

SENSING UNIT ADJUSTMENT PRECISION LEVELING SYSTEM

IMPORTANT: THE VEHICLE MUST BE ON A LEVEL SURFACE WHEN ADJUSTING THE SENSING UNIT. IF THERE IS A SLOPE; THE FRONT SHOULD BE LOWER THAN THE REAR.

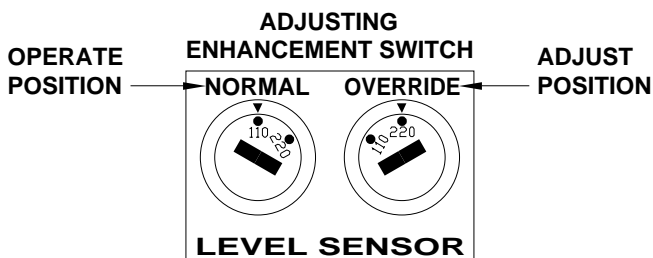
SENSING UNIT INFORMATION

Power must be on for the leveling system to be able to adjust the level sensing unit. Refer to the vehicle manufacturer for this procedure.

There are three level sensing units. There is one sensing unit for side to side leveling at the front of the vehicle, one for side to side leveling at the rear of the vehicle and one for front to rear leveling located at the rear of the vehicle. The rear side to side level sensor and the front to rear level sensor at the rear of the vehicle have a precision bubble level fastened to the base of the sensing unit.

The central control module has a sensing unit adjustment switch on the side of the box. This switch must be in the "OVERRIDE" position while adjusting the sensing units. Refer to the vehicle manufacturer for location of the central control module.

IMPORTANT: The adjustment switch must be kept in the "NORMAL" position for proper system operation. Only move the switch if adjusting the level sensing units.



ADJUSTING A SENSING UNIT

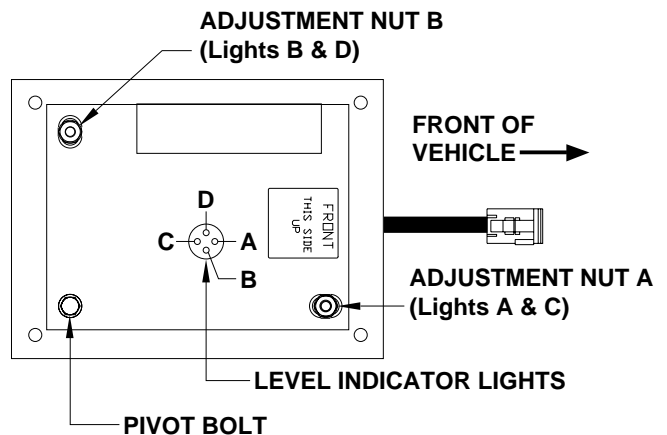
Turn adjustment nuts A and B to turn a level light off.

If level light A is on, turn adjustment nut A counterclockwise.
If level light B is on, turn adjustment nut B clockwise.
If level light C is on, turn adjustment nut A clockwise.
If level light D is on, turn adjustment nut B counterclockwise.

When a level light is on, turn the appropriate adjustment nut slowly until the light goes out. Note the position of the wrench. Continue to turn the same adjustment nut very slowly the same direction until the opposite light comes on. Now turn the adjustment nut in the opposite direction one half the distance the wrench moved between turning the original light off and turning the opposite light on. Ensure both lights are off.

EXAMPLE: Level light (A) is on. Slowly turn adjusting nut (A) counterclockwise. When light (A) goes out, note the position of the wrench. Now continue turning adjusting nut (A) counterclockwise very slowly until level light (C) (opposite light) comes on. Figure the distance the wrench moved between level light (A) going out and level light (C) coming on. Now turn adjusting nut (A) clockwise 1/2 that distance. Ensure both lights are off.

SENSING UNIT ASSEMBLY - TOP VIEW



Only use adjustment nuts A and B to adjust the sensing units. NEVER turn the pivot bolt when adjusting the sensing units.

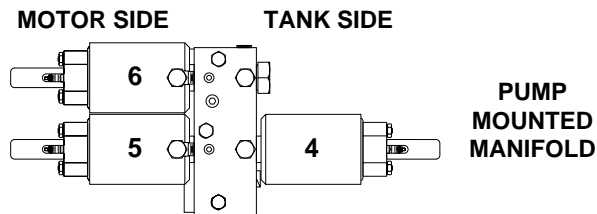
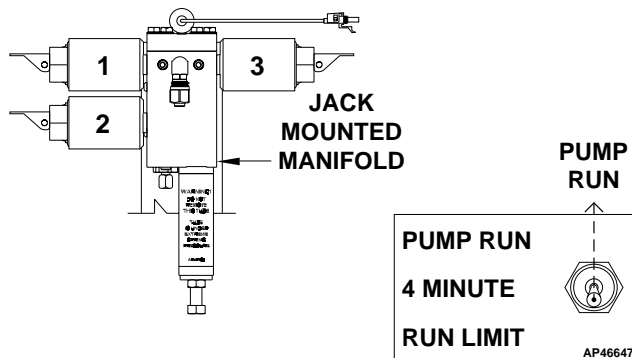
SENSING UNIT ADJUSTMENT

PRECISION LEVELING SYSTEM

LEVELING THE VEHICLE AND ADJUSTING THE SENSING UNIT

Adjust the rear sensing unit with the side to side bubble level first. Open the number 1 and number 2 solenoid valves on both rear jacks. Open the number 5 valve on the pump manifold. Hold the pump run switch to "PUMP RUN" until both rear jacks are firmly on the ground. Using the bubble level on the rear side to side level sensing unit, determine the low side of the vehicle. Close both solenoid valves for the rear jack on the high side of the vehicle. Use the pump run switch to extend the low jack to center the side to side bubble as close as possible. Close both jack solenoid valves. Again, determine the low side according to the rear side to side bubble level. **The bubble must be centered exactly between the lines.** If minor adjustment is needed to center the bubble, use the manual precision leveling process to extend the jack on the low side.

MANUAL PRECISION LEVELING: Open jack manifold valve number 1 for the jack(s) that need to be extended. Open pump manifold valve number 5. Both valves should remain open during this procedure. Push and hold the pump run switch during the manual precision leveling procedure. The jack(s) with the open number 1 valve will extend slightly. After approximately 4 seconds, open the number six pump manifold valve. After approximately 4 seconds, close the number 6 valve. The pump will load up with the number 6 valve closed and unload with the number 6 valve open. The jack(s) will move slightly each time the number six valve is closed. Repeat the 4 seconds closed with 4 seconds opened sequence until the jacks are extended as necessary.



Adjust the rear sensing unit with the front to rear bubble level. When the rear side to side level sensing unit is adjusted, open the number 1 and 2 jack manifold valves for both front jacks. Open the number 5 pump manifold valve. Use the pump run switch to extend the front jacks until they are both firmly on the ground. Check the rear sensing unit front to rear bubble level. Get the bubble level centered as close as possible with the front of the vehicle slightly low. Close the number 2 valve on both front jack manifolds and use the Manual Precision Leveling procedure to precisely center the bubble between the lines of the front to rear bubble level. When the bubble is precisely centered, adjust the front to rear sensing unit until all level lights are out. Close all valves when finished.

When the front to rear level sensor is adjusted, recheck the side to side bubble level on the rear side to side level sensing unit.

If the bubble is not centered, use the manual precision leveling procedure to center the bubble. Adjust the rear side to side level sensing unit as necessary to turn any lit level lights out.

If the bubble is still centered, check the rear side to side level sensor level lights. Adjust as necessary so all lit level lights are out.

Alternate checking both rear sensing units until both bubble levels are precisely centered and all level lights on both rear level sensors are off. Precision level and adjust sensing units as necessary.

When both rear sensing units are properly adjusted, adjust the front level sensing unit so all four level lights are off.

IMPORTANT: ONCE THE REAR SIDE TO SIDE BUBBLE LEVEL AND THE FRONT TO REAR BUBBLE LEVEL ARE PRECISELY CENTERED DO NOT EXTEND OR RETRACT ANY JACKS UNTIL ALL THREE LEVEL SENSING UNITS ARE ADJUSTED.

When all adjustments are complete, close all jack manifold and pump manifold valves. Move the control box ADJUSTING ENHANCEMENT SWITCH to the OPERATE POSITION (NORMAL).

Move the vehicle to an out of level position and try automatic leveling. Repeat adjustments as necessary.

When the bubble is precisely centered between the lines of the bubble level, adjust the side to side sensing unit until all four yellow lights are out. This process is described on the previous page. Close all rear jack manifold valves when the rear side to side sensing unit adjustment is complete.