



HEWITT INDUSTRIES

BATTERY DISCHARGE PROTECTION SYSTEM

COMPLETE BATTERY PROTECTION

AGAINST

DEEP DISCHARGING • OVER USE OF ACCESSORIES • PARASITIC DRAIN

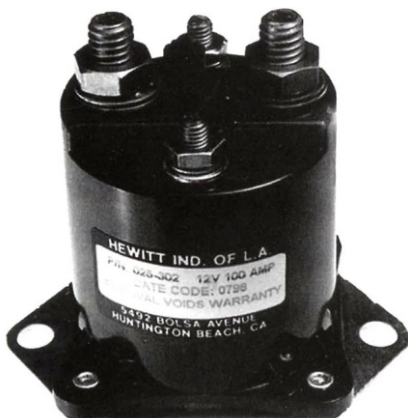
--- THE BATTERY KILLERS ---

ASSURES RESTART VOLTAGE • EXTENDS BATTERY LIFE

--- NO MORE JUMP STARTS ---

APPLICATIONS

- TRUCK - CAB AND SLEEPER
- CAR CARRIERS
- CARGO LIGHTS
- LIFT GATES
- MARINE
- PICKUPS AND VANS
- RV'S / MOTORHOMES
- AUTOS



- LOW COST
- EASY TO INSTALL
- THREE YEAR WARRANTY
- NO LIMIT TO USEFUL LIFE

DEEP DISCHARGING SHORTENS BATTERY LIFE

DESIGN FEATURES:

This system constantly monitors battery voltage and ALARMS upon low voltage, notifying the driver to start the engine or limit the accessory use. Installation of the systems can be made in minutes.

It can also be connected to automatically disconnect all accessory circuits at a preset voltage when the engine is shut down (sensed by oil pressure) assuring adequate voltage for engine restart. (No More Jumpstarts). See diagrams.

When battery voltage reaches the preset level (suggested 12 volt) a panel mounted light illuminates. If voltage remains low for 8 seconds, the light begins to flash with audio alarm indicating impending accessory switch off. After 20 seconds all connected circuits are switched off, audio alarm stops. Flashing light remains until system is reset by cycling the ignition or starting the engine.

The system uses all batteries to supply accessory circuits allowing maximum accessory use time without affecting restart capability, but eliminates deep discharging resulting in longer battery life.

Components:

P/N: 030-900 has all of the functions and features previously mentioned, and includes Oil Pressure Switch P/N: 020-308, plus low voltage indicating lamp P/N: 710-009.

Self Test:

With each engine startup the system self tests, indicated by a light and audio alarm for three seconds.

The circuitry includes a momentary low voltage trigger for this purpose.

The Battery Discharge Protection System can be connected to control existing relays: either internally grounded relays or externally grounded relays.

Wiring Methods:

Diagram indicates wiring method for protecting key switch accessories using 100-amp continuous duty relay and wiring method for protecting constant power circuitry by PARALLELING RELAYS.

APPLICATIONS:

Cab and Sleeper: Both key accessories and sleeper constant power accessories can be protected separately by taking supply from all batteries, which allows much longer accessory use time, especially for sleepers equipped with refrigerators, TV, fans, a/c, heaters, microwaves and lights.

Liftgates / Car Carriers: Battery protection for these applications is critical, due to the high battery demand to operate hydraulics. This system reliability notifies the operator of low batteries, requiring that the engine be restarted before it's too late.

Motorhomes / RV's: With this system, separate batteries for engine and accessories are no longer required. System assures engine restart voltage plus longer accessory use time.

Adjusting Setpoint:

On the connector end of the module is an adjusting screw requiring a small, jeweler-sized screwdriver. Turn counter-clockwise to lower a clockwise to raise. The module is adjustable by 0.1V, 1/2 turn equals 0.3V.

Accessories:

P/N 025-302 Accessory Relays 100 amp constantly.

P/N 405-006 Relay, reset.

P/N 030-705 Tester, Battery Discharge Protection System for voltage setting and system testing.

INSTALLATION PROCEDURE:

ECM: P/N 030-900

Mount as convenient using supplied double back tape or with hardware into mounting holes under instrument panel connector facing down.

Low Battery Light: P/N 710-009

Select location and drill 1/2" inch hole to accept part. Make wire connections through hole before inserting lamp assembly in hole.

Connect Brown wire from harness to White wire on lamp and Black wire of lamp to "A" terminal of accessory relay.

Place lamp in hole, and press firmly in place.

Switching Relay: P/N 025-302

(Existing relays may be used)
For ignition and constant power accessories, position relay near power bus between battery and bus to connect accessories.

Ignition voltage source must be connected to constant power (unprotected).

Oil Pressure Switch: P/N 710-009

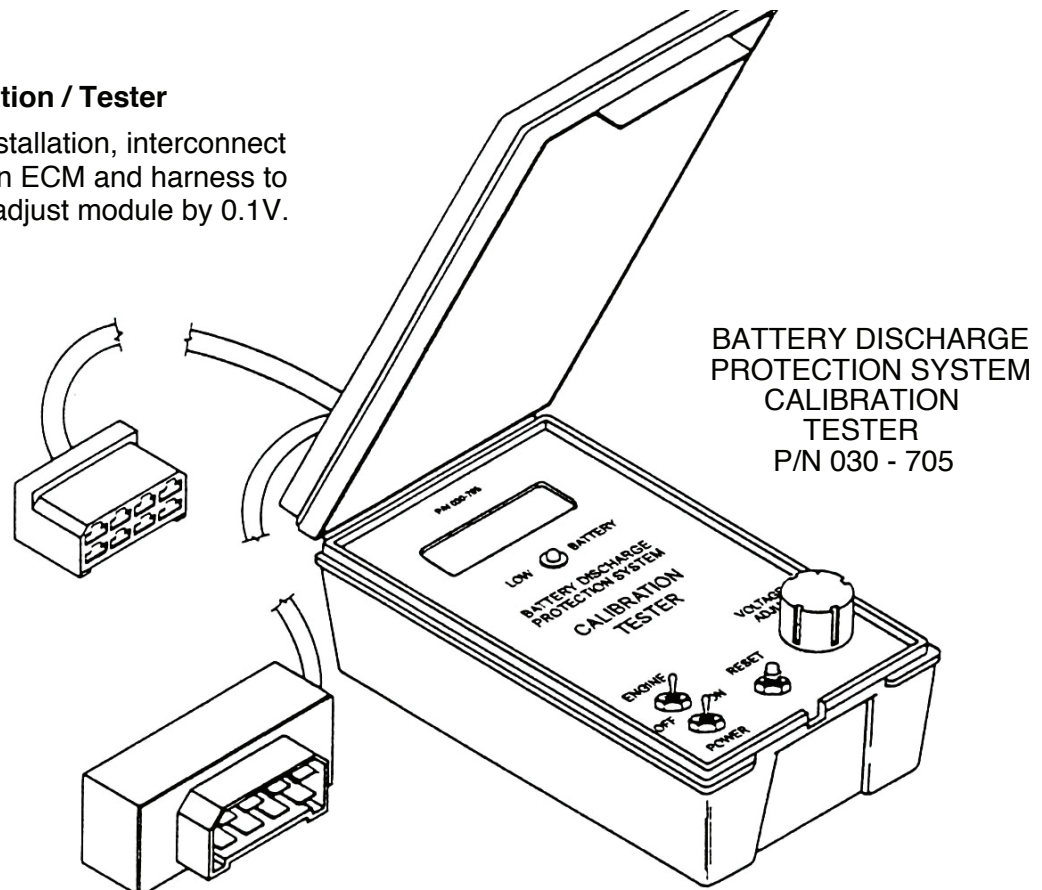
Install in engine oil pressure port or inline to oil pressure gauge.

Harness Assembly: P/N 071-820

Includes mating connector to ECM with 6 ft. color-coded wire lengths for maximum requirements, inline reset relay connector, conduit and securing ties.

Calibration / Tester

After installation, interconnect between ECM and harness to test or adjust module by 0.1V.



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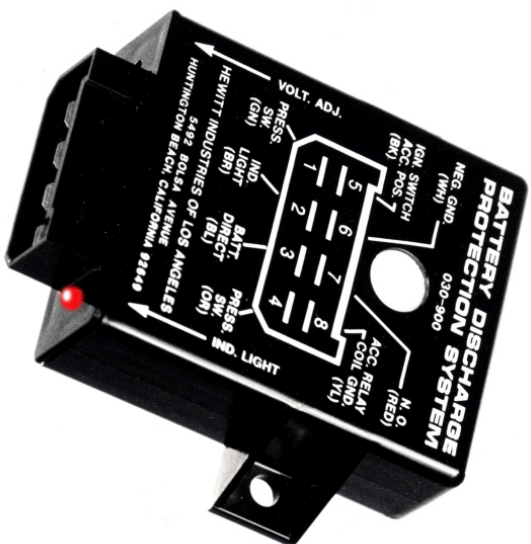
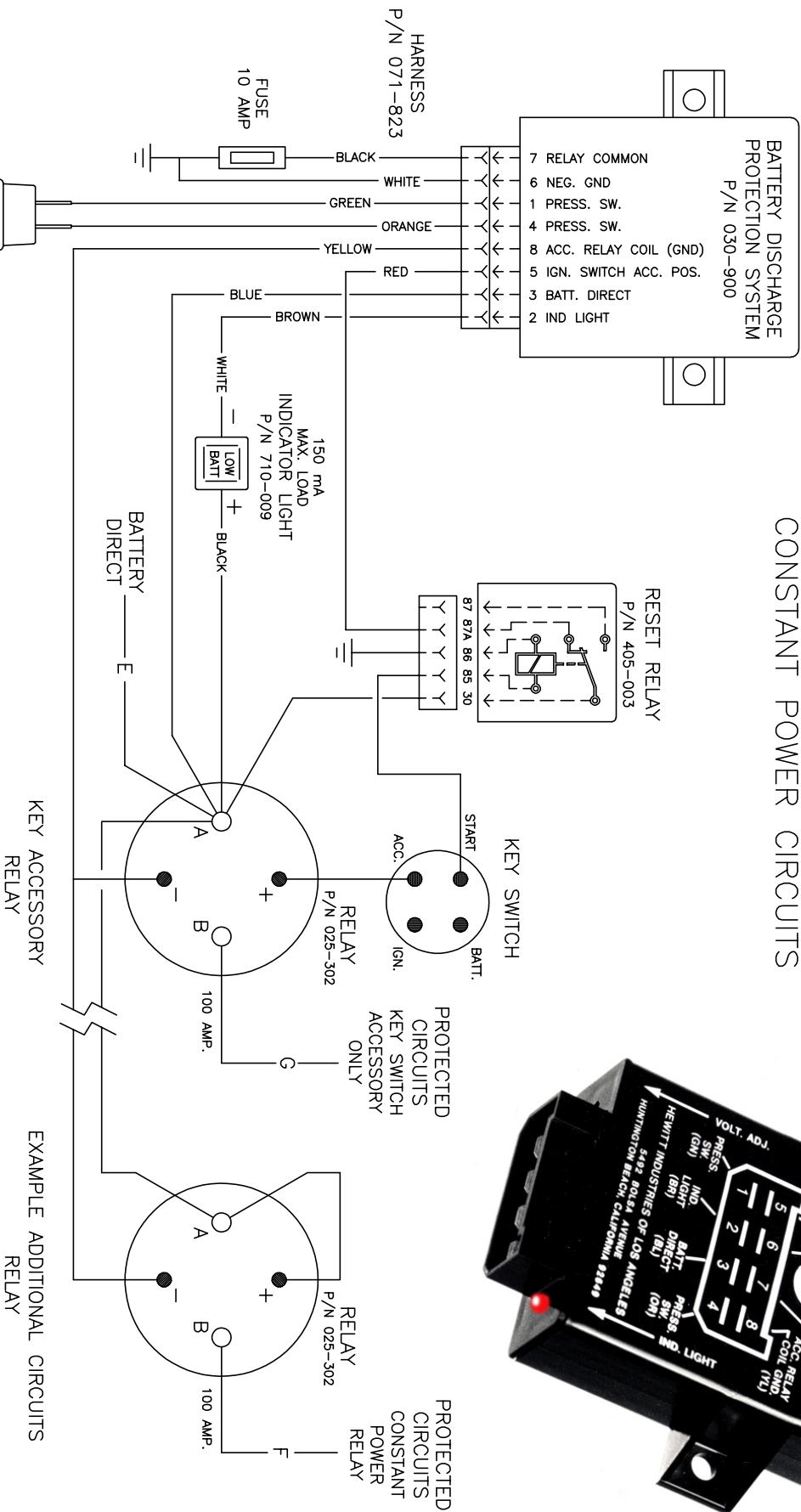
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PROTECT BOTH KEY SWITCH (ACCESSORY) AND CONSTANT POWER CIRCUITS



REVISIONS

REV.	DESCRIPTION	EQ#	DATE	BY
-	RELEASE	-	07/12/02	LT
A	REDRAWN, NEW TITLE BLOCK	-	10/14/03	BCT

TOLERANCES

UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN INCHES.
 METRIC EQUIVALENTS ARE IN [BRACKETS]:
 .x = .030 [0.761]
 .xx = .010 [0.254]
 .xxx = .005 [0.127]
 FRACTIONS = 1/32
 ANGLES = ±1°
 SCALE: NONE

HEWITT INDUSTRIES OF LOS ANGELES

TITLE: BATTERY DISCHARGE PROTECTION SYS. W/ AUTO RESET
 DRAWN BY: B. TRIMAN
 APPR. BY:

DATE: 10/14/03
 KIT NO. 030-900
 SHEET 1 OF 1