

## Reconditioning Starion JA Tail-Lights



**Old**



**New**

Welcome to this tech article about reconditioning Starion JA tail-lights. This will help you remove the tail-lights, lenses, rear garnish and recondition them.

The Starion tail-light lenses have a habit of coming apart from the light assembly, either from old age, bad sealant or both. This causes them to fill up with water. This discolours the inside and lenses.



This is the reason for reconditioning the lights.

As the picture shows the lens is coming apart from the light body. This lets a lot of water in, this can seriously damage the globe holders. if left alone.

After opening mine up I found a small forest of mould in the indicator and the inside silver almost black.

The picture also shows the way to lift up the lens without damaging. You want to start at the indicator and work away from it, more detailed instructions follow in the article.

Before you get started you will need.

1. Basic tools, 10mm socket and spanner, small extension bar, pliers (bull and pointy nose), soft mallet, Phillips head screw drivers and Flat blade screw drivers.
2. Paint - Your choice of colours, you can use either acrylic or 2 pak.  
I used 2 pak GM Panther Mica (really nice black), coarse silver and clear-coat.
3. Caulking gun and Clear sealant...
4. Prep sol (wax and grease remover).
5. Masking tape.
6. 1500 and 2000 grit wet sandpaper. I used 3M paper as its great quality.
7. Grey scotch. This is used to rough up the surface ready for painting, (This can be found at automotive paint retailers).

8. Rubbing compound, glaze, (softer cutters) and polish (once again I used 3M products.).
9. Soft cloths. (lots of clean ones)

## Removal of tail-lights

Before we get started on the reconditioning of the tail-lights they first have to be removed from the car.

***If you have dodgy gas struts on the hatch PLEASE make sure that the hatch is well supported as you will be working under it for a period of time.***

The tail-lights **must** be removed before you remove the rear garnish.

1. Remove the inside carpet trims around and between the tail-lights.
2. Unplug the lights.
3. Undo the six 10mm nuts around the lights.

You may need to give the tail-lights a gentle tap with the soft mallet to help ease them out after many years of sitting there. This will also help loosen any sealant that maybe there. If they are still firmly in there a little more tapping, a little gentle wiggling and a lot of patience will finally get them out.



This picture shows the Rear lights removed, with the old garnish on.

## Removal of the rear garnish

The rear garnish is really easy to remove; you **must** make sure that you remove the tail-lights first.

1. Remove Number plate and Number plate mounting bracket screws.
2. Unplug the number plate lights.
3. Undo the two 10mm nuts ( inside the boot )
4. Undo the two Phillips Head screws ( on the outside)
5. Gently push it outwards and it will slide garnish off.

Once your tail-lights and garnish are removed, it would be a good idea to mask off where the tail-lights were and any little holes



The picture shows how I masked the rear, this helps to prevent moisture and other foreign objects getting into your nice clean interior. I used race tape (gaffer tape) and a good quality masking tape.

You can use any thing you like; this was all I had on hand,

## Removing the lenses from the main light body

Now it's the fun part of removing the lenses. A lot of patience is need here as you don't want to break the lens. Please be careful. If you have a cracked lens and need to replace them, it may pay to check out [www.austarion.com.au](http://www.austarion.com.au) and check out the forums. Especially buy/sell.

It's easiest when the lenses are already coming away. See pictures below.



lens coming away



rear of tail-light showing globe holder

1. Remove the bulb assembly (big white plastic holder) be careful not to break any wires. The wires will easily come out from the holders with a little careful persuasion. Twist the globes in the direction shown to remove them.
2. Lift up the lens *very carefully*, testing for how well it's stuck. The brake lens comes out **before** the indicator lens. **Take note!**
  - If it's similar to the one shown gently lift the lens, starting at the indicator and lifting *carefully* upwards. A *gentle* wiggle may be needed.
  - The **key** here is lots of **patience**.
  - The indicator lens will be removed in the same way starting where the brake lens was and gently lifting outwards.
  - If your lens isn't coming away easily very carefully heat up the lens with a heat gun (on low) or a hairdryer. Gently heat around the edges (that's where the sealer is), making sure you don't get too close as you can melt the lense. **Be extremely careful**. Allow the lens to cool a little, as being warm it will be a little soft. Applying pressure may result in the lens breaking. Once cool, very carefully remove the lens as described above

Once the lens is removed it will look like this.



As you can see from the picture on the left, the inside of the light has faded considerably. It's a good idea to put the lenses in a **safe** place while working on the light bodies.

## Prepping the light body for painting

Once you have the lense(s) apart from the main body, it's time to start preparing them for painting. The better the prep work the better the final finish.

1. You will need to clean all the old sealant out, so there is a clean surface for the new paint and sealer to stick to. To do this, use an old flat blade screw driver wide enough to fit in the gap. Then *carefully* scrap the old sealer away, making sure not to slip. Be very *careful* and *patient*.
2. Once all of the sealer has been cleaned away wipe the surface down with prep sol and a soft clean cloth.
3. Next you will need to wash them down with warm soapy water to get rid of all the junk that's collected over the years.
4. Allow them to dry.
5. Once dry it's time do rub them down with the grey scotch. Gentle rubbing is enough to dull the surface enough for the paint to stick to.
6. Give the surfaces a final wipe with a clean cloth and prep sol.

You are now ready to mask and paint.

## Masking the tail-light body

The next step is to mask off the areas that you don't want painted. You can either mask off the black area first or the silver area. I have shown silver first then black. When you mask off the areas, you want to make sure there is no chance of overspray. Follow the original colour lines and you'll be safe.

Before applying the paint give the area one final wipe over with a clean cloth and prep sol. This is to make sure that no greasy fingerprints will cause the paint to fry up.



Picture **(a)** on the left shows the black masked off, with the new silver paint. In the same picture you can see the light un-masked with the old black.

**(a)**



Picture **(b)** shows the silver masked off with the new black.

It's a very good idea to make sure that you mask off well, as you don't want any overspray ruining your freshly painted silver.

**(b)**

7. After you have painted the light bodies allow them to dry overnight,
8. Be very *careful* when you un-mask them as you don't want to peel back any fresh paint.

9. Once they are unmasked wipe over the area to be painted with prep sol and a clean rag.
10. I used 2 inch Masking tape to cover the silver when the black was painted.
11. Now it's time to paint the black. **Pic (a)** shows the black masked off with the freshly painted silver, while **Pic (b)** shows the silver masked off with the fresh black paint. Again you want to make sure you do a good job of masking.
12. Allow them to dry overnight at least and then un-mask them. Again being *careful*.

### Re-Fitting the lenses to the light bodies

13. **Pic (c)** is the finished product. All that's left to do now is apply the sealer & re-fit the lense.



(c)

Now that the lights have been painted it's time to refit the lenses. This is easy to do, so long as you are careful. Before you refit the lenses you can polish them up. I used a 3m polish after a little cutting was done to bring them back to life. Again be very careful. Once they are all polished up and looking brand new, put them aside ready for refitting.



(d)



(e)

**Pic (d)** shows the indicator lens in with the sealer around where the brake lens will go. To refit the lens you do the opposite to removing them. Indicator 1st and then the brake lense.

**Pic (e)** shows what was used to put the lenses on, pictured is a caulking gun, masking tape, side-cutters and a clean rag.

14. Now that you have the light body all painted and ready for the clean lense/s, as shown in picture (d) and (e). Before applying the sealant trial fit the lenses to make sure they will fit nice and snug as well as flush against each other.

15. The first thing to do is wipe around where the new sealer is going to go. This helps the sealer adhere properly. I used Selley's All clear and a caulking gun with a new tip.
16. Cut the sealant tip to the size of the gap around the lights. *Gently squeeze* out the sealant around the light body where the indicator goes..
17. Allow to tack off for a min and then *very carefully* fit the indicator lens 1st.
18. Once the indicator lens is in and firmly in place it's time for the brake lens to be fitted up.
19. Run the sealer around the outside of the light body, except this time you apply it where the brake lens goes.
20. Very carefully fit the brake lense, starting at the end away from the indicator.
21. Once both the lenses are in place it's time to mask them up to help the sealer do its job.
22. Picture (e) shows the both the lights after being sealed up. The light in the background is all masked up firmly to assist the sealer, while the light in the foreground is yet to be masked.

### **Re-Fitting the lenses to the light bodies continued**

23. Allow them to dry overnight (8 – 10 hrs) all masked up. This cure time really helps the sealer to do its job, that way you don't have to do this all over again in a few months.
24. Picture (f) and (g) show the finished lights, ready to be fitted back into the car.

(f)



(g)



Now that the lights are all reconditioned, and freshly sealed, they are ready to put back into the car. Before I put the lights back in I reconditioned the rear garnish as well. This freshens up the look of the rear. The following article explains how I did this as well as rebuilding the number plate lights.

### **Refitting the New lights and garnish**

Refitting the new/reco taillights is a easy job. You do the reverse to the removal article, explained earlier. Here's a quick guide.

1. Fit the rear garnish back up. When doing up the nuts/screws be *careful* not to do them up too tight as they **will crack** the **garnish**. ***You've been warned.***  
***Example shown -***
2. Now that the garnish is in place it's time to fit up the lights. It doesn't matter which side you do 1st.



3. One thing to remember is to make sure that the bulb holder is attached to the lights before you fit them back into the car. If you don't, you won't be able to get the wiring for the lights through.
4. When doing up the lights don't do up one nut tightly at a time, do up the nuts in a similar way you would fit a tyre. If you are unsure this is when you do up the nut opposite/diagonal from the one you just tightened. This helps even the load across the light, and prevents it from cracking.
5. Lastly don't forget to check your globes, and all of your wiring plugs to make sure they are o.k.

(h)

Picture (h) and (i) show the lights back in the car.



(i)

## Reconditioning of Rear Garnish & No Plate Lights

While I was doing the tail-lights I thought I may as well do the rear garnish. This is the piece between the tail-lights. This is really easy to do and gives great results. To make things easier I removed the number plate light assemblies. A couple of extra minutes removing those, saves you time later. (If you happen to get paint on them from a dodgy masking job!).

1. Remove the garnish from the vehicle as described previously.
2. Remove the number plate holder and light assemblies. (Easier to paint!)
3. Wash down with soapy water, leave to dry.
4. Rub down with the grey scotch once dry. Scotching the surface dulls and roughens it ready for painting.
5. Wipe down with a clean rag and prep sol.

You're now ready to paint. I chose a GM colour, Panther Mica. It's a nice black with a little bit of sparkle to it. You can choose whatever colour you like, maybe you could even do it body colour.

I went the extra step of repainting the number plate holders, lenses and the globe reflector. Once all of this was done I fitted up some l.e.d globes.



Here you can see the difference in the lenses.

The lens on the left is the original (all dirty).

The lens on the right has been cleaned with some soapy water and a soft toothbrush. It's amazing what a little soapy water can do.



This picture shows the cleaned reflector/s for the number plate light. One of them was replaced because it was rusted. In the background you can see the replacement l.e.d globes, including the newly painted holder. (On the left)



Here's how they look. You can also see the nicely painted garnish. Hmm reflection.



### Reconditioning of Rear Garnish & No Plate Lights continued

Here you can see the difference between the old garnish and the newly painted one. It does make a big difference to the look of the car. If I had a spare garnish I would've tried another colour possibly body colour to see what it looks like. Picture **(j)** is the old/original garnish, while **(k)** is newly painted.



**(j)**

**(k)**



With the new garnish in place it's time to re-fit the taillights. This has been explained earlier, you can find the information in the article "Refitting the new taillights".

Here they are back in the car, and in action.



They are a lot clearer and brighter than they used to be, if you would like your lights a darker red i.e. not so whitish, purchase some red globes/red l.e.d replacement globes from your local auto parts store. If you don't want to pay top \$\$ for groovy globes you can get sleeves that go over the outside of the globe. These don't last nearly as long as the replacement globes but they are more than half the price.

I hope that this tech guide has helped you to recondition your lights/rear garnish/number plate lights. If you have any questions, suggestions please drop by [www.austarion.com.au](http://www.austarion.com.au) .

Photo's and Article by : Drew / Melbstazz