



---

# Rotax 912/912S XS exhaust silencer heat shield strap security

---

<b>Classification</b>	Mandatory
<b>Applicability</b>	Rotax 912/912S XS exhaust systems supplied between September 2004 and August 2005
<b>Compliance</b>	Before the next flight

## Introduction

The method of securing the straps that hold the aluminium heat shield to the exhaust silencer includes the use of clips with screws. Vibration and heating has been found to cause the screws to loosen, allowing the clips to undo, resulting in the strap falling off. Apart from the loss of the straps and heat shield, there is the danger of these loose parts becoming entangled in the rudder control system, potentially causing a control jam. It is therefore essential that the screws that hold the clips are made secure.

The preferred method for securing the screws is by use of locking wire - see the photos. Approximately 40cm (16") of 0.025" diameter locking wire will be required. Other sizes of locking wire may be used. Tools needed are a medium size blade type screwdriver, pliers or wire locking pliers, and wire cutters. A marking pen will also be useful.

## Action

Note the position of the two hooks of the nut plate relative to the ladder strap. Make a mark on the strap using the marker pen.

Undo the screw, remove the cup washer from its head and discard it, then reinstall the screw. Note that the ladder strap runs over the top of the baseplate of the screw holder.

Tighten the screw, leaving the screwdriver slot at an angle of about 45°.



Cut a 20cm (8") length of lock wire and fold it in half. Thread one end of the lockwire under the screw retainer, looping the other end over it and place the end of the loop into the screw head's slot. Push the wire into the slot with a screwdriver to help it stay in place.

Pull the wire ends taut, then twist them for about 12mm (½"). Tighten the twist close to the screw head so that it cannot come out of the screw slot.

Next, thread one end of the wire under the nut, the other end over the top and then twist the ends together for a further length of about 2-3cm (1").

Cut off the untwisted ends and fold the tail back on itself, tucking the sharp end under the nut.

Annotate the log book that this Service Bulletin had been carried out.