

SUBJECT: NORWICH AERO PRODUCTS, INC. Oil Temperature Probes, Inspection for improper assembly.

MODELS/S/N AFFECTED: Mooney M20J (MSE) S/N 24-3293, 24-3298, 24-3299, 24-3300

(The above listed aircraft had one of the suspect S/N probes installed at the factory, these aircraft require inspection and corrective action, if necessary)

There are three other S/N aircraft in the field that may have suspect Oil Temperature Probes installed. The Quality Assurance records contain probe serial number entries that are in error and the actual installed units can not be verified. Therefore these additional aircraft will require inspection to verify S/N's of installed units. The aircraft are: M20J, S/N 24-3296, 24-3302 and M20M, S/N 27-0158.

There are three probes, Norwich S/N, 00023, 00027 and 00036 that have not been accounted for as of the writing of the SI. These may be installed on the three aircraft listed above (paragraph 2 of MODELS/S/N AFFECTED), however, inspections are necessary to locate suspect probes.

TIME OF COMPLIANCE: Within next 10 hours of operation.

INTRODUCTION: Mooney Aircraft Corporation returned one malfunctioning Oil Temperature Probe to Norwich Aero Products, Inc. for warranty. A few days later another unit was found to be leaking and was also returned to the manufacturer. Norwich Aero Products, Inc. contacted Mooney Purchasing personnel and asked that all serial numbers within the manufacturing lot number of the two returned units be inspected for improper assembly. This Service Instruction is being prepared to accomplish this inspection.

The probes that are improperly assembled by Norwich Aero Co. Inc. may develop an oil leak at the wire lead pass through points on the visible portion of the probe. This is normally inspected at each annual or periodic inspection as a routine maintenance item and attrition should correct the possibility of any malfunctioning unit. The oil loss rate can vary, but units found to be leaking were not leaking at an excessive rate but could develop into a significant oil leak.

INSTRUCTIONS:

1. Remove upper and lower cowling per appropriate model Service and Maintenance (S & M) manual, Section 71-10-00.
2. Locate oil temperature probe. Both installations have the Oil Temperature Probe located near the oil filter.  
M20M - Located just above oil filter, pointing almost straight up on the accessory case.  
M20J - Located to the right and slightly below the top flange of the oil filter on the accessory case.
3. Remove terminal lead connections. Remove probe from accessory case carefully.
4. Inspect probe at threaded shoulder for visible signs of incomplete weld around circumference of threaded shoulder. This weld (fusing) will show up as a light "weld" type operation. If junction between the stem portion and the threaded shoulder is smooth and a visible separation is seen, the unit is **improperly assembled**.
5. Return for Warranty Credit any improperly assembled unit (even if no leaks have occurred) and install a replacement, Mooney P/N, 800263-799.
6. Check all connections, electrical and mechanical, and re-install lower and upper cowling per S & M manual, Section 71-11-00.

WARRANTY: Mooney Aircraft Corporation will allow 1.0 hour labor to accomplish this inspection, and replacement, if needed. Replacement Oil Temperature Probes may be obtained through your nearest Mooney Service Center. **It is recommended that good replacement probes be on hand prior to starting inspections.** Warranty will be honored if inspection per this SI and warranty claim submittal is accomplished within 180 days of the issue date of this SI.

REFERENCE DATA: N/A

PARTS LIST: Kit Part Number - SI M20-99-1

ITEM	P/N	DESCRIPTION	QTY
1.	800263-799.	PROBE, OIL TEMP.	1

(REPLACEMENT NECESSARY ONLY WHEN PROPER "WELD" IS NOT APPLIED ON INSTALLED UNIT)

FIGURES/  
TABLES: SEE FIGURE SI M20-99-1 BELOW

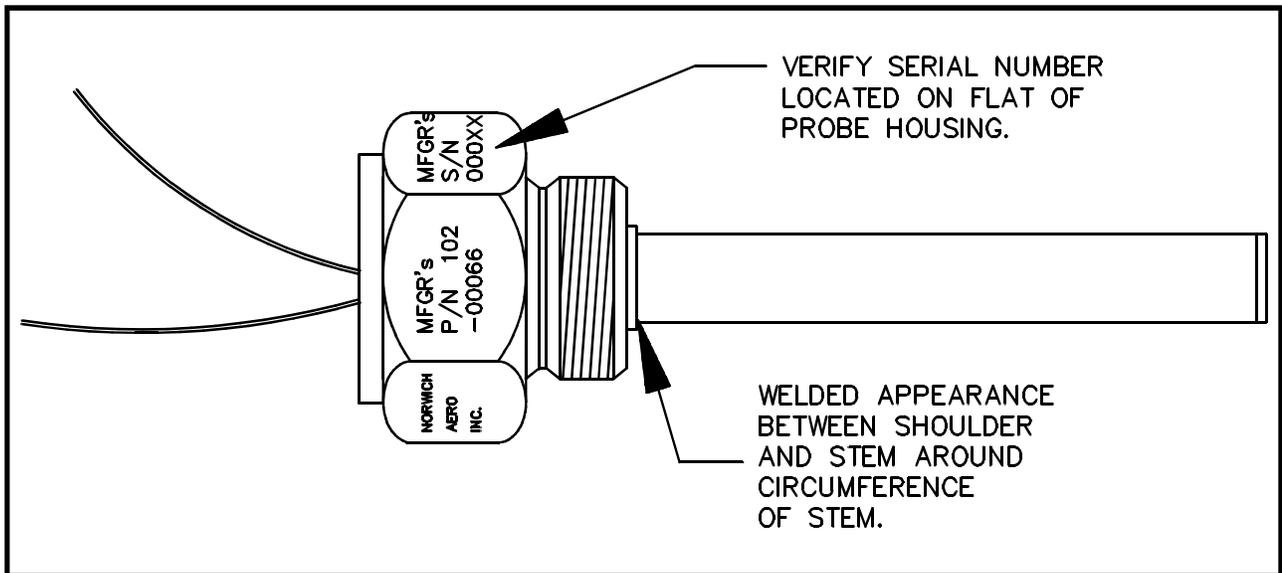


FIGURE SI M20-99-1 OIL TEMPERATURE PROBE (NORWICH AERO)