

Should this occur, charge battery as described in "Battery Charging Procedures".

- (2) **Dark or green dot not visible in viewing port**
If there is a cranking complaint, battery should be tested as described in "Load Test" section, and the Vehicles Charging System should be checked as covered in this Service Manual.

WARNING: ON RARE OCCASIONS, TEST INDICATOR MAY TURN LIGHT YELLOW. IN THIS CASE, THE VEHICLES CHARGING SYSTEM SHOULD BE CHECKED AS COVERED IN THE APPLICABLE SECTION OF THIS SERVICE MANUAL. ALTHOUGH THE BATTERY MAY BE CAPABLE OF FURTHER SERVICE, REPLACE THE BATTERY IF A CRANKING COMPLAINT HAS BEEN REPORTED. DO NOT CHARGE, TEST, OR JUMP START!!!

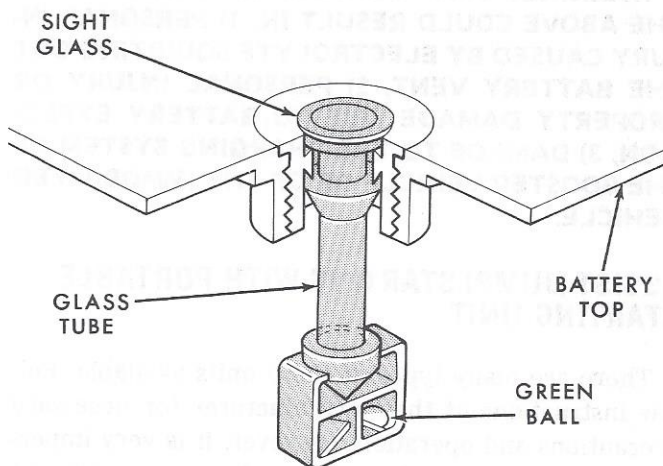
SERVICE PROCEDURES

BATTERY VISUAL INSPECTION

- (1) Make sure ignition switch is in **Off** position and all battery feed accessories are **Off**.
- (2) Disconnect battery cables at battery (negative first).
- (3) Remove thermo guard cover and remove battery from vehicle.

WARNING: CARE SHOULD BE TAKEN IN THE EVENT BATTERY CASE IS CRACKED OR LEAKING TO PROTECT HANDS FROM THE ELECTROLYTE. A SUITABLE PAIR OF RUBBER GLOVES (NOT THE HOUSEHOLD TYPE) SHOULD BE WORN WHEN REMOVING BATTERY BY HAND.

- (4) Inspect battery carrier for damage caused by loss of acid from battery. If acid damage is present it will be necessary to clean area with a solution of clean warm water and baking soda. Scrub area with a stiff bristle brush and wipe off with a cloth moistened with ammonia or baking soda in water.
- (5) Clean top of battery with same solutions as described in Step (4).
- (6) Inspect battery case and cover for cracks. If cracks are present battery must be replaced.
- (7) Clean battery post with a suitable battery post cleaning tool.



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Fig. 19—Built In Test Indicator

CATOR MAY TURN LIGHT YELLOW. IN THIS CASE, THE VEHICLES CHARGING SYSTEM SHOULD BE CHECKED AS COVERED IN THE APPLICABLE SECTION OF THIS SERVICE MANUAL. ALTHOUGH THE BATTERY MAY BE CAPABLE OF FURTHER SERVICE, REPLACE THE BATTERY IF A CRANKING COMPLAINT HAS BEEN REPORTED. DO NOT CHARGE, TEST, OR JUMP START!!!

- (8) Clean the inside surfaces of the terminal clamps with a suitable battery terminal cleaning tool. Replace damaged or frayed cables and broken terminal clamps.
- (9) Install battery in vehicle.
- (10) Install thermo guard cover.
- (11) Connect cable clamps to battery post making sure top of clamp is flush with top of post.
- (12) Tighten clamp nut securely.
- (13) Coat all connections with light mineral grease after tightening.

LOAD TEST

- (1) Observe indicator for presence of green dot. If not visible, charge battery prior to testing.
- (2) Observing polarity, connect a voltmeter and a battery load tester across battery terminals.
- (3) Apply a 300 ampere load for 15 seconds to remove surface charge from the battery. Remove the load.
- (4) Wait 15 seconds to let battery recover and apply **210 amp** load.
- (5) Read voltage after 15 seconds with specified load applied, then disconnect load.
- (6) If voltage does not drop below the minimum listed in the Load Test Chart, the battery is good and should be returned to service. (The battery temperature must be estimated by feel and by the temperature the battery has been exposed to for the preceding few hours.)
- (7) If the voltage drops below the minimum listed, replace the battery.

LOAD TEST CHART

Minimum Voltage	Temperature	
	F°	C°
9.6	70 and above	21 and above
9.6	60	16
9.4	50	10

CHARGING PROCEDURES

When it is necessary to charge a sealed battery, the following safety precautions must be followed.