



**SUBJECT:** PTRIM NML FAIL AND PTRIM BKP FAIL DURING FLIGHT CONTROLS CHECK

**APPLICABILITY:** Phenom 100 fleet

## DESCRIPTION

Embraer has received some reports of PTRIM NML FAIL and PTRIM BKP FAIL on ground when the pilot is verifying the Pitch (NML and BKP) trims before flight.

Two possible cases were identified:

- Switching the PTRIM mode from normal (NML) to backup (BKP) followed shortly by the backup trim command results in CAS PTRIM NML FAIL that remains displayed when the operator returns to the NML trim mode;
- Switching the PTRIM mode from backup (BKP) to normal (NML) followed shortly by the pitch trim switch command (in any of the control yokes) results in CAS PTRIM BKP FAIL triggered.

EMBRAER analyzed both cases and concluded that they are related to the same system characteristic. When TAC's (Trim Actuator Controller) are being transitioned after the pitch trim mode selection, the power supply of the deactivated TAC will not drop to zero instantly. During the transition, the non governing TAC will identify that the actuator is moving without a command, due to the other TAC command, thus triggering the CAS message.

In order to avoid this situation, EMBRAER recommends that after switching between PTRIM modes; **wait at least 3 seconds before executing a trim command.**

If a PTRIM NML FAIL or PTRIM BKP FAIL was already generated on the scenario described on this FOL, a complete power cycle of the aircraft will reset the system and the CAS is prone to disappear.

In any event of pitch trim failure on ground other than the one discussed here, maintenance assistance is required.

In case of pitch trim issues in flight, refer to the proper AFM/QRH procedure.

**FLIGHT  
OPERATIONS  
LETTER**



**PHENOM**  
BY EMBRAER

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Best Regards,

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