

BELL SYSTEM PRACTICES
Outside Plant Construction
and Maintenance

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PRESSURE TESTING

SOLUTIONS AND ACCESSORIES

Contents	Page
1. General	1
2. Materials	2
3. Soap Solutions	2
4. Pressure Testing Solutions	3
5. B Soap Brush	3
6. B Soap Bucket	4

1. GENERAL

1.01 This section replaces Section G50.722.1, Issue 2 and the information related to soap solution contained in Section G73.206, Issue 1, which are cancelled. It outlines the use of soap solutions, pressure testing solutions, and the B Soap Brush and Bucket.

1.02 The Regular and Winter soap solutions are for use in pressure testing lead sheathed cables. The B and C pressure testing solutions are for testing cables having polyethylene outer jackets.

1.03 The Regular and Winter soap solutions used on lead-covered cables are injurious to polyethylene and must not be used on alpth, stalpth or other cables having an outer jacket of polyethylene.

1.04 The B and C solutions can be used on lead-covered cables if conditions do not warrant carrying the regular and winter soap solutions for the lead cables.

2. MATERIALS

2.01 The standard pressure testing solutions and associated tools are listed below.

Solution, Soap, Regular	Supplied in one-quart and one-gallon cans. For use at temperatures above 32° F.
Solution, Soap, Winter	Supplied in one-quart and one-gallon cans. For use at temperatures below 32° F.
Solution, Testing, Pressure, B	Supplied in one-quart cans. For use at temperatures above 32° F.
Solution, Testing, Pressure, C	Supplied in one-quart cans. Contains anti-freeze. For use at temperatures below 32° F.
Brush, Soap, B	A short handled round sash brush having china bristles. A rubber stopper around the base of the handle fits the bottom of the well in the soap bucket.
Bucket, Soap, B	A cylindrical can equipped with a bail. The bucket is fitted with a funnel-shaped well to accommodate a brush.

3. SOAP SOLUTIONS

3.01 Soap solution is furnished in two types, Regular and Winter. The Regular should be used at temperatures above 32° F. and the Winter at temperatures below 32° F. The winter solution can be used at temperatures above 32° F.; however, as it is more expensive than the regular solution the latter is recommended for use at the higher temperatures.

3.02 The soap solutions are suitable for use on lead sheath cable, except where the cable is so located with respect to polyethylene covered cable that the solution might come in contact with the polyethylene. Use the B and C solutions instead of soap solutions where there is a likelihood of contact with polyethylene sheath.

3.03 If any soap solution drips on a bare alpeh or similarly sheathed cable, the soap should be removed promptly by washing with water. These solutions may discolor or soften some types of paint. Therefore, care must be taken to avoid spilling or dripping the solution on automobiles or other painted surfaces. If any of the solution is accidentally spilled on such surfaces, it should be washed off immediately with cold water.

3.04 The solutions should be applied as they come in the can.

- 3.05 The soap solution should be well shaken before it is used or transferred from one container to another.

4. PRESSURE TESTING SOLUTIONS

4.01 The B Pressure Testing Solution contains no anti-freeze and can be used at temperatures down to 32° F. This solution becomes sluggish at lower temperatures and then freezes. The B solution should be used whenever possible as it produces bubbles easier and is less expensive than the C solution.

4.02 The C Pressure Testing Solution can be used when pressure testing has to be done at temperatures below 32° F.

4.03 This solution contains a non-evaporating type anti-freeze. The solution is usable at temperatures down to about 5° F. At lower temperatures, it becomes sluggish and may freeze.

4.04 Both solutions should be used as they come in the can; do not add water.

4.05 Neither the B nor C solution is injured by freezing in the can, but if freezing occurs, the solution should be thawed out and the liquid warmed gently before being applied.

4.06 Use a clean container and a clean brush for dispensing these solutions. They should not be poured into a container which has been used for soap solution unless the container has been thoroughly washed with water and it is certain that all soap residue has been removed. A soap solution brush should not be used unless it has been washed thoroughly.

4.07 The solutions are injurious to paint and automobile finishes on prolonged contact. Therefore, care should be taken to avoid spilling or dripping the solution on automobiles or other painted surfaces. If any solution is accidentally spilled on such surfaces, it should be washed off as soon as practicable with cold water.

5. B SOAP BRUSH

5.01 The B Soap Brush consists of a short handled No. 8 round sash brush having china bristles set in rubber and bound with a metal ferrule. A rubber stopper over the ferrule fits the bottom of the well in the soap bucket.

5.02 This brush is for applying soap and pressure testing solutions. A brush used for applying soap solution should not be used for applying pressure testing solution unless it has been thoroughly cleaned first to make sure that no trace of the soap solution remains on the brush.

5.03 The solutions should be applied generously flowing them with the brush over the surface being inspected. It is important not to spread the solution too thin. The solutions should not be worked into a lather in the soap bucket.

6. B SOAP BUCKET

6.01 The B Soap Bucket consists of a cylindrical aluminum can having a centrally located funnel-shaped well to accommodate a brush and a bail for hoisting or suspending the bucket. The well is removable to permit cleaning the bucket.

6.02 The bucket is a convenient dispensing container for the soap or pressure testing solutions if the tester has to do a considerable amount of such testing. The gallon can of soap solution is intended as a reserve supply from which the soap bucket is refilled.

6.03 Use a clean bucket for the pressure testing solutions used on polyethylene jacketed cables as prescribed in Paragraph 4.06.

6.04 When the bucket is being transported or when the brush is not in use, it should be inserted tightly into the bucket to prevent spilling the solution and to reduce evaporation and thickening of the solution.