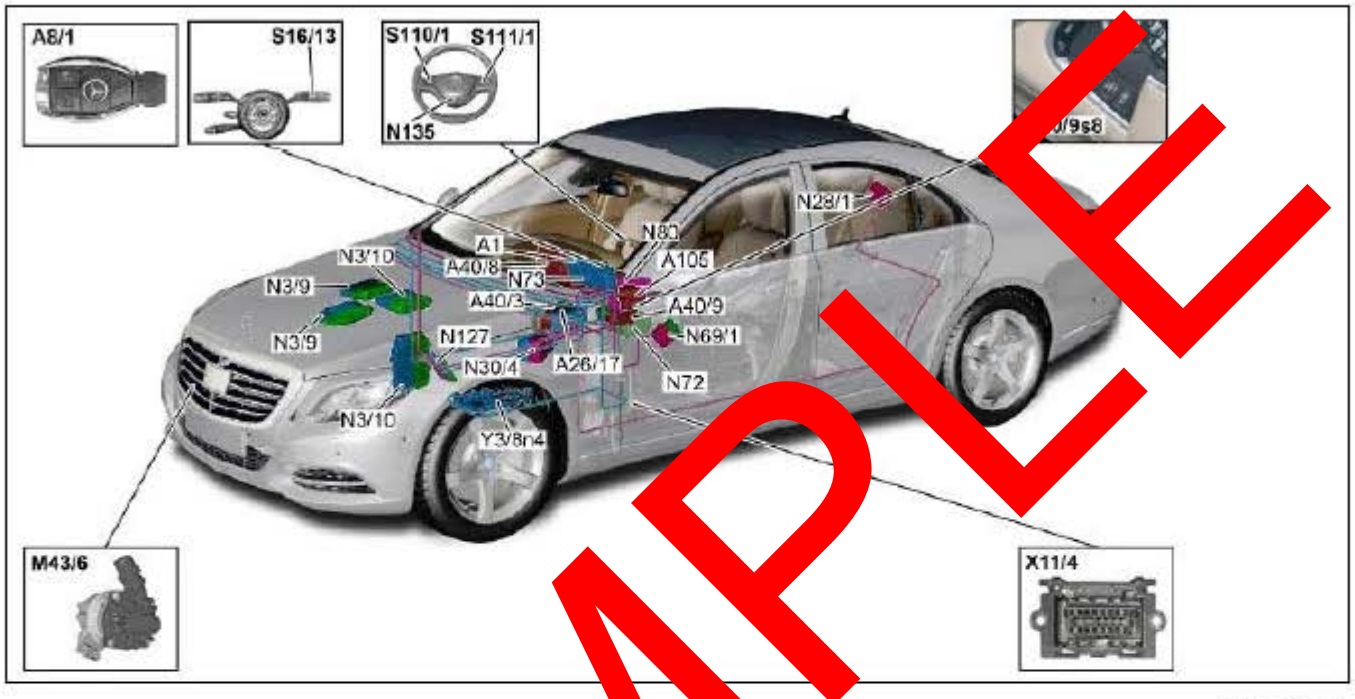
TRANSMISSION 725.0 in MODEL 217, 222

Phantom view of vehicle; illustration shows model 222



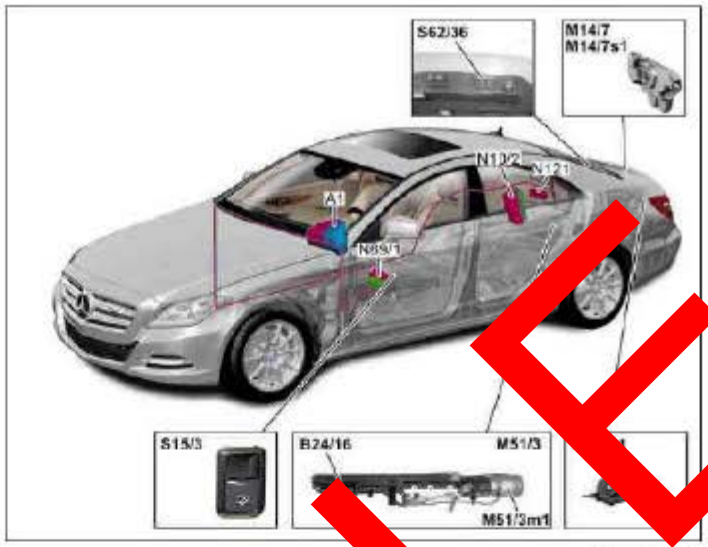
P27.19-2665-79

A1	Instrument clus	N3/10	ME-SFI [ME] control unit (with soline engine)	N135	Steering wheel electronics
A8/1	Transmitter key	N28/1	ler recognition control unit (with CODE 550 (Trailer hitch))	S16/13	DIRECT SELECT lever
A40/3	COMAND control u	N3	Electronic Stability Program control unit	S110/1	Steering wheel downshift button
A40/9	MAND contr	N69/1	Left front door control unit	S111/1	Steering wheel upshift button
A40/9s8	ransmission mode but	N73	Electronic ignition switch control unit	X11/4	Diagnostic connector
M43	Low temper circuit circulat	N80	Steering column module control unit	Y3/8n4	Fully integrated transmission control unit (with integrated transmission oil temperature sensor Y3/8s2)
N3/9	DI control unit (wi esel engine)	N127	Drivetrain control unit		

Fig. 22: Overview Of Automatic Transmission System Components - Shown On Model 222
Courtesy of MERCEDES-BENZ USA

Sectional view of automatic transmission with torque converter and integrated centrifugal pendulum (shown on vehicles with rear wheel drive)

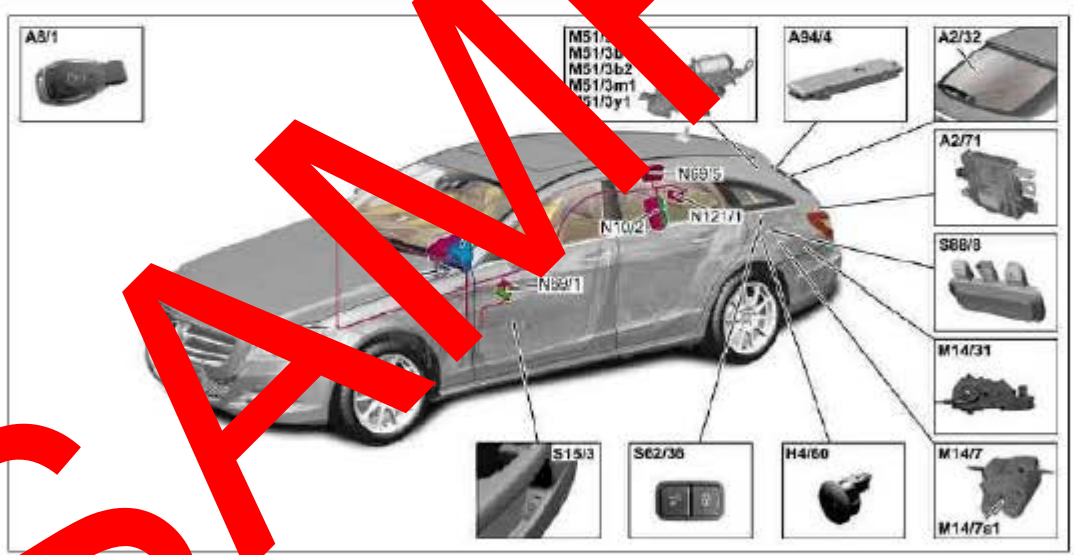
A1	Instrument cluster
B24/16	Trunk lid/liftgate position sensor
M14/7	Trunk lid/liftgate central locking motor
M14/7s1	Trunk lid/liftgate rotary tumbler switch
M14/31	Trunk lid/liftgate locking element
M51/3	Trunk lid/liftgate control drive unit
M51/3m1	Trunk lid/liftgate control electric motor
N10/2	Rear SAM control unit with fuse and relay module
N69/1	Left front door control unit
N121	Trunk lid control control unit
S15/3	Driver trunk lid/liftgate control button
S62/36	Trunk lid/liftgate control button



P80.20-3538-76

Fig. 2: Identifying Trunk Lid Control Components - Shown On Model 218 With Code (881)
Courtesy of MERCEDES-BENZ USA

Liftgate control, model 218.9

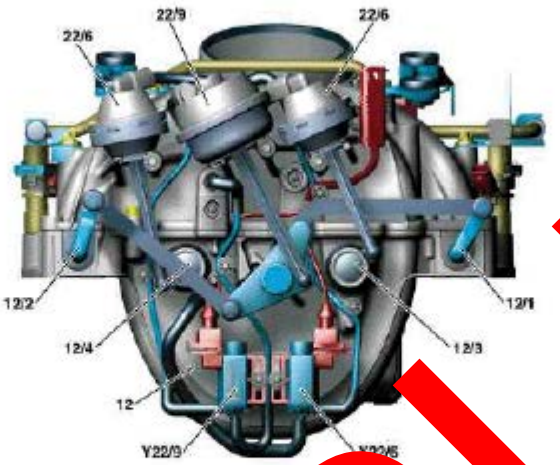


P80.20-3735-79

A1	Instrument cluster
A2/32	Rear window antenna
A2/71	Rear window antenna amplifier 1
A8/1	Transmitter key
A94/4	KEYLESS-GO antenna amplifier (with code (889) KEYLESS-GO)
H4/60	Trunk lid/liftgate control warning buzzer
M14/7	Trunk lid/liftgate central locking motor
M14/7s1	Trunk lid/liftgate rotary tumbler switch
M14/31	Trunk lid/liftgate locking element
M51/3	Trunk lid/liftgate control drive unit
M51/3b1	Trunk lid/liftgate control Hall sensor
M51/3b2	Trunk lid/liftgate control position sensor
M51/3m1	Trunk lid/liftgate control electric motor
M51/3y1	Trunk lid/liftgate control magnetic clutch
N10/2	Rear SAM control unit with fuse and relay module
N69/1	Left front door control unit
N69/5	Keyless-Go control unit (with code (889) Keyless-Go)
N73	Electronic ignition switch control unit
N121/1	Tailgate control control unit
S15/3	Driver trunk lid/liftgate control button
S62/36	Trunk lid/liftgate control button
S88/8	Trunk lid/liftgate external operation switch

12 Intake manifold with integral vacuum memory
12/1 Tumble flap shaft, left cylinder bank
12/2 Tumble flap shaft, right cylinder bank
12/3 Longitudinal switch flap shaft, right cylinder bank
12/4 Longitudinal switch flap shaft, left cylinder bank
22/6 Intake manifold switchover aneroid capsules
22/9 Tumble flap switchover aneroid capsule

Y22/6 Variable intake manifold switchover valve
Y22/9 Intake manifold tumble flap switchover valve



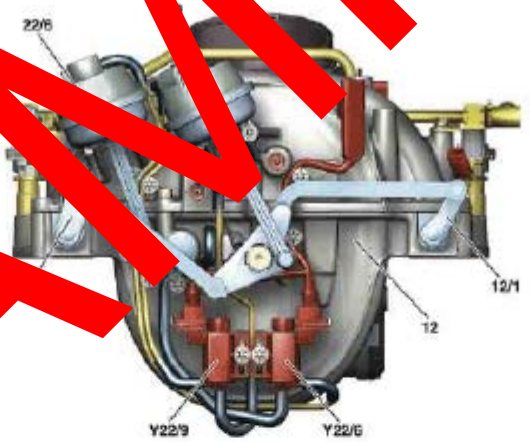
117-76

Fig. 18: Identifying Intake Manifold Design - Shown on Engine 2
Courtesy of MERCEDES-BENZ OF NORTH AMERICA.

Shown on ENGINE 273

12 Intake manifold with integral vacuum memory
12/1 Tumble flap shaft, left cylinder bank
12/2 Tumble flap shaft, right cylinder bank
22/6 Variable intake manifold switchover diaphragm unit
22/9 Tumble flap switchover aneroid capsule

Y22/6 Variable intake manifold switchover valve
Y22/9 Intake manifold tumble flap switchover valve



P09.20-2176-76

Fig. 19: Identifying Intake Manifold Design - Shown On Engine 273
Courtesy of MERCEDES-BENZ OF NORTH AMERICA.

Intake manifold switchover, function

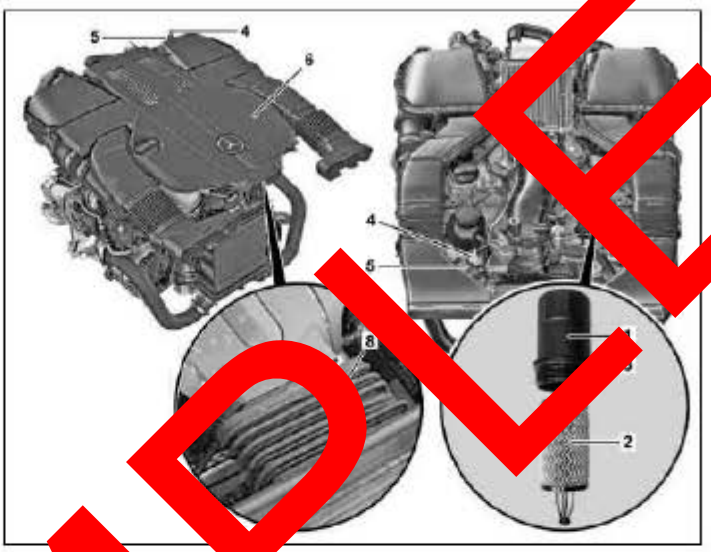
The individual intake manifolds each approx. 800 mm long, are arranged in a spiral shape around the air collecting volume. Each single intake manifold has a further opening to the air collecting volume somewhere in the middle. These can be opened or closed by rotating longitudinal switch flap shafts. The switch flaps of a

Number	Designation	Engine 274.920 in model 218
	Specification	-

Engine oil and filter change (Engine 276 in model 172, 204, 205, 207, 212, 217, 218, 221, 222, 231) - AP18.00-P-0101CWZ

ENGINE 276.8

1 Oil filter screw-on cover
2 Oil filter element
3 Sealing ring
4 Oil dipstick
5 Oil measuring pipe
6 Engine cover
8 Cold air duct

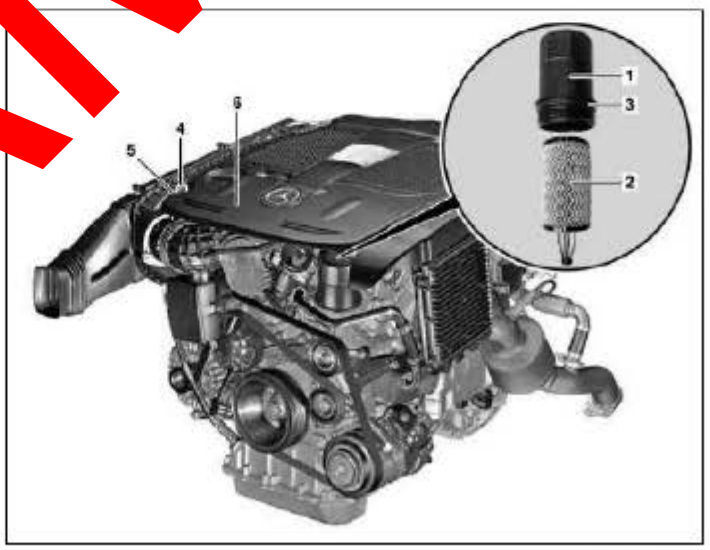


P18.00-2343-08

Fig. 9: Identifying Oil Filter Element, Sealing Ring And Oil Dipstick (Engine 276.8)
Courtesy of MERCEDES-BENZ USA

ENGINE 276.9

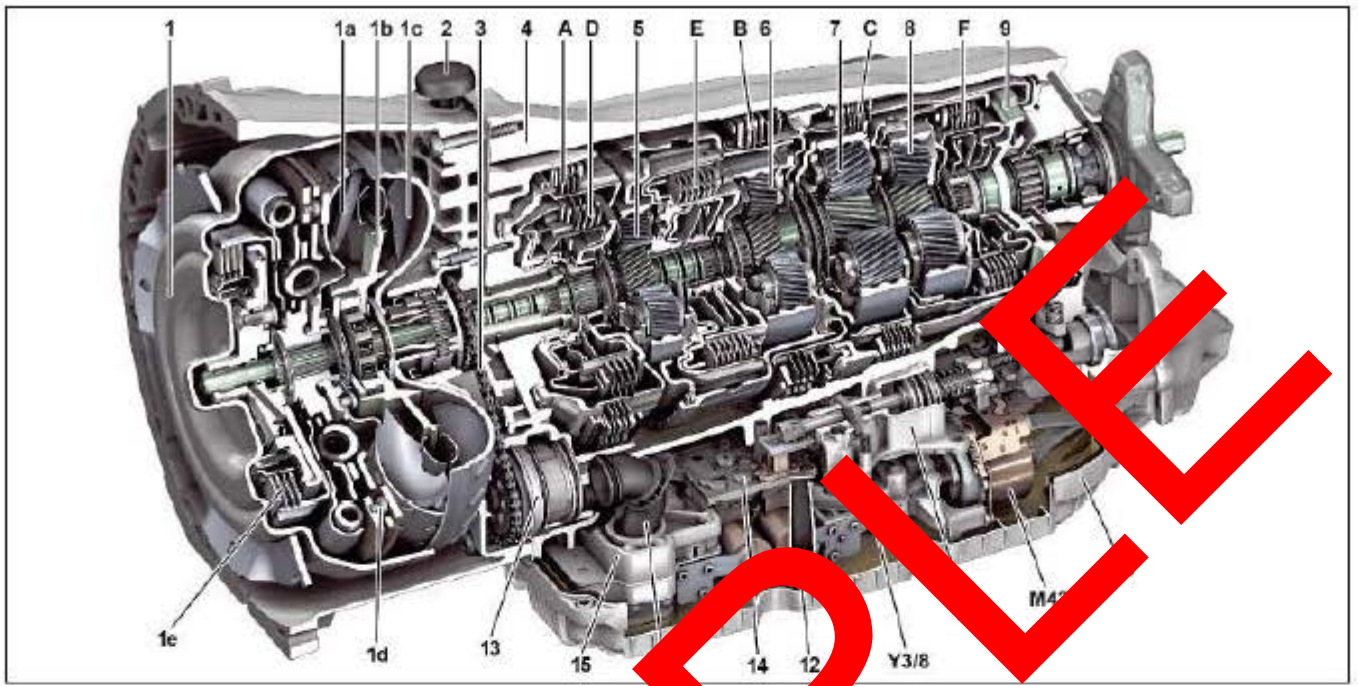
1 Oil filter screw-on cover
2 Oil filter element
3 Sealing ring
4 Oil dipstick
5 Oil measuring pipe
6 Engine cover



P18.00-2344-08

Fig. 10: Identifying Oil Filter Element, Sealing Ring And Oil Dipstick (Engine 276.9)
Courtesy of MERCEDES-BENZ USA

h



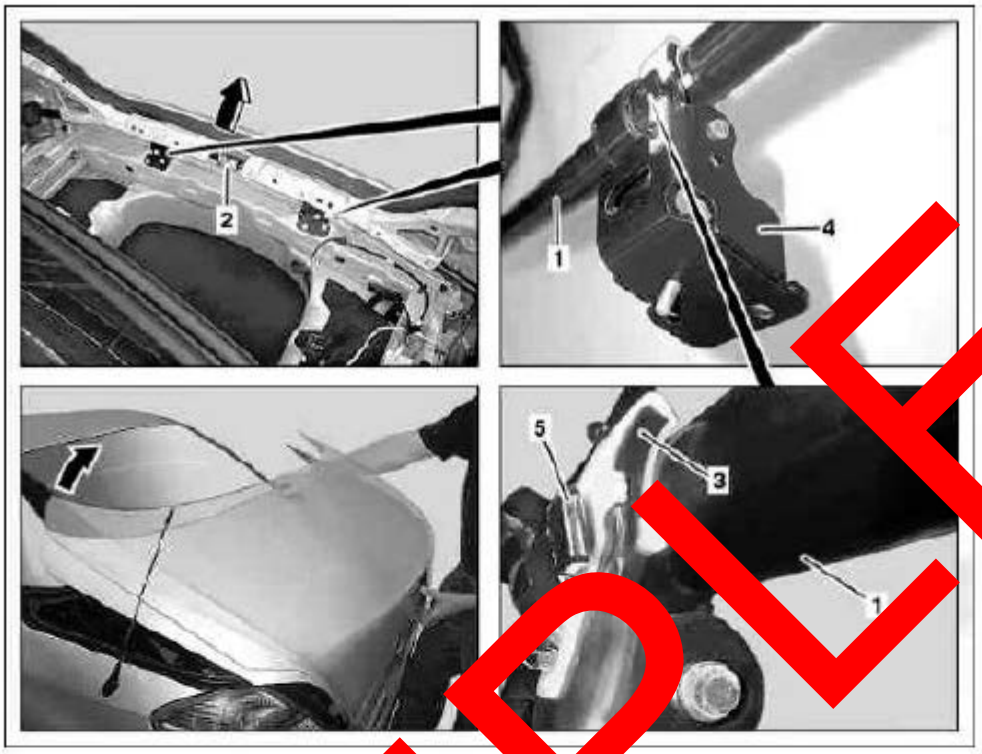
P27.10-2453-79

1	Torque converter cover		Planetary gear system	15a	Pressure and oil suction pipes
1a	Turbine wheel		Planetary gear set 3	M42	Electric auxiliary oil pump
1b	Stator		Planetary gear set 4	Y3/8	Fully integrated transmission control control unit
1c	Impeller	9	Park pawl	A	B08 multidisk brake
1d	Centrifugal pendulum	10	Oil pan	B	B05 multidisk brake
1e	Torque converter lockup clutch (WÜK)	11	Valve housing of electrohydraulic parking lock actuator	C	B06 multidisk brake
2	Transmission housing bell housing		Guide tube	D	K81 multidisk clutch
3	Oil pump chain drive		Oil pump	E	K36 multidisk clutch
4	Transmission housing	14	Supporting body of fully integrated transmission control	F	K27 multidisk clutch
5	Planetary gear set 1	15	Cover/shift valve body		

Fig. 23: Sectional View of Automatic Transmission With Torque Converter And Integrated Centrifugal Pendulum

Courtesy of MERCEDES-BENZ USA

View of fully integrated transmission control controller unit (Y3/8) from above



P88.50-2526-06

Fig. 1: Moving Tubular Frame (Shown On Model 1[illegible]4)

When the tubular frame (1) is moved by hand to adjust, for work or repair, it is necessary to ensure that the tubular frame (1) is simultaneously pulled toward the rear and upward when moving in the area of the striker eye (2).

This applies even when the trunk lid is locked on the trunk lid lock. Here, it is necessary to pull the trunk lid toward the rear and simultaneously upward on the handle when moving the tubular frame (1).

This serves to prevent the shackles (3) of the 2-articulated hinges (4) lying above the shackles (5) on the tubular frame.

When attaching the tubular frame (1) to the rear center assembly, ensure that the shackle (3) is located inside the lug (5).

If the tubular frame (1) is moved, when the shackles (5) are over the brackets (3) of if the brackets (3) are tilted, the tubular frame (1) or the 2-articulated (4) will be damaged and the tubular frame (1) will have to be replaced.

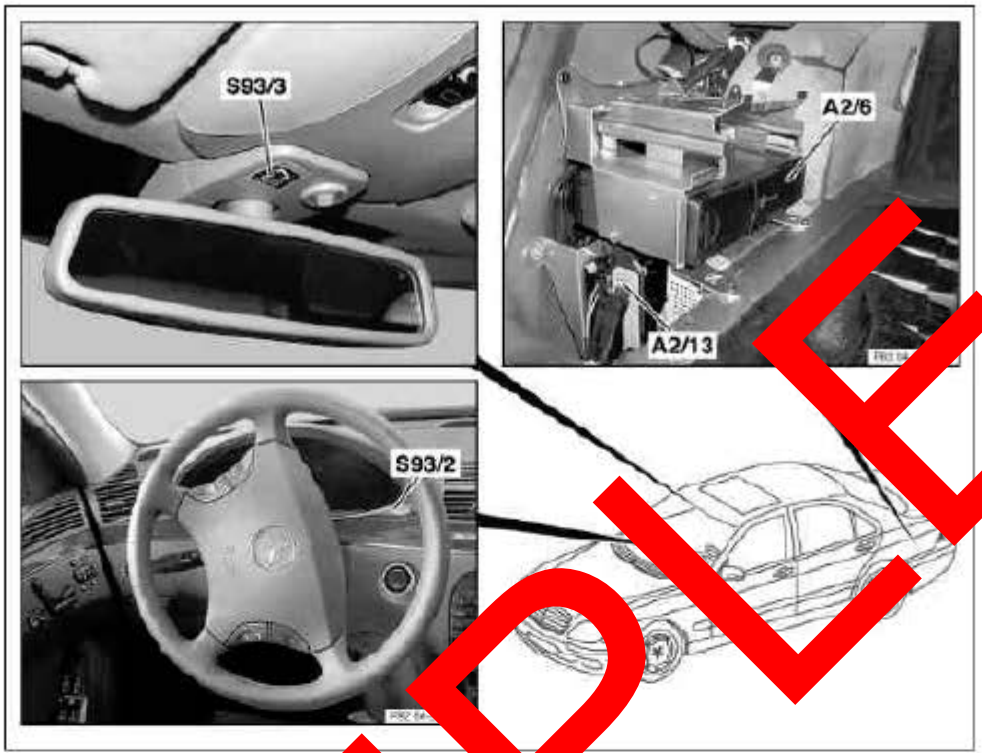


Fig. 98: Identifying Sound Amplifier An CD ver Wi hanger
Courtesy of MERCEDES-BENZ USA

- **TELE AID emergency cal tem**

  SOS push button (S93/3) present.

- **Cell phone op n**

  Open glove comp ment.

NOT ELEPHO ETROFITTING

No on telephone retrofitting H82.70-P-0001-04A

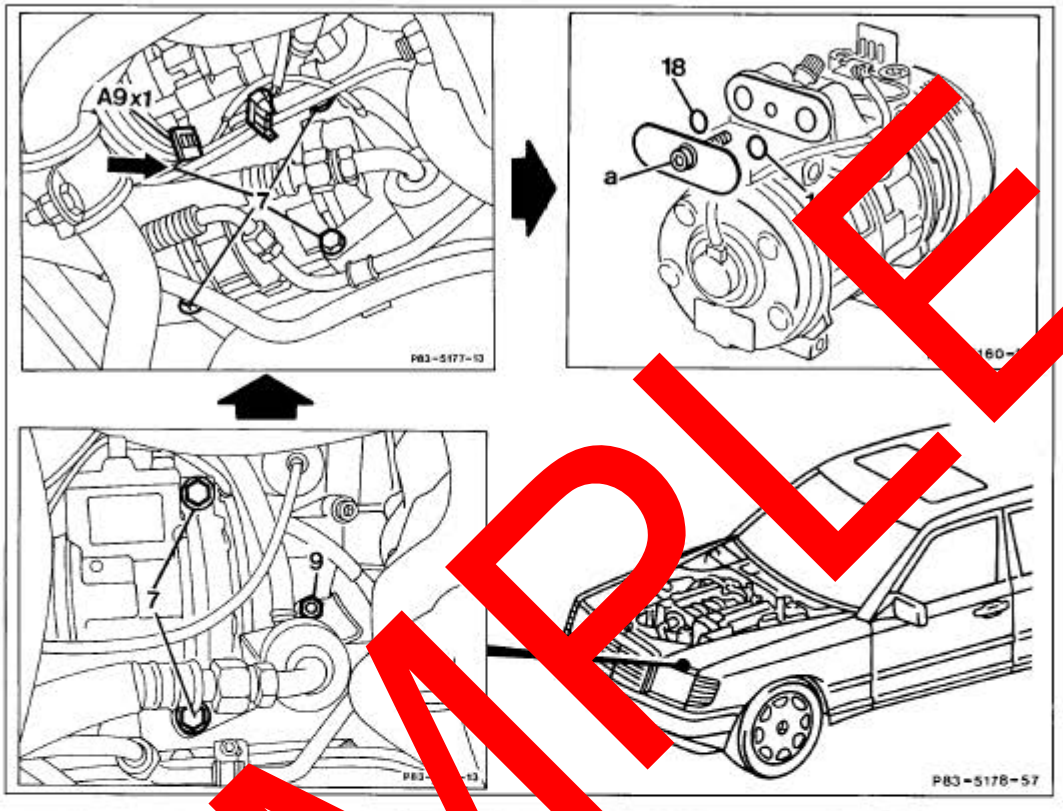
M DEL s of 7/1 up to 6/30/00, 168 as of 7/1/98 up to 6/30/00, 170 as of 7/1/98 up to 6/30/00, 202 as of 7/1/98 up to 6/30 , 208 as of 7/1/98 up to 6/30/00, 210 as of 7/1/98 up to 6/30/00 without CODE 347 (TELE AID emerge call system (D2B)) without CODE 930 (Taxi emergency call)

i

i The retrofitting of a telephone with D2B optical fiber technology, is only advisable for vehicles in which the components of the D2B ring are present, and only in combination with the Audio 30 radio.

Vehicles without these components should be retrofitted, where possible, with conventionally connected

C. Engine 119



Air conditioner	empty (recycling).
Lower compartment lining	remove.
Poly-V-	release tension and remove (13-342).
Air supply pipe for the engine bearing	remove (3 screws).
Left engine compartment lining	remove.
attachment (A9x1)	disconnect.
Level line to pump and oil pan	remove.
Torsion bar at front fixing	remove (2 clamps, 4 self-locking nuts).

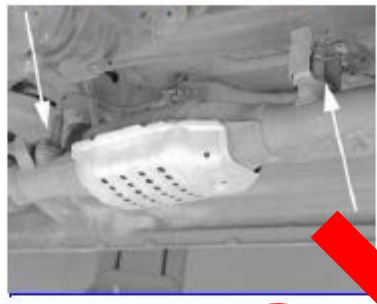
⚠
Self-locking nuts and bolts are always to be rep,laced with new ones when removed.

for engine oil cooler	remove (2 screws).

1. Start the engine and allow it to reach normal operating temperature, then turn the ignition switch **OFF**.
2. Disconnect the negative battery cable.
3. Open the hood and locate the Oxygen (O2S) sensor connector. It may be necessary to raise and safely support the vehicle for access to the sensor and its connector.

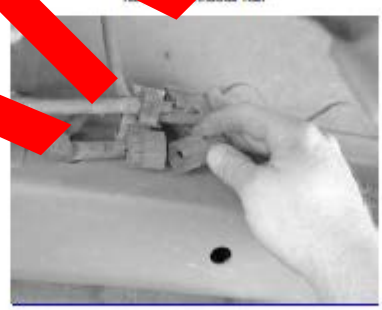
NOTE: On a few models, it may be necessary to remove the passenger seat and lift the carpeting in order to access the connector for a downstream O2S sensor.

Since sensor locations vary between vehicles, the first step in removal is to locate the O2S sensors (arrows)...



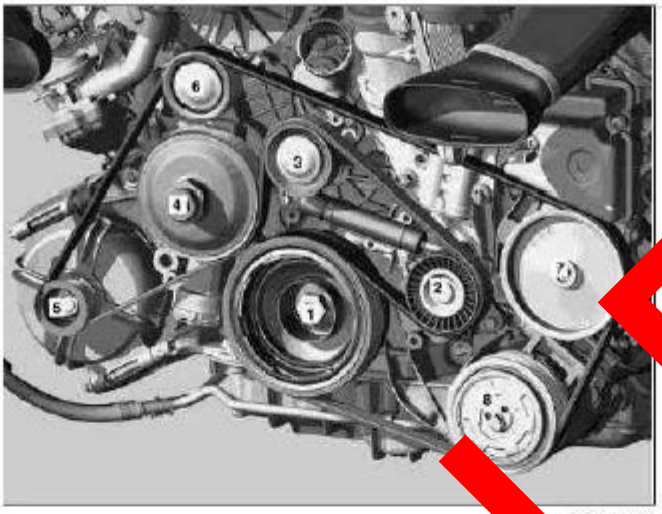
... and the sensor connector (2 ... the O2S sensor (1), but remov... ...gh from the h... ...e exh... ...stem

...engage the ... connector half from the vehicle ... ...nector half



For flange type sensors, loosen the hold-down fasteners...

1 Belt pulley/vibration damper
2 Tensioning pulley
3 Pulley
4 Coolant pump belt pulley
5 Generator belt pulley
6 Pulley
7 Power steering pump belt pulley
8 Belt pulley on refrigerant compressor



P13.22-2089-06

Fig. 10: Routing Diagram Of Poly V-Belt - Shown On Engine 272.9
Courtesy of MERCEDES-BENZ USA

MAINTENANCE

CHECK POLY-V-BELT IN VISIBLE AR OR WE AP13.22-P-1352

Check poly-V-belt in visible area for wear (ENGINE 272) P13.22-P 2VA

ENGINE 272.942 in MODEL 1 154

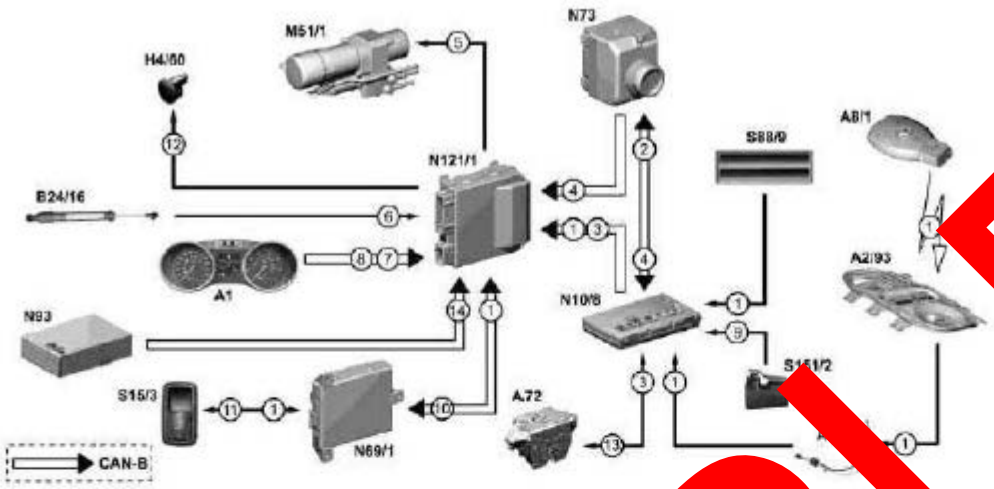
ENGINE 272.963 in MODEL 17 56

1 Poly-V-belt

P13.22-2130-01

Fig. 11: Identifying Poly-V-Belt
Courtesy of MERCEDES-BENZ USA

Damage diagra



1 Open rear-end door request
2 Transmitter key validity inquiry
3 Rear-end door lock status
4 Valid transmitter key
5 Open tailgate
6 Rear-end door opening angle
7 Vehicle speed
8 Opening angle limitation
9 Spare tire carrier open (on model 164 with code (849) Spare tire holder/spare tire)
10 Visual feedback request (up to 31.5.07)
11 Visual feedback actuation (up to 31.5.07)
12 Acoustic feedback actuation
13 Unlocking rear-end door
14 Variant coding
A1 Instrument cluster
A2/93 Roof antenna module
A8/1 Transmitter key
A49/6 Radio antenna ... filter
A72 Rear door lock ...
B24/16 Rear-end door ... recognition sensor
H4/60 Rear-end door ... warning buzzer
M51 Rear-end door hydra...
N10/8 Re... control u...
N69/1 Do... control module ...
N73 El... control unit
N93 ... gateway control unit
N121/1 ...-end door closing control mod...
Driver-side opening and ... driver-side tailgate
S8... ...ailgate handle switch
S151/2 ...re tire carrier switch open (on mod... with code (849) Spare ...e holder/spare ...)
... Controller area network bus class B (interior compartment) (CAN B)

Fig. 12: Tailgate Opening Function Di...m
Courtesy of MERC... BENZ OF NO... AMERICA.

Function requiremen... general

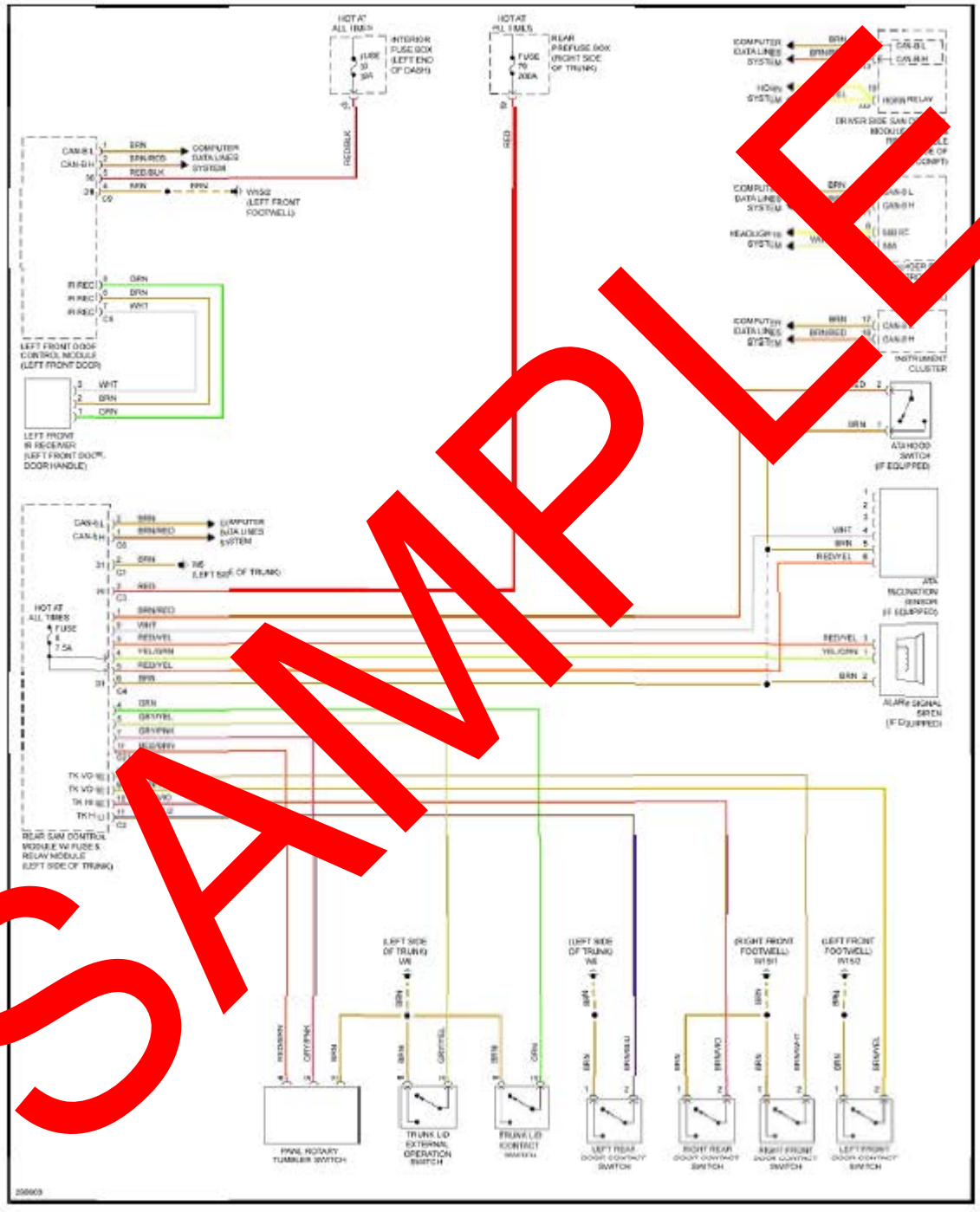
- Cir...t 30
- ...ystem synchronize...
- Speed = 0 km/h
- Spare ...olde... en i... 0° position

(on model 164 w... code (849) Spare tire holder/spare tire)

Open tail...

the rear-end door function consists of the following functions:

- Opening rear-end door via rear-end door handle switch
- Opening rear-end door via rear-end door switch


HOT AT ALL TIMES
INTERIOR FUSE BOX (LEFT END OF DASH)
FUSE 33 10A
HOT AT ALL TIMES
REAR PREFUSE BOX (RIGHT SIDE OF TRUNK)
FUSE 76 200A
COMPUTER DATA LINES SYSTEM
HORN SYSTEM
HORN RELAY
DRIVER SIDE SAM CONTROL MODULE
HEADLIGHTS SYSTEM
INSTRUMENT CLUSTER
ATA HOOD SWITCH (IF EQUIPPED)
ATA INCLINATION SENSOR (IF EQUIPPED)
ALARM SIGNAL SIREN (IF EQUIPPED)
CAN-B L
CAN-B H
BRN
BRN/RED
RED/BLK
WHT
RED/YEL
YEL/GRN
GRY/YEL
GRY/PNK
TK VD
TK HI
TK LO
W9
(LEFT SIDE OF TRUNK)
W152
(LEFT FRONT FOOTWELL)
W151
(RIGHT FRONT FOOTWELL)
LEFT FRONT DOOR CONTROL MODULE (LEFT FRONT DOOR)
LEFT FRONT IR RECEIVER (LEFT FRONT DOOR HANDLE)
REAR SAM CONTROL MODULE W/ FUSE & RELAY MODULE (LEFT SIDE OF TRUNK)
PANIC ROTARY TUMBLER SWITCH
TRUNK LID EXTERNAL OPERATION SWITCH
TRUNK LID CONTACT SWITCH
LEFT REAR DOOR CONTACT SWITCH
RIGHT REAR DOOR CONTACT SWITCH
RIGHT FRONT DOOR CONTACT SWITCH
LEFT FRONT DOOR CONTACT SWITCH