



Buyer's Guide: Vehicle Fire Extinguishers

Below is a UK-focused Buyers Guide for Vehicle Fire Extinguishers, written in line with BS 5306 principles (selection, positioning, and maintenance) and common UK fire safety best practice.

1. Purpose of a Vehicle Fire Extinguisher

A vehicle extinguisher is intended for early-stage fires only, such as:

- Engine bay fires
- Electrical faults (wiring, battery, dash fires)
- Fuel or oil leaks igniting
- Small cabin fires

It is not designed to fight a fully developed vehicle fire the primary goal is safe evacuation.

2. Recommended Extinguisher Types (by Vehicle Type)

Vehicle Type	Recommended Extinguisher	Why
Private cars / small vans	ABC Dry Powder (1kg-2kg)	Works on fuel, oil, plastics, and electrical fires (most common vehicle risks)
Commercial vans / fleet vehicles	ABC Dry Powder (2kg) + optional CO ₂ backup	Faster knockdown of engine fires; CO ₂ useful for electrical compartments
HGV / lorries	ABC Dry Powder (2kg-6kg)	Higher fire load; powder effective across multiple fire classes
Buses / passenger transport	Foam (AFFF) + ABC Powder mix strategy	Foam reduces re-ignition risk; powder for versatility



Vehicle Type	Recommended Extinguisher	Why
Motorhomes / caravans	ABC Powder + optional Wet Chemical (kitchen area)	Covers gas, cooking, and electrical risks
Electric / hybrid vehicles	CO ₂ or specialist vehicle-rated extinguisher	Reduces electrical system damage; safer around high-voltage systems

3. Key Considerations Before Buying

Fire rating (BS EN 3 compliance)

- BS Kitemark or CE/UKCA marking
- Fire rating such as 13A, 21B, etc.
- Suitable for Class A & B fires minimum

Size matters

- 1kg: emergency personal use only
- 2kg: standard recommended minimum for most vehicles
- 6kg: commercial/heavy-duty use

Mounting system

Must include:

- Secure bracket (prevents movement while driving)
- Easy quick-release access
- No obstruction to driving controls

Operating pressure type

- Stored pressure extinguishers = most common (easy visual gauge)
- Cartridge-operated = less common in vehicles



4. Positioning in the Vehicle (BS 5306 Best Practice Adaptation)

Although BS 5306-8 mainly applies to buildings, its principles apply to safe accessibility:

Recommended placement:

- Within arm's reach of driver or operator
- Preferably:
 - Under front seat (secured bracket)
 - Door side panel mount
 - Behind passenger seat (if accessible)

Avoid:

- Boot/trunk (too slow to access in emergency)
- Loose storage (dangerous projectile risk)
- Areas exposed to heat sources (engine proximity)

Key rule:

Extinguisher must be visible, accessible, and removable in seconds

5. Service & Maintenance Requirements (UK Compliance)

Vehicle extinguishers fall under BS 5306-3 maintenance principles:

Required checks:

- Monthly visual check (user level):
- Pressure gauge in green
- Seal intact
- No damage or corrosion
- Secure mounting
- **Annual service (competent person):**
 - Pressure test / internal inspection



- Seal replacement if required
- Weight check (loss indicates leakage)
- **Extended servicing:**
 - Typically, every 5 years (manufacturer dependent)
 - May involve discharge and refill

Even in vehicles, extinguishers still require formal servicing if used in business fleets or work vehicles.

6. Legal & Standards Context (UK)

- Vehicles are generally not legally required to carry extinguishers (except specific transport categories)
- However, under **Health & Safety at Work Act 1974** and **Fire Safety Order 2005**, employers must provide suitable emergency equipment where risk is identified
- Equipment selection and placement should align with:
 - BS 5306-8 (selection & positioning principles)
 - BS 5306-3 (maintenance & servicing)
 - BS EN 3 (extinguisher performance standard)

7. Best Practices (Critical Safety Guidance)

- Train drivers/users on PASS method:
 - Pull pin
 - Aim at base of fire
 - Squeeze handle
 - Sweep side to side
- Only attempt fire suppression if:
 - Fire is small and contained
 - Escape route is clear
- Always prioritise:
 - Personal safety first
 - Evacuation over firefighting



8. Quick Buyer Summary

- Best all-round choice: 2kg ABC dry powder
- Best for electrical-heavy environments: CO₂ extinguisher
- Best for mixed-risk commercial fleets: Powder + foam combination
- Most important factors: accessibility, correct rating, secure mounting, and regular servicing

Fleet Fire Safety Compliance Checklist (Company Vehicles – UK)

A practical checklist to help employers meet Health & Safety duties (HSWA 1974) and relevant fire safety best practice (BS 5306 principles) for vehicles used in business operations.

1. Vehicle Fire Extinguisher Provision

- Every operational vehicle has a suitable fire extinguisher installed
- Extinguisher type matches vehicle risk (e.g. ABC powder 2kg minimum for most vans)
- Extinguisher is BS EN 3 compliant (UKCA/CE marked)
- Extinguisher is correctly rated for vehicle use (fire classes A/B minimum)
- Extinguisher is securely mounted using approved bracket
- Extinguisher is easily accessible from driver position (not stored in boot)
- No obstruction to removal in under 5 seconds

2. Inspection & Maintenance Compliance

Monthly checks (driver/user responsibility)

- Pressure gauge in green zone
- Safety pin and tamper seal intact
- No visible corrosion, damage, or leakage
- Bracket secure and undamaged



- Label and instructions readable

Professional servicing

- Annual service completed by competent fire equipment technician
- Service label present and in date
- Any discharged units replaced immediately
- 5-year extended service / overhaul schedule followed (if applicable)

3. Fire Safety Equipment Readiness

- Correct extinguisher type present for each vehicle category:
 - Cars / vans → ABC dry powder (1-2kg minimum)
 - HGVs → 2-6kg ABC powder
 - Passenger transport → powder + foam strategy (where applicable)
 - Electric/hybrid vehicles → CO₂ or manufacturer-recommended type
- Optional additional equipment provided where risk is higher:
 - First aid kit
 - Fire blanket (motorhomes/catering vehicles)
 - Emergency warning triangle / PPE

4. Driver & Staff Training Requirements

- All drivers receive basic fire safety awareness training
- Training includes:
 - PASS method (Pull, Aim, Squeeze, Sweep)
 - When NOT to fight a fire
 - Safe evacuation procedures
- High-risk drivers (fleet operators, transport staff) receive refresher training annually
- Fire extinguisher familiarisation included in driver induction
- Training records are documented and retained



5. Installation & Positioning Standards

- Extinguisher positioned within immediate reach of driver/operator
- Mounted in approved bracket (no loose storage)
- Not placed near heat sources (engine bay, exhaust zones)
- Not stored in locked compartments or inaccessible storage areas
- Positioned consistently across fleet (standardised layout where possible)

6. Legal & Compliance Documentation

- Fire risk assessment completed for fleet operations (where required)
- Equipment selection justified based on operational risk
- Maintenance records retained for inspection
- Inspection logs completed monthly
- Supplier certificates (BS EN 3 compliance) retained
- Insurance requirements for fire safety equipment are met

7. Operational Best Practice

- Clear policy in place: life safety first, vehicle second
- Drivers instructed to evacuate immediately in most fire scenarios
- Fire response only attempted if:
 - Fire is small and controllable
 - Safe escape route is available
- Emergency procedures communicated to all staff
- Incident reporting system in place for vehicle fires or extinguisher use



8. Audit & Review Schedule

- Quarterly internal fleet safety checks completed
- Annual fire safety policy review conducted
- Equipment replaced or upgraded when standards change
- Lessons learned from incidents shared across fleet
- Compliance gaps actioned within defined timeframe

Quick Compliance Summary

A compliant fleet should ensure:

- Correct extinguisher type per vehicle
- Secure and accessible installation
- Monthly checks + annual servicing
- Trained drivers and documented procedures
- Clear evacuation-first fire response policy