“The Retro-Fit Source”

Bi-Xenon: Morimoto Mini (H1) Clear Lens Projector Upgrade Installation
Mazda 6/Mazdaspeed 6

Congratulations on your recent purchase of this great TRS upgrade for your beloved Mazda 6. The Morimoto Mini is the smallest projector with an output that's more than suitable as a main light source. The Morimoto Mini bi-xenon projectors install easier, perform better, cost less, and fit a wider variety of applications than most other projectors out there. Morimoto Mini Madness!

The following manual will detail the installation of you new product. Please read carefully and follow all instructions as they will help prevent you from damaging anything during the process. This upgrade is a Retro-Fit process upgrade which entails removing your factory headlights and internal components and replacing them with that of you TRS upgrade kit. TRS accepts no liability in the event of any damage being caused during the installation of the above described product. Take your time and follow the instructions to minimize the chance of damaging your factory or upgrade equipment.

Thank You,

TRS Staff

WHATS NEEDED FOR INSTALLATION:

-TRS Bi-Xenon Morimoto Mini (H1) Clear Lens Projector Upgrade Kit
-Phillips Head Screwdriver
-Security Torx Screwdriver (T-20)
-Heat Gun, Hair Blow Dryer, or Oven (must be large enough to fit one or both headlights inside)
-Needle Nose Pliers
-Butter-knife or Flat-tip Screwdriver
-Butyl Rubber, Automotive Goop, or some other kind of sealing adhesive
-Razor Blade (optional)
-Blue painters Tape (optional)
-Four Scotch Locks or Soldering supplies Equivalent

TIME NEEDED FOR INSTALLATION:

-Approximately One Hour per Headlight assembly

INSTALLATION INSTRUCTIONS:

1. Once the respective headlight assemblies are removed from the vehicle you will want to take the time to remove any loose wiring, connectors, or dust covers

2. Using Windex or some glass/plastic cleaner or your choice, thoroughly clean the assembly and lens from dirt and any loose debris
   -this is so nothing gets baked into the assembly and/or lens of the assembly

3. Using Blue Painters tape or masking tape. Cover the outside of the lens of the headlight assembly.(OPTIONAL)
   -this is to help protect the lens from scratches or other damage while handling it

4. Looking at the headlight assembly you will see several metal clips that help hold the headlight assembly together. These need to be removed. Use the needle nose pliers to remove them by sliding the tip of the needle nose under the center and twisting up and away from the assembly. These clips look like this:

5. Once you have all the clips removed from the headlight assembly, it's now time to get the headlight assemblies apart. Getting the headlights apart require heating up the headlight assemblies to soften the glue used to hold them together. There are two ways to accomplish this task.

   a. Baking the Headlights Open using an Oven
   b. Using a heat gun or a hair blow-dryer

NOTE – in this instructional the utilization of a heat gun will be explained

6. Using a heat gun, you will need to start working your way around the headlight assembly using slow sweeping motions across the mating areas that have the glue. Keep the heat gun at least **FOUR** inches away from the headlight assembly surface. This is to prevent overheating the unit and melting the plastic.

NOTE – Do not hold the heat in one spot on the headlight assembly for more than 2-3 seconds at a time

7. Continue heating around the headlight assembly until the areas with the glue become hot to the touch and you feel the glue become soft. The assembly being hot to the touch and glue being very soft and sticky is a sign that the glue will be pliable enough to begin splitting the headlight assembly

8. Using a butter knife or a flat tip screwdriver. Position the tip of the tool used, between the mating points of the headlight assembly. And carefully begin to pry the headlight halves apart by twisting the butter knife or screwdriver. Work your way around the entire circumference of the headlight assembly as fast as you can, but carefully.

NOTE - Do not force the headlight open, as it may cause the lens or housing to become damaged.

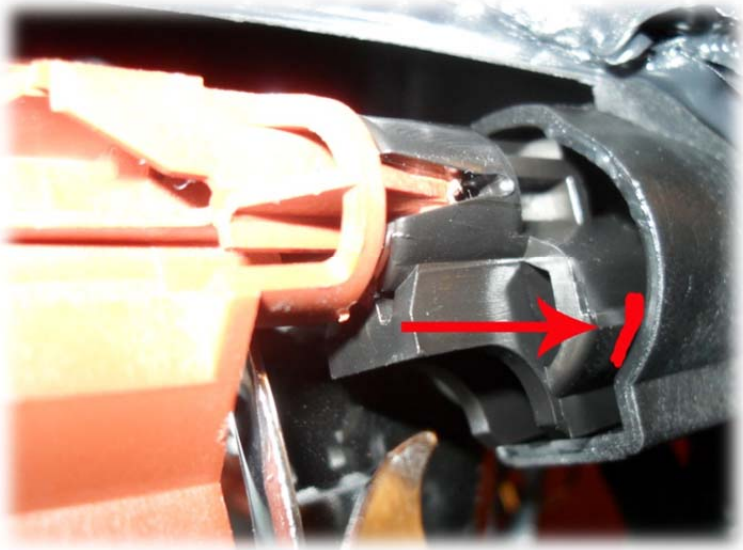
9. Reheat as needed to keep the glue warm and soft as you work the headlight apart. If the glue gets cold it will become harder to pull apart and increase the risk of cracking the lens or housing.

10. As you begin to open the headlight assembly you will begin to see the glue start stringing across the span of space you have created by separating the halves. As this happens take the Razor blade and just slit them so they do get all over the place. They should snap back right into the slots where the halves come together.

HERES WHAT YOU SHOULD BE LOOKING AT ONCE THE HALVES ARE APART:

NOW THAT YOU HAVE THE HALVES APART ITS TIME TO REMOVE THE STOCK PROJECTORS

11. Looking at the factory projector bracket, you will see that it is attached to TWO shafts on both sides of the bracket at the very top. The shafts the bracket is attached to are the aim adjustment. Please note the position of these both **(because it will help have your aim in the ballpark of what it was before disassembly)** by either taking a mental note or marking them somehow at the spot **highlighted in red here:**



12. Turn the housing around so that you are looking at the back of it. You will need to locate the Factory Projector aim adjust screws as they will need to be unscrewed completely from the factory projector housing. There are two of them for the factory project that will

need attention. **See them circled in red here:**

13. Using the Phillips head screwdriver, unscrew the factory aim adjusters by turning them counter-clockwise until they completely release the Factory projector bracket

14. Once fully released from the aim adjusters. Swing the projector forward and inward toward the inside of the housing about 45 degrees. Then pull out away from the housing to release the projector bracket from the lower pivot ball.

NOTE – the following pictures show the aim adjusters removed from the factory projector bracket. These were removed for clarity and are not required to be removed. See factory projector assembly and bracket here:

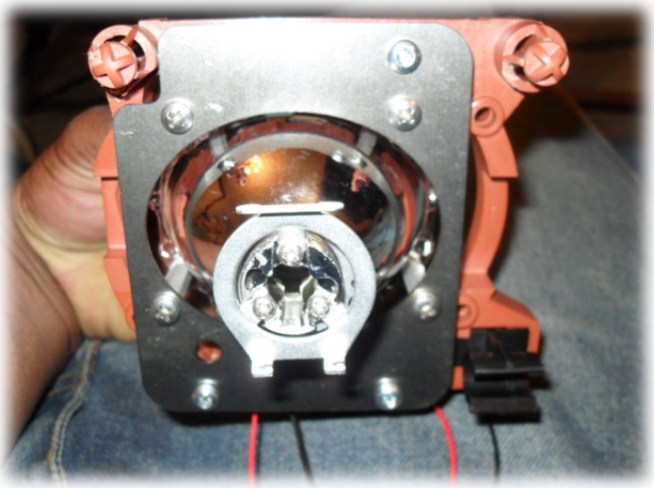
15. Using the T-20 security Torx screwdriver. Remove three projector housing mounting screws from the projector assembly. Screw shown here circled in red:

FACTORY PROJECTOR AND TRS PROJECTOR UPGRADE SIDE BY SIDE:

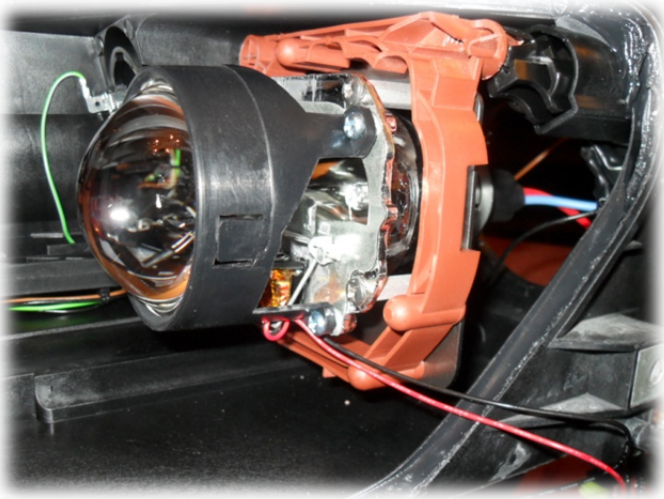
16. Take four supplied mounting screws and spacers and install them onto the TRS retrofit bracket. (there are four screws and spacers used on each TRS bracket)

17. Take the three Torx T-20 screws you removed to take apart the factory projector housing from the factory projector bracket and use them to attach the TRS upgrade bracket to the factory bracket

18. Using four supplied screws attach the TRS clear lens projector to the four spacers of the TRS bracket. Be sure to orient the TRS projector with the high beam projector facing down and the side marked "TOP" facing upwards.



19. Re-install the fully assembled projector back into the headlight assembly by sliding the bottom in at an angle onto the lower pivot ball and then screw the top aim adjusters back in all the way to your marks or close to where you took your mental note of location.

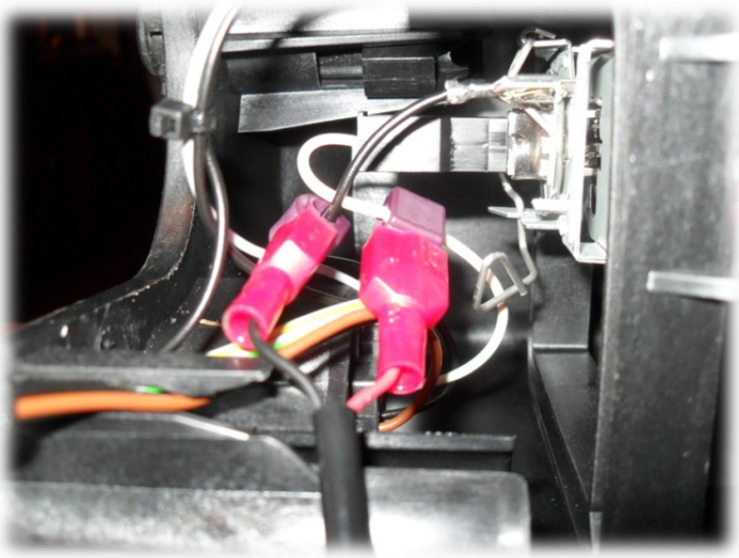


20. Take the supplied 2-wire pigtail and locate the white and black wires going into the factory high beam light.

NOTE – colors may vary from each car. Black is ground coming off the high beam housing

21. Attach the red wire of the supplied pigtail to the white wire of the factory high beam plug. Then connect the black wire of the supplied pigtail to the black wire coming off of the factory high beam housing.

NOTE – Soldering or Use of scotch locks are acceptable methods of connection



22. Connect the pigtail you just hooked up to the factory high beam wires to the plug coming out of the TRS projector solenoid. Take care in routing the wire out of the way of pinch points and where the lights will project light.

23. Install Hid Bulb into the Projector

24. Take the headlight assembly out to the car and hook everything back up. You will now test the function of the high beam and HID projector itself. If something doesn't work, verify you have made good connections and everything is wired correctly.

25. Once testing is complete and troubleshooting if any has been completed. Remove the headlight and prepare to re-assemble the headlight halves.

26. Begin by uniformly applying the headlight sealer of your choice to the area that the two halves come together. Take care in not spilling any on the housings or lens.

27. Once the sealant is applied, begin heating the housings up just like before when you took them apart. Once the glue and housing is hot to the touch it's time to start pressing the housing and lens back together.

NOTE – keep the glue warm while pressing everything back together. And work it all back together slowly and firmly.

28. Re-install the metal housing clip in their respective places. You will see small slots spaced out around the housing to know where they go.

NOTE – you can also squeeze the clips a bit in your fingers to close them up a bit more to create more tension on them

29. Once all the clips are back on. Let the assembled headlight sit overnight to let the glue/sealant dry and cure before allowing it to get wet.

30. Re-install the headlight back onto the vehicle if it hasn't already been done.

31. Repeat procedure on the other headlight

Congratulations!!!! You have just completed the installation of your Morimoto Mini Clear Lens Projector Upgrade By "The Retrofit Source". ENJOY!

Created By:

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