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SYSTEM SCHEMATIC
SEE FIG.1 FOR
PLACEMENTS.

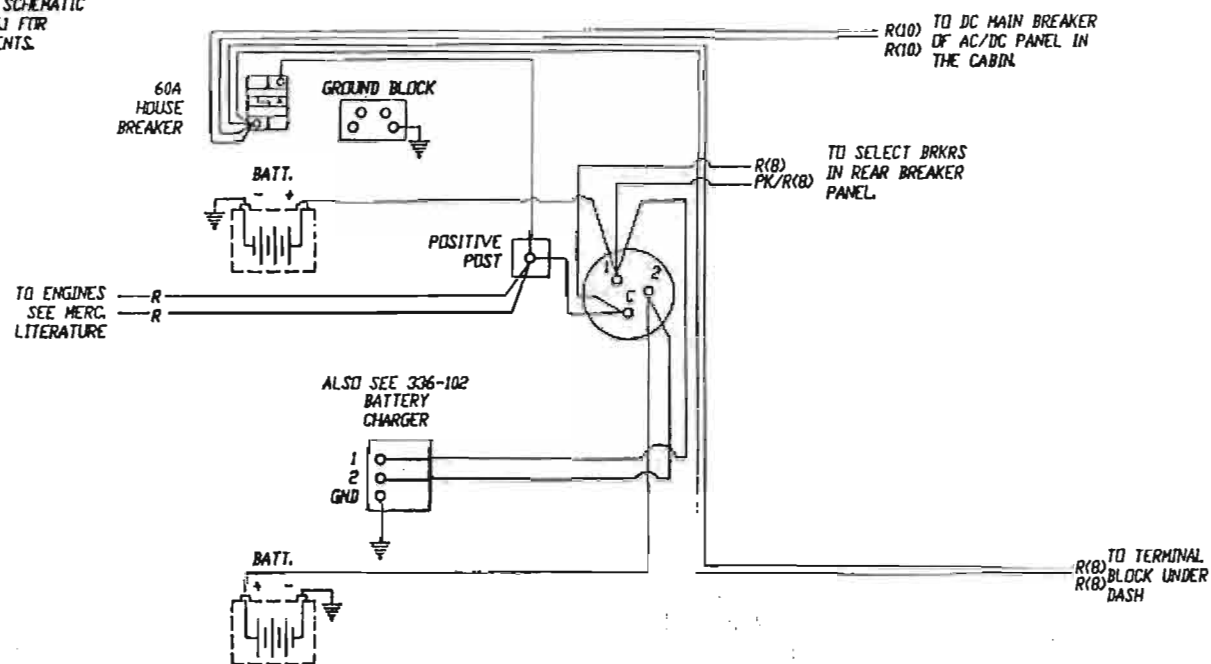


FIG.2 BATTERY SELECTOR SWITCH

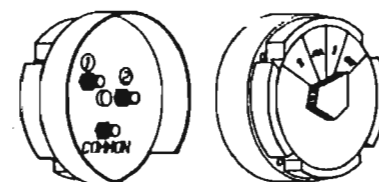
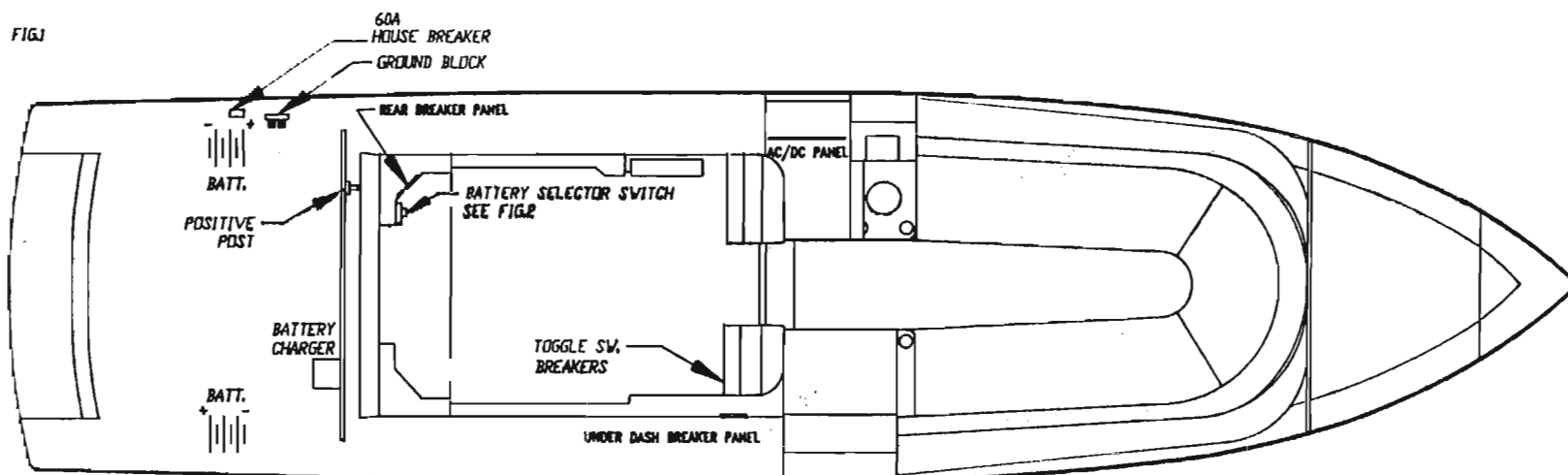


FIG.1



SUGGESTED BATTERY SELECTION WHEN
STARTING ENGINES:
BATTERY SELECTOR SWITCH IN THE
"ALL" POSITION.

THUNDERBIRD PRODUCTS
P.O. BOX 501
DECATUR, IN 46733
(219) 724-9111

4
3
2
1
#

REVISIONS

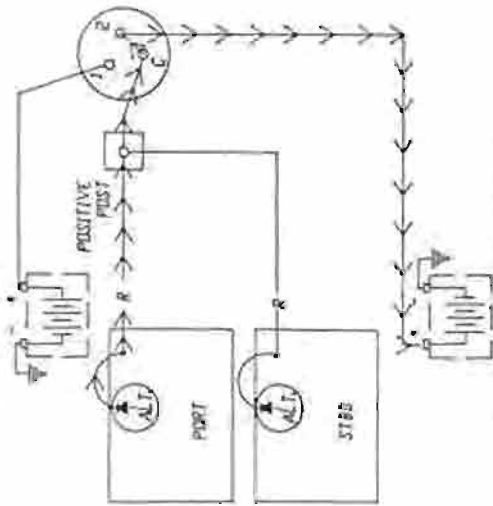
DR CH DATE

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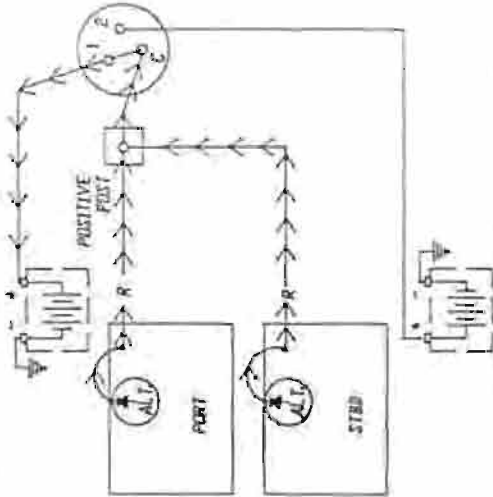
TITLE: F-336 DC SUPPLY SYSTEM	
DR BY: KKE	CH BY: RE
DATE: 7-17-91	NO.: 336-001a

METHODS OF CHARGING BY ALTERNATOR
 ALSO SEE 328-102 FOR CHARGING WITH INSTALLED BATTERY CHARGER.
 * SHOWS FLOW OF CHARGE

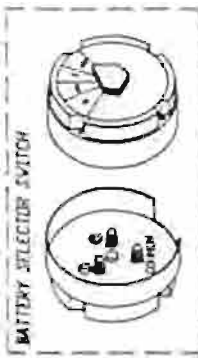
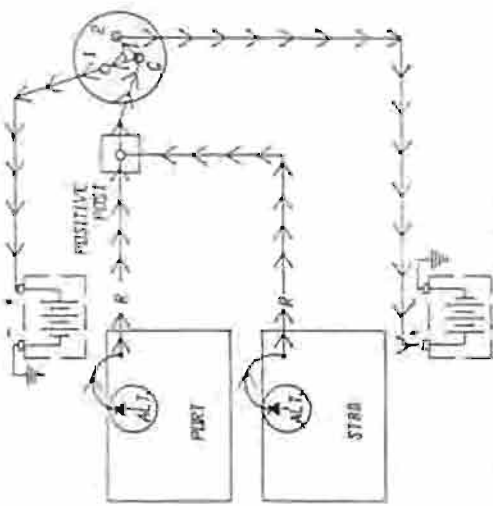
BATTERY 2ND BEING CHARGED
 PORT ENGINE RUNNING
 SELECTOR SWITCHED TO BATT 2ND



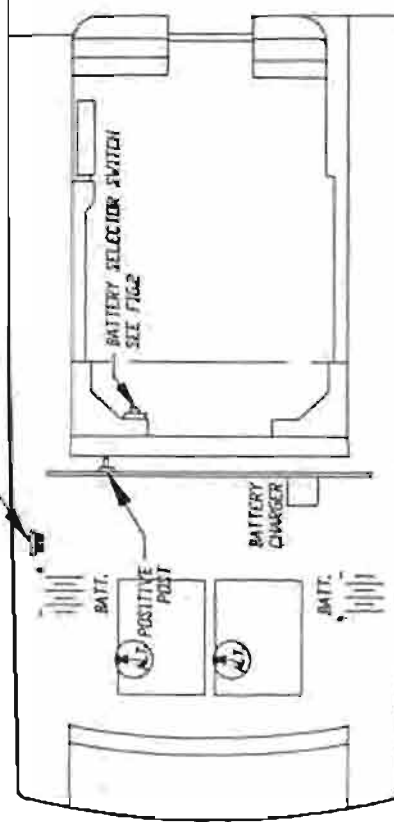
BATTERY 1ST BEING CHARGED
 PORT AND STBD ENGINES RUNNING
 SELECTOR SWITCHED TO BATT 1ST



SUGGESTED MEANS OF CHARGING
 BOTH BATTERIES BEING CHARGED
 PORT AND STBD ENGINES RUNNING
 SELECTOR SWITCHED TO 'BOTH'



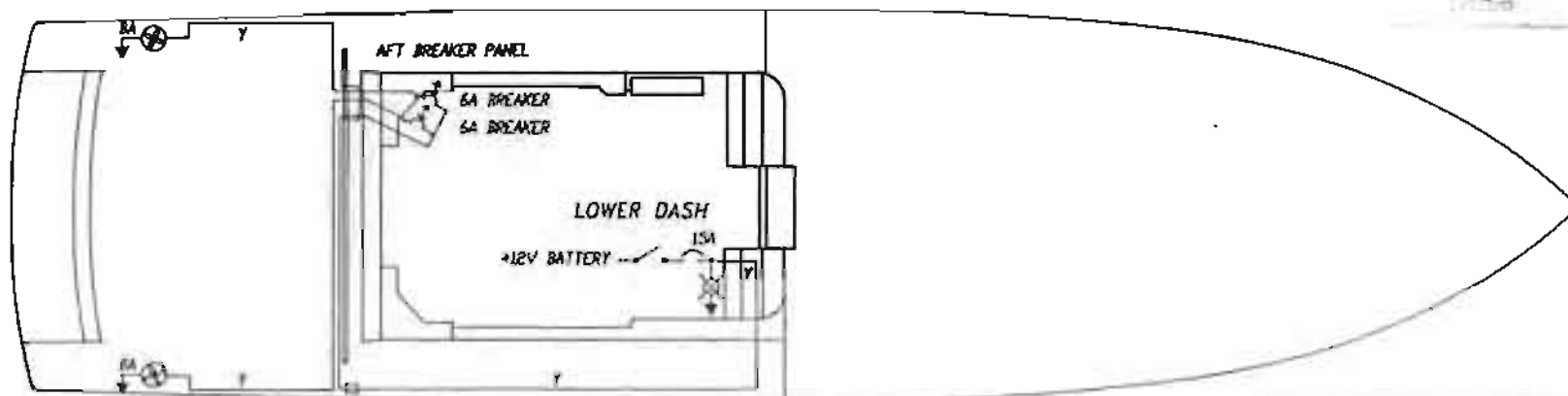
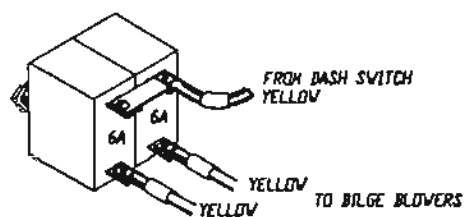
GROUND BLOCK



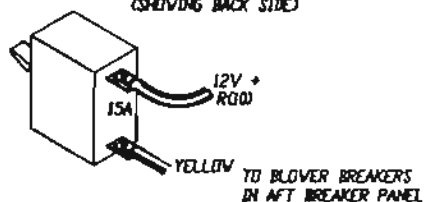
SUGGESTED BATTERY SELECTION WHEN
 STARTING ENGINES
 BATTERY SELECTOR SWITCH IN
 THE 'ALL' POSITION

THUNDERBIRD PRODUCTS P.O. BOX 501 DECATUR, IN 46733 (219) 724-9111	4	TO HIN	FROM HIN	DR	CH	DATE	REVISIONS	TITLE: F-306 CHARGING BATTERIES WITH ALTERNATORS DR BY: KBE CH BY: [blank] DATE: 7-17-91 NO: 336-201 b
	3	TO HIN	FROM HIN					
	2	TO HIN	FROM HIN					
	1	TO HIN	FROM HIN					

AFT BREAKER PANEL
(SHOWING BACK SIDE)



ACCESSORY SWITCH PANEL
(SHOWING BACK SIDE)



WARNING:
GASOLINE VAPORS CAN EXPLODE
BEFORE STARTING ENGINE!
-CHECK ENGINE COMPARTMENT
FOR GASOLINE VAPORS.
-OPERATE BLOWERS FOR 4 MINUTES.
RUN BLOWER BELOW CRUISING SPEED.

NOTE:
TO OPERATE BLOWERS:
1. TURN BATTERY SELECTOR
SWITCH TO '1', '2' or 'ALL'.
2. THE SWITCH AT THE DASH
IS NOW SUPPLIED WITH +12V
AND WHEN SWITCHED ON WILL
RUN BOTH BLOWERS.

LEGEND

PUSH/PULL
BREAKER

TOGGLE SWITCH

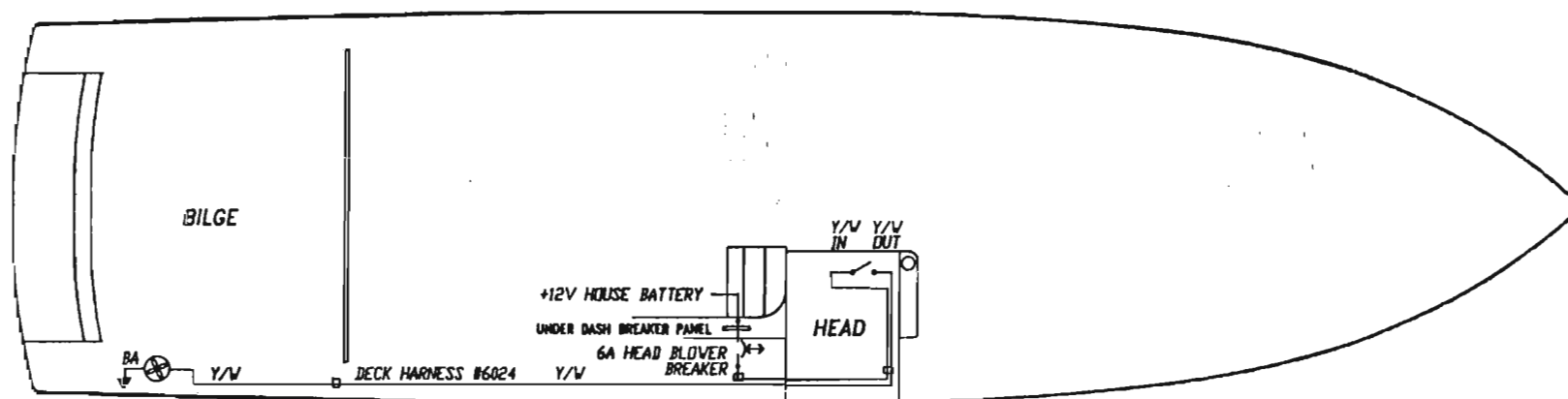
BLOWER

GROUND

PLUG

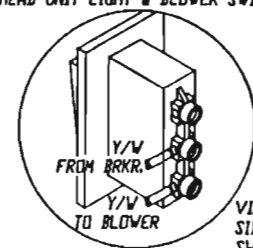
THUNDERBIRD PRODUCTS
P.O. BOX 501
DECATUR, IN 46733
(219) 724-9111

REV	DESCRIPTION	DR	CH	DATE	FROM HIN #	TO HIN #	TITLE: F-336 SRI ENGINE COMP. BLOWERS CLOVER DASH/BILGE
4					FROM HIN #	TO HIN #	
3					FROM HIN #	TO HIN #	
2					FROM HIN #	TO HIN #	
1					FROM HIN #	TO HIN #	
1					FROM HIN #	TO HIN #	DR BY: KKE CH BY: KKE
1	REVISIONS				FROM HIN #	TO HIN #	DATE: 9-10-91 NO. 336-002



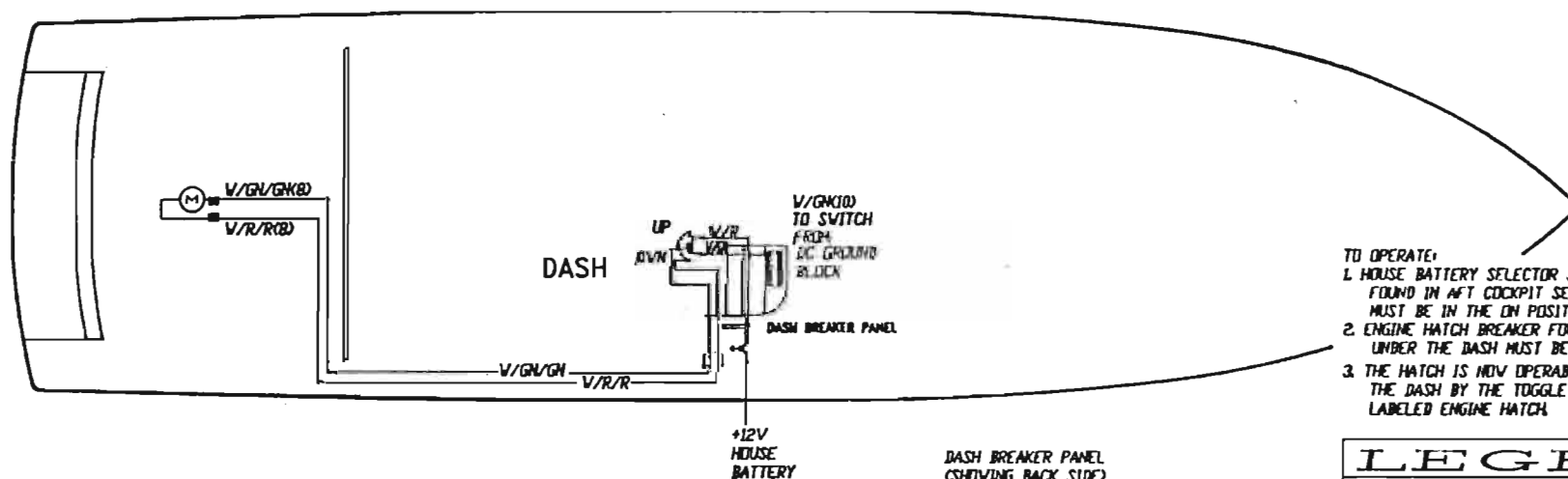
LEGEND

HEAD UNIT LIGHT & BLOWER SWITCH



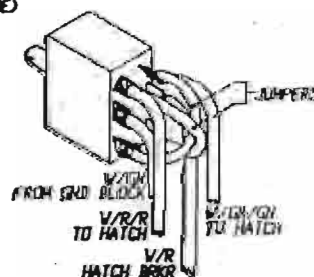
BREAKER	
TOGGLE SWITCH	
BLOWER	
GROUND	
PLUG	

THUNDERBIRD PRODUCTS P.O. BOX 501 DECATUR, IN 46733 (219) 724-9111	4					FROM HIN #	TO HIN #	TITLE: F-336 VENT BLOWER DIAGRAM (VANITY/BILGE) DR BY: KKE CH BY: DATE: 7-19-91 NO.: 336-002 b
	3					FROM HIN #	TO HIN #	
	2					FROM HIN #	TO HIN #	
	1					FROM HIN #	TO HIN #	
	#					FROM HIN #	TO HIN #	
REVISIONS		DR	CH	DATE				

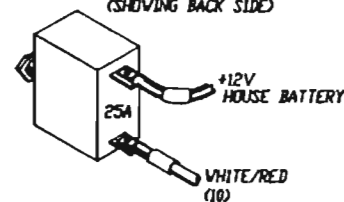


- TO OPERATE:
1. HOUSE BATTERY SELECTOR SWITCH FOUND IN AFT COCKPIT SEAT PAN MUST BE IN THE ON POSITION.
 2. ENGINE HATCH BREAKER FOUND UNDER THE DASH MUST BE PUSHED IN.
 3. THE HATCH IS NOW OPERABLE AT THE DASH BY THE TOGGLE SWITCH LABELED ENGINE HATCH.

ENGINE HATCH TOGGLE SWITCH ON DASH ACC. SV. PANEL (SHOWING BACK SIDE)



DASH BREAKER PANEL (SHOWING BACK SIDE)



LEGEND

N.O. PUSH BUTTON SWITCH	
BREAKER	
BUTT SPLICE	
PLUG	
TERMINAL BLOCK	
N.O. DPDT SWITCH	
ACTUATOR MOTOR	
GROUND	

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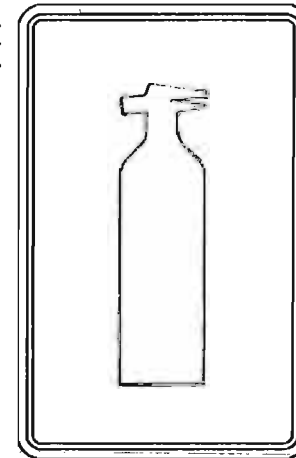
DR CH DATE

FROM HIN #	TO HIN #
FROM HIN #	TO HIN #
FROM HIN #	TO HIN #
FROM HIN #	TO HIN #
FROM HIN #	TO HIN #

TITLE: F-336
ENGINE HATCH RAM
(ENGINE COMPARTMENT)

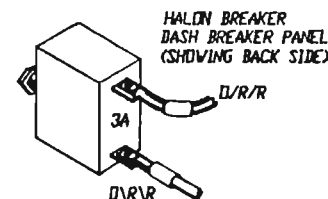
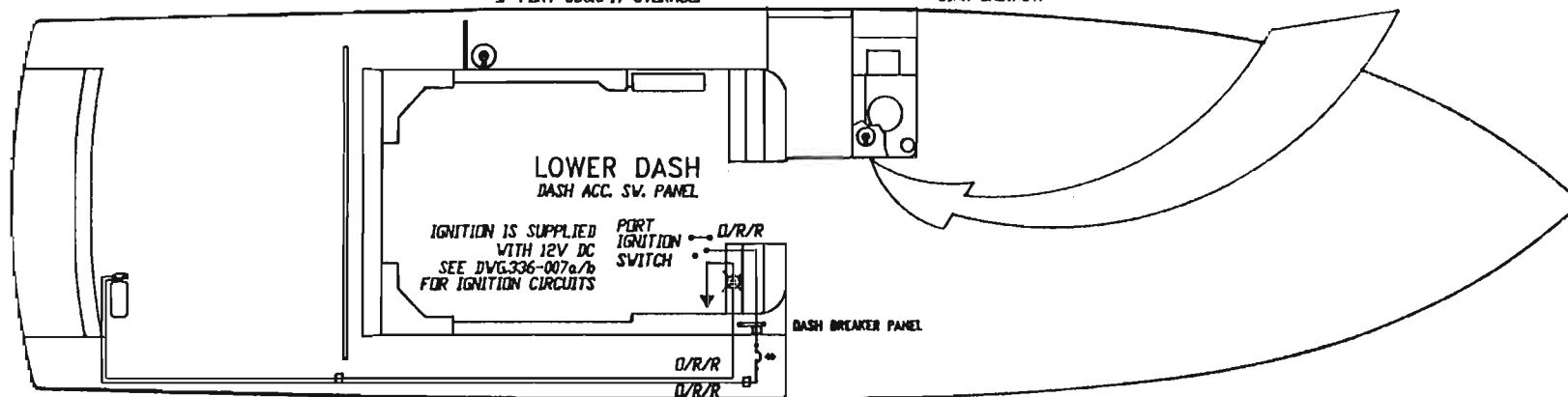
DR BY: KKE CH BY: R.E.
DATE: 7-19-91 NO.: 336-003

LABEL REPRESENTS
THE PRESENCE OF
AN EXTINGUISHER
WITHIN.



MANUAL OPERATION
FOUND ON AFT WALL
OF PORT COCKPIT STORAGE.

MANUAL OPERATION
FOUND UNDER GALLEY
SINK CABINET.



THE HALON INDICATOR LIGHT
IS POWERED BY THE STARTING
BATTERY ONLY WHEN THE
IGNITION SWITCH IS IN THE
ON POSITION. THE LIGHT INDICATES
TO THE OPERATOR THERE IS
SUFFICIENT PRESSURIZATION TO
EXPUL THE AGENT OF THE ENGINE
SUPPLEMENTARY EXTINGUISHER. THE
THE UNIT DOES NOT
REQUIRE 12 VOLTS TO EXPUL
THE AGENT.

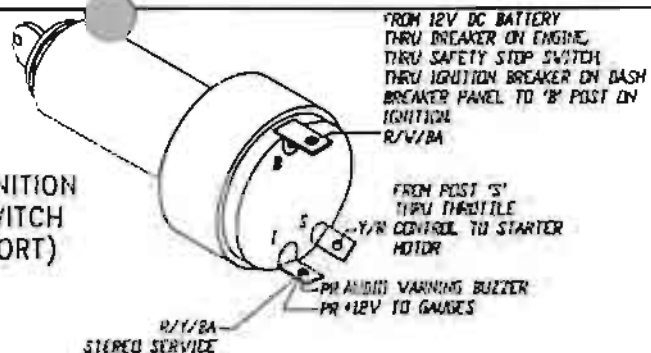
LEGEND

HALON FIRE EXTINGUISHER	
PUSH/PULL BREAKER	
PLUG	
HALON LIGHT	
IGNITION SWITCH	
GROUND	

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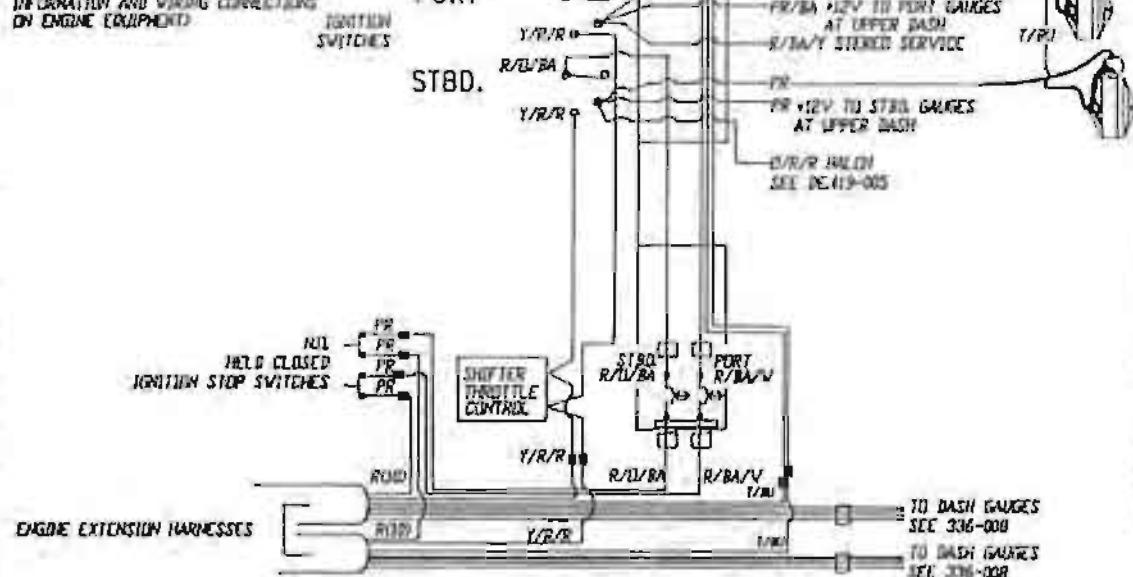
REV	DESCRIPTION	DR	CH	DATE	FROM HIN #	TO HIN #	TITLE: F-306 HALON INDICATOR LIGHT HALON PLACEMENTS
1					FROM HIN #	TO HIN #	DR BY: KKE CH BY: RE
2					FROM HIN #	TO HIN #	DATE: 7-19-91 NO: 336-005
3					FROM HIN #	TO HIN #	
4					FROM HIN #	TO HIN #	

IGNITION SWITCH (PORT)

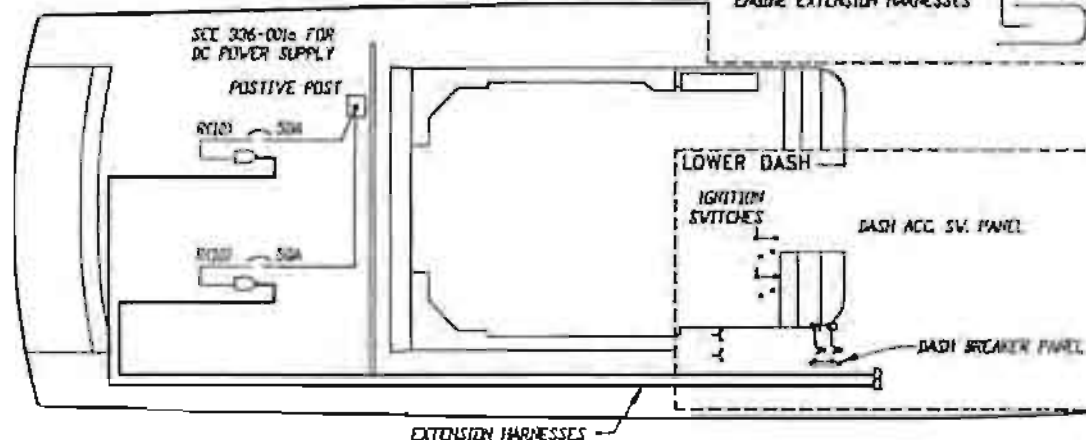


LOWER DASH / IGNITION SWITCH WIRING

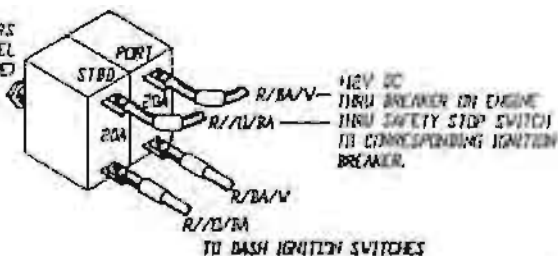
(SEE HORIZON CRUISER MANUAL FOR FURTHER INFORMATION AND WIRING CONNECTIONS ON ENGINE EQUIPMENT)



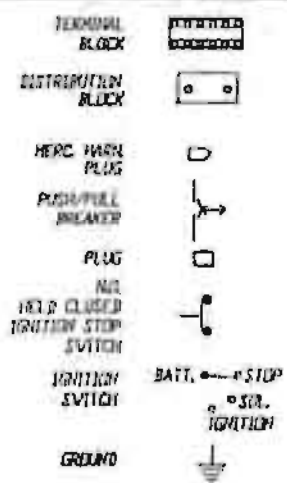
AUDIO WARNING BUZZERS



IGNITION BREAKERS DASH BREAKER PANEL (SHOWING BACK SIDE)



LEGEND



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REVISIONS

OR CH DATE

FROM HIM # TO HIM #
FROM HIM # TO HIM #
FROM HIM # TO HIM #
FROM HIM # TO HIM #
FROM HIM # TO HIM #

TITLE: F-336
IGNITION GAS ENGINE (DASH AREA)
DR BY: KRE CH BY: JLS
DATE: 7-22-91 NO.: 336-001a

CODE	BASE COLOR	STRIP	STRIPE
BA	BLACK		
BU	BLUE		
LBU	LIGHT BLUE		
LGY	LIGHT GREY		
PR	PURPLE		
PR/V	PURPLE	WHITE	
R	RED		
T	TAN		
Y/R	YELLOW	RED	
Y/R/R	YELLOW	RED	RED

FROM ENG. EXTENSION
PIGTAILS TWO 8-WAY
PLUGS.
NOT USED, SEE -007a

R(10)
Y/R
Y/R/R
PR

(STBD)
PR/V TO TRIM GAUGE ON SHIFTER PANEL

PR/V
TO TRIM
GAUGE
(PORT)

PR

BLACK
GND FROM
BLACK UNDER
DASH

(FROM STBD IGN.
SV. SEE -007a)

(FROM PORT IGN.
SV. SEE -007a)

(FROM SENDING
UNIT OF FUEL
TANK)

D/BN/BN
BA
GND

LORAN (SEE LORAN LITERATURE)

TACHOMETER
ENGINE HOUR METER

SPEEDO

TACHOMETER
ENGINE HOUR METER

LGY WIRES
ARE FROM RESPECTIVE
IGNITION COILS (-A)

PR/BA
PR/BA
LGY

NOTES:
ALL CONNECTIONS DENOTED
'PL' ARE CONNECTED IN
PARALLEL TO THE PANEL
LIGHT SWITCH ON THE DASH
ACCESSORY PANEL.
EACH SET OF GAUGES IS
POWERED BY ITS CORRESPONDING
IGNITION SWITCH.

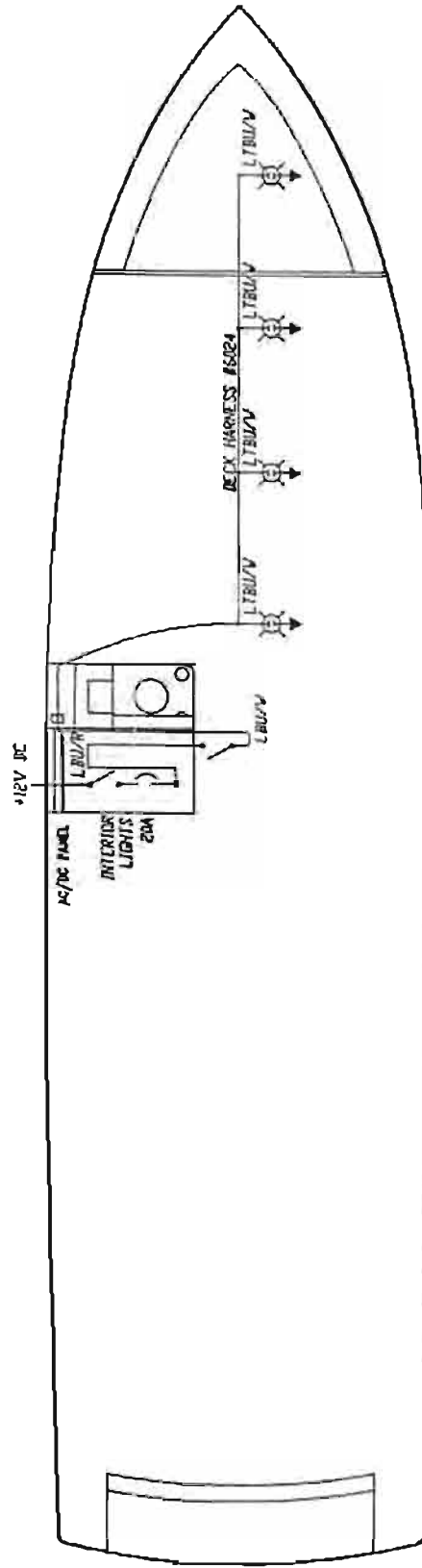
THUNDERBIRD PRODUCTS
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(219) 724-9111

REVISIONS

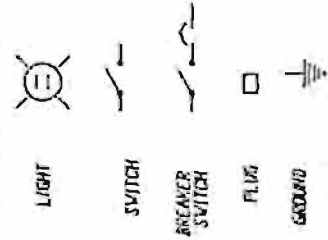
DR CH DATE

FROM HIN # TO HIN #
FROM HIN # TO HIN #
FROM HIN # TO HIN #
FROM HIN # TO HIN #
FROM HIN # TO HIN #

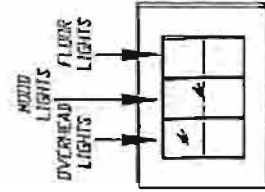
TITLE: F-336 (UPPER DASH
DASH INSTRUMENTS)
ALSO SEE 336-007 AND 008a
DR BY: KCE CH BY: RC
DATE: 7-22-91 NO.: 336-008



LEGEND

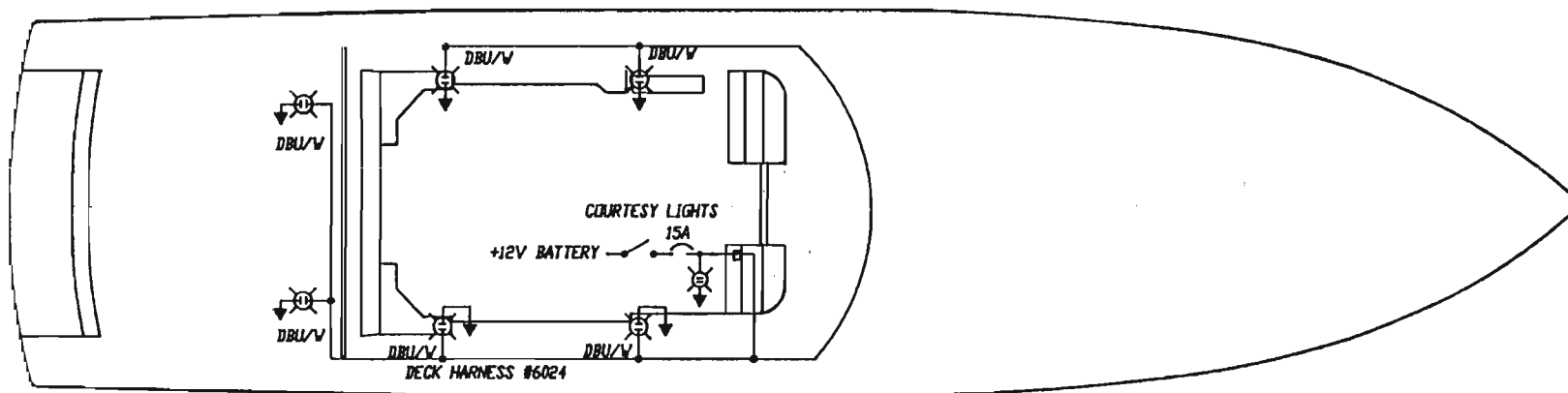


- NOTES:
CABIN LIGHTS ARE PROVIDED BY THE 12V BATTERY.
1. THE BATTERY SELECTOR SWITCH FOUND IN THE AFT SEAT PAN MUST BE TURNED TO ON.
2. THE DC MAIN BREAKER AT THE AC/DC PANEL MUST BE SWITCHED TO ON.
3. THE CABIN LIGHT BREAKER AT THE AC/DC PANEL MUST BE SWITCHED TO ON.
4. THE ENTRYWAY'S FIRST SWITCH IS NOW SUPPLIED WITH POWER TO TURN LIGHTS ON.

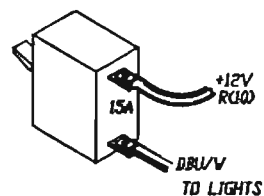


THUNDERBIRD PRODUCTS	4					FROM HIN #	TO HIN #	TITLE: F-136 SR1
P.O. BOX 501	3					FROM HIN #	TO HIN #	CABIN LIGHTS
DECATUR, IN 46733	2					FROM HIN #	TO HIN #	
(219) 724-9111	1					FROM HIN #	TO HIN #	DR BY: KKE CH BY: RY
	1					FROM HIN #	TO HIN #	DATE: 7-30-91 NO. 336-010a

REVISIONS



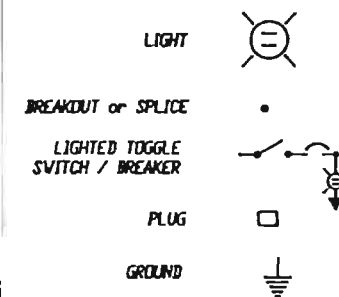
ACCESSORY SWITCH PANEL
(SHOWING BACK SIDE)
COURTESY LIGHTS



NOTES:
COURTESY LIGHTS ARE POWERED
BY A 12V BATTERY.
TO OPERATE:
1. THE BATTERY SELECTOR SWITCH
FOUND IN THE AFT SEAT PAN,
MUST BE TURNED TO ON.
2. THE COURTESY LIGHTS' RED
TOGGLE SWITCH AT THE DASH
IS NOW SUPPLIED WITH 12V
TO TURN THE COURTESY LIGHTS ON.

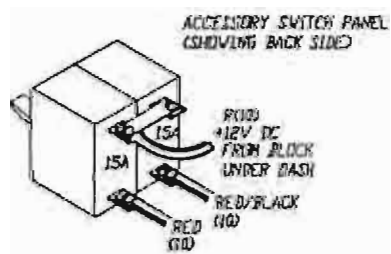
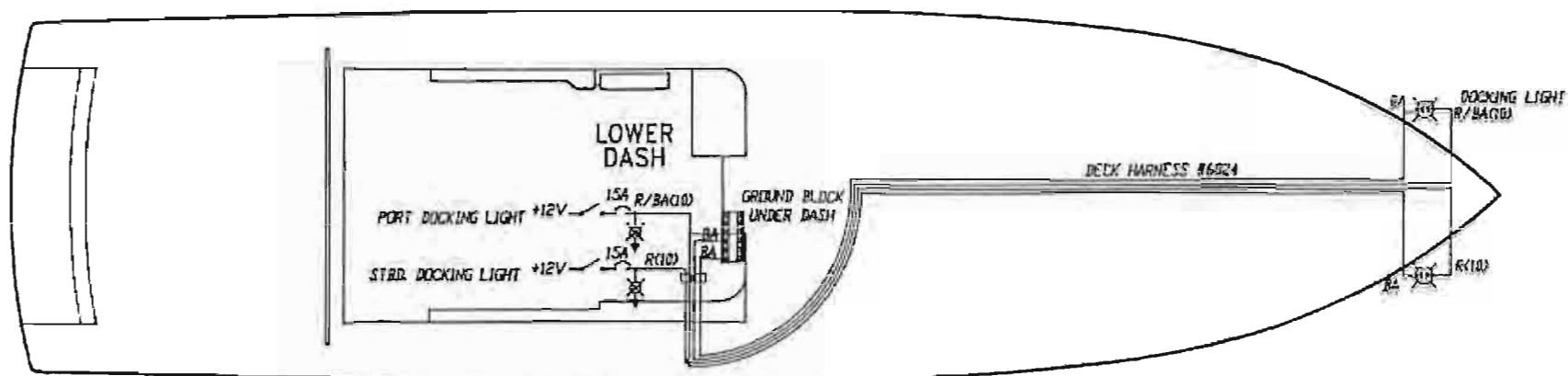
CODE	BASE COLOR	STRIP
BA	BLACK	
DBU/V	DARK BLUE	WHITE

LEGEND

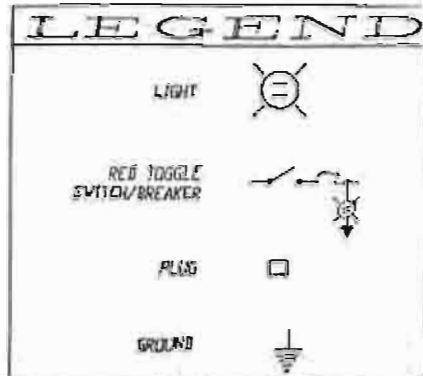


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(219) 724-9111

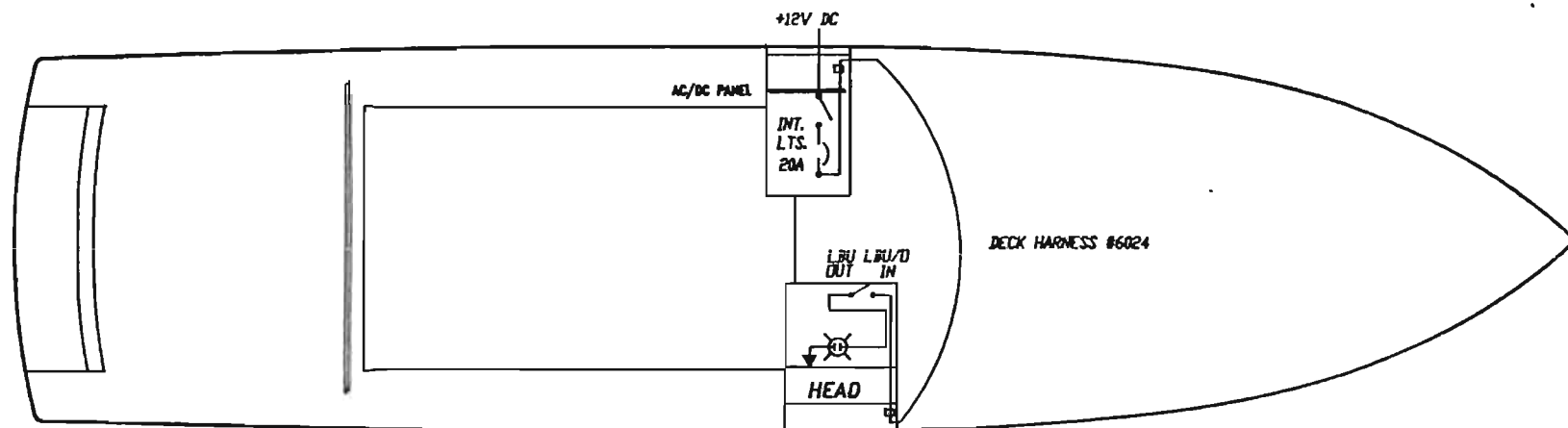
REV	DESCRIPTION	DR	CH	DATE	FROM HIN #	TO HIN #	TITLE
4					FROM HIN #	TO HIN #	TITLE: F-336 SR1
3					FROM HIN #	TO HIN #	COURTESY LIGHTS
2					FROM HIN #	TO HIN #	
1					FROM HIN #	TO HIN #	DR BY: KKE CH BY: RS
	REVISIONS				FROM HIN #	TO HIN #	DATE: 7-30-91 NO.: 336-0106



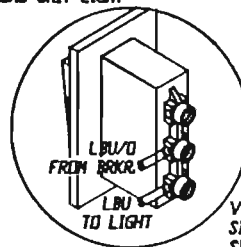
NOTES:
DOCKING LIGHTS ARE POWERED BY A 12V DC BATTERY. TO OPERATE:
1. THE 12V BATTERY SELECTION SWITCH FOUND IN THE AFT SEAT PAN MUST BE TURNED TO GR.
2. THE RED TOGGLE SWITCH/BREAKERS AT THE DASH LABELLED PORT AND STBD DOCKING LIGHT ARE NOW SUPPLIED WITH THE 12V NEEDED TO TURN ON THE 80W DOCKING LIGHTS.



THUNDERBIRD PRODUCTS P.O. BOX 501 DECATUR, IN 46733 (219) 724-9111	4					FROM HIN #	TO HIN #	TITLE: F-336 SR1 DOCKING LIGHTS (DASH / BOW) DR BY: KKE CH BY: RE DATE: 7-31-91 NO. 133-018 c
	3					FROM HIN #	TO HIN #	
	2					FROM HIN #	TO HIN #	
	1					FROM HIN #	TO HIN #	
	7	REVISIONS	OR	CH	DATE	FROM HIN #	TO HIN #	



HEAD UNIT LIGHT



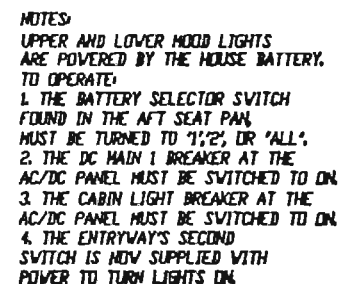
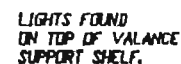
VIEWING BACK
SIDE OF TOGGLE
SWITCH

NOTE:
ALL INTERIOR LIGHTS ARE
POWERED BY A 12V DC
BATTERY.
TO OPERATE:
1. BATTERY SELECTOR SWITCH
FOUND IN THE AFT SEAT
PAN MUST BE TURNED ON.
2. DC MAIN BREAKER MUST BE
MUST BE SWITCHED 'ON'.
3. INTERIOR LIGHTS BRKR
FOUND ON AC/DC PANEL
MUST BE SWITCHED 'ON'.
4. SWITCH IN HEAD UNIT
IS NOW SUPPLIED WITH
POWER TO TURN ON LIGHT.

LEGEND

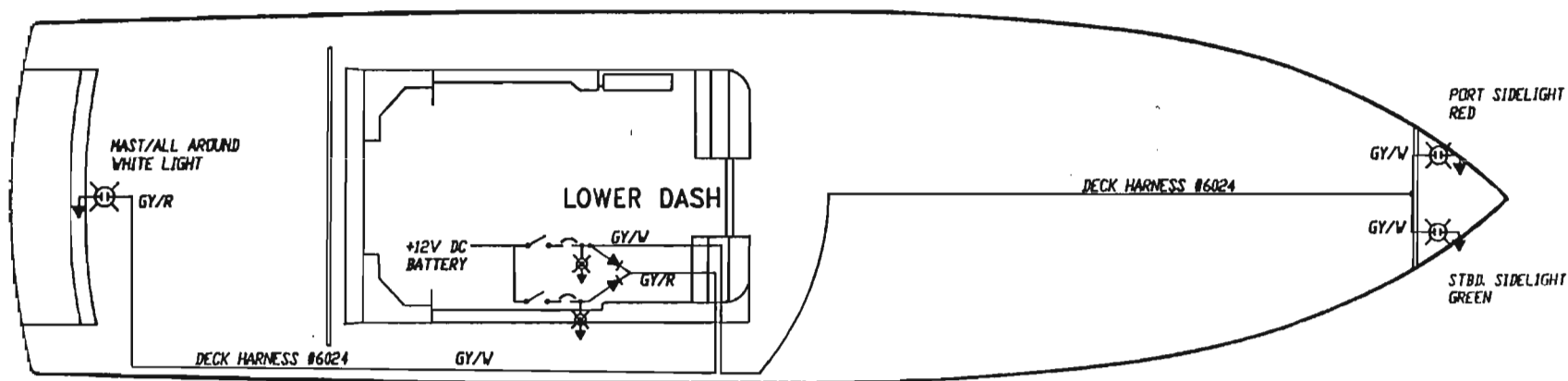
LIGHT	
SWITCHED BREAKER	
TOGGLE SWITCH	
GROUND	
PLUG	

THUNDERBIRD PRODUCTS P.O. BOX 501 DECATUR, IN 46733 (219) 724-9111	4					FROM HIN #	TO HIN #	TITLE: F-336 HEAD LIGHTS DIAGRAM (AC/DC PANEL/VANITY) DR BY: KKE CH BY: R.E. DATE: 7-31-91 NO.: 336-010 F
	3					FROM HIN #	TO HIN #	
	2					FROM HIN #	TO HIN #	
	1					FROM HIN #	TO HIN #	
	7					FROM HIN #	TO HIN #	
REVISIONS					DR	CH	DATE	

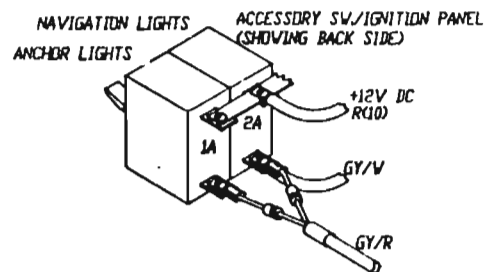


LIGHT	
SWITCH	
BREAKER SWITCH	
PLUG	
GROUND	

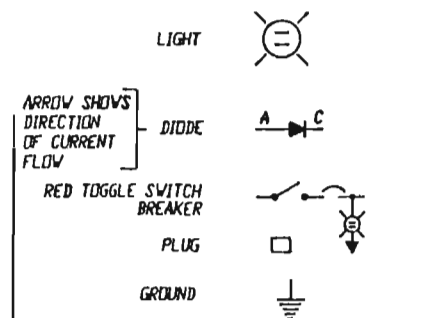
4					FROM HIN # *	TO HIN # *	TITLE: F-336 SR1
3					FROM HIN # *	TO HIN # *	VALANCE (MOOD) LIGHTS
2					FROM HIN # *	TO HIN # *	
1					FROM HIN # *	TO HIN # *	DR BY: KKE CH BY: RF
0	REVISIONS	DR	CH	DATE	FROM HIN # *	TO HIN # *	DATE: 9-11-91 NO. 336-0106



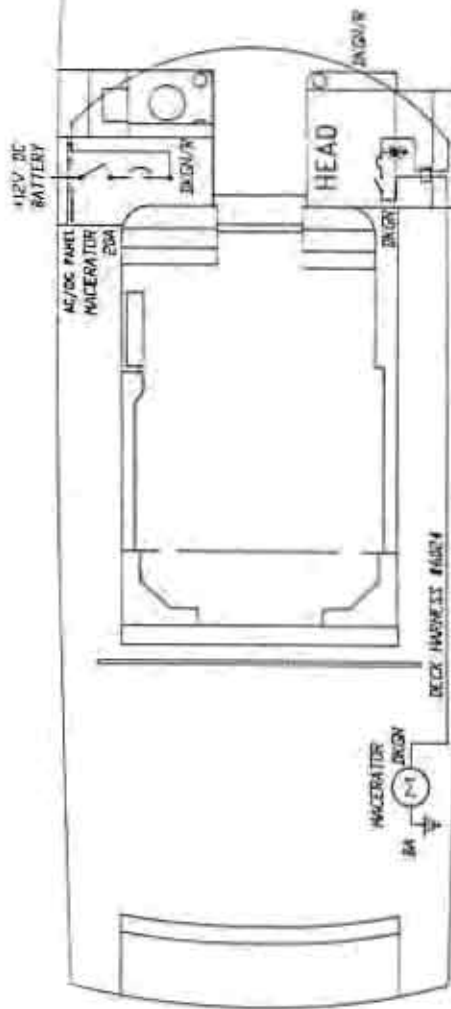
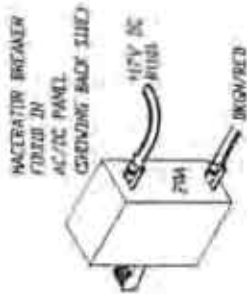
NOTES:
THE BATTERY SELECTOR SWITCH
MUST BE TURNED ON TO OPERATE
ANCHOR AND NAVIGATION LIGHTS.



LEGEND

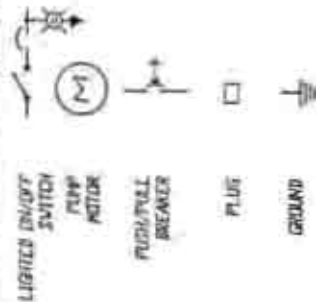


THUNDERBIRD PRODUCTS P.O. BOX 501 DECATUR, IN 46733 (219) 724-9111	1					FROM HIN #	TO HIN #	TITLE: F-336 SR1 NAVIGATION LIGHTS DR BY: KKE CH BY: DATE: 8-1-91 NO.: 336-010h
	2					FROM HIN #	TO HIN #	
	3					FROM HIN #	TO HIN #	
	4					FROM HIN #	TO HIN #	
		REVISIONS	DR	CH	DATE			



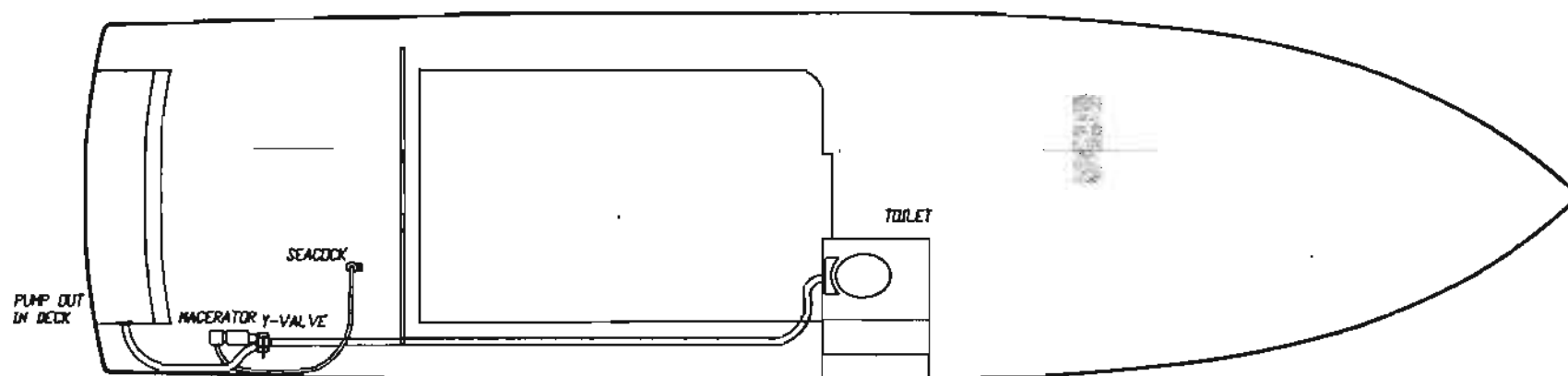
NOTES:
 MACERATOR IS POWERED BY A 12V DC BATTERY TO OPERATE.
 1. TURN BATTERY SELECTION SWITCH IN RT SEAT STORAGE TO ON.
 2. SWITCH DC MAIN BREAKER AT AC/DC PANEL ON.
 3. SWITCH MACERATOR BREAKER AT AC/DC PANEL ON.
 4. MACERATOR CAN NOW BE ACTIVATED BY SWITCH IN HEAD.

LEGEND



COLOR	PART COLOR	STRIPS
BA	BLACK	RED
BN/R	BROWN	RED
DAK/GN	DARK GREEN	DEAR
LG/GRN	LIGHT GREEN	RED
R	RED	

THUNDERBIRD PRODUCTS	4	FROM HIN	TO HIN	TITLE: F-336
P.O. BOX 501	3	FROM HIN	TO HIN	MACRATOR
DECATUR, IN 46733	2	FROM HIN	TO HIN	UNDER VANTY / BUCO
(219) 724-9111	1	FROM HIN	TO HIN	DR BY: KKE
	1	FROM HIN	TO HIN	CH BY: F
	1	FROM HIN	TO HIN	DATE: 8-1-91
	1	FROM HIN	TO HIN	NO: 306-001

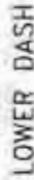


OVERVIEW



SIDE VIEW

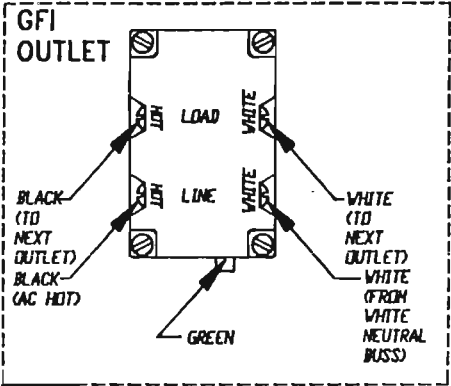
THUNDERBIRD PRODUCTS P.O. BOX 501 DECATUR, IN 46733 (219) 724-9111	4					FROM HIN #	TO HIN #	TITLE: F-336 MACERATOR HOOK-UP PLUMBING DR BY: KKE CH BY: R.T. DATE: 10-8-91 NO.: 336-011 b
	3					FROM HIN #	TO HIN #	
	2					FROM HIN #	TO HIN #	
	1					FROM HIN #	TO HIN #	
		REVISIONS			DR	CH	DATE	



LEGGEND

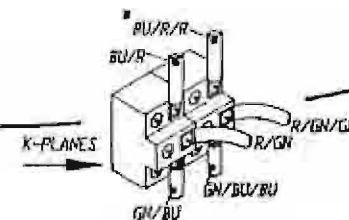
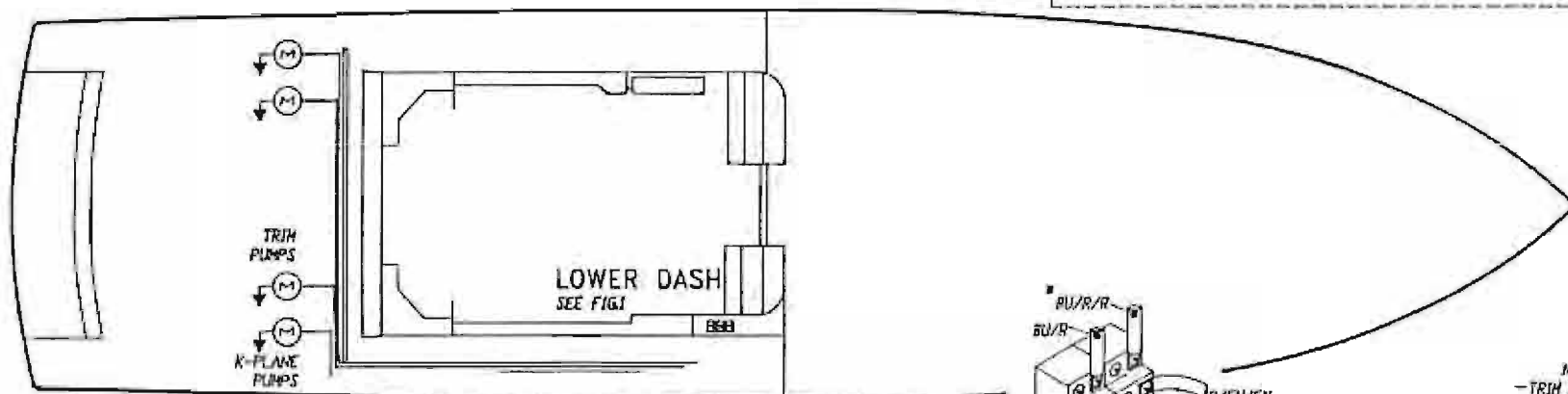
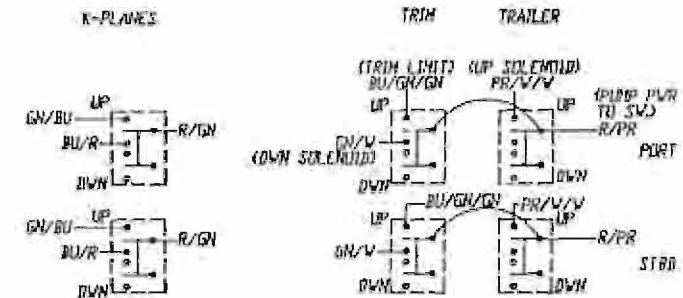


THUNDERBIRD PRODUCTS	4				FROM HIN #	TO HIN #	TITLE: F-336 ENGINE BILGE PUMP ³ WAT BILGE / WASTO DR BY: KKE CH BY: / S DATE: 8-1-95 NO.: 336-013 B
P.O. BOX 501	3				FROM HIN #	TO HIN #	
	2				FROM HIN #	TO HIN #	
DECATUR, IN 46733	1				FROM HIN #	TO HIN #	
(219) 724-9111	1				FROM HIN #	TO HIN #	
REVISIONS		DR	CH	DATE			

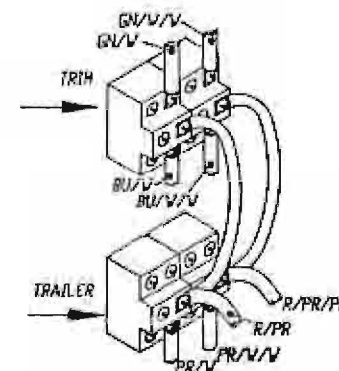


JUNCOBIRD PRODUCTS P.O. BOX 501 DECATUR, IN 46733 (219) 724-9111	4					FROM HIN #	TO HIN #	TITLE:	
	3					FROM HIN #	TO HIN #	OUTLET	
	2					FROM HIN #	TO HIN #		
	1					FROM HIN #	TO HIN #	DR BY: KKE	CH BY: JI
	#	REVISIONS	DR	CH	DATE	FROM HIN #	TO HIN #	DATE: 9-19-91	NO.: 336-113

FIG. 1



VIEWING FROM BACK SIDE
SEE FIG. 1 FOR SCHEMATIC
DETAIL

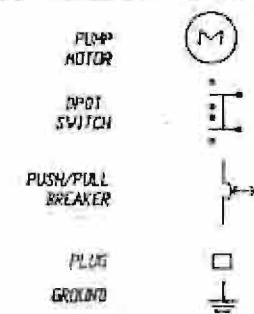


- NOTES:
- TRIM AND K-PLANE PUMPS
ARE POWERED BY A 12V DC
BATTERY.
- SEE KIEHMEIER OWNERS
MANUAL FOR K-PLANE WIRING
- SEE DWT-336-0156 FOR TRIM
PUMP WIRING

CODE	BASE COLOR	STRIPES
B	BLACK	
BU/R	BLUE	RED
BU/V	BLUE	WHITE
GN/BU	GREEN	BLUE
GN/V	GREEN	WHITE
PR/V	PURPLE	WHITE
R	RED	
R/GH	RED	GREEN
R/PR	RED	PURPLE

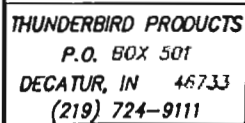
BU/R/R
STRIPES 2
STRIPES 1
BASE COLOR

LEGEND



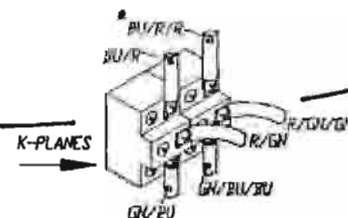
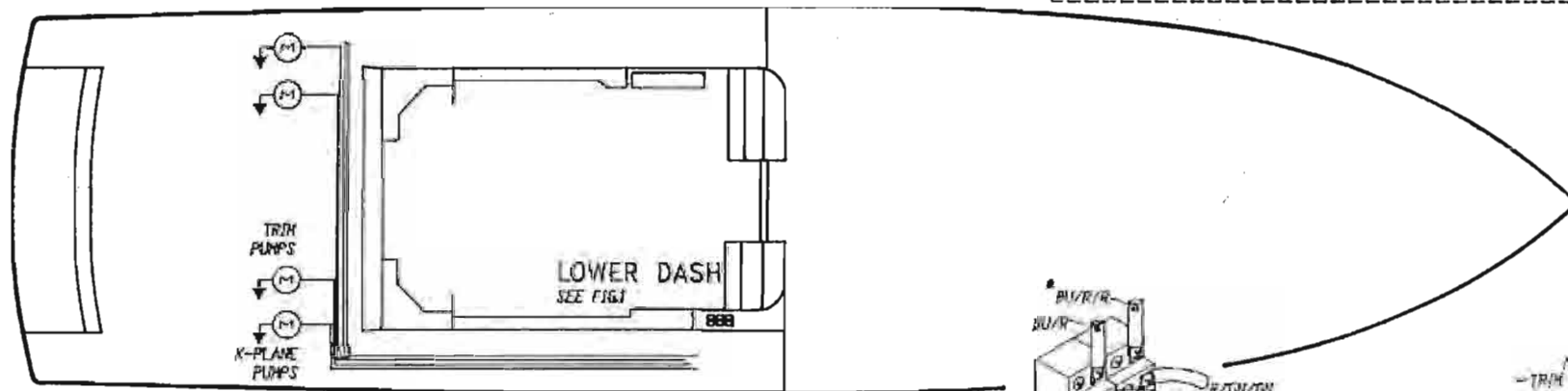
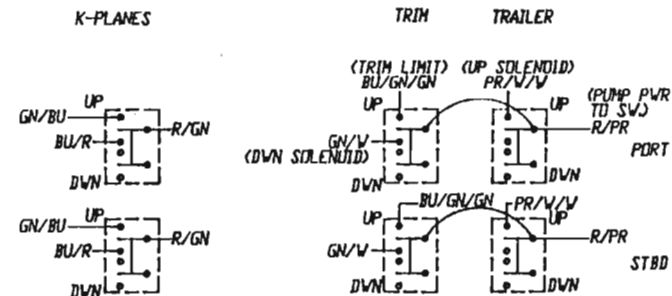
THUNDERBIRD PRODUCTS
P.O. BOX 501
DECATUR, IN 46733
(219) 724-9111

REV	DESCRIPTION	DATE	BY	CHK	DATE	FROM HIN #	TO HIN #	TITLE
1						FROM HIN #	TO HIN #	TITLE: F-336
2						FROM HIN #	TO HIN #	TRIM & K-PLANE PUMPS
3						FROM HIN #	TO HIN #	(W/GE /SHIFTER PANEL)
4						FROM HIN #	TO HIN #	DR BY: KKE CH BY: R.E
						FROM HIN #	TO HIN #	DATE: 10-21-91 NO.: 336-015

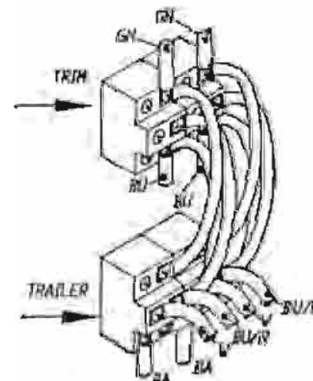


4					FROM HIN #	TO HIN #	TITLE: F-336
3					FROM HIN #	TO HIN #	TRIM WIRING
2					FROM HIN #	TO HIN #	(SHIFTER PANEL/BILGE WALL)
1					FROM HIN #	TO HIN #	DR BY: KXE CH BY:
#	REVISIONS	DR	CH	DATE	FROM HIN #	TO HIN #	DATE: 10-21-91 NO.: 336-015

FIG. 1



VIEWING FROM BACK SIDE
SEE FIG. 1 FOR SCHEMATIC
DETAIL.

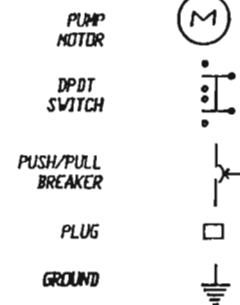


NOTES
- TRIM AND K-PLANE PUMPS
ARE POWERED BY A 12V DC
BATTERY.
- SEE KRAFTMASTER OWNERS
MANUAL FOR K-PLANE WIRING
- SEE BWG336-0156 FOR TRIM
PUMP WIRING

CODE	BASE COLOR	STRIPE
BA	BLACK	
BU/R	BLUE	RED
BU/V	BLUE	WHITE
GN/BU	GREEN	BLUE
GN	GREEN	WHITE
V	PURPLE	WHITE
R/GN	RED	GREEN
R/PR	RED	PURPLE

BU/R/R
STRIPE 2
STRIPE 1
BASE COLOR

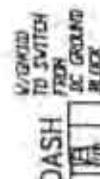
LEGEND



THUNDERBIRD PRODUCTS	4					FROM HIN #	TO HIN #	TITLE: F-336
P.O. BOX 501	3					FROM HIN #	TO HIN #	TRIM & K-PLANE PUMPS
DECATUR, IN 46733	2					FROM HIN #	TO HIN #	(BLGE /SHIFTER PANEL)
(219) 724-9111	1					FROM HIN #	TO HIN #	DR BY: KKE CH BY: RS
						FROM HIN #	TO HIN #	DATE: 10-21-91 NO.: 336-015 b

REVISIONS

DR CH DATE



WHEN WATER IN THE BILGE IS AT A LEVEL THAT MAY REQUIRE MANUAL PUMPING, THE UNDER DASH ALARM WILL SOUND.

WHEN ALARM SOUNDS

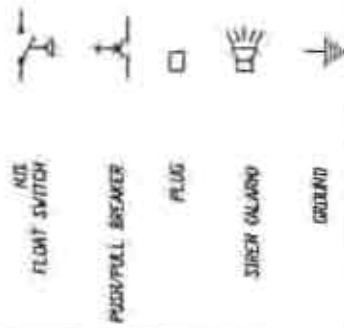
1. CHECK TRANSIT SEALS AND DRIPS FOR LEAKAGE.
2. CHECK BATTERY LEVELS.

THE BILGE PUMP WILL NOT OPERATE WHEN THE BATTERY IS BELOW FULL CHARGE.

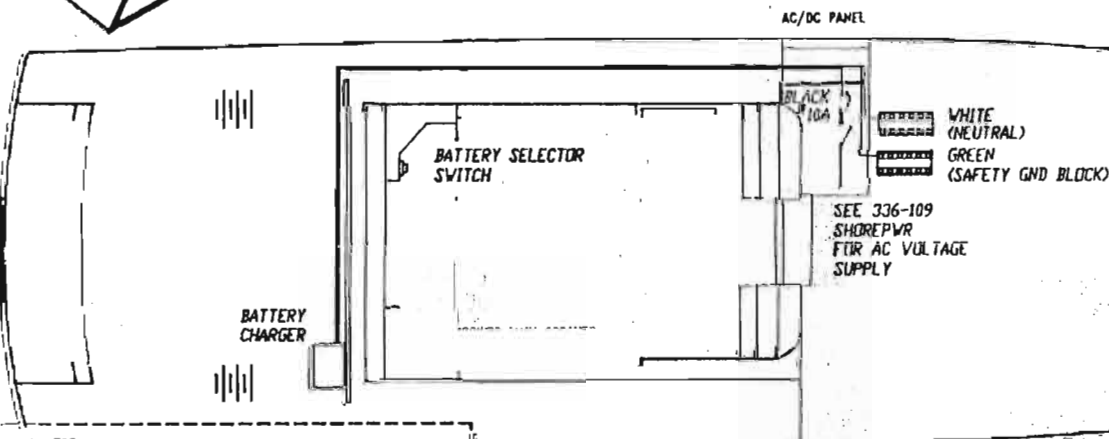
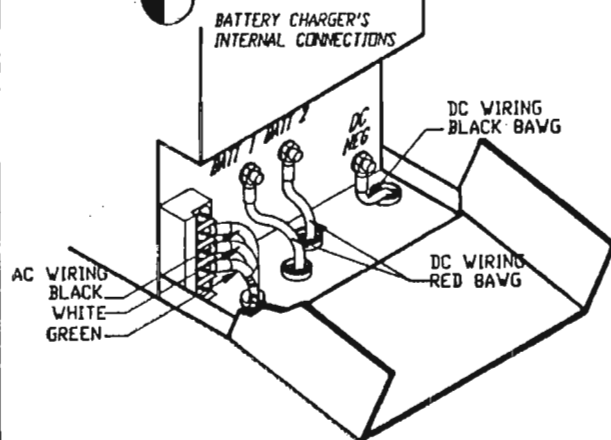
3. CONDUCT MAINTENANCE SERVICE.

DEPARTMENT ON CONTACT FURNISHES TECHNICAL ASSISTANCE GROUP.

LEGGEND



	4				FROM HIN #	TO HIN #	TITLE
THUNDERBIRD PRODUCTS	1				FROM HIN #	TO HIN #	F-306 HIGH WATER ALARM (ENGINE COMPRT/DASH)
P.O. BOX 501	1				FROM HIN #	TO HIN #	
DECATUR, IN 46733	2				FROM HIN #	TO HIN #	
	1				FROM HIN #	TO HIN #	OR BYPASS CH BNC
(219) 724-9111	7			DATE	FROM HIN #	TO HIN #	DATE: 10-7-90 NO. 336-017
				REVISIONS			



TO OPERATE BATTERY CHARGER:

1. READ EACH BATTERY'S DC VOLTAGE LEVEL (NO LOAD) AND MAKE NOTE OF IT.
2. IN THE AFT SEAT STORAGE, PORT SIDE, SWITCH SHOREPOWER BREAKER TO 'ON'.
3. ON THE AC/DC PANEL IN CABIN, SWITCH SHOREPOWER BREAKER TO 'ON'.
4. SWITCH BATTERY CHARGER TO 'ON'.
5. CHECK FACE OF BATTERY CHARGER FOR DC AVAILABLE LIGHT.
6. AFTER 24 HOURS OF CHARGING, BATTERIES SHOULD READ 13.6V (NO LOAD).
7. IF BATTERIES READ BELOW 13V OR DROP UNDER 12V WITHIN 15MIN, FIRST CHECK YOUR VOLTMETER THEN CHECK YOUR BATTERIES.

- THE BATTERY CHARGER CAN NOT BE DISCONNECTED FROM THE BATTERIES BY THE SELECTOR SWITCH. THE SWITCH DOES NOT DETERMINE WHICH BATTERY WILL RECEIVE CHARGE. THE CHARGER IS DIRECTLY CONNECTED TO BOTH BATTERIES.
 - SEE PROFESSIONAL MARINER LITERATURE FOR FURTHER INFORMATION.
 - SA FOR 220V/50HZ SUPPLIED.
 - TO CHARGE BATTERIES BY THE ENGINE ALTERNATORS SEE 336-001b.
- WHEN CHARGING WITH ALTERNATORS, THE POSITION OF THE BATTERY SELECTOR SWITCH DOES DETERMINE HOW THE BATTERIES WILL BE CHARGED.

BATTERY CHARGER SYSTEM SCHEMATIC
SEE 336-001a FOR DC SYSTEM

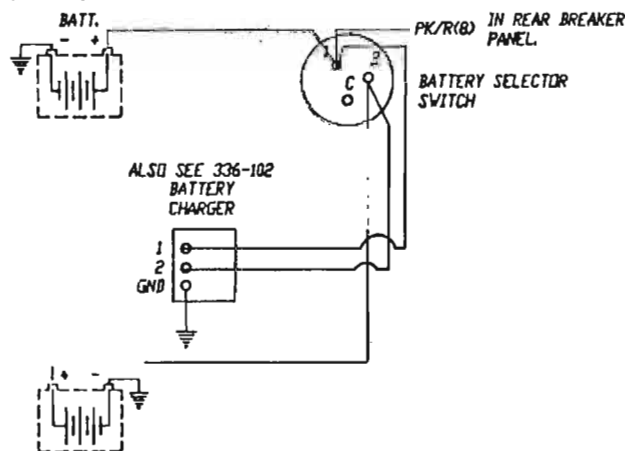
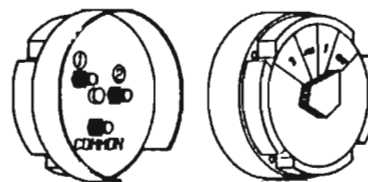
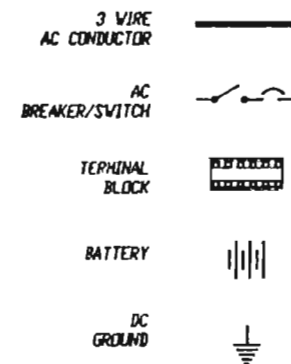


FIG2 BATTERY SELECTOR SWITCH



LEGEND



THUNDERBIRD PRODUCTS
P.O. BOX 501
DECATUR, IN 46733
(219) 724-9111

REV	DESCRIPTION	DATE	BY
4			
3			
2			
1			

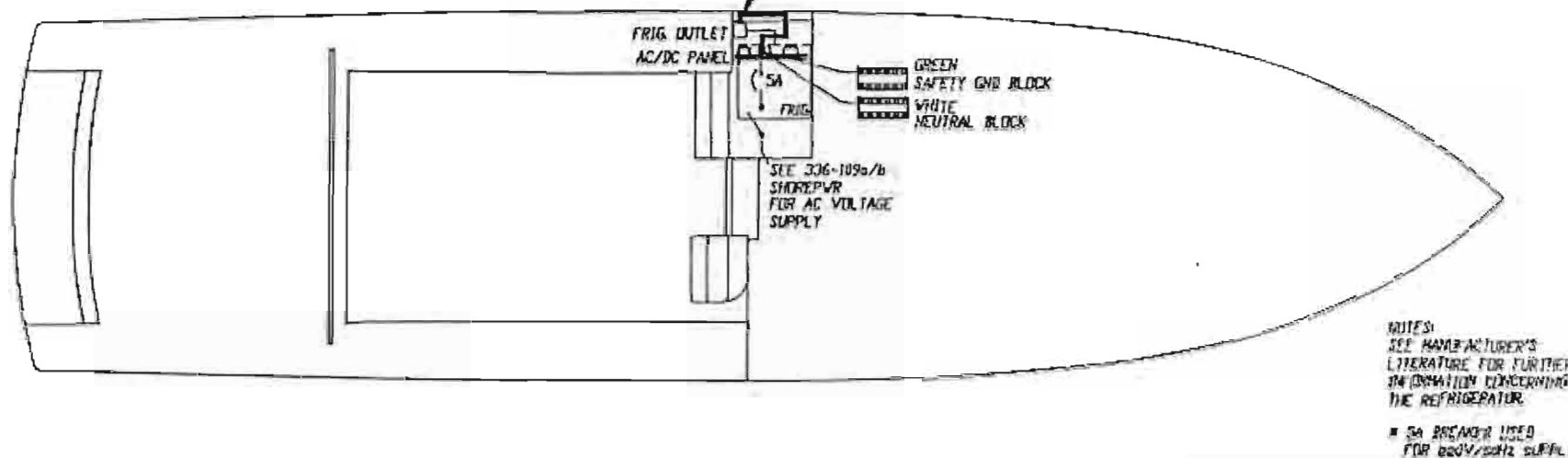
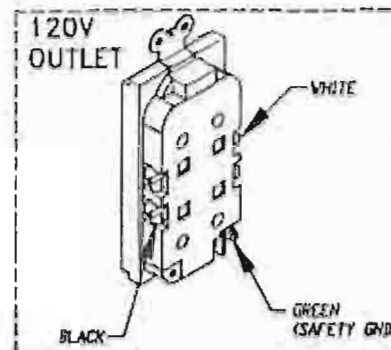
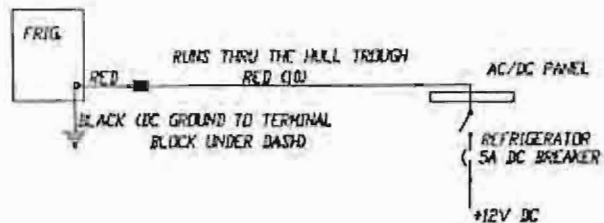
REVISIONS

DR CH DATE

FROM HIN #	TO HIN #
FROM HIN #	TO HIN #
FROM HIN #	TO HIN #
FROM HIN #	TO HIN #
FROM HIN #	TO HIN #
FROM HIN #	TO HIN #

TITLE: F-336
BATTERY CHARGER WIRING
(AC/DC PANEL / BILGE WALL)
DR BY: KKE CH BY:
DATE: 9-4-91 NO.: 336-102

DC WIRING FOR 120V AND 220V UNITS



LEGEND

3 WIRE
AC CONDUCTOR

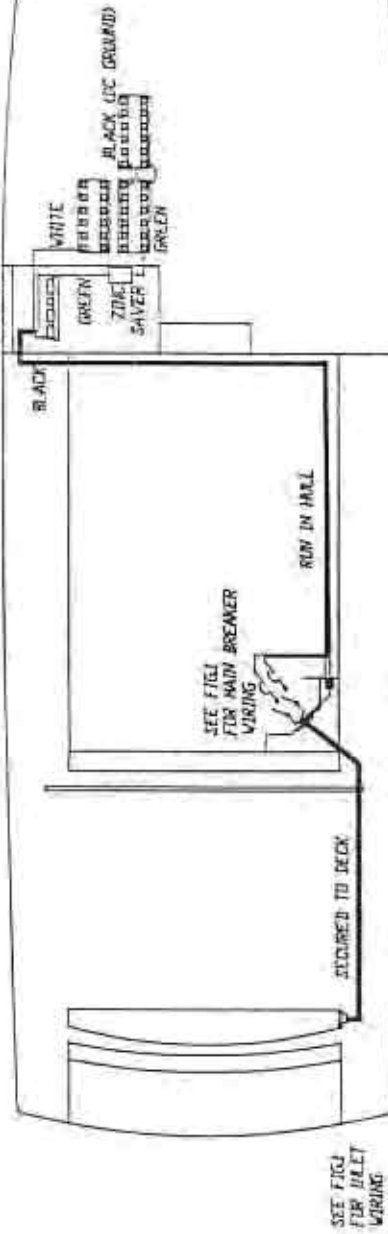
AC
BREAKER/SWITCH

TERMINAL
BLOCK

THUNDERBIRD PRODUCTS P.O. BOX 501 DECATUR, IN 46733 (219) 724-9111	1					FROM HIN #	TO HIN #	TITLE: F-336 REFRIGERATOR (AC/DC PANEL / GALLEY) DR BY: WKE CH BY: JTC DATE: 9-9-91 NO.: 336-109
	2					FROM HIN #	TO HIN #	
	3					FROM HIN #	TO HIN #	
	4					FROM HIN #	TO HIN #	
REVISIONS						OR	CH	DATE

SEE DRAWING 336-109 a FOR 120V SYSTEMS
SEE DRAWING 336-109 b FOR 220V SYSTEMS

AC/DC PANEL



CONDUCTORS RUN IN DECK

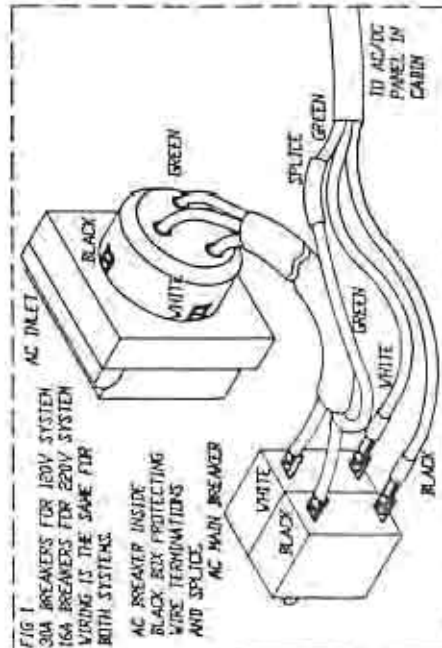
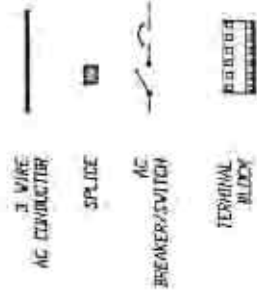


FIG. 1
20A BREAKERS FOR 120V SYSTEM
16A BREAKERS FOR 220V SYSTEM
WIRING IS THE SAME FOR
BOTH SYSTEMS

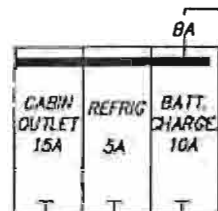
AC BREAKER INSIDE
BLACK BOX PROTECTING
WIRE TERMINATIONS
AND SPLICES
AC MAIN BREAKER

LEGEND



THUNDERBIRD PRODUCTS				REVISIONS				TITLE: F-336			
4	3	2	1	DR	CH	DATE	FROM	TO	TO	TO	TO
P.O. BOX 501							FROM	FROM	FROM	FROM	FROM
DECATUR, IN 46733							FROM	FROM	FROM	FROM	FROM
(219) 724-9111							FROM	FROM	FROM	FROM	FROM
								DR BY: RKE			
								CH BY: RKE			
								DATE: 9-9-91			
								NO. 336-109			

POSITIVE
BLACK WIRES
TO RESPECTIVE
APPLIANCES



(GREEN)
AC
AVAILABLE
LIGHT

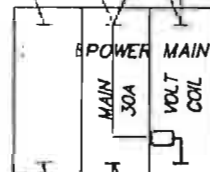


W BA

REVERSE
POLARITY
LIGHT
(2000 OHM)
(RED)



W BA



FROM AFT BREAKER
SHOREPOWER
MAIN

WHITE
WIRES FROM
APPLIANCE
CONDUCTORS



BLACK
WIRES IN
THIS BLOCK
ARE DC
GROUND
WIRES

GREEN
GREEN

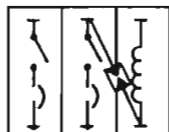
GREEN WIRES
ARE FROM EACH
APPLIANCE'S
CONDUCTOR.

ZINC
SAVER

VUEING BACKSIDE OF PANEL

BREAKERS

3 POLE
SWITCHABLE
BREAKER
w/ SURGE ARRESTER



SINGLE POLE
SWITCHABLE
BREAKER



(READ THROUGH BEFORE OPERATING)
TO OPERATE AC EQUIPMENT:

1. BEFORE HOOKING UP TO SHOREPOWER, TURN 'OFF' ALL AC EQUIPMENT AND MAIN BREAKER ON AC/DC PANEL IN CABIN. ALSO TURN 'OFF' SHOREPOWER MAIN BREAKER IN AFT COCKPIT SEAT.
2. PLUG SHOREPOWER CORD INTO THE BOAT'S SHOREPOWER INLET, FOUND INSIDE HATCH'S AFT POCKET ON STBD SIDE.
3. CONNECT OTHER END OF CORD TO SHORE.
4. SWITCH SHOREPOWER MAIN BREAKER IN AFT COCKPIT SEAT (STBD SIDE) TO 'ON'.
5. IN CABIN, SWITCH AC SYSTEM MAIN TO 'ON'.

WARNING:

- IF REVERSED POLARITY LIGHT (RED) IS ILLUMINATED:
- DO NOT TOUCH ELECTRICAL APPLIANCES
- LEAVE BOAT IMMEDIATELY
- DISCONNECT SHOREPOWER CABLE AT SHORE OUTLET.

ALSO:

- CONTACT MARINA TO HAVE SUPPLIED SHOREPOWER TESTED FOR REVERSED POLARITY.
- CONTACT FORMULA RELIABILITY CENTER FOR ADDITIONAL SERVICE.

6. WHEN AC SYSTEM MAIN BREAKER IS SWITCHED 'ON' AND THE AC AVAILABLE LIGHT (GREEN) IS ILLUMINATED, ALL AC EQUIPMENT BREAKERS ARE SUPPLIED WITH 120V 60HZ. EQUIPMENT IS OPERATIONAL WHEN THE BREAKER BEARING EQUIPMENT NAME IS SWITCHED 'ON'.

ALSO SEE DIAGRAMS OF INDIVIDUAL CIRCUITS.

THUNDERBIRD PRODUCTS
P.O. BOX 501
DECATUR, IN 46733
(219) 724-9111

4
3
2
1
#

REVISIONS

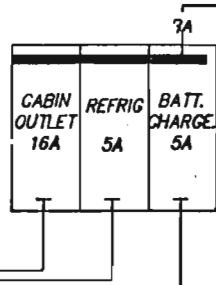
DR CH DATE

FROM HIN #
FROM HIN #
FROM HIN #
FROM HIN #
FROM HIN #

TO HIN #
TO HIN #
TO HIN #
TO HIN #
TO HIN #

TITLE: F-419 SRI 110V/60HZ
AC WIRING AT AC/DC PANEL
(AC-DC PANEL)
DR BY: KKE CH BY: RE
DATE: 7-29-91 NO. 336-109 a

POSITIVE
BLACK WIRES
TO RESPECTIVE
APPLIANCES



(GREEN)
AC
AVAILABLE
LIGHT

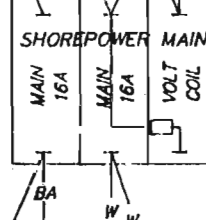


W BA

REVERSE
POLARITY
LIGHT
(2000 OHM)
(RED)

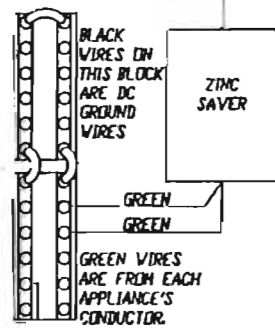


W BA



FROM AFT BREAKER
SHOREPOWER
MAIN

WHITE
WIRES FROM
APPLIANCE
CONDUCTORS



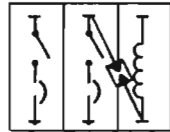
VUEING BACKSIDE OF PANEL

AC CONDUCTORS' COLOR CODE

BLACK: CURRENT CARRYING
WHITE: NEUTRAL
GREEN: SAFETY GROUND

BREAKERS

3 POLE
SWITCHABLE
BREAKER
W/SURGE ARRESTER



SINGLE POLE
SWITCHABLE
BREAKER



(READ THROUGH BEFORE OPERATING)
TO OPERATE AC EQUIPMENT:

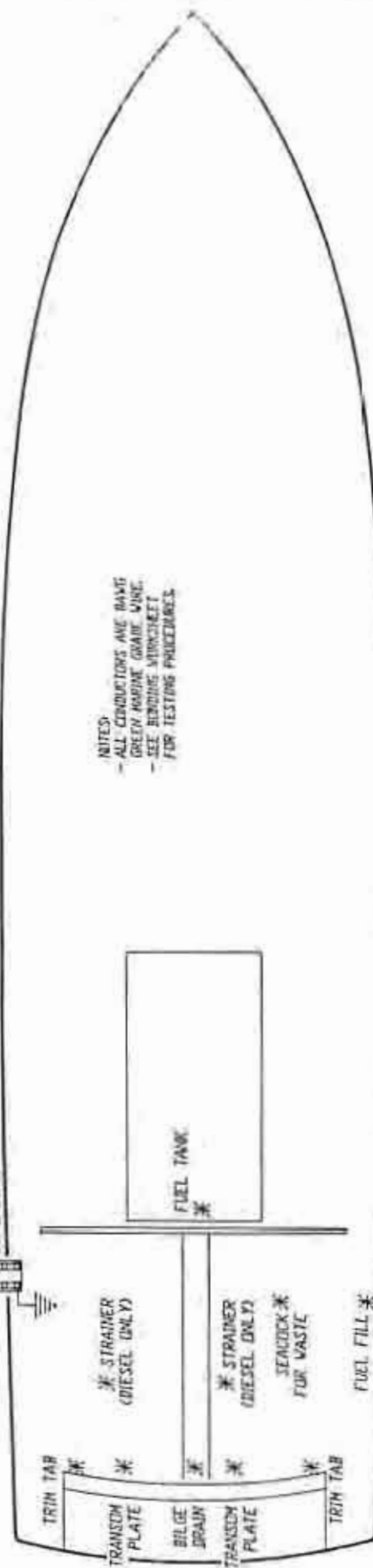
- BEFORE HOOKING UP TO SHOREPOWER, TURN 'OFF' ALL AC EQUIPMENT AND MAIN BREAKER ON AC/DC PANEL IN CABIN. ALSO TURN 'OFF' SHOREPOWER MAIN BREAKER IN AFT COCKPIT SEAT.
- PLUG SHOREPOWER CORD INTO THE BOAT'S SHOREPOWER INLET, FOUND INSIDE HATCH'S AFT POCKET ON STBD SIDE.
- CONNECT OTHER END OF CORD TO SHORE.
- SWITCH SHOREPOWER MAIN BREAKER IN AFT COCKPIT SEAT (STBD SIDE) TO 'ON'.
- IN CABIN, SWITCH AC SYSTEM MAIN TO 'ON'.
WARNING:
IF REVERSED POLARITY LIGHT (RED) IS ILLUMINATED:
-DO NOT TOUCH ELECTRICAL APPLIANCES
-LEAVE BOAT IMMEDIATELY
-DISCONNECT SHOREPOWER CABLE AT SHORE OUTLET.
ALSO:
-CONTACT MARINA TO HAVE SUPPLIED SHOREPOWER TESTED FOR REVERSED POLARITY.
-CONTACT FORMULA RELIABILITY CENTER FOR ADDITIONAL SERVICE.
- WHEN AC SYSTEM MAIN BREAKER IS SWITCHED 'ON' AND THE AC AVAILABLE LIGHT (GREEN) IS ILLUMINATED, ALL AC EQUIPMENT BREAKERS ARE SUPPLIED WITH 220V 50/60HZ. EQUIPMENT IS OPERATIONAL WHEN THE BREAKER BEARING EQUIPMENT NAME IS SWITCHED 'ON'.

ALSO SEE DIAGRAMS OF INDIVIDUAL CIRCUITS.

THUNDERBIRD PRODUCTS
P.O. BOX 501
DECATUR, IN 46733
(219) 724-9111

4					FROM HIN #	TO HIN #	TITLE: F-336 220V/50HZ
3					FROM HIN #	TO HIN #	AC WIRING AT AC/DC PANEL
2					FROM HIN #	TO HIN #	(AC-DC PANEL)
1					FROM HIN #	TO HIN #	DR BY: KKE CH BY: RC
	REVISIONS	DR	CH	DATE	FROM HIN #	TO HIN #	DATE: 7-29-91 NO. 336-109 b

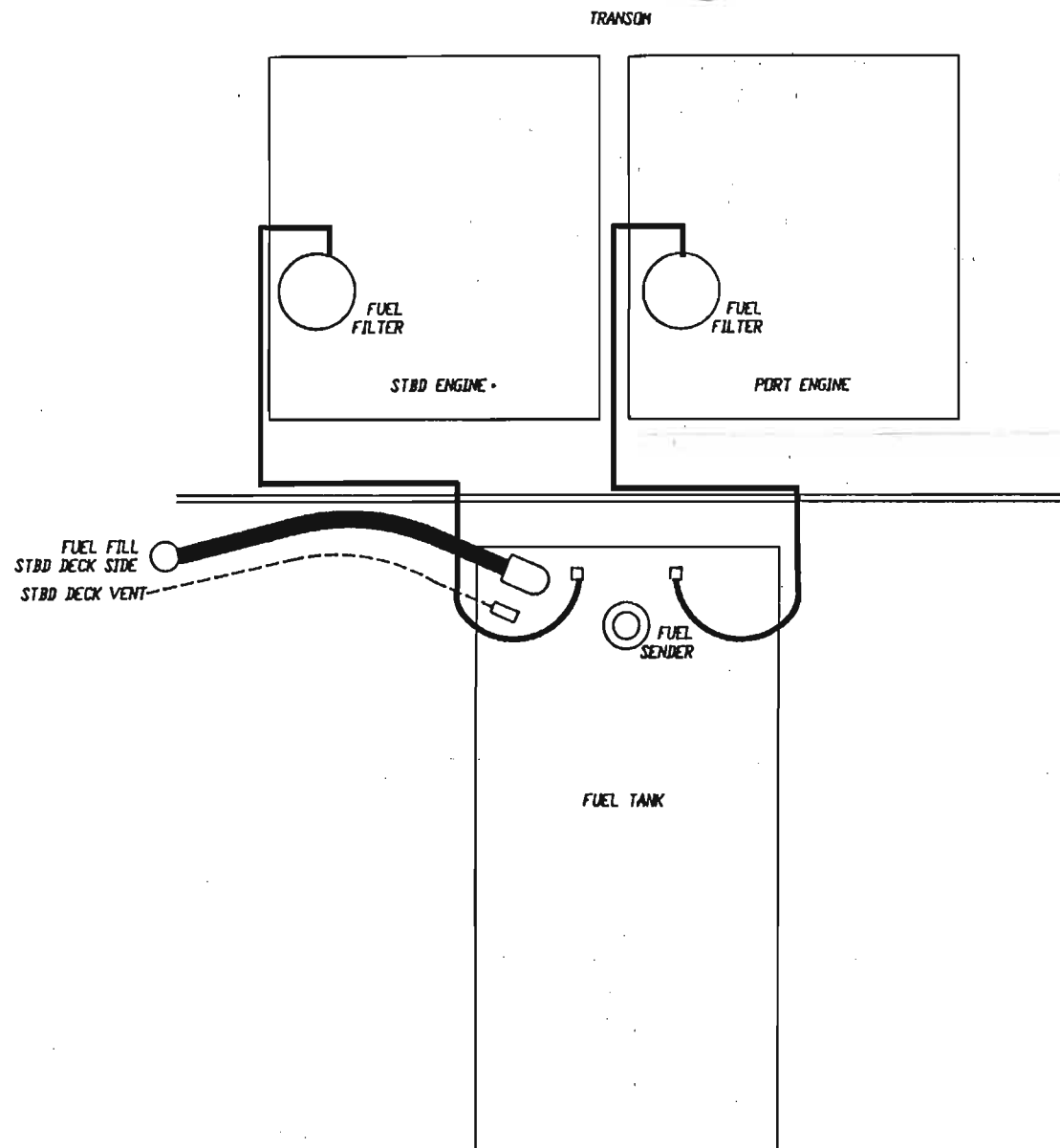
* ALL CONDUCTORS TERMINATE
AT THIS STRIP WHERE
THEY ARE BONDED TO
DC GROUND.



NOTES:
- ALL CONDUCTORS ARE BOND
GREEN MARINE GRADE WIRE.
- SEE BONDING SCHEDULE
FOR TESTING PROCEDURES.

THUNDERBOLT PRODUCTS	4					FROM HIN	TO HIN	TITLE: F-326
P.O. BOX 501	3					FROM HIN	TO HIN	REVISED EQUIPMENT
DECATUR, IN 46733	2					FROM HIN	TO HIN	
(219) 724-9111	1					FROM HIN	TO HIN	OR BY: RDE
	1					FROM HIN	TO HIN	DATE: 10-8-91
	1					FROM HIN	TO HIN	NO: 326-12V

REVISIONS



LEGEND

FUEL LINES
USCG TYPE A-1
3/8" SAE J1527
(9.525 mm)

FUEL FILL
USCG TYPE A-1
1 1/2" TO SAE J1527
2 (38.1 mm)

VENT LINE
USCG TYPE A-1
5/8" SAE J1527
(15.8 mm)

THUNDERBIRD PRODUCTS
P.O. BOX 501
DECATUR, IN 46733
(219) 724-9111

4
3
2
1
7

REVISIONS

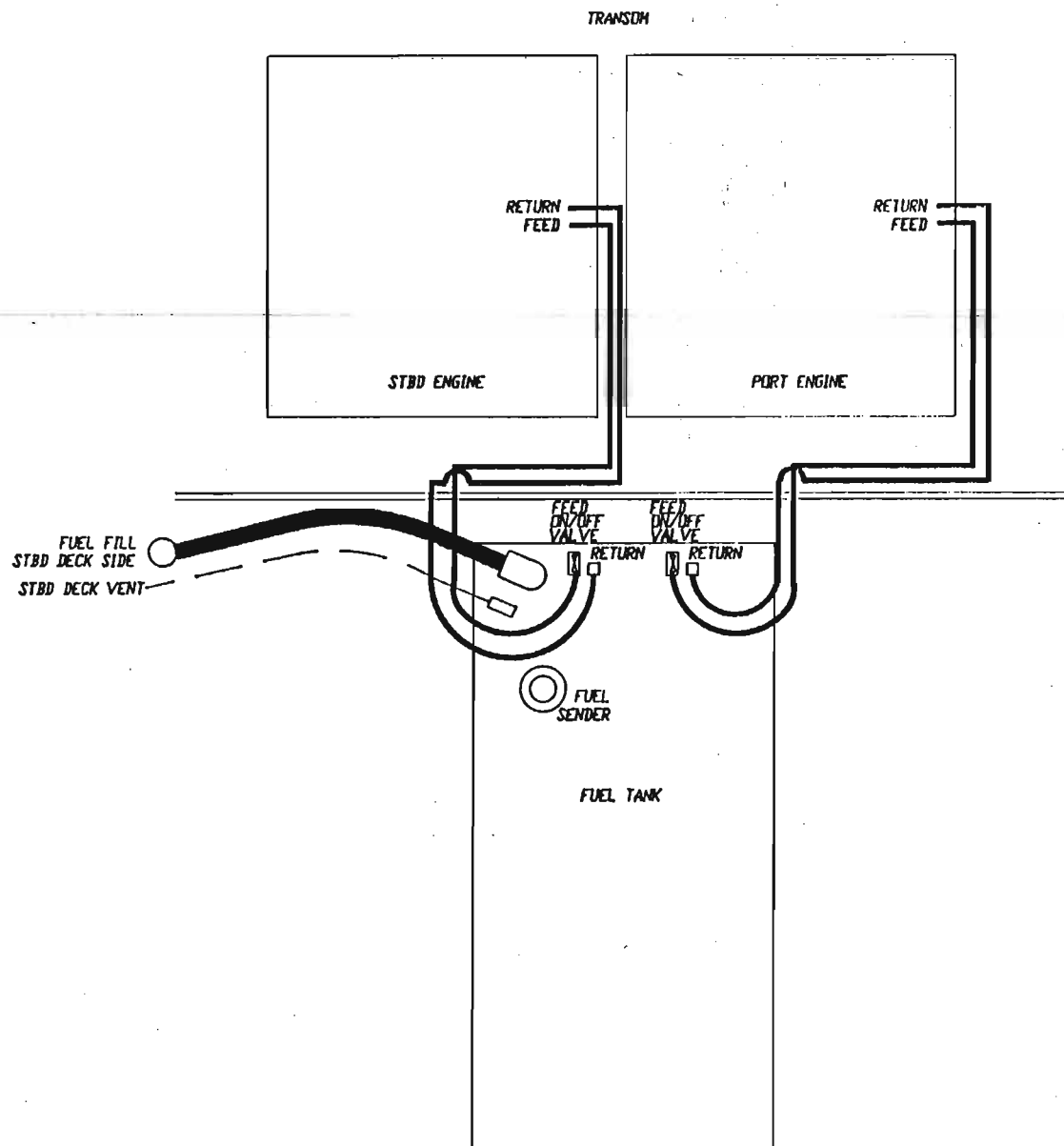
OR

CH

DATE

FROM HIN #	TO HIN #
FROM HIN #	TO HIN #
FROM HIN #	TO HIN #
FROM HIN #	TO HIN #
FROM HIN #	TO HIN #

TITLE: F-336 FUEL SYSTEM DIAGRAM (GAS) (W/LGE)	
DR BY: KKE	CH BY: [Signature]
DATE: 10-8-91	NO.: 336-130



LEGEND

FUEL LINES
USCG TYPE A-1
3/8" SAE J1527
(9.525 mm)

FUEL FILL
USCG TYPE A-1
1 1/2" ID SAE J1527
(38.1 mm)

VENT LINE
USCG TYPE A-1
5/8" SAE J1527
(15.8 mm)

THUNDERBIRD PRODUCTS
P.O. BOX 501
DECATUR, IN 46733
(219) 724-9111

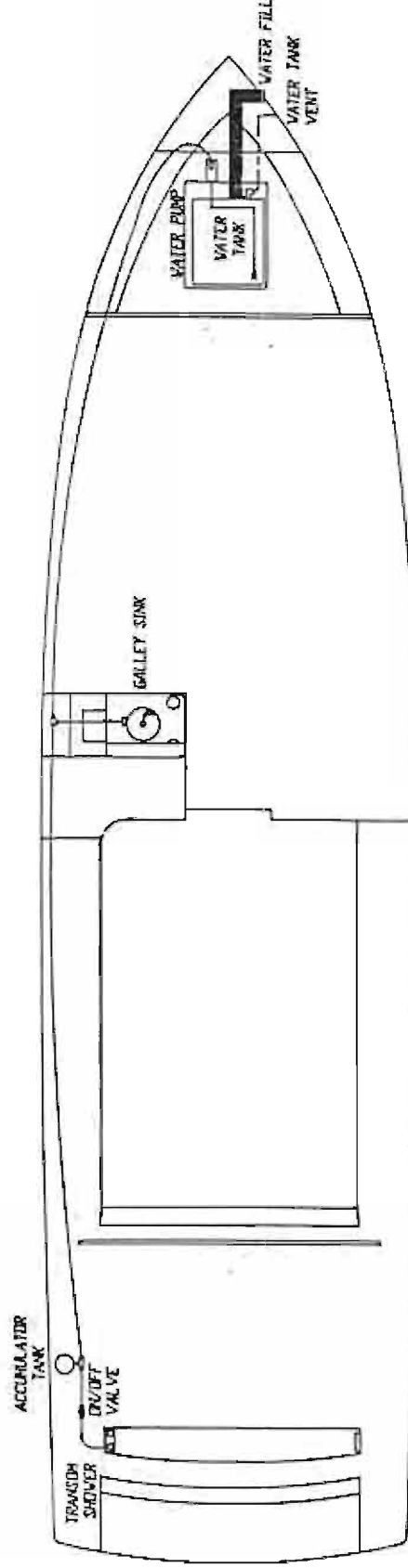
4
3
2
1
#

REVISIONS

DR CH DATE

FROM HIN #	TO HIN #
FROM HIN #	TO HIN #
FROM HIN #	TO HIN #
FROM HIN #	TO HIN #
FROM HIN #	TO HIN #

TITLE: F-336 FUEL SYSTEM DIAGRAM (DIESEL-VOLVO)	
DR BY: KKE	CH BY: R.S.
DATE: 10-10-91	NO.: 336-130 b



WATER FILL
VENT IN HALL

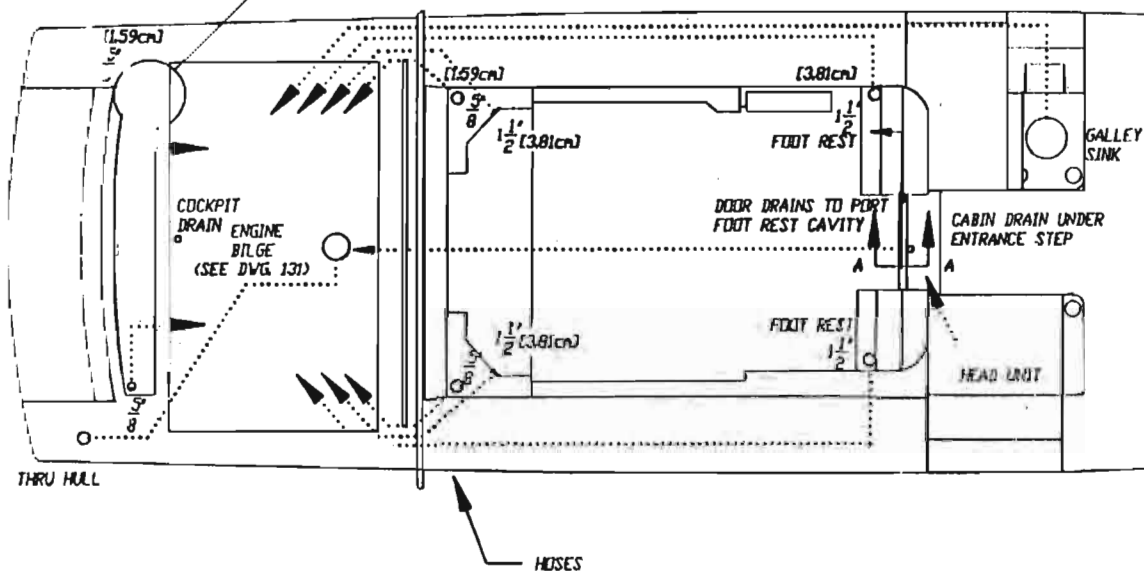
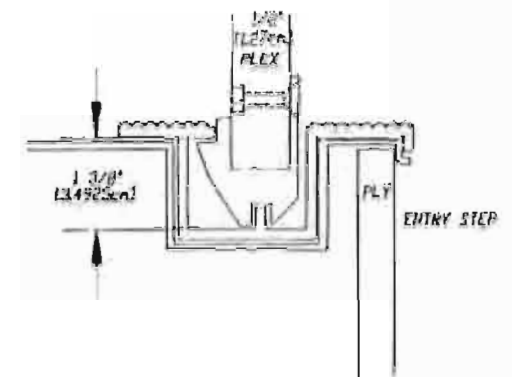
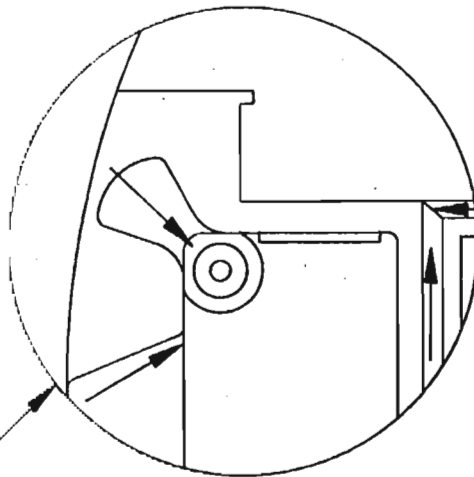
COLD WATER LINE

VENT LINES

WATER FILL

THUNDERBIRD PRODUCTS	4					FROM HIN #	TO HIN #	TITLE: F-306
P.O. BOX 501	3					FROM HIN #	TO HIN #	PLUMBING SYSTEM
DECATUR, IN 46733	2					FROM HIN #	TO HIN #	
(219) 724-9111	1					FROM HIN #	TO HIN #	DR BY: KRE
	1					FROM HIN #	TO HIN #	CH BY: P.E.
						FROM HIN #	TO HIN #	DATE: 10-7-91
						FROM HIN #	TO HIN #	NO.: 306-131

REVISIONS



NOTE: ALL COCKPIT DRAINS DRAIN TO THE
ENGINE BILGE.
ALL DRAINS SIT ABOVE THE WATERLINE

LEGEND

VENT LINES

DRAINAGE

THUNDERBIRD PRODUCTS
P.O. BOX 501
DECATUR, IN 46733
(219) 724-9111

4
3
2
1
#

REVISIONS

DR

CH

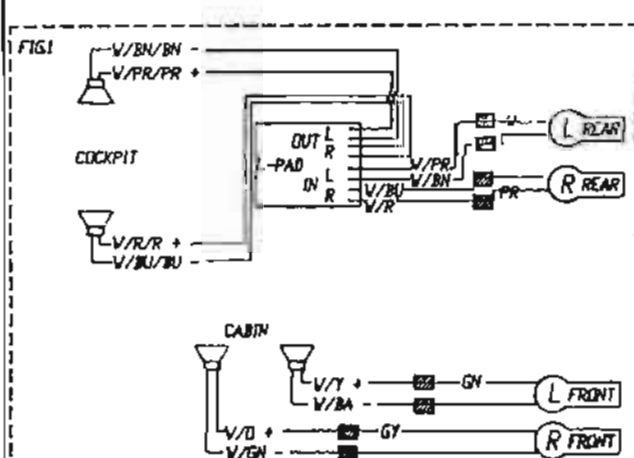
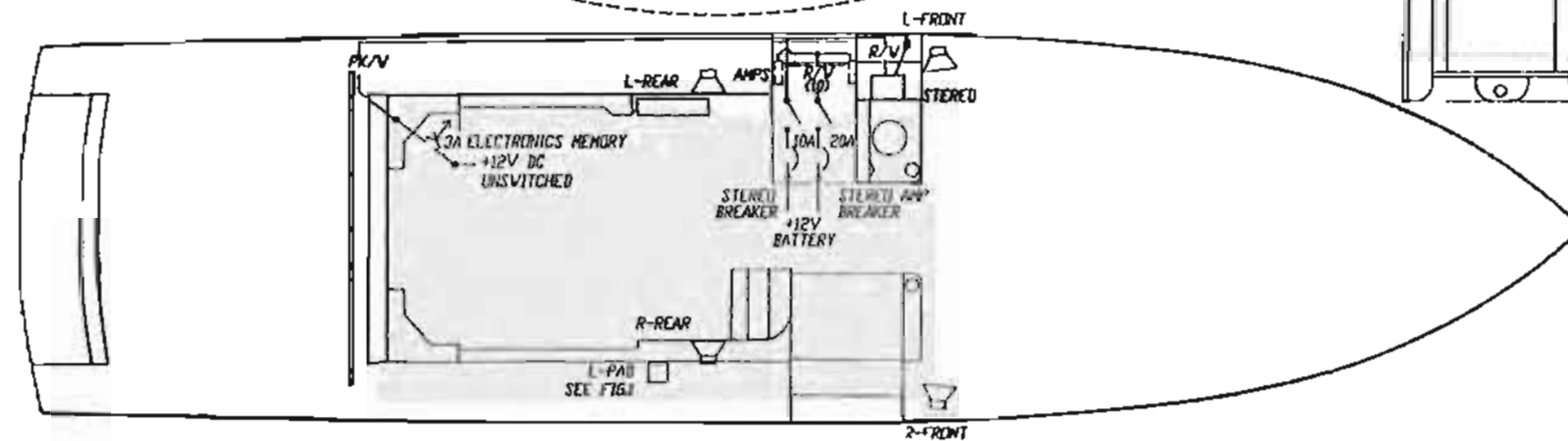
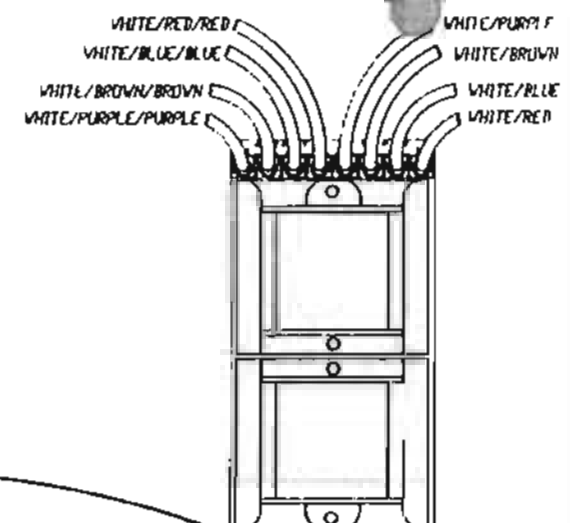
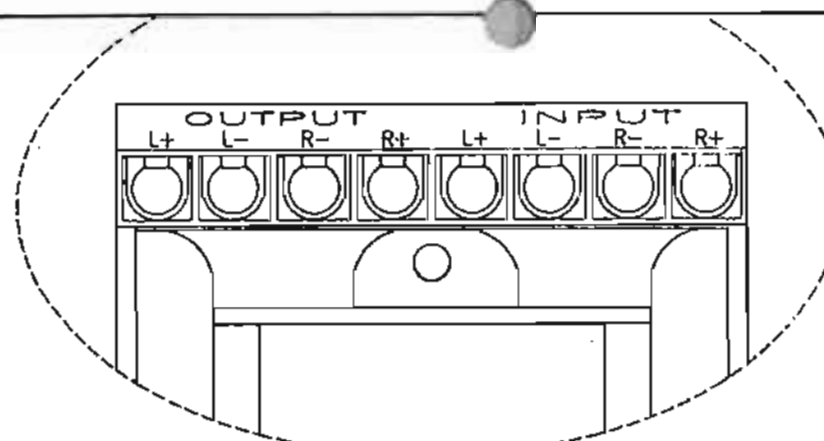
DATE

FROM HIN #
FROM HIN #
FROM HIN #
FROM HIN #
FROM HIN #

TO HIN #
TO HIN #
TO HIN #
TO HIN #
TO HIN #

TITLE: F-336
COCKPIT DRAINAGE

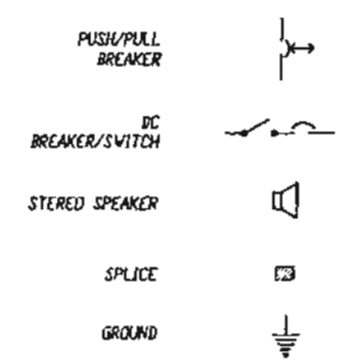
DR BY: KKE CH BY: R1
DATE: 10-9-91 NO.: 336-131 b



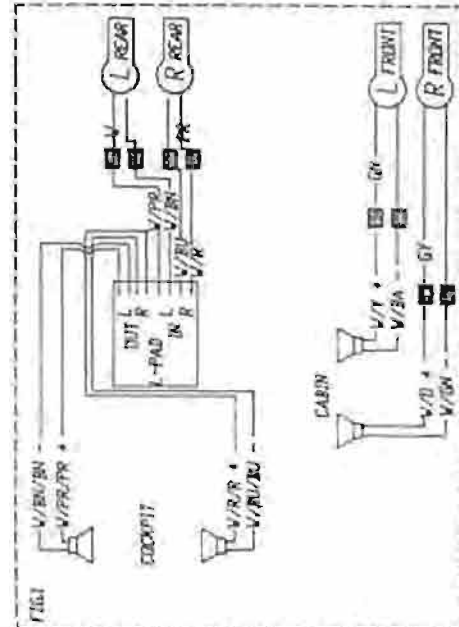
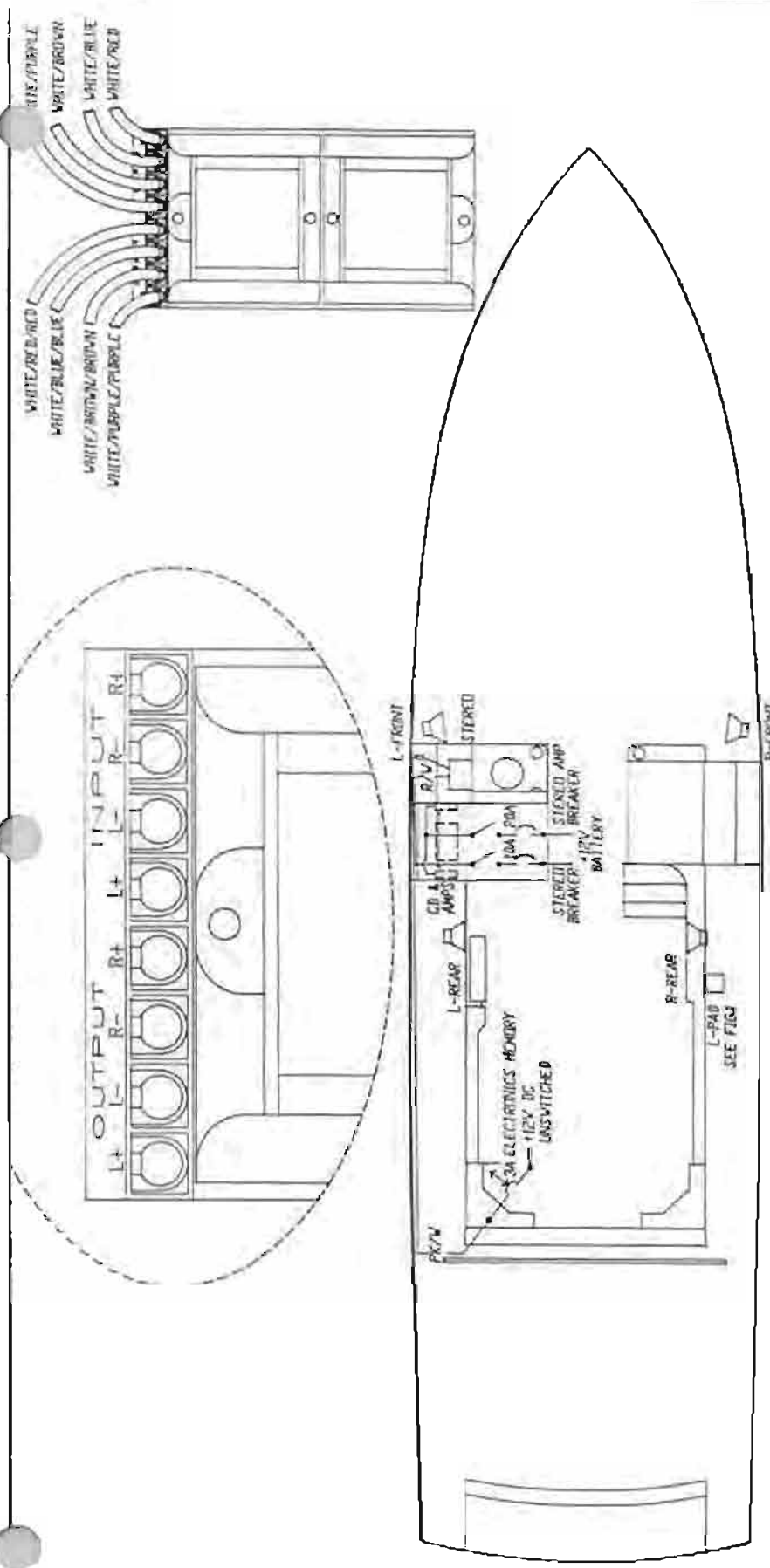
- STEREO REMOVAL**
1. TURN THE BATTERY SELECTOR SWITCH FOUND IN THE PORT AFT COCKPIT STORAGE, TO '1', '2' OR 'ALL'.
 2. AT THE IGNITION PANEL, TURN THE PORT IGNITION SWITCH TO ITS FIRST POSITION THEN OFF.
 3. YOU NOW HAVE 15 SECONDS TO RETURN TO THE CABIN AND REMOVE THE STEREO FROM ITS BASKET.

- STEREO OPERATION**
1. THE ELECTRONICS MEMORY BREAKER IN THE AFT BREAKER PANEL MUST BE PUSHED IN.
 2. THE DC MAIN, STEREO AND STEREO AMP BREAKERS AT THE AC/DC PANEL MUST BE SWITCHED ON.
 3. POWER IS NOW SUPPLIED TO THE STEREO AND CAN BE TURNED ON AT THE UNIT.
 4. TO REDUCE THE VOLUME OF THE COCKPIT SPEAKERS ONLY, TURN THE L-PAD CONTROL, AT THE DASH, TOWARD THE '0'.

LEGEND



THUNDERBIRD PRODUCTS P.O. BOX 501 DECATUR, IN 46733 (219) 724-3111		1					FROM HIN #	TO HIN #	TITLE: F-336 STEREO SYSTEM WITH AMPS			
		3					FROM HIN #	TO HIN #				
		2					FROM HIN #	TO HIN #				
		1					FROM HIN #	TO HIN #				
				2	REVISIONS			OR	CH	DATE	FROM HIN #	TO HIN #



LEGEND

PUSH/PULL BREAKER

DC BREAKER/SWITCH

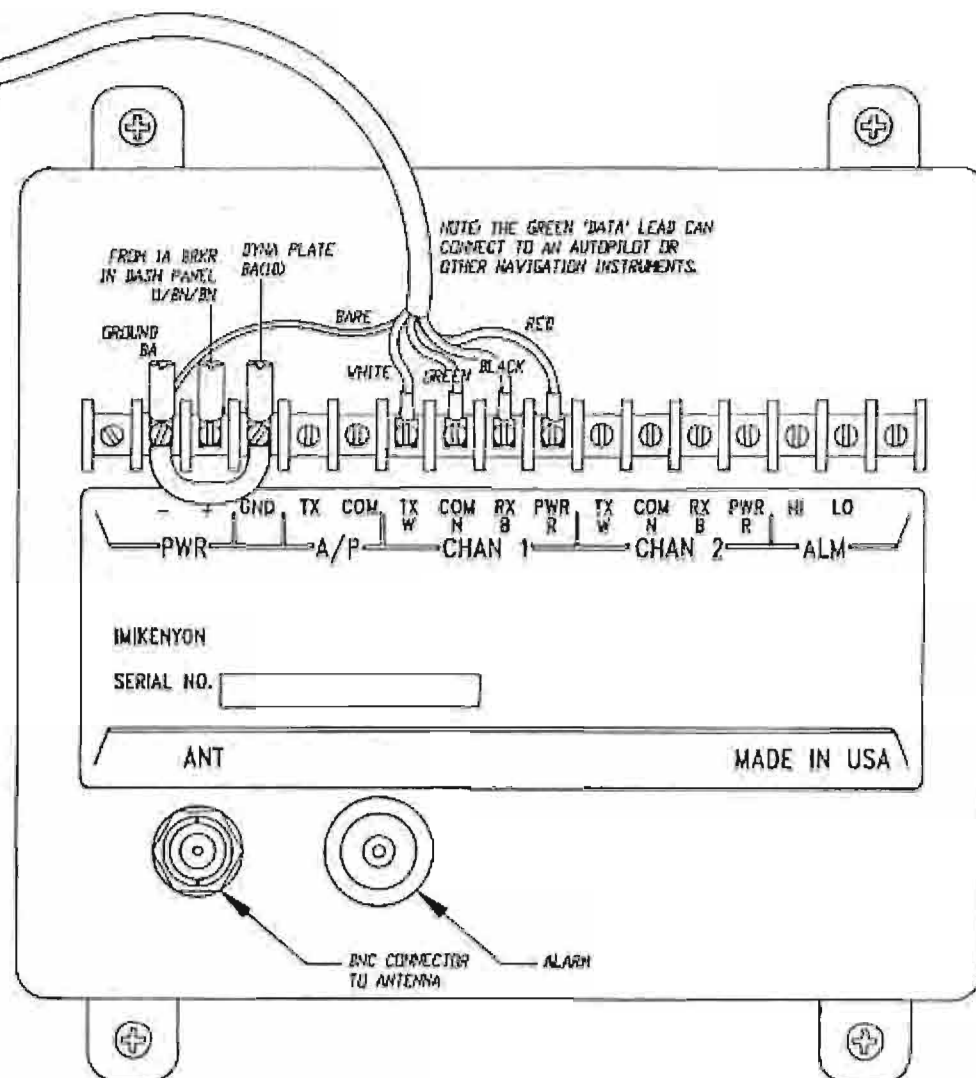
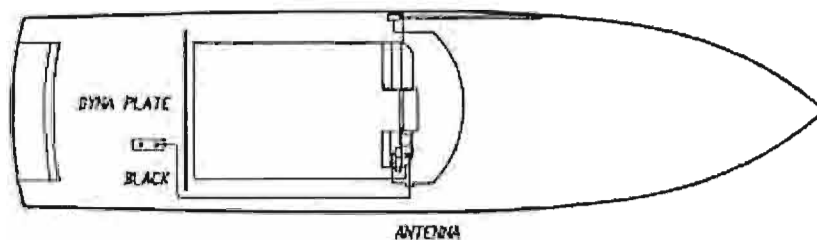
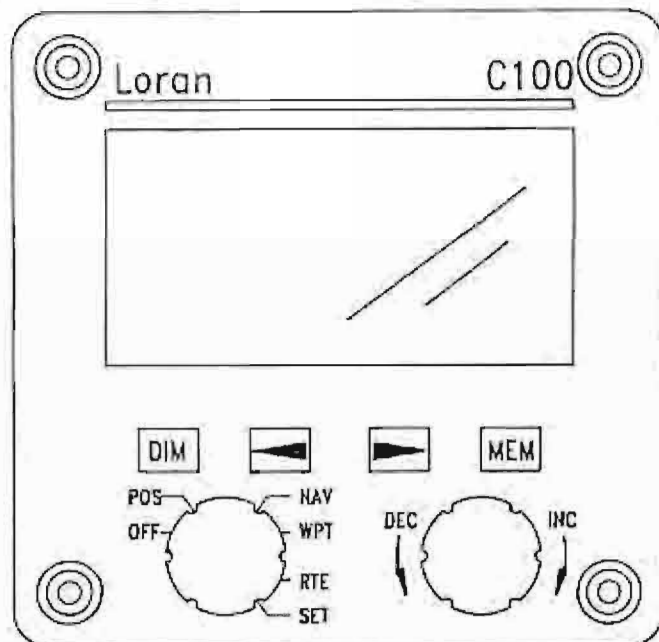
STEREO SPEAKER

SPLIT

GROUND

- ### STEREO REMOVAL
- TURN THE BATTERY SELECTION SWITCH FOUND IN THE FRONT AFT COCKPIT STORAGE TO "1/2" OR "ALL".
 - AT THE IGNITION PANEL, TURN THE FIRST IGNITION SWITCH TO ITS FIRST POSITION THEN OFF.
 - YOU NOW HAVE 15 SECONDS TO RETURN TO THE CABIN AND REMOVE THE STEREO FROM ITS BASKET.
- ### STEREO OPERATION
- THE ELECTRONICS MEMORY BREAKER IN THE AFT BREAKER PANEL MUST BE PUSHED IN.
 - THE DC MAIN STEREO AND STEREO AMP BREAKERS AT THE AC/DC PANEL MUST BE SWITCHED ON.
 - FITTING IS NOW SUPPLIED TO THE STEREO AND CAN BE TURNED ON AT THE UNIT.
 - TO REDUCE THE VOLUME IF THE COCKPIT SPEAKERS ONLY, TURN THE L-PAD CONTROL, AT THE DASH, TOWARD THE "0".

THUNDERBIRD PRODUCTS		TO HIM #	FROM HIM #	TITLE: F-236
P.O. BOX 501		TO HIM #	FROM HIM #	STEREO SYSTEM
DECATUR, IN 48733		TO HIM #	FROM HIM #	
(219) 724-9111		TO HIM #	FROM HIM #	
	OR CH	DATE	DATE	OR BY: DEE
				DATE: 9-10-91
				CH BY: R.E.
				NO: 336-140 b



THUNDERBIRD PRODUCTS
P.O. BOX 501
DECATUR, IN 46733
(219) 724-9111

1					FROM HIN #	TO HIN #	TITLE: F-336
2					FROM HIN #	TO HIN #	LORAN WIRING
3					FROM HIN #	TO HIN #	(DIRECTIVE)
4					FROM HIN #	TO HIN #	DR BY: KKE
5					FROM HIN #	TO HIN #	CH BY: KKE
6					FROM HIN #	TO HIN #	DATE: 9-10-91
7					FROM HIN #	TO HIN #	NO.: 336-143

REVISIONS

DR CH DATE

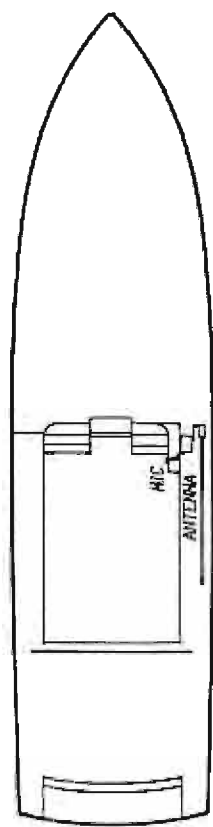
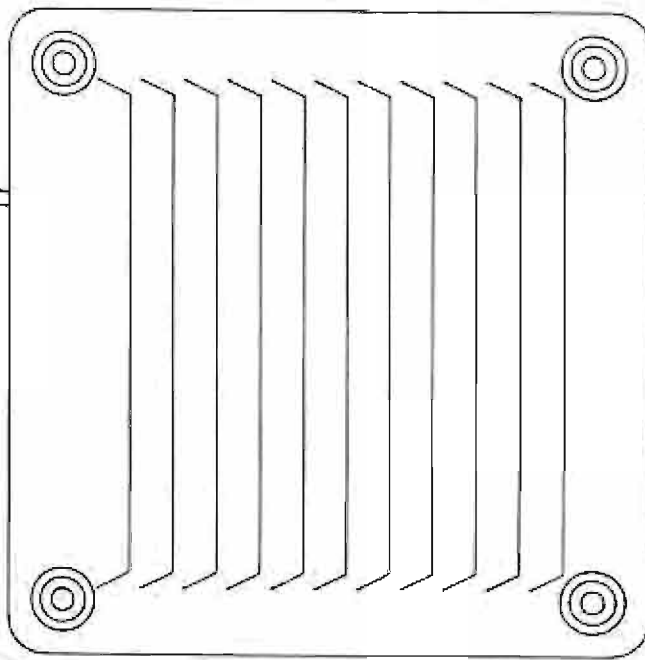
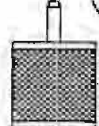
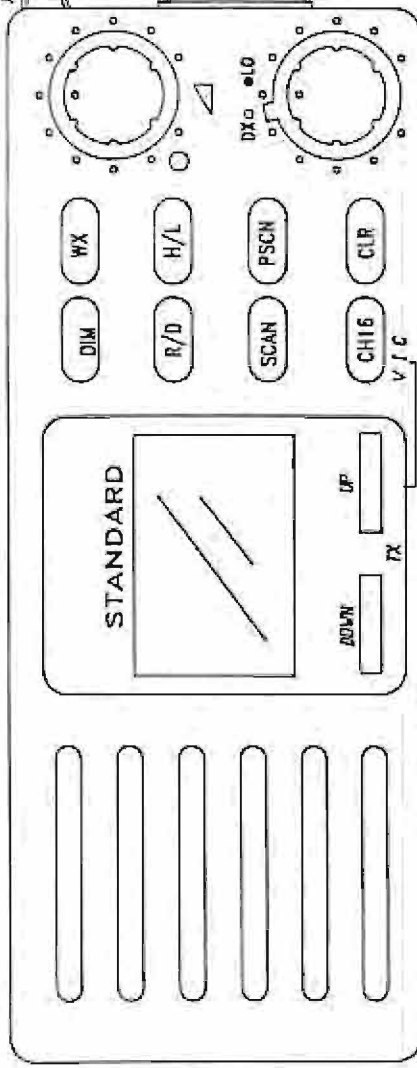
RED/BLUE/GREY DC VOLTAGE FROM
6A BREAKER
AT DASH

RED
BLACK

SPEAKER HOOD-UP
TO BACK OF TRANSCEIVER

MIC
CONNECTION

ANTENNA
CABLE



THUNDERBIRD PRODUCTS	4						FROM HIM #	TO HIM #	TITLE: F-336
P.O. BOX 501	3						FROM HIM #	TO HIM #	VHF RADIO WIRING
DECATUR, IN 46733	2						FROM HIM #	TO HIM #	
(219) 724-9111	1						FROM HIM #	TO HIM #	DR BY: KKE
	#						FROM HIM #	TO HIM #	DATE: 9-10-91
									NO: 336-144

REVISIONS