HID INSTALLATION ON RST1000 Futura

Disclaimer:
This is a full description of what I have done to my motorcycle. I am in no way suggesting you do as I have done by following these instructions. I have not adequately tested the installation and the failure of a lighting system can result in serious injury or even death. Follow these instructions at your own risk and potential peril. These instructions are compiled at the request of several RST owners that are curious as to what I did to install the HID lights. It should be noted that these lights are not DOT approved for street use on the RST1000 Aprilia.

Tools required:

- Metric allen wrenches
- Phillips screw driver
- Electrical tape
- Crimp style spade connectors
- Crimp tool
- Wire cutters

We will begin with the low beam installation.

1. Place the bike on the center stand.
2. Disassemble the dash starting with the two top windshield supports located on the right and left side of the wind screen.
3. Next remove the two (right and left) dash side panels. It is not necessary to remove the seat release from the panel on the left side. Just hang it over the side of the bike until you are ready to re-install it.
4. Once the side panels are off the instrument cluster can be removed by taking out the two top mounted socket head cap screws (technical name of the allen head bolts). Once the bolts are out carefully tilt the instrument panel down to gain access to the two large electrical plugs in the back. The release tabs are on the clutch side of the plugs. Push these in and the plugs will pull straight out of the back of the instrument cluster.
5. With the instrument cluster out you have access to the shelf areas to the right and left of the front faring. Either side will hold the low beam ballast. Select a side and clean the shelf area. Use some adhesive Velcro hook and loop to attach the ballast to the shelf.

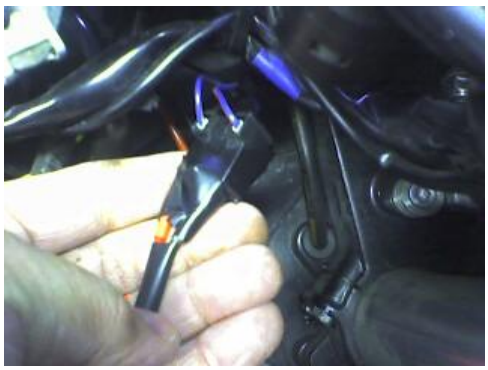
6. Find the power plug that goes into the ballast. This plug will have one blue and one black wire. Cut this wire to be 16 inches in length from the plug. Inspect by placing on the ballast and see if you might want it shorter.

7. Crimp a spade connector on to the end of each wire.
8. Remove the stock low beam bulb and bulb adapter.
9. Carefully remove the HID bulb from its container.
10. Slide the split spacer over the back of the bulb as far as it will go and align the tabs.

11. Trim the excess material off of the split spacer until it matches the size and shape of the stock bulb and adapter. Be careful not to put finger prints on your new HID bulb. If you touch it, clean it with a cotton ball with a small amount of alcohol.
12. Assemble the new bulb and split spacer through the stock boot seal as shown.

13. Once the split spacer is trimmed, place the new bulb into the socket of the headlamp with the key in the top position.
14. Apply the spring retainer clip to hold the bulb in. If it is too tight the four studs on the split spacer can be shortened a bit to make it closer to the stock adapter in thickness.
15. Now you can connect the new HID light to the ballast with the connectors. They are fool proof. You will not be able to plug them in any way but the correct way.

16. Insert the plug you just trimmed to 16 inches into the ballast.
17. Use a zip tie to run between the two wires and then through the slot on the far side of the ballast. Pull the zip tie tight. This will prevent any accidental decoupling of the power cord.
18. Now plug the black wire of the power cord into the original bulb socket that was plugged into the original halogen light. Make sure you plug it into the side of the BLUE and RED wire. This is the side that is grounded to the frame.
19. Plug the blue wire into the other side of the same connector.
20. Tape the wires and connector together to prevent accidental decoupling.
21. Remove the cover of the fuse block located at the lower center of the dash area.
22. Remove the far clutch side 15 amp fuse and replace it with a 20 or 25 amp fuse. This is not fully tested and does pose risks to your electrical lighting circuit. I am instructing as to what I did and not what I am suggesting for you to do with your bike. Start with the 20 amp and then do a key switch test of the HID.

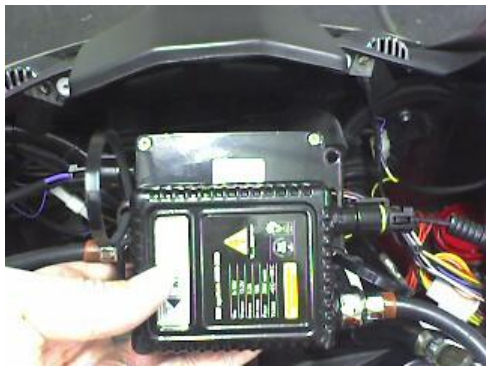


23. With the key on the HID should illuminate. I turned the key off and on at least 10 to 15 times to make sure it did not blow a fuse. If it does I would increase the fuse to a 25 amp.
24. Tie up any loose wires to non moving supports or other wire bundles.
25. Turn the wheel both ways to make sure no wires are in harms way.
26. If you are only doing the low beam you can now re-assemble the dash and clean up.

High beam installation

1. If you have just completed the low beam install skip to step 7.
2. Place the bike on the center stand.
3. Disassemble the dash starting with the two top windshield supports located on the right and left side of the wind screen.
4. Next remove the two (right and left) dash side panels. It is not necessary to remove the seat release from the panel on the left side. Just hang it over the side of the bike until you are ready to re-install it.
5. Once the side panels are off the instrument cluster can be removed by taking out the two top mounted socket head cap screws (technical name of the allen head bolts). Once the bolts are out carefully tilt the instrument panel down to gain access to the two large electrical plugs in the back. The release tabs are on the clutch side of the plugs. Push these in and the plugs will pull straight out of the back of the instrument cluster.
6. With the instrument cluster out you have access to the shelf areas to the right and left of the front faring. Either side will hold the low beam ballast. Select a side and clean the shelf area. Use some adhesive Velcro hook and loop to attach the ballast to the shelf.
7. Find the power plugs that goes into the ballasts. This plug will have one blue and one black wire. Cut these wires to be 20 inches in length from the plug. Inspect by placing on the ballast and see if you might want it shorter.

8. Plug the power wires into the two ballasts. Use a zip tie to run between the two wires and then through the slot on the far side of the ballasts. Pull the zip tie tight. This will prevent any accidental decoupling of the power cord.
9. Attach the two ballasts together as shown. Stagger the ballast so the front most ballast is lower. Leave the zip ties loose so the two ballasts can be placed in the tight area under the dash as shown in the second photo. Make sure the leads that go to the HID bulbs are pointing in opposite directions. It does not matter which one is right or left.



10. Once satisfied with position and lead lengths tighten the zip ties you left loose earlier. The ballasts should be nearly impossible to get out without cutting off the zip ties.
11. Add one additional zip tie to attach the two ballasts to the relay rail just below it. This should prevent things from moving around when riding.
12. Pull out the power wires and run them to the plugs to check for proper length. They will be plugging into the sockets that once were attached to the back of the original Halogen bulbs. Trim length them as needed.
13. Crimp a spade connector on to the end of each wire. See photo on item 7 low beam install.
14. Remove the stock high beam bulbs and bulb adapters.
15. Carefully remove the HID bulbs from their containers.

16. Slide the split spacer over the back of the bulbs as far as it will go and align the tabs.
17. Trim the excess material off of the split spacers until they match the size and shape of the stock bulb and adapter. Be careful not to put finger prints on your new HID bulb. If you touch it, clean it with a cotton ball with a small amount of alcohol.
18. Once the split spacer is trimmed, assemble the bulb split spacer together with the large rubber boot as seen in the earlier photo.
19. Place the new bulb into the socket of the headlamp with the key in the top position.
20. Apply the spring retainer clip to hold the bulb in. If it is too tight the four studs on the split spacer can be shortened a bit to make it closer to the stock adapter in thickness.
21. Press the rubber boot into place to seal in the new bulb and keep dirt out of the enclosed lens.
22. Now you can connect the new HID light to the ballast with the connectors. They are fool proof. You will not be able to plug them in any way but the correct way.
23. Insert the plug you just trimmed to 16 inches into the ballast.
24. Now plug the black wires of the power cords into the original bulb sockets that were plugged into the original halogen lights. Make sure you plug it into the side of the BLUE and RED wire. This is the side that is grounded to the frame.
25. Plug the blue wire into the other side of the same connector.
26. Tape the wires and connector together to prevent accidental decoupling.
27. Remove the cover of the fuse block located at the lower center of the dash area.
28. Remove the far clutch side 15 amp fuse and replace it with a 20 or 25 amp fuse. ***This is not fully tested and does pose risks to your electrical lighting circuit. I am instructing as to what I did and not what I am suggesting for you to do with your bike.*** Start with the 20 amp and then do a key switch test of the HID.
29. With the key on the engine running turn on the low beam only. Using your high beam flash button light up the high beams at least 10 to 15 times to make sure you don't blow a fuse. If it does I would increase the fuse to a 25 amp.
30. Tie up any loose wires to non moving supports or other wire bundles.
31. Turn the wheel both ways to make sure no wires are in harms way.
32. Re-assemble the dash and clean up.
33. Store your stock bulbs and adapters in the bulb cases that the HID bulbs came in. I keep one with me in my tank bag in case I loose a bulb or ballast.

Some mods have the WOW factor and this is one of them. I have not been on the bike at night yet but the difference in my garage is quite amazing. I have taken a lot of photos of the modification and shown what needs changed in order for things to just plug in. The whole mod takes only about an hour and can be done with nothing more than Allen wrenches, wire cutters (not used on wires), zip ties, and some stick down Velcro. Todd is buying the other half of my h-7 car kit. When he comes over with his bike I'll take comparison photos of his lights and mine. We both have the high beam / low beam on mod. The specs for the lights says that the heat output of the HID is lower than a halogen bulb. I would think this would be good for the plastic. I hope so anyway. I will need to make sure my low beam is low enough or this thing will blind oncoming traffic.

Here are the photos I took of the install. I think it is relatively self explanatory. If not shoot me some questions and I'll answer.

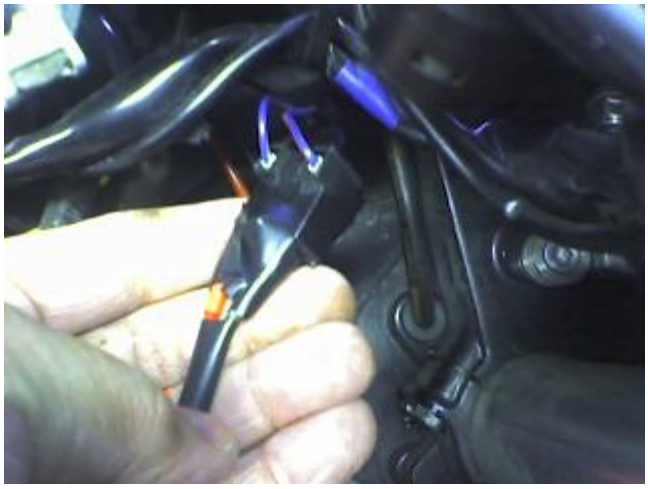
Bob
p.s. I didn't use the supplied metal bracket in the photo. I just velcro attached the back of the ballast to the inside of the faring.
Attached Images


Vorschaltgerat
Xenon-light 12V
5DV 007 760-01
Suit for various car types
007 Ballast 2500h
Made in Hongkong
Hochspannung!
Vorsicht!
≥ 23000V


Vorschaltgerat
Xenon-light 12V
5DV 007 760-01
Suit for various car types
DOT
Ballast
2000h
Made in HongKong
Hochspannung!
Vorsicht!
23000V


TUV ISO 9001 2000

Here are more of the install photos. The base of the HID bulb has a sleeve on it. This sleeve must be modified by trimming off the excess plastic. You can see the excess material in the photo where I compare a standard bulb to the HID version looking straight down at the top. This is the only mod needed for a plug and play install. At the bottom I show the cutters I used to trim off the excess plastic.



http://cgi.ebay.com/ebaymotors/ws/eBayISAPI.dll?ViewItem&ih=018&sspagename=STRK%3AME WA%3AIT&viewitem=&item=280041794174&rd=1,1

Purchased this one....

Got it for less than listed here on a make offer bid.

I should have it in about a week.

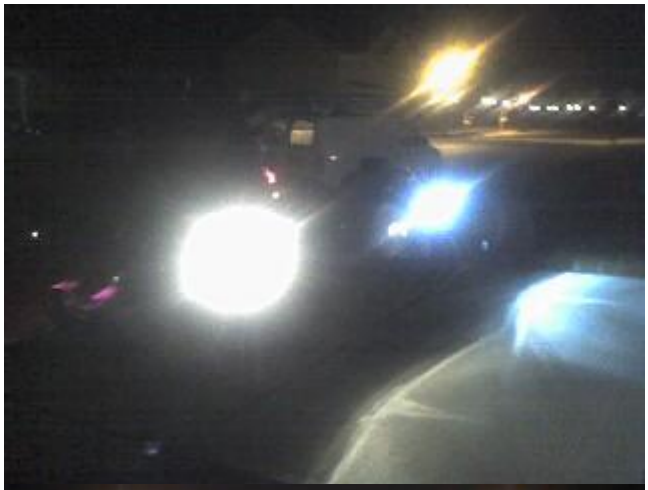
Here are some photos of the bike in my garage with the light on. For those who have seen my garage it is lit up like an operating room. The three photos are taken head on, about 20 degrees off line, and then about 45 degrees off line.

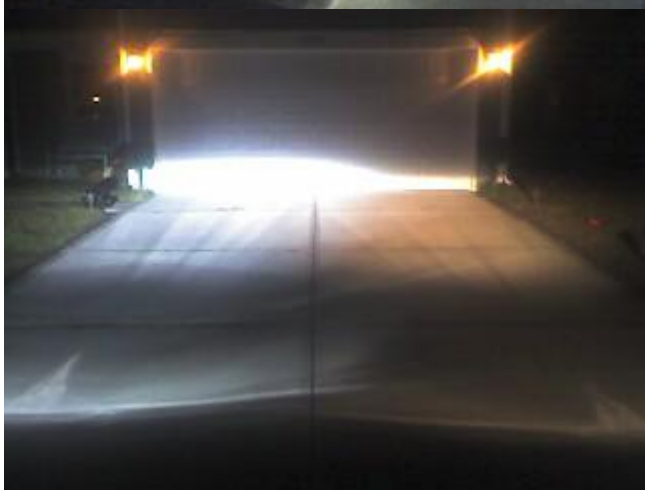
I rode the bike last night with the new light (6000K color) and it is absolutely awesome. If the WOW factor of StayInTunes is 5 and the WOW factor of the H-pipe is a 10 this is certainly an 8.

What a difference for night riding. I rode the bike for about 10 miles in 4 lane and town traffic. No one flashed me to turn off my high beams so I figure they are not too offensive to other drivers. It is really cool to pull up to a car and outclass his headlights with my one bulb.

Bob

I have only one to post tonight because I don't have my hotsync cable here at home. I'll post more tomorrow. This one will show the significant difference in the lights. I took a ride over to Todd's house in 38 degree weather to get this. The two bikes are using low beam only. The beams of the HID is slightly higher but not as much higher than the photo makes it appear.

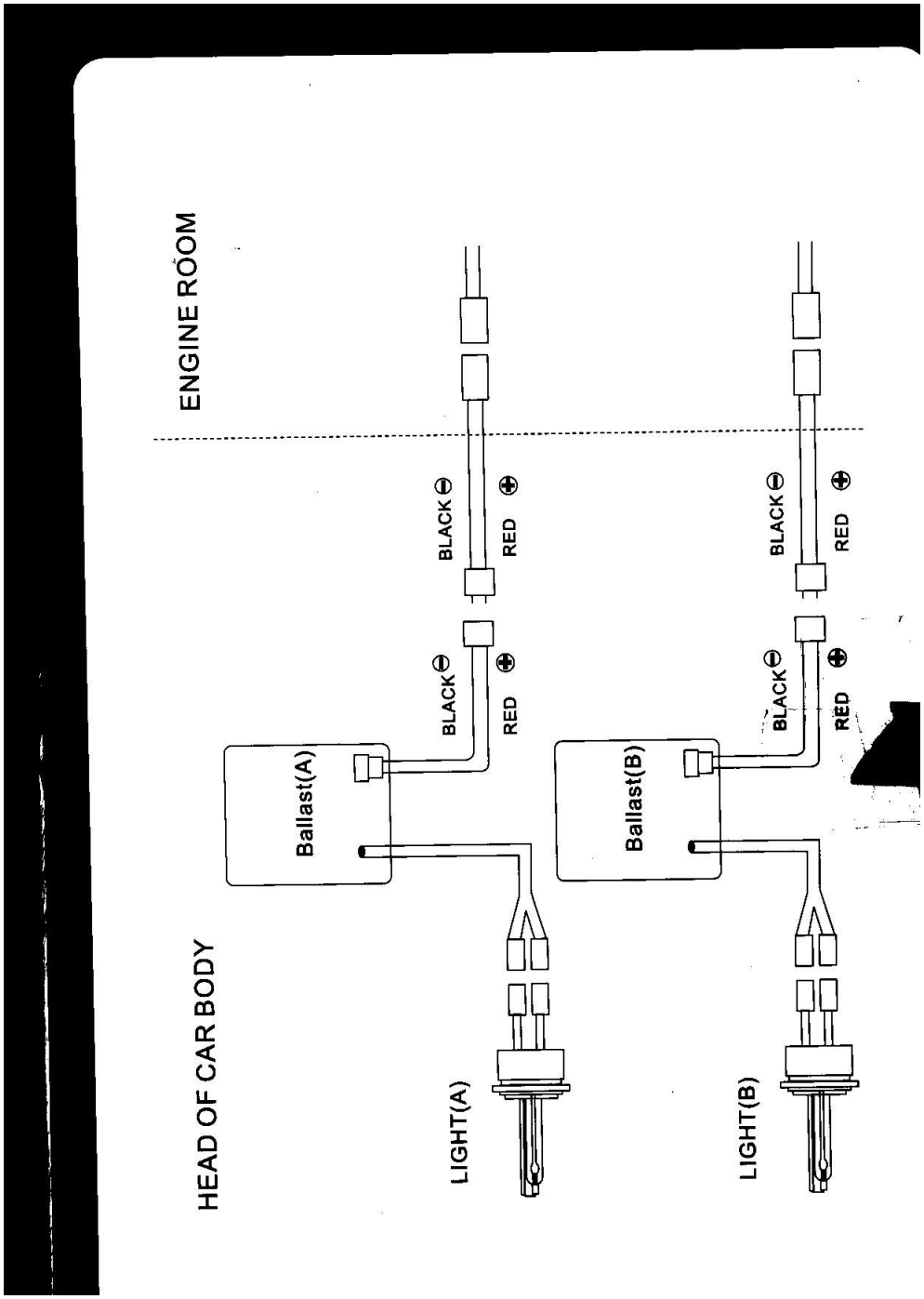




That is all you need to do to get a good install. No crushing is needed. The original plug for the lights remains in tact so reverting back to stock takes seconds. The last photo above is of the spade connectors taped into the stock bulb plug. Pull the tape and spade connectors out and plug it into a stock bulb if you like (I doubt you would do it though).

Here are the balance of the photos taken in the comparison. The first shot is standing between the bikes. Second is head on, then off from the left side and finally off from the right side. Notice the improvement of ground illumination in front of the bikes.

The HID lights have no filament. They will last 10 times longer than a halogen bulb. I go through a lot of bulbs for some reason and that will be a welcome improvement.



http://cgi.ebay.com/ebaymotors/ws/eBayISAPI.dll?ViewItem&ih=010&sspagename=STRK%3AMEWA%3AIT&viewitem=&item=200040035462&rd=1&rd=1