

1. ELT manufacturer, model number, and TSO Number

**Manufacturer: ACR Electronics**  
**Vendor p/n: 455-6608**  
**Cirrus p/n: 17190-007**  
**TSO-C126**

2. Type of restraints (3 or 4 point) and whether inflatable restraints were installed?

**Front seats have a 4-point harness and airbag seatbelts. The rear seat is a 60/40 split bench to allow for 3 occupants. All three seat positions in the rear seats have 3-point harnesses and no airbags. System description excerpt from POH is below.**

## **Front Seats**

The front seats are adjustable fore and aft and the seat backs can be reclined for passenger comfort or folded forward for rear seat access. Integral headrests are provided. The fore and aft travel path is adjusted through the seat position control located below the forward edge of the seat cushion. The seat track is angled upward for forward travel so that shorter people will be positioned slightly higher as they adjust the seat forward. Recline position is controlled through levers located on each side of the seat backs. Depressing the recline release control while there is no pressure on the seat back will return the seat back to the full up position.

To position front seat fore and aft:

1. Lift the position control handle.
2. Slide the seat into position.
3. Release the handle and check that the seat is locked in place.

To adjust recline position:

1. Actuate and hold the seat back control lever.
2. Position the seat back to the desired angle.
3. Release the control lever.

## **Rear Seats**

The rear seats employ a one-piece bench seat and two seat backs configured in 60/40 split. This "2+1" seating configuration provides for a center seat/restraint area for a third passenger on the wider left hand seat.

Each seat back reclines independently of each other and can be folded forward to provide a semi-flat surface for cargo extending

forward from the baggage compartment. Recline position is controlled through a lever located on either side of the seat.

To fold seat back forward:

1. With no pressure on the seat back, rotate the lever to the recline position and fold the seat back forward.

### **Seat Belt and Shoulder Harness**

Integrated seat belt and shoulder harness assemblies with inertia reels are provided for the pilot and each passenger.

The front seats use a 4-point inflatable restraint system. Forward seat belts are attached to the seat frame. The shoulder harnesses are attached to inertia reels mounted in the seat back.

The rear seats use a 3-point safety harness consisting of one shoulder harness and a lap belt. The rear seat belts are attached to fittings on the cabin floor. The shoulder harnesses are attached to inertia reels mounted to the baggage compartment rear bulkhead.

Each front and rear seat shoulder harness is attached to the seat belt. The inertia reels allow complete freedom of movement of the occupant's upper torso. In the event of a sudden deceleration, the reels lock automatically to protect the occupants. It is recommended that the seat belts be stowed in the latched position when not in use.

3. Whether the inflatable restraints deployed. If so, what seats?

**Recovery company photos show that both front crew seat airbags had deployed.**



4. An excerpt of the electrical diagram from the maintenance manual or other document associated with the oil pressure indicating system suitable for the NTSB public docket.

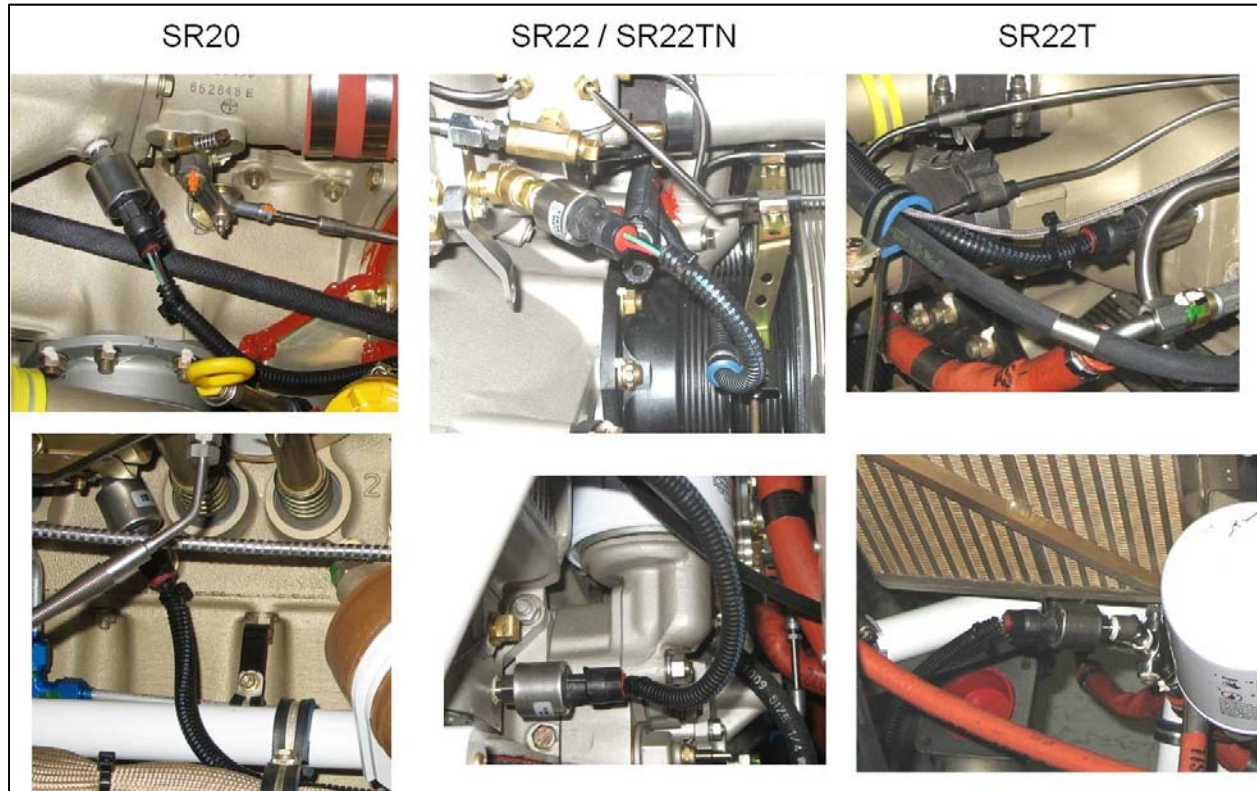
**See attached documents. WM 77-00-01 pg. 8 & 77-40-01 pg 4 sht 1 & 2**

5. Whether Cirrus has been aware (continued airworthiness) of a previous event involving faulty oil pressure annunciation

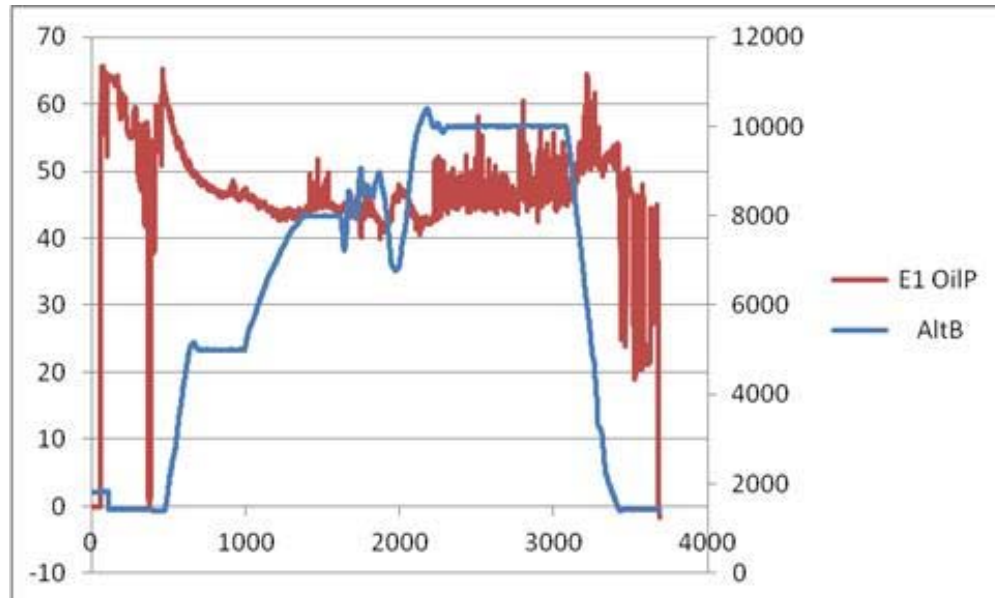
**Tim Timmerman, Director of the SR2X Program, provided the following information:**

**Oil and Manifold Pressure Sensors**

**Starting back in 2010, Cirrus Aircraft noticed an increase in warranty claims and customer satisfaction survey results that showed a high replacement rate for oil and manifold pressure sensors. These are identical parts and are installed and wired similarly.**



The reason for replacement was erratic indications of oil or manifold pressure as shown on the MFD. A typical example is shown below.



Several potential causes were explored for this issue and in the end, two causes were identified as contributing to the erratic behavior. Both of those causes were due to connectors. The first was baffle connector and the second was the connector at the sensor.

In November 2012, Service Bulletin SB2X-77-04 was released which described the replacement of the oil and manifold pressure sensors, the addition of strain relief parts at the sensor connector and removal of the baffle connector. This same system was installed on the production line in the months leading up to this service bulletin release.

6. An electronic copy of the airplane POH/AFM

See attached.

7. A copy of the original build list or delivery document(s)

**According to factory records the airplane came equipped with the following:**

- **Cirrus Perspective Avionics by Garmin**
- **Garmin GFC 700 autopilot with yaw damper**
- **Synthetic Vision Technology (SVT)**
  - **3-D representation of terrain and objects displayed on the PFD**
- **Enhanced Vision System (EVS)**
  - **Wing mounted camera combines low light and infrared vision technology to display forward view to pilot on MFD in cockpit**
- **Dual AHRS (attitude and heading reference system)**
- **Dual ADC (air data computers)**
- **FIKI (a TKS system capable of flight into known icing)**
- **Transponder with ADS-B capability**
- **Electronic Stability Protection (ESP)**
- **Garmin Traffic**
- **Garmin Terrain Awareness (TAWS-B)**
- **Global Connect (satellite text message capability)**
- **Chartview (electronic charts)**
- **Air Conditioning**
- **60/40 seating (back seats)**
- **Tanis engine pre-heater**