

PLIOCEL REPAIR PROCEDURE

TEMPORARY

The repair of damaged pliocels (tears, holes, and cuts) should be made in the following manner and with the following specified materials:

REPAIR MATERIALS

1. Grade A or Intermediate Airplane Fabric
2. Nitro-Cellulose Lacquer
3. One Inch Paint Brush
4. Shears

REPAIR PROCEDURE

All repairs which are due to defects that result in leakage of the cell must be made with internal patches of above materials. The patch must be cut to have at least one inch or more lap from the edge of the defect.

1. Carefully wash the internal surface of the cell surrounding the
2. Carefully trim the defect to remove rough edges or irregularities.
3. Paint one coat of nitro-cellulose lacquer on the patch and on the section to be repaired. Allow to dry until tack is gone from the surface of the cement.
4. Apply second coat of Nitro-Cellulose lacquer on same surfaces and allow to dry until tacky.
5. Apply patch to defective section - Avoid trapping air under patch.
6. Apply six coats of nitro-cellulose lacquer over the entire repair allowing each coat to thoroughly dry before applying next coat.
7. Allow repair to set a minimum of two hours before handling or putting into service.
8. If external surface of the repaired area is accessible, paint two coats of nitro-cellulose lacquer on the repaired area and allow to dry.

The above repair procedure applies to temporary repairs in the field. This repair should not be used for a longer period than one week. Cell should be removed and repaired with Goodyear Permanent Repair Procedure or returned to Goodyear for reconditioning as soon as possible.

THE GOODYEAR TIRE & RUBBER COMPANY

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SILVAIRE AIRCRAFT CO.
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FORT COLLINS, COLORADO

PLIOCEL REPAIR PROCEDURE

PERMANENT

The repair of damaged Pliocels such as tears, holes, cuts, loose support patches, and loose fitting rings should be made with the following specified materials and supplied in the standard pliocel repair kit.

REPAIR MATERIALS

1. Pliocel Repair Fabric
2. 1392C Nylon Repair Cement
3. 5071C Chemigum Coating Cement
4. Mekol
5. Nedine
6. One Inch Paint Brush
7. Shears
8. 1/2 Inch Roller

REPAIR PROCEDURE

- A. Tears, holes, cuts - All repairs of defects (except defects in seams greater than 1/4" which result in leakage of cells must be made with internal patches of Pliocel repair fabric. The patch must be cut to have a one inch lap from the edge of the defect. The repair should be made as follows:
 1. Carefully wash the internal surface of the cell surrounding the defect with mekol to remove all oil, grease, or foreign material.
 2. Carefully trim the defect to remove rough edges or irregularities.
 3. Paint one coat of 1392C on the patch and one coat on the section of the cell to be repaired. Allow to dry until the cement is no longer tacky.
 4. Paint second coat of 1392C on same surfaces and allow to dry until tacky.
 5. Apply patch to defective section with the 1/2" roller, carefully rolling edges of patch with the roller and avoiding the trapping of air under the patch if possible, and place weight on the repair for a period of three hours.

REPAIR PROCEDURE (continued)

6. Paint tow coats of 1392C over internal surface of repair and allow to dry.

7. Paint one coat of 5071C over external surface of repair.

B. Loose Seams, Support Patches, and Fitting Rings

Repairs may be made as in items 1, 3, 4, 5, and 6 above.

C. Defects in Seams Greater than 1/4 Inch and Which Cause Cell Leakage

Cells with such defects should be returned to the Goodyear Tire & Rubber Company.

HANDLING OF CEMENTS

A. 1392C Nylon Repair Cement

1. If too thick for use, heat cement container in water at 140° to 150° until sufficiently thin.

2. Keep brush, while using, either in 1392C or in mixture of one part mekol and one part Nedine. Do not allow cement to dry on brush.

B. 5071C Chemigum Coating Cement

1. Add 1408C to 5070 in following ratio to make 5071C:
100 cc 1408 to one gallon 5070C.

2. Do not mix any more 5071C than is immediately required. The 5071C is an air curing cement and will jell in six to eight hours.

3. Use mekol to wash brushes used with 5071C (mekol can also be used to wash area of defect on outside of cell if necessary).

NOTE:

UNDER NO CIRCUMSTANCES SHOULD THE SAME BRUSH BE USED FOR BOTH 5071C and 1392C.

The Goodyear Tire & Rubber Co.