FLEET OPERATIONS & DRIVER ONBOARDING MANUAL

# Small Van (Fourgon) Last-Kilometer & Frequent-Stop Driver Training

Standard Operating Procedures, Micro-Stop Safety Routines, Ergonomics, and Urban Route Execution for Light Commercial Vehicles (LCVs under 3.5t)

| VEHICLE CLASS | OPERATIONAL PROFILE | TRAINING DURATION |
|---|---|---|
| Small & Compact Vans (Fourgonnettes / L1H1–L2H2) | 60–140+ Daily Stops / Dense Urban & Residential Zones | 4 Days (Classroom, Yard & Supervised Route) |

## 1. Program Purpose & Frequent-Stop Risk Profile

Operating a small delivery van (fourgon) on a last-kilometer route presents distinct risks compared to long-haul driving. Drivers spend less than 40% of their shift driving and more than 60% stopping, exiting, sorting parcels, maneuvering in tight spaces, and walking across traffic.

| Risk Category | Frequent-Stop Operational Trigger | Core Training Countermeasure |
|---|---|---|
| **Low-Speed Backing & Striking** | 80–140 daily parking, U-turn, and driveway maneuvers under tight delivery schedules. | Eliminate unnecessary reversing; use G.O.A.L. (Get Out And Look) and pull-through parking. |
| **Rollaway Incidents** | Rushing out of the cab dozens of times per hour without fully engaging the parking brake. | Enforce the 6-Point Micro-Stop Shutdown Sequence at every single stop without exception. |
| **Musculoskeletal Strain** | Repetitive cab entry/exit (150+ times/day), twisting with parcels, and awkward lifting. | 3-Point Contact cab exit, Power Zone lifting, and sequence-based cargo loading. |
| **Vulnerable Road Users (VRUs)** | Opening driver-side doors into bike lanes; stopping near crosswalks, schools, and sidewalks. | Dutch Reach door opening, curb-side sliding door access, and 360-degree mirror/camera scans. |
| **Vehicle & Cargo Theft** | Leaving engine idling or cargo doors unlocked during "quick 30-second" doorstep drops. | Key-in-pocket rule and automatic cargo lock verification at every stop. |

# 2. Pre-Trip Inspection & Route-Sequenced Loading

A safe, low-stress shift begins before leaving the depot. Drivers must complete a structured 10-minute vehicle check and load parcels in strict reverse-stop order to eliminate searching inside the cargo bay.

## A. Small Van Pre-Trip Walkaround (Daily Mandatory)

- **Tires & Wheels:** Inspect tread depth, sidewall cuts, and inflation across all four tires. Frequent curb contact damages sidewalls rapidly.
- **Lights & Sensors:** Verify headlights, brake lights, turn signals, hazard flashers, reverse lights, and clean all parking sensors and rear-view cameras.
- **Doors, Latches & Bulkhead:** Test rear barn doors, side sliding door tracks, central locking, and verify the cab-to-cargo bulkhead partition is secure.
- **Cab & Visibility:** Adjust seat height, lumbar support, and mirrors (flat and wide-angle convex) to eliminate blind spots along the lower body panels.
- **EV Van Specifics (if applicable):** Confirm State of Charge (SoC) meets route distance + 20% buffer, inspect charge port flap, and verify regenerative braking mode.

## B. Ergonomic & Sequence-Based Cargo Loading

- **Last-In, First-Out (LIFO) Zoning:** Place Stops 1–20 directly accessible from the curb-side sliding door to minimize rear-door exposure to live traffic.
- **Weight Distribution:** Place heavy parcels (over 15 kg) on the floor between the axles. Keep lighter packages on upper shelving to prevent shifting during urban braking.
- **Zero Cab Clutter:** Never place parcels, clipboards, or water bottles on the dashboard, passenger footwell, or floor near the pedals.

## 3. The 6-Point Micro-Stop Protocol (Core Daily Habit)

With up to 140 stops per shift, safety cannot rely on memory alone. Drivers must execute the following six steps in exact sequence at every delivery stop, even if the drop takes less than 20 seconds.

**STEP 1** **Strategic Curb-Side Positioning**

Select a legal loading bay or wide curb space on the delivery side of the street. Never double-park in a bike lane, block a crosswalk, or park within 5 meters of an intersection corner.

**STEP 2** **Hazard Activation & Neutral/Park**

Activate 4-way hazard flashers before slowing down to alert following traffic. Bring the van to a complete stop and shift into Park (automatic) or Neutral (manual).

**STEP 3** **Full Parking Brake & Wheel Turn**

Firmly engage the handbrake or verify electronic parking brake engagement on the dash. On slopes, turn front wheels toward the curb (downhill) or away from the curb (uphill).

**STEP 4** **Engine Off & Key-in-Pocket**

Turn off the ignition and take the key fob with you at every stop. Never leave a van idling unattended, which prevents rollaways, saves fuel, and eliminates vehicle theft.

**STEP 5** **Dutch Reach & Curb-Side Exit**

When exiting into traffic, open the door with your far (right) hand to force your torso to turn and check for cyclists and e-scooters. Whenever possible, exit via the curb-side sliding door.

**STEP 6** **360° Walkaround Before Departure**

Upon returning, walk around the front or rear of the van while scanning beneath and behind the vehicle for children, pets, bollards, or scooters before entering the cab.

**ZERO-TOLERANCE REVERSING RULE**

Never back into a main road from a driveway or alley. Plan stops so you pull forward into spaces or drive around the block. When backing is unavoidable, fold down windows, turn off the radio, use mirrors plus camera, and exit to inspect tight blind spots first.

## 4. Urban Defensive Driving & Space Management

- **4-Second Following Distance:** Maintain at least 4 seconds behind the vehicle ahead in city traffic (6+ seconds in rain) to absorb sudden stops without shifting cargo.

- **Tail-Swing & Height Awareness:** Even compact vans (L2H2) have rear overhang swing during sharp turns and roof heights (2.5m–2.7m) that strike low balconies, tree branches, and underground garage beams.
- **Bike Lane & Crosswalk Scanning:** Check convex blind-spot mirrors 3 seconds before every right turn or curb pull-in to detect fast-moving e-bikes and cargo bikes.
- **Smooth Eco-Driving:** Accelerate progressively between closely spaced stops and anticipate red lights early. Harsh acceleration and braking between frequent stops increases fuel/energy consumption by up to 25% and accelerates brake wear.

## 5. Driver Ergonomics & Injury Prevention

Exiting a small van 150 times a day equals climbing roughly 35 flights of stairs. Proper body mechanics prevent chronic knee, ankle, and lower-back injuries.

| Activity | Incorrect Habit (High Injury Risk) | Correct Technique (Mandatory) |
|---|---|---|
| **Cab Entry & Exit** | Jumping down from the seat onto pavement; twisting knees while stepping out. | Maintain 3 points of contact (two hands, one foot); pivot hips toward door and step down deliberately. |
| **Cargo Bay Handling** | Bending at the waist to pull heavy boxes from the back of the van. | Slide boxes to the edge of the floor/shelf first; squat with a straight back and lift in the Power Zone (mid-thigh to chest). |
| **Device & Scanner Use** | Looking at handheld scanner or route tablet while walking across streets or stairs. | Complete all scanning while stationary at the doorstep or inside the cab; keep eyes up while walking. |

## 6. Four-Day Training & Certification Curriculum

Trainees progress through four structured phases before solo route assignment. Drivers must pass all yard maneuvers and score at least 85% on the Day 4 live route audit.

| Day | Training Module | Core Learning Activities & Practical Exercises |
|---|---|---|
| **Day 1** | Classroom & Vehicle Familiarization (4 hrs) | Last-kilometer safety mindset, urban traffic rules, VRU blind-spot demonstration, pre-trip inspection walkthrough, and LIFO cargo loading simulation. |
| **Day 2** | Closed-Course Yard Maneuvers (6 hrs) | Precision parallel curb parking, alley docking, serpentine forward/reverse cone course, overhead clearance judgment, and 6-Point Micro-Stop speed/accuracy drills. |
| **Day 3** | Co-Pilot Route Observation & Coaching (7 hrs) | Morning shadow with certified driver trainer (30 stops), followed by trainee driving afternoon urban/residential loop (35 stops) with real-time coaching. |
| **Day 4** | Solo Simulation & Practical Road Test (7 hrs) | Full 70-stop urban route execution under realistic delivery windows while instructor scores Micro-Stop compliance, VRU scanning, ergonomics, and smooth driving. |

## 7. Instructor Practical Evaluation Checklist (Day 4 Audit)

The instructor records compliance across a minimum of 25 observed stops during the Day 4 road evaluation. Any single critical safety violation results in an automatic retake.

| Item | Observed Competency Standard | Weight | Pass / Fail |
|---|---|---|---|
| **01** | Completes thorough pre-trip inspection and LIFO cargo load securing before departure. | 15 pts | [ ] Pass [ ] Fail |
| **02** | Selects safe, legal curb-side stopping positions without blocking bike lanes or crosswalks. | 15 pts | [ ] Pass [ ] Fail |
| **03** | Executes full 6-Point Micro-Stop Protocol (hazards, park, brake, engine off, key, Dutch Reach). | 25 pts | [ ] Pass [ ] Fail |
| **04** | Scans mirrors and blind spots prior to every lane change, turn, and curb pull-out. | 20 pts | [ ] Pass [ ] Fail |
| **05** | Applies 3-point cab exit, Power Zone lifting, and never reads scanner while walking. | 15 pts | [ ] Pass [ ] Fail |
| **06** | Maintains smooth eco-driving pace without speeding or harsh braking between stops. | 10 pts | [ ] Pass [ ] Fail |

**AUTOMATIC FAILURE TRIGGERS (IMMEDIATE STOP)**

Leaving the vehicle with the engine running or parking brake unset; rolling backward/forward unattended; opening a door into an oncoming cyclist; backing into a live traffic lane without a spotter; or using a mobile device while the vehicle is in motion.

**Driver Certification Sign-Off**

Trainee Name: _____ License Class / ID: _____

Instructor Name: _____ Final Audit Score: _____ / 100 pts

Trainee Signature: _____ Date: _____