# MK6.5 GLI (ALPTECH CLEAR ) Taillights Hardwire

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**Introduction**

This harness converts the factory MK6.5 GLI LED taillights to a 5-pin configuration, allowing you to use Alptechs Clear taillights. This is **not** a plug-and-play harness; it requires wiring modifications. If you're uncomfortable with wiring or splicing, please consult a knowledgeable professional.

**Important:** North American GLI factory LED taillights use a PWM signal combining brake and turn signals on a single circuit, which cannot currently be altered directly. The provided solution involves splicing into the third brake light and front turn signals to achieve separate brake and signal outputs.

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**Installation Procedure**

**Step 1: Harness Connection**

• The harness connects the outer and inner taillight assemblies on each side.

• The left outer and right outer taillights are pre-wired together and should be routed along the lower trunk trim panel, inside the vehicle.

• The inner taillights connect to the outer taillights using a red wire one one side any yellow on the other, with a two-pin connector. This setup is pre-terminated to simplify routing and installation.

• *Note: Inner connections are interchangeable.*

• Route the inner taillight harness along the trunk hinge, and ensure you leave enough slack to accommodate trunk movement when opening and closing.

• Plug the included resistors into the 4-pin connector on each outer taillight. These resistors are required for proper light operation and error-free functionality.

**Step 2: Wire Routing**

• The harness is designed to follow the driver's side of the vehicle.

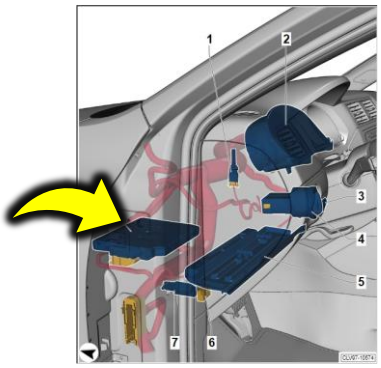
• After making the taillight connections, you'll have approximately 15 feet of wire extending from the harness, which must be routed forward to the Central Electronics Control Module (CECM), also referred to as the Body Control Module (BCM).

• Route this wire along the driver's side, as the CECM is located beneath the steering wheel.

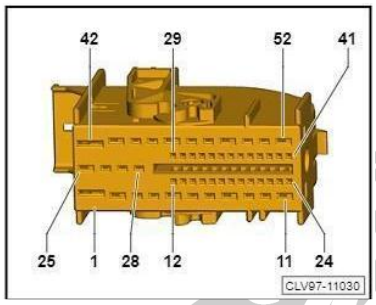
**Wire Labeling and CECM Pinout**

Connect each of the four loose wires ( RED YELLOW ORANGE) to their corresponding pin on the CECM connectors according to the table below:

**CECM Location**



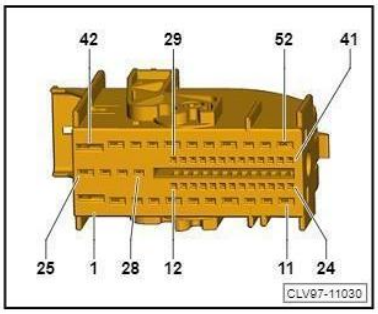

-T52a-
BLACK PLUG




**Connector T52a (52-pin black connector)**

| Pin Number | Function | Factory Wire Color | Harness Wire Color |
|---|---|---|---|
| 45 | High-Level Brake Light | Red/Black | Orange |
| 10 | Left Turn Signal (front signal) | Black/White | Red |

-T52c-
BROWN PLUG




**Connector T52c (52-pin brown connector)**

| Pin Number | Function | Factory Wire Color | Harness Wire Color |
|---|---|---|---|
| 50 | Right Turn Signal (front signal) | Black/Green | Yellow |

**Recommended Installation Method**

• Before making any electrical connections, disconnect the vehicle battery at the battery terminal to avoid short circuits or potential damage. This is especially important as the harness taps into the Central Electronics Control Module (CECM) to provide power to the taillights.
• The harness comes supplied with wire taps for convenience; however, soldering is the recommended method for the most secure and reliable connection.
• If you're not experienced with soldering, the provided wire taps can be used as an alternative.
• For those soldering connections:
  o Cut, splice, and solder all connections securely.
  o Protect each soldered connection using heat-shrink tubing or quality electrical tape for safety and long-term durability.

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**Note on Coding Requirements:**

**For V1 harnesses (produced before May 2025), coding is required to disable PWM for the rear lighting. This ensures proper operation of the sequential turn signals while the vehicle is running. Without this coding, you may notice that only the inner and outer segments function, and the sequential effect only works when the vehicle is off.**

**V2 harnesses (produced May 2025 and onward) do not require any coding. Simply install the harness as directed for full functionality.**

**Coding Required – Disable PWM for Rear Lighting**

This step is required to ensure proper operation of the sequential turn signals. Without this coding, the lights will not function correctly when the vehicle is running — you may see only the inner or outer segment working, and the sequential effect will only operate with the vehicle off.

**Final Steps:**

1. Reconnect the vehicle battery.
2. Perform the required coding using VCDS or OBDeleven:
    - Disable **PWM** for the tail light, brake light, and turn signal channels by unchecking **Byte 19, Bits 1, 2, and 3** in the Central Electronics module (Address 09). (check coding chart below for specific details)

**VCDS vs. OBDeleven – Coding Instructions**

| | VCDS | OBDeleven |
|---|---|---|
| **Module** | 09 – Central Electronics | 09 – Central Electronics |
| **Access Method** | Select > [09 - Central Electronics] > [Coding - 07] > Long Coding Helper | Control Units > 09 – Central Electronics > Long Coding |
| **Byte** | Byte 19 | Byte 19 |
| **Bits to Uncheck** | - Bit 1: Tail Lights via PWM<br>- Bit 2: Brake Lights via PWM<br>- Bit 3: Turn Signals via PWM | - Bit 1: Tail Lights via PWM<br>- Bit 2: Brake Lights via PWM<br>- Bit 3: Turn Signals via PWM |
| **Steps** | 1. Go to Byte 19 in Long Coding Helper<br>2. Uncheck bits 1, 2, and 3<br>3. Exit and click "Do It!" to save | 1. Tap Byte 19 in Long Coding<br>2. Uncheck bits 1, 2, and 3<br>3. Tap "Back" then "Do It" or "Apply" |
| **Purpose** | Disables PWM signal on tail/brake/turn signal lines to prevent flickering or malfunctions | Same — prevents PWM-related flickering or issues after installing your harness |

3. Test all taillight functions, ensuring:
    - Brake lights operate correctly.
    - Turn signals function fully (inner and outer) with proper sequential flow.
    - No errors or warning lights appear on the dashboard.

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**Important Notes:**

- Incorrect wiring could lead to electrical damage or vehicle malfunctions.
- Ensure all connections match precisely to avoid issues.
- If unsure about the wiring or installation process, seek professional help.

**MK6IX assumes no responsibility for damages or issues resulting from improper installation or wiring errors.**

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