# Vauxhall Opel Holden Astra Twin Top Convertible Roof Parcel Shelf Winglet Flap Motor CNC Brass Gear Repair Fix Kit Install Guide Instructions

by x8rltd on August 17, 2015

Intro: Vauxhall Opel Holden Astra Twin Top Convertible Roof Parcel Shelf Winglet Flap Motor CNC Brass Gear Repair Fix Kit Install Guide Instructions

The Problem

The plastic gear within the parcel shelf winglet motor wears and strips causing roof faults.

It is common for the motor which operates the parcel shelf winglets to fail, within this motor is a plastic gear. The gear is made from a poor quality plastic which wears prematurely; stopping the motor from working and causing defects such as the roof not opening or closing- a result of the parcel shelf winglets sticking, not operating or only moving part way.

It is rare for any other components in this motor / actuator to fail. The outer worm gear in this module is made of metal and does not fail however this interacts with the plastic gear causing the plastic gears teeth to wear / strip and fail to function. A new motor can be purchased from the vehicle manufacturer, these typically retail for £350+, these are also fitted with the same plastic gear which will fail again. Our CNC Brass gear allows you to replace just the part that fails at a fraction of the cost and permanently fixes the fault. This product is also ideal to fit as a preventative measure as the plastic gear will wear in future and is likely to malfunction at an inconvenient time.

Symptoms of the fault

Typical symptoms of the failure of the gear within the parcel shelf winglet motor include; roof going down but taking a long time to come back up, perhaps going half way stopping for a period before closing down. When opening / closing roof parcel shelf winglets remain in the air and do not fold out / in. Alternatively winglets may function but slowly or erratically. Please check out our video to see the most common symptoms of this fault.

Vehicles affected and compatibility

Vauxhall / Opel Astra Twin Top 2006-2010.

Part numbers:

Parcel shelf motor, part numbers 93188313 93188314 and all newer motor part numbers 13297951 13297952.

Our solution

Install our precision engineered CNC Brass gear and restore your twin top roof operation.

Our Brass gear allows you to replace just the component that fails within the parcel shelf winglet motor without the need to replace the whole motor which would just fail again. Our Brass gear replaces the plastic gear that fails. We have matched the material of our gear to function correctly with the existing gear within the motor to ensure smooth life time use. Replacement motors are extremely expensive and are fitted with the same plastic gear which will just fail again. Install our gear at a fraction of the cost and enjoy using your roof again. Our gear is bench tested to 10,000+ motions with no measurable deterioration of our gear or the worm drive, also fitted and field tested ensuring this product means our high quality standards. Install is very simple with the aid of our video and pictorial instructions and the help of our technical team if required

This is a CNC machined part. We recommend replacing both gears left and right parcel shelf motors at the same time.

Our kit

1x Brass CNC machined parcel shelf winglet gear. This is not a cheaper cast part, this is a CNC part produced to fine tolerances.



## Step 1: Remove the parcel shelf flap and motor from the vehicle Operate the roof and stop the roof at the point where the parcel shelf flaps are fully extended out.

Remove the electrical plug to the flap motor.

Remove the screws to release the motor and parcel shelf flap.











Step 2: Remove the motor from the parcel shelf flap.
Using a Torx screw driver remove the screw holding the parcel shelf flap to the motor, take care to retain the washer.

Pull the flap away from the motor.





Step 3: Remove the motor cover and the old gear Remove the 2x Philips screws from the cover.

Lever off the cover.

Sometimes the gear will come out with the cover.

On top of the old gear there is a metal washer remove this as this is needed when fitting the new gear.









Step 4: Grease and fit our new gear
Before fitting the new gear grease the gear; making sure grease is in every tooth of the gear, wipe any excess grease off before install.

Fit the metal washer onto the new gear.

Slot the gear into the motor.

Refit the cover and tighten the 2x Philips screws.















### **Step 5: Test function**

Slot the motor back onto the parcel shelf flap and reattach the screw securing the two.

On the side of the motor is a flat headed screw; this allows you to manually adjust/move the gear. You can test the gear and see that it is functioning correctly by rotating the screw.

If you need to adjust the angle of the flap wind the screw to get the flap to the desired position. The flap needs to be in the fully extended position when refitting to the vehicle.

Refit the flap and motor unit to the vehicle and test operation.

If you need any further guidance on this install or would like to purchase the parts shown please call us on +44 01843 446643 or email us at sales@x8r.co.uk . Please also check out our instruction guide on YouTube. www.x8r.co.uk

Installation is carried out at installers risk, if unsure please contact us or a professional, X8R Ltd cannot be held responsible for any adverse result of installing this product or any injuries caused by install, if in doubt ask a professional. All images and texts are copyright X8R Ltd 2013.







