BMW TIS Troubleshooting on level control system

Faults marked with * can be limited with BMW Diagnosis System.

- 1. Height setting not O.K.
- 2. Control times not O.K.
- 3. Drive characteristics not O.K.
- 4. Compressor

Fault	Cause	Remedy
Vehicle too low when stationary	a) Stationary for too long	a) No fault (system-related)
but rises to correct height when	b) Large temperature drop while	b) No fault (system-related)
vehicle is started.	vehicle stationary	c) Check lines (in visible area), air tank and screw connections (first
	c) Line/air tank defective	on distributor block and air tank, then on pneumatic spring) with leak
	d) Air supply unit defective	tester spray (BMW Parts Service) and replace if necessary.
	e) Both air springs defective	d) Replacing air supply unit
	f) One of lines (to air springs/air	e) Replace air springs
	reservoirs) on both sides	f) Replace lines
	defective	
One side of vehicle too low when	a) Line/air tank defective	a) Check lines (in visible area), air tank and screw connections (first
stationary, but rises again after	b) Air supply unit defective	on distributor block and air tank, then on pneumatic spring) with leak
vehicle starts.	c) Air spring defective	tester spray (BMW Parts Service) and replace if necessary.
	d) Line (to air spring/air	b) Replacing air supply unit
	reservoir) defective	c) Replace air spring
		d) Replace line
* One side of vehicle too high	 a) Height setting sensor 	a) If necessary, replace height setting sensor, bracket and control rod
(does not lower in response to	mechanically defective (bracket,	b) Connect lines of same color
control unit).	control rod bent)	c) Unfasten line on distributor block, check for escaping air and
	b) Lines interchanged	replace if necessary
	c) A line is blocked	d) Replacing air supply unit
	d) Air supply unit defective	

* Both sides of vehicle always too low. If the vehicle was driven in this condition, refer to 37 00 Information on air spring strut.	e) Line/air tank defective f) Both height setting sensors mechanically defective (bracket, control rod bent) g) Both air springs defective h) One of lines (to air springs/air reservoirs) on both sides defective	a) Partially unload vehicle b) Replace failsafe c) Replace relay d) Replacing air supply unit e) Check lines (in visible area), air tank and screw connections (first on distributor block and air tank, then on pneumatic spring) with leak tester spray (BMW Parts Service) and replace if necessary. f) If necessary, replace height setting sensor, bracket and control rod g) Replace both air springs h) Replace lines
* Vehicle does not rise in response to loads.	a) Overload b) Failsafe on air supply unit defective c) Air supply unit defective d) Both height setting sensors mechanically defective (bracket, control rod bent) e) Lines on both sides blocked or defective	a) Partially unload vehicle b) Replace failsafe c) Replacing air supply unit d) If necessary, replace height setting sensor, bracket and control rod e) Blow out lines and replace if necessary
* One side of vehicle too low. If the vehicle was driven in this condition, refer to 37 00 Information on air suspension.	a) Height setting sensor mechanically defective (bracket, control rod bent) b) Line/air tank defective c) Air supply unit defective d) Air spring defective e) Line defective	a) If necessary, replace height setting sensor, bracket and control rod b) Check lines (in visible area), air tank and screw connections (first on distributor block and air tank, then on pneumatic spring) with leak tester spray (BMW Parts Service) and replace if necessary. c) Replacing air supply unit d) Replace air spring e) Replace line
* Vehicle only rises on one side in response to load. If the vehicle was driven in this condition, refer to 37 00 Information on air suspension.	a) One-sided loading b) Height setting sensor mechanically defective (bracket, control rod bent) c) Line/air tank defective d) Air supply unit defective e) Air spring defective f) Line defective	a) Partially unload vehicle b) If necessary, replace height setting sensor, bracket and control rod c) Check lines (in visible area), air tank and screw connections (first on distributor block and air tank, then on pneumatic spring) with leak tester spray (BMW Parts Service) and replace if necessary. d) Replacing air supply unit e) Replace air spring f) Replace line

	a) Control unit still in "Transport" modeb) Air supply unit defectivec) Lines on both sides blocked	a) Change mode with BMW Diagnosis System b) Replacing air supply unit c) Blow out lines and replace if necessary 2. Control times not O.K.
Fault	Cause	Remedy
* Vehicle rises too slowly.	a) Overload b) Battery voltage too low c) Air supply unit defective d) Lines defective or blocked	a) Partially unload vehicle b) Charge battery/start engine c) Replacing air supply unit d) Check lines with leak tester spray (BMW Parts Service) or blow out and replace if necessary
* Vehicle lowers too slowly.	a) Air supply unit defective b) Line blocked	a) Replacing air supply unit b) Blow out lines and replace if necessary 3. Drive characteristics not O.K.
Fault	Cause	Remedy
* Vehicle height control operates frequently while vehicle in motion.	a) System leaking	a) Refer to "1. Height setting not O.K." 4. Compressor
Fault	Cause	Remedy
* Compressor ran significantly longer than 2 minutes.	a) Air supply unit defective	a) Replacing air supply unit
Compressor runs loudly.	a) Air supply unit defective	a) Replacing air supply unit