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Midland 77-145A Owner's Manual
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MIDLAND



77-145A

OWNER'S MANUAL

40-channel mobile citizens band transceiver.

Midland 77-145A

40-channel mobile citizens band transceiver.

For your protection, the space below is provided for you to record the Serial Number of this product which is located on the identification plate attached to the rear cabinet panel. After recording this number, keep this record for future reference. *When contacting Midland for service or parts information, the FCC I.D. Number and Serial Number must be referred to in order to expedite your request.*

FCC I.D.: _____ AK58T677145A _____

Serial Number: _____

Welcome to the world of Midland electronics.

Congratulations. You've just graduated to the state of the art in mobile CB power, clarity and operating convenience.

In the years ahead, you can expect to realize — time and time again — the real reasons and meaning of the front running position Midland holds among CB users everywhere.

And you'll come to know that Midland Power is more than just a slogan, but the heading of a long list of hearable, seeable benefits.

Like controls designed and located for maximum convenience and ease of operation.

And like the assurance that comes from knowing the nationwide Midland service network goes with you everywhere you take and use your Midland CB.

As your Midland CB experience unfolds and grows, we hope you'll remember that CB is only one kind of electronic excellence available under the Midland nameplate.

Remember that the same dependability, range and clarity engineered into your CB are also built into a long, versatile line of Midland car stereo receivers, telephones and other electronic products.

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Midland 77-145A

40-channel mobile
CB transceiver.



Features:

State-of-the-art techniques have been used in the electronics of your new Midland CB.

Including Midland Power performance — with a transmitter rated for legal maximum 4-watt output power with high level modulation in accordance with FCC Part 95.

Plus a highly sensitive, selective dual-conversion superheterodyne receiver with tuned RF stage and built in, automatic noise limiter — certified to FCC Part 15 requirements.

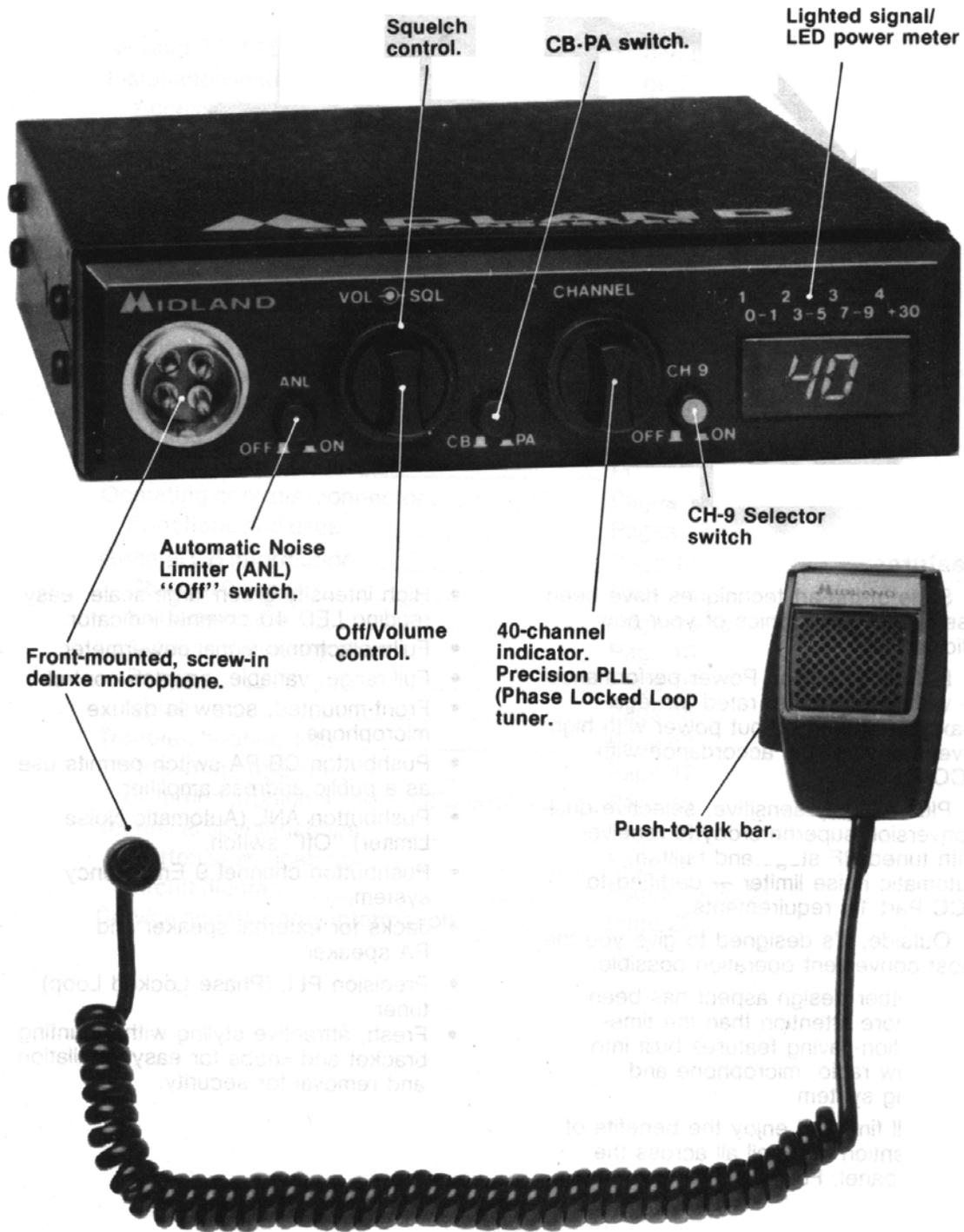
Outside, it's designed to give you the most convenient operation possible.

No other design aspect has been given more attention than the time- and motion-saving features built into your new radio, microphone and mounting system.

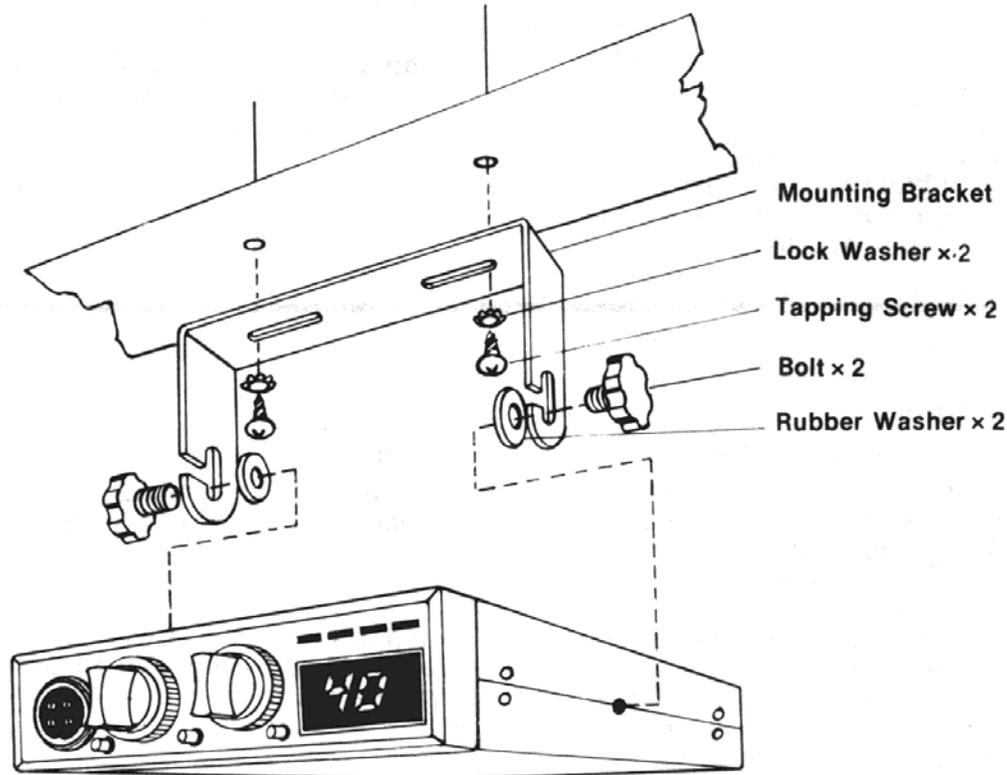
You'll find and enjoy the benefits of this attention to detail all across the control panel. For example:

- High intensity green large-scale, easy-reading LED 40 channel indicator.
- Fully electronic signal/powermeter.
- Full-range, variable squelch control.
- Front-mounted, screw in deluxe microphone.
- Pushbutton CB-PA switch permits use as a public address amplifier.
- Pushbutton ANL (Automatic Noise Limiter) "Off" switch.
- Pushbutton channel 9 Emergency system.
- Jacks for external speaker and PA speaker.
- Precision PLL (Phase Locked Loop) tuner.
- Fresh, attractive styling with mounting bracket and knobs for easy installation and removal for security.

Midland 77-145A mobile CB operating controls.



How to install your Midland mobile CB.



This transceiver may be installed in any **12-volt negative ground-system** car or truck. Most current U.S. and foreign vehicles use a negative system.

Check the requirements for your vehicle before you begin installation.

Generally, you have a **negative-ground** system if the minus (-) battery terminal is connected to the motor block. Contact your dealer in the event you are unable to determine your vehicle's polarity system.

Installation and operating accessories furnished with your Midland Mobile CB:

1. Easy-removal mounting bracket system.
2. Microphone bracket system.
3. All main-unit and microphone mounting hardware needed for normal installation.

4. Screw-in microphone with coil cord.
5. FCC Part 95, Subpart D.
6. Owner's Manual.

Where to locate your CB transceiver.

Your new Midland CB is designed to be installed under the dash of your vehicle.

Safety and convenience are the primary considerations in deciding exactly where to locate your radio.

Caution: Be sure that the unit is located so that it does not interfere with the driver or impair access to any controls. Connecting cables must be routed and secured in such a manner as not to interfere with the operation of the brake, accelerator or other controls. Interference from either the unit or connecting cables may contribute to the loss of control of the vehicle.

Mechanical mounting.

Step 1: Heeding the caution, use the mounting bracket as a template for marking the location of screwholes under your dash. Use an awl, nail or other sharp, pointed object to mark the metal.

Step 2: Drill a 1/8" hole for each screwhole in the mounting bracket. Attach the bracket to the dash with the 3/8" Phillips machine screws provided. *Extreme care should be exercised when*

drilling into dash to avoid damage to under-dash electronic ignition, cruise control, instrument and/or accessory wiring.

Step 3: Locate and secure the radio into the mounting bracket allowing working space for later power connections.

Power wiring.

Step 1: If you have not determined whether your vehicle has a negative, do so now. Then disconnect the leads from the battery to prevent short circuits that can occur during wiring.

Step 2: With negative ground, connect the red wire — the one with in-line fuse holder — to either the (a) fuse block, (b) cigarette lighter or (c) directly to the positive post on your battery.

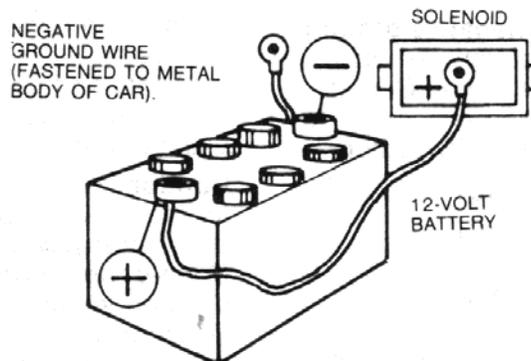
(Usually, the fuse block is the most convenient connecting point. It is also possible to connect to the Accessory terminal on the ignition switch, so that your CB automatically goes off when the ignition goes off, preventing accidental

battery drainage.)

Then tightly connect the black wire directly to the vehicle's metal frame.

Step 3: Plug-in the power cord to the receptacle provided on the back of the transceiver.

CAR'S MOTOR BLOCK OR FIRE WALL GROUND

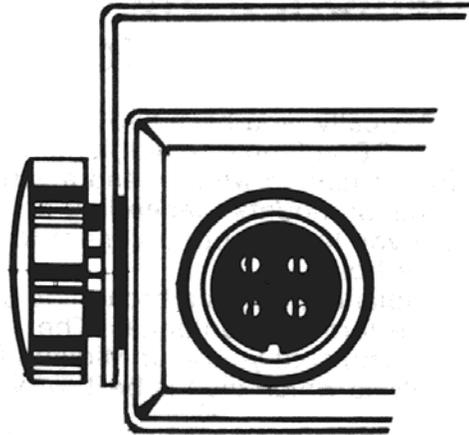
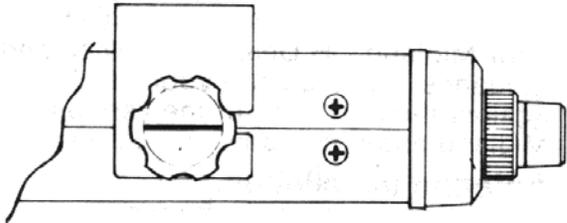


EXAMPLE OF
NEG. GROUND 12-V DC CAR BATT
CONNECTION ILLUSTRATION
MOST CARS & TRUCKS ARE
THIS TYPE.

Mounting the main unit.

Step 1: Position the main unit between the bracket arms in line with the mounting hardware.

Step 2: Tighten the retention hardware.



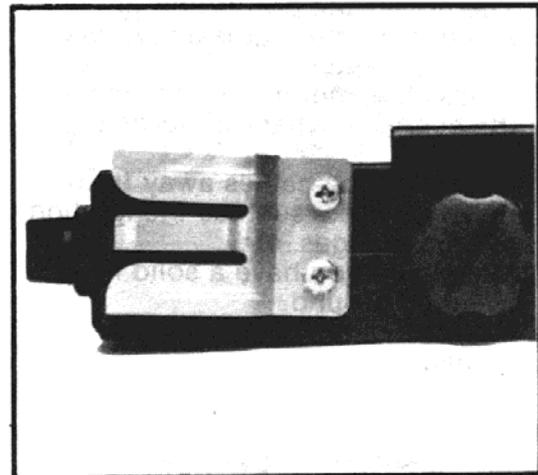
Installation of microphone hanger.

Mounting holes are provided on the side of the transceiver for the microphone hanger bracket. Alternately, the bracket can be attached to the vehicle dash.

Connecting optional remote speaker.

Locate the "EXT" jack on the main unit rear panel. Firmly insert and seat the speaker wire plug into the jack.

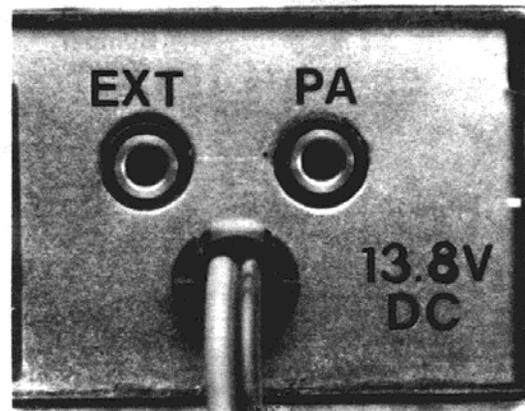
When connected, the external speaker will override and "blank out" the in-unit speaker standard with your Midland Mobile CB.



Connecting optional Public Address speaker.

Locate the "PA" jack on the main unit back panel. Firmly insert and seat the speaker wire plug into the jack.

Directions for mounting the optional PA speaker are included along with mounting hardware, with the speaker.



Antennas: How to select, position, install and tune the right one for you.

Basically, you have two types of mobile CB antennas — full-length whip and loaded whip — and a variety of types of mounts (depending on where you locate your antenna) to choose from.

Midland markets a broad line of high-performance antennas. The dealer who sold you your Midland CB can advise which type is best for you.

Where you locate your antenna does make a difference.

Some general rules for antenna location that can aid CB performance:

1. Put your mount as high on the vehicle as possible.
2. The higher the proportion of antenna length that is above the roof, the better.
3. If possible, mount the antenna in the center of whatever surface you choose.
4. Keep antenna cables away from noise sources, such as the ignition system, gauges, etc.
5. Make sure you have a solid metal-to-metal ground.
6. Exercise care to prevent cable damage.

Essentially, you have five location choices: the roof, gutter, rear deck, front cowl or rear bumper.

Where you decide to locate your antenna will determine the type of antenna you install. Again, consult your Midland CB Dealer for advice and guidance, and measure your needs against the attributes of the various Midland antenna models he carries.

Antenna installation.

Follow the manufacturer's installation instructions carefully.

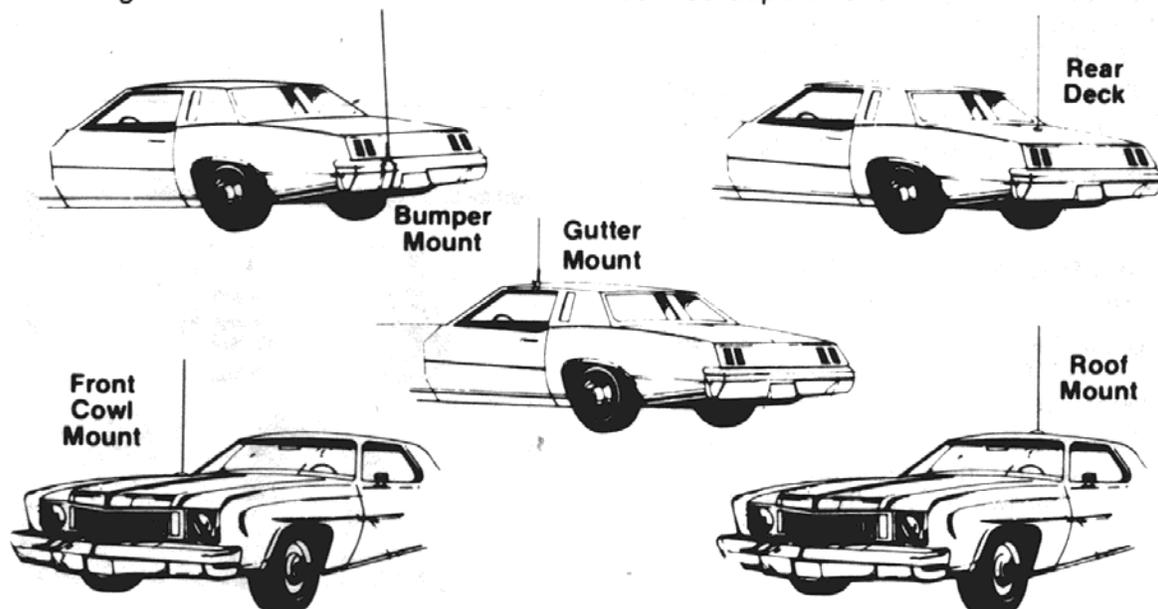
Warning: Never operate your CB radio without attaching an antenna or with a broken antenna cable. This can result in damage to transmitter circuitry.

Tuning your antenna.

Some antennas are factory tuned. However, performance can usually be improved by slightly lengthening or shortening its length, using a Standing Wave Ratio (SWR) meter.

For the exact procedures to be used, refer to the antenna manufacturer's installation manual.

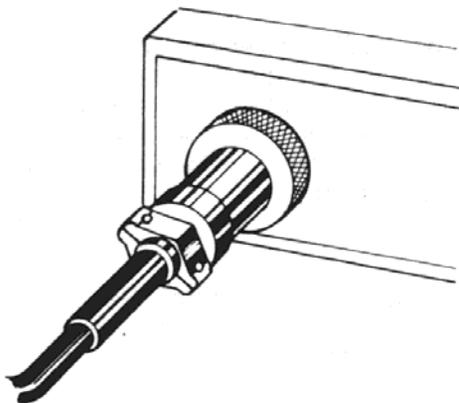
You can buy an SWR meter separately or have your antenna checked by your Midland CB Dealer's service department.



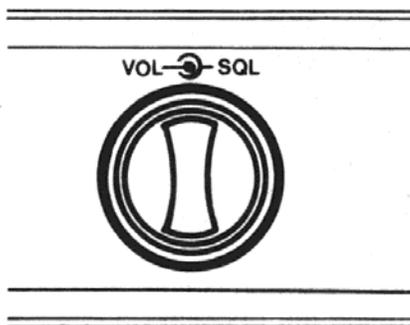
Midland 77-145A Operating Instructions.

Having properly installed and wired your CB and antenna, you are now ready for the six steps designed to get you into effective, satisfactory operation:

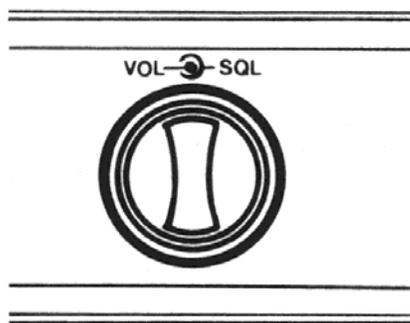
Step 1: Screw in the plug from the microphone into the microphone jack on the face panel and check for secure fit.



Step 2: Make sure your antenna is securely connected to the antenna connector.



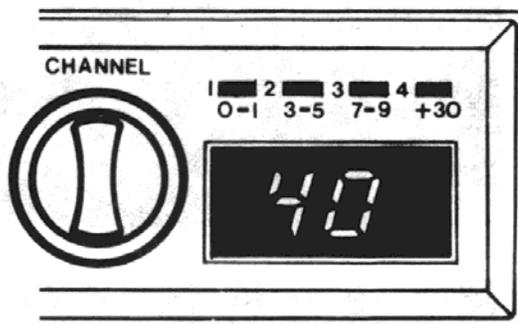
Step 3: Make sure the Squelch control is in the 9 o'clock position.



Step 4: Turn the power on and adjust the "Volume" control for a satisfactory sound level.

Step 5: Select your desired channel by turning the Channel Selector dial on leftside of the LED digital indicator clockwise (up) or counter-clockwise (down).

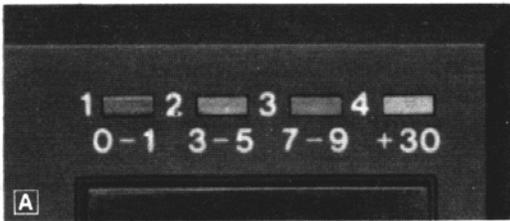
NOTE: Make sure the channel 9 emergency system is off.



Step 6: To transmit, press the Push-to talk bar on the microphone. To receive, release the bar.



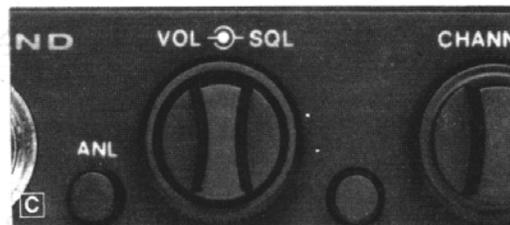
Operating controls, connectors: Their functions and uses.



A Signal/LED Power Meter. This LED power meter is used two ways. (1) When receiving, it gives the relative strength of incoming signals. (2) When transmitting, it shows the amount of power put out by your transmitter.



B Microphone Connector. Securely links your microphone to the main unit during use.



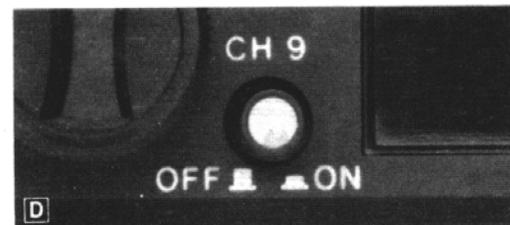
C Off/Volume Control. Turns your CB on and adjusts the sound level for comfortable reception.

C Squelch Control. Turned clockwise, it quiets the receiver when signals are not being received and allows a quiet standby operation.

The Squelch Control functions only in the receive mode and does not affect receiver volume when signals are being received.

To adjust, when no signals are present, rotate the Squelch Control clockwise until the receiver is quieted. Incoming signals will automatically release the squelch action.

Careful adjustment is necessary as a setting too far clockwise will not allow weaker signals to release the squelch action.



D CH-9 Selector Switch. Use for instant selection of emergency channel 9 (Push CH-9 switch). Release it for normal position, all 40 CB channels are selected by the channel selector switch.