



Issues

INFORMATION BULLETIN No. EV-97 – 010b (IBEV-97-010b)
SPORTSTAR – 007b (IBSPORTSTAR-007b)

1. **CONCERNING TO :** Oil thermostat additional installation.
2. **REASON :** Low oil temperature during winter operation.
Operating oil temperature is reached sooner when thermostat is installed.
3. **REQUIRED ACTION :** Install oil thermostat (P/N 48909) into engine oil system
4. **DATE OF THE ACTION:** According to airplane owner decision – depending on service conditions and actually reached operating oil temperatures.
5. **ACTION CARRIED OUT BY :** Airplane owner, operator or by him entrusted mechanic.
6. **COSTS COVERED BY :** Airplane owner.
Estimated time to perform bulletin is 2 hours.
7. **NECESSARY MATERIAL :** Will be supplied by the airplane manufacturer.
List of necessary tools see in Enclosure.
8. **WORK PROCEDURE :** see Enclosure.
9. **ENCLOSURES :** Procedure to install oil thermostat.
10. **ELABORATED BY :** Petr Javorský, Pavel Ulrich

Petr JAVORSKY
Manufacturer's Representative

09/09/2006
Date:

Jiří VYCHOPEN
Light Aircraft Association
Expert supervisor

09/09/2006
Date:



Procedure to install oil thermostat

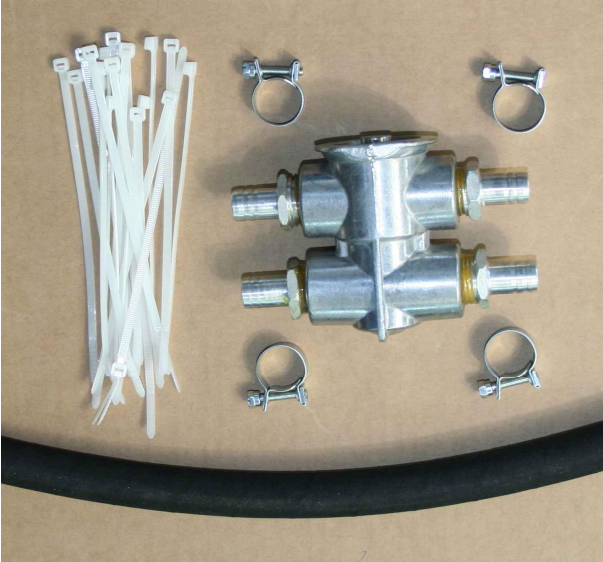
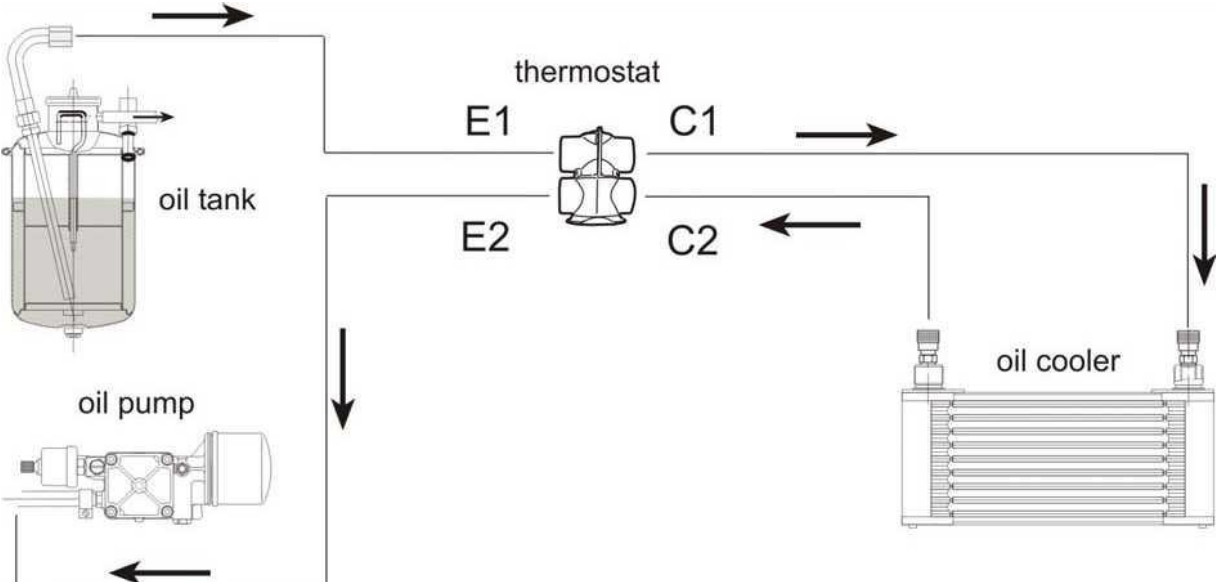
Photo	Procedure
	<p>Supplied material: (set No. E6 10-34 01)</p> <ul style="list-style-type: none">- P/N 48909 oil thermostat - set- P/N 13393 - tightening strip 3.6x142 – 10 pcs- P/N8595 - oil hose 20/12 – 3 pcs- P/N 49497 - protective hose HILCOFLEX (not shown) – 19 in <p>Other necessary material</p> <ul style="list-style-type: none">- grease for lubrication hose socket and elbow-pipe to ease assembly
<p>List of necessary tools:</p> <ul style="list-style-type: none">- screwdriver to remove engine cowling and hose clamp assembly- wrench size 22 mm to knee assembly- cutting pliers to cut tightening strips- pliers to tighten tightening strips- vessel to decant oil from the hoses- knife to cut hoses	
<p>Oil thermostat connection schema:</p> 	





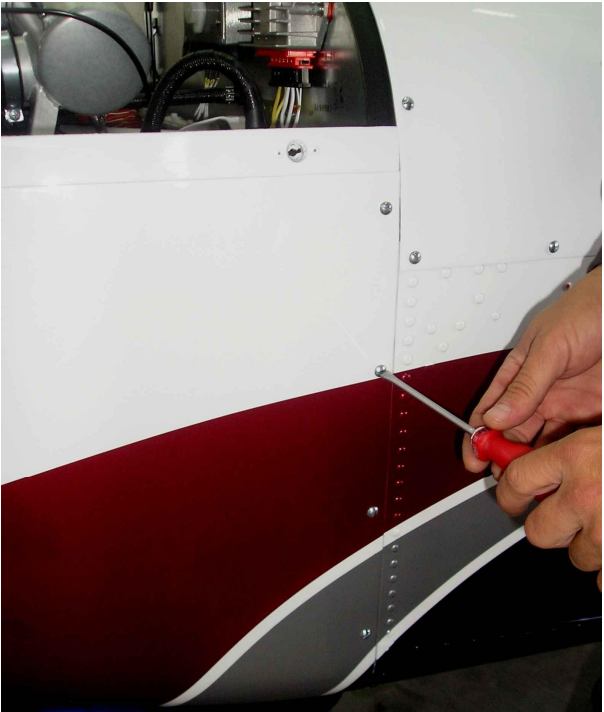
Photo	Procedure
	<p>Transport the airplane to a place suitable to perform the work.</p> <p>Remove upper engine cowling.</p>
	<p>Remove 5 screws attaching water cooler to bottom engine cowling.</p>
	<p>Set propeller (3-blade) upper blade vertically. Remove lower engine cowling. Unscrew upper bolts last. Helper unscrews upper screw on the opposite side and it will help during lower cowling removal. It is necessary to hold cowling during upper screws removal. Lower slightly cowling after upper screws removal and push cowling forward among propeller blades. Avoid contact cowling with nose wheel cover to prevent paint damage.</p>




Photo	Procedure
	<p>Unscrew sleeve nuts of the oil cooler elbow-pipe and remove elbows from oil cooler.</p> <p>Loosen hose clamps and remove elbows from the hoses.</p>



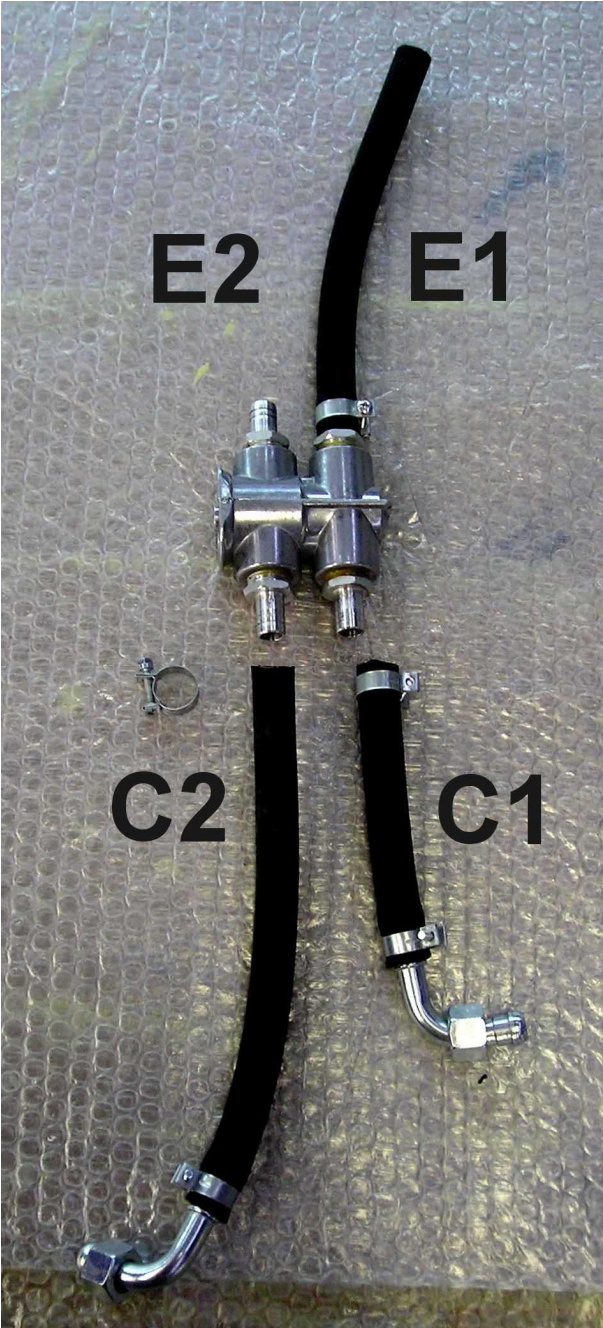

Photo	Procedure
	<p>3 pieces of the oil hose 20/12 are delivered with the following lengths:</p> <p>E1 - 9 in C1 - 5.5 in C2 – 9.6 in</p> <p>Measure E2 hose length (between engine oil pump inlet and E2 thermostat neck) after thermostat location on the aircraft. Original hose E2 (from aircraft) will be used for thermostat connection.</p> <p>Slip hose clamps on the hoses. Slip hoses on the appropriate hose sockets. Grease sockets before hose slip to ease it. Designating codes of the thermostat outlet/inlet are located on the thermostat necks periphery.</p> <p>Slip hose clamps and elbow-pipes on the C1 and C2 hose.</p> <p>Do not tighten hose clamps to allow thermostat position setting during installation.</p> <p>Note: When using your own thermostat, seal hose sockets with Loctite 577.</p>
	<p>Slip HILCOFLEX protective hose (approx 6 in long) on the E1 oil hose.</p>



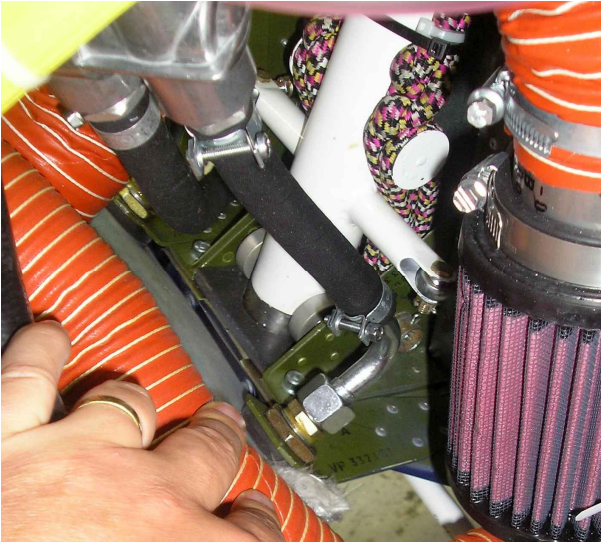
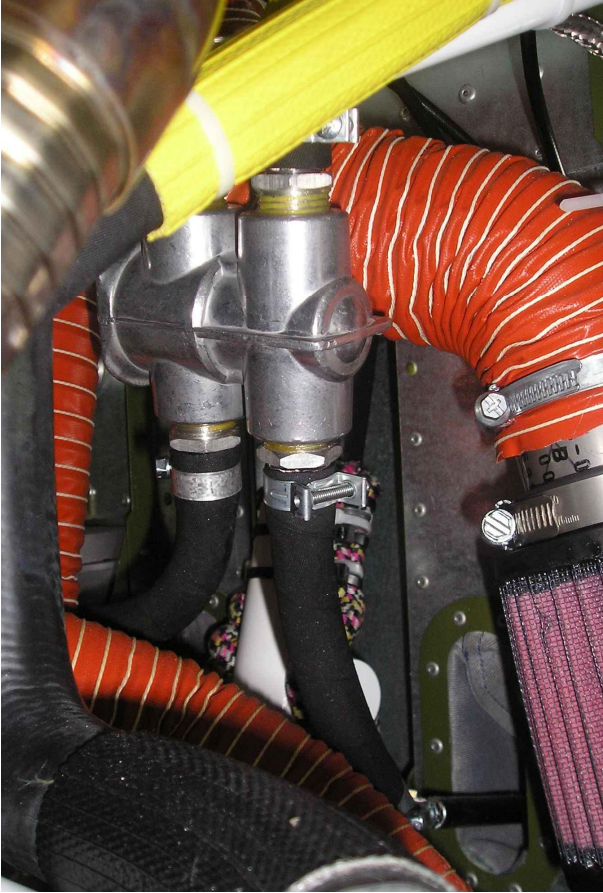
Photo	Procedure
	<p>Screw elbows on the oil cooler.</p> <p>Turn elbows to position where contact with pedal control rods in utmost position can not occur.</p> <p>Tighten elbows in this position.</p>
	<p>Set oil thermostat to position according to this figure.</p>




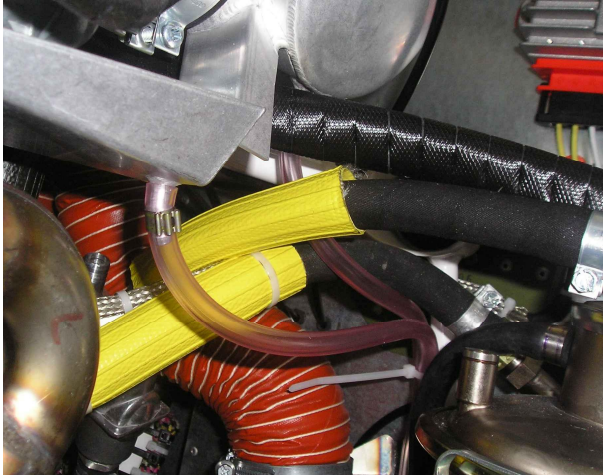
Photo	Procedure
	<p>Oil thermostat - total view</p>
	<p>Remove original hose between oil tank and oil cooler, it will be replaced with E1 hose.</p> <p>If is hose attached to surrounding construction with tightening strips, cut them.</p> <p>Train E1 hose to oil tank between two tubes of the engine bed. Locate middle of the HILCOFLEX protective hose on the engine bed tube.</p>




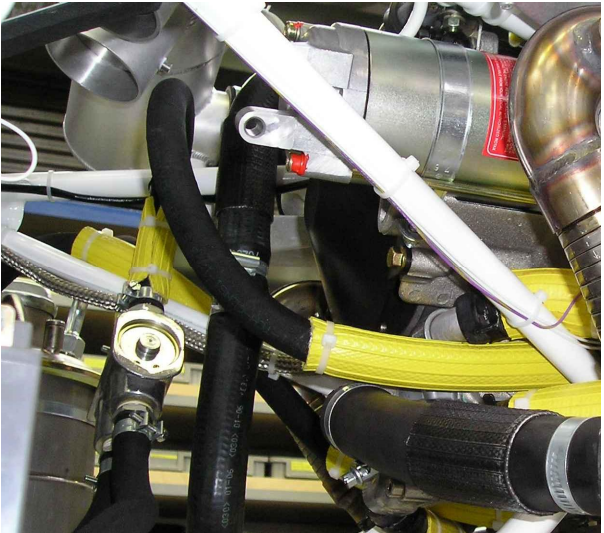

Photo	Procedure
	<p>Slip hose clamp on the hose and put it on the oil tank elbow.</p>
	<p>Train original hose from oil pump to E2 hose socket of the thermostat. Make smooth hose arch.</p> <p>Mark necessary hose length. Cut hose for this length. Slip HILCOFLEX protective hose on the oil hose. Locate protective hose to place when contact with surrounding construction can occur. Slip hose clamp on the oil hose and put hose on the E2 hose socket of the thermostat.</p> <p>Note: Hoses of the heating and suction system are removed on this picture to improve clearness.</p>



Photo	Procedure
	<p>Check all thermostat oil hoses for flattening. Flattening is not permissible.</p> <p>Tighten all hose clamp.</p>
	<p>Secure all HILCOFLEX protective hoses against shift with tightening strips.</p> <p>Fix thermostat oil hoses to surrounding construction or to other hoses with tightening strips.</p>
	<p>Install lower engine cowling, screw up water cooler.</p>
<p>Check oil quantity, replenish oil if necessary.</p>	
<p>Install upper engine cowling.</p>	
<p>Perform engine test. Oil pressure and temperature must be within green arc.</p>	
<p>Record implementation of this bulletin into Airplane Log Book.</p>	