Output Diagnostic Test Mode (DTM)

Note:

- All functions which could previously be performed with V.A.G 1551 can also be performed with the tester VAS 5051.
- ◆ The pump motor and the correct functioning of the hydraulic circuits (allocation of brake lines to wheel cylinders and function of valves) can be checked via the output DTM for interchange or leaks.
- The vehicle must be raised until all wheels are free to turn. (2nd mechanic required to rotate wheels)
- The -C- key can be used to exit the test sequence at any time.
- ◆ After depressing the brake pedal several times the vacuum in the brake booster will be exhausted. Therefore more pressure must be applied to the brake pedal in order to attain the same fluid pressure in brake system, as that attained with vacuum.
- When vacuum in brake booster is exhausted wheels may not lock; start engine and build-up vacuum in brake booster.

Example:

Indicated on V.A.G 1551 display during output Diagnostic Test Mode (DTM):

(e.g. front left wheel, FL)

Output Diagnostic Test Mode - →

IFL: VBAT OFL: 0V Wheel FL locked

IFL = Inlet valve Front Left

VBAT = Voltage Battery; Voltage at valve

OFL = Outlet valve Front Left

0V = 0 Volt; No voltage at valve

Locked/free = Wheel condition; must be checked by 2nd mechanic if required

Output Diagnostic Test Mode - →

EDL valves/Hyd-P: VBAT Wheel FL/FR locked

Hydr-P = Hydraulic pump

- Connect V.A.G 1551 Scan Tool.
- Switch ignition on.
- Press key -1- for "Rapid data transfer" operating mode.
- Select brake electronics (address word 03); ⇒ Page 01-23

Rapid data transfer

Indicated on display

- Confirm entry with key Q.

Note:

During the next work steps the ABS warning light -K47- flashes.

- Read off control module version in V.A.G 1551 display.
- Press → key.

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Rapid data transfer	HELP
Select function XX	

- Rapid data transfer Q
- 03 Output Diagnostic Test Mode
- Output Diagnostic Test Mode _ →

 ABS hydraulic pump V64
- Output Diagnostic Test Mode
 Operate brakes
- Output Diagnostic Test Mode -
- IFL: 0V OFL: 0V Wheel FL locked

- ◄ Indicated on display
 - Press keys 0 and 3
- ◄ Indicated on display
 - Confirm entry with key Q.
 - ABS hydraulic pump -V64- must run.
- ◄ Indicated on display
 - Press → key.
- ◄ Indicated on display
 - Operate brake pedal.
 - Press → key.
- ◄ Indicated on display
 - Indicate to 2nd mechanic which wheel requires turning by hand.

Note:

If the wheel does not lock, there is a possibility that there is a malfunction in the mechanical/hydraulic part of the brake system.

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- Press → key.
- ◄ Indicated on display
 - Press → key.
 - ABS hydraulic pump -V64- must run.
 - Brake pedal must not give.

If the brake pedal gives, there is a malfunction in the hydraulic unit. In this case the hydraulic unit must be replaced.

⇒ Repair Manual, Brake System,
Repair Group 45; Hydraulic unit,
brake booster/brake master cylinder
- Assembly overview; Removing and
installing control module and
hydraulic unit

◄ Indicated on display

 Indicate to 2nd mechanic which wheel requires turning by hand.

Note:

If the wheel locks there is a possibility that the brake lines to the wheel calipers/cylinders have been interchanged.

IFL: VBAT OFL: 0V Wheel FL locked

Output Diagnostic Test Mode

IFL: VBAT OFL: VBAT Wheel FL free

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