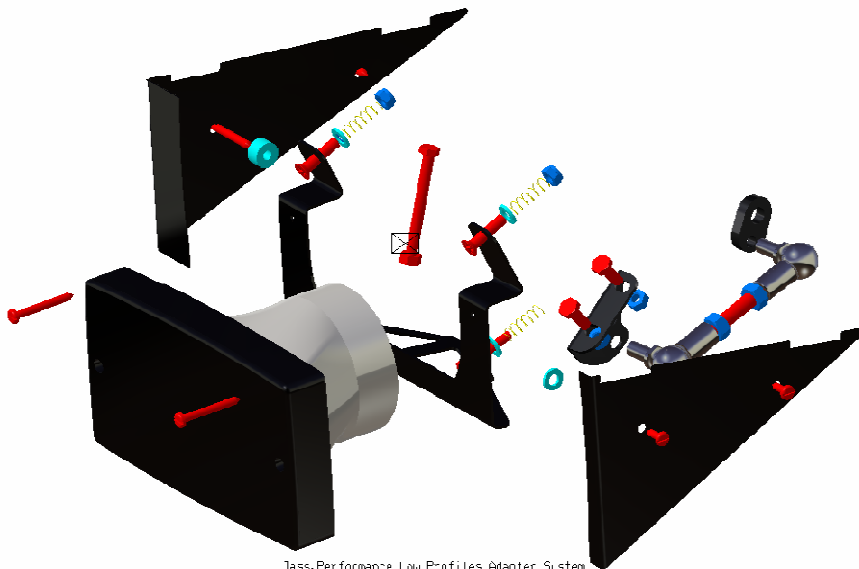


Jass.Performance Low Profiles Installation Manual



The Jass.Performance Low Profiles are featuring:

- Fully reversible upgrade of the stock headlight bodies.
- Premium branded E-signed, TÜV approved Hella Headlights with integrated low/high beam.
- Significantly improved light output to the US headlights.
- Extremely low profile design of only 9cm maximum lift.
- Optimized aerodynamics with headlights on, improved top speed.
- Significantly enhanced and sportier look
- Full manual adjustability – top, bottom, left right.
- Preserving the MOT/TÜV relevant el. height adjustability.



Jass.Performance Low Profiles Adapter System

Tools needed

You will need the following tools for the conversion:

- Philips screwdriver
- 10mm socket wrench
- 13mm socket wrench
- 14mm socket wrench
- 6mm drill bit
- Drilling machine
- Dremel or jig-saw, in case the headlights were sourced alternatively

Preparation

Both headlight bodies have to be removed in order to prepare them for Low Pro adapters. Removing the el. motors for the headlights and the adjustability is not necessary.

Electronics

1. The headlight motors are programmed for self-adjustment. To prevent self-rotation during the installation process we will remove their fuse in the left fuse box in the engine bay. Look for 30 Amper "RETRACTOR" fuse in the box and pull it out for the moment.
2. Remove the connector from both headlights.
3. Remove the connectors from the height adjustment motors on the headlight bodies. They are to be found on the outer side of each, in case available.

Hardware

1. Unscrew the 4 cross head screws on the plastic covers of each headlight and remove it.
2. Unscrew the 4 8mm screws on each lid and remove it.
3. Unscrew the 14mm screw of the el.motor. Remove it carefully with the washer.
4. Unscrew the two 10mm screws pivoting the headlight body. Collect the screws and nuts.
5. Lift the bodies carefully.
6. Remove the 3 plastic screws from the black rubbers in front of the headlight bodies and remove them.

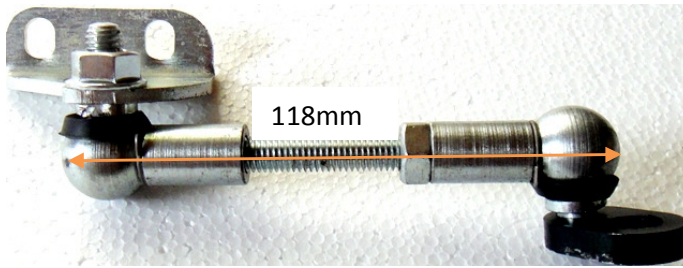
Now you need to remove the round headlights.

7. Fully remove the 3 screws, including the springs and washers.
8. Take the headlights off. Now is the moment to swap the H4 bulbs to the new Hella headlights.

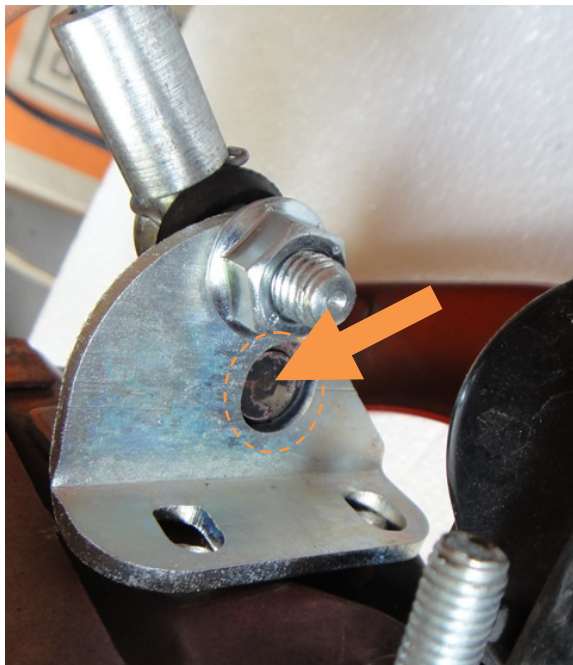
9. Remove the pushrod from the headlights bodies, by evenly pulling it out of the pivoting ball.
10. Remove the bracket on the inner top side, held by 3 cross head screws.

Installation

Pushrod & brackets

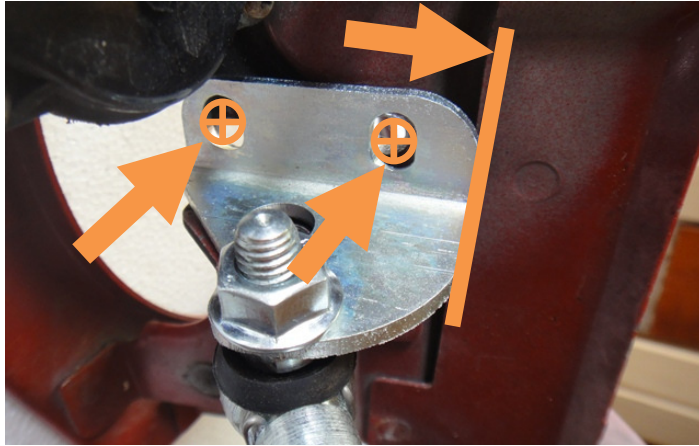


To have the Low Profiles installation fully reversible, we will preserve the original pivoting point and install new ones (picture above) on a new bracket (picture below).



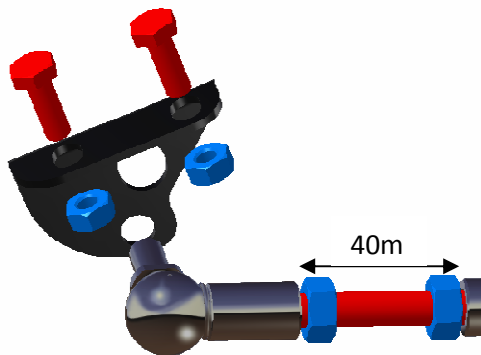
It is essential to position the bracket correctly. The brackets for the new pivoting point needs to be positioned as shown on the picture with the rivet centered in the middle of the bracket hole. The rivet is the rear part of the original ball joint head.

The front of the bracket aligns with the metal edge as shown on the next picture:



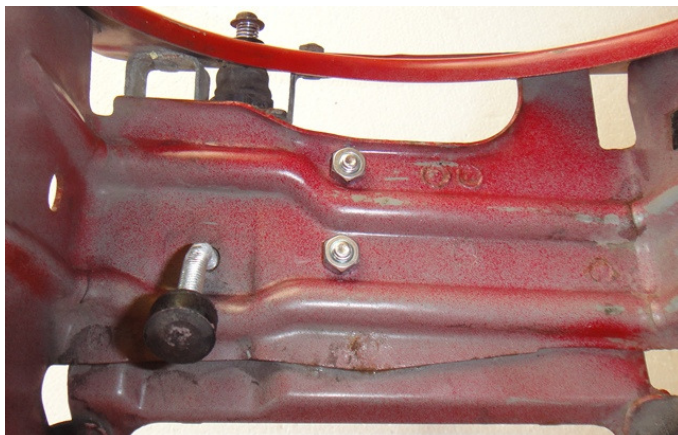
Mark the centers of the fixing points to the headlight body and carefully drill two 6mm holes. The bracket is secured with the provided 2x M6x12mm screws (10mm head). Repeat on the other headlight.

Having the brackets installed, you need to screw the pushrod with the two ball joints with the provided M8 securing screw to the bracket.



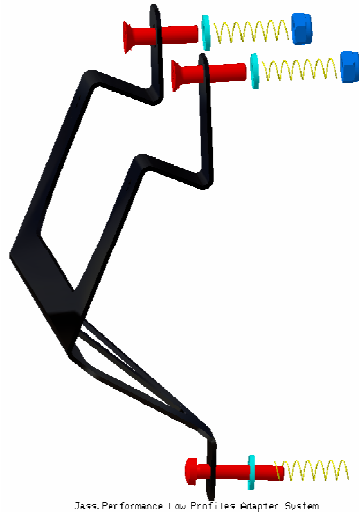
Jass.Performance Low Profiles Receiver System

The other side of the pushrod with the lever will be later adjusted and screwed to the headlight retracting motor shaft. The outer length of the pushrod assembled has to be 118mm, the distance between the inner of the ball joints 40mm. The bottom picture shows the installed position of the nuts.

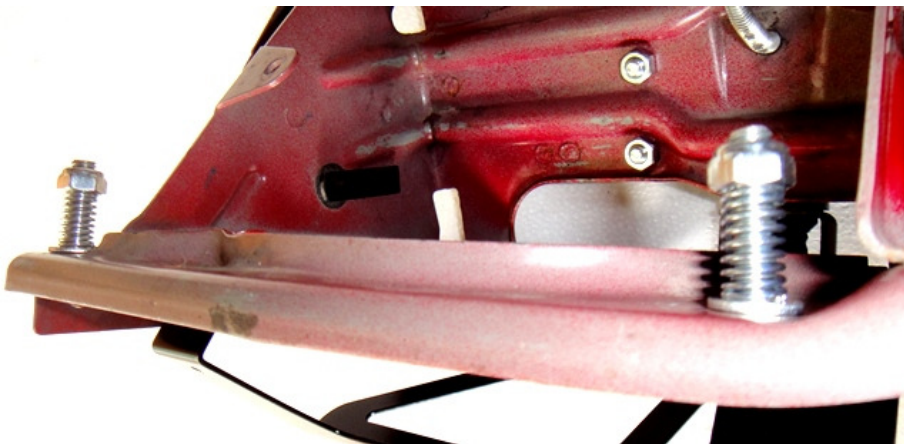


Installing the adapter frame

The adapter frame uses 3 points for the installation – at the bottom the el. motor or original mounting point. At the top the leftmost and rightmost holes. The installation sequence is as shown on the picture with the headlight body between the adapter and washer:



Other than the stock, the springs need to be fitted behind the headlight body. Secure the both top screws with the provided locknuts with plastic inserts. Do not fully tighten the springs, as they are allowing the pivoting of the headlight frame and the automatic height adjustment. 3-5mm thread left behind the nut (as shown) should be fine.

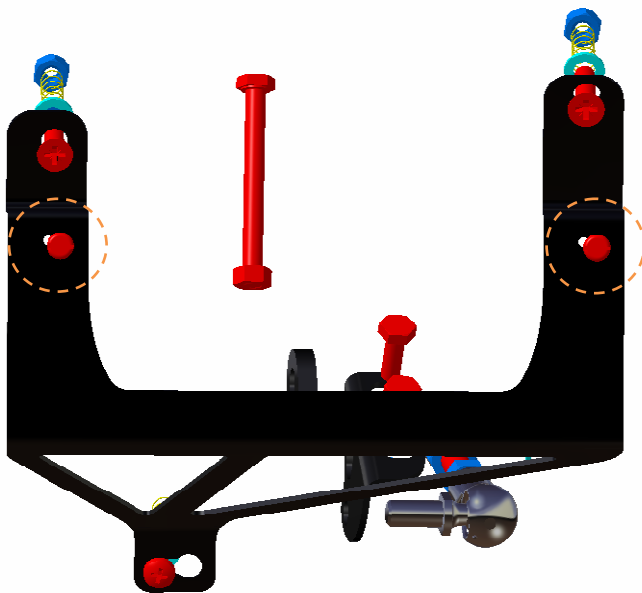


The adapter frame mounted below.



Installing the headlights

Having the adapter in place, the headlights can be installed. They are screwed on both sides with the provided self-taping screws.



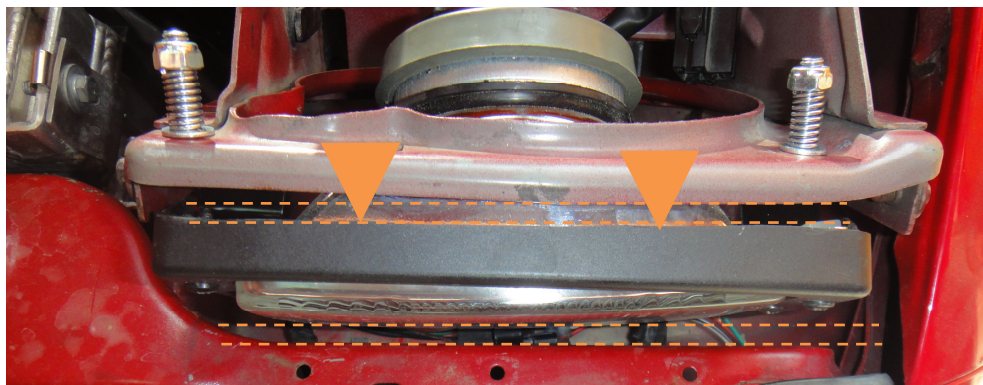
33 Low Profiles Configuration

Fully tighten them. In case the headlight doesn't lie perfectly on the frame, refer to the next topic.

(Optional) Trimming the headlight frame

In case you have bought a ready set headlights + adapter kit, you should skip this step, as the headlights are pre-modified.

In case you have sourced the Hella headlights yourself, you need to modify their frame for the very “low profile” fit. You need to trim down the top side of the black plastic frame to 18mm or trim from the rear of the frame 6mm. The total width is 24mm. You should trim it on both sides down to level of the headlight body screws. Be careful not to scratch or damage the headlight body.



This is needed in order to allow the lowest possible fitment position.

Stopper screws

There are two stopper screws for the upper and bottom position of the headlight. Their proper adjustment ensures the stability of the headlight during drive.

With the old adjustment screw removed, you have to provisionally screw the provided long M6 bend screw. Later on it will be adjusted properly. After the final adjustment the rubber cup of the old screw should be reused on the new one.



This is the bottom screw, that has to be adjusted in the bottom position:



To adjust the screws correctly, you need to move the headlight body to its highest and lowest positions with the red screw on the headlight motor. It is hidden behind the black cap on top of the motor.

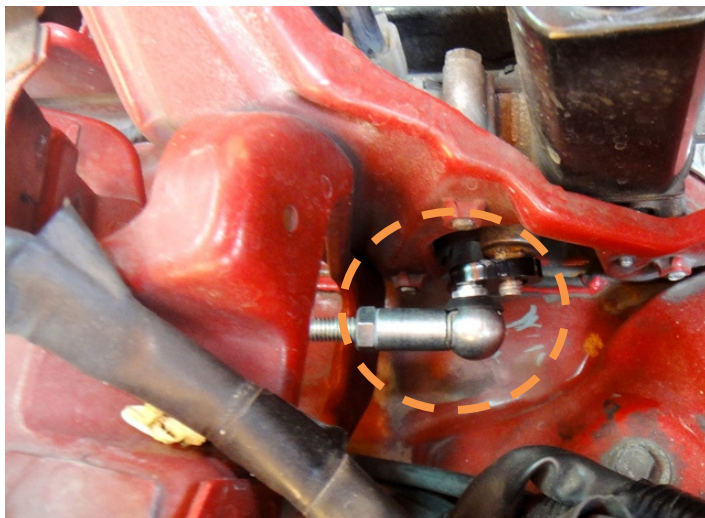
You would optimally adjust them to have slight push, when in furthest positions to ensure a very stable fix and no shake.

After adjustment tighten the screws at the back and refit the black cups.

Installation of the headlight body

Having everything assembled you need now to reinstall the body using the two side screws and M6 nuts. Make sure you have reconnected the height adjustment connector on the side of the body.

Once reinstalled you will end up with this and need now to connect loose end of the push rod with the lever to the el. motor:



It is held with the original 14mm flat nut.

Order of fitting:

- Fit the lever to the motor shaft.
- Fit the nut and tighten loose.
- Connect the RETRACTOR fuse.
- Pop the headlight up.
- Lift the headlight body in its highest position – lever and rod should be in a straight line.
- Tighten the nut as much as possible. Once the nut is holding the body, you can turn to red motor cup to make the screwing easier.

Now you have installed the headlights and need to ensure they are in the correct height. The tolerances are very narrow due to the extreme low profile of the lights. How to check the position:

- Lights popped up: the bottom of the headlight (not the black frame) is above the top edge of the bumper.
- Lights down: The headlight lid slips in and fall below the bonnet/bumper.

If adjustment is needed, you need to remove the nut from the headlight motor shaft and change the distance between the ball joint is steps of 1 rotation in the desired direction. Longer to lift the lights, shorter to have the lower.

After all is adjusted and screwed back in place you should connect the power connector to the headlight (its plug and play to the stock connector).

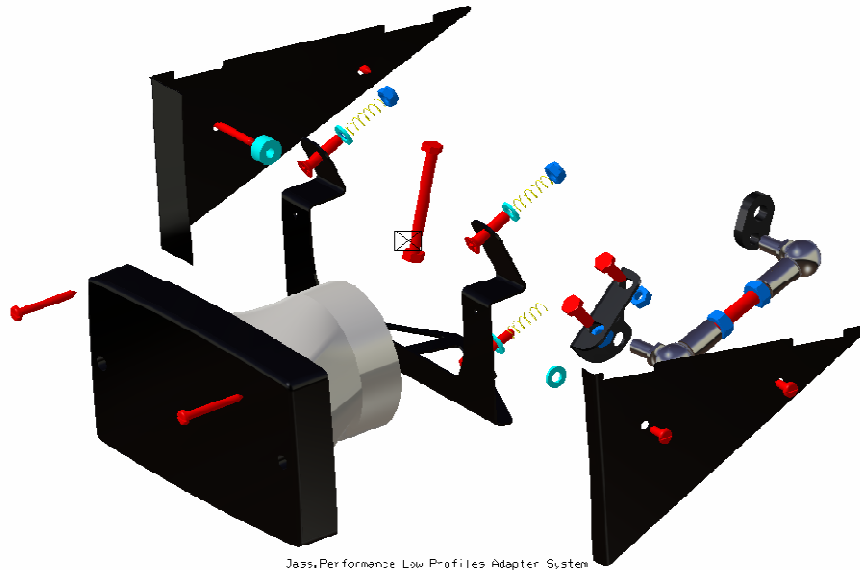
Adjust the lid in height as a next step as used with the stock headlights.

Installation of the side panels

Once everything is done so far you can install the black side panels. As a general rule, the panels should be approx. 1mm away from the headlight. This allows the movement of the adjustable headlight.

The outer panel is held with a short screw (12mm) at the back. At the front it is held with the longer black screw and needs the plastic spacer on the inner side to keep its parallel position.

The inner panel is held with two 12mm screws. You might find necessary to offset the front of the panel with the provided 6mm washer.



Headlight adjustment

You should have installed everything correct if reached to this point. Before adjusting the headlights you should check the function of the retractors and height adjustments.

Next step is to align the headlights.

To do this you should use the two screws found on top of the fixing screws. They adjust the lights in both – horizontal and vertical direction.

Final words

We hope you enjoyed your Low Profiles even in their installation phase.

Please feel free to contribute to this manual with hint or ideas, if you think it can be optimized. This will be considered in a new version of the manual and highly appreciated by other MX5/Miata/Eunos enthusiasts!