

COMPASS INSTRUCTIONS

Calibrating the Compass Module

Once calibrated, it is rarely necessary to recalibrate it. If the compass is obviously incorrect at several locations, follow this procedure to recalibrate it (also shown in Figure 1).

NOTE:

Calibrating the compass near power transmission lines, radio transmitters, or other strong magnetic or electromagnetic fields can result in miscalibration.

1. From the Setup Menu screen, press \Rightarrow six times to display **Calibrate Compass** .
2. Press \Downarrow to begin the calibration process. When **Hold RIGHT Key to Begin Calibration** appears, press and hold \Rightarrow at least three seconds.
3. Perform Steps 3a and 3b within the next three minutes:
 - a. Release the Park Brake and drive the vehicle two complete 360° turns (direction does not matter).
 - b. After stopping the vehicle, press and hold \Rightarrow at least three seconds.
4. The system will verify the calibration process and display the results:
 - a. **Calibration Complete** - No problems were detected.
 - b. **Calibration Failed, No Response** - The system received no data from the Compass Module. The vehicle should be serviced to determine the cause. The system checks for about five seconds before making this determination.
 - c. **Calibration Failed** - Appears if it took longer than three minutes to make the two turns, display, and/or accept a calibration value. This message can also appear if the calibration was performed in the presence of a strong magnetic or electromagnetic field. In such cases, the system will display and use the value that was in effect when at the start of the Setup routine.
5. When the calibration results are displayed:
 - a. Pressing \Rightarrow while the Park Brake is disengaged will terminate the Setup mode and return the system to the default display.
 - b. Setting the Park Brake and then pressing \Rightarrow enables the Set Declination function.

Setting the Compass Declination

The compass reading can be modified to allow for different declination value depending upon the vehicle's location. This is done by locating the vehicle's current position on the map in Figure 2, reading the declination value for that location along the top of the map, and entering that value in the Set Declination function as follows (also shown in Figure 1):

1. Locate the vehicle's current position on the map in Figure 2.
2. Find the nearest declination line (the curved blue lines or the somewhat straighter red lines) having a declination factor at the top of the map (for example, 12°W, or 0, 18°E).
3. Follow this line to the top of the map and make a note of its declination value.
4. From the Setup Menu screen, press ⇨ six times to display the Calibrate Compass screen.
5. Press ⇨ again to display the Set Declination screen.
6. Perform Steps 5a through 5c within the next three minutes:
 - a. Press ↓. The current declination value will appear.
 - b. To accept this value, press ⇨; or,
 - c. To change and accept another value, press ↓ repeatedly until the desired value appears, then press ⇨ to accept it.
7. The system will verify the declination process and display the results:
 - a. **Declination Complete, using < value >** - No problems were detected.
 - b. **Declination Failed, No Response** - The system received no data from the Compass Module. The vehicle should be serviced to determine the cause. The system checks for about five seconds before making this determination.
 - c. **Declination Failed, using < value >** - Appears if it took longer than three minutes to display and/or accept a declination value. In this case, the system will display and use the value that was in effect when at the start of the Setup routine.
8. While the declination results are being displayed, press ⇨ to return to the Setup Menu screen.

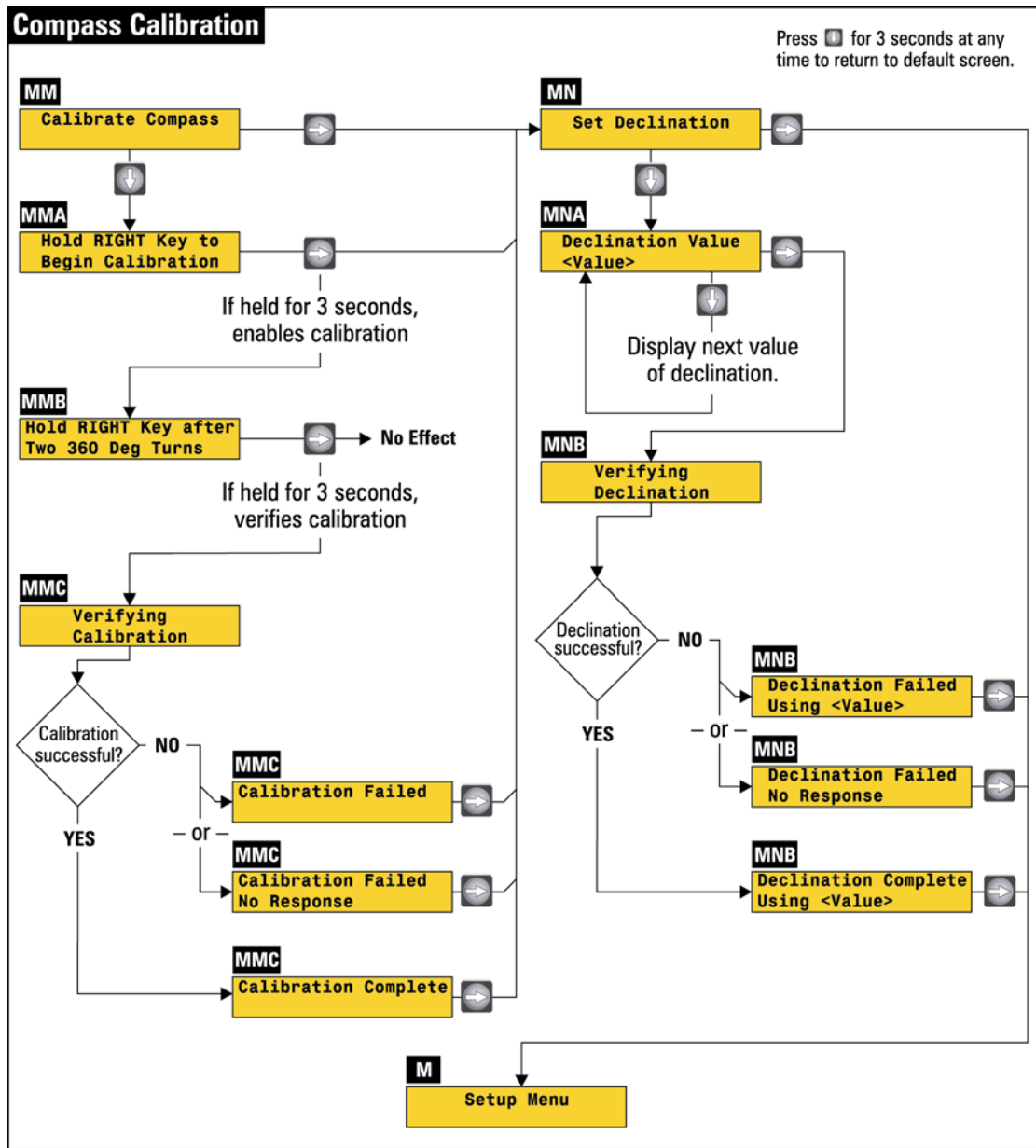
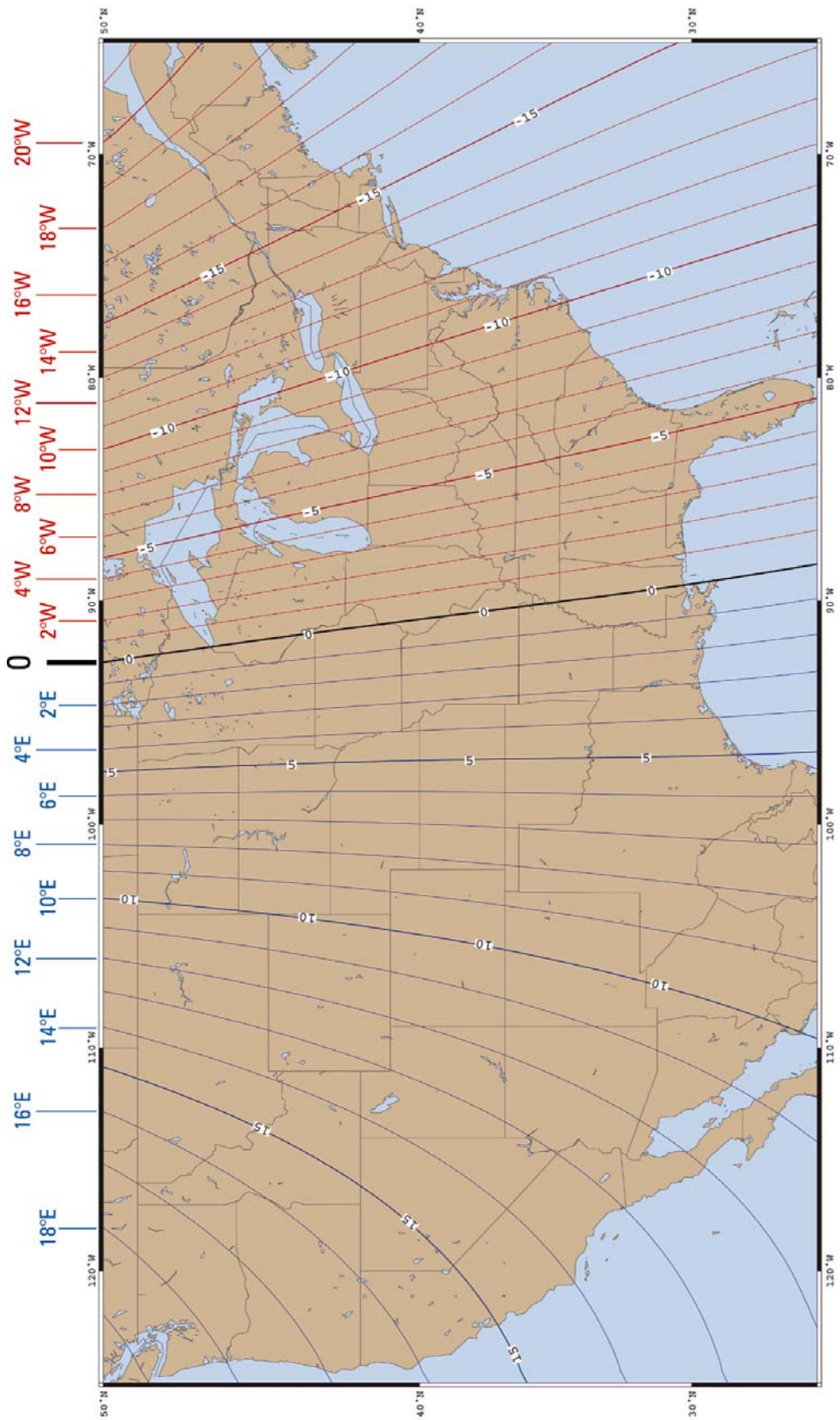


Figure 1



USGS map data valid as of December 31, 2004.

Figure 2