Service Tips

COMPASS/THERMOMETER

A popular feature in many of our models is the dash-mounted compass and outside thermometer. Winnebago part number 136119-01-000. This device will display outside or ambient temperature in either Fahrenheit or Celsius and give a cardinal point directional heading. While the unit is calibrated when initially installed, it may require recalibration or zone adjustment under certain circumstances and depending upon your location.

Following are excerpts from the operator's manual which explains features, modes of operation, calibration and zone adjustment and troubleshooting. This information should give you a better understanding of the system and will help resolve any operational difficulties you might experience.

Compass Modes of Operation Unit has two buttons-MODE and BF/BC-which are used to change the unit between the various operating modes.

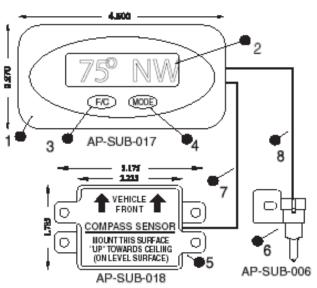
Ignition On Operation

- 1. Unit displays temperature and heading.
- 2. Press the BF/BC button to toggle between displaying BC and BF.
- 3. If the unit has been properly calibrated, the heading will remain "on" continuously. If the unit does not have a valid calibration, the word "CAL" will flash continuously.
- 4. If the temperature reading is valid, the temperature display will remain "on" continuously. If the temperature reading is invalid (due to an open or shorted temperature sensor), the temperature reading will read -40 (open), and 127 (shorted).

Sleep Mode Operation

- 1. Unit enters SLEEP MODE when ignition is turned off.
- 2. The display is blank and the unit is in a LOW POWER MODE.

COMPONENT AND FEATURE DESCRIPTIONS



- 1 In dash or console mountable display panel with bezel to hide mounting screws.
- 2 Vacuum fluorescent display shows both:
 - A. Outside temperature in either degrees Fahrenheit (-40°F to 127°F) or degrees Celsius (-40°C to 53°C) "ICE" appears at 37 °F
 - B. Cardinal point heading N, NE, E, SE, S, SW, W, NW
- 3 *F/*C button used to switch between Fahrenheit and Celsius, and in conjunction with the MODE button to change the unit between various operating modes.
- 4 MODE button used in conjunction with the "F/"C button to change the unit between various operating modes
- 5 Remote compass sensor module
- 6 Moisture-proof temperature sensor
- 7 3-wire compass sensor harness (15' AP-HRN-176) (10" AP-HRN-235)
- 8 2-wire temperature sensor harness (AP-HRN-234)
- 3. Unit wakes from SLEEP MODE and enters:
 - A. Ignition ON operation when the ignition is turned on, or B. CAMPING MODE when the BF/BC or the MODE button is pressed for three seconds.

Camping Mode Operation

1. Unit enters CAMPING MODE after the BF/BC button or MODE is pressed for three seconds while in SLEEP MODE.

2. Unit displays temperature and heading for 10 seconds; the display stays "on" if you continue to push either button and then returns to SLEEP MODE 10 seconds after the last button was pushed.

Nighttime dimming

The display's brightness will be decreased by 50 percent when the vehicle headlamps are turned on.

Calibration

The compass must be calibrated after initial its installation and anytime the compass sensor is replaced or relocated. The calibration values are saved in EPROM memory, so it not necessary to recalibrate if the battery is disconnected.

Calibration Routine

- 1. Press and hold the MODE button until the words "ZONE" and "CAL" appear (approximately 10 seconds). The unit will display the current zone value.
- 2. Press the BF/BC button to increment the zone value.
- 3. Press the MODE button to store the zone value.
- 4. The unit now displays the word "CAL." Press the BF/BC button to enter the calibration mode. The display will begin counting down from 60 seconds and the word "CAL" will flash. The driver should slowly drive in a circle during the 60 second calibration period. lf calibration procedure successful, the unit will display the word "CAL" for five seconds and then return to normal ignition "on" operation.

Zone Adjustment

When you travel outside the

zone the unit is currently set "on," the compass has reduced accuracy. To achieve maximum accuracy, it is recommended to change the zone setting when traveling to a new zone in the U.S. To change the zone setting, follow steps one through three of the Calibration Routine, at which point the unit will display the word "CAL." Press the MODE button again to skip calibrating. It is not necessary to recalibrate the compass when you change zones.

Compass Trouble Shooting

- Display won't work Verify with a multi-meter that you have +12vdc battery (constant) voltage on the Red wire, +12vdc Ignition hot (switched) on the Orange wire, and that you have a good chassis ground on the Black wire.
- Display won't dim with headlights Verify with a multimeter that you have +12vdc on the White wire when the headlights are turned on and zero volts when headlights are off.
- Calibration failed. "CAL" still flashing Make sure that after you push the F/C button to start the calibration countdown timer you drive the vehicle at a speed in which you complete 2-4 circles

while the display is counting from 60 down to 0.

- Heading flashes Check for a loose or bad connection in the compass sensor harness. See that the wires are snapped into the 3-pin housing securely, and check for a cut or broken wire in the harness.
- Temp flashes Check for a loose or bad connection in the Temp sensor harness. See that the wires are snapped into the 2-pin housing securely, and check for a cut or broken wire in the harness.
- Temperature reading is inaccurate Make sure the Temp sensor is mounted in a location away from heat sources. And where fresh air can blow over it as you drive.
- Compass reading is inaccurate Make sure you have the correct zone selected where you are located. Make sure the compass label is mounted with the labeled side facing up and the arrow facing the front of the vehicle. Make sure the compass sensor is mounted level, if the sensor is 90 degrees off level the compass reading will be off by 90 degrees.

