SEA **Springfield Euro Auto** EXAMPLE SHOP
service@springfield-euro-auto.example

2021 Volkswagen ID.4 at 50,000 mi

WVGDMPE27MP123456

MODEL / CHASSIS	DRIVETRAIN	MILEAGE	DRIVETRAIN
ID.4 · 2021 ID.4 Pro S RWD	Volkswagen MEB electric drive: ID.4 (rear motor, or dual motor AWD)	50,000 mi	RWD
BUILD MONTH	**REPORT DATE**	**MODE**	**PREPARED FOR**
Not entered (door jamb)	October 28, 2026	Shop	Sample Owner

VIN check: check digit valid; model-year code 'M' = 2021, matches the year entered. The VIN doesn't record the build month. Sample report: synthetic VIN.

1 · SUMMARY

What this car needs, in order

Each item compares this car's mileage with when owners and shops report the part failing. It is not an inspection: our technician decides what the car actually needs.

2
jobs recommended now

1
to plan in the next 30,000 miles · plus 1 factory maintenance item

1
to watch or check at each service

Safety recalls NHTSA lists for this model year (8 of 10)

- **23V-040** · High-voltage battery · BMS and inverter software: The battery management module can restart or the motor inverter can switch off, cutting drive power. Free software update.
- **22V-162** · High-voltage battery · cell module circuit soldering: A badly soldered circuit inside the battery can lose contact and stall the car. Dealers replace the battery cell modules free.
- **25V-120** · Instrument panel · gear position display: The instrument panel may not show the selected gear, so the car could roll away if left out of park without the parking brake.
- **24V-651** · Doors · exterior door handles (water in circuit board): Water can get into the door handle electronics and a door can open unexpectedly. Dealers replace handles as needed and update software. Expands 23V-312.
- **23V-312** · Doors · exterior door handles (first remedy): Water can get into the door handle electronics and a door can open unexpectedly at low speed. Cars repaired under this recall need the 24V-651 remedy.
- **22V-858** · Air bags · passenger frontal air bag fold: The passenger air bag may be folded wrong and not protect as intended in a crash (55 cars).
- **21V-607** · Seat belts · rear outboard locking retractor: Rear outboard belts may lack the automatic locking function needed to hold a child seat.
- **21V-606** · Seat belts · rear locking retractor: A rear seat belt retractor may not lock to hold a child seat securely.

A model-year list, not a VIN check. The full report lists the others. Repairs are free at a Volkswagen dealer if open. Check this VIN at nhtsa.gov/recalls.

Step 0 · Free: run the VIN at nhtsa.gov/recalls and ask a Volkswagen dealer for a campaign printout, including 22V-162, 23V-040. Read the build month (MM/YY) on the driver's door-jamb label.

Factory warranty: this 2021 Volkswagen at 50,000 mi may still be under Volkswagen's battery and drive warranty (usually 8 years or 100,000 mi from the day it was first sold). A covered high-voltage battery or drive motor repair is free at a Volkswagen dealer, so we check the coverage before quoting one.

Recommended now at the next service

Battery cell faults and range loss (P0BBD), 2021–2023

Free if open

Recall 22V-162 is listed for this model year. Check the VIN; the repair is free at a Volkswagen dealer if it is open.

Loss of drive power from battery software, inverter or motor faults

Free if open

Recall 23V-040 is listed for this model year. Check the VIN; the repair is free at a Volkswagen dealer if it is open.

Next 12 months up to about 62,000 mi — $320

12V battery and 12V supply faults

$320

Any mileage (All years; 2023 RWD (cable recall), 2024 (on-board charger recall))

our price EXAMPLE

Within the next 30,000 miles up to 80,000 mi

Nothing else enters its reported range in this window.

Watch inspect at each service, fix on condition, or optional

Charging socket lock actuator and release cable

Ask us for a quote

Any mileage (2021–2023 ID.4) · Inspect at each service; fix at the first sign

Recommended now

Free recall check

Springfield Euro Auto prices (example)

Planned through 80,000 mi

$469

Now + next 12 months + next 30,000 miles, with the factory maintenance on this report if the records don’t show it done. Excludes “watch” and optional items.

Prices are Springfield Euro Auto's estimates for typical parts and labor. They don't include tax, shop supplies or disposal fees, and may change after inspection or if part prices change. Not a written repair estimate: Springfield Euro Auto confirms the price and gets your OK before any work.

Bundled jobs are priced together because the labor overlaps. Routine service (tires, brakes, cabin filter) isn't included; factory fluid intervals are listed below.

FACTORY MAINTENANCE

Scheduled maintenance from 50,000 mi to 80,000 mi

The maker's normal schedule for this car. Service history isn't known here, so an item is shown at its next interval mark; skip it if the records show it was done.

ITEM	INTERVAL	THIS CAR	OUR PRICE
Brake fluid VW: first change at 3 years, then every 2 years, regardless of mileage.	every 2 years	**By time: check the records** [M1] [M2]	**$149**

M1. Volkswagen Service: Maintenance Schedules, 2025 gas and battery-electric models (VW owner's literature) OFFICIAL
https://ownersliterature.vw.com/owners-literature-service/v1/document/760f5f9a-0290-4dfe-adf0-30d03981a9ad

M2. Volkswagen Service: Maintenance Schedules, 2026 gas and battery-electric models (VW owner's literature) OFFICIAL
https://ownersliterature.vw.com/owners-literature-service/v1/document/d063309f-f793-4d23-8799-a4ff5ffb3850

WHERE 50K SITS FOR EACH WEAK POINT

#	WEAK POINT	REPORTED RANGE	THIS CAR
1	Battery cell faults and range loss (P0BBD), 2021–2023	2021 (soldering recall) and 2021–2023 ID.4 (cell self-discharge bulletin) OFFICIAL	Any mileage
2	Loss of drive power from battery software, inverter or motor faults	2021 (software recall, front power electronics bulletin), 2023 (motor seal recall) OFFICIAL	Any mileage
3	12V battery and 12V supply faults	All years; 2023 RWD (cable recall), 2024 (on-board charger recall) OFFICIAL	Any mileage
4	Charging socket lock actuator and release cable	2021–2023 ID.4 OFFICIAL	Any mileage

Colors compare mileage with reported failures, not the car's condition. Red: past the range. Amber: inside or approaching. Green: below, or not listed for a recall.

2 · RECALLS AND BULLETINS

Recalls to check for this 2021 Volkswagen ID.4

Safety recall repairs are free at Volkswagen dealers. Nothing here can tell whether a recall is open or already done on this VIN; only the official VIN lookup or a dealer can.

Official VIN check (2 minutes)

1. Go to nhtsa.gov/recalls and enter WVGDMPE27MP123456.
2. Note every recall shown as “Recall incomplete” and keep a screenshot.
3. Ask a Volkswagen dealer for a campaign printout; it also lists completed campaigns.

ID.4 EV RECALLS WE TRACK

22V-162 · Battery flexible circuit soldering may lose contact, stall (2021 ID.4)

NHTSA lists this model and year: check by VIN

Dealer replaces the battery cell modules, free. OFFICIAL [5]

☐ VIN checked ☐ Open: booked with dealer ☐ Completed (printout kept)

23V-040 · Battery management module may restart or pulse inverter switch off, loss of drive power (2021 ID.4)

NHTSA lists this model and year: check by VIN

Free software update for both modules. OFFICIAL [7]

☐ VIN checked ☐ Open: booked with dealer ☐ Completed (printout kept)

22V-830 · Motor sealing ring fitted wrong, coolant can leak into the high-voltage system (2023 ID.4)

Not listed for MY2021

Dealer inspects and replaces the motor if needed, free. OFFICIAL [7]

25V-125 · On-board charger (OCDC) may stop charging the 12V battery, loss of drive power (2024 ID.4)

Not listed for MY2021

Dealer replaces the OCDC, free. OFFICIAL [9]

22V-956 · 12V charging cable may chafe on the steering shaft and short (2023 ID.4 RWD)

Not listed for MY2021

Park outside until fixed; dealer inspects and repairs or replaces the cable, free. OFFICIAL [9]

EVERY RECALL NHTSA LISTS FOR THE 2021 VOLKSWAGEN ID.4 (10)

RECALL	COMPONENT	WHAT CAN HAPPEN (NHTSA, SHORTENED)
23V-040 ID.4 EV tracked	High-voltage battery · BMS and inverter software	The battery management module can restart or the motor inverter can switch off, cutting drive power. Free software update. Details
22V-162 ID.4 EV tracked	High-voltage battery · cell module circuit soldering	A badly soldered circuit inside the battery can lose contact and stall the car. Dealers replace the battery cell modules free. Details
25V-120	Instrument panel · gear position display	The instrument panel may not show the selected gear, so the car could roll away if left out of park without the parking brake. Details
24V-651	Doors · exterior door handles (water in circuit board)	Water can get into the door handle electronics and a door can open unexpectedly. Dealers replace handles as needed and update software. Expands 23V-312. Details
23V-312	Doors · exterior door handles (first remedy)	Water can get into the door handle electronics and a door can open unexpectedly at low speed. Cars repaired under this recall need the 24V-651 remedy. Details
22V-858	Air bags · passenger frontal air bag fold	The passenger air bag may be folded wrong and not protect as intended in a crash (55 cars). Details
21V-607	Seat belts · rear outboard locking retractor	Rear outboard belts may lack the automatic locking function needed to hold a child seat. Details
21V-606	Seat belts · rear locking retractor	A rear seat belt retractor may not lock to hold a child seat securely. Details
24V-344	Displays · center and instrument displays software	The center and instrument displays may not start or may reset, losing the speedometer and rearview camera image. Details
21V-413	Headlights · aim caps	Caps were fitted on the wrong headlight aim screw, so the beam can be set sideways and glare other drivers. Details

Source: NHTSA recalls API, fetched 2026-10-28 and combined across NHTSA model names: ID.4. Safety categories (air bags, fire, brakes, stalling, roll-away and loss of control) are listed first; listings whose NHTSA text names another engine, or an aftermarket part, go last. OFFICIAL

Left out of this list (ID.4): 21V-852 (steering gear drive bushing) covers one single 2021 ID.4 and is left out of this sample; a VIN check would show it if it applied.

SERVICE ACTIONS, BULLETINS AND WARRANTY PROGRAMS

Manufacturer bulletins and warranty programs for this drivetrain are cited on each weak point in section 4, where they apply.

4 · THE 4 WEAK POINTS

Each weak point, one card each

Every figure carries its source. Retailer part numbers are shown only when the retailer lists them for this chassis (ID.4). Left out because they apply to other models, years, versions or body codes: High-voltage battery fire recalls, 2023–2025.

1 Battery cell faults and range loss (P0BBD), 2021–2023

Any mileage

Severity: High: overheating, stalls, limp mode or a big bill · 30 mentions in counted NHTSA complaints

COMPUTED FROM NHTSA DATA

Reports cover a wide mileage span (2021 (soldering recall) and 2021–2023 ID.4 (cell self-discharge bulletin)), so mileage doesn't say much here. Range: 2021 (soldering recall) and 2021–2023 ID.4 (cell self-discharge bulletin) OFFICIAL [5] [6]

WHAT FAILS OFFICIAL [5][6]

On some 2021 cars a badly soldered flexible circuit inside the battery can lose contact and stall the car; VW replaced the cell modules. On 2021–2023 cars some cells self-discharge too fast because of a production fault, which sets DTC P0BBD00 with a yellow electrical system warning and cuts range; the dealer replaces the faulty cell modules.

SYMPTOMS

- Yellow electrical system error message
- Range drops or is lower than expected
- DTC P0BBD00

IF IT'S LEFT TOO LONG

Range keeps falling and a module can fail completely.

IS IT WORTH DOING EARLY? OUR ESTIMATE

Check the VIN for 22V-162 and read battery health; report a P0BBD code while the battery warranty lasts.

ESTIMATED REPAIR COST

Free under recall 22V-162 (2021)	**Free if covered** OFFICIAL [5] published independent-shop range
Cell module replacement: no published price	**No published price** reported range for the bill after a failure

PARTS FOR ID.4

- Ask your parts supplier for the OE part number for this VIN.

QUESTIONS TO ASK US

- Any battery or electrical warnings?
- Cell modules ever replaced?
- Range at full charge?

2 Loss of drive power from battery software, inverter or motor faults

Any mileage

Severity: High: overheating, stalls, limp mode or a big bill · 56 mentions in counted NHTSA complaints

COMPUTED FROM NHTSA DATA

Reports cover a wide mileage span (2021 (software recall, front power electronics bulletin), 2023 (motor seal recall)), so mileage doesn't say much here. Range: 2021 (software recall, front power electronics bulletin), 2023 (motor seal recall)

OFFICIAL [7][8]

WHAT FAILS OFFICIAL [7][8]

On 2021 cars the battery management module could restart or the pulse inverter switch off, which cuts drive power; VW updated the software. Some 2021 AWD cars show Error: Drive system from the front motor power electronics. On some 2023 cars a motor sealing ring was fitted wrong, so coolant can leak into the high-voltage system; VW replaces the motor if needed.

SYMPTOMS

- Error: Drive system. Please service vehicle
- Electrical system not working correctly
- Sudden loss of power while driving

IF IT'S LEFT TOO LONG

A loss of drive power in traffic is a crash risk.

IS IT WORTH DOING EARLY? OUR ESTIMATE

Check the VIN for 23V-040 and 22V-830; scan the drive electronics for stored codes.

ESTIMATED REPAIR COST

Free under recall 23V-040 / 22V-830	**Free if covered** OFFICIAL [7] published independent-shop range
Motor or power electronics replacement: no published price	**No published price** reported range for the bill after a failure

PARTS FOR ID.4

- Ask your parts supplier for the OE part number for this VIN.

QUESTIONS TO ASK US

- Any loss-of-power or drive-system messages?
- Recalls done?

---

3 12V battery and 12V supply faults

Any mileage

Severity: High: overheating, stalls, limp mode or a big bill · 35 mentions in counted NHTSA complaints

COMPUTED FROM NHTSA DATA

Reports cover a wide mileage span (All years; 2023 RWD (cable recall), 2024 (on-board charger recall)), so mileage doesn't say much here. Range: All years; 2023 RWD (cable recall), 2024 (on-board charger recall) OFFICIAL [9][10]

WHAT FAILS OFFICIAL [9][10]

The 12V battery powers the car's computers and is charged by the on-board charger/DC-DC unit (OCDC). On some 2024 cars the OCDC can fail and stop charging the 12V battery, which can end in a loss of drive power; VW replaces it. On some 2023 rear-drive cars the 12V charging cable can rub on the steering shaft and short. VW has a set test procedure before a drained 12V battery is replaced.

SYMPTOMS

- 12V power supply. Safely park the vehicle! message
- Car will not wake or unlock
- Many warnings at once, then loss of power

IF IT'S LEFT TOO LONG

ESTIMATED REPAIR COST

12V battery replacement (YourMechanic average)	**Our price is in the plan above** ask us for a written quote
OCDC replacement outside the recall: no published price	**No published price** reported range for the bill after a failure

Where the numbers come from: Early: a new 12V battery (mobile-mechanic average).

PARTS FOR ID.4

A 12V supply failure can shut the car down while driving or strand it.

IS IT WORTH DOING EARLY? OUR ESTIMATE

Test the 12V battery at each service and check the VIN for 25V-125 and 22V-956.

QUESTIONS TO ASK US

- How old is the 12V battery?
- Any 12V warnings or dead-battery events?

- Ask your parts supplier for the OE part number for this VIN.

---

4 Charging socket lock actuator and release cable

Any mileage

Severity: Medium: leaks and wear · 30 mentions in counted NHTSA complaints

COMPUTED FROM NHTSA DATA

Reports cover a wide mileage span (2021–2023 ID.4), so mileage doesn't say much here. Range: 2021–2023 ID.4

OFFICIAL [12]

WHAT FAILS OFFICIAL [12]

The charging socket has a locking actuator that holds the plug and an emergency release cable. VW now sells both parts on their own, so a failure no longer needs a whole new charging socket.

SYMPTOMS

- Charge cable will not lock or will not release
- Charging will not start

IF IT'S LEFT TOO LONG

The car cannot be charged, or the cable is stuck in the port.

IS IT WORTH DOING EARLY? OUR ESTIMATE

Ask for the actuator or release cable alone, not a complete charging socket.

ESTIMATED REPAIR COST

No published price	**Our price is in the plan above** ask us for a written quote
No published price	**No published price** reported range for the bill after a failure

PARTS FOR ID.4

- Ask your parts supplier for the OE part number for this VIN.

QUESTIONS TO ASK US

- Any plug lock or release problems?

5 · ALSO REPORTED, NOT RANKED

Other themes in ID.4 EV owner complaints

Every NHTSA complaint theme with 10 or more counted reports is either a weak point above or explained here.

THEME	COMPLAINTS	WHY IT ISN'T A WEAK POINT
Screens / rear camera	303	Display and rearview-camera software recalls (22V-764, 22V-823, 23V-436, 24V-344, 24V-875); not part of the electric drive.
Brakes / driver assistance	297	Brake and driver-assistance complaints; not part of the electric drive.
Door handles	218	Door-handle complaints and recalls 23V-312 / 24V-651 (water in the handle circuit board can let a door open); a body item, not part of the electric drive.

How this report is built

Inputs. VIN, model year, model, mileage and build month (if entered). Model and drivetrain are checked with NHTSA's vPIC decoder.

Mileage positions. Below: more than 10,000 miles before the reported range. Approaching: within 10,000. Inside: in the range, or past the start of an open-ended range. Past: beyond the top of the range. These bands are our rules, not an industry standard.

The plan. Critical items inside or past their range go first; high-severity items follow, and jobs that share labor are bundled. At most three jobs land in “Recommended now”. Leaks that are cheap to watch are fixed on condition; inspections are asked for at each service.

Costs. Published independent-shop ranges from shop quotes, retailer prices and owner reports. Shop prices come from the issuing shop. The worst-case cost of every item failing is not shown: it isn't an expected cost.

Labels. `OFFICIAL` NHTSA/Volkswagen documents · `SHOP/RETAILER` parts prices and shop articles · `FORUM/BLOG` owner forums and blogs · `COMPUTED FROM NHTSA DATA` our analysis of NHTSA data · `OUR ESTIMATE` ours.

NHTSA complaint data. Pulled Oct 27, 2026 from NHTSA's complaints API for All complaints for the ID.4 in the years shown: 1,023 complaints. We pooled every complaint NHTSA files under these model names and years; where a nameplate also came with another engine or powertrain, a few complaints may be about it. Themes are keyword matches on the complaint text. `COMPUTED FROM NHTSA DATA`

THEME	COMPLAINTS	IN THIS REPORT
Screens / rear camera	303	Also reported
Brakes / driver assistance	297	Also reported
Door handles	218	Also reported
Battery fire / battery recall	56	Other years or versions
Loss of power / drive system error	56	Item 2
12V battery / 12V supply	35	Item 3
Battery range / cell faults	30	Item 1
Charging	30	Item 4

Limits: complaints are self-reported and not adjusted for cars sold; keyword matching over- and under-counts; owners rarely file safety complaints about slow-building faults such as coolant seeps or noises, so those look rarer than they are.

SOURCES

1. NHTSA owner complaints for 2021–2025 Volkswagen ID.4, pulled Oct 27, 2026 (ODI numbers in the cost notes) `OFFICIAL`
https://www.nhtsa.gov/report-a-safety-problem#complaints

2. NHTSA recall records: 25V-836 and 26V-028 (2023–2024: cell modules with misaligned electrodes), 26V-030 (2023–2025: battery may overheat) and 26V-630 (2023–2026: battery may fail and catch fire; remedy under development), checked Oct 27, 2026 `OFFICIAL`
https://www.nhtsa.gov/recalls?nhtsaId=26V630000

3. Volkswagen TSB 93-25-05: High-voltage battery pre-warning excessive temperature, DTC B203400: Ready mode cannot be established and a Risk of fire message shows, 2021–2026 ID.4 (2025-12-16), filed with NHTSA `OFFICIAL`
https://static.nhtsa.gov/odi/tsbs/2026/MC-11027262-0001.pdf

4. Recharged: Volkswagen ID.4 battery replacement cost (VW battery warranty 8 years/100,000 miles; via search extract Oct 28, 2026) `FORUM/BLOG`
https://web.archive.org/web/20260617225843/https://recharged.com/articles/volkswagen-id4-battery-replacement-cost/

5. NHTSA recall records: 22V-162 (2021: bad soldering of the flexible circuit inside the battery, stall risk; cell modules replaced), checked Oct 27, 2026 `OFFICIAL`
https://www.nhtsa.gov/recalls?nhtsaId=22V162000

6. Volkswagen TSB 93-24-01: Yellow electrical system error with DTC P0BBD00: some cells self-discharge too fast from a production fault and cut range; replace the cell modules named by the test plan, 2021–2023 ID.4 (2026-09-30), filed with NHTSA OFFICIAL
https://static.nhtsa.gov/odi/tsbs/2026/MC-11038152-0001.pdf

7. NHTSA recall records: 23V-040 (2021: battery management module may restart or the pulse inverter may switch off, loss of drive power) and 22V-830 (2023: motor sealing ring, coolant can leak into the high-voltage system), checked Oct 27, 2026 OFFICIAL
https://www.nhtsa.gov/recalls?nhtsaId=23V040000

8. Volkswagen TSB 93-23-05: Front electric drive power electronics DTCs P30A000, P18F100, P0A1B00: Error: Drive system message, 2021 ID.4 AWD (2023-09-28), filed with NHTSA OFFICIAL
https://static.nhtsa.gov/odi/tsbs/2023/MC-10243300-0001.pdf

9. NHTSA recall records: 25V-125 (2024: on-board charger/DC-DC converter (OCDC) may stop charging the 12V battery, loss of drive power) and 22V-956 (2023 RWD: 12V charging cable can chafe on the steering shaft and short), checked Oct 27, 2026 OFFICIAL
https://www.nhtsa.gov/recalls?nhtsaId=25V125000

10. Volkswagen TSB 27-24-01: 12V battery is drained: battery check procedure and documents required before replacement, 2024–2026 models (2026-01-15), filed with NHTSA OFFICIAL
https://static.nhtsa.gov/odi/tsbs/2026/MC-11028489-0001.pdf

11. YourMechanic: Volkswagen ID.4 battery replacement estimate (12V; via search extract Oct 28, 2026) SHOP/RETAILER
https://www.yourmechanic.com/estimates/volkswagen/id-4/battery-replacement

12. Volkswagen TSB 93-23-03: Charging socket locking actuator and emergency release cable now sold separately from the charging socket, 2021–2023 ID.4 (2023-08-22), filed with NHTSA OFFICIAL
https://static.nhtsa.gov/odi/tsbs/2023/MC-10241184-0001.pdf

This report contains no affiliate links; retailer prices are quoted as price sources only. Found an error? Email hello@repairahead.com.

PLEASE READ

Important

Based on public records and published repair costs. Not a diagnosis or a guarantee. Your technician's inspection decides what your car needs. Confirm recalls with a dealer using your VIN.

Informational only. This report is not a mechanical inspection, a diagnosis, or professional, legal or financial advice. It was issued by Springfield Euro Auto using RepairAhead data; the inspection findings and prices are the shop's.

Reported ranges and estimates, not predictions

Failure mileages are reported ranges compiled from public owner complaints, manufacturer bulletins, recalls and repair-shop reports. Costs are estimates. Parts can fail earlier, later or not at all, and other problems can occur. Statistics from owner complaints describe past reports to NHTSA; NHTSA has not reviewed or endorsed this analysis.

Safety issues go to a dealer

If you notice overheating, a burning smell, smoke, a brake-assist problem, stalling or loss of power, pull over when it's safe and contact a Volkswagen dealer or qualified shop. Safety recall repairs are free at Volkswagen dealers. Confirm recalls for this VIN at nhtsa.gov/recalls.

No warranty

Provided “as is”, without warranties of any kind, under the Terms of Use at repairahead.com/terms.

Trademarks and independence

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Based on public records and published repair costs. Not a diagnosis or a guarantee. Your technician's inspection decides what your car needs. Confirm recalls with a dealer using your VIN.