



SERVICE INSTRUCTION

SI-32-07
Revision 0

TITLE: Rebound Puck Replacement

SUBJECT / REASON / DESCRIPTION:

This service instruction outlines the procedure to replace the rebound elastomer pucks and the spherical washers in the shock absorber assembly on the main landing gear. This modification will enhance the rebound capability of the landing gear which can be an asset when operating on rough runway surfaces that require tundra tires or skis.

COMPLIANCE:

Compliance is optional.

EFFECTIVITY:

All FBA-2C1 and FBA-2C2 aircraft operating on skis or wheels.

APPROVAL:

This modification has been approved by FAC Engineering and TCCA where applicable.

SPECIAL TOOLS / EQUIPMENT:

None required

PARTS LIST (BILL OF MATERIALS):

Kit # FAC-SI-32-07A R00 (Cost of kit available upon request)

| Qty | Part # | Description |
|-----|-------------|-----------------------|
| 2 | U1117 | Shock Absorber Spacer |
| 2 | U1119 | Rebound Puck |
| 2 | MS24665-153 | Cotter Pin |

Kit # FAC-SI-32-07B R00 (Cost of kit available upon request)

| Qty | Part # | Description |
|-----|------------|-------------|
| 1 | F2721 | Scuff Plate |
| 1 | F2722 | Scuff Plate |
| 8 | MS51957-43 | Screw |
| 8 | N-17 | T Nut |

The following parts are scrap after compilation of the service instruction:

- Removed cotter pins
- 656-253 Spherical Washer (x2)

WEIGHT & BALANCE:

This modification has negligible effect on the weight and balance.

DRAWINGS/MANUALS:

FAC2-M200 Maintenance Manual (MM)

FAC2-M250 Illustrated Parts Catalog (IPC)

IMPLEMENTATION INSTRUCTIONS:

Part 1 Floor Access Cutouts

This part is optional and it is not required to accomplish Part 2 of this service instruction. However, it is recommended as it will simplify future puck replacement as well as provide access for inspection.

1. Remove main gear access covers B1, B20 and B21. Ref. MM Chapter 6, Figure 06-30-04. Retain hardware.
2. Remove the pilot and co-pilot seats. Ref. MM and/or IPC Chapter 25
3. If equipped, remove the stainless steel floor scuff plates located in the foot wells from both pilot and copilot floors. Retain the hardware.
4. Mark access holes location on both pilot and copilot floors, Ref. Figure 1.
5. Place the scuff plates back on the floors to ensure they will cover each access hole. If yes, proceed to step 6. If no, FAC-SI-32-07B R00 kit is required.

WARNING

COMPOSITE DUST IS HARMFUL, USE PERSONNEL PROTECTIVE EQUIPMENT WHEN CUTTING AND SANDING COMPOSITES.

6. Cut access holes in the floors. It is recommended to use a vacuum to minimize dust.
7. Clean reworked area by vacuuming and seal exposed edges of the access holes with good quality wood sealer.
8. If the aircraft is not equipped with scuff plates, use FAC-SI-32-07B R00 kit.
 - a. Place scuff plates on the floor such as they cover the access holes.
 - b. Using the scuff plates as templates, drill pilot holes in floors (Drill #21). Use a drill stop so as not to damage parts under the floor.
 - c. Open the holes up to Drill #8.
 - d. Install the T-Nuts wet with 5 min. epoxy or equivalent.

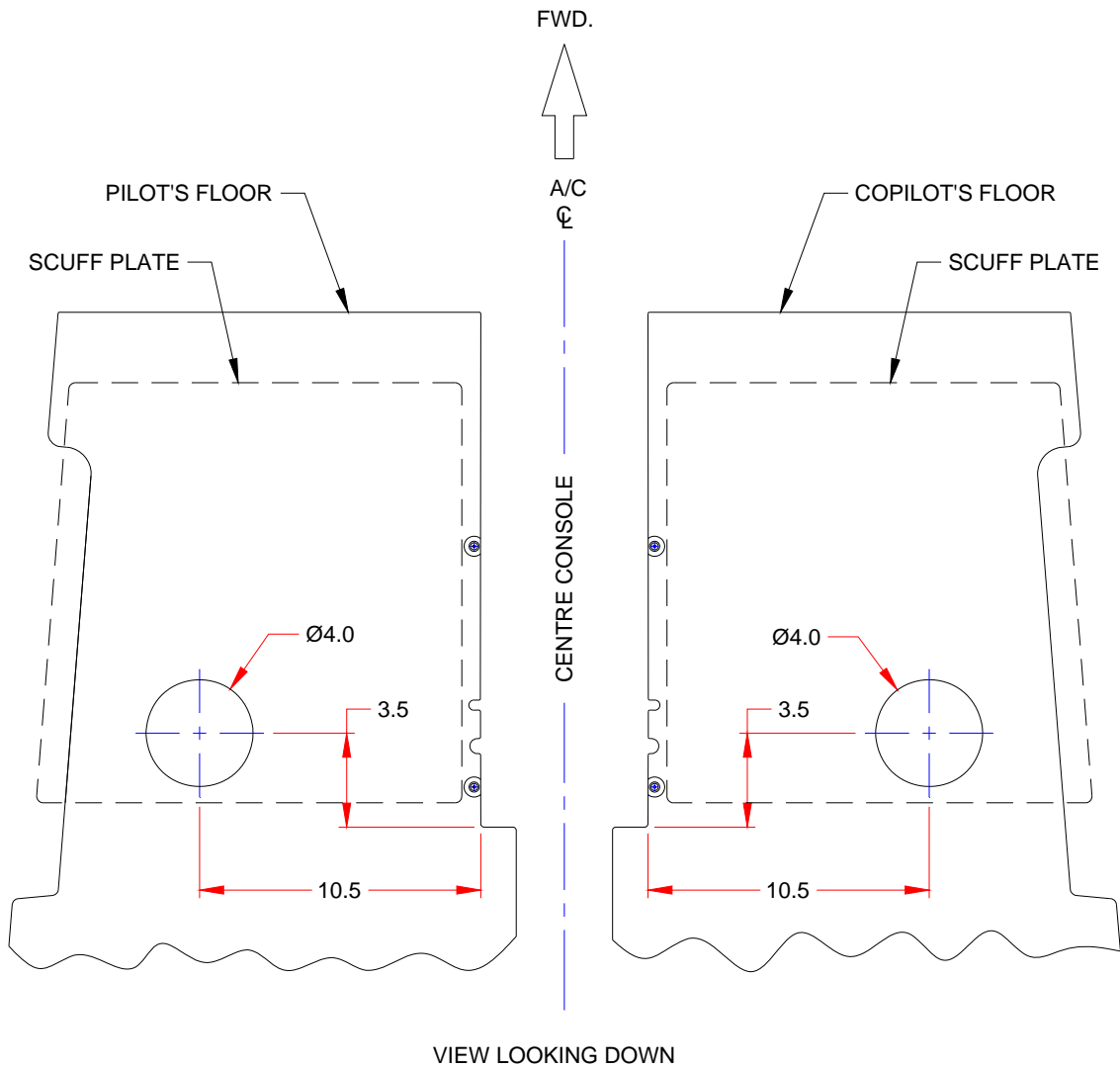


Figure 1 Access Cutouts Location

Part 2 Rebound Puck and Spherical Washer Replacement

1. Remove main gear access covers B1, B20 and B21, as required. Ref. MM Chapter 6, Figure 06-30-04. Retain hardware.
2. Remove the pilot and co-pilot floors, as required. Ref. MM Chapter 53-20

WARNING

TO PREVENT PERSONAL INJURY OR AIRCRAFT DAMAGE; AIRCRAFT WEIGHT MUST BE ON THE MAIN LANDING GEAR TO RELIEVE SHOCK ABSORBER PRELOAD PRIOR TO REMOVAL OF A SHOCK ABSORBER TIE BOLT NUT.

3. With the full weight of the aircraft on the landing gear there should be free play in the spherical washer at the bottom end of the tie bolts as shown in Figure 2. If this is not the case more weight must be added to the aircraft until the washers are free.
4. Remove the cotter pin from the lower end of the left (port) shock absorber tie rod. Discard cotter pin.
5. Remove the nut and the spherical washer. Retain the nut and discard the spherical washer.
6. Pull the shock absorber tie rod out of the puck stack. There is no need to remove the hardware from the top end of the tie rod. Retain for installation.
7. Remove the rebound cap and the rebound puck.
8. Install the new rebound puck (U1119) and the rebound cap.
9. Insert the shock absorber tie rod into the shock absorber assembly.
10. Install the nut and secure with a cotter pin. Note the nut should thread on easily. However, due to the replacement of the spherical washer with the U1117 spacer, there may be more weight required on the aircraft in order to secure the nut with the cotter pin. If so, add weight to the aircraft as required.
11. Repeat steps 4 -11 for the right (starboard) shock absorber assembly.
12. If applicable, remove all added weight from the aircraft.
13. Inspect the installation.
14. Install the pilot and co-pilot floors. Ref. MM Chapter 53-20.
15. Install main gear access covers B1, B20 and B21. Ref. MM Chapter 6, Figure 06-30-04.

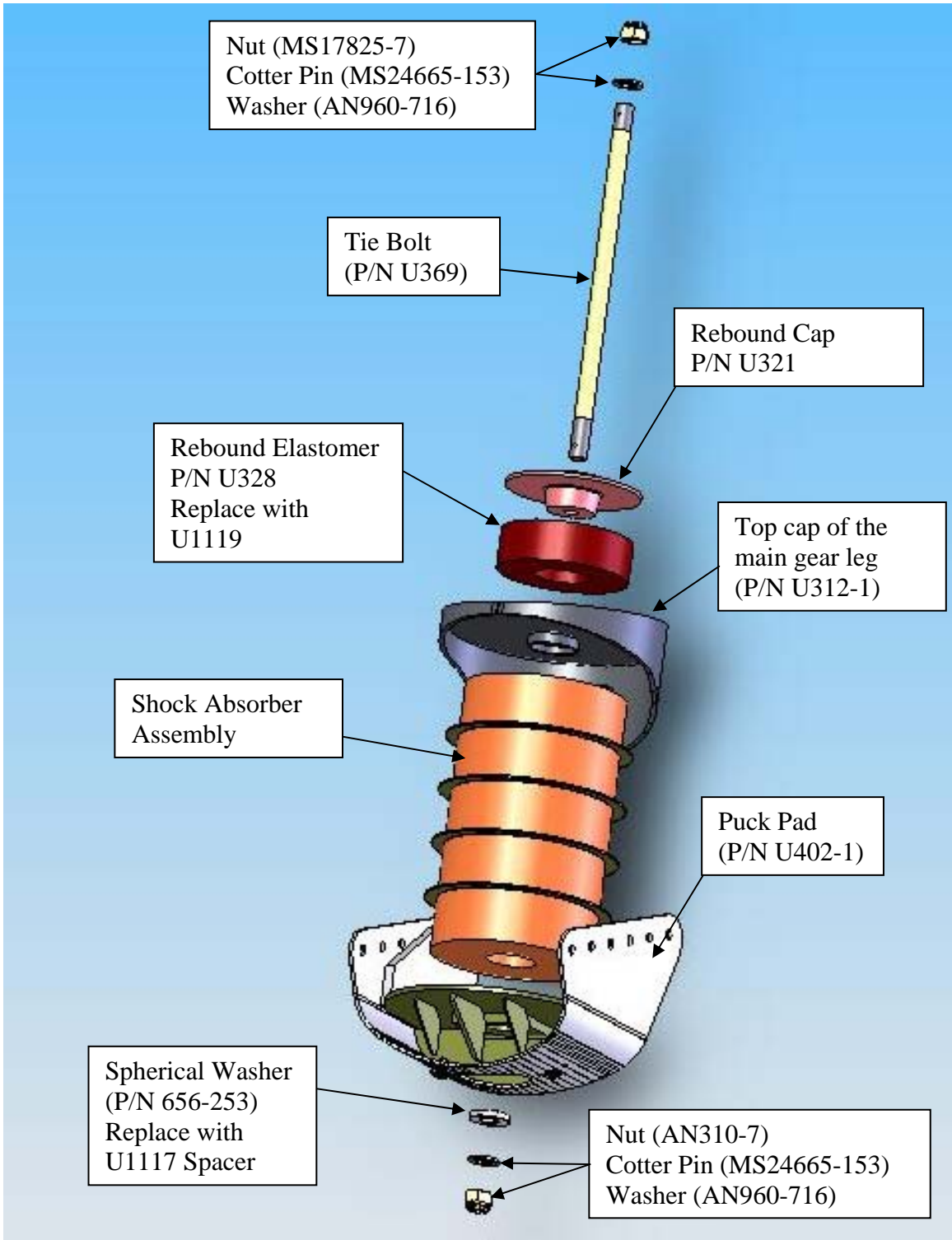


Figure 2 Shock Absorber Assembly

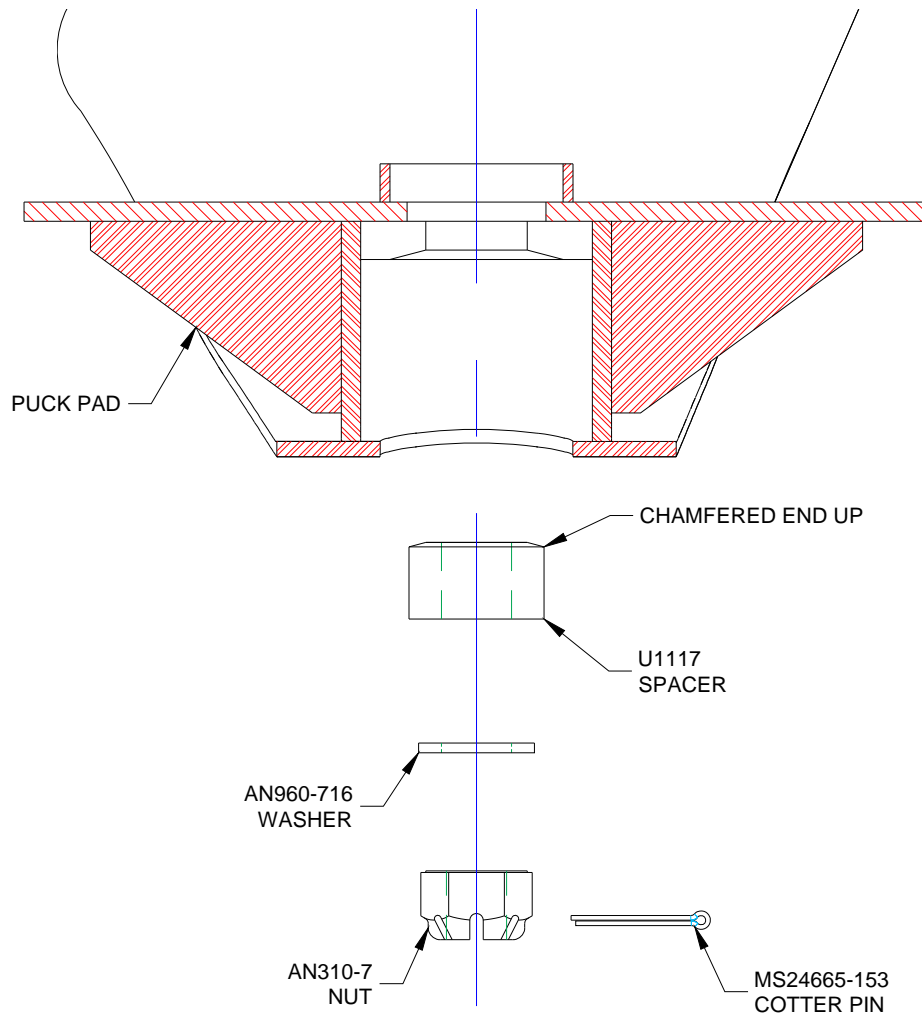


Figure 3 Shock Absorber Spacer Installation

LOG BOOK CERTIFICATION:

1. Upon completion of the Part 1 of the service instruction, make an appropriate Log Book entry stating "SB 32-07 Rev 0, Part I Optional Floor Access Cutouts accomplished"
2. Upon completion of the Part 2 of the service instruction, make an appropriate Log Book entry stating "SB 32-07 Rev 0, Part 2 Rebound Puck and Spherical Washer Replacement accomplished"