A15	AR47.30-P-8212-01DA	Connecting diagram of evaporation	
		emission control system	

Connecting diagram of evaporation emission control system HFM-SFI models 124, 129, 140 without ski bag with engine 104

Shown on model 124

19a	Ram	intake	manifold

19b Resonance intake manifold

75 Fuel tank

76 Vent valve

77 Activated charcoal canister

M16/6 Idle speed control (ISC) actuator

N3/4 HFM sequential multiport fuel injection/ignition system (HFM-SFI) control module

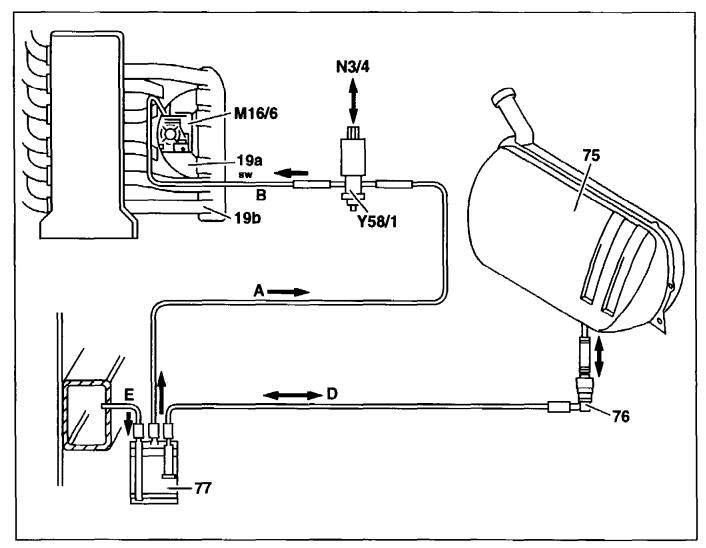
Y58/1 Purge switchover valve

A Activated charcoal canister/purge switchover valve pipe

B Purge switchover valve/idle speed control (ISC) actuator (M16/6) pipe

D Vent valve/activated charcoal canister pipe

E Vent pipe



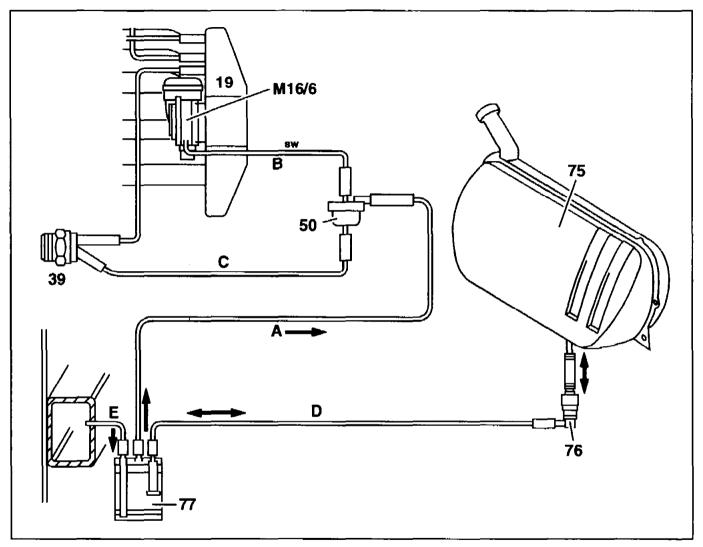
Connecting diagram of evaporation emission control system PEC 1st version model 124 with engine 111

19	Intake	manifold
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- 39 Thermo valve (opens at 70°C/closes at 35°C)
- 50 Purge valve
- 75 Fuel tank
- 76 Vent valve
- 77 Activated charcoal canister

M16/6 Idle speed control (ISC) actuator

- A Activated charcoal canister/purge valve pipe
- B Purge valve/idle speed control (ISC) actuator (M16/6) pipe
- C Purge valve/thermo valve pipe
- D Vent valve/activated charcoal canister pipe
- E Vent pipe



Connecting diagram of evaporation emission control system HFM-SFI model 124 and PEC 2nd version model 124 with engine 111

Shown on engine 111 with HFM-SFI

19 Intake manifo	IQ
------------------	----

75 Fuel tank

76 Vent valve

77 Activated charcoal canister

M16/6 Idle speed control (ISC) actuator

N3/4 HFM sequential multiport fuel injection/ignition system (HFM-SFI) control module

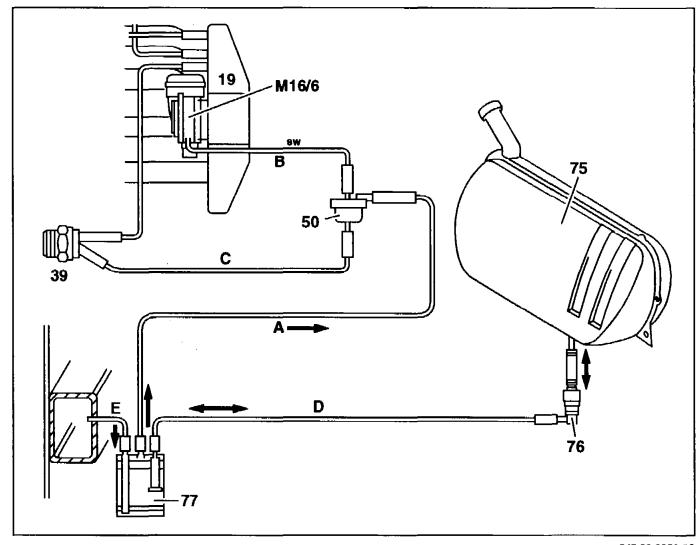
Y58/1 Purge switchover valve

A Activated charcoal canister/purge switchover valve pipe

B Purge switchover valve/idle speed control (ISC) actuator (M16/6) pipe

D Vent valve/activated charcoal canister pipe

E Vent pipe



P47.30-0250-06

Connecting diagram of evaporation emission control system

Connecting diagram of evaporation emission control system HFM-SFI model 140, engine 104 with ski bag

ija nailiillakeillailliviu	19a	Ram	intake	manifold
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19b Resonance intake manifold

75 Fuel tank

76 Vent valve

77 Activated charcoal canister

93 Fuel expansion reservoir

M16/6 Idle speed control (ISC) actuator

N3/4 HFM sequential multiport fuel injection/ignition system (HFM-SFI) control module

Y58/1 Purge switchover valve

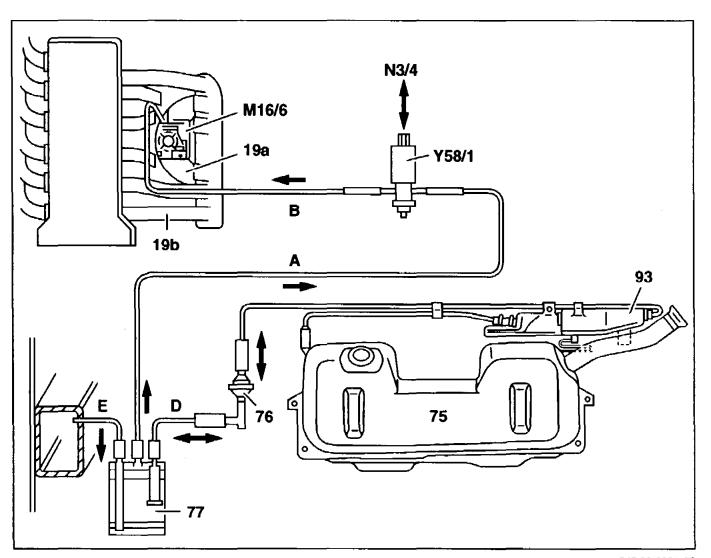
A Activated charcoal canister/purge switchover valve pipe

B Purge switchover valve/idle speed control (ISC) actuator (M16/6) pipe

D Vent valve/activated charcoal

canister pipe

E Vent pipe



E15	AR47.30-P-8212-01DC	Connecting diagram of evaporation	
		emission control system	

Function diagram of evaporation emission control system HFM-SFI model 202.028 up to 7/96

Resonance intake manifold 19b

46/3 Vent pipe to filler neck

Fuel tank 75

76 Vent valve

77 Activated charcoal canister

77/3 Air inlet cap

91/2 Vent pipe for refuelling

91/3 Air inlet and vent pipe to vent valve

92 Air inlet and vent pipe from fuel

tank

93 Fuel expansion reservoir

M16/6 Idle speed control (ISC) actuator

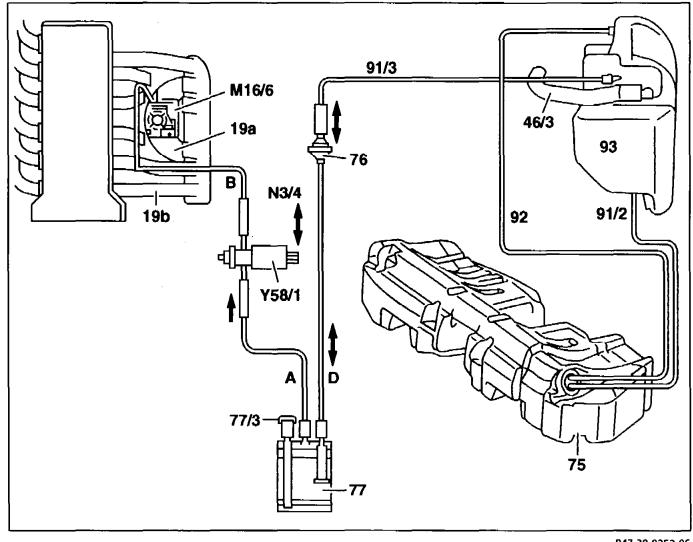
N3/4 HFM sequential multiport fuel injection/ignition system (HFM-SFI) control module

Y58/1 Purge switchover valve

Activated charcoal canister/purge Α valve pipe

Purge valve/idle speed control В actuator (ISC, M16/6) pipe

Vent valve/activated charcoal D canister pipe



P47.30-0252-06

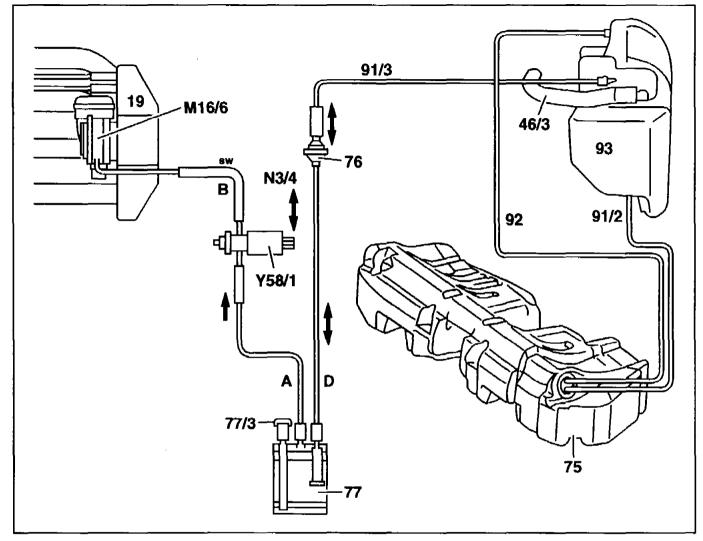
Connecting diagram of evaporation emission control system HFM-SFI model 202.022

1	9	Inta	ke r	nan	ifol	d

- 46/3 Vent pipe to filler neck
- 75 Fuel tank
- 76 Vent valve
- 77 Activated charcoal canister
- 77/3 Air inlet cap
- 91/2 Vent pipe for refuelling
- 91/3 Air inlet and vent pipe to vent valve
- 92 Air inlet and vent pipe from fuel

tank

- 93 Fuel expansion reservoir
- M16/6 Idle speed control (ISC) actuator
- N3/4 HFM sequential multiport fuel injection/ignition system (HFM-SFI) control module
- Y58/1 Purge switchover valve
- A Activated charcoal canister/purge switchover valve pipe
- B Purge switchover valve/idle speed control actuator (ISC, M16/6) pipe
- D Vent valve/activated charcoal canister pipe



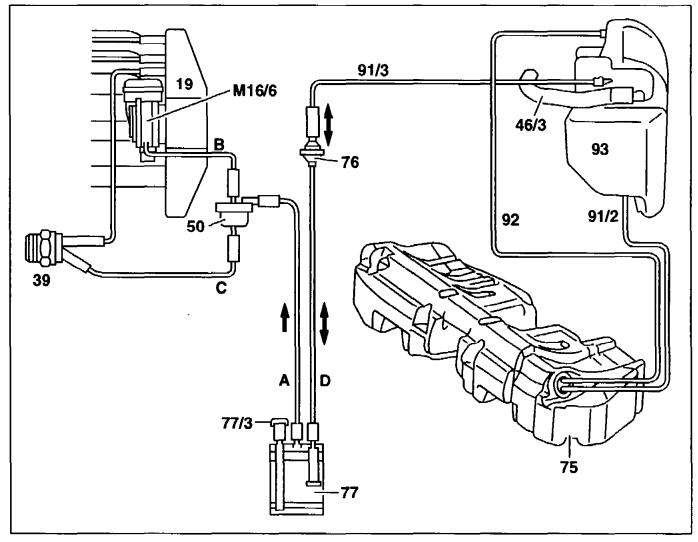
P47.30-0253-06

Connecting diagram of evaporation emission control system PEC model 202 with engine 111

- 19 Intake manifold
- 39 Thermo valve (opens at 70°C/closes at 35°C)
- 46/3 Vent pipe to filler neck
- 50 Purge valve
- 75 Fuel tank
- 76 Vent valve
- 77 Activated charcoal canister
- 77/3 Air inlet cap
- 91/2 Vent pipe for refuelling
- 91/3 Air inlet and vent pipe to vent valve
- 92 Air inlet and vent pipe from fuel

tank

- 93 Fuel expansion reservoir
- M16/6 Idle speed control (ISC) actuator
- A Activated charcoal canister/purge switchover valve pipe
- B Purge switchover valve/idle speed control actuator (ISC, M16/6) pipe
- D Vent valve/activated charcoal canister pipe



P47.30-0254-06

Connecting diagram of evaporation emission control system

Connecting diagram of evaporation emission control system HFM-SFI model 210 with engine 104

19b Resonance intake manifold

75 Fuel tank

В

77 Activated charcoal canister

77/3 Air inlet cap

M16/6 Idle speed control (ISC) actuator

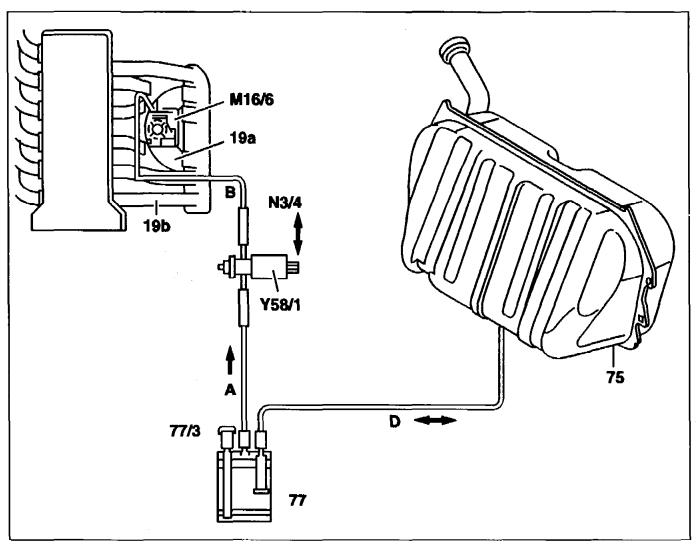
N3/4 HFM sequential multiport fuel injection/ignition system (HFM-SFI) control module

Y58/1 Purge switchover valve

A Activated charcoal canister/purge switchover valve pipe

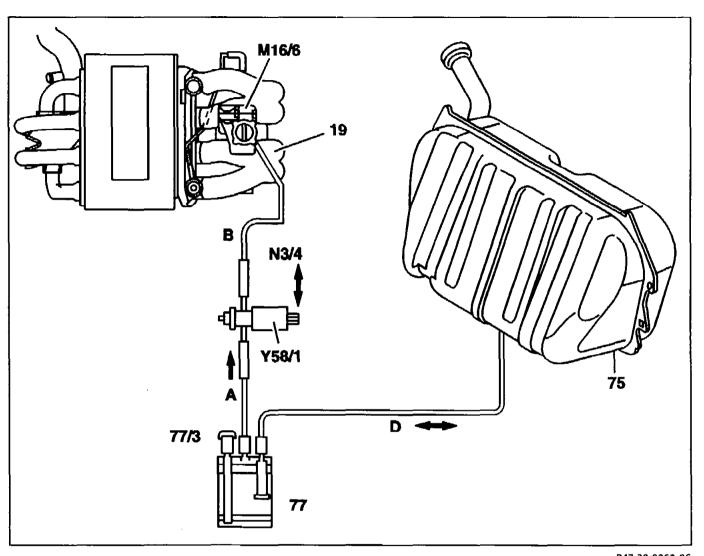
Purge switchover valve/idle speed control actuator (ISC, M16/6) pipe

D Vent valve/activated charcoal canister pipe



Connecting diagram of evaporation emission control system HFM-SFI model 170, 210 with engine 111

- 19 Intake manifold
- 75 Fuel tank
- 77 Activated charcoal canister
- 77/3 Air inlet cap
- M16/6 Idle speed control (ISC) actuator
- N3/4 HFM sequential multiport fuel injection/ignition system (HFM-SFI) control module
- Y58/1 Purge switchover valve
- A Activated charcoal canister/purge switchover valve pipe
- B Purge switchover valve/idle speed control actuator (ISC, M16/6) pipe
- D Vent valve/activated charcoal canister pipe



P47.30-0262-06

K15	AR47.30-P-8212-01DF	Connection diagram of evaporative	
		emission control system	

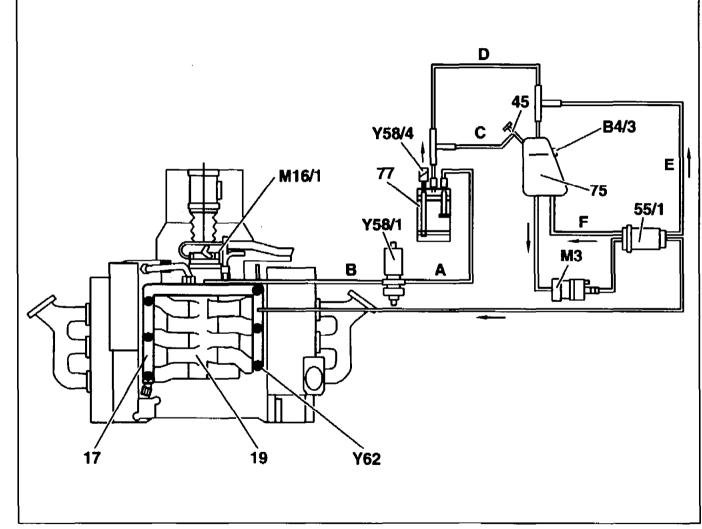
Connection diagram evaporative emission control system engine 112 (see) version up to 09/97

Fuel rail

17

C

17	i uti i aii
19	Intake manifold
45	Fuel filler neck
<i>55/1</i>	Fuel filter
<i>75</i>	Fuel tank
77	Activated charcoal canister
B4/3	Pressure sensor
M3	Fuel pump
M16/1	Electronic accelerator actuator
Y58/1	Purge control valve
Y58/4	Activated charcoal canister shutoff valve
Y62	Fuel injector
A	Activated charcoal canister - purge control valve line
В	Purge control valve - intake



F

P47.30-0293-06

D Fuel tank - activated charcoal canister line

Activated charcoal canister - fuel

manifold line

tank line

E Fuel filter - fuel tank degasing line

Fuel filter - fuel tank return flow line

					
L	15	AR47.30-P-8212-01DG	Connection diagram of evaporative	Model 210 with engine 113	
			emission control system		

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Connection diagram of evaporative emission control system model 113 version (SA) up to 09.97

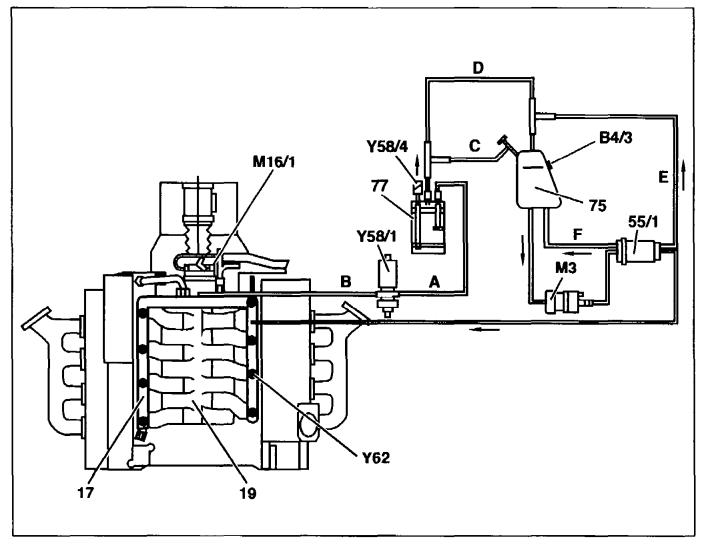
17	Fuel rail
19	Intake manifold
<i>55/1</i>	Fuel filter with integrated fuel
	pressure regulator
<i>75</i>	Fuel tank
<i>77</i>	Activated charcoal filter
B4/3	Pressure sensor
M3	Fuel pump
M16/1	Electronic accelerator actuator
Y58/1	Purge control valve
Y58/4	Purge shutoff valve
Y62	Fuel injection valve
A	Activated charcoal filter - purge
	control valve pipe
В	Purge control valve - intake
	manifold pipe
C	Activated charcoal filter - fuel tank
	vent pipe
D	Fuel tank - activated charcoal filter
	pipe
	, ,

Fuel tank - fuel tank degasing pipe

Fuel filter - fuel tank fuel return

flow pipe

Ε



P47.30-0303-06

N15	AR47.30-P-8212-01DH	Connection diagram of evaporative	
		emission control system	

Connection diagram of evaporative emission control system engine 112 version

(LSA) as of 09/97

17 I	Fuel rail
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Intake manifold 19

55/1 Fuel filter

75 Fuel tank

77 Activated charcoal filter

B4/3 Pressure sensor

M3 Fuel pump

M16/1 Electronic accelerator actuator

Y58/1 Purge control valve

Activated charcoal filter shutoff Y58/4

valve

Pressure relief valve (ORVR) Y58/5

Y62 Fuel injector

Activated charcoal filter - purge A

control valve line

Purge control valve - intake В

manifold line

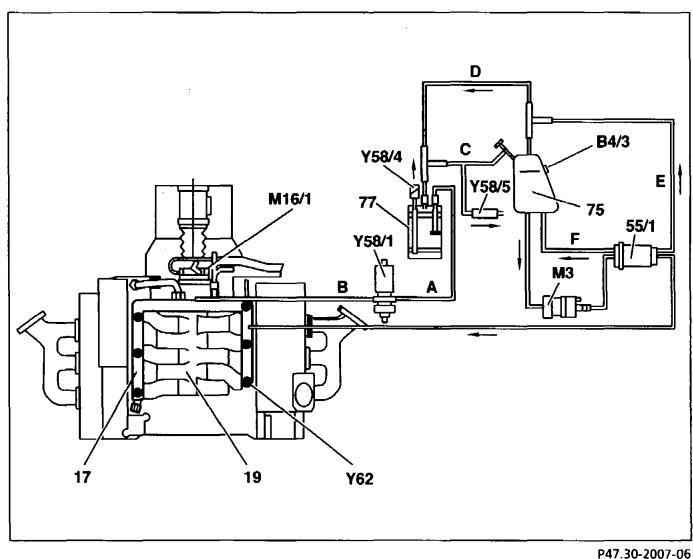
Activated charcoal filter - fuel tank C

line

Fuel tank - activated charcoal filter D line

Fuel filter - fuel tank degassing Ε line

Fuel filter - fuel tank return flow F line

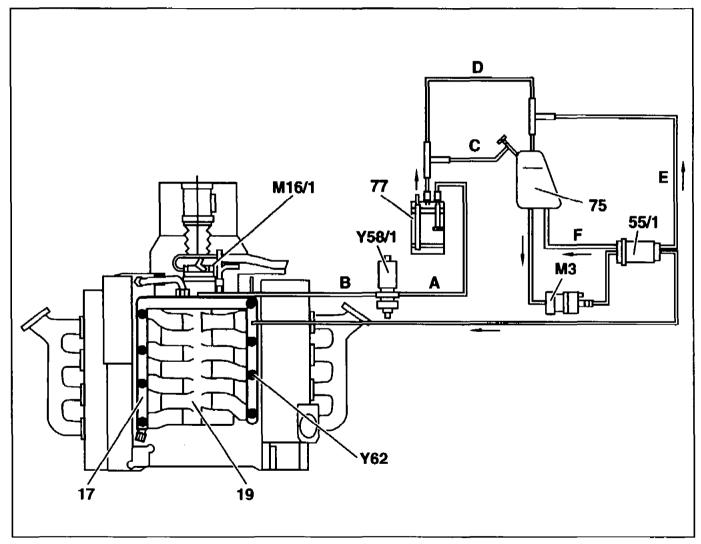


015	AR47.30-P-8212-01DI	Connection diagram of evaporative		
		emission control system	· !	

Connection diagram of evaporative emission control system engine 113 as of 09/97

09/97	
17	Fuel rail
19	Intake manifold
55/1	Fuel filter with integrated fuel
	pressure regulator
<i>75</i>	Fuel tank
<i>77</i>	Activated charcoal filter
M3	Fuel pump
M16/1	Electronic accelerator actuator
Y58/1	Purge control valve
Y62	Fuel injector
Α	Activated charcoal filter - purge
	control valve line
В	Purge control valve - intake
	manifold line
C	Activated charcoal filter - fuel tank
	vent line
D	Fuel tank - activated charcoal filter
	line
E	Fuel filter - fuel tank degassing line
F	Fuel filter - fuel tank return flow

line



P15	AR47.30-P-8212-01DJ	Connection diagram of evaporative	
		emission control system	

Connection diagram of evaporative emission control system engine 113 version

(BA) as of 09.97

19 Intake manifold

55/1 Fuel filter with integrated fuel pressure regulator

75 Fuel tank

77 Activated charcoal filter

B4/3 Pressure sensor

M3 Fuel pump

M16/1 Electronic accelerator actuator

Y58/1 Purge control valve

Y58/5 Pressure relief valve (ORVR)

Y62 Fuel injector

A Activated charcoal filter - purge

control valve line

B Purge control valve - intake

manifold line

C Activated charcoal filter - fuel tank

vent line

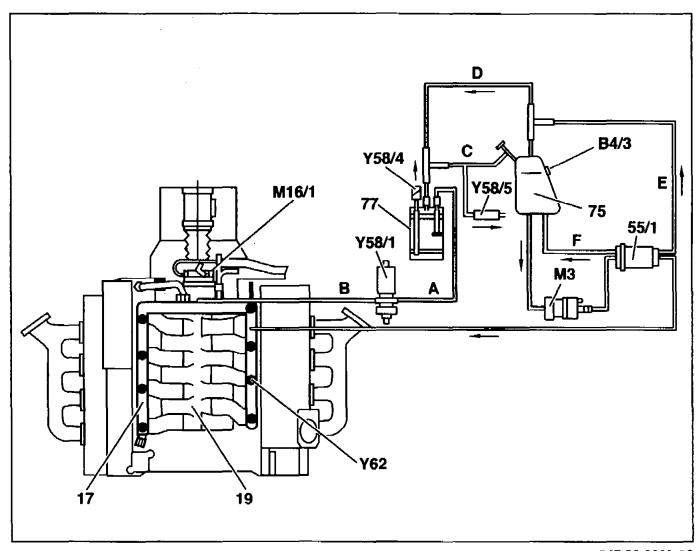
D Fuel tank - activated charcoal filter

line

E Fuel filter - fuel tank degassing line

F Fuel filter - fuel tank return flow

line



P47.30-2009-06

A16	AR47.30-P-8212-01DK	Connection diagram of evaporative	
		emission control system	

Connection diagram of evaporative emission control system engine 112 as of 09/97

17	Fuel rail
19	Intake manifold
45	Filler neck (with connection for
	collecting fuel vapors when
	refuelling ORVR)
<i>55/1</i>	Fuel filter
<i>75</i>	Fuel tank
77	A stive to all all a uses all filters

77 Activated charcoal filter

M3 Fuel pump

M16/1 Electronic accelerator actuator

Y58/1 Purge control valve

Y62 Fuel injector

A Activated charcoal filter - purge

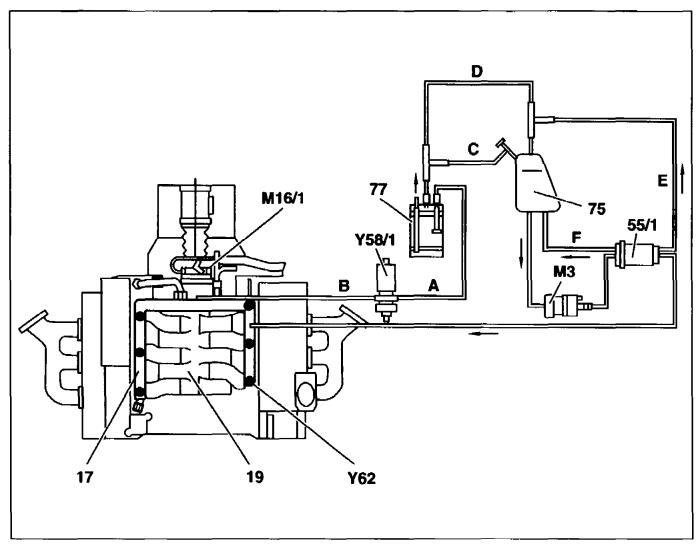
control valve line

B Purge control valve - intake

manifold line

C Activated charcoal filter - fuel tank

line



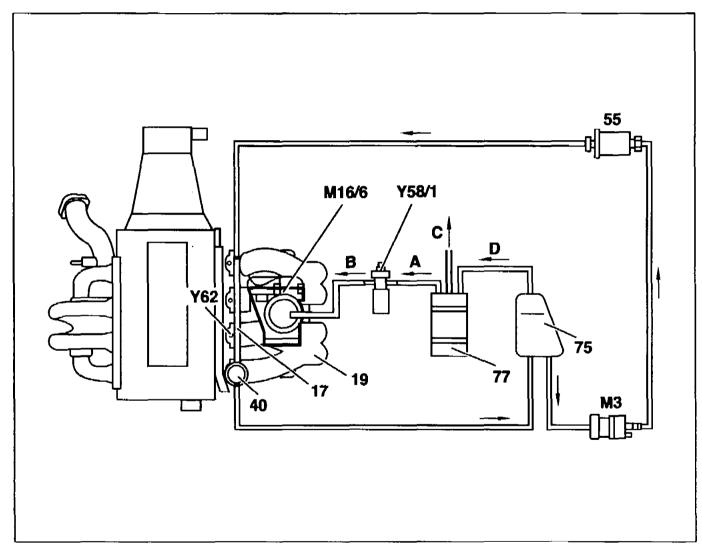
P47.30-2008-06

B16	AR47.30-P-8212-01DL	Connection diagram of evaporative		
		emission control system	,	

Connection diagram
Evaporative emission control system
Engine 111.921/42/45/46/70/74
without code 923 low emission D3

17	Fuel rail
19	Intake manifold
40	Diaphragm pressure regulator
<i>55</i>	Fuel filter
<i>75</i>	Fuel tank
77	Activated charcoal canister
М3	Fuel pump

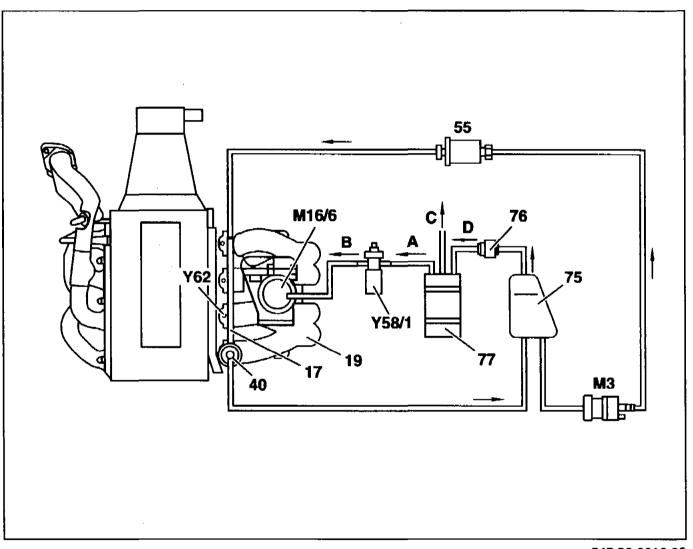
, ,	I GCI COIIN
77	Activated charcoal canister
M3	Fuel pump
M16/6	Idle speed control (ISC) actuator
Y58/1	Purge control valve
Y62	Fuel injector
Α	Activated charcoal canister - purge control valve line
В	Purge control valve - idle speed control (ISC) actuator line
C	Vent line
D	Fuel tank - activated charcoal canister line

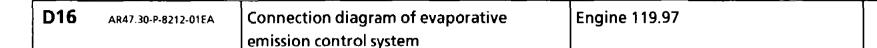


C16	AR47.30-P-8212-01DM	Connection diagram of evaporative	
		emission control system	

Connection diagram
Evaporative emission control system
Engine 111.921/42/45/46/70/74
with code 923 low emission D3

17	Fuel rail
19	Intake manifold
40	Diaphragm pressure regulator
<i>55</i>	Fuel filter
<i>75</i>	Fuel tank
76	Vent valve (only model 170)
77	Activated charcoal canister
M3	Fuel pump
M16/6	Idle speed control (ISC) actuator
Y58/1	Purge control valve
Y62	Fuel injector
Α	Activated charcoal canister - purge control valve line
В	Purge control valve - idle speed
	control (ISC) actuator line
C	Vent line
D	Fuel tank - activated charcoal
	canister line





Connection diagram of LH-SFI evaporative emission control system model 129, 140 without skibag with engine 119.97

19	Intak	e man	ifold
----	-------	-------	-------

75 Fuel tank

76 Vent valve

77 Activated charcoal filter

M16/1 Electronic accelerator (EA)/cruise control (CC)/idle speed control (ISC) actuator

N3/1 Air hot wire (LH-SFI) control module

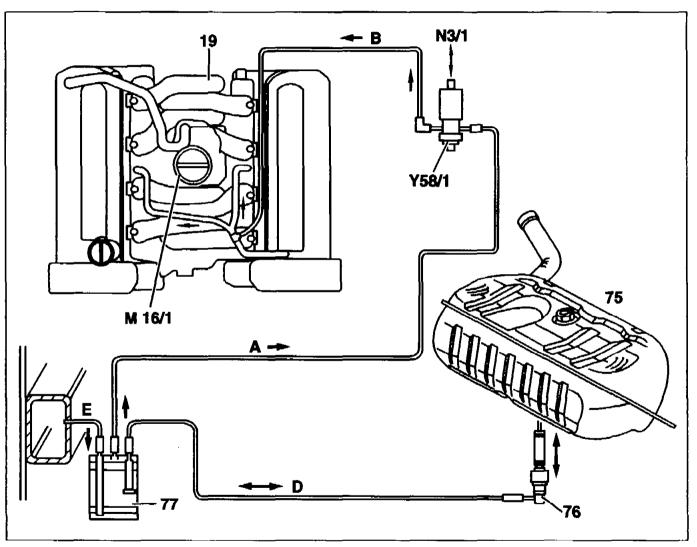
Y58/1 Purge control valve

A Activated charcoal filter – purge control valve pipe

B Purge control valve – actuator (M16/1) pipe

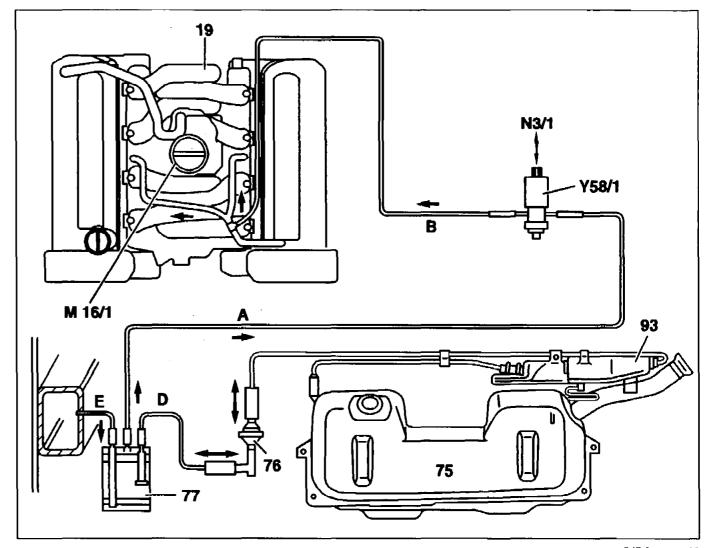
D Vent valve – activated charcoal filter pipe

E Vent pipe



Connection diagram of LH-SFI evaporative emission control system model 140 with skibag with engine 119.97

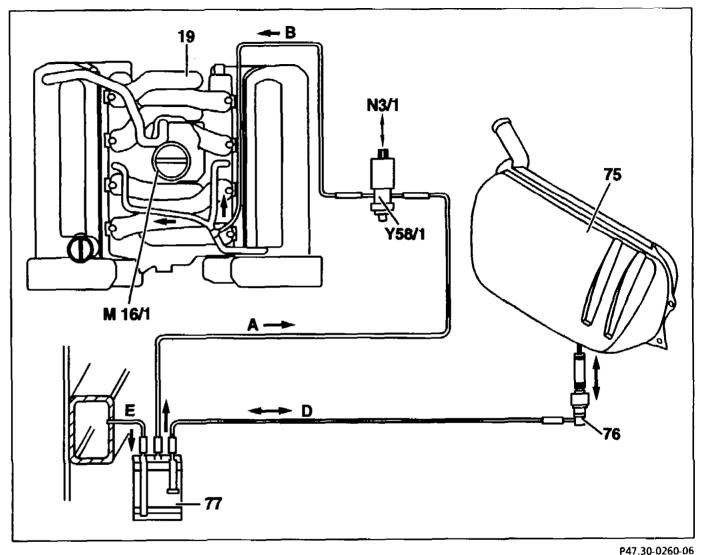
- 19 Intake manifold
- 75 Fuel tank
- 76 Vent valve
- 77 Activated charcoal filter
- 93 Fuel expansion reservoir
- M16/1 Electronic accelerator (EA)/cruise control (CC)/idle speed control (ISC) actuator
- N3/1 Air hot wire (LH-SFI) control module
- Y58/1 Purge control valve
- A Activated charcoal filter purge control valve pipe
- B Purge control valve actuator (M16/1) pipe
- D Vent valve activated charcoal filter pipe
- E Vent pipe



P47.30-0259-06

Connection diagram of LH-SFI evaporative emission control system model 124 with engine 119.97

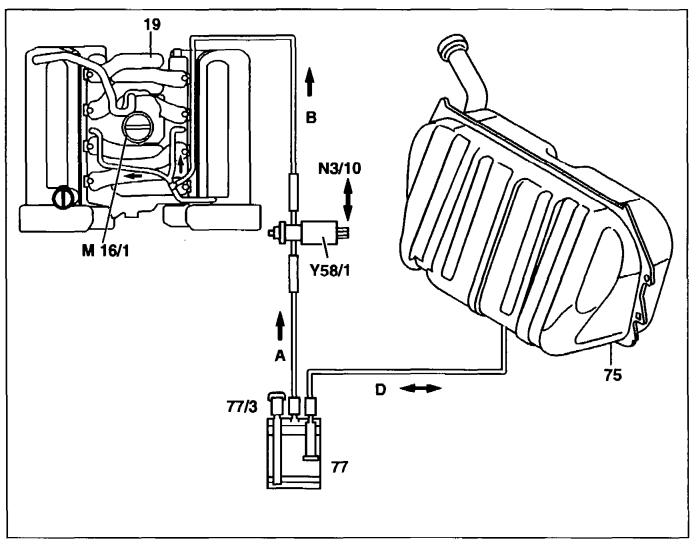
- Intake manifold 19
- Fuel tank *75*
- 76 Vent valve
- Activated charcoal filter 77
- M16/1 Electronic accelerator (EA)/cruise control (CC)/idle speed control (ISC) actuator
- Air hot wire (LH-SFI) control module N3/1
- Y58/1 Purge control valve
- Activated charcoal filter purge Α control valve pipe
- Purge control valve actuator В (M16/1) pipe
- Vent valve activated charcoal filter D pipe
- Vent pipe Ε



G16	AR47.30-P-8212-01EB	Function diagram of evaporative emission	
		control system	

Connection diagram of evaporative emission control system, ME-SFI model 129, 140, 210 with engine 119.98

19	Suction pipe
<i>75</i>	Fuel tank
<i>76</i>	Vent valve
77	Activated charcoal canister
M16/1	Electronic accelerator (EA)/cruise
	control (CC)/idle speed control (ISC)
	actuator
N3/10	Motor electronics (ME-SFI) control
	module
Y58/1	Purge control valve
Α	Activated charcoal canister – purge
	control valve pipe
В	Purge control valve – actuator
	(M16/1) pipe
D	Fuel tank – activated charcoal
	canister pipe



H16	AR47.30-P-8212-01EC	Connection diagram of evaporative		
		emission control system		

Connection diagram of evaporative emission control system model 129 with engine 119 Model Year 98 version (sa)

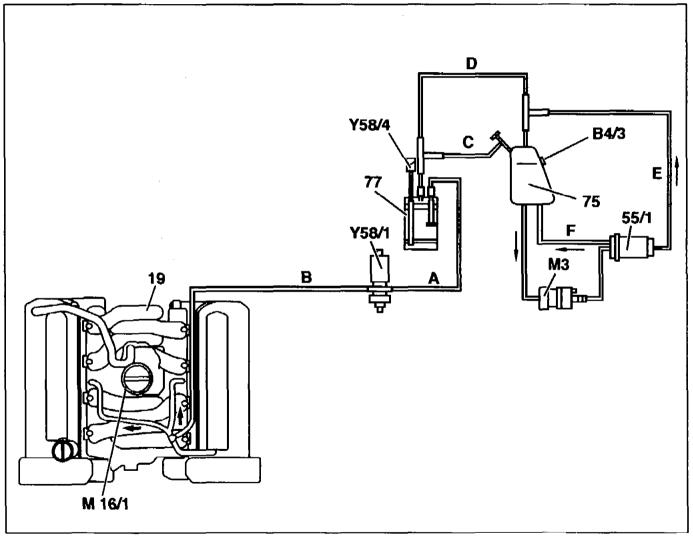
19	Suction pipe
<i>55/1</i>	Fuel filter
<i>75</i>	Fuel tank
<i>77</i>	Activated charcoal canister
B4/3	Pressure sensor
M3	Fuel pump
M16/1	Electronic accelerator actuator
Y58/1	Purge control valve
Y58/4	Activated charcoal canister shutoff
	valve
Α	Activated charcoal canister - purge
	control valve pipe
В	Purge control valve - intake
	manifold pipe
C	Activated charcoal canister - fuel
	tank pipe
D	Fuel tank - activated charcoal
	canister pipe
E	Fuel filter - fuel tank degassing

Fuel filter - fuel tank fuel return

pipe

flow pipe

F



P47.30-0310-06

J16	AR47.30-P-8212-01ED	Connection diagram of evaporative	
		emission control system	

Connection diagram
Evaporative emission control system HFMSFI
Model 170 with engine 111

Model year 98 version (sa)

19 Intake manifold55/1 Fuel filter75 Fuel tank

77 Activated charcoal canister

B4/3 Pressure sensor

M3 Fuel pump

M16/6 Idle speed control (ISC) actuator

Y58/1 Purge control valve

Y58/4 Activated charcoal canister shutoff

valve

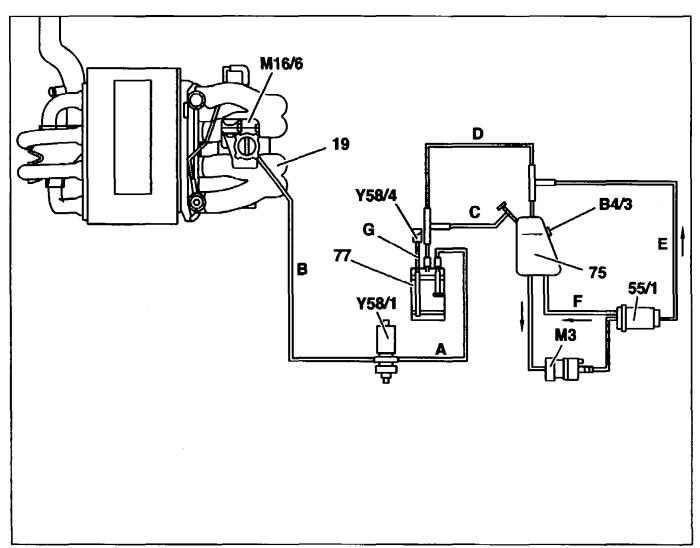
A Activated charcoal canister - purge control valve line

B Purge control valve - idle speed control (ISC) actuator line

C Activated charcoal canister - fuel tank line

D Fuel tank - activated charcoal canister line

E Fuel filter - fuel tank degassing line



P47.30-0311-05

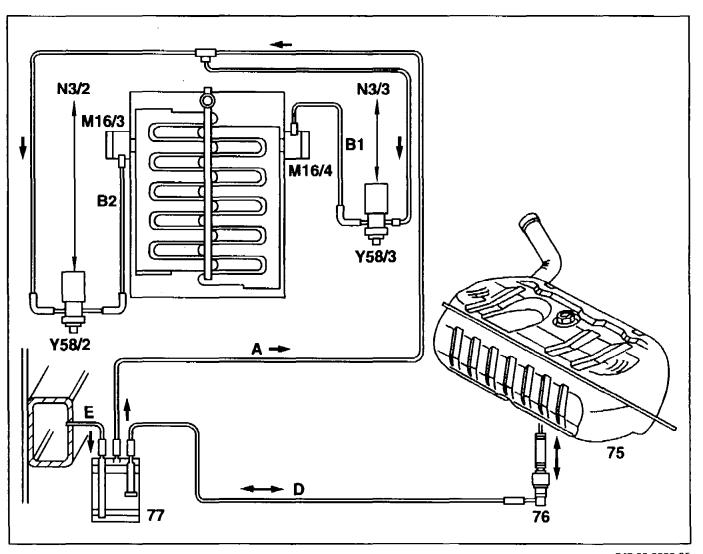
F Fuel filter - fuel tank return flow line

G Activated charcoal canister - activated charcoal canister shutoff valve line

K16	AR47.30-P-8212-01FA	Connection diagram of evaporative	Engine 120.980/981	
		emission control system		

Connection diagram of LH-SFI evaporative emission control system model 129, 140 without skibag with engine 120

- 75 Fuel tank
- 76 Vent valve
- 77 Activated charcoal filter
- 93 Feul expansion reservoir
- M16/3 Right electronic accelerator (EA)/cruise control (CC)/idle speed control (ISC) actuator, positioned on left of engine
- M16/4 Left electronic accelerator (EA)/cruise control (CC)/idle speed control (ISC) actuator, positioned on right of engine
- N3/2 Left hot wire (LH-SFI) control module
- N3/3 Right hot wire (LH-SFI) control module
- Y58/2 Left purge control valve, positioned in right of engine compartment
- Y58/3 Right purge control valve, positioned in left of engine compartment



A Activated charcoal filter – purge control valve pipe

B1 Purge control valve – actuator

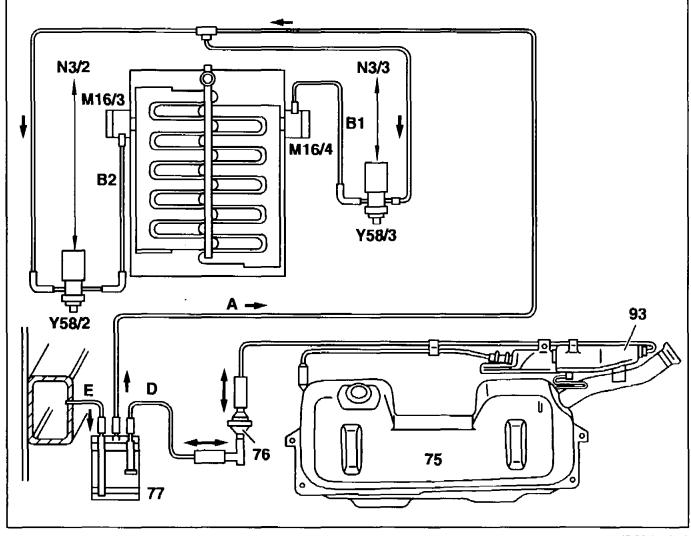
(M16/4) pipe

- B2 Purge control valve actuator (M16/3) pipe
- D Vent valve activated charcoal filter pipe

E Vent pipe

Connection diagram of LH-SFI evaporative emission control system model 140 with skibag with engine 120

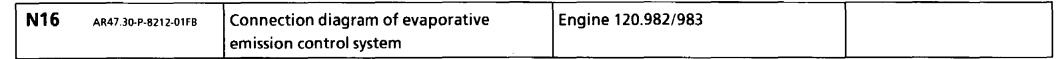
- 75 Fuel tank
- 77 Activated charcoal filter
- 93 Feul expansion reservoir
- M16/3 Right electronic accelerator (EA)/cruise control (CC)/idle speed control (ISC) actuator, positioned on left of engine
- M16/4 Left electronic accelerator
 (EA)/cruise control (CC)/idle speed
 control (ISC) actuator, positioned on
 right of engine
- N3/2 Left hot wire (LH-SFI) control module
- N3/3 Right hot wire (LH-SFI) control module
- Y58/2 Left purge control valve, positioned in right of engine compartment
- Y58/3 Right purge control valve, positioned in left of engine compartment



P47.30-0256-06

- A Activated charcoal filter purge control valve pipe
- B1 Purge control valve actuator (M16/4) pipe

- B2 Purge control valve actuator (M16/3) pipe
- D Vent valve activated charcoal filter pipe
- E Vent pipe



Connection diagram of ME-SFI evaporative emission control system model 129, 140 without ski bag with engine 120

75 Fuel tank

77 Activated charcoal filter

M16/3 Right electronic accelerator
(EA)/cruise control (CC)/idle speed
control (ISC) actuator, positioned on
left of engine

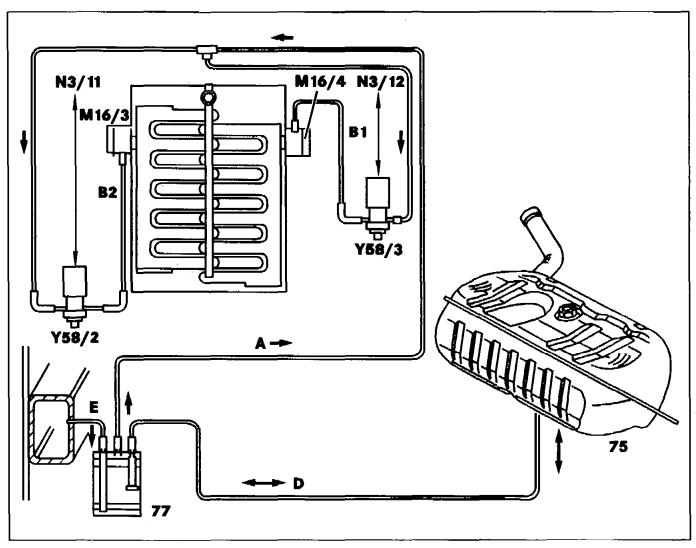
M16/4 Left electronic accelerator
(EA)/cruise control (CC)/idle speed
control (ISC) actuator, positioned on
right of engine

N3/11 Left ME-SFI control module

N3/12 Right ME-SFI control module

Y58/2 Left purge control valve, positioned in right of engine compartment

Y58/3 Right purge control valve, positioned in left of engine compartment



A Activated charcoal filter – purge control valve pipe

B1 Purge control valve – actuator

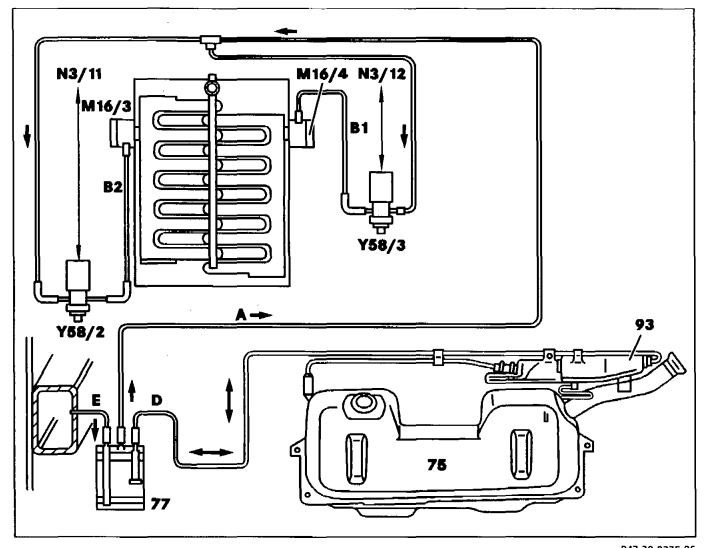
(M16/4) pipe

- B2 Purge control valve actuator (M16/3) pipe
- D Fuel tank activated charcoal filter pipe

E Vent pipe

Connection diagram of ME-SFI evaporative emission control system model 140 with ski bag, engine 120

- 75 Fuel tank
- 77 Activated charcoal filter
- 93 Fuel expansion tank
- M16/3 Right electronic accelerator
 (EA)/cruise control (CC)/idle speed
 control (ISC) actuator, positioned on
 left of engine
- M16/4 Left electronic accelerator
 (EA)/cruise control (CC)/idle speed
 control (ISC) actuator, positioned on
 right of engine
- N3/11 Left ME-SFI control module
- N3/12 Right ME-SFI control module
- Y58/2 Left purge control valve, positioned in right of engine compartment
- Y58/3 Right purge control valve, positioned in left of engine compartment



P47.30-0275-06

A Activated charcoal filter – purge control valve pipe

B1 Purge control valve – actuator

(M16/4) pipe

- B2 Purge control valve actuator (M16/3) pipe
- D Fuel expansion tank activated charcoal filter pipe

E Vent pipe

Connection diagram of ME-SFI evaporative emission control system model 129 (sa) with engine 120

75 Fuel tank

77 Activated charcoal filter

B4/4 Purge monitoring pressure sensor

M16/3 Right electronic accelerator
(EA)/cruise control (CC)/idle speed
control (ISC) actuator, positioned on
left of engine

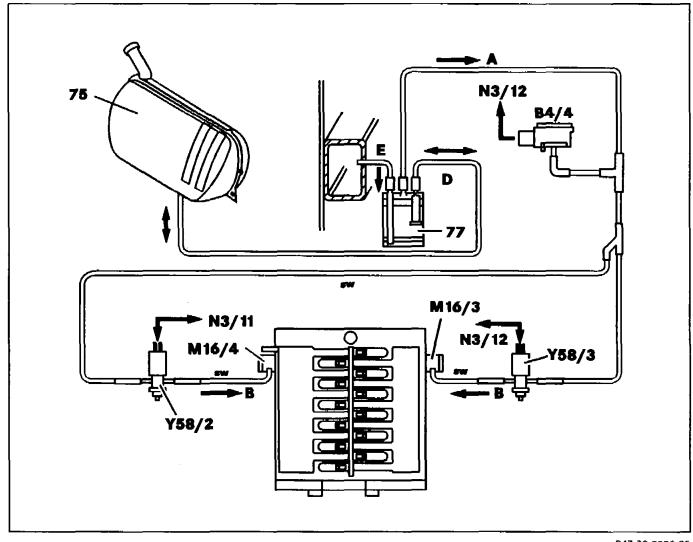
M16/4 Left electronic accelerator
(EA)/cruise control (CC)/idle speed
control (ISC) actuator, positioned on
right of engine

N3/11 Left ME-SFI control module

N3/12 Right ME-SFI control module

Y58/2 Left purge control valve, positioned in right of engine compartment

Y58/3 Right purge control valve, positioned in left of engine compartment



- A Activated charcoal filter purge control valve pipe
- B Purge control valve actuator (M16/3, M16/4) pipe
- D Fuel tank activated charcoal filter pipe
- E Vent pipe

Connection diagram of ME-SFI evaporative emission control system model 140 (ss) with engine 120

75 Fuel tank

77 Activated charcoal filter

93 Fuel expansion tank

B4/3 Fuel pressure sensor

M16/3 Right electronic accelerator (EA)/cruise control (CC)/idle speed control (ISC) actuator, positioned on left of engine

M16/4 Left electronic accelerator
(EA)/cruise control (CC)/idle speed
control (ISC) actuator, positioned on
right of engine

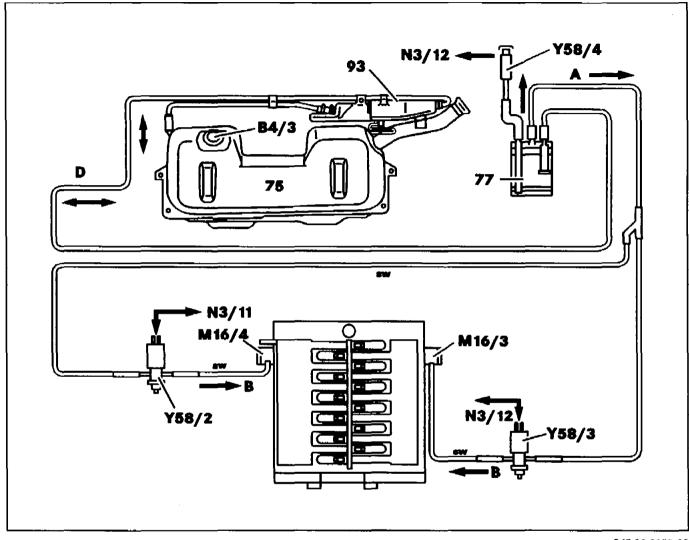
N3/11 Left ME-SFI control module

N3/12 Right ME-SFI control module

Y58/2 Left purge control valve, positioned in right of engine compartment

Y58/3 Right purge control valve, positioned in left of engine compartment

Y58/4 Activated charcoal filter shut-off valve

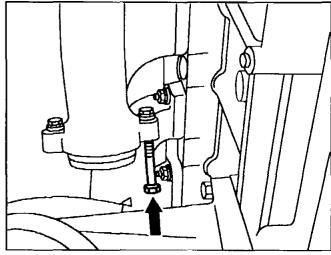


- A Activated charcoal filter purge control valve pipe
- B Purge control valve actuator (M16/3, M16/4) pipe
- D Fuel expansion tank activated charcoal filter pipe

Replacing rivet nuts in exhaust manifold

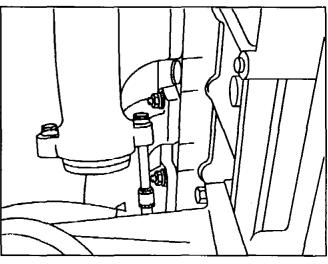
3 103 589 01 39 00 Caulking screw

- 1 Use a suitable bolt (arrow) to knock rivet nuts out of the holes in the exhaust manifold.
- i Screw in bolt by hand only.



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- 2 Insert new rivet nut into hole of the exhaust manifold.
- 3 Screw in caulking bolt and tighten to about 30 Nm.



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