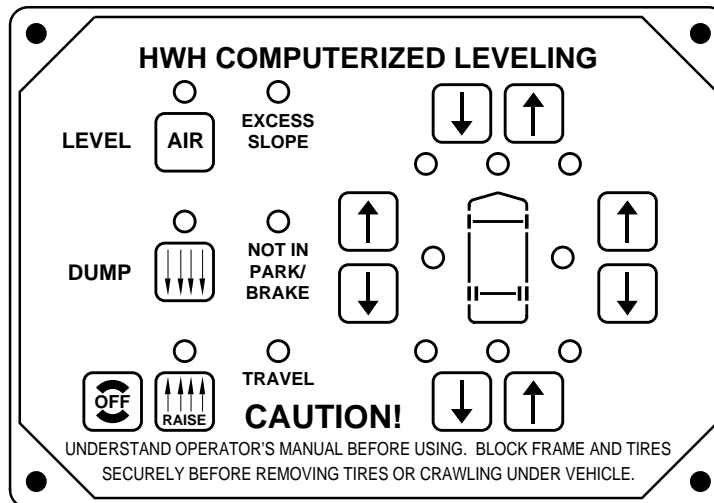




OPERATOR'S MANUAL

HWH COMPUTER-CONTROLLED LEVELING SYSTEM 500 SERIES

**FEATURING:
TOUCH PANEL CONTROL
AIR LEVELING**



**HWH CORPORATION
(ON I-80, EXIT 267 SOUTH)
2096 MOSCOW ROAD
MOSCOW, IOWA 52760
(800) 321-3494 / (563) 724-3396
INTERNET: <http://www.hwhcorp.com>**

OPERATOR'S MANUAL

HWH LEVELING SYSTEM AIR LEVELING ONLY

CAUTION !

READ THE ENTIRE OPERATOR MANUAL BEFORE OPERATING.

BLOCK FRAME AND TIRES SECURELY BEFORE CRAWLING UNDER VEHICLE. DO NOT USE LEVELING JACKS OR AIR SUSPENSION TO SUPPORT VEHICLE WHILE UNDER VEHICLE OR CHANGING TIRES. VEHICLE MAY DROP AND/OR MOVE FORWARD OR BACKWARD WITHOUT WARNING CAUSING INJURY OR DEATH.

KEEP ALL PEOPLE CLEAR OF VEHICLE WHILE LEVELING SYSTEM AND ROOM EXTENSION ARE BEING OPERATED.

DO NOT OPERATE LEVELING SYSTEM OR USE THE RAISE OR DUMP BUTTONS WHEN TRAVELING AT SPEEDS IN EXCESS OF 5 MPH.

WEAR SAFETY GLASSES WHEN INSPECTING OR SERVICING THE SYSTEM TO PROTECT EYES FROM DIRT, METAL CHIPS, OIL LEAKS, ETC. FOLLOW ALL OTHER APPLICABLE SHOP SAFETY PRACTICES.

IMPORTANT: IF COACH IS EQUIPPED WITH A ROOM EXTENSION, READ ROOM EXTENSION SECTION BEFORE OPERATING LEVELING SYSTEM.

HOW TO OBTAIN WARRANTY SERVICE

THIS IS NOT TO BE INTERPRETED AS A STATEMENT OF WARRANTY

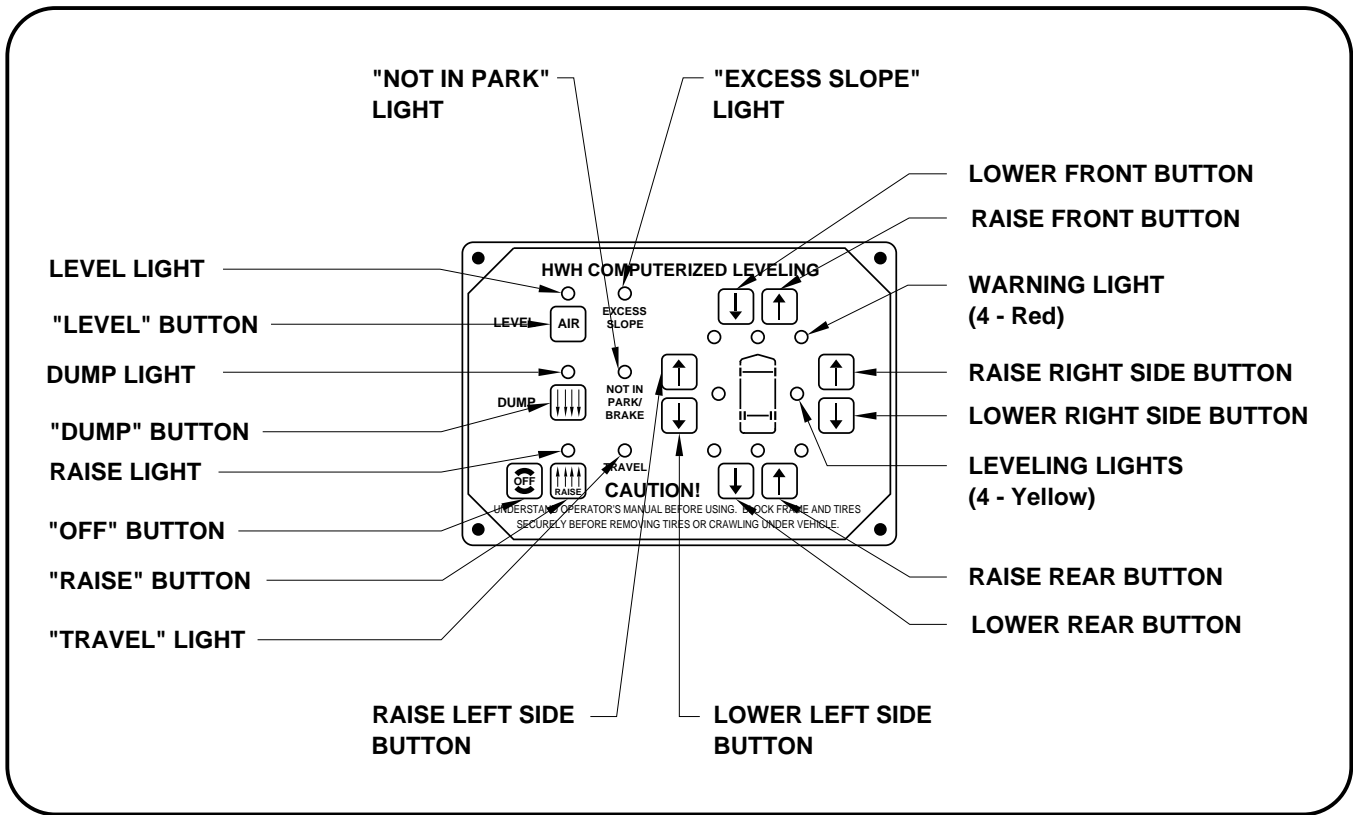
HWH CORPORATION strives to maintain the highest level of customer satisfaction. Therefore, if you discover a defect or problem, please do the following:

FIRST: Notify the dealership where you purchased the vehicle or had the leveling system installed. Dealership management people are in the best position to resolve the problem quickly. If the dealer has difficulty solving the problem, he should immediately contact the Customer Service Department, at HWH CORPORATION.

SECOND: If your dealer cannot or will not solve the problem, notify the Customer Service Department:
HWH CORPORATION 2096 Moscow Rd. Moscow IA. 52760
(563) 724-3396 OR (800) 321-3494. Give your name and address, coach manufacturer and model year, date the coach was purchased, or the date of system installation,

description of the problem, and where you can be reached during business hours (8:00 a.m. till 5:00 p.m. c.s.t.). HWH CORPORATION personnel will contact you to determine whether or not your claim is valid. If it is, HWH CORPORATION will authorize repair or replacement of the defective part, either by appointment at the factory or by the authorization of an independent service facility, to be determined by HWH CORPORATION. All warranty repairs must be performed by an independent service facility authorized by HWH CORPORATION, or at the HWH CORPORATION factory, unless prior written approval has been obtained from proper HWH CORPORATION personnel.

CONTROL IDENTIFICATION



CONTROL FUNCTIONS

CONTROL BUTTONS

"LEVEL" BUTTON: This button is the system on button and automatic operation button.

"OFF" BUTTON: This button will turn the system OFF but does NOT control power to the "DUMP" or "RAISE" buttons.

"DUMP" BUTTON: This button will lower the whole vehicle by exhausting air from the suspension system.

"RAISE" BUTTON: This button will raise the whole vehicle by adding air to the suspension system.

UP ARROWS (RAISE BUTTONS): These momentary buttons are used for manually operating the air leveling systems. Sides or ends of the vehicle will raise while these buttons are pushed.

DOWN ARROWS (LOWER BUTTONS): These momentary buttons are used to manually operate the air leveling systems. Sides or ends of the vehicle will lower while these buttons are pushed.

INDICATOR LIGHTS

LEVEL LIGHT: This light will be on when the system is on, and flash during automatic leveling.

DUMP LIGHT: This light will flash when the "DUMP" button is being pushed.

RAISE LIGHT: This light will flash when the "RAISE" button is being pushed.

"EXCESS SLOPE" LIGHT: This light will be on if the leveling system can NOT level the coach.

"TRAVEL" LIGHT: This light will be on if the leveling system is off and the ignition is in the "ON" or "ACC" position. See "PREPARATION FOR TRAVEL".

WARNING LIGHTS: These lights will function only with the ignition key is in the "ON" or "ACC" position. They will be on if the system is on.

LEVELING LIGHTS: One or two yellow lights can be on indicating the side, end or corner of the coach is low.

"NOT IN PARK/BRAKE" LIGHT: This light will be on if the "AIR" button is pushed and the park brake is not set if the ignition switch is in the "ON" position.

OPERATING PROCEDURES

GENERAL INSTRUCTIONS

Press the "OFF" button at any time to stop the operation of the system.

NOTE : If the ignition switch is "ON" the vehicle's air suspension may return to travel height.

If the ignition is in the "ON" position and the hand/auto brake is not set, the "NOT IN PARK" light will come on and the system

will not operate when the "AIR" button is pressed. The "NOT IN PARK" light will remain on only while the "AIR" button is pressed.

The "DUMP" and "RAISE" buttons will function with the system and park brake is off. (See "AIR DUMP AND RAISE FUNCTIONS")

CAUTION: DO NOT MOVE THE COACH WHEN THE AIR BAGS ARE DEFLATED.

PREPARATION FOR TRAVEL

Start the vehicle's engine and allow air pressure to build to the recommended level for traveling. Before traveling, the "TRAVEL" light must be on.

CAUTION: IT IS THE OPERATOR'S RESPONSIBILITY TO VISUALLY MAKE SURE THE COACH IS AT THE PROPER RIDE HEIGHT BEFORE TRAVELING.

AIR OPERATION

AUTOMATIC AIR LEVELING

1. Set the hand/auto brake in the recommended position for parking. Leave the engine running to provide air for leveling.
2. Press the "AIR" button once to enter the air mode. The AIR indicator light and the four AIR BAG warning lights will glow steady.
3. Press the "AIR" button a second time. The AIR indicator light will start flashing and the air leveling will begin.
4. When all four yellow LEVEL SENSING lights are out the leveling is complete. The AIR indicator light will stop flashing

and turn steady red. The processor is now in a SLEEP MODE for 30 minutes. The vehicle's engine may now be turned off. After 30 minutes the processor will recheck the vehicle level, make any corrections required, and return to the SLEEP MODE. This will continue until the system is turned off by pushing the "OFF" button or the transmission is taken out of the parking position and the park brake is released.

After 45 minutes if the system is unable to level the vehicle, one or two yellow "LEVELING SENSING" indicator lights will remain on and the "EXCESS SLOPE" light will come on. The system will remain on but will not go into the sleep mode.

MANUAL AIR LEVELING

1. Place the hand/auto brake in the recommended position for parking. The engine should be running to provide air for leveling.
2. Press the "AIR" button. The "AIR" indicator light will glow steady.
3. Individual RAISE and LOWER buttons (UP and DOWN ARROWS) will add or dump air from suspension air bags to raise or lower coach for leveling. These are momentary buttons. The function will stop when the button is released.

NOTE : THE "RAISE" AND "DUMP" BUTTONS CAN BE USED AT THIS TIME BUT THE SYSTEM WILL SHUT OFF AFTER THE BUTTON IS RELEASED.

The yellow LEVEL lights indicate a side, end, or corner is low. Level the coach from side to side first. Lower the the opposite side or end of the coach to achieve leveling. If a level position cannot be achieved by dumping air, raise the coach according to lit yellow "LEVEL" lights.

IMPORTANT : ALWAYS GIVE PREFERENCE TO ANY SIDE LIGHT BEFORE LEVELING THE THE COACH FRONT TO REAR.

4. Turn ignition switch "OFF". Turn the system off.

OPERATING PROCEDURES

AIR OPERATION (Cont'd) "DUMP" AND "RAISE" FUNCTIONS

The "DUMP" and "RAISE" functions are provided for operator convenience for purposes such as dumping the air suspension when parked.

Leave the engine running if the "RAISE" function is to be used. The park brake does not have to be set to use the "DUMP" or "RAISE" buttons.

IMPORTANT: If the ignition is ON and the park brake is OFF, the "DUMP" and "RAISE" features will latch in and remain on. If the vehicle exceeds 10 MPH, the "DUMP" or "RAISE" functions will automatically turn off and the system will return to the TRAVEL MODE. If the park brake is set, the "TRAVEL MODE" button must be pushed before the vehicle can return to ride height.

CAUTION: REREAD CAUTIONS ON THE FIRST PAGE OF THIS MANUAL. THE VEHICLE MAY DROP OR RAISE AND/OR MOVE FORWARD OR BACKWARD WITHOUT WARNING CAUSING INJURY OR DEATH.

DO NOT OPERATE THE VEHICLE UNLESS THE AIR SUSPENSION IS AT THE PROPER HEIGHT FOR TRAVEL.

The "RAISE" and "DUMP" buttons can be used at any time the network is active. The park brake does not have to be on.

If the ignition is in the "ON" position and the park brake is off, the "RAISE" or "DUMP" buttons will latch in. The vehicle will raise or lower completely and stay in that position. The vehicle can not return to ride height until the "TRAVEL MODE" button or the "EMERGENCY STOP" button is pushed or the vehicle exceeds 10 M.P.H, putting the system in the TRAVEL MODE.

If the ignition is in the "OFF" position the "RAISE" and "DUMP" buttons will not latch in. The vehicle will remain in the position it was when the button was released. The vehicle can return to ride height when the ignition is turned to "ON" if the park brake is released or the "TRAVEL MODE" button is pushed.

DO NOT operate the vehicle for extended distances unless the air suspension is at the proper height for travel. The vehicle can not return to ride height until the "EMERGENCY STOP" button is pushed or the vehicle exceeds 10 MPH, putting the system in the TRAVEL MODE.

CAUTION: IT IS THE OPERATOR'S RESPONSIBILITY TO CHECK THAT THE VEHICLE IS AT PROPER RIDE HEIGHT BEFORE TRAVELING.

OPERATIONAL CHECK

Review the operator's manual and check that all functions and lights work correctly.

"NOT IN PARK/BRAKE" Check: Set hand/auto park brake. Set the transmission in the recommended position for parking the vehicle. Turn the ignition on. Push the "AIR" button on the touch panel. Release the hand/auto park brake.

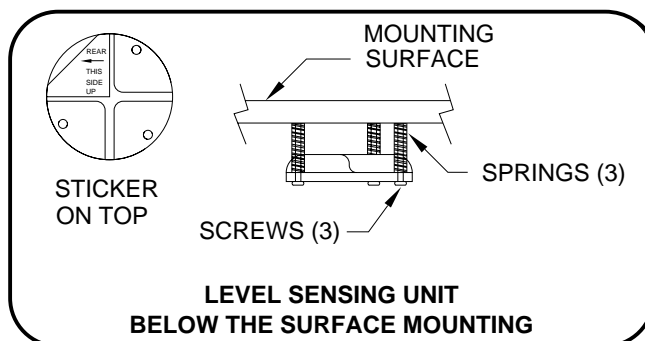
CAUTION: THE VEHICLE MAY MOVE FORWARD OR BACKWARD WHEN THE PARK IS RELEASED.

Check that the "NOT IN PARK/BRAKE" light comes ON. Reapply the park brake. The "NOT IN PARK/BRAKE" light should go out.

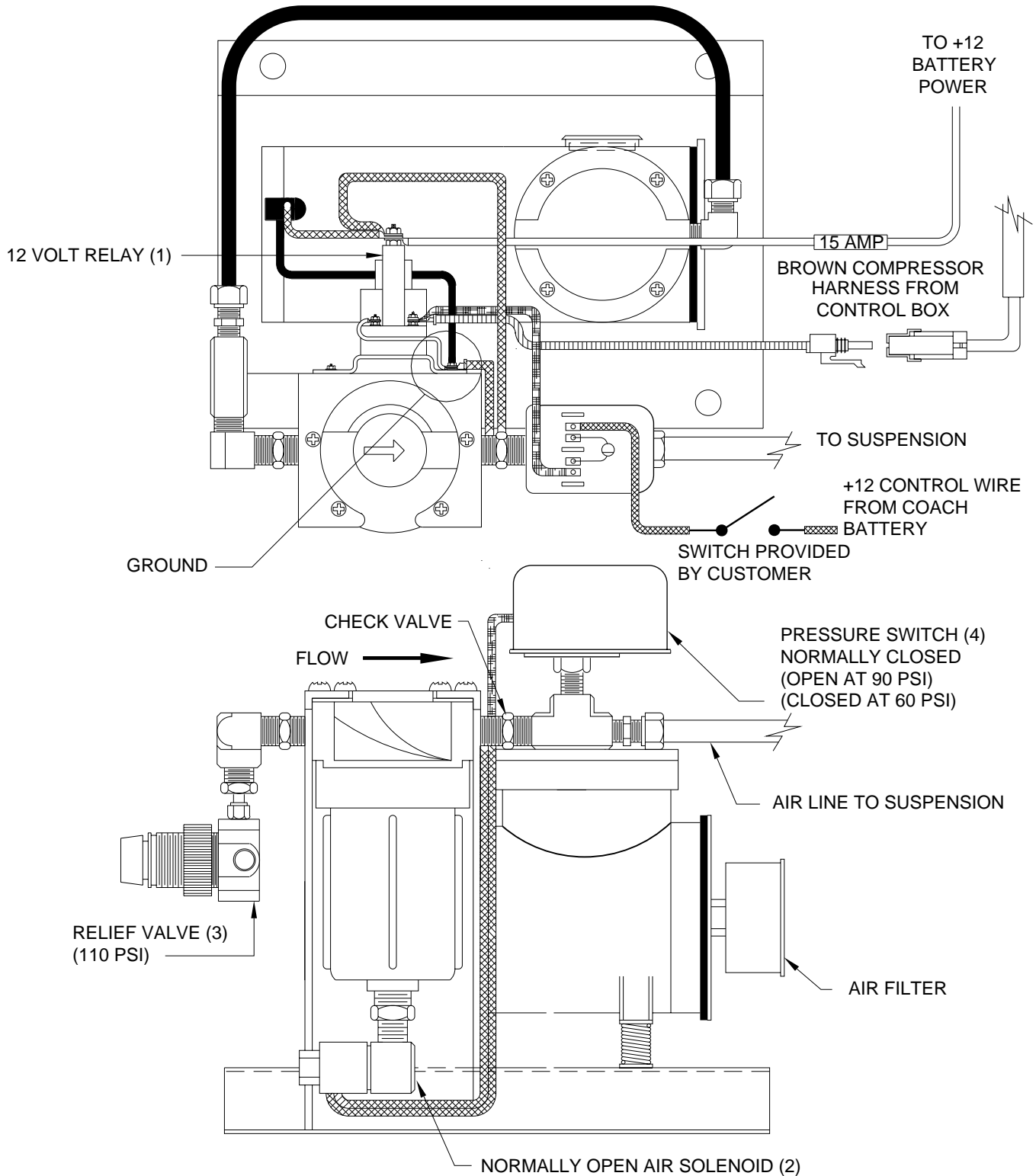
NOTE : IF ANY CHECKS REVEAL ANY PROBLEMS OR IF THERE ARE OTHER PROBLEMS OR QUESTIONS, CONSULT A QUALIFIED RV REPAIR CENTER, YOUR VEHICLE OR COACH MANUFACTURER OR HWH CORPORATION FOR SERVICE OR ASSISTANCE.

LEVEL SENSING UNIT ADJUSTMENT

Level the vehicle by placing a circular bubble level in the center of the freezer floor or location within the vehicle that is to be level. With the vehicle level, adjust the sensing unit until all yellow lights are off. This is done by drawing up the corresponding screw if the sensing unit is mounted below the surface, as shown, or backing out the corresponding screw if the sensing unit is mounted above the surface. Bump the sensing unit to see that it has settled down in the level position.

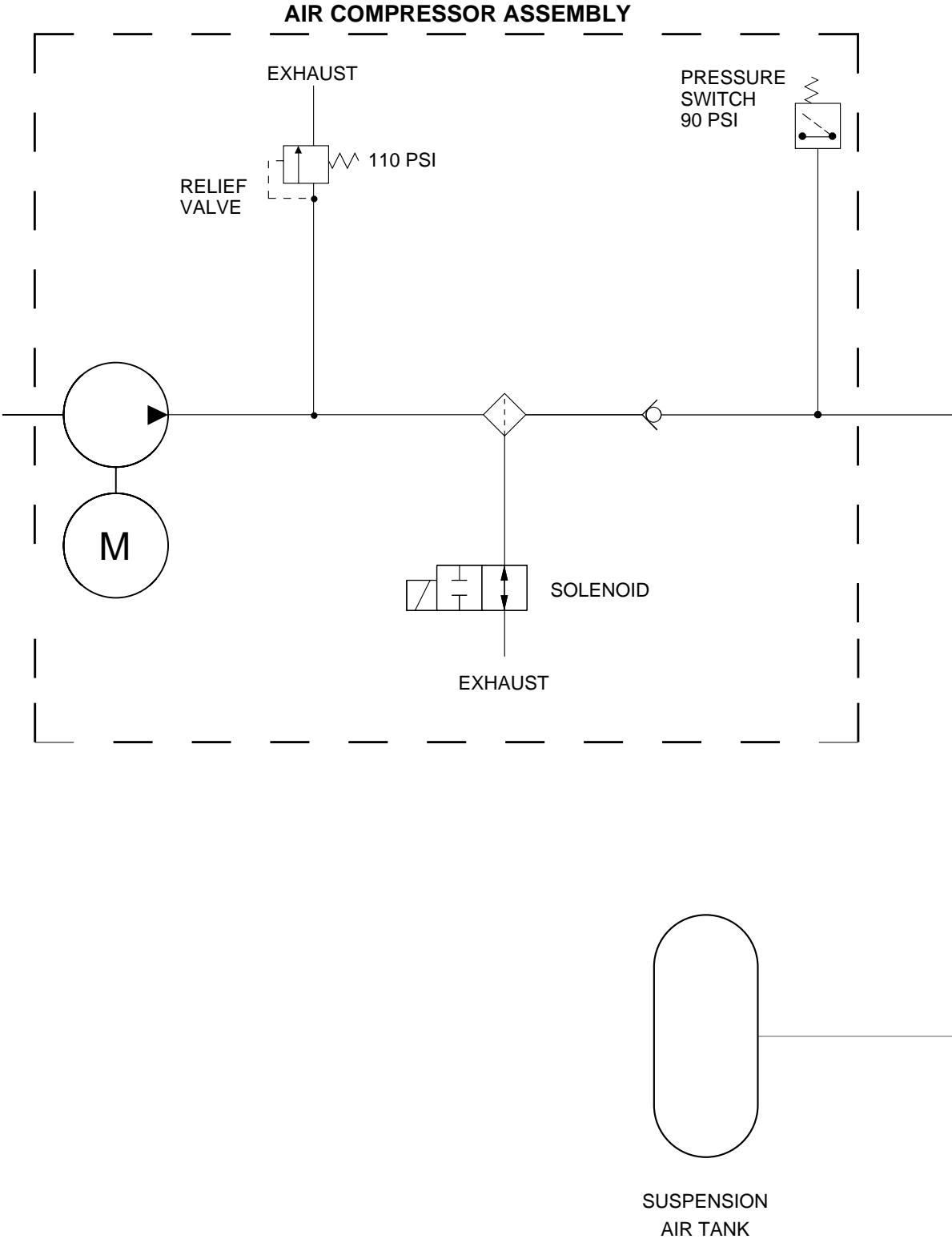


COMPRESSOR DIAGRAM

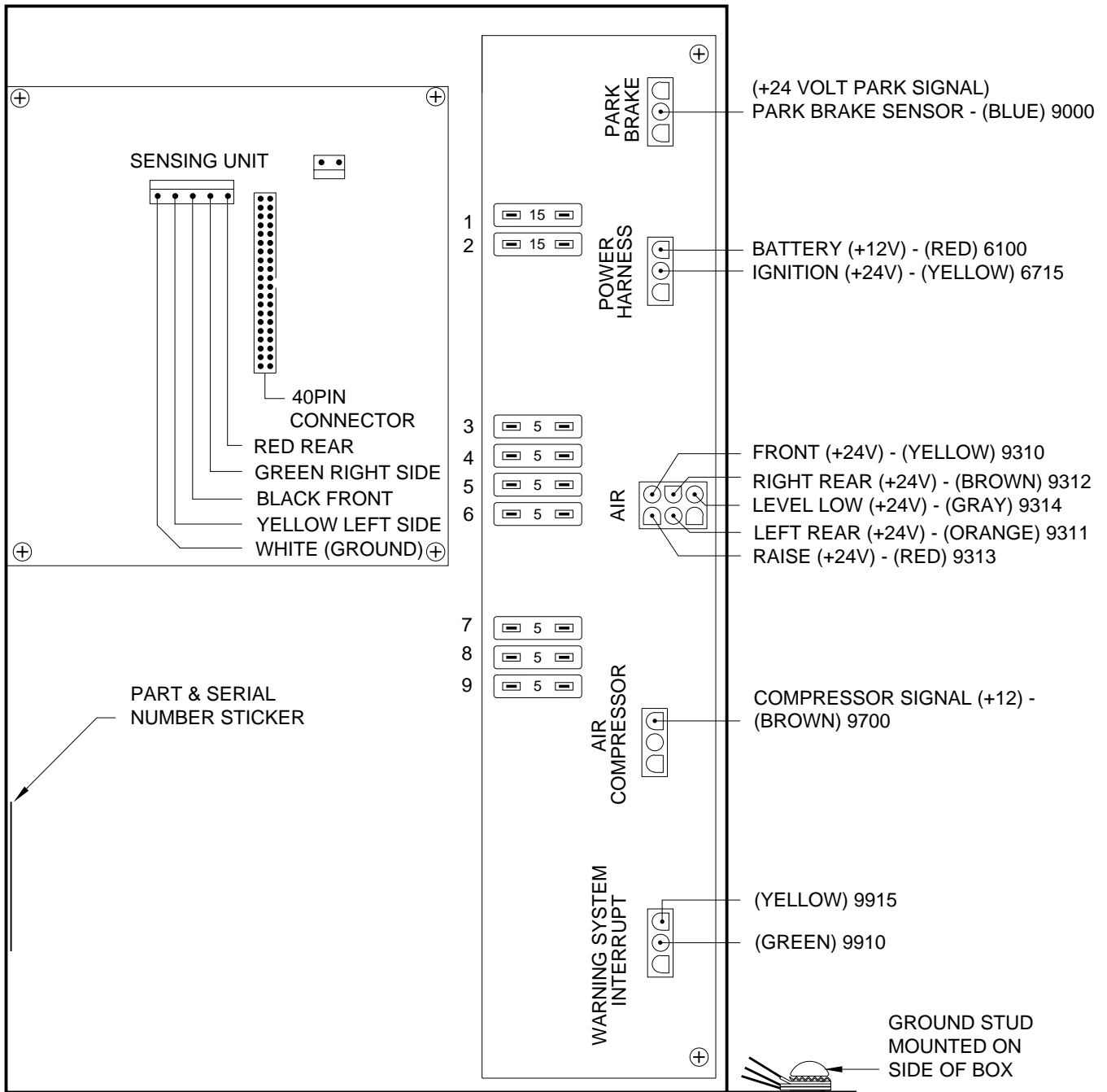


The control box sends a +12 signal to the 12 Volt Relay (1) whenever a raise function is needed in automatic or manual leveling. The compressor will run and the normally open air solenoid (2) will close allowing the compressor to build pressure. When the pressure builds to 110 psi the relief valve (3) will open and the compressor will continue to run. The pressure switch (4) will not affect the operation of the leveling system. During auxiliary operation of the compressor, when pressure builds to 90 psi the pressure switch will open, stopping the compressor. The air solenoid (2) will be open whenever the compressor is not running. This releases internal pressure from the compressor.

**AIR SCHEMATIC
PREVOST WITH AUXILIARY SYSTEM PRESSURE SWITCH**



CONTROL BOX CONNECTION DIAGRAM



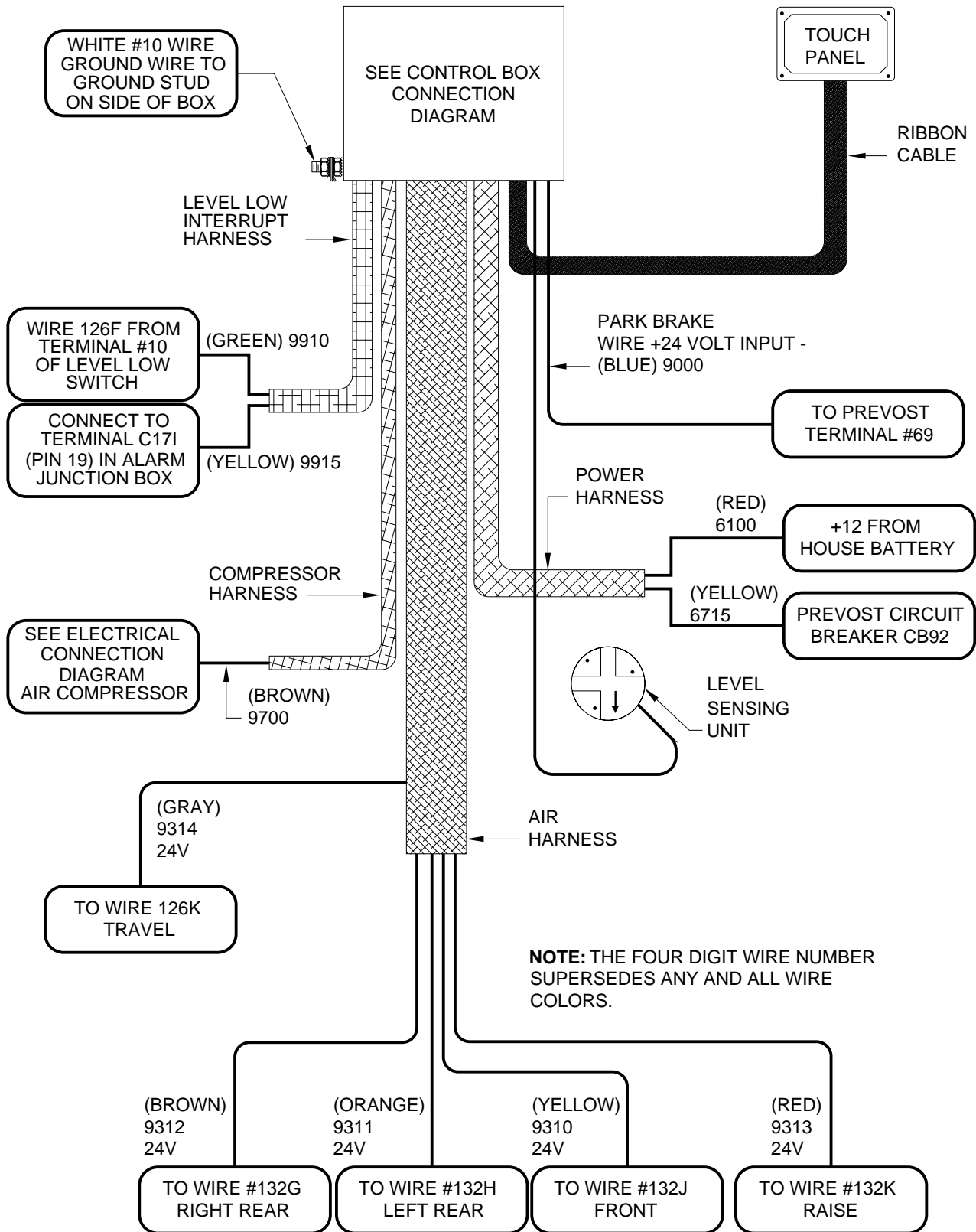
FUSE DESIGNATION

- 1 BATTERY
- 2 IGNITION
- 3 RIGHT REAR
- 4 LEFT REAR
- 5 RAISE
- 6 FRONT
- 7 LEVEL LOW
- 8 CR1-CR2
- 9 AIR COMPRESSOR

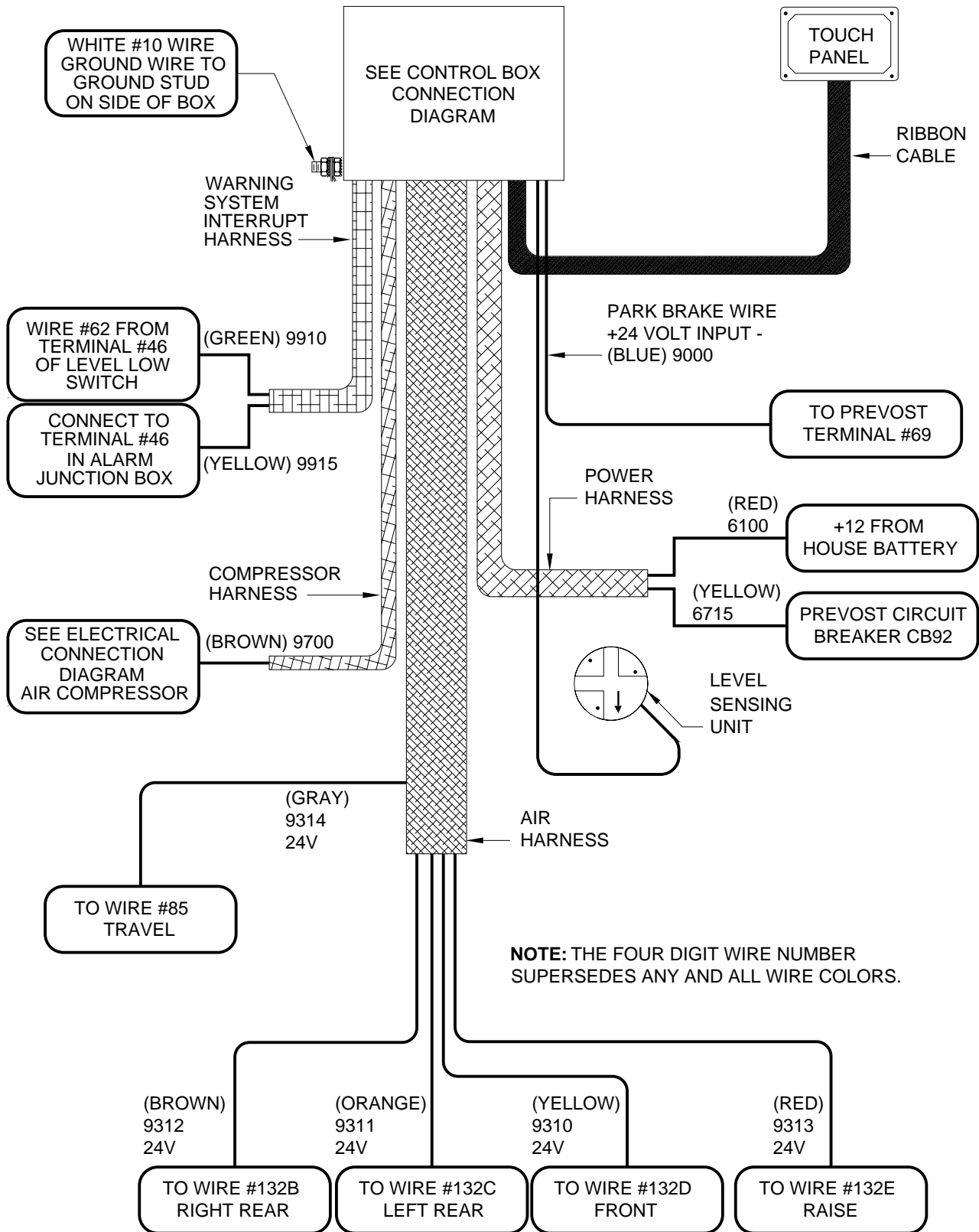
GROUND #10 WIRE
TO FRAME RAIL

NOTE: THE FOUR DIGIT WIRE NUMBER
SUPERSEDES ANY AND ALL WIRE
COLORS.

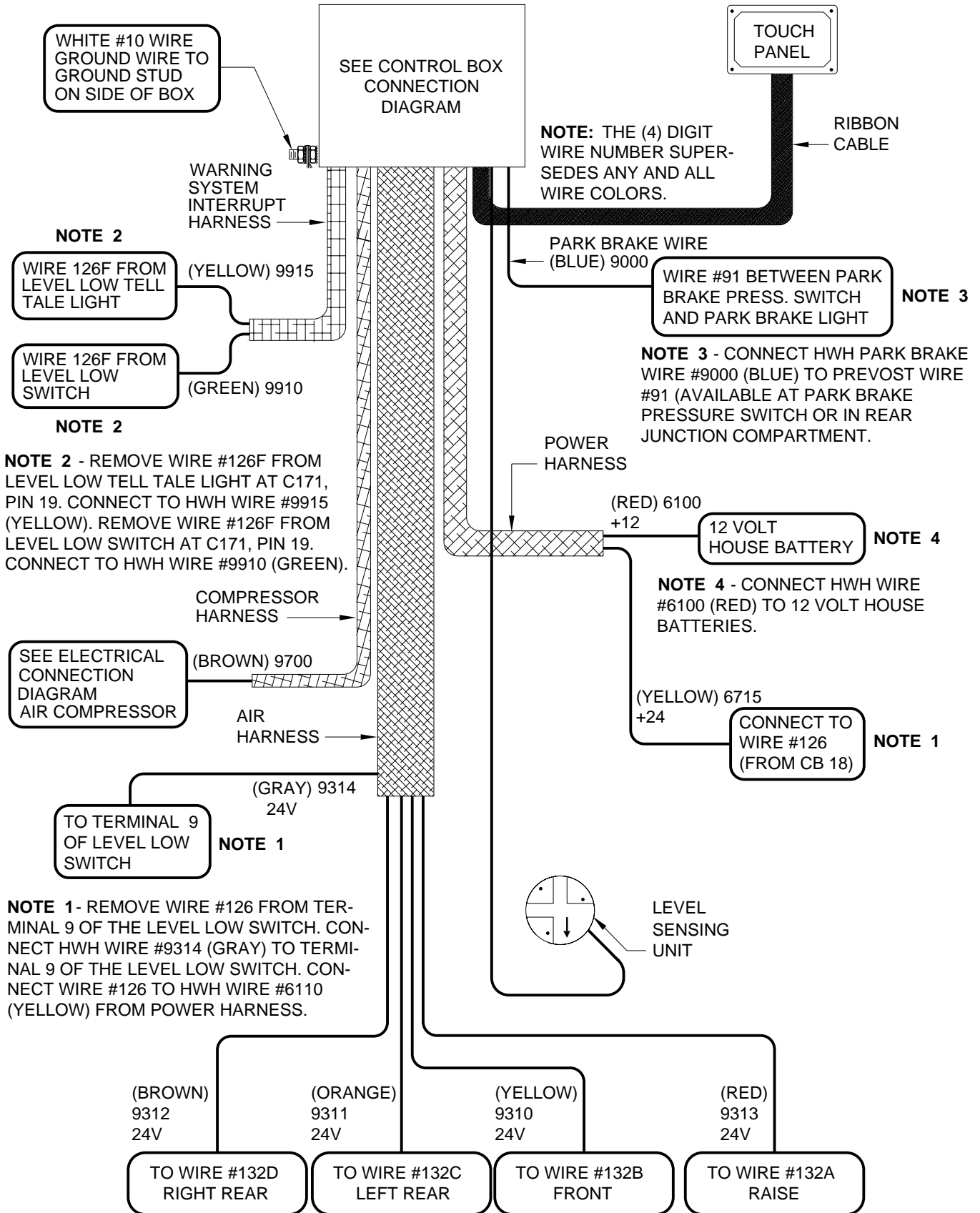
ELECTRICAL CONNECTION DIAGRAM COMPUTER - CONTROLLED AIR LEVELING PREVOST H3-40 - 24 VOLT OUTPUT



ELECTRICAL CONNECTION DIAGRAM COMPUTER - CONTROLLED AIR LEVELING PREVOST XL - 24 VOLT OUTPUT



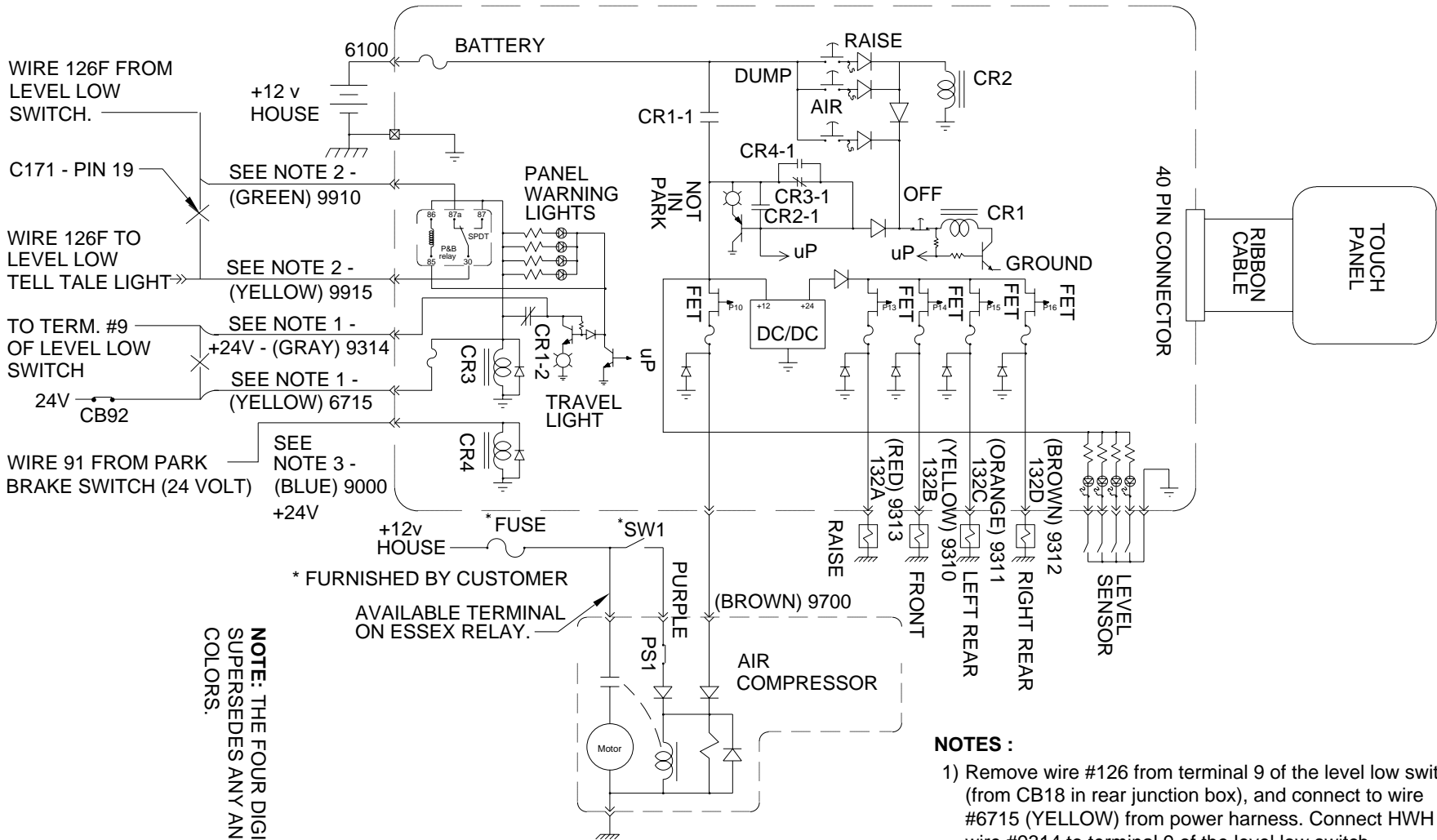
ELECTRICAL CONNECTION DIAGRAM COMPUTERIZED AIR LEVELING PREVOST H3-45



ELECTRICAL SCHEMATIC

PREVOST H3-45

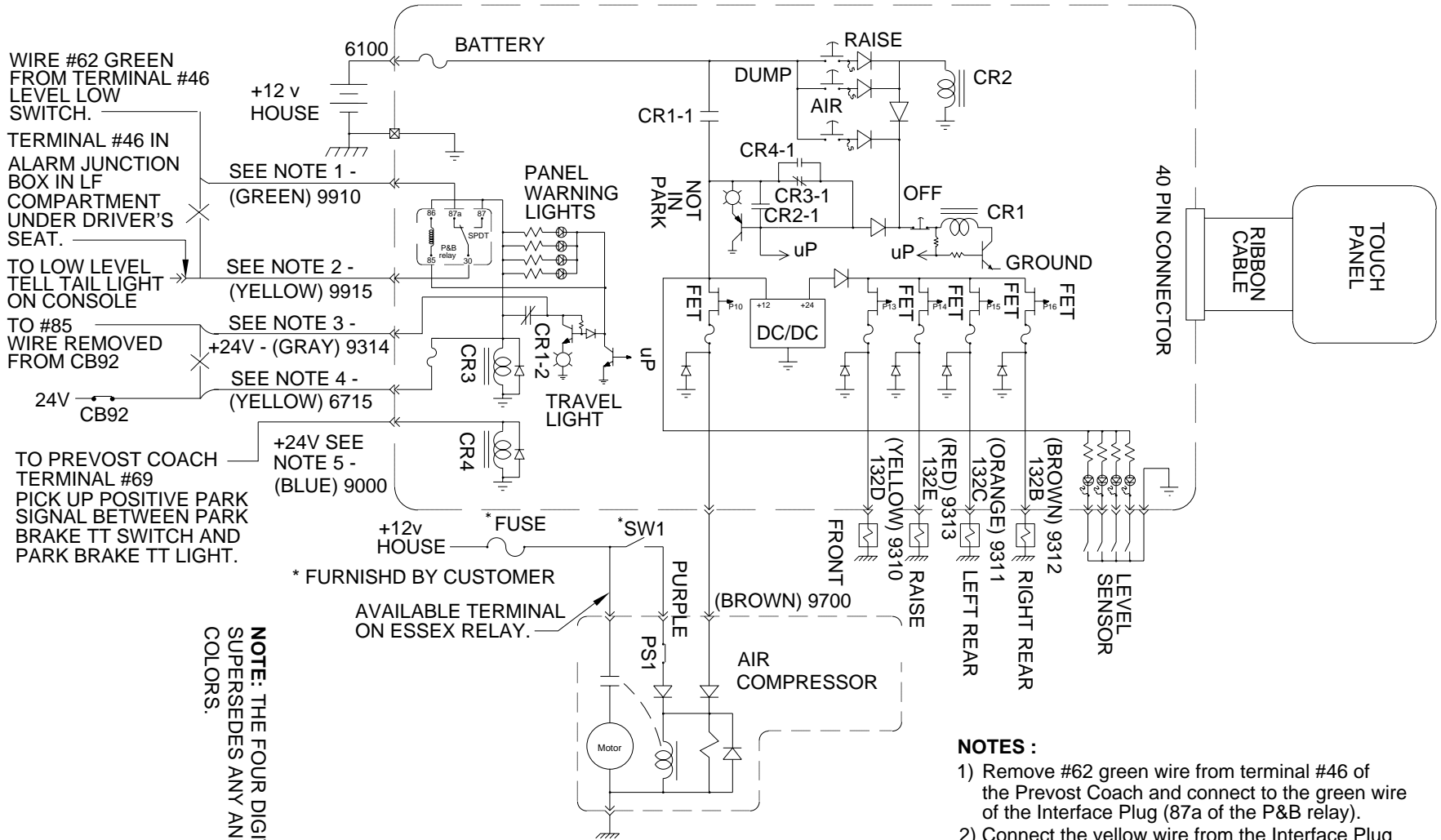
24 VOLT OUTPUT



- NOTES :**
- 1) Remove wire #126 from terminal 9 of the level low switch (from CB18 in rear junction box), and connect to wire #6715 (YELLOW) from power harness. Connect HWH wire #9314 to terminal 9 of the level low switch.
 - 2) Remove wire #126F from Level Low Tell Tale Light at C171, PIN 19. Connect to HWH wire #9915 (YELLOW). Remove wire #126F from Level Low Switch at C171, PIN 19. Connect to HWH wire #9910 (GREEN).
 - 3) Connect HWH Park Brake Wire #9000 (BLUE) to Prevost wire #91 (Available at Park Brake Pressure Switch or in rear junction compartment).
 - 4) Connect HWH wire #6100 (RED) to 12 volt House Batteries.

NOTE: THE FOUR DIGIT WIRE NUMBER SUPERSEDES ANY AND ALL WIRE COLORS.

ELECTRICAL SCHEMATIC PREVOST XL - 40 AND 45 24 VOLT OUTPUT



NOTE: THE FOUR DIGIT WIRE NUMBER SUPERSEDES ANY AND ALL WIRE COLORS.

- NOTES :**
- 1) Remove #62 green wire from terminal #46 of the Prevost Coach and connect to the green wire of the Interface Plug (87a of the P&B relay).
 - 2) Connect the yellow wire from the Interface Plug (30 of the P&B relay) to terminal #46 of the Prevost Coach.
 - 3) Remove #85 wire from CB92 and route to the gray wire from the Air Plug of the Control Box.
 - 4) Route the yellow wire from the Power Plug (harness) to CB92 of the Prevost Coach.
 - 5) Route the blue wire from the Control Box (Park Plug) to terminal #69 of the Prevost Coach.

ELECTRICAL CONNECTION DIAGRAM FOR AIR COMPRESSORS WITH AUXILIARY SYSTEM PRESSURE SWITCH

