



TECHNICAL BULLETIN

RELOCATION OF AUTO REIGNITION CONTROLS AND MODIFICATION OF SYSTEM FOR FULL-TIME OPERATION

1. PLANNING INFORMATION

A. Models Affected:

500 Model 369HE, 369HM and 369HS Series Helicopters equipped with PN 369H90118-505, -507, -509 and -511 Automatic Engine Reignition Kit.

B. Preface:

The information given in this Service Information Notice lists procedure for relocating the auto reignition controls on the instrument panel and necessary rewiring, to provide full-time operation of the system. The FAA has determined that accomplishment of HHI Service Information Notice HN-160 is an action which provides an equivalent level of safety and satisfies the requirement of Airworthiness Directive (AD) 80-24-04. The authority for this action is granted in paragraph c of the subject AD.

C. Time of Compliance:

At owners/operators discretion.

D. Reference:

500 Model 369HE, 369HM, and 369HS Helicopters Owners Manual Supplement for Automatic Reignition Kit PN 369H90118-505 (Modified), -507 (Modified), -509 (Modified), and-511 (Modified), Publication No. CSP-H-1S, Approved

FAA Airworthiness Directive 80-24-04

E. Weight and Balance Data:

Weight and balance not affected

F. FAA Approval:

The resultant alteration to the affected helicopters by the procedure in this Notice has been shown to comply with Federal Aviation Regulations and is FAA approved.

G. Materials:

MATERIAL	
Nomenclature	Source
Aluminum alloy sheet, 2024-T3, QQ-A-250/5, Temp T3	
Primer, catalyzed epoxy, HMS-15-1082 1-1Y-10 U-1201	Advanced Coatings & Chemicals Company, 2213 North Tyler Avenue, So. Elmonte, CA 91733 Sterling Lacquer .Mfg. Co., Sunbrite Mfg. Co., 3150 Brannon Avenue, St. Louis, MO 63139

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MATERIAL (Cont.)	
Nomenclature	Source
Paint acrylic lacquer, HMS-15-1083, Color No. 37038 per FED-STD-595	Advanced Coatings & Chemicals Company Sterling Lacquer Mfg. Co., Sunbrite Mfg. Co.
Black Nextel Suede Coating, 3101-C10	3M Co., Minneapolis, Minn.
Scotch Cal Brand Film, 3650	Airmark Company (General Marketing Co.), 211 North Victory, Burbank, CA 91502 Hesik Company, Inc., 385 Clinton St., Costa Mesa, CA 92626 Rose Name Plate, 4169 Olympic Blvd, Los Angeles, CA 90063

2. PROCEDURE

- (1). Set BATTERY, EXT PWR switch (S2) to OFF.
- (2). Disconnect wires from auto reignition switches as follows:
 - (a). Remove wire No. J501A20 from circuit breaker (CB124-1) and (CB106-2) and discard wire.
 - (b). Disconnect wire No. J502A20 and J502D20 from circuit breaker (CB124-2).
 - (c). Remove wire No. J507AA20 from terminal board (TB502-13E).
 - (d). Remove wire No. J503D20 and J503EE20 from terminal board (TB502-13A and 13C).
 - (e). Remove wire No. J505A20N and J508A20N from stud (E2).
- (3). Remove auto reignition switch from instrument panel.
- (4). Remove circuit breaker (CB124) from instrument panel.
- (5). Remove and retain relay (K104) from instrument panel. Remove all wires from relay.

NOTE: It is not necessary to relocate the auto reignition indicator and switch installed in 369HM series helicopters. To complete the modification of 369HM auto reignition systems, replace switch S11 with PN 88ZGK15, Cutler Hammer or equivalent, spring loaded switch. Replace card switch to read OFF and TEST as shown in Figure 2. Continue modification with step (14).

- (6). Fabricate cover, as required, for holes vacated by switches (see Figure 2).



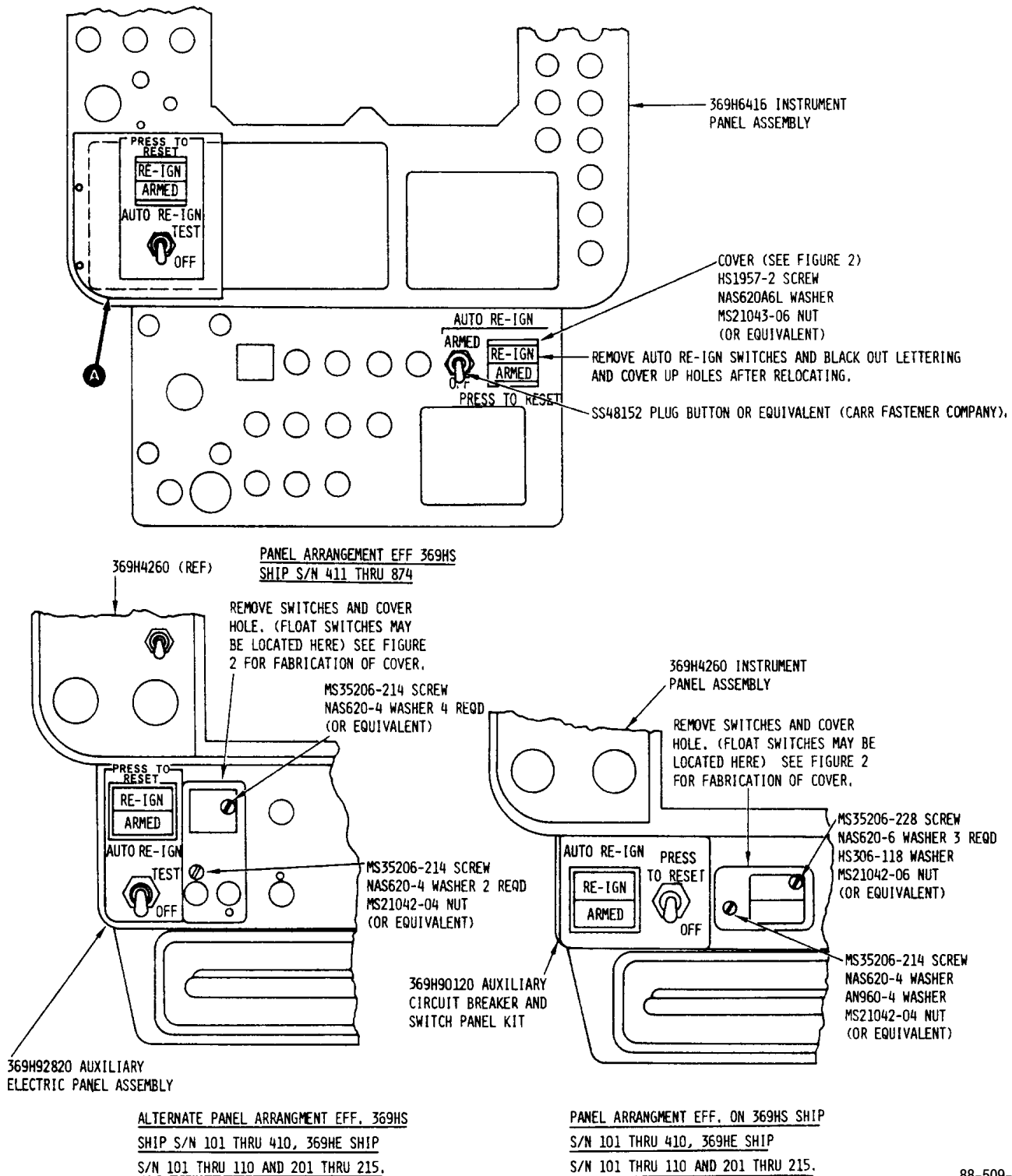
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- (7). Install cover on instrument panel (see Figure 1).
- (8). Install plug button (369H6416 instrument panel only) (see Figure 1).
- (9). Paint out lettering at previous auto reignition switch location with acrylic lacquer (see Figure 1).
- (10). Fabricate plate, as required:
 - (a). Make plate from 0.062 inch thick aluminum alloy sheet as shown in Figure 1.
 - (b). Apply one coat HMS-15-1082 primer and dry for 1 to 2 hours.
 - (c). Apply topcoat of HMS-15-1083 acrylic lacquer and air dry 4 hour minimum.
- (11). Install plate and auto reignition switch (XDS9) (retained above) and (S11) (PN 882GK15, Cutler Hammer or equivalent) at new location on instrument panel (see Figure 1).
- (12). Fabricate decal (see Figure 2).
- (13). Install decal (see Figure 1).
- (14). Revise wiring as follows (see Figure 3):
 - (a). Install diode at circuit breaker (CB101).
 - (b). Install diodes (CR3 and CR4) on switch (S11).
 - (c). Install transorb (CRS) on relay (K104).
 - (d). Rewire switches (S11 and XDS9) and relay (K104) as shown.
 - (e). Reinstall relay (K104) in original position.
- (15). Perform check of modified auto reignition system per instructions in Owners Manual Supplement for Automatic Engine Reignition Kit Modified (CSP-H- 1S).
- (16). Record compliance with this Service Information Notice in Compliance Record of Helicopter Log Book.

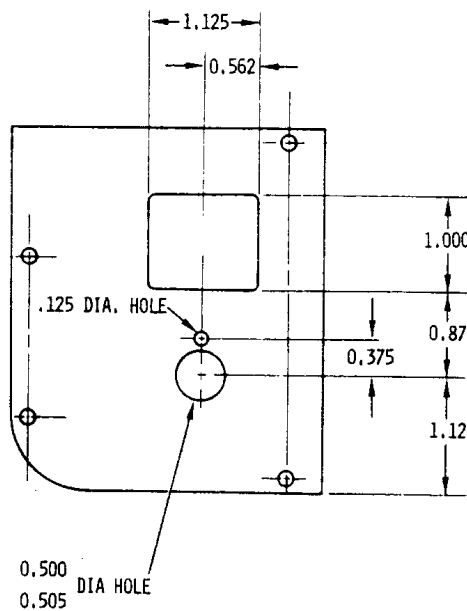
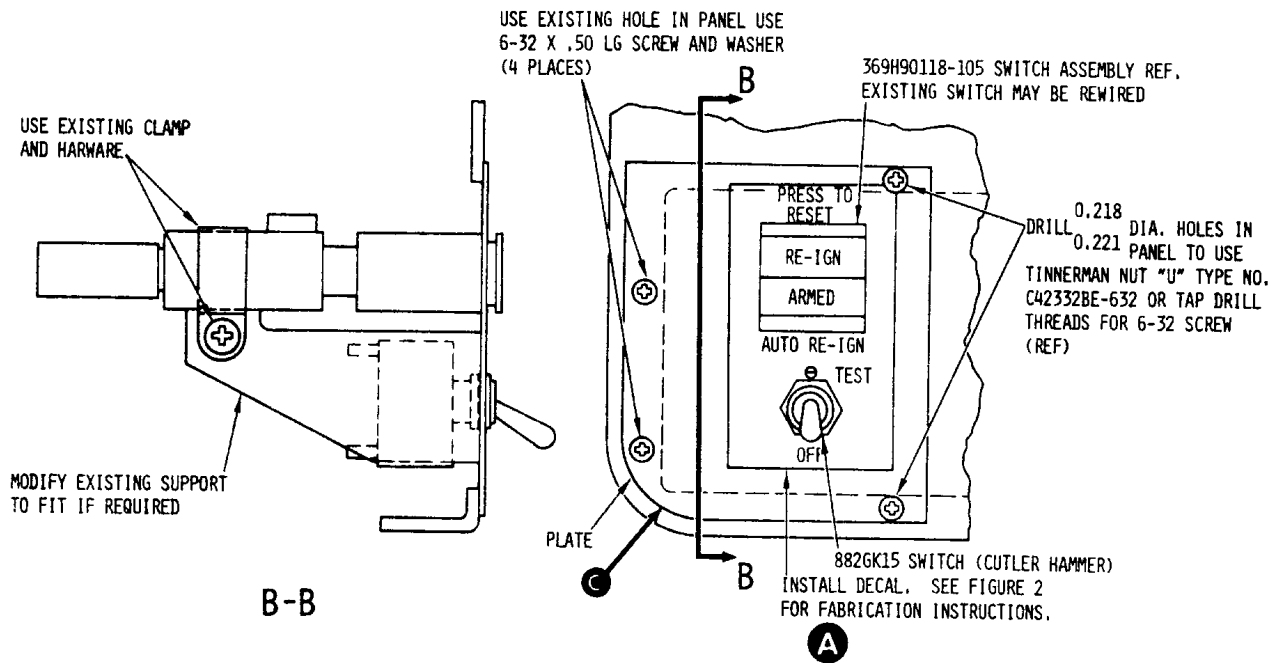
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Figure 1. Relocation of Auto Reignition Controls (Sheet 1 of 2)

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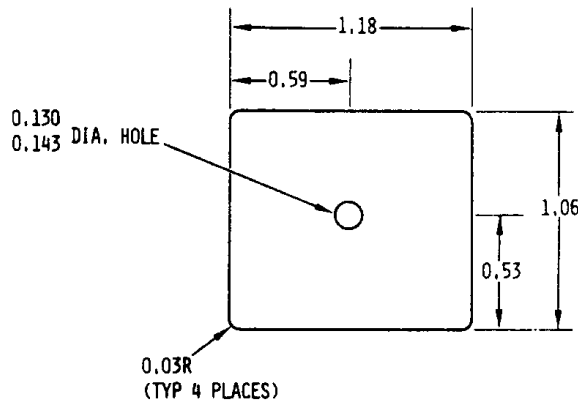
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Figure 1. Relocation of Auto Reignition Controls (Sheet 2 of 2)

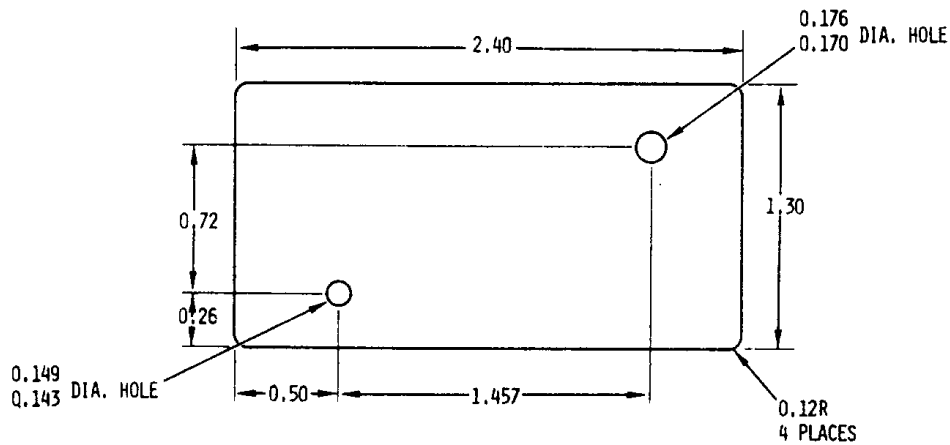
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COVER
(FOR 369H6416 INSTRUMENT PANEL)
MAKE FROM ALUMINUM ALLOY SHEET, 2024-T3, QQ-A-250/5, TEMP T-3
0.03 X 1.062 X 1.187. APPLY ONE COAT HMS-15-1082 PRIMER AND DRY FOR
1 TO 2 HOURS. APPLY TOPCOAT HMS-15-1083 ACRYLIC LACQUER AND AIR
DRY 4 HOURS MINIMUM.



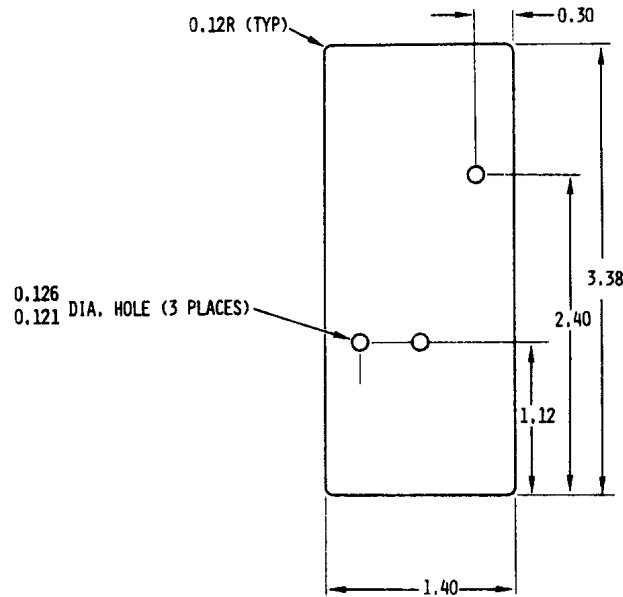
COVER
(FOR 369H90120 INSTRUMENT PANEL)
MAKE FROM ALUMINUM ALLOY SHEET, 2024-T3, QQ-A-250/5, TEMP T-3,
0.032 X 1.30 X 2.40. APPLY 3101-C10 BLACK NEXTEL SUEDE COATING PER
MANUFACTURER'S INSTRUCTIONS.

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Figure 2. Fabrication of Cover and Decal (Sheet 1 of 2)

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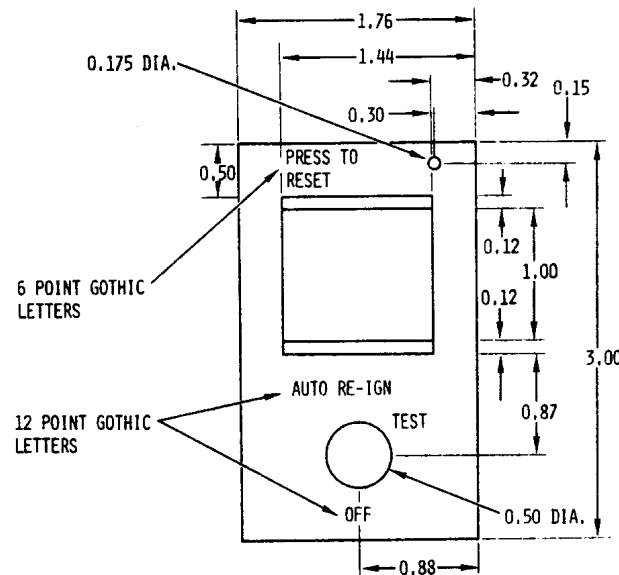
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COVER

(FOR 369H9280 INSTRUMENT PANEL)

MAKE FROM ALUMINUM ALLOY SHEET, 2024-T3, QQ-A-205/5, TEMP T-3,
0.032 X 1.40 X 3.38, APPLY 3101-C10 BLACK NEXTEL SUEDE COATING PER
MANUFACTURER'S INSTRUCTIONS.



DECAL

MAKE FROM 3650 SCOTCH CAL BRAND FILM, BLACK BACKGROUND
(COLOR NO. 37078) WITH WHITE LETTERS (COLOR NO. 37875) PER
FED-STD-595

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Figure 2. Fabrication of Cover and Decal (Sheet 2 of 2)

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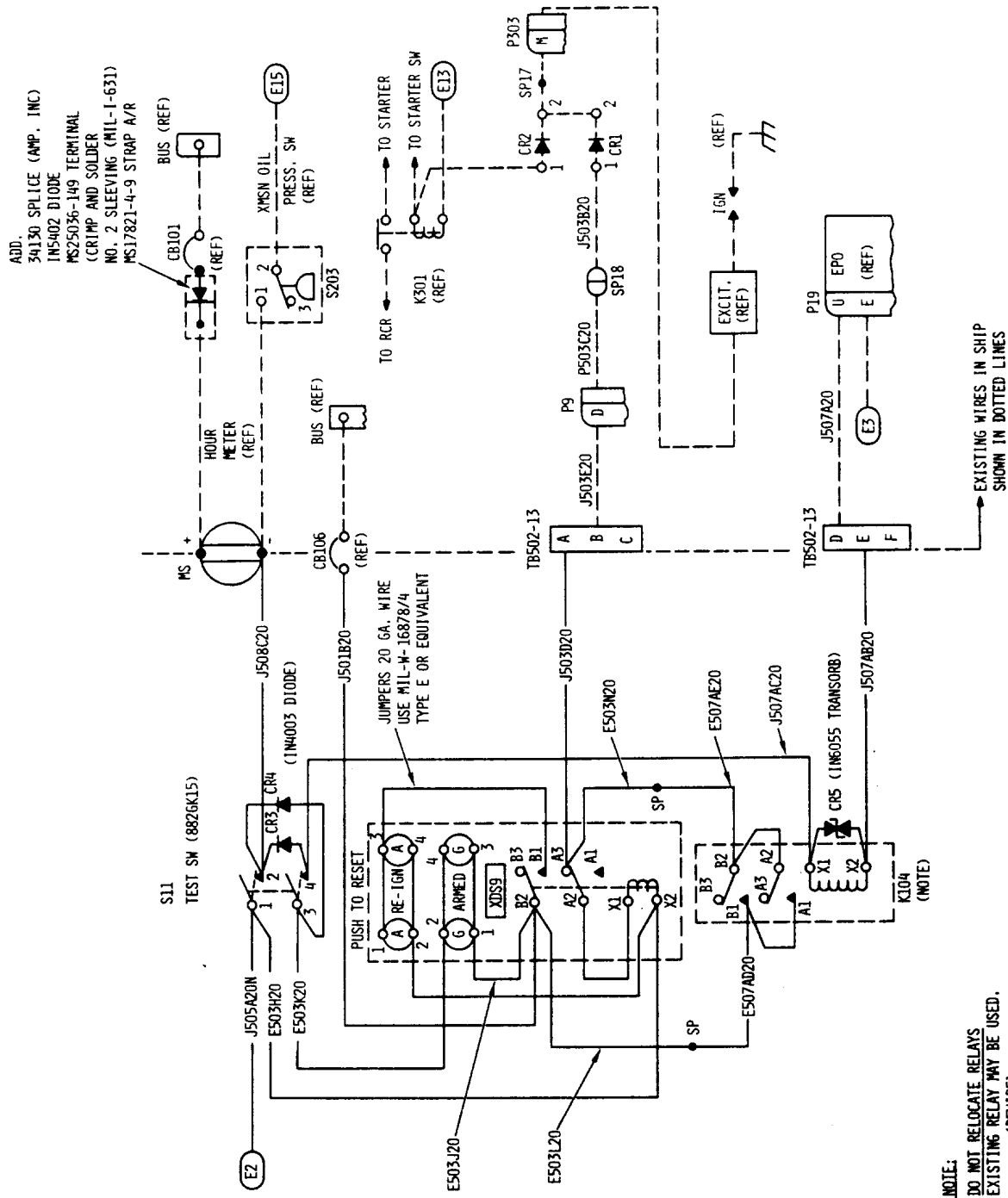


Figure 3. Wiring Diagram

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