

BLADE MOUNTING:

The following steps address how to mount the blades on the Blade Carrier assembly when the unit has been received with the blades free in the carton:



Remove the blades and first check that the O-Ring is present and retained by the smear of grease that has been placed in the groove to hold it during transport and for the initial fitting to ensure smooth operation and all tolerances and pitch have been set correctly. The spare O-Ring held alongside shows a sample removed from the groove.



Remove the small Pozidrive screw that provides access for subsequent greasing in service using a small Pozidrive screwdriver.



Place a smear of grease (Marine Grade) in each of the grooves at the end of the blade mounting pins to ensure the blade mounts are full of grease when assembled.



Place ~ 20 ml of grease down the recess in the blade with a spatula or knife.
Note the O-Ring has lifted and will need to be bedded down into it's groove again.



Now place the blade over the mounting pin.

While each blade is interchangeable position wise – they have been numbered as fitted and should be replaced onto the same mounting that they were previously pre-fitted to.



Now force the blade fully down on to the mounting pin - this will cause any excess grease to ooze from the grease point hole.



From the same side as shown in the shot below insert one of the BNS or Brass Nickel Silver retaining pins and tap gently home with a down stroke on the hammer face. This will ensure the chamfered pin lifts up and starts correctly in the opposite side of the hole.



The pin once nearly home and fully started in the opposite side can be driven home with flat hammer strokes until equidistant from both outer faces for smooth appearances. Wipe the excess grease from the exit hole of the retaining pin.



Reinsert the small Pozidrive screw into the grease access hole again. This is the screw that will need to be removed for periodic greasing.



It is now important to check that the blades are moving smoothly to allow the correct feathering function.

This is best done by leaving the blade at $\sim 45^\circ$ to the horizon whereupon the blade should fall slowly down overcoming the friction of the grease until it reaches the pitch stop.

If the blade moves under its own weight – then it is in tolerance for friction and assembly of the blade is now complete.

The next two blades are then mounted in identical fashion.



If the blade is stiff – which it should not be as it was previously assembled and tested in the factory – then the blade will need to be removed.

Punch the pin out in the OPPOSITE direction from which it was entered.

Clean out the groove under the O- Ring and check for any pieces of swarf or dirt that will be causing the binding. Repeat the assembly and testing procedure detailed above.