

- (+)
- (-62)
- (0V) STICK
- (+6)
- (+1) STICK
- (+52)
- +2
- (-5) STICK
- (3)
- (5)
- (3) - STICK

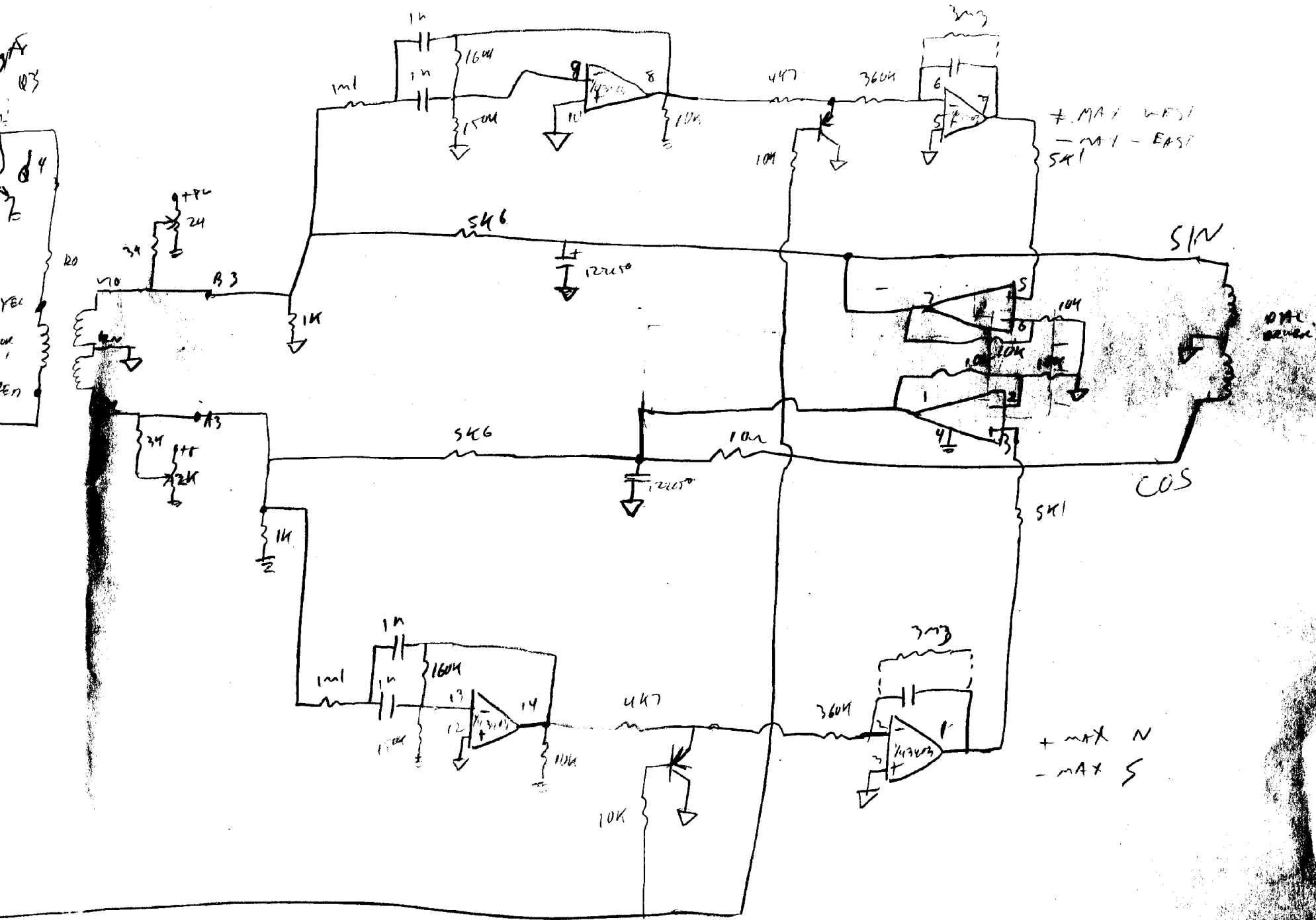
Pin 7 Pin 1
 POS. = CW DRIFT, 0.5 A 0.5
 NEG. = CCW DRIFT

Pin 7 Pin 1
 POS. = CW DRIFT, 0.5 A 0.5
 NEG. = CCW DRIFT

9mV
 Pin 7 = CCW 0.5 NE/SW
 Pin 1 = CW

SO IF SIG A 0.7+ THEN PORT CORN
 0.7 = THEN CCW CORN.





+ MAX WFSI
 - MAX EAST
 SK1

+ MAX N
 - MAX S

Add 3m3
 pins 1 to 2
 1 to 7

INTRODUCTION

Your **MICRONTA® Flux-Gate Electronic Compass** is a precision electronic compass that provides greater accuracy and visibility than a conventional compass. It determines your vehicle's heading by measuring the strength and orientation of the earth's magnetic field. The direction is indicated on a hi-tech display for quick viewing.

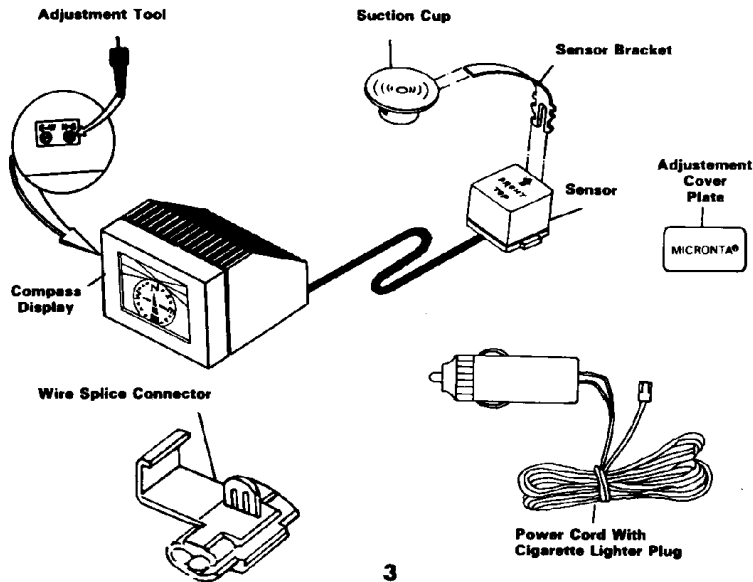
Your new compass also has these advanced features :

- Aircraft-type Quadrature Circuit**- compensates for stray magnetic fields in or around your vehicle.
- Contoured Design**- fits on the dashboard so that you can see it easily while driving.
- Color, Illuminated Display**- is easy to read day or night.
- Quick Installation**- lets you begin using your electronic compass immediately.

To get the best performance from your Flux-Gate Electronic Compass, read this manual carefully before installing.

1988 InterTAN Ltd
All Rights Reserved

A QUICK LOOK AT YOUR COMPASS



INSTALLATION

CHOOSING A MOUNTING LOCATION

Before fully mounting the unit, check at different positions until best/correct results are obtained.

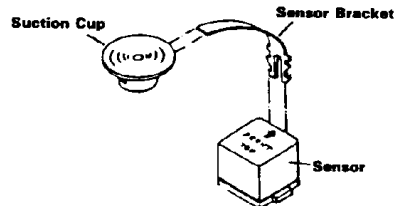
- Keep the sensor as far away as possible from sources of magnetic field interference (such as speakers, motors, main power cables, and so on).
- Mount the sensor on the windshield so that it is level and so that the arrow on the top of the sensor points straight ahead. Never place the sensor on the dashboard.
- Select a location for the display on the dashboard that provides easy viewing for both the passengers and the driver and that does not obstruct the driver's view of the road.

MOUNTING THE FLUX-GATE ELECTRONIC COMPASS

1. Clean the areas where you will mount the sensor and the display.

INSTALLATION

2. Push the sensor bracket into the suction cup. Be sure the suction cup faces outward, as shown, so the sensor faces forward when it is attached to the windshield. Moisten the suction cup, and press it onto the windshield.



3. Plug the three-pin connector on one end of the cigarette lighter power cord into the back of the display.
4. Remove the protective backing from one side of the double-sided tape, and stick it to the bottom of the display. Then, remove the other piece of backing and press the display onto the desired location.

INSTALLATION

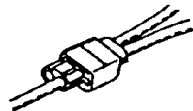
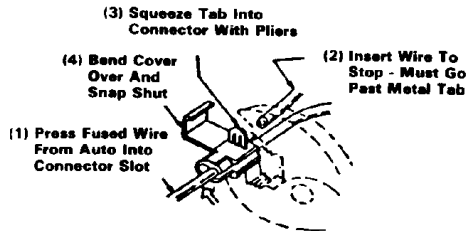
ELECTRICAL CONNECTIONS

You must connect your electronic compass to a source of + 12 volts DC that is switched on only when the ignition is on, and to ground. We have provided two different options for making the electrical connections. Read through both procedures to determine which option is best for you.

Option 1 : Permanently wired to vehicle

1. Route the power cord along the bottom or the top of the windshield and down to the fuse block area. You might wish to remove the trim molding around the windshield and hide the wiring from view.
2. Use a 12-volt test light or a voltmeter to locate a source of power that provides + 12 volts DC when the ignition key is in the ON or ACC (accessory) position.
3. Cut the cigarette lighter plug off of the power cord. Connect the wire that has the white stripe to the + 12 volt power source using the wire splice connector, as shown in the illustration.

INSTALLATION



4. Connect the wire that does not have a stripe to a good ground source (for example, a metal chassis part).
5. Turn on the ignition and verify that the display lights up and turns to indicate a direction.

Note: At this point, do not expect the display to show the correct direction. See "Adjusting the Compass".

INSTALLATION

Option 2 : Cigarette lighter plug wiring

Simply insert the cigarette lighter plug into its socket on the vehicle. Then, turn on the ignition and confirm that the display comes on and indicates a direction.

Note:

At this point, do not expect the display to show the correct direction. See "Adjusting the Compass".

Warning:

To protect the compass from damage by over-current, the cigarette lighter plug incorporates an 1-amp fuse. If you need to replace the fuse, be sure to replace it with one rated at no more than 1 amp. If you use a larger fuse, you might damage the compass or the wiring system of your car.

Note:

If your lighter plug has power even with the ignition turned off, be sure to unplug the cigarette lighter plug from the socket when you leave the vehicle to prevent excessive battery drain.

ADJUSTING THE COMPASS

You must adjust your electronic compass before it can accurately display the direction. The following procedure corrects for stray magnetic fields in and around your vehicle.

1. Using a hand held compass outside your vehicle, determine magnetic north. If you do not have a compass, use an accurate road map to locate a road that runs north/south or east/west. Drive to this road.

Note:

Depending upon where you live, magnetic north and true north might not be the same direction. This difference is known as variation and can be as high as 20 degrees in some areas. If you use a map, be sure your reference is magnetic north and not true north. Many good maps indicate this variation.

2. Position the vehicle facing magnetic north.
3. Using the supplied aluminum adjustment tool, slowly turn the N-S (North-South) adjustment (located on the left side of the display) while lightly tapping the unit until the compass reads due north.

ADJUSTING THE COMPASS

Note:

If you have lost the supplied tool, use a small screwdriver to make the adjustment. Be sure the screwdriver is not magnetized, as this could affect the sensor and make adjustment difficult.

4. Position the vehicle facing magnetic east.
5. Slowly turn the E-W (East-West) adjustment while lightly tapping the unit until the compass reads due east.
6. Recheck the N-S adjustment by positioning your vehicle facing south. If the direction is off by more than one marked division on the display, readjust the N-S adjustment until the error is within one-half a marked division.
7. Recheck the E-W adjustment by positioning your vehicle facing west. Again, fine-tune the adjustment until the reading is within one-half a marked division.
8. After you have completed all adjustments, remove the protective backing from the MICRONTA name plate, and press it into the recessed area over the two adjustment holes.

OPERATION

When you turn on the ignition key, the compass shows your current direction. As you drive, the display moves to track your changing headings. The electronic compass also makes it easier to determine the direction to turn to achieve a specific heading.

For example, if you are traveling due north and want to go east, your electronic compass indicates that east is 90 degrees to the right. A standard magnetic compass, however, shows east is on the left side of the compass, and when you do actually turn toward the east, the compass rotates in the opposite direction of your turn.

Your electronic compass is protected by a 1 ampere fuse, located in the cigarette lighter plug. If your compass does not work when you plug into the cigarette lighter socket and turn on the ignition, the fuse might be blown. Unscrew the cap from the cigarette lighter plug to access and replace the fuse.

If you wire the compass directly to your vehicle, you should install an inline fuse holder, such as Tandy's cat.no. 270-1281, to the compass. Install a 1 Amp. fuse to protect your vehicle and compass.

CARE AND MAINTENANCE

Your **MICRONTA® Flux-Gate Electronic Compass** is an example of superior design and craftsmanship. The following suggestions will help you care for the compass so that you can enjoy it for years.



Keep the compass dry. If it does get wet, wipe it dry immediately. Liquids can contain minerals that can corrode the electronic circuits.



Handle the compass gently and carefully. Dropping it can damage circuit boards and cases and can cause the compass to work improperly.



Wipe the compass with a wet cloth to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the compass.



Modifying or tampering with the compass's internal components can cause a malfunction and invalidate the compass's warranty. If your compass is not performing as it should, take it to your local Tandy store. Our personnel can assist you and arrange for service if needed.

SPECIFICATIONS

Power requirements	12-Volt DC
Accessory operating voltage	10-18 VDC
Current drain	800 mA maximum
Operating temperature	- 40° to + 70° C
Dimensions	2.2''x3.0''x2.9'' (5.5 x 7.6 x 7.4 cm) (HWD)
Weight	0.39 lb (175g)

MICRONTA[®]

FLUX-GATE ELECTRONIC COMPASS

Cat.No. 63-641

CORRECTION (page 6/7)

- 3. Cut the cigarette lighter plug off of the power cord. Connect the wire without white stripe to the +12 volt power source using the wire splice connector, as shown in the illustration.**
- 4. Connect the wire with white stripes to a good ground source (for example, a metal chassis part).**