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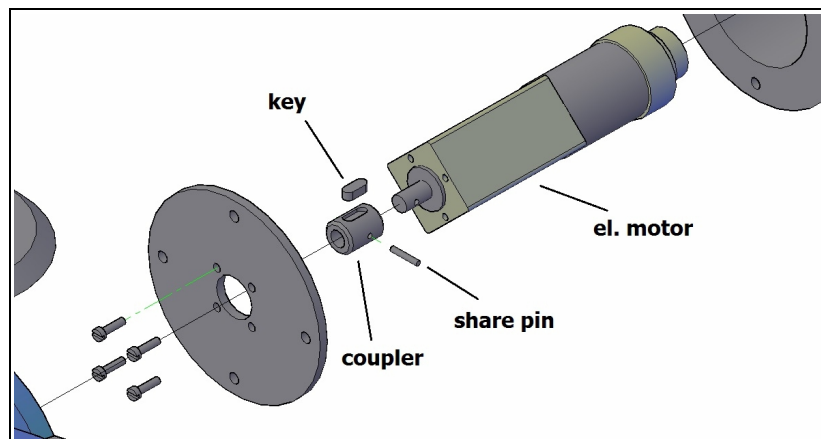
Produzione Sistemi Telecomunicazioni
Antenna rotators - Towers

Mechanical fuse fixing/restoring

If the motor run (you can hear the motor sound), but the main rotator shaft doesn't turn, then we suppose that the motor joint pass through pin broke.

Let us explain: the motor with the first gearmotor stage are joined to the main rotator body with a steel coupler, such cylinder is stopped on there with a pass through pin, such pin protect the motor and his gearbox from possible damages in case that for somehow the rotator shaft get stopped due external forces. It is a safety device that works like a fuse protecting the motor and the first gearmotor stage. In other words better to break such pin which cost few cents and is easily replaceable because available in any mechanical parts shop than not to destroy the motor and his gearbox that cost much more and is available only here.

This kind of safety device solution is used in many expensive industrial machinery, where is better to have a pin broken than not a larger damage due overload.



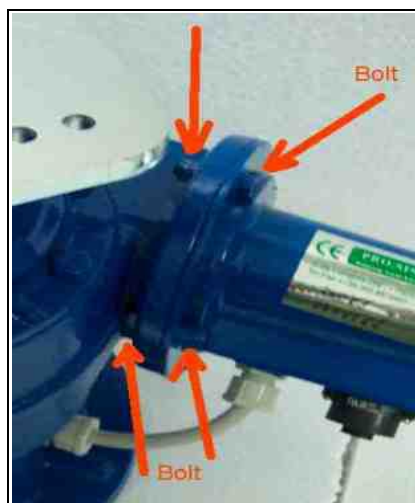
The frequency of this issue is less than 1% but happens and if happens means that something stopped antenna for a while (very often wind), so the motor go in overload, if overload time became too long, the motor delivery enough power to break the pin.

It look like an issue, but it is a protection, that save many money if happens.

What is the solution? Replace it with a new one.

Unscrew the bolts and using a cutter share the motor cover body from the rotator body.

PST61 don't have external cable, for which pay attention using the cutter, do not damages inner wires.

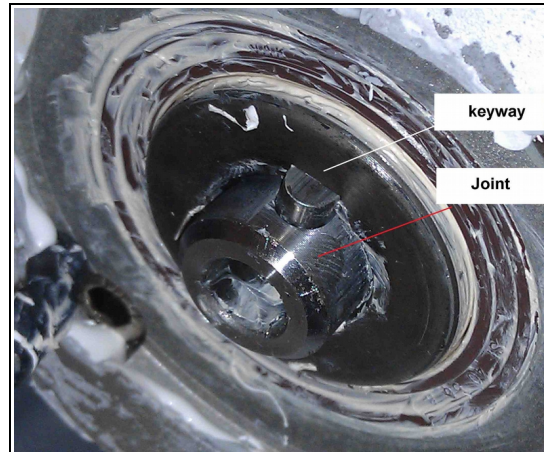


If the grey cable is too short, release a bit the plastic nut from the rotator base side and pull the cable out for few centimeters.

PST61 don't have external cable, for which pay attention when reassembly the motor assy back that wires do not get damaged in the flanges joint. Check with a multimeter that each one pin is insulated against rotator body ground.

When the motor cover come out you may have the coupler cylinder still on the motor shaft or on the main rotator side (see the picture below).

In this case use a hook or a player to pull it out.



Using a 3mm rod tool, push out the rest of the pin from the motor shaft and from the cylinder, get a new pin (3mm x 18mm flexible version, they are available in any mechanical shop, in stainless steel or black steel, the black steel is stronger and more easy to find) if you get a longer one, than just cut away the extra length. If you get difficulties to fit in the cylinder hole the new flexible pin, than using a player just reduce one pin end diameter for a couple of millimeters making it conical, this will help the entry way in the cylinder hole, after than you need a small hammer to push it down.



When done it will looks like the pictures below.



Reassembly the motor assy back, don't forget the keyway, put momentary bolts and check the rotator, if runs OK, remove the bolts, seal the motor cover against the rotator main body using polyuretane sealant or similar glue, screw down the bolts and clean the sealant that come out from the flanges. Make sure that the sealant fully cover the flanges border.

Push back in the basement the gray cable and lock the plastic nut. Pay attention do not damaging the wires when closing the flanges joint.

When sealant is dry, you may use blue spray to restore the original painting.



p.s.

because this is not a material defect, is not covered by warranty, when happens 99% of our customers fix it by themselves, as alternative way, call your local dealer for repair service.

Best regards

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