



# CONDIÇÃO ESPECIAL

CE/SC nº 25 – 002

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**Título:** **Condição Especial Aplicável à Parada Súbita de Motor e APU**

**Title:** **Special Condition for Sudden APU and Engine Stoppage.**

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**Aprovação:** Resolução nº 155, de 1 de julho de 2010, publicada no **Origem:** SAR Diário Oficial da União nº 125, Seção 1, pág. 60.

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## APLICABILIDADE

Esta condição especial se aplica à parada súbita de motor e APU do avião Embraer EMB 135BJ.

## CONDIÇÃO ESPECIAL

Esta condição especial substitui os requisitos RBHA 25.361(b) e (c), emenda 25-84.

### “§ SC 25-361 Engine and auxiliary power unit torque

(b) The limit engine torque to be considered under § 25.361 (a) must be obtained by multiplying mean torque for the specified power and speed by a factor of-

- (1) 1.25 for turbopropeller installations;
- (2) 1.33 for reciprocating engines.

(c) For turbine engine installations, the engine mounts, pylons and adjacent supporting airframe structure must be designed to withstand 1 g level flight loads acting simultaneously with the maximum limit torque loads imposed by each of the following:

- (1) sudden engine deceleration due to a malfunction which could result in a temporary loss of power or thrust; and
- (2) the maximum acceleration of the engine.

(d) For auxiliary power unit installations, the power unit mounts and adjacent supporting airframe structure must be designed to withstand 1g level flight loads acting simultaneously with the maximum limit torque loads imposed by each of the following:

- (1) sudden auxiliary power unit deceleration due to malfunction or structural failure; and
- (2) the maximum acceleration of the power unit.

### § SC 25-362 Engine failure loads

(a) For engine supporting structure, an ultimate loading condition must be considered that combines 1 g flight loads with the transient dynamic loads resulting from:

- (1) The loss of any fan, compressor, or turbine blade; and
- (2) Separately, where applicable to a specific engine design, any other engine structural failure that results in higher loads.

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- (b) The ultimate loads developed from these conditions are to be multiplied by a factor of 1.0 when applied to engine mounts and pylons and multiplied by a factor of 1.25 when applied to adjacent supporting airframe structure.
- (c) Any permanent deformation that results from the conditions specified in the item (a) of this § SC 25.362 must not prevent continued safe flight and landing.”