



Tire inflation systems

Error list

Digital

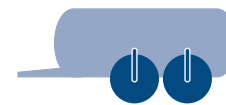


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No.	Display on control console	Description	Limit MIN	Limit MAX	Cause(s)	Remedy
-	F VA D-Ports ¹⁾	The module for switching the magnetic valves in the ECV VA does not report with the correct address	Address 066d	Address 066d	Module for switching the magnetic valves in the ECV VA is defective	Send in ECV VA for repair or replace
-	F VA AD-Ports ¹⁾	The module for reading out the pressure sensors in the ECV VA does not report with the correct address	Address 146d	Address 146d	Module for reading out the pressure sensors in the ECV VA is defective	Send in ECV VA for repair or replace
E24	F VA Istwert ¹⁾	Idle value of the tyre pressure sensor in the ECV VA is outside the permissible range	20 digits	32 digits	<p>➔ Call up diagnostic screen, check sensor values. Correct values are 26...28.</p> <p>Diagnostic screen does not show the correct value in line VA and column IW. Tyre pressure sensor in the ECV VA is defective</p>	Send in ECV VA for repair or replace
E24	F VA Sollwert ¹⁾	Idle value of the set point pressure sensor in the ECV VA is outside the permissible range	20 digits	32 digits	<p>➔ Call up diagnostic screen, check sensor values. Correct values are 26...28.</p> <p>Diagnostic screen does not show the correct value in line VA and column StGr. Set point pressure sensor in the ECV VA is defective</p>	Send in ECV VA for repair or replace
E24	F VA Sensoren ¹⁾	Idle values of the set point <u>and</u> tyre pressure sensor in the ECV VA are outside the permissible range	20 digits	32 digits	<p>➔ Call up diagnostic screen, check sensor values. Correct values are 26...28.</p> <p>(1) Set point <u>and</u> tyre pressure sensor in the ECV VA are defective, or signal connection damaged</p>	(1) Send in ECV VA for repair or replace
-	F HA D-Ports ¹⁾	The module for switching the magnetic valves in the ECV HA does not report with the correct address	Address 068d	Address 068d	Module for switching the magnetic valves in the ECV HA is defective	Send in ECV HA for repair or replace
-	F HA AD-Ports ¹⁾	The module for reading out the pressure	Address	Address	Module for reading out the pressure	Send in ECV HA for repair or replace

		sensors in the ECV HA does not report with the correct address	148d	148d	sensors in the ECV HA is defective	
E25	F HA Istwert ¹⁾	Idle value of the tyre pressure sensor in the ECV HA is outside the permissible range	20 digits	32 digits	<p>→ Call up diagnostic screen, check sensor values. Correct values are 26...28.</p> <p>Diagnostic screen does not show the correct value in line HA and column IW. Tyre pressure sensor in the ECV HA is defective</p>	Send in ECV HA for repair or replace
E25	F HA Sollwert ¹⁾	Idle value of the set point pressure sensor in the ECV HA is outside the permissible range	20 digits	32 digits	<p>→ Call up diagnostic screen, check sensor values. Correct values are 26...28.</p> <p>Diagnostic screen does not show the correct value in line HA and column StGr. Set point pressure sensor in the ECV HA is defective</p>	Send in ECV HA for repair or replace
E25	F HA Sensoren ¹⁾	Idle values of the set point and tyre pressure sensor in the ECV HA are outside the permissible range	20 digits	32 digits	<p>→ Call up diagnostic screen, check sensor values. Correct values are 26...28.</p> <p>(1) Set point and tyre pressure sensor in the ECV HA are defective, or signal connection damaged</p>	(1) Send in ECV HA for repair or replace
-	F GW D-Ports ¹⁾	The module for switching the magnetic valves in the ECV GW does not report with the correct address	Address 070d	Address 070d	Module for switching the magnetic valves in the ECV GW is defective	Send in ECV GW for repair or replace
-	F GW AD-Ports ¹⁾	The module for reading out the pressure sensors in the ECV GW does not report with the correct address	Address 150d	Address 150d	Module for reading out the pressure sensors in the ECV GW is defective	Send in ECV GW for repair or replace
E26	F GW Istwert ¹⁾	Idle value of the tyre pressure sensor in the ECV GW is outside the permissible range	20 digits	32 digits	<p>→ Call up diagnostic screen, check sensor values. Correct values are 26...28.</p> <p>Diagnostic screen does not show the</p>	Send in ECV GW for repair or replace

					correct value in line GW and column IW. Tyre pressure sensor in the ECV GW is defective	
E26	F GW Sollwert ¹⁾	Idle value of the set point pressure sensor in the ECV GW is outside the permissible range	20 digits	32 digits	→ Call up diagnostic screen, check sensor values. Correct values are 26...28. Diagnostic screen does not show the correct value in line GW and column StGr. Set point pressure sensor in the ECV GW is defective	Send in ECV GW for repair or replace
E26	F GW Sensoren ¹⁾	Idle values of the set point <u>and</u> tyre pressure sensor in the ECV GW are outside the permissible range	20 digits	32 digits	→ Call up diagnostic screen, check sensor values. Correct values are 26...28. (1) Set point <u>and</u> tyre pressure sensor in the ECV GW are defective, or signal connection damaged	(1) Send in ECV GW for repair or replace
E10 E11 E12	Maximale Regeldauer überschritten! ²⁾	Adjustment of the tyre pressure takes longer than the maximum permissible adjustment time (t_{max} : 20 min)	-	t_{max}	(1) Insufficient air supply of the RDRA, since delivery rate of the air brake system is too low or additional compressor is defective/switched off (2) Leak in rotary union/working line causes increased demand for air for adjustment	(1) Motor of tractor should run at min. half the rated rpm when inflating the tyres to achieve feasible inflation times. Switch on additional compressor. (2) Check rotary union/working line for leaks, use leak detector if necessary
-	FEHLER StGrmaxVA	Controlled variable (red connection) of the ECV VA is at least min. 0.2 bar above the maximum permissible tyre pressure (p_{max} : 2.5 bar)	-	$p_{max} + 0.2$ bar	(1) Vent for control air on the ECV VA is blocked, therefore unable to lower controlled variable (2) Magnetic valve 3 (StGrAb/SET-) does not switch correctly, therefore unable to lower controlled variable	(1) Check vent for control air of the ECV VA for blockages, remove if necessary (2) Set VA to road travel and reduce set point using Minus button, thereby looking out for intermittent deflation at the vent for the control air of the ECV VA. If no intermittent deflation, send in ECV VA for repair

						or replace
-	FEHLER StGrmaxHA	Controlled variable (red connection) of the ECV HA is at least min. 0.2 bar above the maximum permissible tyre pressure (p_{max} : 2.5 bar)	-	$p_{max} + 0.2$ bar	(1) Vent for control air on the ECV HA is blocked, therefore unable to lower controlled variable (2) Magnetic valve 3 (StGrAb/SET-) does not switch correctly, therefore unable to lower controlled variable	(1) Check vent for control air of the ECV HA for blockages, remove if necessary (2) Set HA to road travel and reduce set point using Minus button, thereby looking out for intermittent deflation at the vent for the control air of the ECV HA. If no intermittent deflation, send in ECV HA for repair or replace
-	FEHLER StGrmaxGW	Controlled variable (red connection) of the ECV GW is at least min. 0.2 bar above the maximum permissible tyre pressure (p_{max} : 4.2 bar)	-	$p_{max} + 0.2$ bar	(1) Vent for control air on the ECV GW is blocked, therefore unable to lower controlled variable (2) Magnetic valve 3 (StGrAb/SET-) does not switch correctly, therefore unable to lower controlled variable	(1) Check vent for control air of the ECV GW for blockages, remove if necessary (2) Set GW to road travel and reduce set point using Minus button, thereby looking out for intermittent deflation at the vent for the control air of the ECV GW. If no intermittent deflation, send in ECV GW for repair or replace
E5 E6 E8	HI ³⁾	Tyre pressure (yellow connection) of the ECV is min. 0.3 bar above the maximum permissible tyre pressure (p_{max} : 2.5/4.2 bar)	-	$p_{max} + 0.3$ bar	(1) Tyre pressure too high after the tyre, in spite of the high tyre pressure, heated up further due to too much flexing	(1) Reduce speed or wheel load – tyre may already be overloaded!
E5 E6 E8	LO ³⁾	Tyre pressure (yellow connection) of the ECV is min. 0.15 bar below the minimum permissible tyre pressure (p_{min} : 0.5/1.0 bar)	$p_{min} - 0.15$ bar	-	(1) Tyre pressure too low due to leak/damage to actual tyre (2) Tyre pressure too low after the tyre cooled down following intensive work at low tyre pressure → Inflate air brake up to shut down pressure, motor off, ignition on, set axle to inflation and listen for air	(1) Check tyre for leaks/damage (2) Following intensive work at low tyre pressure, increase it by 0.3 bar before switching off the machine




					<p><i>leaks</i></p> <p>(3) Leak/damage to working line between ECV and the wheels, therefore unable to measure pressure</p> <p>(4) Leak/damage to yellow measuring line between ECV and the measuring connection, therefore unable to measure pressure</p> <p>(5) Other axles affected: insufficient air supply of the RDRA, since reserve pressure of air brake system is below 6.5 bar</p>	<p>(3) Check working line for visual damage. Check that all push-in fittings are sealed, plug in again if necessary. Check rotary union for leaks, use leak detector if necessary</p> <p>(4) Check measuring line for visual damage. Check that all push-in fittings are sealed, plug in again if necessary.</p> <p>(5) Note shut down pressure of air brake system – it should be min. 6.8 bar</p>
	Dru ckaufbaubau StGr ³⁾	Controlled variable (red connection) of the ECV is min. 0.2 bar even though the tyre pressure is not being adjusted just now - it should only be 0.0 bar	0.2 bar	-	<p>(1) Vent for control air on the ECV is blocked, therefore unable to lower controlled variable at the end of the tyre pressure adjustment</p> <p>(2) Magnetic valve 3 (StGrAb/SET-) does not switch correctly, therefore unable to lower controlled variable at the end of the tyre pressure adjustment</p> <p>(3) Magnetic valve 2 (StGrAuf/SET+) does not seal correctly, therefore at the end of the tyre pressure adjustment, air continues to flow into the controlled variable range of the ECV</p>	<p>(1) Check vent for control air of the ECV for blockages, remove if necessary</p> <p>(2) Set axle to road travel and reduce set point using Minus button, thereby looking out for intermittent deflation at the vent for the control air of the ECV. If no intermittent deflation, send in ECV for repair or replace</p> <p>(3) Inflate air brake up to shut down pressure, motor off, switch RDRA off completely via main switch and listen for leaks at vent for control air of the ECV. If leak is audible, send in ECV for repair or replace</p>
E17 E18	Luft verlust ³⁾	Tyre pressure (yellow connection) of the ECV is min. 0.2 bar even though the tyre	0.2 bar	-	→ Repeat tyre pressure adjustment, as soon as the fault arises, pull a thin	




E19		pressure is not being adjusted just now - it should only be 0.0 bar			<p><i>blue control line directly off the tyre valve in the rim and monitor the response.</i></p> <p>(1) Tyre valves still do not close after the control line is pulled off: Tyre valve is defective or blocked by a foreign object, which is why there is still pressure on the working line/measuring line</p> <p>(2) Tyre valves close immediately after the control line is pulled off: tyre valve is OK. Blockage/damage/incorrect wiring of the control line prevents the tyre valves from closing in the tyres once the tyre pressure has been adjusted, which is why there is still pressure on the working line/measuring line</p>	<p>(1) Support tyre, remove tyre valve, clean tyre valve, replace if necessary</p> <p>(2) Check control line for kinks/damage/incorrect wiring, replace if necessary or connect correctly (see layout diagram) Check rotary union to check for correct seating/wear/leaks.</p>
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- 1) Error message is only displayed when control console system is started (after throwing the main switch or after switching on power supply/ignition).
If the message arises during operation, this is a clear indication of a brief power interruption immediately prior to the error message occurring – in this case, the stability of the power supply must be checked (good contact to 12 V and ground, other consumers on the same fuse, etc.)!
- 2) It does not show which axle has triggered the fault. Leaks on the individual axles, that are not audible/visible, must be located by means of regulated processes with the individual axles.
- 3) Error message is shown on the display line of the axle that has triggered the fault, i.e. faults on the front axle (VA) are shown in the front axle line. Several faults can be displayed at the same time.





AD-Port	Analog digital input (on the module for reading out the pressure sensors in the ECV)
BAR	Pressure unit bar, displays the converted raw value of the sensor on the diagnostic screen
CTIS	Central tyre inflation system
D-Port	Digital output (on the module for switching the magnetic valves in the ECV)
ECV	Electronic control valve
if nec.	if necessary
IW	Actual value of the tyre pressure (during the tyre pressure adjustment, yellow connection of the ECV)







GW	Slurry trailer (also trailer)
HA	Rear axle
RDRA	Tyre inflation system
StGr	Controlled variable (set point of the tyre pressure during the tyre pressure adjustment, red connection of the ECV)
VA	Front axle



Location	Nr.	Display content	Description	MIN limit	MAX limit	Cause(s)	Troubleshooting
	A01	Sensor SET ¹⁾	Idle value of the setpoint-pressure sensor in the front-axle ERV is outside the permissible range	15 counts	32 counts	<p>➔ Call up service menu and display raw values. Check the SET sensor value in the row for the front axle. The correct value is 26...28 counts.</p> <p>Setpoint-pressure sensor in the front-axle ERV defective</p>	Send the front-axle ERV to be checked or replace the front-axle ERV.
	A02	Sensor TIRE ¹⁾	Idle value of the tire-pressure sensor in the front-axle ERV is outside the permissible range	15 counts	32 counts	<p>➔ Call up service menu and display raw values. Check the TIRE sensor value in the row for the front axle. The correct value is 26...28 counts.</p> <p>a) System pressure supply (4 mm, black) for the front-axle ERV is connected to the measurement connection (yellow) of the front-axle ERV. b) Tire-pressure sensor in the front-axle ERV is defective.</p>	<p>a) Connect the system pressure supply for the front-axle ERV to the black connection of the front-axle ERV.</p> <p>b) Send the front-axle ERV to be checked or replace the front-axle ERV.</p>
	A03	Sensors/Pwr ¹⁾	Idle values of the setpoint-pressure <u>and</u> tire-pressure sensor in the front-axle ERV are outside the permissible range	15 counts	32 counts	<p>➔ Call up service menu and display raw values. Check the SET and TIRE sensor values in the row for the front axle. The correct values are 26...28 counts.</p> <p>Setpoint-pressure <u>and</u> tire-pressure sensor in the front-axle ERV defective, or signal connection damaged.</p>	Send the front-axle ERV to be checked or replace the front-axle ERV.



Location	Nr.	Display content	Description	MIN limit	MAX limit	Cause(s)	Troubleshooting
	A04	Chip ADC ¹⁾	The module for reading out the pressure sensors in the front-axle ERV is not registered to the correct address			Module for reading out the pressure sensors in the front-axle ERV defective	Send the front-axle ERV to be checked or replace the front-axle ERV.
	A05	Chip I/O ¹⁾	The module for switching the solenoid valves in the front-axle ERV is not registered to the correct address			Module for switching the solenoid valves in the front-axle ERV defective	Send the front-axle ERV to be checked or replace the front-axle ERV.
	A06	Sensor SET ¹⁾	Idle value of the setpoint-pressure sensor in the rear-axle ERV is outside the permissible range	15 counts	32 counts	<p>→ Call up service menu and display raw values. Check the SET sensor value in the row for the rear axle. The correct value is 26...28 counts.</p> <p>Setpoint-pressure sensor in the rear-axle ERV defective</p>	Send the rear-axle ERV to be checked or replace the rear-axle ERV.



Location	Nr.	Display content	Description	MIN limit	MAX limit	Cause(s)	Troubleshooting
	A07	Sensor TIRE ¹⁾	Idle value of the tire-pressure sensor in the rear-axle ERV is outside the permissible range	15 counts	32 counts	<p>➔ Call up service menu and display raw values. Check the TIRE sensor value in the row for the rear axle. The correct value is 26...28 counts.</p> <p>a) System pressure supply (4 mm, black) for the rear-axle ERV is connected to the measurement connection (yellow) of the rear-axle ERV. b) Tire-pressure sensor in the rear-axle ERV is defective.</p>	<p>a) Connect the system pressure supply for the rear-axle ERV to the black connection of the rear-axle ERV. b) Send the rear-axle ERV to be checked or replace the rear-axle ERV.</p>
	A08	Sensors/Pwr ¹⁾	Idle values of the setpoint-pressure <u>and</u> tire-pressure sensor in the rear-axle ERV are outside the permissible range	15 counts	32 counts	<p>➔ Call up service menu and display raw values. Check the SET and TIRE sensor values in the row for the rear axle. The correct values are 26...28 counts.</p> <p>Setpoint-pressure <u>and</u> tire-pressure sensor in the rear-axle ERV defective, or signal connection damaged.</p>	Send the rear-axle ERV to be checked or replace the rear-axle ERV.
	A09	Chip ADC ¹⁾	The module for reading out the pressure sensors in the rear-axle ERV is not registered to the correct address			Module for reading out the pressure sensors in the rear-axle ERV defective	Send the rear-axle ERV to be checked or replace the rear-axle ERV.
	A10	Chip I/O ¹⁾	The module for switching the solenoid valves in the rear-axle ERV is not registered to the correct address			Module for switching the solenoid valves in the rear-axle ERV defective	Send the rear-axle ERV to be checked or replace the rear-axle ERV.
	A11	Sensor SET ¹⁾	Idle value of the setpoint-pressure sensor in the trailer ERV is outside the permissible range	15 counts	32 counts	<p>➔ Call up service menu and display raw values. Check the SET sensor value in the row for the trailer. The correct value is 26...28 counts.</p> <p>Setpoint-pressure sensor in the trailer ERV defective</p>	Send the trailer ERV to be checked or replace the trailer ERV.


Location	Nr.	Display content	Description	MIN limit	MAX limit	Cause(s)	Troubleshooting
	A12	Sensor TIRE ¹⁾	Idle value of the tire-pressure sensor in the trailer ERV is outside the permissible range	15 counts	32 counts	<p>→ Call up service menu and display raw values. Check the TIRE sensor value in the row for the trailer. The correct value is 26...28 counts.</p> <p>a) Connect the system pressure supply (4 mm, black) for the trailer ERV is connected to the measurement connection (yellow) of the trailer ERV.</p> <p>b) Tire-pressure sensor in the trailer ERV is defective.</p>	<p>a) Connect the system pressure supply for the trailer ERV to the black connection of the trailer ERV.</p> <p>b) Send the trailer ERV to be checked or replace the trailer ERV.</p>
	A13	Sensors/Pwr ¹⁾	Idle values of the setpoint-pressure and tire-pressure sensor in the trailer ERV are outside the permissible range	15 counts	32 counts	<p>→ Call up service menu and display raw values. Check the SET and TIRE sensor values in the row for the trailer. The correct values are 26...28 counts.</p> <p>Setpoint-pressure and tire-pressure sensor in the trailer ERV defective, or signal connection damaged.</p>	Send the trailer ERV to be checked or replace the trailer ERV.
	A14	Chip ADC ¹⁾	The module for reading out the pressure sensors in the trailer ERV is not registered to the correct address			Module for reading out the pressure sensors in the trailer ERV defective	Send the trailer ERV to be checked or replace the trailer ERV.
	A15	Chip I/O ¹⁾	The module for switching the solenoid valves in the trailer ERV is not registered to the correct address			Module for switching the solenoid valves in the trailer ERV defective	Send the trailer ERV to be checked or replace the trailer ERV.
-	A16	Adj.Time >30 min ²⁾	Adjustment of the tire pressure is taking longer than the maximum permissible adjustment duration (t _{max} : 30 min)	-	30 min	<p>[1] No air supplied to the CTIS because the flow rate of the compressed-air-brake system is too low or the additional compressor is defective/switched off.</p> <p>[2] A leak in the rotary union/work line is causing increased air pressure for adjustment.</p>	<p>[1] When filling the tires, the tractor engine should reach at least ¾ nominal speed to achieve viable filling times. Switch on the additional compressor.</p> <p>[2] Check the rotary union/work line (14 mm, blue) for leaks, using a leak detector if necessary</p>


Location	Nr.	Display content	Description	MIN limit	MAX limit	Cause(s)	Troubleshooting
	A17	SET >2,7 bar 39 psi ³⁾	Manipulated variable (red connection) of the front-axle ERV is at least 0.2 bar 3 psi above the maximum permissible tire pressure (p _{max} : 2.5 bar 36 psi)	-	2.5 + 0.2 bar 36 + 3 psi	[1] Ventilation of the front-axle ERV blocked in the system pressure circuit [2] Defective solenoid valve in the front-axle ERV	[1] Check the ventilation hose (6 mm, black) of the front-axle ERV for blockages. [2] Send the front-axle ERV to be checked or replace the front-axle ERV.
	A18	SET >2,7 bar 39 psi ³⁾	Manipulated variable (red connection) of the rear-axle ERV is at least 0.2 bar 3 psi above the maximum permissible tire pressure (p _{max} : 2.5 bar 36 psi)	-	2.5 + 0.2 bar 36 + 3 psi	[1] Ventilation of the rear-axle ERV blocked in the system pressure circuit [2] Defective solenoid valve in the rear-axle ERV	[1] Check the ventilation hose (6 mm, black) of the rear-axle ERV for blockages. [2] Send the rear-axle ERV to be checked or replace the rear-axle ERV.
	A19	SET >4,5 bar 65 psi ³⁾	Manipulated variable (red connection) of the trailer ERV is at least 0.3 bar 4 psi above the maximum permissible tire pressure (p _{max} : 4.2 bar 61 psi)	-	4.2 + 0.3 bar 61 + 4 psi	[1] Ventilation of the trailer ERV blocked in the system pressure circuit [2] Defective solenoid valve in the trailer ERV	[1] Check the ventilation hose (6 mm, black) of the trailer ERV for blockages. [2] Send the trailer ERV to be checked or replace the trailer ERV.
	A20	SET >0 bar 0 psi ³⁾	Manipulated variable (red connection) of the front-axle ERV is at least 0.2 bar 3 psi even though the tire pressure is not currently being adjusted – the tire pressure should only read 0.0 bar 0 psi	0.2 bar 3 psi	-	[1] Ventilation of the front-axle ERV blocked in the system pressure circuit [2] Defective solenoid valve in the front-axle ERV	[1] Check the ventilation hose (6 mm, black) of the front-axle ERV for blockages. [2] Send the front-axle ERV to be checked or replace the front-axle ERV.
	A21	SET >0 bar 0 psi ³⁾	Manipulated variable (red connection) of the rear-axle ERV is at least 0.2 bar 3 psi even though the tire pressure is not currently being adjusted – the tire pressure should only read 0.0 bar 0 psi	0.2 bar 3 psi	-	[1] Ventilation of the rear-axle ERV blocked in the system pressure circuit [2] Defective solenoid valve in the rear-axle ERV	[1] Check the ventilation hose (6 mm, black) of the rear-axle ERV for blockages. [2] Send the rear-axle ERV to be checked or replace the rear-axle ERV.
	A22	SET >0 bar 0 psi ³⁾	Manipulated variable (red connection) of the trailer ERV is at least 0.2 bar 3 psi even though the tire pressure is not currently being adjusted – the tire pressure should only read 0.0 bar 0 psi	0.2 bar 3 psi	-	[1] Ventilation of the trailer ERV blocked in the system pressure circuit [2] Defective solenoid valve in the trailer ERV	[1] Check the ventilation hose (6 mm, black) of the trailer ERV for blockages. [2] Send the trailer ERV to be checked or replace the trailer ERV.


Location	Nr.	Display content	Description	MIN limit	MAX limit	Cause(s)	Troubleshooting
	A23	TIRE >0 bar 0 psi ³⁾	Tire pressure (yellow connection) of the front-axle ERV is at least 0.2 bar 3 psi even though the tire pressure on the front axle is not currently being adjusted – the tire pressure should only read 0.0 bar 0 psi	0.2 bar 3 psi	-	<p>➔ Repeat the tire pressure adjustment on the front axle; as soon as the error occurs, disconnect the control line (4 mm, blue) directly at the wheel valve in the rim and observe the behavior.</p> <p>[1] Front-axle wheel valves <u>close immediately</u> after disconnecting the control line: The wheel valve is OK. A blockage/damage or incorrect connection of the control line is preventing the wheel valves in the rims from closing once front-axle tire pressure adjustment has finished.</p> <p>[2] One or more front-axle wheel valves <u>do not close</u> after disconnecting the control line: Wheel valve is defective or blocked by foreign material.</p>	<p>[1] Check control line to the front-axle wheel valves for kinks/damage or incorrect connection; replace or correctly connect the control line if necessary. ➔ See layout drawing Check ventilation hose (6 mm, black) of the front-axle distributor for blockages. Check ventilation hose (6 mm, black) of the front-axle ERV for blockages.</p> <p>[2] Replace the front-axle wheel valve(s).</p>
	A24	TIRE >0 bar 0 psi ³⁾	Tire pressure (yellow connection) of the rear-axle ERV is at least 0.2 bar 3 psi even though the tire pressure on the rear axle is not currently being adjusted – the tire pressure should only read 0.0 bar 0 psi	0.2 bar 3 psi	-	<p>➔ Repeat the tire pressure adjustment on the rear axle; as soon as the error occurs, disconnect the control line (4 mm, blue) directly at the wheel valve in the rim and observe the behavior.</p> <p>[1] Rear axle wheel valves <u>close immediately</u> after disconnecting the control line: The wheel valve is OK. A blockage/damage or incorrect connection of the control line is preventing the wheel valves in the rims from closing once rear-axle tire pressure adjustment has finished.</p> <p>[2] One or more rear-axle wheel valves <u>do not close</u> after disconnecting the control line: Wheel valve is defective or blocked by foreign material.</p>	<p>[1] Check control line to the rear-axle wheel valves for kinks/damage or incorrect connection; replace or correctly connect the control line if necessary. ➔ See layout drawing Check ventilation hose (6 mm, black) of the rear-axle ERV for blockages.</p> <p>[2] Replace the rear-axle wheel valve(s).</p>

Location	Nr.	Display content	Description	MIN limit	MAX limit	Cause(s)	Troubleshooting
	A25	TIRE >0 bar 0 psi ³⁾	Tire pressure (yellow connection) of the trailer ERV is at least 0.2 bar 3 psi even though the tire pressure on the trailer is not currently being adjusted – the tire pressure should only read 0.0 bar 0 psi	0.2 bar 3 psi	-	<p>→ Repeat the tire pressure adjustment on the trailer; as soon as the error occurs, disconnect the control line (4 mm, blue) directly at the wheel valve in the rim and observe the behavior.</p> <p>[1] Trailer wheel valves <u>close immediately</u> after disconnecting the control line: The wheel valve is OK. A blockage/damage or incorrect connection of the control line is preventing the wheel valves in the rims from closing once trailer tire pressure adjustment has finished.</p> <p>[2] One or more trailer wheel valves <u>do not close</u> after disconnecting the control line: Wheel valve is defective or blocked by foreign material.</p>	<p>[1] Check control line to the trailer wheel valves for kinks/damage or incorrect connection; replace or correctly connect the control line if necessary. → See layout drawing Check ventilation hose (6 mm, black) of the trailer ERV for blockages.</p> <p>[2] Replace the trailer wheel valve(s).</p>
	-	HI ³⁾	Tire pressure (yellow connection) of the front-axle ERV is at least 0.3 bar 4 psi above the maximum permissible tire pressure for the front axle (p _{max} : 2.5 bar 36 psi)	-	2.5 + 0.3 bar 36 + 4 psi	<p>→ Check the front-axle tire pressure manually (tire pressure gauge)</p> <p>[1] Tire pressure ≤2.5 bar ≤36 psi: Front-axle wheel valves do not open while the tire pressure should measure roughly 2.5 bar 36 psi.</p> <p>[2] Tire pressure >2.5 bar >36 psi: Tire pressure too high because the tire has heated up more due to intensive flexing.</p>	<p>[1] Check the pressure of the control line (4 mm, blue) at the control connection of the front-axle wheel valves (min. 1.5 bar 22 psi). If the control pressure <1.5 bar <22 psi at the front-axle wheel valve, trace back the control line to the front-axle ERV and check for leaks. Check the front-axle rotary unions for leaks.</p> <p>[2] Reduce the speed or wheel load – the tires could already be overloaded!</p>

Location	Nr.	Display content	Description	MIN limit	MAX limit	Cause(s)	Troubleshooting
	-	H ³	Tire pressure (yellow connection) of the rear-axle ERV is at least 0.3 bar 4 psi above the maximum permissible tire pressure for the rear axle (p _{max} : 2.5 bar 36 psi)	-	2.5 + 0.3 bar 36 + 4 psi	<p>→ <i>Check the rear-axle tire pressure manually (tire pressure gauge)</i></p> <p>[1] Tire pressure ≤2.5 bar ≤36 psi: Rear-axle wheel valves do not open while the tire pressure should measure roughly 2.5 bar 36 psi.</p> <p>[2] Tire pressure >2.5 bar >36 psi: Tire pressure too high because the tire has heated up more due to intensive flexing.</p>	<p>[1] Check the pressure of the control line (4 mm, blue) at the control connection of the rear-axle wheel valves (min. 1.5 bar 22 psi). If the control pressure <1.5 bar <22 psi at the rear-axle wheel valve, trace back the control line to the rear-axle ERV and check for leaks. Check the rear-axle rotary unions for leaks.</p> <p>[2] Reduce the speed or wheel load – the tires could already be overloaded!</p>
	-	H ³	Tire pressure (yellow connection) of the trailer ERV is at least 0.3 bar 4 psi above the maximum permissible tire pressure for the trailer (p _{max} : 4.2 bar 61 psi)	-	4.2 + 0.3 bar 61 + 4 psi	<p>→ <i>Check the trailer tire pressure manually (tire pressure gauge)</i></p> <p>[1] Tire pressure ≤4.2 bar ≤61 psi: Trailer wheel valves do not open while the tire pressure should measure roughly 4.2 bar 61 psi.</p> <p>[2] Tire pressure >4.2 bar >61 psi: Tire pressure too high because the tire has heated up more due to intensive flexing.</p>	<p>[1] Check the pressure of the control line (4 mm, blue) at the control connection of the trailer wheel valves (min. 1.5 bar 22 psi). If the control pressure <1.5 bar <22 psi at the trailer wheel valve, trace back the control line to the trailer ERV and check for leaks. Check the trailer rotary unions for leaks.</p> <p>[2] Reduce the speed or wheel load – the tires could already be overloaded!</p>

Location	Nr.	Display content	Description	MIN limit	MAX limit	Cause(s)	Troubleshooting
	-	LO ³	Tire pressure (yellow connection) of the front-axle ERV is at least 0.15 bar 2 psi below the minimum permissible tire pressure for the front axle (p _{min} : 0.5 bar 7 psi)	0.5 - 0.15 bar 7 - 2 psi	-	<p>[1] Rear axle also shows „LO“: No air supplied to the CTIS, or to the front-axle ERV.</p> <p>→ <i>Fill the air-brake system to the cut-out pressure, engine off, ignition on, set the front axle to inflate and listen for air leaks.</i></p> <p>[2] Work line (14 mm, blue) leaking/damaged between the front-axle ERV and the wheels, thus impossible to measure tire pressure.</p> <p>[3] Measurement line (4 mm, yellow) leaking/damaged between the front-axle ERV and the front axle distributor block, thus impossible to measure tire pressure.</p> <p>[4] Tire pressure too low because the tire has cooled down following the machine being switched off after intensive work with low tire pressure.</p> <p>[5] Tire pressure too low due to leaking of the front-axle wheel valves.</p> <p>[6] Tire pressure too low due to the tire itself leaking/being damaged.</p>	<p>[1] Observe the cut-out pressure of the air-brake system – should be at least 6.8 bar 99 psi. Check the additional compressor and switch it on if necessary. Check the system pressure supply of the front-axle ERV (4 mm, black) for leaks and installation errors. System pressure should be 2.5 + 0.2 bar 36 + 3 psi.</p> <p>[2] Check the work line for visible damage. Check that all plug-in connections are secure and plug them in again if necessary. Check the rotary union for leaks, using a leak detector if necessary.</p> <p>[3] Check the measurement line for visible damage. Check that all plug-in connections are secure and plug them in again if necessary.</p> <p>[4] After intensive work with low tire pressure, increase the tire pressure by 0.3 bar before switching off the machine.</p> <p>[5] Use a leak detector to check the front-axle wheel valves for leaks at the rim hole. Unplug the work line (14 mm, blue) and check whether the wheel valve is completely closed.</p> <p>[6] Check the front-axle tires for leaks/damage.</p>

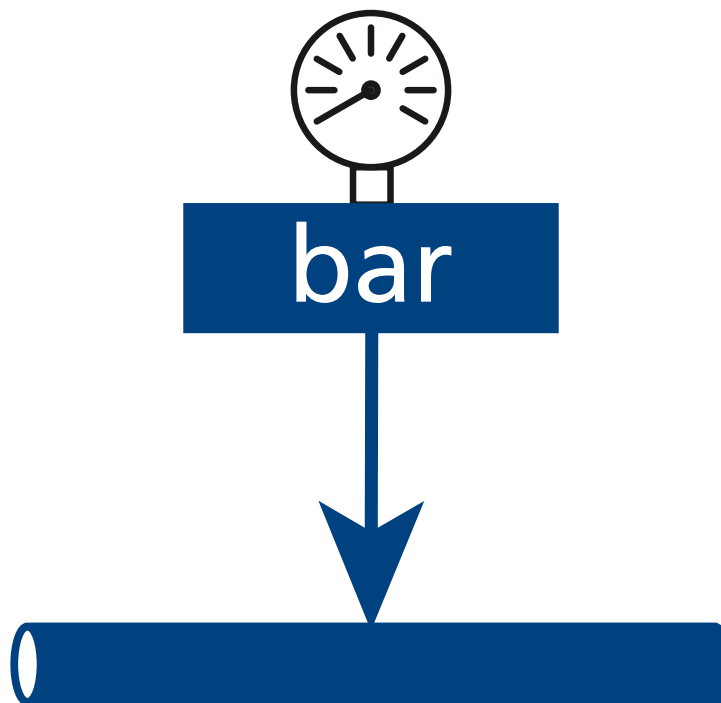
Location	Nr.	Display content	Description	MIN limit	MAX limit	Cause(s)	Troubleshooting
	-	LO ³⁾	Tire pressure (yellow connection) of the rear-axle ERV is at least 0.15 bar 2 psi below the minimum permissible tire pressure for the rear axle (p _{min} : 0.5 bar 7 psi)	0.5 - 0.15 bar 7 - 2 psi	-	<p>[1] Front axle also shows „LO“: No air supplied to the CTIS, or to the rear-axle ERV.</p> <p>→ Fill the air-brake system to the cut-out pressure, engine off, ignition on, set the rear axle to inflate and listen for air leaks.</p> <p>[2] Work line (14 mm, blue) leaking/damaged between the rear-axle ERV and the wheels, thus impossible to measure tire pressure.</p> <p>[3] Measurement line (4 mm, yellow) leaking/damaged between the rear-axle ERV and the rear-axle measurement connection, thus impossible to measure tire pressure.</p> <p>[4] Tire pressure too low because the tire has cooled down following the machine being switched off after intensive work with low tire pressure.</p> <p>[5] Tire pressure too low due to leaking of the rear-axle wheel valves.</p> <p>[6] Tire pressure too low due to the tire itself leaking/being damaged.</p>	<p>[1] Observe the cut-out pressure of the air-brake system – should be at least 6.8 bar 99 psi. Check the additional compressor and switch it on if necessary. Check the system pressure supply of the rear-axle ERV (4 mm, black) for leaks and installation errors. System pressure should be 2.5 + 0.2 bar 36 + 3 psi.</p> <p>[2] Check the work line for visible damage. Check that all plug-in connections are secure and plug them in again if necessary. Check the rotary union for leaks, using a leak detector if necessary.</p> <p>[3] Check the measurement line for visible damage. Check that all plug-in connections are secure and plug them in again if necessary.</p> <p>[4] After intensive work with low tire pressure, increase the tire pressure by 0.3 bar before switching off the machine.</p> <p>[5] Use a leak detector to check the rear-axle wheel valves for leaks at the rim hole. Unplug the work line (14 mm, blue) and check whether the wheel valve is completely closed.</p> <p>[6] Check the rear-axle tires for leaks/damage.</p>

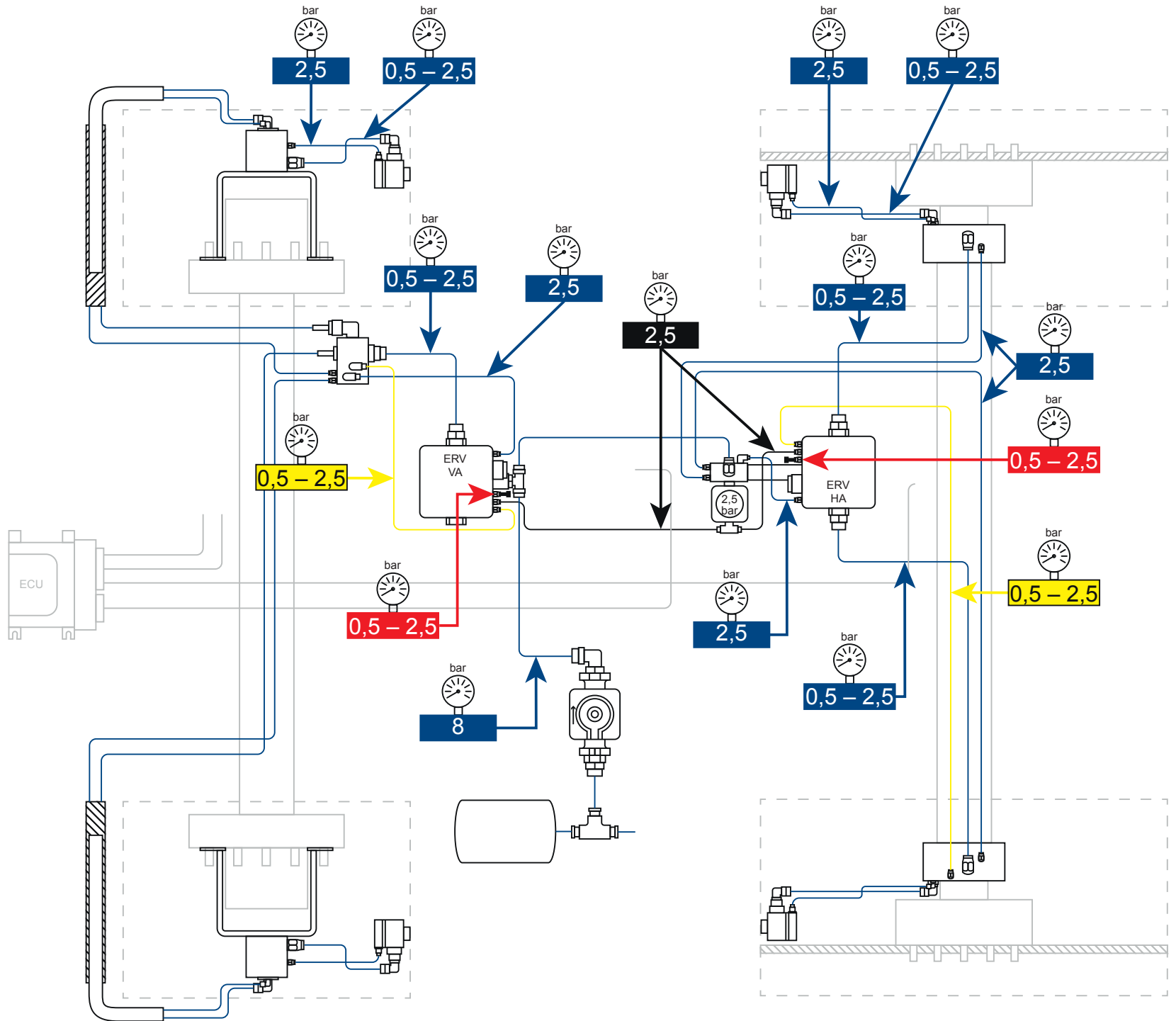
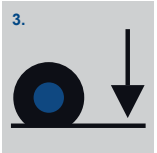
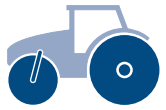
Location	Nr.	Display content	Description	MIN limit	MAX limit	Cause(s)	Troubleshooting
	-	LO ³	Tire pressure (yellow connection) of the trailer ERV is at least 0.15 bar 2 psi below the minimum permissible tire pressure for the trailer (p _{min} : 1.0 bar 15 psi)	1.0 - 0.15 bar 15 - 2 psi	-	<p>[1] No air supplied to the CTIS, or to the trailer ERV.</p> <p>→ <i>Fill the air-brake system to the cut-out pressure, engine off, ignition on, set the trailer to inflate and listen for air leaks</i></p> <p>[2] Work line (14 mm, blue) leaking/damaged between the trailer ERV and the wheels, thus impossible to measure tire pressure.</p> <p>[3] Measurement line (4 mm, yellow) leaking/damaged between the trailer ERV and the trailer measurement connection, thus impossible to measure tire pressure.</p> <p>[4] Tire pressure too low because the tire has cooled down following the machine being switched off after intensive work with low tire pressure.</p> <p>[5] Tire pressure too low due to leaking of the trailer wheel valves.</p> <p>[6] Tire pressure too low due to the tire itself leaking/being damaged.</p>	<p>[1] Observe the cut-out pressure of the air-brake system – should be at least 6.8 bar 99 psi. Check the additional compressor and switch it on if necessary. Check the system pressure supply of the trailer ERV (4 mm, black) for leaks and installation errors. System pressure should be 4.2 + 0.3 bar 61 + 4 psi.</p> <p>[2] Check the work line for visible damage. Check that all plug-in connections are secure and plug them in again if necessary. Check the rotary union for leaks, using a leak detector if necessary.</p> <p>[3] Check the measurement line for visible damage. Check that all plug-in connections are secure and plug them in again if necessary.</p> <p>[4] After intensive work with low tire pressure, increase the tire pressure by 0.3 bar before switching off the machine.</p> <p>[5] Use a leak detector to check the trailer wheel valves for leaks at the rim hole. Unplug the work line (14 mm, blue) and check whether the wheel valve is completely closed.</p> <p>[6] Check the trailer tires for leaks/damage.</p>

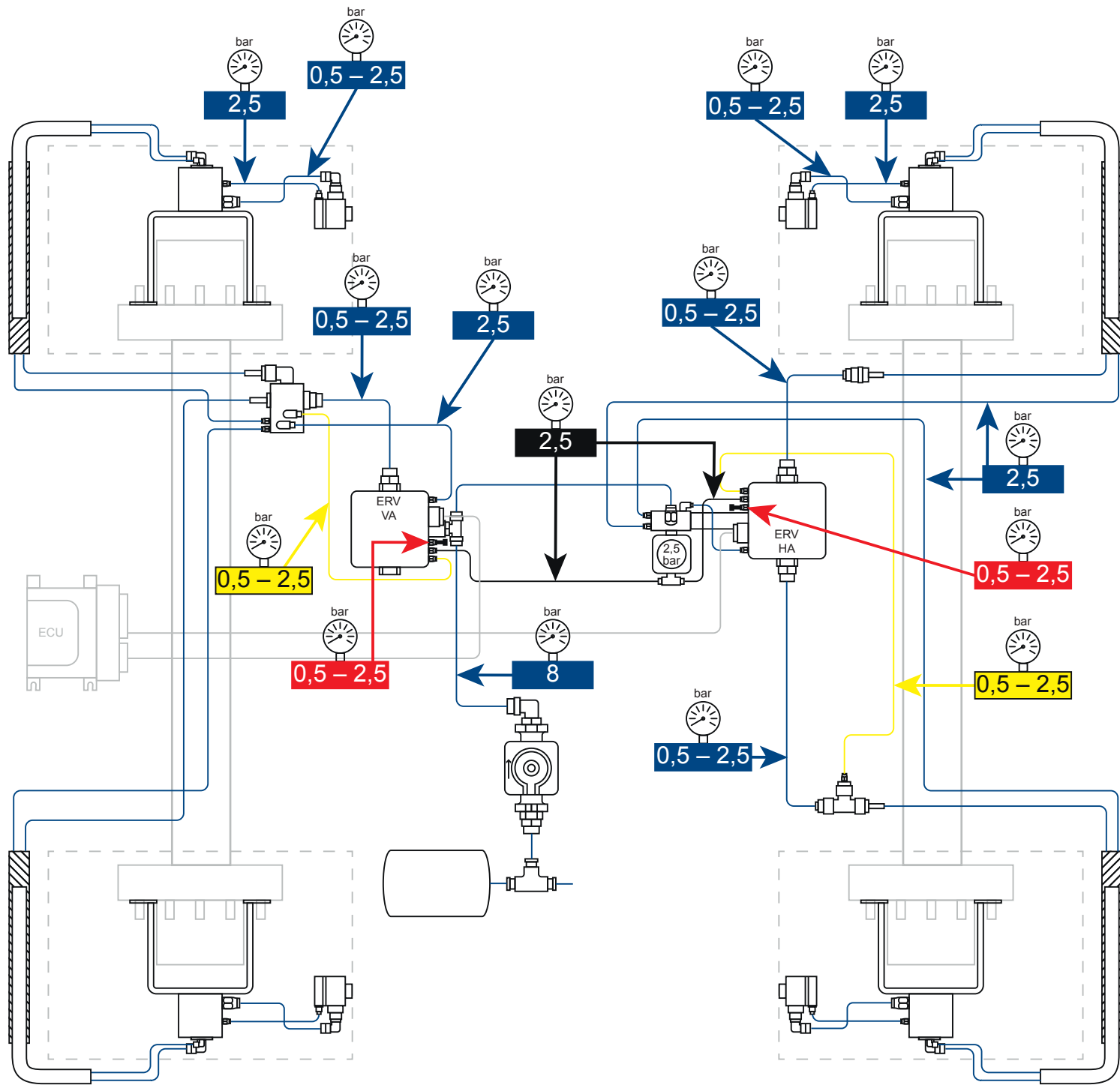
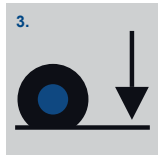
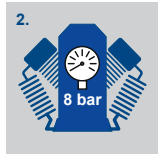
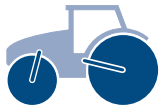
- 1) The error message is only displayed at the system start of the operating console (after flipping the main switch or after switching on the power supply/ignition). If the message appears during operation, this is a clear indication of a brief voltage interruption directly prior to the appearance of the error message – in such cases, it is imperative that the voltage supply is checked (good contact to 12 V and ground, other consumers on the same fuse, etc.)!
- 2) Which axle triggered the error is not displayed. If neither audible nor visible, leaks on individual axles must be located by carrying out adjustment processes on the individual axles.
- 3) The error message is displayed in the display row for the axle that triggered the error, i.e. errors on the front axle are displayed in the row for the front axle [●○]. Multiple errors can be displayed simultaneously.

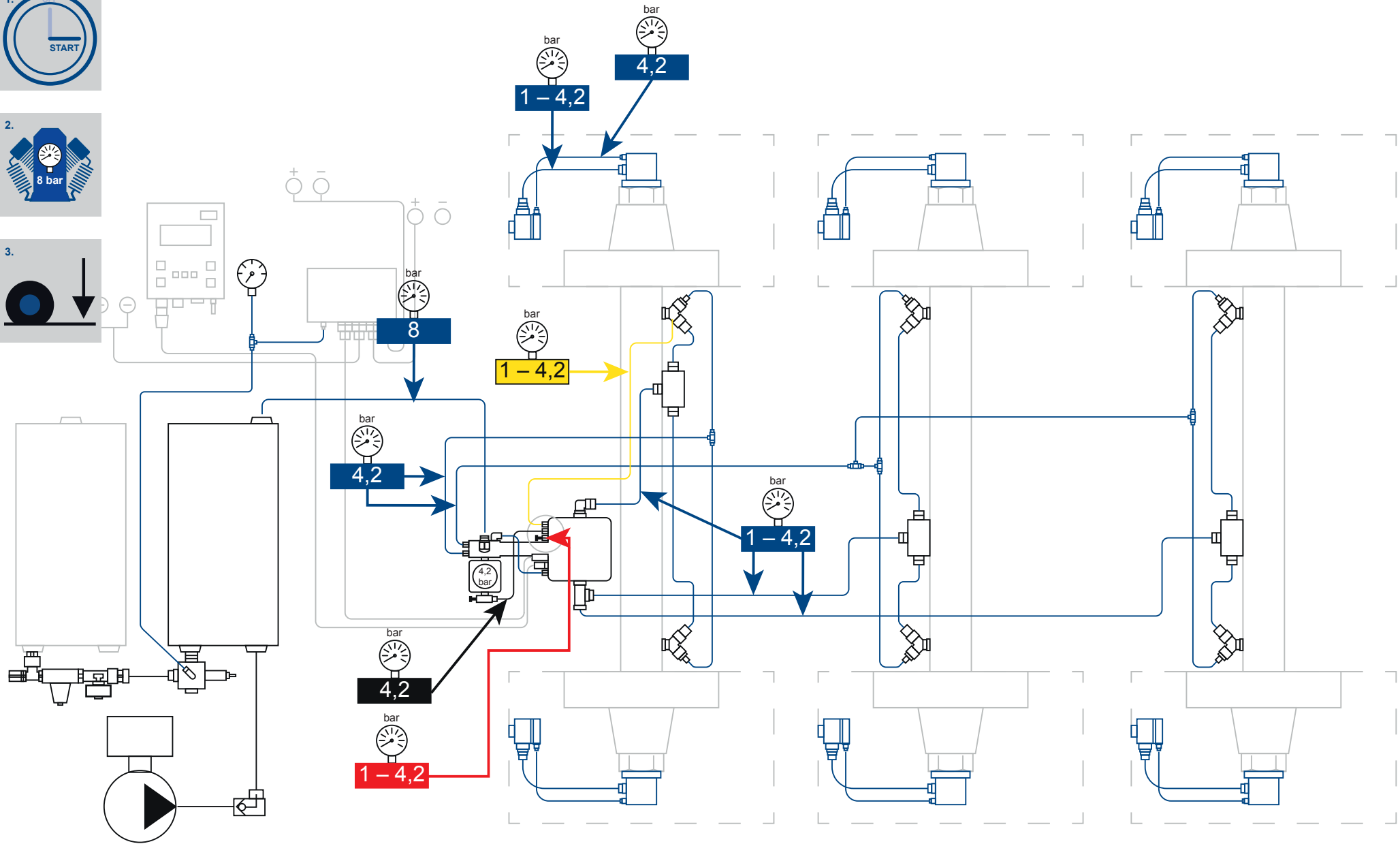
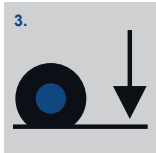
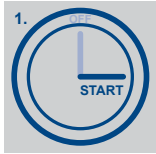
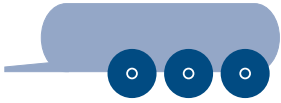
ADC	Analog/digital input (on the module for reading out the pressure sensors in the ERV)
bar	The pressure unit "bar," display of the converted sensor raw value on the diagnostic screen
CTIS	Central Tire Inflation System
ERV	Electronic Regulator Valve
I/O	Digital output (on the module for switching the solenoid valves in the ERV)
psi	The pressure unit "psi," display of the converted sensor raw value on the diagnostic screen
SET	Manipulated variable (setpoint of the tire pressure during tire pressure adjustment, red connection of the ERV)
TIRE	Actual tire pressure value (during tire pressure adjustment, yellow connection of the ERV)

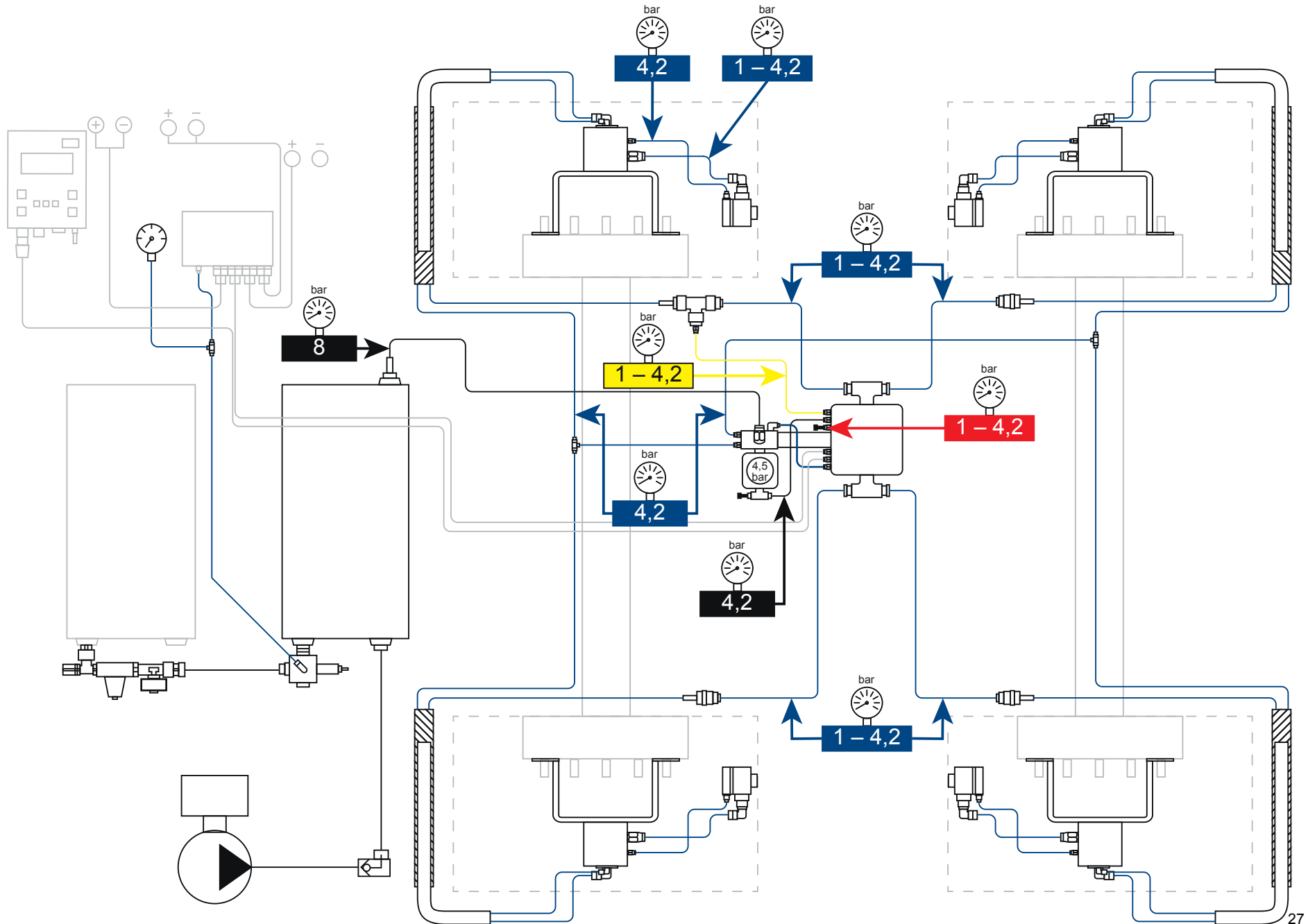
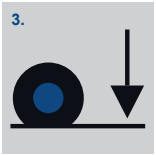
Test Instructions













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