

# SCHWEIZER AIRCRAFT CORP.

Supplement to the Approved  
Rotorcraft Flight Manual

For

Schweizer 330 Model 269D Helicopters

## ENGINE AIR PARTICLE SEPARATOR FILTER

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**SECTION I**

General

This supplement must be carried in the applicable basic FAA approved 330 Model 269D Rotorcraft Flight Manual when the rotorcraft is equipped with the Optional Engine Air Particle Separator Filter. Except as modified by this flight manual supplement, operation in compliance with the basic approved Rotorcraft Flight Manual is mandatory.

The Engine Air Particle Separator provides filtration of engine air. The installation incorporates a particle separator filter, a bleed air operated ejector system, and a gas spring operated bypass door. The particle separator unit filters engine intake air by imparting centrifugal force to separate heavy dirt particles from the mainstream of air entering the engine. The ejector system, powered by engine compression air, boosts the scavenge velocity increasing the efficiency of particle removal, and ejects the dirt out of the aircraft. Should differential pressure exceed set limits, the gas spring allows the bypass door to open, providing an alternate air path to the engine plenum chamber. An indicator light on the instrument panel illuminates when the bypass door is activated.

**SECTION II**

Limitations

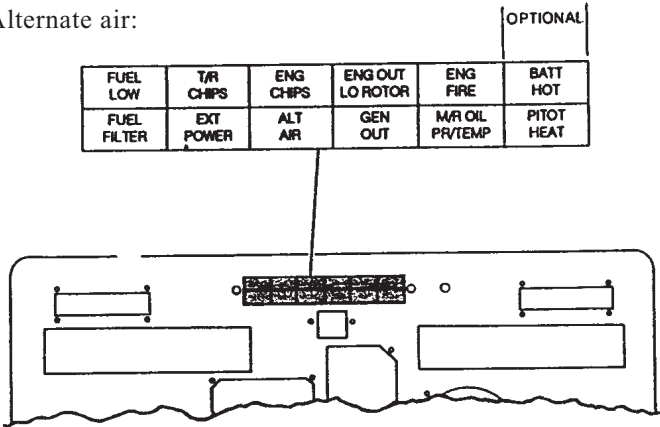
Not Affected

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**SECTION III**

Emergency

- Alternate air:



- • Amber ALT AIR Indicator Illuminates Indicating air bypass door is activated
- • Monitor engine instruments
- • • Land as soon as practicable
- • • Service Particle Separator before next flight (HMI Appx A)

**SECTION IV**

Normal Procedures

**4-1. PILOTS PREFLIGHT INSPECTION**

**INTERMEDIATE FUSELAGE LEFT SIDE**

Engine air filter for obstructions and damage CHECK

Engine air filter ejector tube for obstructions and damage CHECK

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**SECTION V**

Performance

- 5-1.** When making a power check use the internal screen inlet power check chart (Model 269D Pilot's Flight Manual, Fig. 5-8) in the normal manner except, reduce recorded T.O.T. by 11°C at the test torque.

**SECTION VI**

Weight and Balance

- 6-1.** At the time of delivery, Schweizer Aircraft Corporation provides each rotorcraft with an original weight and balance report and a list of equipment (equipment both required and optional) installed on the helicopter at the time of licensing. The removal or addition of any equipment can affect the basic empty weight and center of gravity. Any change to the permanently installed equipment or modification which affects weight or moment must be entered in the weight and balance record.

**SECTION VII**

Handling, Servicing & Maintenance

**7-1. CLEANING AND INSPECTION**

- a. Open lower access door to plenum chamber.
- b. Cover engine air inlet port
- c. Visually check for obstruction or debris in filter. Vacuum any debris from tubes and ejector passageway. Use compressed air to blow out any contaminates.
- d. Wash the filter assembly using a pressurized solution of soap and water then rinse thoroughly to remove any cleaning solution from filter assembly and plenum chamber.
- e. Use compressed air to dry and remove excess moisture from the filter assembly. Remove any standing puddles of water inside the plenum chamber.

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**SECTION VIII**

Additional Operations and Performance Data

- 8-1.**
- Decrease calculated specific range by 3%.
  - Increase calculated fuel flow by 3%.