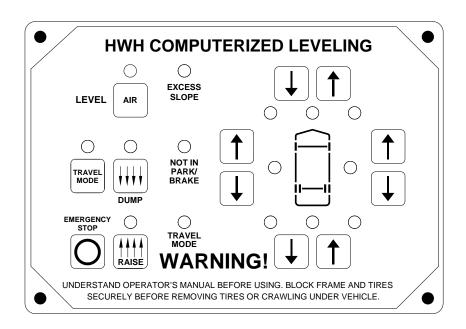


OPERATOR'S MANUAL

HWH° COMPUTER-CONTROLLED 2000 SERIES LEVELING SYSTEM

FEATURING:

Single Step Touch Panel Control
Air Leveling



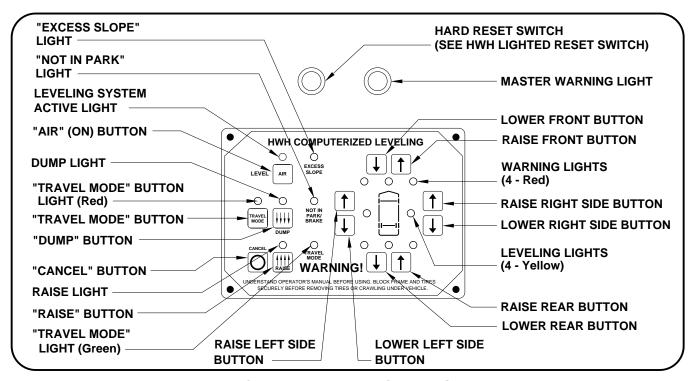
HWH CORPORATION

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AP46483

CONTROL IDENTIFICATION



CONTROL FUNCTIONS

CONTROL BUTTONS

"AIR" BUTTON: This is the automatic operation button. It works if the ignition is in the "ON" position and the park brake is set.

"CANCEL" BUTTON: This button turns the system OFF but does NOT control power to the "DUMP" or "RAISE" buttons. Pushing this button will NOT put the system in the TRAVEL mode.

"TRAVEL MODE" BUTTON: This button will put the Leveling System in the TRAVEL mode. The ignition must be "ON" for the vehicle to return to proper ride height for traveling.

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

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

IMPORTANT: Read "DUMP AND RAISE FUNCTIONS" before using the "DUMP" or "RAISE" buttons.

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 for manually operating the air leveling systems. Sides or ends of the vehicle will lower while these buttons are pushed.

INDICATOR LIGHTS

LEVEL SYSTEM ACTIVE LIGHT: ON when the system is active, and flashes during automatic leveling.

DUMP LIGHT: Flashes when "DUMP" button is pushed.

RAISE LIGHT: Flashes when "RAISE" button is pushed.

"EXCESS SLOPE" LIGHT: ON if the leveling system can NOT level the coach.

"TRAVEL MODE" BUTTON LIGHT (RED): Light flashes for 3 seconds after the "TRAVEL MODE" button is pushed.

"TRAVEL MODE" LIGHT (GREEN): ON if the ignition is in the "ON" position, the system is not being used, and there is sufficient air pressure in the suspension.

See PREPARATION FOR TRAVEL.

WARNING LIGHTS: Function with the ignition in the "ON" position. ON when the LEVELING SYSTEM ACTIVE LIGHT is ON. See PREPARATION FOR TRAVEL.

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: ON while the "AIR" button is being pushed if the Park Brake is NOT set. The light will go out when the "AIR" button is released.

MASTER WARNING LIGHT: ON any time the "TRAVEL" light is not ON, if the ignition is in the "ON" position.

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OPERATING PROCEDURES

NETWORK INFORMATION

The HWH 2000 series CAN system is a computerized modular network. It controls all functions of the leveling system and HWH room extensions. The network is active any time the ignition is in the "ON" or "ACC" position or when any room extension control panel key is "ON". Certain functions and indicator lights for the leveling system will work when the network is active. Certain functions and lights will work ONLY if the the ignition is in the "ON" or "ACC" position to start the function.

NOTE: The network will stay active for 5 minutes after the ignition key has been turned "OFF". If the leveling system was turned "ON", the network will stay active for 5 minutes after automatic leveling is complete or the system goes "EXCESS SLOPE". If manual leveling buttons were used, the network stays active for 5 minutes after the last manual button is released.

GENERAL INSTRUCTIONS

Maintain adequate clearance in all directions for vehicles, room extensions, doors, steps, etc.. Vehicle may move in any direction due to raising or lowering of vehicle during leveling, settling of vehicle, equipment malfunction, etc..

The MASTER WARNING LIGHT will be on if an air bag has low pressure if the ignition is in the "ON" position.

WARNING: DO NOT MOVE THE VEHICLE AT SPEEDS IN EXCESS OF 5 MPH IF THE MASTER WARNING LIGHT IS ON.

The "DUMP" and "RAISE" buttons will function with the leveling system and park brake off, if the ignition is in the "ON" or "ACC" position or if the network is active. See AIR DUMP AND RAISE FUNCTIONS section of this manual.

If the Park Brake is not set, the Leveling System cannot be turned ON.

HWH LIGHTED RESET SWITCH

The HWH lighted reset switch is located on the vehicle dash. If there is a failure at any time in the HWH CAN network, the network will shut down. The leveling system will not operate. If the ignition is off, no indicator lights will come on. If the ignition is in the "ON" or "ACC" position, the lighted reset switch and the MASTER WARNING Light will come on.

If the lighted reset switch is on, the switch must be pushed before the leveling system can be operated.

If the lighted reset switch will not go out when pushed, there is a problem with the central control module of the network system. The Leveling System will not operate. The vehicle suspension will return to the travel mode if the ignition key is in the "ON" position.

WARNING: IF THE IGNITION IS IN THE "ON" POSITION AND THE LIGHTED RESET SWITCH IS ON, THE VEHICLE CAN RETURN TO RIDE HEIGHT WITHOUT RELEASING THE PARK BRAKE.

PREPARATION FOR TRAVEL

Visually check that the vehicle is at the proper ride height for traveling.

The ignition must be in the "ON" position for the vehicle suspension to be in the travel mode. Also the "TRAVEL MODE" button must be pushed or the park brake released for the suspension to be in the travel mode If the Leveling System was used.

A lit "TRAVEL MODE" light indicates that the HWH Leveling System is in the TRAVEL MODE. It does not indicate that the suspension is at ride height or that the coach is ready to travel.

Pushing the "TRAVEL MODE" button during an automatic leveling sequence will not put the suspension in the travel mode even if the ignition is on. It will stop the auto leveling sequence.

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

Before traveling, the MASTER WARNING light must be off and the "TRAVEL MODE" light must be ON.

NOTE: Low air pressure can turn the green "TRAVEL MODE" light off and turn the MASTER WARNING light on.

Refer to "DUMP" and "RAISE" FUNCTIONS operating procedures when moving the vehicle with the suspension NOT at the proper ride height.

OPERATING PROCEDURES

AUTOMATIC AIR OPERATION

NOTE: The ignition must be in the "ON" or "ACC" position to use the "AIR" button. Once the operation is started, the ignition can be moved to the "OFF" position and the operation will continue.

1. Place the transmission in the proper position for parking and set the park brake. The air leveling system can only be turned on if the ignition is in the "ON" or "ACC" position. Leaving the engine running during leveling is recommended. This will provide a better air supply for leveling. The vehicle will level with the engine shut off, however more time will be required for leveling.

NOTE: If the ignition key is in the "ON" or "ACC" position, the panel will not turn on if the park brake is not set. The "NOT IN PARK/BRAKE" light will be on while the "AIR" button is being pushed.

2. Press the "AIR" button once to start the automatic leveling sequence. The LEVELING SYSTEM ACTIVE LIGHT will flash. The four red WARNING lights on the panel will come on. This indicates that the height control valves have been locked out. The vehicle should not be moved when these lights are on. The system will first exhaust all air from the suspension air bags regardless of the status of the yellow level lights. After the air is exhausted from the air bags, if no yellow light is on, the system will go directly to the sleep mode. If yellow lights are on, the system will add air to air bags to raise the low side or end of the vehicle, starting with any lit side yellow light.

NOTE: Only one or two yellow LEVEL SENSING lights may be ON at one time.

3. When all four yellow level lights are out, the LEVELING SYSTEM ACTIVE LIGHT will stop flashing and start pulsating dimly. The Leveling System is now in the SLEEP MODE. The vehicle's engine/ignition may now be turned OFF.

NOTE: After the ignition and any HWH room extension KEY SWITCHES are turned OFF, the CAN Network stays active for 5 minutes before shutting down. Leveling System touch panel lights will stay ON during this time and go out when the CAN Network shuts down. If the Leveling System is in the SLEEP MODE when the Network shuts down, the computer will stay ON. The Leveling System touch panel lights will all be OFF, but the Leveling System will still be in the SLEEP MODE.

4. 30 minutes after the Leveling System enters the SLEEP MODE, the computer will monitor the LEVELING SENSING UNIT for one minute. If no leveling is needed, the computer will continue to monitor the LEVELING SENSING UNIT every 30 minutes. No light will be seen on the Touch Panel.

5. If the vehicle needs to be releveled, the CAN Network will become active. The Leveling System touch panel lights will come ON during the leveling procedure. The LEVELING SYSTEM ACTIVE LIGHT will flash. One or two yellow LEVELING LIGHTS will be ON. The system will relevel the vehicle. When the yellow LEVELING LIGHTS are all out, the LEVELING SYSTEM ACTIVE LIGHT will stop flashing and start pulsating dimly. The Leveling System will remain in the SLEEP MODE with the computer monitoring the LEVELING SENSING UNIT every 30 minutes, releveling the vehicle as needed.

NOTE: The CAN Network will stay active for 5 minutes after releveling the vehicle and then shut down, turning the touch panel lights OFF. This happens every time the system relevels the vehicle.

6. The SLEEP MODE will continue until the "CANCEL" button or the "TRAVEL MODE" button is pushed or the park brake is released, if the ignition is in the "ON" position.

NOTE: The "CANCEL" or "TRAVEL MODE" button will not turn the system off unless the network is active (LEVELING SYSTEM ACTIVE light pulsating dimly). If the ignition is on and the "TRAVEL MODE" button is pushed, the vehicle can return to ride height.

EXCESS SLOPE: The system will attempt to level the vehicle for approximately 30 minutes. After the 30 minutes, if a LEVEL SENSING light is still on, the "EXCESS SLOPE" light will come on. The LEVEL LIGHT indicator light will go out. The "EXCESS SLOPE" light will be on whenever the network is active.

The "EXCESS SLOPE" light will be on whenever the network is active until the vehicle is leveled with all yellow LEVEL indicator lights off.

The system will only return to the TRAVEL MODE if the "STORE" button is pushed or the park brake is released. In either case, the ignition key must be in the "ON" position.

OPERATING PROCEDURES

MANUAL AIR OPERATION

1. Place the transmission in the proper position for parking and set the park brake. The manual raise and lower buttons can only be used if the ignition is in the "ON" or "ACC" position. Running the vehicle engine during leveling is recommended. This will provide a better air supply for leveling. The vehicle will level with the engine shut off, however more time will be required for leveling.

NOTE: The RAISE and LOWER buttons will not function if the system is in automatic leveling or the SLEEP mode. Push the "CANCEL" button with the ignition in the "ON" or "ACC" position to use the manual RAISE and LOWER buttons.

2. The vehicle can be leveled using the RAISE (up arrow) and LOWER (down arrow) buttons on the right half of the panel in conjunction with the yellow LEVEL indicator lights. Any side to side leveling should be done, if needed, before leveling the vehicle front to rear.

The yellow LEVEL indicator light indicates that side or end is end is low. When all yellow lights are out the vehicle is level. Try leveling the vehicle by lowering the high side or end (opposite of the lit yellow level lights). If a level position is not achieved use the RAISE (up arrow) button to raise the low side or end.

- 3. Turn the ignition to the "OFF" position.
- 4. Turn the system off.

NOTE: If the "DUMP" or "RAISE" buttons are pushed while manually leveling the vehicle with air and the ignition is in the "ON" position, the system will latch into the dump or raise mode until the "CANCEL" button is pushed or the ignition is turned off.

"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.

WARNING: 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.

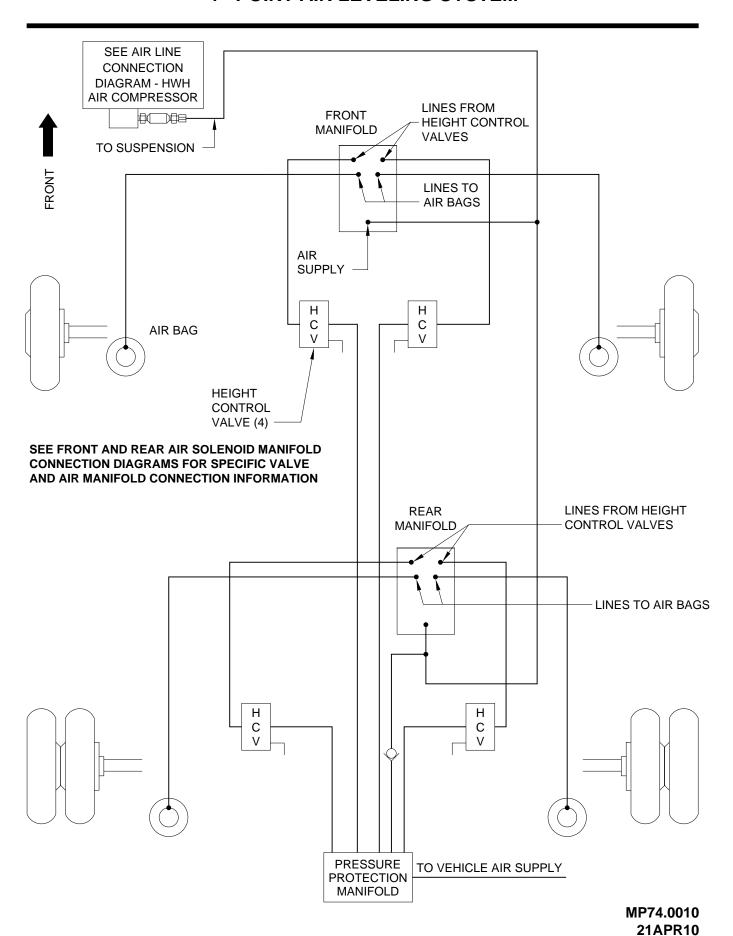
The vehicle can not return to ride height until the "TRAVEL MODE" button or the "CANCEL" button is pushed or the vehicle exceeds 10 M.P.H, putting the system in the TRAVEL MODE.

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.

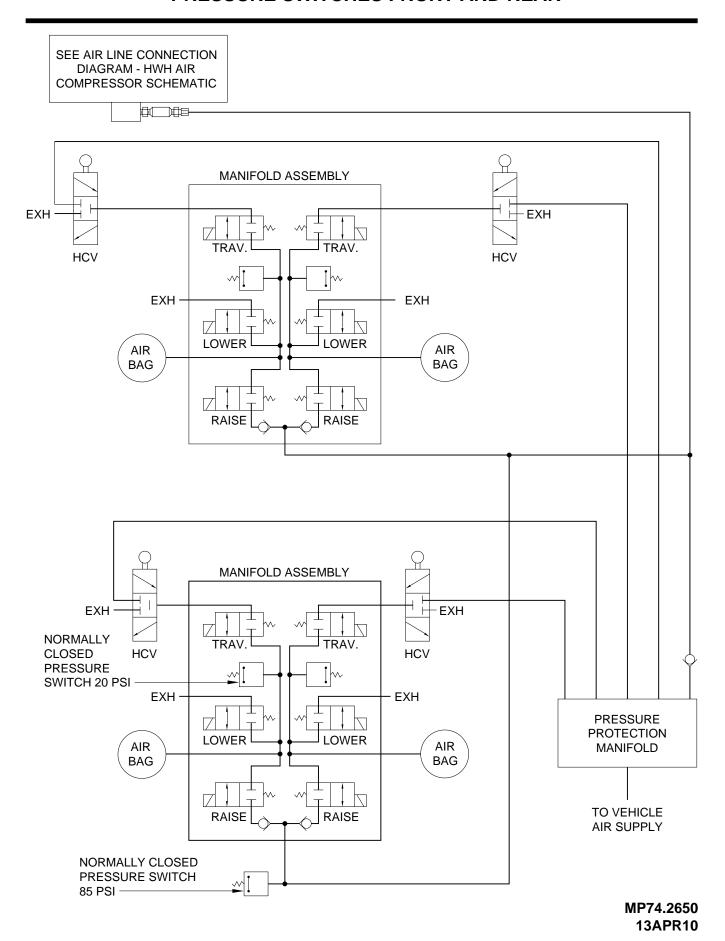
DO NOT operate the vehicle for extended distances unless the air suspension is at the proper height for travel. The vehicle can not return to ride height until the "CANCEL" button is pushed or the vehicle exceeds 10 MPH, putting the system in the TRAVEL MODE.

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

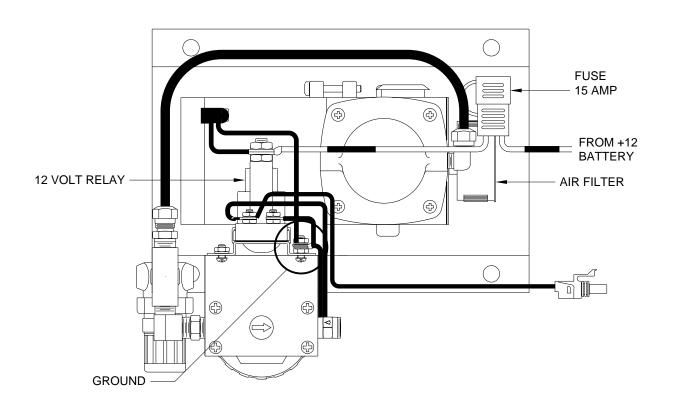
AIR LINE CONNECTION DIAGRAM 4 - POINT AIR LEVELING SYSTEM

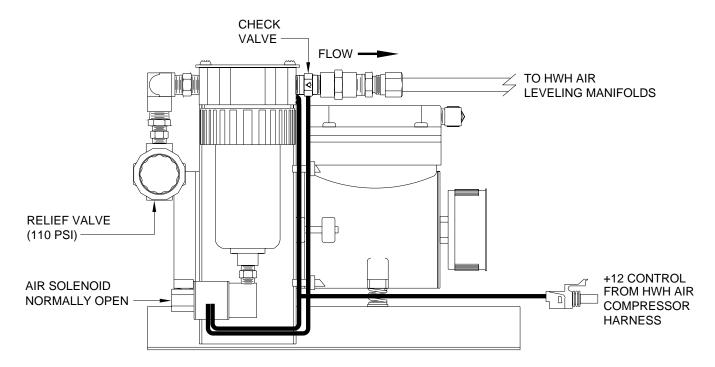


AIR LINE CONNECTION DIAGRAM 4-POINT LEVELING SYSTEM SCHEMATIC PRESSURE SWITCHES FRONT AND REAR

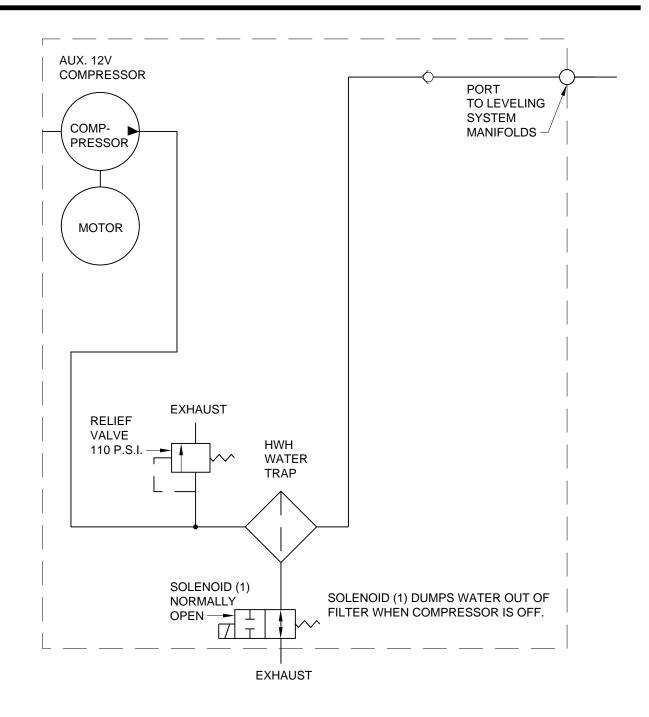


AIR LINE CONNECTION DIAGRAM HWH AIR COMPRESSOR

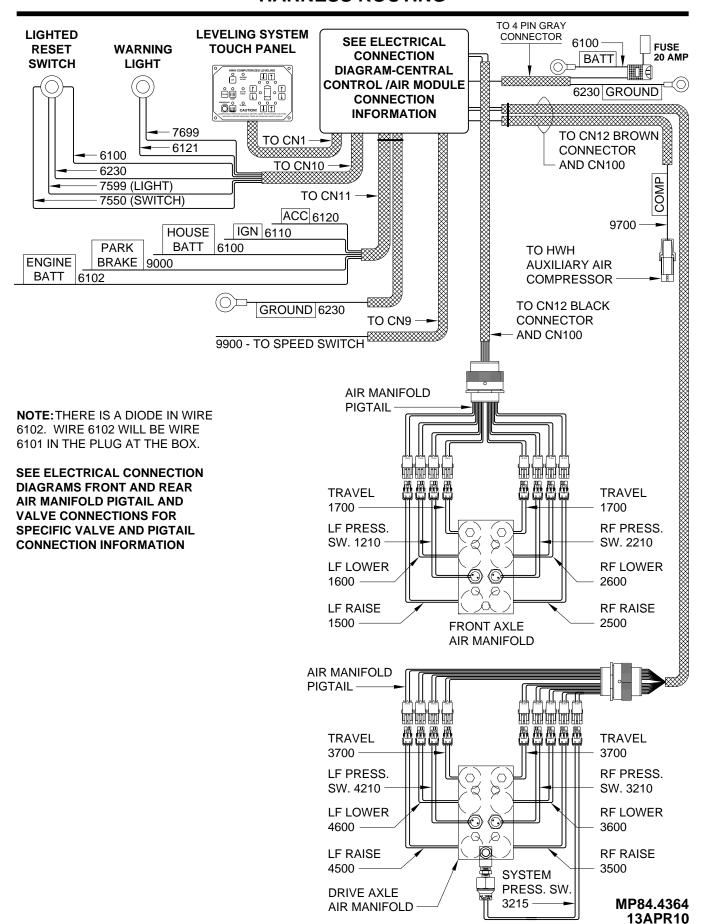




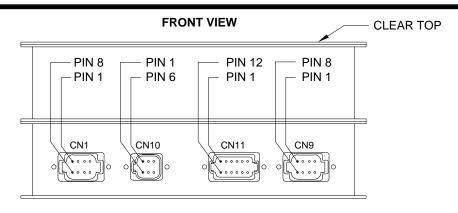
AIR LINE CONNECTION DIAGRAM HWH AIR COMPRESSOR SCHEMATIC



ELECTRICAL CONNECTION DIAGRAM 2000 SERIES CAN SYSTEM AIR LEVELING HARNESS ROUTING

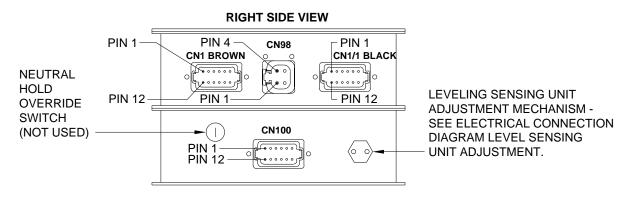


ELECTRICAL CONNECTION DIAGRAM CENTRAL CONTROL / AIR MODULE WIRE AND CONNECTION INFORMATION - PAGE 1 OF 5



PIN#	WIRE COLOR	WIRE NUMBER	WIRE DESCRIPTION AND FUNCTION
CN1			8 PIN BLACK CONNECTOR
1			NO CONNECTION
2 - — —			— — — NO CONNECTION
			— — — +12 SWITCHED BATTERY TO TOUCH PANEL
4 — —	− WHITE − −	— — 6230 — — — — —	GRND TO TOUCH PANEL
5 — —		—— <u> </u>	SHIELD WIRE FOR CAN CABLE
6			NO CONNECTION
7 — —	− GREEN − −		CAN DATA LINE LOW-DO NOT MODIFY
8 ——	— YELLOW — -	- 	CAN DATA LINE HIGH-DO NOT MODIFY
CN10			6 PIN GRAY CONNECTOR
1 ——	- BLACK	— — 7 599 — — — —	— — — RESET SWITCH LIGHT CONTROL-SWITCHED +12
			— — — RESET SWITCH SUPPLY +12
3 — —	- BLACK	— — 7550 — — — — —	— — — RESET SWITCH OUTPUT +12
			— — — — WARNING LIGHT SUPPLY +12
			— — — RESET SWITCH LIGHT GROUND
6 — —	- BLACK	— — 7699 — — — — —	WARNING LIGHT CONTROL - SWITCHED GROUND
CN11			12 PIN GRAY CONNECTOR
1 ——	$-\operatorname{RED}$	— - 6110 <i>—</i> — — —	— — — — SWITCHED +12 FROM IGNITION
			NO CONNECTION
			NO CONNECTION
			NO CONNECTION
			— — — — SWITCHED +12 FROM ACCESSORY
			— — — HOUSE BATTERY +12
			— — — — GROUND FOR PROCESSOR
			NO CONNECTION
			NO CONNECTION
			NO CONNECTION
			FROM PARK BRAKE SWITCH - SWITCHED GROUND
			— — — ENGINE BATTERY +12 (6102 IN OTHER CONNECTOR)
			8 PIN GREEN CONNECTOR
			— — — NO CONNECTION
			— — — SPEED SW. +12 BELOW SPEED - OPEN ABOVE SPEED
			NO CONNECTION

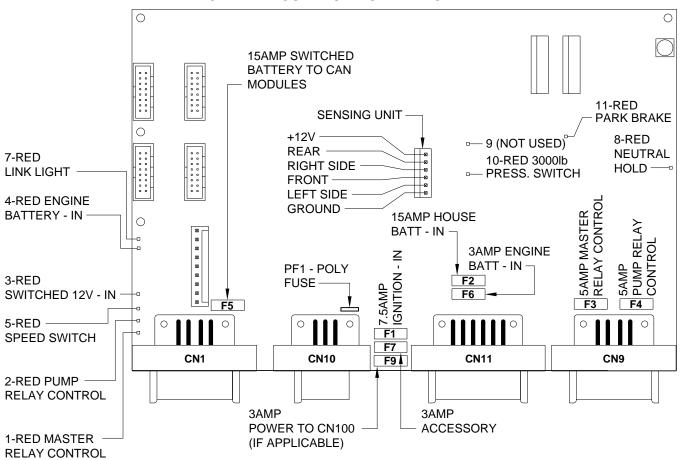
ELECTRICAL CONNECTION DIAGRAM CENTRAL CONTROL / AIR MODULE WIRE AND CONNECTION INFORMATION - PAGE 2 OF 5



PIN#	WIRE COLOR	WIRE NUMBER	WIRE DESCRIPTION AND FUNCTION
CN1 (BR	OWN)		— 12 PIN BROWN CONNECTOR
			- — NO CONNECTION
2 — —	- BLACK $ -$	1500	- LEFT FRONT RAISE AIR VALVE CONTROL - SWITCHED +12
3 — —	- BLACK	1600	- LEFT FRONT LOWER AIR VALVE CONTROL - SWITCHED +12
4 — —	- BLACK		RIGHT FRONT RAISE AIR VALVE CONTROL - SWITCHED +12
			RIGHT FRONT LOWER AIR VALVE CONTROL - SWITCHED +12
			- — AUXILARY AIR COMPRESSOR CONTROL - SWITCHED +12
7 — —			- — NO CONNECTION
8 — —	- BLACK	1700	- FRONT AIR MANIFOLD TRAVEL VALVES CONTROL - SWITCHED +12
			- — NO CONNECTION
			- — NO CONNECTION
			- — GROUND FOR AIR SOLENOID VALVES
			- — NO CONNECTION
			— 4 PIN GRAY CONNECTOR
1 — —	$-\operatorname{RED}$ - $ -$	— — 6100 — — —	- — +12 BATTERY
2 — —	$-\operatorname{RED}$ - $ -$	— — 6100 — — —	- — +12 BATTERY
3 — —	- WHITE $ -$	6230	- — GROUND FOR SOLENOID VALVES
			- — GROUND FOR SOLENOID VALVES
			— 12 PIN BLACK CONNECTOR
1 – –			- — NO CONNECTION
			- LEFT REAR RAISE AIR VALVE CONTROL - SWITCHED +12
3 — —	- BLACK	4600	- LEFT REAR LOWER AIR VALVE CONTROL - SWITCHED +12
4 — —	- BLACK	3500	- RIGHT REAR RAISE AIR VALVE CONTROL - SWITCHED +12
5 — —	- BLACK	3600	RIGHT REAR LOWER AIR VALVE CONTROL - SWITCHED +12
			- — NO CONNECTION
8 — —	- BLACK	3700	REAR AIR MANIFOLD TRAVEL VALVES CONTROL - SWITHED +12
			- — NO CONNECTION
11 — —	- WHITE $ -$	6258	- — GROUND SUPPLY FOR REAR SOLENOID VALVES
			- — NO CONNECTION
			— 12 PIN GRAY CONNECTOR
1			- — NO CONNECTION
			- LEFT FRONT PRESSURE SWITCH INPUT - SWITCHED GROUND
			- RIGHT FRONT PRESSURE SWITCH INPUT - SWITCHED GROUND
			RIGHT REAR PRESSURE SWITCH INPUT - SWITCHED GROUND
			— LEFT REAR PRESSURE SWITCH INPUT - SWITCHED GROUND
			- GROUND SUPPLY FOR ALL AIR MANIFOLD PRESSURE SWITCHES
			- — NO CONNECTION
			- — AIR SYSTEM PRESSURE SWITCH - SWITCHED GROUND
			- — NO CONNECTION

ELECTRICAL CONNECTION DIAGRAM CENTRAL CONTROL / AIR MODULE LED - FUSE LOCATION AND DESCRIPTION - PAGE 3 OF 5

CENTRAL CONTROL MOTHER BOARD



LED	DESCRIPTION	CN AND PIN
1-RED	MASTER RELAY CONTROL (NOT USED)	CN 9 - PIN 1
2-RED	PUMP RELÁY CONTROL	CN 9 - PIN 4
3-RED	(NOT USED) SWITCHED 12V FROM MASTER RELAY	CN 1 - PIN 3
4-RED	ENGINE BATTERY - IN	CN 11 - PIN 12
5-RED	SPEED SWITCH*	CN 9 - PIN 5
7-RED	LINK LIGHT	CN 1 - PIN 7 & 8
8-RED	NEUTRAL HOLD**	CN 11 - PIN 8 & 9
9-NOT USED	NOT USED	NOT USED
10-RED	3000 LBS PRESS SWITCH - ON	CN 9 - PIN 2
11-RED	PARK PRAKE - ON	CN 11 - PIN 11

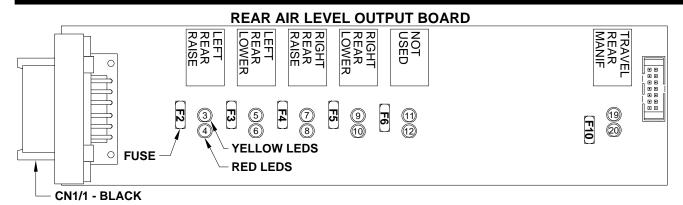
FUSE DESCRIPTION
PF1 - POLY FUSE - POWER TO MASTER WARNING LIGHT AND RESET SWITCH F1 - 7.5AMP IGNITION - IN F2 - 15AMP HOUSE BATTERY - IN F3 - 5AMP MASTER RELAY CONTROL F4 - 5AMP PUMP RELAY CONTROL F5 - 15AMP SWITCHED BATTERY - IN F6 - 3AMP RESET OUT F7 - 3AMP ACCESSORY - IN F9 - 3AMP POWER TO CN100 (IF APPLICABLE)

NOTE: FOR DETAILED INPUT / OUTPUT INFORMATION ABOUT PIN CONNECTIONS SEE ELECTRICAL CONNECTION DIAGRAM - CENTRAL CONTROL / AIR MODULE CONNECTION INFORMATION PAGE 1 OF 5.

 $^{^{\}star}$ LED 5 INDICATES A +12 SIGNAL FROM THE SPEED SWITCH - IGNITION ON COACH SPEED LESS THAN 10 MPH

^{**} LED 8 INDICATES TRANSMISSION IS DISABLED WHEN LIT.

ELECTRICAL CONNECTION DIAGRAM CENTRAL CONTROL / AIR MODULE LED - FUSE LOCATION AND DESCRIPTION - PAGE 4 OF 5



LED	RELAY DESCRIPTION	FUSE	BROWN
3-YELLOW	LEFT REAR RAISE		
4-RED	LEFT REAR RAISE	F2-5 AMP	PIN 2
5-YELLOW	LEFT REAR LOWER		
6-RED	LEFT REAR LOWER	F3-5 AMP	PIN 3
7-YELLOW 8-RED	RIGHT REAR RAISE	F4-5 AMP	PIN 4
9-YELLOW	RIGHT REAR RAISE	F4-5 AIVIP	PIN 4
10-RED	RIGHT REAR LOWER	F5-5 AMP	PIN 5
11-YELLOW	COMPRESSOR		
12-RED	COMPRESSOR	F6-5 AMP	PIN 6
19-YELLOW	TRAVEL	[[[] [] [] [] [] [] [] [] []	DINIO
20-RED	TRAVEL	F10-7.5 AMP	PIN 8

NOTE: THE TRAVEL RELAY IS WIRED AS A NORMALLY CLOSED RELAY. WHEN THE YELLOW LED (19) IS ON THE RELAY CONTACTS WILL OPEN. THE RED LED (20) WILL NOT BE ON. THE RED LED WILL BE ON IF THE LEVELING SYSTEM IS IN THE TRAVEL MODE AND THE IGNITION IS ON.

NOTE: FOR DETAILED INPUT / OUTPUT INFORMATION ABOUT PIN CONNECTIONS SEE ELECTRICAL CONNECTION DIAGRAM - CENTRAL CONTROL / AIR MODULE CONNECTION INFORMATION PAGE 2 OF 5.

NOTE: A LIT YELLOW LED INDICATES THERE IS A GROUND SIGNAL TO TURN THE CORRESPONDING RELAY ON.

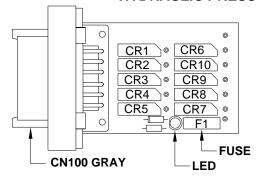
A LIT RED LED INDICATES THERE IS VOLTAGE ON IT'S CORRESPONDING PIN.

IF A YELLOW LED IS LIT AND THE CORRESPONDING RED LED IS OFF, EITHER IT'S FUSE IS BLOWN OR THE RELAY IS BAD.

IF THE YELLOW LEDS ARE WORKING BUT NO RED LED IS COMING ON THERE IS A PROBLEM WITH INPUT VOLTAGE IN THE 4-PIN CONNECTOR ON THE MIDDLE RING.

IF A YELLOW LED IS NOT LIT, THIS INDICATES A PROBLEM WITH A MODULE.

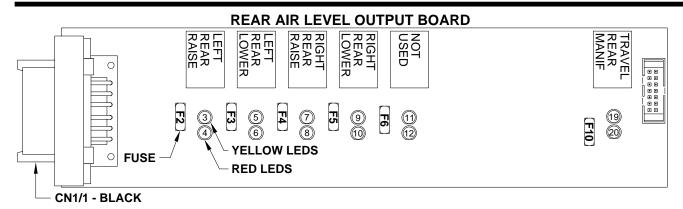
AIR PRESSURE SWITCH INPUTS - CN100 HYDRAULIC PRESSURE AND WARNING SWITCH INPUTS



NOTE: FOR DETAILED INPUT / OUTPUT INFORMATION ABOUT PIN CONNECTIONS SEE ELECTRICAL CONNECTION DIAGRAM - CENTRAL CONTROL / AIR MODULE CONNECTION INFORMATION - PAGE 2 OF 5.

READ SWITCH	DESCRIPTION
CR1 - PIN 1 CR2 - PIN 2 CR3 - PIN 3 CR4 - PIN 4 CR5 - PIN 5 CR6 - PIN 12	NOT USED AIR LEFT FRONT PRESS SW AIR RIGHT FRONT PRESS SW HYD RIGHT FRONT WARN SW HYD LEFT FRONT WARN SW NOT USED
CR7 - PIN 8	NOT USED
CR8 - PIN 9	HYD RIGHT FRONT PRESS SW
CR9 - PIN 10	HYD LEFT FRONT PRESS SW
CR10 - PIN 11	NOT USED
PIN 6	GROUND
PIN 7	NOT USED
FUSE - F1	3 AMP SWITCHED BATTERY
LED - RED	+12 POWER TO BOARD

ELECTRICAL CONNECTION DIAGRAM CENTRAL CONTROL / AIR MODULE LED - FUSE LOCATION AND DESCRIPTION - PAGE 5 OF 5



LED	RELAY DESCRIPTION	FUSE	BROWN
3-YELLOW	LEFT REAR RAISE		
4-RED	LEFT REAR RAISE	F2-5 AMP	PIN 2
5-YELLOW	LEFT REAR LOWER	I Z-3 AWII	1 111 2
6-RED	LEFT REAR LOWER	F3-5 AMP	PIN 3
7-YELLOW	RIGHT REAR RAISE		0
8-RED	RIGHT REAR RAISE	F4-5 AMP	PIN 4
9-YELLOW	RIGHT REAR LOWER		
10-RED	RIGHT REAR LOWER	F5-5 AMP	PIN 5
11-YELLOW	NOT USED		
12-RED	NOT USED	F6-5 AMP	PIN 6
19-YELLOW	TRAVEL - REAR MANIFOLD		
20-RED	TRAVEL - REAR MANIFOLD	F10-7.5 AMP	PIN 8

NOTE: THE TRAVEL RELAY IS WIRED AS A NORMALLY CLOSED RELAY. WHEN THE YELLOW LED (19) IS ON THE RELAY CONTACTS WILL OPEN. THE RED LED (20) WILL NOT BE ON. THE RED LED WILL BE ON IF THE LEVELING SYSTEM IS IN THE TRAVEL MODE AND THE IGNITION IS ON.

NOTE: FOR DETAILED INPUT / OUTPUT INFORMATION ABOUT PIN CONNECTIONS SEE ELECTRICAL CONNECTION DIAGRAM - CENTRAL CONTROL / AIR MODULE CONNECTION INFORMATION PAGE 2 OF 5.

NOTE: A LIT YELLOW LED INDICATES THERE IS A GROUND SIGNAL TO TURN THE CORRESPONDING RELAY ON.

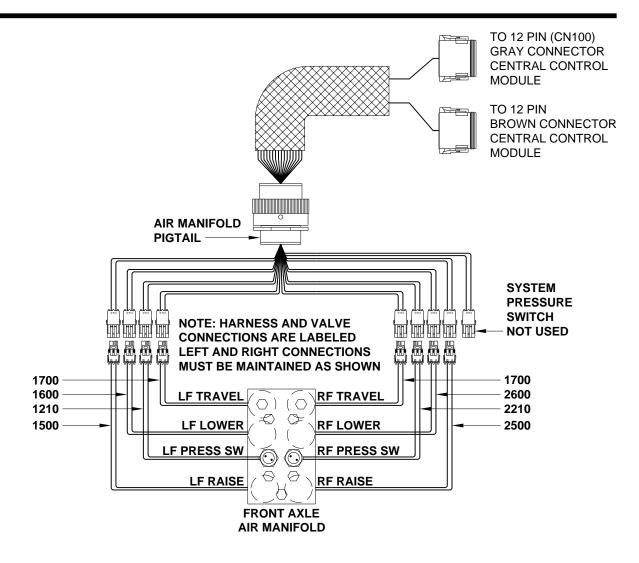
A LIT RED LED INDICATES THERE IS VOLTAGE ON IT'S CORRESPONDING PIN.

IF A YELLOW LED IS LIT AND THE CORRESPONDING RED LED IS OFF, EITHER IT'S FUSE IS BLOWN OR THE RELAY IS BAD.

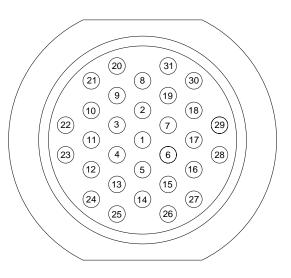
IF THE YELLOW LEDS ARE WORKING BUT NO RED LED IS COMING ON THERE IS A PROBLEM WITH INPUT VOLTAGE IN THE 4-PIN CONNECTOR ON THE MIDDLE RING.

IF A YELLOW LED IS NOT LIT, THIS INDICATES A PROBLEM WITH A MODULE.

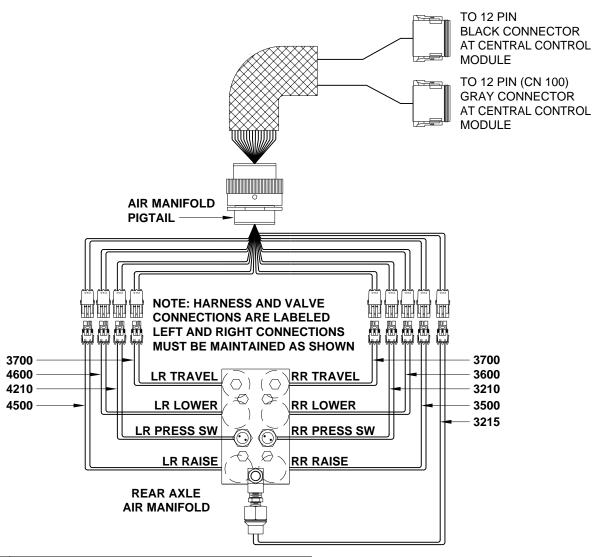
ELECTRICAL CONNECTION DIAGRAM FRONT AIR MANIFOLD PIGTAIL AND VALVE CONNECTIONS



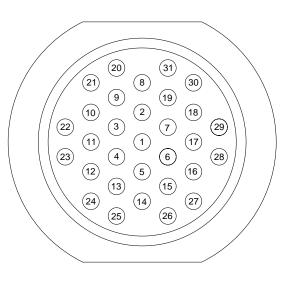
PIN	COLOR	DESCRIPTION
1	BLACK	TRAVEL - 1700 SW +12
2	WHITE	GROUND - 6254
3	BLACK	RIGHT SIDE PRESSURE SWITCH - 2210 SW GRND
4	WHITE	GROUND - 6230
5	BLACK	RIGHT SIDE RAISE - 2500 SW +12
6	WHITE	GROUND - 6254
7	BLACK	RIGHT SIDE LOWER - 2600 SW +12
8	WHITE	GROUND - 6254
9	BLACK	LEFT SIDE RAISE - 1500 SW +12
10	WHITE	GROUND - 6254
11	BLACK	LEFT SIDE LOWER - 1600 SW +12
12	WHITE	GROUND - 6254
13	BLACK	TRAVEL - 1700 SW +12
14	WHITE	GROUND - 6254
15	BLACK	LEFT SIDE PRESSURE SWITCH - 1210 SW GRND
16	WHITE	GROUND - 6230
17	BLACK	SYSTEM PRESSURE SWITCH - NA
18	WHITE	GROUND - NA
19 THROUGH 31 NOT USED		



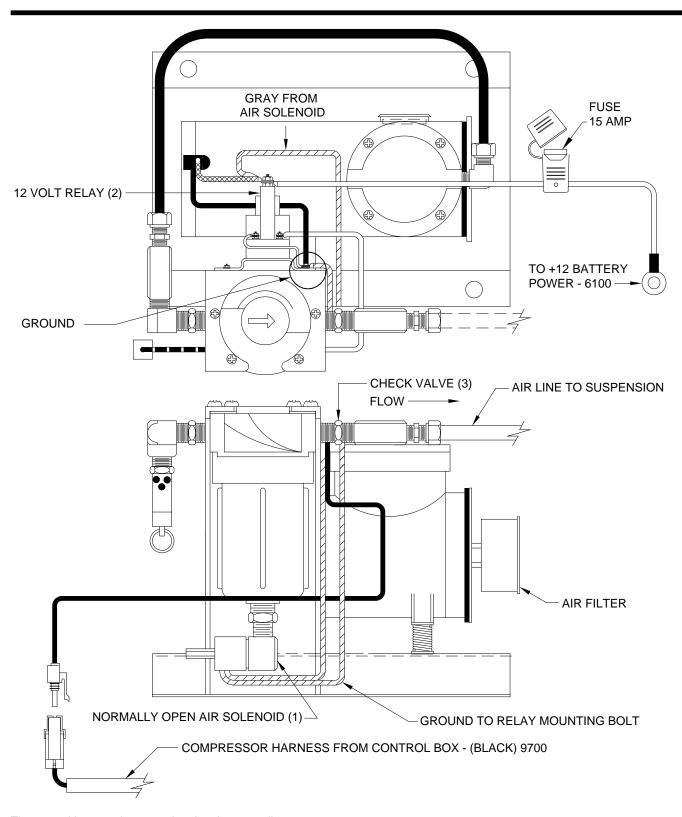
ELECTRICAL CONNECTION DIAGRAM REAR AIR MANIFOLD PIGTAIL AND VALVE CONNECTIONS



PIN	COLOR	DESCRIPTION	
1	BLACK	TRAVEL - 3700 SW +12	
2	WHITE	GROUND - 6258	
3	BLACK	RIGHT SIDE PRESSURE SWITCH - 3210 SW GRND	
4	WHITE	GROUND - 6232	
5	BLACK	RIGHT SIDE RAISE - 3500 SW +12	
6	WHITE	GROUND - 6258	
7	BLACK	RIGHT SIDE LOWER - 3600 SW +12	
8	WHITE	GROUND - 6258	
9	BLACK	LEFT SIDE RAISE - 4500 SW +12	
10	WHITE	GROUND - 6258	
11	BLACK	LEFT SIDE LOWER - 4600 SW +12	
12	WHITE	GROUND - 6258	
13	BLACK	TRAVEL - 3700 SW +12	
14	WHITE	GROUND - 6258	
15	BLACK	LEFT SIDE PRESSURE SWITCH - 4210 SW GRND	
16	WHITE	GROUND - 6232	
17	BLACK	SYSTEM PRESSURE SWITCH - 3215 SW GRND	
18	WHITE	GROUND - 6231	
19 T	19 THROUGH 31 NOT USED		



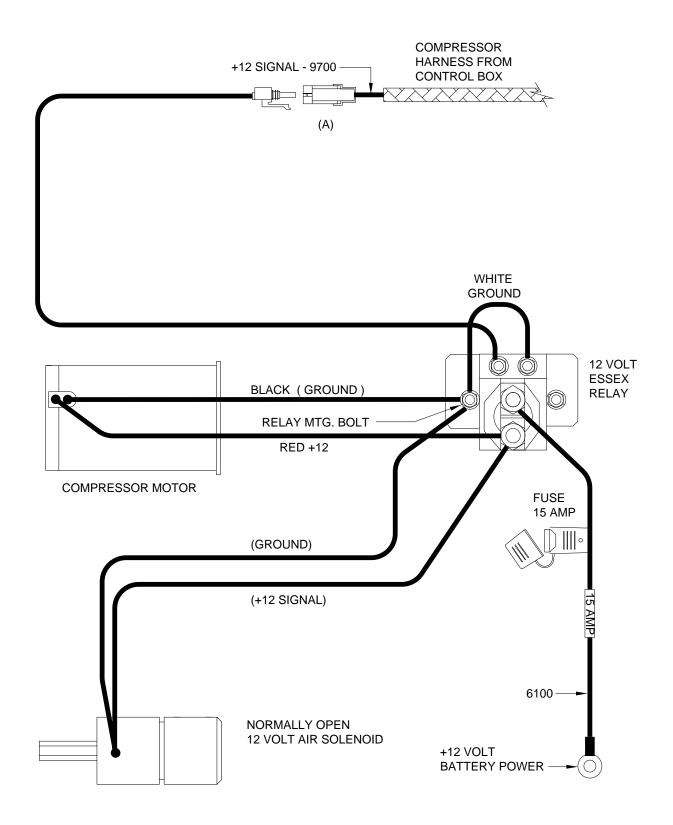
COMPRESSOR DIAGRAM



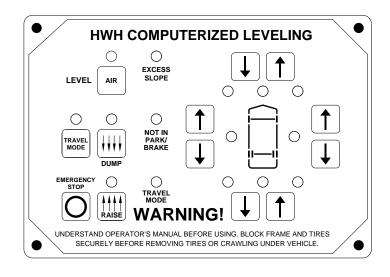
The control box sends a +12 signal to the normally open 12 volt relay. The 12 volt relay (2) will energize and the compressor will run. The normally open air solenoid (1) will close allowing the compressor to build pressure.

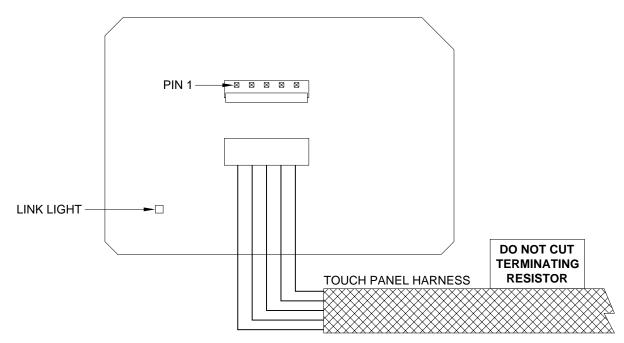
The normally open air solenoid (1) will open any time the compressor is not running, allowing internal pressure & moisture to bleed off. The check valve (3) will keep the suspension air from bleeding back to the compressor.

ELECTRICAL CONNECTION DIAGRAM AIR COMPRESSOR



ELECTRICAL CONNECTION DIAGRAM 2000 SERIES AIR / HYDRAULIC LEVELING SYSTEM TOUCH PANEL CONNECTIONS





NOTE: THERE IS A 1200HM TERMINATING RESISTOR AT EACH END OF THE TOUCH PANEL HARNESS. DO NOT REMOVE, CUT OR MODIFY THE HARNESS.

PIN#	WIRE COLOR	WIRE NUMBER	WIRE DESCRIPTION AND FUNCTION
1 — —	— VELLOW — -		— — — — · CAN HIGH
-			——————————————————————————————————————
_	· · · · · ·		— — — — - CAN SHIFI D
•			GROUND FROM CONTROL MODULE
			- — — — — SWITCHED BATTERY FROM CONTROL MODULE