



# SPECTROLAB, INC. SX-16 NIGHTSUN® INSPECTION AND MAINTENANCE SCHEDULE

\* SERVICE LIFE  
 \*\* AIR = AS REQUIRED  
 OPN HRS = OPERATIONAL HOURS  
 FLT HRS = FLIGHT HOURS

| ASSEMBLY                    | SUB ASSY           | DETAIL PART             | TASK              | PRE-FLIGHT | DAILY | EACH  | EACH   | EACH  | EACH   |  |
|-----------------------------|--------------------|-------------------------|-------------------|------------|-------|---|--|---|--|--|
|                             |                    |                         |                   |            |       | 3 MONTHS<br>OR<br>100 FLT HRS<br>OR<br>50 OPN HRS | 6 MONTHS<br>OR<br>300 FLT HRS<br>OR<br>100 OPN HRS | 12 MONTHS<br>OR<br>600 FLT HRS<br>OR<br>250 OPN HRS | 24 MONTHS<br>OR<br>1200 FLT HRS<br>OR<br>500 OPN HRS |  |
| SEARCH-LIGHT                | REAR COVER         | AIR FILTER              | INSPECT           |            | •     | •   |  |   |  |  |
|                             |                    |                         | CLEAN             |            |       | •   |  |   |  |  |
|                             |                    |                         | REPLACE           |            |       |   |  | •   |  |  |
|                             |                    | COVER SCREWS            | INSPECT           |            | •     |   |  |   |  |  |
|                             |                    | BLOWER                  | LISTEN            |            | •     |   |  |   | •  |  |
|                             |                    | REAR COVER FASTENERS    | INSPECT           |            |       |   |  | •   |  |  |
|                             | WINDOW ASSY        | FRONT GLASS             | INSPECT           | •          |       |   |  |   |  |  |
|                             |                    | EXTERIOR                | CLEAN             | •          | •     |   |  |   |  |  |
|                             |                    | INTERIOR                | CLEAN             |            |       | •   |  |   |  |  |
|                             | REFLECTOR          | REFLECTOR               | INSPECT           | •          |       |   |  |   |  |  |
|                             |                    | ASSEMBLY                | CLEAN             |            |       | •   |  |   |  |  |
|                             | LAMP               | LAMP ON                 | RUN               |            |       |   | •  |   |  |  |
|                             |                    | SHAKEOUT                | TEST              |            |       |   | •  |   |  |  |
|                             |                    | QUICK COLD STARTS       | TEST              | •          |       |   |  | •   |  |  |
|                             |                    | FULL COLD STARTS        | TEST              |            |       |   |  | •   |  |  |
|                             |                    | QUICK HOT STARTS        | TEST              | •          |       |   |  |   |  |  |
|                             |                    | FULL HOT STARTS         | TEST              |            |       |   |  | •   |  |  |
|                             |                    | OPTICS:                 | LAMP CENTERING &  | TEST       |       | •   |  |   |  |  |
|                             | LIGHT BEAM         | FOCUS CAM               | ADJUST AIR*       |            |       |   | •  |   |  |  |
|                             | ELEVATION          | SCREWS                  | INSPECT           |            |       |   | •  |   |  |  |
| STOP                        | 80 DRIVE HOLE      | INSPECT                 |                   |            |       |   | •  |   |  |  |
| HOUSING                     | T-THREADED INSERTS | INSPECT                 |                   |            |       |   | •  |   |  |  |
|                             | DRIVE BOSSES EXT.  | INSPECT                 |                   | •          |       | •   |  |   |  |  |
|                             | DRIVE BOSSES INT   | INSPECT                 |                   |            |       |   |  | •   |  |  |
| CHASSIS INTERNAL INSPECTION |                    | INSPECT, LUBE           |                   |            |       |   |  | •   |  |  |
| GIMBAL                      | WIRING             | MOTOR CABLES            | INSPECT           |            | •     | •   |  |   |  |  |
|                             | MOTORS             | MOTOR(S) FUNCTION       | TEST              |            | •     |   |  |   |  |  |
|                             |                    | MOTOR BOOTS             | INSPECT           |            | •     |   |  |   |  |  |
|                             |                    | CONNECTORS              | INSPECT           |            |       | •   |  |   |  |  |
|                             |                    |                         | TEST              |            |       |   | •  |   |  |  |
|                             | MECHANICAL         | AZIMUTH ENDCAP          | INSPECT           |            | •     |   |  | •   |  |  |
|                             |                    | EL GEARBOX TO GIMBAL    | INSPECT           |            | •     |   |  | •   |  |  |
|                             |                    | GEARBOX BACKLASH        | TEST              |            | •     |   |  | •   |  |  |
|                             |                    | GEARBOX CLUTCHES        | TEST              | •          |       | •   |  |   |  |  |
|                             |                    | WINDBOLTS               | INSPECT           | •          |       |   |  |   |  |  |
|                             |                    | SAFETY CABLES           | INSPECT           | •          |       |   |  |   |  |  |
|                             | GIMBAL ARM         | FATIGUE & RUST          | INSPECT           |            |       |   |  | •   |  |  |
|                             |                    | ALUMINUM ARM            | INSPECT / REPLACE | •          |       |   |  | •   |  |  |
|                             |                    | STEEL ARM               | INSPECT / REPLACE | •          |       |   |  | •   |  |  |
|                             |                    | UNIBODY                 | INSPECT           | •          |       |   |  | •   |  |  |
|                             |                    | EL HARD STOPS (UNIBODY) | INSPECT           |            | •     |   |  | •   |  |  |
|                             | AZ STOP ROLL PIN   | INSPECT                 |                   | •          |       | •   |  |   |  |  |
| CABLING                     | EXTERNAL (VISIBLE) | SPLIT CABLE             | INSPECT           | •          |       |   |  |   |  |  |
|                             |                    | BULKHEAD CONNR          | INSPECT           | •          |       |   |  |   |  |  |
|                             | INTERNAL (HIDDEN)  | CABLES                  | INSPECT           |            |       |   | •  |   |  |  |
|                             |                    | BULKHEAD CONNR          | INSPECT           |            |       |   | •  |   |  |  |
|                             | JUNCTION BOX       | INSPECT                 |                   |            |       | •   |  |   |  |  |
| CONTROL BOX                 | RETRACTILE CABLE   | INSPECT                 |                   | •          |       | •   |  |   |  |  |
|                             |                    | TEST                    |                   |            |       |   | •  |   |  |  |
|                             | SWITCHES           | TEST                    |                   | •          |       |   |  |   |  |  |

REFERENCE MAINTENANCE MANUAL (031734-1) FOR PROCEDURES AND CRITERIA