## Multi-engine SERVICE BULLETIN



MEB-27-01

### **TITLE**

FLIGHT CONTROLS - CONTROL-COLUMN INTERNAL GLIDE ATTACH-SCREW INSTALLATION

#### **EFFECTIVITY**

MODEL	SERIAL NUMBERS		
T303	T30300001 thru T30300315		
(T)337	33700756 thru 33701950		
F(T)337	F33700001 thru F33700086		
P337	P3370001 thru P3370356, 677		
T337H-SP	33701920, 33701923 thru 33701927, 33701951 thru 33701955		
M337	337-M0193 thru 337-M0476		
FT337GP-FT337HP	FP33700001 thru FP33700023		

### **REASON**

If the control-column internal glide attach-screws are not correctly attached, they can loosen and fall off inside the control column tube. This condition can cause looseness of the control column and the fallen screw may limit full range of elevator control.

### **DESCRIPTION**

The pilot's and the copilot's control-column internal glide attach-screws are removed and new ones are installed and 0.020 steel wire is used to safety the screw to the installation as specified in this service bulletin.

### **COMPLIANCE**

Mandatory: Shall be accomplished at the next 100-hour inspection or 12-month (annual-type) inspection, whichever occurs first.

### **APPROVAL**

FAA approval has been obtained on technical data in this publication that affects airplane type design.

### **CONSUMABLE MATERIAL**

You must use the consumable material that follows, or equivalent, to complete this service bulletin.

NAME	NUMBER	MANUFACTURER	USE
0.020 steel safety wire		Commercially available	To secure the screw

### WEIGHT AND BALANCE INFORMATION

Negligible

MEB-27-01 Page 1 of 8

### SERVICE BULLETIN



MEB-27-01

### **REFERENCES**

Applicable Cessna Airplane Maintenance Manuals and Illustrated Parts Catalogs.

NOTE: Make sure all publications used are complete and current. Refer to www.cessnasupport.com.

**NOTE:** This information shall be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual or Instructions for Continued Airworthiness and must be accomplished for ongoing airworthiness compliance as necessary in accordance with 14 CFR Part 43.13.

#### **PUBLICATIONS AFFECTED**

Applicable Cessna Airplane Maintenance Manuals and Illustrated Parts Catalogs.

#### **ACCOMPLISHMENT INSTRUCTIONS**

- 1. Prepare the airplane for maintenance.
  - A. Make sure that all switches are in the OFF/NORM position.
  - B. Disconnect electrical power from the airplane.
    - (1) Electrically ground the airplane.
    - (2) Disconnect external electrical power.
    - (3) Disconnect the airplane battery.
  - C. Attach maintenance warning tags to the battery and external power receptacle that have "DO NOT CONNECT ELECTRICAL POWER MAINTENANCE IN PROGRESS" written on them.
- 2. Remove and replace the control-column internal glide attach-screw on the pilot's control column as follows:
  - A. (Refer to Figure 1, Detail A.) To get access to the control-column internal glide attach-screw, remove the control wheel from the control column. (Refer to the applicable maintenance manual.)
  - B. If installed, remove the control wheel gust lock from the pilot's control column.
  - C. Make sure that the elevators are at the fully down position and that the ailerons are at the neutral position.
  - D. Remove and discard the old screw.
  - E. Cut a section of 0.020 steel safety wire to approximately 24 inches in length.
  - F. Install the new MS35265-48 Screw and the 0.20 steel safety wire as follows:
    - (1) {Refer to Figure 1, Detail B (Step 1).} Put one end of the safety wire through the large diameter hole and through the gap between the square tube and the stake nut support, and pull the two ends of the safety wire aft until they come together aft of the square tube.
      - Make sure that you install the safety wire through the large diameter hole and not through one of the 0.25-inch diameter holes for the gust lock.
      - If the square tube is installed with the large diameter hole on the top surface of the square tube, make sure that the safety wire goes through the gap between the right side of the square tube and the stake nut support.
      - If the square tube is installed with the large diameter hole on the bottom surface of the square tube, make sure that the safety wire goes through the gap between the left side of the square tube and the stake nut support.

**NOTE:** The square tube may be installed with the large diameter hole on the top surface or on the bottom surface of the square tube.

(2) {Refer to Figure 1, Detail B (Step 2) and View A-A.} At the corner (on the outer diameter) of the aft end of the square tube, begin to twist the two parts of the safety wire together until the twisted section is approximately one inch in length. Make sure that you do not twist the safety wire on the end surface of the square tube.

### SERVICE BULLETIN



MEB-27-01

(3) {Refer to Figure 1, Detail B (Step 3).} Install the glide, plug, and the MS35265-48 Screw.

**NOTE:** On some installations, the square tube is not centered in the control tube. As you install the screw, to make it easier to align the hole in the plug with the screw hole in the square tube, you can use one hand to move the control tube left, right, up, or down as applicable.

- Make sure that you install the glide with one of the troughs between the lobes turned straight up.
- As you do the installation, make sure that you keep the safety wire in the trough between two of the lobes of the glide.
- (4) {Refer to Figure 1, Detail B (Step 4).} Tighten the MS35265-48 Screw until there is no lateral free play in the control column between the glide and the outer control tube and there is no friction through the full range of travel of the control column.
  - To make sure that there is no friction, move the control column forward and aft through the full range of travel while you adjust the MS35246-48 Screw.
  - As you move the control column, make sure that the orientation of the glide stays the same.
- (5) {Refer to Figure 1, Detail B (Step 5), View B-B, and View C-C.} Finish the installation of the safety wire through the head of the MS35246-48 Screw. (Refer to the applicable maintenance manual.)
- 3. Remove and replace the control-column internal glide attach-screw on the copilot's control column as follows:
  - A. (Refer to Figure 1, Detail A.) To get access to the control-column internal slide attach-screw, remove the control wheel from the control column. (Refer to the applicable maintenance manual.)
  - B. If installed, remove the control wheel gust lock from the pilot's control column.
  - C. Make sure that the elevators are at the fully down position and that the ailerons are at the neutral position.
  - D. Remove and discard the old screw.
  - E. Cut a section of 0.020 steel safety wire to approximately 24 inches in length.
  - F. Install the new MS35265-48 Screw and the 0.20 steel safety wire as follows:
    - (1) {Refer to Figure 1, Detail B (Step 1).} Put one end of the safety wire through the large diameter hole and through the gap between the square tube and the stake nut support, and pull the two ends of the safety wire aft until they come together aft of the square tube.
      - Make sure that you install the safety wire through the large diameter hole and not through one of the 0.25-inch diameter holes for the gust lock.
      - If the square tube is installed with the large diameter hole on the top surface of the square tube, make sure that the safety wire goes through the gap between the right side of the square tube and the stake nut support.
      - If the square tube is installed with the large diameter hole on the bottom surface of the square tube, make sure that the safety wire goes through the gap between the left side of the square tube and the stake nut support.

**NOTE:** The square tube may be installed with the large diameter hole on the upper or on the lower half of the square tube.

(2) {Refer to Figure 1, Detail B (Step 2) and View A-A.} At the corner (on the outer diameter) of the aft end of the square tube, begin to twist the two parts of the safety wire together until the twisted section is approximately one inch in length. Make sure that you do not twist the safety wire on the end surface of the square tube.

### SERVICE BULLETIN



MEB-27-01

(3) {Refer to Figure 1, Detail B (Step 3).} Install the glide, plug, and the MS35265-48 Screw.

**NOTE:** On some installations, the square tube is not centered in the control tube. As you install the screw, to make it easier to align the hole in the plug with the screw hole in the square tube, you can use one hand to move the control tube left, right, up, or down as applicable.

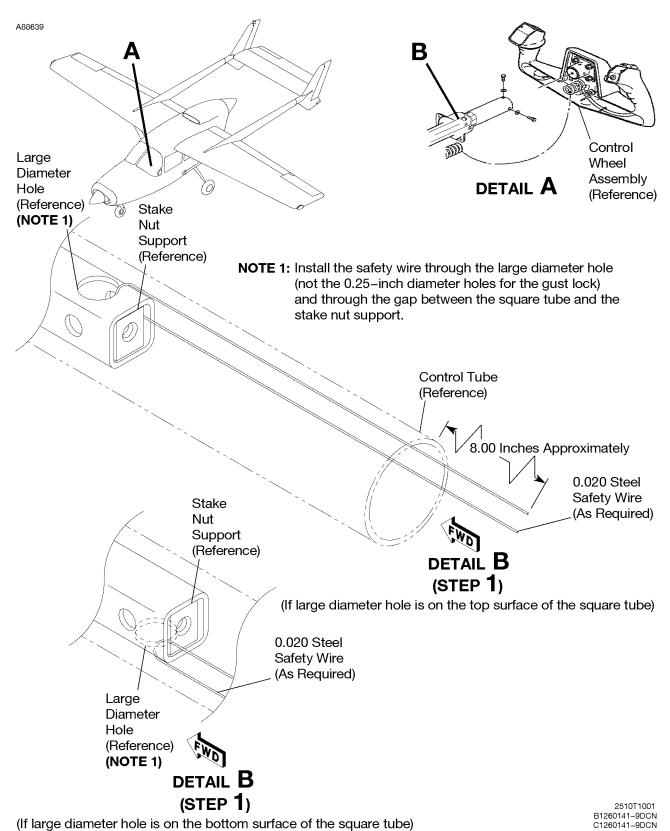
- Make sure that you install the glide with one of the troughs between the lobes turned straight up.
- As you do the installation, make sure that you keep the safety wire in the trough between two of the lobes of the glide.
- (4) {Refer to Figure 1, Detail B (Step 4).} Tighten the MS35265-48 Screw until there is no lateral free play in the control column between the glide and the outer control tube and there is no friction through the full range of travel of the control column.
  - To make sure that there is no friction, move the control column forward and aft through the full range of travel while you adjust the MS35246-48 Screw.
  - As you move the control column, make sure that the orientation of the glide stays the same.
- (5) {Refer to Figure 1, Detail B (Step 5), View B-B, and View C-C.} Finish the installation of the safety wire through the head of the MS35246-48 Screw. (Refer to the applicable maintenance manual.)
- 4. Install the control wheels on the control columns. (Refer to the applicable maintenance manual.)
- 5. Remove maintenance warning tags from battery and external power receptacle and connect the battery.
- 6. Make an entry in the airplane logbook that states compliance and method of compliance with this service bulletin.

**NOTE:** This information shall be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual or Instructions for Continued Airworthiness and must be accomplished for ongoing Airworthiness Compliance as necessary in accordance with 14 CFR Part 43.13.

## SERVICE BULLETIN



MEB-27-01



(If large diameter hole is on the bottom surface of the square tube)

Figure 1. Control-Column Internal Glide Attach-Screw Installation (Sheet 1)

## Multi-engine SERVICE BULLETIN



MEB-27-01

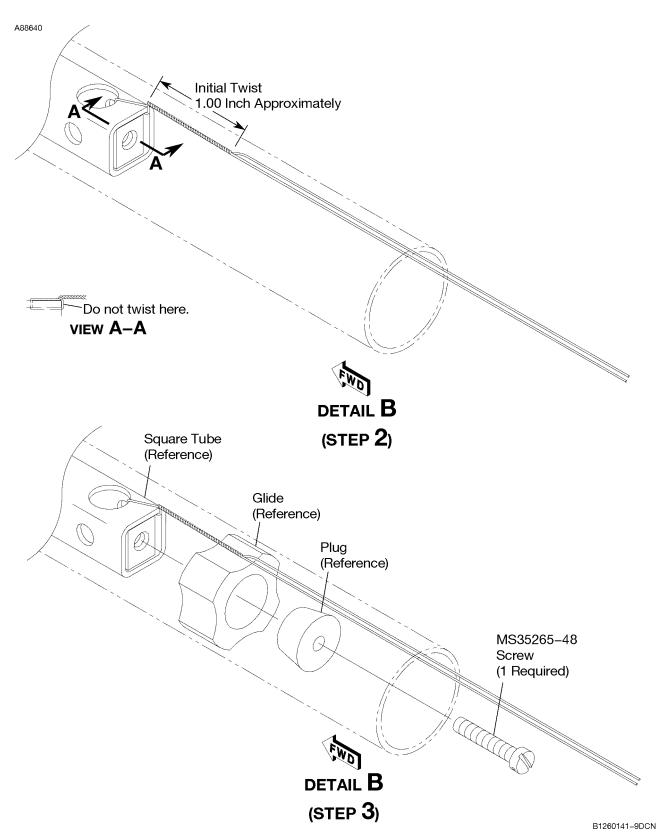


Figure 1. Control-Column Internal Glide Attach-Screw Installation (Sheet 2)

## SERVICE BULLETIN



MEB-27-01

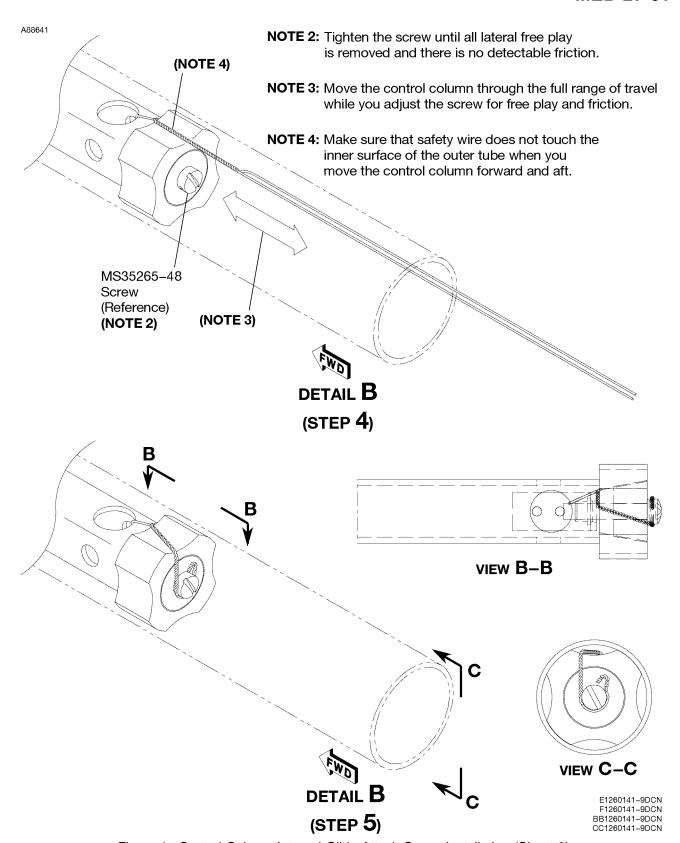


Figure 1. Control-Column Internal Glide Attach-Screw Installation (Sheet 3)

# SERVICE BULLETIN



**MEB-27-01** 

### **MATERIAL INFORMATION**

Order the part below to install this modification.

NEW P/N	QUAN- TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
MS35265-48	2	Screw		

### OWNER ADVISORY



MEB-27-01

### **TITLE**

FLIGHT CONTROLS - CONTROL-COLUMN INTERNAL SLIDE ATTACH-SCREW INSTALLATION

#### TO:

Cessna Crusader or Skymaster Owner:

### **REASON**

This owner advisory is to inform you that MEB-27-01 has been issued.

If the control-column internal glide attach-screws are not correctly attached, they can loosen and fall off inside the control column tube. This condition can cause looseness of the control column and the fallen screw may limit full range of elevator control.

MEB-27-01 Control-Column Internal Slide Attach-Screw Installation has been issued to provide parts and instructions to remove the pilot's and the copilot's control-column internal slide attach-screws and install new ones. 0.020 steel wire is used to safety the screw to the installation as specified in this service bulletin.

### **COMPLIANCE**

Mandatory: Shall be accomplished at the next 100-hour inspection or 12-month (annual-type) inspection, whichever occurs first.

#### **LABOR HOURS**

3.0 man-hours to accomplish this service bulletin

#### **WARRANTY**

Not applicable

Please contact a Cessna Multi Engine Authorized Service Facility for detailed information and arrange to have Cessna Service Bulletin MEB-27-01 accomplished on your airplane.

**NOTE:** As a convenience, service documents are now available online to all our customers through a simple, free-of-charge registration process. If you would like to sign up, please visit the "Customer Access" link at www.cessnasupport.com to register.