

THINGS THAT MAY OR MAY NOT HAPPEN WHEN YOU PUSH THE FEATHER BUTTON

(Hamilton Standard 23E50 ONLY) TJLJ

1. It works normally. Meaning the propeller feathers, the feather button pops out and the feather motor stops.
2. The feather button pops up early. Meaning that the propeller did not feather and the engine and prop are still turning. The likely problem is that the pressure cutout switch has released the feather button early. THE FIX – simply push the feather button back down and hold it there until the propeller is feathered and then release it.
3. The feather button does not pop up and the propeller begins to un-feather. Meaning the propeller feathered but then started to un-feather. This is likely the pressure cutout switch again. If this condition is not corrected quickly, the propeller will overspeed and cause greater problems. THE FIX – simply pull the feather button up, make sure that the load meter shows a drop in the load, and push the feather button back down. It is now up to you to pull it up again when the propeller reaches the feather position.
4. Nothing happens. Meaning you pushed the feather button down, it stayed down but there is no load increase showing on the load meter, indicating that the feather motor is running. For some reason beyond your control, the feather motor will not run and therefore the propeller will not feather. THE FIX – the best you can do is to place the propeller control to full decrease. This will minimize the drag. You should get 1100 – 1200 rpm.
5. The propeller feathers, the button pops up but then the propeller begins to un-feather. You should immediately look at the load meter, if there is a load, the feather motor is still running and you will soon overspeed the propeller similar to the situation in problem number 3 above. For some unknown reason you have lost normal control of the feathering motor. There is no circuit breaker to pull for this high load motor but you need to stop it. THE FIX – quickly turn off ALL electrical power, meaning the batteries and generators. Now you've stopped the feather motor but the propeller is still not feathered and is still turning but you don't want that, you want it feathered. Because of the way the system works, there is no reason to delay getting the propeller back to the feathered position, so immediately turn on some form of electrical power to start the feather motor. When the propeller reaches the feathered position turn off the source of electrical power. In other words, the electrical source of choice has now become your feather button and you have to operate it manually. Obviously you will be without electrical power for the remainder of the flight.