

STORAGE BATTERIES POST CORROSION

1. GENERAL

1.01 This section includes the information necessary to determine the seriousness of the effects of chemical action on storage battery posts and intercell connectors. It also suggests corrective action. For general information on storage battery posts and connections, see Section 157-601-701.

1.02 The illustrations in this section show various stages of post and intercell connector discoloration and corrosive action induced by the creepage of electrolyte up the battery post.

(a) *Print No. 6 and 25* illustrate acceptable conditions. Occasional wiping with a cloth wet in a strong soda solution is suggested to retard further chemical action but not required. A strong soda solution is 1 pound of table soda (bicarbonate), 1/2 pound of washing soda, or 1/2 pound Bell System pyrophosphate cleaner to 1/2 gallon water. A 1/2 gallon solution will neutralize 1/4 to 1/2 pint of nominal 1.210 electrolyte. If smaller volumes of strong soda solution are desired, decrease ingredients proportionally.

(b) *Print No. 1 and 29* call for no immediate action. With the condition presented in these prints, loose products of the chemical action should be wiped or brushed off and the affected area neutralized once a year. More frequent wiping with a cloth wet in a strong soda solution is suggested but not required [see (a)]. It will stop or reduce future chemical action. Note that neither cleaning nor neutralizing will reduce the brown lead-dioxide frequently found at the positive post.

(c) *Print No. 2 and 9* indicate the need for prompt cleaning and neutralizing. Where feasible, post to connector contact areas should be inspected as shown in Print No. 9. In this view, the contact area is better than might be expected from outside appearance.

(d) While brown lead-dioxide, white lead-sulphate, and other products of chemical action may not be harmful in themselves and do not prove that there is harmful corrosion, they do warn of the presence of acid and the possibility of high-resistance contacts. Note the high electrolyte level as shown by the red area exposed on the floats of Print No. 1 and 2. Overfilling contributes to spraying, acid creepage, and cell overflow.



