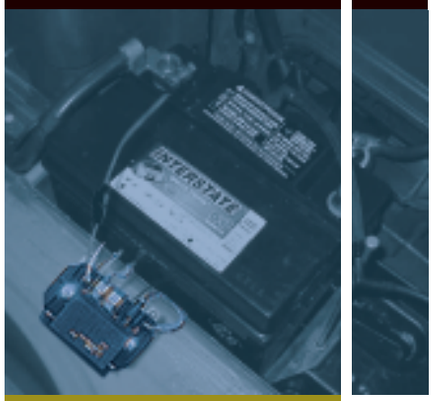
extend battery life

improve vehicle availability

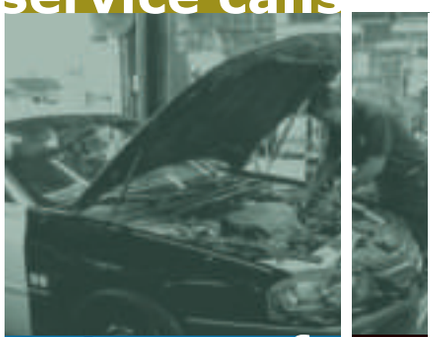
TOP H.A.T.

High Amp Timer
P/N #6001

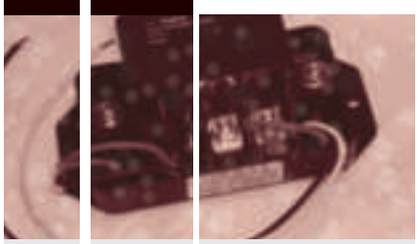


5 second test mode (all switches off)

eliminate monday morning battery service calls



waterproof construction mounts anywhere



- **DIGITAL DESIGN** - Provides reliability and dependability over wide temperature and voltage ranges
- **SELF-CONTAINED** - High Reliability 250-AMP relay built into the product, with 6mm bolts providing convenient wire-attachment points.
- **LOW VOLTAGE DISCONNECT** - Activates when battery is less than 10.5 volts for 15-seconds.
- **VOLTAGE AND IGNITION SWITCH SENSE** - Output turns on if either the yellow wire is "hot" OR the input voltage is greater than 13.25 volts.
- **FEATURE ENABLE/DISABLE SWITCHES** - Additional switches next to the time-set switches allow disabling the ignition voltage sense and Over/Under voltage functions. This facilitates shore power and other special power applications.
- **PROGRAMMABLE FROM 15 MINUTES TO 16 HOURS**
- **5 SECOND TEST MODE** - Turn all time setting switches "off" for trouble shooting.
- **MOUNTS ANYWHERE** - Epoxy encapsulation resists water.

OPTIONAL DIRECT IGNITION SENSING
RECOMMENDED FOR EMERGENCY VEHICLE APPLICATIONS
This feature over rides the auto sense circuit. You should connect this wire to the ignition circuit to guarantee turn on even if the alternator is not working.

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COPELAND ENGINEERING, INC
DEPENDABLE POWER MANAGEMENT

Dedicated to Providing the Highest Quality Motor Vehicle Electrical Products and Customer Support

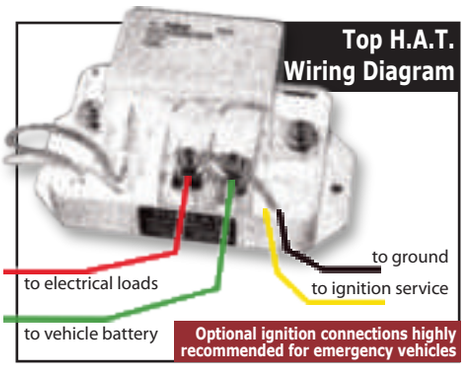
TWO YEAR WARRANTY

TOP H.A.T.
INSTALLATION INSTRUCTIONS

The Copeland Engineering **TOP H.A.T**. is the High (250) Amp enhanced version of Power Tamer VS Timer. It eliminates dead batteries caused by forgotten electrical equipment such as data terminals and radios. This self-contained product features both voltage sensing and auto-ignition sensing options for relay activation.

It also features programmable times ranging from 15 minutes to 16 Hours. Low voltage disconnect activates when the battery is at 10.5 volts for 15-seconds. This ignores voltage dips caused by turning on the light bar, engine starting, etc.

There are two LEDs. The **GREEN LED** monitors output voltage, and the **RED LED** flashes when power is first applied and during delay timing. Switches 1-6 are for delay time programming. The two other switches set apart are labeled "IGN VOLT" AND "O/U VOLT". These are for enabling and disabling voltage sense features.



Installation

IGN VOLT enables the 13.25-Volt battery charging (engine running) sense. Turn this switch off to rely solely on the yellow ignition sense wire for timing initiation. Factory default is "ON".

O/U VOLT enables the over and under voltage sense functions. Switch "off" to disable all voltage sensing. Factory default is "ON".

Install TOP H.A.T. at any convenient location in the vehicle and wire according to the drawing below. In the auto-ignition sense mode (YELLOW wire not connected) TOP H.A.T. senses the charging system pick-up (engine running) to turn equipment on and starts timing when the engine stops. If the YELLOW wire is connected to a circuit that is hot when the ignition switch is on, your equipment will come on immediately with the ignition. **This connection is recommended for emergency service vehicles to guarantee equipment operation in high electrical load during idle conditions.**

SETTING TIME DELAY

The time delay switches are on the bottom of the box. Using the table, the total delay is the sum of the time set for each switch placed "ON". [For **TEST** purposes, all switches **OFF** causes the Power Tamer to shut off in approximately 5-seconds.]

After setting the desired time, place the enclosed label over the switches.

THIS STEP IS EXTREMELY IMPORTANT. FAILURE TO COVER THE SWITCHES WILL VOID THE WARRANTY AND MAY CAUSE PREMATURE FAILURE DUE TO SWITCH CONTAMINATION.

SWITCH VALUES	Time Setting Examples
S1= 1/4 Hour	S1 on 2,3,4,5,6 off = 15 Minutes
S2= 1/2 Hour	S1,2 on 3,4,5,6 off = 45 Minutes
S3= 1 Hour	S4 on 1,2,3,5,6 off = 2 Hours
S4= 2 Hours	S3,4 on 1,2,5,6 off = 3 Hours
S5= 4 Hours	S1,2,3,4 on 5,6 off = 3 Hours, 45 minutes
S6= 8 Hours	S5,6 on 1,2,3,4 off = 12 Hours

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