AIRKEWLD INSTALL GUIDE

CHASSIS FUEL LINE KIT

Application: All Classic VW Chassis · All Years · 12V systems only (Type 2 Bus kit coming soon) · Kits 711 000 930 · 931 · 932 · 933

Quick Reference · Page 3 = kit variant routing + Facet pump requirements. Replaces the separate Facet insert.

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SPECS AT A GLANCE

KITS
Basic · Filter
Pump · Deluxe

HOSE
Braided · -6AN 90° each end
sun-soften before fishing

PUMP
Facet 40177N · 12V · keyed hot
3–5 A fuse · inlet filter (74µ min.)

FILTER
40 micron · service yearly
verify flow direction

TOP 5 INSTALL MISTAKES

01. **Hardline exits not clear.** The factory hardline runs INSIDE the chassis tunnel — it MUST be removed (or trimmed and pushed inside the exits) before the new braided line can route through. Free, clear front + rear exits are non-negotiable.
02. **Routing against shift / cables.** Inside the tunnel the new line runs near the clutch cable, accelerator cable, and shift linkage. Route AWAY — vibration over miles will rub through braided sleeve and weep fuel.
03. **Skipping the line blow-out.** Tape the leading end while fishing (debris guard) AND blow the line out with compressed air before any final connection. A grain of chassis grit kills a 40-micron filter inside a week.
04. **Filters installed backwards — or the pump left unprotected.** Every filter has a flow-direction arrow. Pump kits: tank → inlet filter (ours or yours, 74-micron minimum standard) → pump → carb. No inlet filter = a dead pump; backwards = restriction = fuel-starvation symptoms that mimic carb problems.
05. **Sealing the wrong fittings / skipping the fuse.** Thread sealant goes ONLY on the connections going INTO and OUT OF the fuel pump (10–15 ft-lbs). Every other fitting is hydraulic -6AN — sealant crud up the seat and CAUSE leaks. And never wire the pump without a 3–5 A fuse.

TOOLS REQUIRED

ABC fire extinguisher within reach

Jack & jack stand · driver-rear wheel

Socket set · 7/16" wrench · fuel line plugs

Hose cutters (square cuts)

Tape (debris guard for hose end)

Drill motor + 7/32" bit (Pump & Deluxe kits)

Thread sealant (PUMP PORTS ONLY)

Compressed air (blow-out)

Marker for length measurement

1 TANK OUT

00. **Fire extinguisher (ABC) within reach** before any fuel line is opened. No sparks, no smoking.
01. Disconnect the battery.
02. Pop hood. Remove tank sender wires, vent lines, and gauge cables.
03. Pitch tank forward, clamp the outlet line, undo the hose clamp at chassis hardline. Plug open lines.
04. Lift tank. Drain. Inspect interior for rust or debris.
05. Lubricate supplied O-ring; install the outlet fitting on the tank — snug fit only.

PRO TIP ***Inspection plate makes this 10× easier.*** *If you've installed AK-CH-001 (chassis inspection plate), you've got an access hole halfway down the tunnel — fish the hose in and out without pulling the pedal assembly. No inspection plate? Pop the shift-linkage inspection plate behind the front beam for tunnel access. The pedal-assembly route works but doubles the labor.*

INSTALLATION FLOW

PHASES 2 – 6 · REAR ACCESS · CLEAR EXITS · ROUTE LINE · KIT ASSEMBLY · TEST & LEAK CHECK

2 REAR ACCESS & SOFT LINE OUT

01. Jack the rear of the vehicle, place stands; wheel under chassis as failsafe.
02. Remove the driver-side rear wheel.
03. Disengage the soft-line-to-hardline connection near the transaxle.
04. Pull the soft line out through the engine bay.

3 CLEAR THE HARDLINE EXITS

01. Inside the tunnel, the chassis hardline is clamped to brackets. Either remove fully (body-off rebuild) or trim flush.
02. If trimming: push the cut ends inside the exits so they're hidden but no longer in the way.
03. Goal: front + rear exits FREE and CLEAR for the new braided line.
04. Inspect both exits — burrs filed off so the new line can't chafe.

PRO TIP ***Sun-soften before fishing.*** *Coil-set memory in braided hose makes fishing through the tunnel a fight. Lay the line in DIRECT SUN ~1 hour BEFORE you start — it goes from springy to docile and snakes through cable runs without binding. Tape the leading end the entire fish. Equal hose at each exit when done — you can trim to length at fitting time.*

4 ROUTE THE BRAIDED LINE

01. Confirm hose is sun-softened and leading end taped.
02. Pull pedals / shifter / coupler if needed for tunnel access (or use the inspection-plate hole — see Pro Tip 1).
03. Fish from the REAR exit forward through the tunnel.
04. Watch the clutch cable, accelerator cable, and shift linkage — route AWAY from all moving cables.
05. Equal hose at both exits before you trim or fit.

5 KIT ASSEMBLY *see page 3*

01. **BASIC** (711 000 930): -6AN 90° fittings each end · blow out · connect.
02. **FILTER** (711 000 931): serviceable mount location · verify flow direction · blow out.
03. **PUMP** (711 000 932): Facet 40177N on brake-line stand · inlet filter (74µ min. standard) · drill 2 mounts (7/32") · ground under 2nd screw · seal pump ports ONLY · keyed hot through a 3–5 A fuse.
04. **DELUXE** (711 000 933): new brake-line stands w/ built-in pump mount + isolators · mil-spec harness w/ inline fuse · fuel-pump block-off.
05. All variants: blow out the entire line one more time before connecting to tank or engine.

PRO TIP ***Blow out — every time.*** *Tape protects the leading end during fishing, but chassis dust and tunnel debris still find their way in. Compressed air through the hose BEFORE any final fitting connection. Then again at tank and engine connections. A grain of grit kills a 40-micron filter inside a week — and chases you with carb problems that aren't actually carb problems.*

6 REASSEMBLE · TEST · LEAK CHECK

01. Reinstall pedals, shifter, coupler, inspection plates.
02. Reinstall the tank; reconnect all fittings.
03. Battery on. KEY ON only — do NOT start the engine. Verify pump runs (Pump & Deluxe kits): you'll hear a steady ticking / vibrating sound from the pump. Silent = check fuse, ground, and keyed-hot feed.
04. Connect to engine: hardline kit (forwardmost tin out the factory exit) OR softline -6AN to carbs.
05. Add a SMALL amount of fuel to the tank — leak-check every connection. Clean up any spilled fuel before starting.
06. No leaks? Fill the tank and "letter rip tater chip."

KIT VARIANT ROUTING · BASIC / FILTER / PUMP / DELUXE

BASIC 711 000 930

- Hose only — no filter, no pump, no harness.
- Install -6AN 90° fittings on each end of the routed hose.
- Front: route AWAY from steering linkage.
- Blow out the line, then connect to tank and engine.

FILTER 711 000 931

- Adds an inline fuel filter (40 micron).
- Find a SERVICEABLE mounting location — you'll be back here yearly.
- VERIFY flow direction (arrow on filter). Tank → filter → engine.
- Measure, cut, fit. Blow out the line BEFORE final connection.

PUMP 711 000 932

- Adds a Facet 40177N fuel pump (auto-store stocked nationwide).
- Mount on the brake-line stand — pump body 90° to the chassis, FLOW arrow pointing toward the engine.
- Drill (2) 7/32" holes; start the 1st 1/4" self-tap screw, capture the black ground lead under the 2nd. Tighten both.
- Wire to a KEYED HOT through a 3–5 A fuse — pump runs only when ignition is on.
- Thread sealant ONLY on the connections going INTO and OUT OF the pump. Everything else is hydraulic -6AN.

DELUXE 711 000 933

- Everything in **Pump** (711 000 932) — plus replacement brake-line stands.
- New stands have built-in pump mount points + rubber isolators (quieter).
- Drill out factory spot welds to remove originals. Bolt or spot-weld new stands in.
- Mil-spec wiring harness with inline fuse — connects to keyed hot.
- Includes fuel-pump block-off plate (factory pump location).

FACET PUMP REQUIREMENTS

Pump & Deluxe kits · replaces Facet insert

01. **Inlet filter required.** Run the Airkewld filter or one of your choice on the pump's INLET port — minimum standard is 74 micron (Facet #479735 or equal). Torque inline filter / fittings 10–15 ft-lbs.
02. **Fuse required.** 3–5 A automotive-type fuse on the red (+) lead.
03. **12V only.** These kits are built for 12-volt systems (positive or negative ground) and will not fit 6-volt applications.
04. **Location.** Clean section of chassis, away from road hazards and exhaust. Mounting spot must stay under 140°F (60°C). Within 12 vertical inches of the tank bottom.
05. **Orientation.** FLOW arrow toward the engine. Facet-approved positions: vertical, 45° upward (Facet's preference), or horizontal.
06. **Wiring.** Black (–) lead to chassis ground under a mounting screw. Red (+) to an ignition-controlled relay or the ignition-switch supply terminal.

KEYED HOT / RELAY → **3–5 A FUSE** → **RED (+) PUMP** · **BLACK (–) → CHASSIS**

Not for aircraft use.

MAINTENANCE

- 40-micron filter — service or replace yearly.
- Pump inlet filter — inspect at the same time.
- Annual check on EVERY fitting — better safe than sorry.
- Replacement pump: Facet 40177N (AutoZone, Kragen, PepBoys).
- Inspect hose for rubs against cables / linkage every season.

RELATED KITS

- Hardline Kits (engine bay) — airkewld.com/Performance-Parts (s/2325)
- Chassis Inspection Plate (AK-CH-001) — easy tunnel access for this install
- Air Management (AK-AM-001) — if also routing air lines through trunk
- PRObuilt Front Beam (AK-FB-001) — for full chassis refresh package

FULL INSTALL GUIDE

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Stuck? Text 1-623-518-3537 or email help@airkewld.com — we answer.