

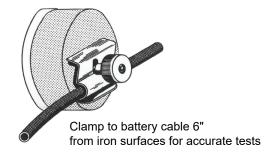
## **Automotive Test Meters**

## **INSTRUCTIONS**

## **CLAMP-ON AMMETER HOYT 764**



Approx. 4" cable each side of meter for true readings



The 764 Clamp On Ammeter is designed for the man who wants to know the condition of his charging system, consisting of his generator or alternator and the battery.

This meter is designed to clamp on the battery cable either the positive cable or the negative cable whichever is the easiest to get at and whichever is farther away from any steel. Steel will effect tihe reading and therefore the meter should be placed in the area that is farthest away from the block or the fenders, etc.

- 1. Turn off the engine
- 2. Turn on the headlights
- 3. Install the meter on the battery cable and with the headlights on, the meter must be reading "Discharge".
- 4. Clamp the meter in place so it is easy to read when the hood is lifted.
- 5. Start the engine and then shut off the lights and see if the meter is reading in the "Charge" to the right of zero in the green area.
- 6. Be sure the meter is secure in the cable.

WARNING: Do not attempt to install this meter with the motor running.

With this meter installed on the cable, you now can tell the condition of your electrical system.

- 1. With the engine shut off and all the electrical accessories turned off, the meter should read zero.
- 2. While the engine is cranking, of course the meter will discharge beyond the 60 ampere range but it is so designed that no harm will occur.
- 3. Once the engine starts the ammeter should indicate a charging condition or nearly the outputt of the generator such as, 55 amps. on heavy duty alternator, about 40 amps. on medium size alternator and about 30 amps. on smaller alternators.
- 4. As the engine runs on the charging rate should decrease to about 5 amperes if the battery is normal.
- 5. If the ammeter continues to charge at a high rate indefinitely, it indicates that you have a faulty regulator and the output of the generator is not reducing, therefore, this will be indicated by adding excessive water to the battery.
  - Exceptionally bright lights will result, and the burning out of the alternator and regulator.

- 6. If there is no indication and the meter stays at zero with the engine running, it indicates that the alternator is not charging, either the alternator is faulty or the regulator is faulty because the alternator is not charging the battery.
- 7. If the ammeter continues on discharge, while the engine is running, again it is a sign that there is no charging, yet the accessories are draining the current from the battery. This condition must be rectified or the battery will soon be discharged and the engine will not start.
- 8. Prior to taking a long trip with your car, one should check the condition of the battery visually to be sure there is a normal amount of water over the plates and then leave the lights on for a few minutes, then start the engine and see if the generator charge is up to its approximate rate and slowly tapers down to a charge of about 5 amperes, this will indicate the system is working normally.

In the event that the charging system does not reduce down to a lower rate of 5 amperes or if the generator does not charge at all, it indicates the system should be checked by a competent authorized mechanic.

This instrument, properly installed, will not introduce any problems to the charging circuit, which is many times the problem with other types of ammeters that can be shorted, grounded, etc.

This meter can be changed from car to car or to other vehicles if you so desired.

It can be used as a test instrument periodically on other vehicles.

This meter will be a great help to your protection if it is properly looked at periodically and wil! be a great help to keep a good control of your electrical systems.

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