

RUBBER GOODS CARE & INSPECTION

Type I natural (not resistant to ozone) and Type II SALCOR® synthetic rubber (resistant to ozone) both provide electrical workers with the highest level of electrical insulating protection. However, in order to maintain this level of protection and ensure long life, it is essential that rubber goods are properly cared for and stored. Before each use, rubber goods should be visually inspected for holes, rips or tears, ozone cutting, UV checking and signs of chemical deterioration, contamination, physical damage and embedded wires. Refer to ASTM F1236, standard guide for visual inspection of electrical protective rubber products for additional information.

Glove & Sleeve Care

Before Each Use

Inspect gloves and sleeves for holes, rips or tears, ozone cutting, UV checking and signs of chemical deterioration.



Proper Glove Inflation

Inflating gloves makes cuts, tears or ozone damage easier to detect. Expand no more than 1.5 times their normal size for Type I, and 1.25 times normal for Type II SALCOR. Listen for escaping air to detect holes. If a portable inflator is unavailable, roll the cuff tightly to trap air inside, then apply pressure to areas of the glove to inspect for escaping air. Repeat procedure with glove turned inside out.

Maximum Inflation Size:

Type I Gloves: 1.5 times normal
Type II Gloves: 1.25 times normal

Sleeve Inspection

Inspect sleeves along the edge as they are rolled. Rolling will stretch the sleeve along the edge, making cuts, tears and ozone cutting more visible. Repeat with sleeve turned inside out.

Proper Storage

Proper storage extends the service life of linemen's gloves and sleeves. Folds and creases strain rubber and cause it to crack from ozone prematurely. By storing rubber gloves and sleeves in the right size bag, and never forcing more than one pair into each bag, equipment will lie flat and last longer.

Blanket Care



Before Each Use

Roll blankets in order to locate scratches, tears, abrasions, snags, corona cutting or age-cracking. The blankets should be rolled two times on each side with the second roll at a right angle to the first. Blankets that show any signs of the damage described above should be removed from service. The ASTM In-Service Specifications call for an electrical retest at least every 12 months. A visual inspection in the field should be performed before each use.

Blanket Care & Storage

Blankets should always be stored flat or rolled in blanket roll-ups or canisters. They should never be folded, creased or compressed in any manner. When more than one blanket is stored, the most convenient method of loading is to roll and insert each blanket into the canister independently. A single blanket can then be removed without removing the others. Do not use tape of any type to hold the blankets in the rolled position, the adhesive can damage the blanket surfaces. Both Type I and Type II Salcor® elastomeric compound blankets are subject to damage by petroleum base products.

Line Hose Care

Before Each Use

Rubber insulating line hose, hoods and covers should be thoroughly inspected inside and out for cuts, scratches, corona cutting, holes, tears and punctures, aging, rope or wire burns and texture changes such as swelling, softening, hardening, becoming sticky or inelastic.

Line Hose Care & Storage

If mechanical damage extends one third the wall thickness of the hose or hoods or if there are signs of chemical deterioration, they should be removed from service. Line hose, hoods and covers should be wiped clean of any petroleum base product as soon as possible after contact. They should be stored in a relaxed position, without distortion and mechanical stress. Tape shall not be used to secure these items when shipped or stored.

ASTM Reference

D120	Rubber Insulating Gloves
D178	Rubber Insulating Matting
D1048	Rubber Insulating Blankets
D1049	Rubber Insulating Covers
D1050	Rubber Insulating Line Hose
D1051	Rubber Insulating Sleeves
F478	In-Service Care of Line Hose & Covers
F479	In-Service Care of Insulating Blankets
F496	In-Service Care of Gloves & Sleeves
F696	Leather Protectors for Insulating Gloves and Mittens
F1236	Inspection Guide for Rubber Products
F1742	PVC Insulating Sheeting
F2320	Rubber Insulating Sheeting
F2677	Electrically Insulating Aprons
Type I	Designates Natural Rubber
Type II	Designates SALCOR® UV and Ozone Resistant Rubber



Protective Rubber Equipment Labeling Chart

Rubber insulating gloves are available in six ASTM defined voltage classes. Rubber insulating sleeves are available in five ASTM defined voltage classes. Insulating gloves and sleeves must have a color coded label to meet appropriate ASTM specifications.

Class Color	Proof Test Voltage AC/DC	Maximum Use Voltage*	Insulating Rubber Glove Label	Insulating Rubber Dipped Sleeve Label	Insulating Rubber Molded Sleeve Label
00 BEIGE	2,500 / 10,000	500 / 750			
0 RED	5,000 / 20,000	1,000 / 1,500			
1 WHITE	10,000 / 40,000	7,500 / 11,250			
2 YELLOW	20,000 / 50,000	17,000 / 25,500			
3 GREEN	30,000 / 60,000	26,500 / 39,750			
4 ORANGE	40,000 / 70,000	36,000 / 54,000			

* Maximum Use Voltage when worn with leather protectors.

COMMON PROBLEMS TO LOOK FOR

Cracking & Cutting

Shown below is damage caused by prolonged folding or compressing.



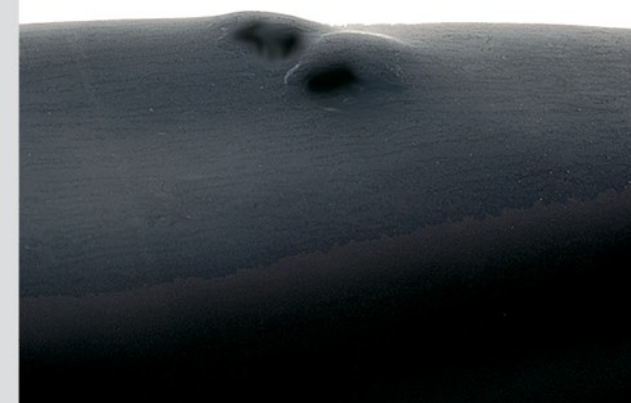
Avoid Folding

The strain on rubber at a folded point is equal to stretching the rubber to twice its length.



Chemical Attack

This photo shows swelling caused by oils and petroleum compounds.



Embedded Wires

Inspect for embedded wires or metal shavings that could puncture rubber gloves.



UV Checking

Storing in areas exposed to prolonged sunlight causes UV checking.



Snags

Damage shown here is due to wood and metal splinters and other sharp objects.



Contamination

Discard protectors contaminated with oil or petroleum compounds.



Avoid Inside Out

Storing reversed gloves strains the rubber severely and promotes ozone cutting.



Physical Damage

Rope burns, deep cuts and puncture hazards are cause for rejection.

