

Vehicle Safety Sensor Calibration

Walk Test and Calibration Checklist — backwatch.co.uk

Complete this checklist after installation, sensor replacement, vehicle configuration change, or any time a walk test fails. File the completed record as FORS maintenance evidence.

1 — Pre-Calibration Checks

- Vehicle on level ground, engine running
- Sensor face clean — no mud, grease, or debris
- All sensor mounting brackets visually inspected for looseness or damage
- Installation manual available (for dip switch map and torque specs)
- Controller powered and displaying normal status (no fault codes)

2 — Height Verification

- Rear sensors: mounted at 0.8–1.2m for HGVs; 0.7–0.9m for vans/LCVs
- Side sensors: height matched to vehicle body and pedestrian detection requirement
- No sensor closer than 0.6m to ground (false trigger from ground surface risk)
- Height measured with vehicle on level ground, not from frame/bumper spec alone

3 — Angle Verification

- Rear sensors: face horizontal (parallel to ground), pointing rearward
- Side sensors: face parallel to vehicle body (not angled outward or inward)
- Spirit level used to confirm horizontal alignment where practical
- Bracket fasteners torqued to installation spec (typically 8–12 Nm for M6)
- No downward tilt on any sensor (immediate reverse-trigger symptom)

4 — Detection Distance / Sensitivity

- Factory zone settings confirmed against installation manual
- Caution (yellow) zone: 1.5–3m from sensor face (or operator-adjusted range)

- Stop (red) zone: 0–1.5m from sensor face
- Dip switch configuration matches intended range setting
- Overhang compensation switch set if towbar/rear overhang present
- No sensitivity reduced to mask an angle or height fault

5 — Walk Test — Rear Sensors

- Colleague approaches from 5m — caution zone triggers before 3m ✓
- Colleague reaches 1.5m — stop zone continuous alarm activates ✓
- Person steps back — alert clears immediately ✓
- No alert sounds with nothing behind vehicle in reverse ✓
- Cab display shows correct zone alert (not buzzer only) ✓

6 — Walk Test — Side Sensors

- Colleague approaches from side at mid-body — caution zone at 2–3m ✓
- Stop zone at 1.5m or less ✓
- Walk along nearside front to rear — no coverage gaps between sensors ✓
- No false trigger from vehicle wheels or mudguards ✓

7 — Sign-Off and Documentation

- Date of calibration check recorded
- Vehicle registration recorded
- All zones tested: pass / fail noted per zone
- Any adjustments made recorded with before/after settings
- Technician name recorded
- Record filed in vehicle maintenance folder (FORS audit evidence)
- Next scheduled walk test date set