



WARRANTY DIAGNOSIS CHART

MULTI-PURPOSE DEEP CYCLE AND SWEEPER/SCRUBBER BATTERIES

STEP 1

EXAMINE BATTERIES, CABLES, ELECTROLYTE LEVELS, ETC.

DAMAGED BATTERIES (BROKEN TERMINAL, CASE, COVER, ETC.)
REPAIR OR REPLACE

DAMAGED CABLES (CRACKED, CORRODED, FRAYED)
REPAIR OR REPLACE

CHECK OCV, SP.GR., & ELECTROLYTE LEVELS (ADD WATER TO ABOVE TOP OF PLATES)

6 VOLT BATTERY

OCV <6.15 VOLTS
SP.GR. <1.255
SG VAR. >0.015

OCV ≥6.15 VOLTS
SP.GR. ≥1.255
SG VAR. ≤0.015

GO TO STEP 2

GO TO STEP 4

8 VOLT BATTERY

OCV <8.20 VOLTS
SP.GR. <1.255
SG VAR. >0.015

OCV ≥8.20 VOLTS
SP.GR. ≥1.255
SG VAR. ≤0.015

GO TO STEP 2

GO TO STEP 4

12 VOLT BATTERY

OCV <12.30 VOLTS
SP.GR. <1.255
SG VAR. >0.015

OCV ≥12.20 VOLTS
SP.GR. ≥1.255
SG VAR. ≤0.015

GO TO STEP 2

GO TO STEP 4

STEP 2

FULLY RECHARGE (QUICK CHARGE 6-127V/6A OR AUTOMATIC CHARGER)

6 VOLT BATTERY

CHECK CHARGE VOLTAGE (CHV) & SP.GR.

CHV <7.75 VOLTS
ANY CELL >1.270
SG VAR. >0.015

CHV ≥7.75 VOLTS
SP.GR. ≥1.255
SG VAR. ≤0.015

GO TO STEP 3

GO TO STEP 4

8 VOLT BATTERY

CHECK CHARGE VOLTAGE (CHV) & SP.GR.

CHV <10.33 VOLTS
ANY CELL >1.270
SG VAR. >0.015

CHV ≥10.33 VOLTS
SP.GR. ≥1.255
SG VAR. ≤0.015

GO TO STEP 3

GO TO STEP 4

12 VOLT BATTERY

CHECK CHARGE VOLTAGE (CHV) & SP.GR.

CHV <15.50 VOLTS
ANY CELL >1.270
SG VAR. >0.015

CHV ≥15.50 VOLTS
SP.GR. ≥1.255
SG VAR. ≤0.015

GO TO STEP 3

GO TO STEP 4

STEP 3

OPEN CIRCUIT STAND (ALLOW TO STAND ON OPEN CIRCUIT FOR 24 HOURS)

6 VOLT BATTERY

OCV <6.00 VOLTS
SP.GR. <1.200
SG VAR. >0.015

OCV ≥6.30 VOLTS
SP.GR. ≥1.255
SG VAR. ≤0.015

DEFECTIVE/ABUSED

GO TO STEP 4

8 VOLT BATTERY

OCV <8.00 VOLTS
ANY CELL >1.200
SG VAR. >0.015

OCV ≥8.40 VOLTS
SP.GR. ≥1.255
SG VAR. ≤0.015

DEFECTIVE/ABUSED

GO TO STEP 4

12 VOLT BATTERY

OCV <12.00 VOLTS
ANY CELL >1.200
SG VAR. >0.015

OCV ≥12.60 VOLTS
SP.GR. ≥1.255
SG VAR. ≤0.015

DEFECTIVE/ABUSED

GO TO STEP 4

STEP 4

DISCHARGE TEST (ADJUSTABLE LOAD TESTER* OR QUICK CHARGE C6812 TESTER**)

6 VOLT BATTERY

ADJ. LOAD TEST*	QUICK CHARGE C6812**
<4.80 V	<4.95 V

ADJ. LOAD TEST*	QUICK CHARGE C6812**
≥4.80 V	≥4.95 V

DEFECTIVE/ABUSED

GOOD/SERVICEABLE

8 VOLT BATTERY

ADJ. LOAD TEST*	QUICK CHARGE C6812**
<6.40 V	<6.60 V

ADJ. LOAD TEST*	QUICK CHARGE C6812**
≥6.40 V	≥6.60 V

DEFECTIVE/ABUSED

GOOD/SERVICEABLE

12 VOLT BATTERY

ADJ. LOAD TEST*	QUICK CHARGE C6812**
<9.60 V	<9.90 V

ADJ. LOAD TEST*	QUICK CHARGE C6812**
≥9.60 V	≥9.90 V

DEFECTIVE/ABUSED

GOOD/SERVICEABLE

*ADJUSTABLE LOAD TESTER SHOULD BE SET AT A LOAD IN AMPS EQUAL TO THE C/20 AH RATING IN AMP-HOURS

**QUICK CHARGE C6812 TEST LOAD IS PRESET FOR 6V, 8V, & 12V BATTERIES

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