

31 PC WIRING, FUEL, AND PLUMBING DIAGRAMS

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THUNDERBIRD
PRODUCTS
ENGINEERING

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		P.O. BOX 1003
MODEL: F-31 PC	DR. BY: R. HANNI	DECATUR IN., 45733-500
NO: 31-B	DATE: 12/25/95	(210) 724-9111

F-31 PC HARNESSSES & PIGTAILS #'S

HARNESSES

AC 110V/220V _____ 7437
 DECK _____ 7429
 HULL _____ 7475

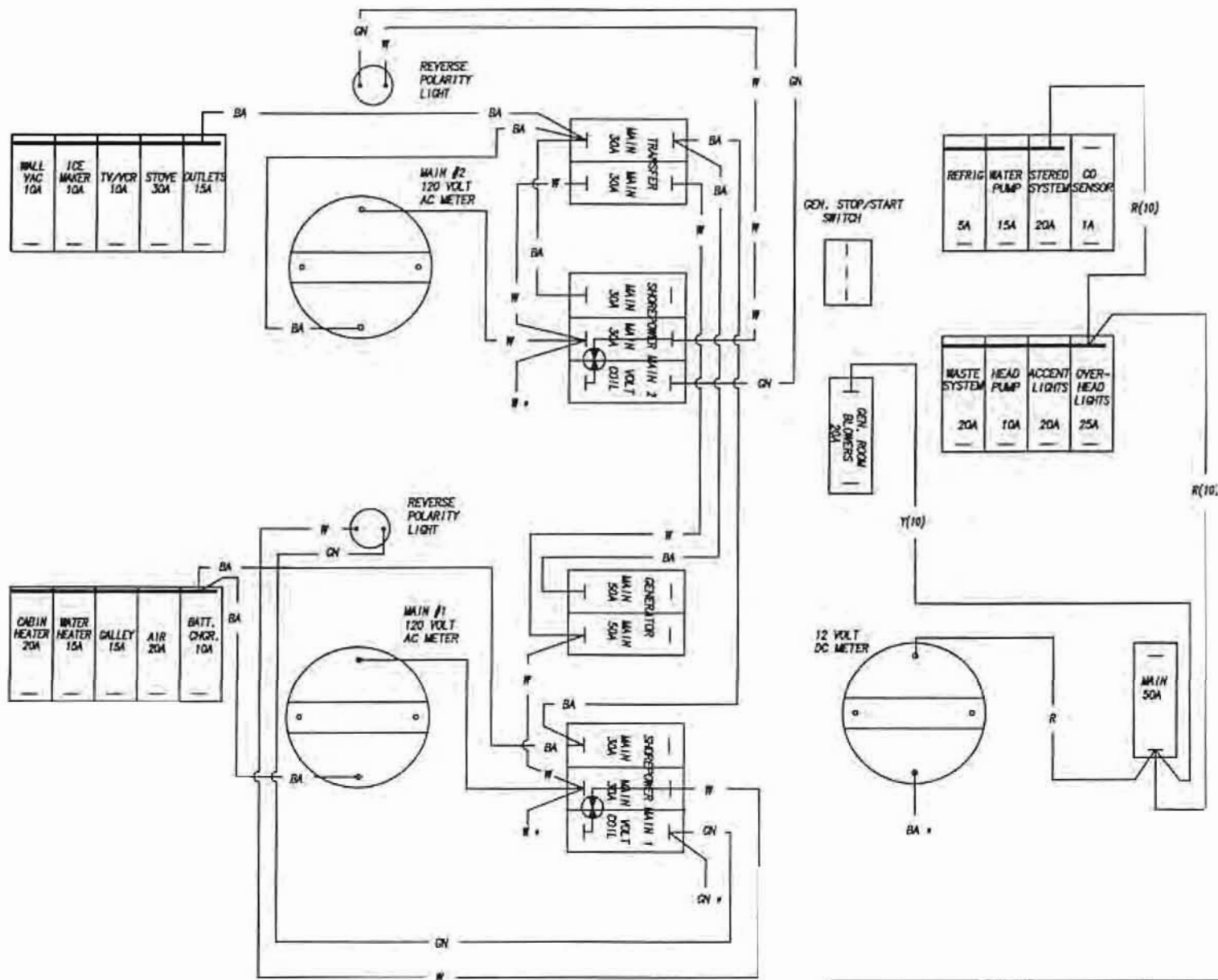
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HARNESSES & PIGTAILS		THUNDERBIRD PRODUCTS
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THUNDERBIRD
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110V AC SCHEMATIC

THUNDERBIRD PRODUCTS

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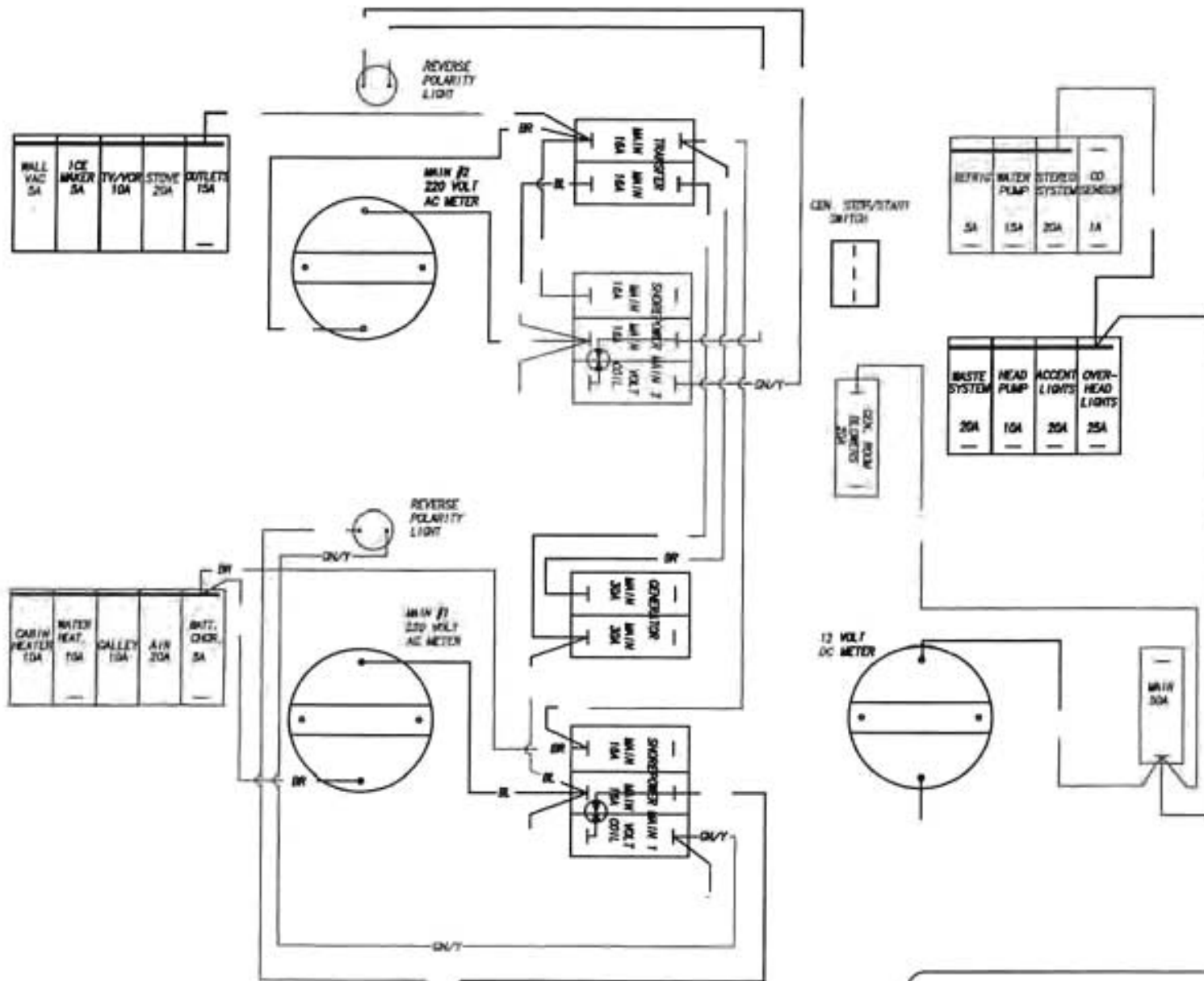
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NO. 31-D

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THUNDERB RD
PRODUCTS
ENGINEER NG

220V AC SCHEMATIC

THUNDERBIRD PRODUCTS

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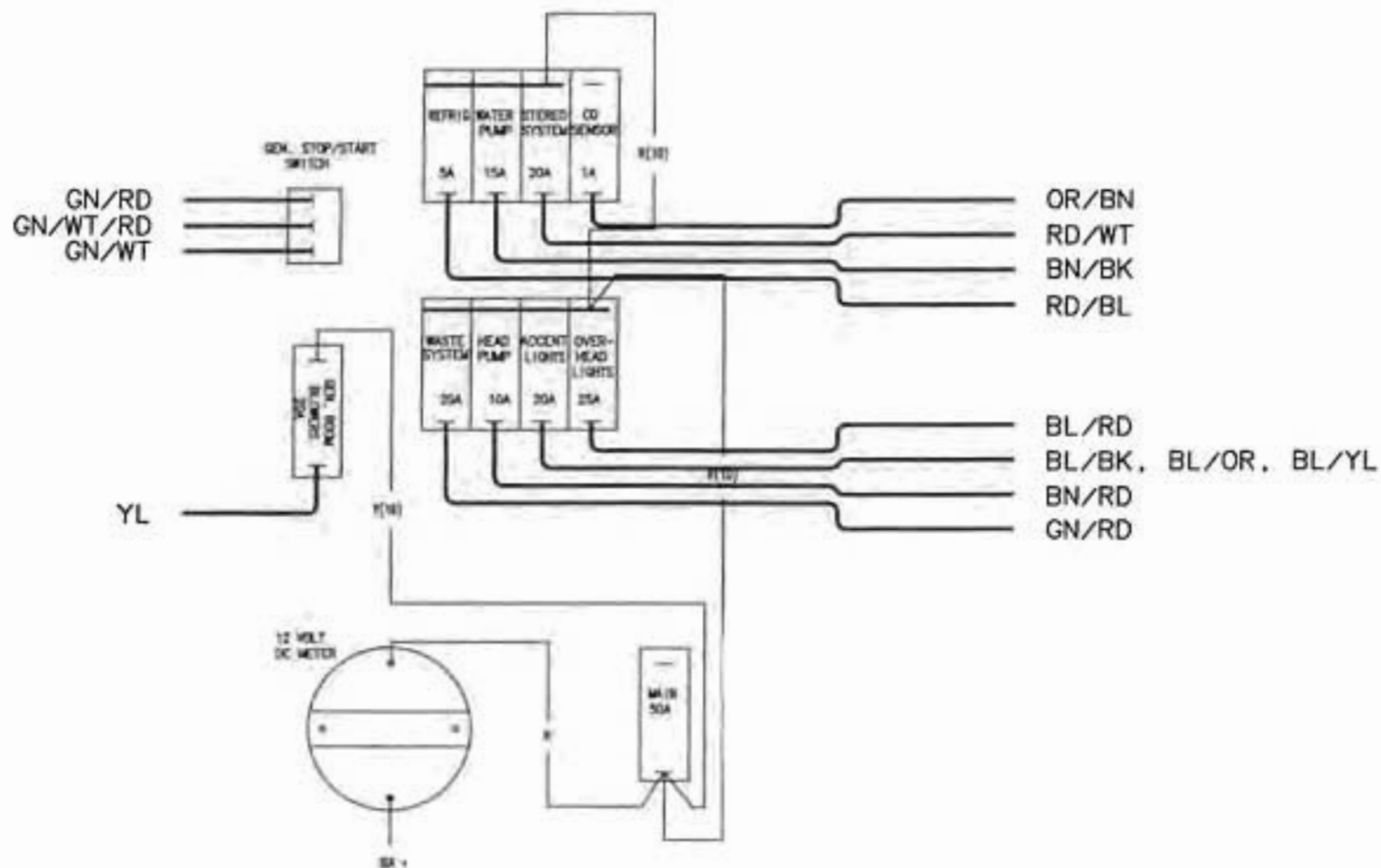
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31-F

1/25/85



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DC SCHEMATIC

THUNDERBIRD PRODUCTS

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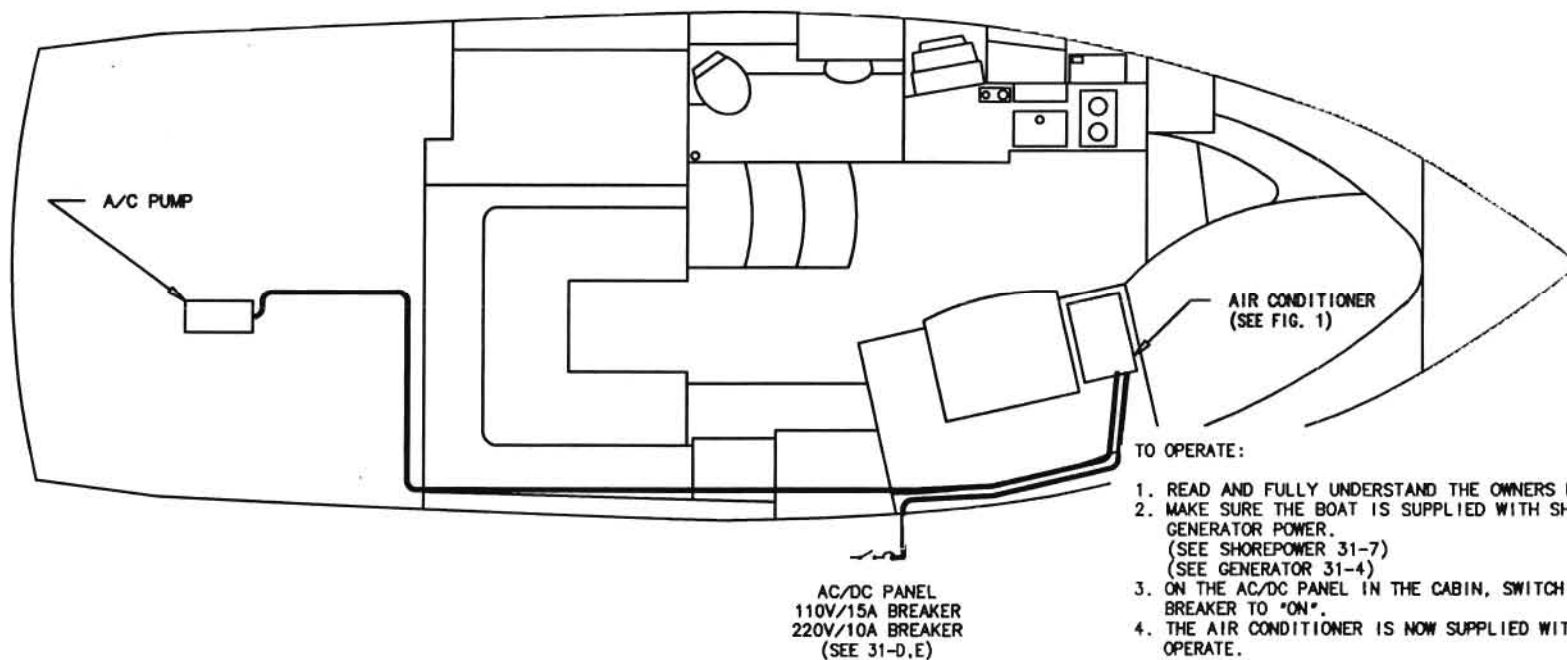
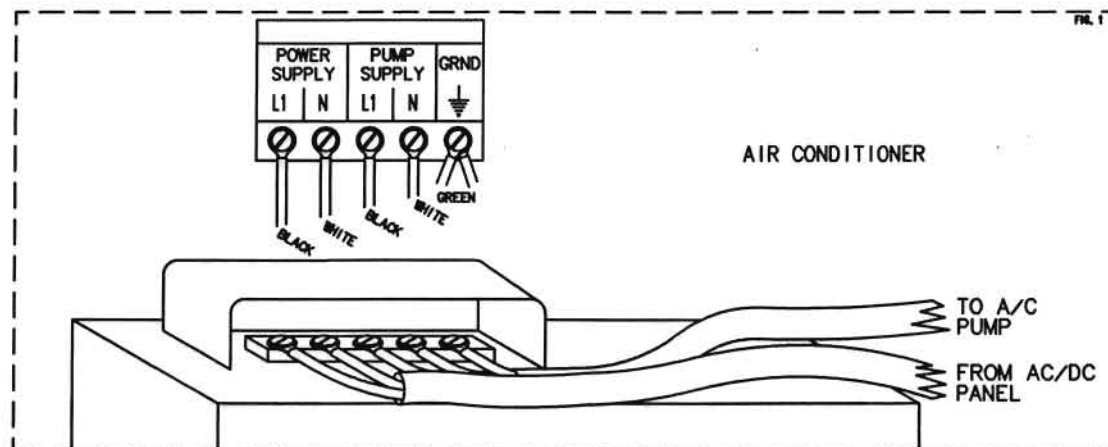
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LEGEND

BREAKER
SWITCH



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
(SEE SHOREPOWER 31-7)
(SEE GENERATOR 31-4)
3. ON THE AC/DC PANEL IN THE CABIN, SWITCH THE "AIR COND." BREAKER TO "ON".
4. THE AIR CONDITIONER IS NOW SUPPLIED WITH POWER AND READY TO OPERATE.



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AIR CONDITIONER

THUNDERBIRD PRODUCTS

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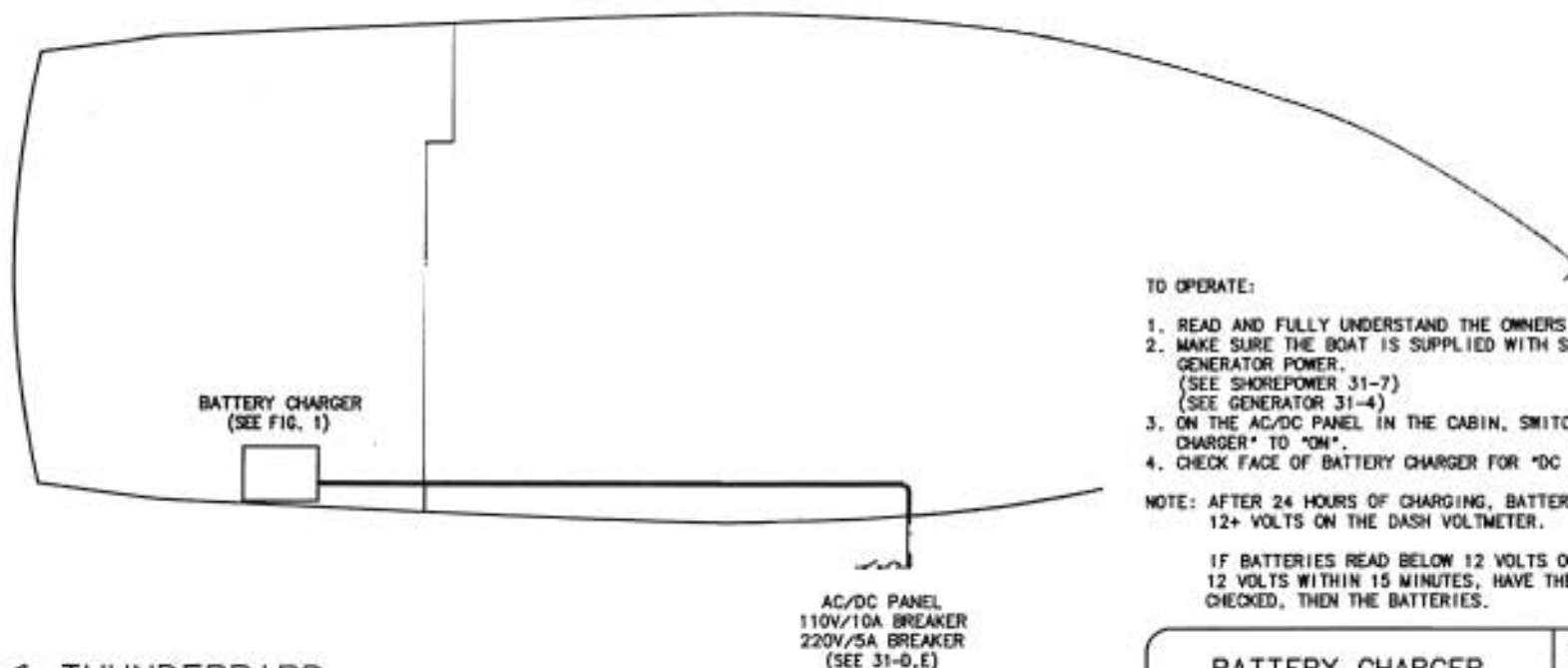
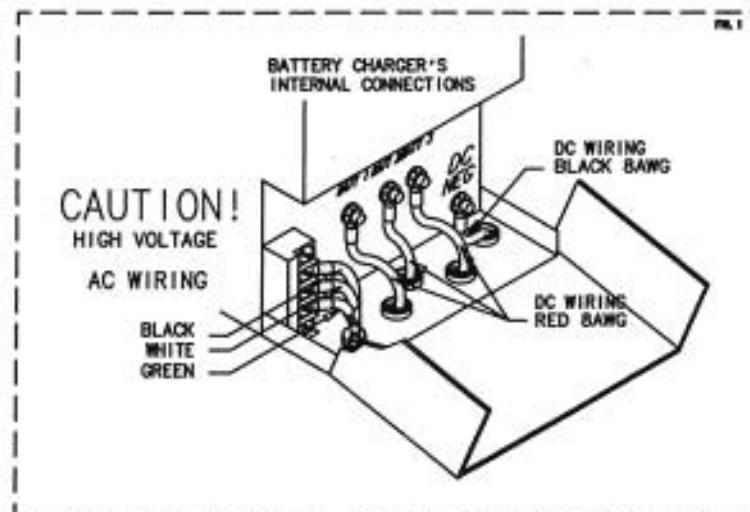
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IN. 31-

DATE: 12/25/95

LEGEND

BREAKER
SWITCH



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
(SEE SHOREPOWER 31-7)
(SEE GENERATOR 31-4)
3. ON THE AC/DC PANEL IN THE CABIN, SWITCH THE "BATTERY CHARGER" TO "ON".
4. CHECK FACE OF BATTERY CHARGER FOR "DC AVAILABLE" LIGHT.

NOTE: AFTER 24 HOURS OF CHARGING, BATTERIES SHOULD READ 12+ VOLTS ON THE DASH VOLTMETER.

IF BATTERIES READ BELOW 12 VOLTS OR DROP BELOW 12 VOLTS WITHIN 15 MINUTES, HAVE THE VOLTMETER CHECKED, THEN THE BATTERIES.



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BATTERY CHARGER

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LEGEND

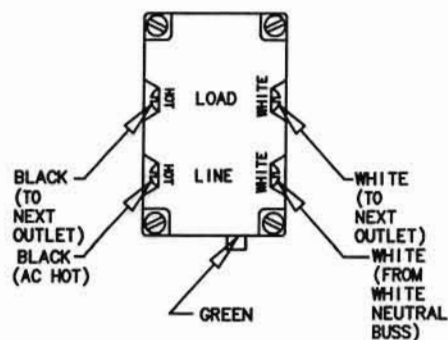
BREAKER SWITCH



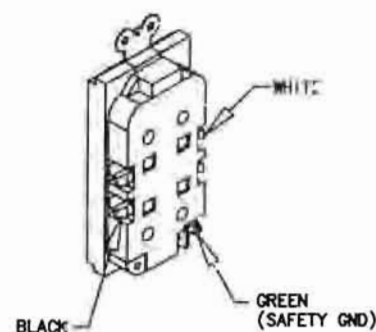
GFCI OUTLET



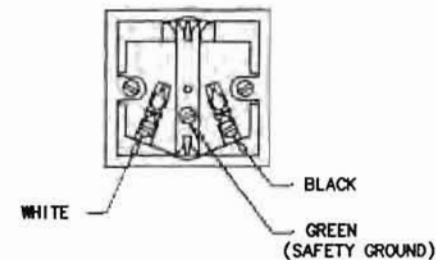
OUTLET



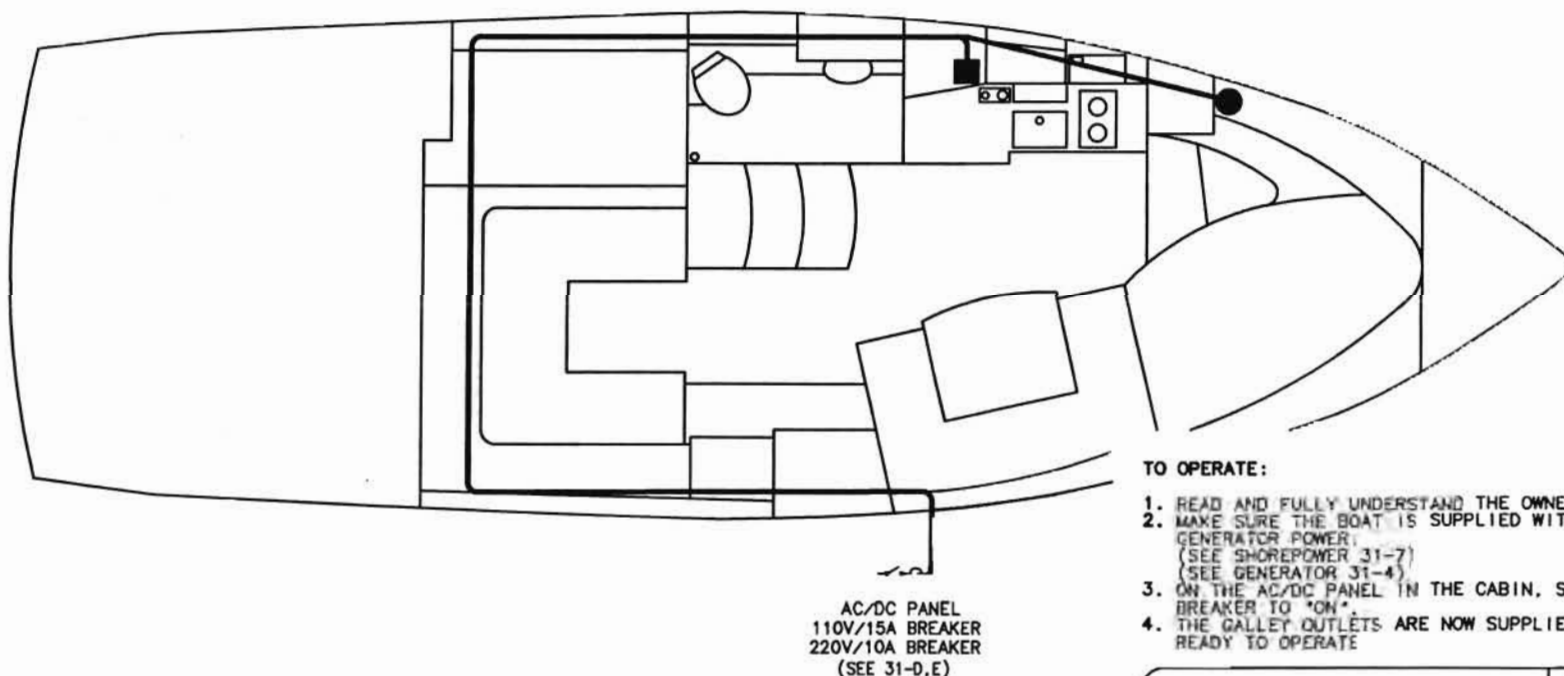
110V AC GFCI OUTLET



110V AC OUTLET



220V AC OUTLET



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER. (SEE SHOREPOWER 31-7) (SEE GENERATOR 31-4)
3. ON THE AC/DC PANEL IN THE CABIN, SWITCH THE "GALLEY" BREAKER TO "ON".
4. THE GALLEY OUTLETS ARE NOW SUPPLIED WITH POWER AND READY TO OPERATE



THUNDERBIRD
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GALLEY OUTLETS

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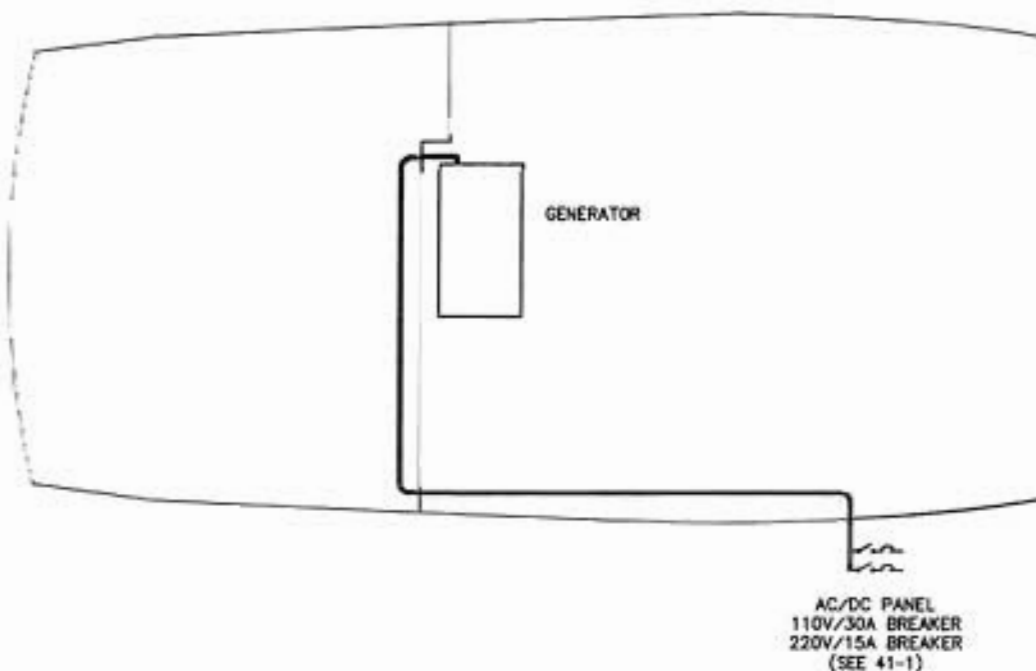
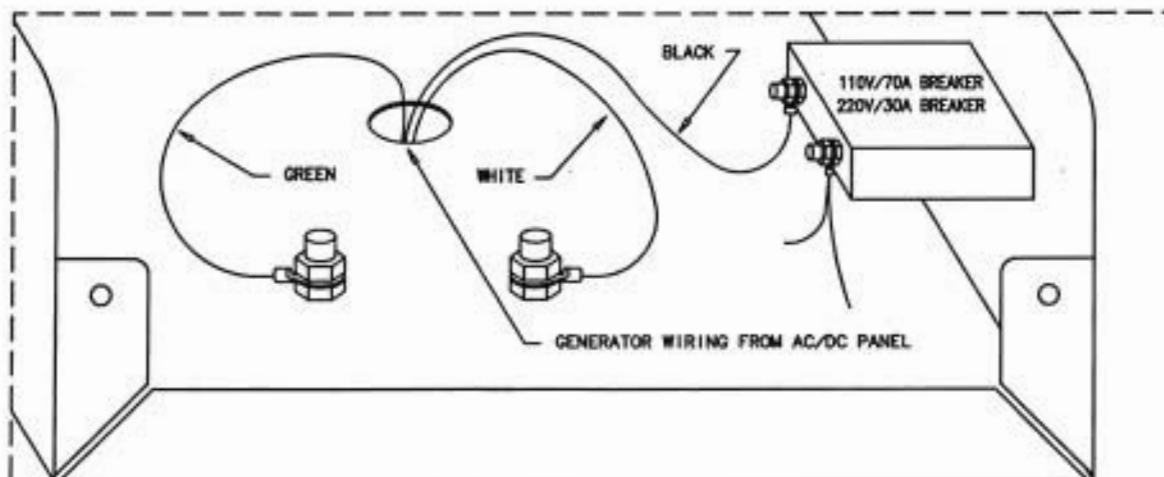
NO.: 31-3

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LEGEND

BREAKER
SWITCH



AFTER READING AND UNDERSTANDING THE GENERATOR OPERATORS
MANUAL:
TO OPERATE GENERATOR FROM THE REMOTE SWITCH:

1. TEST THE CARBON MONOXIDE DETECTOR AND BE CERTAIN IT IS OPERATING PROPERLY.
2. ON THE AC/DC PANEL IN THE CABIN, SWITCH THE "BLOWERS" BREAKER TO "ON" AND RUN THEM A MINIMUM OF FOUR (4) MINUTES.
3. PLACE THE "SHOREPOWER #1/GENERATOR" SLIDE BAR IN THE "SHOREPOWER #1" POSITION.
4. SWITCH ALL AC CIRCUIT BREAKERS TO THE "OFF" POSITION.
5. PRESS AND HOLD THE GENERATOR "START" SWITCH.
NOTE: DO NOT CRANK THE GENERATOR ENGINE CONTINUOUSLY FOR MORE THAN TEN (10) SECONDS AT A TIME.
6. AFTER THE GENERATOR IS "RUNNING", PLACE THE "SHOREPOWER #1/GENERATOR" SLIDE BAR IN THE "GENERATOR" POSITION.
7. PLACE THE "SHOREPOWER #2/TRANSFER" SLIDE BAR IN THE "TRANSFER" POSITION.
8. SWITCH "ON" THE AC CIRCUIT BREAKERS (ONE AT A TIME) FOR THE ITEMS TO BE USED.



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GENERATOR

THUNDERBIRD PRODUCTS

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DATE: 12/25/95

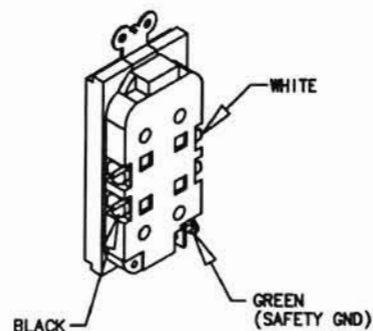
(919) 774-0111

LEGEND

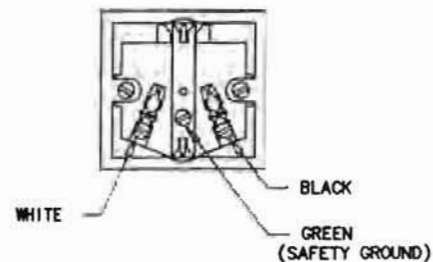
BREAKER
SWITCH



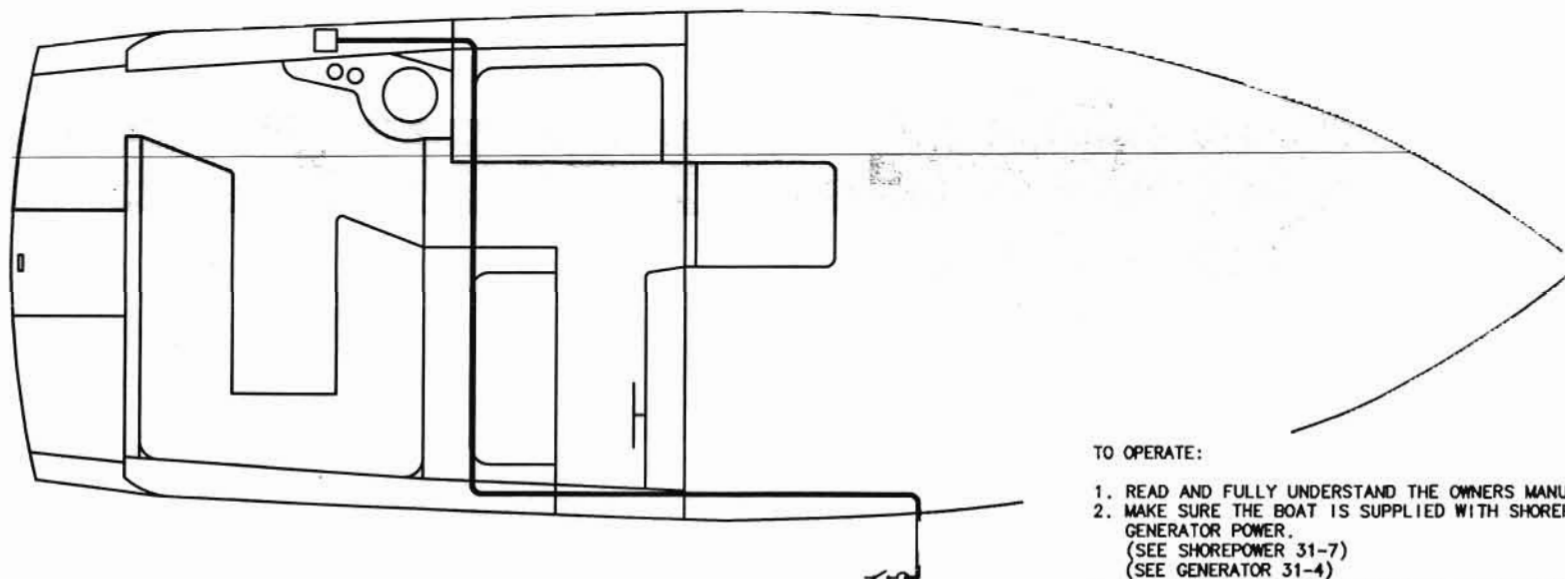
OUTLET



110V AC OUTLET



220V AC OUTLET



AC/DC PANEL
110V/10A BREAKER
220V/5A BREAKER
(SEE 31-0,E)

TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
(SEE SHOREPOWER 31-7)
(SEE GENERATOR 31-4)
3. ON THE AC/DC PANEL IN THE CABIN, SWITCH THE 'ICE MAKER' BREAKER TO 'ON'.
4. THE ICE MAKER IS NOW SUPPLIED WITH POWER AND READY TO OPERATE.



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ICE MAKER

THUNDERBIRD PRODUCTS

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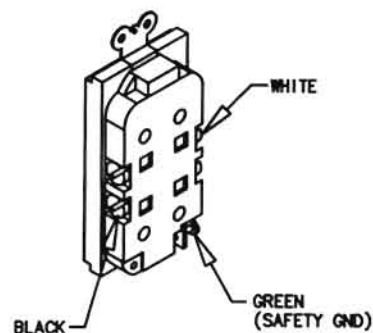
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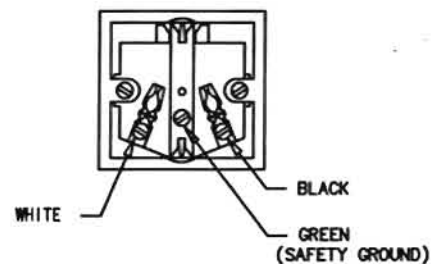
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LEGEND

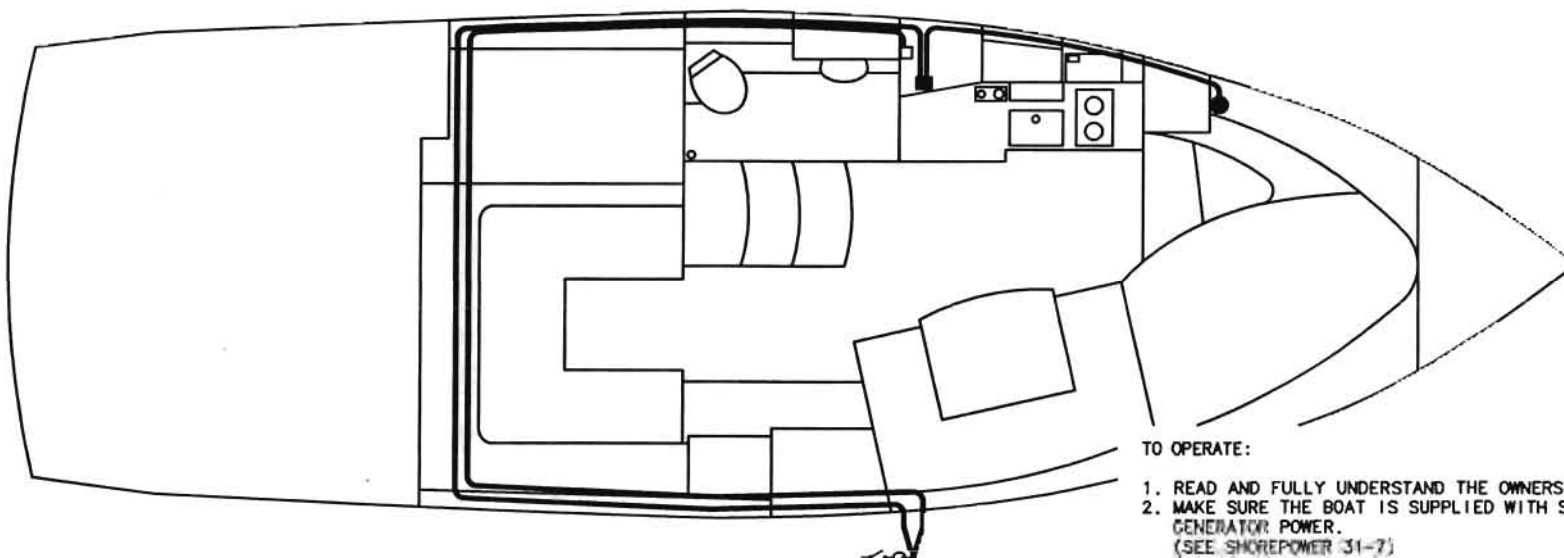
BREAKER SWITCH	
OUTLET	
GFCI OUTLET	
JUNCTION BOX	



110V AC OUTLET



220V AC OUTLET



AC/DC PANEL
110V/15A BREAKER
220V/10A BREAKER
(SEE 31-D,E)

TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
(SEE SHOREPOWER 31-7)
(SEE GENERATOR 31-4)
3. ON THE AC/DC PANEL IN THE CABIN, SWITCH THE "GALLEY" BREAKER TO "ON".
4. THE GALLEY OUTLETS ARE NOW SUPPLIED WITH POWER AND READY TO OPERATE.



THUNDERBIRD
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GALLEY		THUNDERBIRD PRODUCTS
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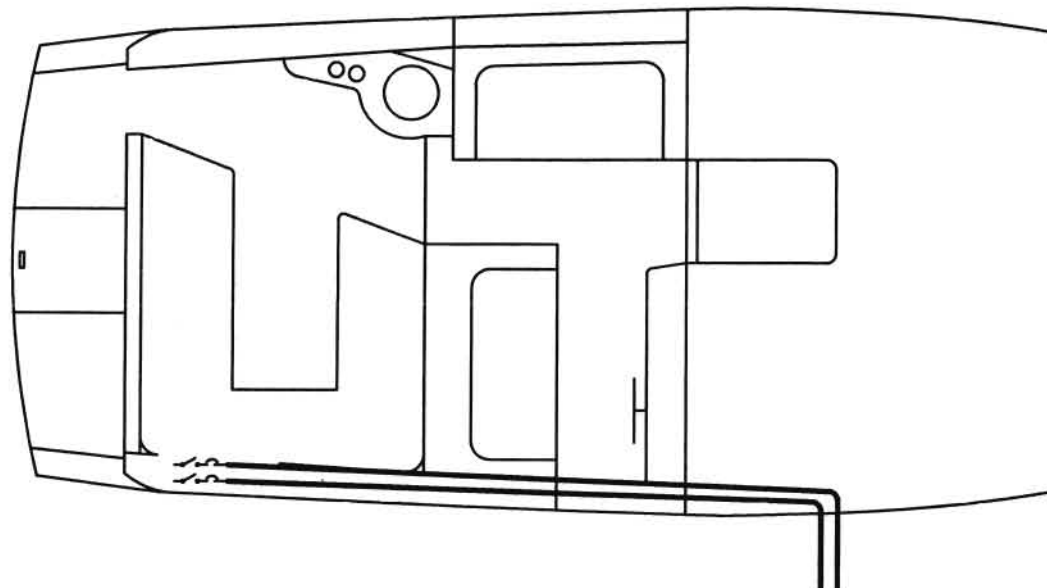
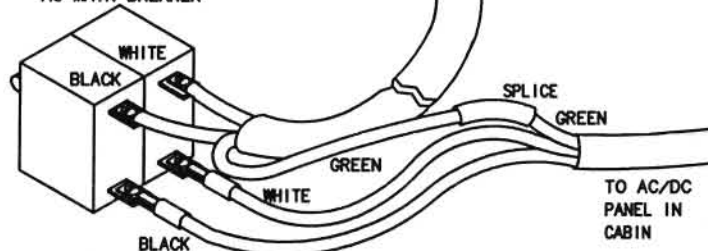
LEGEND

BREAKER
SWITCH

30A 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 SPLICE.

AC MAIN BREAKER



AC/DC PANEL
110V/30A BREAKER
220V/16A BREAKER
(SEE 31-D,E)



(READ THIS COMPLETELY BEFORE OPERATING)
TO OPERATE:

1. BEFORE PLUGGING INTO SHOREPOWER, SWITCH "OFF" ALL AC EQUIPMENT AND MAIN BREAKERS ON AC/DC PANEL IN CABIN. ALSO SWITCH "OFF" SHOREPOWER MAIN BREAKERS BEHIND COCKPIT AFT LOUNGE SEAT (STBD SIDE).
2. PLUG BOATS SHOREPOWER CORD(S) INTO SHOREPOWER.
3. SWITCH SHOREPOWER MAIN BREAKERS TO "ON" BEHIND AFT LOUNGE SEAT (STBD SIDE).
4. IN CABIN, SWITCH SHOREPOWER BREAKERS TO "ON".
WARNING!
IF REVERSED POLARITY LIGHT IS ILLUMINATED:
- DO NOT TOUCH ELECTRICAL APPLIANCES
- LEAVE SHIP IMMEDIATELY
- DISCONNECT ALL SHOREPOWER
ALSO:
- CONTACT MARINA TO HAVE SHOREPOWER TESTED FOR REVERSED POLARITY
- CONTACT FORMULA'S TECHNICAL ASSISTANCE GROUP FOR ADDITIONAL ASSISTANCE.
5. WHEN THE MAIN BREAKERS OR MAIN BREAKER #1 AND TRANSFER ARE "ON", AND NO REVERSE POLARITY LIGHT IS ILLUMINATED, ALL AC EQUIPMENT BREAKERS ARE SUPPLIED WITH POWER.
6. EQUIPMENT IS OPERATIONAL WHEN THE BREAKER BEARING THE EQUIPMENTS NAME IS "ON".



THUNDERBIRD
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SHOREPOWER #1, #2

THUNDERBIRD PRODUCTS

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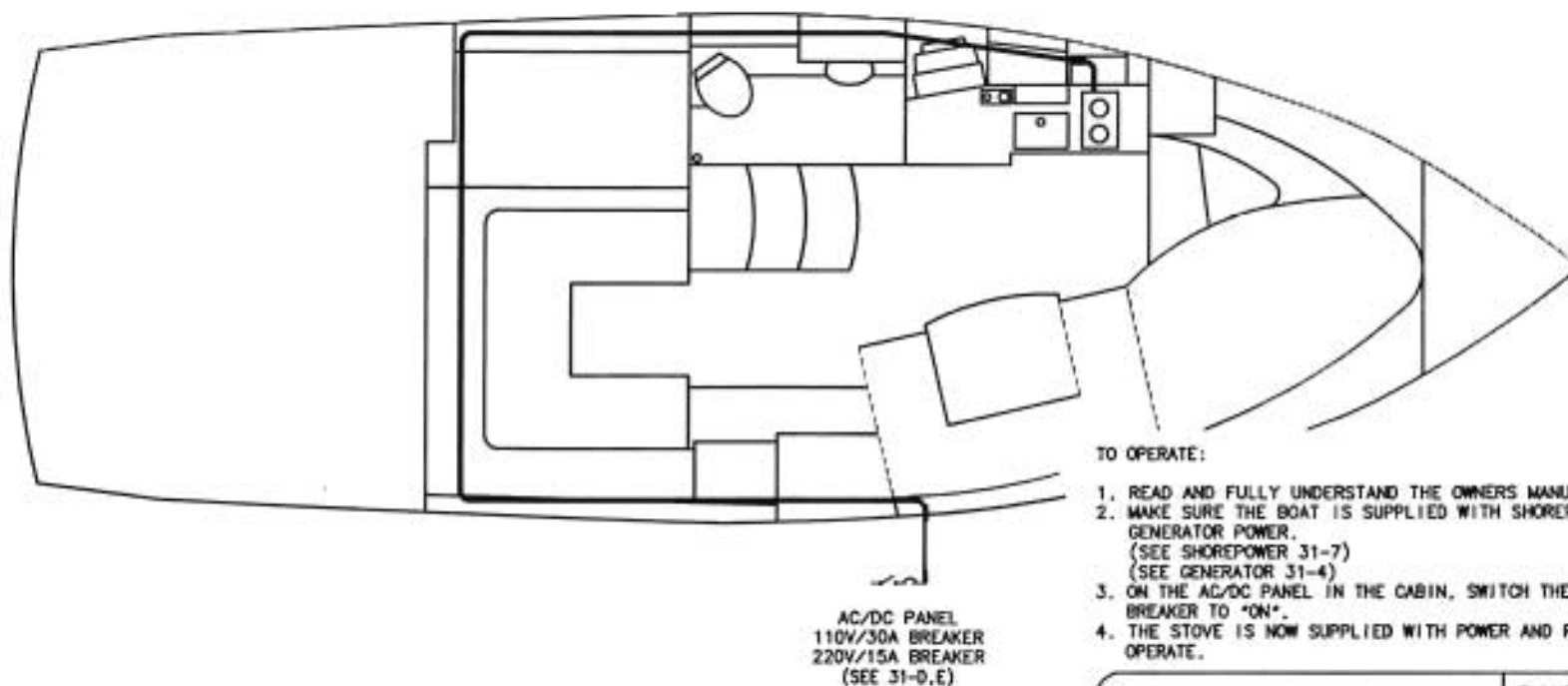
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DATE: 12/25/95

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LEGEND

BREAKER
SWITCH



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
(SEE SHOREPOWER 31-7)
(SEE GENERATOR 31-4)
3. ON THE AC/DC PANEL IN THE CABIN, SWITCH THE "STOVE" BREAKER TO "ON".
4. THE STOVE IS NOW SUPPLIED WITH POWER AND READY TO OPERATE.



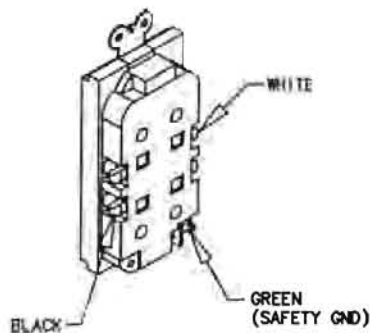
THUNDERBIRD
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STOVE		THUNDERBIRD PRODUCTS
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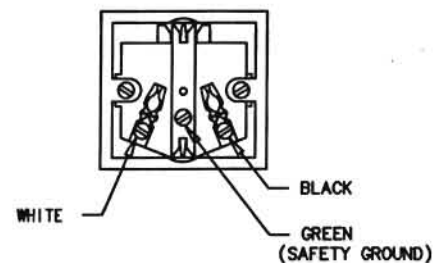
LEGEND

BREAKER
SWITCH

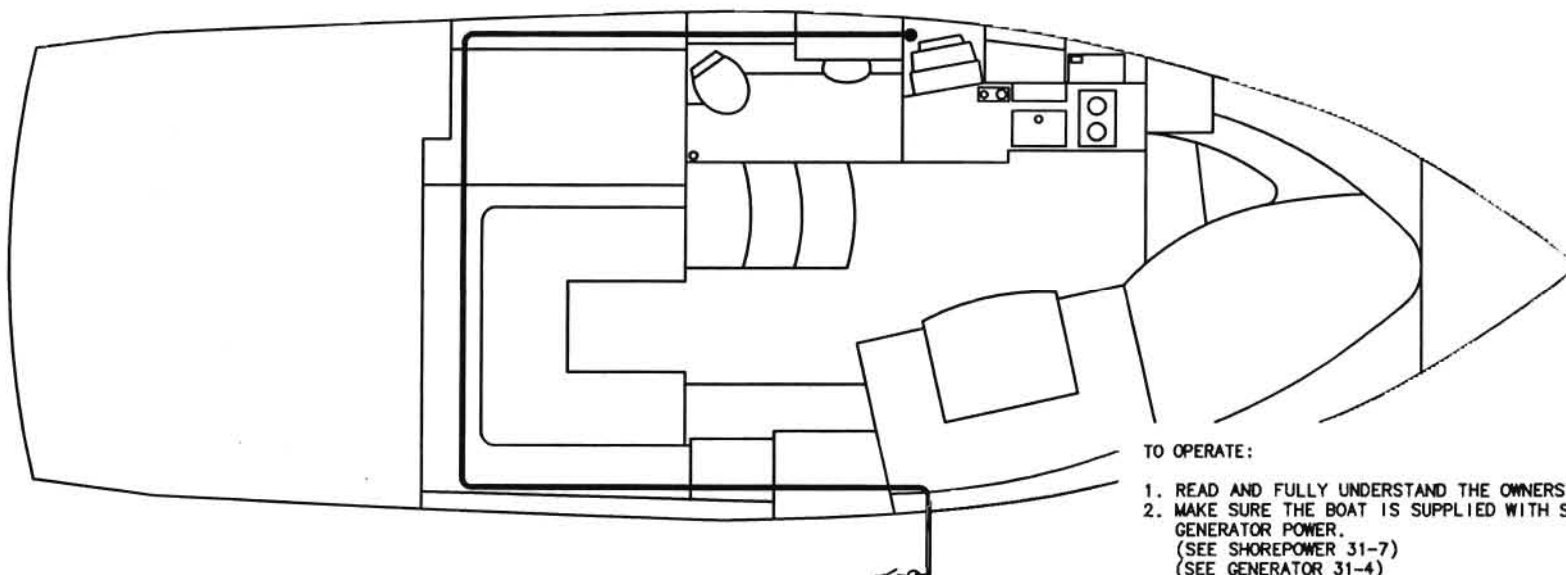
OUTLET



110V AC OUTLET



220V AC OUTLET



AC/DC PANEL
110V/10A BREAKER
220V/10A BREAKER
(SEE 31-0,E)

TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
(SEE SHOREPOWER 31-7)
(SEE GENERATOR 31-4)
3. ON THE AC/DC PANEL IN THE CABIN, SWITCH THE "TV/VCR" BREAKER TO "ON".
4. THE TV/VCR IS NOW SUPPLIED WITH POWER AND READY TO OPERATE.



THUNDERBIRD
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ENGINEERING

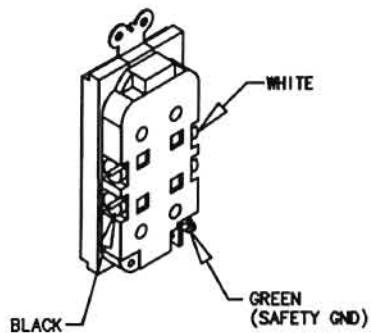
TV/VCR		THUNDERBIRD PRODUCTS
		P.O. BOX 1003
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LEGEND

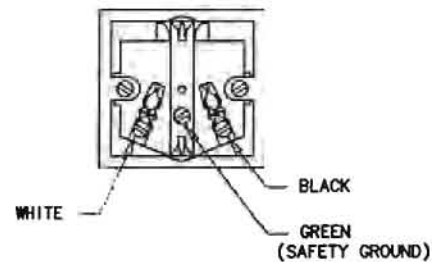
BREAKER
SWITCH



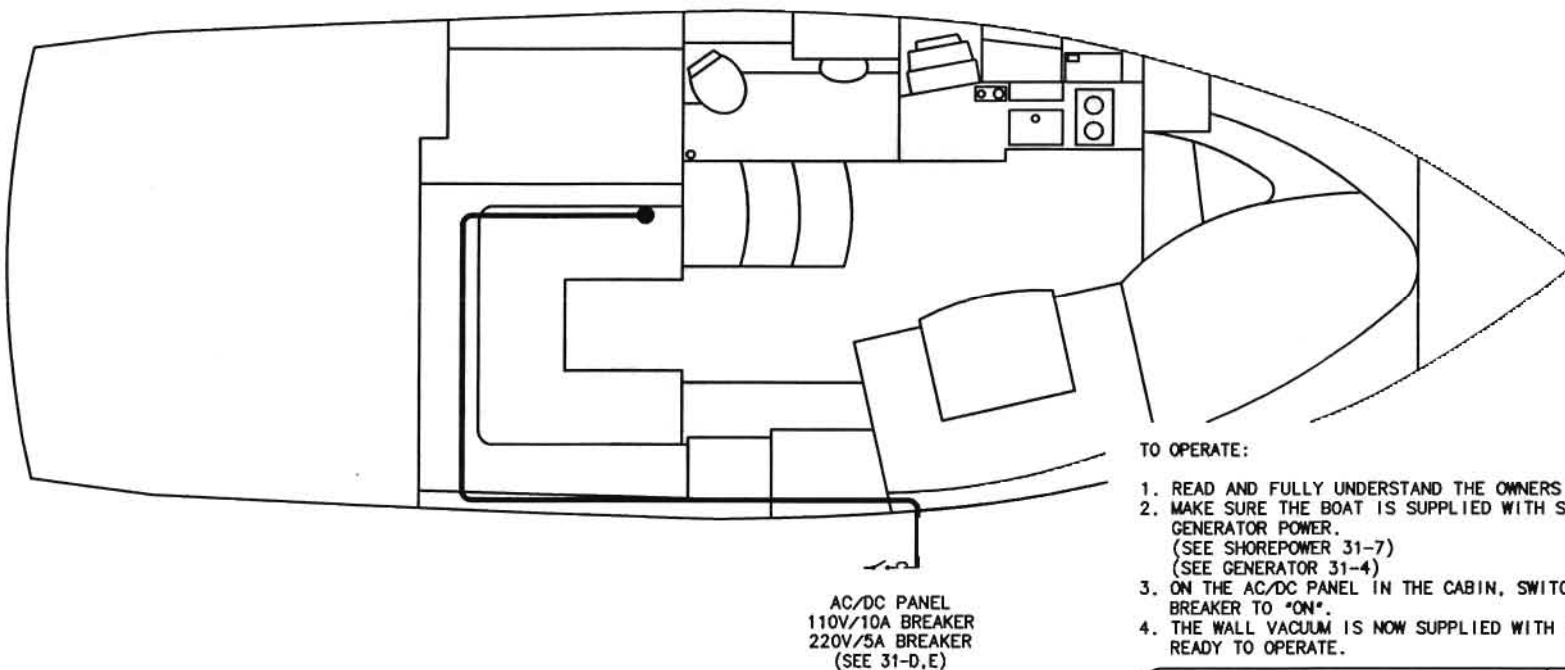
OUTLET



110V AC OUTLET



220V AC OUTLET



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
(SEE SHOREPOWER 31-7)
(SEE GENERATOR 31-4)
3. ON THE AC/DC PANEL IN THE CABIN, SWITCH THE "WALL VACUUM" BREAKER TO "ON".
4. THE WALL VACUUM IS NOW SUPPLIED WITH POWER AND READY TO OPERATE.



THUNDERBIRD
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WALL VACUUM

THUNDERBIRD PRODUCTS

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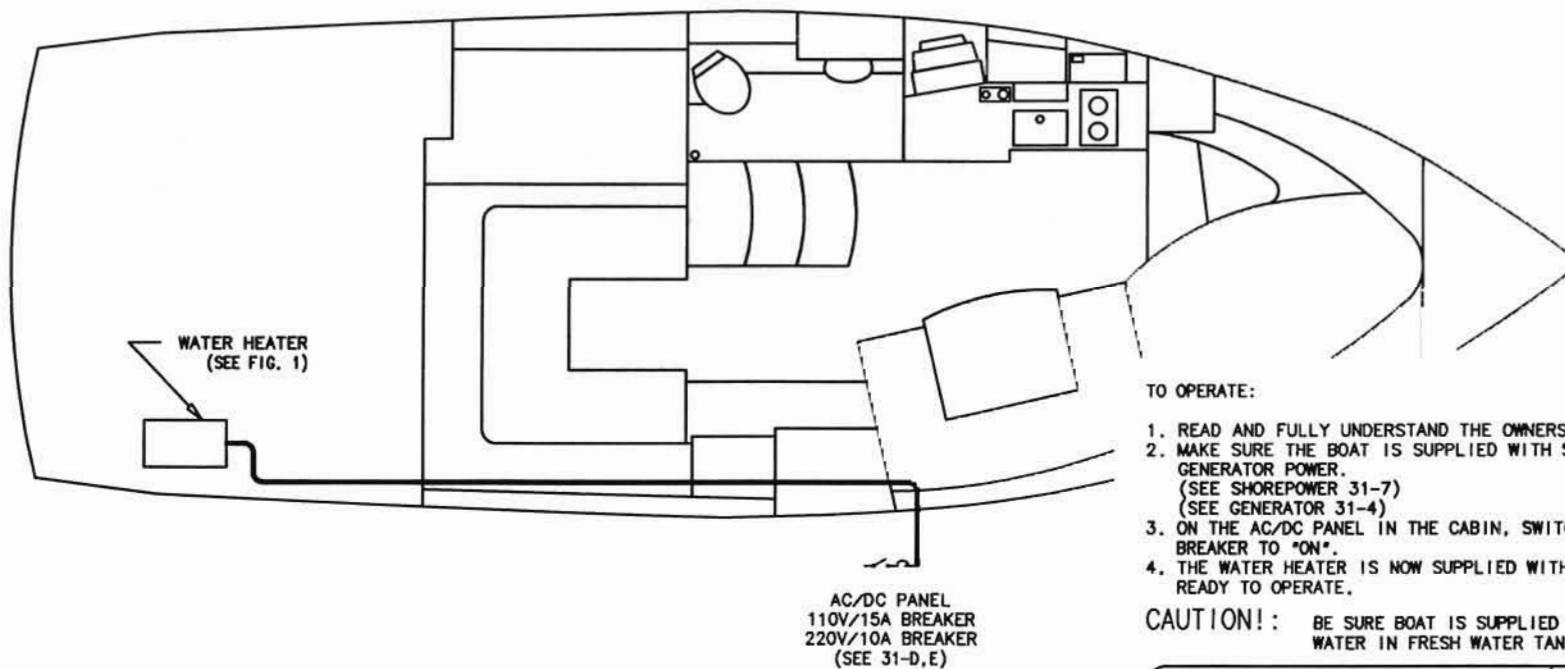
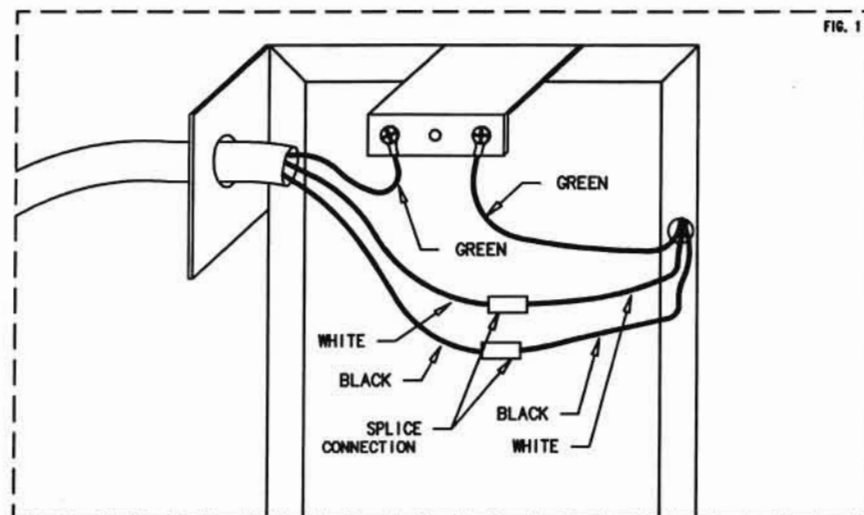
REV. 31 10

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LEGEND

BREAKER
SWITCH



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
(SEE SHOREPOWER 31-7)
(SEE GENERATOR 31-4)
3. ON THE AC/DC PANEL IN THE CABIN, SWITCH THE "WATER HEATER" BREAKER TO "ON".
4. THE WATER HEATER IS NOW SUPPLIED WITH POWER AND READY TO OPERATE.

CAUTION!: BE SURE BOAT IS SUPPLIED WITH WATER IN FRESH WATER TANK.

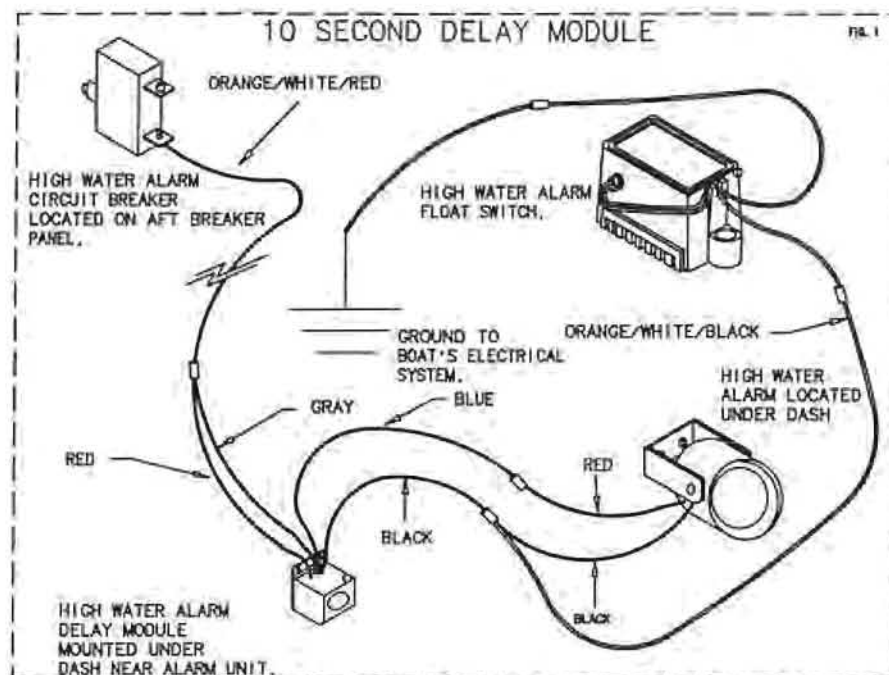


THUNDERBIRD
PRODUCTS
ENGINEERING

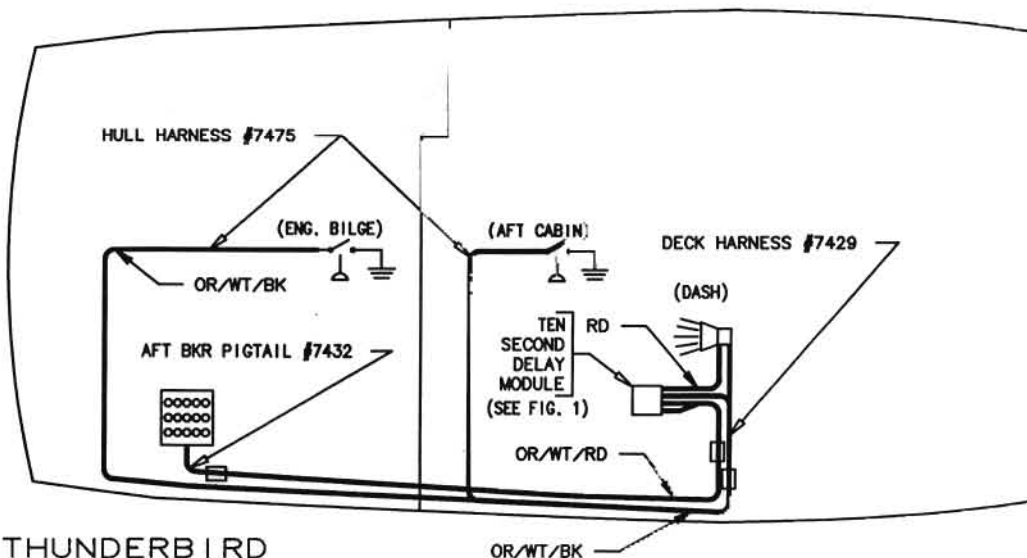
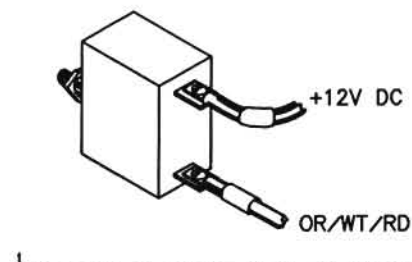
WATER HEATER		THUNDERBIRD PRODUCTS
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LEGEND

BREAKER SWITCH	
ALARM SIREN	
BREAKER PANEL	
PLUG	
FLOAT SWITCH	
DC GROUND	



HIGH WATER BKR 2A
(AFT BKR PANEL)
(REAR VIEW)



TO OPERATE:

- ON THE AFT BREAKER PANEL, BEHIND THE STBD SIDE LOUNGE SEAT IN THE COCKPIT, THE "CONST PWR" BREAKER MUST BE PUSHED IN (CLOSED).

NOTE: THE BATTERY SELECTOR SWITCH DOES NOT NEED TO BE SWITCHED TO "ON" FOR THE HIGH WATER ALARM TO WORK.

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

WHEN ALARM SOUNDS:

- CHECK TRANSOM SEALS AND DRAINS FOR LEAKAGE.
- CHECK BATTERY LEVELS. THE BILGE WILL NOT OPERATE WHEN THE BATTERY IS BELOW FULL CHARGE.
- CONSULT MARINA'S SERVICE DEPARTMENT OR CONTACT FORMULA'S TECHNICAL ASSISTANCE GROUP.



THUNDERBIRD
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ALARM, HIGH WATER

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DATE: 12/25/95

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LEGEND

BREAKER
SWITCH



BREAKER
PANEL



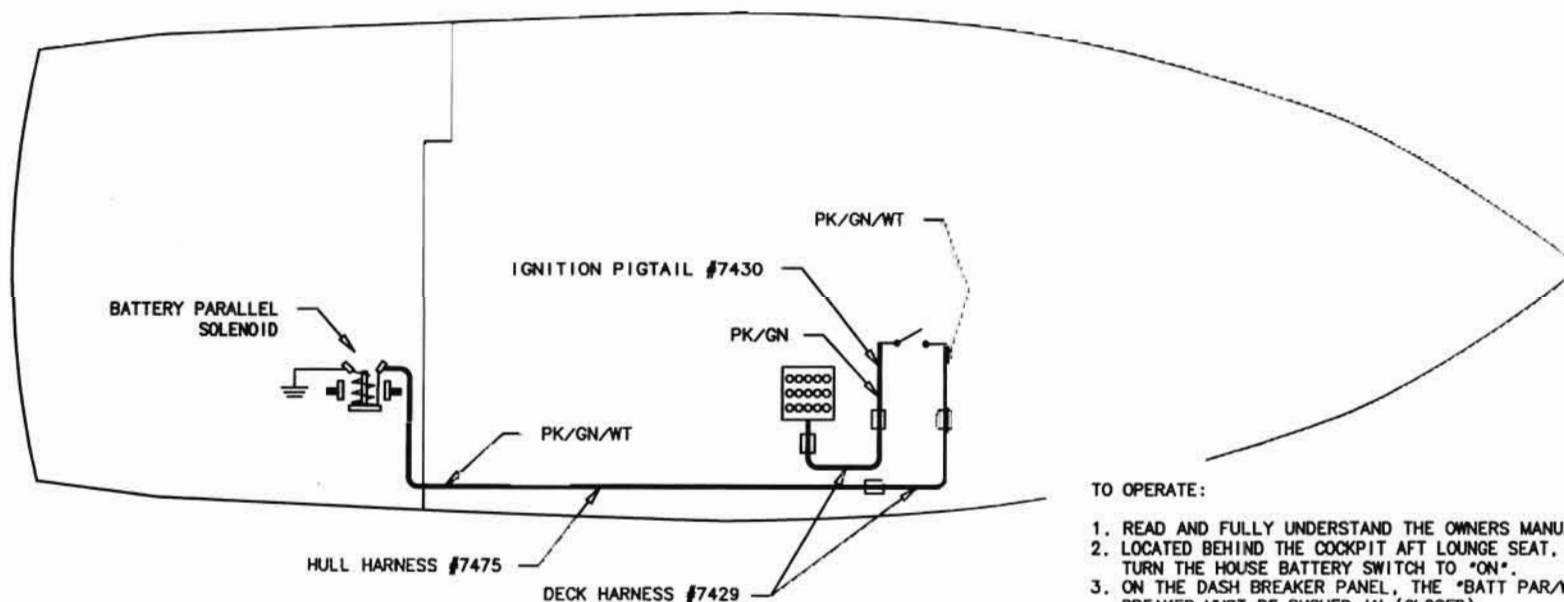
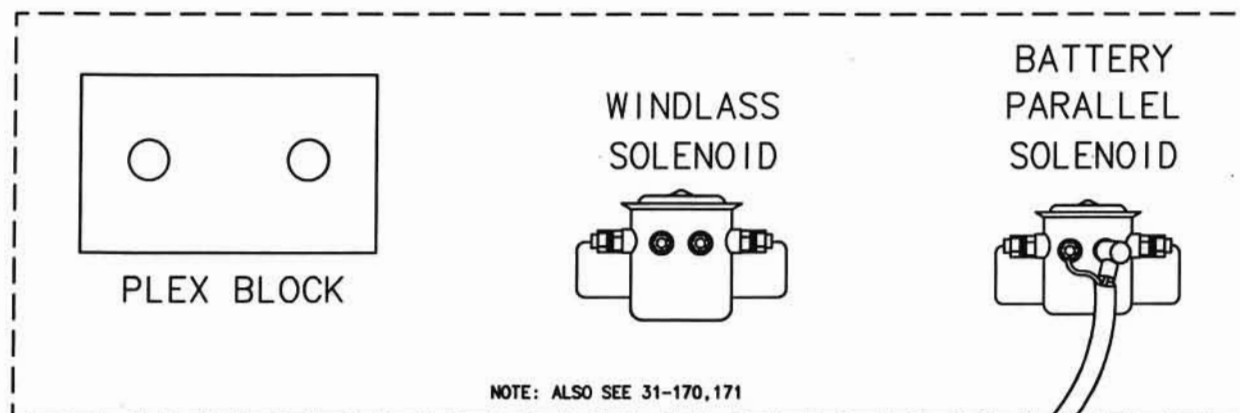
PLUG



SWITCH



DC GROUND



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE DASH BREAKER PANEL, THE "BATT PAR/WNDLS" BREAKER MUST BE PUSHED IN (CLOSED).
4. THE BATTERY PARALLEL SYSTEM CAN NOW BE OPERATED BY THE "BATT PAR" SWITCH ON THE IGNITION PANEL.



THUNDERBIRD
PRODUCTS
ENGINEERING

BATTERY PARALLEL

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

NO.: 31-120

DATE: 12/25/95

(219) 724-0111

LEGEND

BREAKER
SWITCH



BREAKER
PANEL



BLOWER



PLUG



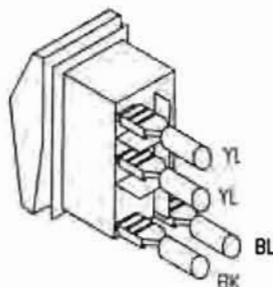
SWITCH



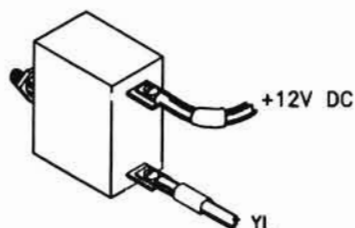
DC GROUND



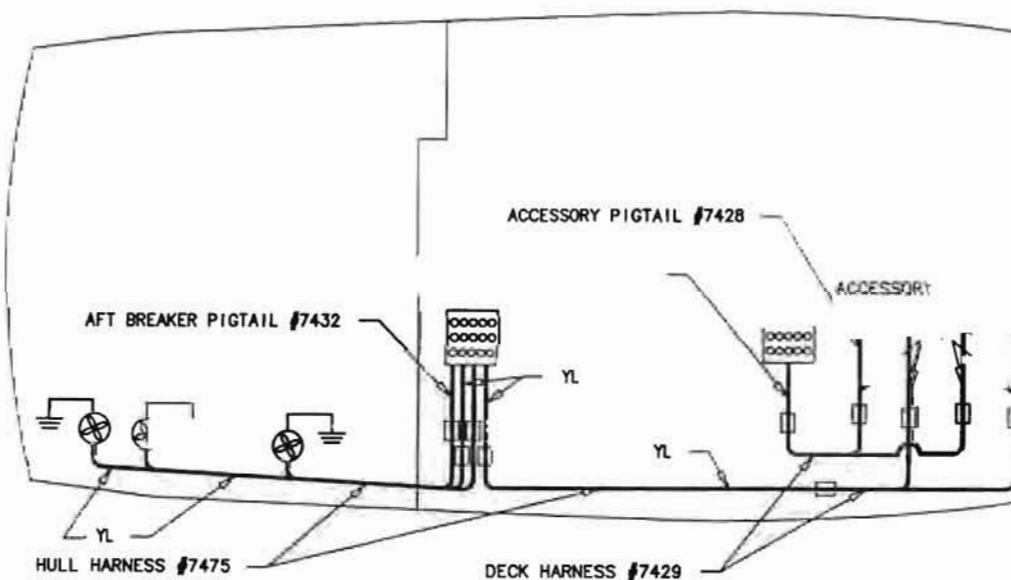
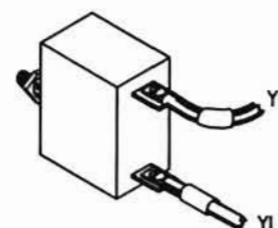
BLOWER SWITCH
(ACCESSORY PANEL)
(REAR VIEW)



BILGE BLOWER BKR 15A
(DASH BKR PANEL)
(REAR VIEW)



(3) BLOWER BKR 5A
(AFT BKR PANEL)
(REAR VIEW)



WARNING!

GASOLINE VAPORS CAN EXPLODE. BEFORE STARTING ENGINES:

- CHECK ENGINE BILGE FOR GASOLINE VAPORS.
 - OPERATE BLOWERS FOR 4 MINUTES
- ALWAYS RUN BLOWERS WHEN BELOW CRUISING SPEED.

TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE DASH BREAKER PANEL, THE "BILGE BLOWER" BREAKER MUST BE PUSHED IN (CLOSED).
4. ON THE AFT BREAKER PANEL, ALL THREE (3) "BLOWER" BREAKERS MUST BE PUSHED IN (CLOSED).
5. THE BILGE BLOWERS CAN NOW BE OPERATED BY THE "BLOWER" SWITCH ON THE DASH ACCESSORY PANEL.
6. THE BILGE BLOWERS CAN ALSO BE OPERATED BY SWITCHING THE "BLOWER" BREAKER TO "ON" ON THE AC/DC PANEL IN THE CABIN.



THUNDERBIRD
PRODUCTS
ENGINEERING

BLOWERS, BILGE

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

31-130

10/1/75

(10/1/75)

LEGEND

BREAKER
PANEL



BLOWER



SWITCH



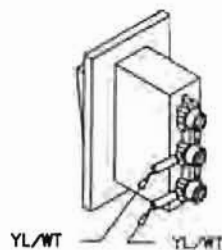
PLUG



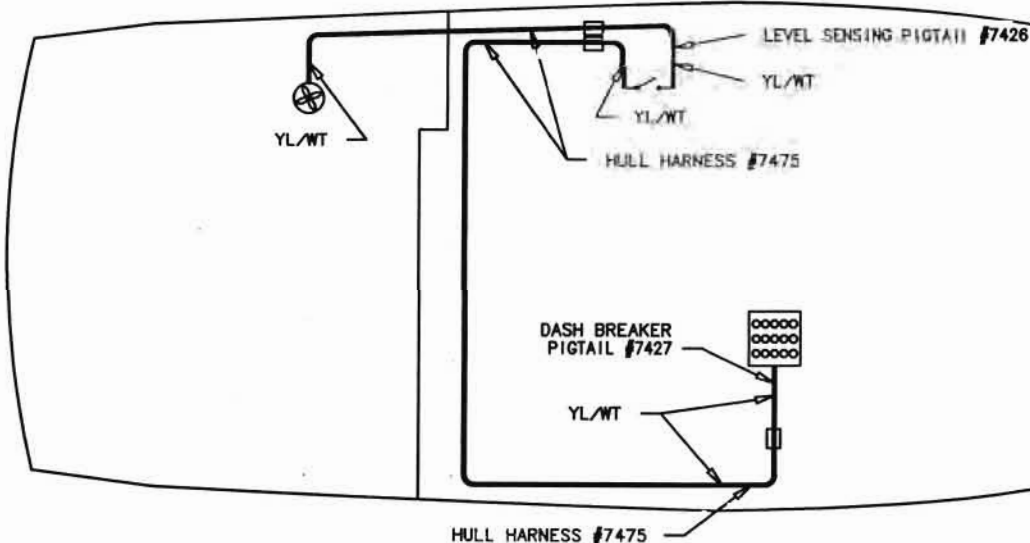
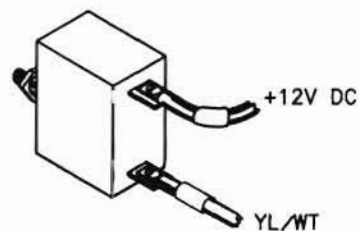
DC GROUND



HEAD BLOWER SWITCH
(REAR VIEW)



BLOWER BKR 5A
(DASH BKR PANEL)
(REAR VIEW)



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE DASH BREAKER PANEL, THE "BLOWER" BREAKER MUST BE PUSHED IN (CLOSED).
4. THE HEAD BLOWER CAN NOW BE OPERATED BY THE HEAD BLOWER SWITCH IN THE HEAD.



THUNDERBIRD
PRODUCTS
ENGINEERING

BLOWERS, HEAD

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

NO.: 31- 140

DATE: 12/25/95

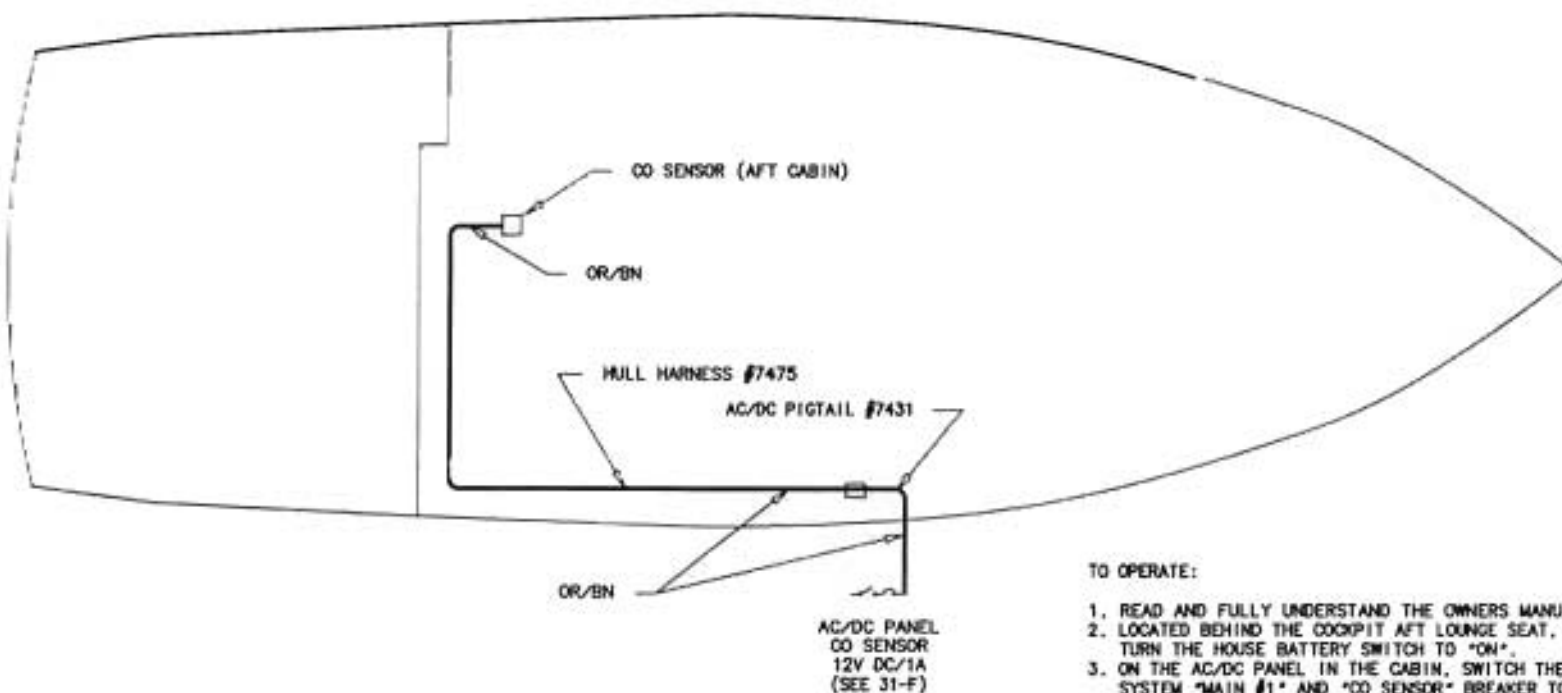
(219) 774-9111

LEGEND

BREAKER
SWITCH



PLUG



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE AC/DC PANEL IN THE CABIN, SWITCH THE 12V DC SYSTEM "MAIN #1" AND "CO SENSOR" BREAKER TO "ON".
4. CHECK THE CO SENSOR (AFT CABIN) TO BE SURE THE GREEN POWER "ON" INDICATOR IS ILLUMINATED.
5. AFTER THE TEN (10) MINUTE WARM-UP PERIOD, PRESS THE "TEST" BUTTON. IF THE SENSOR IS O.K., THE AUDIBLE ALARM WILL SOUND AND THE GREEN POWER "ON" LIGHT WILL CHANGE TO RED.



THUNDERBIRD
PRODUCTS
ENGINEERING

CO SENSOR

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

REV: 31-150

DATE: 12/25/95

(219) 724-911

LEGEND

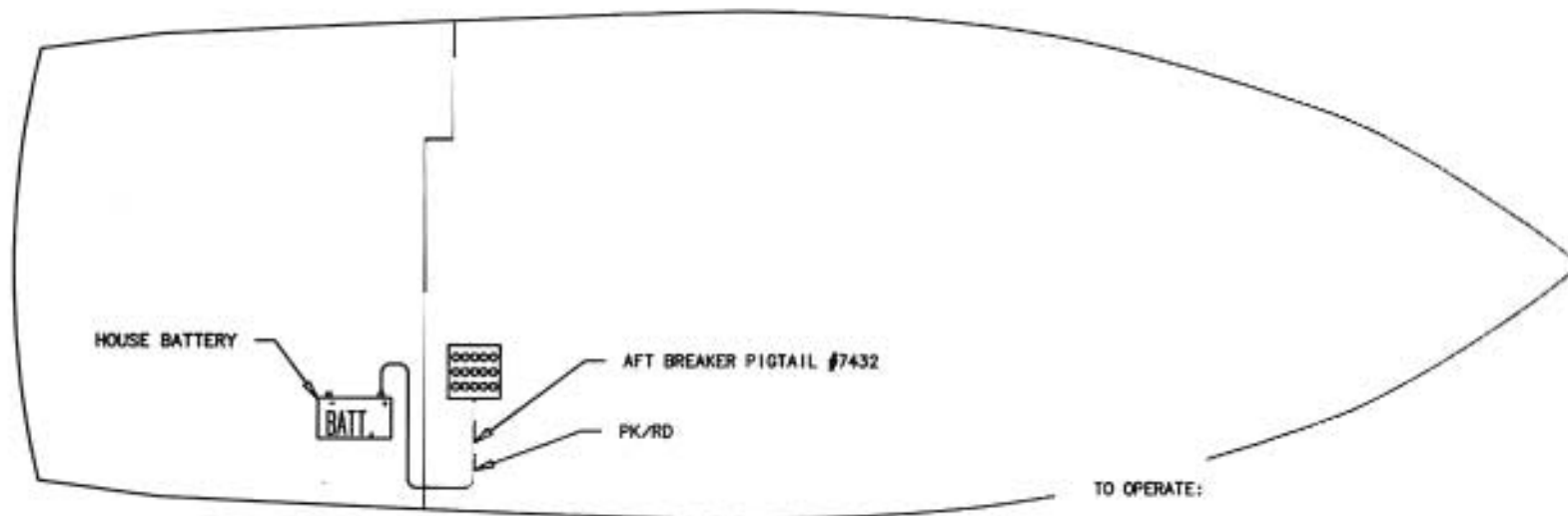
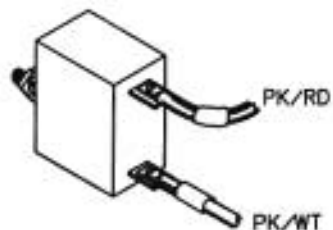
BREAKER
PANEL



BATTERY



CONSTANT POWER BKR 5A
(AFT BBKR PANEL)
(REAR VIEW)



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STRD SIDE, ON THE AFT BREAKER PANEL, THE "CONST PMR" BREAKER MUST BE PUSHED IN (CLOSED).

NOTE: CONSTANT POWER IS SUPPLIED TO THESE COMPONENTS:
- STEREO MEMORY



THUNDERBIRD
PRODUCTS
ENGINEERING

CONSTANT POWER

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 48733-5003

NO.: 31-160

DATE: 12/25/95

(219) 724-9111

LEGEND

BATTERY



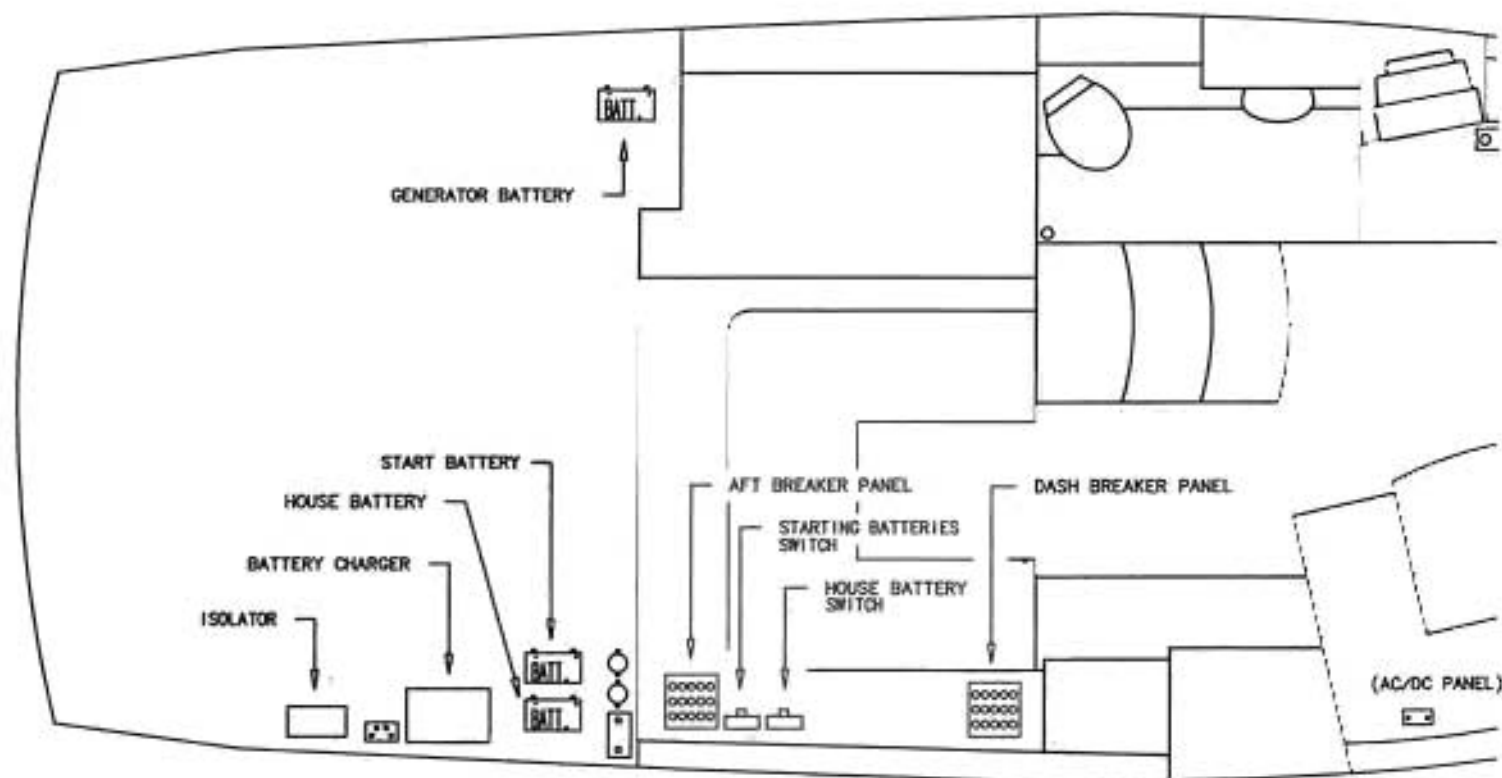
PLEX BLOCK



GROUND
BLOCK



SOLENOID



THUNDERBIRD
PRODUCTS
ENGINEERING

DC SUPPLY

MODEL: F-31 PC

DR BY: R. HANNI

REV: 31-170

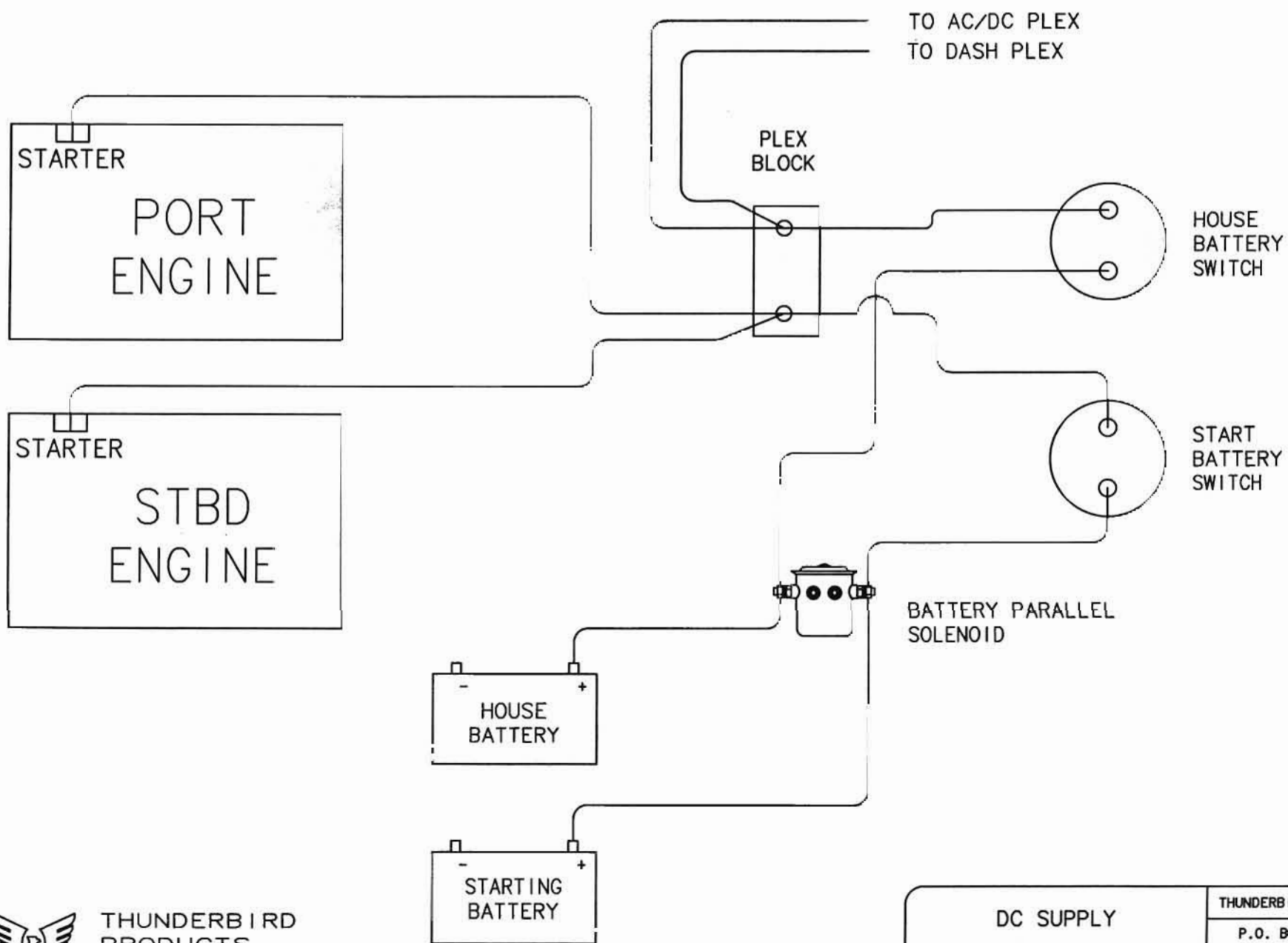
DATE: 12/25/95

THUNDERBIRD PRODUCTS

P.O. BOX 1003

DECATUR IN., 46733-5003

(219) 724-9111



THUNDERBIRD
PRODUCTS
ENGINEERING

DC SUPPLY		THUNDERBIRD PRODUCTS
		P.O. BOX 1003
MODEL: F-31 PC	DR BY: R. HANNI	DECATUR IN., 46733-5003
NO.: 31-171	DATE: 12/25/95	(219) 724-9111

LEGEND

BREAKER
PANEL



SWITCH



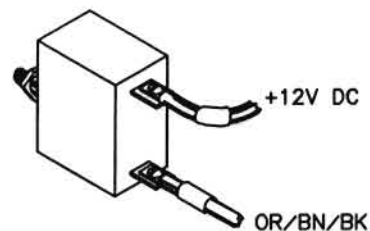
PLUG



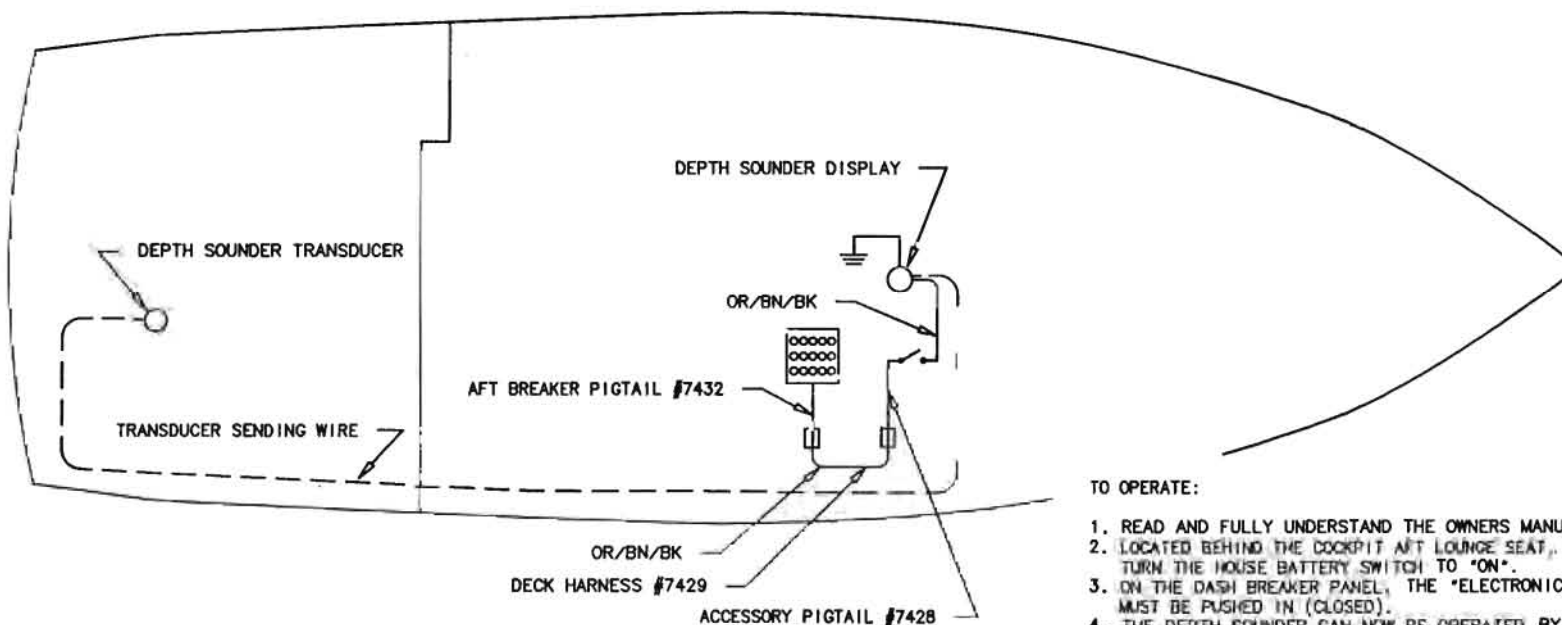
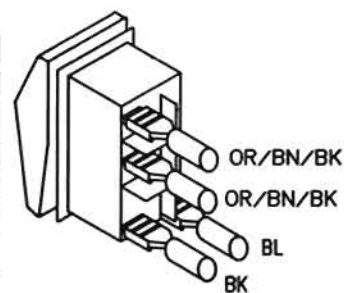
DC GROUND



ELECTRONICS BKR 10A
(DASH BKR PANEL)
(REAR VIEW)



DEPTH SNDR SWITCH
(ACCESSORY PANEL)
(REAR VIEW)



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO 'ON'.
3. ON THE DASH BREAKER PANEL, THE 'ELECTRONICS' BREAKER MUST BE PUSHED IN (CLOSED).
4. THE DEPTH SOUNDER CAN NOW BE OPERATED BY THE 'DEPTH SOUNDER' SWITCH ON THE ACCESSORY PANEL.



THUNDERBIRD
PRODUCTS
ENGINEERING

DEPTH SOUNDER

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

NO.: 31-180

DATE: 12/25/95

(219) 724-9111

LEGEND

BREAKER
PANEL



MOTOR



SWITCH



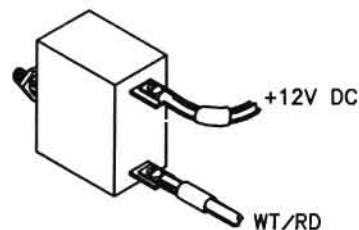
PLUG



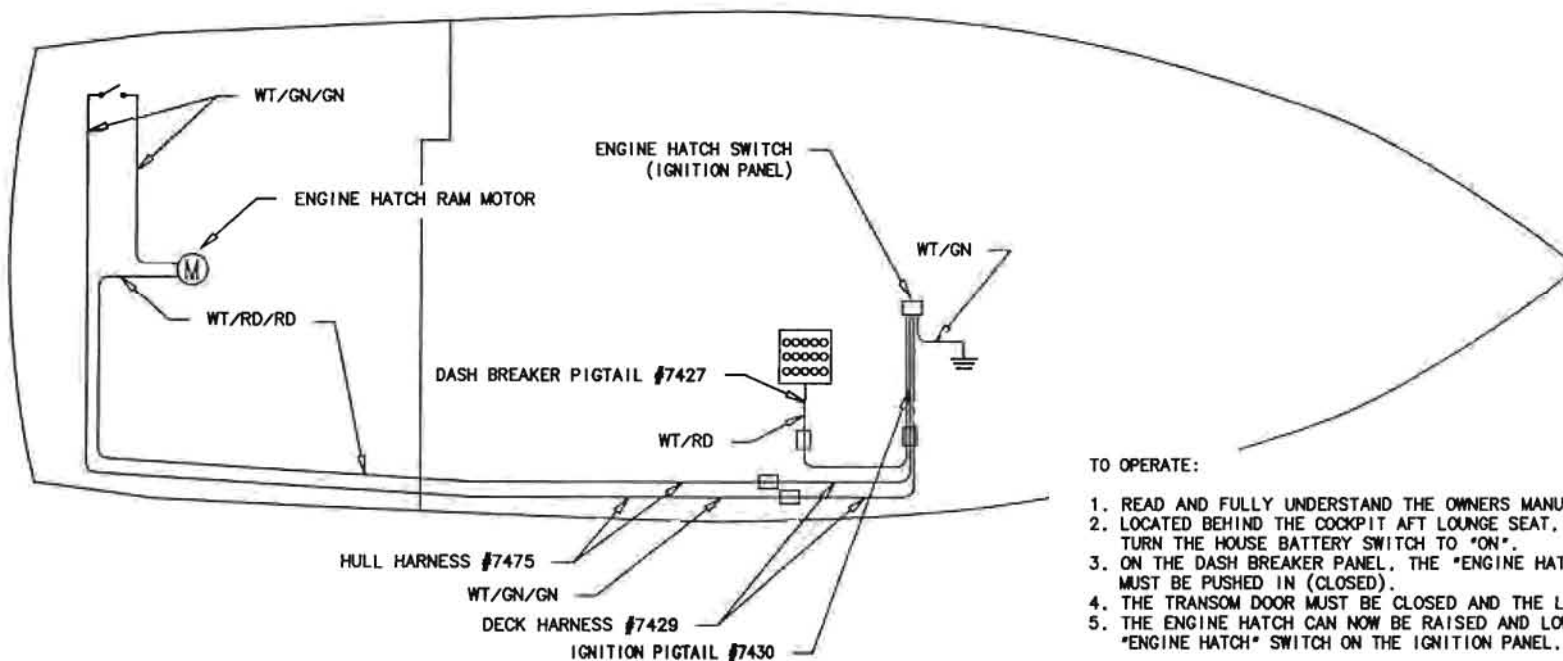
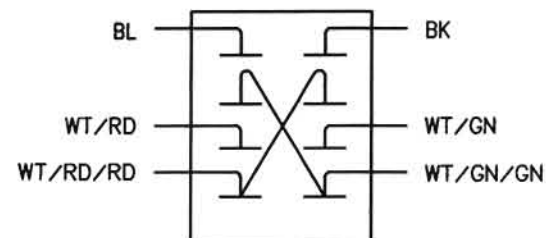
DC GROUND



ENGINE HATCH BKR 20A
(DASH BKR PANEL)
(REAR VIEW)



ENGINE HATCH SWITCH
(IGNITION PANEL)
(REAR VIEW)



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE DASH BREAKER PANEL, THE "ENGINE HATCH" BREAKER MUST BE PUSHED IN (CLOSED).
4. THE TRANSOM DOOR MUST BE CLOSED AND THE LATCH SECURED.
5. THE ENGINE HATCH CAN NOW BE RAISED AND LOWERED BY THE "ENGINE HATCH" SWITCH ON THE IGNITION PANEL.



THUNDERBIRD
PRODUCTS
ENGINEERING

ENGINE HATCH

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 48733-5003

IN 31-190

DATE: 12/25/95

(219) 724-0111

LEGEND

BREAKER
PANEL



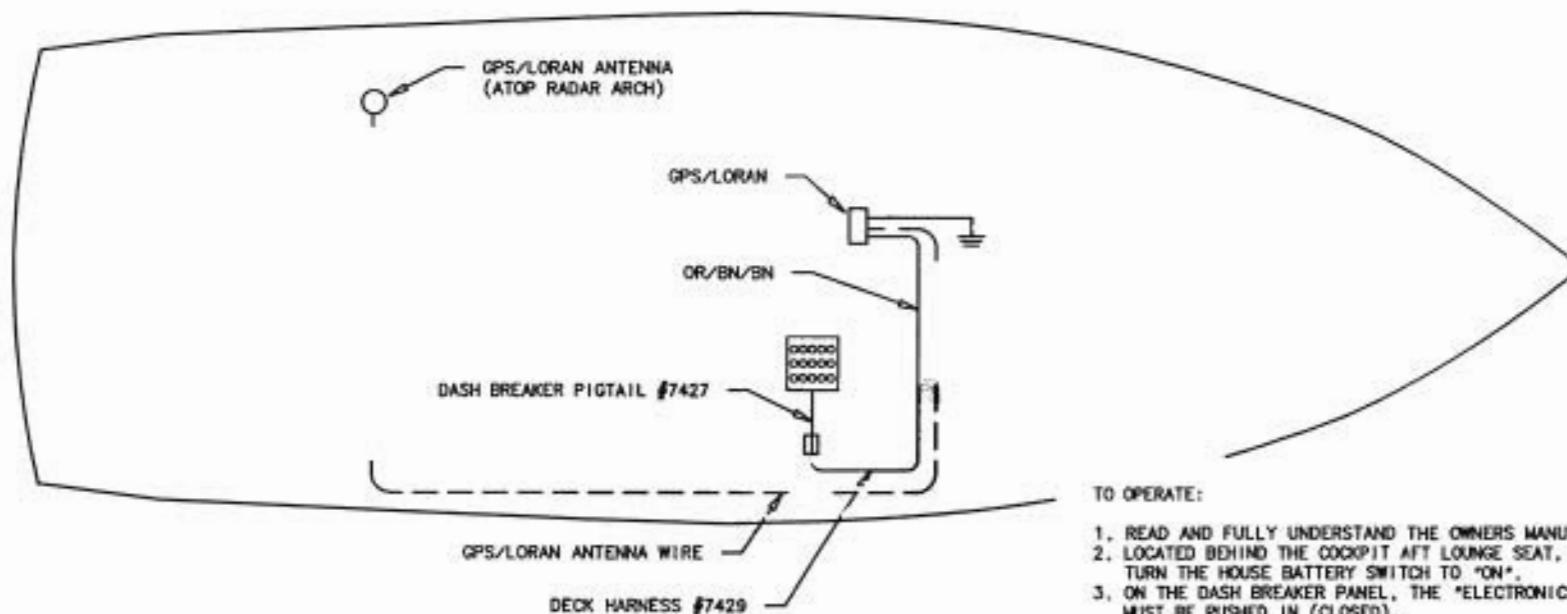
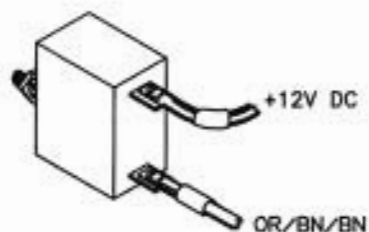
PLUG



DC GROUND



ELECTRONICS BKR 10A
(DASH BKR PANEL)
(REAR VIEW)



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE DASH BREAKER PANEL, THE "ELECTRONICS" BREAKER MUST BE PUSHED IN (CLOSED).
4. THE GPS/LORAN IS NOW SUPPLIED WITH POWER AND READY TO OPERATE.



THUNDERBIRD
PRODUCTS
ENGINEERING

GPS/LORAN

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

NO. 31-200

DATE: 12/25/95

(219) 724-9111

LEGEND

BREAKER
PANEL



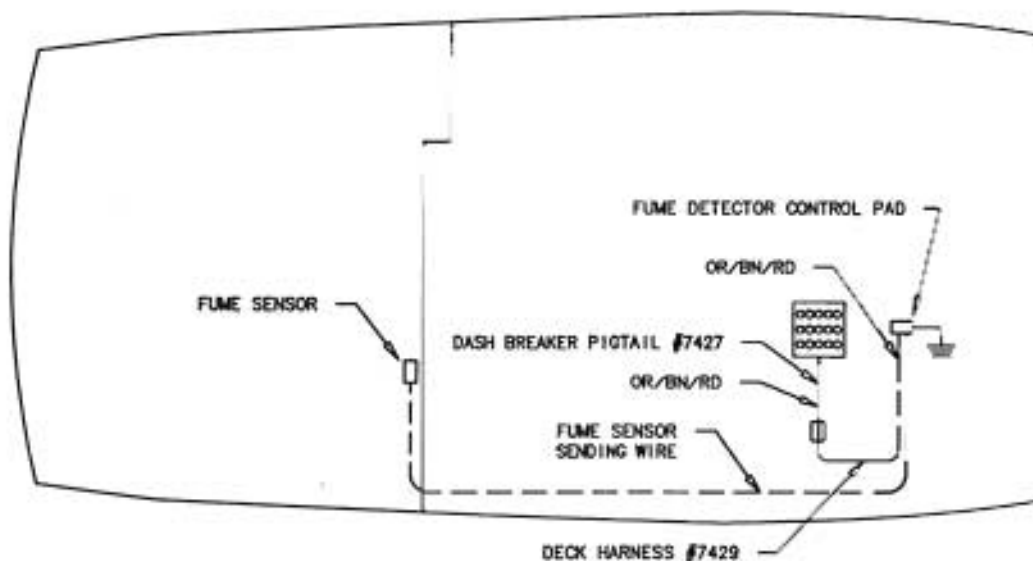
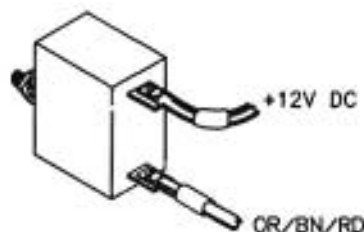
PLUG



DC GROUND



ELECTRONICS BKR 10A
(DASH BKR PANEL)
(REAR VIEW)



NOTE: THE FUME DETECTOR PROVIDES AN AUDIBLE AND VISUAL ALARM WHEN EVER EXPLOSIVE GASES ARE PRESENT IN THE BILGE AREA.

IN THE EVENT THE DETECTOR GOES INTO THE ALARM MODE, OPERATE THE ENGINE BLOWERS AND INSPECT FOR SOURCE.

TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE DASH BREAKER PANEL, THE "ELECTRONICS" BREAKER MUST BE PUSHED IN (CLOSED).
4. PRESS THE "ON" BUTTON LOCATED UPON THE FACE OF THE FUME DETECTOR CONTROL PAD.
5. PRESS "TEST".



THUNDERBIRD
PRODUCTS
ENGINEERING

FUME DETECTOR

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

OR BY: R. HANNI

DECATUR IN., 48733-5003

NO. 31- 210

DATE: 12/25/95

(219) 724-9111

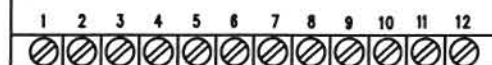
LEGEND

BREAKER SWITCH

PLUG

DC GROUND

TANKWATCH 3 LEVEL MONITOR SYSTEM



YL/WT/BK (FULL)

WT/YL/BK (MID)

BK/WT/YL (EMPTY)

BN/RD

DIODE

87

86

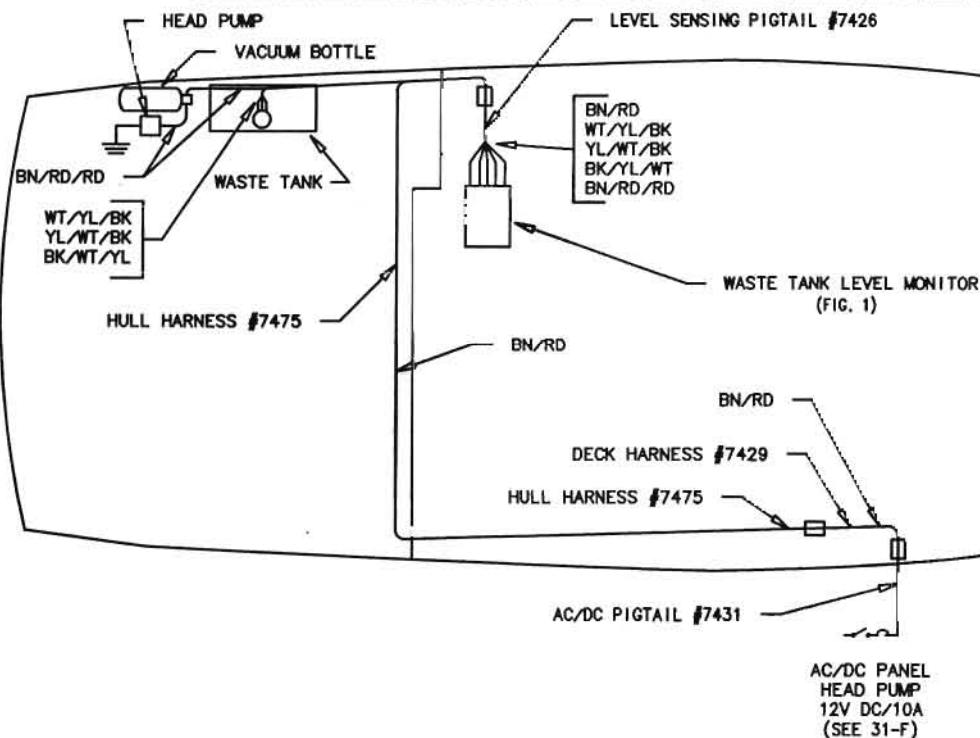
87A

85

30

RELAY

BN/RD/RD



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNER'S MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE AC/DC PANEL IN THE CABIN, SWITCH THE 12V DC SYSTEM "MAIN #1" AND "HEAD PUMP" BREAKERS TO "ON".
4. THE HEAD PUMP IS NOW SUPPLIED WITH POWER AND READY TO OPERATE.

NOTE: WHEN THE "FULL" LIGHT IS ILLUMINATED ON THE TANK LEVEL MONITOR, THE VACUUM PUMP SHUTS DOWN AND THE TOILET WILL NOT FLUSH.

HEAD PUMP

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

NO. 31-220

DATE: 12/25/95

(219) 724-9111



THUNDERBIRD
PRODUCTS
ENGINEERING

LEGEND

BREAKER
PANEL



COMPRESSOR



SWITCH



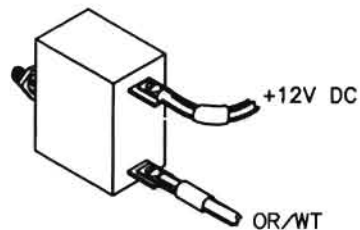
PLUG



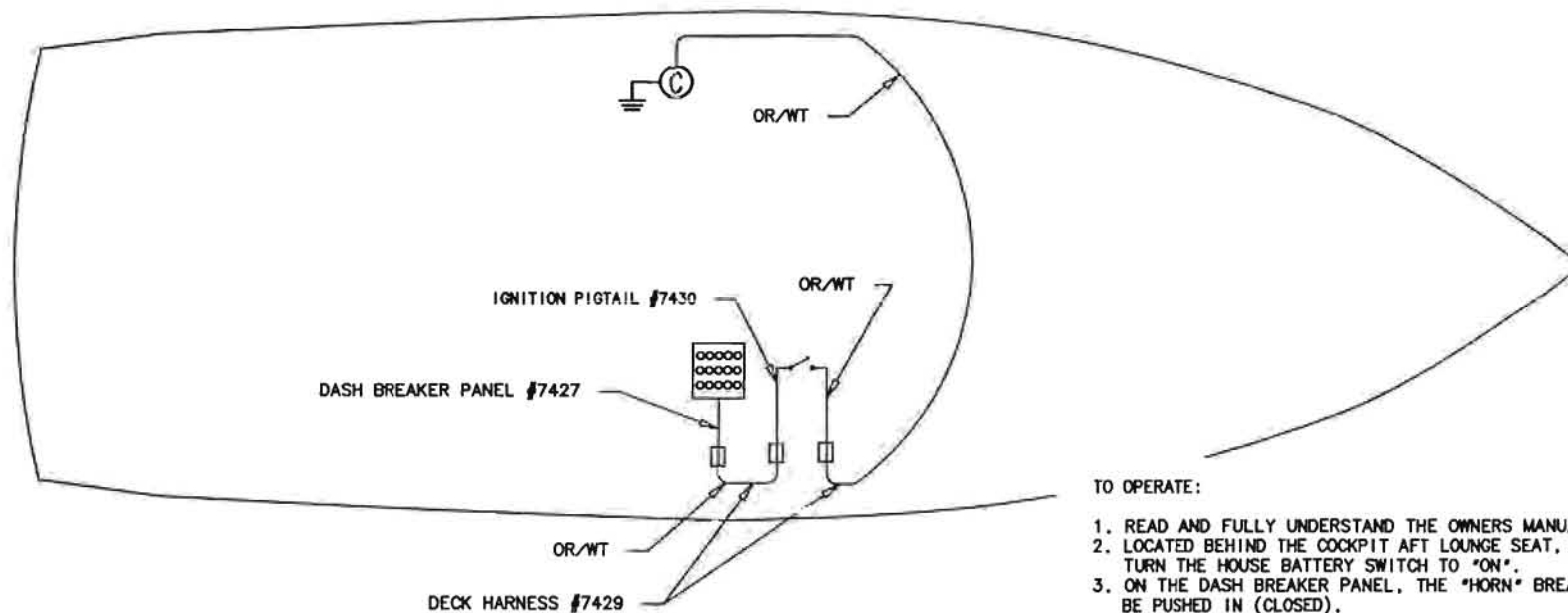
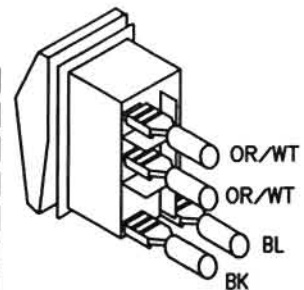
DC GROUND



HORN BKR 20A
(DASH BKR PANEL)
(REAR VIEW)



HORN SWITCH
(IGNITION PANEL)
(REAR VIEW)



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE DASH BREAKER PANEL, THE "HORN" BREAKER MUST BE PUSHED IN (CLOSED).
4. THE HORN CAN NOW BE OPERATED BY THE "HORN" SWITCH ON THE ACCESSORY PANEL.



THUNDERBIRD
PRODUCTS
ENGINEERING

HORN

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

IN: 31-230

DATE: 12/25/95

(210) 724-0111

LEGEND

BREAKER
PANEL



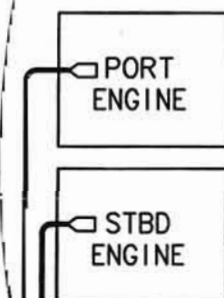
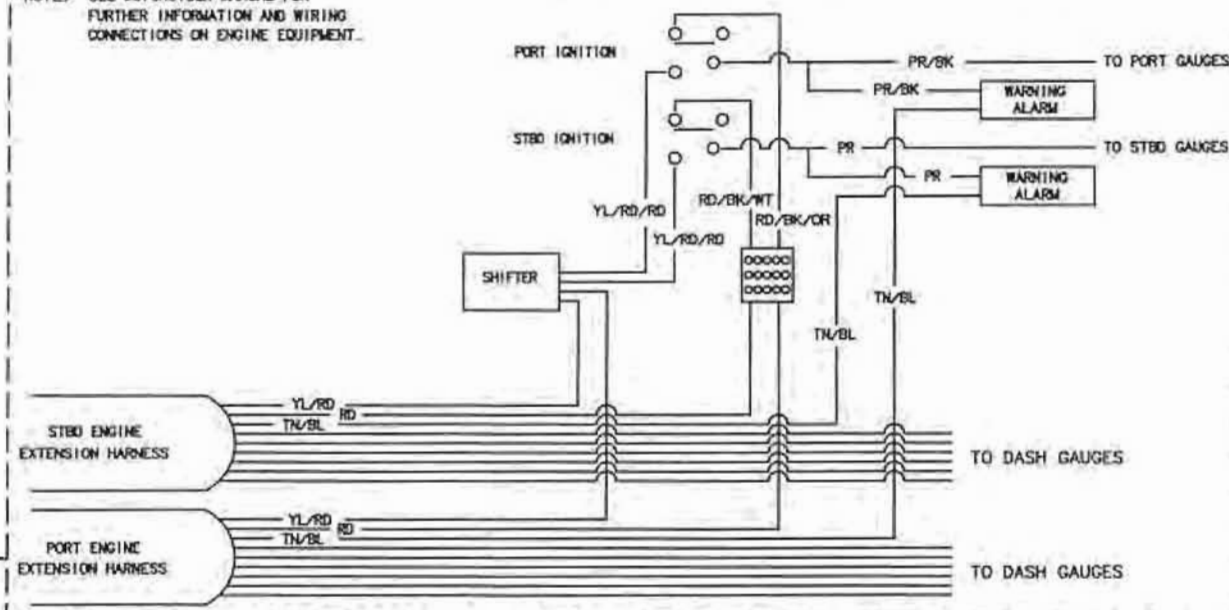
IGNITION
SWITCH



MERCURY
PLUG

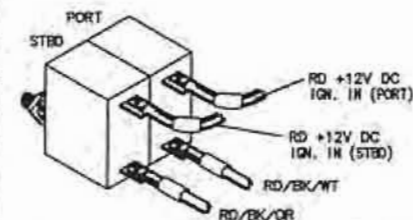


NOTE: SEE MERCURUISER MANUAL FOR
FURTHER INFORMATION AND WIRING
CONNECTIONS ON ENGINE EQUIPMENT.



SEE DETAIL ABOVE

IGNITION BKRS 20A
(DASH BKR PANEL)
(REAR VIEW)



THUNDERBIRD
PRODUCTS
ENGINEERING

IGNITION

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

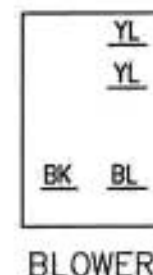
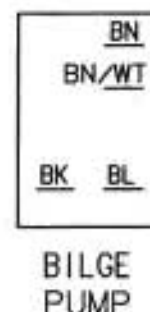
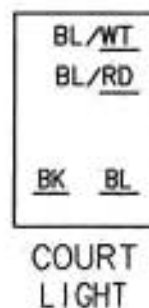
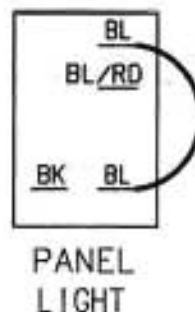
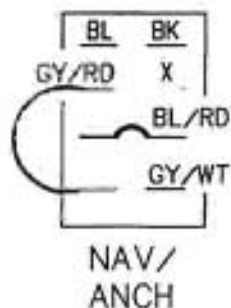
DECATUR IN., 46733-5003

NO.: 31-240

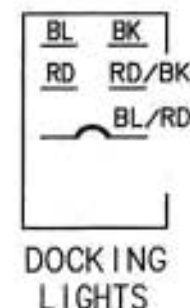
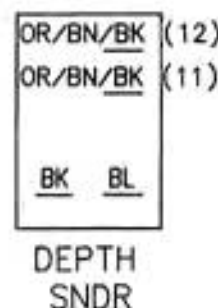
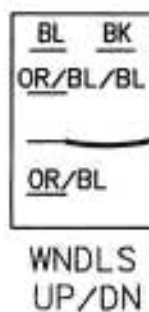
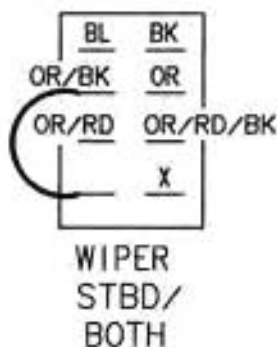
DATE: 12/25/95

(219) 724-9111

F-31 PC ACCESSORY PANEL (REAR VIEW)



X - NOT USED



PANEL #9084
PIGTAIL #7428



THUNDERBIRD
PRODUCTS
ENGINEERING

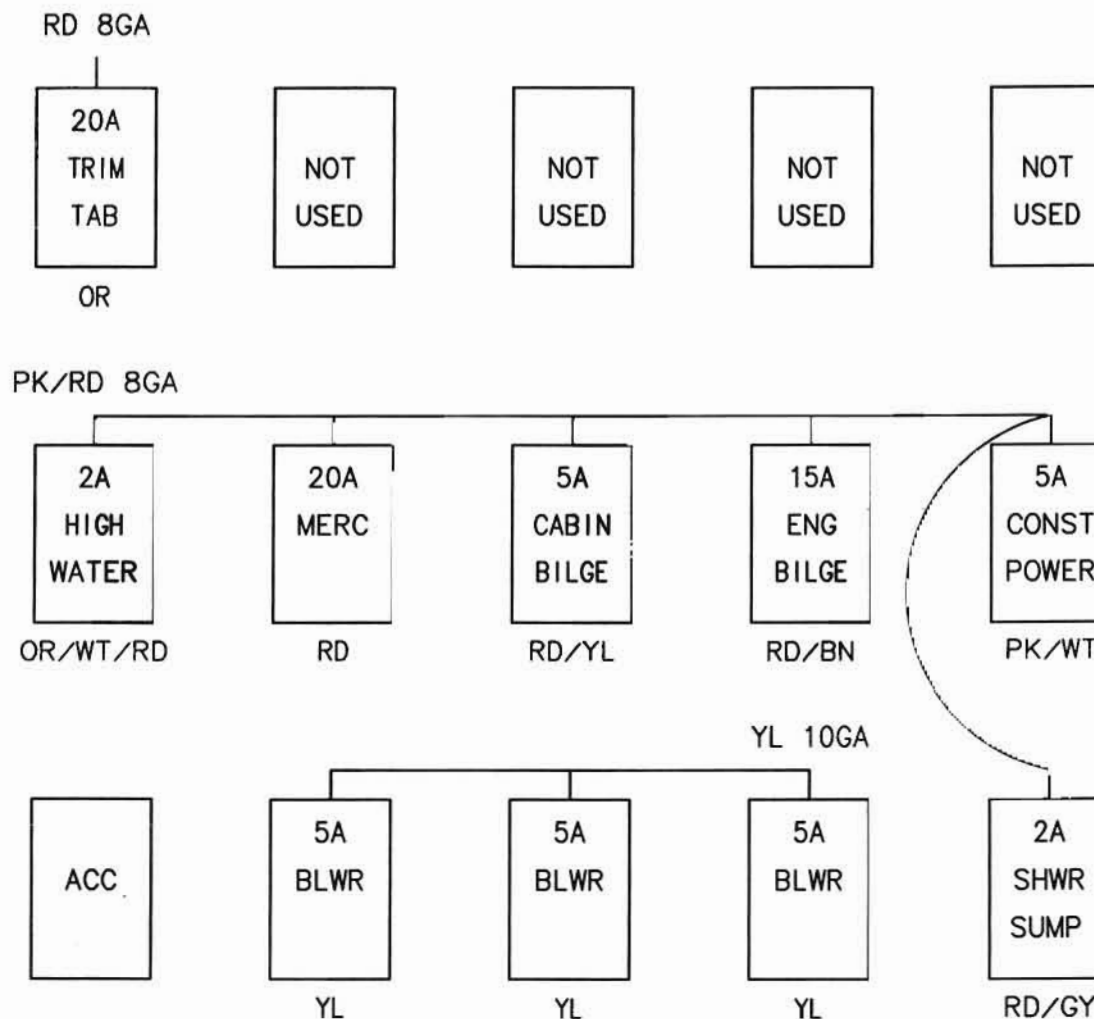
INSTRUMENT PANELS, ACCESSORY PANEL		THUNDERBIRD PRODUCTS
MODEL: F-31 PC		P.O. BOX 1003
DR BY: R. HANNI	DATE: 12/25/95	DECATUR IN., 48733-5003
NO. 31-250		(219) 724-9111

PANEL #9068

PIGTAIL #7432

F-31 PC AFT BREAKER PANEL

(REAR VIEW)



THUNDERBIRD
PRODUCTS
ENGINEERING

AFT BREAKER PANEL

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

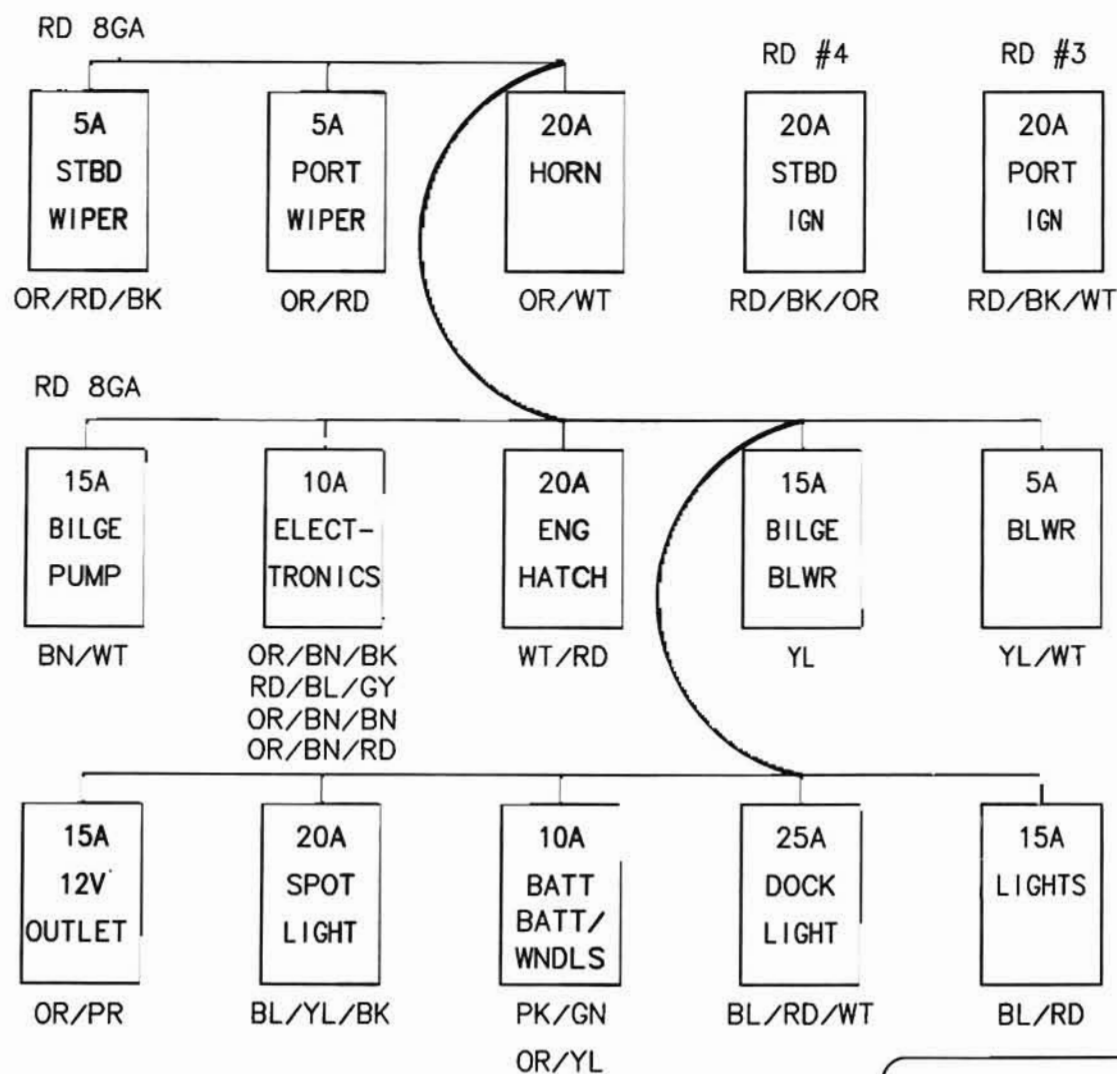
NO.: 31- 260

DATE: 12/25/95

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PANEL #9081
PIGTAIL #7427

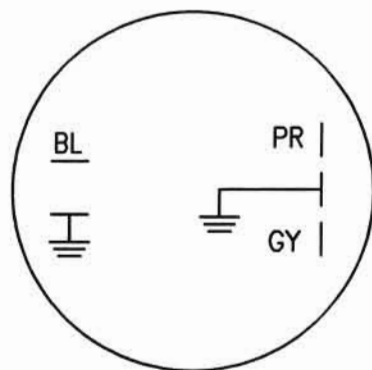
F-31 PC DASH BREAKER PANEL (REAR VIEW)



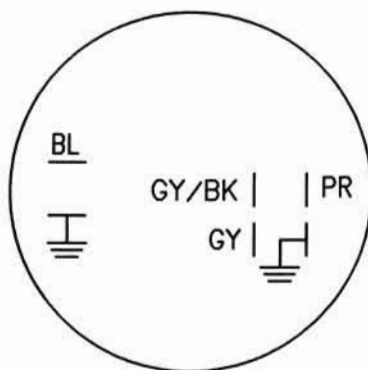
THUNDERBIRD
PRODUCTS
ENGINEERING

DASH BREAKER PANEL		THUNDERBIRD PRODUCTS
		P.O. BOX 1003
MODEL: F-31 PC	DR BY: R. HANNI	DECATUR IN., 46733-5003
NO.: 31- 270	DATE: 12/25/95	(219) 724-9111

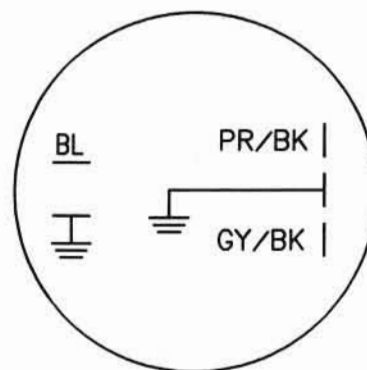
F-31 PC INSTRUMENT PANEL (REAR VIEW)



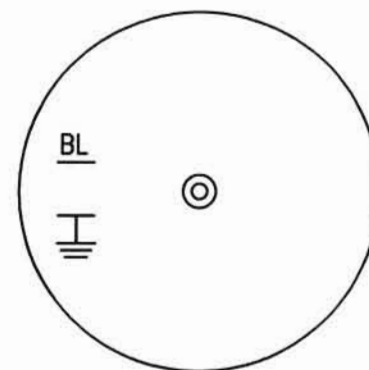
STBD TACH



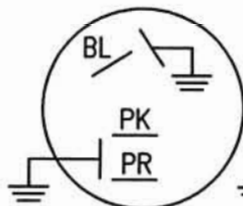
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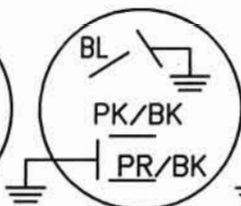
PORT TACK



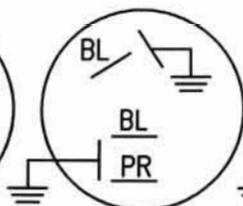
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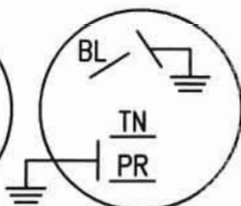
STBD
FUEL



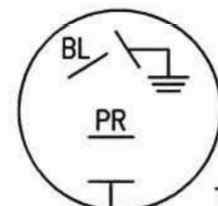
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FUEL



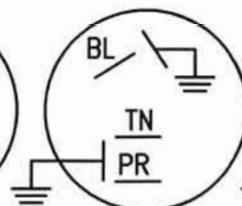
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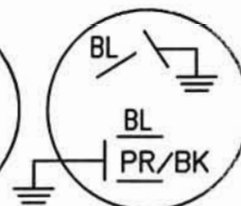
STBD
TEMP



VOLT



PORT
TEMP



PORT
OIL



THUNDERBIRD
PRODUCTS
ENGINEERING

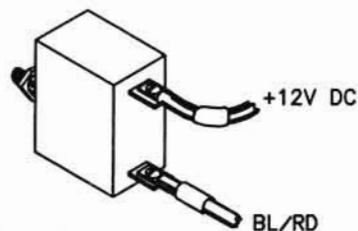
PANEL #9086
PIGTAIL #3471

INSTRUMENT PANEL		THUNDERBIRD PRODUCTS
		P.O. BOX 1003
MODEL: F-31 PC	DR BY: R. HANNI	DECATUR IN., 46733-5003
NO.: 31- 290	DATE: 12/25/95	(219) 724-9111

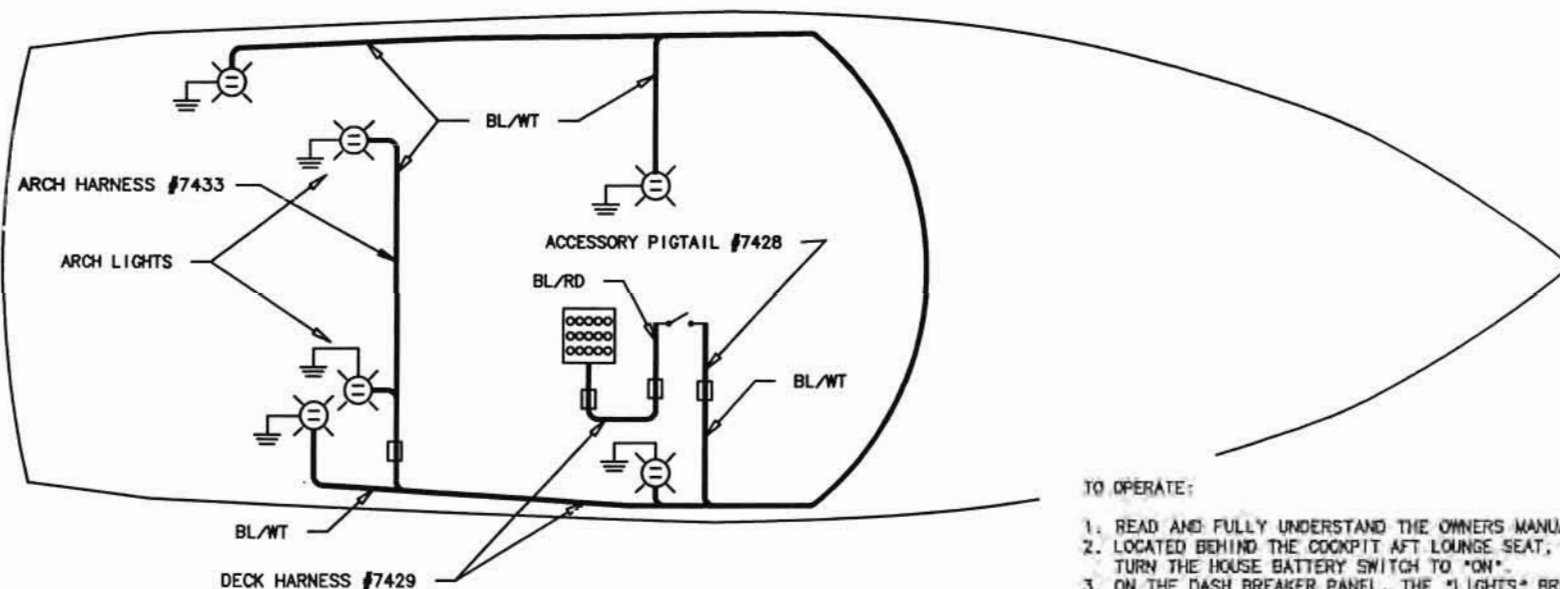
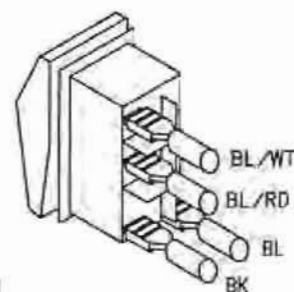
LEGEND

BREAKER PANEL	
LIGHT	
SWITCH	
PLUG	
DC GROUND	

LIGHTS BKR 15A
(DASH BKR PANEL)
(REAR VIEW)



COURT SWITCH
(ACCESSORY PANEL)
(REAR VIEW)



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE DASH BREAKER PANEL, THE "LIGHTS" BREAKER MUST BE PUSHED IN (CLOSED).
4. THE COURTESY LIGHTS CAN NOW BE OPERATED BY THE "COURT" SWITCH ON THE ACCESSORY PANEL.



THUNDERBIRD
PRODUCTS
ENGINEERING

LIGHTS, COURTESY, COCKPIT

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

NO.: 31- 300

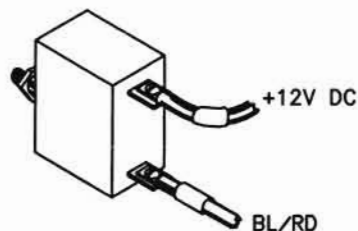
DATE: 12/25/95

(219) 724-9111

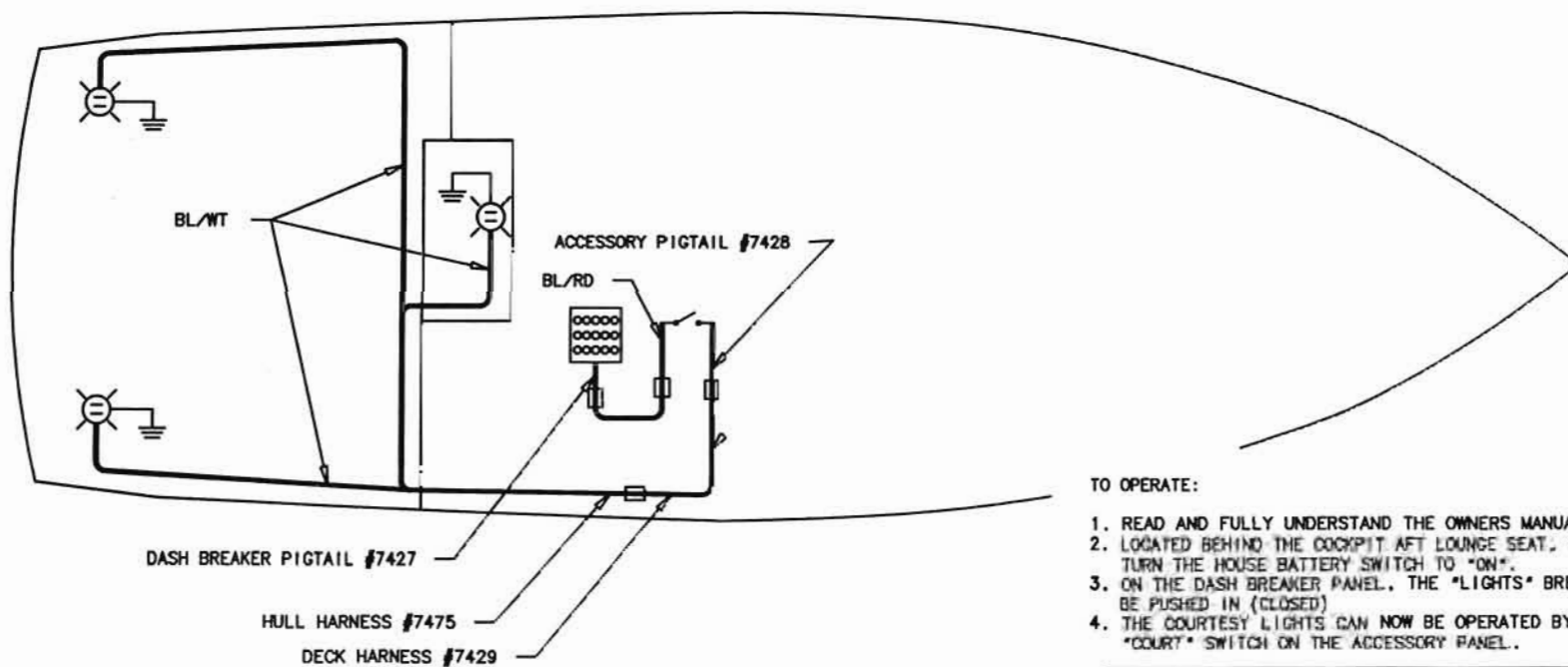
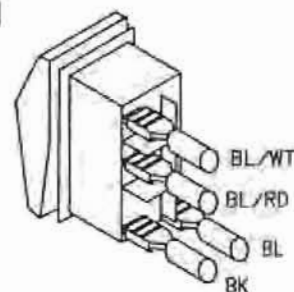
LEGEND

BREAKER PANEL	
LIGHT	
SWITCH	
PLUG	
DC GROUND	

LIGHTS BKR 15A
(DASH BKR PANEL)
(REAR VIEW)



COURT SWITCH
(ACCESSORY PANEL)
(REAR VIEW)



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE DASH BREAKER PANEL, THE "LIGHTS" BREAKER MUST BE PUSHED IN (CLOSED).
4. THE COURTESY LIGHTS CAN NOW BE OPERATED BY THE "COURT" SWITCH ON THE ACCESSORY PANEL.



THUNDERBIRD
PRODUCTS
ENGINEERING

LIGHTS, COURTESY, ENGINE BILGE

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

NO.: 31- 301

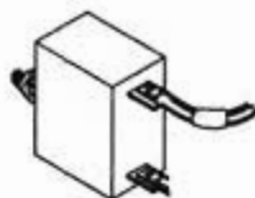
DATE: 12/25/95

(219) 724-9111

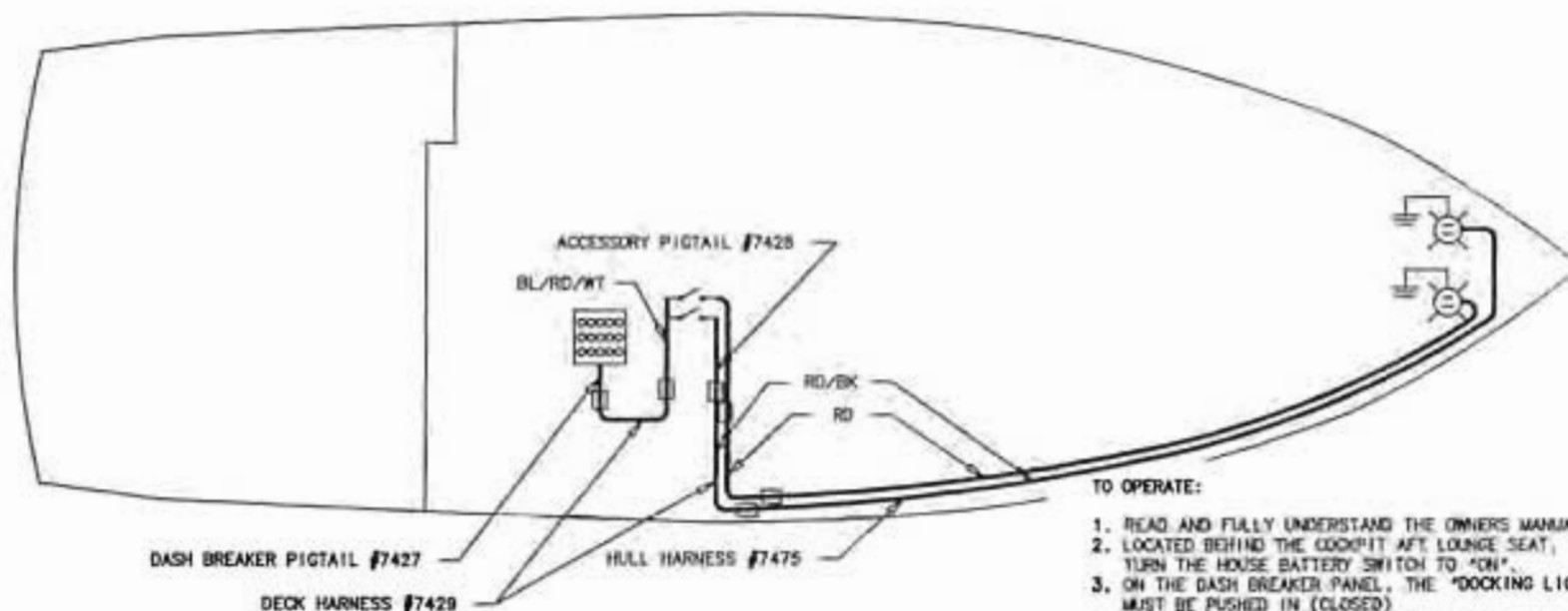
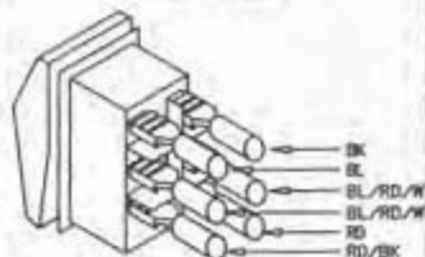
LEGEND

BREAKER PANEL	
SWITCH	
PLUG	
LIGHT	
DC GROUND	

DOCKING LIGHTS BKR 25A
(DASH BKR PANEL)
(REAR VIEW)



DOCKING LTS SWITCH
(ACCESSORY PANEL)
(REAR VIEW)



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE DASH BREAKER PANEL, THE "DOCKING LIGHTS" BREAKER MUST BE PUSHED IN (CLOSED).
4. THE DOCKING LIGHTS CAN NOW BE OPERATED BY THE "DOCKING LIGHTS" SWITCH ON THE ACCESSORY PANEL.



THUNDERBIRD
PRODUCTS
ENGINEERING

LIGHTS, DOCKING		THUNDERBIRD PRODUCTS
		P.O. BOX 1003
MODEL: F-31 PC	DR BY: R. HANNI	DECATUR IN., 46733-5003
31-310	12/26/06	(404) 271-1111

LEGEND

BREAKER
PANEL



SWITCH



PLUG



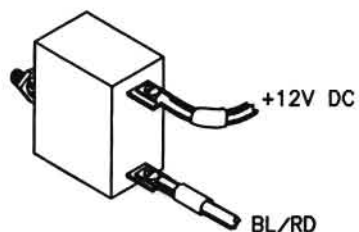
LIGHT



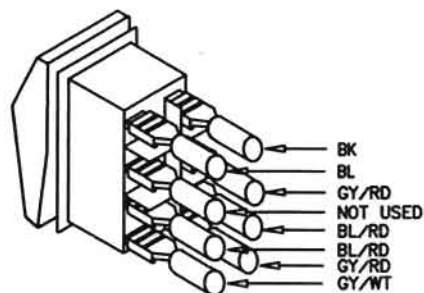
DC GROUND



LIGHTS BKR 15A
(DASH BKR PANEL)
(REAR VIEW)

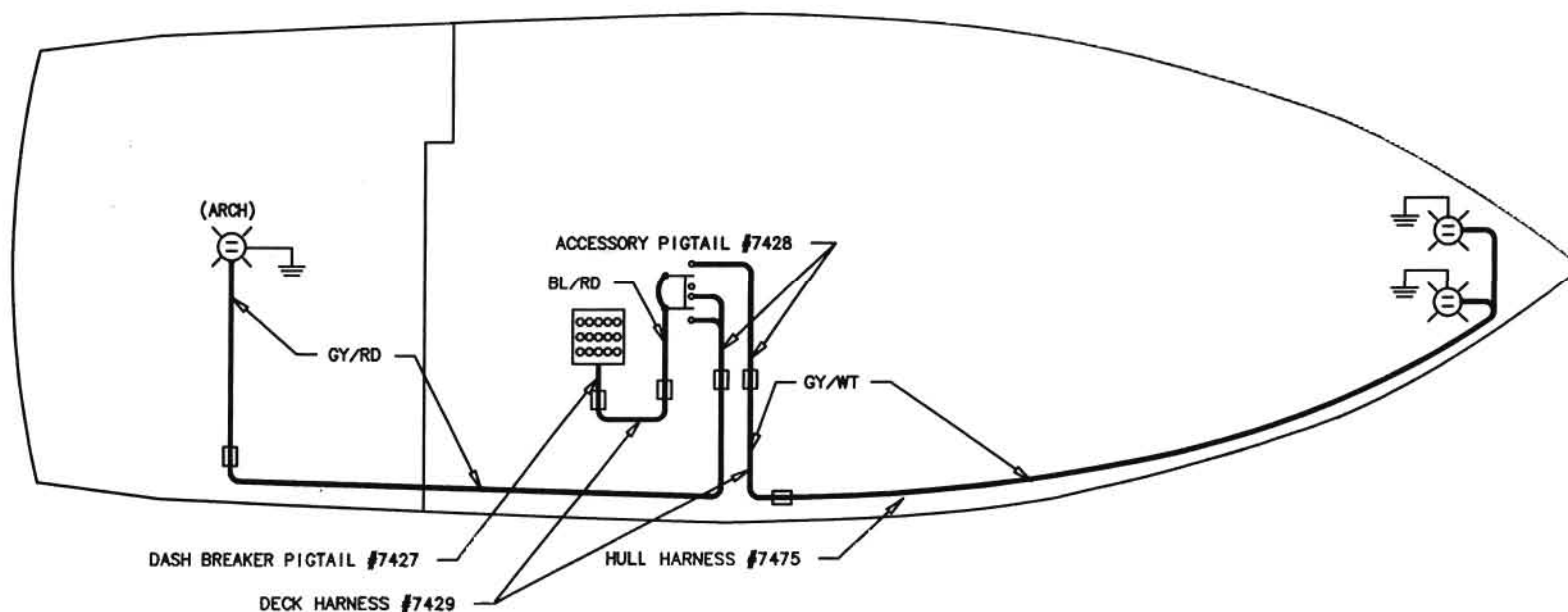


NAV/ANCH SWITCH
(ACCESSORY PANEL)
(REAR VIEW)



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STRD SIDE, TURN THE HOUSE BATTERY SWITCH TO 'ON'.
3. ON THE DASH BREAKER PANEL, THE 'LIGHTS' BREAKER MUST BE PUSHED IN (CLOSED).
4. THE NAVIGATIONAL LIGHTS CAN NOW BE OPERATED BY PUSHING 'UP' ON THE 'NAV/ANCH' SWITCH ON THE ACCESSORY PANEL.
5. THE ALL-AROUND ANCHOR LIGHT CAN NOW BE OPERATED BY PUSHING 'DOWN' ON THE 'NAV/ANCH' SWITCH ON THE ACCESSORY PANEL.



THUNDERBIRD
PRODUCTS
ENGINEERING

LIGHTS, NAVIGATIONAL/ ALL AROUND

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

NO.: 31- 320

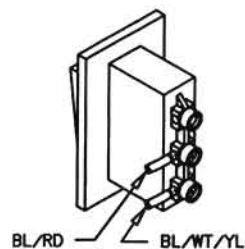
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(219) 794-0111

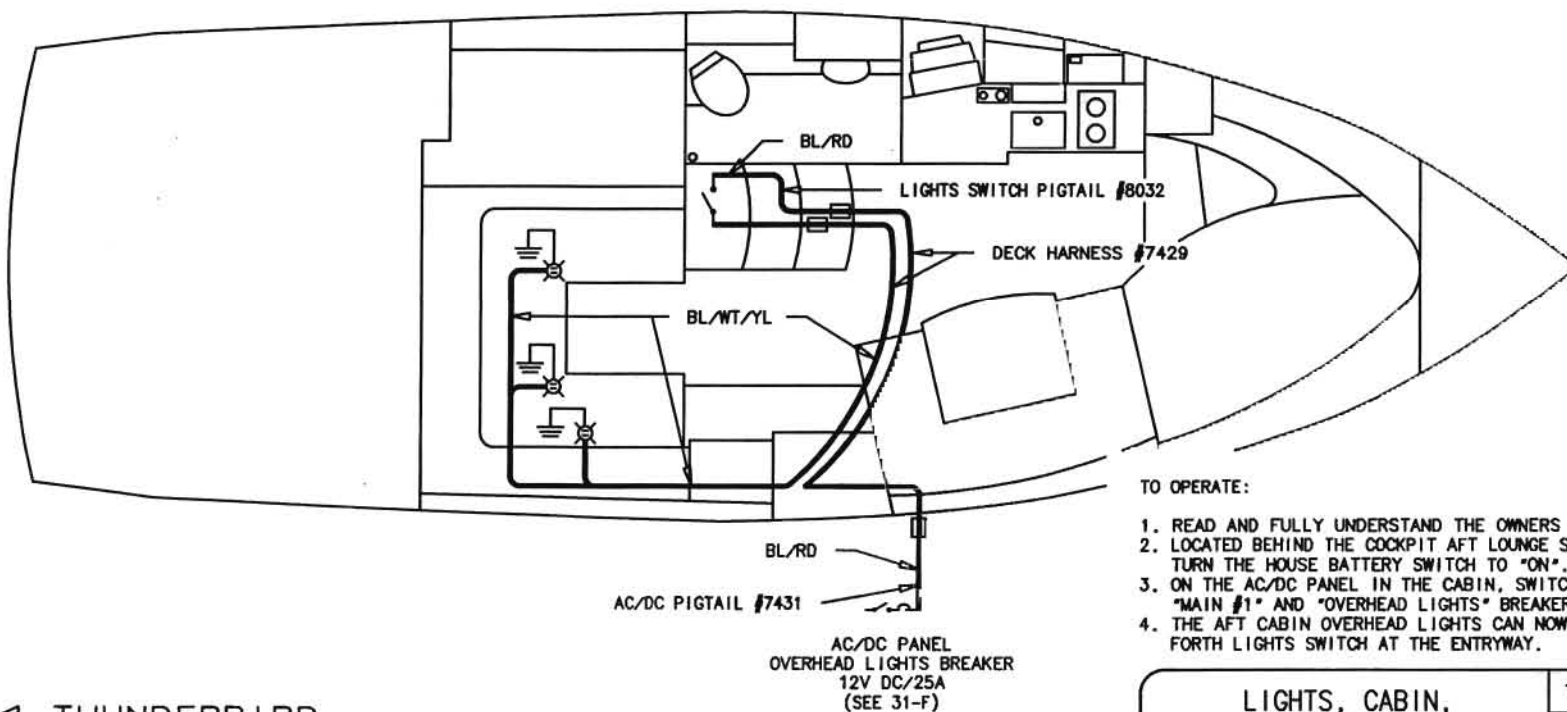
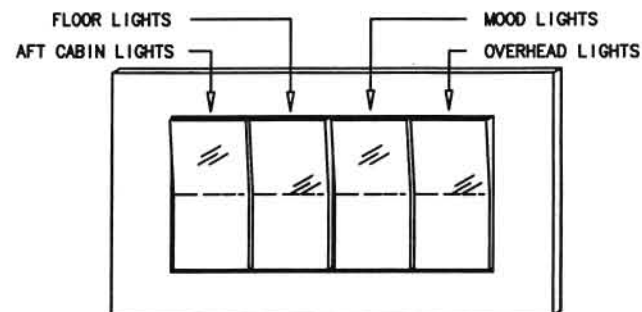
LEGEND

BREAKER SWITCH	
SWITCH	
PLUG	
LIGHT	
DC GROUND	

AFT CABIN LIGHT SWITCH (REAR VIEW)



MAIN CABIN LIGHT SWITCH'S (ENTRYWAY)



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE AC/DC PANEL IN THE CABIN, SWITCH THE 12V DC SYSTEM "MAIN #1" AND "OVERHEAD LIGHTS" BREAKERS TO "ON".
4. THE AFT CABIN OVERHEAD LIGHTS CAN NOW BE OPERATED BY THE FORTH LIGHTS SWITCH AT THE ENTRYWAY.



THUNDERBIRD
PRODUCTS
ENGINEERING

LIGHTS, CABIN, AFT OVERHEAD

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

NO.: 31- 330

DATE: 12/25/95

(219) 724-9111

LEGEND

BREAKER SWITCH



SWITCH



PLUG



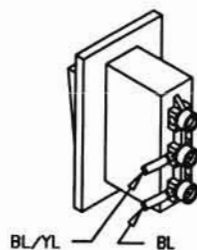
LIGHT



DC GROUND



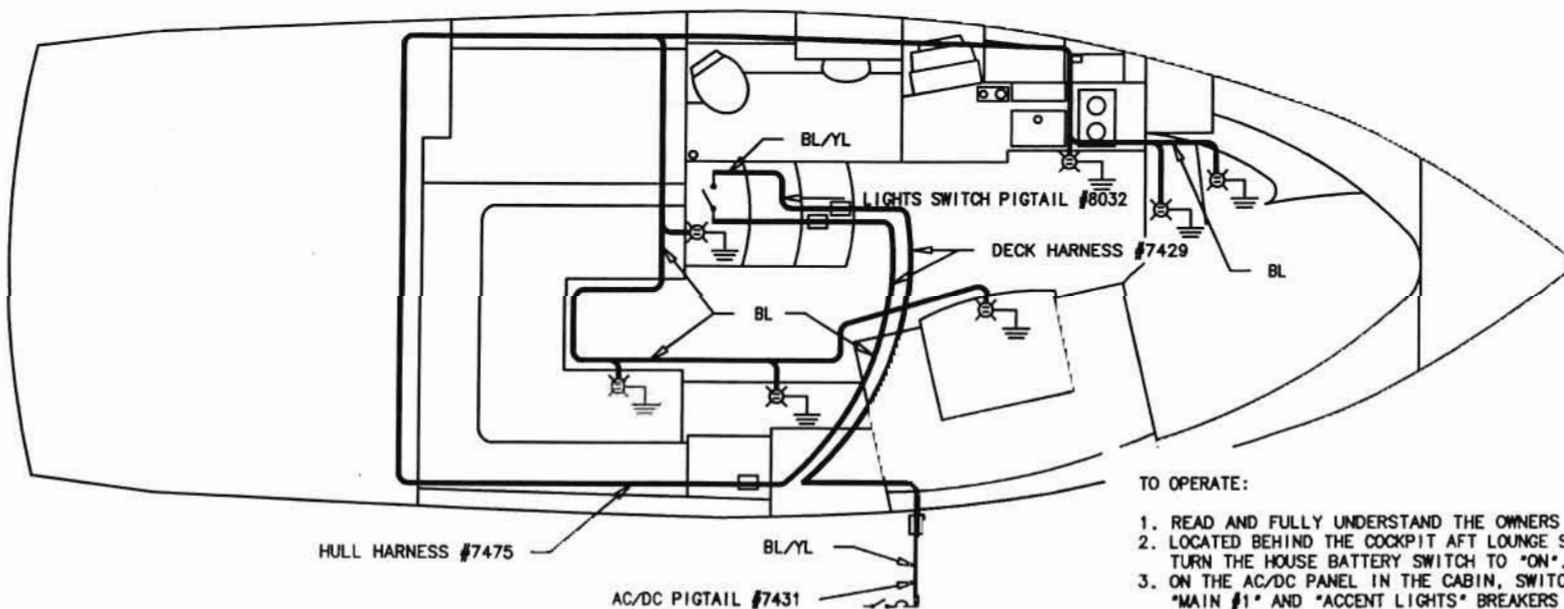
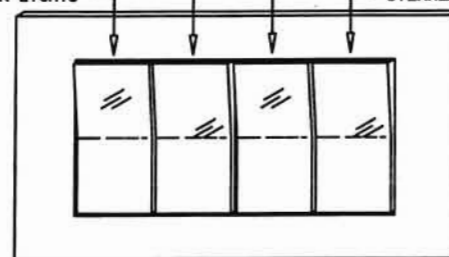
FLOOR LIGHTS SWITCH (REAR VIEW)



MAIN CABIN LIGHT SWITCH'S (ENTRYWAY)

FLOOR LIGHTS
AFT CABIN LIGHTS

MOOD LIGHTS
OVERHEAD LIGHTS



AC/DC PANEL
ACCENT LIGHTS BREAKER
12V DC/20A
(SEE 31-F)

TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE AC/DC PANEL IN THE CABIN, SWITCH THE 12V DC SYSTEM "MAIN #1" AND "ACCENT LIGHTS" BREAKERS TO "ON".
4. THE FLOOR LIGHTS CAN NOW BE OPERATED BY THE THIRD LIGHT SWITCH AT THE ENTRYWAY.

LIGHTS, CABIN, FLOOR

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

NO. 31-340

DATE: 12/25/95

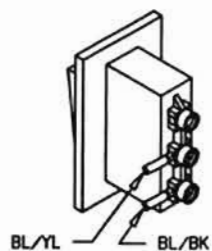


THUNDERBIRD
PRODUCTS
ENGINEERING

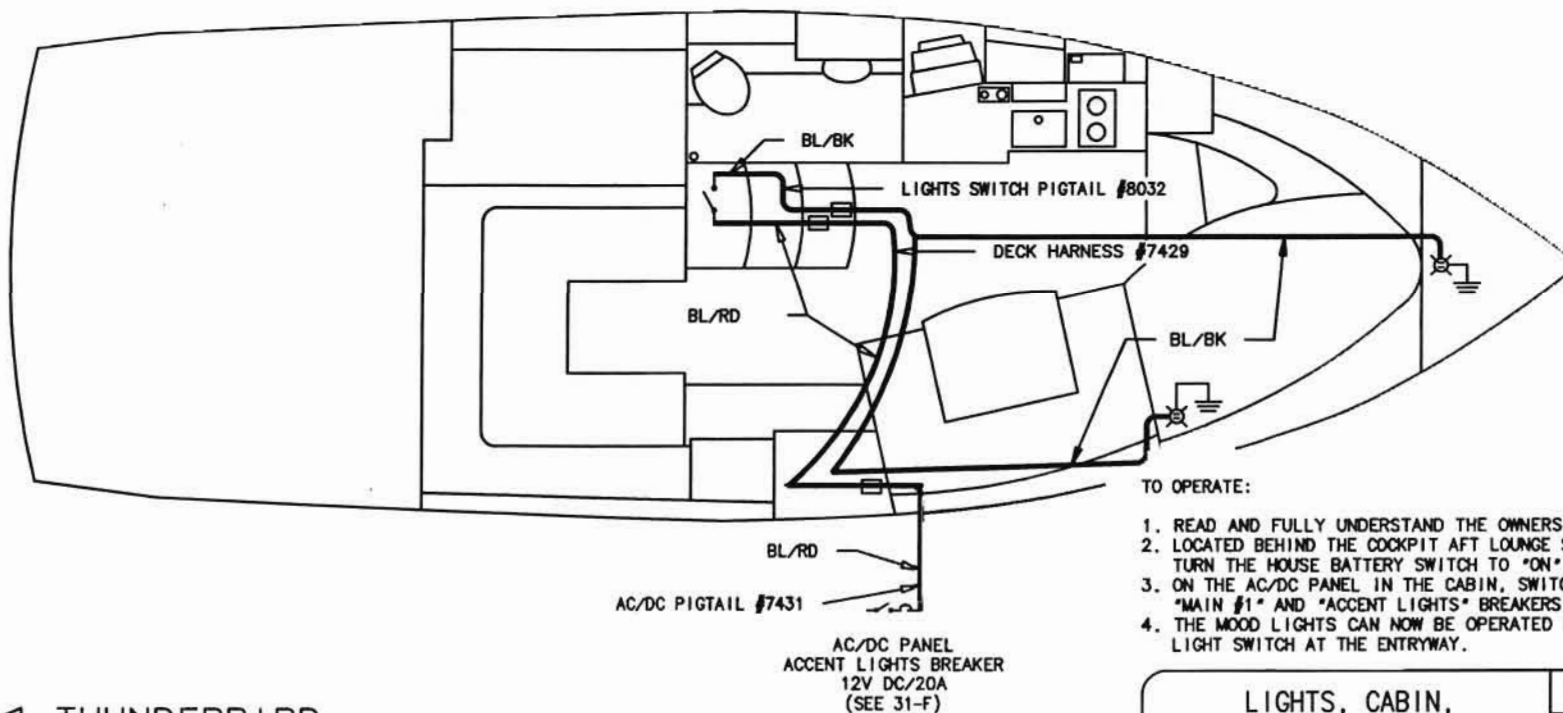
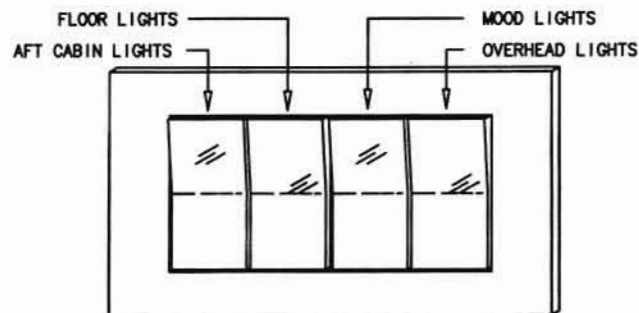
LEGEND

BREAKER SWITCH	
SWITCH	
PLUG	
LIGHT	
DC GROUND	

MOOD LIGHT SWITCH (REAR VIEW)



MAIN CABIN LIGHT SWITCH'S (ENTRYWAY)



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE AC/DC PANEL IN THE CABIN, SWITCH THE 12V DC SYSTEM "MAIN #1" AND "ACCENT LIGHTS" BREAKERS TO "ON".
4. THE MOOD LIGHTS CAN NOW BE OPERATED BY THE SECOND LIGHT SWITCH AT THE ENTRYWAY.



THUNDERBIRD
PRODUCTS
ENGINEERING

LIGHTS, CABIN, MOOD

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

NO.: 31- 350

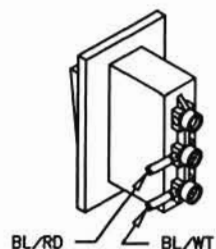
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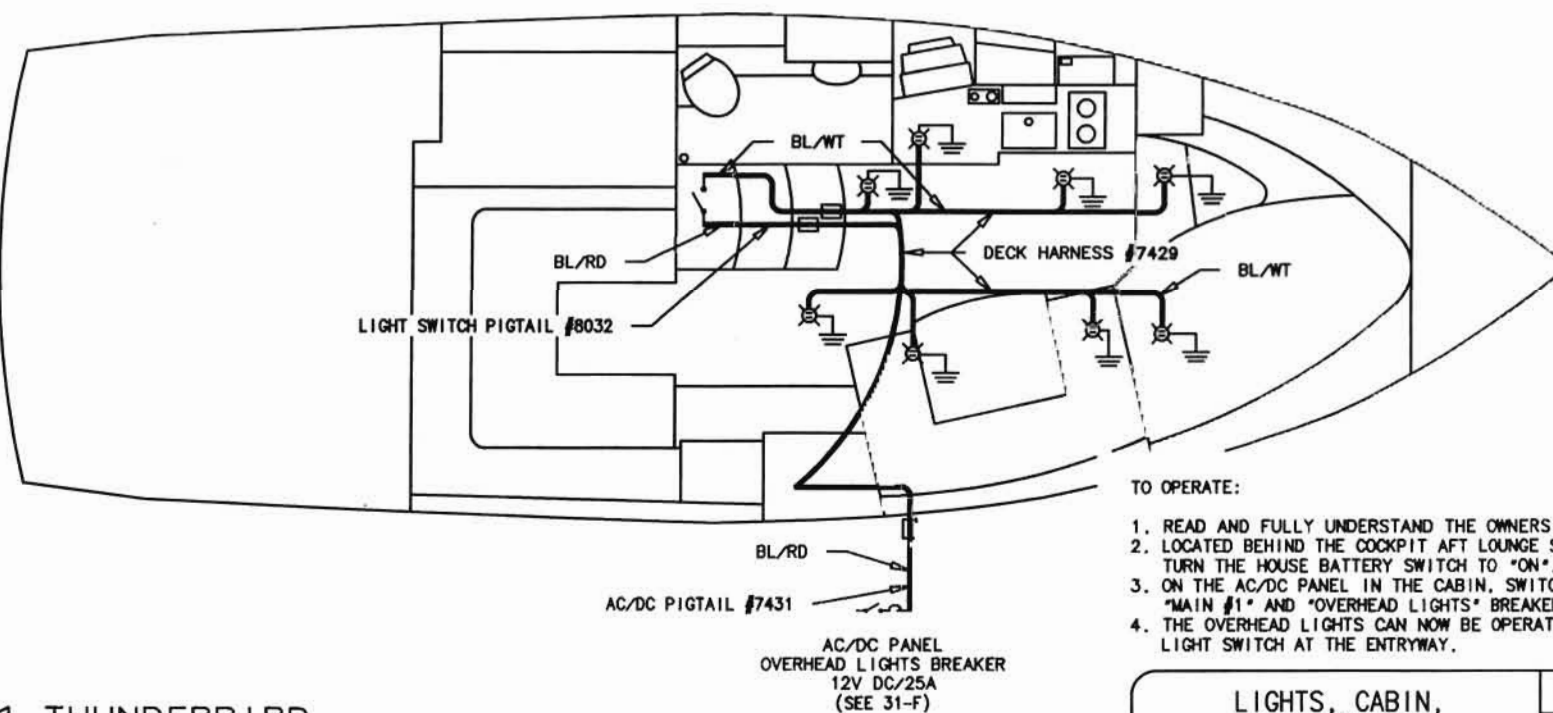
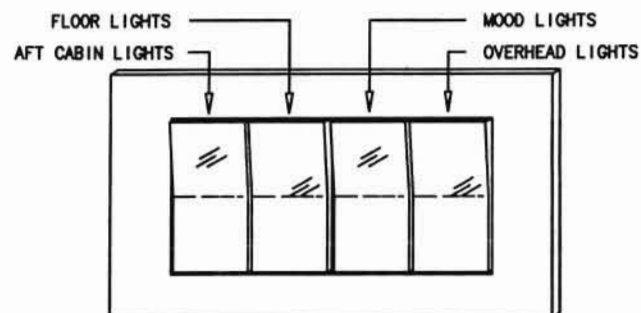
LEGEND

BREAKER SWITCH	
SWITCH	
PLUG	
LIGHT	
DC GROUND	

OVERHEAD LIGHT SWITCH (REAR VIEW)



MAIN CABIN LIGHT SWITCH'S (ENTRYWAY)



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE AC/DC PANEL IN THE CABIN, SWITCH THE 12V DC SYSTEM "MAIN #1" AND "OVERHEAD LIGHTS" BREAKERS TO "ON".
4. THE OVERHEAD LIGHTS CAN NOW BE OPERATED BY THE FIRST LIGHT SWITCH AT THE ENTRYWAY.



THUNDERBIRD
PRODUCTS
ENGINEERING

LIGHTS, CABIN, OVERHEAD

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

NO.: 31-360

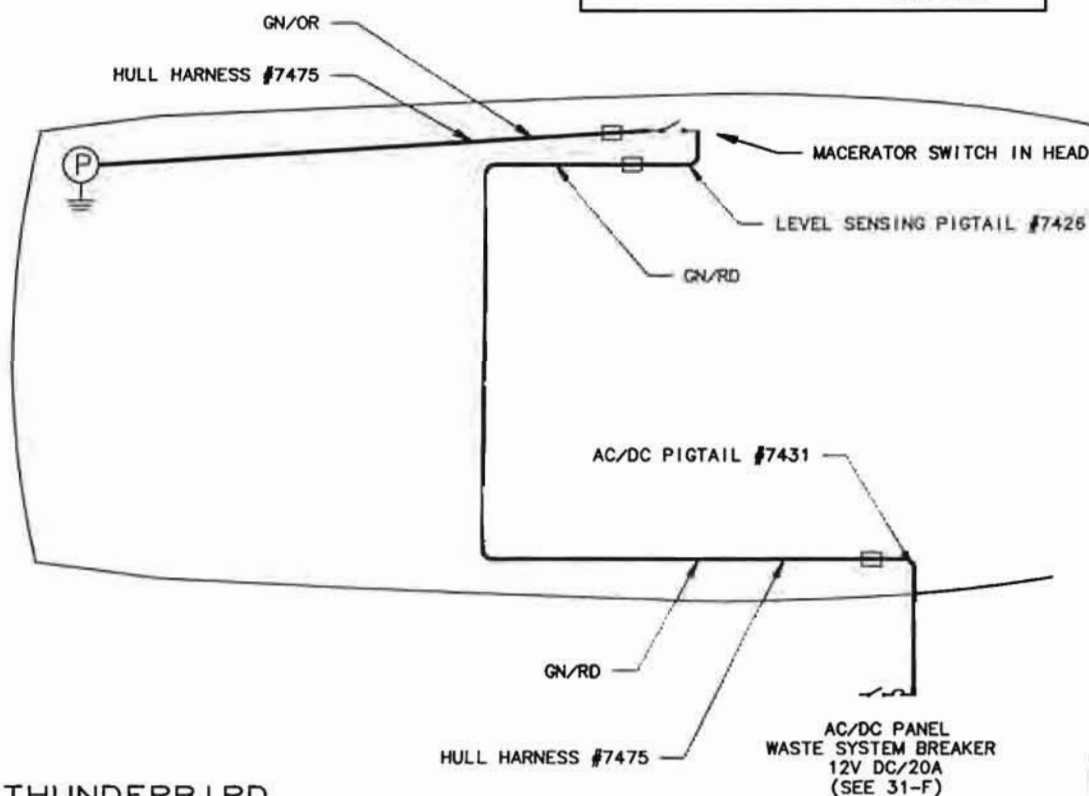
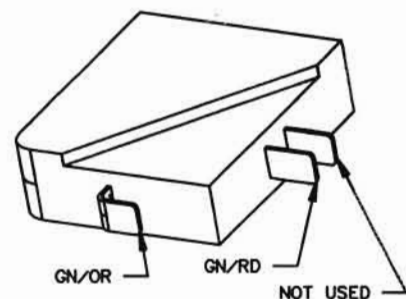
DATE: 12/25/95

(210) 778-0000

LEGEND

BREAKER SWITCH	
SWITCH	
PUMP	
PLUG	
DC GROUND	

MACERATOR SWITCH (REAR VIEW)



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE AC/DC PANEL IN THE CABIN, SWITCH THE 12V DC SYSTEM "MAIN #1" AND "WASTE SYSTEM" BREAKERS TO "ON".
4. IN THE ENGINE BILGE, PLACE THE "Y" VALVE IN THE "DISCHARGE" (DOWN) POSITION.
5. IN THE HEAD, PRESS AND HOLD THE MACERATOR BUTTON (LOCATED NEXT TO TOILET) UNTIL THE "EMPTY" LIGHT (ON THE TANK LEVEL MONITOR) ILLUMINATES.

NOTE: FOLLOW ALL LOCAL, STATE, AND FEDERAL GUIDELINES FOR WASTE DISCHARGE.



THUNDERBIRD
PRODUCTS
ENGINEERING

MACERATOR, ELECTRICAL

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

NO. 31- 370

DATE: 12/25/95

(219) 724-9111

LEGEND

BREAKER
PANEL



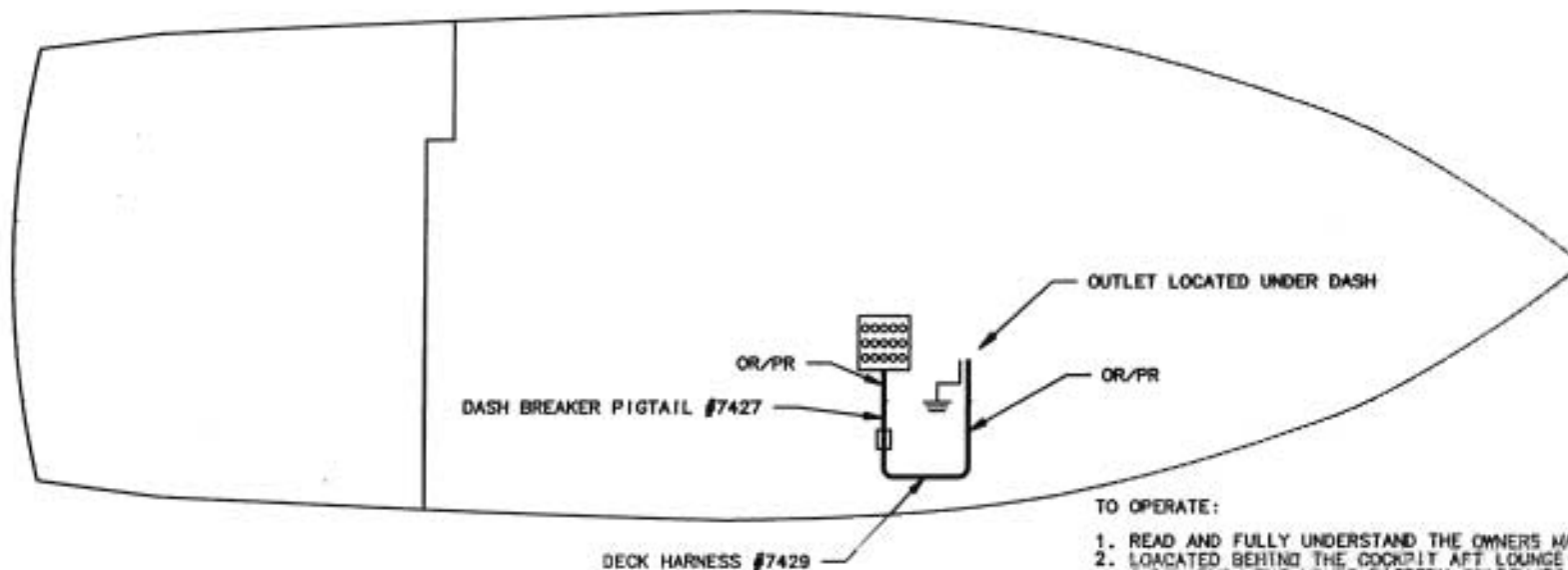
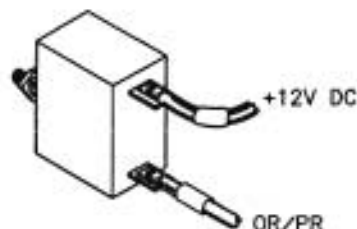
PLUG



DC GROUND



12 VOLT OUTLET BKR 15A
(DASH BKR PANEL)
(REAR VIEW)



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE DASH BREAKER PANEL, THE "12 VOLT OUTLET" BREAKER MUST BE PUSHED IN (CLOSED).
4. THE 12 VOLT OUTLET IS NOW SUPPLIED WITH POWER AND READY TO OPERATE.



THUNDERBIRD
PRODUCTS
ENGINEERING

OUTLET, 12 VOLT

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

IN: 31-380

DATE: 12/25/95

(210) 724-8111

LEGEND

BREAKER
PANEL



PUMP



FLOAT
SWITCH



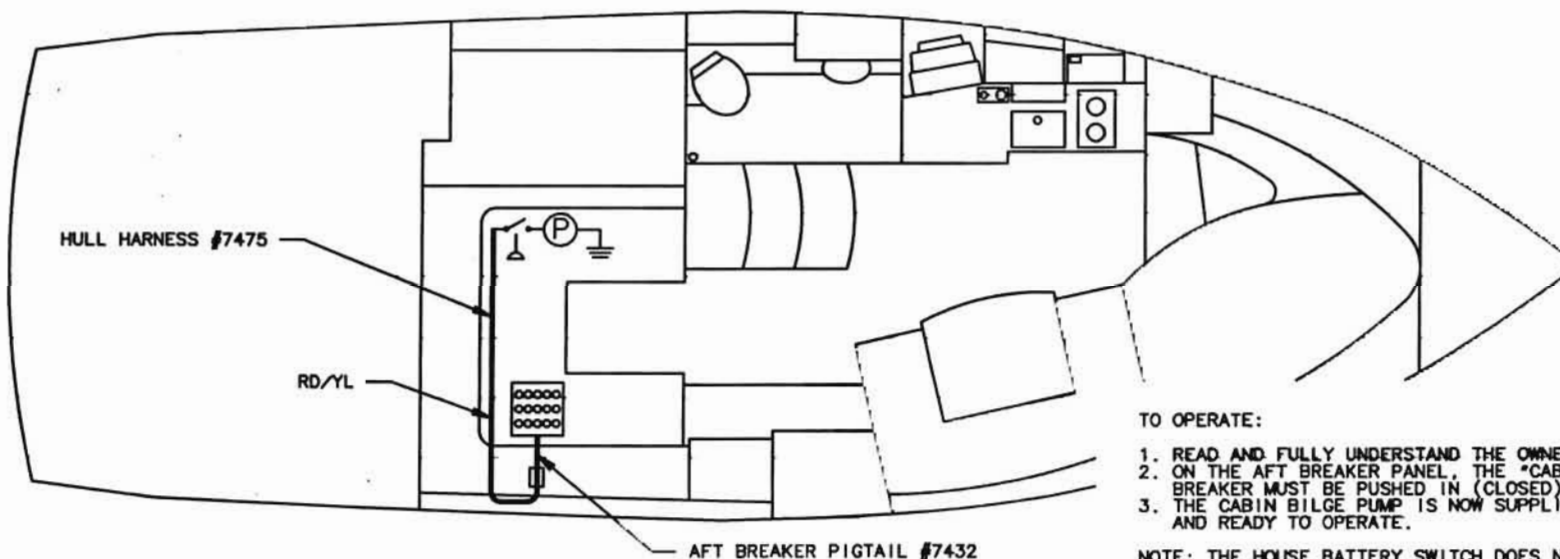
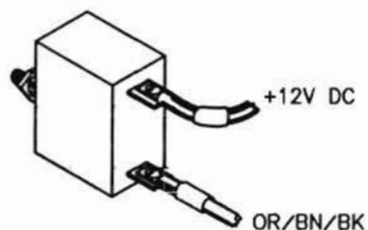
PLUG



DC GROUND



CABIN BILGE BKR 5A
(AFT BKR PANEL)
(REAR VIEW)



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. ON THE AFT BREAKER PANEL, THE "CABIN BILGE" BREAKER MUST BE PUSHED IN (CLOSED).
3. THE CABIN BILGE PUMP IS NOW SUPPLIED WITH POWER AND READY TO OPERATE.

NOTE: THE HOUSE BATTERY SWITCH DOES NOT NEED TO BE TURNED ON FOR THE CABIN BILGE PUMP TO OPERATE.

THE CABIN BILGE PUMP WILL AUTOMATICALLY START WHEN WATER IS AT A LEVEL HIGH ENOUGH TO ACTIVATE THE FLOAT SWITCH.



THUNDERBIRD
PRODUCTS
ENGINEERING

PUMPS, CABIN BILGE

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 48733-5003

31-300

DATE 12/25/05

(310) 701-0111

LEGEND

BREAKER
PANEL



PUMP



SWITCH



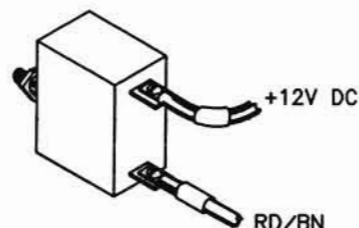
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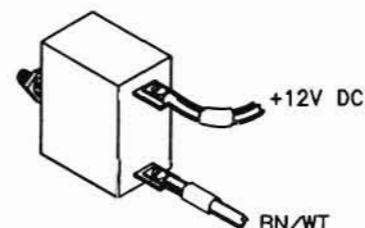
DC GROUND



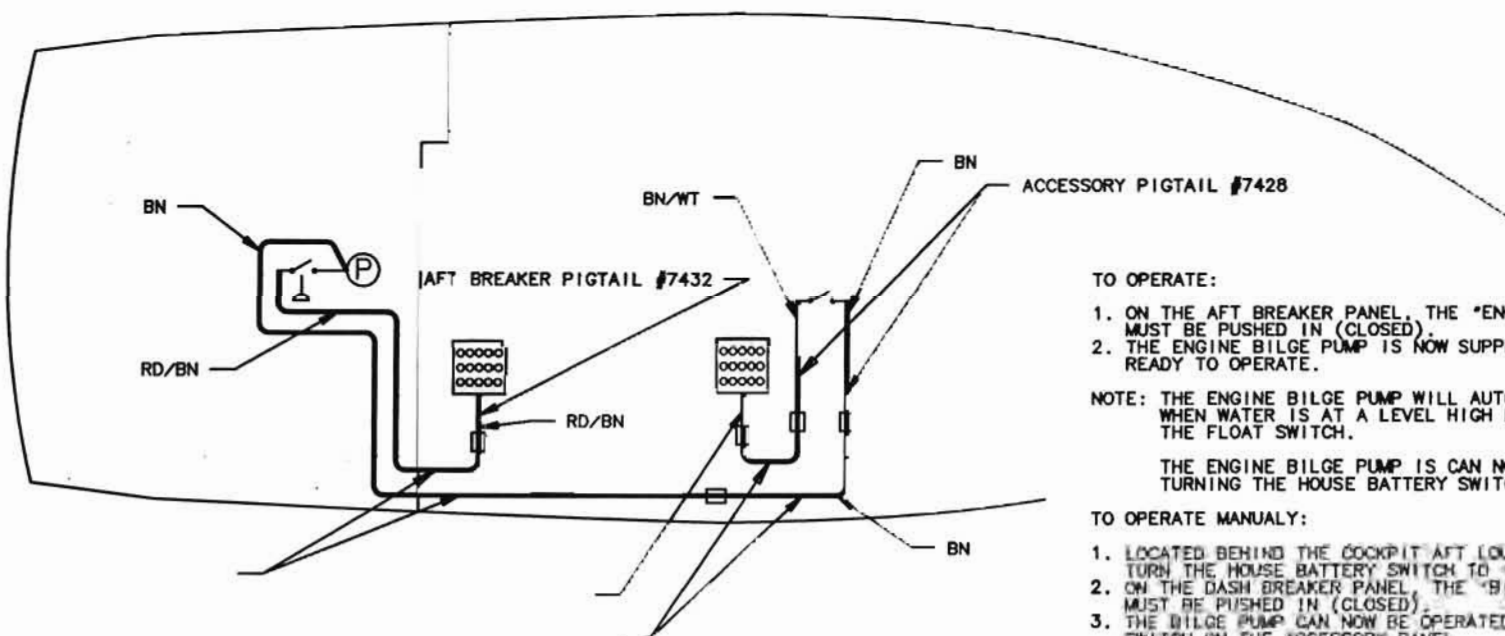
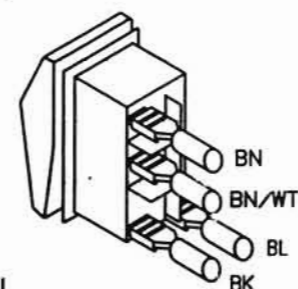
ENGINE BILGE BKR 15A
(AFT BKR PANEL)
(REAR VIEW)



BILGE PUMP BKR 15A
(DASH BKR PANEL)
(REAR VIEW)



BILGE PUMP SWITCH
(ACCESSORY PANEL)
(REAR VIEW)



TO OPERATE:

1. ON THE AFT BREAKER PANEL, THE "ENGINE BILGE" BREAKER MUST BE PUSHED IN (CLOSED).
2. THE ENGINE BILGE PUMP IS NOW SUPPLIED WITH POWER AND READY TO OPERATE.

NOTE: THE ENGINE BILGE PUMP WILL AUTOMATICALLY START WHEN WATER IS AT A LEVEL HIGH ENOUGH TO ACTIVATE THE FLOAT SWITCH.

THE ENGINE BILGE PUMP IS CAN NOT BE TURNED OFF BY TURNING THE HOUSE BATTERY SWITCH TO "OFF".

TO OPERATE MANUALLY:

1. LOCATED BEHIND THE COCKPIT AFT LOUVE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
2. ON THE DASH BREAKER PANEL, THE "BILGE PUMP" BREAKER MUST BE PUSHED IN (CLOSED).
3. THE BILGE PUMP CAN NOW BE OPERATED BY THE "BILGE PUMP" SWITCH ON THE ACCESSORY PANEL.



THUNDERBIRD
PRODUCTS
ENGINEERING

PUMPS, ENGINE BILGE

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

ID.: 31- 400

DATE: 12/25/95

(219) 724-9111

LEGEND

BREAKER
PANEL



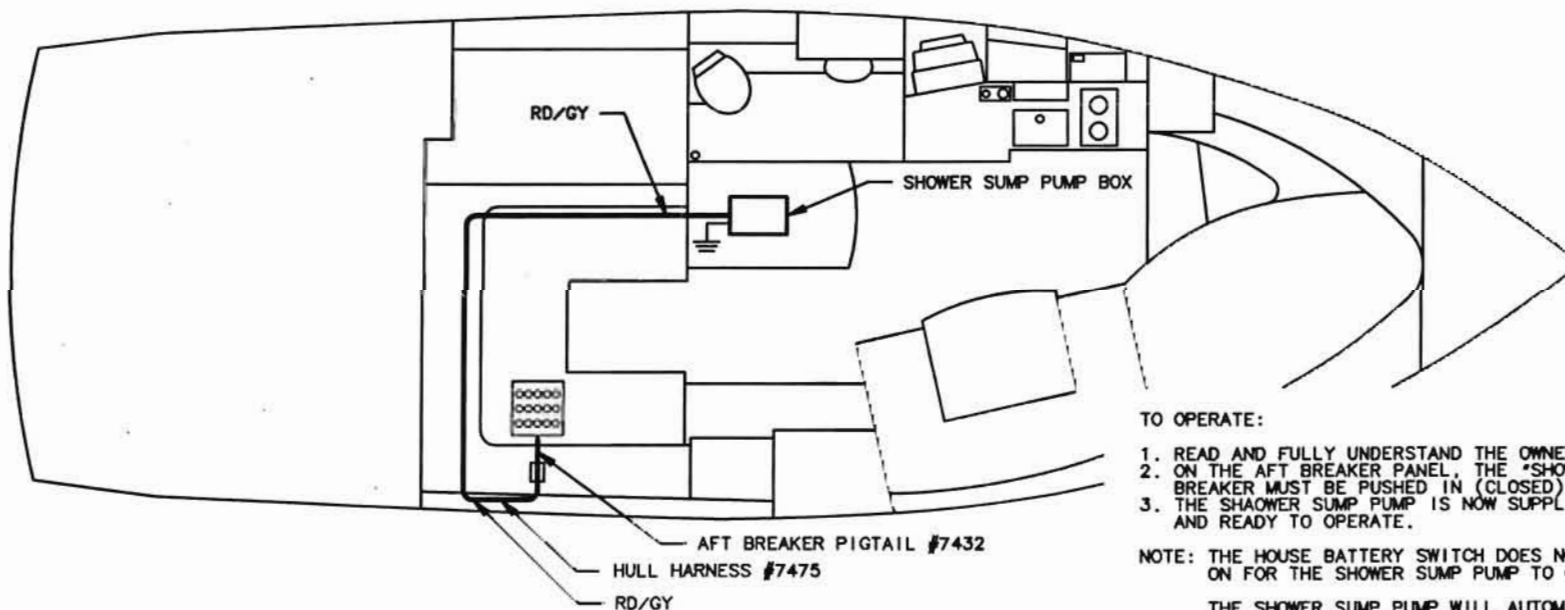
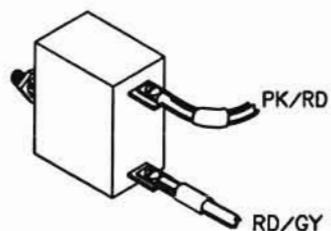
PLUG



DC GROUND



SHOWER SUMP BKR 2A
(AFT BKR PANEL)
(REAR VIEW)



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. ON THE AFT BREAKER PANEL, THE "SHOWER SUMP" BREAKER MUST BE PUSHED IN (CLOSED).
3. THE SHOWER SUMP PUMP IS NOW SUPPLIED WITH POWER AND READY TO OPERATE.

NOTE: THE HOUSE BATTERY SWITCH DOES NOT NEED TO BE TURNED ON FOR THE SHOWER SUMP PUMP TO OPERATE.

THE SHOWER SUMP PUMP WILL AUTOMATICALLY START WHEN WATER IS AT A LEVEL HIGH ENOUGH TO ACTIVATE THE FLOAT SWITCH.



THUNDERBIRD
PRODUCTS
ENGINEERING

PUMPS, SHOWER SUMP

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

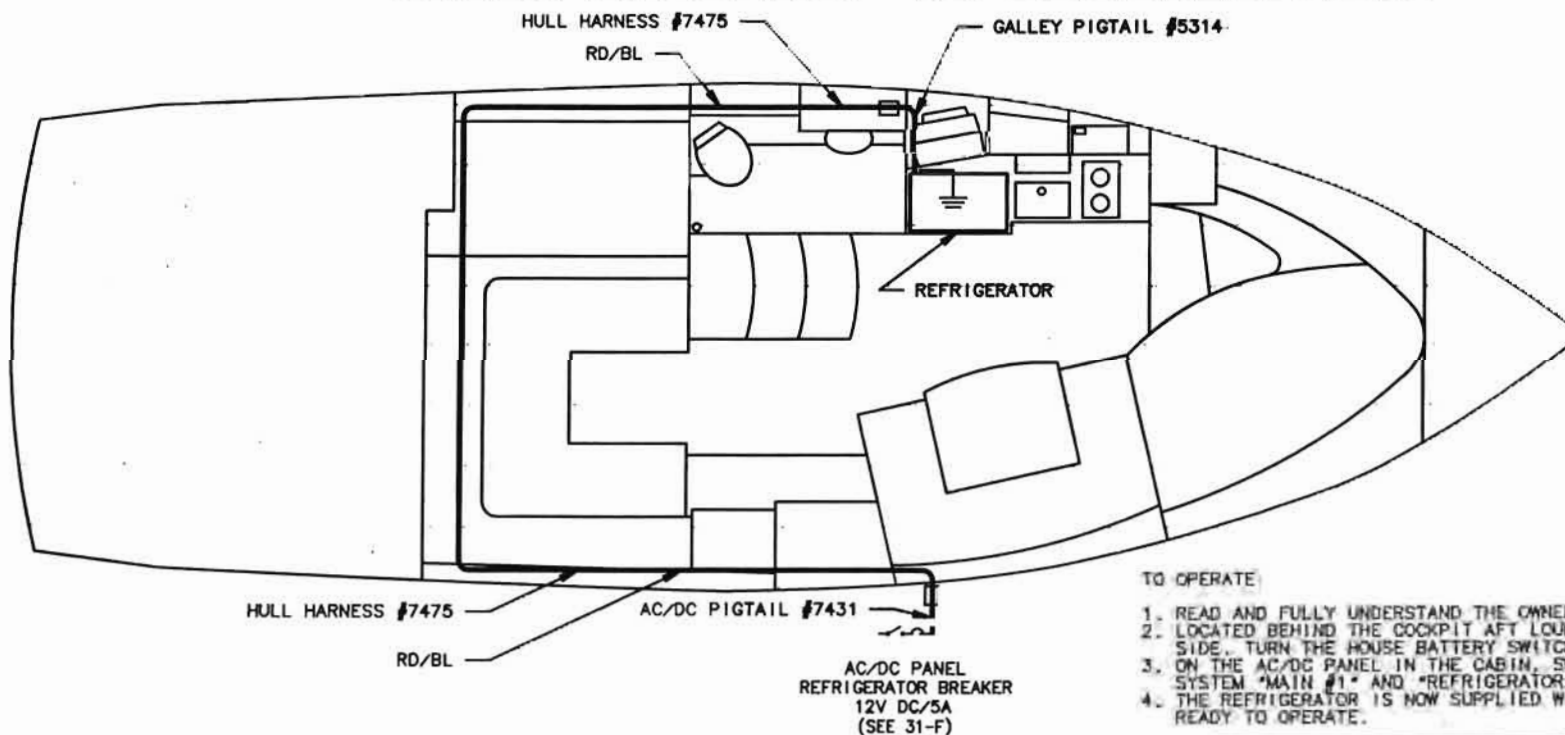
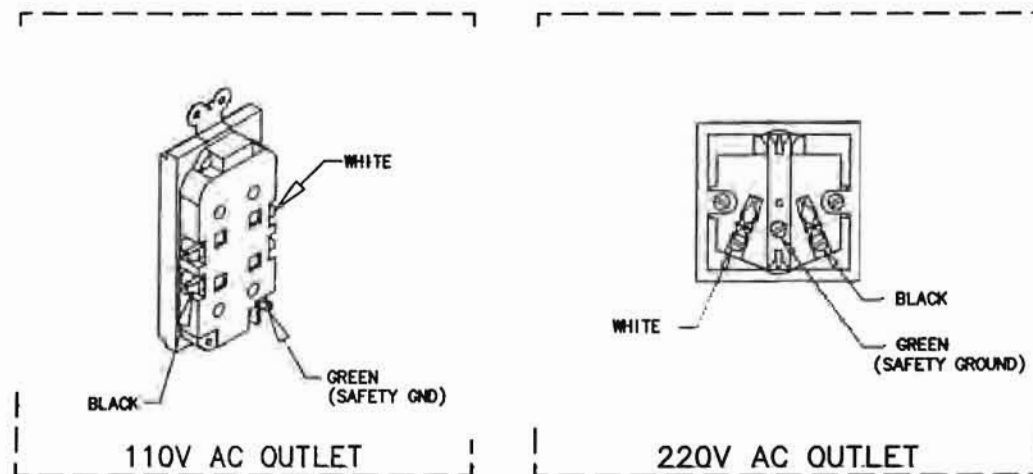
NO.: 31-410

DATE: 12/25/95

(219) 724-9111

LEGEND

BREAKER SWITCH	
PLUG	
DC GROUND	



TO OPERATE

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE AC/DC PANEL IN THE CABIN, SWITCH THE 12 V DC SYSTEM "MAIN #1" AND "REFRIGERATOR" BREAKERS TO "ON".
4. THE REFRIGERATOR IS NOW SUPPLIED WITH POWER AND READY TO OPERATE.



THUNDERBIRD
PRODUCTS
ENGINEERING

REFRIGERATOR

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

NO.: 31-420

DATE: 11/25/95

(219) 774-91

LEGEND

BREAKER
PANEL



LIGHT



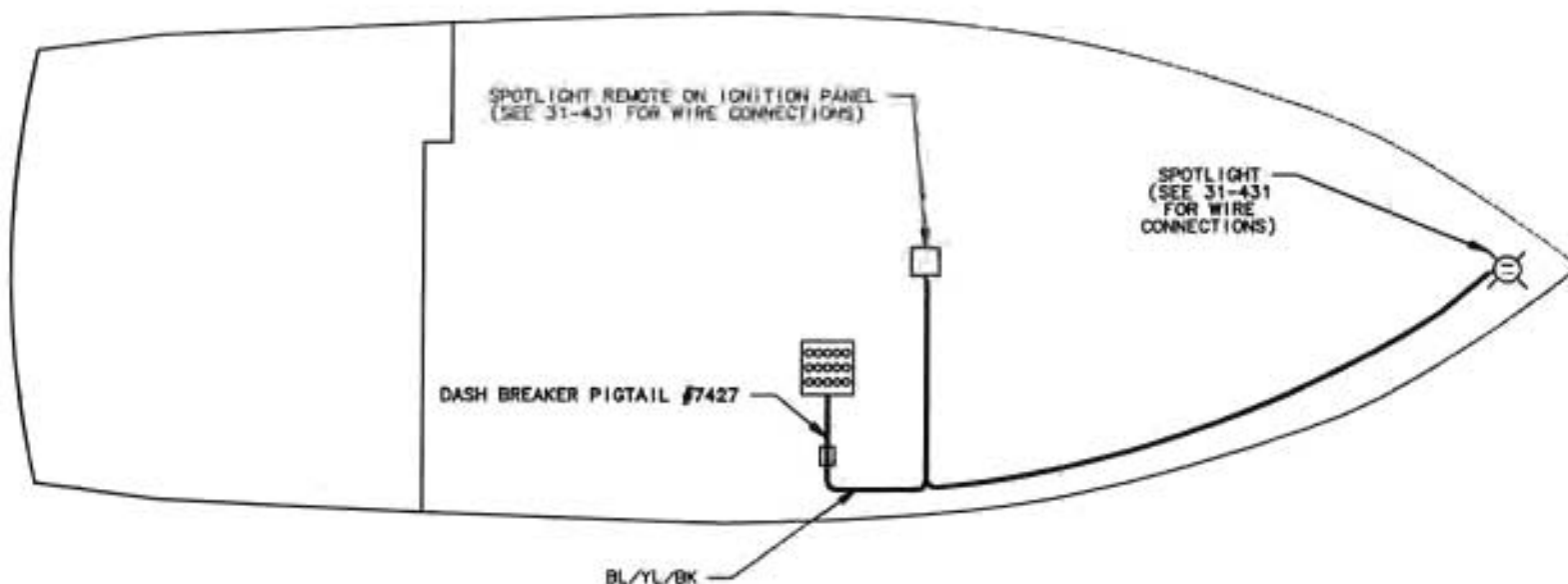
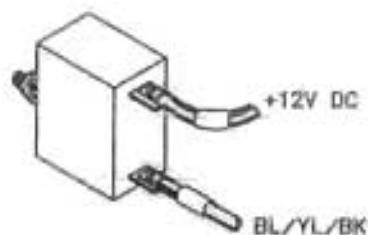
PLUG



DC GROUND



SPOTLIGHT BKR 20A
(DASH BKR PANEL)
(REAR VIEW)



THUNDERBIRD
PRODUCTS
ENGINEERING

SPOTLIGHT

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

MT 31-430

DATE 12/25/95

(210) 794-0111

REMOTE

LIGHT

BL

BL/YL/BK

GY

GY/OR/OR

GY

OR

GY/OR

OR

BL

GY/BL

BL

YL

GY/YL

YL

GN

GY/GN

GN

BN

GY/BN

BN

BK



THUNDERBIRD
PRODUCTS
ENGINEERING

SPOTLIGHT

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 48733-5003

REV: 31-431

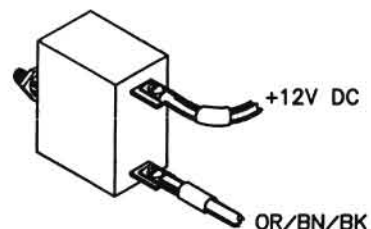
DATE: 12/25/95

(219) 774-8111

LEGEND

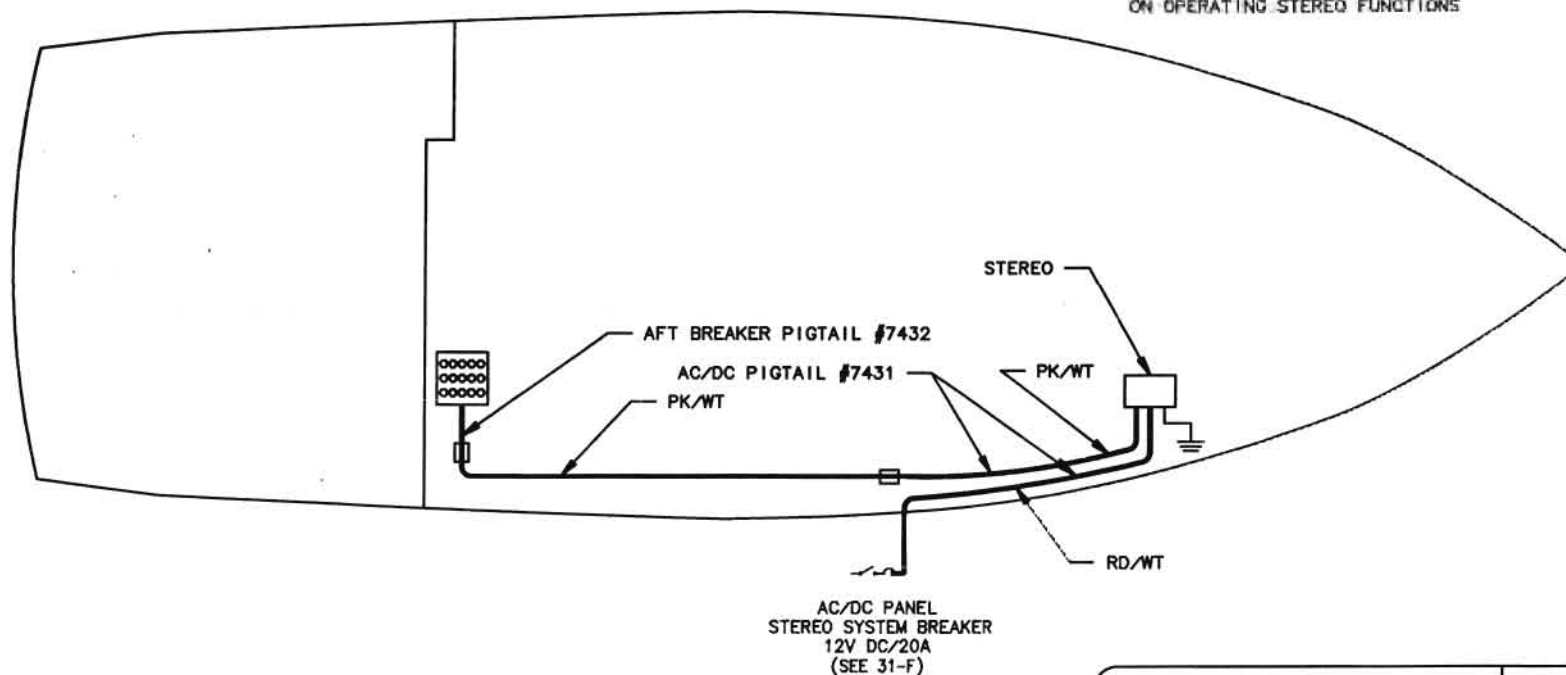
BREAKER SWITCH	
BREAKER PANEL	
PLUG	
DC GROUND	

CONSTANT POWER BKR 5A
(AFT BKR PANEL)
(REAR VIEW)



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE AC/DC PANEL IN THE CABIN, SWITCH THE 12V DC SYSTEM "MAIN #1" AND "STEREO SYSTEM" BREAKERS TO "ON".
4. THE STEREO SYSTEM IS NOW SUPPLIED WITH POWER AND READY TO OPERATE.
5. SEE KENWOOD'S OPERATING MANUAL FOR INSTRUCTIONS ON OPERATING STEREO FUNCTIONS.



THUNDERBIRD
PRODUCTS
ENGINEERING

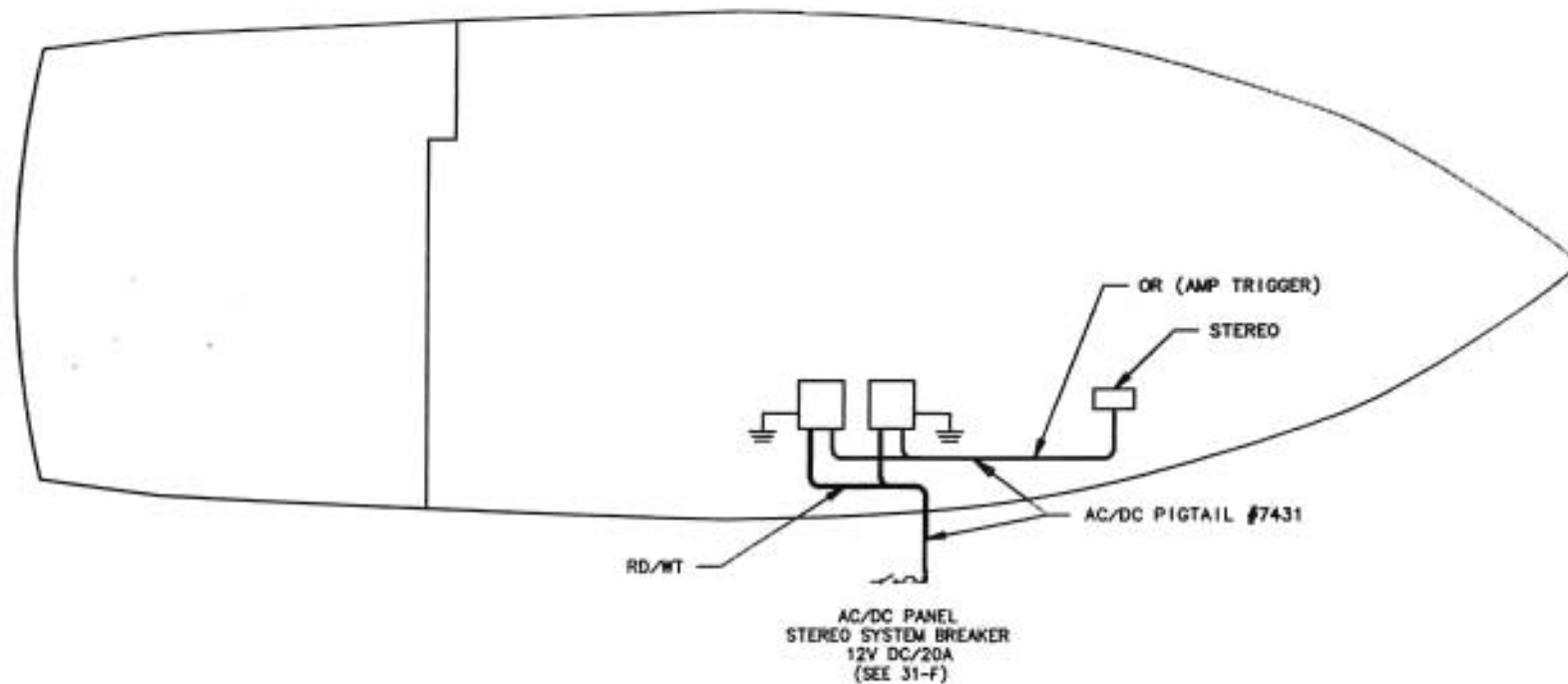
STEREO		THUNDERBIRD PRODUCTS
		P.O. BOX 1003
MODEL: F-31 PC	DR BY: R. HANNI	DECATUR IN., 46733-5003
NO. 31-440	DATE: 12/25/95	(210) 724-0111

LEGEND

BREAKER
SWITCH

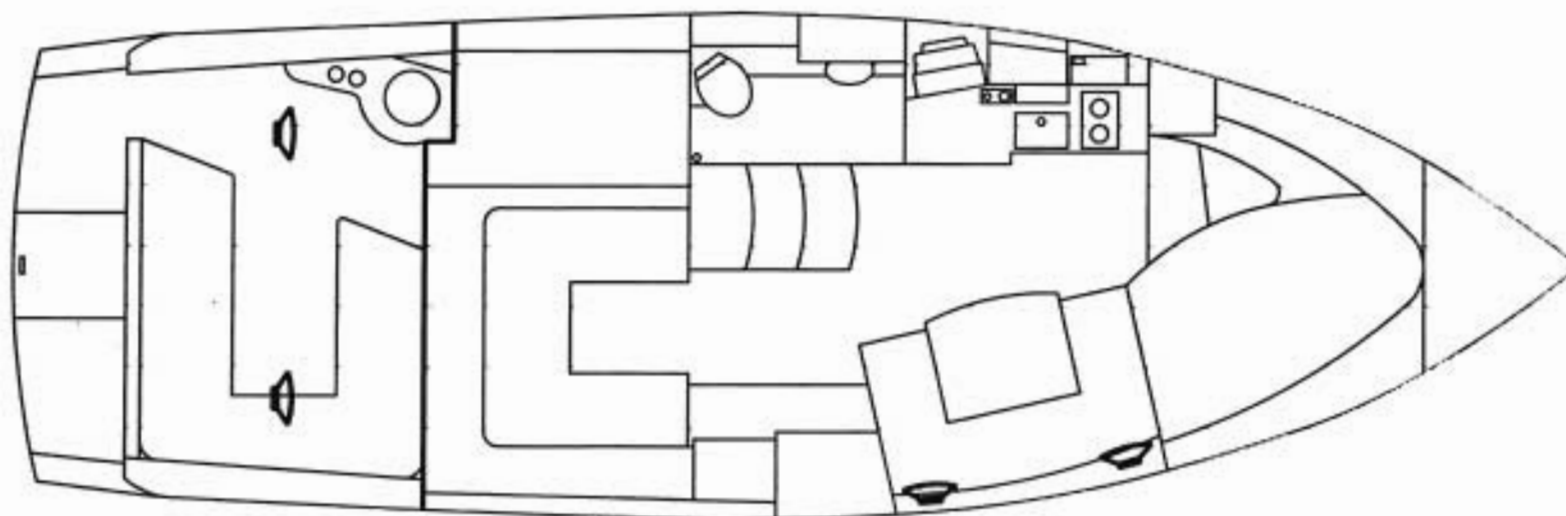


DC GROUND



THUNDERBIRD
PRODUCTS
ENGINEERING

STEREO, AMPS		THUNDERBIRD PRODUCTS
		P.O. BOX 1003
MODEL: F-31 PC	DR BY: R. HANNI	DECATUR IN., 48733-5003
NO: 31 441	DATE: 12/25/95	(219) 724-9111



THUNDERBIRD
PRODUCTS
ENGINEERING

STEREO,
SPEAKER LOCATION

MODEL: F-31 PC

DR BY: R. HANNI

31-442

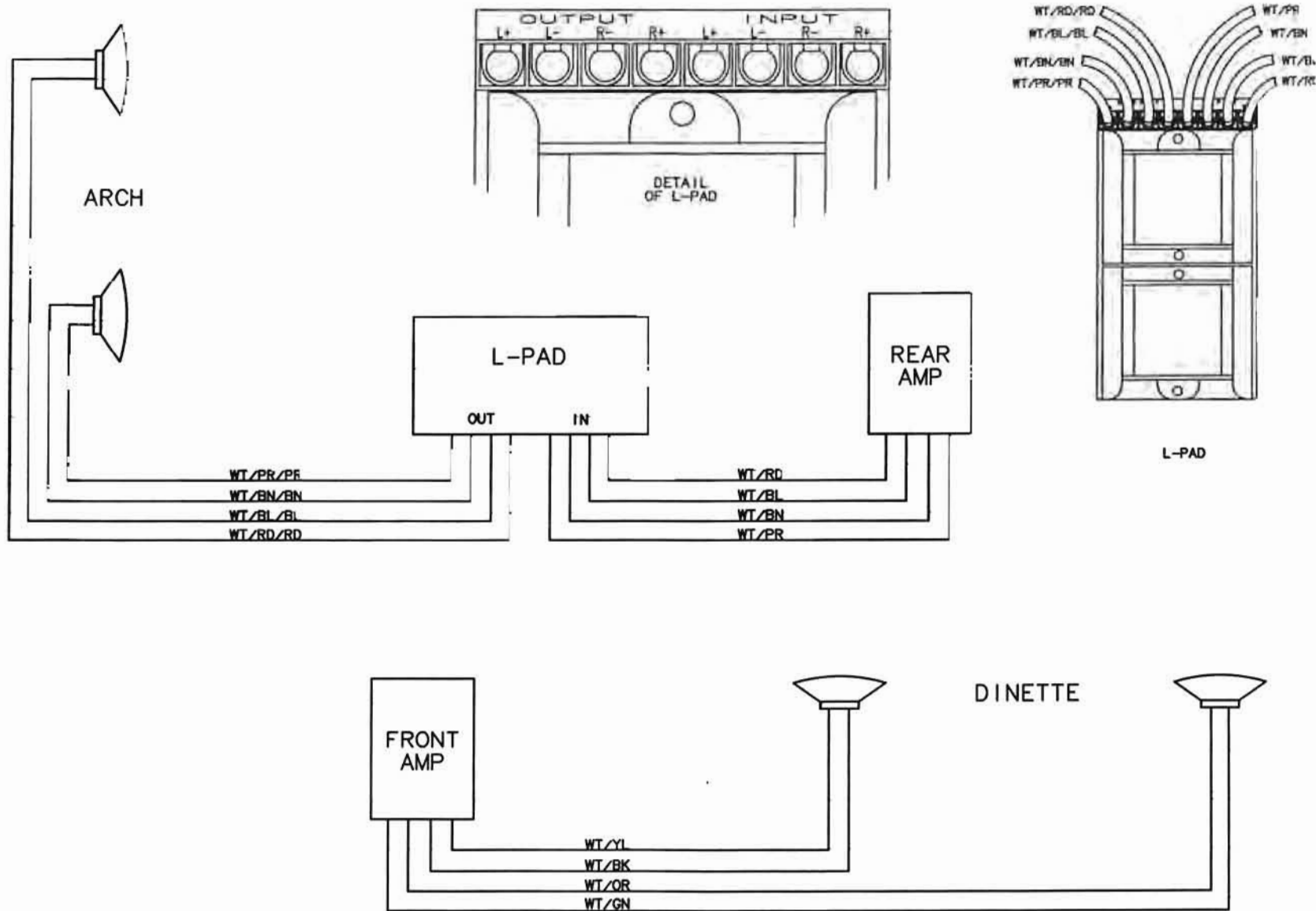
DATE 12/26/06

THUNDERBIRD PRODUCTS

P.O. BOX 1003

DECATUR IN., 46733-5003

(516) 781-0000



THUNDERBIRD
PRODUCTS
ENGINEERING

STEREO, SPEAKER WIRING

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

ID.: 31-443

DATE: 12/25/95

(219) 774-011

THUNDERBIRD PRODUCTS

P.O. BOX 1003

LEGEND

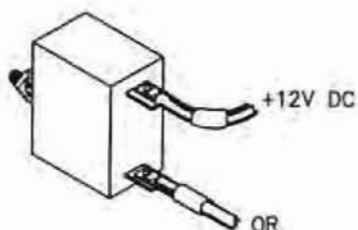
BREAKER
PANEL



DC GROUND

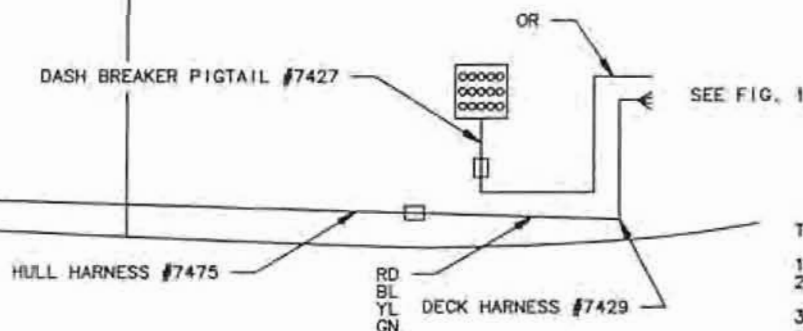
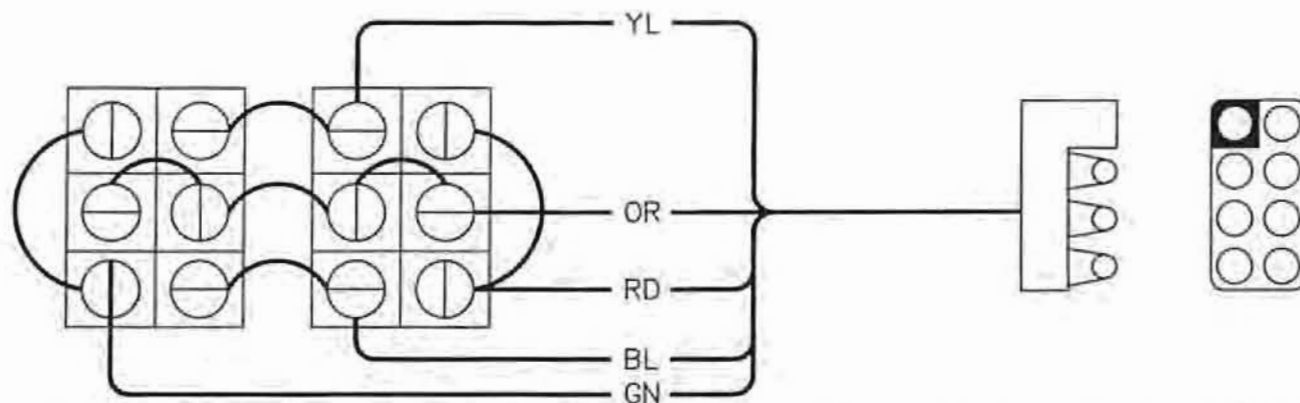


TRIM TAB BKR 20A
(DASH BKR PANEL)
(REAR VIEW)



TRIM TAB SWITCHES
(SHIFTER PANEL)
(REAR VIEW)

FIG. 1



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE AFT BREAKER PANEL, THE "TRIM TAB" BREAKER MUST BE PUSHED IN (CLOSED).
4. THE TRIM TABS CAN NOW BE OPERATED BY THE "TRIM TAB" SWITCHES ON THE SHIFTER PANEL.



THUNDERBIRD
PRODUCTS
ENGINEERING

TRIM TABS

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

31-450

DATE 12/25/05

THUNDERBIRD PRODUCTS

LEGEND

BREAKER
PANEL



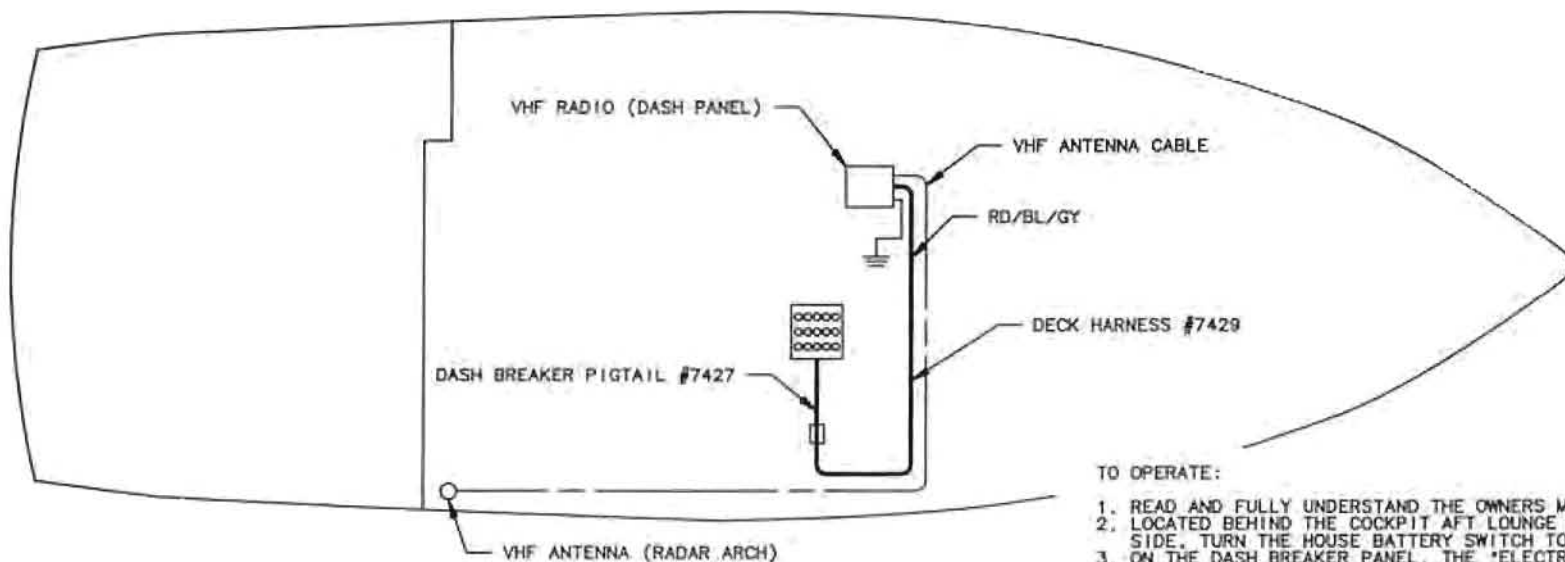
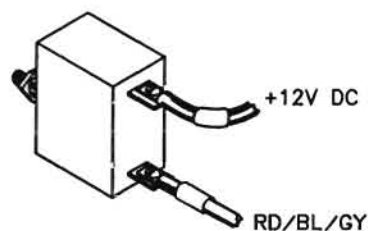
PLUG



DC GROUND



ELECTRONICS BKR 10A
(DASH BKR PANEL)
(REAR VIEW)



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNER'S MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE DASH BREAKER PANEL, THE "ELECTRONICS" BREAKER MUST BE PUSHED IN (CLOSED).
4. THE VHF RADIO IS NOW SUPPLIED WITH POWER AND READY TO OPERATE.
5. SEE THE VHF RADIO'S OPERATING MANUAL FOR INSTRUCTIONS ON OPERATING RADIO FUNCTIONS.



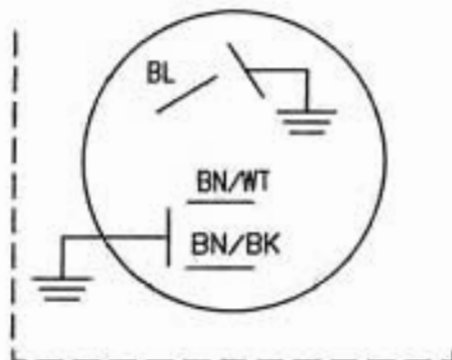
THUNDERBIRD
PRODUCTS
ENGINEERING

VHF		THUNDERBIRD PRODUCTS
		P.O. BOX 1003
MODEL: F-31-PC	DR BY: R. HANNI	DECATUR IN., 46733-5003
NO.: 31-460	DATE: 12/25/95	(219) 724-9111

LEGEND

BREAKER SWITCH	
PUMP	
PLUG	
DC GROUND	

WATER GAUGE (REAR VIEW)



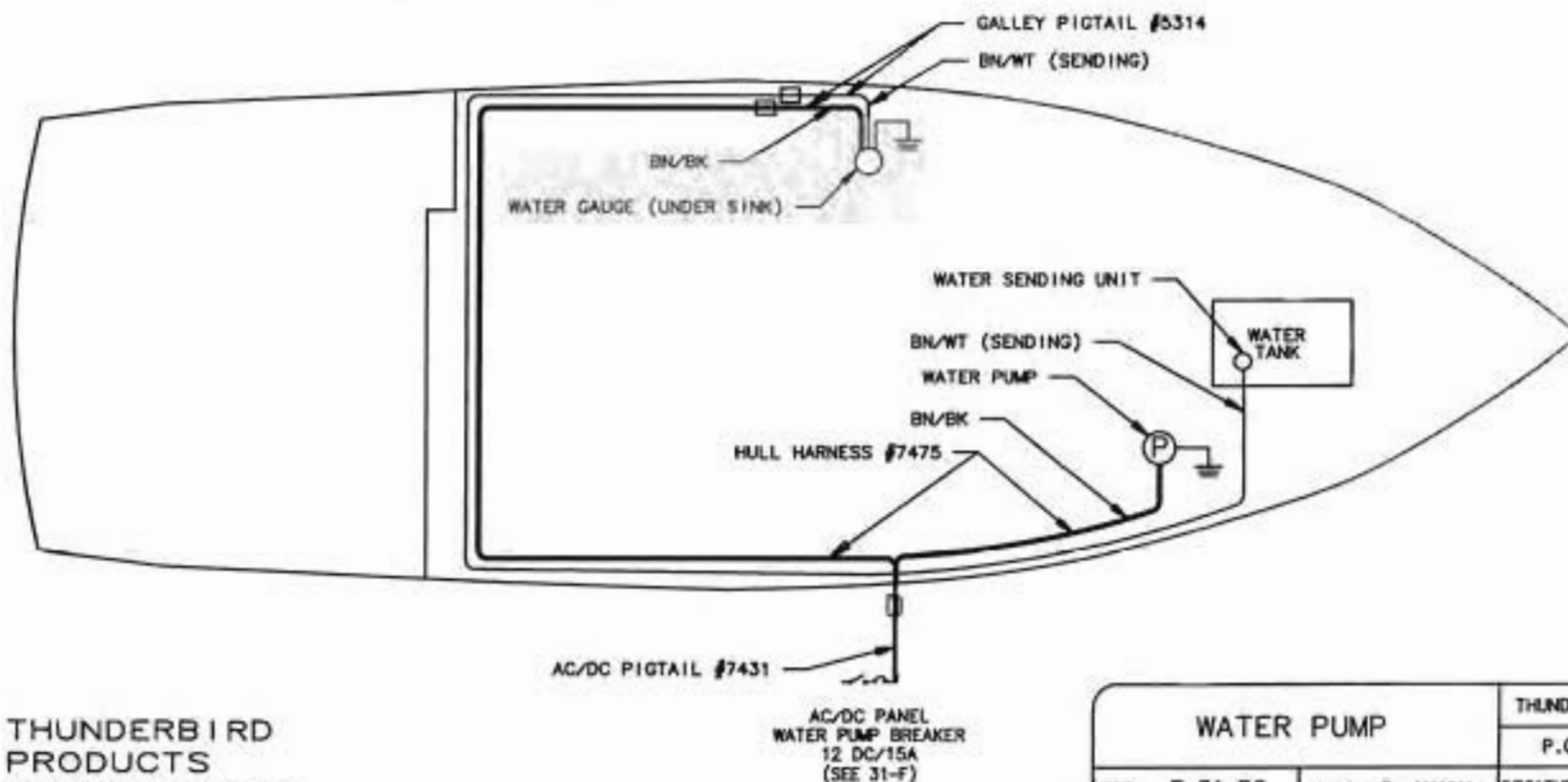
TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE AC/DC PANEL IN THE CABIN, SWITCH THE 12V DC SYSTEM "MAIN #1" AND "WATER PUMP" BREAKERS TO "ON".
4. THE WATER PUMP IS NOW ON, AND WILL SHUT OFF AUTOMATICALLY WHEN THERE IS SUFFICIENT WATER PRESSURE IN THE SYSTEM.

NOTE: THE WATER PUMP DOES NOT NEED TO BE IN OPERATION WHEN THE BOAT IS CONNECTED TO SHORE WATER.

WARNING!

MAKE SURE WATER TANK HAS SUFFICIENT AMOUNT OF WATER TO RUN SYSTEM, RUNNING THE SYSTEM DRY CAN CAUSE DAMAGE TO WATER PUMP. WATER TANK GAUGE IS LOCATED IN CABINET, UNDER SINK.



THUNDERBIRD
PRODUCTS
ENGINEERING

WATER PUMP

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

RE: 31-470

DATE:

12/25/95

(910) 794-0111

LEGEND	
BREAKER PANEL	
PLUG	
DC GROUND	

□

⊥

WINDLASS BKR 15A
(DASH BKR PANEL)
(REAR VIEW)



+12V DC

OR/YL

OR/YL

WINDLASS SWITCH
ON/OFF
(ACCESSORY PANEL)
(REAR VIEW)

OR/YL/YL
OR/YL
BL
BK

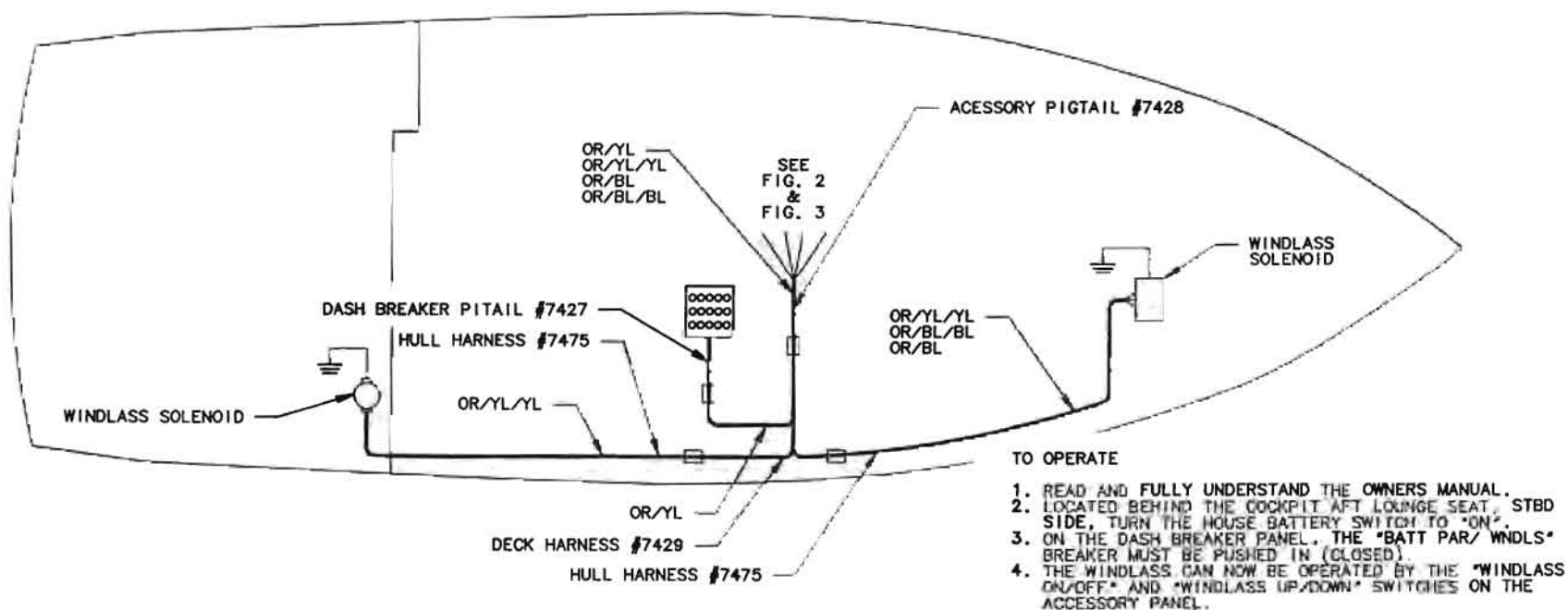
BK

WINDLASS SWITCH
UP/DOWN
(ACCESSORY PANEL)
(REAR VIEW)

BK
 BL
 OR/BL/BL
 OR/YL/YL
 OR/BL

000000

OR/BL



TO OPERATE

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, LOCATED NEAR HOIST BATTERY SWITCH TO "ON".
3. ON THE DASH BREAKER PANEL THE "BATT PAR/ WNDLS" BREAKER MUST BE PUSHED IN (CLOSED).
4. THE WINDLASS CAN NOW BE OPERATED BY THE "WINDLASS ON/OFF" AND "WINDLASS UP/DOWN" SWITCHES ON THE ACCESSORY PANEL.

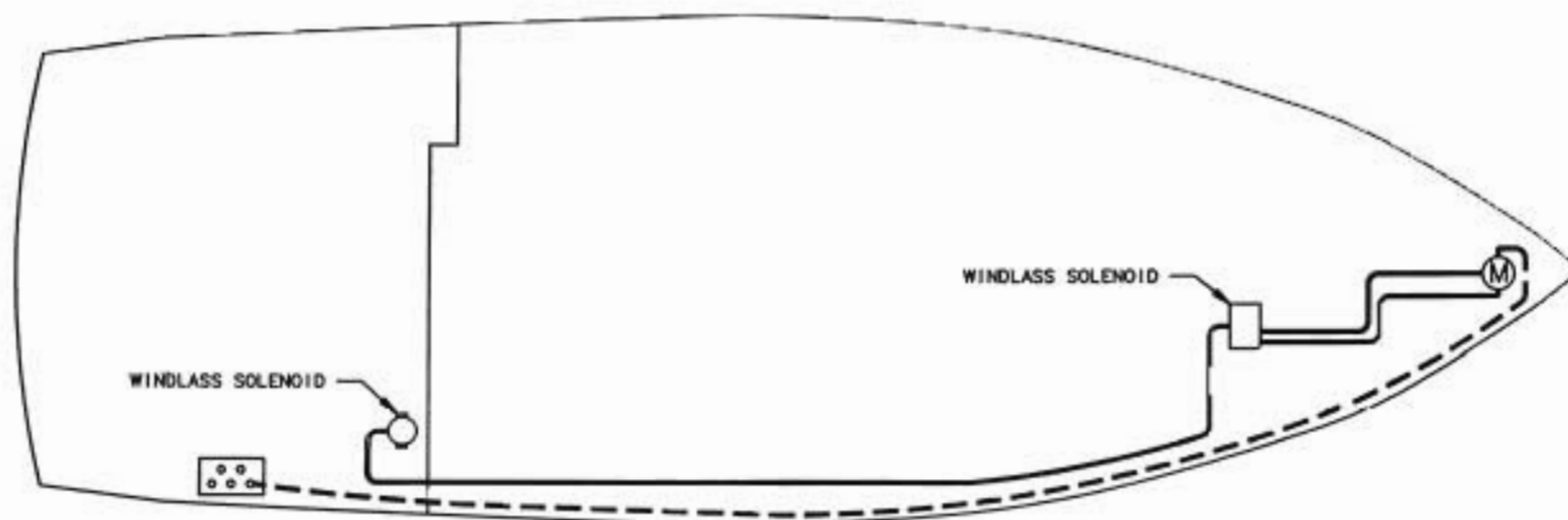


THUNDERBIRD
PRODUCTS
ENGINEERING

WINDLASS		THUNDERBIRD PRODUCTS
		P.O. BOX 1003
MODEL: F-31 PC	DR BY: R. HANNI	DECATUR IN., 46733-5003
NO. 31-480	DATE 12/25/95	(219) 724-9111

LEGEND

WINDLASS MOTOR	
GROUND BLOCK	
CABLE #2 RED	
CABLE #2 BLACK	



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STEER SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE DASH BREAKER PANEL, THE "BATT PAIR/ WINDLS" BREAKER MUST BE PUSHED IN (CLOSED).
4. THE WINDLASS CAN NOW BE OPERATED BY THE "WINDLASS ON/OFF" AND "WINDLASS UP/DOWN" SWITCHES ON THE ACCESSORY PANEL.



THUNDERBIRD
PRODUCTS
ENGINEERING

WINDLASS		THUNDERBIRD PRODUCTS
		P.O. BOX 1003
MODEL: F-31 PC	DR BY: R. HANNI	DECATUR IN., 46733-5003
REV: 31-481	DATE: 12/25/95	(219) 724-9111

LEGEND

BREAKER
PANEL



DOUBLE POLE
DOUBLE THROW
SWITCH



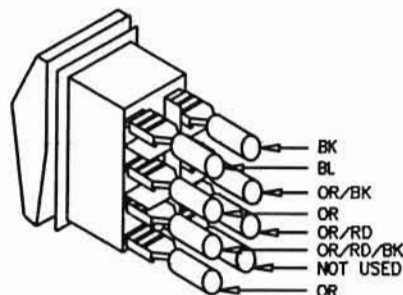
PLUG



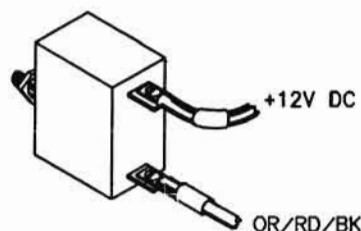
DC GROUND



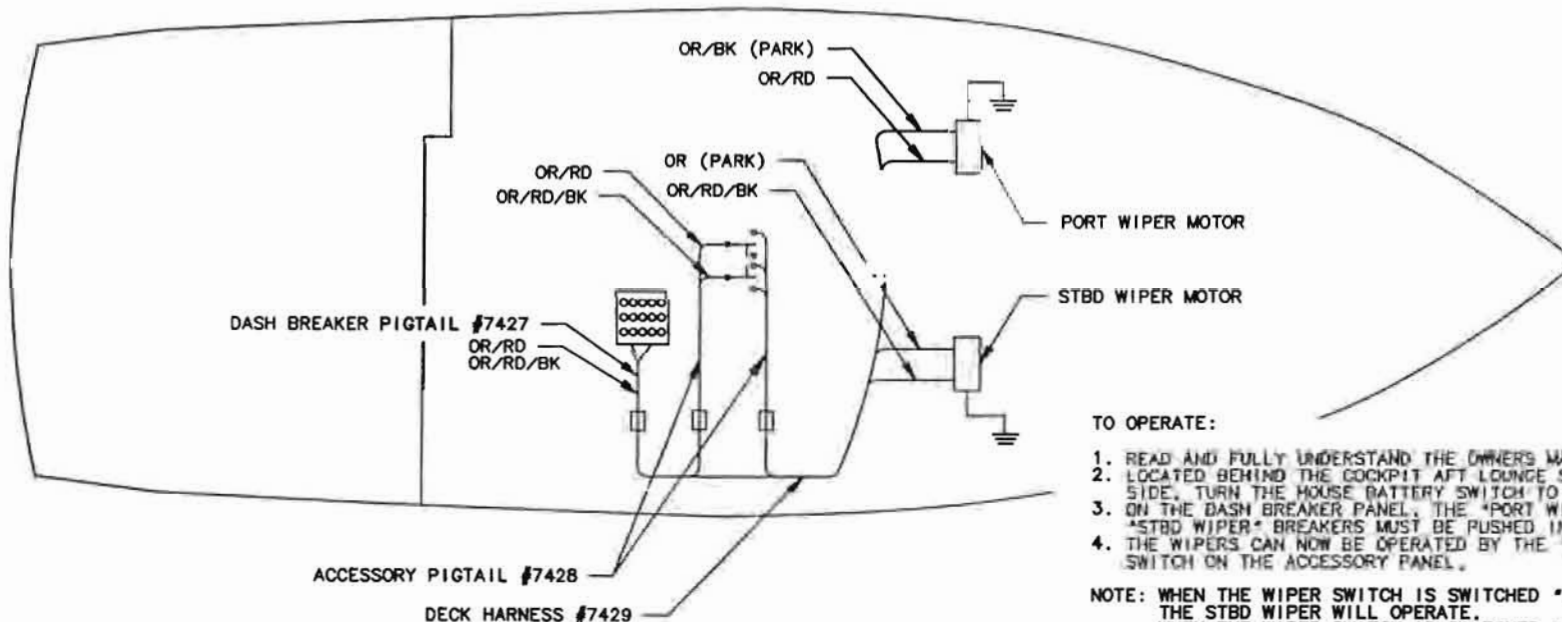
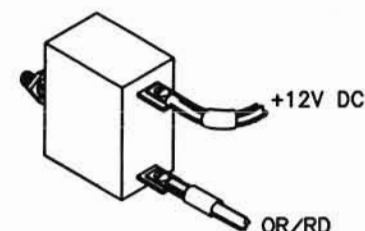
WIPER SWITCH
(ACCESSORY PANEL)
(REAR VIEW)



STBD WIPER BKR 5A
(DASH BKR PANEL)
(REAR VIEW)



PORT WIPER BKR 5A
(DASH BKR PANEL)
(REAR VIEW)



TO OPERATE:

1. READ AND FULLY UNDERSTAND THE OWNERS MANUAL.
2. LOCATED BEHIND THE COCKPIT AFT LOUNGE SEAT, STBD SIDE, TURN THE HOUSE BATTERY SWITCH TO "ON".
3. ON THE DASH BREAKER PANEL, THE "PORT WIPER" AND "STBD WIPER" BREAKERS MUST BE PUSHED IN (CLOSED).
4. THE WIPERS CAN NOW BE OPERATED BY THE "WIPER" SWITCH ON THE ACCESSORY PANEL.

NOTE: WHEN THE WIPER SWITCH IS SWITCHED "UP", ONLY THE STBD WIPER WILL OPERATE.
WHEN THE WIPER SWITCH IS SWITCHED "DOWN", BOTH THE STBD AND PORT WIPERS WILL OPERATE.



THUNDERBIRD
PRODUCTS
ENGINEERING

WIPERS

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

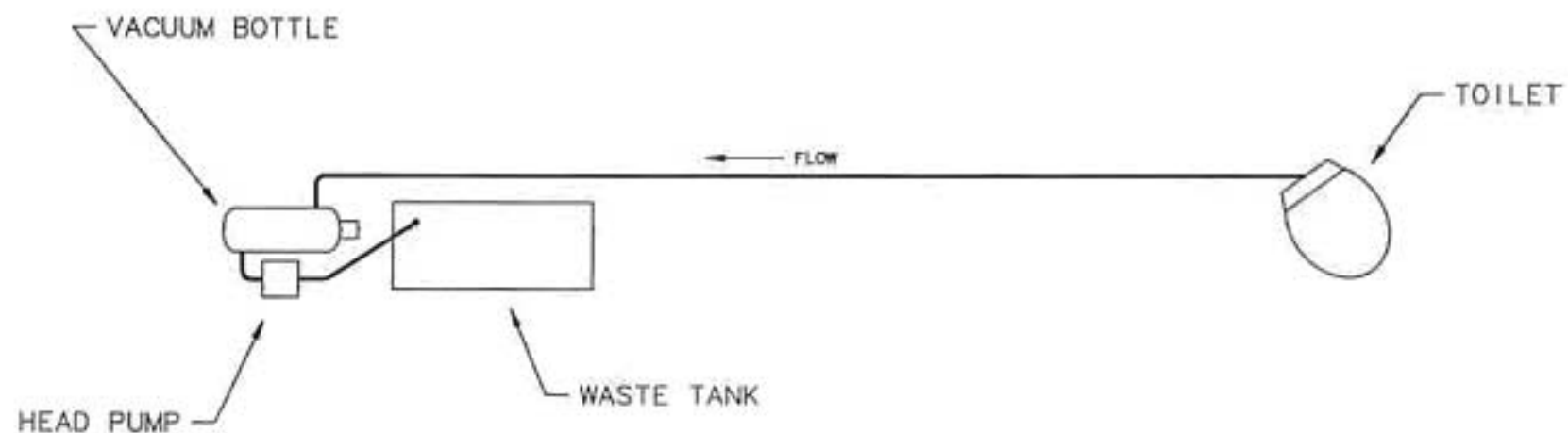
DR BY: R. HANNI

DECATUR IN., 46733-5003

ID: 31-490

DATE: 12/25/95

(219) 724-9111



THUNDERBIRD
PRODUCTS
ENGINEERING

PLUMBING, HEAD PUMP		THUNDERBIRD PRODUCTS
		P.O. BOX 1003
MODEL: F-31 PC	DR BY: R. HANNI	DECATUR IN., 46733-5003
REV: 31-500	DATE: 12/25/85	(219) 794-911

TO
MANUAL
DISCHARGE
OUTLET

"Y"
VALVE

MACERATOR

TANK INLET

WASTE
TANK

TANK OUTLET



THUNDERBIRD
PRODUCTS
ENGINEERING

PLUMBING, MACERATOR		THUNDERBIRD PRODUCTS
		P.O. BOX 1003
MODEL: F-31 PC	DR BY: R. HANNI	DECATUR IN., 46733-5003
NO.		(910) 792-0111

LEGEND

PUMP

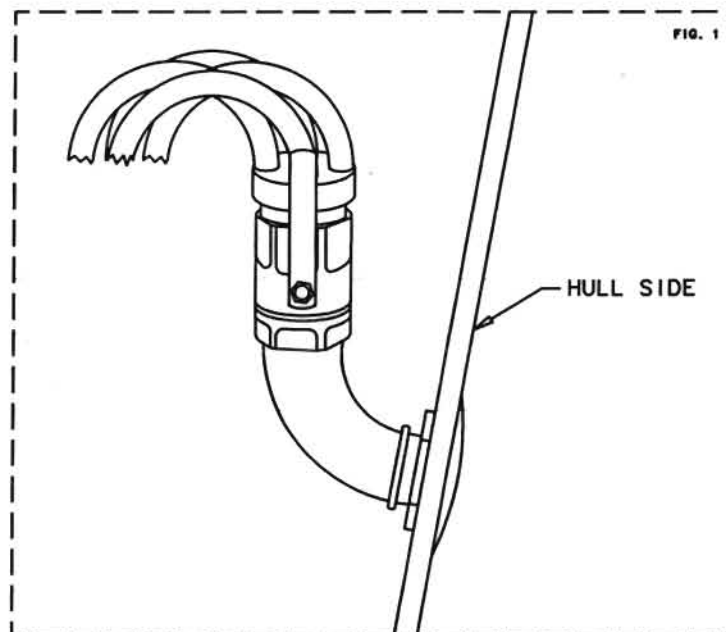
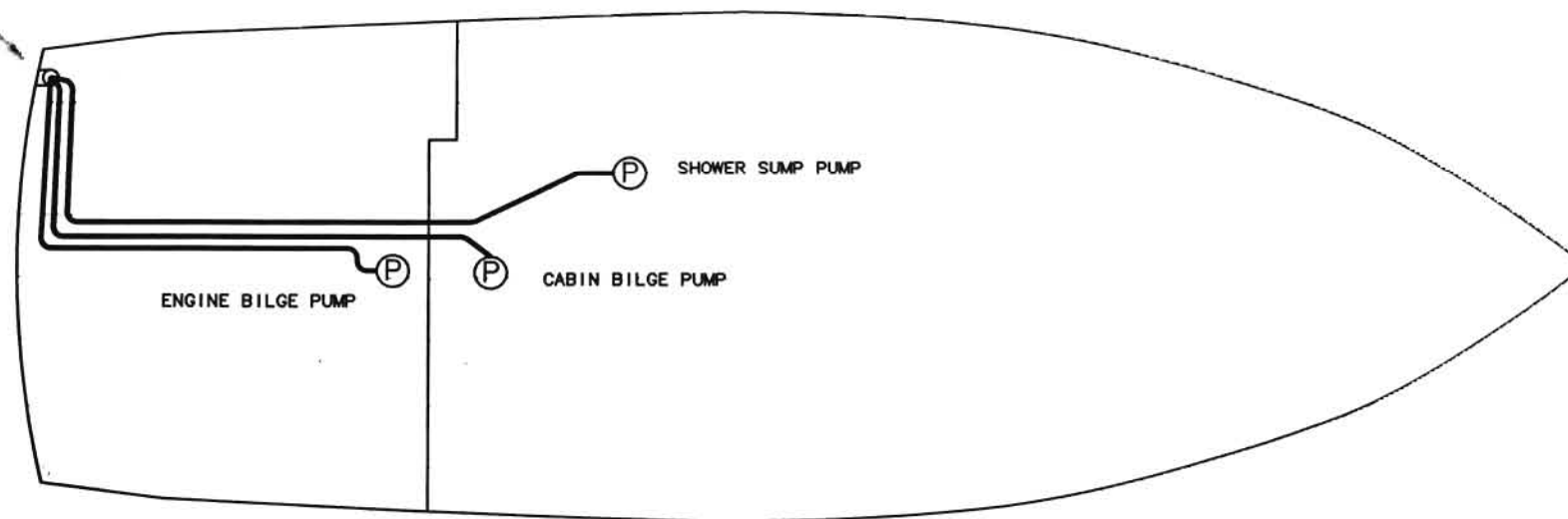


FIG. 1

HULL SIDE

THRU HULL DRAIN
(SEE FIG. 1)



SHOWER SUMP PUMP

CABIN BILGE PUMP

ENGINE BILGE PUMP



THUNDERBIRD
PRODUCTS
ENGINEERING

PLUMBING,
CABIN BILGE PUMP,
ENGINE BILGE PUMP,
SHOWER SUMP

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

31 520

DATE: 12/25/95

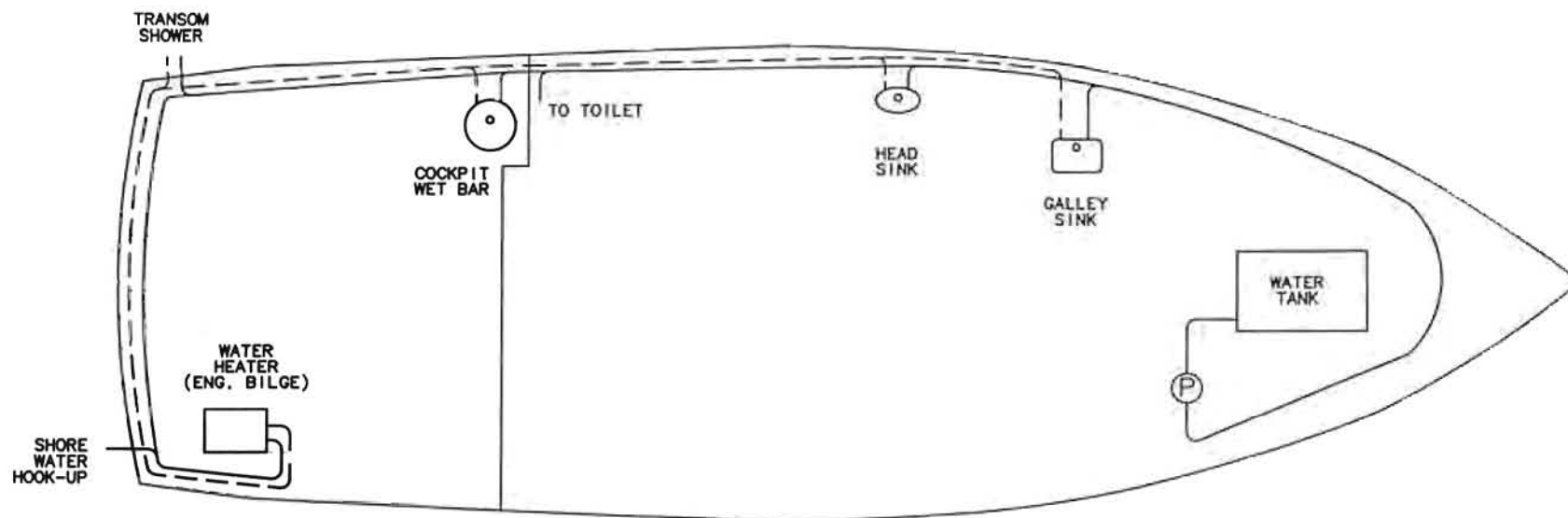
(210) 724-0111

LEGEND

COLD WATER
LINE

HOT WATER
LINE

WATER
PUMP



ENGINEERING

PLUMPING, WATER PUMP

THUNDERBIRD PRODUCTS

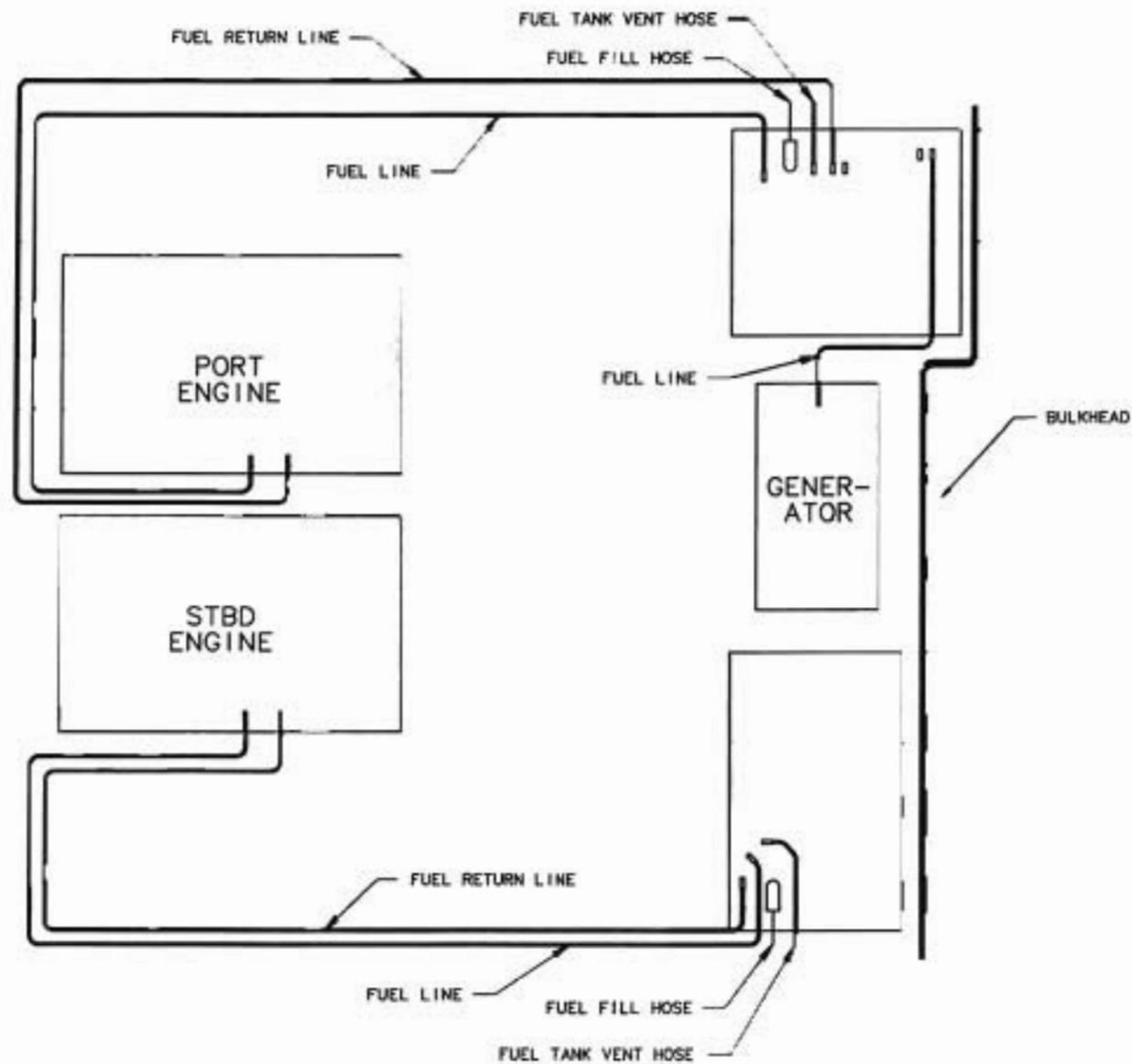
P.O. BOX 1003

MODEL: F-31 PC

DR BY: R. HANNI

DECATUR IN., 46733-5003

(210) 724-0114



THUNDERBIRD
PRODUCTS
ENGINEERING

DIESEL

THUNDERBIRD PRODUCTS

P.O. BOX 1003

MODEL: F-31 PC

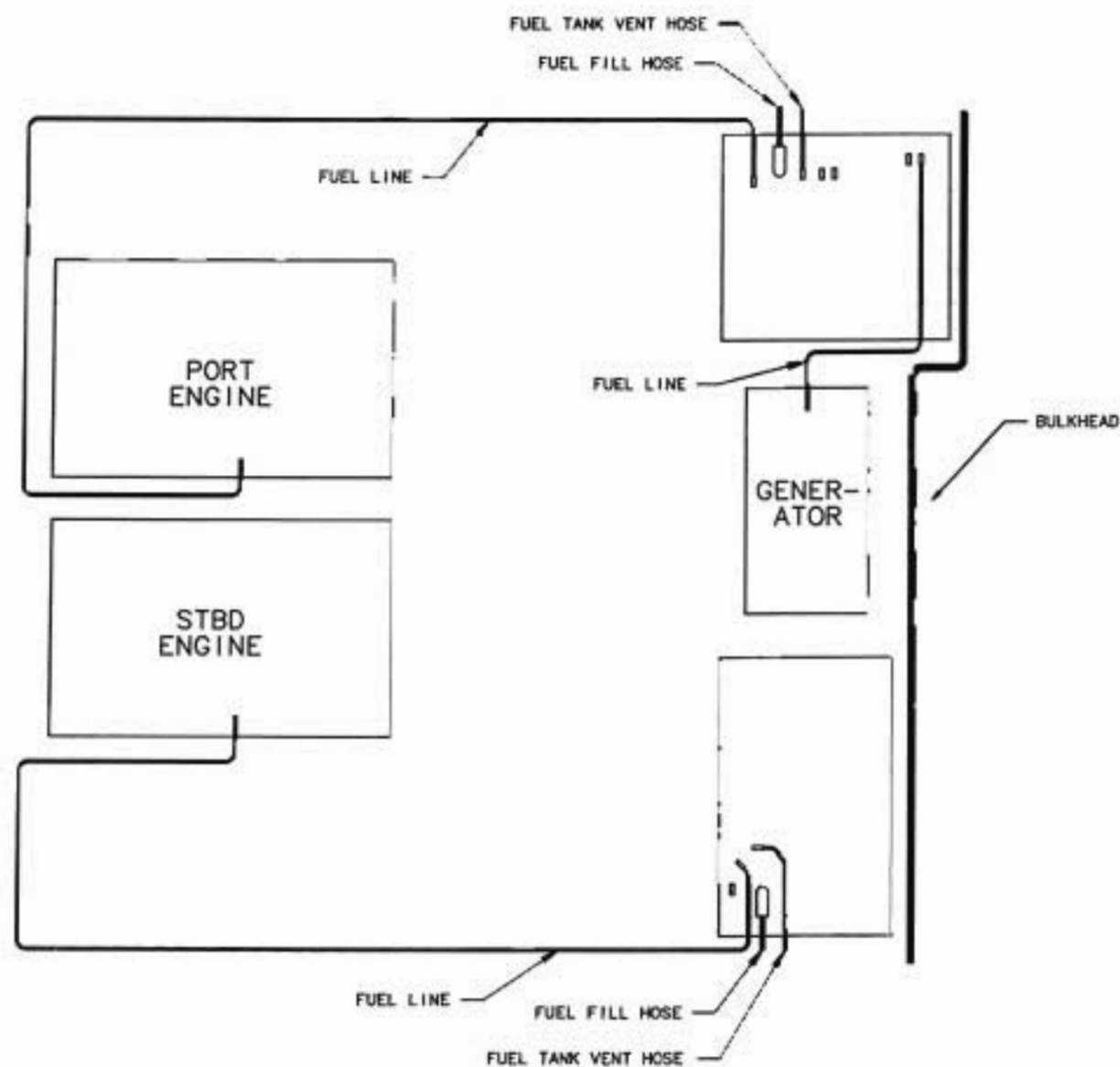
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DECATUR IN., 46733-5003

ID: 31-540

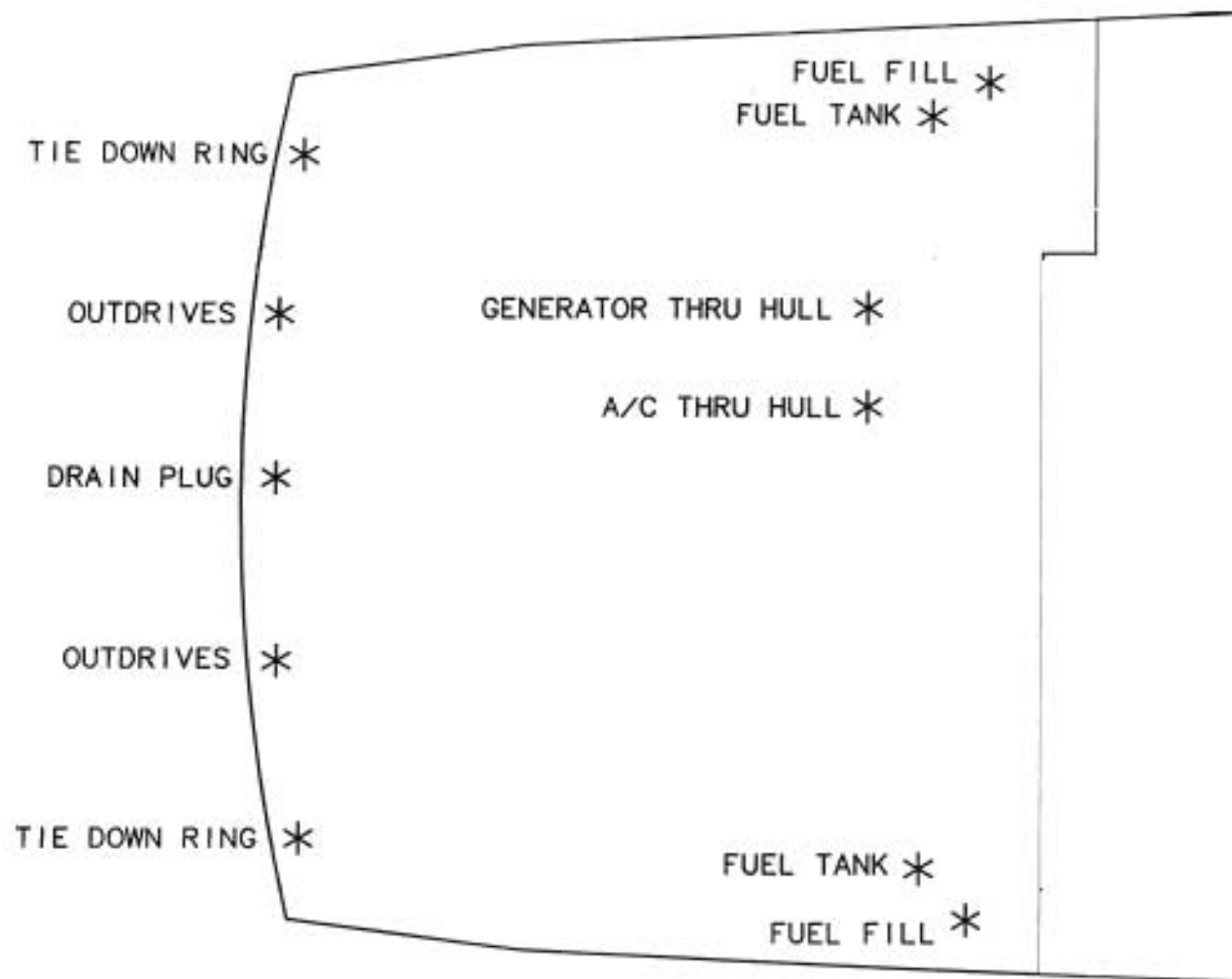
DATE: 12/25/95

(916) 792-0111



THUNDERBIRD
PRODUCTS
ENGINEERING

FUEL SYSTEM, GASOLINE		THUNDERBIRD PRODUCTS
		P.O. BOX 1003
MODEL: F-31 PC	DR BY: R. HANNI	DECATUR IN., 46733-5003
NO. 31-550	DATE: 12/25/95	19101 794 0111



THUNDERBIRD
PRODUCTS
ENGINEERING

BONDING POINTS

BONDING POINTS		THUNDERBIRD PRODUCTS
		P.O. BOX 1003
MODEL: F-31 PC	DR BY: R. HANNI	DECATUR IN., 46733-5003
NO: 31- 560	DATE: 12/25/95	(219) 724-9111