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48Y WIRE DIAGRAM INDEX

DC CIRCUITS

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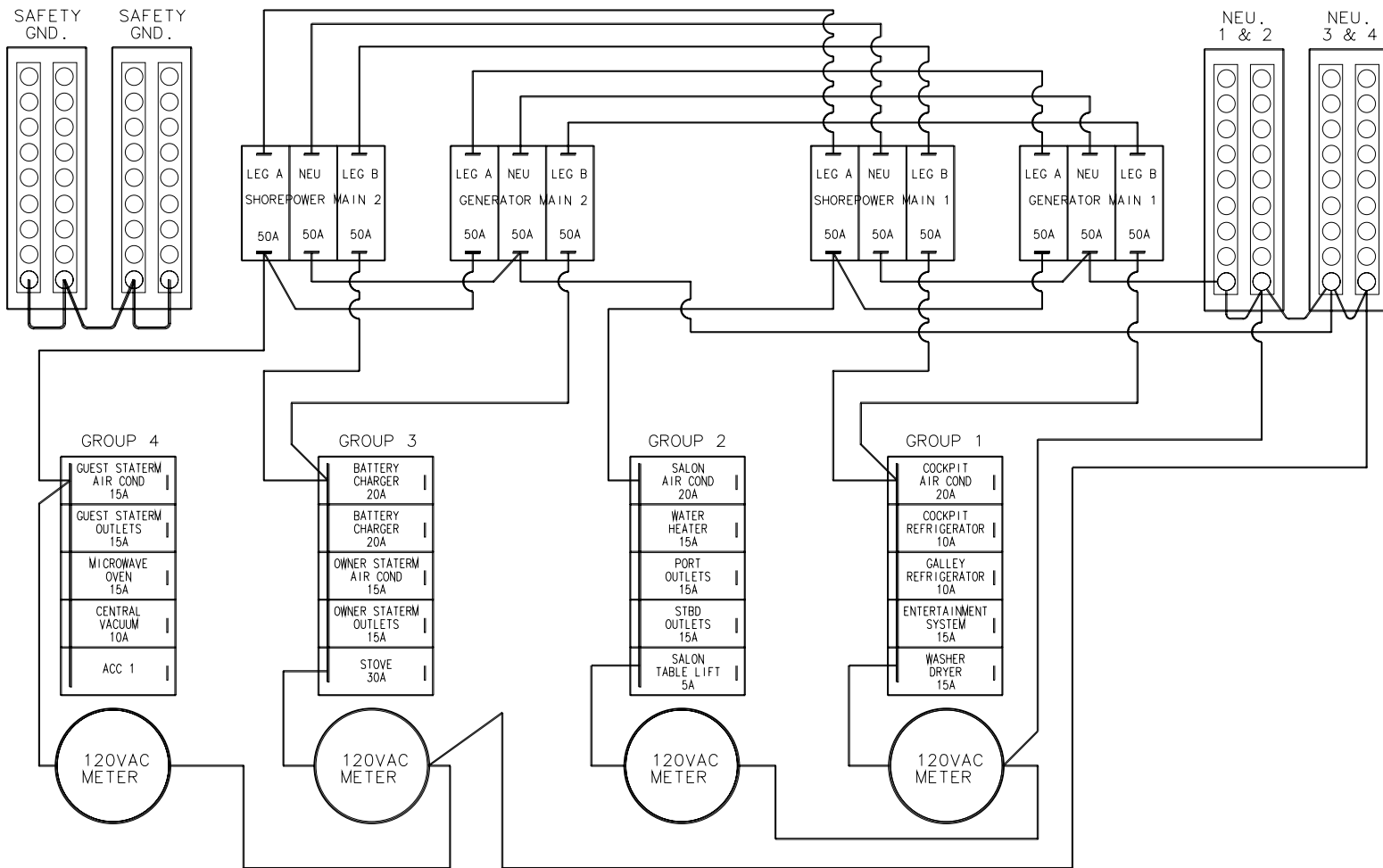
DC 12V HARNESSES

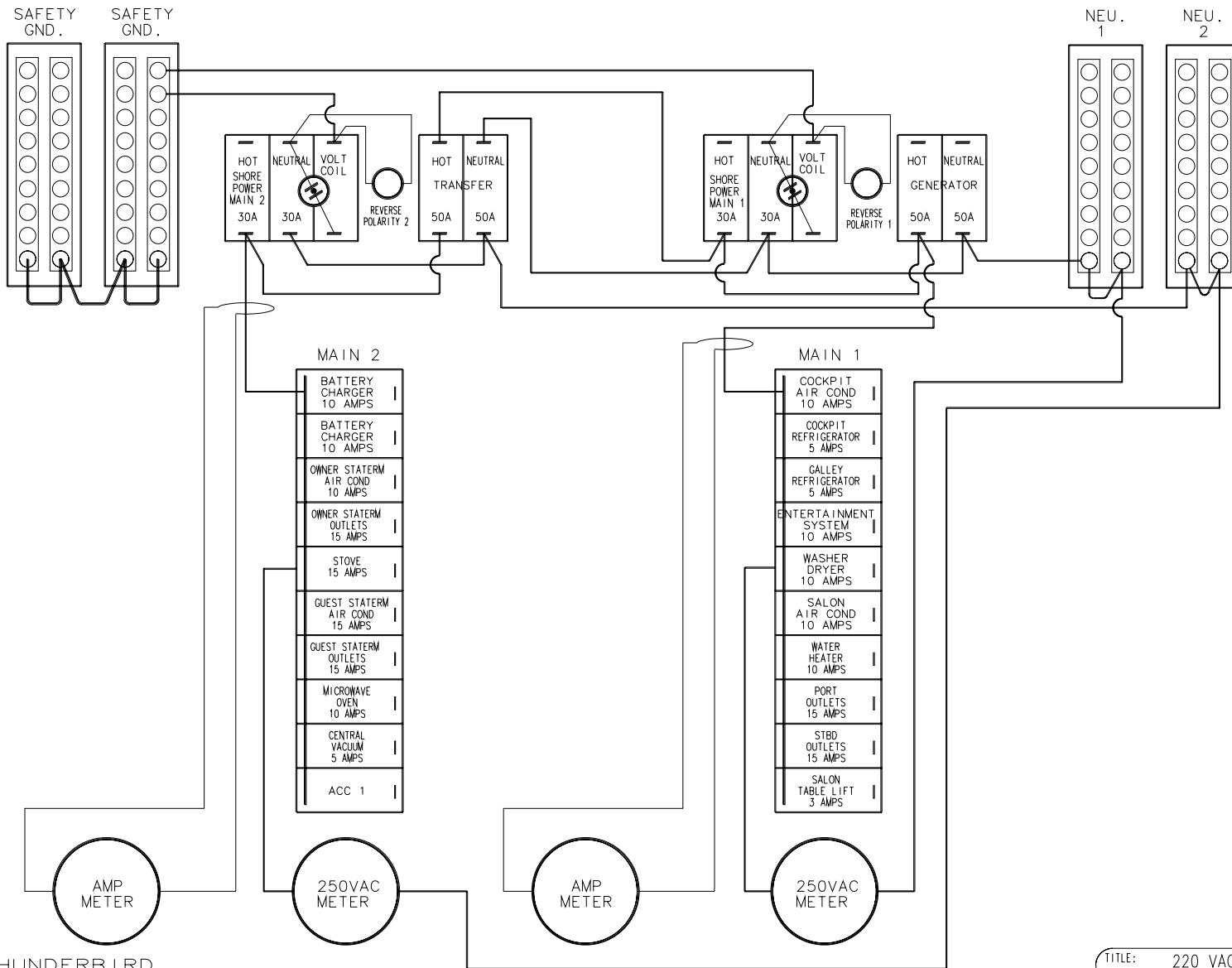
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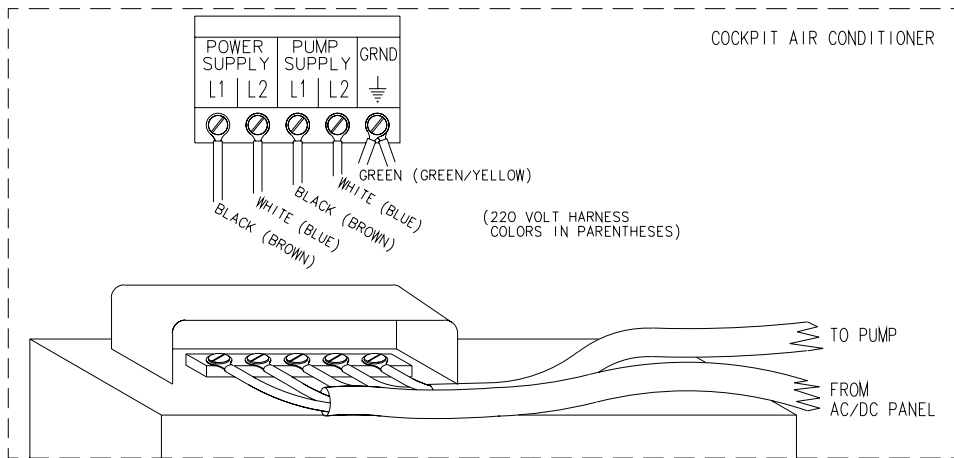
LEGEND

3-WIRE AC CONDUCTOR 

BREAKER 

PUMP 

AC PLUG 

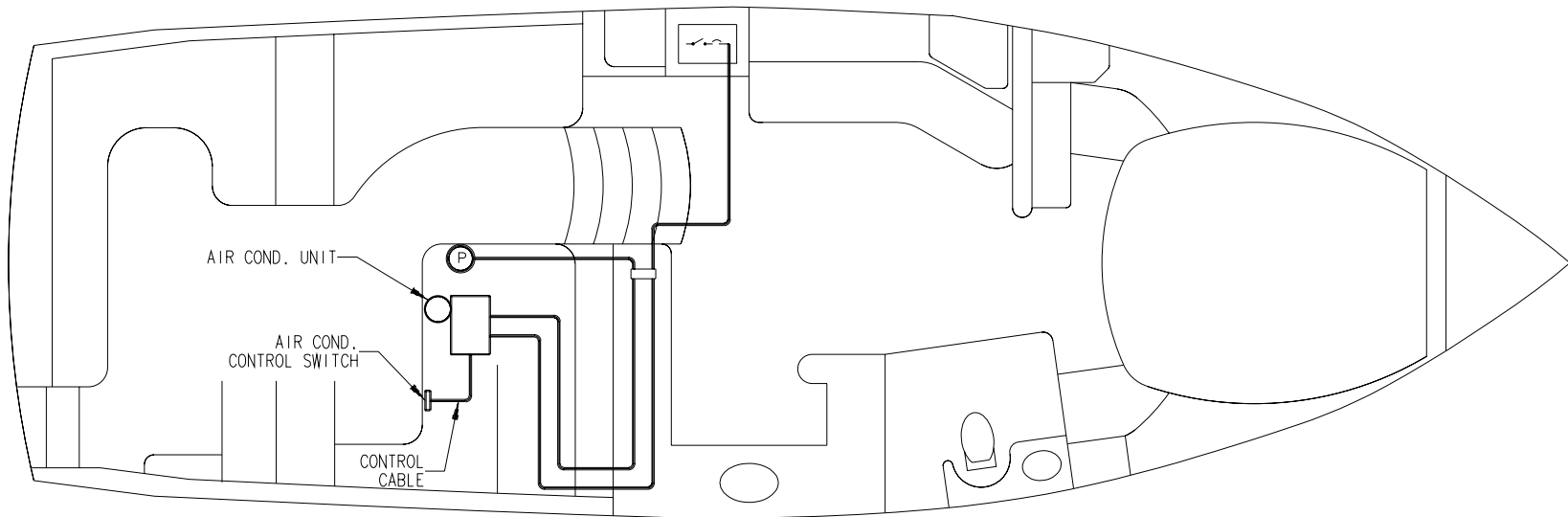


COCKPIT AIR CONDITIONER

TO OPERATE:

1. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH SHOREPOWER BREAKER OR GENERATOR BREAKER, GROUPS 1 & 2, TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "COCKPIT AIR COND" BREAKER TO "ON".
4. THE COCKPIT AIR CONDITIONER IS NOW SUPPLIED WITH POWER.

AC/DC PANEL
120V/20A BREAKER
220V/10A BREAKER



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<https://www.boat-manuals.com/>

TITLE: AIR CONDITIONER,
COCKPIT

MOD.: 48Y
DR BY: JAW

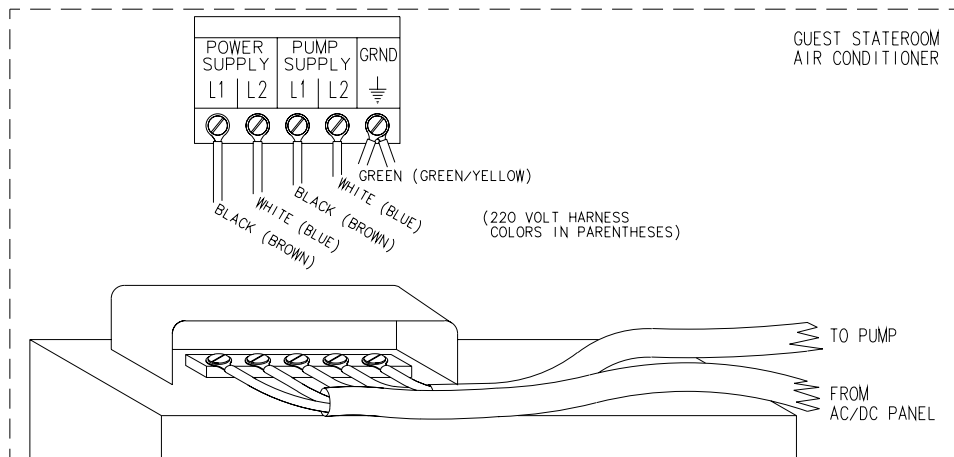
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LEGEND

3-WIRE AC CONDUCTOR 

BREAKER 

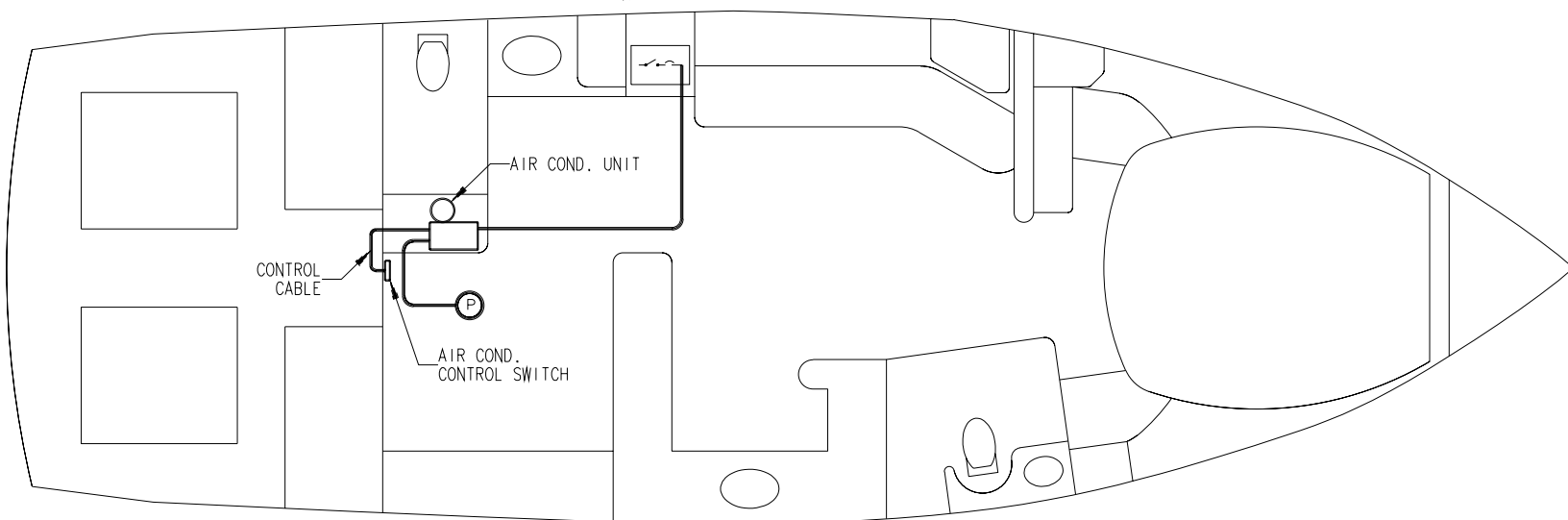
PUMP 



TO OPERATE:

1. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH SHOREPOWER BREAKER OR GENERATOR BREAKER, GROUPS 3 & 4, TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "GUEST STATEROOM AIR COND" BREAKER TO "ON".
4. THE GUEST STATEROOM AIR CONDITIONER IS NOW SUPPLIED WITH POWER.

AC/DC PANEL
120V/15A BREAKER
220V/10A BREAKER



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

<https://www.boat-manuals.com/>

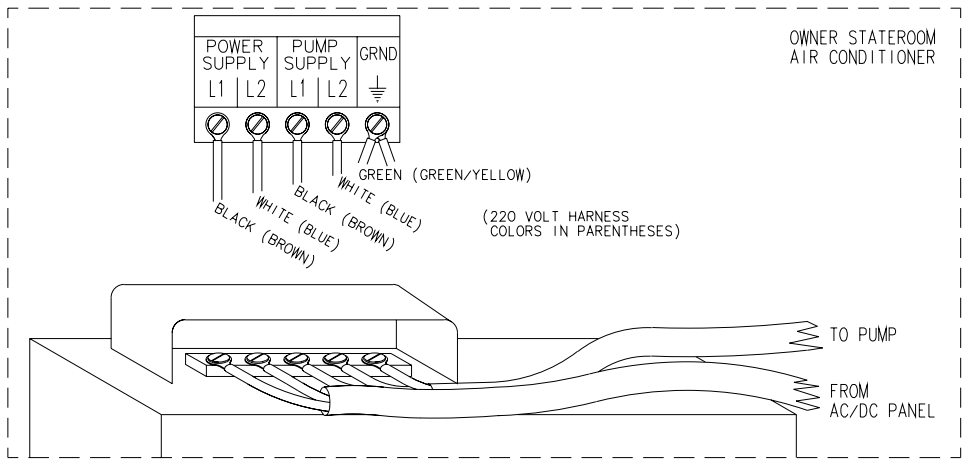
TITLE: AIR CONDITIONER,
GUEST STATEROOM

MOD.: 48Y
DR BY: JAW

07

LEGEND

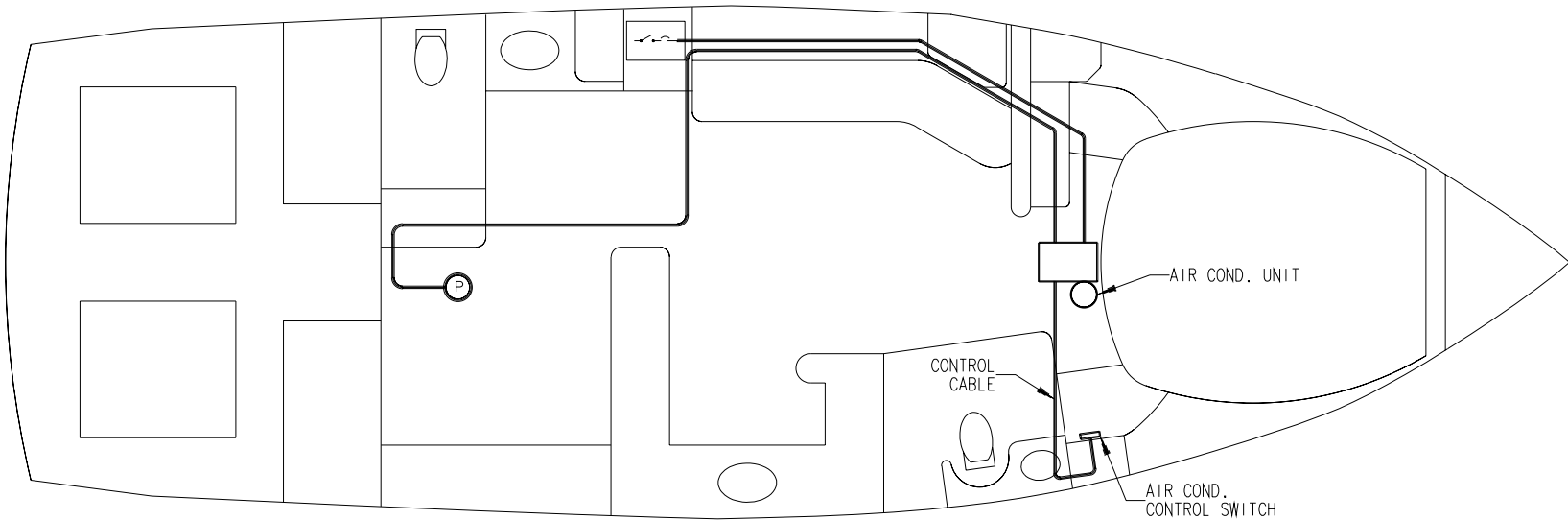
- 3-WIRE AC CONDUCTOR 
- BREAKER 
- PUMP 






TO OPERATE:

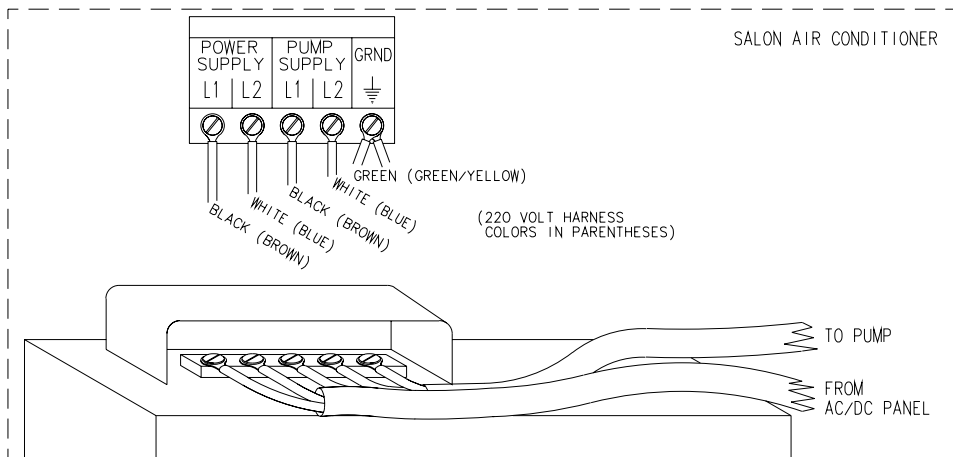
1. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH SHOREPOWER BREAKER OR GENERATOR BREAKER, GROUPS 3 & 4, TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "OWNER STATEROOM AIR COND" BREAKER TO "ON".
4. THE OWNER STATEROOM AIR CONDITIONER IS NOW SUPPLIED WITH POWER.

AC/DC PANEL
120V/15A BREAKER
220V/10A BREAKER



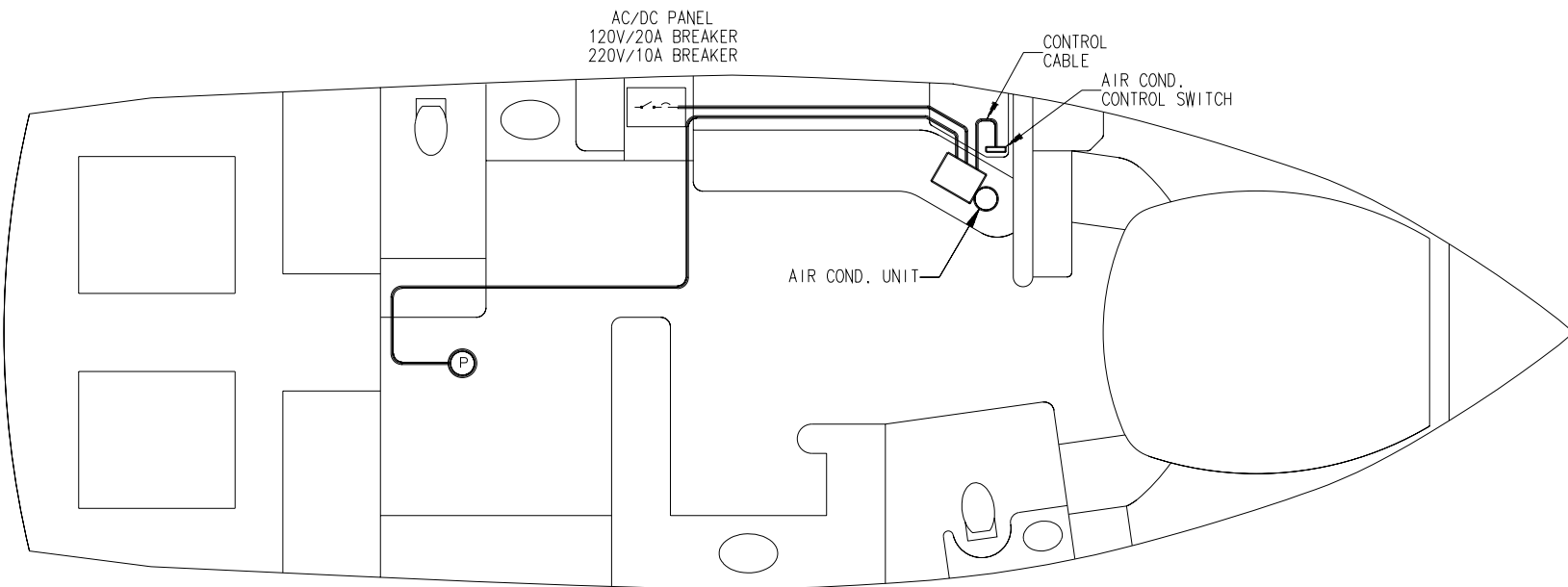
LEGEND

- 3-WIRE AC CONDUCTOR 
- BREAKER 
- PUMP 



TO OPERATE:

1. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH SHOREPOWER BREAKER OR GENERATOR BREAKER, GROUPS 1 & 2, TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "SALON AIR COND" BREAKER TO "ON".
4. THE SALON AIR CONDITIONER IS NOW SUPPLIED WITH POWER.



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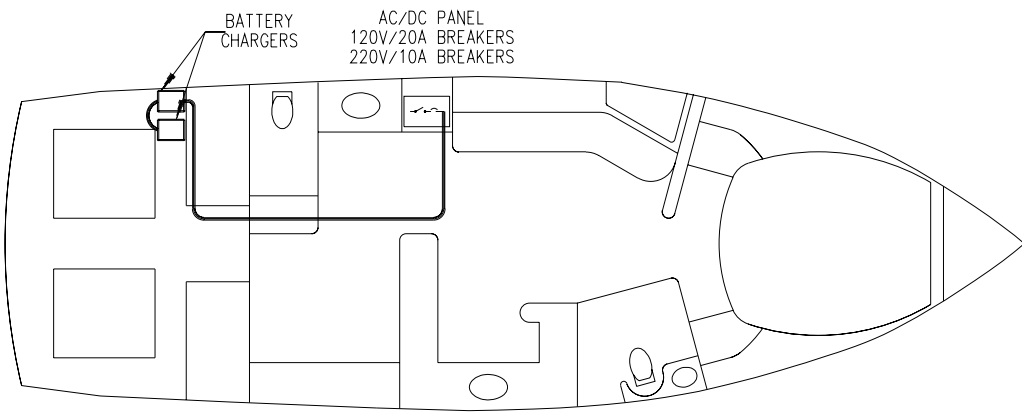
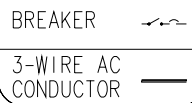
<https://www.boat-manuals.com/>

TITLE: AIR CONDITIONER,
SALON

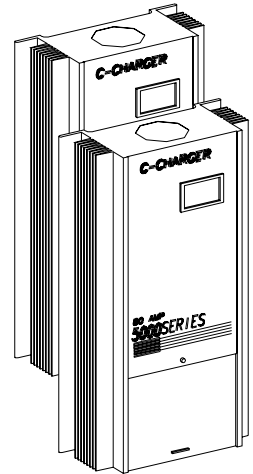
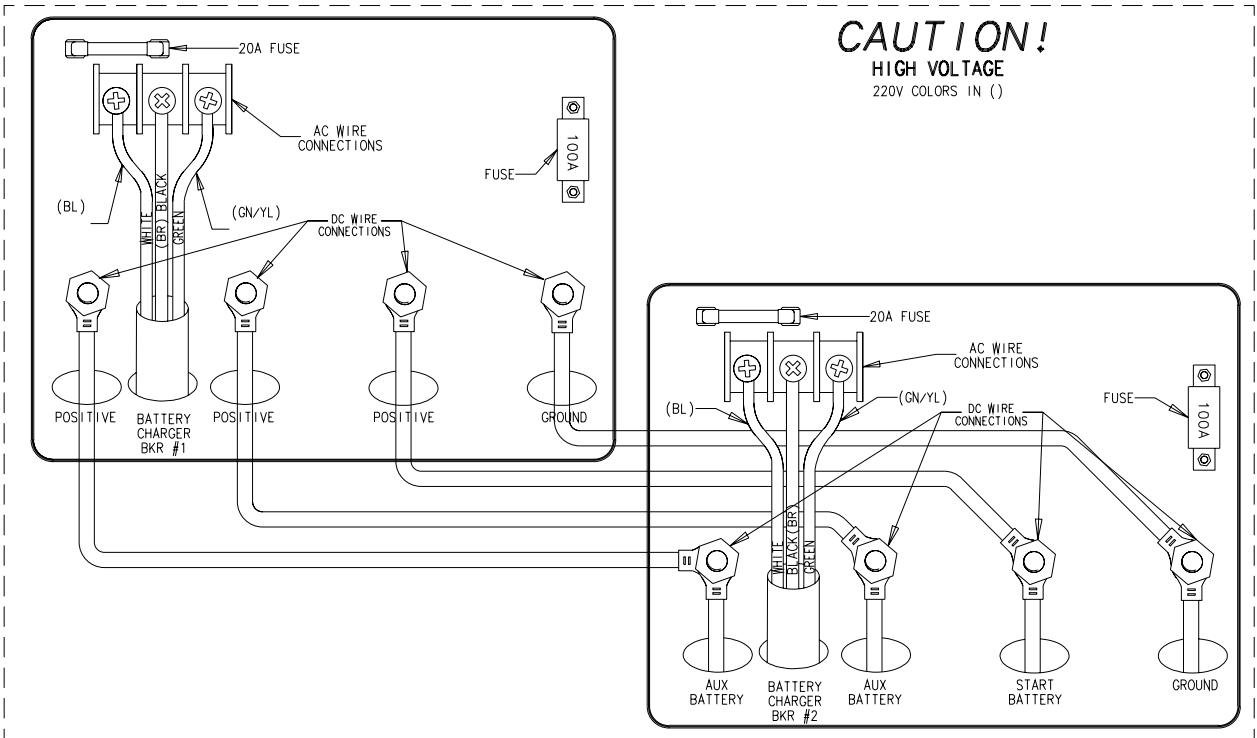
MOD.: 48Y
DR BY: JAW

09

LEGEND



- TO OPERATE:
1. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
 2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH BOTH SHOREPOWER BREAKERS TO "ON".
 3. AT THE AC/DC PANEL, SWITCH THE "BATTERY CHARGER" BREAKERS TO "ON".
 4. CHECK FACE OF BATTERY CHARGER FOR "DC AVAILABLE" LIGHT.
 5. AFTER 24 HOURS OF CHARGING, BATTERIES SHOULD READ 12+ VOLTS ON THE DASH VOLTMETER.
 6. IF BATTERIES READ BELOW 12V OR DROP BELOW 12V WITHIN 15 MINUTES, HAVE THE BATTERIES CHECKED.




LEGEND

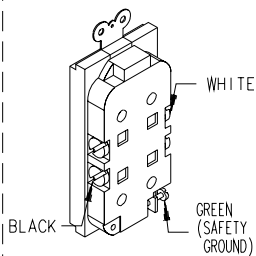
3-WIRE AC CONDUCTOR 

BREAKER 

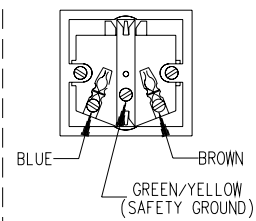
AC PLUG 

OUTLET 

120V AC OUTLET
(REAR VIEW)

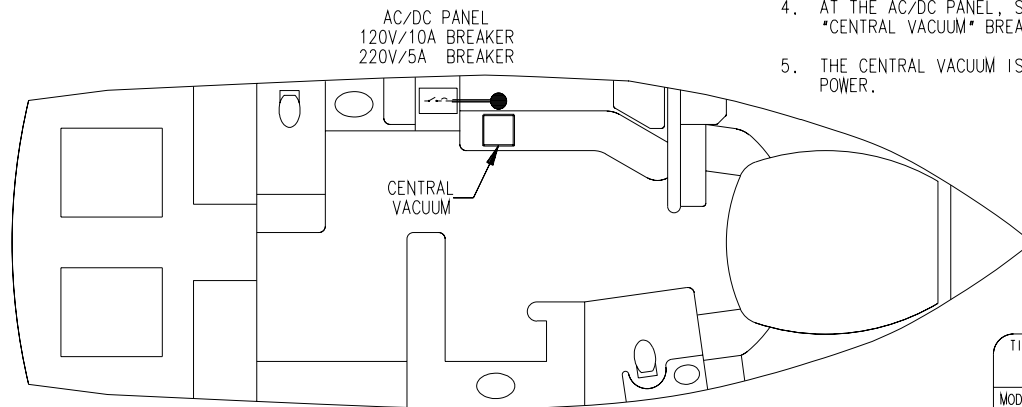


220V AC OUTLET
(REAR VIEW)



TO OPERATE:

1. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH SHOREPOWER BREAKER OR GENERATOR BREAKER, GROUPS 3 & 4, TO "ON".
4. AT THE AC/DC PANEL, SWITCH THE "CENTRAL VACUUM" BREAKER TO "ON".
5. THE CENTRAL VACUUM IS NOW SUPPLIED WITH POWER.



TITLE: CENTRAL VACUUM

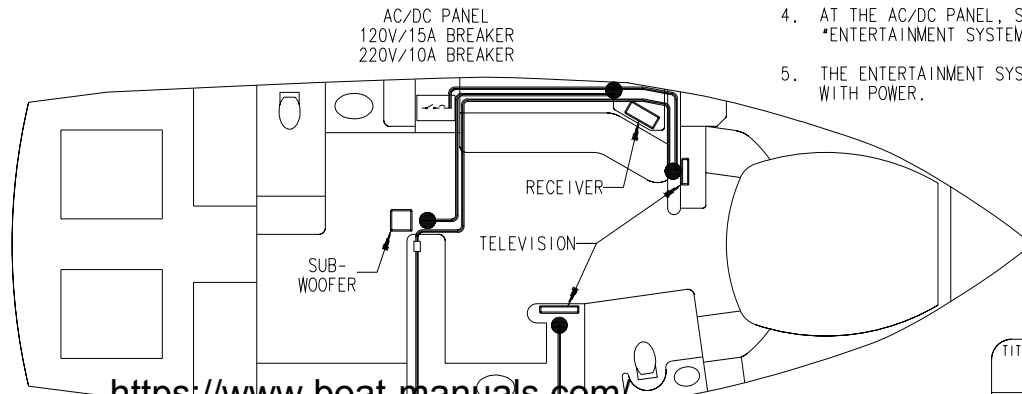
MOD.: 48Y

DR BY: JAW

11A

TO OPERATE:

1. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH SHOREPOWER BREAKER OR GENERATOR BREAKER, GROUPS 1 & 2, TO "ON".
4. AT THE AC/DC PANEL, SWITCH THE "ENTERTAINMENT SYSTEM" BREAKER TO "ON".
5. THE ENTERTAINMENT SYSTEM IS NOW SUPPLIED WITH POWER.



TITLE: ENTERTAINMENT SYSTEM

MOD.: 48Y

DR BY: JAW

11B

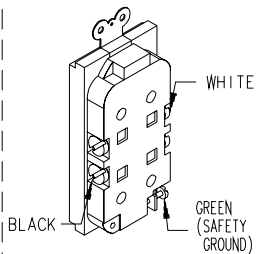


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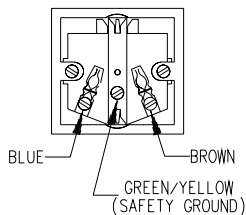
LEGEND

OUTLET	●
BREAKER	— —
AC PLUG	□
3-WIRE AC CONDUCTOR	—

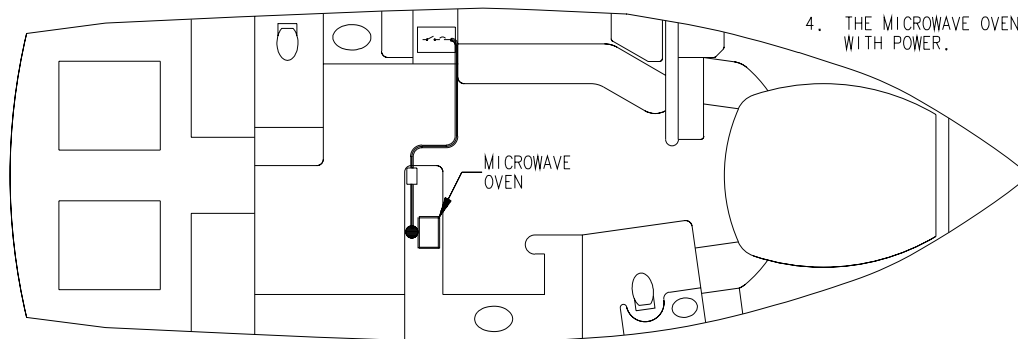
120V AC OUTLET
(REAR VIEW)



220V AC OUTLET
(REAR VIEW)



AC/DC PANEL
120V/15A BREAKER
220V/10A BREAKER

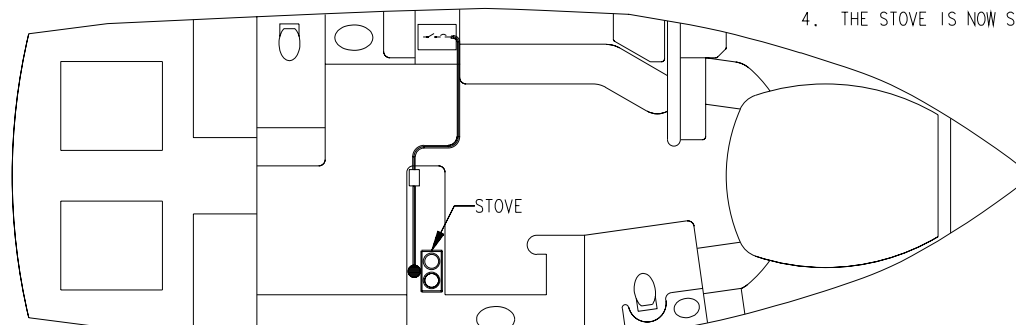


TITLE: MICROWAVE OVEN	
MOD.: 48Y	12A
DR BY: JAW	

TO OPERATE:

1. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH SHOREPOWER BREAKER OR GENERATOR BREAKER, GROUPS 3 & 4, TO "ON".
3. AT THE AC/DC PANEL SWITCH THE "MICROWAVE OVEN" BREAKER TO "ON".
4. THE MICROWAVE OVEN IS NOW SUPPLIED WITH POWER.

AC/DC PANEL
120V/30A BREAKER
220V/15A BREAKER



TITLE: STOVE	
MOD.: 48Y	12B
DR BY: JAW	

TO OPERATE:

1. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH SHOREPOWER BREAKER OR GENERATOR BREAKER, GROUPS 3 & 4 TO "ON".
3. AT THE AC/DC PANEL SWITCH THE "STOVE" BREAKER TO "ON".
4. THE STOVE IS NOW SUPPLIED WITH POWER.

LEGEND

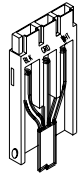
3-WIRE AC CONDUCTOR 

BREAKER 

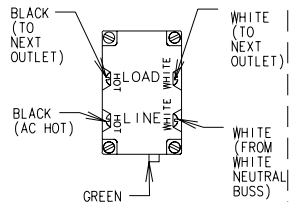
OUTLET 

GFCI OUTLET 

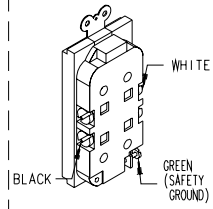
AC HARNESS PLUG



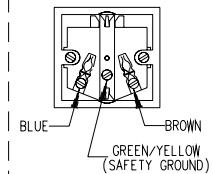
120V AC GFCI OUTLET



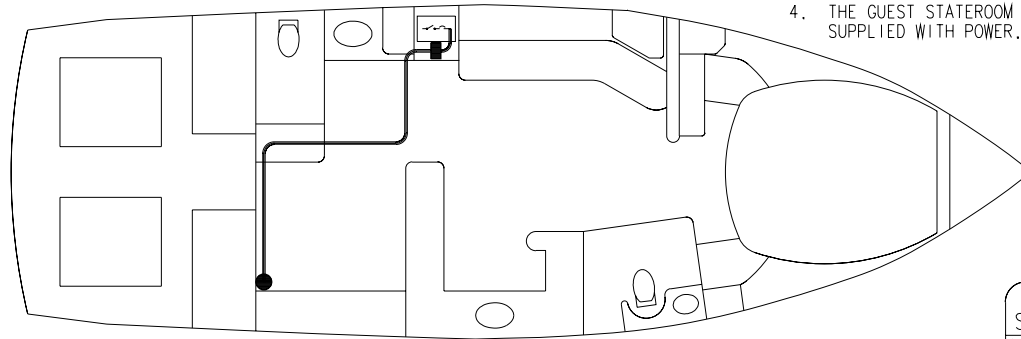
120V AC OUTLET (REAR VIEW)



220V AC OUTLET (REAR VIEW)



AC/DC PANEL
120V/15A BREAKER
220V/15A BREAKER



TITLE: GUEST
STATEROOM OUTLETS
MOD.: 48Y
DR BY: JAW

13A

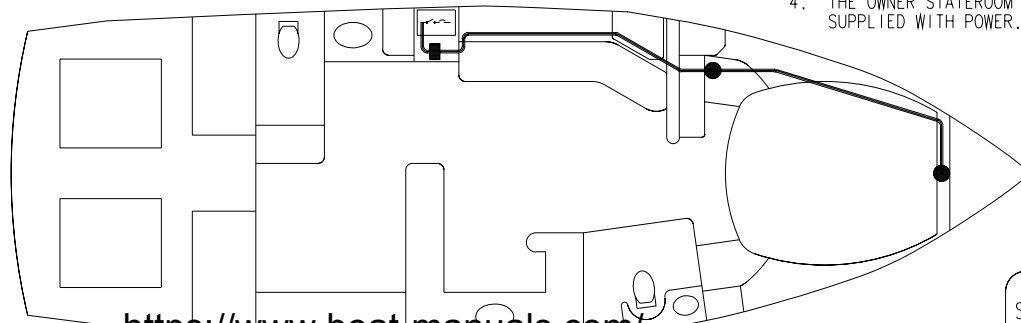
TO OPERATE:

1. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH SHOREPOWER BREAKER OR GENERATOR BREAKER, GROUPS 3 & 4, TO *ON*.
3. AT THE AC/DC PANEL, SWITCH THE *GUEST STATEROOM OUTLETS* BREAKER TO *ON*.
4. THE GUEST STATEROOM OUTLETS ARE NOW SUPPLIED WITH POWER.

TO OPERATE:

1. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH SHOREPOWER BREAKER OR GENERATOR BREAKER, GROUPS 3 & 4 TO *ON*.
3. AT THE AC/DC PANEL, SWITCH THE *OWNER STATEROOM OUTLETS* BREAKER TO *ON*.
4. THE OWNER STATEROOM OUTLETS ARE NOW SUPPLIED WITH POWER.

AC/DC PANEL
120V/15A BREAKER
220V/15A BREAKER



TITLE: OWNER
STATEROOM OUTLETS
MOD.: 48Y
DR BY: JAW






13B

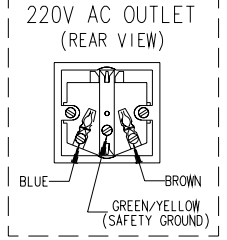
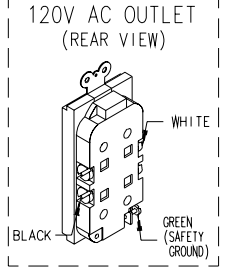
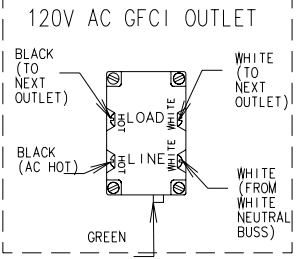
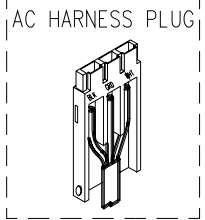


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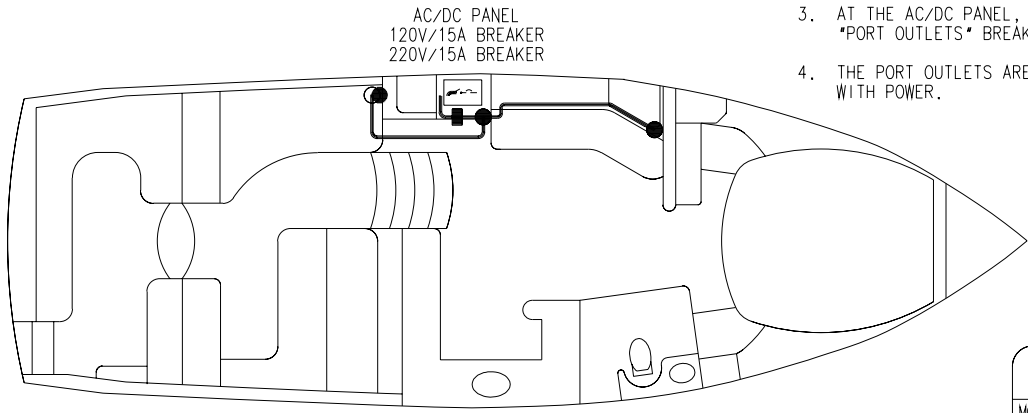
LEGEND

- AC PLUG 
- BREAKER 
- OUTLET 
- GFCI OUTLET 
- 3-WIRE AC CONDUCTOR 



TO OPERATE:

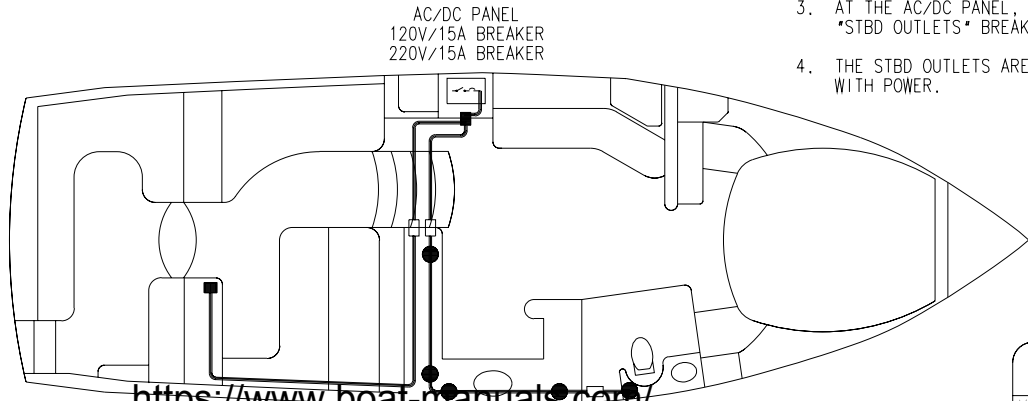
1. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH SHOREPOWER BREAKER OR GENERATOR BREAKER, GROUPS 1 & 2 TO *ON*.
3. AT THE AC/DC PANEL, SWITCH THE *PORT OUTLETS* BREAKER TO *ON*.
4. THE PORT OUTLETS ARE NOW SUPPLIED WITH POWER.



TITLE: PORT OUTLETS	
MOD.: 48Y	14A
DR BY: JAW	

TO OPERATE:

1. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH SHOREPOWER BREAKER OR GENERATOR BREAKER, GROUPS 1 & 2 TO *ON*.
3. AT THE AC/DC PANEL, SWITCH THE *STBD OUTLETS* BREAKER TO *ON*.
4. THE STBD OUTLETS ARE NOW SUPPLIED WITH POWER.



TITLE: STBD OUTLETS	
MOD.: 48Y	14B
DR BY: JAW	

LEGEND

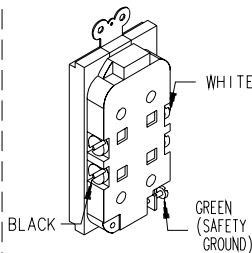
OUTLET ●

BREAKER 

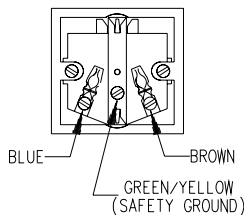
AC PLUG 

3-WIRE AC CONDUCTOR 

120V AC OUTLET
(REAR VIEW)

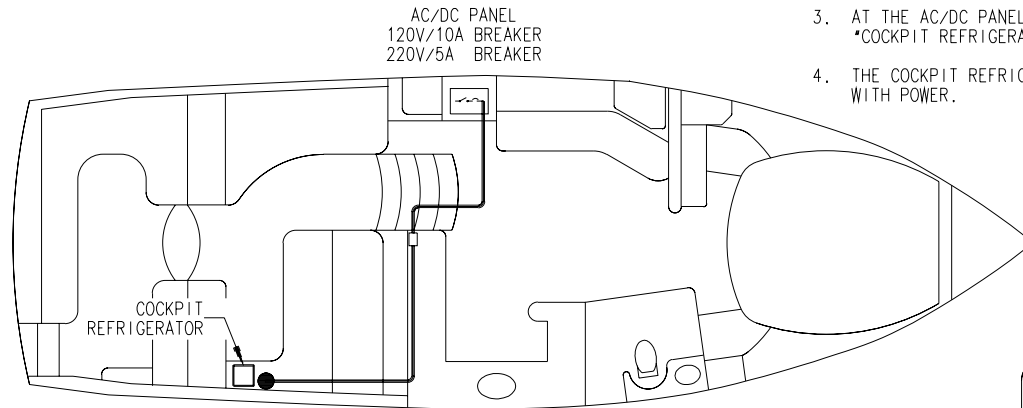


220V AC OUTLET
(REAR VIEW)



TO OPERATE:

1. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH SHOREPOWER BREAKER OR GENERATOR BREAKER, GROUPS 1 & 2, TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "COCKPIT REFRIGERATOR" BREAKER TO "ON".
4. THE COCKPIT REFRIGERATOR IS NOW SUPPLIED WITH POWER.



TITLE: COCKPIT
REFRIGERATOR

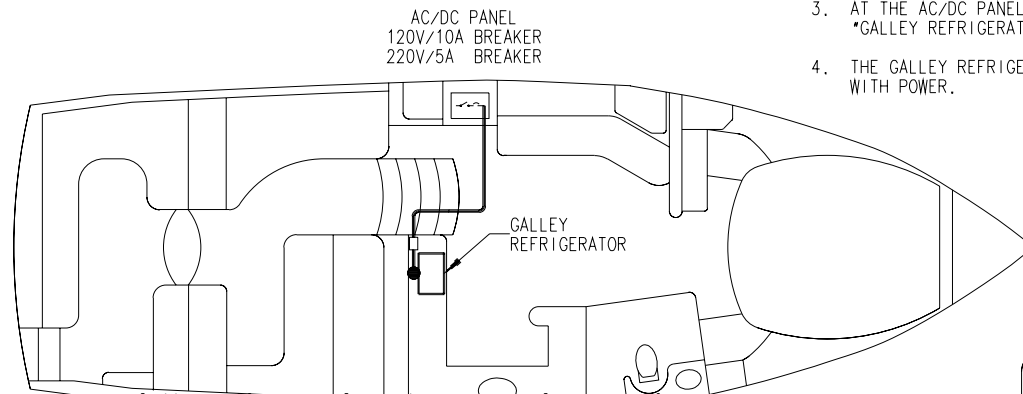
MOD.: 48Y

DR BY: JAW

15A

TO OPERATE:

1. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH SHOREPOWER BREAKER OR GENERATOR BREAKER, GROUPS 1 & 2, TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "GALLEY REFRIGERATOR" BREAKER TO "ON".
4. THE GALLEY REFRIGERATOR IS NOW SUPPLIED WITH POWER.



TITLE: GALLEY
REFRIGERATOR

MOD.: 48Y

DR BY: JAW

15B



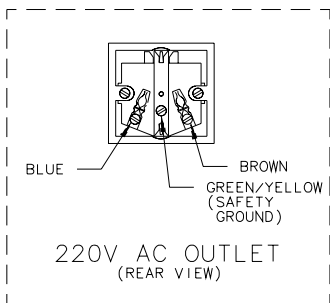
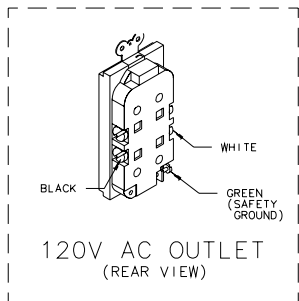
THUNDERBIRD
PRODUCTS
ENGINEERING

LEGEND

OUTLET ●

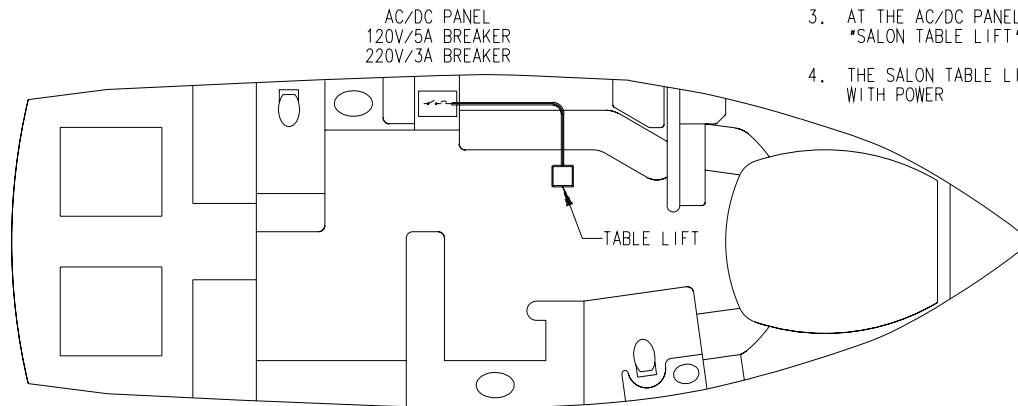
BREAKER 

3-WIRE AC CONDUCTOR 



TO OPERATE:

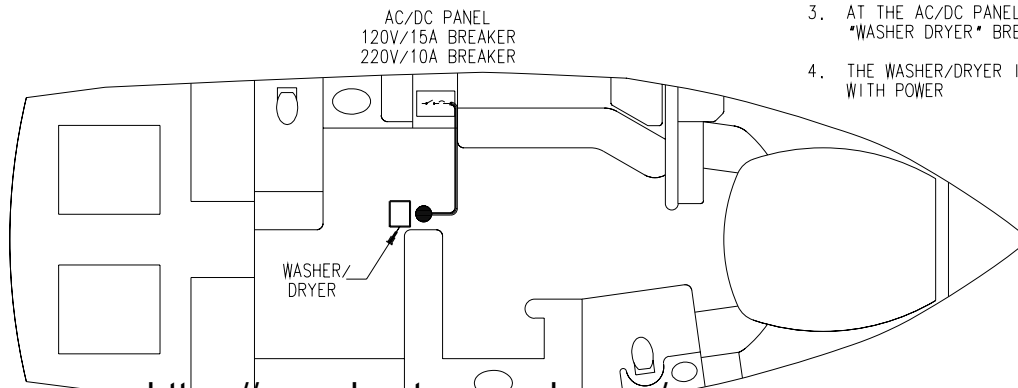
1. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH SHOREPOWER BREAKER OR GENERATOR BREAKER, GROUP 1 & 2, TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "SALON TABLE LIFT" BREAKER TO "ON".
4. THE SALON TABLE LIFT IS NOW SUPPLIED WITH POWER



TITLE: SALON TABLE LIFT	
MOD.: 48Y	16A
DR BY: JAW	

TO OPERATE:

1. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH SHOREPOWER BREAKER OR GENERATOR BREAKER, GROUPS 1 & 2, TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "WASHER DRYER" BREAKER TO "ON".
4. THE WASHER/DRYER IS NOW SUPPLIED WITH POWER



TITLE: WASHER/DRYER	
MOD.: 48Y	16B
DR BY: JAW	

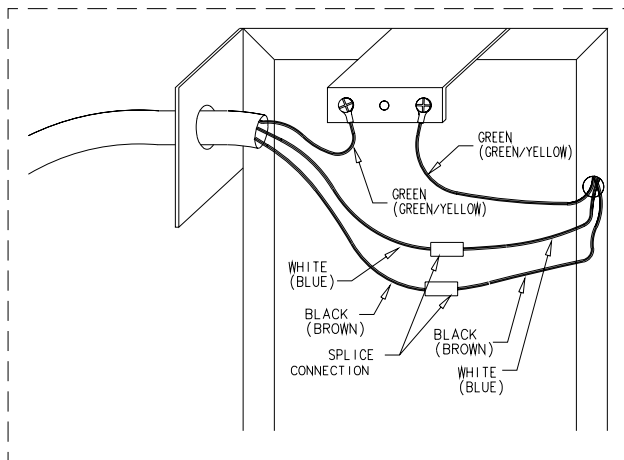


THUNDERBIRD
PRODUCTS
ENGINEERING

LEGEND

BREAKER 

3-WIRE AC CONDUCTOR 

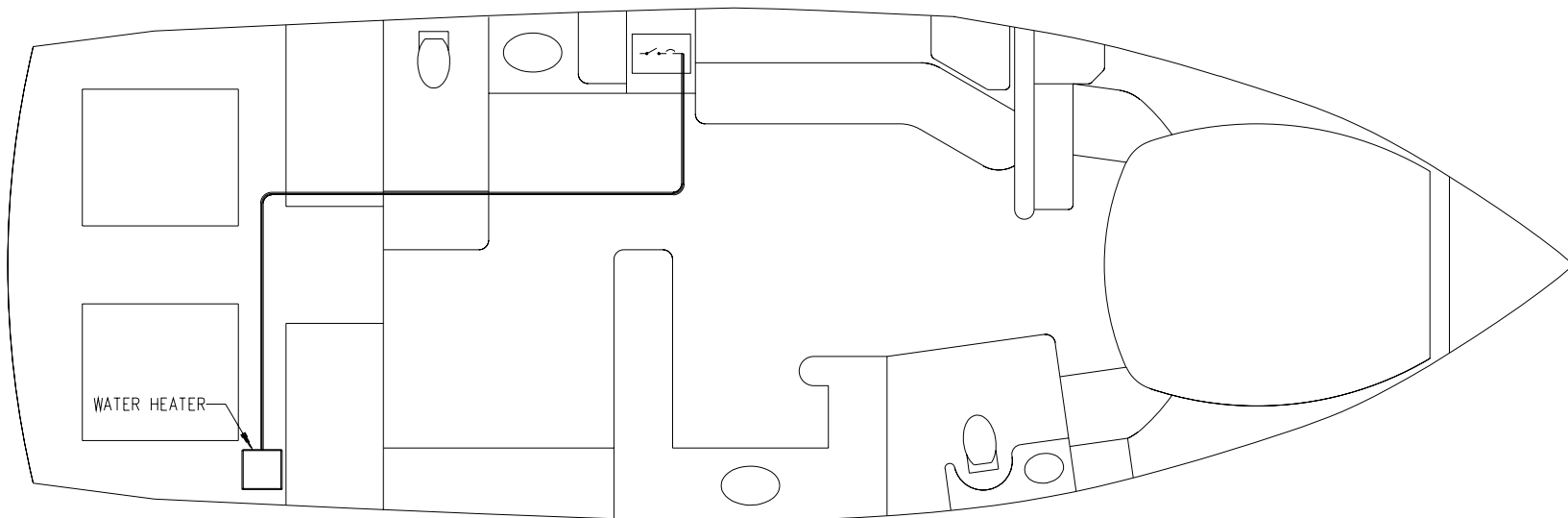


TO OPERATE:

1. MAKE SURE THE BOAT IS SUPPLIED WITH SHOREPOWER OR GENERATOR POWER.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH BOTH SHOREPOWER BREAKERS TO "ON", OR BOTH GENERATOR BREAKERS TO "ON".
4. AT THE AC/DC PANEL, SWITCH THE "WATER HEATER" BREAKER TO "ON".
5. THE WATER HEATER IS NOW SUPPLIED WITH POWER.

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

AC/DC PANEL
120V/15A BREAKER
220V/10A BREAKER



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PRODUCTS
ENGINEERING

<https://www.boat-manuals.com/>

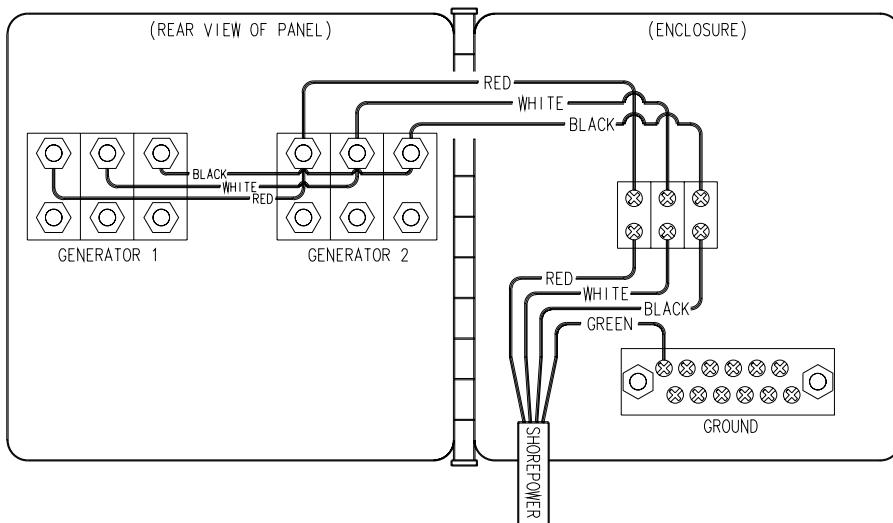
TITLE: WATER HEATER

MOD.: 48Y
DR BY: JAW

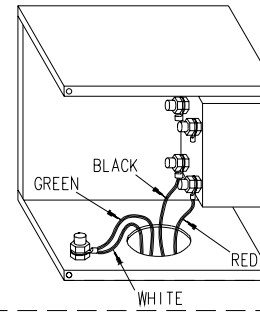
17

FIG. 1

AC/DC PANEL (W/ DOOR OPEN)



GENERATOR WIRING FROM AC/DC PANEL



AFTER READING AND UNDERSTANDING THE GENERATOR OPERATOR'S MANUAL:

OPERATE GENERATOR FROM THE REMOTE SWITCH:

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

CAUTION! AT OR ABOVE CRUISING SPEEDS GENERATOR COOLING SYSTEM MAY LACK PROPER WATER FLOW CAUSING GENERATOR TO SHUT DOWN.

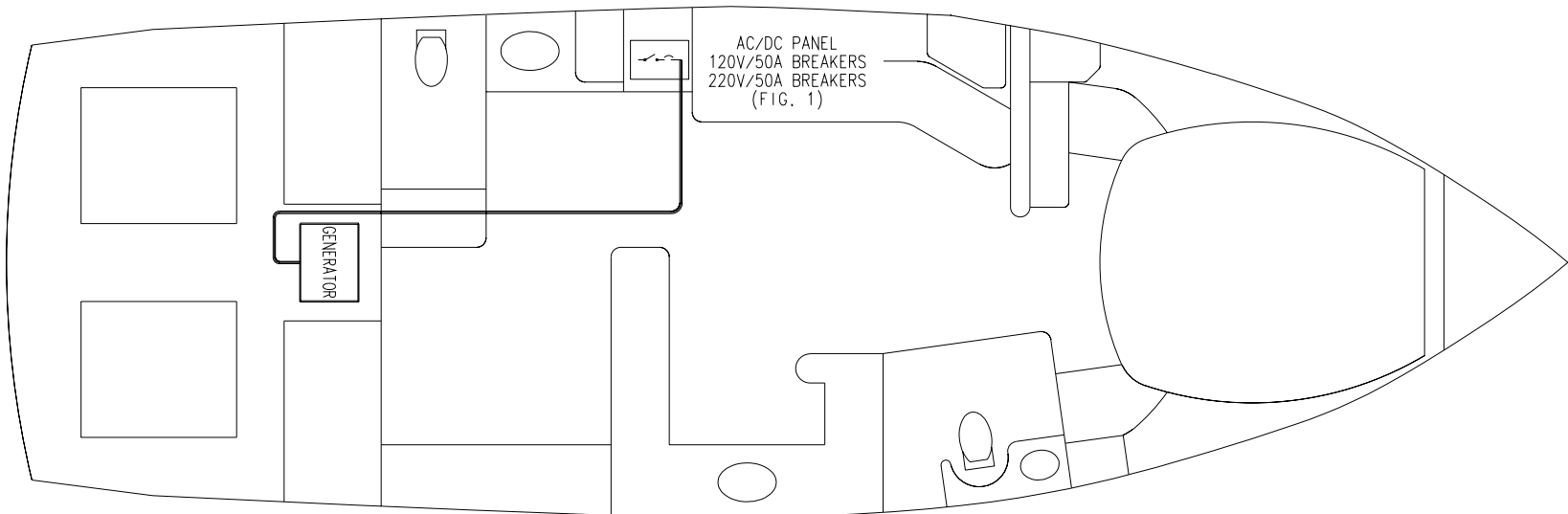
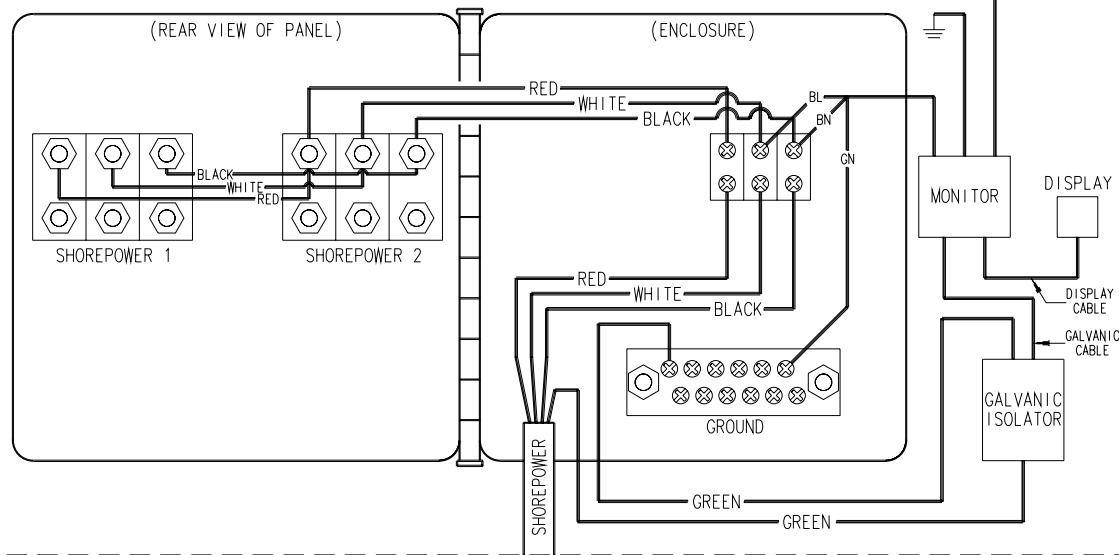


FIG. 1

AC/DC PANEL (W/ DOOR OPEN)

FROM AFT DC PANEL

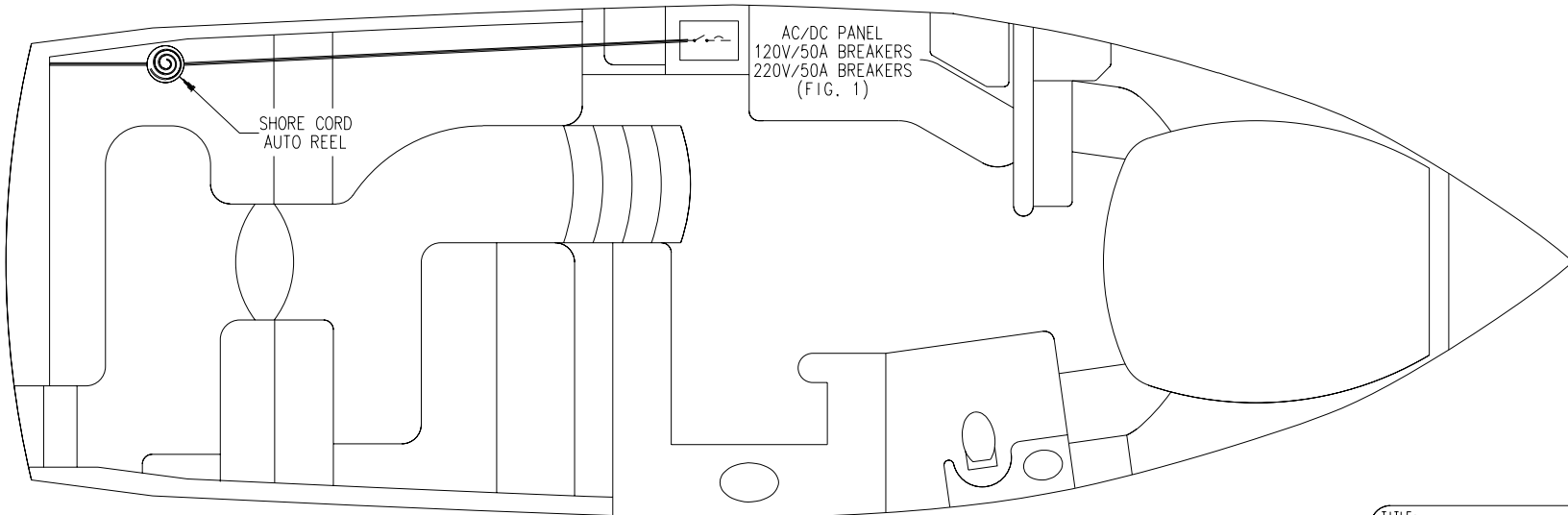
PK/BL



*(READ THIS COMPLETELY BEFORE OPERATING)

TO OPERATE:

1. BEFORE PLUGGING INTO SHOREPOWER, SWITCH "OFF" ALL AC EQUIPMENT AND MAIN BEAKERS AT THE AC/DC PANEL, LOCATED IN THE CABIN.
2. PLUG BOAT'S SHOREPOWER CORD INTO SHOREPOWER.
3. IN CABIN, SWITCH SHOREPOWER BREAKERS TO "ON".
WARNING!
IF REVERSED POLARITY LIGHT IS "ILLUMINATED":
-DO NOT TOUCH ELECTRICAL APPLIANCES
-LEAVE SHIP IMMEDIATELY
-DISCONNECT 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 ARE "ON" AND NO REVERSE POLARITY LIGHT IS ILLUMINATED, ALL AC EQUIPMENT BREAKERS ARE NOW SUPPLIED WITH POWER.

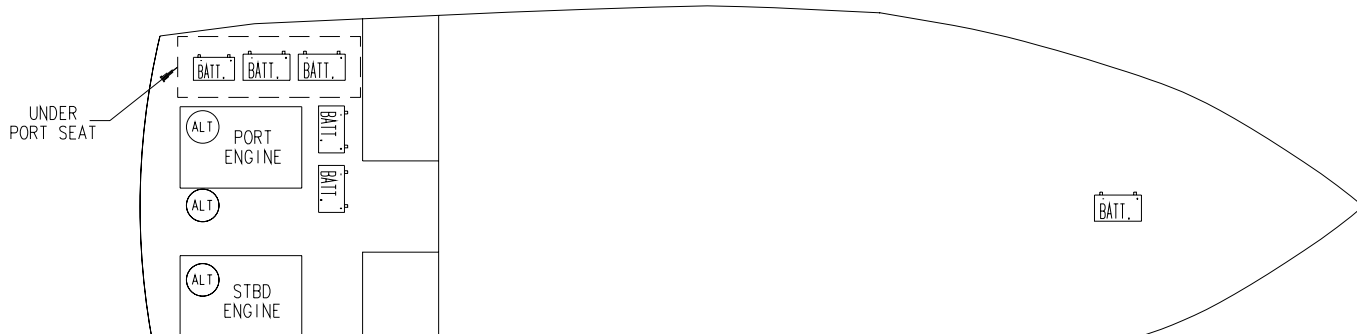
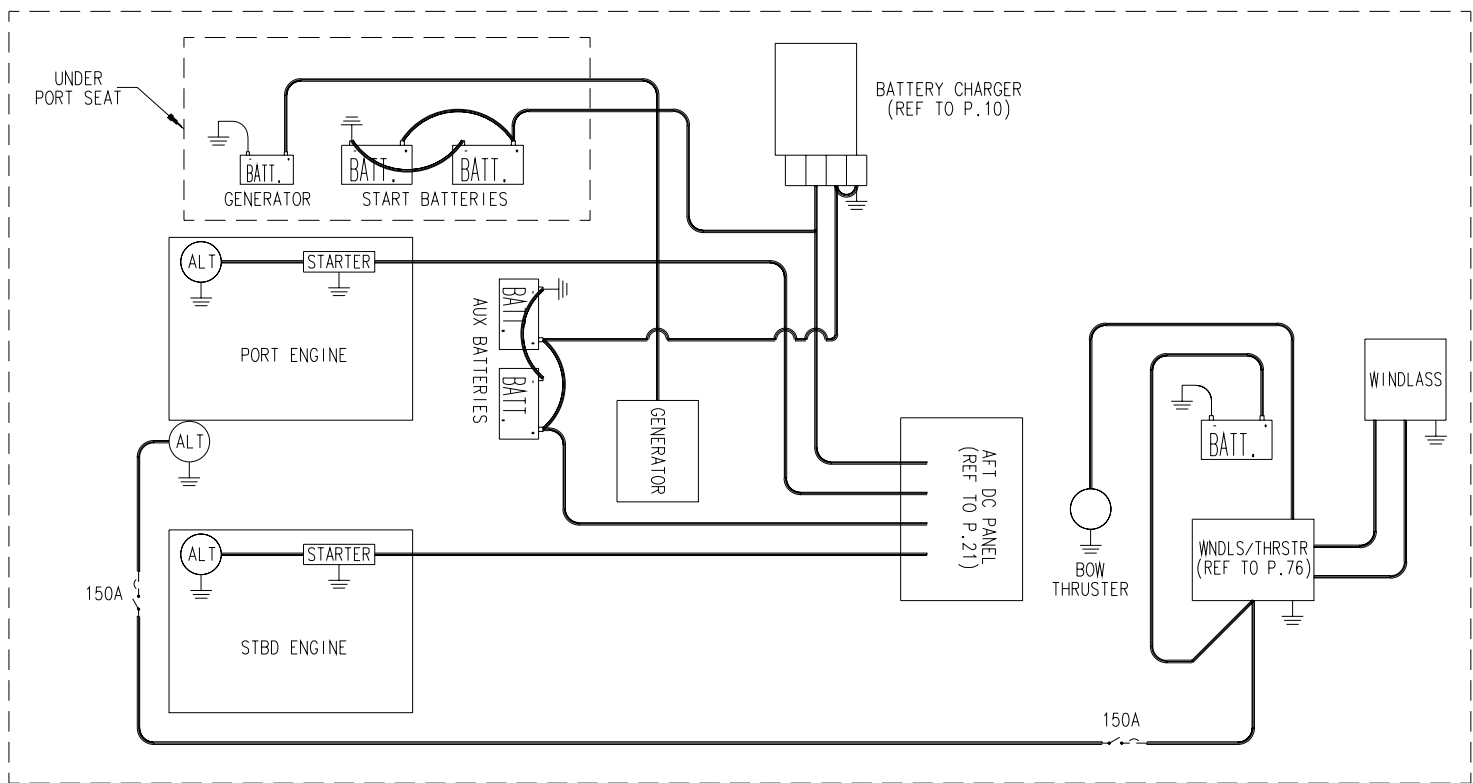


LEGEND

GROUND 

BATTERY 

BREAKER 




THUNDERBIRD
PRODUCTS
ENGINEERING

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TITLE: DC SUPPLY	
MOD.: 48Y	20
DR BY: JAW	

LEGEND

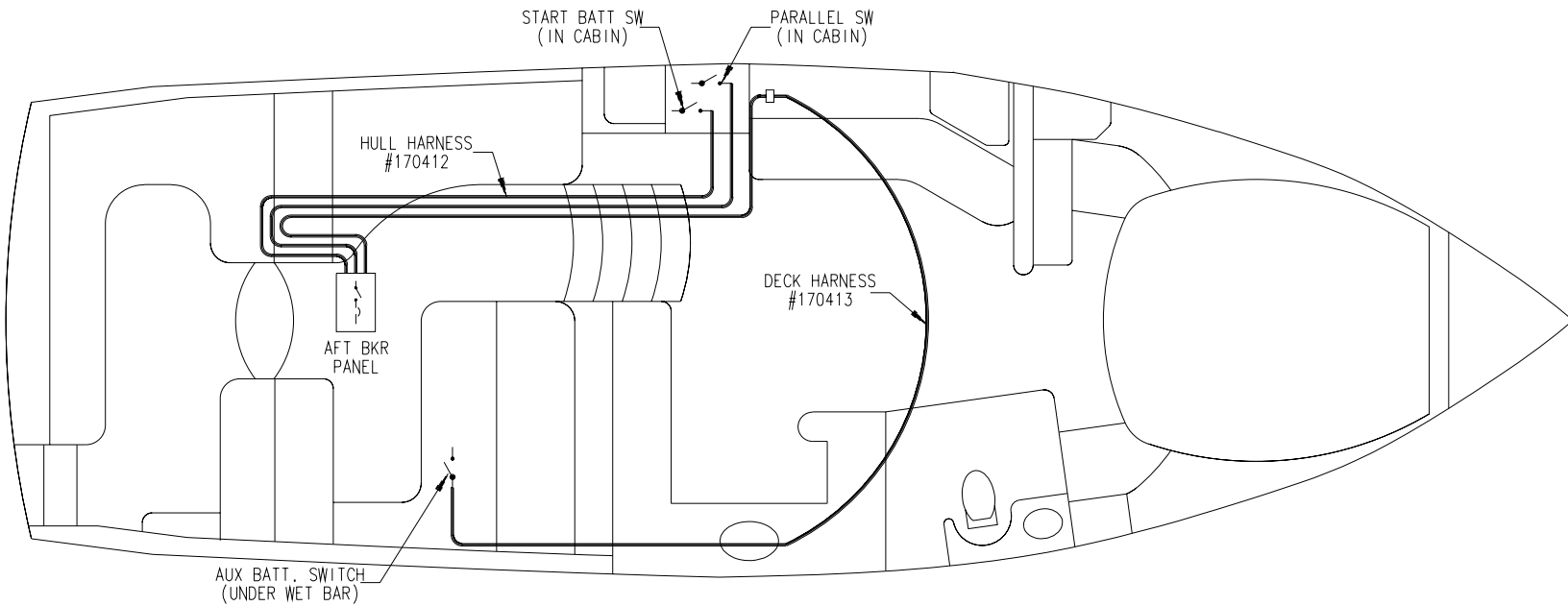
BATTERY 

SWITCH 

PLUGS 

NOTE:

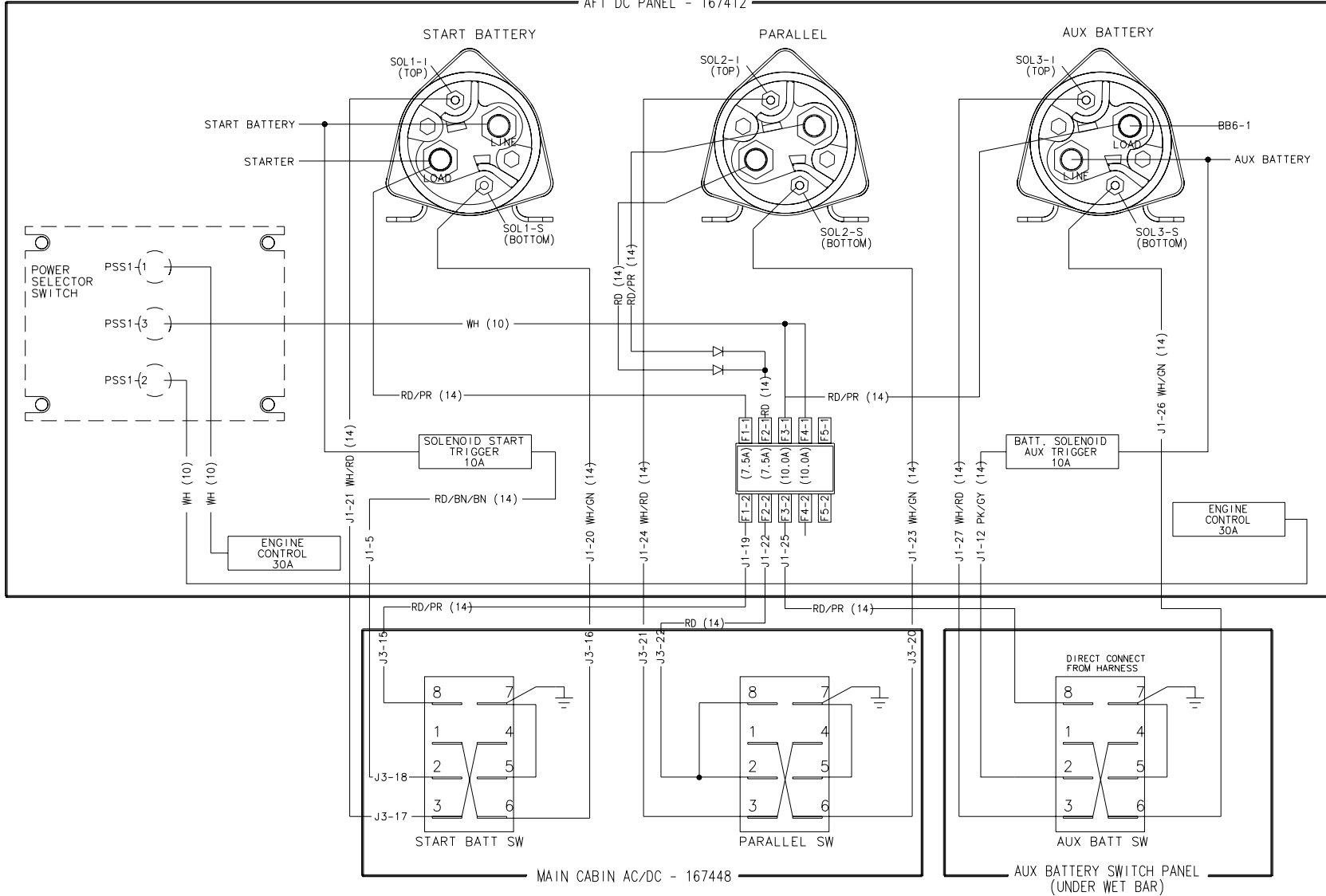
REFER TO PAGE 22 FOR DETAILED SCHEMATIC INFORMATION ABOUT THE 12V DC SUPPLY SWITCHES.



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<https://www.boat-manuals.com/>

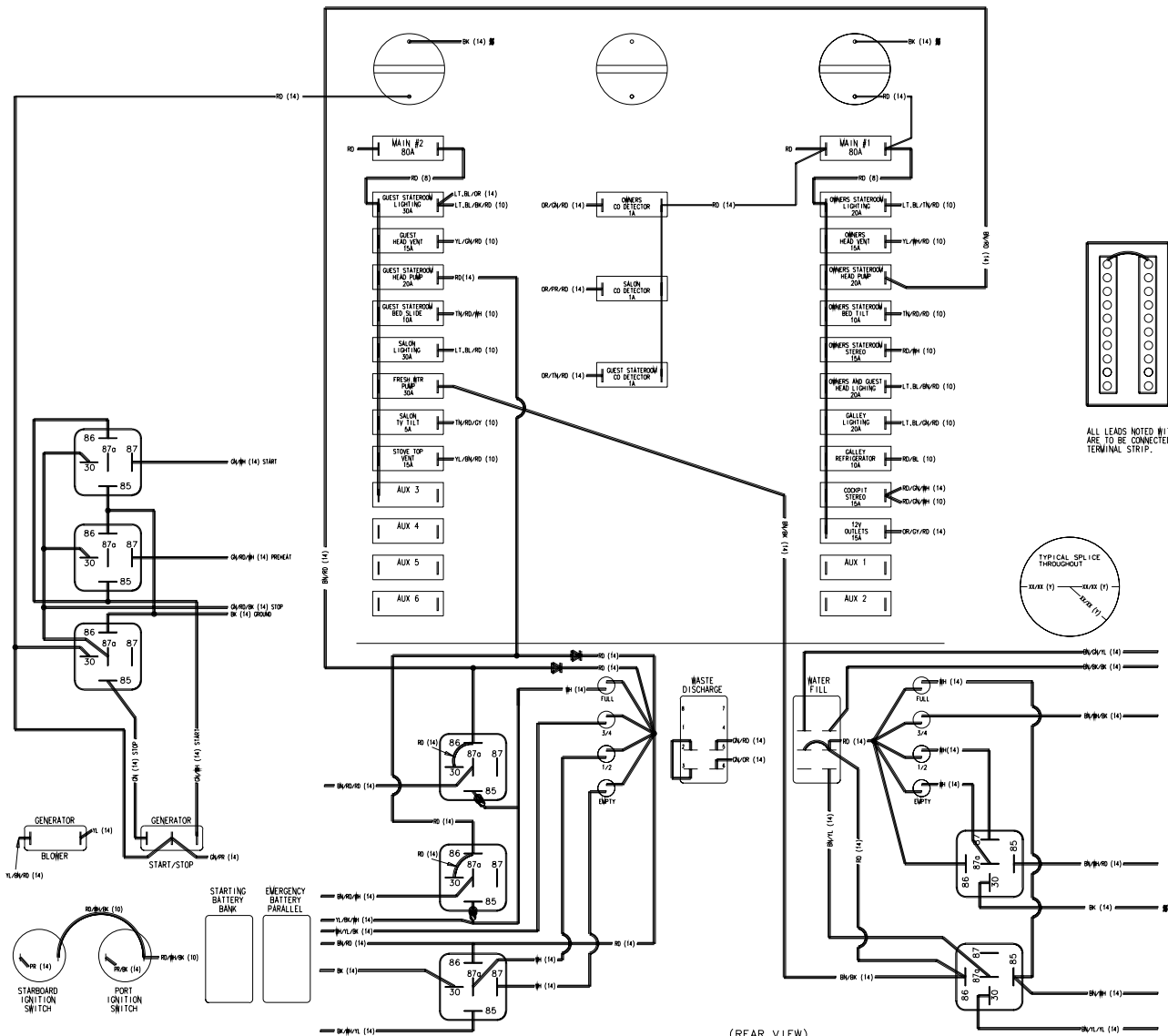
TITLE: 12V SUPPLY SWITCHES, LOCATION	
MOD.: 48Y	21
DR BY: JAW	



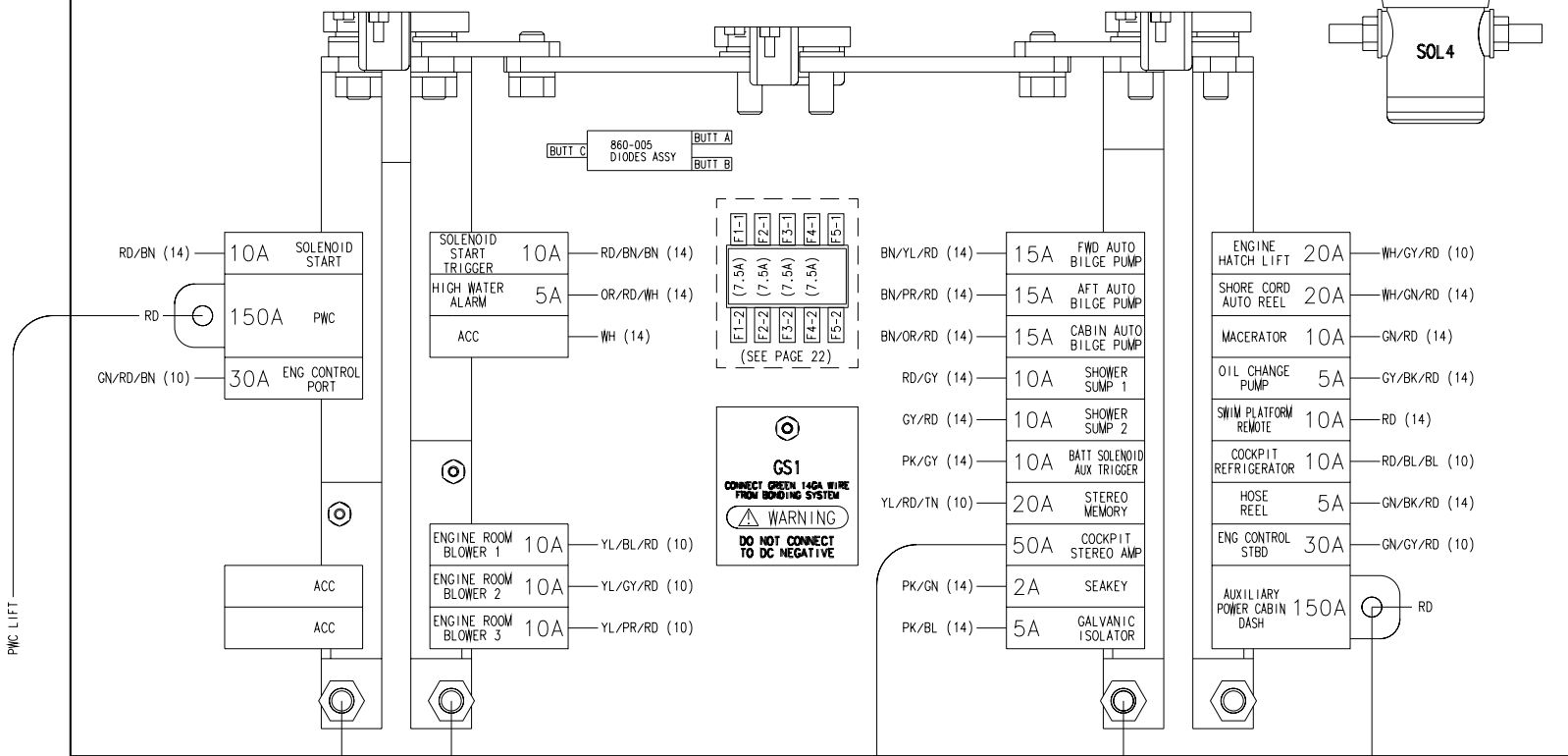
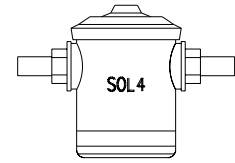
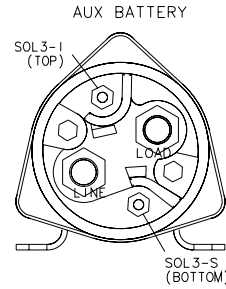
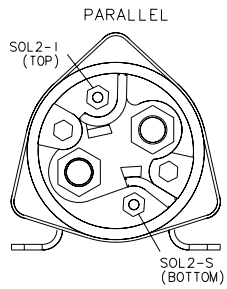
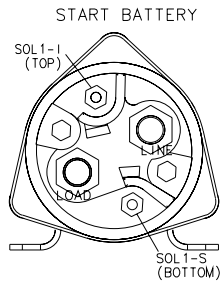


THUNDERBIRD
PRODUCTS
ENGINEERING

<https://www.boat-manuals.com/>



TITLE: 12V AC/DC
PANEL SCHEMATIC
MOD.: 48Y
DR BY: JAW
23

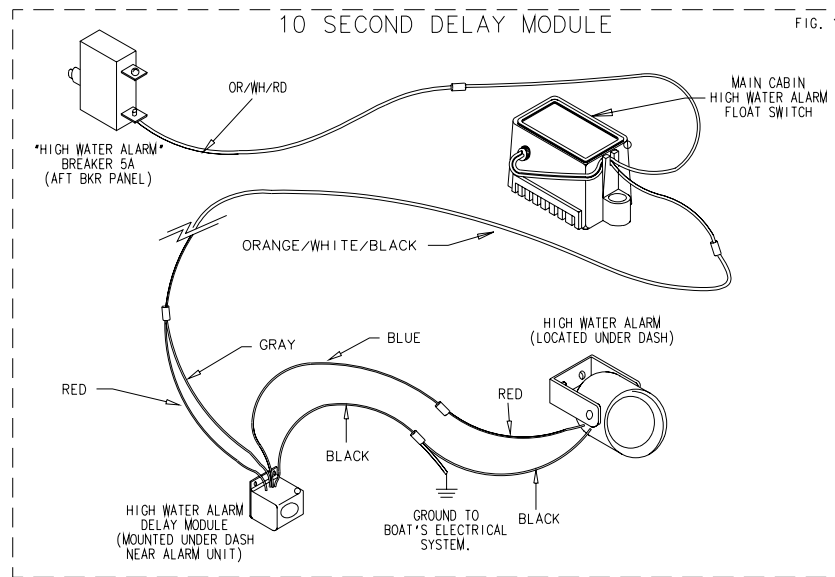


LEGEND

GROUND	
ALARM	
FLOAT SWITCH	
PLUGS	

10 SECOND DELAY MODULE

FIG. 1



TO OPERATE:

1. THE "CONST POWER" BREAKER MUST BE PUSHED IN (CLOSED).
2. AT THE AFT BKR PANEL, SWITCH THE "HIGH WATER ALARM" BREAKER TO "ON".

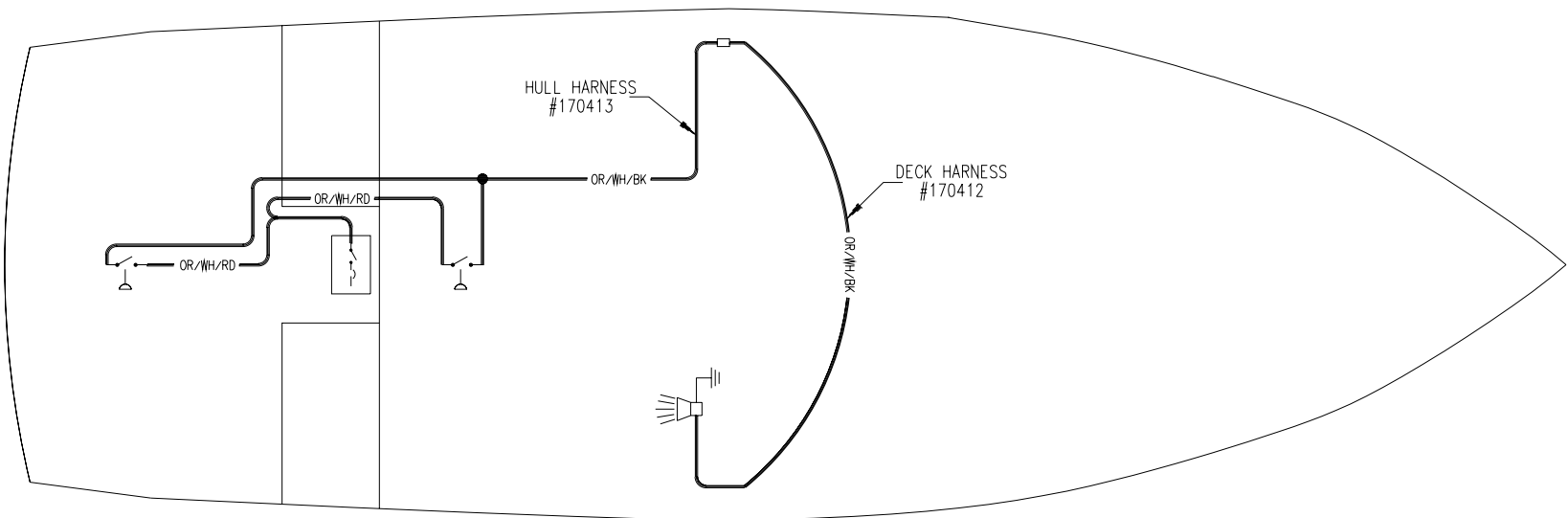
NOTE:

THE "AUX BATT" 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:

1. CHECK ENGINE ROOM AND CABIN FOR HIGH WATER.
2. CHECK BILGE PUMPS TO SEE IF THEY ARE FUNCTIONING PROPERLY.
3. CONSULT MARINA'S SERVICE DEPARTMENT OR CALL FORMULA'S TECHNICAL ASSISTANCE GROUP.



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TITLE: HIGH WATER
ALARM

MOD.: 48Y

DR BY: JAW

25

LEGEND

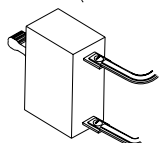
GROUND 

BREAKER 

SWITCH 

DPDT SWITCH 

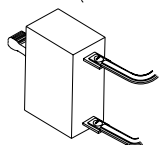
"OWNER STATERM BED TILT"
BKR 10A
(AC/DC BKR PANEL)
(REAR VIEW)



+12V DC

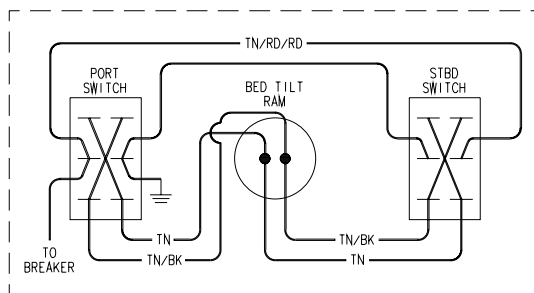
TN/RD/RD

"GUEST STATERM BED SLIDE"
BKR 10A
(AC/DC BKR PANEL)
(REAR VIEW)

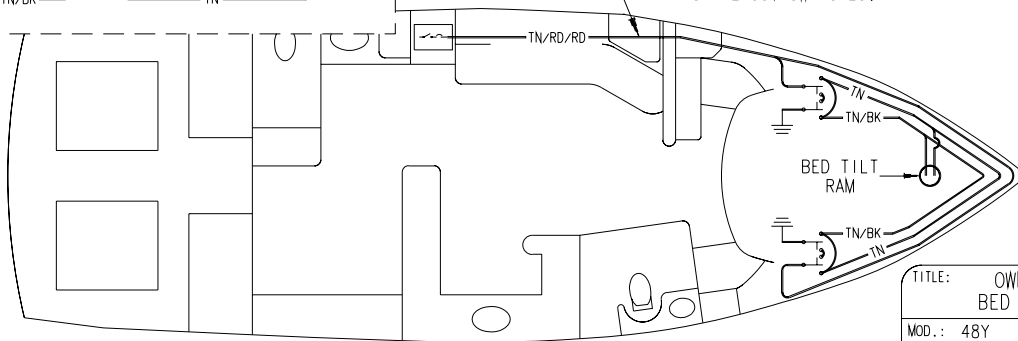


+12V DC

TN/RD/WH



HULL HARNESS #170413

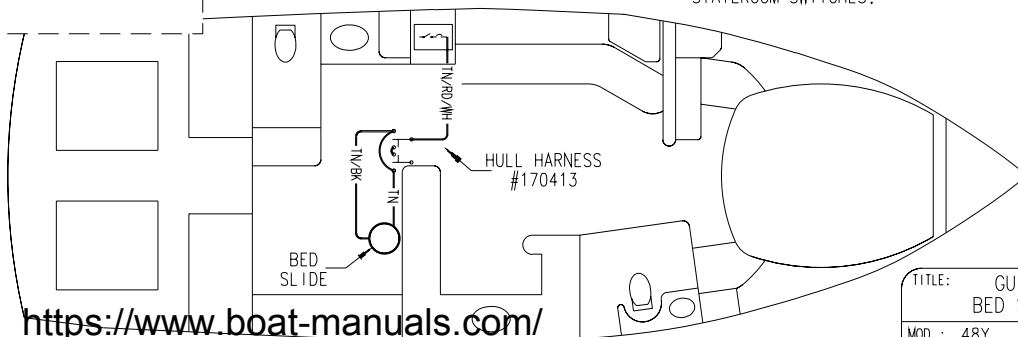
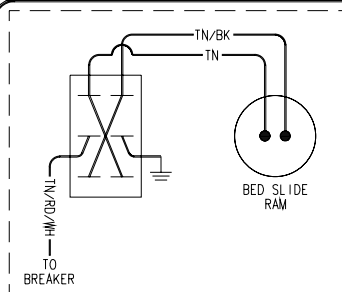


TITLE: OWNER
BED TILT

MOD.: 48Y

DR BY: JAW

26A



TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 2" BREAKER TO "ON".
2. AT THE AC/DC PANEL, SWITCH THE "GUEST STATERM BED SLIDE" BREAKER TO "ON".
3. THE BED SLIDE CAN BE OPERATED BY THE GUEST STATEROOM SWITCHES.

TITLE: GUEST
BED SLIDE

MOD.: 48Y

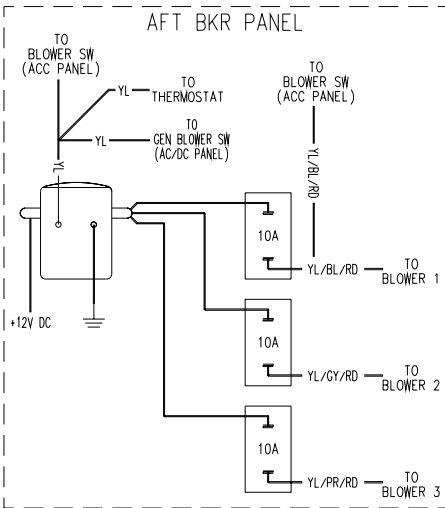
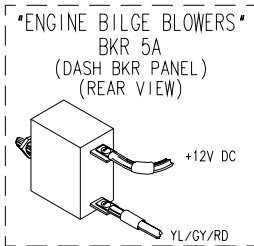
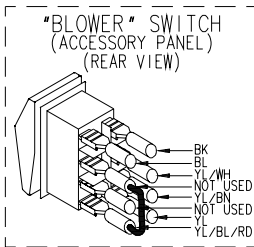
DR BY: JAW

26B



LEGEND

GROUND	
BLOWER	
DPDT SWITCH	
PLUGS	
BREAKER	
BREAKER PANEL	

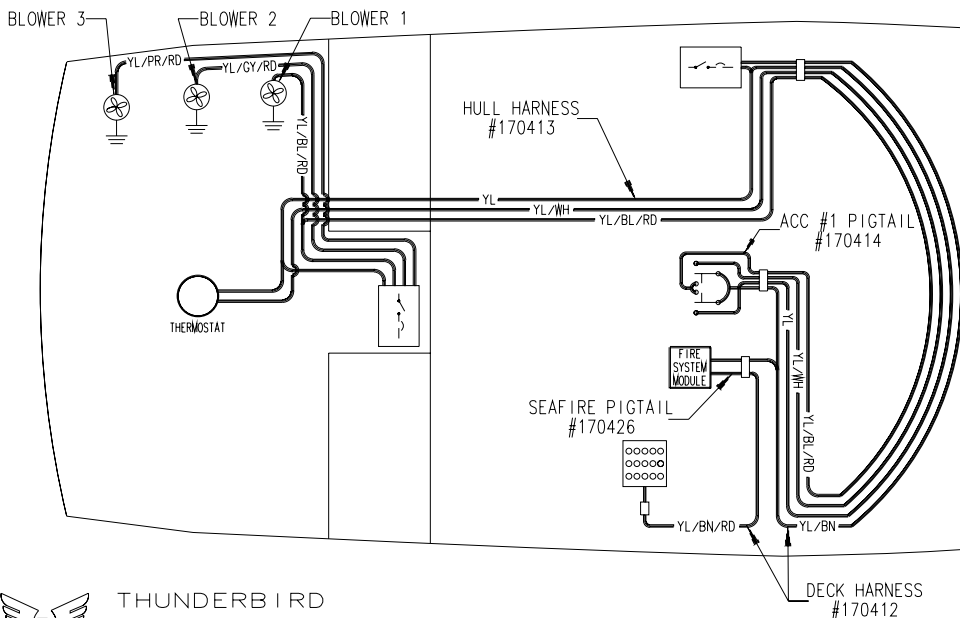


WARNING!

GASOLINE VAPORS CAN EXPLODE.
BEFORE STARTING ENGINE:
-CHECK ENGINE BILGE FOR GASOLINE VAPORS.
-OPERATE BLOWERS FOR FOUR (4) MINUTES,
RUN BLOWERS BELOW CRUISING SPEED.

TO OPERATE:

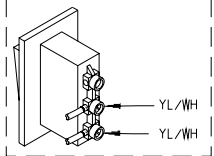
1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE DASH BREAKER PANEL, THE "ENGINE BILGE BLOWERS" BREAKER MUST BE PUSHED IN (CLOSED).
3. AT THE AFT BKR PANEL, SWITCH THE "ENGINE ROOM BLOWER 1", "ENGINE ROOM BLOWER 2", AND "ENGINE ROOM BLOWER 3" BREAKERS TO "ON".
4. THE ENGINE BILGE BLOWERS CAN NOW BE OPERATED BY THE "BLOWER" SWITCH LOCATED ON THE ACCESSORY PANEL.
5. THE ENGINE BILGE BLOWERS CAN ALSO BE OPERATED BY SWITCHING THE "GENERATOR BLOWER" BREAKER AT THE AC/DC PANEL, LOCATED IN THE CABIN, TO "ON".



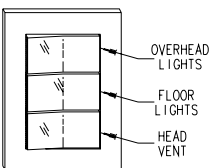
LEGEND

GROUND	
BLOWER	
BREAKER	
PLUGS	
SWITCH	

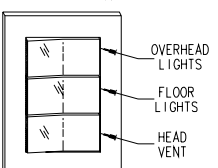
OWNER HEAD BLOWER SWITCH (REAR VIEW)



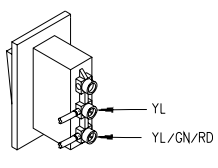
OWNER HEAD LIGHT SWITCHES



GUEST HEAD LIGHT SWITCHES

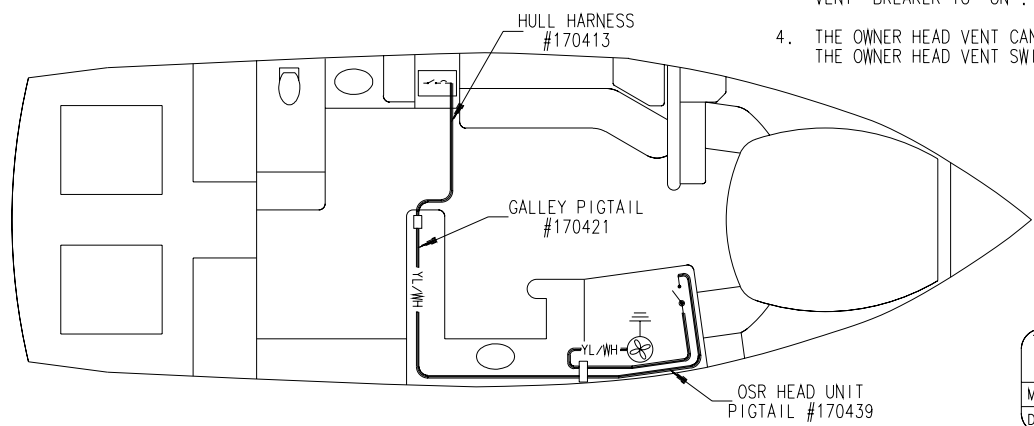


GUEST HEAD BLOWER SWITCH (REAR VIEW)



TO OPERATE:

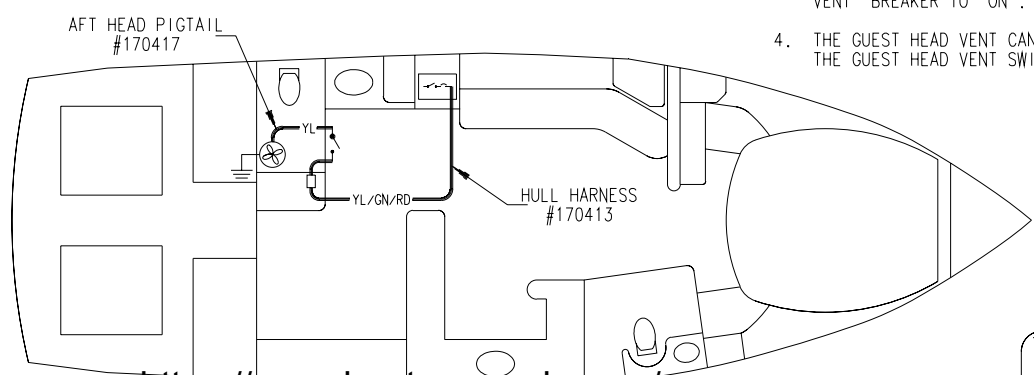
1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 1" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "OWNER HEAD VENT" BREAKER TO "ON".
4. THE OWNER HEAD VENT CAN NOW BE OPERATED BY THE OWNER HEAD VENT SWITCH.



TITLE: BLOWER, OWNER HEAD	
MOD.: 48Y	28A
DR BY: JAW	

TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 2" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "GUEST HEAD VENT" BREAKER TO "ON".
4. THE GUEST HEAD VENT CAN NOW BE OPERATED BY THE GUEST HEAD VENT SWITCH.



TITLE: BLOWER, GUEST HEAD	
MOD.: 48Y	28B
DR BY: JAW	

LEGEND

GROUND 

BLOWER 

BREAKER 

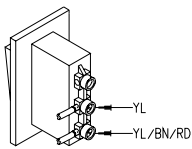
PLUGS 

SWITCH 

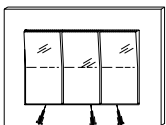
BREAKER PANEL 

12V OUTLET 

STOVE TOP VENT SWITCH (REAR VIEW)

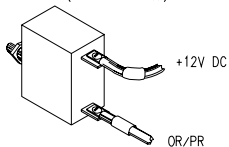


GALLEY SWITCHES

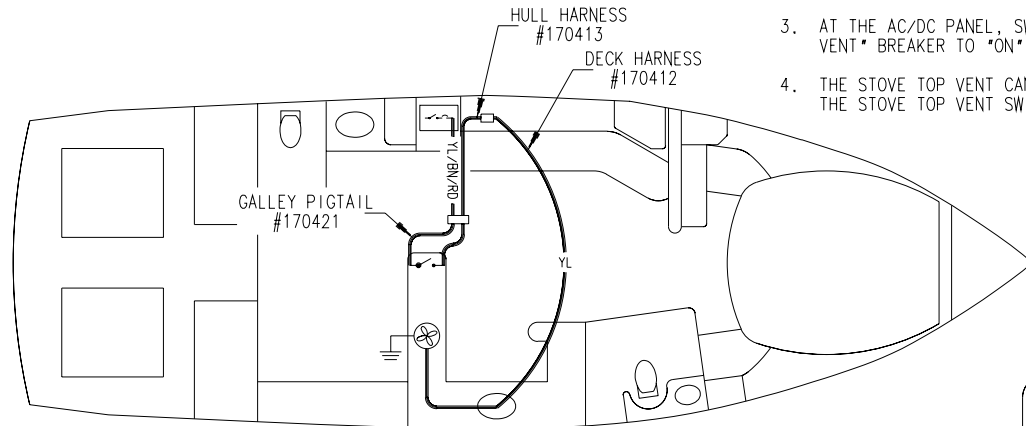
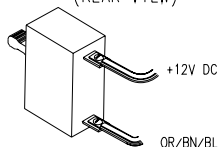


GALLEY MOOD LIGHTS STOVE TOP VENT UNDER CABINET LIGHTS

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



12 VOLT OUTLETS BKR 15A (CABIN AC/DC PANEL) (REAR VIEW)



TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE *AUX BATT* SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC *MAIN 2* BREAKER TO *ON*.
3. AT THE AC/DC PANEL, SWITCH THE *STOVE TOP VENT* BREAKER TO *ON*.
4. THE STOVE TOP VENT CAN NOW BE OPERATED BY THE STOVE TOP VENT SWITCH.

TITLE: BLOWER, STOVE TOP

MOD.: 48Y

DR BY: JAW

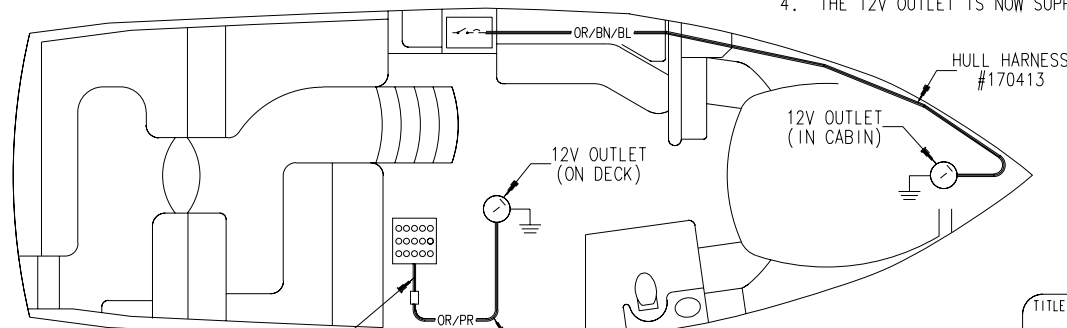
29A

TO OPERATE (DECK 12V OUTLET):

1. LOCATED UNDER THE WET BAR, TURN THE *AUX BATT* SWITCH ON.
2. AT THE DASH BREAKER PANEL, THE *12 VOLT OUTLET* BREAKER MUST BE PUSHED IN (CLOSED).
3. THE 12V OUTLET IS NOW SUPPLIED WITH POWER.

TO OPERATE (CABIN 12V OUTLET):

1. LOCATED UNDER THE WET BAR, TURN THE *AUX BATT* SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC *MAIN 1* BREAKER TO *ON*.
3. AT THE AC/DC PANEL, SWITCH THE *12V OUTLETS* BREAKER TO *ON*.
4. THE 12V OUTLET IS NOW SUPPLIED WITH POWER.



TITLE: 12V OUTLETS

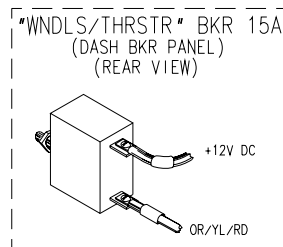
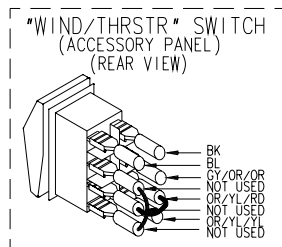
MOD.: 48Y

DR BY: JAW

29B

LEGEND

PLUGS	□ □
BREAKER PANEL	○○○○○ ○○○○○ ○○○○○
GROUND	⊥
SWITCH	⎓
SOLENOID	⊙



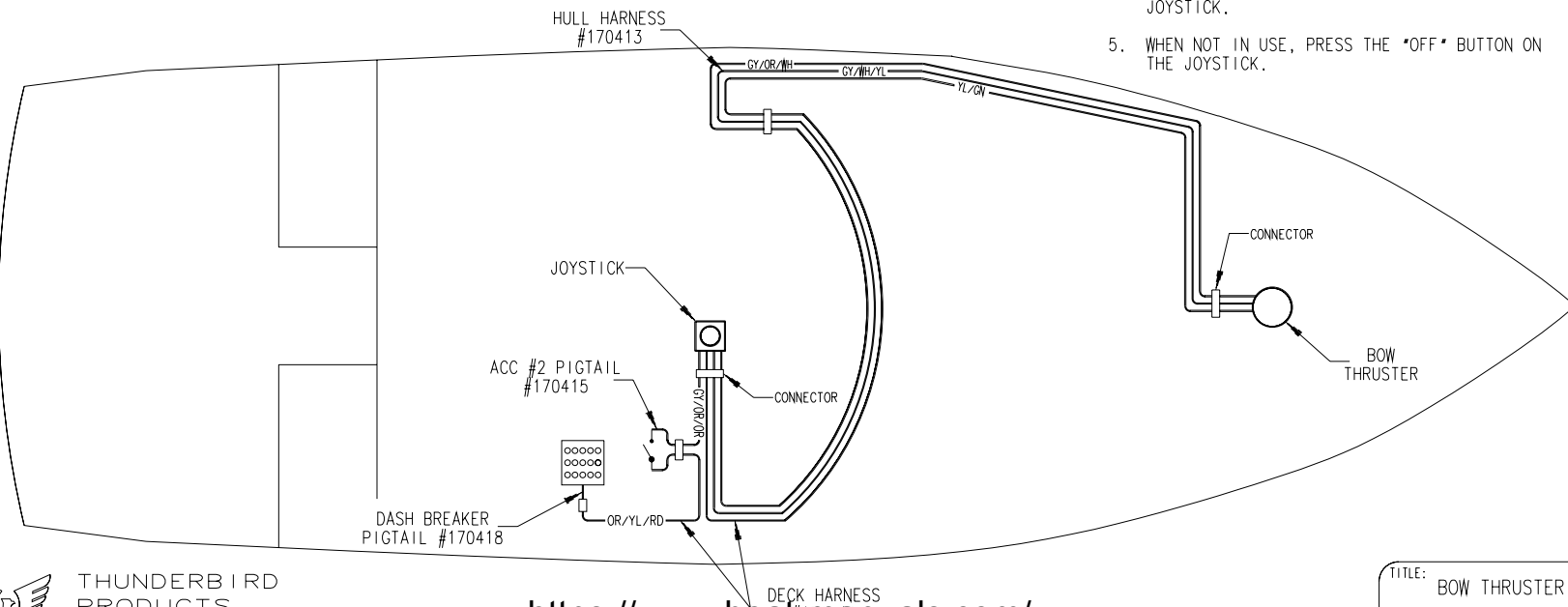
WARNING!

DO NOT OPERATE BOW THRUSTER!

It is very dangerous to run the thruster out of the water, even for a few seconds, the motor will over speed by 300%, causing damage to the seals etc. and the propeller will cause serious damage to whatever it comes into contact with and invalidate the warranty.

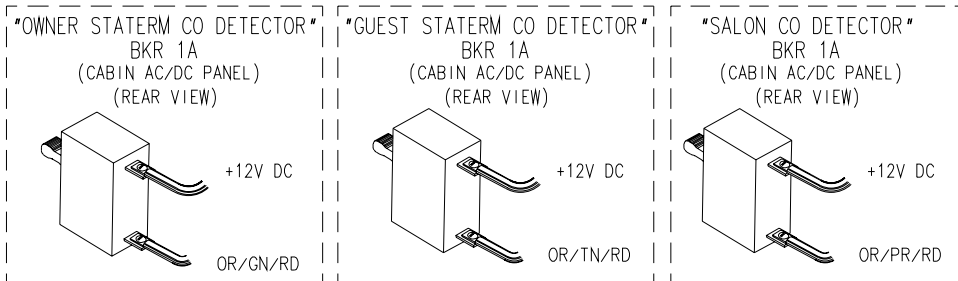
TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE DASH BREAKER PANEL, THE "WINDLS/THRSTR" BREAKER MUST BE PUSHED IN (CLOSED).
3. LOCATED ON THE ACCESSORY PANEL, THE "WIND/THRSTR" SWITCH MUST BE IN THE "THRSTR" POSITION. (WINDLASS AND BOW THRUSTER CANNOT BE OPERATED SIMULTANEOUSLY.)
4. ON THE BOW THRUSTER JOYSTICK, LOCATED ON THE DASH, PRESS BOTH "ON" BUTTONS SIMULTANEOUSLY. THE BOW THRUSTER CAN NOW BE OPERATED BY THE JOYSTICK.
5. WHEN NOT IN USE, PRESS THE "OFF" BUTTON ON THE JOYSTICK.



LEGEND

GROUND	
PLUGS	
BREAKER PANEL	
BREAKER	

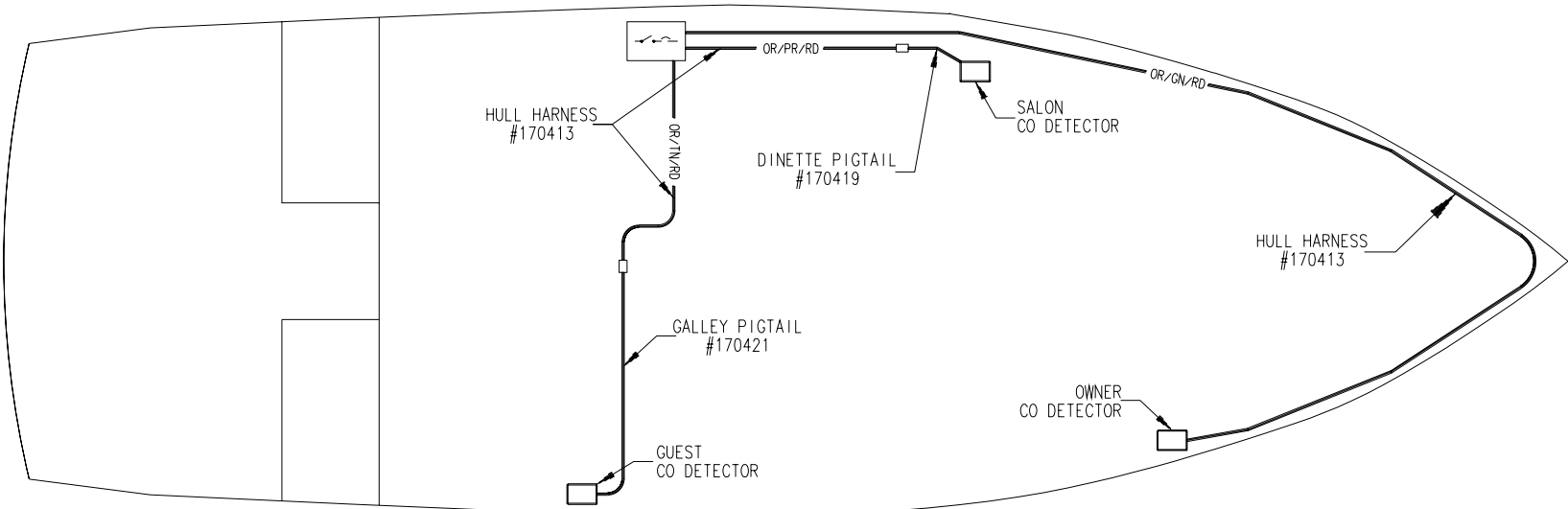


TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE "OWNERS STATERM CO DETECTOR", "SALON CO DETECTOR", AND "GUEST STATERM CO DETECTOR" BREAKERS TO "ON".
3. CHECK THE CO SENSORS TO BE SURE THE GREEN POWER "ON" INDICATOR IS ILLUMINATED.
4. AFTER THE INITIAL TEN (10) MINUTE WARM-UP PERIOD, PRESS THE "TEST" BUTTON. IF THE SENSOR IS OK THE AUDIBLE ALARM WILL SOUND AND THE GREEN POWER "ON" LIGHT WILL CHANGE TO RED.


NOTE: THE CO DETECTOR PROVIDES AN AUDIBLE AND VISUAL ALARM IF CARBON DIOXIDE IS PRESENT IN THE CABIN AREA.

CO DETECTORS SHOULD REMAIN ON AT ALL TIMES WHILE BOAT IS OCCUPIED.



LEGEND

GROUND 

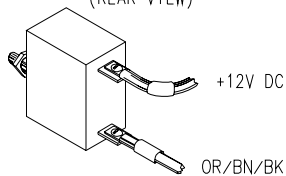
PLUGS 

BREAKER PANEL 

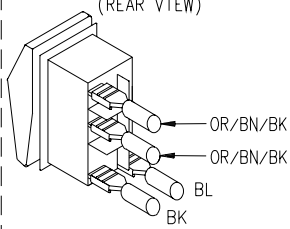
SWITCH 

BREAKER 

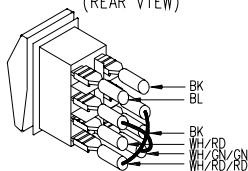
"DEPTH SOUNDER" BKR 5A
(DASH BKR PANEL)
(REAR VIEW)



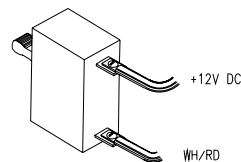
"DEPTH SOUNDER" SWITCH
(ACCESSORY PANEL)
(REAR VIEW)



"ENG HATCH" SWITCH
(AFT BKR PANEL)
(REAR VIEW)

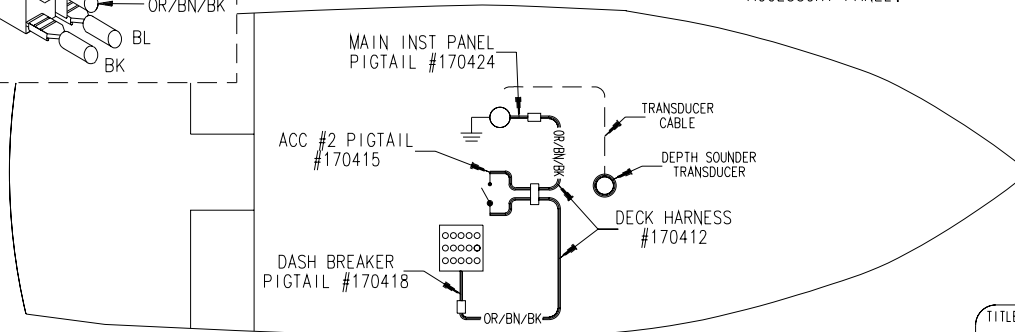


"ENGINE HATCH LIFT" BKR 20A
(AFT BKR PANEL)
(REAR VIEW)



TO OPERATE:

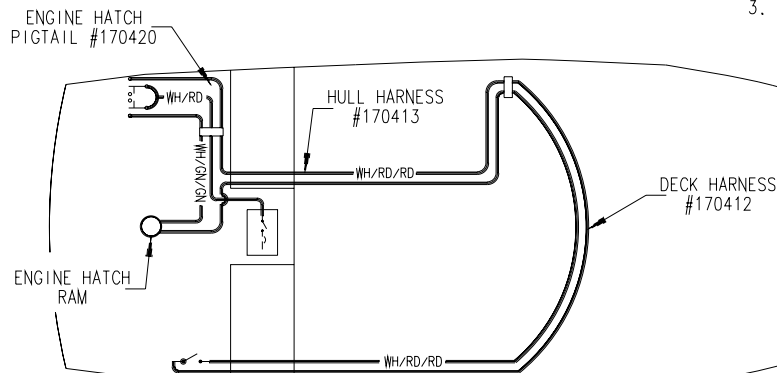
1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE DASH BREAKER PANEL, THE "DEPTH SOUNDER" BREAKER MUST BE PUSHED IN (CLOSED).
3. THE DEPTH SOUNDER CAN NOW BE OPERATED BY THE "DEPTH SOUNDER" SWITCH LOCATED ON THE ACCESSORY PANEL.



TITLE: DEPTH SOUNDER	
MOD.: 48Y	32A
DR BY: JAW	

TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AFT BKR PANEL, SWITCH THE "ENGINE HATCH LIFT" BREAKER TO "ON".
3. THE ENGINE HATCH CAN BE RAISED AND LOWERED BY THE "ENG HATCH" SWITCH, LOCATED UNDER THE AFT COCKPIT SEAT.



TITLE: ENGINE HATCH	
MOD.: 48Y	32B
DR BY: JAW	



THUNDERBIRD
PRODUCTS
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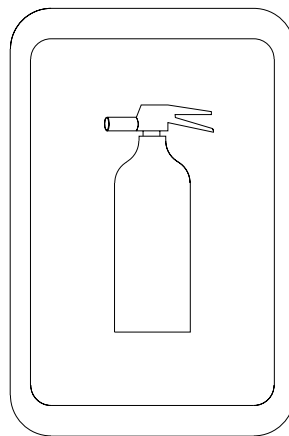
<https://www.boat-manuals.com/>

LEGEND

PLUGS □ □

GROUND ⊥

FIRE EXTINGUISHER 



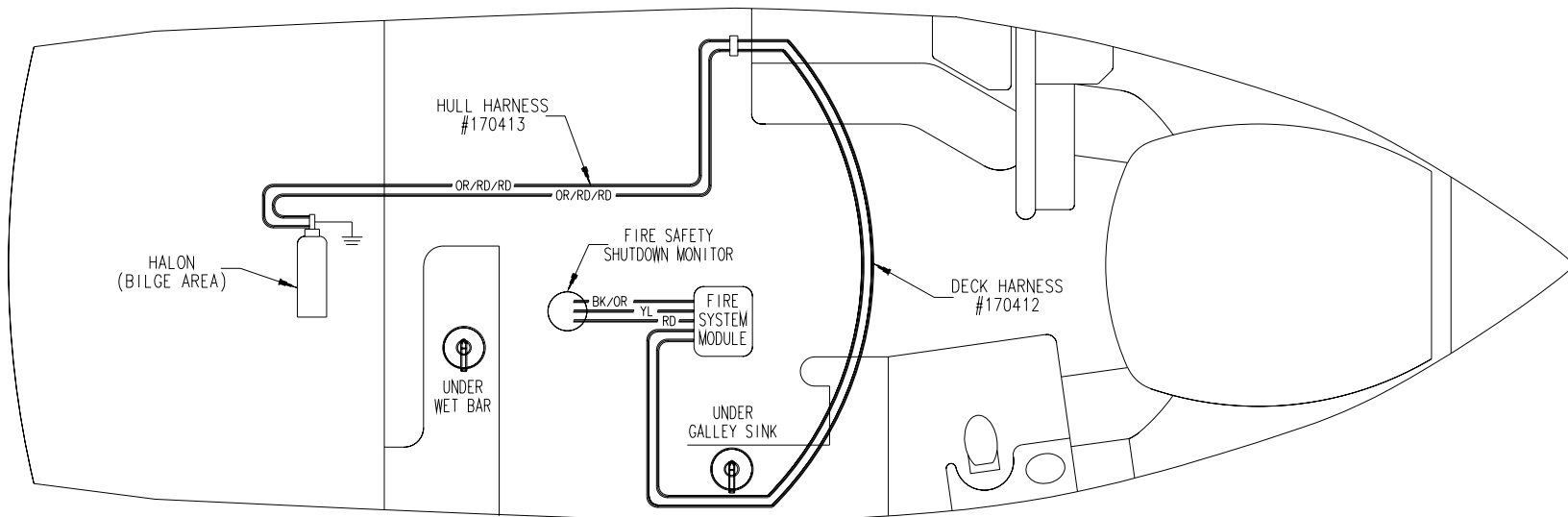
LABEL REPRESENTS THE PRESENCE OF A DRY CHEMICAL EXTINGUISHER WITHIN

OPERATION:

THE ENGINE INTERRUPT/RESTART SYSTEM, WHEN PROPERLY INSTALLED, HAS PROVISIONS FOR SIMULTANEOUS EQUIPMENT SHUTDOWN UPON EXTINGUISHER DISCHARGE. THIS IS ACCOMPLISHED BY USE OF AN IN-CYLINDER PRESSURE SWITCH, WHICH IS STANDARD EQUIPMENT ON ALL AUTOMATIC FIRE EXTINGUISHERS.

IMMEDIATELY UPON SYSTEM DISCHARGE THE PRESSURE SWITCH WILL DEACTIVATE THE CONTROL UNIT. THIS IN TURN WILL OPEN OR CLOSE THE CONTROL CONTACTS THEREBY DISRUPTING ELECTRICALLY CONTROLLED FUEL SOLENOID VALVES AND AIR DAMPERS ON DIESEL(S).

SYSTEM STATUS	DISPLAY UNIT INDICATOR LIGHT STATUS		
	AUDIBLE SOUND	GREEN LED	RED LED
NORMAL POWER *ON*	OFF	ON	OFF
ALARM (DISCHARGE)	ON	OFF	ON
OVERRIDE MODE	OFF	OFF	OFF

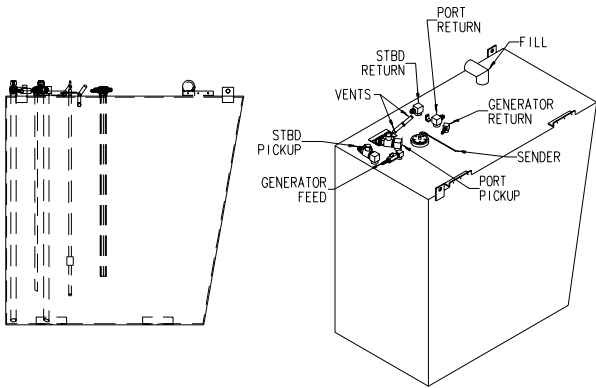


THUNDERBIRD
PRODUCTS
ENGINEERING

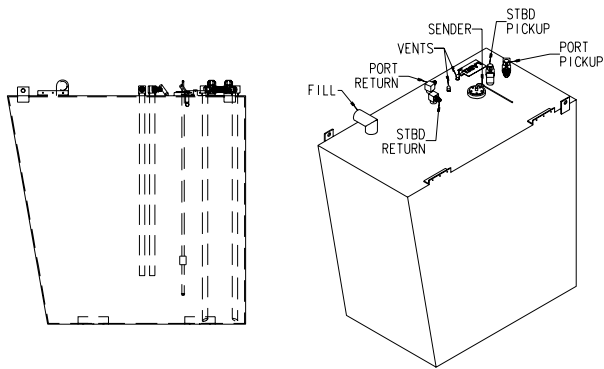
<https://www.boat-manuals.com/>

TITLE: FIRE SYSTEM	
MOD.: 48Y	33
DR BY: JAW	

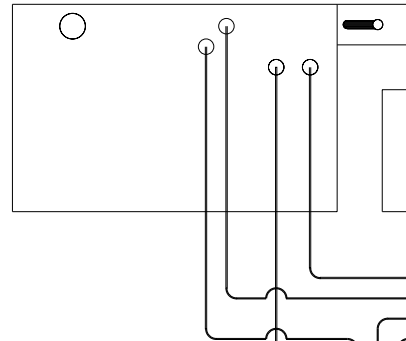
PORT FUEL TANK



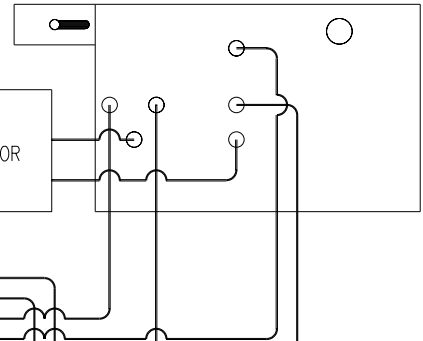
STBD FUEL TANK



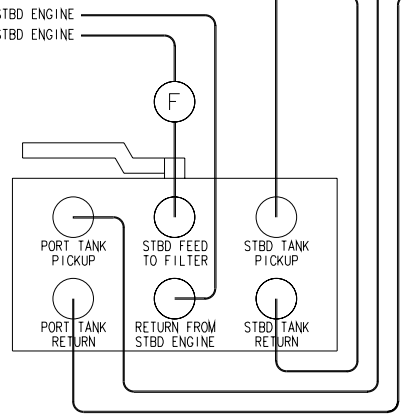
STBD FUEL TANK (TOP VIEW)



PORT FUEL TANK (TOP VIEW)

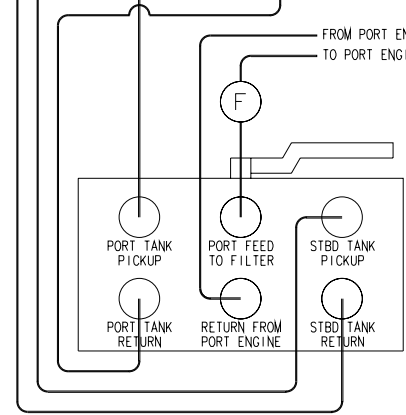


FROM STBD ENGINE TO STBD ENGINE



STBD VALVE (BACK VIEW)

FROM PORT ENGINE TO PORT ENGINE




PORT VALVE (BACK VIEW)

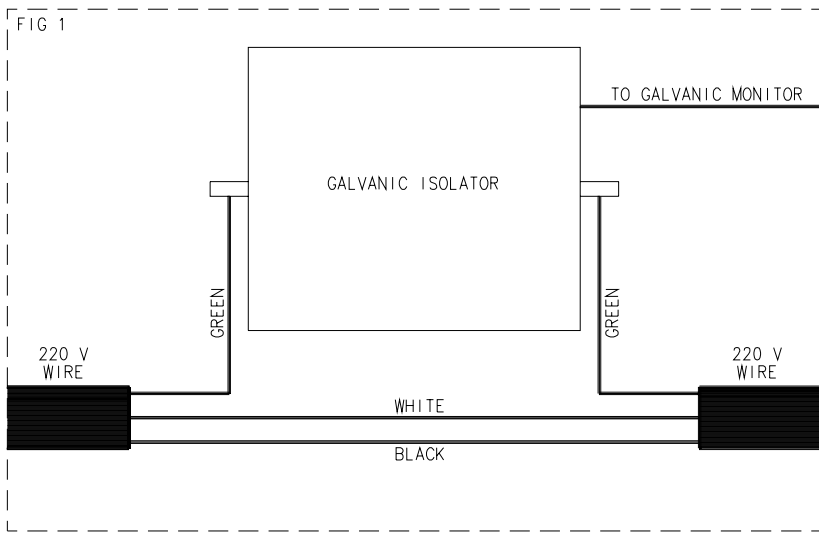


LEGEND

PLUGS 

BREAKER 

GROUND 

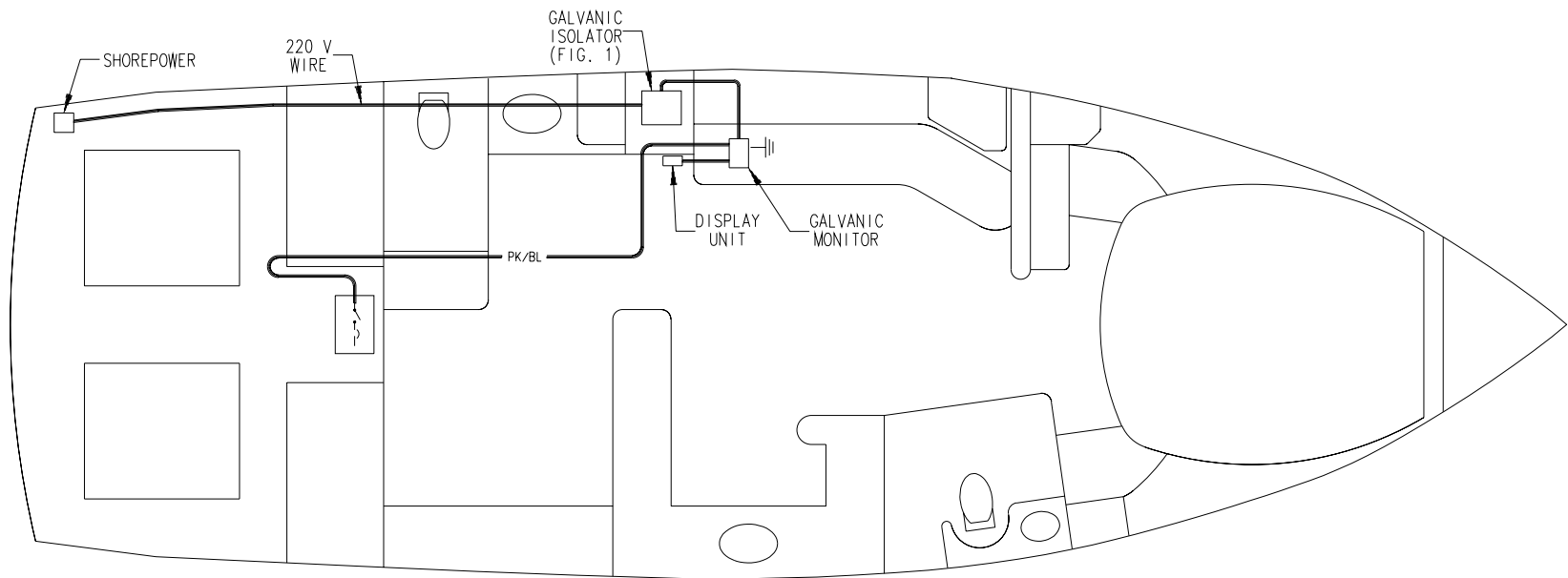


TEST PROCEDURE:

1. PLUG IN SHORE CORD AND TURN ON SHOREPOWER BREAKERS.
2. LOOK AT GALVANIC DISPLAY; IT SHOULD SAY GROUND WIRE NORMAL AND GALVANIC ISOLATOR NORMAL.

NOTE:

GALVANIC ISOLATOR WILL OPERATE AUTOMATICALLY WHEN BOAT IS SUPPLIED WITH SHOREPOWER.



LEGEND

GROUND 

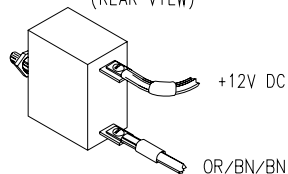
PLUGS 

BREAKER PANEL 

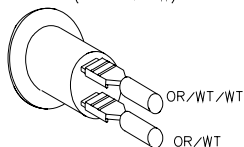
SWITCH 

COMPRESSOR 

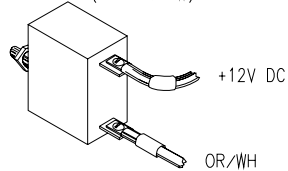
"GPS" BKR 5A
(DASH BKR PANEL)
(REAR VIEW)



"HORN" SWITCH
(IGNITION PANEL)
(REAR VIEW)

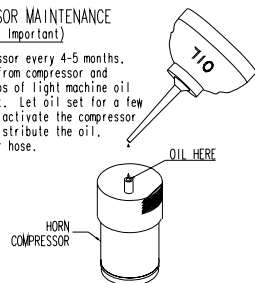


"HORN" BKR 20A
(DASH BKR PANEL)
(REAR VIEW)



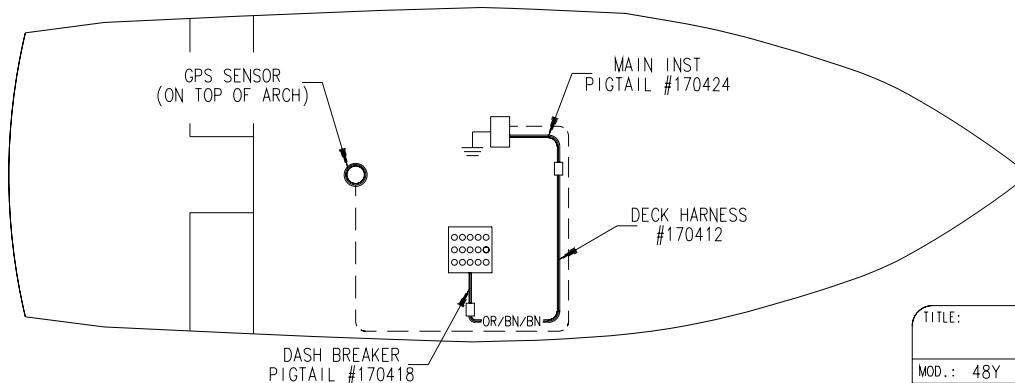
HORN COMPRESSOR MAINTENANCE LUBRICATION (Very Important)

Lubricate compressor every 4-5 months. Remove air hose from compressor and apply 3 to 4 drops of light machine oil into the air port. Let oil set for a few minutes and then activate the compressor momentarily to distribute the oil. Reconnect the air hose.



TO OPERATE :

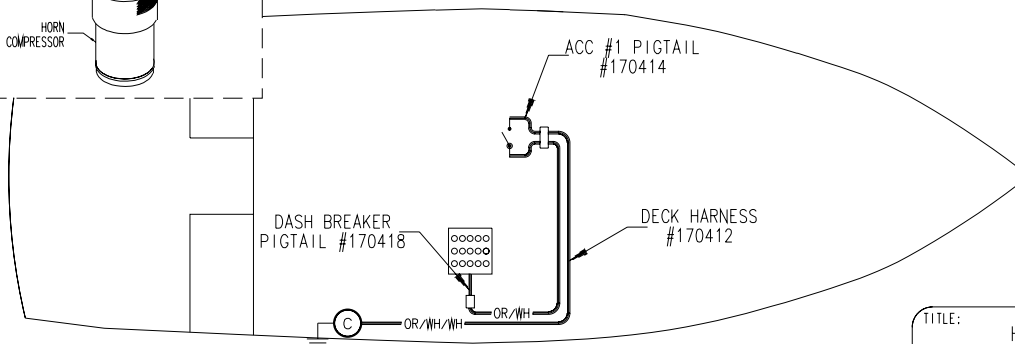
1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE DASH BREAKER PANEL, THE "GPS" BREAKER MUST BE PUSHED IN (CLOSED).
3. THE GPS UNIT CAN BE TURNED ON BY PRESSING THE "POWER" BUTTON LOCATED ON THE GPS UNIT.



TITLE: GPS	
MOD.: 48Y	36A
DR BY: JAW	

TO OPERATE :

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE DASH BREAKER PANEL, THE "HORN" BREAKER MUST BE PUSHED IN (CLOSED).
3. THE HORN CAN NOW BE OPERATED BY THE "HORN" SWITCH LOCATED AT THE ACCESSORY PANEL.



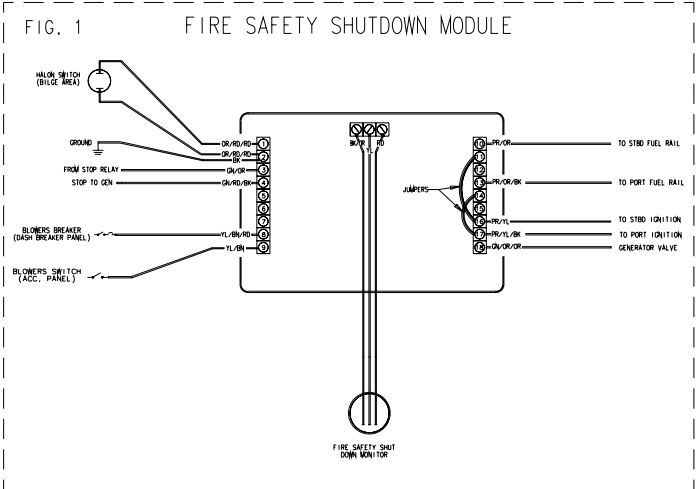
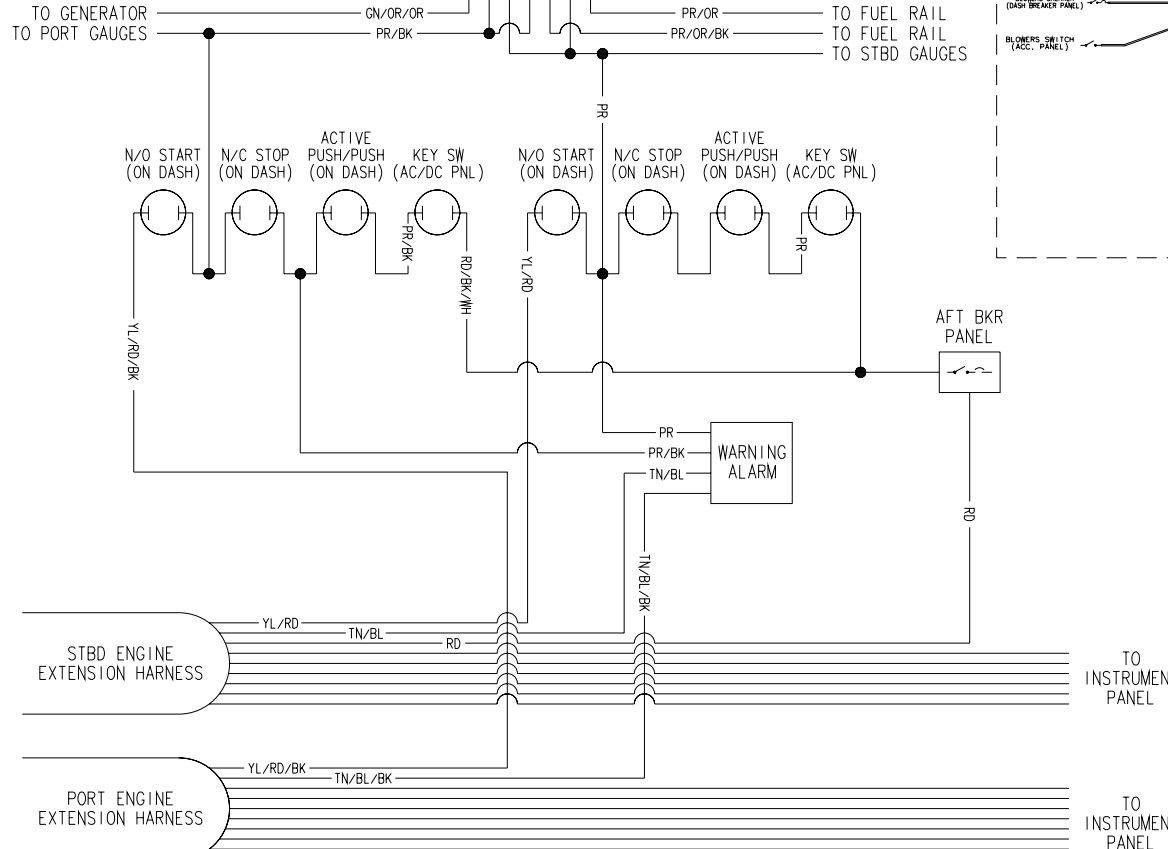
TITLE: HORN	
MOD.: 48Y	36B
DR BY: JAW	

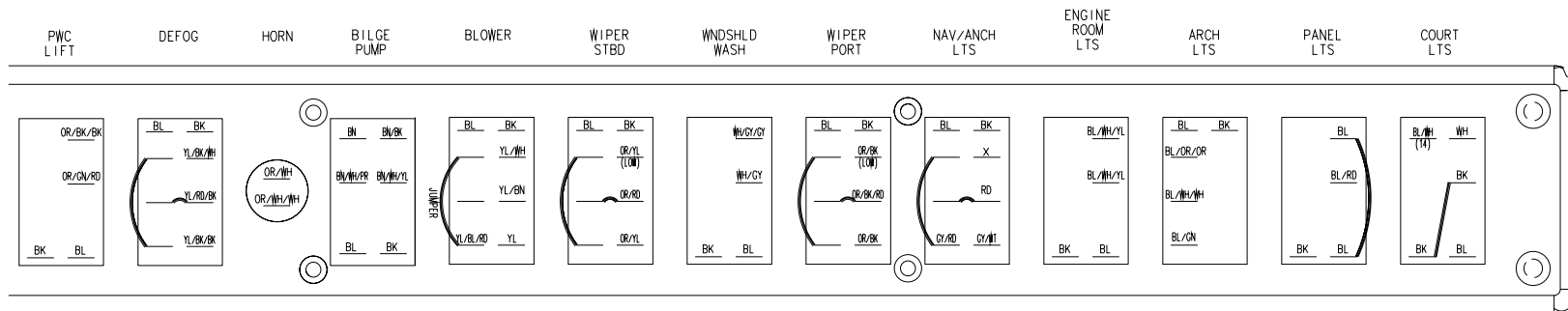


LEGEND

GROUND 

BREAKER 

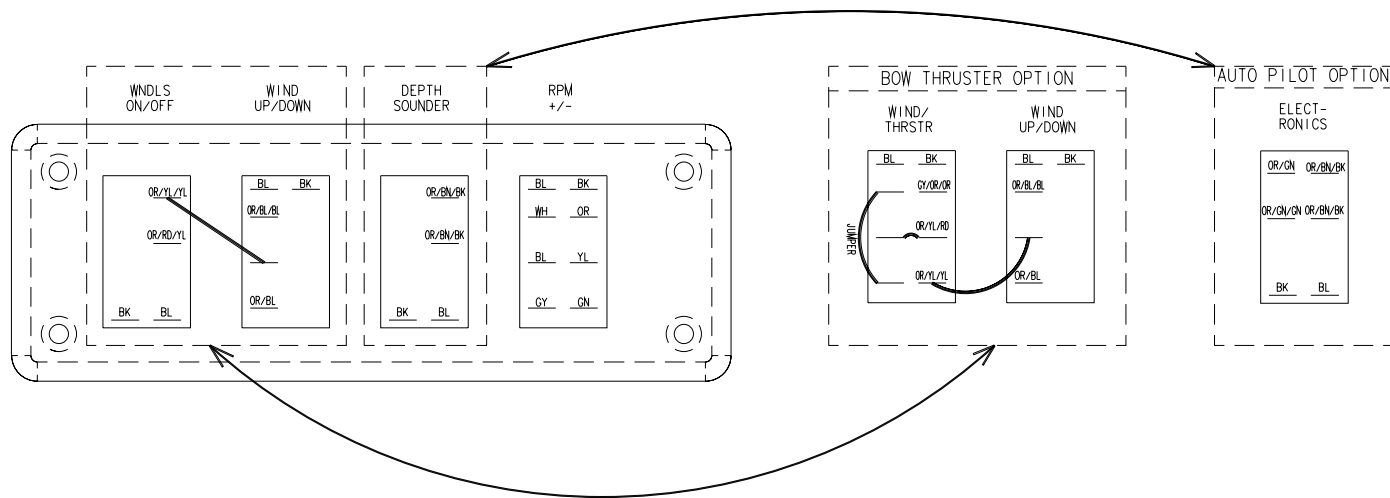




ACCESSORY PANEL #1

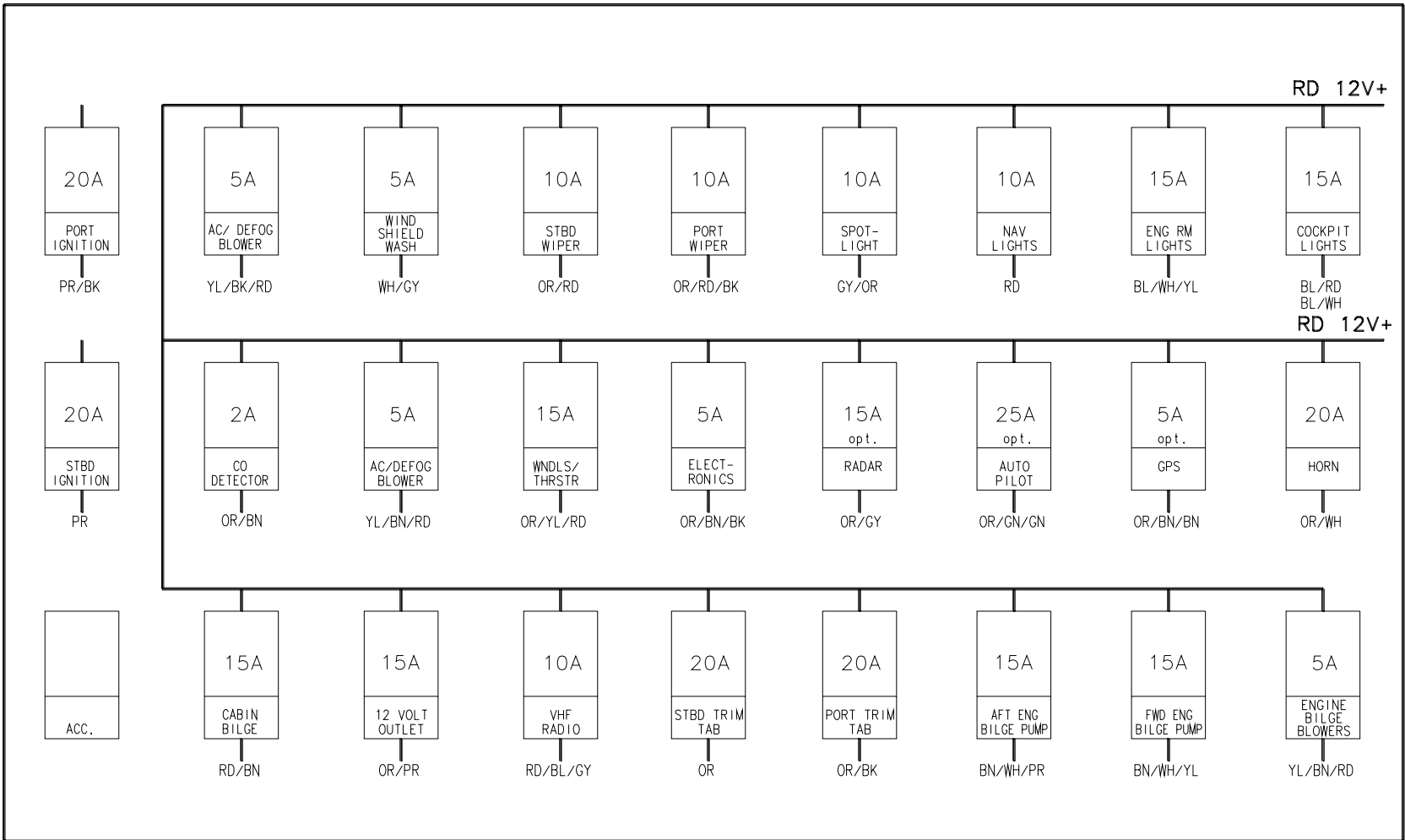
PANEL #169584

PIGTAIL #170414

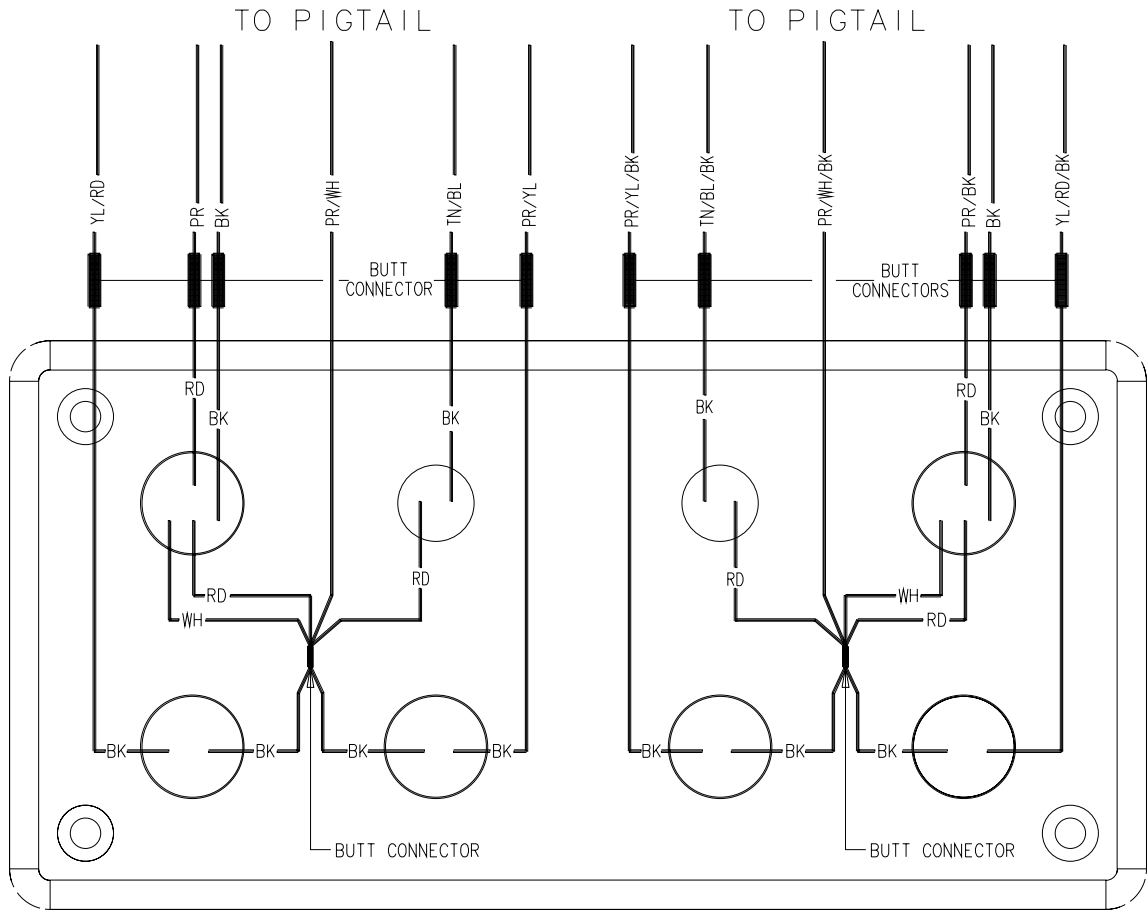


ACCESSORY PANEL #2

PANEL #169585



(rear view)



(REAR VIEW)



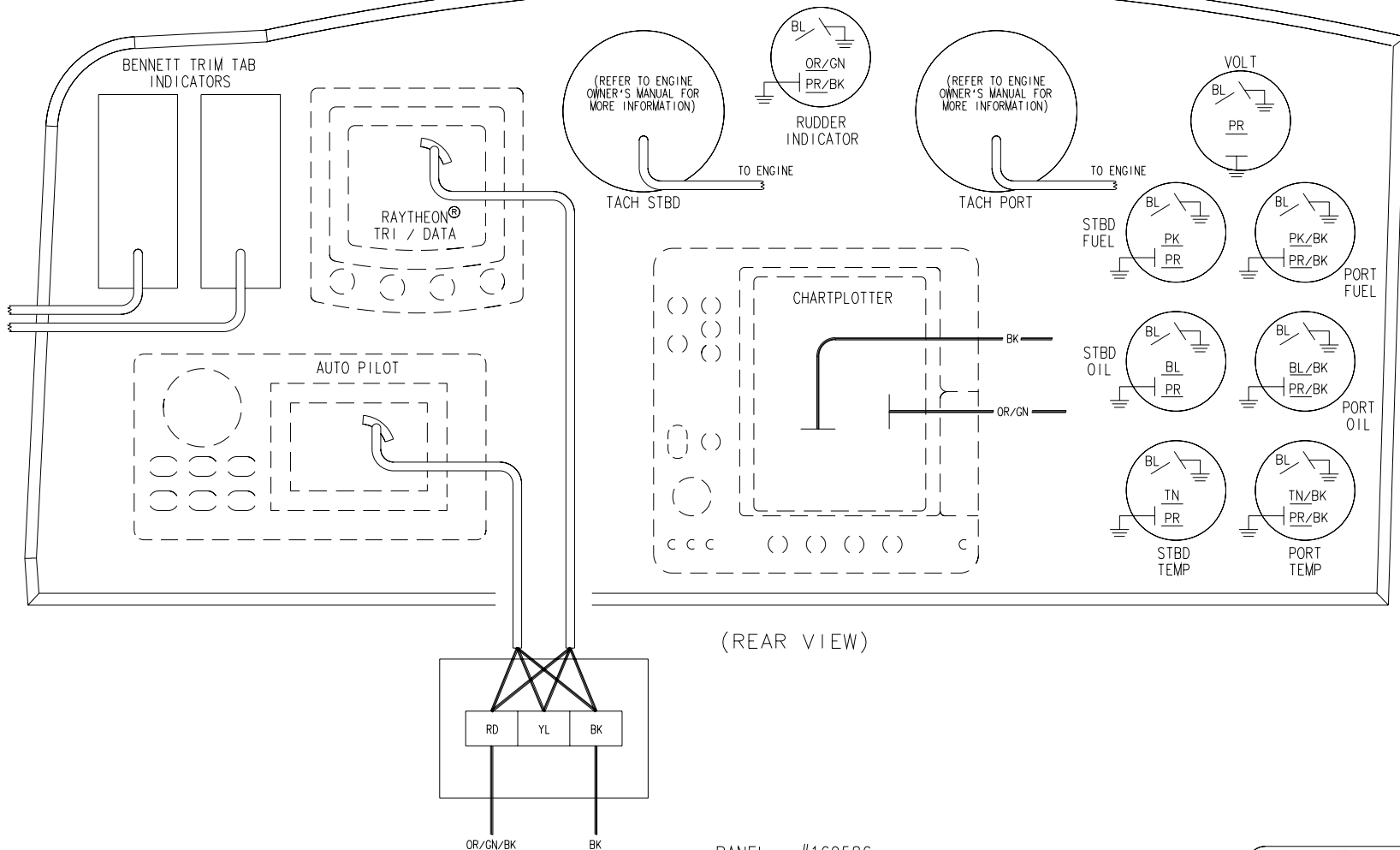
THUNDERBIRD
PRODUCTS
ENGINEERING

PANEL #169583

<https://www.boatmanuals.com/>

TITLE: IGNITION PANEL	
MOD.: 48Y	40
DR BY: JAW	

NOTE:
 RAYTHEON® TRI/DATA IS STANDARD
 EQUIPMENT. SEE RAYTHEON® TRIDATA
 USER MANUAL FOR INSTRUCTIONS.



(REAR VIEW)

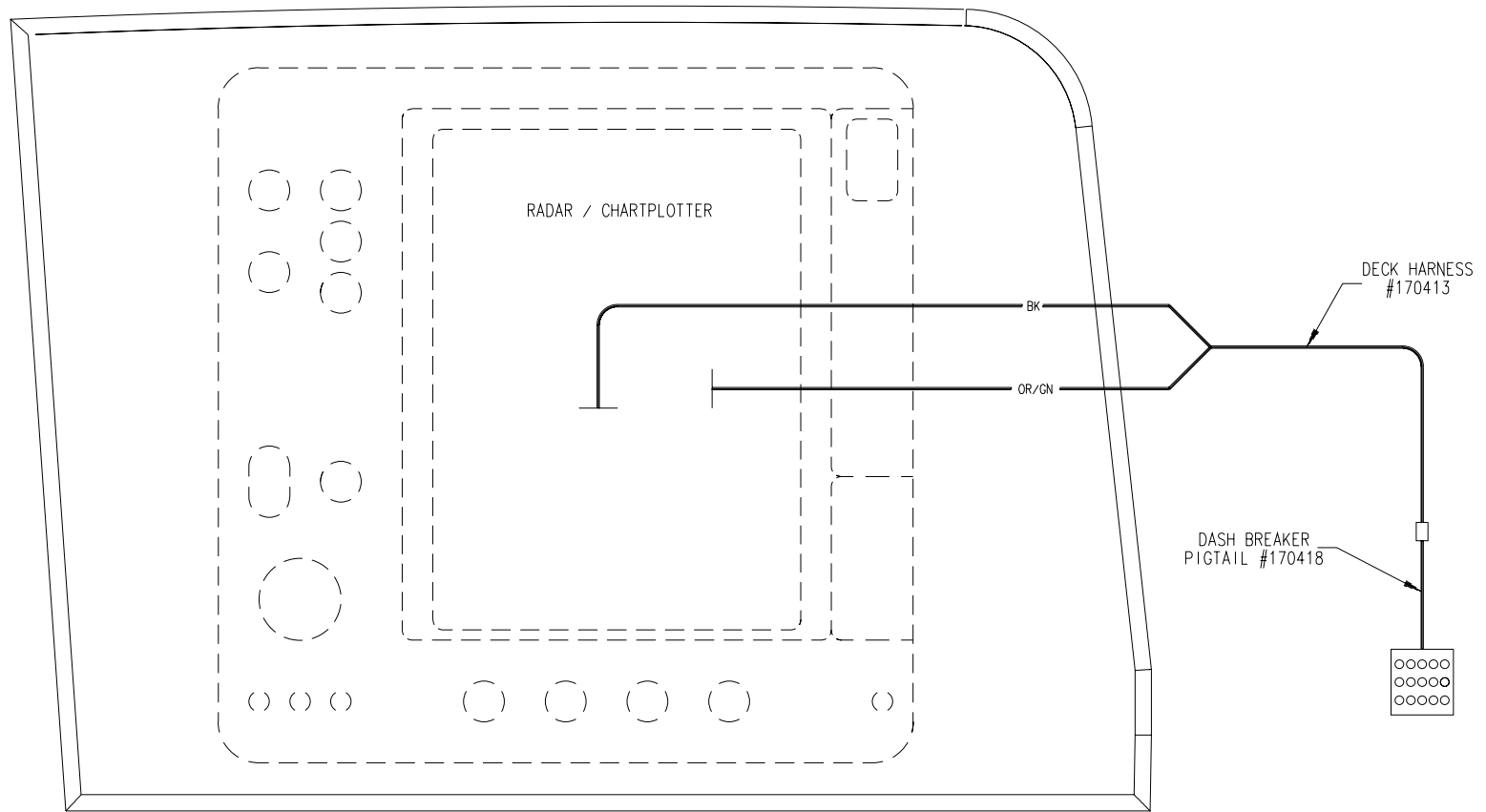
PANEL #169586

<https://www.boatmanuals.com/>



THUNDERBIRD
 PRODUCTS
 ENGINEERING

TITLE: MAIN INSTRUMENT PANEL	
MOD.: 48Y	41
DR BY: JAW	



THUNDERBIRD
PRODUCTS
ENGINEERING

PANEL #169587

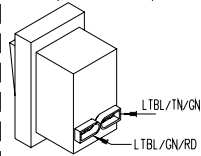
<https://www.boat-manuals.com/>

TITLE: MAIN INBOARD PANEL	
MOD.: 48Y	42
DR BY: JAW	

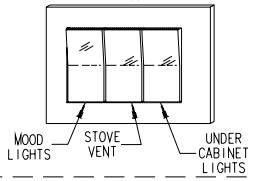
LEGEND

- GROUND
- BREAKER
- PLUGS
- SWITCH
- ROPE LIGHTS

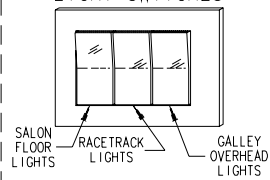
GALLEY MOOD LIGHT SWITCH (REAR VIEW)



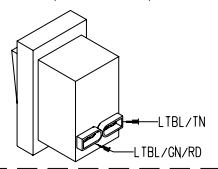
GALLEY LIGHT SWITCHES



STBD ENTRY WALL LIGHT SWITCHES



RACETRACK LIGHT SWITCH (REAR VIEW)

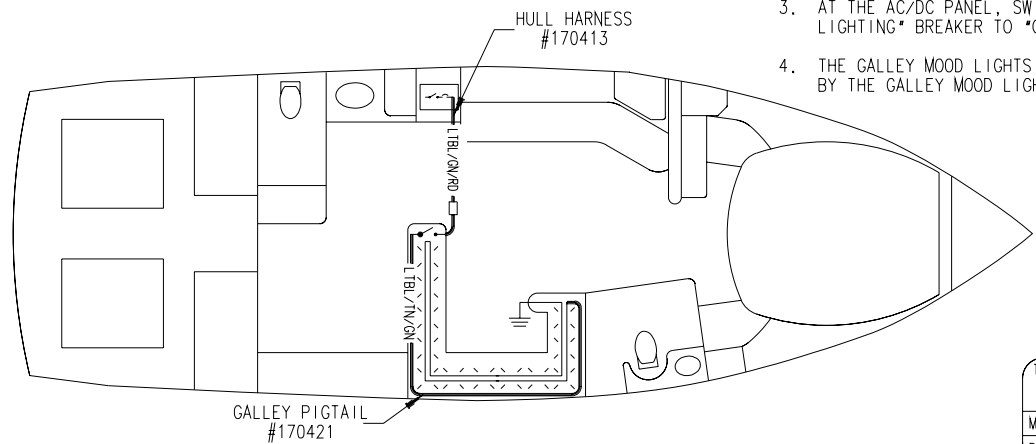


THUNDERBIRD PRODUCTS ENGINEERING



TO OPERATE:

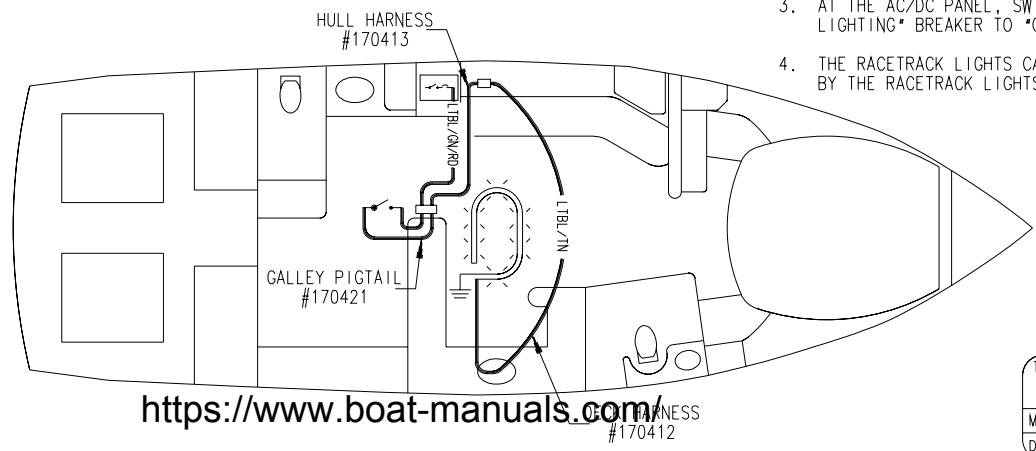
1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 1" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "GALLEY LIGHTING" BREAKER TO "ON".
4. THE GALLEY MOOD LIGHTS CAN NOW BE OPERATED BY THE GALLEY MOOD LIGHTS SWITCH.



TITLE: LIGHTS, GALLEY MOOD
 MOD.: 48Y
 DR BY: JAW
43A

TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 1" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "GALLEY LIGHTING" BREAKER TO "ON".
4. THE RACETRACK LIGHTS CAN NOW BE OPERATED BY THE RACETRACK LIGHTS SWITCH.



TITLE: LIGHTS, RACETRACK
 MOD.: 48Y
 DR BY: JAW
43B

LEGEND

GROUND 

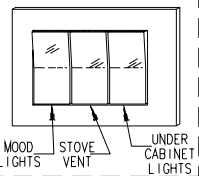
LIGHT 

BREAKER 

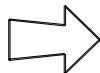
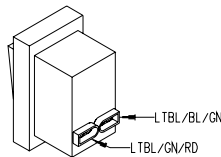
PLUGS 

SWITCH 

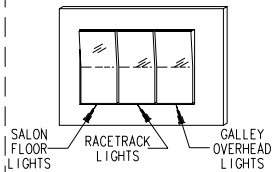
GALLEY LIGHT SWITCHES



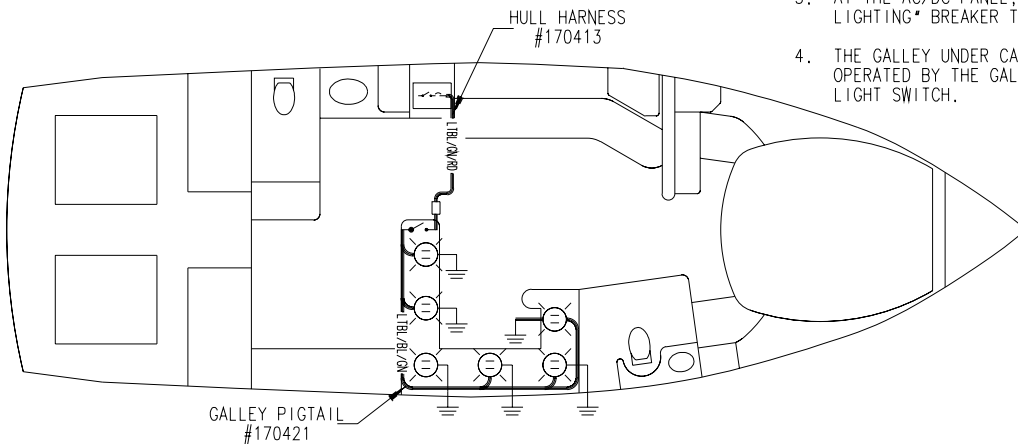
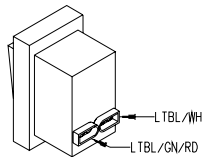
GALLEY UNDER CABINET LIGHT SWITCH (REAR VIEW)



STBD ENTRY WALL LIGHT SWITCHES



GALLEY OVERHEAD LIGHT SWITCH (REAR VIEW)



TO OPERATE:

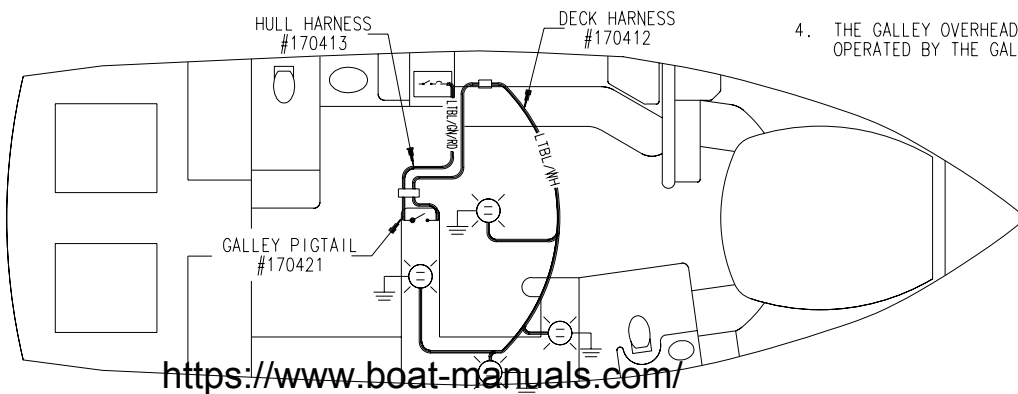
1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 1" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "GALLEY LIGHTING" BREAKER TO "ON".
4. THE GALLEY UNDER CABINET LIGHTS CAN NOW BE OPERATED BY THE GALLEY UNDER CABINET LIGHT SWITCH.

TITLE: LIGHTS, GALLEY UNDER CABINET

MOD.: 48Y

DR BY: JAW

44A



TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 1" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "GALLEY LIGHTING" BREAKER TO "ON".
4. THE GALLEY OVERHEAD LIGHTS CAN NOW BE OPERATED BY THE GALLEY OVERHEAD LIGHT SWITCH.

TITLE: LIGHTS, GALLEY OVERHEAD

MOD.: 48Y

DR BY: JAW

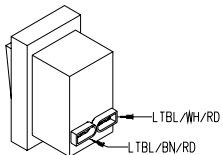
44B



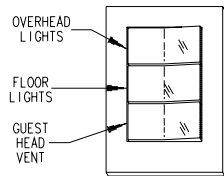
LEGEND

GROUND	
LIGHT	
BREAKER	
PLUGS	
SWITCH	

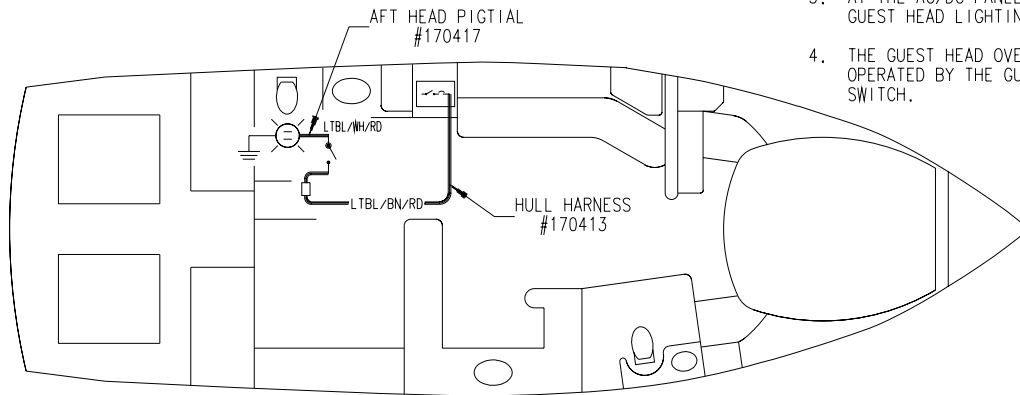
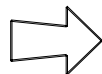
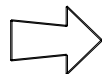
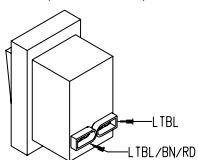
GUEST HEAD OVERHEAD LIGHT SWITCH (REAR VIEW)



GUEST HEAD LIGHT SWITCHES



GUEST HEAD FLOOR LIGHT SWITCH (REAR VIEW)



TO OPERATE:

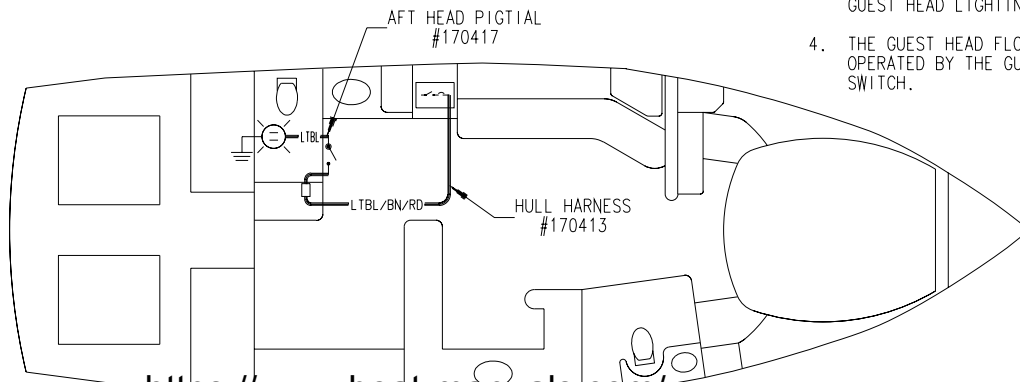
1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 1" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "OWNER AND GUEST HEAD LIGHTING" BREAKER TO "ON".
4. THE GUEST HEAD OVERHEAD LIGHTS CAN NOW BE OPERATED BY THE GUEST HEAD OVERHEAD LIGHT SWITCH.

TITLE: LIGHTS, GUEST HEAD OVERHEAD

MOD.: 48Y

DR BY: JAW

45A



TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 1" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "OWNER AND GUEST HEAD LIGHTING" BREAKER TO "ON".
4. THE GUEST HEAD FLOOR LIGHTS CAN NOW BE OPERATED BY THE GUEST HEAD FLOOR LIGHT SWITCH.

TITLE: LIGHTS, GUEST HEAD FLOOR

MOD.: 48Y

DR BY: JAW

45B



THUNDERBIRD
PRODUCTS
ENGINEERING

LEGEND

GROUND 

LIGHT 

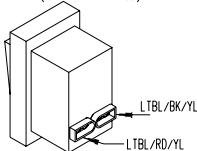
BREAKER 

PLUGS 

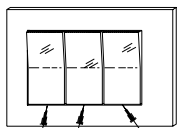
SWITCH 

ROPE LIGHTS 

GUEST MOOD LIGHT SWITCH (REAR VIEW)

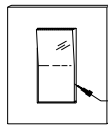


GUEST STATEROOM LIGHT SWITCHES



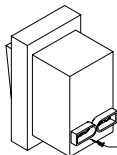
OVERHEAD LIGHTS
MOOD LIGHTS
FLOOR LIGHTS

GUEST VANITY LIGHT SWITCHES



VANITY LIGHTS

GUEST VANITY LIGHT SWITCH (REAR VIEW)

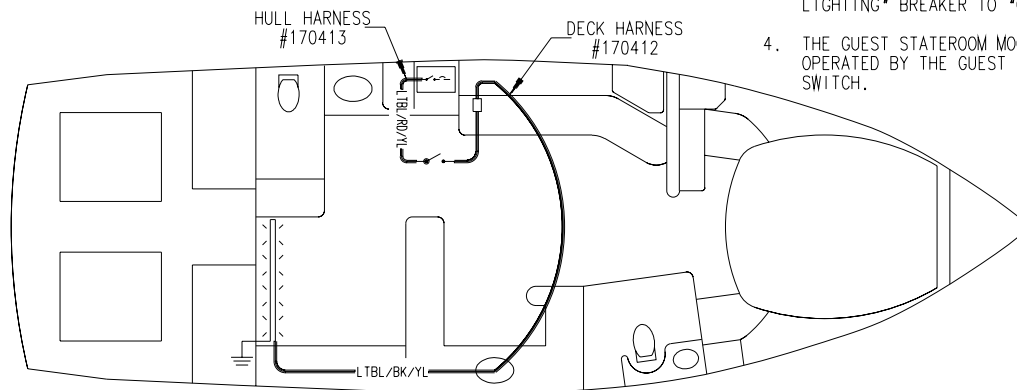


LTBL/GN/GN
LTBL/BN/RD

THUNDERBIRD PRODUCTS ENGINEERING

TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 2" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "GUEST STATERM LIGHTING" BREAKER TO "ON".
4. THE GUEST STATEROOM MOOD LIGHTS CAN NOW BE OPERATED BY THE GUEST STATEROOM MOOD LIGHT SWITCH.



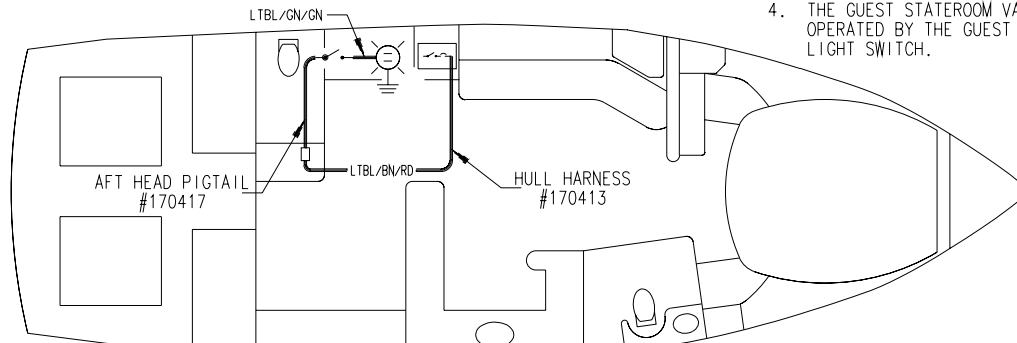
TITLE: LIGHTS, GUEST STATEROOM MOOD

MOD.: 48Y
DR BY: JAW

46A

TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 2" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "GUEST STATERM LIGHTING" BREAKER TO "ON".
4. THE GUEST STATEROOM VANITY LIGHTS CAN NOW BE OPERATED BY THE GUEST STATEROOM VANITY LIGHT SWITCH.



TITLE: LIGHTS, GUEST STATEROOM VANITY

MOD.: 48Y
DR BY: JAW

46B


LEGEND

GROUND 

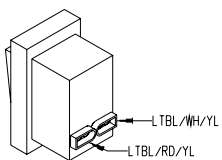
LIGHT 

BREAKER 

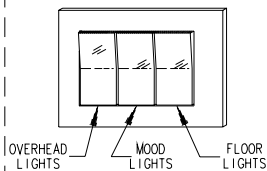
PLUGS 

SWITCH 

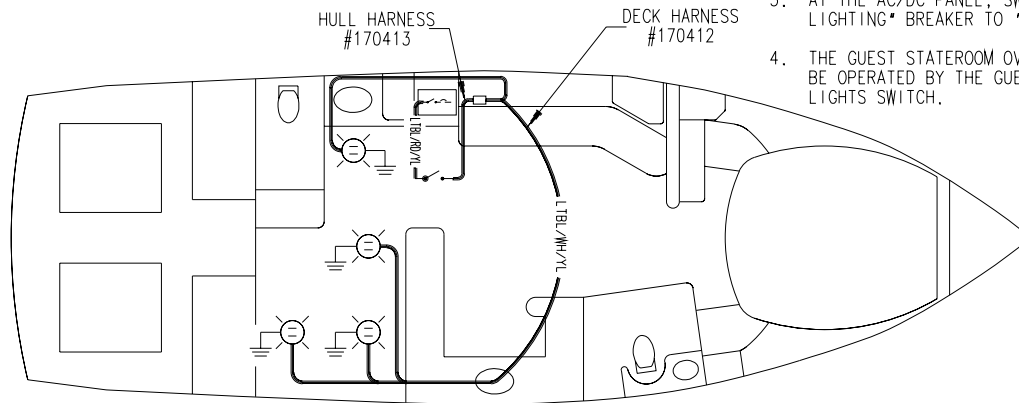
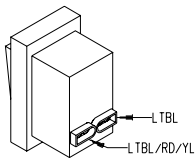
GUEST OVERHEAD
LIGHT SWITCH
(REAR VIEW)



GUEST STATEROOM
LIGHT SWITCHES



GUEST FLOOR
LIGHT SWITCH
(REAR VIEW)



TO OPERATE:

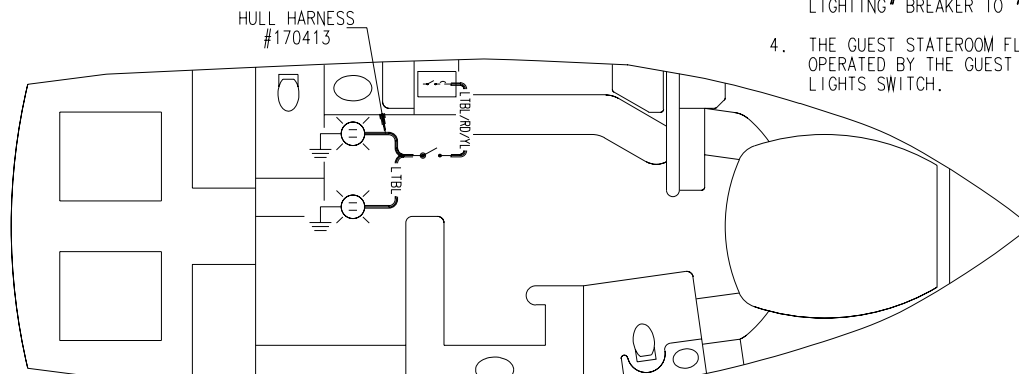
1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 2" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "GUEST STATERM LIGHTING" BREAKER TO "ON".
4. THE GUEST STATEROOM OVERHEAD LIGHTS CAN NOW BE OPERATED BY THE GUEST STATEROOM OVERHEAD LIGHTS SWITCH.

TITLE: LIGHTS, GUEST
STATEROOM OVERHEAD

MOD.: 48Y

DR BY: JAW

47A



TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 2" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "GUEST STATERM LIGHTING" BREAKER TO "ON".
4. THE GUEST STATEROOM FLOOR LIGHTS CAN NOW BE OPERATED BY THE GUEST STATEROOM FLOOR LIGHTS SWITCH.

TITLE: LIGHTS, GUEST
STATEROOM FLOOR

MOD.: 48Y

DR BY: JAW

47B



THUNDERBIRD
PRODUCTS
ENGINEERING

LEGEND

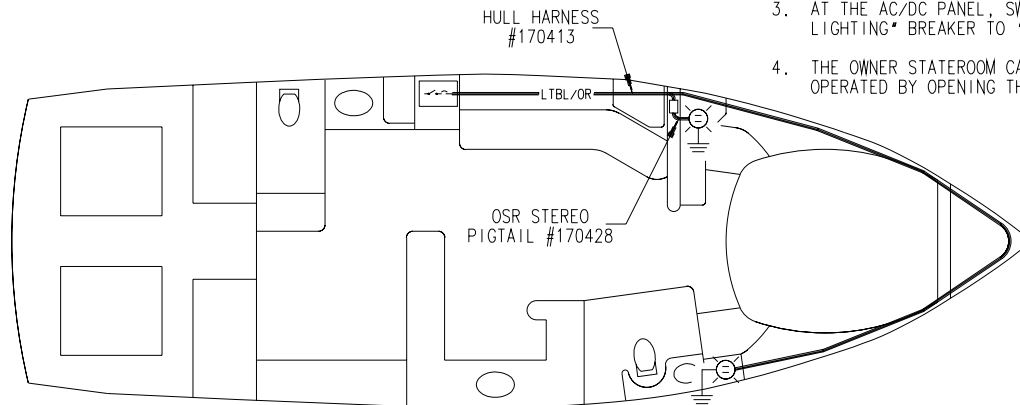
GROUND 

LIGHT 

BREAKER 

PLUGS 

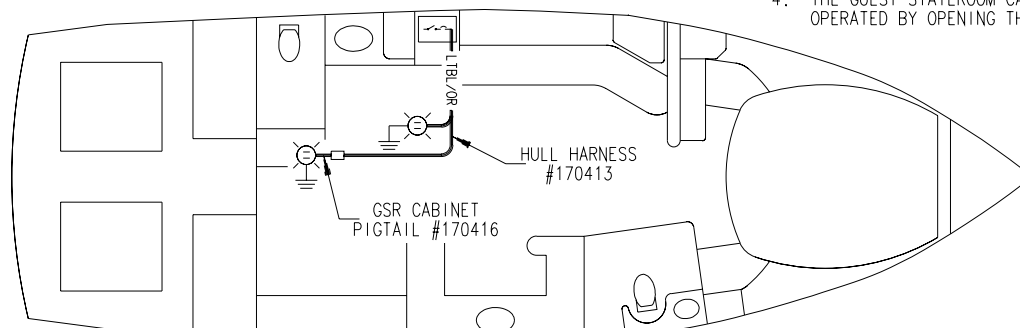
SWITCH 



TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE *AUX BATT* SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC *MAIN 1* BREAKER TO *ON*.
3. AT THE AC/DC PANEL, SWITCH THE *OWNER STATERM LIGHTING* BREAKER TO *ON*.
4. THE OWNER STATEROOM CABINET LIGHTS CAN NOW BE OPERATED BY OPENING THE CABINET DOORS.

TITLE: LIGHTS, OWNER CABINET	
MOD.: 48Y	48A
DR BY: JAW	



TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE *AUX BATT* SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC *MAIN 2* BREAKER TO *ON*.
3. AT THE AC/DC PANEL, SWITCH THE *GUEST STATERM LIGHTING* BREAKER TO *ON*.
4. THE GUEST STATEROOM CABINET LIGHTS CAN NOW BE OPERATED BY OPENING THE CABINET DOORS.

TITLE: LIGHTS, GUEST CABINET	
MOD.: 48Y	48B
DR BY: JAW	



THUNDERBIRD
PRODUCTS
ENGINEERING


LEGEND

GROUND 

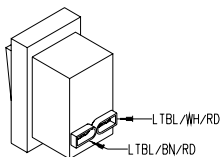
LIGHT 

BREAKER 

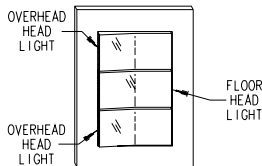
PLUGS 

SWITCH 

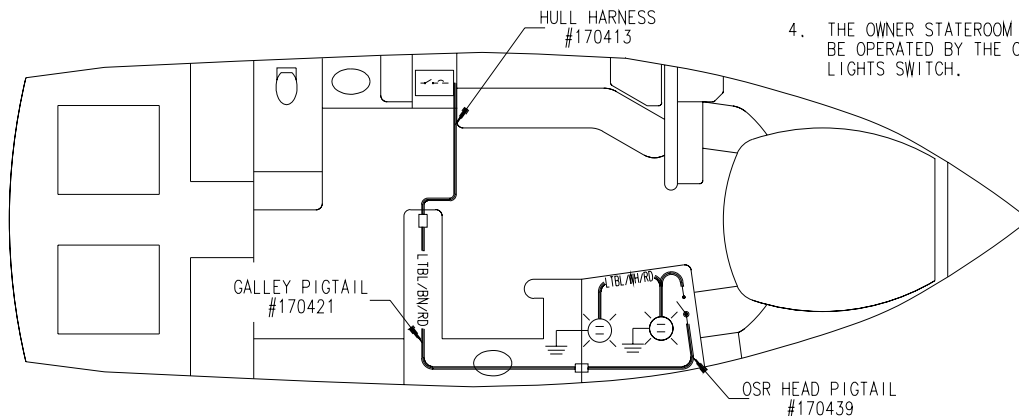
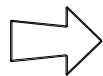
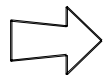
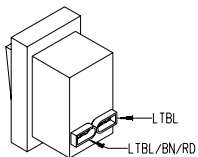
OWNER HEAD OVERHEAD
LIGHT SWITCH
(REAR VIEW)



OWNER HEAD
LIGHT SWITCHES



OWNER HEAD FLOOR
LIGHT SWITCH
(REAR VIEW)



TO OPERATE:

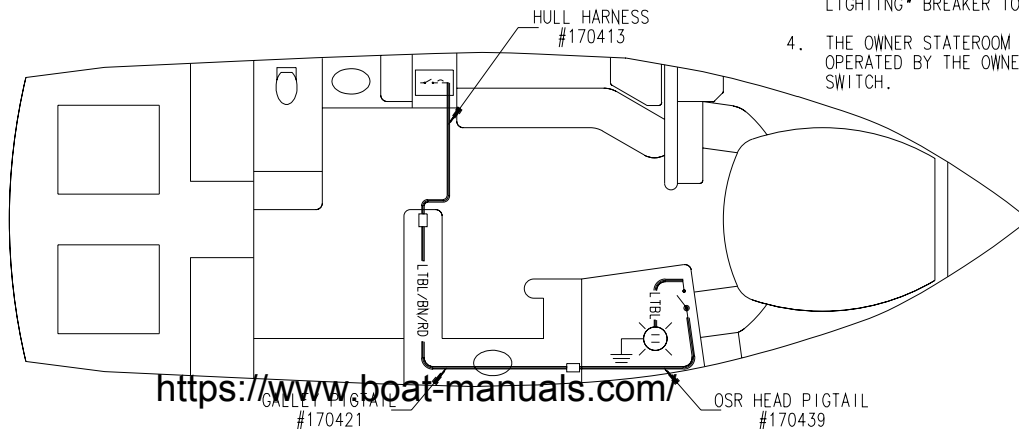
1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 1" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "OWNER STATERM LIGHTING" BREAKER TO "ON".
4. THE OWNER STATEROOM OVERHEAD LIGHTS CAN NOW BE OPERATED BY THE OWNER STATEROOM OVERHEAD LIGHTS SWITCH.

TITLE: LIGHTS, OWNER
HEAD OVERHEAD

MOD.: 48Y

DR BY: JAW

49A



TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 1" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "OWNER STATERM LIGHTING" BREAKER TO "ON".
4. THE OWNER STATEROOM FLOOR LIGHTS CAN NOW BE OPERATED BY THE OWNER STATEROOM FLOOR LIGHTS SWITCH.

TITLE: LIGHTS, OWNER
HEAD FLOOR

MOD.: 48Y

DR BY: JAW

49B



THUNDERBIRD
PRODUCTS
ENGINEERING

<https://www.boat-manuals.com/>

GALLEY PIGTAIL
#170421

LEGEND


GROUND 

LIGHT 

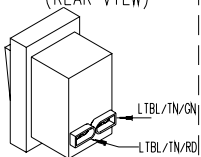
BREAKER 

PLUGS 

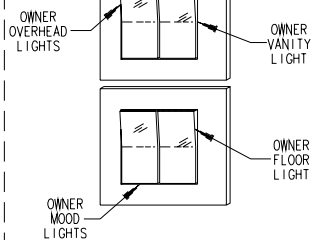
SWITCH 

ROPE LIGHT 

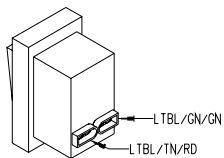
OWNER'S MOOD LIGHT SWITCH (REAR VIEW)



OWNER'S ENTRY WALL LIGHT SWITCHES

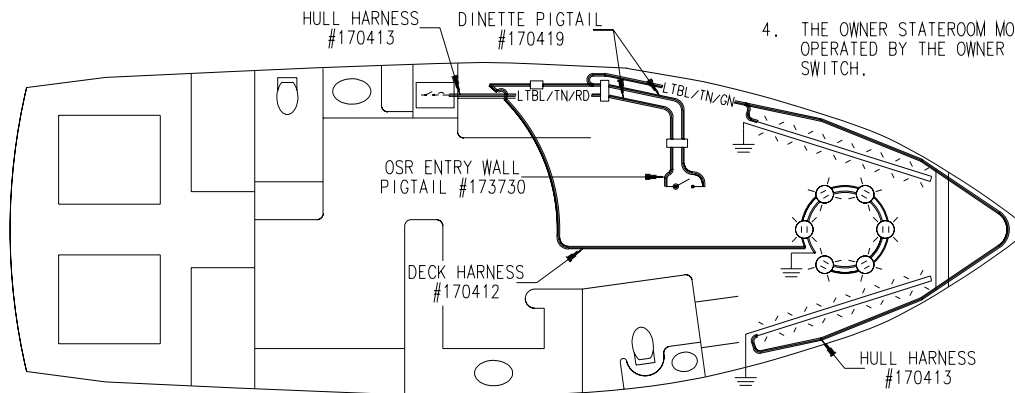


OWNER VANITY LIGHT SWITCH (REAR VIEW)



TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 1" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "OWNER STATERM LIGHTING" BREAKER TO "ON".
4. THE OWNER STATEROOM MOOD LIGHTS CAN NOW BE OPERATED BY THE OWNER STATEROOM MOOD LIGHTS SWITCH.



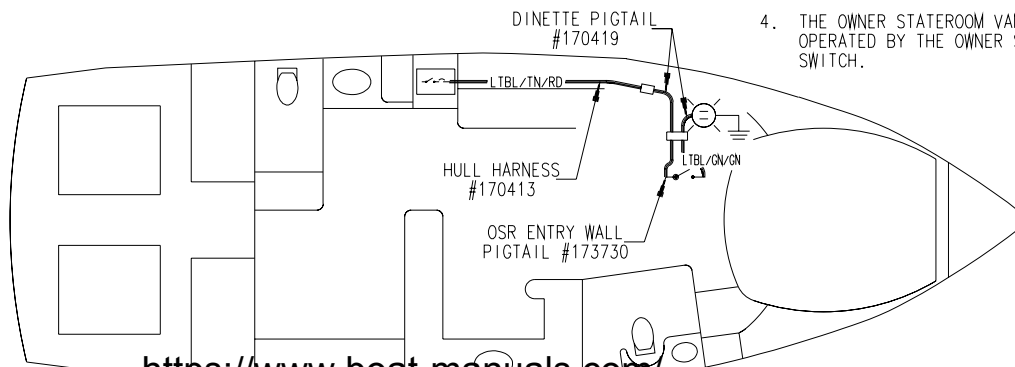
TITLE: LIGHTS, OWNER STATEROOM MOOD

MOD.: 48Y
DR BY: JAW

50A

TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 1" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "OWNER STATERM LIGHTING" BREAKER TO "ON".
4. THE OWNER STATEROOM VANITY LIGHTS CAN NOW BE OPERATED BY THE OWNER STATEROOM VANITY LIGHTS SWITCH.



TITLE: LIGHTS, OWNER STATEROOM VANITY


MOD.: 48Y
DR BY: JAW

50B




LEGEND

GROUND 

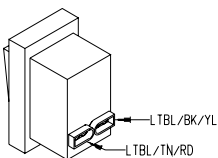
LIGHT 

BREAKER 

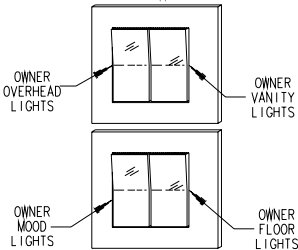
PLUGS 

SWITCH 

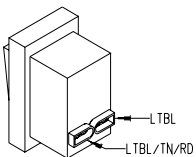
OWNER OVERHEAD
LIGHT SWITCH
(REAR VIEW)



OWNER ENTRY WALL
LIGHT SWITCHES



OWNER FLOOR
LIGHT SWITCH
(REAR VIEW)

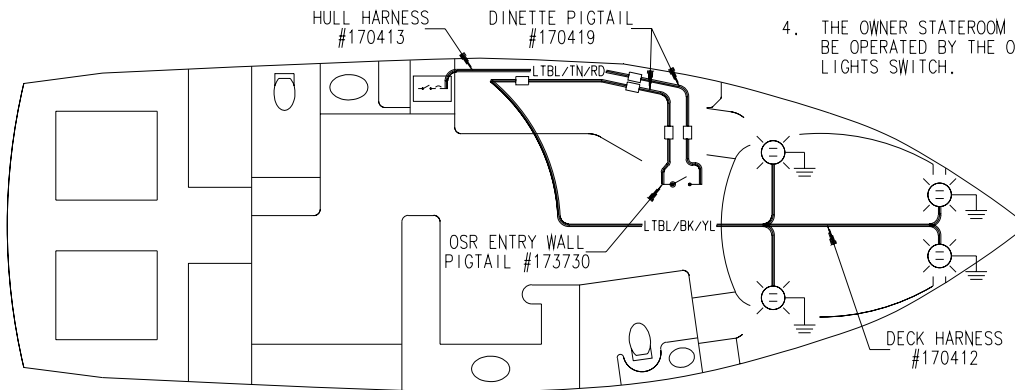


THUNDERBIRD
PRODUCTS
ENGINEERING



TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "BATTERY AUX" SWITCH TO "ON".
2. ON THE AC/DC PANEL IN THE CABIN, SWITCH THE DC "MAIN 1" BREAKER TO "ON".
3. ON THE AC/DC PANEL, SWITCH THE "OWNER STATERM LIGHTING" BREAKER TO "ON".
4. THE OWNER STATEROOM OVERHEAD LIGHTS CAN NOW BE OPERATED BY THE OWNER STATEROOM SWITCHES.



TITLE: LIGHTS, OWNER
STATEROOM OVERHEAD

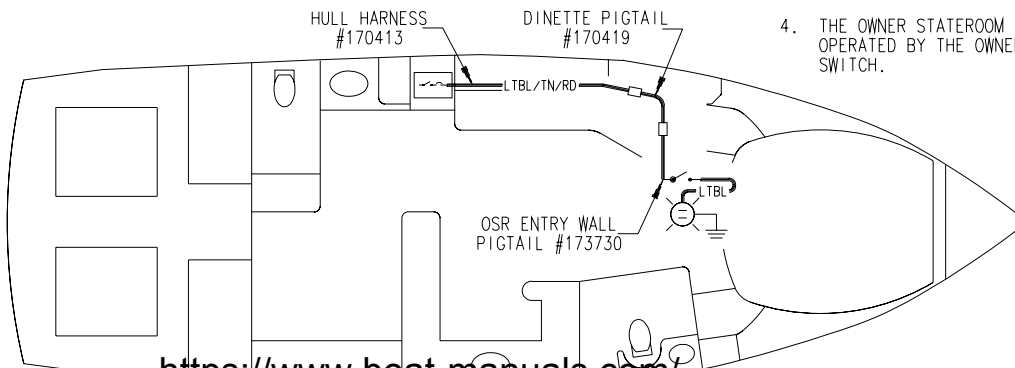
MOD.: 48Y

DR BY: JAW

51A

TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 1" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "OWNER STATERM LIGHTING" BREAKER TO "ON".
4. THE OWNER STATEROOM FLOOR LIGHTS CAN NOW BE OPERATED BY THE OWNER STATEROOM FLOOR LIGHT SWITCH.



TITLE: LIGHTS, OWNER
STATEROOM FLOOR

MOD.: 48Y

DR BY: JAW

51B


LEGEND

GROUND 

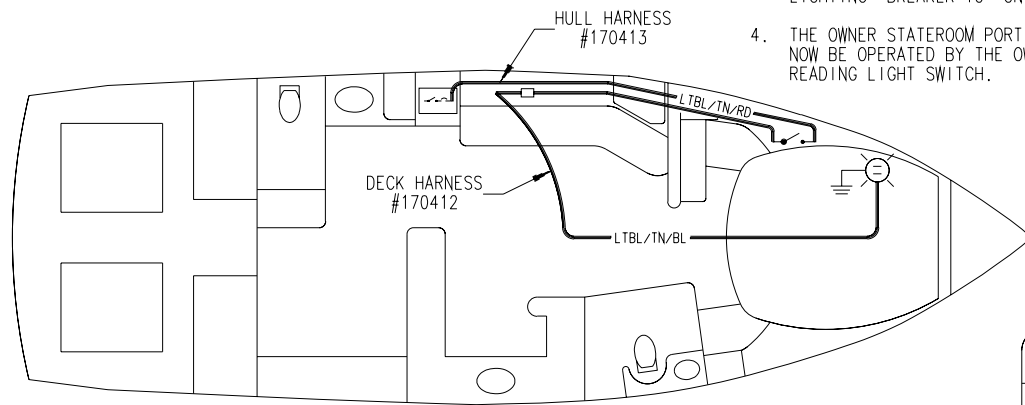
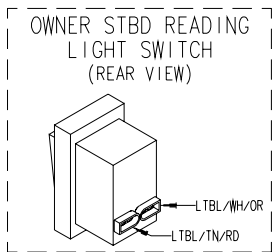
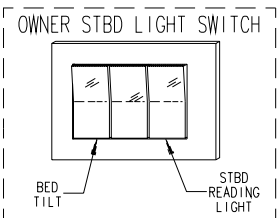
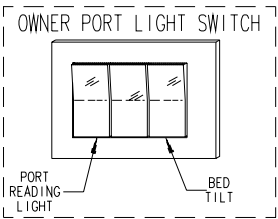
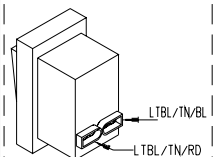
LIGHT 

BREAKER 

PLUGS 

SWITCH 

OWNER PORT READING LIGHT SWITCH (REAR VIEW)

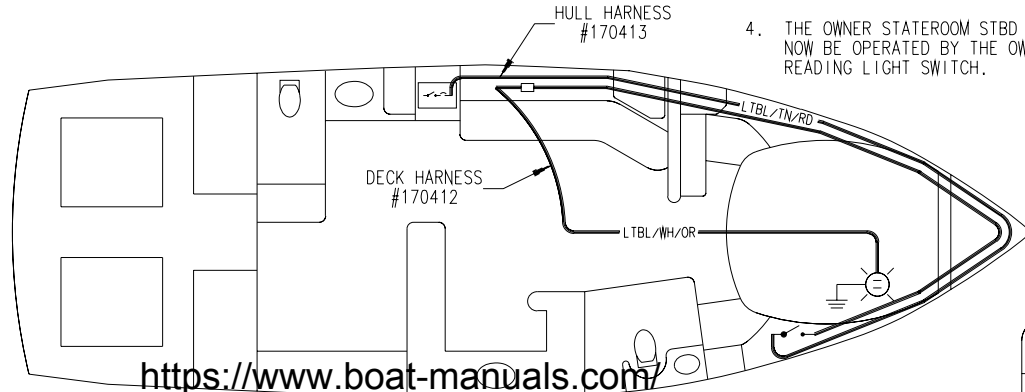


TITLE: LIGHTS, OWNER STATEROOM PORT READING
 MOD.: 48Y
 DR BY: JAW

52A

TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 1" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "OWNER STATERM LIGHTING" BREAKER TO "ON".
4. THE OWNER STATEROOM PORT READING LIGHTS CAN NOW BE OPERATED BY THE OWNER STATEROOM PORT READING LIGHT SWITCH.



TITLE: LIGHTS, OWNER STATEROOM STBD READING
 MOD.: 48Y
 DR BY: JAW

52B

TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 1" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "OWNER STATERM LIGHTING" BREAKER TO "ON".
4. THE OWNER STATEROOM STBD READING LIGHTS CAN NOW BE OPERATED BY THE OWNER STATEROOM STBD READING LIGHT SWITCH.

LEGEND


GROUND 

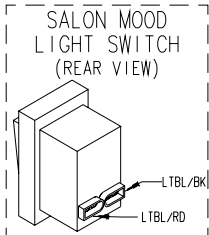
LIGHT 

BREAKER 

PLUGS 

SWITCH 

ROPE LIGHTS 



PORT ENTRY WALL LIGHT SWITCHES

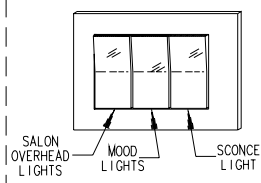
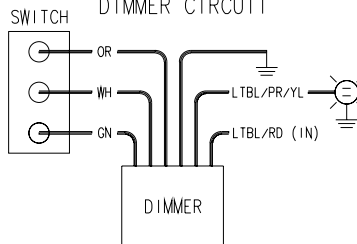
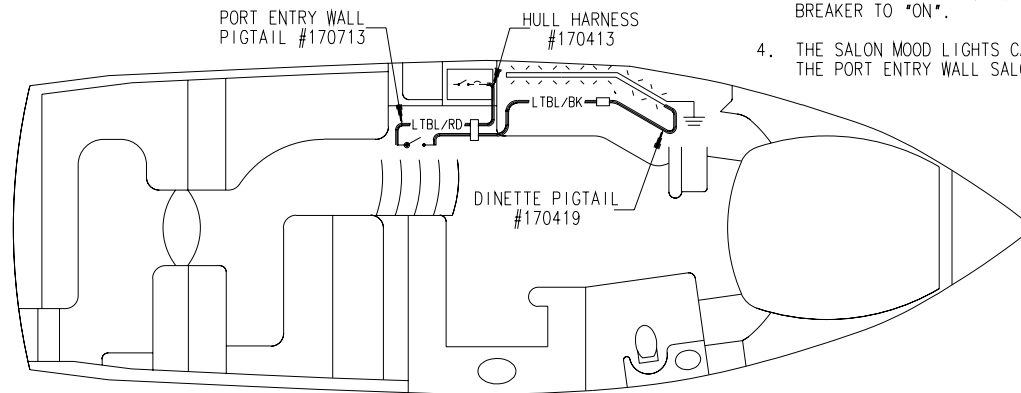


FIG. 1 SALON SCNCE LIGHT DIMMER CIRCUIT



TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 2" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "SALON LIGHTING" BREAKER TO "ON".
4. THE SALON MOOD LIGHTS CAN NOW BE OPERATED BY THE PORT ENTRY WALL SALON MOOD LIGHTS SWITCH.



TITLE: LIGHTS, SALON MOOD

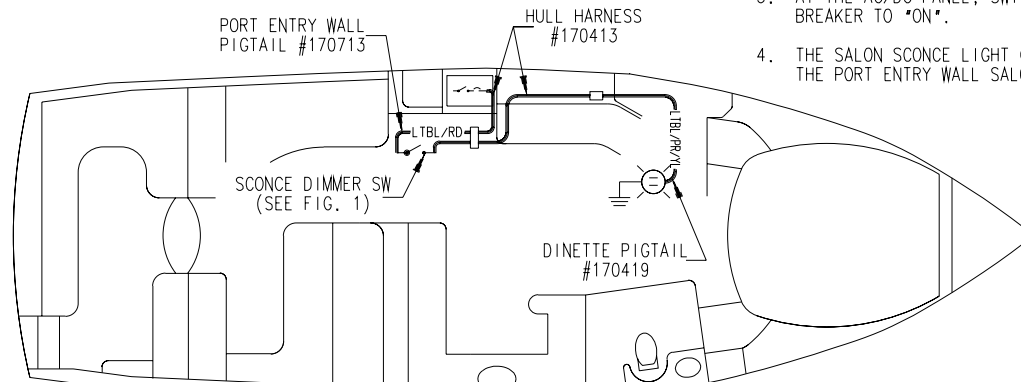
MOD.: 48Y

DR BY: JAW

53A

TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 2" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "SALON LIGHTING" BREAKER TO "ON".
4. THE SALON SCNCE LIGHT CAN NOW BE OPERATED BY THE PORT ENTRY WALL SALON SCNCE LIGHT SWITCH.



TITLE: LIGHT, SALON SCNCE

MOD.: 48Y

DR BY: JAW

53B



THUNDERBIRD PRODUCTS ENGINEERING


LEGEND

GROUND 

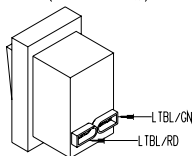
LIGHT 

BREAKER 

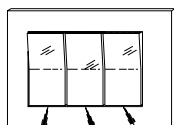
PLUGS 

SWITCH 

SALON OVERHEAD LIGHT SWITCH (REAR VIEW)

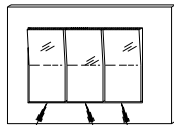


PORT ENTRY WALL LIGHT SWITCHES



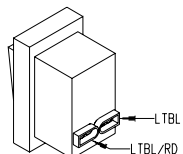
SALON OVERHEAD LIGHTS
SALON MOOD LIGHTS
SALON SCOFF LIGHTS

STBD ENTRY WALL LIGHT SWITCHES



SALON FLOOR LIGHTS
RACE TRACK LIGHTS
GALLEY OVERHEAD LIGHTS

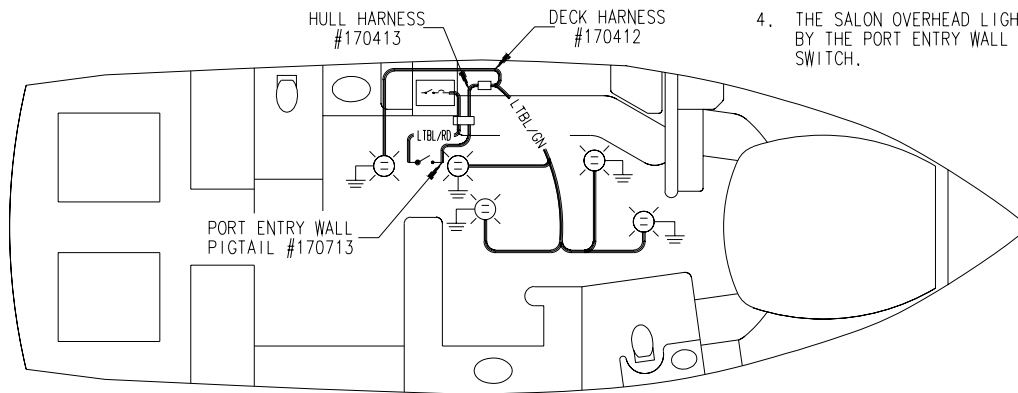
SALON FLOOR LIGHT SWITCH (REAR VIEW)



THUNDERBIRD PRODUCTS ENGINEERING

TO OPERATE:

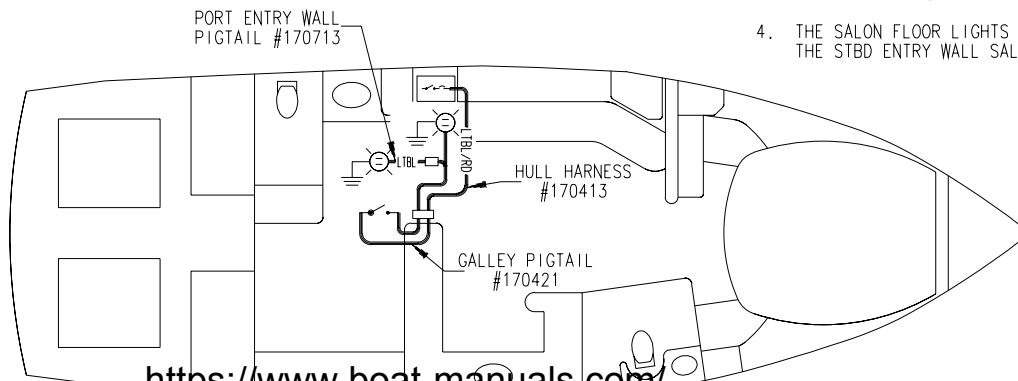
1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 2" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "SALON LIGHTING" BREAKER TO "ON".
4. THE SALON OVERHEAD LIGHTS CAN NOW BE OPERATED BY THE PORT ENTRY WALL SALON OVERHEAD LIGHTS SWITCH.



TITLE: LIGHTS, SALON OVERHEAD	
MOD.: 48Y	54A
DR BY: JAW	

TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 2" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "SALON LIGHTING" BREAKER TO "ON".
4. THE SALON FLOOR LIGHTS CAN NOW BE OPERATED BY THE STBD ENTRY WALL SALON FLOOR LIGHTS SWITCH.




TITLE: LIGHTS, SALON FLOOR	
MOD.: 48Y	54B
DR BY: JAW	

LEGEND

GROUND 

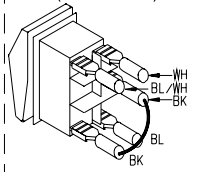
BREAKER PANEL 

SWITCH 

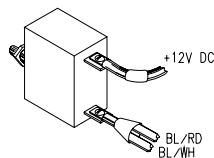
PLUGS 

LIGHT 

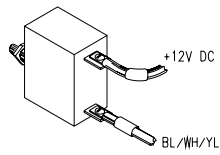
"COURT LTS" SWITCH
(ACCESSORY PANEL)
(REAR VIEW)



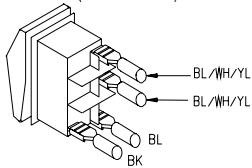
"COCKPIT LIGHTS" BKR 15A
(DASH BKR PANEL)
(REAR VIEW)



"ENG RM LIGHTS" BKR 15A
(DASH BKR PANEL)
(REAR VIEW)



"ENGINE ROOM LTS" SWITCH
(ACCESSORY PANEL)
(REAR VIEW)

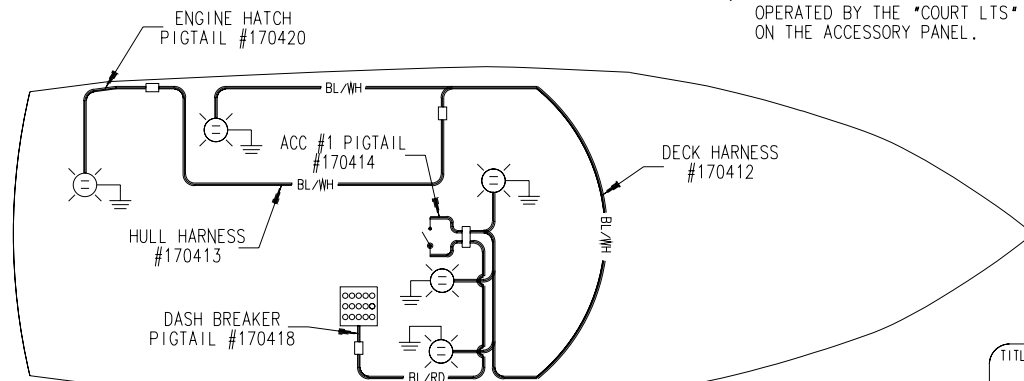


THUNDERBIRD
PRODUCTS
ENGINEERING



TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE DASH BREAKER PANEL, THE "COCKPIT LIGHTS" BREAKER MUST BE PUSHED IN (CLOSED).
3. THE COCKPIT COURTESY LIGHTS CAN NOW BE OPERATED BY THE "COURT LTS" SWITCH LOCATED ON THE ACCESSORY PANEL.

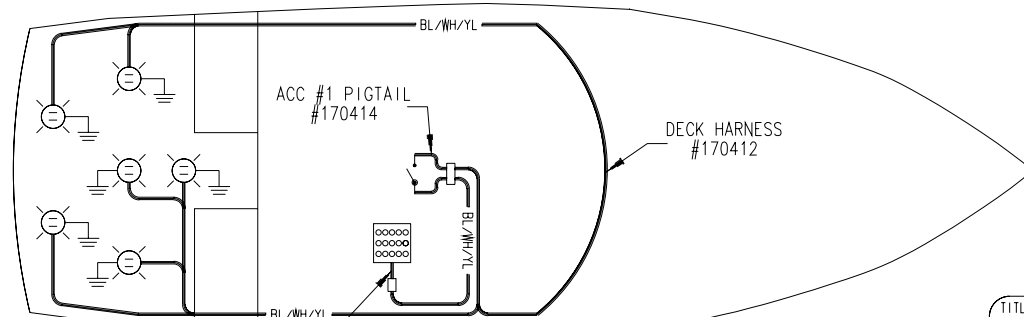


TITLE: LIGHTS,
COCKPIT COURTESY
MOD.: 48Y
DR BY: JAW

55A

TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE DASH BREAKER PANEL, THE "ENG RM LIGHTS" BREAKER MUST BE PUSHED IN (CLOSED).
3. THE ENGINE ROOM LIGHTS CAN NOW BE OPERATED BY THE "ENGINE ROOM LTS" SWITCH LOCATED ON THE ACCESSORY PANEL.



TITLE: LIGHTS,
ENGINE ROOM
MOD.: 48Y
DR BY: JAW

55B

LEGEND

GROUND 

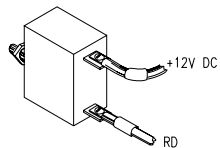
BREAKER PANEL 

SWITCH 

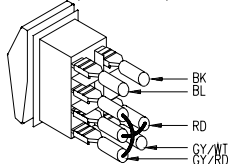
PLUGS 

LIGHT 

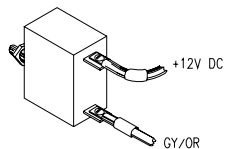
"NAV LIGHTS" BKR 10A
(DASH BKR PANEL)
(REAR VIEW)



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



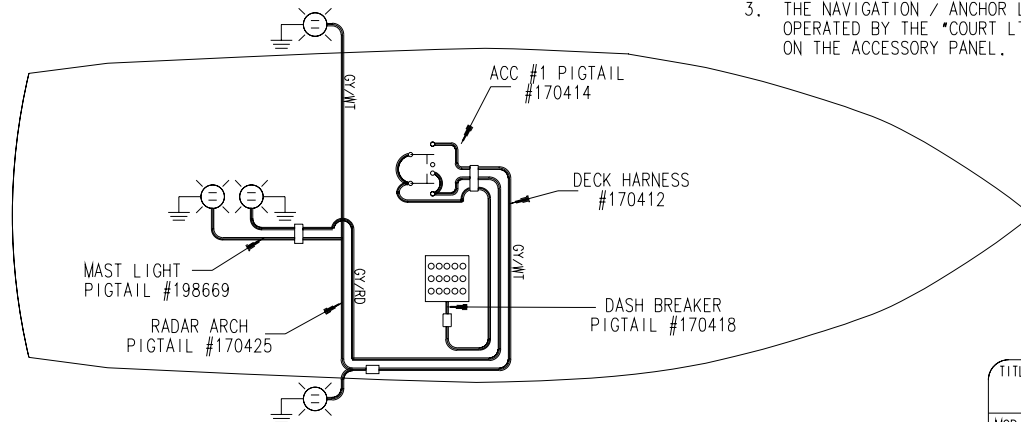
"SPOTLIGHT" BKR 10A
(DASH BKR PANEL)
(REAR VIEW)



THUNDERBIRD
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TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE DASH BREAKER PANEL, THE "NAV LIGHTS" BREAKER MUST BE PUSHED IN (CLOSED).
3. THE NAVIGATION / ANCHOR LIGHTS CAN NOW BE OPERATED BY THE "COURT LTS" SWITCH LOCATED ON THE ACCESSORY PANEL.



TITLE: LIGHTS,
NAV/ANCHOR

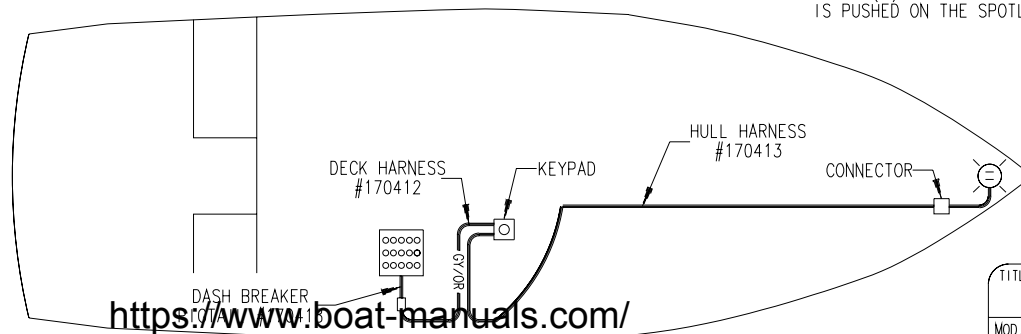
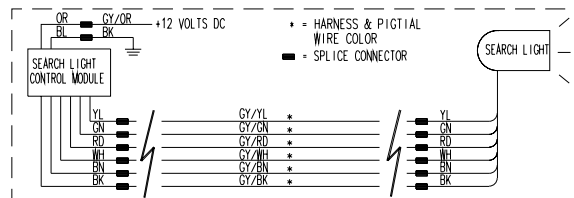
MOD.: 48Y
DR BY: JAW

56A

TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE DASH BREAKER PANEL, THE "SPOT-LIGHT" BREAKER MUST BE PUSHED IN (CLOSED).
3. THE SPOT LIGHTS CAN NOW BE OPERATED BY THE KEYPAD LOCATED ON THE IGNITION PANEL.

NOTE: SPOTLIGHT WILL ILLUMINATE APPROXIMATELY THREE (3) SECONDS AFTER THE "ON" BUTTON IS PUSHED ON THE SPOTLIGHT KEYPAD.



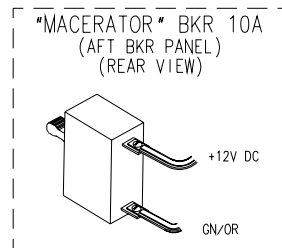
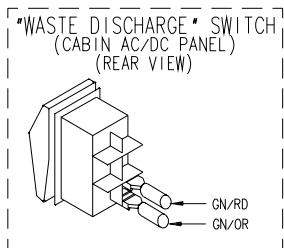
TITLE: LIGHTS,
SPOTLIGHT

MOD.: 48Y
DR BY: JAW

56B

LEGEND

GROUND	
PLUGS	
BREAKER	
SWITCH	

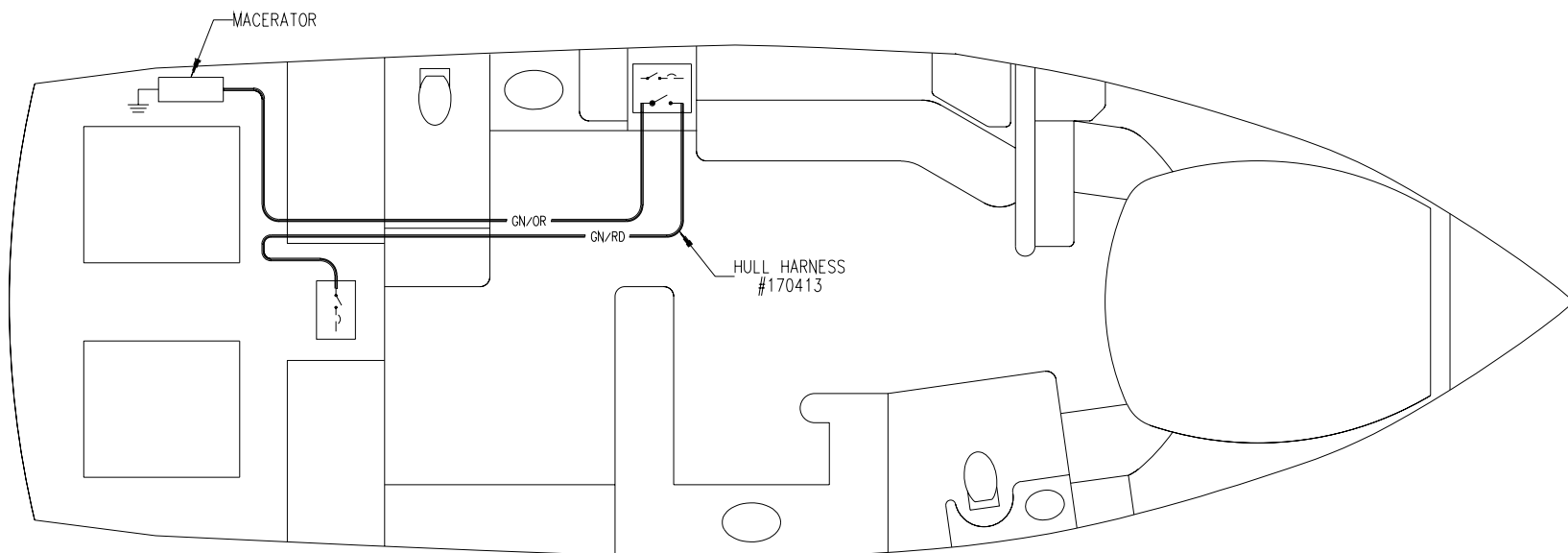


TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AFT BKR PANEL, SWITCH THE "MACERATOR" BREAKER TO "ON".
3. IN THE ENGINE BILGE AREA, PLACE THE SEACOCK VALVE IN THE "OPEN" POSITION.
4. AT THE CABIN AC/DC PANEL, HOLD THE "WASTE DISCHARGE" SWITCH UNTIL THE "EMPTY" LIGHT ILLUMINATES.

CAUTION!

FOLLOW LOCAL, STATE, AND FEDERAL GUIDELINES FOR WASTE DISCHARGE.



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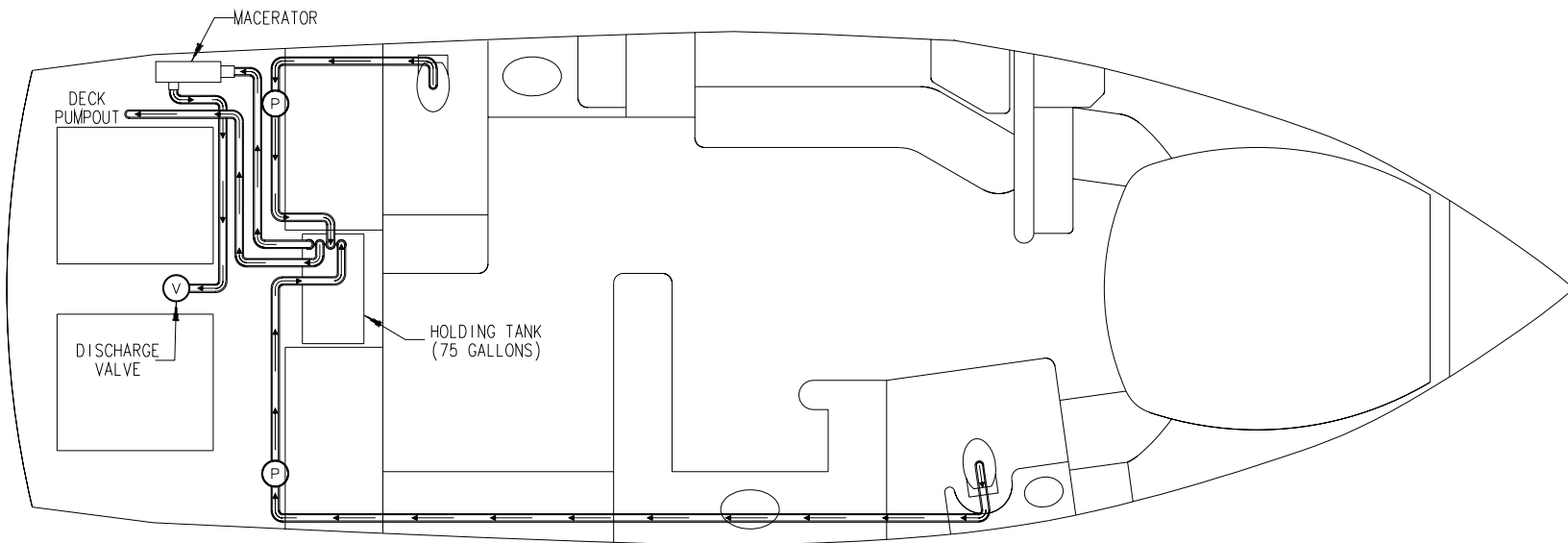
TITLE:	MACERATOR, ELECTRICAL
MOD.:	48Y
DR BY:	JAW

57

LEGEND

VALVE (V)

PUMP (P)



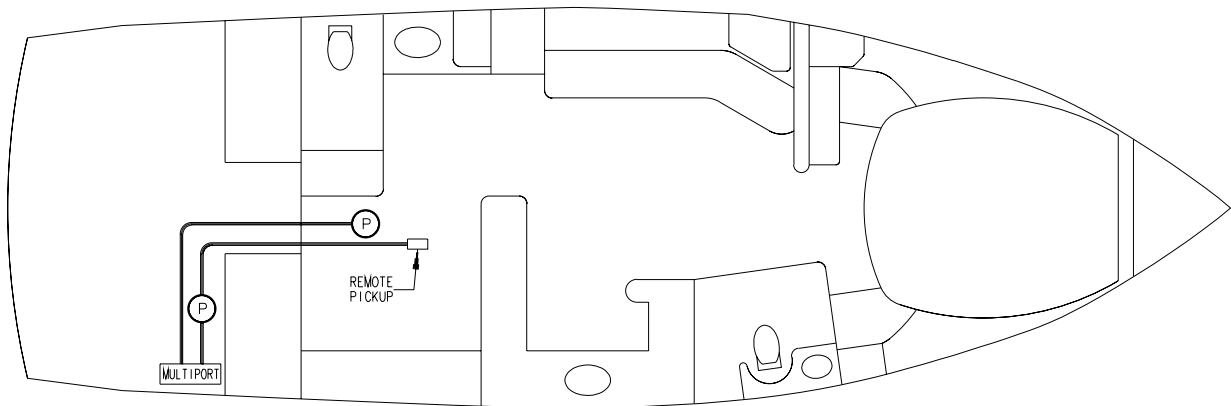
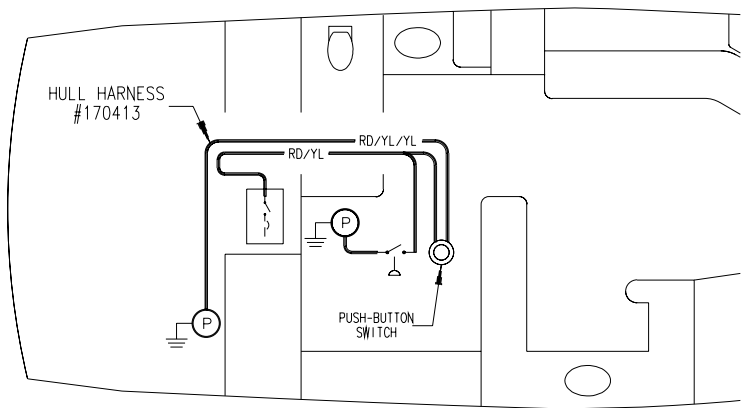
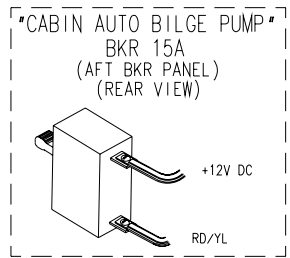
THUNDERBIRD
PRODUCTS
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<https://www.boat-manuals.com/>

TITLE: MACERATOR, PLUMBING	
MOD.: 48Y	58
DR BY: JAW	

LEGEND

GROUND	
BREAKER	
PUMP	
FLOAT SWITCH	



TO OPERATE:

1. AT THE AFT BKR PANEL, SWITCH THE *CABIN AUTO BILGE PUMP* BREAKER TO *ON*.
2. THE CABIN BILGE PUMP IS NOW SUPPLIED WITH 12V DC.

NOTE:

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

THE CABIN BILGE PUMP CANNOT BE TURNED OFF BY TURNING THE *BATTERY AUX* SWITCH TO *OFF*.

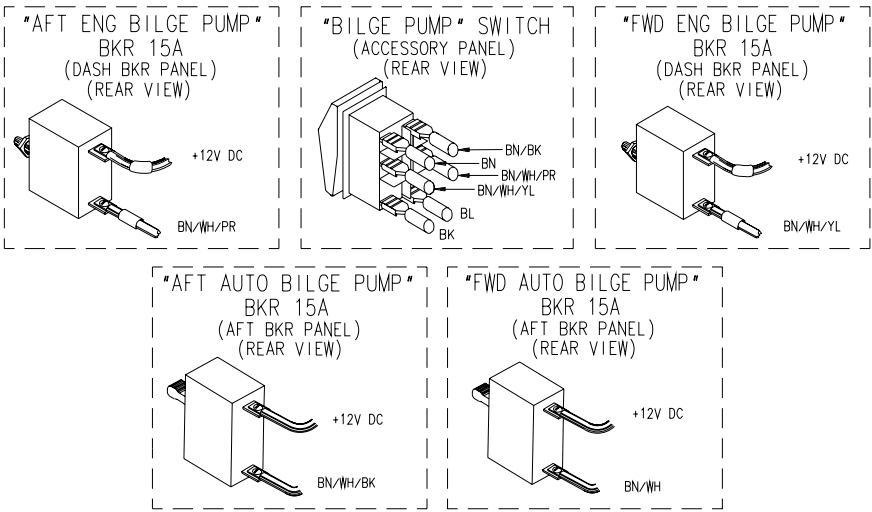
THE CABIN BILGE PUMP CAN ALSO BE OPERATED BY PRESSING AND HOLDING THE PUSH-BUTTON SWITCH LOCATED UNDER THE GUEST STATEROOM FLOOR.

TITLE: CABIN BILGE, ELECTRICAL	
MOD.: 48Y	59A
DR BY: JAW	

TITLE: CABIN BILGE, PLUMBING	
MOD.: 48Y	59B
DR BY: JAW	

LEGEND

GROUND	
BREAKER	
PUMP	
SWITCH	
PLUGS	
FLOAT SWITCH	
BREAKER PANEL	



TO OPERATE:

1. AT THE AFT BKR PANEL, SWITCH THE *AFT AUTO BILGE PUMP* AND *FWD AUTO BILGE PUMP* BREAKERS TO *ON*.
3. THE ENGINE BILGE PUMPS ARE NOW SUPPLIED WITH 12 VOLTS DC.

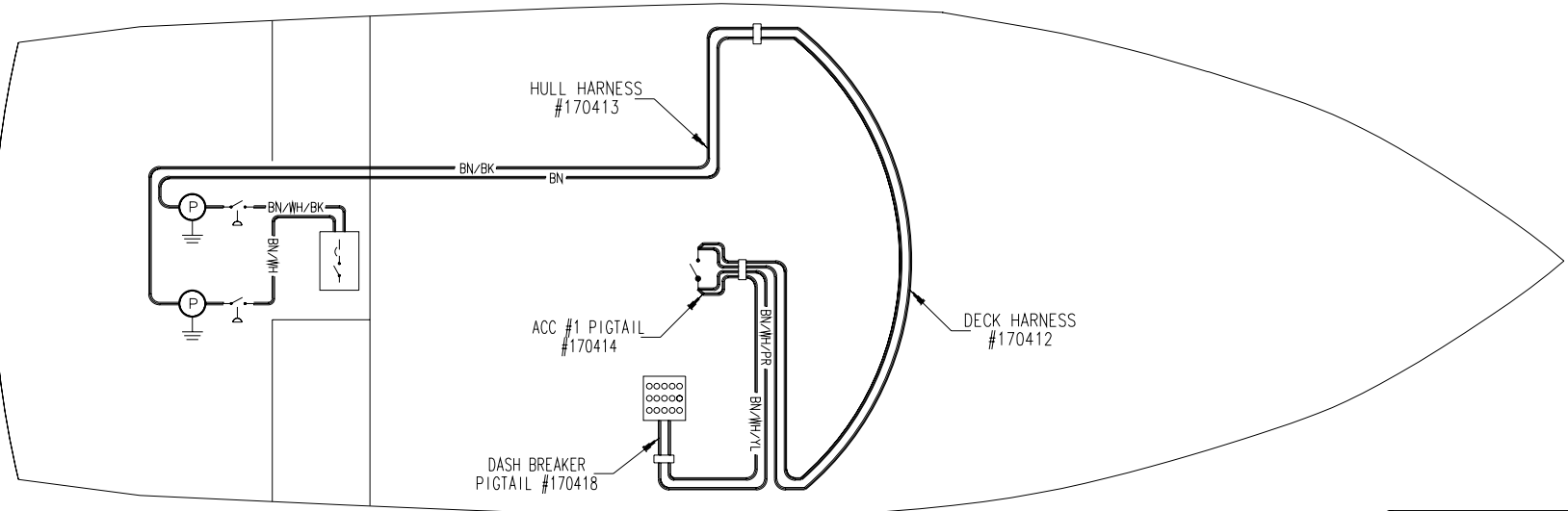
NOTE:

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

THE ENGINE BILGE PUMPS CANNOT BE TURNED OFF BY TURNING THE *BATTERY AUX* SWITCH TO *OFF*.

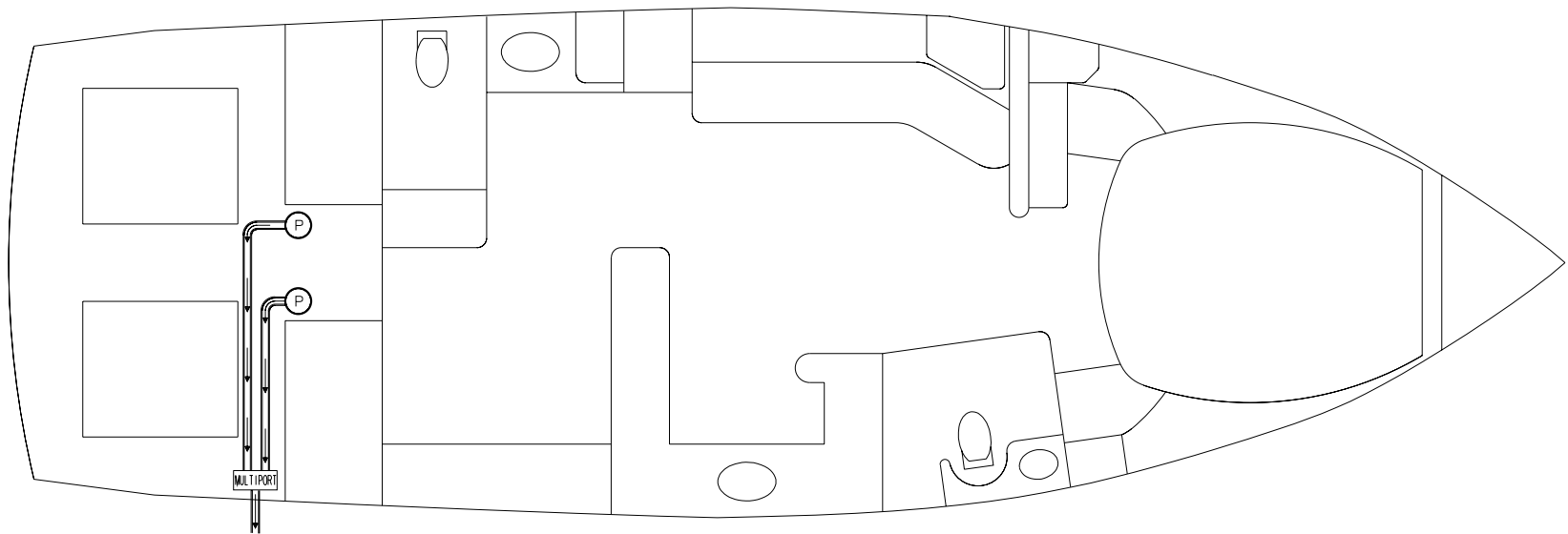
TO OPERATE MANUALLY:

1. LOCATED UNDER THE WET BAR, TURN THE *BATTERY AUX* SWITCH ON.
2. AT THE DASH BREAKER PANEL, THE *AFT ENG BILGE PUMP* AND *FWD ENG BILGE PUMP* BREAKERS MUST BE PUSHED IN (CLOSED).
3. THE ENGINE BILGE PUMPS CAN NOW BE OPERATED BY THE *BILGE PUMP* SWITCH ON THE ACCESSORY PANEL.



LEGEND

PUMP



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TITLE: ENGINE BILGE, PLUMBING	
MOD.: 48Y	61
DR BY: JAW	

LEGEND

PLUGS 

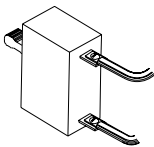
BREAKER 

GROUND 

FUSE 

PUMP 

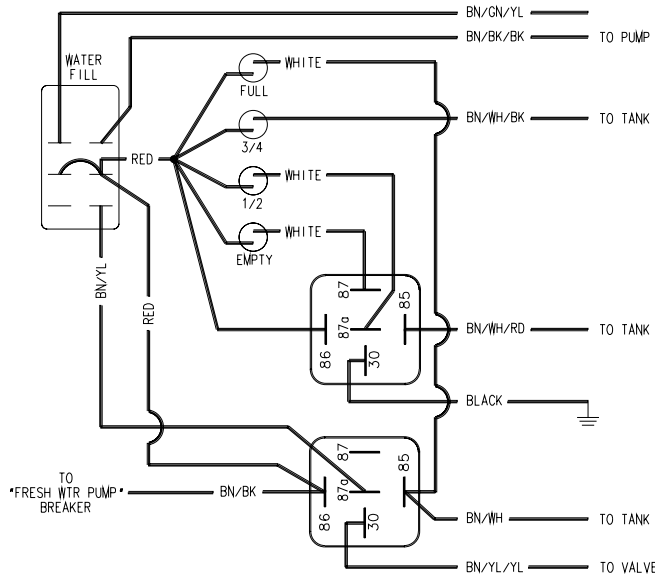
"FRESH WATER PUMP" BKR 30A
(CABIN AC/DC PANEL)
(REAR VIEW)



+12V DC

BN/BK

FIG. 1



TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 2" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "FRESH WATER PUMP" BREAKER TO "ON".
4. THE FRESH WATER PUMP IS NOW ON, AND WILL SHUT OFF AUTOMATICALLY WHEN THERE IS SUFFICIENT WATER PRESSURE IN THE SYSTEM.

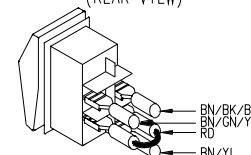
NOTE:

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

WARNING!

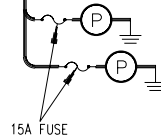
MAKE SURE WATER TANK HAS SUFFICIENT AMOUNT OF WATER TO RUN SYSTEM. RUNNING THE SYSTEM DRY CAN CAUSE DAMAGE TO THE WATER PUMP. WATER TANK GAUGE IS LOCATED IN CABINET, UNDER SINK.

ONE POINT WATER FILL SWITCH
(GALLEY UNIT)
(REAR VIEW)



(SEE FIG. 1 FOR DETAILED
CIRCUIT INSIDE PANEL)

HULL HARNESS
#170413



WATER
TANK



THUNDERBIRD
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<https://www.boat-manuals.com/>

TITLE: FRESH WATER
PUMP, ELECTRICAL

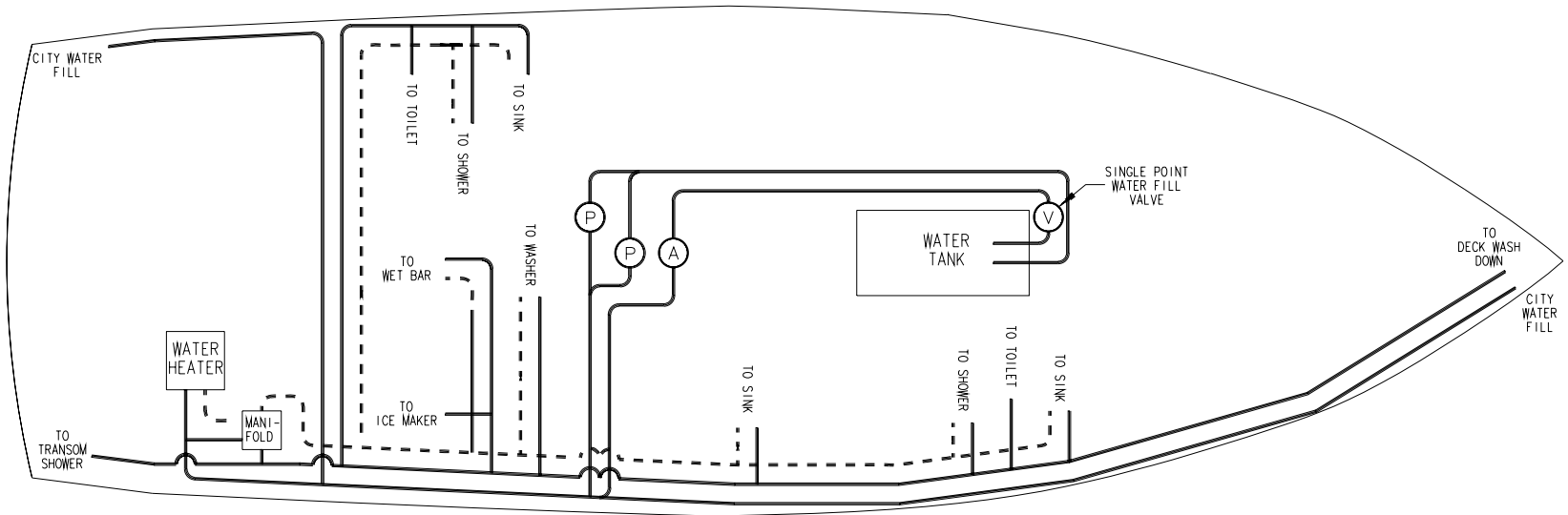
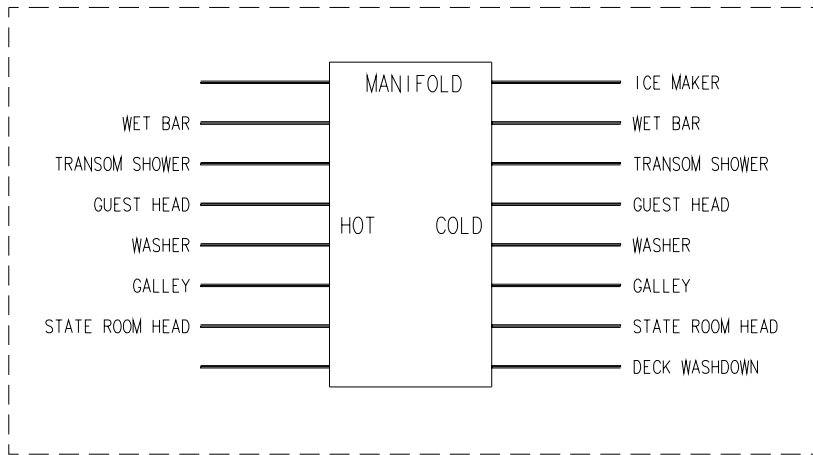
MOD.: 48Y

DR BY: JAW





62

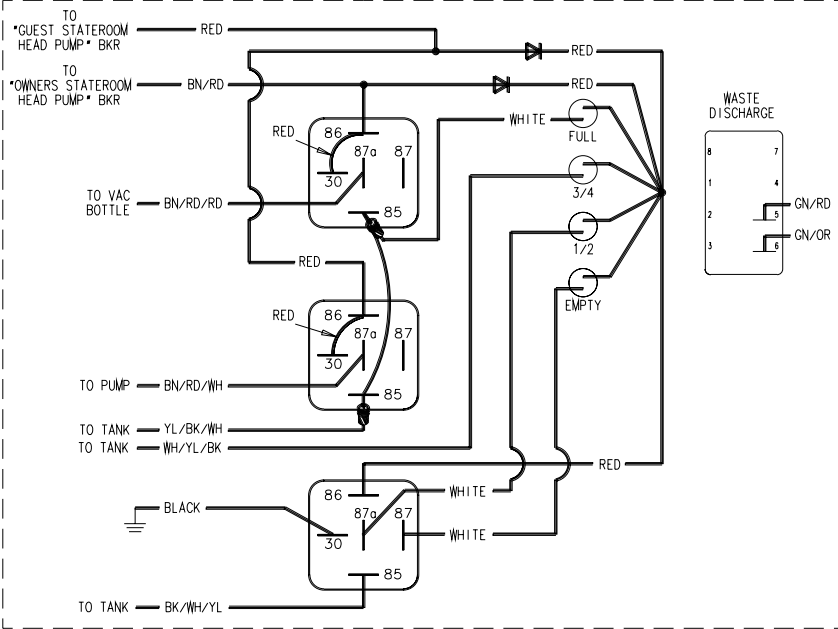
LEGEND

COLD WATER LINE	—
HOT WATER LINE	- - - -
PUMP	(P)
ACCUMULATOR	(A)
VALVE	(V)



LEGEND

- PLUGS 
- BREAKER 
- GROUND 
- PUMP 

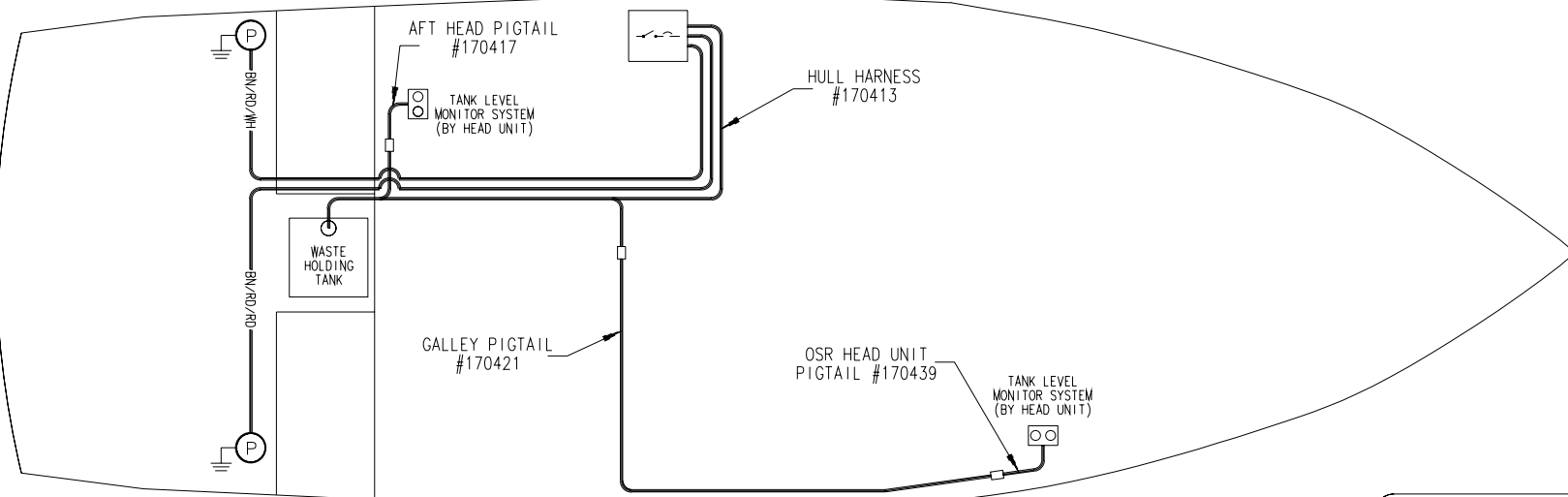
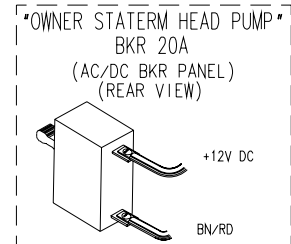
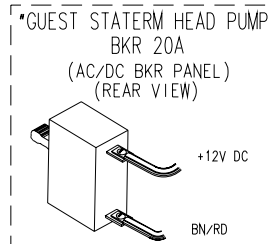


TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 1" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "HEAD PUMP" BREAKER TO "ON".
4. THE HEAD PUMP IS NOW OPERATIONAL, AND THE TOILET CAN BE FLUSHED.

NOTE:

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



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TITLE: HEAD PUMPS,
ELECTRICAL

MOD.: 48Y

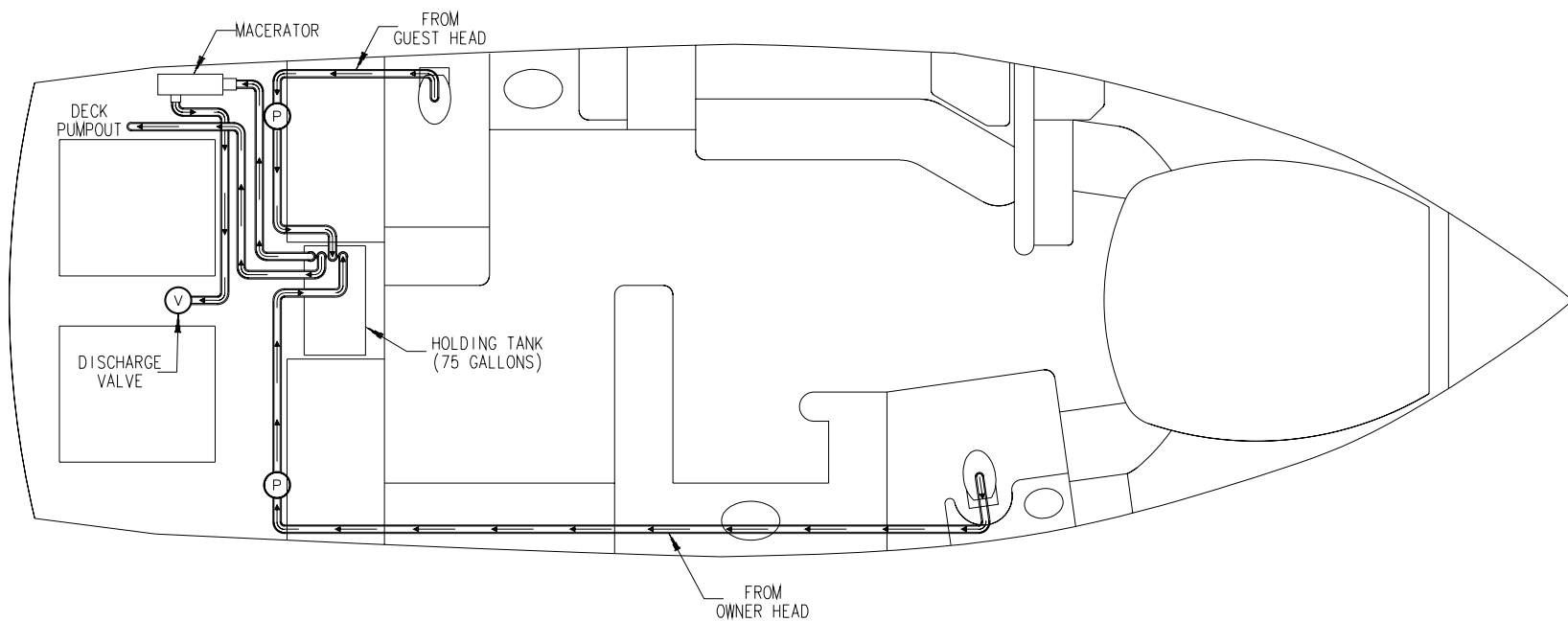
DR BY: JAW

64

LEGEND

VALVE (V)

PUMP (P)



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<https://www.boat-manuals.com/>

TITLE: HEAD PUMPS,
PLUMBING

MOD.: 48Y
DR BY: JAW

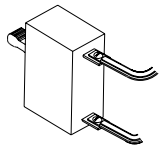
65

LEGEND

GROUND 

BREAKER 

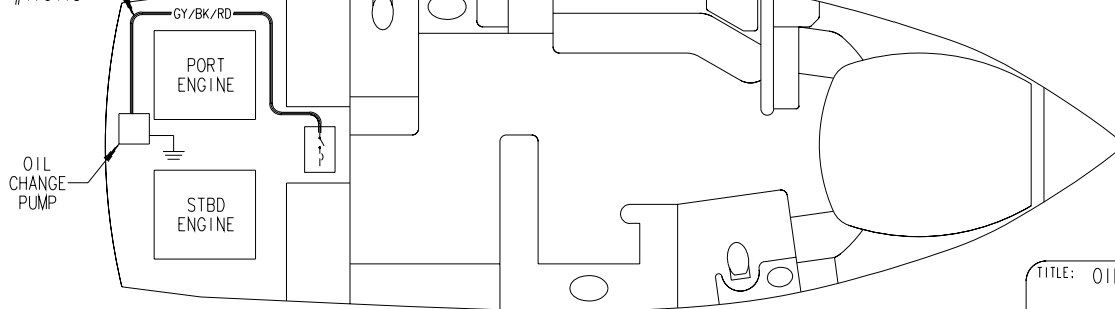
"OIL CHANGE PUMP" BKR 5A
(AFT BKR PANEL)
(REAR VIEW)



+12V DC

GY/BK/RD

HULL HARNESS
#170413



TO OPERATE:

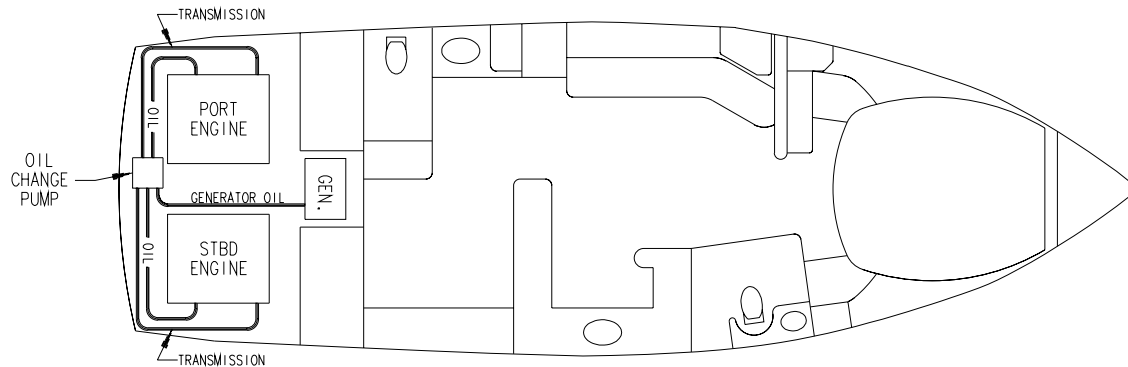
1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AFT BKR PANEL, SWITCH THE "OIL CHANGE PUMP" BREAKER TO "ON".
3. THE OIL CHANGE PUMP IS NOW SUPPLIED WITH 12V DC. SEE THE OIL CHANGE PUMP OPERATOR'S MANUAL FOR OPERATING INSTRUCTIONS.

TITLE: OIL CHANGE PUMP,
ELECTRICAL

MOD.: 48Y

DR BY: JAW

66A



TITLE: OIL CHANGE PUMP,
PLUMBING

MOD.: 48Y

DR BY: JAW

66B

<https://www.boat-manuals.com/>



THUNDERBIRD
PRODUCTS
ENGINEERING

LEGEND

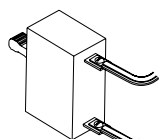
GROUND 

PUMP 

BREAKER 

FLOAT SWITCH 

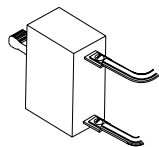
"SHOWER SUMP 1" BKR 10A
(AFT BKR PANEL)
(REAR VIEW)



+12V DC

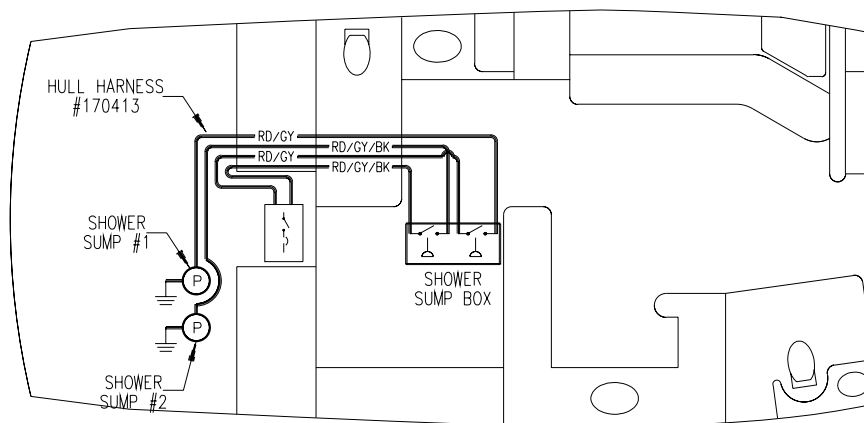
RD/GY

"SHOWER SUMP 2" BKR 10A
(AFT BKR PANEL)
(REAR VIEW)



+12V DC

RD/GY/BK



TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AFT BKR PANEL, SWITCH THE "SHOWER SUMP 1" AND "SHOWER SUMP 2" BREAKERS TO "ON".
3. THE SHOWER SUMPS ARE NOW SUPPLIED WITH 12 VOLTS DC.

NOTE:

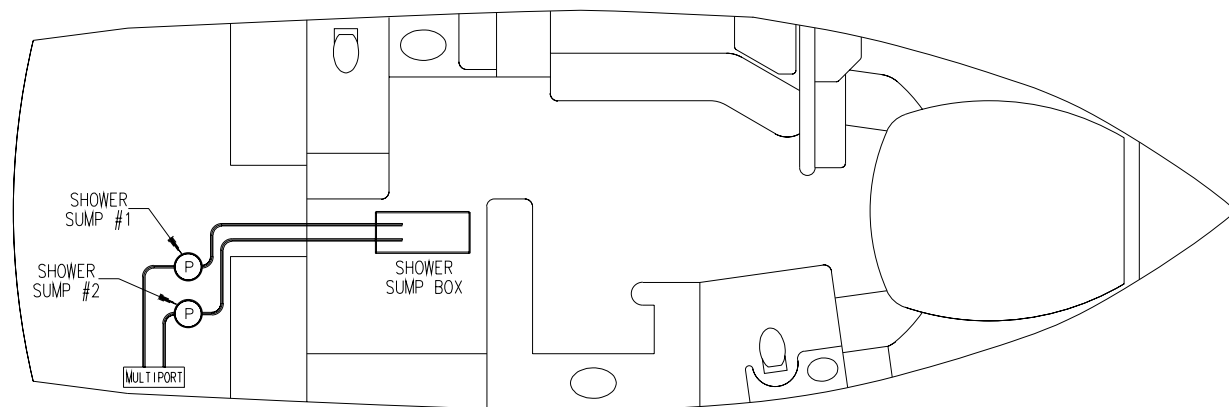
THE SHOWER SUMPS WILL AUTOMATICALLY START WHEN THE WASTE WATER IS AT A LEVEL HIGH ENOUGH TO ACTIVATE THE FLOAT SWITCH.

TITLE: SHOWER SUMPS,
ELECTRICAL

MOD.: 48Y

DR BY: JAW

67A



TITLE: SHOWER SUMPS,
DRAINAGE

MOD.: 48Y

DR BY: JAW

67B



THUNDERBIRD
PRODUCTS
ENGINEERING

<https://www.boat-manuals.com/>


LEGEND

GROUND 

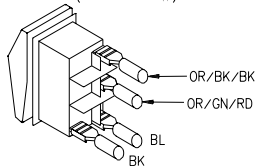
PLUGS 

BREAKER PANEL 

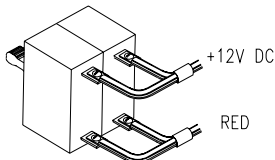
SWITCH 

PUMP 

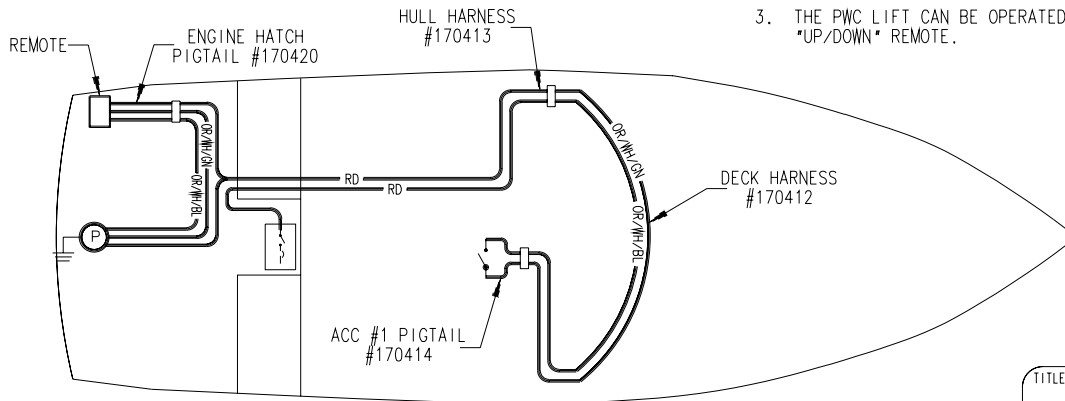
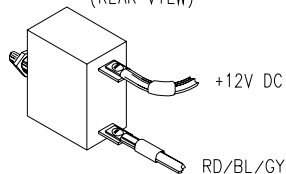
"PWC LIFT" SWITCH
(ACCESSORY PANEL)
(REAR VIEW)



STEREO AMP BKR 10A
(AFT BKR PANEL)
(REAR VIEW)



"VHF RADIO" BKR 10A
(DASH BKR PANEL)
(REAR VIEW)



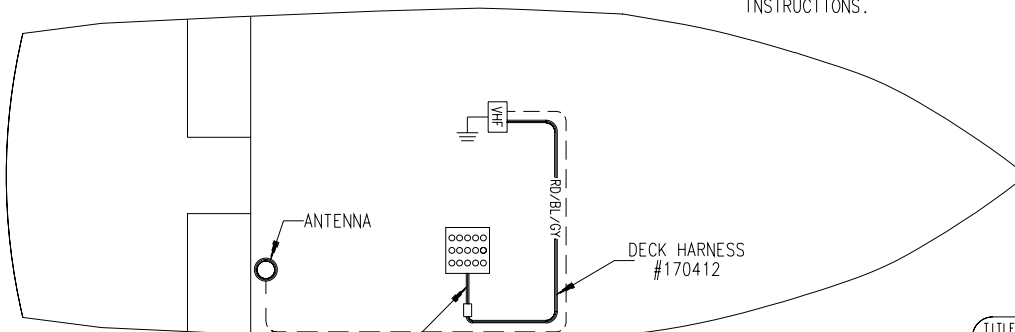
TITLE: PWC LIFT	
MOD.: 48Y	68A
DR BY: JAW	

TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AFT BKR PANEL, SWITCH THE "PWC" BREAKER TO "ON".
3. THE PWC LIFT CAN BE OPERATED BY THE "UP/DOWN" REMOTE.

TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE DASH BREAKER PANEL, THE "VHF RADIO" BREAKER MUST BE PUSHED IN (CLOSED).
3. THE VHF RADIO IS NOW SUPPLIED WITH 12V DC. SEE OPERATOR'S MANUAL FOR OPERATING INSTRUCTIONS.



TITLE: VHF RADIO	
MOD.: 48Y	68B
DR BY: JAW	



THUNDERBIRD
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ENGINEERING

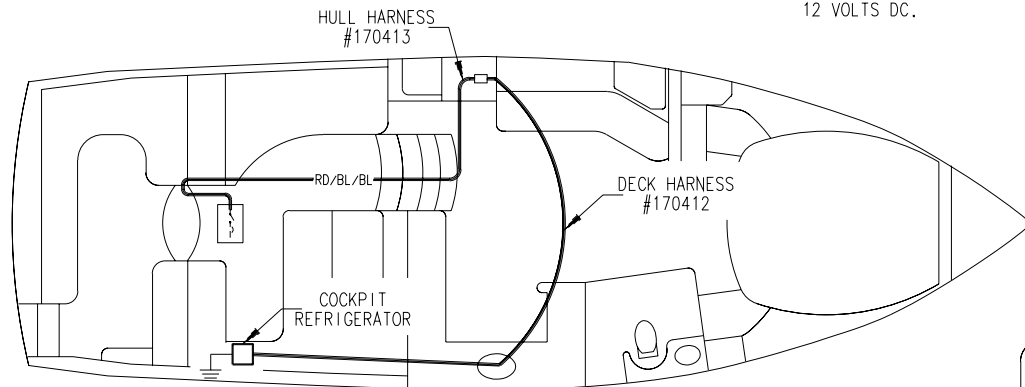
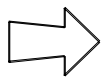
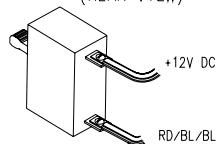
LEGEND

BREAKER 

PLUG 

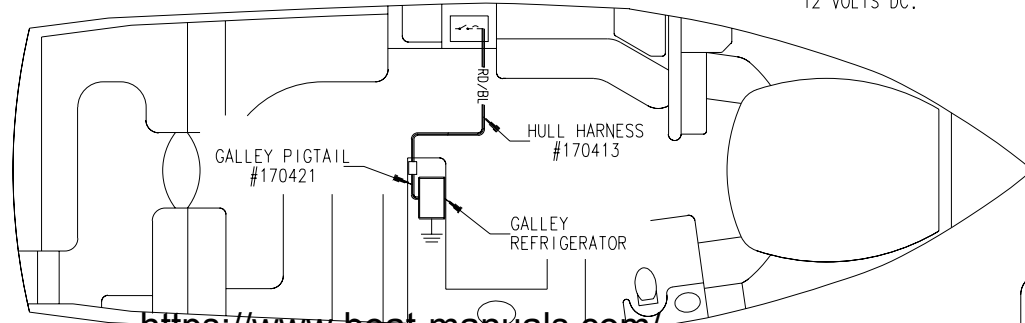
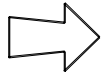
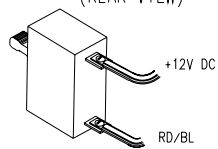
GROUND 

"COCKPIT REFRIGERATOR"
BKR 10A
(AFT BKR PANEL)
(REAR VIEW)



TITLE: COCKPIT REFRIGERATOR	
MOD.: 48Y	69A
DR BY: JAW	

"GALLEY REFRIGERATOR"
BKR 10A
(CABIN AC/DC PANEL)
(REAR VIEW)



TITLE: GALLEY REFRIGERATOR	
MOD.: 48Y	69B
DR BY: JAW	

TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AFT BKR PANEL, SWITCH THE "COCKPIT REFRIGERATOR" BREAKER TO "ON".
3. THE COCKPIT REFRIGERATOR IS NOW SUPPLIED WITH 12 VOLTS DC.

TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 1" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "GALLEY REFRIGERATOR" BREAKER TO "ON".
4. THE GALLEY REFRIGERATOR IS NOW SUPPLIED WITH 12 VOLTS DC.

LEGEND

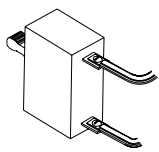
GROUND 

BREAKER 

PLUGS 

FLOAT SWITCH 

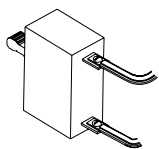
"SEAKEY" BKR 2A
(AFT BKR PANEL)
(REAR VIEW)



+12V DC

PK/GN

"HOSE REEL" BKR 5A
(AFT BKR PANEL)
(REAR VIEW)

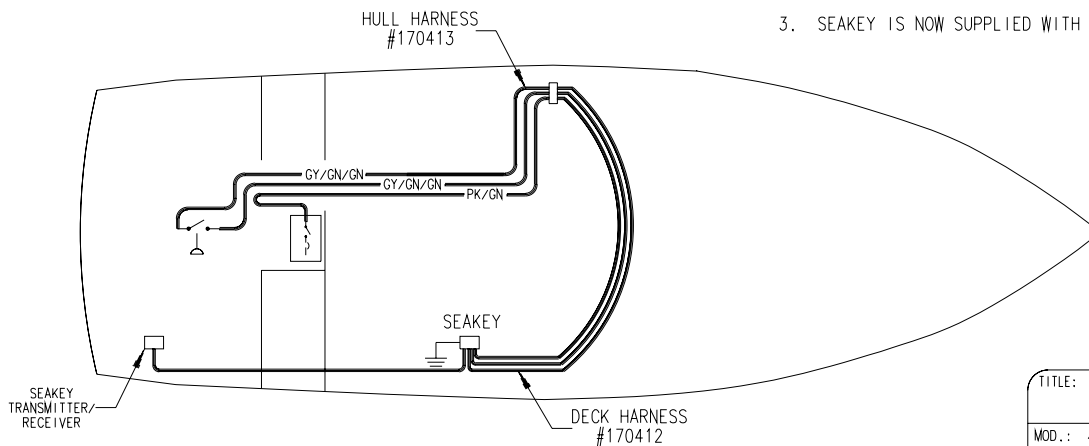


+12V DC

GN/BK/RD

TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AFT BKR PANEL, SWITCH THE "SEAKEY" BREAKER TO "ON".
3. SEAKEY IS NOW SUPPLIED WITH 12 VOLTS DC.



TITLE: SEAKEY

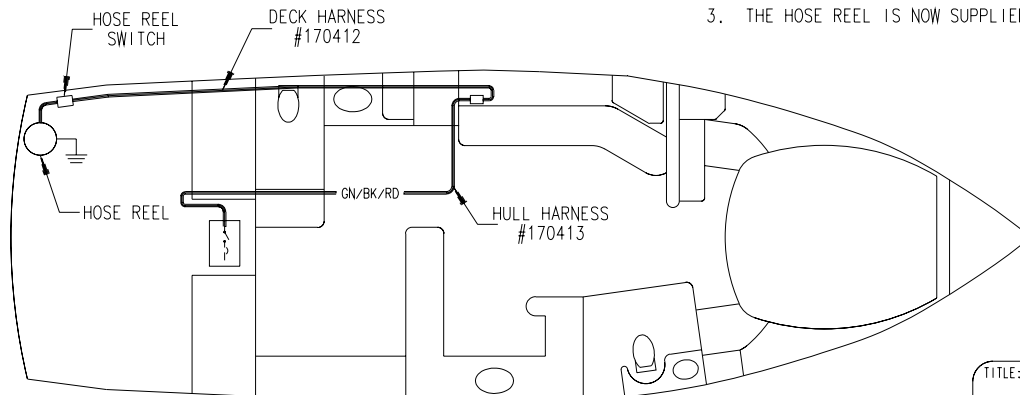
MOD.: 48Y

DR BY: JAW

70A

TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AFT BKR PANEL, SWITCH THE "HOSE REEL" BREAKER TO "ON".
3. THE HOSE REEL IS NOW SUPPLIED WITH 12 VOLTS DC.



TITLE: HOSE REEL

MOD.: 48Y

DR BY: JAW

70B

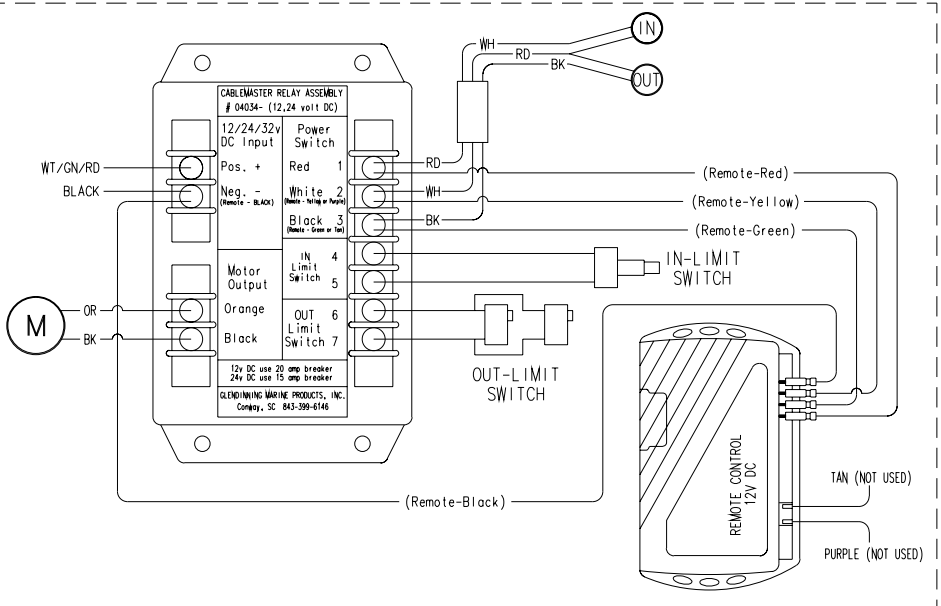


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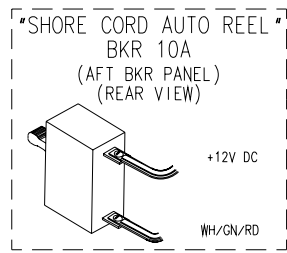
LEGEND

- GROUND
- BREAKER
- SWITCH
- PLUGS

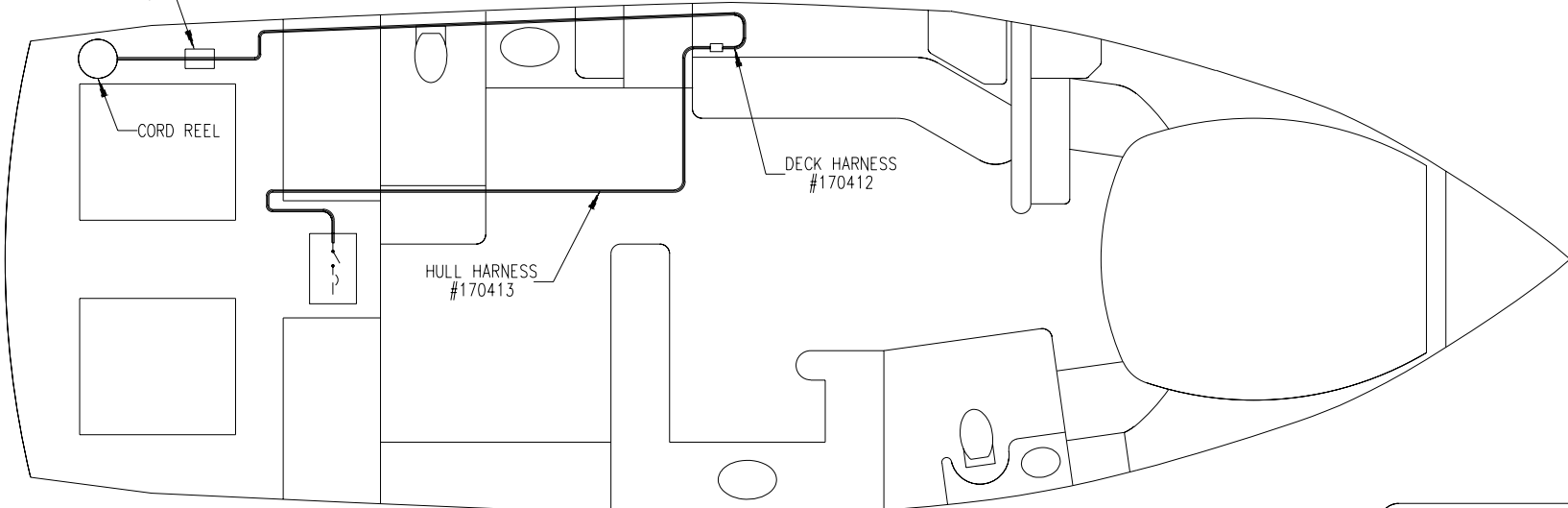


TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AFT BKR PANEL, SWITCH THE "SHORE CORD AUTO REEL" BREAKER TO "ON".
3. THE SHORE CORD AUTO REEL CAN NOW BE OPERATED BY THE IN/OUT BUTTONS.



CORD REEL SWITCH
(SEE ABOVE DIAGRAM)



LEGEND


GROUND 

PLUGS 

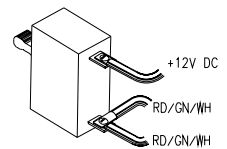
BREAKER 

SPEAKER 

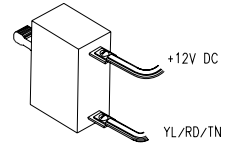
SOLENOID 

PLEX BLOCK 

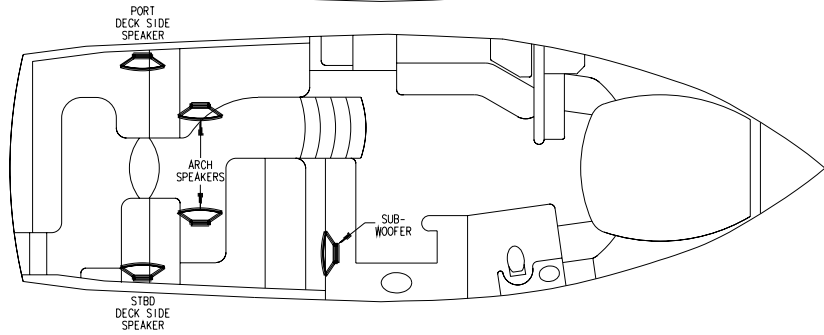
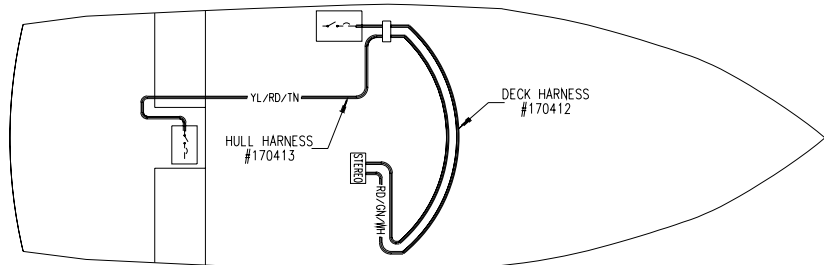
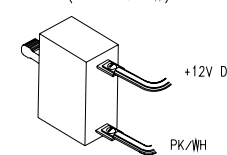
"COCKPIT STEREO" BKR 15A
(CABIN AC/DC PANEL)
(REAR VIEW)



"STEREO MEMORY" BKR 20A
(AFT BKR PANEL)
(REAR VIEW)

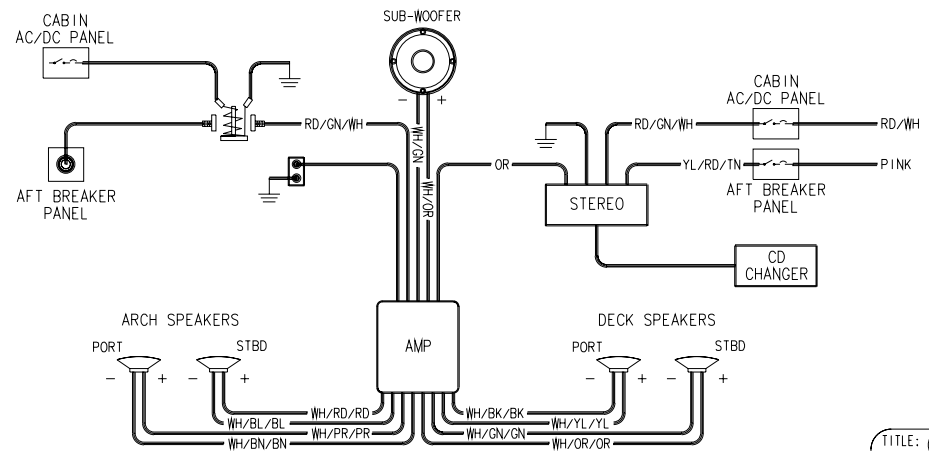


"COCKPIT STEREO AMP" BKR 50A
(AFT BKR PANEL)
(REAR VIEW)



- TO OPERATE:
1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
 2. AT THE AFT BKR PANEL, SWITCH THE "STEREO MEMORY" AND "COCKPIT STEREO AMP" BREAKERS TO "ON".
 3. THE COCKPIT STEREO SYSTEM IS NOW SUPPLIED WITH 12 VOLTS DC AND READY FOR OPERATION.
 4. SEE STEREO'S OPERATING MANUAL FOR INSTRUCTIONS ON OPERATING STEREO FUNCTIONS.

TITLE: COCKPIT STEREO, COMPONENT LOCATION
MOD.: 48Y
DR BY: JAW
72A



TITLE: COCKPIT STEREO, COMPLETE WIRING
MOD.: 48Y
DR BY: JAW
72B

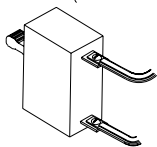
LEGEND

GROUND 

BREAKER 

SPEAKER 

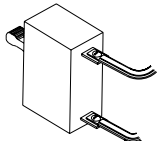
"OWNER STATERM STEREO" BKR 15A
(AC/DC BKR PANEL)
(REAR VIEW)



+12V DC

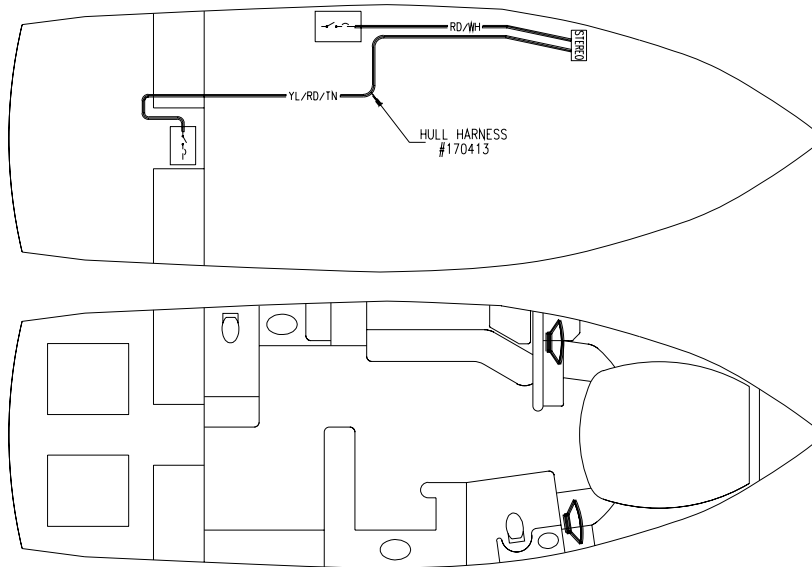
RD/WH

"STEREO MEMORY" BKR 20A
(AFT BKR PANEL)
(REAR VIEW)



+12V DC

YL/RD/TN



TO OPERATE:

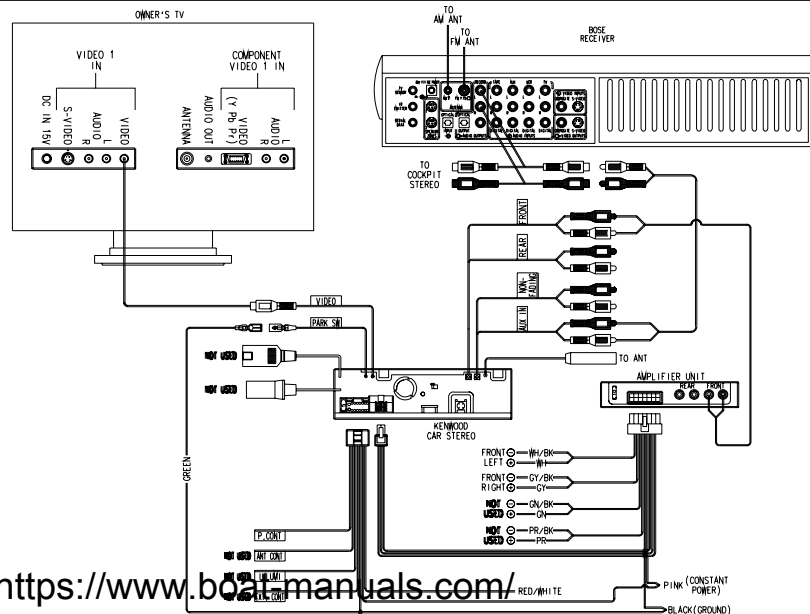
1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AFT DC PANEL, SWITCH THE "STEREO MEMORY" BREAKER TO "ON".
3. AT THE CABIN AC/DC PANEL, SWITCH THE "OWNER STATERM STEREO" BREAKER TO "ON".
4. THE OWNER STATEROOM STEREO IS NOW SUPPLIED WITH 12 VOLTS DC AND IS READY FOR OPERATION.
5. SEE STEREO'S OPERATING MANUAL FOR INSTRUCTIONS ON OPERATING STEREO FUNCTIONS.

TITLE: OWNER STEREO,
COMPONENT LOCATION

MOD.: 48Y

DR BY: JAW

73A



TITLE: OWNER STEREO,
COMPLETE WIRING

MOD.: 48Y

DR BY: JAW

73B



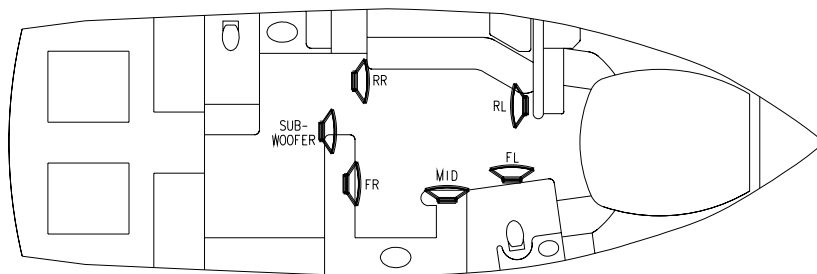
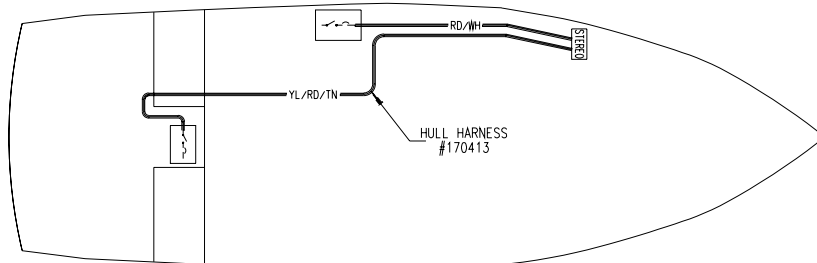
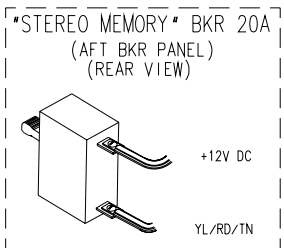
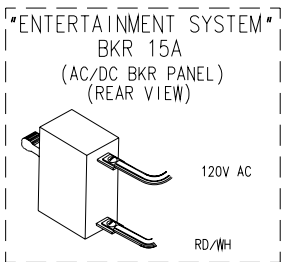
THUNDERBIRD
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LEGEND

GROUND 

BREAKER 

SPEAKER 



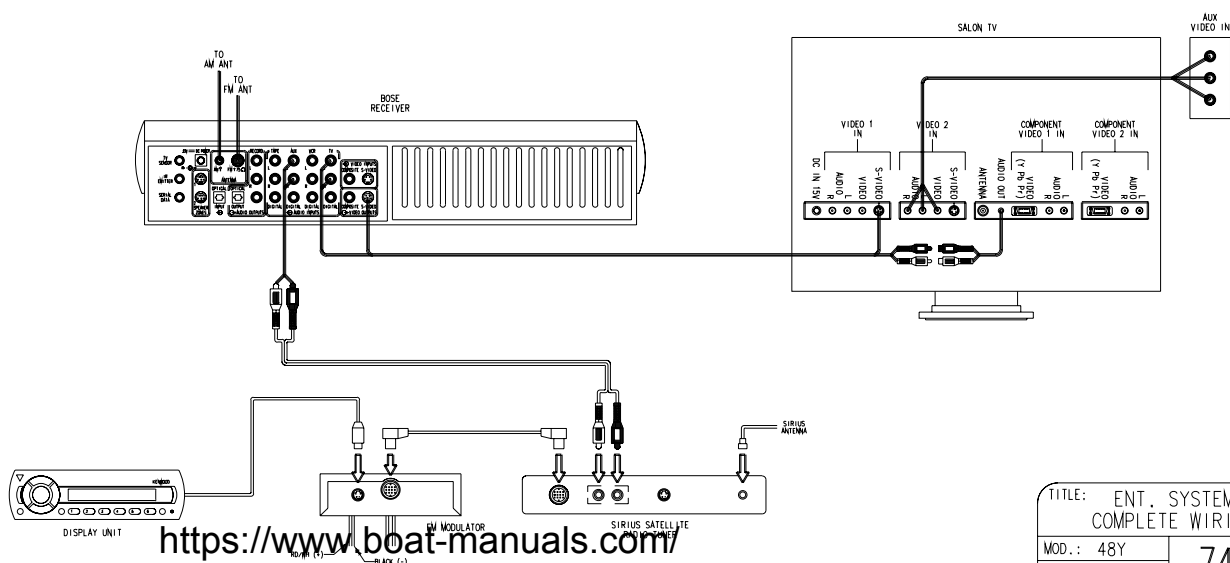
TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AFT DC PANEL, SWITCH THE "STEREO MEMORY" BREAKER TO "ON".
3. AT THE CABIN AC/DC PANEL, SWITCH THE "ENTERTAINMENT SYSTEM" BREAKER TO "ON".
4. THE SALON ENTERTAINMENT SYSTEM IS NOW SUPPLIED WITH 12 VOLTS DC AND IS READY FOR OPERATION.
5. SEE SALON ENTERTAINMENT SYSTEM OPERATING MANUAL FOR INSTRUCTIONS ON OPERATING STEREO FUNCTIONS. (ALSO SEE PAGE 09B.)

TITLE: ENT. SYSTEM,
COMPONENT LOCATION

MOD.: 48Y
DR BY: JAW

74A



TITLE: ENT. SYSTEM,
COMPLETE WIRING

MOD.: 48Y
DR BY: JAW

74B



THUNDERBIRD
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ENGINEERING


<https://www.boat-manuals.com/>

LEGEND

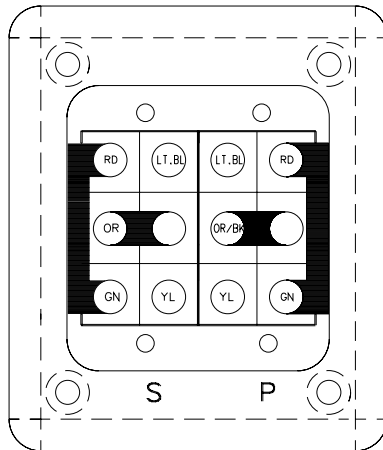
BREAKER PANEL 

PUMP 

PLUGS 

GROUND 

TRIM TAB SWITCHES (TRIM TAB PANEL) (REAR VIEW)



PANEL #166088
PIGTAIL #170427

TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE DASH BREAKER PANEL, THE "PORT TRIM TAB" AND "STBD TRIM TAB" BREAKERS MUST BE PUSHED IN (CLOSED).
3. THE TRIM TABS CAN NOW BE OPERATED BY THE "TRIM TAB" SWITCHES LOCATED ON THE TRIM TAB PANEL.

NOTE:

FOR ADDITIONAL INFORMATION SEE BENNETT TRIM TABS OWNER'S MANUAL.

PORT TRIM TAB PUMP

PORT BENNET TRIM TAB PUMP PIGTAIL

HULL HARNESS #170413

TRIM TAB PIGTAIL #170427

DASH BREAKER PIGTAIL #170418

DECK HARNESS #170414



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ENGINEERING

<https://www.boatmanuals.com/>

TITLE: TRIM TABS

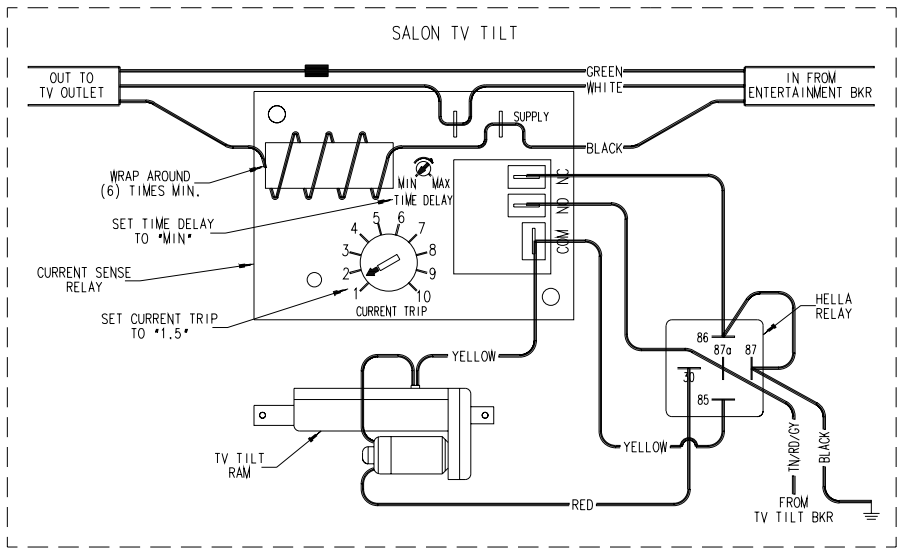
MOD.: 48Y

DR BY: JAW

75

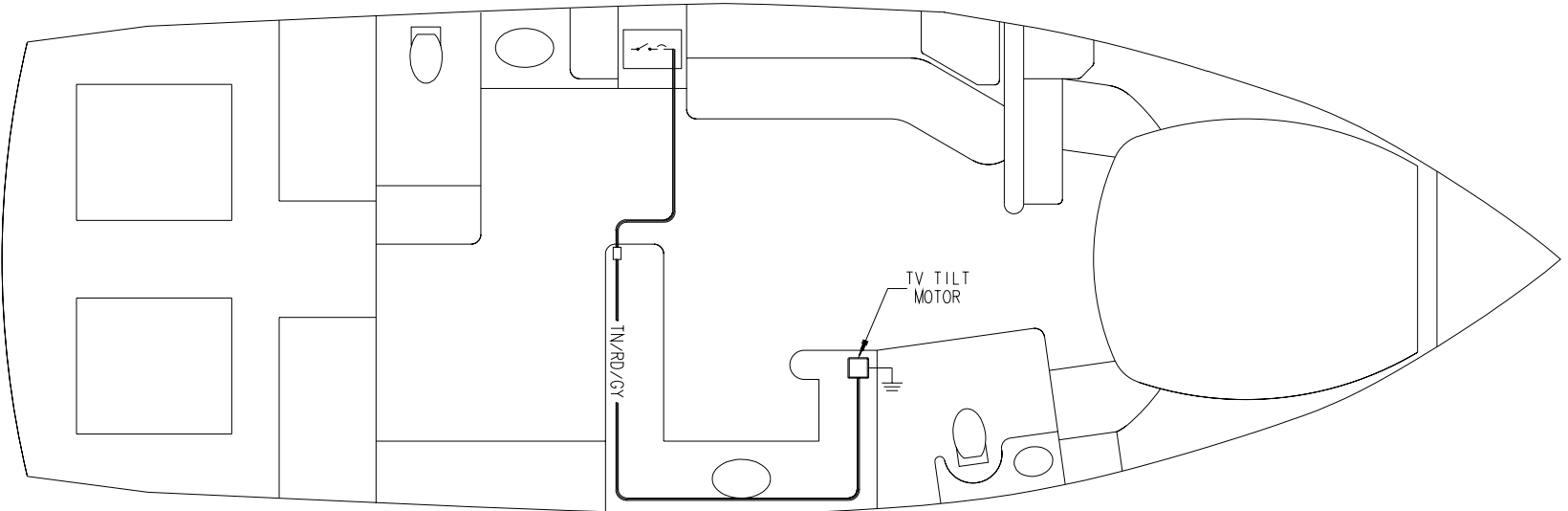
LEGEND

PLUGS	
BREAKER	
GROUND	



TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE AC/DC PANEL, LOCATED IN THE CABIN, SWITCH THE DC "MAIN 2" BREAKER TO "ON".
3. AT THE AC/DC PANEL, SWITCH THE "ENTERTAINMENT SYSTEM" BREAKER TO "ON".
4. AT THE AC/DC PANEL, SWITCH THE "SALON TV TILT" BREAKER TO "ON".
5. THE TELEVISION WILL TILT OUT WHEN POWER IS TURNED "ON".
6. THE TELEVISION WILL TILT IN WHEN POWER IS TURNED "OFF".



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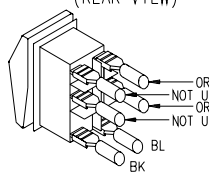
<https://www.boat-manuals.com/>

TITLE: TV TILT, SALON	
MOD.: 48Y	76
DR BY: JAW	

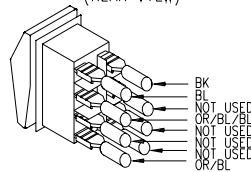
LEGEND

PLUGS	
BREAKER PANEL	
GROUND	
SOLENOID	
FUSE	
MOTOR	
BREAKER	
DPDT SWITCH	
SWITCH	

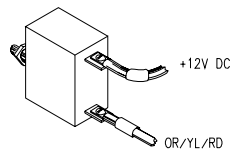
"WINDLS ON/OFF" SWITCH
(ACCESSORY PANEL)
(REAR VIEW)



"WIND UP/DOWN" SWITCH
(ACCESSORY PANEL)
(REAR VIEW)

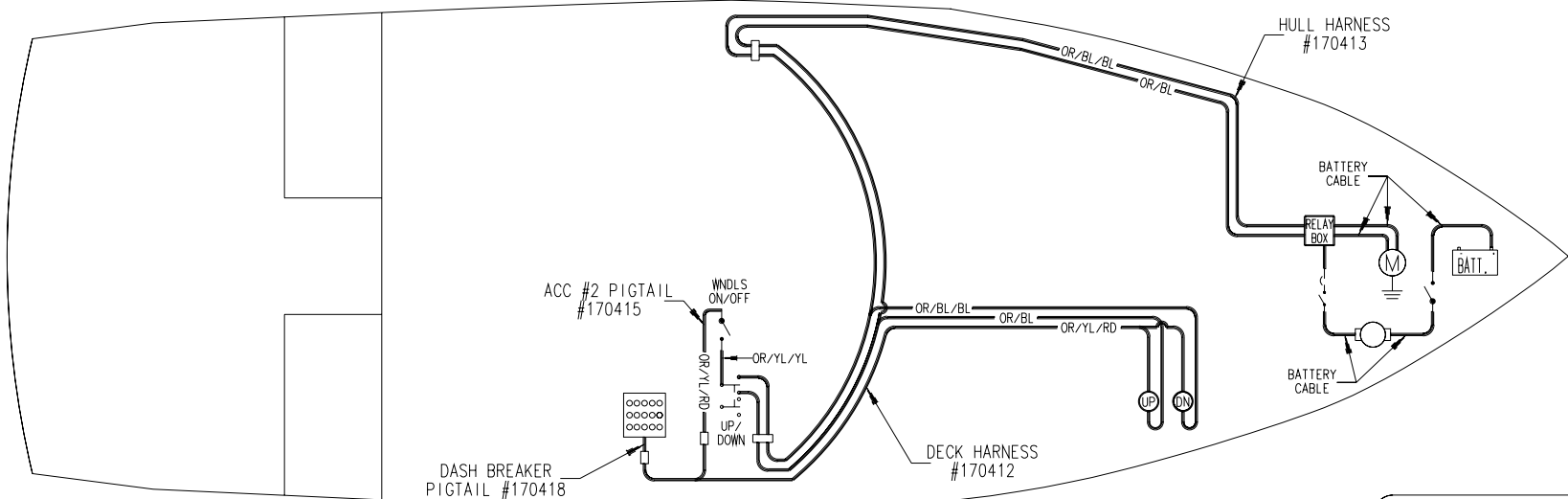
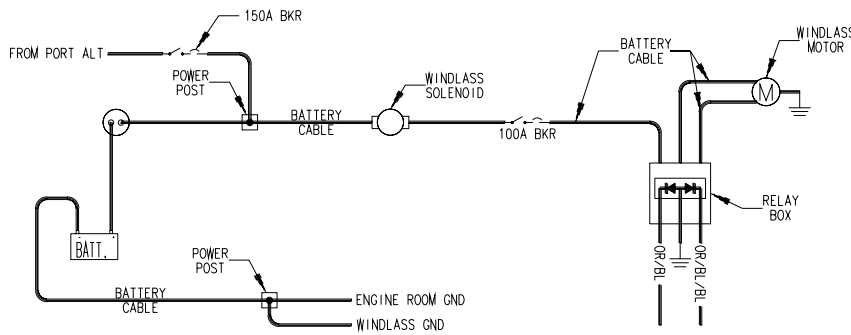


"WINDLS/THRSTR" BKR 15A
(DASH BKR PANEL)
(REAR VIEW)



TO OPERATE:

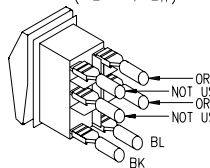
1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE DASH BREAKER PANEL, THE "WINDLS/THRSTR" BREAKER MUST BE PUSHED IN (CLOSED).
3. SWITCH "WINDLS ON/OFF" SWITCH TO "ON".
4. WINDLASS CAN NOW BE OPERATED BY THE "WIND UP/DOWN" SWITCH LOCATED ON THE ACCESSORY PANEL, OR BY THE "UP" OR "DOWN" FOOT SWITCHES ON THE FORE DECK.



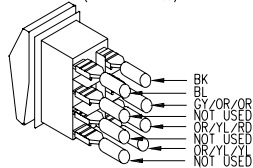
LEGEND

PLUGS	
BREAKER PANEL	
GROUND	
SOLENOID	
FUSE	
MOTOR	
BREAKER	
DPDT SWITCH	
SWITCH	

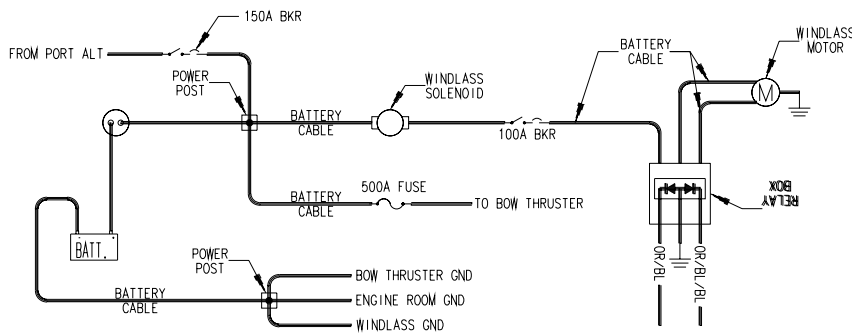
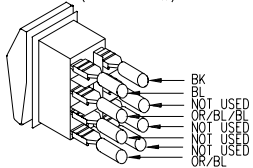
"WINDLS ON/OFF" SWITCH
(ACCESSORY PANEL)
(REAR VIEW)



"WIND/THRSTR" SWITCH
(ACCESSORY PANEL)
(REAR VIEW)



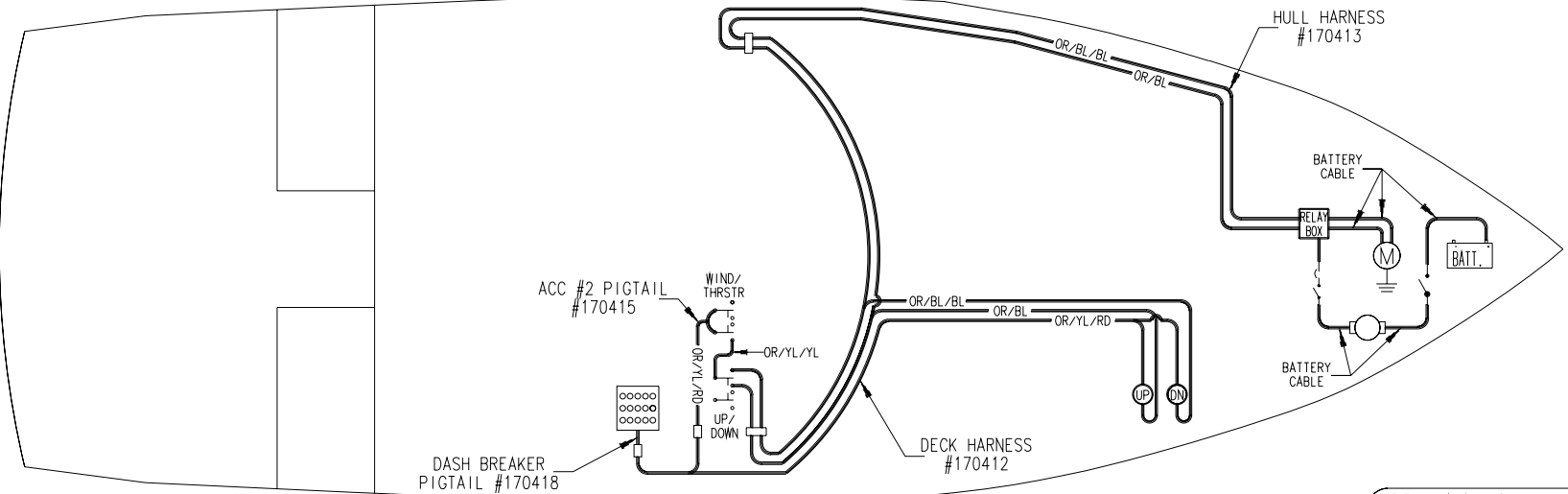
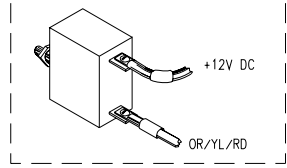
"WIND UP/DOWN" SWITCH
(ACCESSORY PANEL)
(REAR VIEW)



TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE DASH BREAKER PANEL, THE "WINDLS/THRSTR" BREAKER MUST BE PUSHED IN (CLOSED).
3. SWITCH "WIND/THRSTR" SWITCH TO WINDLASS POSITION.
4. WINDLASS CAN NOW BE OPERATED BY THE "WIND UP/DOWN" SWITCH LOCATED ON THE ACCESSORY PANEL, OR BY THE "UP" OR "DOWN" FOOT SWITCHES ON THE FORE DECK.

"WINDLS/THRSTR" BKR 15A
(DASH BKR PANEL)
(REAR VIEW)



LEGEND

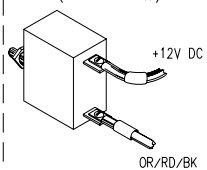
GROUND 

PLUGS 

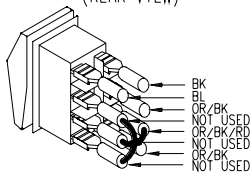
BREAKER PANEL 

DPDT SWITCH 

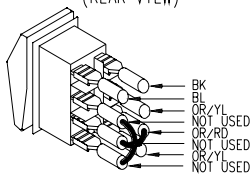
"PORT WIPER" BKR 10A
(DASH BKR PANEL)
(REAR VIEW)



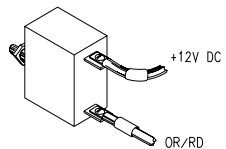
"WIPER PORT" SWITCH
(ACCESSORY PANEL)
(REAR VIEW)



"WIPER STBD" SWITCH
(ACCESSORY PANEL)
(REAR VIEW)



"STBD WIPER" BKR 10A
(DASH BKR PANEL)
(REAR VIEW)



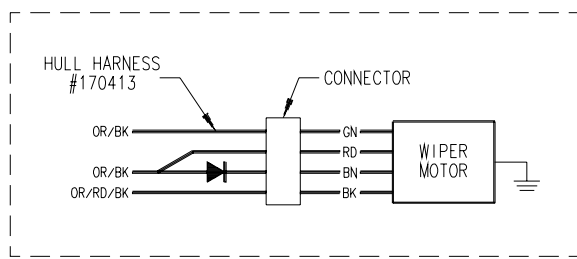
HULL HARNESS
#170413

OR/BK
OR/BK
OR/RD/BK

CONNECTOR

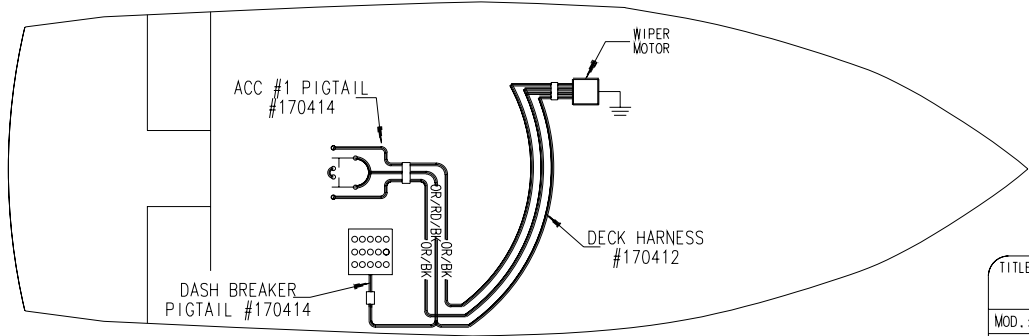
GN
RD
BN
BK

WIPER MOTOR



TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE DASH BREAKER PANEL, THE "PORT WIPER" BREAKER MUST BE PUSHED IN (CLOSED).
3. THE PORT WIPER CAN BE OPERATED BY THE "WIPER PORT" SWITCH LOCATED ON THE ACCESSORY PANEL.



TITLE: WIPER, PORT	
MOD.: 48Y	79A
DR BY: JAW	

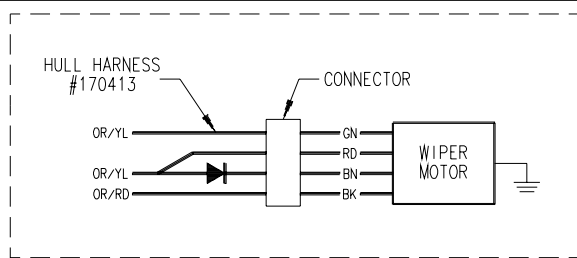
HULL HARNESS
#170413

OR/YL
OR/YL
OR/RD

CONNECTOR

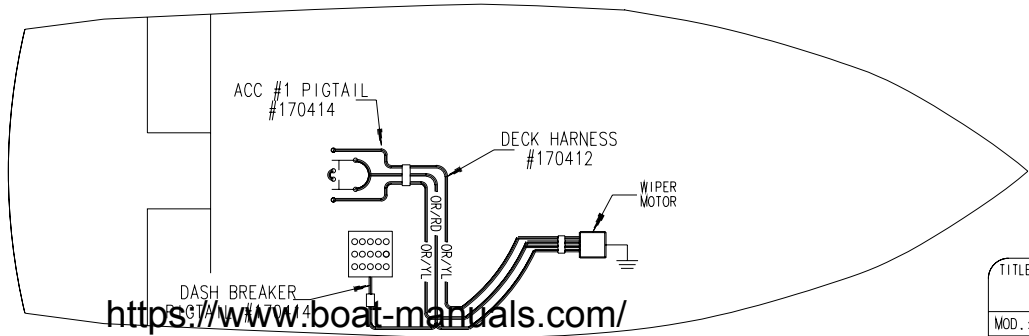
GN
RD
BN
BK

WIPER MOTOR



TO OPERATE:

1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE DASH BREAKER PANEL, THE "STBD WIPER" BREAKER MUST BE PUSHED IN (CLOSED).
3. THE STBD WIPER CAN BE OPERATED BY THE "WIPER STBD" SWITCH LOCATED ON THE ACCESSORY PANEL.



TITLE: WIPER, STBD	
MOD.: 48Y	79B
DR BY: JAW	


LEGEND

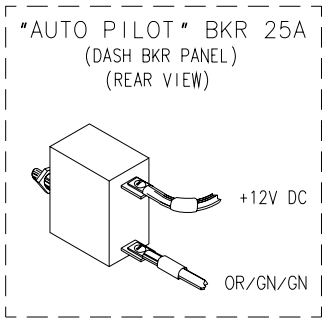
GROUND 

SWITCH 

BREAKER PANEL 

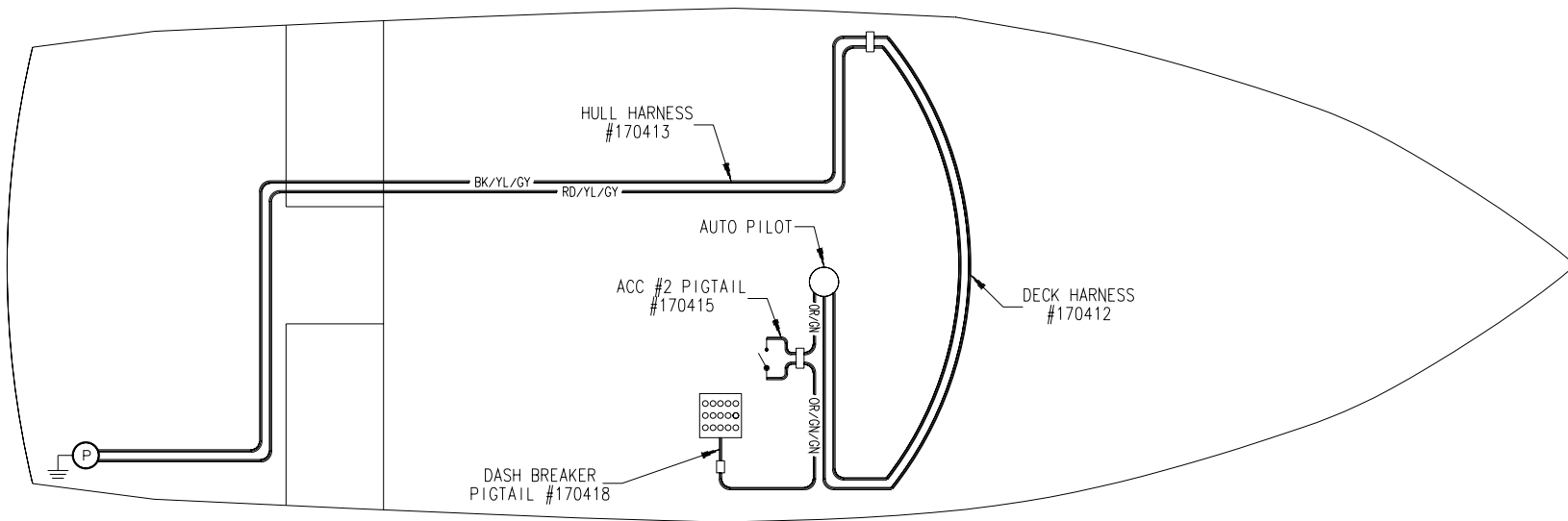
PLUGS 

PUMP 



TO OPERATE:

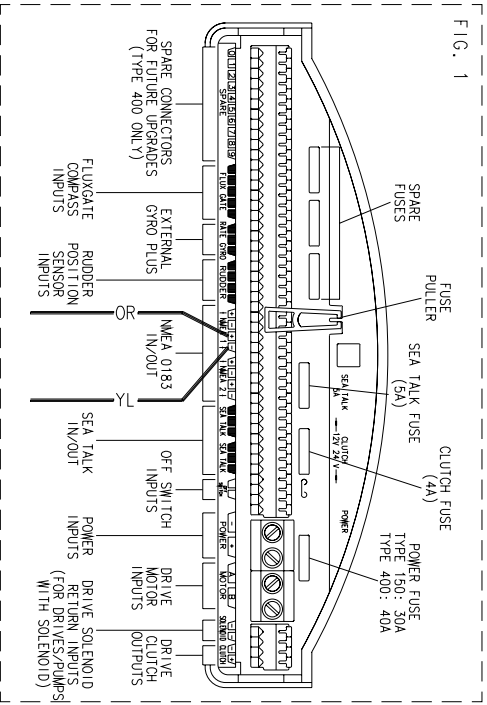
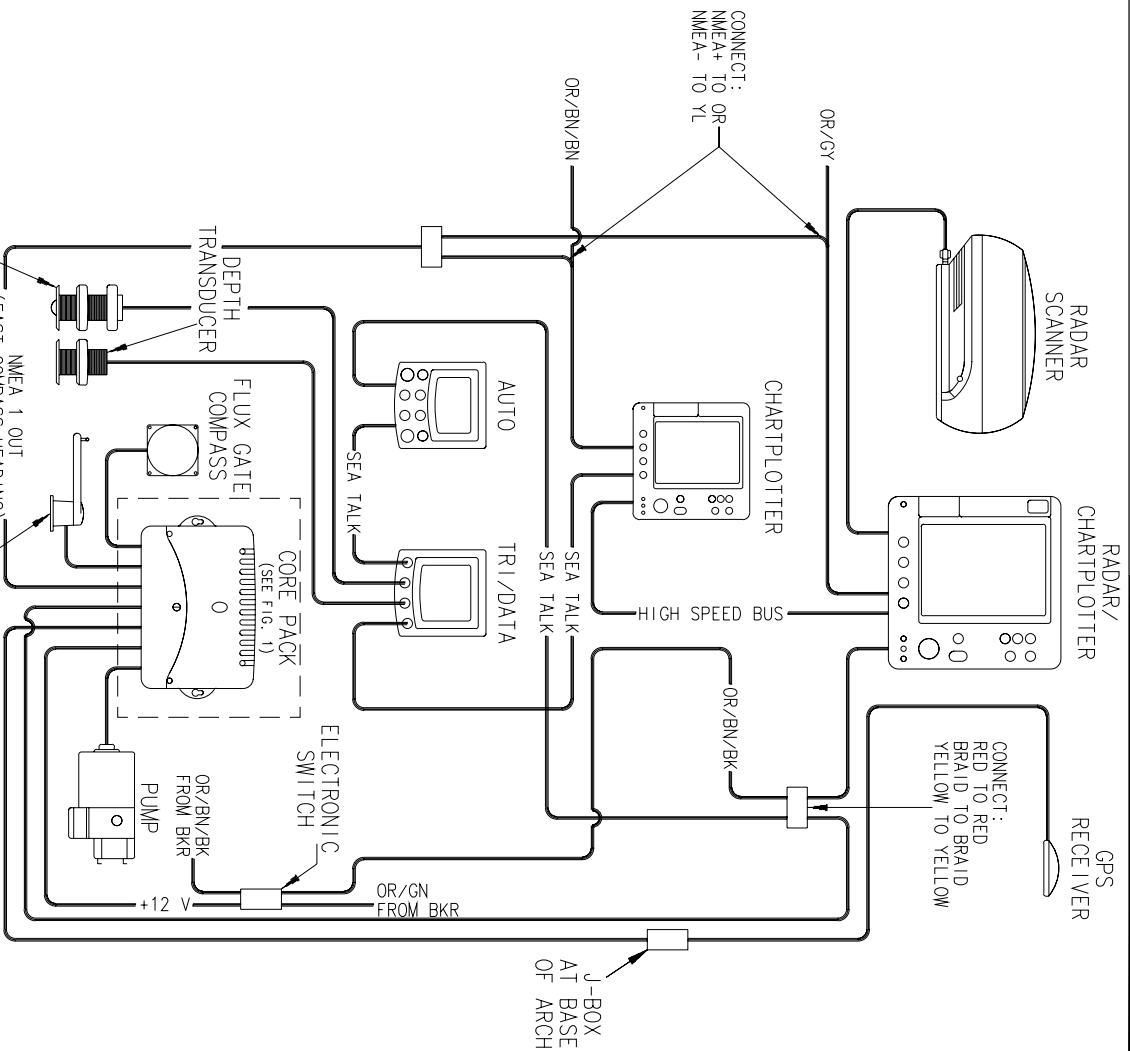
1. LOCATED UNDER THE WET BAR, TURN THE "AUX BATT" SWITCH ON.
2. AT THE DASH BREAKER PANEL, THE "AUTO PILOT" BREAKER MUST BE PUSHED IN (CLOSED).
3. THE AUTO PILOT IS NOW SUPPLIED WITH POWER.
4. REFER TO RAYMARINE'S OPERATING MANUAL FOR OPERATING INSTRUCTIONS.



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TITLE: AUTO PILOT	
MOD.: 48Y	80
DR BY: JAW	



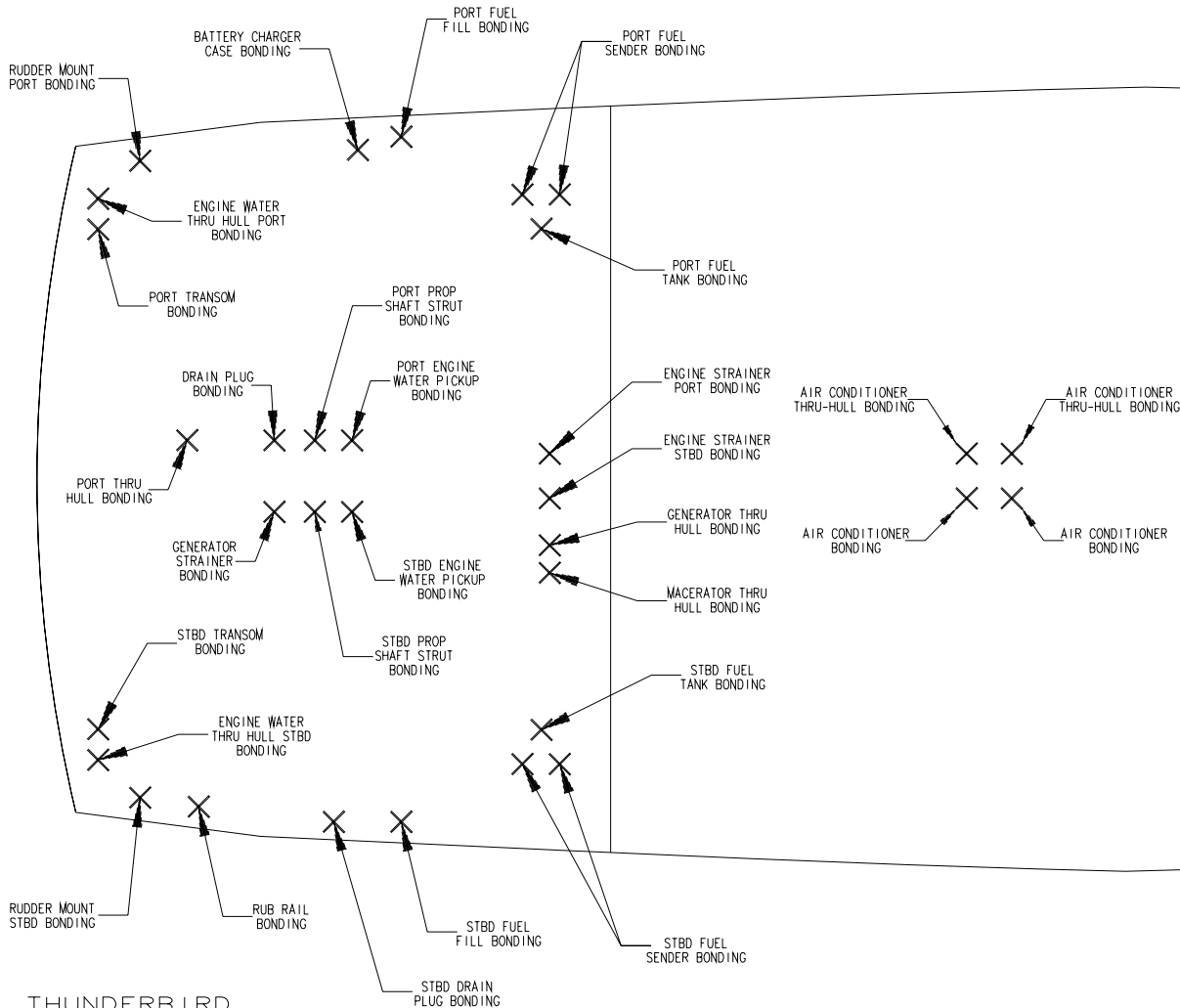
TITLE: FULL ELECTRONICS PACKAGE	
MOD.: 48Y	81
DR BY: JAW	

LEGEND

GROUND



NOTE:
ALL BONDING WIRES ARE LIGHT GREEN.
ALL GROUND WIRES ARE BLACK.



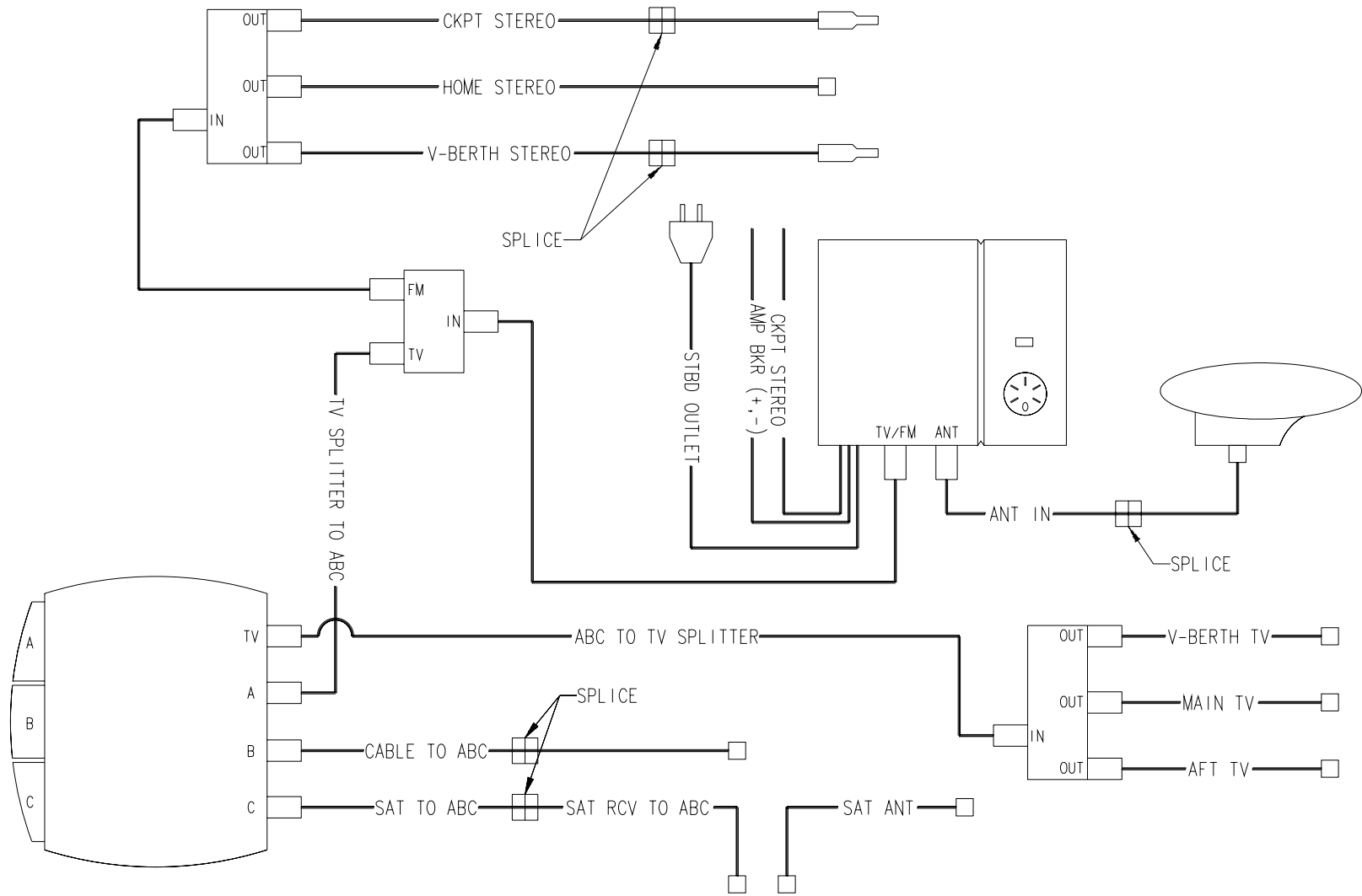
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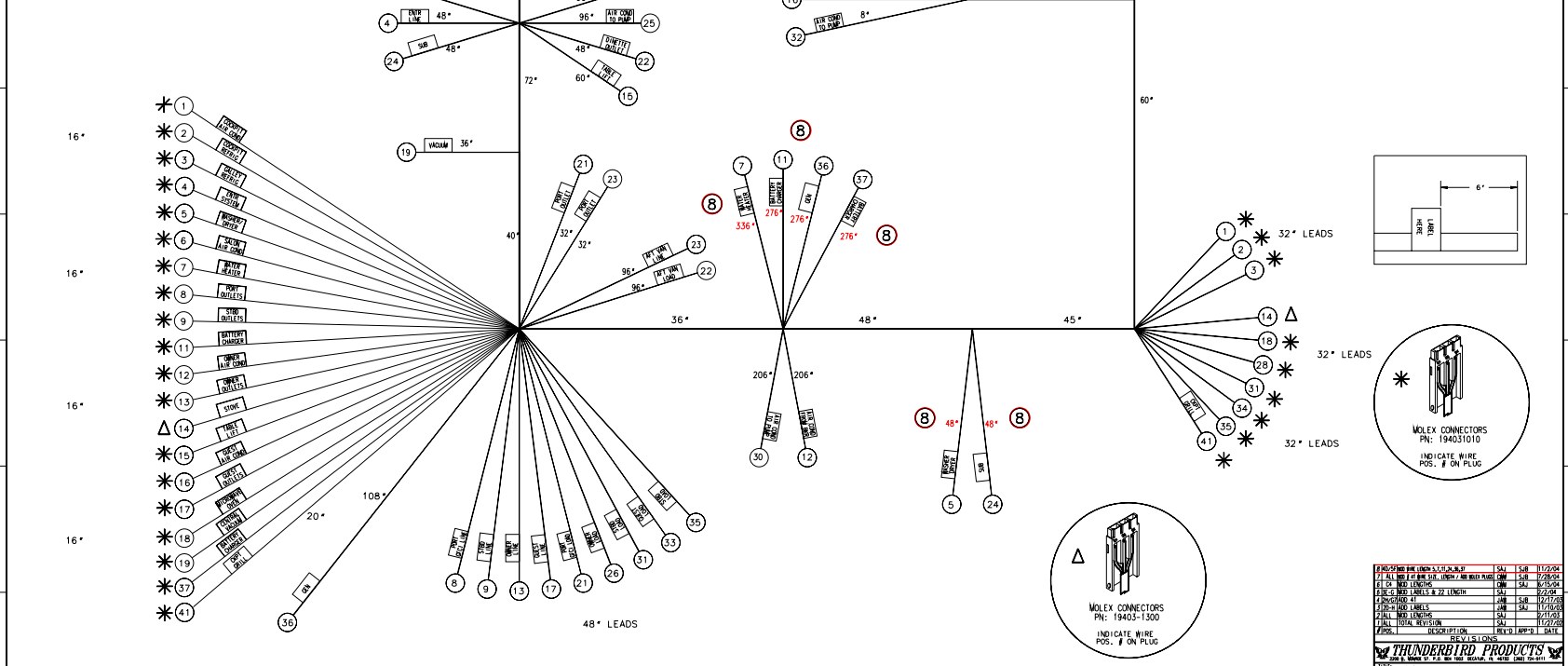
TITLE: BONDING

MOD.: 48Y
DR BY: JAW

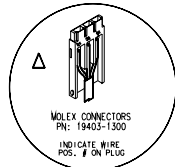
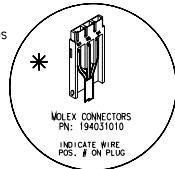
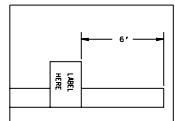
82



WIRE NO.	DESCRIPTION	LENGTH
1	MOOSEY AIR COND (PUMP TO UNIT)	179"
2	MOOSEY BLEND (PUMP TO UNIT)	179"
3	GALLEY REFRIG (PUMP TO UNIT)	179"
4	WATER INTAKE (PUMP TO UNIT)	179"
5	WATER EXHAUST (PUMP TO UNIT)	179"
6	WATER PUMP (PUMP TO UNIT)	179"
7	WATER PUMP (PUMP TO UNIT)	179"
8	WATER PUMP (PUMP TO UNIT)	179"
9	WATER PUMP (PUMP TO UNIT)	179"
10	WATER PUMP (PUMP TO UNIT)	179"
11	WATER PUMP (PUMP TO UNIT)	179"
12	WATER PUMP (PUMP TO UNIT)	179"
13	WATER PUMP (PUMP TO UNIT)	179"
14	WATER PUMP (PUMP TO UNIT)	179"
15	WATER PUMP (PUMP TO UNIT)	179"
16	WATER PUMP (PUMP TO UNIT)	179"
17	WATER PUMP (PUMP TO UNIT)	179"
18	WATER PUMP (PUMP TO UNIT)	179"
19	WATER PUMP (PUMP TO UNIT)	179"
20	WATER PUMP (PUMP TO UNIT)	179"
21	WATER PUMP (PUMP TO UNIT)	179"
22	WATER PUMP (PUMP TO UNIT)	179"
23	WATER PUMP (PUMP TO UNIT)	179"
24	WATER PUMP (PUMP TO UNIT)	179"
25	WATER PUMP (PUMP TO UNIT)	179"
26	WATER PUMP (PUMP TO UNIT)	179"
27	WATER PUMP (PUMP TO UNIT)	179"
28	WATER PUMP (PUMP TO UNIT)	179"
29	WATER PUMP (PUMP TO UNIT)	179"
30	WATER PUMP (PUMP TO UNIT)	179"
31	WATER PUMP (PUMP TO UNIT)	179"
32	WATER PUMP (PUMP TO UNIT)	179"
33	WATER PUMP (PUMP TO UNIT)	179"
34	WATER PUMP (PUMP TO UNIT)	179"
35	WATER PUMP (PUMP TO UNIT)	179"
36	WATER PUMP (PUMP TO UNIT)	179"
37	WATER PUMP (PUMP TO UNIT)	179"
38	WATER PUMP (PUMP TO UNIT)	179"
39	WATER PUMP (PUMP TO UNIT)	179"
40	WATER PUMP (PUMP TO UNIT)	179"
41	WATER PUMP (PUMP TO UNIT)	179"



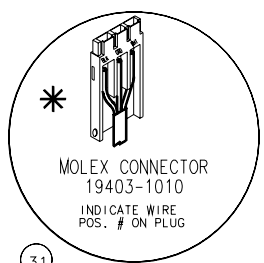
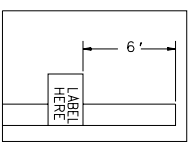
- NOTES:
- 1) CONDUCTORS SHALL HAVE A MINIMUM RATING OF 600 VOLTS.
 - 2) THE DRY TEMPERATURE RATING OF INSULATION SHALL BE AT LEAST 100°C (212°F).
 - 3) THE INSULATION SHALL BE OIL RESISTANT.
 - 4) ALL CONDUCTORS SHALL MEET THE FLAME RETARDANT AND MOISTURE RESISTANT REQUIREMENTS OF UL 85, "THERMOPLASTIC-INSULATED WIRES AND CABLES".
 - 5) THE OUTER JACKET SHALL BE MARKED WITH THE FOLLOWING INFORMATION: TYPE/STYLE, VOLTAGE, WIRE SIZE, AND TEMPERATURE RATING DRY.
 - 6) CONDUCTORS SHALL BE STRANDED THINNED COPPER.
 - 7) ALL WIRE MUST CONSIST OF AN OUTER JACKET SURROUNDING THREE INDIVIDUALLY INSULATED CONDUCTORS.
 - 8) ALL WIRE MUST HAVE A WHITE CLAD CONDUCTOR, A BLACK CLAD CONDUCTOR, AND A GREEN CLAD CONDUCTOR, UNLESS OTHERWISE SPECIFIED.
 - 9) ALL WIRE TERMINALS MUST HAVE THE SHANK INSULATED WITH DUAL WALLED ADHESIVE LINED SHRINK TUBING.
 - 10) DESCRIPTIONS TO BE TAGGED, AS MARKED, ONTO EVERY LEAD 6" FROM EACH END. MOLEX PLUGS SHALL HAVE POSITION NUMBER TAPED ONTO PLUG.
 - 11) SEAL ALL MOLEX CONNECTORS WITH DOW CORNING® 4-ELECTRICAL INSULATING COMPOUND.



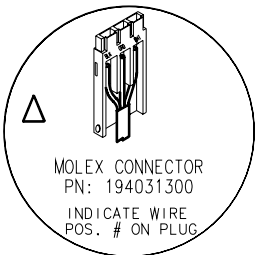
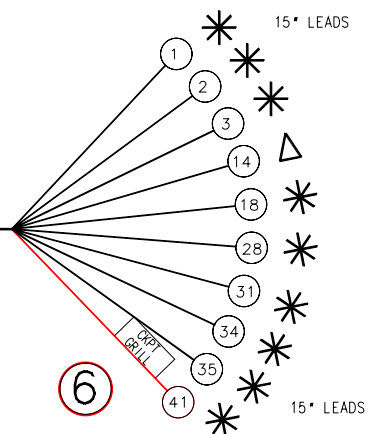
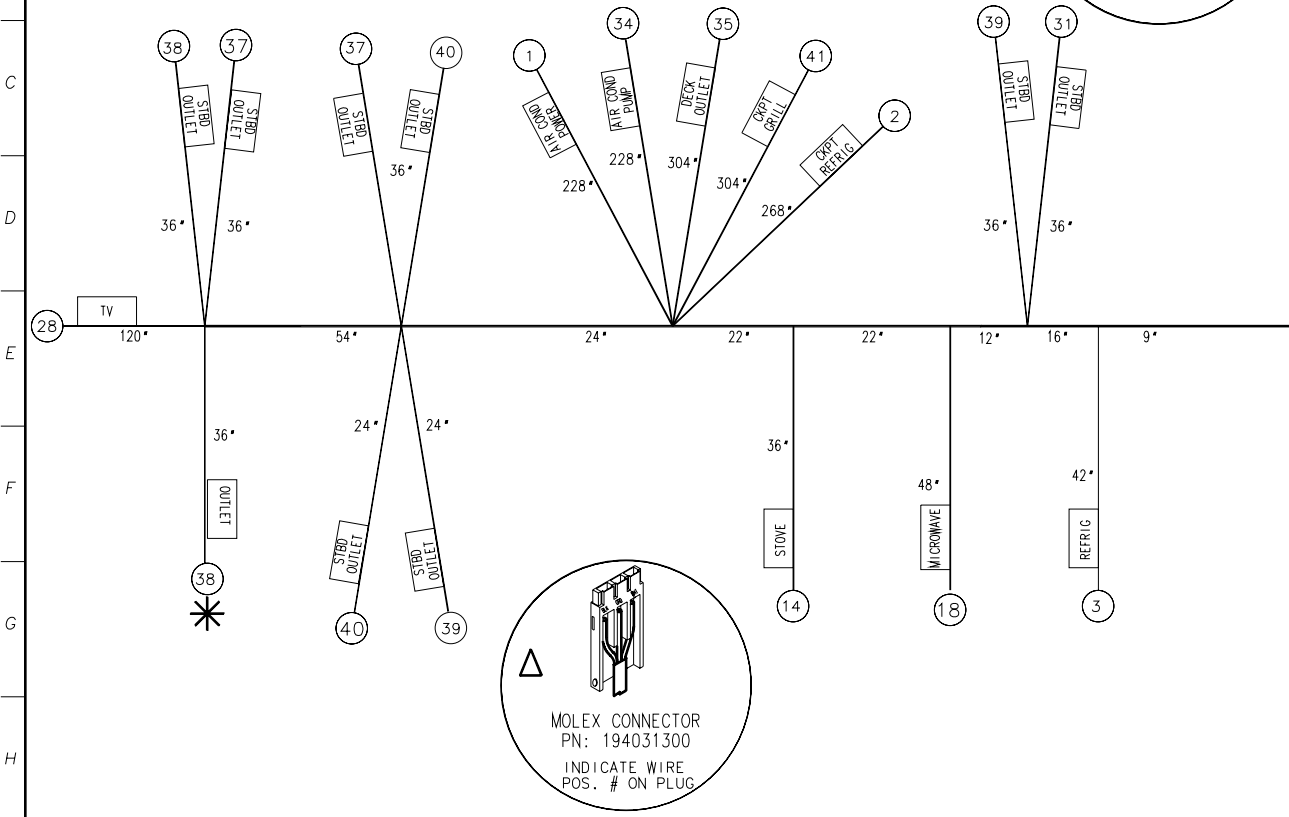
ITEM	DESCRIPTION	QTY	UNIT	REV	DATE
1	WIRE	1	EA	1	11/22/04
2	WIRE	1	EA	1	11/22/04
3	WIRE	1	EA	1	11/22/04
4	WIRE	1	EA	1	11/22/04
5	WIRE	1	EA	1	11/22/04
6	WIRE	1	EA	1	11/22/04
7	WIRE	1	EA	1	11/22/04
8	WIRE	1	EA	1	11/22/04
9	WIRE	1	EA	1	11/22/04
10	WIRE	1	EA	1	11/22/04
11	WIRE	1	EA	1	11/22/04
12	WIRE	1	EA	1	11/22/04
13	WIRE	1	EA	1	11/22/04
14	WIRE	1	EA	1	11/22/04
15	WIRE	1	EA	1	11/22/04
16	WIRE	1	EA	1	11/22/04
17	WIRE	1	EA	1	11/22/04
18	WIRE	1	EA	1	11/22/04
19	WIRE	1	EA	1	11/22/04
20	WIRE	1	EA	1	11/22/04
21	WIRE	1	EA	1	11/22/04
22	WIRE	1	EA	1	11/22/04
23	WIRE	1	EA	1	11/22/04
24	WIRE	1	EA	1	11/22/04
25	WIRE	1	EA	1	11/22/04
26	WIRE	1	EA	1	11/22/04
27	WIRE	1	EA	1	11/22/04
28	WIRE	1	EA	1	11/22/04
29	WIRE	1	EA	1	11/22/04
30	WIRE	1	EA	1	11/22/04
31	WIRE	1	EA	1	11/22/04
32	WIRE	1	EA	1	11/22/04
33	WIRE	1	EA	1	11/22/04
34	WIRE	1	EA	1	11/22/04
35	WIRE	1	EA	1	11/22/04
36	WIRE	1	EA	1	11/22/04
37	WIRE	1	EA	1	11/22/04
38	WIRE	1	EA	1	11/22/04
39	WIRE	1	EA	1	11/22/04
40	WIRE	1	EA	1	11/22/04
41	WIRE	1	EA	1	11/22/04

THUNDERBIRD PRODUCTS
 THIS HARNESS 470 AC 110V
 DRAWN BY: STEVE JONES DATE: NONE
 CHECKED BY: STEVE BOYCE DATE: 7/20/02
 APPROVED BY: [Signature] DATE: [Blank]
 PART 7 SEE NOTES PART 8 SEE NOTES
 SHEET 1 OF 1

POS	GA	DESCRIPTION	LENGTH
1	12	COCKPIT AIR COND (BKR TO UNIT)	324"
2	12	COCKPIT REFRIG (BKR TO UNIT)	364"
3	12	GALLEY REFRIG (BKR TO UNIT)	66"
14	10	STOVE (BKR TO UNIT)	110"
18	12	MICROWAVE OVEN	100"
28	12	V-BERTH TV TO MAIN TV	294"
31	12	STBD GF1 TO OUTLET	76"
34	12	COCKPIT AIR (UNIT TO PUMP)	324"
35	12	STBD OUTLET GF1 TO DECK GF1	400"
37	12	STBD OUTLET TO STBD OUTLET	126"
38	12	STBD OUTLET TO STBD OUTLET	72"
39	12	STBD OUTLET TO STBD OUTLET	140"
40	12	STBD OUTLET TO STBD OUTLET	60"
41	12/3	RED,BLACK,GREEN (BLUE JACKET) COCKPIT GRILL	400"



- NOTES:
- 1) CONDUCTORS SHALL HAVE A MINIMUM RATING OF 600 VOLTS.
 - 2) THE DRY TEMPERATURE RATING OF INSULATION SHALL BE AT LEAST 105° CELSIUS.
 - 3) THE INSULATION SHALL BE OIL RESISTANT.
 - 4) ALL CONDUCTORS SHALL MEET THE FLAME RETARDANT AND MOISTURE RESISTANT REQUIREMENTS OF UL 83, "THERMOPLASTIC-INSULATED WIRES AND CABLES".
 - 5) THE OUTER JACKET SHALL BE MARKED WITH THE FOLLOWING INFORMATION: TYPE/STYLE, VOLTAGE, WIRE SIZE, AND TEMPERATURE RATING DRY.
 - 6) CONDUCTORS SHALL BE STRANDED TINNED COPPER.
 - 7) ALL WIRE MUST CONSIST OF AN OUTER JACKET SURROUNDING THREE INDIVIDUALLY INSULATED CONDUCTORS.
 - 8) ALL WIRE MUST HAVE A WHITE CLAD CONDUCTOR, A BLACK CLAD CONDUCTOR, AND A GREEN CLAD CONDUCTOR.
 - 9) ALL RING TERMINALS MUST HAVE THE SHANK INSULATED WITH DUAL WALLED ADHESIVE LINED SHRINK TUBING.
 - 10) DESCRIPTIONS TO BE TAGGED, AS MARKED, ONTO EVERY LEAD 6" FROM EACH END. MOLEX PLUGS SHALL HAVE POSITION NUMBER TAPED ONTO PLUG.
 - 11) SEAL ALL MOLEX CONNECTORS WITH DOW CORNING(F) 4-ELECTRICAL INSULATING COMPOUND.



# POS.	DESCRIPTION	REV'D	APP'D	DATE
6 7F	MOD #41 WIRE SIZE / ADD MOLEX PLUG		CWM	7/28/04
5 1E	MOD #28's LENGTH		SAJ	8/16/04
4 4C/7F	ADD 41/ MOD LENGTH		JAW	12/17/03
3 4C	MOD LENGTH		JAW	8/6/03
2 4D	MOD LENGTHS		SAJ	2/11/03
1 ALL	ADD 39, 40/MOD LENGTHS, CONN.		SAJ	11/27/02

REVISIONS

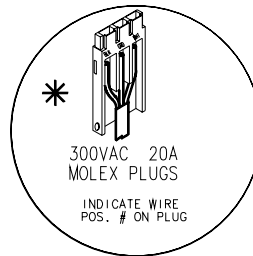
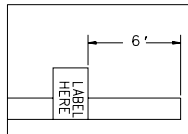
THUNDERBIRD PRODUCTS
2200 W. MONROE ST., P.O. BOX 1003 DECATUR, IN 46733 (219) 724-9111

TITLE: HARNESS 470 GALLEY AC 110V

DRAWN BY: STEVE JONES SCALE: NONE
APP'D BY: STEVE BOYCE DATE: 7-31-02
MATERIAL: SEE NOTES FINISH: SEE NOTES
PART 170739 SHEET 1 OF 1

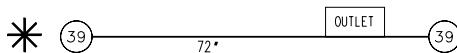
170739

POS	GA	DESCRIPTION	DESCRIPTION	LENGTH
39	12	HEAD GFCI	(FROM STBD. OUTLET)	72"



NOTES:

- 1) CONDUCTORS SHALL HAVE A MINIMUM RATING OF 600 VOLTS.
- 2) THE DRY TEMPERATURE RATING OF INSULATION SHALL BE AT LEAST 105° CELSIUS.
- 3) THE INSULATION SHALL BE OIL RESISTANT.
- 4) ALL CONDUCTORS SHALL MEET THE FLAME RETARDANT AND MOISTURE RESISTANT REQUIREMENTS OF UL 83, "THERMOPLASTIC-INSULATED WIRES AND CABLES".
- 5) THE OUTER JACKET SHALL BE MARKED WITH THE FOLLOWING INFORMATION: TYPE, STYLE, VOLTAGE, WIRE SIZE, AND TEMPERATURE RATING DRY.
- 6) CONDUCTORS SHALL BE STRANDED TINNED COPPER.
- 7) ALL WIRE MUST CONSIST OF AN OUTER JACKET SURROUNDING THREE INDIVIDUALLY INSULATED CONDUCTORS.
- 8) ALL WIRE MUST HAVE A WHITE CLAD CONDUCTOR, A BLACK CLAD CONDUCTOR, AND A GREEN CLAD CONDUCTOR.
- 9) ALL RING TERMINALS MUST HAVE THE SHANK INSULATED WITH DUAL WALLED ADHESIVE LINED SHRINK TUBING.
- 10) DESCRIPTIONS TO BE TAGGED, AS MARKED, ONTO EVERY LEAD 6" FROM EACH END. MOLEX PLUGS SHALL HAVE POSITION NUMBER TAPED ONTO PLUG.



5					
4					
3					
2					
1					
# POS.	DESCRIPTION	REV'D	APP'D	DATE	
REVISIONS					
THUNDERBIRD PRODUCTS					
2200 W. MONROE ST., P.O. BOX 1003 DECATUR, IN 46733 (219) 724-9971					
TITLE: HARNESS 470 HEAD AC 110V					
DRAWN BY: STEVE JONES			SCALE: NONE		
APP'D BY: STEVE BOYCE			DATE: 7-31-02		
MATERIAL: SEE NOTES			FINISH: SEE NOTES		
PART 170739				SHEET 1 OF 1	

<https://www.boat-manuals.com/>

170833

POS	NO	DESCRIPTION	LEADS
1	1	100001T ASB CONN (HORN TO UNIT)	177*
2	2	100001T ASB CONN (HORN TO UNIT)	177*
3	3	100012T ASB CONN (HORN TO UNIT)	177*
4	4	100012T ASB CONN (HORN TO UNIT)	177*
5	5	100012T ASB CONN (HORN TO UNIT)	177*
6	6	100012T ASB CONN (HORN TO UNIT)	177*
7	7	100012T ASB CONN (HORN TO UNIT)	177*
8	8	100012T ASB CONN (HORN TO UNIT)	177*
9	9	100012T ASB CONN (HORN TO UNIT)	177*
10	10	100012T ASB CONN (HORN TO UNIT)	177*
11	11	100012T ASB CONN (HORN TO UNIT)	177*
12	12	100012T ASB CONN (HORN TO UNIT)	177*
13	13	100012T ASB CONN (HORN TO UNIT)	177*
14	14	100012T ASB CONN (HORN TO UNIT)	177*
15	15	100012T ASB CONN (HORN TO UNIT)	177*
16	16	100012T ASB CONN (HORN TO UNIT)	177*
17	17	100012T ASB CONN (HORN TO UNIT)	177*
18	18	100012T ASB CONN (HORN TO UNIT)	177*
19	19	100012T ASB CONN (HORN TO UNIT)	177*
20	20	100012T ASB CONN (HORN TO UNIT)	177*
21	21	100012T ASB CONN (HORN TO UNIT)	177*
22	22	100012T ASB CONN (HORN TO UNIT)	177*
23	23	100012T ASB CONN (HORN TO UNIT)	177*
24	24	100012T ASB CONN (HORN TO UNIT)	177*
25	25	100012T ASB CONN (HORN TO UNIT)	177*
26	26	100012T ASB CONN (HORN TO UNIT)	177*
27	27	100012T ASB CONN (HORN TO UNIT)	177*
28	28	100012T ASB CONN (HORN TO UNIT)	177*
29	29	100012T ASB CONN (HORN TO UNIT)	177*
30	30	100012T ASB CONN (HORN TO UNIT)	177*
31	31	100012T ASB CONN (HORN TO UNIT)	177*
32	32	100012T ASB CONN (HORN TO UNIT)	177*
33	33	100012T ASB CONN (HORN TO UNIT)	177*
34	34	100012T ASB CONN (HORN TO UNIT)	177*
35	35	100012T ASB CONN (HORN TO UNIT)	177*
36	36	100012T ASB CONN (HORN TO UNIT)	177*
37	37	100012T ASB CONN (HORN TO UNIT)	177*
38	38	100012T ASB CONN (HORN TO UNIT)	177*
39	39	100012T ASB CONN (HORN TO UNIT)	177*
40	40	100012T ASB CONN (HORN TO UNIT)	177*
41	41	100012T ASB CONN (HORN TO UNIT)	177*
42	42	100012T ASB CONN (HORN TO UNIT)	177*
43	43	100012T ASB CONN (HORN TO UNIT)	177*
44	44	100012T ASB CONN (HORN TO UNIT)	177*
45	45	100012T ASB CONN (HORN TO UNIT)	177*
46	46	100012T ASB CONN (HORN TO UNIT)	177*
47	47	100012T ASB CONN (HORN TO UNIT)	177*
48	48	100012T ASB CONN (HORN TO UNIT)	177*
49	49	100012T ASB CONN (HORN TO UNIT)	177*
50	50	100012T ASB CONN (HORN TO UNIT)	177*
51	51	100012T ASB CONN (HORN TO UNIT)	177*
52	52	100012T ASB CONN (HORN TO UNIT)	177*
53	53	100012T ASB CONN (HORN TO UNIT)	177*
54	54	100012T ASB CONN (HORN TO UNIT)	177*
55	55	100012T ASB CONN (HORN TO UNIT)	177*

A

B

C

D

E

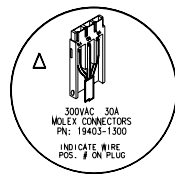
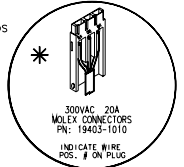
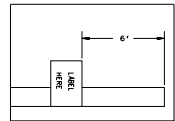
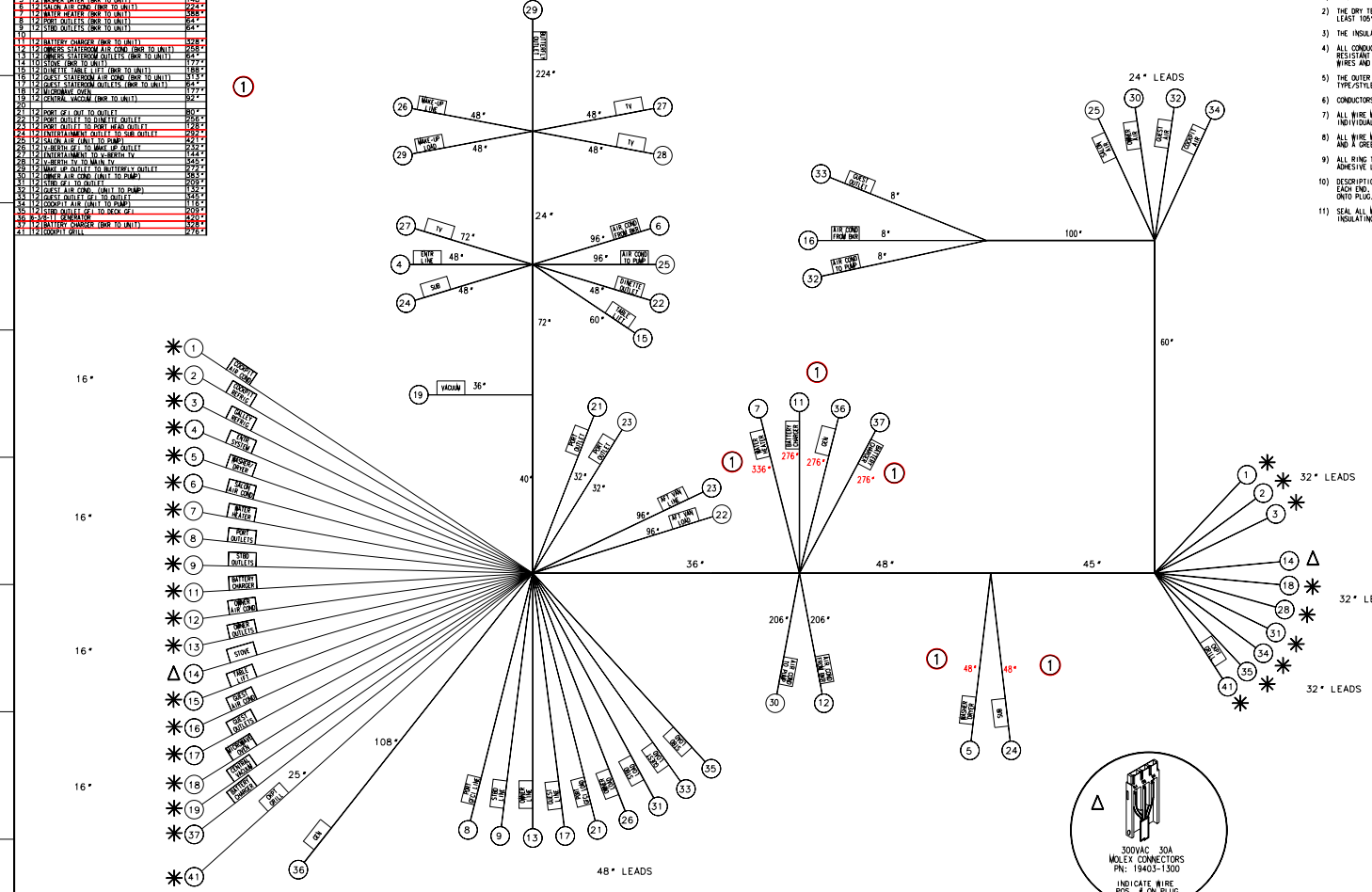
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G

H

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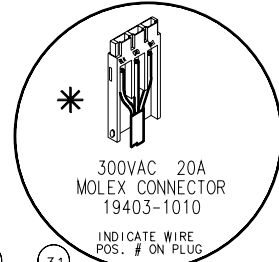
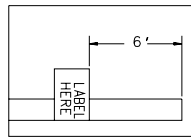
- NOTES:
- 1) CONDUCTORS SHALL HAVE A MINIMUM RATING OF 600 VOLTS.
 - 2) THE OVR TEMPERATURE RATING OF INSULATION SHALL BE AT LEAST 100° CELSIUS.
 - 3) THE INSULATION SHALL BE OIL RESISTANT.
 - 4) ALL CONDUCTORS SHALL MEET THE FLAME RETARDANT AND MOISTURE RESISTANT REQUIREMENTS OF UL 85, "THERMOPLASTIC-INSULATED WIRES AND CABLES".
 - 5) THE OUTER JACKET SHALL BE MARKED WITH THE FOLLOWING INFORMATION: TYPE/STYLE, VOLTAGE, WIRE SIZE, AND TEMPERATURE RATING DRY.
 - 6) CONDUCTORS SHALL BE STRANDED THREE COPPER.
 - 7) ALL WIRE MUST CONFORM OF AN OUTER JACKET SURROUNDING THREE INDIVIDUALLY INSULATED CONDUCTORS.
 - 8) ALL WIRE MUST HAVE A BLUE GLAD CONDUCTOR, A BROWN GLAD CONDUCTOR, AND A GREEN/YELLOW GLAD CONDUCTOR, UNLESS OTHERWISE SPECIFIED.
 - 9) ALL RING TERMINALS MUST HAVE THE SHANK INSULATED WITH DUAL WALLED ADHESIVE LINED SHRINK TUBING.
 - 10) DESCRIPTIONS TO BE TAGGED, AS MARKED, ONTO EVERY LEAD 6" FROM EACH END. MOLEX PLUGS SHALL HAVE POSITION NUMBER TAPED ONTO PLUG.
 - 11) SEAL ALL MOLEX CONNECTORS WITH DON CORNING/ICI 4-ELECTRICAL INSULATING COMPOUND.



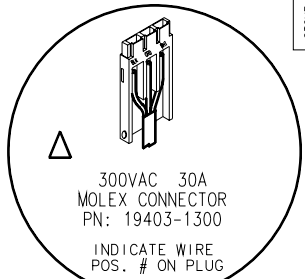
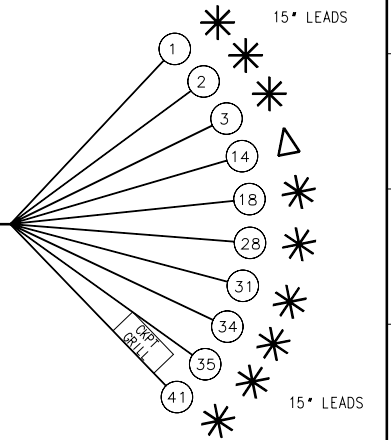
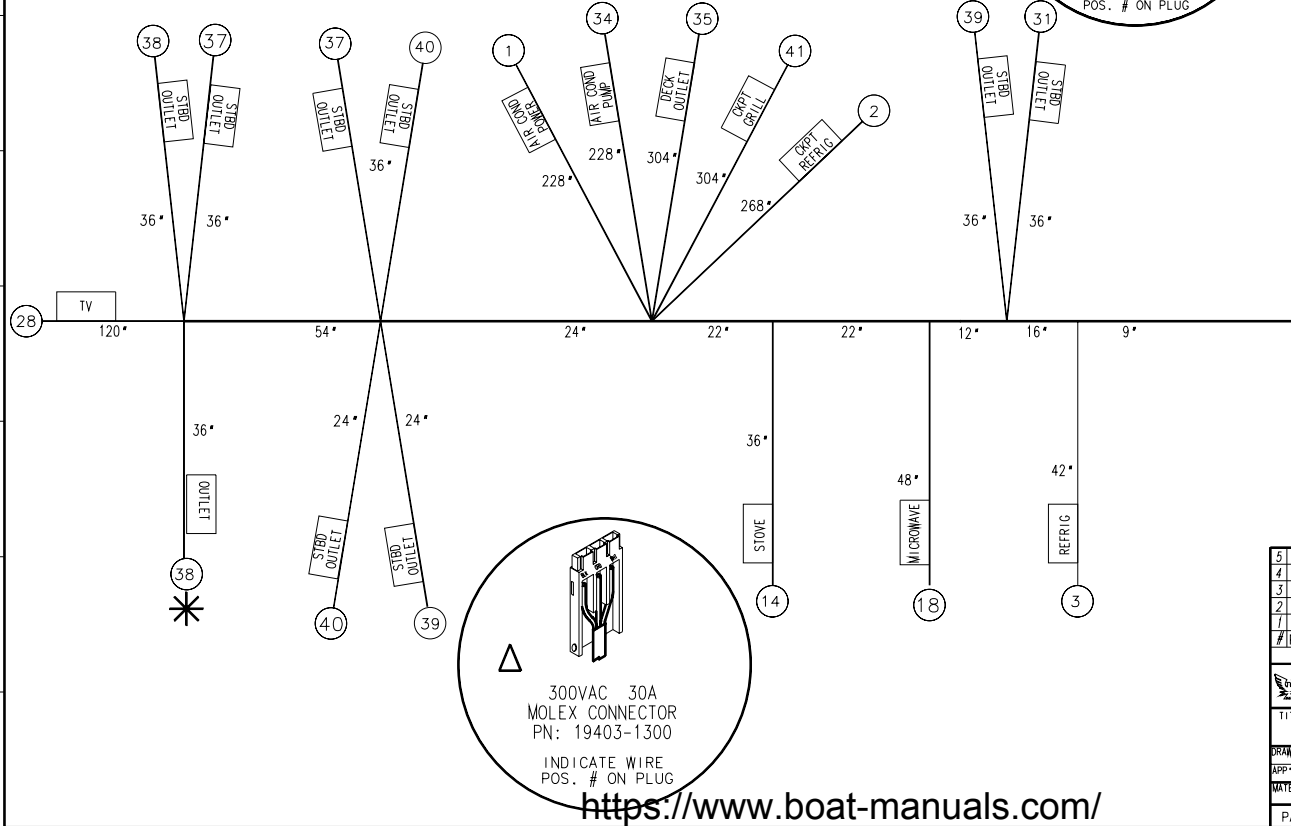
DATE	
DRAWN BY	CHRIS MOKERY
CHECKED BY	STEVE BOVRE
APPROVED BY	
DATE	7/28/04
REV	1

THUNDERBIRD PRODUCTS
 PART # 202290
 SHEET 1 OF 1

POS	GA	DESCRIPTION	LENGTH
1	12	COCKPIT AIR COND (BKR TO UNIT)	324"
2	12	COCKPIT REFRIG (BKR TO UNIT)	364"
3	12	GALLEY REFRIG (BKR TO UNIT)	66"
14	10	STOVE (BKR TO UNIT)	110"
18	12	MICROWAVE OVEN	100"
28	12	IV-BERTH TV TO MAIN TV	294"
31	12	STBD GF1 TO OUTLET	76"
34	12	COCKPIT AIR (UNIT TO PUMP)	324"
35	12	STBD OULET GF1 TO DECK GF1	400"
37	12	STBD OULET TO STBD OULET	126"
38	12	STBD OULET TO STBD OULET	72"
39	12	STBD OULET TO STBD OULET	140"
40	12	STBD OULET TO STBD OULET	60"
41	12	COCKPIT GRILL	400"



- NOTES:
- 1) CONDUCTORS SHALL HAVE A MINIMUM RATING OF 600 VOLTS.
 - 2) THE DRY TEMPERATURE RATING OF INSULATION SHALL BE AT LEAST 105° CELCIUS.
 - 3) THE INSULATION SHALL BE OIL RESISTANT.
 - 4) ALL CONDUCTORS SHALL MEET THE FLAME RETARDANT AND MOISTURE RESISTANT REQUIREMENTS OF UL 83, "THERMOPLASTIC-INSULATED WIRES AND CABLES".
 - 5) THE OUTER JACKET SHALL BE MARKED WITH THE FOLLOWING INFORMATION: TYPE/STYLE, VOLTAGE, WIRE SIZE, AND TEMPERATURE RATING DRY.
 - 6) CONDUCTORS SHALL BE STRANDED TINNED COPPER.
 - 7) ALL WIRE MUST CONSIST OF AN OUTER JACKET SURROUNDING THREE INDIVIDUALLY INSULATED CONDUCTORS.
 - 8) ALL WIRE MUST HAVE A BLUE CLAD CONDUCTOR, A BROWN CLAD CONDUCTOR, AND A GREEN/YELLOW CLAD CONDUCTOR.
 - 9) ALL RING TERMINALS MUST HAVE THE SHANK INSULATED WITH DUAL WALLED ADHESIVE LINED SHRINK TUBING.
 - 10) DESCRIPTIONS TO BE TAGGED, AS MARKED, ONTO EVERY LEAD 6" FROM EACH END. MOLEX PLUGS SHALL HAVE POSITION NUMBER TAGED ONTO PLUG.
 - 11) SEAL ALL MOLEX CONNECTORS WITH DON CORNING(ER) 4-ELECTICAL INSULATING COMPOUND.



#	POS.	DESCRIPTION	REV'D	APP'D	DATE
5					
4					
3					
2					
1					

REVISIONS

THUNDERBIRD PRODUCTS
2200 W. MONROE ST., P.O. BOX 1003 DECATUR, IN 46733 (219) 724-9111

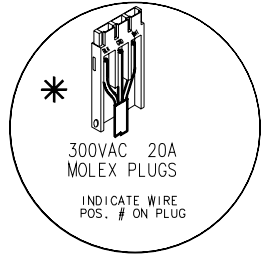
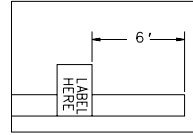
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DRAWN BY: CHRIS MOWERY SCALE: NONE
APP'D BY: STEVE BOYCE DATE: 7/8/04

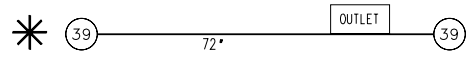
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PART 202289 SHEET 1 OF 1

POS	GA	DESCRIPTION	LENGTH
39	12	HEAD GFCI (FROM STBD. OUTLET)	72"

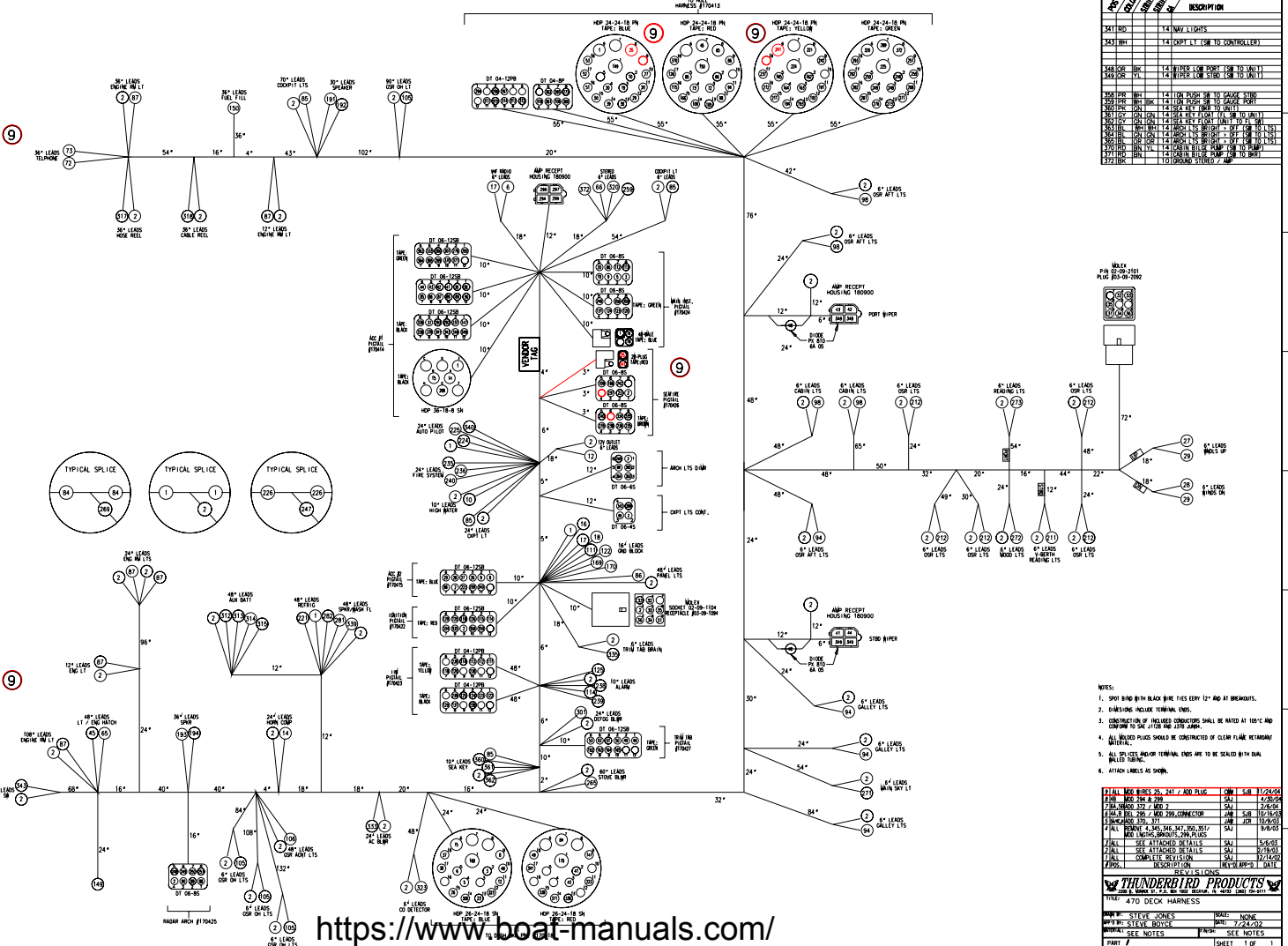


- NOTES:
- 1) CONDUCTORS SHALL HAVE A MINIMUM RATING OF 600 VOLTS.
 - 2) THE DRY TEMPERATURE RATING OF INSULATION SHALL BE AT LEAST 105° CELSIUS.
 - 3) THE INSULATION SHALL BE OIL RESISTANT.
 - 4) ALL CONDUCTORS SHALL MEET THE FLAME RETARDANT AND MOISTURE RESISTANT REQUIREMENTS OF UL 83, "THERMOPLASTIC-INSULATED WIRES AND CABLES".
 - 5) THE OUTER JACKET SHALL BE MARKED WITH THE FOLLOWING INFORMATION: TYPE/STYLE, VOLTAGE, WIRE SIZE, AND TEMPERATURE RATING DRY.
 - 6) CONDUCTORS SHALL BE STRANDED THINNED COPPER.
 - 7) ALL WIRE MUST CONSIST OF AN OUTER JACKET SURROUNDING THREE INDIVIDUALLY INSULATED CONDUCTORS.
 - 8) ALL WIRE MUST HAVE A BLUE CLAD CONDUCTOR, A BROWN CLAD CONDUCTOR, AND A GREEN/YELLOW CLAD CONDUCTOR.
 - 9) ALL RING TERMINALS MUST HAVE THE SHANK INSULATED WITH DUAL WALLED ADHESIVE LINED SHRINK TUBING.
 - 10) DESCRIPTIONS TO BE TAGGED, AS MARKED, ONTO EVERY LEAD 6" FROM EACH END. MOLEX PLUGS SHALL HAVE POSITION NUMBER TAPED ONTO PLUG.
 - 11) SEAL ALL MOLEX CONNECTORS WITH DOW CORNING® 4-ELECTRICAL INSULATING COMPOUND.



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#	POS.	DESCRIPTION	REV'D	APP'D	DATE
REVISIONS					
 THUNDERBIRD PRODUCTS <small>2200 W. MONROE ST. P.O. BOX 1003 DECATUR, IN 46733 (219) 724-9111</small>					
TITLE: HARNESS 470 HEAD AC 220V					
DRAWN BY: CHRIS MOWERY			SCALE: NONE		
APP'D BY: STEVE BOYCE			DATE: 7/8/04		
MATERIAL: SEE NOTES			FINISH: SEE NOTES		
PART 202291			SHEET 1 OF 1		

PN	REV	DATE	DESCRIPTION
1			112111-001
2			112111-002
3			112111-003
4			112111-004
5			112111-005
6			112111-006
7			112111-007
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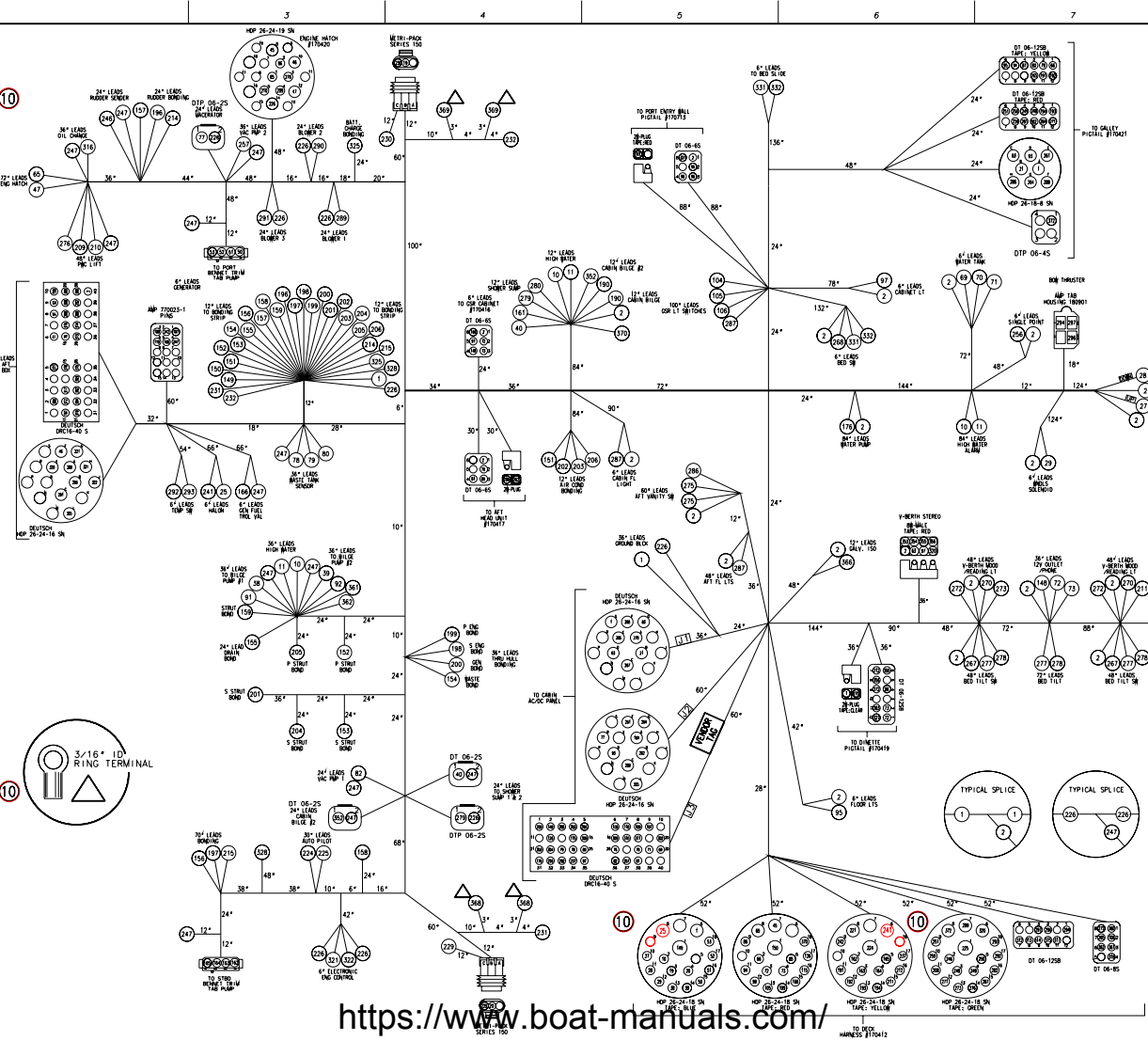


- NOTES:
1. SPOT BOND WITH BLACK BOND TIE TIES EVERY 12" AND AT BENDPOINTS.
 2. DIMENSIONS INCLUDE TERMINAL ENDS.
 3. CONSTRUCTION OF HELI-COIL CONNECTORS SHALL BE MET AT 100°C AND CAPABLE TO PASS 3000 CYCLE VIBRATION TEST.
 4. ALL WELDED POINTS SHALL BE CONSTRUCTED OF CLEAN FLAME RESIDUAL.
 5. ALL SPLICES INCLUDE TERMINAL ENDS ARE TO BE SEALED WITH DUAL BREADED TUBING.
 6. ATTENTION UNLESS SO SHOWN.

PART NO	REV	DATE	DESCRIPTION
112111-001			112111-001
112111-002			112111-002
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THUNDERBOLT PRODUCTS
 470 DECK HARNESS
 DRAWN BY: STEVE JONES
 CHECKED BY: STEVE BOCKE
 PART: 7
 SHEET: 1 OF 1

NO.	QTY.	ITEM NO.	DESCRIPTION
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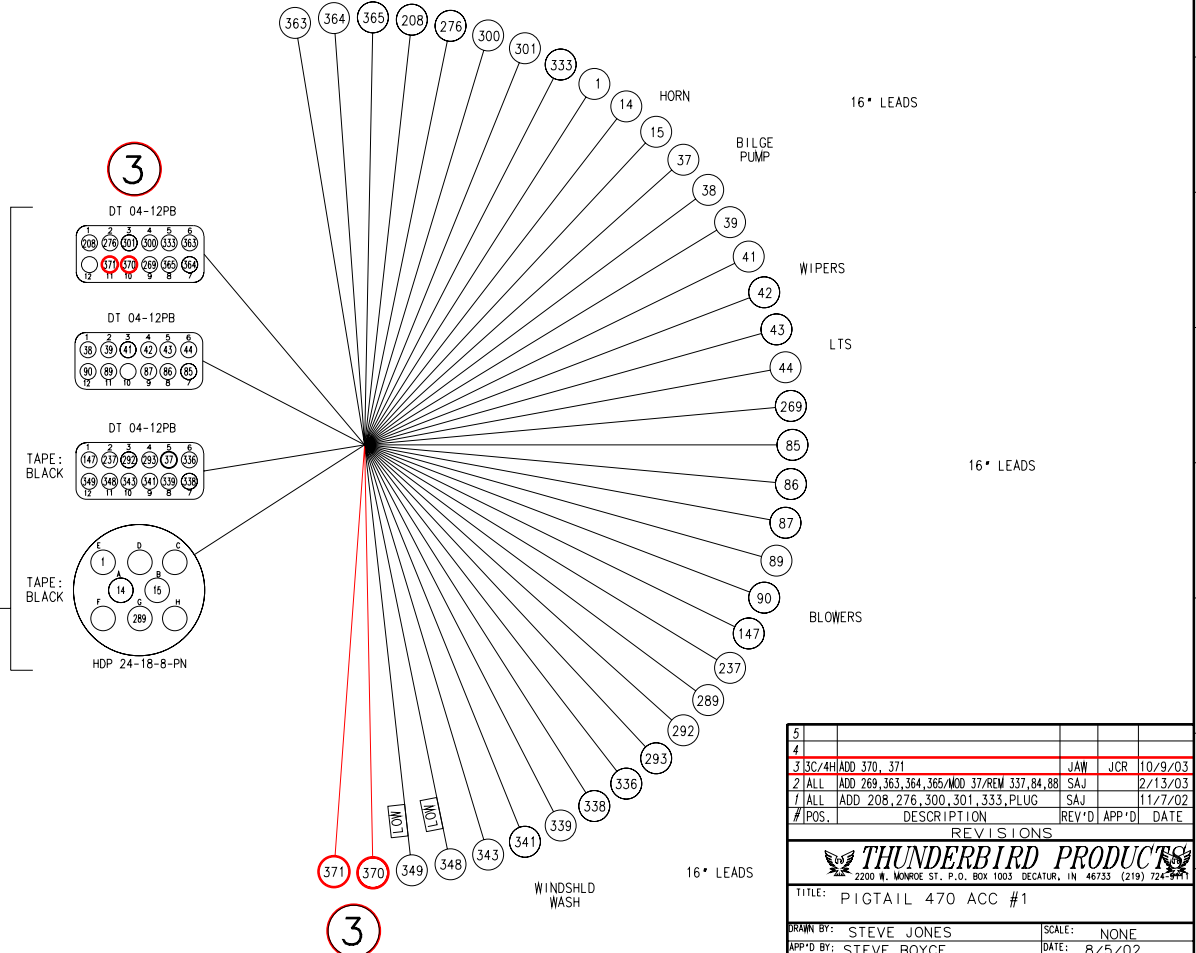
- NOTES:
- SPIN BUSH WITH BLACK BUSH TIES EVERY 12" AND AT BRACKET.
 - DRIVE SHAFT INSIDE TUBING ENDS.
 - CONNECTION OF INSULATED CONDUITS SHALL BE MADE AT 90° AND CONFORM TO THE ATTRA AND ZETA STAND.
 - ALL WELDED PLACES SHOULD BE PROTECTED BY CLEAN FLAME RESISTANT TREATMENT.
 - ALL SPLICES AND/OR TERMINAL ENDS ARE TO BE SEALED WITH DUAL BRUSH LAMINA.
 - ATTACH LEADS AS SHOWN.

ITEM NO.	QTY.	DESCRIPTION
1	1	1/4" DIA. BRUSH LAMINA
2	1	1/4" DIA. BRUSH LAMINA
3	1	1/4" DIA. BRUSH LAMINA
4	1	1/4" DIA. BRUSH LAMINA
5	1	1/4" DIA. BRUSH LAMINA
6	1	1/4" DIA. BRUSH LAMINA
7	1	1/4" DIA. BRUSH LAMINA
8	1	1/4" DIA. BRUSH LAMINA
9	1	1/4" DIA. BRUSH LAMINA
10	1	1/4" DIA. BRUSH LAMINA

THUNDERBIRD PRODUCTS
 470 HULL HARNESS
 DRAWN BY: STEVE JONES DATE: NONE
 PART NO: 81-27-202 REV: 6/22/02
 SEE NOTES
 PART #/REV: SHEET 1 OF 1

POS	COL OR STRIP	DESCRIPTION
1	BK	10 MAIN GROUND
14	OR WH	10 HORN (SW TO COMPRESSOR)
15	OR WH	10 HORN (BKR TO SW)
37	BN WH	14 BILGE PUMP PORT (BKR TO SW)
38	BN	14 BILGE PUMP (STBD SW TO PUMP)
39	BN BK	14 BILGE PUMP (PORT SW TO PUMP)
41	OR RD	14 WIPER STBD (BKR TO SW)
42	OR BK	14 WIPER PORT (SW TO UNIT)
43	OR BK RD	14 WIPER PORT (BKR TO SW)
44	OR YL	14 WIPER STBD (SW TO UNIT)
85	BL WH	14 COCKPIT LTS (SW TO LTS)
86	BL	14 PANEL LTS (SW TO LTS)
87	BL WH YL	14 ENGINE ROOM LTS (SW TO LTS)
89	GY WH	14 NAVIGATION LTS (SW TO LTS)
90	GY RD	14 ANCHOR LT (SW TO LT)
147	BN WH YL	14 BILGE PUMP STBD (BKR TO SW)
208	OR GN RD	14 PWC ON/OFF (BKR TO SW)
237	YL BN	14 BLOWER (FIRE SYS TO SOLENOID)
269	BL RD	14 DASH LTS (BKR TO SW)
276	OR BK BK	14 PWC ON/OFF (SW TO PUMP)
289	YL BL RD	10 BLOWER #1 (SOL TO INDICATOR LT ON SW)
292	YL	14 BLOWER (SW TO SOLENOID)
293	YL WH	14 BLOWER (SW TO TEMP SW)
300	YL RD BK	14 DEFOG (BKR TO SW)
301	YL BK WH	14 DEFOG (SW TO BLOWER)
333	YL BK BK	14 AC BLOWER (SW TO BLOWER)
336	BL WH YL	14 ENG ROOM LTS (BKR TO SW)
338	WH GY	14 WINDSHIELD WASH (BKR TO SW)
339	WH GY GY	14 WINDSHIELD WASH (SW TO PUMP)
341	RD	14 NAV LIGHTS
343	WH	14 CRKPT LT (SW TO CONTROLLER)
348	OR BK	14 WIPER LOW PORT (SW TO UNIT)
349	OR YL	14 WIPER LOW STBD (SW TO UNIT)
363	BL WH WH	14 ARCH LTS SW FEED (MOD TO SW)
364	BL GN GN	14 ARCH LTS SW DOWN (SW TO MOD)
365	BL OR OR	14 ARCH LTS UP (SW TO MOD)
370	RD BN YL	14 CABIN BILGE PUMP (SW TO PUMP)
371	RD BN	14 CABIN BILGE PUMP (SW TO BKR)

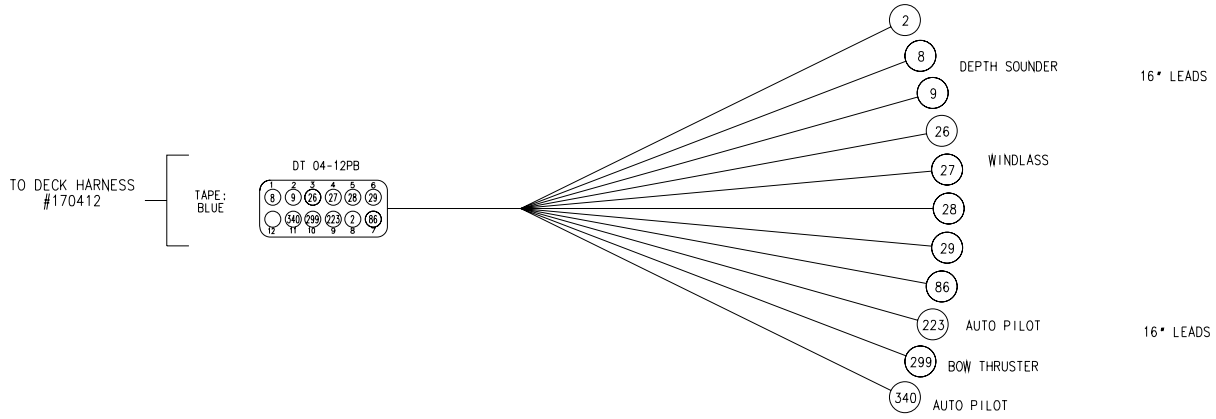
TO DECK HARNESS #170412



- NOTES:
1. SPOT BIND WITH BLACK WIRE TIES EVERY 12" AND AT BREAKOUTS.
 2. DIMENSIONS INCLUDE TERMINAL ENDS.
 3. CONSTRUCTION OF INCLUDED CONDUCTORS SHALL BE RATED AT 105°C AND CONFORM TO SAE J1128 AND J378 JUN84.
 4. ALL MOLDED PLUGS SHOULD BE CONSTRUCTED OF CLEAR FLAME RETARDANT MATERIAL.
 5. ALL SPLICES AND/OR TERMINAL ENDS ARE TO BE SEALED WITH DUAL WALLED TUBING.
 6. ATTACH LABELS AS SHOWN.

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3	3C/4H	ADD 370, 371	JAW	JCR	10/9/03
2	ALL	ADD 269, 363, 364, 365/MOD 37/REV 337, 84, 88	SAJ		2/13/03
1	ALL	ADD 208, 276, 300, 301, 333, PLUG	SAJ		11/7/02
	# POS.	DESCRIPTION	REV'D	APP'D	DATE
REV I S I O N S					
THUNDERBIRD PRODUCTIONS					
2200 N. MONROE ST., P.O. BOX 1005, DECATUR, IN 46733 (219) 724-8471					
TITLE: PIGTAIL 470 ACC #1					
DRAWN BY: STEVE JONES			SCALE: NONE		
APP'D BY: STEVE BOYCE			DATE: 8/5/02		
MATERIAL: SEE NOTES			FINISH: SEE NOTES		
PART #			SHEET 1 OF 1		

POS	COL	STRIP	DESCRIPTION
2	BK		14 SECONDARY GROUND
8	OR	BN BK	14 DEPTH SOUNDER (BKR TO SW)
9	OR	BN BK	14 DEPTH SOUNDER (SW TO UNIT)
26	OR	YL RD	14 WINDLASS (BKR TO SW)
27	OR	BL	14 WINDLASS (SW TO UP SOLND)
28	OR	BL BL	14 WINDLASS (SW TO DN SOLND)
29	OR	YL YL	14 WINDLASS ON/OFF SW (SW TO FORE & AFT SOL)
86	BL		14 PANEL LIGHTS (SW TO LTS)
223	OR	GN GN	14 AUTO PILOT (BKR TO SW)
299	GY	OR OR	14 BOW THRUSTER (SW TO SOL)
340	OR	GN	14 AUTO PILOT (SW TO UNIT)

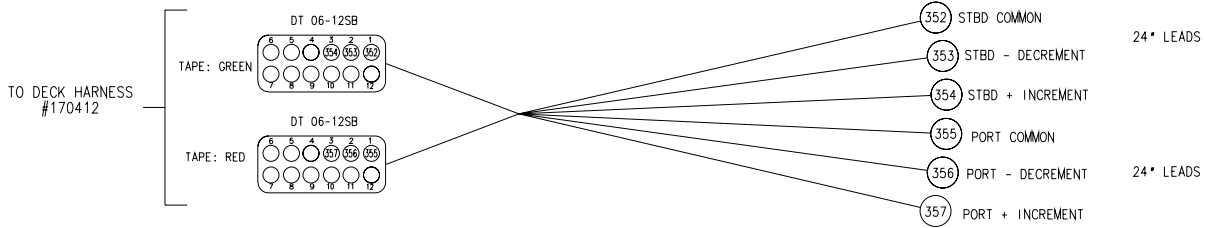


NOTES:

1. SPOT BIND WITH BLACK WIRE TIES EVERY 12" AND AT BREAKOUTS.
2. DIMENSIONS INCLUDE TERMINAL ENDS.
3. CONSTRUCTION OF INCLUDED CONDUCTORS SHALL BE RATED AT 105°C AND CONFORM TO SAE J1128 AND J378 JUN84.
4. ALL MOLDED PLUGS SHOULD BE CONSTRUCTED OF CLEAR FLAME RETARDANT MATERIAL.
5. ALL SPLICES AND/OR TERMINAL ENDS ARE TO BE SEALED WITH DUAL WALLED TUBING.
6. ATTACH LABELS AS SHOWN.

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# POS.	DESCRIPTION	REV'D	APP'D	DATE
REVISIONS				
THUNDERBIRD PRODUCTS				
2200 W. MONROE ST., P.O. BOX 1003 DECATUR, IN 46733 (219) 724-3441				
TITLE: PIGTAIL 470 ACC #2				
DRAWN BY: STEVE JONES		SCALE: NONE		
APP'D BY: STEVE BOYCE		DATE: 8/5/02		
MATERIAL: SEE NOTES		FINISH: SEE NOTES		
PART #		SHEET 1 OF 1		

POS	COLOR	STRIPES	DESCRIPTION
352	BL	1.4	STBD COMMON
353	WH	1.4	STBD - DECREMENT
354	CY	1.4	STBD + INCREMENT
355	YL	1.4	PORT COMMON (SWITCH TO IIM)
356	OR	1.4	PORT - DECREMENT
357	GN	1.4	PORT + INCREMENT



- NOTES:
1. SPOT BIND WITH BLACK WIRE TIES EVERY 12" AND AT BREAKOUTS.
 2. DIMENSIONS INCLUDE TERMINAL ENDS.
 3. CONSTRUCTION OF INCLUDED CONDUCTORS SHALL BE RATED AT 105°C AND CONFORM TO SAE J1128 AND J378 JUN84.
 4. ALL MOLDED PLUGS SHOULD BE CONSTRUCTED OF CLEAR FLAME RETARDANT MATERIAL.
 5. ALL SPLICES AND/OR TERMINAL ENDS ARE TO BE SEALED WITH DUAL WALLED TUBING.
 6. ATTACH LABELS AS SHOWN.

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# POS.	DESCRIPTION	REV'D	APP'D	DATE
REVISIONS				
 THUNDERBIRD PRODUCTS <small>2200 W. MONROE ST. P.O. BOX 1003 DECATUR, IN 46733 (219) 724-9971</small>				
TITLE: PIGTAIL 470 ACC #3				
DRAWN BY: STEVE JONES		SCALE: NONE		
APP'D BY:		DATE: 9/12/02		
MATERIAL: SEE NOTES		FINISH: SEE NOTES		
PART #		SHEET 1 OF 1		

POS	COLOR	STRIP	DESCRIPTION
2	BK		14 SECONDARY GROUND
72	RD		14 TELEPHONE (SHORE TO PHONE)
73	GN		14 TELEPHONE (SHORE TO PHONE)
97	L TBL OR		14 CABINET LTS (BKR TO LTS)
148	OR BNBL		14 12V + CABIN OUTLET (BKR TO OUTLET)

TO HULL HARNESS
#170413



138"

12* LEADS



- NOTES:
1. SPOT BIND WITH BLACK #16 WIRE TIES EVERY 12" AND AT BREAKOUTS.
 2. DIMENSIONS INCLUDE TERMINAL ENDS.
 3. CONSTRUCTION OF INCLUDED CONDUCTORS SHALL BE RATED AT 105°C AND CONFORM TO SAE J1128 AND J378 JUN84.
 4. ALL MOLDED PLUGS SHOULD BE CONSTRUCTED OF CLEAR FLAME RETARDANT MATERIAL.
 5. ALL SPLICES AND/OR TERMINAL ENDS ARE TO BE SEALED WITH DUAL WALLED TUBING.
 6. ATTACH LABELS AS SHOWN.

#	POS.	DESCRIPTION	REV'D	APP'D	DATE
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REVISIONS

THUNDERBIRD PRODUCTS
2200 W. MONROE ST., P.O. BOX 1003 DECATUR, IN 46733 (219) 724-9911

TITLE: PIGTAIL 470 AFT CABIN CABINET

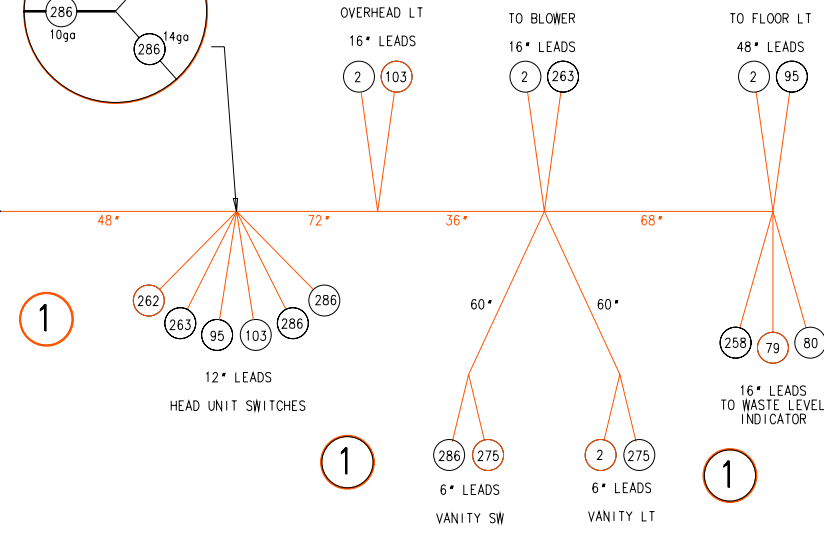
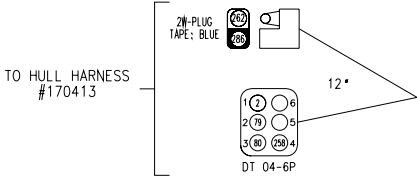
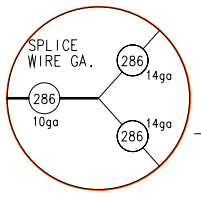
DRAWN BY: STEVE JONES SCALE: NONE

APP'D BY: STEVE BOYCE DATE: 8/5/02

MATERIAL: SEE NOTES FINISH: SEE NOTES

PART # _____ SHEET 1 OF 1

POS	COLOR	STRIP LENGTH	DESCRIPTION
2	BK		14 SECONDARY GROUND
79	WH	YL BK	14 WASTE HOLDING TANK (1/2)
80	YL	WH BK	14 WASTE HOLDING TANK (FULL)
95	LTBL		14 MAIN CABIN FLOOR LTS (SW TO LTS)
103	LTBL	WH RD	14 OVERHEAD LT IN HEAD (SW TO LT)
258	BN	RD	14 HEAD PUMP #2 (BKR TO PUMP)
262	YL	GNRD	10 HEAD #2 (BREAKER TO SW)
263	YL		14 HEAD #2 (SW TO BLOWER)
275	LTBL	GNGN	14 V-BERTH VANITY (SW TO LTS)
286	LTBL	BN RD	10 HEAD LTS (BKR TO SW)



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- NOTES:
1. SPOT BIND WITH BLACK WIRE TIES EVERY 12" AND AT BREAKOUTS.
 2. DIMENSIONS INCLUDE TERMINAL ENDS.
 3. CONSTRUCTION OF INCLUDED CONDUCTORS SHALL BE RATED AT 105°C AND CONFORM TO SAE J1128 AND J378 JUN84.
 4. ALL WOLDED PLUGS SHOULD BE CONSTRUCTED OF CLEAR FLAME RETARDANT MATERIAL.
 5. ALL SPLICES AND/OR TERMINAL ENDS ARE TO BE SEALED WITH DUAL WALLED TUBING.
 6. ATTACH LABELS AS SHOWN.

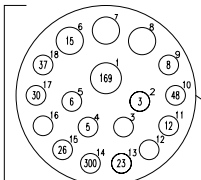
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1	ALL	MODIFY BREAKOUTS	SAJ		11/18/02
	POS.	DESCRIPTION	REV'D	APP'D	DATE
REVISIONS					
THUNDERBIRD PRODUCTS					
2200 W. MONROE ST., P.O. BOX 1003 DECATUR, IN 46733 (219) 724-9911					
TITLE: PIGTAIL 470 AFT HEAD					
DRAWN BY: STEVE JONES			SCALE: NONE		
APP'D BY: STEVE BOYCE			DATE: 8/1/02		
MATERIAL: SEE NOTES			FINISH: SEE NOTES		
PART #			SHEET 1 OF 1		

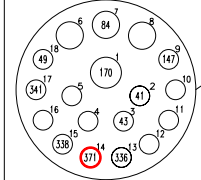
170417

POS	COLOR	STRIP	STRIP	DESCRIPTION
4	OR	GY	14	RADAR (BKR TO RADAR)
5	OR	BN	14	GPS (BKR TO GPS)
6	RD	BL	14	VHF RADIO (BKR TO RADIO)
8	OR	BN	14	DEPTH SOUNDER (BKR TO SW)
12	OR	PR	14	12V DASH OUTLET (BKR TO OUTLET)
15	OR	WH	10	HORN (BKR TO SW)
23	YL	BN	14	BLOWERS (BKR TO SW)
26	OR	YL	14	WINDLASS (BKR TO SW)
30	GY	OR	14	SPOTLIGHT (BKR TO SW)
37	BN	WH	14	BILGE PUMP PORT (BKR TO SW)
41	OR	RD	14	WIPER STBD (BKR TO SW)
43	OR	BK	14	WIPER PORT (BKR TO SW)
48	OR	BK	14	TRIM TAB + PORT (BKR TO SW)
49	OR		14	TRIM TAB + STBD (BKR TO SW)
84	BL	RD	10	DASH LTS (BKR TO SW)
147	BN	WH	14	BILGE PUMP STBD (BKR TO SW)
169	RD		8	12 VOLT + BKR FEED (PLEX BLOCK TO BKR)
170	RD		8	12 VOLT + BKR FEED (PLEX BLOCK TO BKR)
223	OR	GN	14	AUTO PILOT (BKR TO UNIT)
300	YL	RD	14	DEFOG (BKR TO SW)
336	BL	WH	14	ENG ROOM LTS (BKR TO SW)
338	WH	GY	14	WINDSHIELD WASH (BKR TO SW)
341	RD		14	NAV LIGHTS
371	RD	BN	14	CABIN BILGE PUMP (SW TO BKR)

TO DECK HARNESS #170412



HDP 24-24-18 PN
TAPE: BLUE



HDP 24-24-18 PN
TAPE: RED

4

4

INCLUDE: 2-PANEL NUT PN# 2411-001-2405
2-GASKET PN# 16-04477

NOTES:

- SPOT BIND WITH BLACK WIRE TIES EVERY 12" AND AT BREAKOUTS.
- DIMENSIONS INCLUDE TERMINAL ENDS.
- CONSTRUCTION OF INCLUDED CONDUCTORS SHALL BE RATED AT 105°C AND CONFORM TO SAE J1128 AND J378 JUN84.
- ALL MOLDED PLUGS SHOULD BE CONSTRUCTED OF CLEAR FLAME RETARDANT MATERIAL.
- ALL SPLICES AND/OR TERMINAL ENDS ARE TO BE SEALED WITH DUAL WALLED TUBING.
- ATTACH LABELS AS SHOWN

#	POS.	DESCRIPTION	REV'D	APP'D	DATE
4	4E/6F	ADD 371	JAW	JCR	10/9/03
3	ALL	REM 4, 323	SAJ		9/4/03
2	4B/6G	MOD 37 / REM 337	SAJ		2/13/03
1	4D, 6F	MODIFY 49&50 / ADD 300&323	SAJ		11/7/02

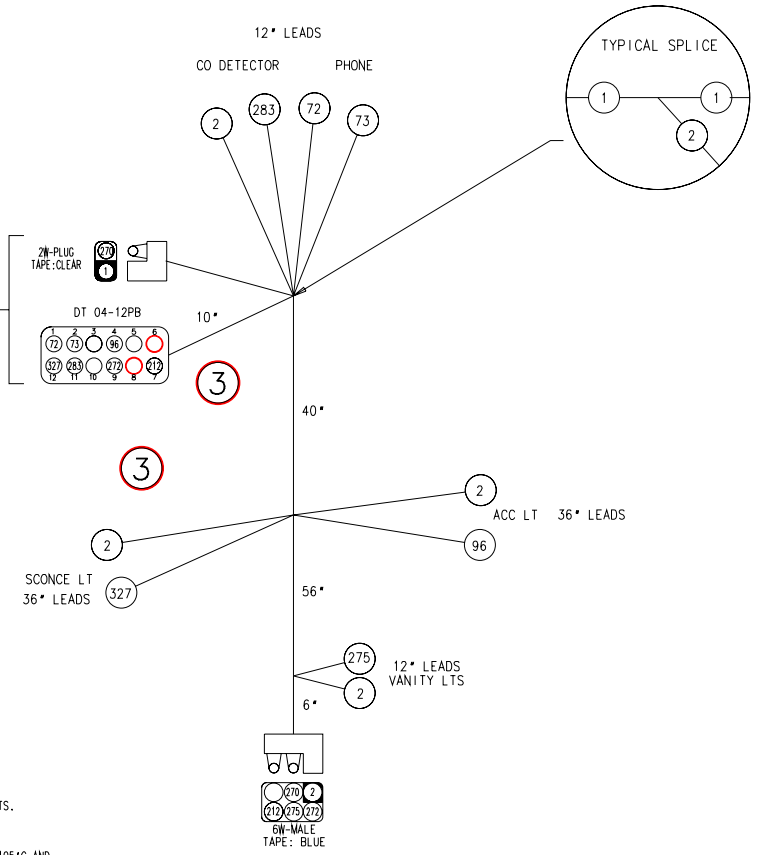
REVISIONS

THUNDERBIRD PRODUCTS
2200 W. MONROE ST., P.O. BOX 1003 DECATUR, IN 46733 (260) 724-9111

TITLE: PIGTAIL 470 DASH BREAKER

DRAWN BY: STEVE JONES SCALE: NONE
APP'D BY: STEVE BOYCE DATE: 8/1/02
MATERIAL: SEE NOTES FINISH: SEE NOTES
PART # SHEET 1 OF 1

POS	COL OR STRIP	STRIP	DESCRIPTION
1	BK		10 MAIN GROUND
2	BK		14 SECONDARY GROUND
72	RD		14 TELEPHONE (SHORE TO PHONE)
73	GN		14 TELEPHONE (SHORE TO PHONE)
96	TBLBK		14 MAIN CABIN ACCENT LTS (SW TO LTS)
212	L TBLBK YL		14 OSR FWD LTS (SW TO LTS)
270	L TBLTNRD		10 OSR LIGHT (BKR TO SW)
272	L TBLTNGN		14 OSR MOOD (SW TO LTS)
275	L TBLGNGN		14 OSR VANITY LTS (SW TO LTS)
283	OR	PRRD	14 CO DETECT SALON (BKR TO UNIT)
327	L TBLPRYL		14 SCONCE LT (SW TO LT)



- NOTES:
- SPOT BIND WITH BLACK WIRE TIES EVERY 12" AND AT BREAKOUTS.
 - DIMENSIONS INCLUDE TERMINAL ENDS.
 - CONSTRUCTION OF INCLUDED CONDUCTORS SHALL BE RATED AT 105°C AND CONFORM TO SAE J1128 AND J378 JUN84.
 - ALL MOLDED PLUGS SHOULD BE CONSTRUCTED OF CLEAR FLAME RETARDANT MATERIAL.
 - ALL SPLICES AND/OR TERMINAL ENDS ARE TO BE SEALED WITH DUAL HALLED TUBING.
 - ATTACH LABELS AS SHOWN.

#	POS.	DESCRIPTION	REV'D	APP'D	DATE
3	SD	REV 355, 356		SAJ	SJB 11/2/04
2	ALL	REV 95, 148/ MOD 2, 96, 283, 327, 355, 356		SAJ	SJB 2/13/03
1	ALL	TOTAL REVISION		SAJ	SJB 11/18/02

REVISIONS

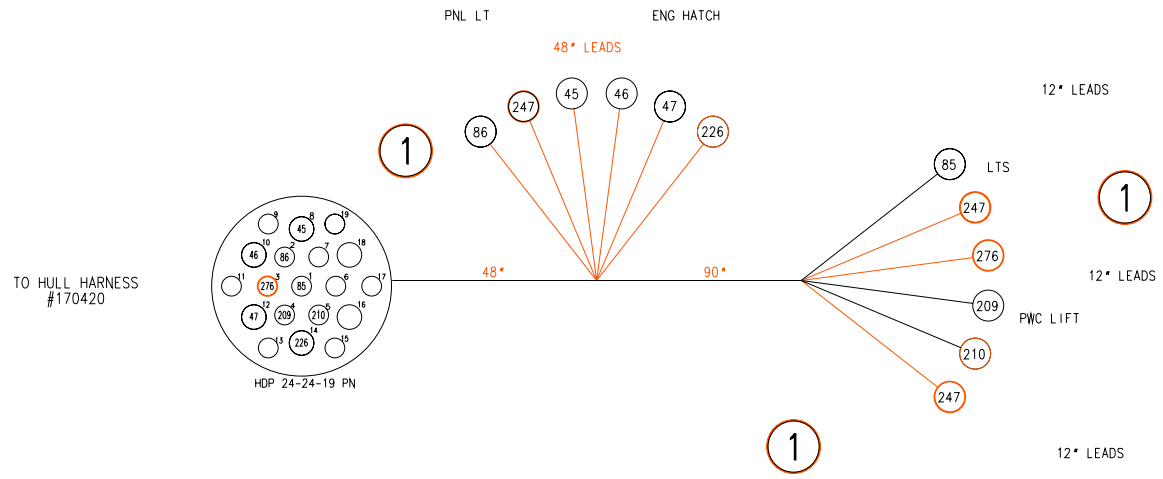
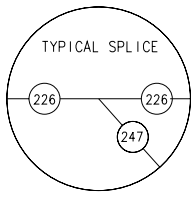
THUNDERBIRD PRODUCTS
2200 W. MONROE ST., P.O. BOX 1003, DECATUR, IN 46735 (219) 724-9111

TITLE: PIGTAIL 470 DINETTE

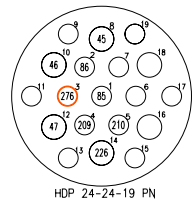
DRAWN BY: STEVE JONES SCALE: NONE
 APP'D BY: STEVE BOYCE DATE: 8/2/02
 MATERIAL: SEE NOTES FINISH: SEE NOTES

PART # _____ SHEET 1 OF 1

POS	COLOR	STRIPES	STRIPES	DESCRIPTION
45	WH	RD	RD	10 ENG HATCH LIFT (DASH SW TO DOOR SW)
46	WH	RD	RD	10 ENG HATCH LIFT (BKR TO DASH SW)
47	WH	GN	GN	10 ENG HATCH LIFT (DASH SW TO RAM)
85	BL	WH	WH	14 COCKPIT LIGHTS (SW TO LTS)
86	BL			14 PANEL LIGHTS (SW TO LTS)
209	OR	WH	BL	14 PWC LIFT UP (REMOTE TO PUMP)
210	OR	WH	GN	14 PWC LIFT DOWN (REMOTES TO PUMP)
226	BK			10 SECOND MAIN GROUND
247	BK			14 SECONDARY GROUND
276	DR	BK	BK	14 PWC (SW TO PUMP)



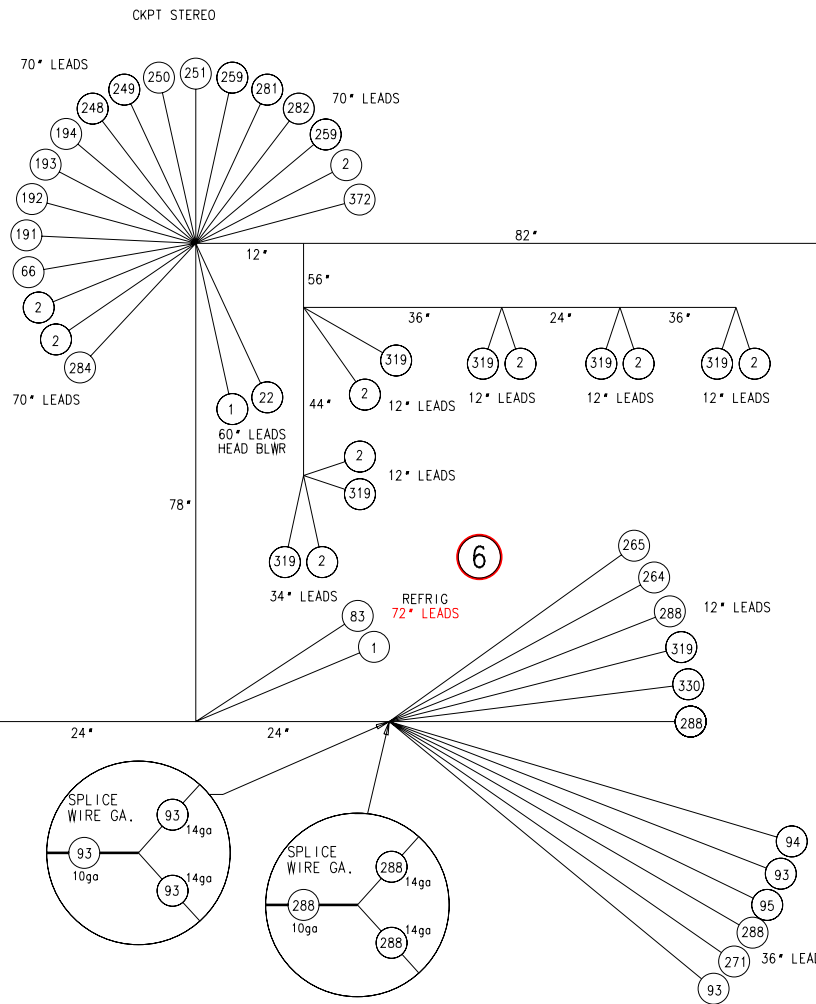
TO HULL HARNESS
#170420



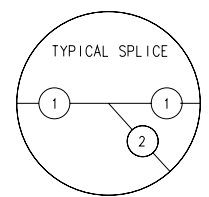
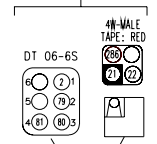
- NOTES:
- SPOT BIND WITH BLACK WIRE TIES EVERY 12" AND AT BREAKOUTS.
 - DIMENSIONS INCLUDE TERMINAL ENDS.
 - CONSTRUCTION OF INCLUDED CONDUCTORS SHALL BE RATED AT 105°C AND CONFORM TO SAE J1128 AND J378 JUN84.
 - ALL MOLDED PLUGS SHOULD BE CONSTRUCTED OF CLEAR FLAME RETARDANT MATERIAL.
 - ALL SPLICES AND/OR TERMINAL ENDS ARE TO BE SEALED WITH DUAL HALLED TUBING.
 - ATTACH LABELS AS SHOWN.

5					
4					
3					
2					
1	ALL	ADD 247, 276/REV. 208/MOD. LENGTHS	SAJ		11/15/02
# POS.	DESCRIPTION	REV'D	APP'D	DATE	
REVISIONS					
2200 W. MONROE ST., P.O. BOX 1003 DECATUR, IN 46733 (219) 724-9911					
TITLE: PIGTAIL 470 ENGINE HATCH					
DRAWN BY: STEVE JONES			SCALE: NONE		
APP'D BY: STEVE BOYCE			DATE: 8/5/02		
MATERIAL: SEE NOTES		FINISH: SEE NOTES			
PART #		SHEET 1 OF 1			

POS	COLOR	STRIP STRIPES GA	DESCRIPTION
1	BK		10 MAIN GROUND
2	BK		14 SECONDARY GROUND
21	YL	WH	10 HEAD BLOWER (BKR TO SW)
22	YL	WH	10 HEAD BLOWER (SW TO MTR)
66	OR		14 STEREO TRIGGER (RADIO TO AMPS)
79	WH	YL BK	14 WASTE HOLDING TANK (3/4)
80	YL	WH BK	14 WASTE HOLDING TANK (FULL)
81	BN	RD	14 HEAD PUMP (BKR TO MOD)
83	RD	BL	10 REFRIG (BKR TO UNIT)
93	LT	BL RD	10 MAIN CABIN LTS (BKR TO UNIT)
94	LT	BL WH	14 GALLEY OVERHEAD (SW TO LTS)
95	LT	BL	14 MAIN CABIN FLOOR LTS (SW TO LTS)
191	WH	YL YL	14 FRONT LEFT + (VOL CONT TO SPKR)
192	WH	BK BK	14 FRONT LEFT - (VOL CONT TO SPKR)
193	WH	OR OR	14 FRONT RIGHT + (VOL CONT TO SPKR)
194	WH	GN GN	14 FRONT RIGHT - (VOL CONT TO SPKR)
248	WH	PR PR	14 REAR LEFT + (VOL CONT TO SPKR)
249	WH	BN BN	14 REAR LEFT - (VOL CONT TO SPKR)
250	WH	RD RD	14 REAR RIGHT + (VOL CONT TO SPKR)
251	WH	BL BL	14 REAR RIGHT - (VOL CONT TO SPKR)
259	RD	GN WH	14 CKPT STEREO AMP (BKR TO AMP)
261	TN	RD GY	10 TV TILT SALON (BKR TO MTR)
264	YL	BN RD	10 STOVE VENT (BKR TO SW)
265	YL		14 STOVE VENT (SW TO MOTOR)
271	LT	BL TN	14 RACE TRACK LTS (SW TO LTS)
281	WH	OR	14 COCKPIT SUB +
282	WH	GN	14 COCKPIT SUB -
284	OR	TN RD	14 CO DETECTOR GUEST (BKR TO UNIT)
286	LT	BL BN RD	10 HEAD LTS (BKR TO SW)
288	LT	BL GN RD	10 GALLEY LTS (BKR TO SW)
319	LT	BL GN	14 GALLEY UNDER CABINET (SW TO LTS)
330	LT	BL TN GN	14 GALLEY MOOD LTS (SW TO LTS)
372	BK		10 GROUND STEREO/AMP



TO FORE HEAD UNIT #170439



NOTES:

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- ALL MOLDED PLUGS SHOULD BE CONSTRUCTED OF CLEAR FLAME RETARDANT MATERIAL.
- ALL SPLICES AND/OR TERMINAL ENDS ARE TO BE SEALED WITH DUAL WALLED TUBING.

#	POS.	DESCRIPTION	REV'D	APP'D	DATE
6	4B, 1H	MOD 83, 1 LENGTH	SAJ	SAJ	4/20/04
5	4B, 1H	ADD 372 AND CONNECTOR	SAJ	SJB	2/5/04
4	3D, 6H	MOD BREAKOUTS	SAJ	SAJ	5/19/03
3	3D, 6H	MOD BREAKOUTS	SAJ	SAJ	5/5/03
2	3F, 2D	MOD 2, 265	SAJ	SAJ	2/17/03
1	ALL	TOTAL REV.	SAJ	SAJ	11/18/02

REVISIONS

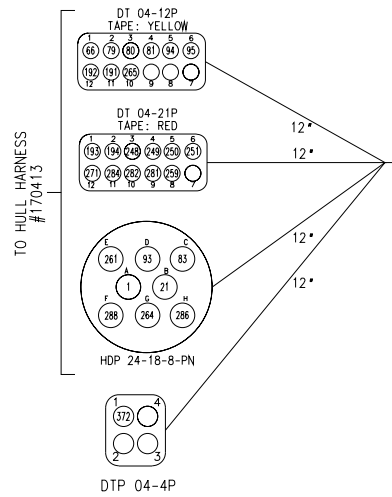
THUNDERBIRD PRODUCTS
2200 W. MONROE ST., P.O. BOX 1003 DECATUR, IN 46733 (219) 724-9971

TITLE: PIGTAIL 470 GALLEY

DRAWN BY: STEVE JONES SCALE: NONE
 APP'D BY: STEVE BOYCE DATE: 8/1/02

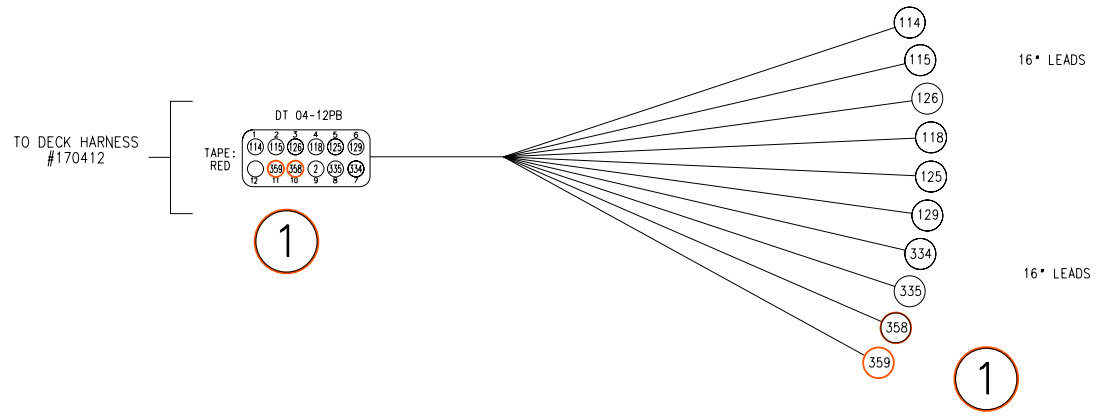
MATERIAL: SEE NOTES FINISH: SEE NOTES

PART # SHEET 1 OF 1



<https://www.boat-manuals.com/>

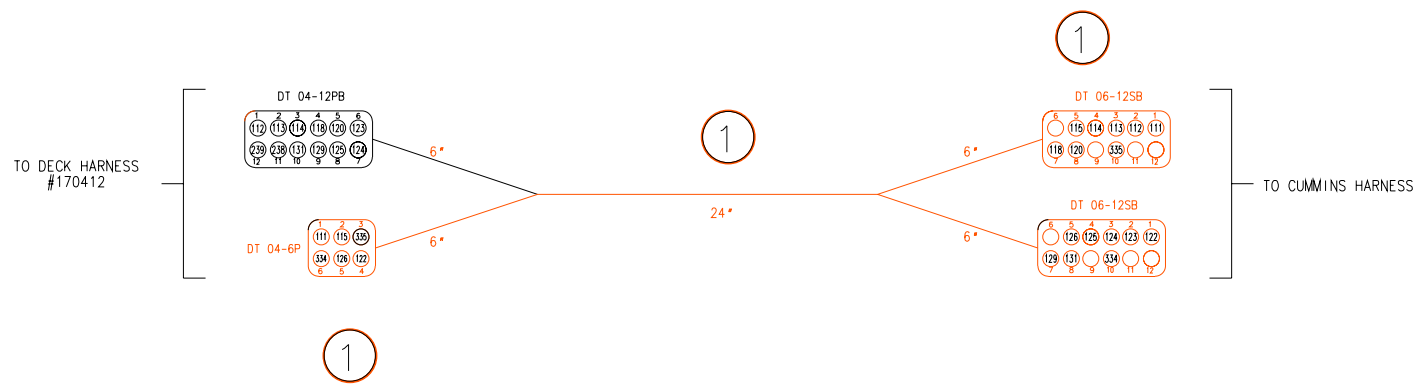
POS	COLOR	STRIP	STRIP	DESCRIPTION
2	BK			14 MAIN GROUND
114	TN	BL		14 AUDIBLE ALARM STBD (ENG SW TO ALARM)
115	PR			14 IGN SWITCHED + STBD (SW TO PUSH BUTTON)
118	YL	RD		14 IGN START STBD (NEU/SFTY SW TO STRTR SOLE)
125	TN	BL	BK	14 AUDIBLE ALARM (PORT ENG SWS TO ALARM)
126	PR	BK		14 IGN SWITCHED + PORT (SW TO PUSH BUTTON)
129	YL	RD	BK	14 IGN START PORT (NEU/SFTY SW TO STRTR SOLE)
334	PR	YL	BK	IGN SW TO GAUGE PORT
335	PR	YL		14 IGN SW TO GAUGE STBD
358	PR	WH		14 IGN PUSH SW TO GAUGE STBD
359	PR	BKWH		14 IGN PUSH SW TO GAUGE PORT



- NOTES:
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 - ALL MOLDED PLUGS SHOULD BE CONSTRUCTED OF CLEAR FLAME RETARDANT MATERIAL.
 - ALL SPLICES AND/OR TERMINAL ENDS ARE TO BE SEALED WITH DUAL WALLED TUBING.
 - ATTACH LABELS AS SHOWN.

5					
4					
3					
2					
1	3E/6F	ADD 358 & 359	SAJ		11/7/02
	# POS.	DESCRIPTION	REV'D	APP'D	DATE
REVISIONS					
TITLE: PIGTAIL 470 IGNITION					
DRAWN BY: STEVE JONES			SCALE: NONE		
APP'D BY: STEVE BOYCE			DATE: 8/5/02		
MATERIAL: SEE NOTES			FINISH: SEE NOTES		
PART #			SHEET 1 OF 1		

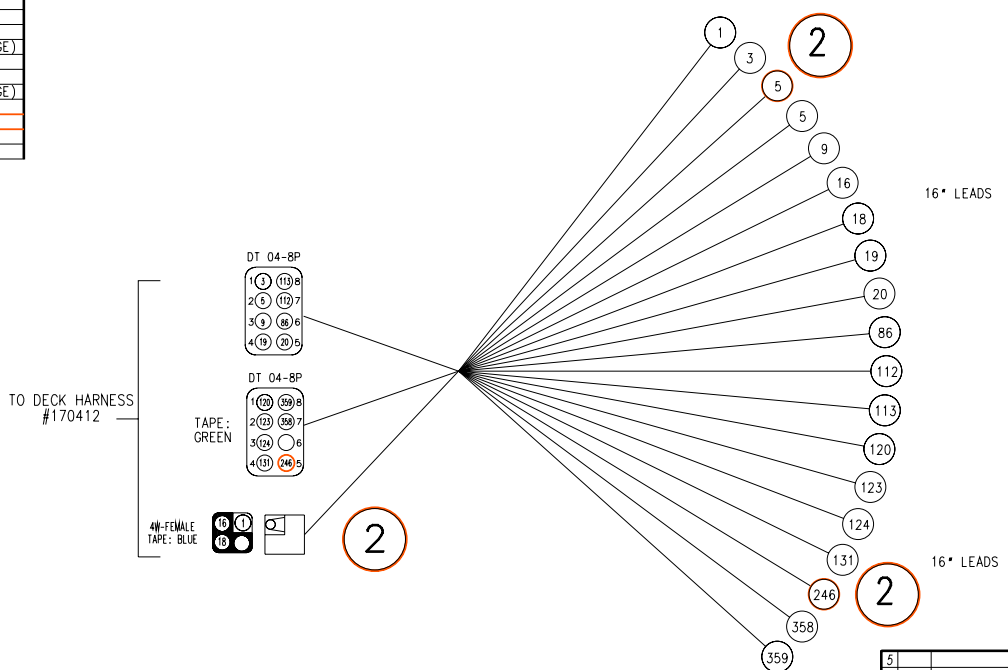
POS	COLOR	STRIP	STRIP	DESCRIPTION
				1.2 ENGINE GROUND
111	BK			1.4 TACH STBD (ENGINE TO TACH)
112	GY			1.4 WATER TEMP SNDR STBD (ENG TO GAUGE)
114	TN	BL		1.4 AUDIBLE ALARM STBD (ENG SWS TO ALARM)
115	PR			1.4 ION SWITCHED + STBD (SW TO PUSH BUTTON)
118	YL	RD		1.4 ION START STBD (NEU/SFTY SW TO STARTER SOLE)
120	LT	BL		1.4 OIL PRESSURE STBD (ENG TO GAUGE)
122	BK			1.4 ENGINE GROUND PORT (ENGINE TO TACH)
123	GY	BK		1.4 TACHOMETER (PORT TACH TO ENG)
124	TN	BK		1.4 WATER TEMP SNDR (PORT ENG TO GAUGE)
125	TN	BL	BK	1.4 AUDIBLE ALARM (PORT ENG SWS TO ALARM)
126	PR	BK		1.4 ION SWITCHED + PORT (SW TO PUSH BUTTON)
129	YL	RD	BK	1.4 ION START PORT (NEU/SFTY SW TO START SOLE)
131	LT	BL	BK	1.4 OIL PRESSURE (PORT ENG TO GAUGE)
238	PR	OR		1.4 ION STBD (MOD TO ENG)
239	PR	OR	BK	1.4 ION PORT (MOD TO ENG)
334	PR	YL	BK	1.4 ION SW TO GAUGE PORT
335	PR	YL		1.4 ION SW TO GAUGE STBD



- NOTES:
- SPOT BIND WITH BLACK WIRE TIES EVERY 12" AND AT BREAKOUTS.
 - DIMENSIONS INCLUDE TERMINAL ENDS.
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 - ALL MOLDED PLUGS SHOULD BE CONSTRUCTED OF CLEAR FLAME RETARDANT MATERIAL.
 - ALL SPLICES AND/OR TERMINAL ENDS ARE TO BE SEALED WITH DUAL WALLED TUBING.
 - ATTACH LABELS AS SHOWN.

5					
4					
3					
2					
1	POS.	ADD 115, 126, 334, 335/ MOD 111&122	SAJ		11/7/02
	# POS.	DESCRIPTION	REV'D	APP'D	DATE
REVISIONS					
 THUNDERBIRD PRODUCTS <small>2200 W. MONROE ST. P.O. BOX 1003 DECATUR, IN 46733 (219) 724-9441</small>					
TITLE: PIGTAIL 470 IIM					
DRAWN BY: STEVE JONES			SCALE: NONE		
APP'D BY: STEVE BOYCE			DATE: 8/5/02		
MATERIAL: SEE NOTES			FINISH: SEE NOTES		
PART #			SHEET 1 OF 1		

POS	COLOR	STRIP	STRIP	DESCRIPTION
1	BK			10 MAIN GROUND
3	OR	GY		14 RADAR (BKR TO GPS)
5	OR	BN	BN	14 GPS (BKR TO GPS)
9	OR	BN	BK	14 DEPTH SOUNDER (SW TO UNIT)
16	BK	YL		10 CHASSIS GROUND (GPS)
18	BK	YL	B	10 CHASSIS GROUND (RADAR GROUND)
19	PK	BK		14 FUEL SENDING PORT (SNDR TO GAUGE)
20	PK			14 FUEL SENDING STBD (SNDR TO GAUGE)
86	BL			14 PANEL LTS (SW TO LTS)
112	GY			14 TACHOMETER (STBD ENG TO TACH)
113	TN			14 WATER TEMP SNDR STBD (ENG TO GAUGE)
120	LT	BL		14 OIL PRESSURE STBD (ENG TO GAUGE)
123	GY	BK		14 TACHOMETER (PORT ENG TO TACH)
124	TN	BK		14 WATER TEMP SNDR (PORT ENG TO GAUGE)
131	LT	BL	BK	14 OIL PRESSURE (PORT ENG TO GAUGE)
246	OR	GN		14 RUDDER POSITION SENDER
358	PR	WH	BK	14 IGN SW TO GAUGE STBD
359	PR	WH	BK	14 IGN SW TO GAUGE PORT

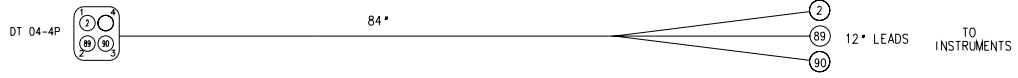


- NOTES:
- SPOT BIND WITH BLACK WIRE TIES EVERY 12" AND AT BREAKOUTS.
 - DIMENSIONS INCLUDE TERMINAL ENDS.
 - CONSTRUCTION OF INCLUDED CONDUCTORS SHALL BE RATED AT 105°C AND CONFORM TO SAE J1128 AND J378 JUN84.
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 - ALL SPLICES AND/OR TERMINAL ENDS ARE TO BE SEALED WITH DUAL WALLED TUBING.
 - ATTACH LABELS AS SHOWN.

5					
4					
3					
2	6C-F	REM 240 / ADD 246 / MOD 5	SAJ		9/3/03
1	POS.	REMOVE 334, 335 / ADD 358, 359	SAJ		11-13-02
# POS.	DESCRIPTION	REV'D	APP'D	DATE	
REVISIONS					
THUNDERBIRD PRODUCTS					
2200 W. MONROE ST., P.O. BOX 1003 DECATUR, IN 46733 (219) 724-5471					
TITLE: PIGTAIL 470 MAIN INST					
DRAWN BY: STEVE JONES			SCALE: NONE		
APP'D BY: STEVE BOYCE			DATE: 8/5/02		
MATERIAL: SEE NOTES		FINISH: SEE NOTES			
PART #				SHEET 1 OF 1	

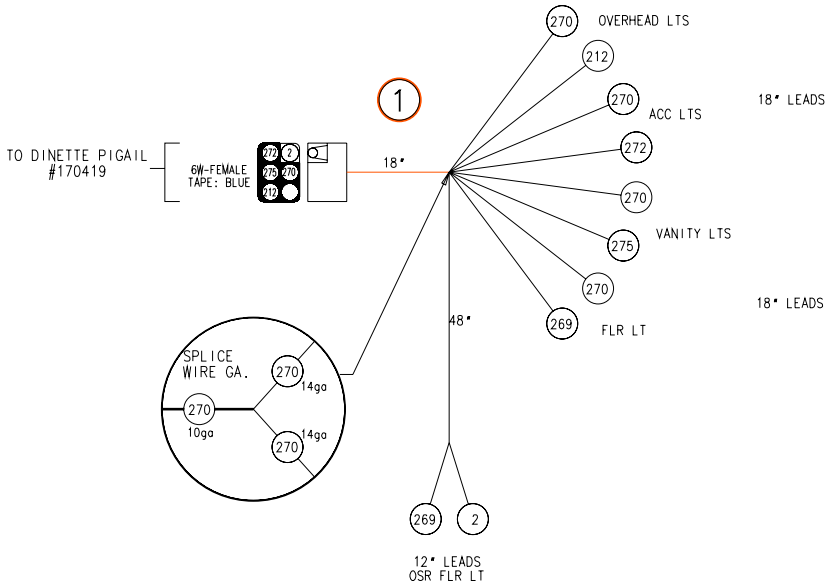
POS	COLOR	STRIPE	STRIPE	GA	DESCRIPTION
2	BLACK			14	SECONDARY GROUND
89	GREY	WHITE		14	NAVIGATION LIGHTS (SW TO LTS)
90	GREY	RED		14	ANCHOR LIGHTS (SW TO LTS)

- NOTES:
1. SPOT BIND WITH BLACK WIRE TIES EVERY 12" AND AT BREAKOUTS.
 2. DIMENSIONS INCLUDE TERMINAL ENDS.
 3. CONSTRUCTION OF INCLUDED CONDUCTORS SHALL BE RATED AT 105°C AND CONFORM TO SAE J1128 AND J378 JUN84.
 4. ALL MOLDED PLUGS SHOULD BE CONSTRUCTED OF CLEAR FLAME RETARDANT MATERIAL.
 5. ALL SPLICES AND/OR TERMINAL ENDS ARE TO BE SEALED WITH DUAL WALLED TUBING.
 6. ATTACH LABELS AS SHOWN.
 7. ALL WIRES DENOTED BY AN ASTERISK (*) SHALL BE SEALED OFF WITH SHRINK TUBING



5					
4					
3					
2					
1					
#	POS.	DESCRIPTION	REV'D	APP'D	DATE
REVISIONS					
 THUNDERBIRD PRODUCTS <small>2200 W. MONROE ST. P.O. BOX 1003 DECATUR, IN 46733 (219) 724-9111</small>					
TITLE: 40 PC HARDTOP MAST LIGHT PIGTAIL					
DRAWN BY: STEVE JONES			SCALE: SEE NOTES		
APP'D BY:			DATE: 8/15/03		
MATERIAL: SEE NOTES			FINISH: SEE NOTES		
TOLERANCES (UNLESS OTHERWISE SPECIFIED)					
DECIMAL .XX ±		FRACTIONAL ± 1/2*		ANGULAR	
PART # 198669			SHEET 1 OF 1		

POS	COLOR	STRIP	STRIP	DESCRIPTION
2	BK			14# SECONDARY GROUND
212	L TBL	BK	YL	14# BERTH END LTS (SW TO LTS)
269	L TBL			14# OSR FLOOR LT (SW TO LT)
270	L TBL	TN	RD	10# OSR LIGHT (BKR TO SW)
272	L TBL	TN	GN	14# OSR MOOD (SW TO LTS)
275	L TBL	GN	GN	14# OSR VANITY LTS (SW TO LTS)



NOTES:

- SPOT BIND WITH BLACK WIRE TIES EVERY 12" AND AT BREAKOUTS.
- DIMENSIONS INCLUDE TERMINAL ENDS.
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5					
4					
3					
2					
4C	MOD LENGTH	SAJ		2/13/03	
# POS.	DESCRIPTION	REV'D	APP'D	DATE	
REVISIONS					
THUNDERBIRD PRODUCTS					
2200 W. MONROE ST., P.O. BOX 1003 DECATUR, IN 46733 (219) 724-9111					
TITLE: PIGTAIL 470 OSR ENTRY WALL					
DRAWN BY: STEVE JONES			SCALE: NONE		
APP'D BY: STEVE BOYCE			DATE: 11/20/02		
MATERIAL: SEE NOTES			FINISH: SEE NOTES		
PART #			SHEET 1 OF 1		

POS	COLOR	STRIP	STRIP	DESCRIPTION
2	BKR			14 SECONDARY GROUND
21	YL	WH	10	HEAD BLOWER (BKR TO SW)
22	YL	WH	10	HEAD BLOWER (SW TO MOTOR)
79	WH	YL	BK	14 WASTE HOLDING TANK (3/4)
80	YL	WH	BK	14 WASTE HOLDING TANK (FULL)
81	BN	RD	14	HEAD PUMP (BKR TO MOD)
95	LT	BL	14	FLOOR LTS OSR HEAD (SW TO LT)
103	LT	BL	WH	RD 14 OVER HEAD HEAD LIGHT (SW TO LT)
286	LT	BL	BN	RD 10 HEAD LTS (BKR TO SW)

A

B

C

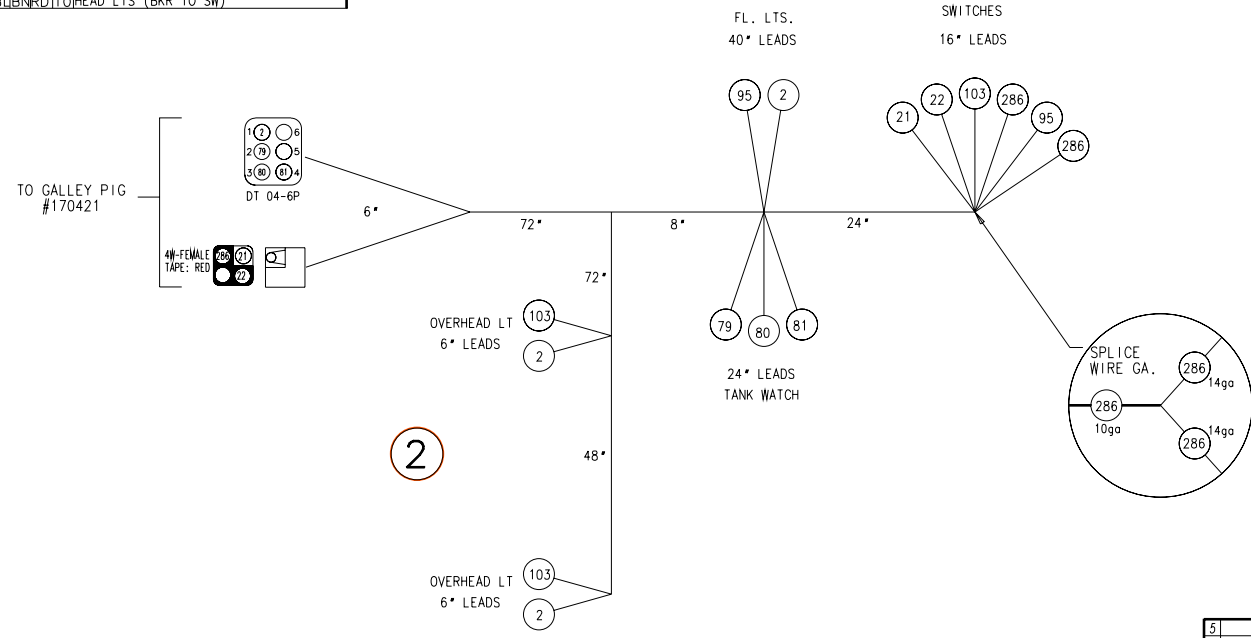
D

E

F


G

H

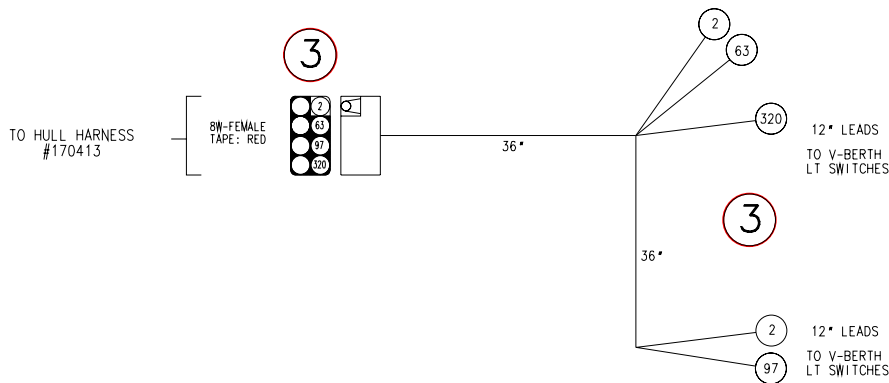


NOTES:

- SPOT BIND WITH BLACK WIRE TIES EVERY 12" AND AT BREAKOUTS.
- DIMENSIONS INCLUDE TERMINAL ENDS.
- CONSTRUCTION OF INCLUDED CONDUCTORS SHALL BE RATED AT 105°C AND CONFORM TO SAE J1128 AND J378 JUNG4.
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- ATTACH LABELS AS SHOWN.

5					
4					
3					
2	3E	MOD 2, 103	SAJ		6/7/03
1	7	ALL REMOVE 272 / MOD. ALL	SAJ		11/15/02
# POS.	DESCRIPTION	REV'D	APP'D	DATE	
REVISIONS					
					
2200 W. MONROE ST., P.O. BOX 1003 DECATUR, IN 46733 (219) 724-9471					
TITLE: PIGTAIL 470 OSR HEAD UNIT					
DRAWN BY: STEVE JONES			SCALE: NONE		
APP'D BY: STEVE BOYCE			DATE: 8/5/02		
MATERIAL: SEE NOTES			FINISH: SEE NOTES		
PART #		SHEET 1 OF 1			

POS	COLOR	STRIP	STRIP	DESCRIPTION
2	BK			14 SECONDARY GROUND
63	RD	WH		10 STEREO 12V + (BKR TO STEREO)
97	YL	BL	OR	14 CABINET LTS (BKR TO LTS)
320	YL	RD	TN	14 STEREO MEMORY



- NOTES:
- SPOT BIND WITH BLACK WIRE TIES EVERY 12" AND AT BREAKOUTS.
 - DIMENSIONS INCLUDE TERMINAL ENDS.
 - CONSTRUCTION OF INCLUDED CONDUCTORS SHALL BE RATED AT 105°C AND CONFORM TO SAE J1128 AND J378 JUN84.
 - ALL MOLDED PLUGS SHOULD BE CONSTRUCTED OF CLEAR FLAME RETARDANT MATERIAL.
 - ALL SPLICES AND/OR TERMINAL ENDS ARE TO BE SEALED WITH DUAL WALLED TUBING.
 - ATTACH LABELS AS SHOWN.

#	POS.	DESCRIPTION	REV'D	APP'D	DATE
5					
4					
3	ALL	DEL 353, 354, 355, 356	SAJ	SJB	11/2/04
2	ALL	MOD 2 & 97	SAJ		5/6/03
1	ALL	TOTAL REV.	SAJ		11/14/02

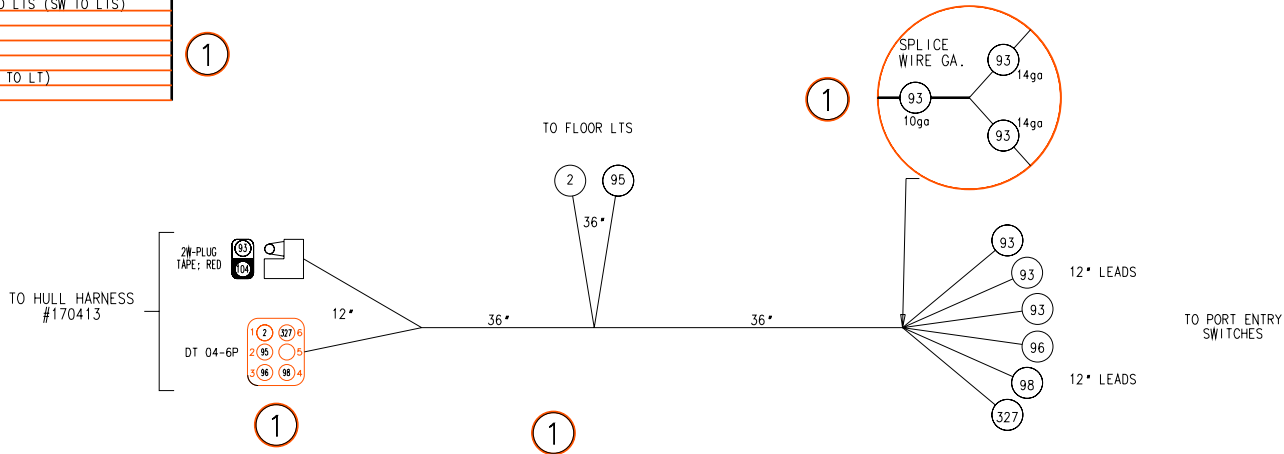
REVISIONS

THUNDERBIRD PRODUCTS
2200 W. MONROE ST., P.O. BOX 1003 DECATUR, IN 46733 (219) 724-5441

TITLE: PIGTAIL 470 OSR STEREO

DRAWN BY: STEVE JONES	SCALE: NONE
APP'D BY: STEVE BOYCE	DATE: 7/25/02
MATERIAL: SEE NOTES	FINISH: SEE NOTES
PART #	SHEET 1 OF 1

POS	COLOR	SIZE	STRIP	DESCRIPTION
2	BK			14 SECONDARY GROUND
93	LTBLRD	10		10 CABIN LIGHTS (BKR TO SW)
95	LTBL	14		14 MAIN CABIN FLOOR LTS (SW TO LTS)
96	LTBLBK	14		14 SALON ACCENT LTS (SW TO LTS)
98	LTBLGN	14		14 SALON OVERHEAD LTS (SW TO LTS)
327	LTBLPRYL	14		14 SCONCE LT (SW TO LT)



NOTES:

- SPOT BIND WITH BLACK WIRE TIES EVERY 12" AND AT BREAKOUTS.
- DIMENSIONS INCLUDE TERMINAL ENDS.
- CONSTRUCTION OF INCLUDED CONDUCTORS SHALL BE RATED AT 105°C AND CONFORM TO SAE J1128 AND J378 JUN84.
- ALL MOLDED PLUGS SHOULD BE CONSTRUCTED OF CLEAR FLAME RETARDANT MATERIAL.
- ALL SPLICES AND/OR TERMINAL ENDS ARE TO BE SEALED WITH DUAL WALLED TUBING.
- ATTACH LABELS AS SHOWN

#	POS.	DESCRIPTION	REV'D	APP'D	DATE
1	ALL	MOD 93, PLUG/REV 104, 105, 106, 287, 342	SAJ		2/12/03

REVISIONS

THUNDERBIRD PRODUCTS
2200 N. MONROE ST., P.O. BOX 1003 DECATUR, IN 46733 (219) 724-5471

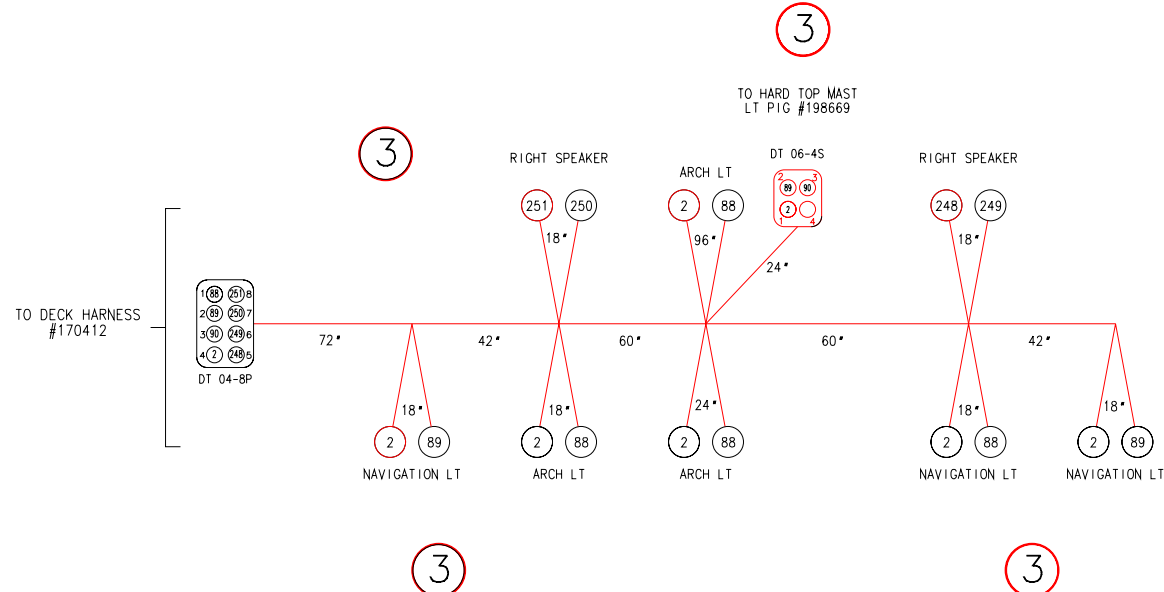
TITLE: PIGTAIL 470 PORT ENTRY WALL

DRAWN BY: STEVE JONES SCALE: NONE
 APP'D BY: STEVE BOYCE DATE: 7/25/02

MATERIAL: SEE NOTES FINISH: SEE NOTES

PART # _____ SHEET 1 OF 1

POS	COLOR	STRIPES	DESCRIPTION
2	BK		14 SECONDARY GROUND
88	BL	WH RD	14 ARCH LIGHTS UP (SW TO LTS)
89	GY	WH	14 NAVIGATION LTS (SW TO LTS)
90	GY	RD	14 ANCHOR LT (SW TO LT)
248	WH	PR PR	14 REAR LEFT + (STEREO TO SPKR)
249	WH	BN BN	14 REAR LEFT - (STEREO TO SPKR)
250	WH	RD RD	14 REAR RIGHT + (STEREO TO SPKR)
251	WH	BL BL	14 REAR RIGHT - (STEREO TO SPKR)



- NOTES:
1. SPOT BIND WITH BLACK WIRE TIES EVERY 12" AND AT BREAKOUTS.
 2. DIMENSIONS INCLUDE TERMINAL ENDS.
 3. CONSTRUCTION OF INCLUDED CONDUCTORS SHALL BE RATED AT 105°C AND CONFORM TO SAE J1128 AND J378 JUN84.
 4. ALL MOLDED PLUGS SHOULD BE CONSTRUCTED OF CLEAR FLAME RETARDANT MATERIAL.
 5. ALL SPLICES AND/OR TERMINAL ENDS ARE TO BE SEALED WITH DUAL WALLED TUBING.
 6. ATTACH LABELS AS SHOWN.

#	POS.	DESCRIPTION	REV'D	APP'D	DATE
3	ALL	MOD ALL BREAKOUTS / ADD CONNECTOR	SAJ	SAJ	11/3/03
2	2C/4E	REMOVE 31, 32, 33, 34, 35, 36, 363, PLUG	SAJ		2/13/03
1	2C/4E	ADD 363	SAJ		11/21/02

REVISIONS

THUNDERBIRD PRODUCTS
2200 W. MONROE ST., P.O. BOX 1003 DECATUR, IN 46733 (219) 724-4441

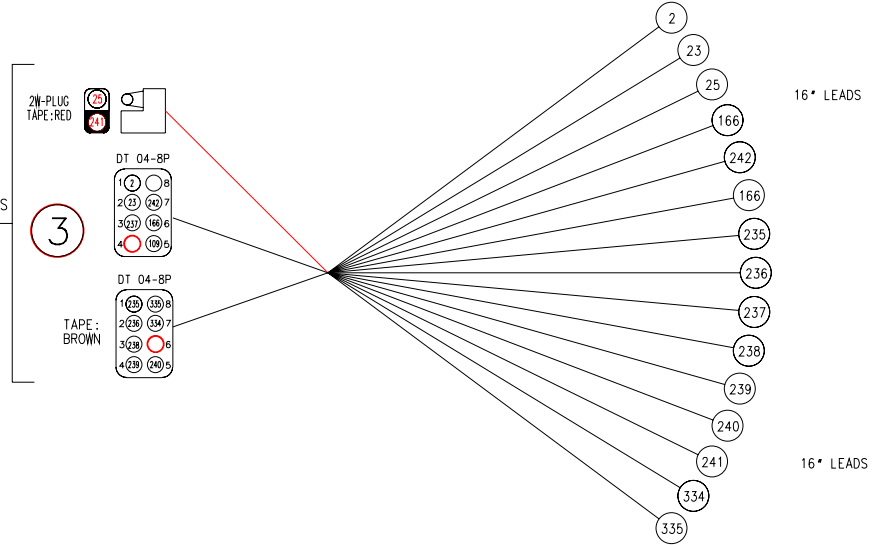
TITLE: PIGTAIL 470 RADAR ARCH

DRAWN BY: STEVE JONES SCALE: NONE
APP'D BY: STEVE BOYCE DATE: 8/5/02
MATERIAL: SEE NOTES FINISH: SEE NOTES
PART # SHEET 1 OF 1

POS	COL	STRIP	STRIP	DESCRIPTION
2	BK		14	SECONDARY GROUND
23	YL	BN	RD	14 BLOWERS (BKR TO SW)
25	OR	RD	RD	10 HALON (LIGHT TO EXTSHR)
109	GN	RD	BK	14 GENERATOR STOP (SW TO GEN)
166	GN	OR	OR	14 GENERATOR (GEN TO FUEL TROL VALVE)
235	YL			14 FIRE SYS (MOD TO GAUGE)
236	RD			14 FIRE SYS (MOD TO GAUGE)
237	YL	BN		14 BLOWERS (FIRE SYS TO SW)
238	PR	OR		14 IGN STBD (MOD TO ENG)
239	PR	OR	BK	14 IGN PORT (MOD TO ENG)
240	BK	OR		14 FIRE SYS (MOD TO ENG)
241	OR	RD	RD	10 HALON (FIRE SYSTEM TO UNIT)
242	GN	OR		14 GEN HOUR METER (GEN TO METER)
334	PR	YL	BK	14 IGN SW TO GAUGE PORT
335	PR	YL		14 IGN SW TO GAUGE STBD

3

TO DECK HARNESS #170412



- NOTES:
- SPOT BIND WITH BLACK WIRE TIES EVERY 12" AND AT BREAKOUTS.
 - DIMENSIONS INCLUDE TERMINAL ENDS.
 - CONSTRUCTION OF INCLUDED CONDUCTORS SHALL BE RATED AT 105°C AND CONFORM TO SAE J1128 AND J378 JUN04.
 - ALL MOLDED PLUGS SHOULD BE CONSTRUCTED OF CLEAR FLAME RETARDANT MATERIAL.
 - ALL SPLICES AND/OR TERMINAL ENDS ARE TO BE SEALED WITH DUAL WALLED TUBING.
 - ATTACH LABELS AS SHOWN.

#	POS.	DESCRIPTION	REV'D	APP'D	DATE
5					
4					
3	ALL	MOD WIRE 25, 241 / ADD PLUG	CWM	SJB	11/23/04
2	HD/6C	ADD 166 / REMOVE 107 / MOD 242	SAJ		2/12/03
1	HD/6C	ADD 7 & 242 / REMOVE 166 & 110	SAJ		12/16/02

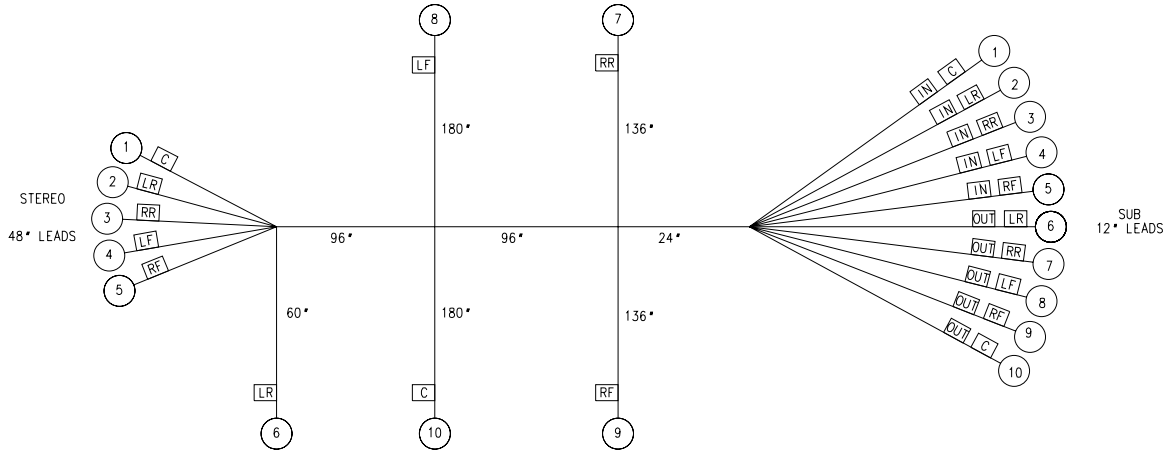
REVISIONS


THUNDERBIRD PRODUCTS
2200 W. WENDE ST. P.O. BOX 1003 DECATUR, IN 46733 (219) 724-3471

TITLE: PIGTAIL 470 SEAFIRE

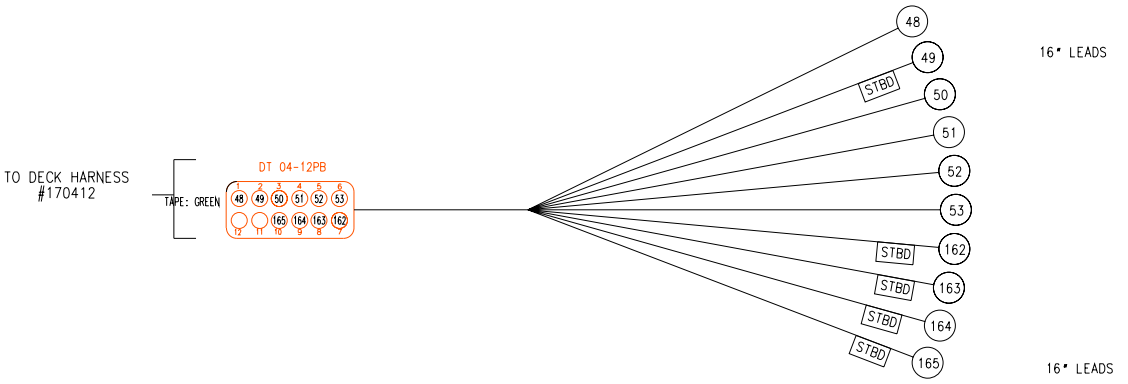
DRAWN BY: STEVE JONES SCALE: NONE
 APP'D BY: STEVE BOYCE DATE: 8/5/02
 MATERIAL: SEE NOTES FINISH: SEE NOTES
 PART # SHEET 1 OF 1

POS	MATERIAL	GA	DESCRIPTION
1	SPEAKER WIRE	18	CENTER - STEREO TO SUB
2	SPEAKER WIRE	18	LEFT REAR - STEREO TO SUB
3	SPEAKER WIRE	18	RIGHT REAR - STEREO TO SUB
4	SPEAKER WIRE	18	LEFT FRONT - STEREO TO SUB
5	SPEAKER WIRE	18	RIGHT REAR - STEREO TO SUB
6	SPEAKER WIRE	18	CENTER - SUB TO SPEAKER
7	SPEAKER WIRE	18	LEFT REAR - SUB TO SPEAKER
8	SPEAKER WIRE	18	RIGHT REAR - SUB TO SPEAKER
9	SPEAKER WIRE	18	LEFT FRONT - SUB TO SPEAKER
10	SPEAKER WIRE	18	RIGHT REAR - SUB TO SPEAKER



5				
4				
3				
2				
1				
# POS.	DESCRIPTION	REV'D	APP'D	DATE
REVISIONS				
 THUNDERBIRD PRODUCTS <small>2200 W. MONROE ST., P.O. BOX 1003 DECATUR, IN 46733 (219) 724-7471</small>				
TITLE: PIGTAIL 470 STEREO SPEAKER WIRE				
DRAWN BY: STEVE JONES		SCALE: NONE		
APP'D BY: JEFF ROBINSON		DATE: 8/1/02		
MATERIAL: SEE NOTES		FINISH: SEE NOTES		
PART #		SHEET 1 OF 1		

POS	COLOR	STRIP	STRIP	DESCRIPTION
48	OR	BK	14	TRIM TAB + PORT (BKR TO SW)
49	OR		14	TRIM TAB + STBD (BKR TO SW)
50	L TBL		14	TRIM TAB MOTOR (SW TO *FWD*)
51	YL		14	TRIM TAB MOTOR (SW TO *REVERSE*)
52	GN		14	TRIM TAB MOTOR (SW TO STBD VALVE)
53	RD		14	TRIM TAB MOTOR (SW TO PORT VALVE)
162	L TBL		14	TRIM TAB MOTOR (SW TO *FWD*)
163	YL		14	TRIM TAB MOTOR (SW TO *REVERSE*)
164	GN		14	TRIM TAB MOTOR (SW TO STBD VALVE)
165	RD		14	TRIM TAB MOTOR (SW TO PORT VALVE)



- NOTES:
- SPOT BIND WITH BLACK WIRE TIES EVERY 12" AND AT BREAKOUTS.
 - DIMENSIONS INCLUDE TERMINAL ENDS.
 - CONSTRUCTION OF INCLUDED CONDUCTORS SHALL BE RATED AT 105°C AND CONFORM TO SAE J1128 AND J378 JUNG4.
 - ALL MOLDED PLUGS SHOULD BE CONSTRUCTED OF CLEAR FLAME RETARDANT MATERIAL.
 - ALL SPLICES AND/OR TERMINAL ENDS ARE TO BE SEALED WITH DUAL WALLED TUBING.
 - ATTACH LABELS AS SHOWN.

5					
4					
3					
2					
1	3D	MODIFY WIRE GAGE AND PLUG	SAJ		9/18/02
#	POS.	DESCRIPTION	REV'D	APP'D	DATE
REVISIONS					
2200 W. MONROE ST., P.O. BOX 1003 DECATUR, IN 46733 (219) 724-7471					
TITLE: PIGTAIL 470 TRIM TAB					
DRAWN BY: STEVE JONES			SCALE: NONE		
APP'D BY: STEVE BOYCE			DATE: 8/5/02		
MATERIAL: SEE NOTES			FINISH: SEE NOTES		
PART #			SHEET 1 OF 1		