VACUUM INDICATING - MAINTENANCE PRACTICES

1. General

A. This section provides a brief description of the components and instruments used to indicate vacuum; and removal/installation instructions for the various components.

2. Description and Operation

A. The required components that provide an indication for operation of the vacuum system include Vacuum-Low warning switch, suction gage, Vacuum-Low warning annunciator light, horizon gyro indicator and directional gyro indicator.

(1) The Vacuum-Low warning switch provides electrical activation for the annunciator light when suction is less than approximately 2.5 to 3.5 in. Hg.

(2) The suction gage indicates in inches of mercury for the vacuum system.

(3) The Vacuum-Low warning annunciator light may illuminate, warning the pilot of a possible Vacuum-Low condition. For annunciator lamp replacement, refer to Chapter 31, Master Warning and Annunciator Panel - Maintenance Practices.

(4) The horizon indicator gyro indicates the pitch and roll flight attitude of the airplane in relationship to the earth.

NOTE: The horizon and directional gyro indicators represented in this chapter are standard equipment.

(5) The directional gyro indicator displays the airplane heading when properly set to agree with the magnetic compass.

3. Vacuum-Low Warning Switch Removal/Installation (Model 208)

A. Remove Vacuum-Low Warning Switch (Refer to Figure 201).

(1) Remove electrical leads (3) and tag for reinstallation.

(2) Loosen clamp (2) and slide hose (1) from Vacuum-Low warning switch (4).

B. Install Vacuum-Low Warning Switch (Refer to Figure 201).

(1) Slip hose (1) over switch (4) and tighten clamp (2).

(2) Install electrical leads (3) and remove tags.

4. Vacuum-Low Warning Switch Removal/Installation (Model 208B)

A. Remove Vacuum-Low Warning Switch (Refer to Figure 201).

(1) Remove electrical leads (3) and tag for reinstallation.

(2) Loosen clamp (2) and slide hose (1) from Vacuum-Low warning switch (4).

B. Install Vacuum-Low Warning Switch (Refer to Figure 201).

(1) Replace electrical leads (3) and remove tags.

(2) Slip hose (1) over switch (4) and tighten clamp (2).

5. Suction Gage Removal/Installation

A. Remove Suction Gage (Refer to Figure 201).

(1) Remove screws securing removable panel and slide the panel forward to gain access to the back of the suction gage.

(2) Reach through opening and loosen clamps (6) and slide hoses (5) off gage (7). Loosen clamps (2) and remove Vacuum-Low warning switch (4).

(3) Remove screws (8) and carefully remove suction gage through opening.

B. Install Suction Gage (Refer to Figure 201).

(1) Position suction gage through opening and secure to instrument panel using screws (8).

(2) Slide hoses (5) over gage (7) and tighten clamps (6). Slide hose (1) over gage (7) and tighten clamps (2).

(3) Slide removable flight panel back against instrument panel and tighten screws.

6. Horizon Gyro Removal/Installation

A. Remove Horizon Gyro (Refer to Figure 201).

(1) Remove screws securing removable panel and slide panel forward to gain access to back of gyro (11).

(2) Loosen clamps (10) and slide hoses (9) off gyro (11).

(3) Remove screws (12) securing gyro to instrument panel and lift gyro from panel.

B. Install Horizon Gyro (Refer to Figure 201).

(1) Position gyro (11) in instrument panel and secure using screws (12).

(2) Slide hoses (9) onto gyro (11) and tighten clamps (10).

(3) Slide removable panel back against instrument panel and tighten screws.

(4) (For airplanes equipped with KFC-225 autopilot.) If a new unit is installed or the unit is calibrated, do a system alignment. Refer to Introduction, the List of Manufacturers Technical Publications for the manufacturer's installation manual.

7. Directional Gyro Removal/Installation

A. Remove Directional Gyro (Refer to Figure 201).

(1) Remove screws securing removable panel and slide panel forward to gain access to back of gyro (14).

(2) Loosen clamps (15) and slide hoses (16) off gyro (14).

(3) Remove screws (13) securing gyro to instrument panel and lift gyro from panel.

B. Install Directional Gyro (Refer to Figure 201).

(1) Position gyro (14) in instrument panel and secure using screws (13).

(2) Slide hoses (16) onto gyro (14) and tighten clamps (15).

(3) Slide removable panel back against instrument panel and tighten screws.

Figure 201 : Sheet 1 : Vacuum System Components Installation

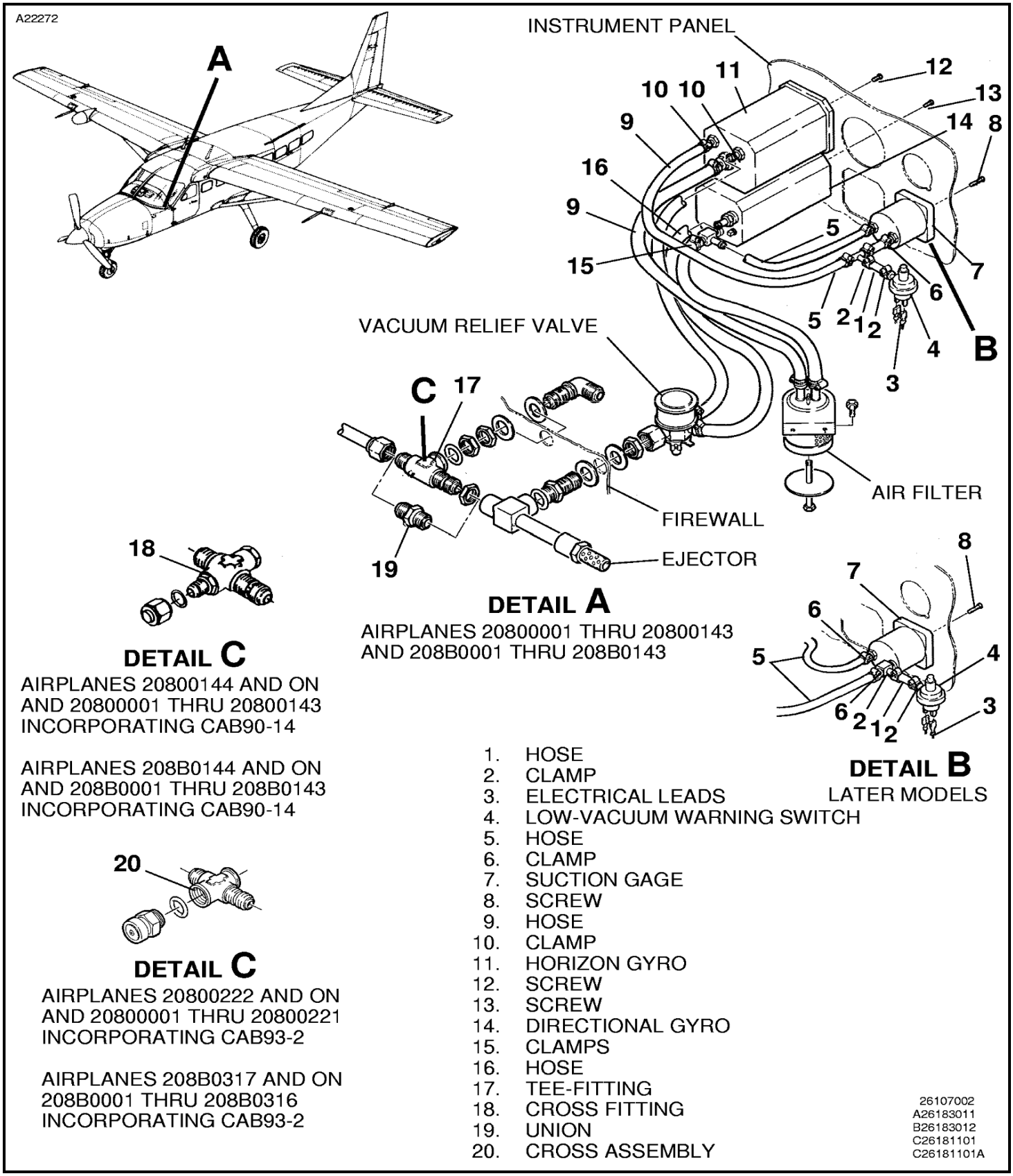

Figure 201 : Sheet 2 : Vacuum System Components Installation

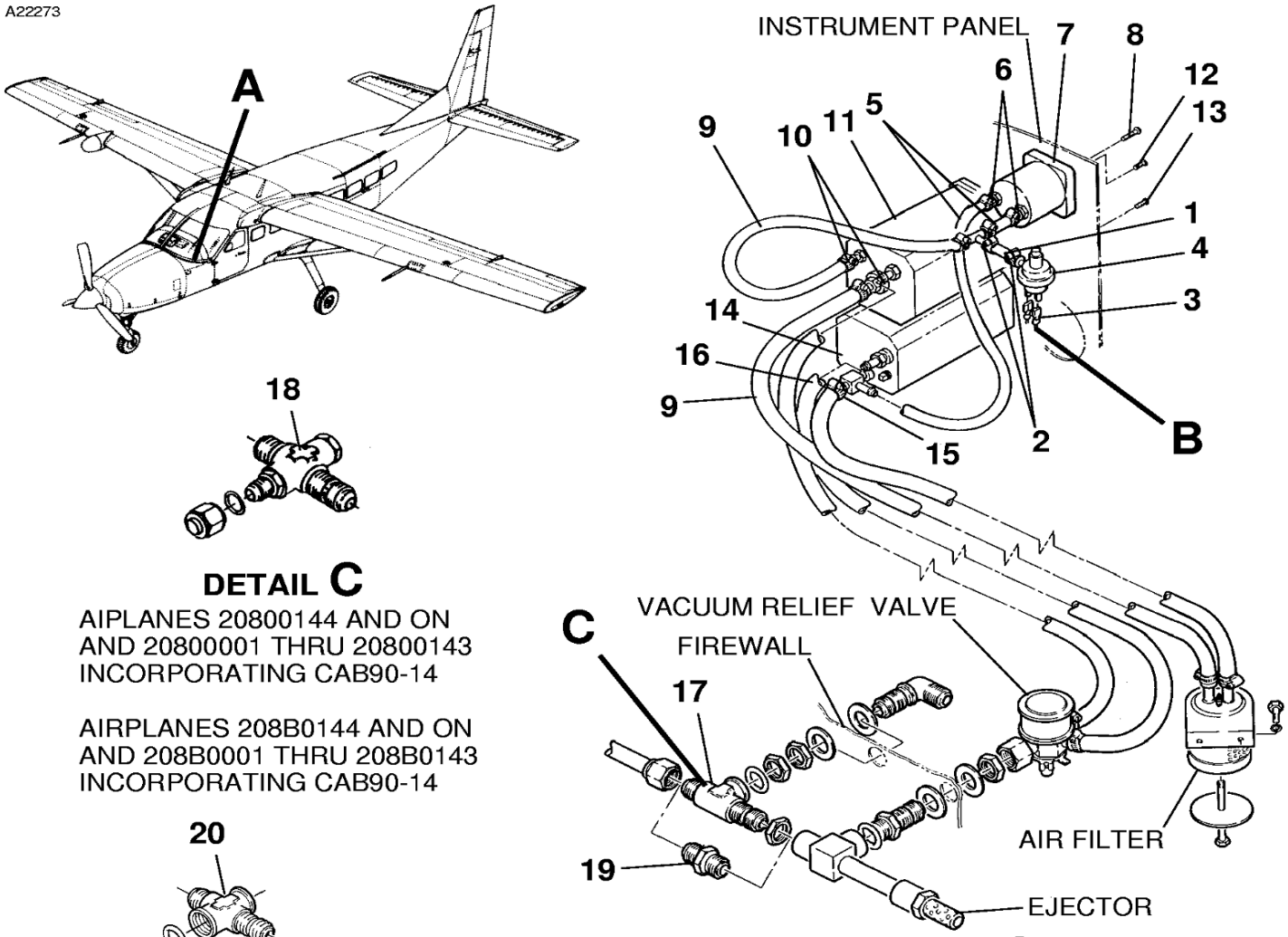

Figure 201 : Sheet 3 : Vacuum System Components Installation