

MK5 (PQ35) – 12-Pin Hardwire Headlight Harness Install Guide

Overview

This harness is designed for **MK5 PQ35 vehicles** originally equipped with **12-pin factory Xenon connectors**. Since Volkswagen never produced a matching 12-pin female counterpart, this harness requires **direct hardwiring to the factory wiring**. Once installed, it restores full OEM control for **low beam, high beam, DRL, and turn signal** operation through the **CECM (Central Electronics Control Module)**.

This harness is not plug-and-play. It requires cutting and splicing. Professional installation is recommended.

Harness Description

- Each side includes one **12-pin connector** with six pre-terminated wires.
 - A built-in **capacitor** stabilizes voltage on PWM (pulse-width-modulated) circuits to prevent flickering.
 - All wires are **color-coded** for easy identification.
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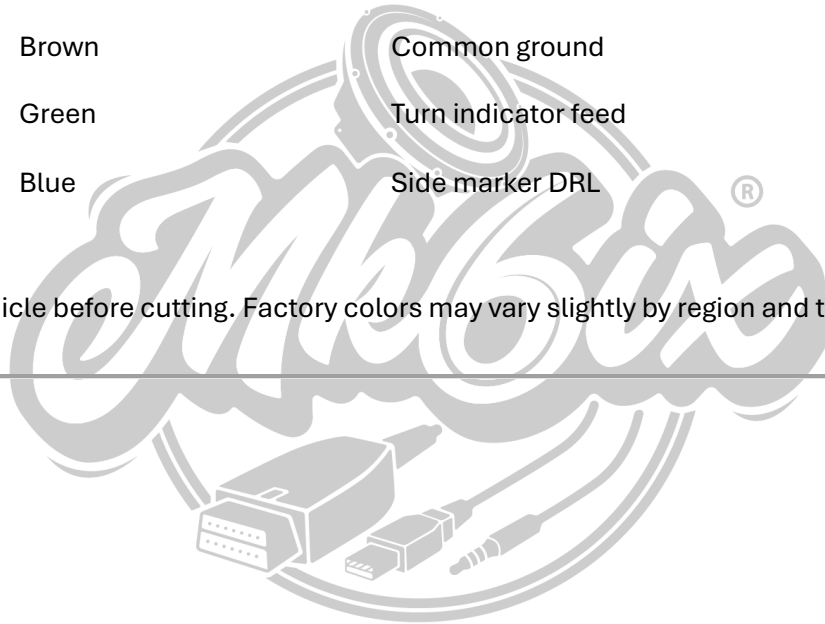
Preparation

1. Turn the ignition **OFF** and remove the key.
 2. Open the hood and keep it **open during installation**.
 3. Wait for the vehicle to **enter sleep mode** (listen for relays to click off).
 4. Disconnect the **negative battery terminal**.
 5. Remove the front bumper or access panels as needed to reach the factory headlight wiring.
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Wire Identification

Function	Wire Color (Harness Side)	Description
Low Beam	Yellow	Main headlight feed
High Beam	White	High-beam shutter
DRL / City Light	Gray	Daytime running or parking light
Ground	Brown	Common ground
Turn Signal	Green	Turn indicator feed
Side Marker / DRL	Blue	Side marker DRL

Always verify wire colors on the vehicle before cutting. Factory colors may vary slightly by region and trim level.



Installation Steps

Step 1 – Preparation

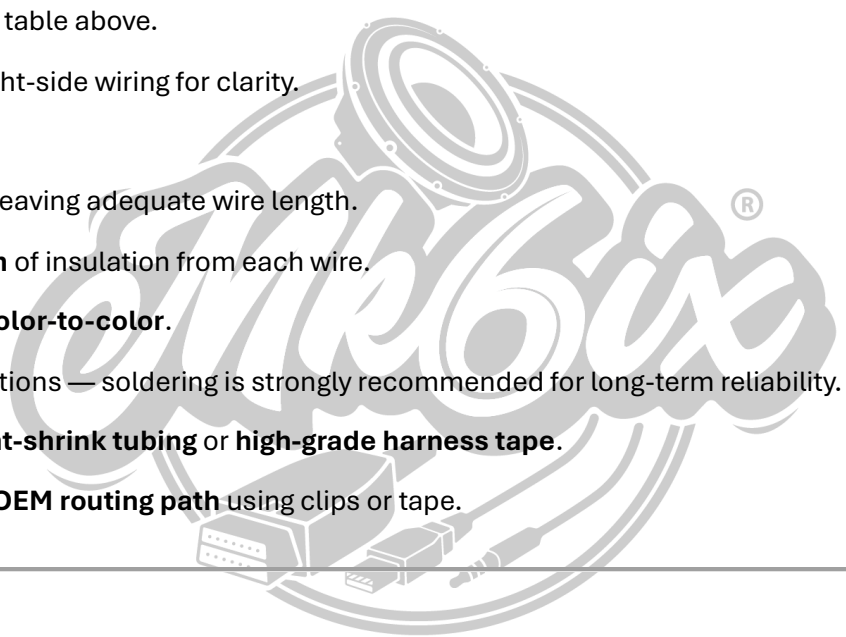
- Disconnect the **vehicle battery**.
- Remove all required panels to access the **factory headlight harness**.

Step 2 – Wire Identification

- Identify each wire using the table above.
- Clearly separate left and right-side wiring for clarity.

Step 3 – Connection

1. Cut the factory connector, leaving adequate wire length.
2. Strip approximately **5–7 mm** of insulation from each wire.
3. Match and connect wires **color-to-color**.
4. Crimp or solder the connections — soldering is strongly recommended for long-term reliability.
5. Insulate each joint with **heat-shrink tubing** or **high-grade harness tape**.
6. Secure all wiring along the **OEM routing path** using clips or tape.



Final Steps

1. Reconnect the **vehicle battery**.
 2. Turn ignition **ON** and test the following:
 - Low beam
 - High beam
 - Turn signal
 - DRL / parking light
 3. Confirm no flickering or fault codes appear.
 4. Once verified, reinstall all removed panels and confirm proper wire clearance.
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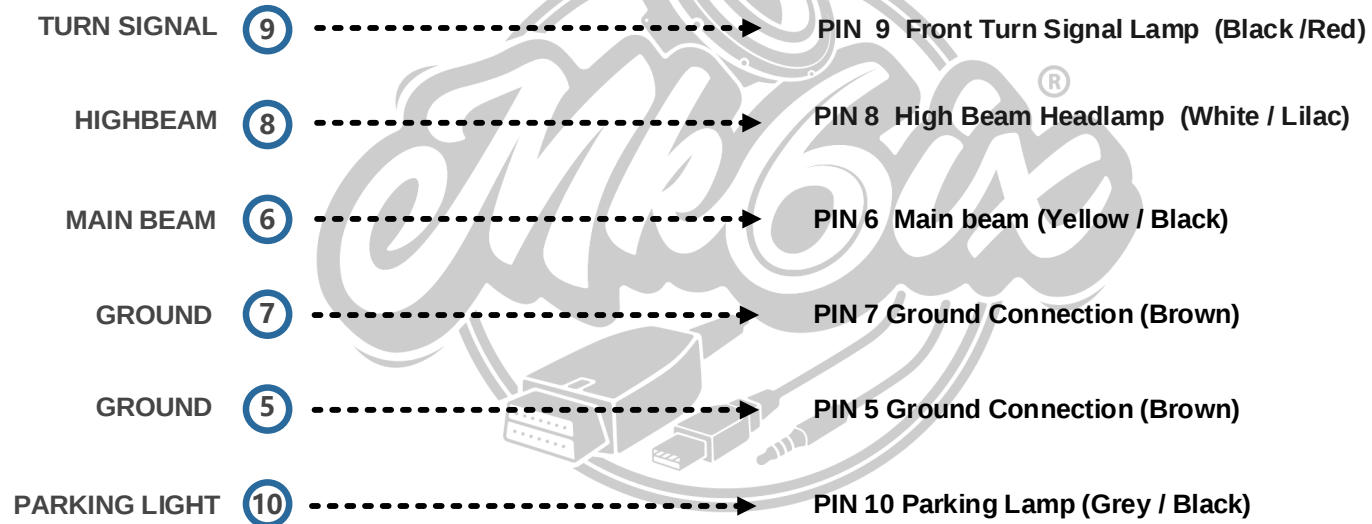
Troubleshooting

Issue	Possible Cause	Solution
Flickering or dim output	Poor ground or PWM interference	Verify ground and confirm capacitor placement
One light inoperative	Miswired or loose connection	Check color match and continuity
Both lights inoperative	Blown fuse or open circuit	Check headlight fuse and wiring integrity

RIGHT SIDE HEADLAMP

10 PIN HARNESS SIDE

FACTORY HARNESS SIDE



LEFT SIDE HEADLAMP

10 PIN HARNESS SIDE

FACTORY HARNESS SIDE

