

LUCAS WORKSHOP INSTRUCTIONS**BATTERIES****REVISED SPECIFIC GRAVITIES FOR BATTERY FILLING ACIDS
USED WHEN PUTTING UNCHARGED AND "DRY-CHARGED"
BATTERIES INTO SERVICE**

Since SECTION G-2 ISSUE 2 was printed in 1952, wet wood separators have been entirely superseded by porous rubber and other dry inert materials. It is now possible, therefore, to specify only two filling strengths for all uncharged and "Dry-charged" batteries having normal electrolyte capacities.

- (a) **Home Trade and Climates having Shade Temperatures Ordinarily Below 80°F. (26.6°C.)**
Use a filling acid of **1.270** s.g., corrected to 60°F. (15.5°C.). To prepare this, add **one** part (by volume) of **1.835** s.g. acid to **2.8** parts of distilled water.

When fully charged, batteries originally filled with this acid should have an electrolyte strength of 1.270 — 1.290 s.g.

- (b) **Climates having Shade Temperatures Frequently Over 80°F. (26.6°C.).**

Use a filling acid of **1.210** s.g., corrected to 60°F. (15.5°C.). To prepare this, add **one** part (by volume) of **1.835** s.g. acid to **four** parts of distilled water.

When fully charged, batteries originally filled with this acid should have an electrolyte strength of 1.210 — 1.230 s.g.

High Acid Level Battery, Model TR19

Tractor battery model TR19 is designed for infrequent topping-up by the provision of extra electrolyte space above the plate pack. To obviate possible damage to cell plates when the electrolyte level is low (and therefore stronger), a weaker filling acid must be used for this battery. The correct filling strengths are **1.250** s.g. and **1.190** s.g. (corrected to 60°F.) for shade temperatures normally below and above 80°F., respectively. To prepare **1.250** s.g. acid, add **one** part (by volume) of **1.835** s.g. acid to **3.2** parts of distilled water. To prepare **1.190** s.g. acid, add **one** part (by volume) of **1.835** s.g. acid to **4.4** parts of distilled water.

In the fully charged condition, these specific gravities become 1.250 — 1.270 and 1.190 — 1.210, respectively.

Model TR19 batteries should be topped-up twice yearly in temperate climates and monthly in very hot climates, whether or not the vehicle is in use.

