

FENDT

Werkstatthandbuch

Workshopmanual

Manuel d'atelier

Manual de taller

Manuale per l'officina

Werkplaatshandboek

FENDT 900 Vario COM III

X 990.005.057.012

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FENDT

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2400

Engine/exhaust system

FENDT 900 Vario - COM III

Volume 1

0000	Overall system/tractor
1005	Overall system/transmission
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1015	Transmission/axle drive
1050	Transmission/housing
1070	Transmission / Brake system
1080	Transmission/drive train
1200	Transmission/front PTO
1220	Transmission / Live PTO
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2000	Overall system/engine
2010	Engine/cylinder head
2050	Engine/cooling
2060	Engine/fuel system
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Volume 2

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(ZSB)**
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program**

2400 Engine/exhaust system

A **General.5**

A General

1	Y094 actuator unit, AGR (exhaust gas recirculation)	7
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1 Y094 actuator unit, AGR (exhaust gas recirculation)

Diagram: exhaust gas recirculation (AGR)

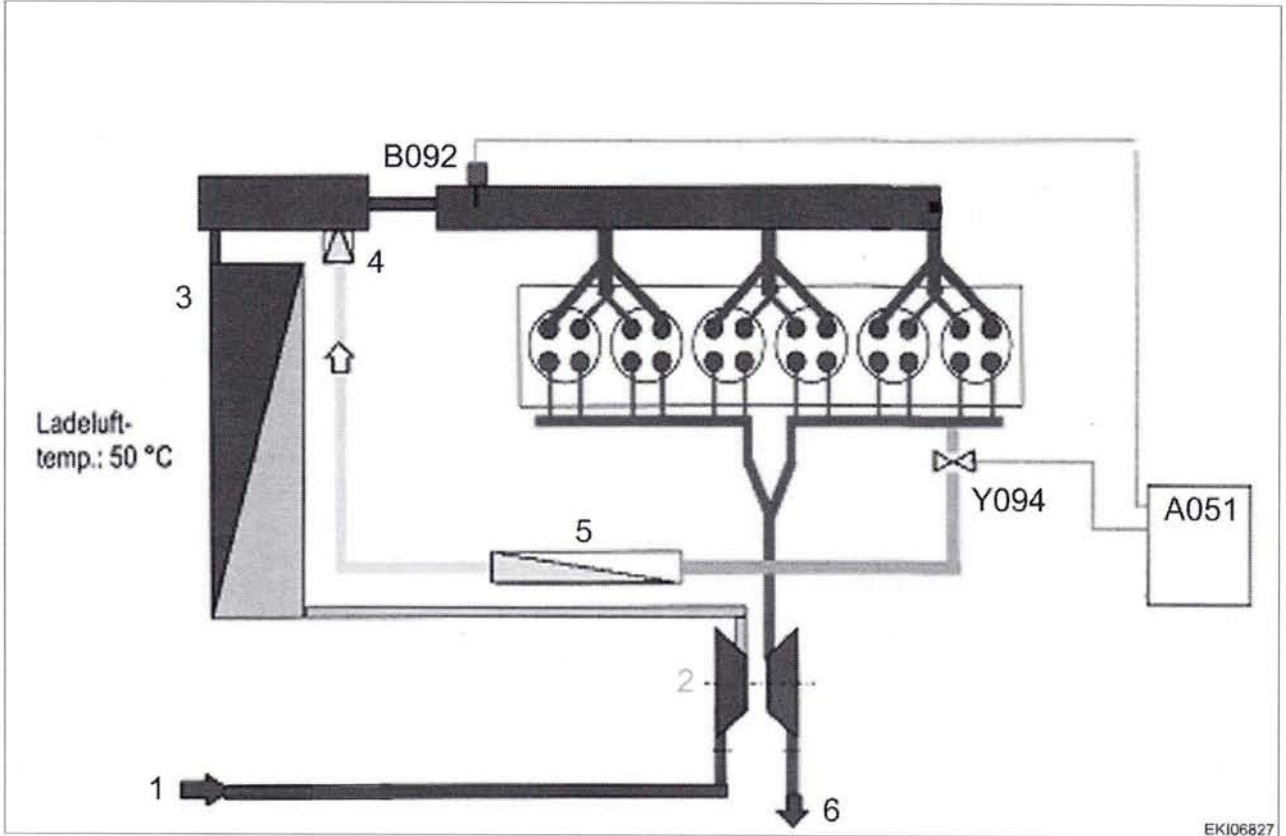
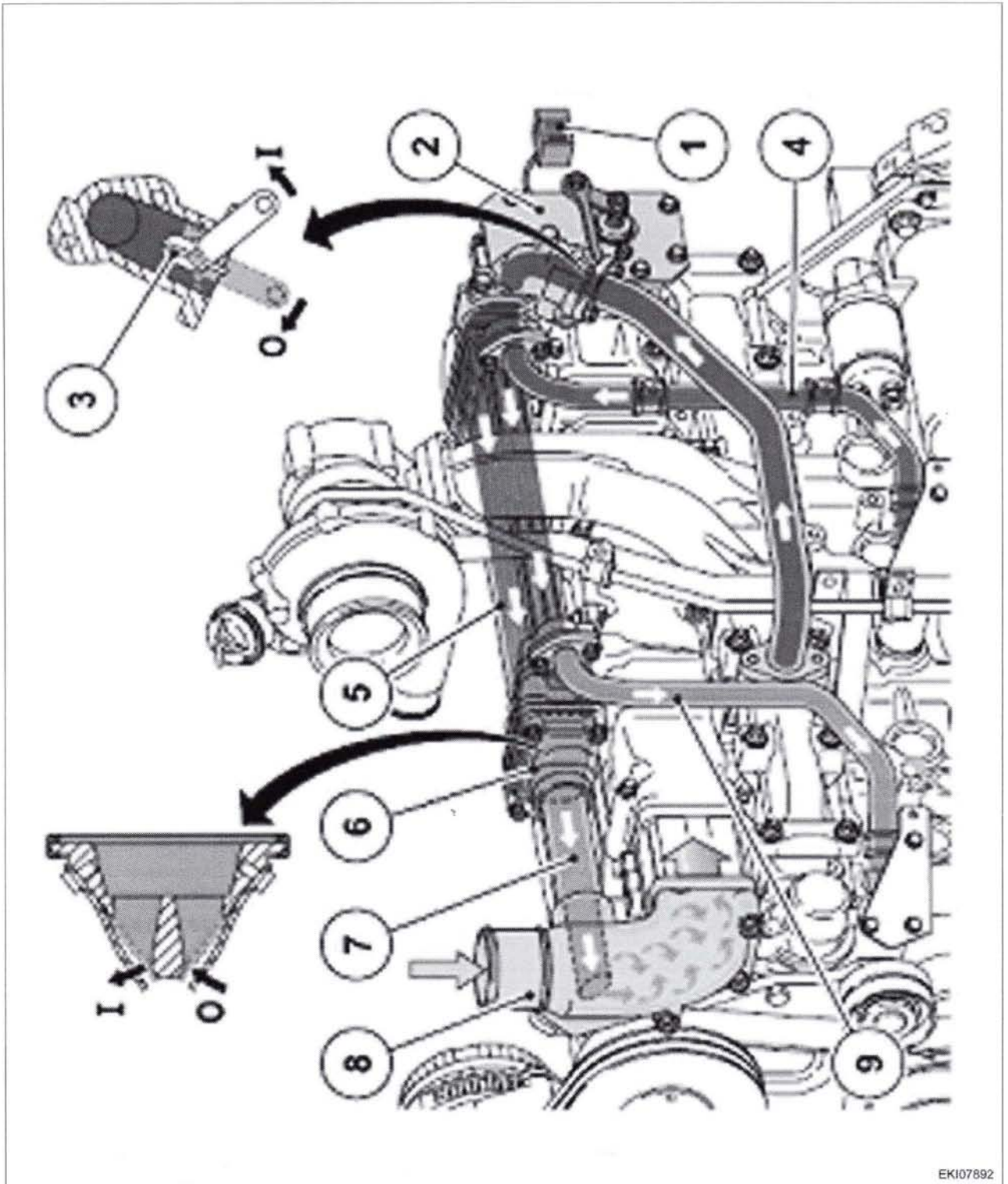


Fig. 1.

EKI06827
1006293

Item	Designation	Item	Designation
1	Inlet air	6	Exhaust gases
2	Exhaust turbocharger		
3	Intercooler	A051	- ECU, engine control unit (EDC 7).
4	Non-return valve (flutter valve)	B092	- Sensor, charge air pressure/temperature
5	Exhaust gas cooler	Y094	- Actuator unit, AGR (exhaust gas recirculation)



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Fig. 2.

Item	Designation	Item	Designation
1	X1674 separation point	5	Exhaust gas cooler
2	Y094 exhaust gas recirculation actuator motor	6	Non-return valve (flutter valve)
3	Exhaust-gas flap	7	Exhaust gas recirculation
4	Water cooler feed	8	Intake manifold

Reason for exhaust gas recirculation

Due to exhaust gas recirculation into the combustion chamber (cylinder), the burning speed of the diesel-air mixture decreases, thus lowering the maximum combustion temperature.

8	T002580 Version 2 05-10-2009	919 .. 0101-1000	925 .. 1001-	934 .. 0101-1000
		919 .. 1001-	928 .. 0101-1000	934 .. 1001-
		922 .. 0101-1000	928 .. 1001-	
		922 .. 1001-	931 .. 0101-1000	
		925 .. 0101-1000	931 .. 1001-	

Due to the drop in combustion temperature, the nitrogen oxide ratio in the exhaust decreases.

The **A051** - ECU, engine control unit (EDC 7). controls the exhaust gas recirculation into the combustion chamber depending on the engine load and speed.

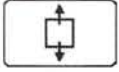
The maximum exhaust gas recirculation rate is approx. 10%.

Functional description: Y094 - Actuator unit, AGR (exhaust gas recirculation)

- A **Exhaust flap open**
- Z **Exhaust flap closed**



On left side of engine



Remove cover panel.

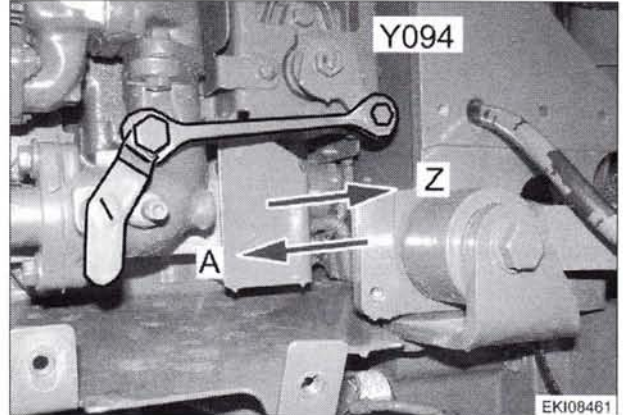


Fig. 3. **Y094** - Actuator unit, AGR (exhaust gas recirculation)

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After ignition ON, the **Y094** - Actuator unit, AGR (exhaust gas recirculation) moves to the exhaust flap stops, calibration. Within the stops, the **A051** - ECU, engine control unit (EDC 7). controls the position of the exhaust flap depending on the engine load.

NOTE: If a new Y094 actuator motor is installed:

Start by hooking in the mechanical linkage on the Y094 actuator motor,

then switch the ignition ON, so that the Y094 actuator motor calibrates the stops of the exhaust flap.

(If the ignition is turned on when the linkage is not attached, the calibration will be carried out incorrectly. The incorrect calibration can not be reset!)

NOTE: see §157

