

SX-16 and SX-5

Gimbal Arm Service Life

Safety and Service Bulletin # SL 0899-01

Amendment #1

Date: 03 February, 2020

Amendment #2

Date: 19 March, 2020

WARNING: TO AVOID A POTENTIALLY DANGEROUS SITUATION WHICH COULD CAUSE PROPERTY DAMAGE, ENSURE THAT THE GIMBAL ASSEMBLY SERVICE LIFE IS NOT EXCEEDED.

Subject: Gimbal Arm Service Life

Affected Products:

All SX-16 Nightsun[®] and SX-5 Starburst Searchlight Gimbal Arms with rivet fasteners. The Gimbal Arm is the portion of the Searchlight system which is the (U-shaped) mechanical yoke between the Searchlight and aircraft mount. If the Gimbal Arm assembly does not have rivet fasteners, this bulletin does not apply and the Gimbal Arm does not have a defined service life.

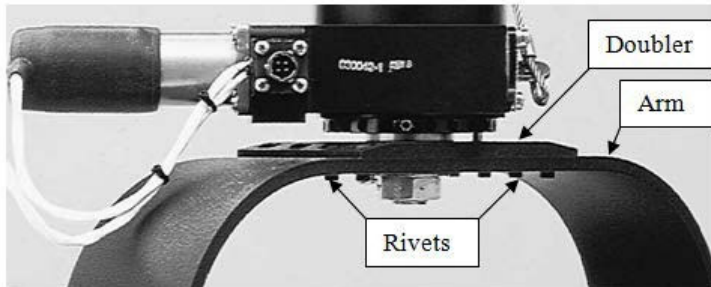
Dear Nightsun[®] and/or Starburst Searchlight Product User:

This amendment #2 supersedes past revisions of SL 0899-01 and is intended to clearly define the Gimbal Arm service life to begin on the date of shipment from Spectrolab.

Under certain environmental conditions, the area around the rivets of the Gimbal Arm Assembly may be subjected to structural integrity weakening.

Weakened Gimbal assemblies may eventually fracture or break, causing a separation between the Gimbal Arm and the doubler plate. This situation would leave the Searchlight and/or Gimbal assembly suspended by the safety cables.

The service life of the Gimbal Arm is limited and the recommended replacement period shall not be exceeded.



What you should do:

The Gimbal Arm service life begins on the shipment date from Spectrolab. It is recommended that this date is recorded for traceability purposes. Regardless if the Gimbal is installed on the aircraft or in storage, the maximum service life of Aluminum Gimbal Arms is **seven (7) years** and the maximum service life of a Steel Gimbal Arm is **ten (10) years**.

If the Gimbal Arm has any signs of corrosion, cracking, loose rivets, or separation between the Gimbal Arm and the doubler, the Arm must be replaced.

The affected Gimbal Assemblies with service life limited gimbal arms are the SX-16 assembly series 019059, 022955 and 021716. The SX-5 Gimbal Assembly series 030040 is also subject to this service letter.

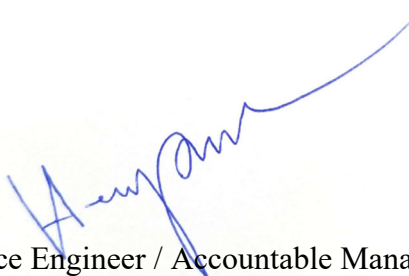
AFFECTED GIMBAL PART NUMBERS AND SERVICE LIFE:

See Appendix I for full listing of assembly part number for which this bulletin affects.

Removal and replacement of the Gimbal Arm can be performed at Spectrolab, any authorized service center or approved MRO facility. Instructions for this procedure are detailed in the appropriate Searchlight Maintenance Manual.

When the Gimbal Arm is replaced, it is important to affix a new identification tag to ensure traceability of the hardware. Have the serial number and Gimbal part number ready when ordering replacement parts and ask the Customer Service representative to include the identification tag with your order.

For questions on this Service Bulletin, please call our Customer Service Department at 1-800-936-4888 for instructions and/or a Return Material Authorization (RMA) number, or refer to <http://www.spectrolab.com/illumination.html> for additional information.


Sara Hesampour
Sr. Quality Assurance Engineer / Accountable Manager
03/19/2020

Appendix I

#	Assembly Part Number	Description	Gimbal Arm Part Number	Service Life (years)
1	019059-104	GIMBAL ASSY, SX-16	019058	7
2	019059-105	GIMBAL ASSY, SX-16 (FASTER MOTORS)	019058	7
3	019059-11	GIMBAL ASSY, SX-16 IFCO	019058-21	7
4	019059-110	GIMBAL ASSY, SX-16 (FASTER MOTORS)	019058	7
5	019059-111	GIMBAL ASSY, SX-16	019058-21	7
6	019059-116	GIMBAL ASSY, SX-16 IR NIGHTSUN	019058-51	7
7	019059-130	GIMBAL ASSY, SX-16, SPECTROLINK	019058	7
8	019059-140	GIMBAL ASSY, SX-16, AL ARM, IFCO, S'LINK	019058-21	7
9	019059-16	GIMBAL ASSY, SX-16 IR NIGHTSUN	019058-51	7
10	019059-4	GIMBAL ASSY, SX-16	019058	7
11	019059-5	GIMBAL ASSY, SX-16	019058	7
12	021716-121	GIMBAL ASSY, SX-16, ALUM LONG	021715	7
13	021716-130	GIMBAL ASSY, SX-16, ALUM LONG, S'LINK	021715	7
14	021716-131	GIMBAL ASSY, SX-16, ALUM LONG	021715	7
15	021716-21	GIMBAL ASSY, SX-16, ALUM LONG	021715	7
16	021716-31	GIMBAL ASSY, SX-16, ALUM LONG	021715	7
17	022955-121	GIMBAL ASSY, SX-16, STEEL	022929	10
18	022955-122	GIMBAL ASSY, IFCO, STL HIGHER SPD MOTORS	022929-11	10
19	022955-124	GIMBAL ASSY SX-16E HIGH AIRSPEED & MOTORS	022929-61	10
20	022955-130	GIMBAL ASSY, SX-16, STEEL ARM, S'LINK	022929	10
21	022955-140	GIMBAL ASSY, SX-16, STL ARM, IFCO S'LINK	022929-11	10
22	022955-141	GIMBAL ASSY, SX-16, STEEL LONG ARM	022929-71	10
23	022955-21	GIMBAL ASSY, SX-16	022929	10
24	022955-22	GIMBAL ASSY, SX-16, IFCO, STEEL	022929-11	10
25	022955-24	GIMBAL ASSY, SX-16E HIGH AIRSPEED	022929-61	10
26	022955-41	GIMBAL ASSY, SX-16, STEEL LONG ARM	022929-71	10
27	022955-51	GIMBAL ASSY (LONGER GIMBAL ARM)	022929-81	10
28	030040	GIMBAL ASSY, SX-5 *SCM*	030041	7
29	030040-100	GIMBAL ASSY, SX-5 (FASTER MOTORS)	030041	7
30	030040-11	GIMBAL ASSY, SX-5, LONG ARM	030043	7
31	030040-111	GIMBAL ASSY, SX-5	030043	7
32	030040-121	GIMBAL ASSY SX-5 5/16 ENDCAP (FSTR MTRS)	030041	7
33	030040-130	GIMBAL ASSY, SX-5, SPECTROLINK	030041	7
34	030040-131	GIMBAL ASSEMBLY	030043	7
35	030040-21	GIMBAL ASSY SX-5 W/HIGH AIRSPD AZ ENDCAP	030041	7
36	030040-31	GIMBAL ASSEMBLY	030041	7
37	030040-41	GIMBAL ASSY, SX-5	030041-11	7