

# SCHWEIZER AIRCRAFT CORP.

Supplement to the Approved  
Rotorcraft Manual

For

Schweizer Model 269D Helicopters

SpectroLab SX-5 Search Light Install

269D9230 (R/H, Single Mount Install.)

or

269D9236-1 (R/H Dual Mount Install.;  
in Conjunction with ULTRA 7000 FLIR)

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**REVISION TABLE**

Number Change	Date	Description
1	06 Oct 2000	Revised to add new VNE for 269D Config. "A"
2	09 Jul 2002	Add optional dual mount information.

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**Section I**  
**General**

This supplement contains basic operation instructions for optional 269D9230 or 269D9236-1 SX-5 Searchlight Installations. See Spectrolab SX-5 Starburst Operation and Maintenance Manual No. 031718 for further details.

This supplement must be carried in the applicable basic FAA approved Model 269D Rotorcraft Flight Manual when the rotorcraft is equipped with the optional searchlight installation contained herein. Except as modified by this flight manual supplement, operation in compliance with the basic approved Rotorcraft Flight Manual is mandatory.

The 269D9230 Installation is a single mount installation. The 269D9236-1 is a dual mount installation, which has provision for both the SX-5 Searchlight and U7000 FLIR. See RFM Supplement CSP-D-1S for FLIR. Note: The dual mount configuration allows the U7000 FLIR and SX-5 Searchlight to be located in either mounting pad singularly or in unison.

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**Section II  
Limitations**

The following placard is required (2 places) and should be displayed on the instrument panel in view of the pilot and on the side of the hand-held control unit.

- DO NOT OPERATE SEARCHLIGHT BELOW 50 FEET
- DO NOT OPERATE SEARCHLIGHT IN DENSE FOG, CLOUD, SMOKE OR SNOW.

**AIRSPEED LIMITS**

- (269D9236-1) Limit installation to Model 269D Config. "A" only.
- Limit VNE to 108 KIAS.

**Section III  
Emergency and Malfunction Procedures**

- 3.1** In the event of an emergency malfunction of the searchlight:
- Turn power switch on control box to the OFF position
  - Pull circuit breaker(s) on searchlight junction box (located behind R/H seat)

**Section IV  
Normal Procedures**

- 4.1 Preflight**
- a. Verify the searchlight, gimbal and mounting frame are mechanically sound by visual inspection and shake test by hand. Verify all attachment hardware and safety wires are properly attached. Verify light-gimbal clutch movement with friction.

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- b. Verify that all associated cables are tightly connected and show no evidence of cracking or fraying, or interference throughout motion range. Maintain clearance of cables from exhaust pipes for aft mounting in dual installation.
- c. Verify front window, reflector and fan intake are clear and not obstructed.
- d. Verify both circuit breakers in junction box are pushed in. Turn on the searchlight master and listen to cooling fan in operation. It should sound smooth and even. Verify operation of vertical and horizontal directional movement and elevation controls.

**CAUTION**

**Light beam intensity can cause eye damage or ignite flammable materials.**

- e. If system has not been used recently, verify that the lamp starts with full operating voltage applied to searchlight.

#### 4.2 Start-up

- a. With engine at take-off rpm, check that the aircraft amp meter reads less than 115 amps. Normal light operation requires up to 35 amps during start and will decrease to 27 amps or less during continuous operation.
- b. To start the light, on the control box locate the OFF-ON-START switch. Move the switch from the OFF position to the START position. Hold the switch in the start position until the lamp starts (3-5 seconds). Once the lamp starts, release the switch. The switch will automatically move back to the ON position for continued running. During start observe ammeter to ensure maximum aircraft amperage loading limitation is not exceeded.

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4.3 Operation

**CAUTION**

**Inadvertent operation of light below 10 feet AGL can ignite flammable material or dry vegetation.**

- a. Focus and tilt the light as required using the corresponding control box switches. See Operation and Maintenance Manual for further operation details and lamp performance. Monitor ammeter periodically during continuous operation.

4.4 Shutdown

**CAUTION**

**Prior to landing, set searchlight in the horizontal elevation position to prevent damage to the light face.**

- a. To extinguish the searchlight, turn the OFF-ON-START switch to OFF. Note: in addition to turning the light off, power to the lamp fan and gimbal motors will be turned off also.

**Section V**  
**Performance**

Not affected



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**Section VI  
Weight and Balance**

At the time of delivery, Schweizer Aircraft Corp. 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.

The weight and balance information for the removable external mounted light unit is shown below. This weight does not include external mount, control box, junction box and internal wiring.

LIGHT INSTALL CONFIG.	LIGHT WEIG HT LBS.	LONG. ARM IN	LONG. MOMENT IN.-LBS.	LAT. AR M IN.	LAT. MOMENT IN.-LBS.
269D9230 Single Mount or 269D9236-1 Dual Mount @ FWD Mount Pad	18.5	STA. 76.00	1406.0	RBL. 45.88	848.8
269D9236-1 Dual Mount Install. @ Aft Mount Pad	18.5	STA. 92.38	1709.0	RBL. 48.85	903.7

**Section VII  
Aircraft Handling, Servicing and Maintenance**

Reference SpectroLab SX-5 Searchlight Operations and Maintenance Instructions for servicing and handling of searchlight assembly itself. Refer to SpectroLab Installation Manual No. 87987.

**Section VIII  
Additional Operations and Performance Data**

Searchlight installation effects on cruise performance have not been determined.

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