TASK DESCRIPTION
WASH BATTERIES AND BATTERY BOX. CHECK CONDITION OF BATTERIES, CONNECTIONS AND CABLES. ENSURE BATTERY FLUIDS ARE AT PROPER LEVEL.
BUILDER'S OR VENDOR'S MAINTENANCE INSTRUCTIONS
SPECIAL TOOLS REQUIRED: Battery Watering Gun and Cart Battery Water Deionizer Battery Maintenance Protective Clothing
RELATED MAINTENANCE PROCEDURES MODIFICATIONS, POINTERS, ETC.
SAFETY PRECAUTIONS: CONTRACTOR TO ASSUME RESPONSIBILITY FOR SAFETY RULES AND COMPLIANCE.
PREPARATION: 1) Ensure the locomotive is secured from movement. 2) Ensure battery watering cart is topped up with de-ionized water. 3) Ensure the water cart's battery is on charge. 4) Verify the water deionizer purity light is illuminated.

PROCEDURE

	**WARNING** Wear eye protection and rubber gloves when inspecting and testing batteries. Never allow sparks, flames, smoking, or bare lights in the battery area. Failure to observe this warning can result in serious injury.

Wash Batteries and Battery Box

1 Unlatch the access panels to the battery box compartment.

2 Wash batteries with clean water only.

3 Use a non metallic brush to loosen excessive and stubborn surface dirt from top of batteries. Rinse off dirt particles

Inspect Batteries, Cable Connections

1 Inspect all battery terminals for tightness.

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2 Apply a thin layer of neutral grease to terminals and connectors.

3 Check condition of cable's insulation for signs of wear, overheating and/or abrasions.

4 Ensure the battery box temperature sensor connections are secure.

Top up Electrolyte Level with Deionized Water

1 Visually check that the electrolyte level for each battery cell is at the maximum mark. Since the electrolyte level on the inside cells cannot be seen from the front or side carefully monitor the level via the cap hole.

2 If necessary adjust the electrolyte level by carefully adding only deionized water.

	**CAUTION** Avoid contaminating the battery cell by first ensuring the watering cart's water gun nozzle is clean before adding deionized water to battery cell and never place a battery hydrometer, normally used on lead acid batteries inside a nickel cadmium battery cell.

3 Open one cell cap at a time when adding the de-ionized water to minimize risk of contamination and ignition.

4 Carefully top up the electrolyte level to the maximum mark. Do not overfill the cells.

5 Close cell cap.

Note: *Any marked change in the rate of water consumption should be investigated immediately.*

Too much water loss or consumption indicates operation at too high a voltage or too high a temperature.

Too little water loss or no water consumption with batteries on continuous low current charge could indicate undercharging.

6 Close and secure battery access covers.

7 Report discrepancies to supervisor

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8 Return the watering cart to its proper storage location. Refill the container with deionized water and place the watering cart on charge. Verify the water deionizer's monitoring light is illuminated.

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