
Service Bulletin

September 2, 2002

SB02-53-01

TITLE

FUSELAGE BALLAST WEIGHT INSTALLATION

EFFECTIVITY

Model	Serial Numbers
182T	18280945 thru 18281179
T182T	T18208001 thru T18208184

REASON

To provide instructions for installing ballast weights on the aft tailcone bulkhead to assist in keeping the airplane center-of-gravity within limits when loading heavier cargo or passengers in the crew seats or forward cabin area.

DESCRIPTION

The ballast weight(s) should be installed and the airplane weight and balance records recalculated and revised as described in this Service Bulletin.

COMPLIANCE

Optional, may be accomplished if desired.

APPROVAL

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

MANPOWER

Approximately 1.0 man-hour

REFERENCES

Model 182 Series 1996 And On Maintenance Manual

NOTE: Make sure all publications used are complete and current.

NOTE: This information shall be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual.

OTHER PUBLICATIONS AFFECTED

Model 182/T182 Illustrated Parts Catalog

NOTE: Make sure all publications used are complete and current.

MATERIAL PRICE AND AVAILABILITY

The following are available from Cessna Parts Distribution through an appropriate Cessna Service Station for the suggested list price shown.

<u>Part Number</u>	<u>Description</u>	<u>Qty/Airplane</u>		<u>Price</u>
2201090-1	Weight-Ballast	(as required)	\$	29.60 (S) ea.
2201090-2	Weight-Ballast	(as required)	\$	36.30 (S) ea.
AN3-6A	Bolt	2	\$	0.24 (PS) ea. MQ 100
AN3-7A	Bolt	2	\$	0.27 (PS) ea. MQ 100
AN3-11A	Bolt	2	\$	0.34 (PS) ea. MQ 25
AN3-12A	Bolt	2	\$	0.34 (PS) ea. MQ 25
AN3-14A	Bolt	2	\$	0.41 (PS) ea. MQ 25
MS21044N3	Nut	2	\$	0.17 (PS) ea. MQ 100
MS35207-266	Screw	1	\$	0.14 (PS) ea. MQ 100
MS35338-157	Lock Washer	2	\$	0.21 (PS) ea.
MS35650-305T	Nut	2	\$	0.24 (PS) ea.
NAS1149D0316H	Flat Washer	4	\$	0.03 (PS) ea. MQ 100
NAS1149F0363P	Flat Washer	2	\$	0.03 (PS) ea. MQ 100

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

CREDIT INFORMATION

Not applicable

ACCOMPLISHMENT INSTRUCTIONS

Weight and Balance Information — Model 182T/T182T

Single Weights

Part Number	Weight	ARM	Moment	Moment/1000	CG Shifting AFT@ 3100 pounds
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2201090-1	1 lb	230.28	230.28	0.230	0.074
2201090-2	4 lbs	230.57	922.28	0.922	0.298

Combinations of Weights

2201090-1 (2 each)	2 lbs	230.37	460.74	0.460	0.149
2201090-1 (3 each)	3 lbs	230.56	691.68	0.692	0.223
2201090-1 (1 each) and 2201090-2 (1 each)	5 lbs	230.66	1,153.3	1.153	0.372

Material Information

The following parts may be required:

New P/N	Quantity	Description	Old P/N	Disposition
2201090-1	As Required (See Table 1)	Weight-Ballast (1 lb)	None	None
2201090-2	As Required (See Table 1)	Weight-Ballast (4 lb)	None	None
AN3-6A	2	Bolt	None	None
AN3-7A	2	Bolt	None	None
AN3-11A	2	Bolt	None	None
AN3-12A	2	Bolt	None	None
AN3-14A	2	Bolt	None	None
MS21044N3	2	Nut	None	None
MS35207-266	1	Screw	Same	Same
MS35338-157	2	Lock Washer	Same	Same
MS35650-305T	2	Nut	Same	Same
NAS1149D0316H	4	Washer	None	None
NAS1149F0363P	2	Washer	None	None

Instructions

1. Electrically ground the airplane and turn all switches to the "OFF" position. If external power is connected to the airplane, disconnect external power from receptacle.
2. Remove and keep the cowling or battery access panel as required. Disconnect the battery. (Refer to the Model 182/T182 Series 1997 And On Maintenance Manual, Chapter 24, Electrical Power.)
3. Attach maintenance warning tags to the battery and external power receptacle stating: **DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROCESS.**
4. Remove and keep the tailcone stinger:
 - A. Remove and keep the screws securing the stinger to the fuselage.
 - B. Disconnect the electrical leads and the ground stud for the tail navigational light assembly.
5. Relocate the ground stud for the tail navigational light assembly:
 - A. (Refer to Figure 1, Sheet 2, View B-B, and Detail B.) Measure to locate the hole in the aft tailcone bulkhead.
 - B. Drill a Number 10 (0.193 inch diameter) hole.
 - C. Deburr the hole.
 - D. Remove the paint and primer approximately one-quarter inch from around the hole. (Refer to the Model 182S/182T/T182T Wiring Diagram Manual, Chapter 20-Bonding and Grounding.)
6. (Refer to Figure 1, Sheet 2, View B-B.) Use the existing holes in the aft tailcone bulkhead to attach the weights.
7. Install the ballast weights on the airplane according to Table 1:
NOTE: Total ballast weight is not to exceed 5 lbs.

Table 1: Ballast Weight Requirements

Desired Ballast	Weight(s) Part Number (Quantity)	Weight(s) Attaching Parts Used (2 each required)
1 lb Ballast	2201090-1 (1 each)	AN3-6A Bolt NAS1149F0363P Washer MS21044N3 Nut
2 lbs Ballast	2201090-1 (2 each)	AN3-7A Bolt NAS1149F0363P Washer MS21044N3 Nut
3 lbs Ballast	2201090-1 (3 each)	AN3-11A Bolt NAS1149F0363P Washer MS21044N3 Nut
4 lbs Ballast	2201090-2 (1 each)	AN3-12A Bolt MS21044N3 Nut
5 lbs Ballast	2201090-1 (1 each) 2201090-2 (1 each)	AN3-14A Bolt NAS1149F0363P Washer MS21044N3 Nut

8. (Refer to Figure 1, Detail B, Sheet 3.) Install the new ground stud using one MS35207-266 Screw, two NAS1149D0316H Washers, one MS35338-157 Lock Washer, and one MS35650-305T Nut.
 - A. Connect the electrical leads for the tail light assembly to the new ground stud using two NAS1149D0316H Washers, one MS35338-157 Lock Washer, and one MS35650-305T Nut.

9. Install the tailcone stinger. Use the screws kept in step 4 to secure the stinger to the fuselage.
10. Remove maintenance warning tags from battery and external power receptacle.
11. Reconnect the battery. (Refer to the Model 182/T182 Series 1997 And On Maintenance Manual, Chapter 24, Electrical Power.)
12. Recalculate the weight and balance for the airplane based on the weight(s) installed.
13. Record the new weight and balance calculations in the airplane weight and balance information sheet(s).
14. Make an entry in the airplane logbook stating compliance and method of compliance of this bulletin.

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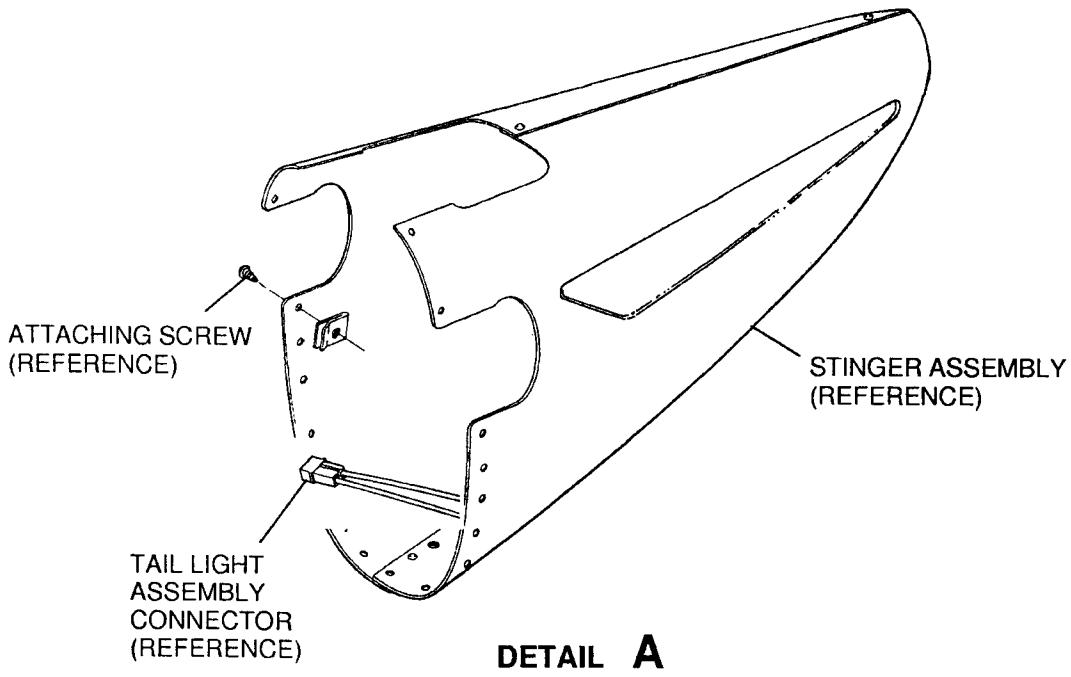
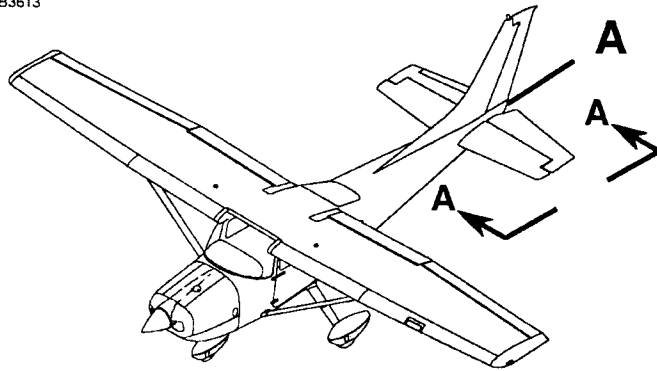
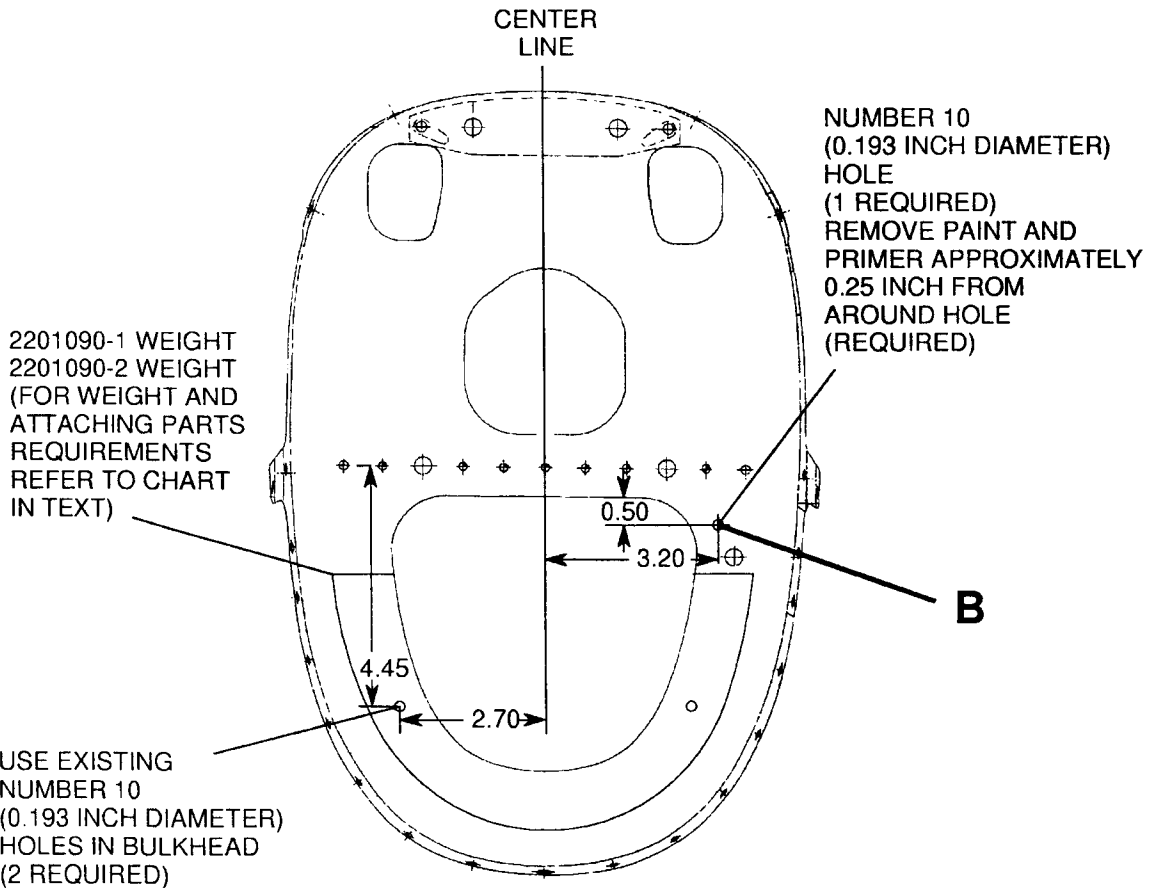
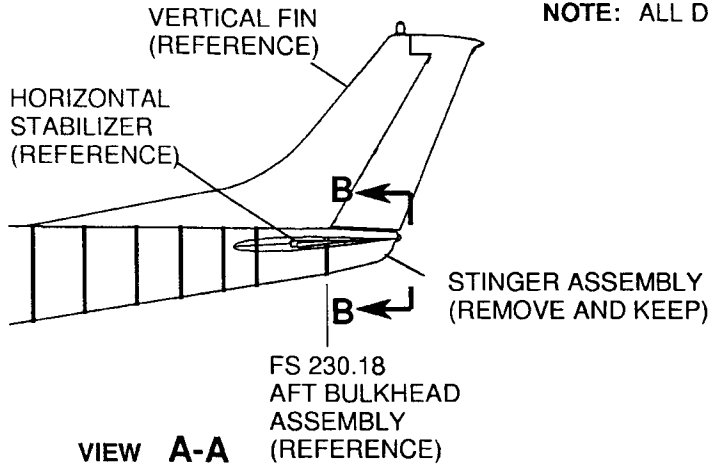


Figure 1. Fuselage Ballast Weight(s) Installation. (Sheet 1)

0710T1001
A0730R1001

NOTE: ALL DIMENSIONS SHOWN ARE IN INCHES.



LOOKING FORWARD AT AFT SURFACE OF FS 230.18 BULKHEAD

AA2201090

Figure 1. Fuselage Ballast Weight(s) Installation. (Sheet 2)

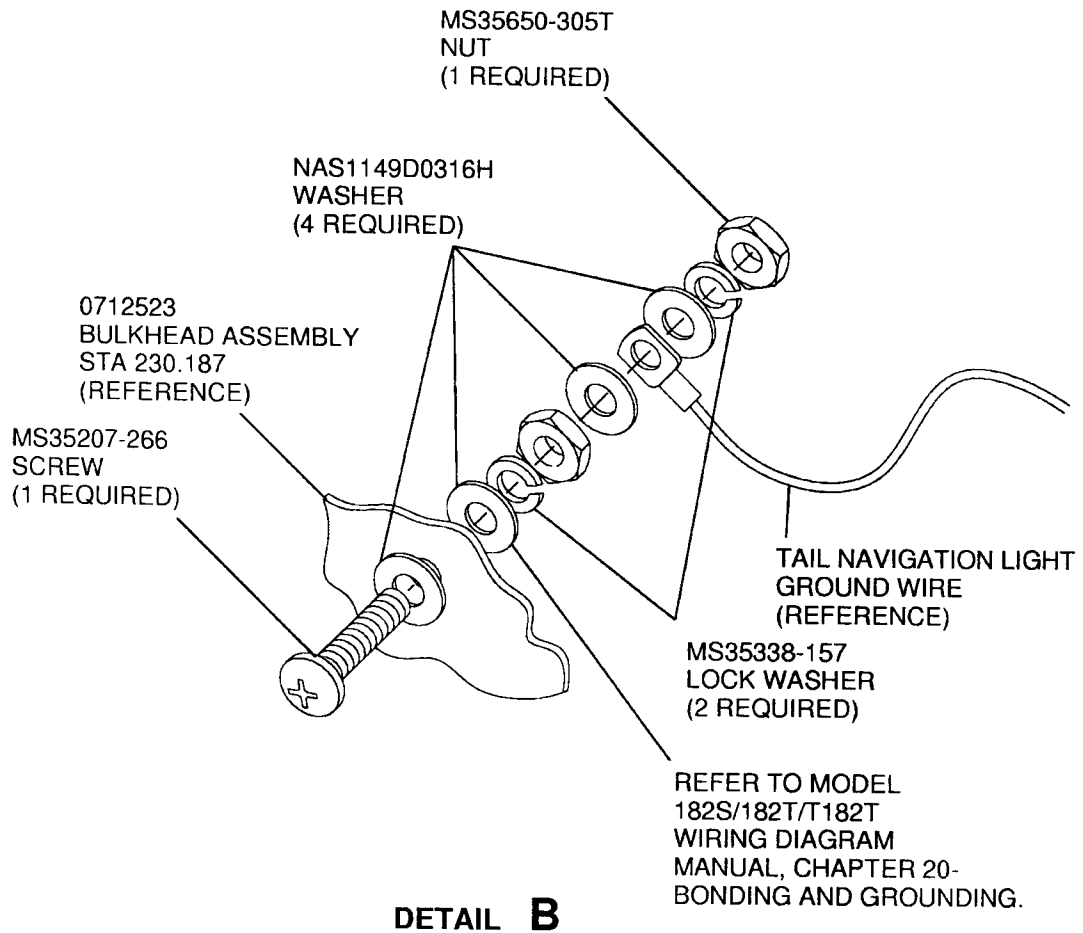


Figure 1. Fuselage Ballast Weight(s) Installation. (Sheet 3)

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OWNER NOTIFICATION

On September 16, 2002 the following Owner Advisory message will be sent to applicable owners of record in SB02-53-01A.

Dear Cessna Owner:

This Owner Advisory is to inform you that Service Bulletin SB02-53-01 has been issued to provide instructions for installing ballast weights on the aft tailcone bulkhead to assist in keeping the airplane center-of-gravity within limits when loading heavier cargo or passengers in the crew seats or forward cabin area.

The ballast weight(s) should be installed and the airplane weight and balance records recalculated and revised as described in Service Bulletin SB02-53-01.

Compliance is optional, may be accomplished if desired.

The information contained in the referenced Cessna Service Bulletin shall be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual.

Please contact a Cessna Single Engine Service Station for detailed information and if desired, arrange to have Cessna Service Bulletin SB02-53-01 accomplished on your airplane.

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