EUROCUSTOMAUTOS

INSTALLATION & CODING MANUAL

SAGITAR IQ.LIGHT TAIL LIGHTS MK7 JETTA

Fitting a EuroCustomAutos Sagitar IQ.Light four-piece set to a North American VW Jetta MK7, 2019–2023.

Written by the EuroCustomAutos workshop — Mississauga, ON · Last updated August 2026 · eurocustomautos.com/guide-sagitar-iq-tail-lights.html

Read this first. This manual is specific to a **EuroCustomAutos Sagitar IQ.Light set fitted to a North American VW Jetta MK7, 2019 to 2023**. The harness is made for those cars — other tail lights use different harnesses and different coding, so don't mix their instructions with this one. **2024 and newer Jettas are not compatible:** VW locked diagnostics behind SFD2, and without coding the lights physically fit but cannot be enabled. Turn the ignition off before you touch the rear wiring, and don't drive with lighting faults active. Provided for information only — you work on your own vehicle at your own risk.

FITS	North American VW Jetta MK7, 2019–2023, including S, SE, SEL, Sport and GLI
TIME	About 2 hours — most of it trim, plus 20–30 minutes of coding
DIFFICULTY	Intermediate — no cutting or repinning, but every function has to be coded
CODING	Required. VCDS or OBDeleven, full channel list in Steps 4 and 5.
TOOLS	VCDS or OBDeleven, trim removal tools, and basic automotive electrical knowledge
PARTS	Just our Sagitar IQ.Light set — all four pieces, both harnesses and the 3-pin connectors are included. Nothing to source, nothing to splice.

WHY THIS ONE IS DIFFERENT

The Sagitar is Volkswagen's Chinese-market Jetta, and the facelift got the **IQ.Light** treatment North America never received — an X-shaped illuminated signature, amber sequential signals and a startup animation. This is that exact conversion, and it's a **four-piece** job: the two outer tail lights plus two inner trunk-lid pieces that replace the blank filler panels your Jetta came with. That second pair is what turns the rear into one wide connected signature instead of two lamps at either end.

Mechanically it's one of the easier retrofits we do. The harness is **plug-and-play** — no de-pinning, no repinning, no cut wires. What the job really asks of you is the **coding**. Every rear lamp position has to be told what it now is, what load type it draws, and which fault byte belongs to it, and then the sweep has to be switched on in six separate parameters. Get the coding right and every function works; get one channel wrong and you'll be chasing a bulb-out warning or a signal that flashes on both sides at once. The tables in Steps 4 and 5 are the complete list.

TOOLS & MATERIALS REQUIRED

- **VCDS or OBDeleven diagnostic tool** — not optional on this install. Every value in Steps 4 and 5 goes in with one of these.
- **Trim removal tools** — for the trunk panels that cover the tail light harnesses
- **Basic automotive electrical knowledge** — you'll be pinning terminals into a connector by wire colour
- Electrical or cloth tape for tidying the loom on reassembly

WHAT'S IN THE BOX

- **2 × outer tail lights** — these replace your factory lamps in the quarter panels
- **2 × inner trunk-lid pieces** — these go where your blank filler panels are now, and carry the white LED reverse lights
- **Inner and outer adapter harnesses** — supplied de-pinned and wrapped in protective tape so they route cleanly
- **3-pin connectors** — one per side, for joining the inner and outer harness wires by colour

Count everything against this list before you start. A missing connector is much easier to deal with before the trunk is in pieces.

INSTALLATION PROCEDURE

STEP 1 — PREPARATION

1. Turn the vehicle ignition **off**.
2. Open the trunk and carefully remove the interior panels to access the tail light harnesses. Work the clips with a trim tool rather than levering on the panel edge.

STEP 2 — ROUTING AND CONNECTING THE HARNESS

Both the inner and outer harness wires come **de-pinned and wrapped in protective tape**. That's deliberate: the taped bundle slides through the grommets far more easily than loose terminals, and the tape keeps the pins from catching and bending on the way through.

1. Route the **outer harness** wires carefully through the existing rubber grommets.
2. **Do not remove the tape until the harness is fully routed.** This is the step people rush, and a bent terminal means a lamp that reads as failed later.
3. Once routed, remove the protective tape from both the inner and outer harness ends.
4. Colour match the wires from the inner and outer harnesses using the supplied **3-pin** connector, pushing each terminal into the slot that matches its wire colour. Push until it clicks.
5. Check sides before you go any further: **left harness to the left tail light, right harness to the right tail light.**

> **Everything gets done twice.** Unless a step says otherwise, do it on the driver's side and then the passenger's side. Crossed sides are the single most common cause of both signals flashing together after coding.

STEP 3 — FINAL ASSEMBLY

1. Confirm all connectors and pins are properly seated. A terminal that is 90% home will work on the bench and fail over a speed bump.
2. Reinstall all removed trunk panels and interior trim, checking that no harness is pinched under a clip or trapped where the trunk lid closes.

Leave the coding until the car is back together — you'll want to open and close the trunk and cycle the lights while testing, and it's easier with the panels in.

STEP 4 — CODING PROCEDURE (VCDS OR OBDELEVEN)

Each rear lamp position in the car is a **Leuchte** channel, and each one needs four things set: the **load type** it should expect (*Lasttyp*), the **bit position** it reports failures on (*Lampendefektbitposition*), the **middle DTC byte** (*Fehlerort mittleres Byte DTC-DFCC*), and the **light function** it performs (*Lichtfunktion A*, and on the running lights, *B* as well). Here's what each channel becomes:

CHANNEL	BECOMES
Leuchte 20 / 21	Brake light, left / right
Leuchte 17 / 16	Turn signal, left / right
Leuchte 23 / 24	Running (tail and park) light, left / right
Leuchte 28 / 27	Dynamic power feed, left / right — the permanent 12 V (Klemme 30G) that drives the animations
Leuchte 29	Reverse light
Leuchte 18 / 19	**2019 cars only** — old left / right turn channels, switched off. 2020 and newer are already off by default.

BRAKE LIGHTS AND TURN SIGNALS

#	PROPERTY	L20 · BRAKE L	L21 · BRAKE R	L17 · TURN L	L16 · TURN R
1	**Lasttyp**	34 – LED Blinkleuchten	34 – LED Blinkleuchten	38 – LED Blinkleuchten	38 – LED Blinkleuchten
2	**Lampendefektbitposition**	09	25	8	24
3	**Fehlerort mittleres Byte DTC-DFCC**	43	45	22	24
4	**Lichtfunktion A**	Brake lamp	Brake lamp	Blinken links Hellphase	Blinken rechts Hellphase
5	**Lichtfunktion B**	not active	not active	not active	not active
6	**Dimmwert AB**	127	127	127	127
7	**Lichtansteuerung HD AB**	Always	Always	always	always
8	**Lichtfunktion C**	not active	not active	not active	not active
9	**Lichtfunktion D**	not active	not active	not active	not active
10	**Dimmwert CD**	0	0	0	0
11	**Dimming Direction CD**	maximize	maximize	maximize	maximize
12	**Lichtfunktion E**	not active	not active	not active	not active

#	PROPERTY	L20 · BRAKE L	L21 · BRAKE R	L17 · TURN L	L16 · TURN R
13	**Lichtfunktion F**	not active	not active	not active	not active
14	**Dimmwert EF**	0	0	0	0
15	**Dimming Direction EF**	maximize	maximize	maximize	maximize
16	**Lichtfunktion G**	not active	not active	not active	not active
17	**Lichtfunktion H**	not active	not active	not active	not active
18	**Dimmwert GH**	0	0	0	0
19	**Dimming Direction GH**	maximize	maximize	maximize	maximize

Note the brake and turn channels use different Lasttyp numbers — **34** on the brake lamps, **38** on the turn signals — even though both read as "LED Blinkleuchten" in the tool.

RUNNING LIGHTS, DYNAMIC POWER AND REVERSE

#	PROPERTY	L23 · RUNNING L	L24 · RUNNING R	L28 · DYN POWER L	L27 · DYN POWER R	L29 · REVERSE
1	**Lasttyp**	37 – allgemeine LED bis 12W	37 – allgemeine LED bis 12W	32 – Allgemeine_Gluehlampe12W	32 – Allgemeine_Gluehlampe12W	32 – allgemeine LED bis 12W
2	**Lampendefektbitposition**	10	26	0	0	1B
3	**Fehlerort mittleres Byte DTC-DFCC**	41	42	1	1	32
4	**Lichtfunktion A**	Standlicht allgemein (schlusslicht; Positionslicht, begrenzungslicht)	Standlicht allgemein (schlusslicht; Positionslicht, begrenzungslicht)	Klemme 30G	Klemme 30G	Rueckfahrlicht
5	**Lichtfunktion B**	Parklicht links (beidseitiges parklicht aktiviert li & re)	Parklicht rechts	not active	not active	not active
6	**Dimmwert AB**	127	127	127	127	127
7	**Lichtansteuerung HD AB**	always	always	always	always	always
8	**Lichtfunktion C**	not active	not active	not active	not active	not active
9	**Lichtfunktion D**	not active	not active	not active	not active	not active
10	**Dimmwert CD**	0	0	0	0	0
11	**Dimming Direction CD**	maximize	maximize	maximize	maximize	maximize
12	**Lichtfunktion E**	not active	not active	not active	not active	not active
13	**Lichtfunktion F**	not active	not active	not active	not active	not active
14	**Dimmwert EF**	0	0	0	0	0
15	**Dimming Direction EF**	maximize	maximize	maximize	maximize	maximize
16	**Lichtfunktion G**	not active	not active	not active	not active	not active
17	**Lichtfunktion H**	not active	not active	not active	not active	not active
18	**Dimmwert GH**	0	0	0	0	0
19	**Dimming Direction GH**	maximize	maximize	maximize	maximize	maximize

Leuchte 28 and 27 aren't lights. They're the permanent 12 V feed (Klemme 30G) the lights need to run their animations, which is why they're set as a plain 12 W bulb load rather than an LED. Leave them at Lampendefektbitposition 0 and DTC byte 1 so the car never expects a lamp there. On Leuchte 29 the Lasttyp entry your tool offers may read slightly differently between software versions — pick the general-LED-to-12 W entry.

2019 CARS ONLY — SWITCH OFF LEUCHTE 18 AND 19

On a **2019** Jetta the old left and right turn channels are still live and will fight the new ones. Set both to inactive. On **2020 and newer** cars these channels are already off by default — check them, but you shouldn't need to change anything.

#	PROPERTY	L18 · LEFT TURN (2019 ONLY)	L19 · RIGHT TURN (2019 ONLY)
1	**Lasttyp**	not active	not active
2	**Lampendefektbitposition**	0	0
3	**Fehlerort mittleres Byte DTC-DFCC**	0	0
4	**Lichtfunktion A**	not active	not active
5	**Lichtfunktion B**	not active	not active
6	**Dimmwert AB**	0	0
7	**Lichtansteuerung HD AB**	always	always
8	**Lichtfunktion C**	not active	not active
9	**Lichtfunktion D**	not active	not active
10	**Dimmwert CD**	0	0
11	**Dimming Direction CD**	maximize	maximize
12	**Lichtfunktion E**	not active	not active
13	**Lichtfunktion F**	not active	not active
14	**Dimmwert EF**	0	0
15	**Dimming Direction EF**	maximize	maximize
16	**Lichtfunktion G**	not active	not active
17	**Lichtfunktion H**	not active	not active
18	**Dimmwert GH**	0	0
19	**Dimming Direction GH**	maximize	maximize

STEP 5 — TURN ON THE SWEEPING SIGNALS

The sweep is enabled in **six separate parameters**, each covering a different trigger. **Active** means that trigger sweeps; **not active** means it just blinks. Set all six for the full effect, or pick and choose — plenty of people run the turn signals sweeping and leave the lock and unlock animations off.

PARAMETER	TRIGGER	VALUE
Außenlicht_Blinker-Richtungs_blinken_links	Turn signal, left	Active
Außenlicht_Blinker-Richtungs_blinken_rechts	Turn signal, right	Active
Außenlicht_Blinker-Warnblinken_Zuendung_AUS	Hazards, ignition off	Active
Außenlicht_Blinker-Warnblinken_Zuendung_EIN	Hazards, ignition on	Active
Außenlicht_Blinker-ZV_Blinken_auf	Unlock	Active
Außenlicht_Blinker-ZV_Blinken_zu	Lock	Active

> **Searching for these in the tool.** When you search *Außenlicht* in VCDS or OBDeleven, note that **ß** is a German character equal to **"ss"**, not a B. Type *Aussenlicht* or search on *Blinker* if the search comes back empty.

FINAL CHECKS

- **Clear the fault codes** with your diagnostic tool once the coding is done. Codes stored during the install will otherwise sit there and light the cluster.
- Then test, thoroughly, one at a time:
  - Brake lights
  - Running lights
  - Turn signals, both sides
  - Reverse lights
  - Sweeping animation, on each trigger you activated
- Re-scan for faults after testing. A clean scan with everything working is the point at which the job is finished.

TIPS & COMMON PROBLEMS

Almost everything that goes wrong on this install is either a connector or one coding value — the lights themselves are rarely at fault.

- **Both turn signals flash at the same time.** The classic one, and it's always the left/right coding. Check that **Leuchte 17** is set to *Blinken links Hellphase* and **Leuchte 16** to *Blinken rechts Hellphase* — not both to the same value. Then confirm the left harness actually went to the left light.
- **Signals blink but never sweep.** The six Außenlicht parameters in Step 5 haven't been set to Active. If the search comes up empty, remember the **ß** is "ss".
- **Bulb-out warning in the cluster.** A Lasttyp that doesn't match what's actually fitted, or a Lampendefektbitposition left on the factory value. Work back through the Step 4 tables channel by channel — the bit position and DTC byte are different for every lamp and are easy to transpose between left and right.
- **A function is dead on one side only.** Go back to the **3-pin** connector on that side. A terminal that isn't fully clicked in is the usual cause, and it often passes a quick tug test.

- **Turn signals behave oddly on a 2019 car.** Leuchte 18 and 19 are still active and competing with 16 and 17. Switch them off using the 2019-only table.
- **No animation at all, everything else fine.** Check Leuchte 27 and 28 — that's the Klemme 30G power feed. Without it the lights work but never animate.
- **Nothing codes at all on a 2024+ car.** That's SFD2. It isn't a fault, and it isn't something a different tool solves yet — these lights can't be enabled on 2024 and newer Jettas.
- **Condensation inside a light.** A little clears on its own; standing water means a bad seal and the light should be swapped.

> **Rather not DIY it?** We install and code Sagitar IQ.Light sets in-house in Mississauga — local install is $140, and coding is included when we fit the lights. Professional installation or expert assistance is recommended if you are uncertain at any point. Get in touch at **eurocustomautos.com/contact.html** for a quote. We ship across Canada and the US.

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