



# GRAVELLY

## Technical Information

To continue its program of quality and design improvement, the manufacturer reserves the right to change specifications, design or prices without notice and without incurring obligation.

### TECHNICAL SERVICE BULLETIN - 1398

TO: ALL GRAVELLY OUTLETS

DATE: May 11, 1971

SUBJECT: PROPER METHOD OF CHARGING BATTERIES

During the last year, we have received many complaints concerning the failure of the batteries to hold the original charge.

Investigation of these complaints by the Gravelly Engineering Department along with personnel from the Battery Manufacturer, have determined that most of this type complaint is caused by not properly charging the battery at the time the electrolyte is installed.

Enclosed are the proper battery charging instructions for the two size batteries being used by Gravelly.

To save yourself unnecessary service calls, please follow these charging instructions.

Mel Lance  
Service Manager

ML/lh



# BATTERY SERVICE

## Procedure for Activating Dry Charged Batteries

### Step 1:

Fill each cell so that the plates and separators are covered with electrolyte, this permits the electrolyte to expand as battery is charged and prevents spillage from the charging process. Electrolyte of 1.265 specific gravity is recommended.

### Step 2:

When using 1.265 electrolyte, charge 12 volt batteries at 30 amps for 20 minutes until the specific gravity is 1.255 - 1.265 and the electrolyte is 80°F.

### Step 3:

After charging, check electrolyte level in all cells. Fill with electrolyte as required to proper level.

### Battery Charge Recommendations

#### (1) Fast Charge:

30 amp rate for initial activation of dry charge.  
(See Chart)

#### (2) Slow Charge:

For Gravelly Battery part number 7274P1 (424, 430, 432, 450, Convertible 7.6, Commercial 10-A, Com-

mercial 12) a rate of 3 amps for 12 hours is recommended or until gravity is in a range of 1.255 - 1.265. For Gravelly Battery part number 15256P1 (408) a rate of 2 amps for 12 hours is recommended or until gravity is in a range of 1.255 - 1.265.

#### (3) Trickle Charge:

Is a continuous charge at a low rate sufficient to compensate for the internal losses of the battery and suitable to maintain the battery in a fully charged condition. Low-rate charges are satisfactory, provided the total amount of charge received by the battery is adequate to cover the local action. Trickle charging only maintains the charge, it neither adds to the state of charge or diminishes the state of charge.

Battery Charging Rate and Time Table For Activating  
12 Volt Battery

AMPS	HOURS	MINUTES
30		20
25		24
20		30
15		40
10	1	0
8	1	15
6	1	40
4	2	30
2	5	0