

EQ SMART-LEVEL CONVERSION FOR FOUR WINDS UNITS

(2005 - 2007)

Effective August 2025

RPI70583



(800) 846-9659 EQSystems.us

EQ SMART-LEVEL CONTROL CONVERSION FOR FOUR WINDS UNITS

2005-2007

OVERVIEW

This conversion replaces the original control panel (part #2057 #2058) and the remotely mounted controller with the new **EQ Smart-Level control panel (#2730SBT)**.

- The new panel fits the same mounting hole.
- It contains the level sensors and output commands for the pump and manifold assembly.
- Note: This system does not control hydraulic slides, but they must be functional before installation. Slide issues may indicate problems with the pump or wire harness.

RPI70583 2

PRE-INSTALLATION REQUIREMENTS

1. Disconnect Existing Components

Disconnect power, ground, and all wire connections from:

- The current control panel
- The pump assembly (may have one or multiple connectors)
- Locate and remove the level sensor mounted near the center of the coach.
 This is the small 3-pin connector on the 2057 or 2058 panel.
- Remove the controller to avoid future confusion—it will not be used.

2. Perform Wire Harness Short Testing

Use a continuity tester to check all wires in the chassis harness connectors (previously connected to the pump).

Ground Check:

- Only Black or Black/Yellow wires may have continuity to ground.
- All other wires must not have continuity to ground.

Wire-to-Wire Check:

- · No continuity should exist between any two wires.
- If continuity is found, locate and repair the short before proceeding.

Special Note for Hydraulic Slide Units with Travel Locks

- Inspect the harness passing through the slide-out support arm.
- Look for wear or rubbing at the entry hole—this can cause shorts.
- If damage is found, **repair before installing EQ Smart-Level**, as the harness is integrated with the leveling system.

SMART-LEVEL INSTALLATION STEPS

1. Remove Original Panel

- Remove the original control panel from its mounting.
- Verify no voltage is present on the red wire in the 2-pin connector (should be confirmed during short testing).
- Disconnect:
 - 12-pin single row connector
 - 2-pin power connector
 - 3-pin level sensor connector (not reused)
 - 2-pin orange/white suspension connector (diesel pushers only)

2. Modify Wiring

- Cut all wires from the **12-pin connector**.
- Strip insulation (~½ inch) from each wire.
- Crimp wires to the supplied 12-pin dual row pigtail, matching colors carefully:
 - Do not mix solid yellow with yellow/trace wires.
- For diesel pushers:
 - Cut orange/white wires from the 2-pin connector.
 - Strip and crimp:
 - Orange → Gray (deflate)
 - White → Purple (inflate)

3. Power Connection

- Cut and strip Red (12VDC+) and Black (Ground) wires from the 2-pin connector.
- Crimp to the supplied 3-pin connector, matching colors.

4. Mount New Panel

- Plug in:
 - 12-pin connector
 - 3-pin power connector
- Secure the panel using the four corner holes in the panel and bezel.

Do not use screws larger than the holes to avoid damage.

• Ensure the panel is firmly mounted to a solid structure.

Level sensors are internal and require stable mounting for accurate readings.

Pressure Switch Replacement

Replace the pressure switch at the pump assembly.

- Early units may require terminal changes:
 - Cut off original terminals.
 - Strip wires.
 - Crimp on new terminals (supplied).

Final Connections

- Reconnect all previously disconnected pump harness connectors.
- Power up the Smart Level panel with the ignition key OFF.

System Check

Upon Power-Up:

- All lights should illuminate briefly.
- Only Power and Jacks Down lights remain on.

To Clear Jacks Down Status:

- Press All Retract:
 - Pump activates.
 - System retracts and pressurizes.
 - All lights except Power should turn off.

Manual Operation:

- Manual buttons should operate the jacks.
- Jacks will not extend if the ignition key is ON.

Programming & Operation

- Auto Level requires panel programming.
 Refer to the Orientation and Null Setting Instructions.
- For Bluetooth operation, consult the Smart Level Quick Start Guide.
- · For full functionality, refer to the Smart Level Operation Manual.

EQ SMART-LEVEL CONTROL PANEL PROGRAMMING

After the system is fully installed the control panel must be programed for operation. Failure to do this will result in a failed or improper Auto Level. There are two program settings that must be programed in the following order - 1) Orientation and 2) Null.

Step 1: Orientation Setting

- This process cannot be completed until after the system has been connected to power and the control panel has been mounted and all electrical harness connections have been completed.
- This process teaches the control panel where the front of the vehicle is and how the control panel is mounted (vertical or horizonal). If this process is not performed correctly the processor will not know where the front of the vehicle is.
- It is possible that without doing this process it may work on a level floor/shop environment however when at locations where the system needs to operate specific legs for leveling it very likely will operate the improper legs.
- Once this process is properly completed the setting will be "retained" in the control panel and should not ever need to be performed again unless the control panel is replaced or moved to a different location.
- With the control panel off, press and hold the ALL RETRACT button, then while holding it press the POWER button, then release both buttons. The power light will start blinking and you will hear a rhythm beeping, and the 4 jacks down indicator lights will be on.
- Next the orientation is selected by pressing one of the manual control arrows. The exact specific
 one is determined by how the panel is mounted (see examples below). You will select an up arrow
 if the panel is mounted vertically and down arrow if it is mounted horizonal. The specific one is the
 one that most relates to the front of the coach.

Examples

- If the panel is mounted vertically inside the vehicle so that when you are looking at it, you are also looking at the inside of the front of the vehicle. You would push the UP ARROW for the front jacks.
- If the panel is mounted vertically inside the vehicle so that when you are looking at it, you are also looking at the inside of the rear of the vehicle then you would press the UP ARROW for the rear jacks.
- If the panel is mounted vertically on the vehicle so that when you are looking at it, you are also looking at the side of the vehicle then you would press the UP ARROW for the left or right jacks depending on which is the closest to the front of the vehicle.

EQ SMART-LEVEL CONTROL PANEL PROGRAMMING

Step 2 - Setting the Null

Null is the term used to indicate the levelness of the coach. A Null setting should have been performed by the installer. If the coach is not level following an attempt to Auto Level, you will need to level the coach and reset the null.

Use a bubble level on a flat surface in the center of the coach as a reference. You do not need to have the jacks deployed to set the null.

- To set the null, first press the POWER button on the keypad to activate the unit. The LED light next to the Power button should be lit RED when the power is on.
- Level the coach by deploying jacks manually, or by simply parking the coach on a level site. Once the coach is level, turn the POWER off at the panel.
- While holding down the AUTO LEVEL button, press and release the POWER button. This should cause the keypad to make a series of beeps.
- After the Keypad has beeped 5 to 6 times, release the AUTO LEVEL button and you will get a confirmation beep. (The Keypad will continue to beep if the Auto Level button is held) The new null has been set and the panel will store/remember this setting.
- Press and release the ALL RETRACT button to retract the jacks to the stowed position.

Note: if you are not clear on this process please check our website for videos and/or call EQ Systems for assistance.

OPERATING THE EQ SMART-LEVEL SYSTEM

Auto Leveling

- 1. Park coach, set brake, and turn off ignition.
- 2. Press **POWER** on keypad or app.
- 3. If 4 center lights are on, press **ALL RETRACT**.
- 4. Once lights go out, press **AUTO LEVEL**.
- 5. System will beep during leveling.
- 6. Two beeps indicate leveling is complete.
- Press **POWER** to turn off.

Retracting Jacks

- Press POWER, then ALL RETRACT.
- Wait for lights to go out and beeping to stop.
- Visually confirm jacks are fully retracted.
- If equipped with air ride suspension, start engine and build air pressure before retracting.

Bluetooth Operation

- If keypad shows Bluetooth compatibility:
- Download EQ Smart-Level app from Android or Apple store.
- Ensure Bluetooth is enabled.
- Follow leveling instructions via app.

Preventative Maintenance

- Keep battery and electrical connections clean and tight.
- Ensure batteries are charged and in good condition.
- Use silicone-based lubricant on jack shafts (not grease).
- Use Dexron ATF if fluid needs to be added to the reservoir.



E QUICK START OPERATION

EQ SMART-LEVEL

Park coach, set the brake, and turn off the ignition.*

Press the POWER button on the EQ SMART-LEVEL KEYPAD/EQ SMART-LEVEL APP to turn the system on.

If the four lights are lit in the center of the keypad, press ALL RETRACT.

After the four lights go out press AUTO LEVEL. During the leveling process the keypad

Allow EQ SMART-LEVEL system to run in the auto mode until all jacks are finished adjusting.

At this time you will hear two beeps indicating you are level and the process is complete.

Press the POWER button on the EQ SMART-LEVEL KEYPAD/EQ SMART-LEVEL APP to turn the system off.

*Note: The leveling system on your coach may require the ignition on and the engine running. Refer to the operation manual per manufacturer.

RETRACTING LEVELING SYSTEM

When you are ready to move your coach, press the POWER button and then press the **ALL RETRACT** button.*

When all jacks are fully retracted, the four lights will go out and the beeping will stop. Once you're finished, press power to turn off.

Visually inspect to be sure that all jacks are fully retracted prior to travel.

*Note: If your coach is equipped with air ride suspension you will need to start your coach engine and build air pressure before retracting to ensure that the suspension will air up.

BLUETOOTH OPERATION

- If the face of your keypad indicates that your controller is compatible with a bluetooth device, download the EQ Smart-Level app in the Android or Apple app store.
- If your keypad does not indicate compatibility, your Bluetooth connectivity may be done through your multiplex system.
- · When downloading the app, make sure your Bluetooth setting is turned on or the app will not connect to your coach.
- Once the app is downloaded please follow the instructions above to level your coach.

PREVENTATIVE MAINTENANCE

- Make sure that all battery and electrical connections are tight and free of corrosion.
- Verify that the batteries are good and properly charged.
- Depending on how often the jack shafts are exposed to the outdoor elements, it is good to keep them coated with a silicone based lubricant.
- Do not use grease or any other lubricant that stays wet.
- In the event that it is necessary to add fluid to the reservoir, use a good quality automatic transmission fluid (Dexron).





FOR RECALIBRATION/SETTING THE NULL

please view the video in the Support section of our website.



FOR MANUAL OVERRIDE OF THE RETRACT FUNCTION

please view the video in the Support section of our website.



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For a complete operation and troubleshooting manual or to activate your warranty please visit EQSYSTEMS.US