## [ SILVA<sup>®</sup> SYSTEM



## THE SILVA® SYSTEM: EASY AS 1-2-3

- [1] Point The Base Plate To Your Destination Place your compass on the map with the edge (as shown) along the desired line of travel.
- [2] Set Compass Heading Turn the compass dial until "N" and the orienting lines on the base of capsule point to the north on your map. Your direction in degrees is read at the Index Line on the dial.
- [3] Follow Your Heading

Remove the compass from the map, and hold it level so the Magnetic Needle is free to turn. Turn your body until the red end of the needle aligns with the red Orienting Arrow and "N" on the dial. Using the Direction of Travel Arrow, sight a distant landmark and move to it. Repeat this process until you reach your destination.

## [ DECLINATION & MAGNETIC DECLINATION

The magnetic needle in a compass is attracted by the magnetism of the earth

Magnetic North (MN) is about 800 miles south of True North (TN), the North Pole. The angle of difference is called magnetic declination (variation) and varies from place to place. Topographic maps include diagrams which indicate the angle of difference between True North (H=True North) and Magnetic North

(see below left). When using a compass and map, you must train yourself to compensate for declination using one of these options:

- 1. Add or subtract the degrees of magnetic declination provided from the map.
- 2. Extend the MN line of declination diagram in the map margin. Draw lines parallel to the extension line, approximately 2" apart. Using these lines, the map and compass now reference the MN.
- 3. Purchase a compass with Geared Declination Correction that allows you

## INCLINATION & BALANCE

Lines of magnetic force vary from vertical at the magnetic poles, to horizontal near the equator, as shown in Figure A.

Consequently, one end of a magnetic needle has a tendency to dip down in areas that lie between the poles and the equator. Silva reduced this tendency by placing the center of gravity below the pivot point of the needle. Also, the needle of each compass is counterbalanced for the middle of the magnetic zone where it may be used.

A compass needle may show a slight tendency to dip in an area between two zones. Figure B shows how the MN-zone-balance compass needle is affected when used in other magnetic zones.







