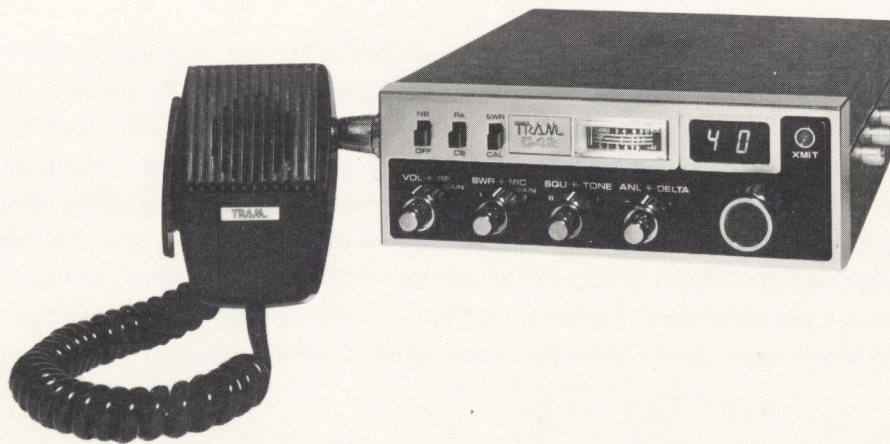


TRAM
D42



CITIZEN'S BAND TRANSCEIVER

*A PRODUCT OF
TRAM / DIAMOND
CORPORATION*

•
LOWER BAY ROAD
WINNISQUAM, N. H. 03289

LIMITED WARRANTY

TRAM/DIAMOND CORPORATION, hereinafter referred to as Tram, warrants that, for a period of ninety (90) days from the date of first sale to the original retail purchaser, this product will be free of defect in materials and workmanship. Tram's obligation is limited to repairing or, at Tram's option, replacing those equipments or parts which are returned transportation and insurance prepaid, to the factory (or the dealership where purchased) without alteration or further damage and in Tram's judgement, were originally defective or became defective in normal use. This equipment was designed under the direction of Tram/Diamond Corporation and is manufactured for Tram/Diamond in Japan by one of the world's foremost makers of fine electronic products.

TRAM/DIAMOND CORPORATION has two service facilities in the United States.

TRAM/DIAMOND CORPORATION

Lower Bay Road

Winnisquam, N.H. 03289

and

TRAM/DIAMOND CORPORATION

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TC 5080P

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LICENSE AND REGULATION INFORMATION

The Federal Communications Commission has made it possible for any citizen over eighteen (18) years of age to obtain a license to operate two way radios in the Citizen's Band. It is not legal to operate this equipment without a license.

Operating and equipment requirements are covered in Part 95 of the Federal Communications Commission's Rules and Regulations. Note the proper use of channel 9 (27.065 MHz). This channel has been reserved for communications concerned with the immediate safety of life of individuals, the immediate protection of property or the emergency assistance to a motorist. No other use of this channel is authorized. All use of this equipment must conform to F.C.C. requirements. Diamond Microwave Corporation certifies that this equipment is designed and manufactured to fully comply with the F.C.C. technical requirements for Class D Citizens Radio Service operation.

Provisions have been made by the Federal Communications Commission for temporary operation of Class D citizen band equipment. Temporary permit, F.C.C. form # 555-B, is designed to serve as an interim license provided a permanent license has been applied for by the filing, and mailing, of F.C.C. form #505. Temporary form 555-B must be filled out in full and kept in a safe place. It is valid for sixty (60) days only and may not be renewed.

To obtain your license, you must first fill out the F.C.C. application form #505. Read the application form carefully and fill out the work sheet, transfer this information to the application form, sign and mail the application with \$4.00 for application fee to FEDERAL COMMUNICATIONS COMMISSION, GETTYSBURG PENNSYLVANIA ... 17325. When approved the F.C.C. will issue your license. You will be assigned a number to be used as your station call letters.

Keep your license close to your equipment at all times. Fill out a transmitter identification card, F.C.C. form #452-C and attach it to the side of the two-way radio. **DO NOT MAKE TRANSMISSIONS WITH YOUR EQUIPMENT UNLESS YOU HAVE YOUR LICENSE.** Read Part 95 of the F.C.C. RULES AND REGULATIONS thoroughly. Make your transmissions short and to the point. Listen to the channel before transmitting to see that it is not in use.

CAUTION: There are no user adjustable components in the D42 transmitter. Adjustments of the D42 transmitter or frequency determining circuits can only be done by, or under the immediate supervision of, the holder of a first or second class commercial radio operator's license.

GENERAL INFORMATION

The TRAM D42 is a compact, class "D" mobile transceiver utilizing PLL (Phase Lock Loop) circuitry in conjunction with digital readout channel indication. Provision for full 40 channel A.M. operation has been built in.

A receiver tone control allows the operator to tailor the receiver audio to his taste, and on RF Gain control allows adjustment of the receiver gain for varying levels of incoming signals and band conditions.

The double conversion receiver uses highly selective ceramic filters to provide excellent adjacent channel rejection. The switch controlled RF noise blanker and automatic noise limiter are very effective in reducing pulse or ignition type noises. A rugged built-in speaker, dynamic microphone and tamper deterrent mounting hardware are also features of this communications package of unusually high quality.

ANTENNA AND COAXIAL CABLE (not provided)

The TRAM D42 is designed to work into a 50 ohm unbalanced antenna system. Many suitable antennas are commercially available ranging from full 1/4 wave length whips to base or top loaded antennas designed for cowl or roof top mounting.

INSTALLATION

The Tram Snap Bracket

TRAM now includes, with every set, its sensational and unique Snap Bracket (Pat. App. for). This bracket provides a tremendous advantage to TRAM owners in achieving set removal and remount. Either operation requires only 10 to 12 seconds and, since the antenna connection is still the original co-axial connector and the power cord comes with a quick disconnect, the efficiency of the antenna system remains unchanged and the power cord connection is instant and positive.

Other than ordinary installation techniques there are, from our experience, two tips that should be of some value to you. Having decided on location, the top part of the bracket may, of course, be used as a layout template. However, to avoid distortion of the assembled bracket the two capscrews should not be tightened until the set is snapped into the lower part. Now the capscrews may be tightened with the radio at the desired angle. The capscrews are 1/4-28 class 5, and are hard and durable and the Pem nuts, also being hard, allow considerable torque. A box wrench completely encircling the head of the capscrew will be found most satisfactory for supplying sufficient torque to maintain the angular adjustment.

When installing the power cable supplied, it is necessary that the red wire be connected to the positive side of the vehicle's electrical system and the black wire be connected to the negative side of the system. Reversing these connections will cause the 2A line fuse to blow.

Connect the antenna cable to the coaxial connector on the rear panel of the unit using a matching PL-259 UHF connector. Connect the microphone plug to the microphone jack located on the left side of the unit.

OPERATION

A. Control Function

1. **OFF-VOL. (small knob).** The volume control is combined with the DC power-on-off switch. At the extreme CCW (counter clockwise) position of the knob, the DC power to the unit is switched off. Advancing the control CW (clockwise) from this position turns on the power. To increase the loudness of the receiver audio, turn the control in a CW direction.
2. **RF GAIN (large knob).** This control reduces receiver sensitivity to eliminate noise or avoid local signal overload. When copying strong signals under noisy or crowded conditions it may be desirable to reduce the RF gain setting. To do this, set the volume control for nearly maximum and adjust the speaker audio level with RF Gain control.
3. **SWR (small knob).** The procedure to correctly measure the SWR (standing wave ratio) is as follows: Place SWR-CAL meter switch, located just above SWR knob, in "CAL" position, key the transmitter and rotate the small SWR knob carefully until the meter pointer rests on the SWR-CAL mark. The SWR meter is now calibrated and you have only to return the switch to the SWR position, with the transmitter still keyed, to read the SWR on the SWR meter scale. The SWR-CAL knob must be rotated fully CCW to the RF position to read RF power on the power scale of the meter.

Note: Since the SWR is not the same for each frequency, it will normally vary a bit from channel to channel. Best transmitter efficiency will be obtained at an SWR of 1.5:1 or less.
4. **MIC GAIN Control (large knob).** The Microphone Gain Control allows the operator to change the microphone sensitivity. For the average voice, and under most conditions, a control setting of approximately 10 o'clock (position "1" on the panel), will achieve 100% modulation. Where there may be loud interfering background noises, wind, voices, etc., it is often desirable to reduce the MIC GAIN and talk closer to the microphone. On the other hand, if you're stopped

beside a quiet road, it may be preferable to advance the MIC GAIN control and hold the microphone as much as 10-12 inches from your mouth. A special compression circuit insures that a high percentage of modulation will be maintained, and over modulation eliminated for widely varying levels of microphone input.

5. **SQUELCH (small knob).** This control, if turned CW, will quiet the receiver audio. If it is set just beyond the point where the receiver background noise disappears, any signal greater in strength than the noise level will restore the receiver to operation. The control may also be advanced to higher settings so that only relatively strong signals will open the squelch. This can be particularly useful if the band is open with skip signals that are weaker than the stations in your local area. The squelch can then be set to open only on the strong local signals.
6. **TONE (large knob).** This control allows the operator to adjust the receiver audio tones to suit his preference. Adjustment over a range from base to treble is possible with rotation to full CCW favoring the bass. Turning the control CW decreases the bass tones and, to some extent, the apparent audio level.
7. **DELTA TUNE (large knob).** Rotating this control changes the receiver frequency and allows the operator to properly tune to stations that might be slightly off frequency. Top center of this control is approximately the center of the channel frequency.
8. **ANL (small knob).** Through careful use of this control varying levels of noise can be tuned out of the receiver. Rotating the control CW turns on the limiter and increases the threshold of limiting allowing the operator to adjust the limiter to varying levels of noise. For weak noise sources effective limiting will be achieved with small amounts of rotation from CCW as the strength of the noise source increases additional rotation toward CW will eliminate the noise signal. The limiter is switched off at maximum CCW.
9. **CHANNEL SELECTOR.** The D42 is designed to provide operation on the 40 CB channels available at the time of its type acceptance. The channel selector switch has forty positions in order to provide mechanical production flexibility in the event of rules changes. The channels are selected by rotating the channel selector. There is no stop on the switch so the knob can be continuously rotated in either direction allowing quick channel changes.

10. **LED DISPLAY.** This display indicates which of the 40 channels is in use as well as unduly high SWR conditions. Rotation of the channel selector knob will result in the display of different digits in the display window. An SWR of 5-1 or greater will result in illumination of the decimal point in the lower right hand corner of the display. Should this decimal point become illuminated during transmission, the operator should cease transmitting immediately and check the conditions of the antenna and lead-in cable with built in SWR bridge. The final power transistor in the D42 can tolerate any degree of mismatch but low effective power output will result with SWR greater than 2-1.
11. **NOISE BLANKER.** The NB switch is used to turn the RF noise blanker circuit ON and OFF. Normally, when driving or, if stopped in traffic, it would be advisable to have the NB switch ON because of the strong ignition noises present. If, however, you are stopped on a quiet road, turning the NB switch OFF may improve very weak signal reception.
12. **PA-CB SWITCH.** This switch is used for selecting normal CB communications, or public address paging. In the PA position, it disables the transceiver and the internal speaker unit, and connects the audio amplifier output circuit to an external loud speaker unit (8 ohms—not supplied) for paging. During PA operation, the "S" meter is not illuminated.
13. **SWR-CAL SWITCH.** The CAL position switches the meter to read relative forward power for calibrating the SWR bridge. The SWR position switches the meter to read SWR. This reading is accurate ONLY when the bridge is first calibrated in the CAL position. This procedure is detailed on page 5.
14. **METER.** Indicates signal strength of received signal in S-units, relative power output and SWR.
15. **TRANSMISSION INDICATOR.** When the transmitter is keyed (ON), this lamp will glow at reduced brilliance. As you speak into the microphone the lamp will vary in brilliance to show modulation.
16. **MIC JACK.** The microphone is connected to this jack. A matching four (4) pin connector is supplied attached to the microphone.

Before any attempt is made to operate the D42, be sure that the proper power and antenna connections are made as indicated in the installation sequence on page 4.

B. OPERATING PROCEDURE TO RECEIVE

1. The PA-CB switch should be in the CB position.
2. Turn the power on to the set by turning the ON-OFF volume control CW. Adjust volume control to a comfortable listening level. RF Gain CW.
3. Turn the channel selector to the desired channel.
4. While listening to background noise, (wait until the channel is clear if signals are present), adjust the SQUELCH until the background noise JUST disappears. The Receiver will remain quiet until a signal is received that is greater in strength than the background noise. Be careful not to advance the SQUELCH farther than is necessary to quiet the background noise, as weak signals may not be heard.
5. The DELTA TUNE control should be adjusted, when necessary, to tune to signals that may not be exactly on channel.

C. OPERATING PROCEDURE TO TRANSMIT

1. Select the desired channel.
2. If transmitting for the first time, set the MIC GAIN control to the position marked 1 on the panel. See instructions for proper use of the MIC GAIN control on page 3.
3. If the channel is clear, push the press-to-talk switch on the microphone, making sure the button is fully depressed, hold the microphone close to, but to the side of your mouth, and speak in a normal voice. The transmit lamp will light and flash as you speak, indicating modulation.

D. USING THE TRAM D42 AS A BASE STATION

The TRAM D42 makes an excellent base station. All that is necessary to operate yours at your base is a regulated power supply to convert the 120V AC house current to approximately 13.8V DC. You may purchase such a power supply locally from your CB dealer or from Diamond Microwave Corporation as an optional accessory.

SPECIFICATIONS

GENERAL

| | |
|------------------------------|---|
| Channels: | 40 |
| Frequency Range: | 26.965 to 27.405 MHz |
| Frequency Tolerance: | 0.005% |
| Operating Temperature Range: | -30°C to +50°C. |
| Microphone: | Dynamic with push-to-talk switch and coiled cord. |
| Supply Voltage: | 13.8V DC (positive or negative ground) |
| Current Drain: | Receive: 1.3A maximum audio output. 0.25A stand by (no signal). Transmit: Full mod . . . 1.8A |
| Meter: | Illuminated, indicates receiving signal strength relative power output and SWR. |
| Size: | 2-23/64"(h) x 6-57/64"(w) x 8"(d). |
| Weight: | 6 pounds. |

TRANSMITTER

| | |
|--|------------------------------|
| Full Carrier: | 4.0 watts |
| Modulation Capability: | 100% |
| Harmonic Suppression and Spurious Emissions: | Better than FCC requirement. |
| Frequency Response: | 300 to 3000 Hz. |

RECEIVER

| | |
|-----------------------------|--|
| Sensitivity: | .3 μ V provides more than 1 watt audio, with gain control full and noise blanker off. Signal mod. 30% @ 1kHz sine wave. |
| Signal to Noise Ratio: | .3 μ V for 10db S+N/N, signal mod 30% @ 1kHz sine wave. |
| Selectivity: | 6db @ 4kHz, 60db @ 20kHz. |
| AGC: | Change in audio output less than 12db from 10 μ V to 5 volts. |
| Squelch: | Adjustable. Threshold less than .5 μ V. Tight more than 200 μ V. |
| Audio Frequency Response: | 500 to 2000Hz. |
| Distortion: | Less than 10% at 5.0 watts output. |
| Image Rejection: | More than 50db. |
| IF Rejection: | More than 80db at 455kHz, 60db. 4.665MHz. |
| Adjacent Channel Rejection: | More than 60db @ .3 μ V. |
| Cross Modulation: | More than 55db. |
| IF Frequency: | 4.665MHz & 455kHz. |
| Delta Tune: | \pm 1.5kHz. |
| Noise Blanker: | RF parallel gate type (hybrid IC). plus series gate ANL. |

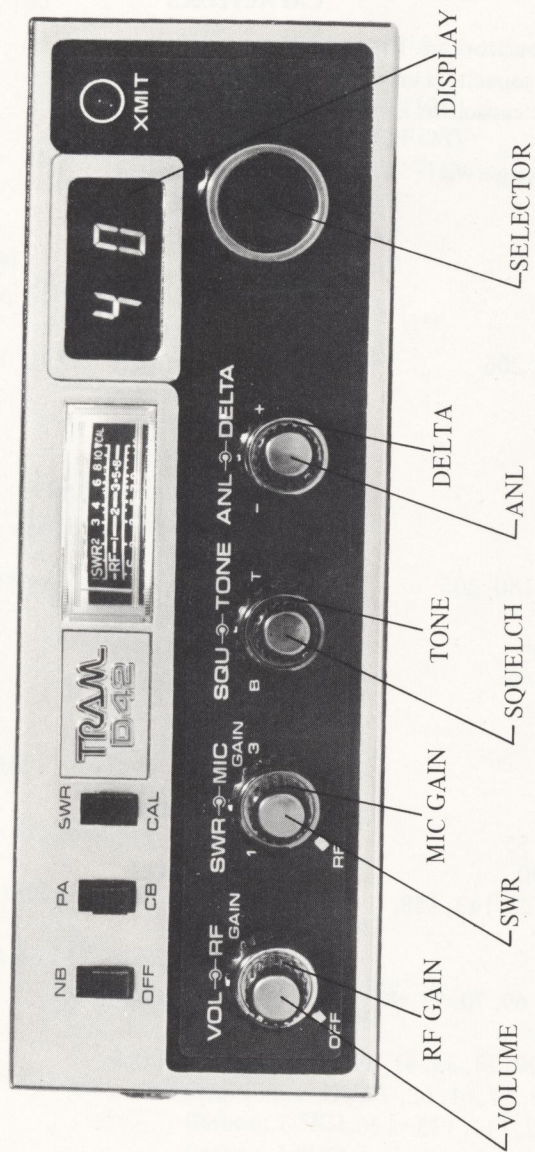


FIG. 1 FRONT PANEL D 42

REPLACEMENT PARTS LIST

NOTE: UNLESS OTHERWISE MARKED.

CAPACITORS

All ceramic capacitors are 10%, 50V DC.

All mylar film capacitors are 20%, 50V DC.

All electrolytic capacitors are +100, -10%, 50V DC.

| Location No. | Description | Parts No. |
|---|----------------------|-----------|
| C15, 21, 225 | Ceramic SL 1pF | 26036023 |
| C26, 32, 165 | Ceramic SL 2pF | 26036002 |
| C177, 178 | Ceramic SL 3pF | 26036003 |
| C30 | Ceramic SL 5pF | 26036004 |
| C42 | Ceramic RH 5pF | 26036056 |
| C10, 202, 203, 206 | Ceramic SL 10pF | 26036030 |
| C22 | Ceramic RH 10pF | 26036057 |
| C157 | Ceramic UJ 10pF | 26036027 |
| C154 | Ceramic TH 15pF | 26036017 |
| C173 | Ceramic Trimmer 20pF | 26030002 |
| C11, 223 | Ceramic SL 22pF | 26036005 |
| C13, 172 | Ceramic RH 22pF | 26036049 |
| C23, 88, 175, 180, 205 | Ceramic SL 47pF | 26036021 |
| C166, 167 | Ceramic RH 47pF | 26036007 |
| C155, 156, 182 | Ceramic UJ 47pF | 26036058 |
| C6, 76, 174, 179 | Ceramic SL 100pF | 26036006 |
| C221, 222 | Ceramic SL 120pF | 26036039 |
| C164 | Ceramic TH 150pF | 26036059 |
| C9 | Ceramic SL 150pF | 26036025 |
| C25, 27 | Ceramic TH 180pF | 26036020 |
| C7, 8, 52, 53, 55 | Ceramic SL 220pF | 26036029 |
| C161, 189, 190 | Ceramic 220pF | 26034027 |
| C2, 3, 47, 80, 121, 143, 158, 192, 251, 252 | Ceramic 470pF | 26034022 |
| C162 | Ceramic 1000pF | 26034019 |
| C1, 4, 12, 16, 69, 70, 73, 89, 151, 159, 201 | Ceramic 2200pF | 26034020 |
| C14, 18, 19, 20, 24, 33, 41, 49, 50, 51, 54, 56, 57, 61, 62, 77, 93, 101~108, 112, 114, 123~126, 133~142, 144~148, 153, 160, 169, 171, 176, 183, 184, 186, 204, 208 ~210, 233, 238, 257 | Ceramic 4700pF | 26034021 |
| C78, 81, 111, 113, 120 | BC Capacitor 0.1μF | 26034006 |

| Location No. | Description | Parts No. |
|---|-------------------------------|-----------|
| C48 | Electrolytic 1 μ F | 26043011 |
| C28, 38, 63 | Electrolytic 3.3 μ F | 26043015 |
| C17, 60, 64, 67, 71, 83, 86, 91, 94, 122, 152, 198, 199 | Electrolytic 10 μ F/16V | 26043016 |
| C36, 75, 79 | Electrolytic 33 μ F/16V | 26043018 |
| C43, 195, 197 | Electrolytic 100 μ F/10V | 26043036 |
| C65 | Electrolytic 220 μ F/10V | 26043049 |
| C82 | Electrolytic 1000 μ F/25V | 26043051 |
| C92 | Electrolytic 1000 μ F/16V | 26043050 |
| C191 | Mylar Film 1000pF | 26037009 |
| C163 | Mylar Film 4700pF | 26037004 |
| C37, 40, 72, 87, 181 | Mylar Film 0.01 μ F | 26037005 |
| C29, 31, 34, 35, 39, 85, 168 | Mylar Film 0.033 μ F | 26037001 |
| 187, 188, 196, 200 | | |
| C 66, 258 | Mylar Film 0.1 μ F | 26037003 |
| C74, 194A, 194B | Tantalum 3.3 μ F | 26040003 |
| C68 | Tantalum 33 μ F | 26040001 |

RESISTORS

All resistors are 1/4 watt, 10% carbon fixed type.

| Location No. | Description | Parts No. |
|---|----------------------------|-----------|
| R50 | Carbon, 4.7 Ω | 26054090 |
| R98 | Metal, 16 Ω 3W | 26050004 |
| R51, 66 | Carbon, 22 Ω | 26054054 |
| R11, 169 | Carbon, 47 Ω | 26054055 |
| R1, 111 | Carbon, 68 Ω | 26054057 |
| R49, 78, 79, 119, 192 | Carbon, 100 Ω | 26054048 |
| R5, 7, 87 | Carbon, 150 Ω | 26054064 |
| R14, 18, 19, 22, 46, 48, 88, 90, 122, 178 | Carbon, 220 Ω | 26054016 |
| R4, 6, 27, 70, 162, 183, 185 | Carbon, 470 Ω | 26054065 |
| R121 | Semi-Fixed, 500 Ω | 26061073 |
| R13, 94, 117, 152, 159, 174, 187 | Carbon, 1K Ω | 26054060 |
| R202~215 | Carbon, 1K Ω , 1/8W | 26054101 |
| R8 | Solid, 1K Ω , 1/2W | 26056010 |
| R251 | Slide, 1K Ω , 1/8W | 26056027 |
| R80 | Semi-Fixed, 1K Ω | 26061111 |
| R184, 186 | Carbon, 1.5K Ω | 26054092 |
| R63 | Carbon, 1.8K Ω | 26054100 |
| R15, 21, 62, 68, 73, 77, 92, 99 | Carbon, 2.2K Ω | 26054068 |
| 125, 153, 167, 177, 190 | | |
| R97 | Carbon, 2.7K Ω | 26054069 |

| Location No. | Description | Parts No. |
|--|---------------------------------------|-----------|
| R9, 16, 23, 26, 35, 43, 55, 64, 76, 85, 96, 118, 151, 160, 161, 164, 166, 189, 216 | Carbon, 4.7K Ω | 26054071 |
| R38, 72 | Variable, 5K/50K Ω | 26061108 |
| R181 | Carbon, 6.8K Ω | 26054073 |
| R10, 45, 56, 57, 67, 71, 75, 91, 114, 120, 170, 171 | Carbon, 10K Ω | 26054074 |
| R3 | Semi-Fixed, 10K Ω | 26061077 |
| R182 | Carbon, 15K Ω | 26054075 |
| R65, 180 | Variable, 20K/20K Ω | 26061109 |
| R12, 37, 41, 42, 95, 116, 156 | Carbon, 22K Ω | 26054076 |
| R32, 33, 34, 59, 155 | Carbon, 33K Ω | 26054077 |
| R30, 31, 44, 47, 84, 176, 179 | Carbon, 47K Ω | 26054078 |
| R2, 83 | Variable, 50K/20K Ω with SW | 26061106 |
| R36, 61 | Variable, 50K/20K Ω without SW | 26061107 |
| R28 | Semi-Fixed, 50K Ω | 26061078 |
| R20, 29 | Carbon, 68K Ω | 26054079 |
| R17, 24, 25, 74, 157, 168, 191, 195~201 | Carbon, 100K Ω | 26054080 |
| R60 | Semi-Fixed, 100K Ω | 26061071 |
| R154 | Carbon, 150K Ω | 26054081 |
| R158, 172, 175 | Carbon, 220K Ω | 26054082 |
| R86, 89, 163, 165, 173, 188 | Carbon, 470K Ω | 26054084 |
| R58 | Thermistor, D33A | 26069002 |

COILS & TRANSFORMERS

| Location No. | Description | Parts No. |
|--------------|------------------------|-----------|
| L1, 2, 9 | RF Coil, L1904-G1 | 26025071 |
| L3 | RF Coil, 25106 | 26025106 |
| L4, 5, 11 | RF Coil, 25082 | 26025082 |
| L6 | RF Choke Coil, L1998 | 26025072 |
| L7 | RF Choke Coil, 332 | 26025098 |
| L8 | AF Choke Coil, G3 | 25020007 |
| L12 | RF Coil, 25085 | 26025085 |
| L13 | RF Coil, 25090 | 26025090 |
| L14 | RF Coil, 25086 | 26025086 |
| L21, 24 | RF Choke Coil, L1447 | 26020002 |
| L22, 23 | RF Choke Coil | 26020009 |
| T1 | RF Transformer, 25087 | 26025087 |
| T2 | RF Transformer, L1641 | 26025037 |
| T3 | RF Transformer, L1642 | 26025038 |
| T4, 5, 13 | RF Transformer, 25088 | 26025088 |
| T6, 7, 8 | IF Transformer, D10753 | 26027008 |
| T9 | RF Transformer, 25089 | 26025089 |
| T10 | AF Transformer | 26023017 |

TRANSISTORS & DIODES

| Location No. | Description | Parts No. |
|--|----------------|-----------|
| CD1, 2, 59 | 1N60 | A7000900 |
| CD3, 4, 5, 6, 7, 8, 14, 20, 25 28, 29 | 1S1588V | A7249601 |
| CD9 | SVC0050 BR | 26010064 |
| CD10, 11, 12, 15 | 1S1885 | A7568500 |
| CD13 | 02Z6.2A | A7286100 |
| CD26 | SVC0053 1S2208 | 26010062 |
| CD27 | 1S1658 FA-2 | A7252805 |
| CD30, 31 | TLR-312 | A8620550 |
| Q1, 6, 7, 8, 13, 17, 19, 22, 35~43 | 2SC372-Y | A6707244 |
| Q2 | 2SC784-R | A6737940 |
| Q3, 5, 9, 32 | 2SC785-R | A6738040 |
| Q4, 33 | 2SK19-GR | A6046940 |
| Q10 | 2SC1166-Y | A6770960 |
| Q11 | 2SC2074-Y | A6319640 |
| Q12 | 2SC1678 HINO | A6319611 |
| Q15, 18, 31 | 2SA495-O | A6502360 |
| Q20 | 2SC732-BL | A6733280 |
| Q21 | 2SB435-O | A6610140 |
| Q23 | 2SD235-O | A6823540 |
| Q34 | 2SC387A | A6708760 |

INTEGRATED CIRCUITS

| Location No. | Description | Parts No. |
|--------------|---------------|-----------|
| IC1, 11 | TA7064P-JA | B0305401 |
| IC2 | SVI0052-10060 | 26010060 |
| IC3 | TA7205P | B0319200 |
| IC7, 9 | TC5081P | B0480810 |
| IC8 | TC5082P | B0480820 |
| IC10 | TC5080P | B0480800 |

MISCELLANEOUS

| Location No. | Description | Parts No. |
|--------------|--------------------------------|-----------|
| F1 | Fuse 2A for DC | 26014024 |
| J1 | Antenna Jack | 26016024 |
| J2 | Microphone Jack | 26016044 |
| J3, 4 | SP Jack | 26016047 |
| K1 | Relay, DC12V, 1C-2P | 26014070 |
| M1 | DC Ammeter | 26019025 |
| MK1 | Dynamic Microphone | 26015293 |
| MK1A | Dynamic Microphone (with P3) | 26015294 |
| P3 | Microphone Plug | 26016045 |
| PL1 | Meter Lamp | 26011014 |
| S1, 4, 5 | Slide Switch | 26014026 |
| S2, 3, 6 | Switch | |
| S10 | Rotary Switch | 26014072 |
| SP1 | Speaker, 16Ω | 26015175 |
| U1 | Ceramic Bypass Filter | 26019026 |
| U2 | Ceramic Filter | 26019009 |
| W1 | DC Power Cord with Fuse Holder | 26017008 |
| X1 | Crystal 15283 | 26015283 |
| X2 | Crystal 15285 | 26015285 |
| X3 | Crystal 15284 | 26015284 |
| Z1 | PC Board (Main) | 26001025 |
| Z1A | PC Board (Shield) | 26001047 |
| Z11 | Cord Stopper | 26075079 |
| Z20 | FCC Application Form | 26093253 |
| Z22 | PC Board (CH SW) | 26001029 |
| Z27 | PC Board (Slide) | 26001041 |
| Z28 | PC Board (LED) | 26001042 |
| Z29 | PC Board (Vol) | 26001043 |
| Z32 | PC Board (Filter) | 26001050 |

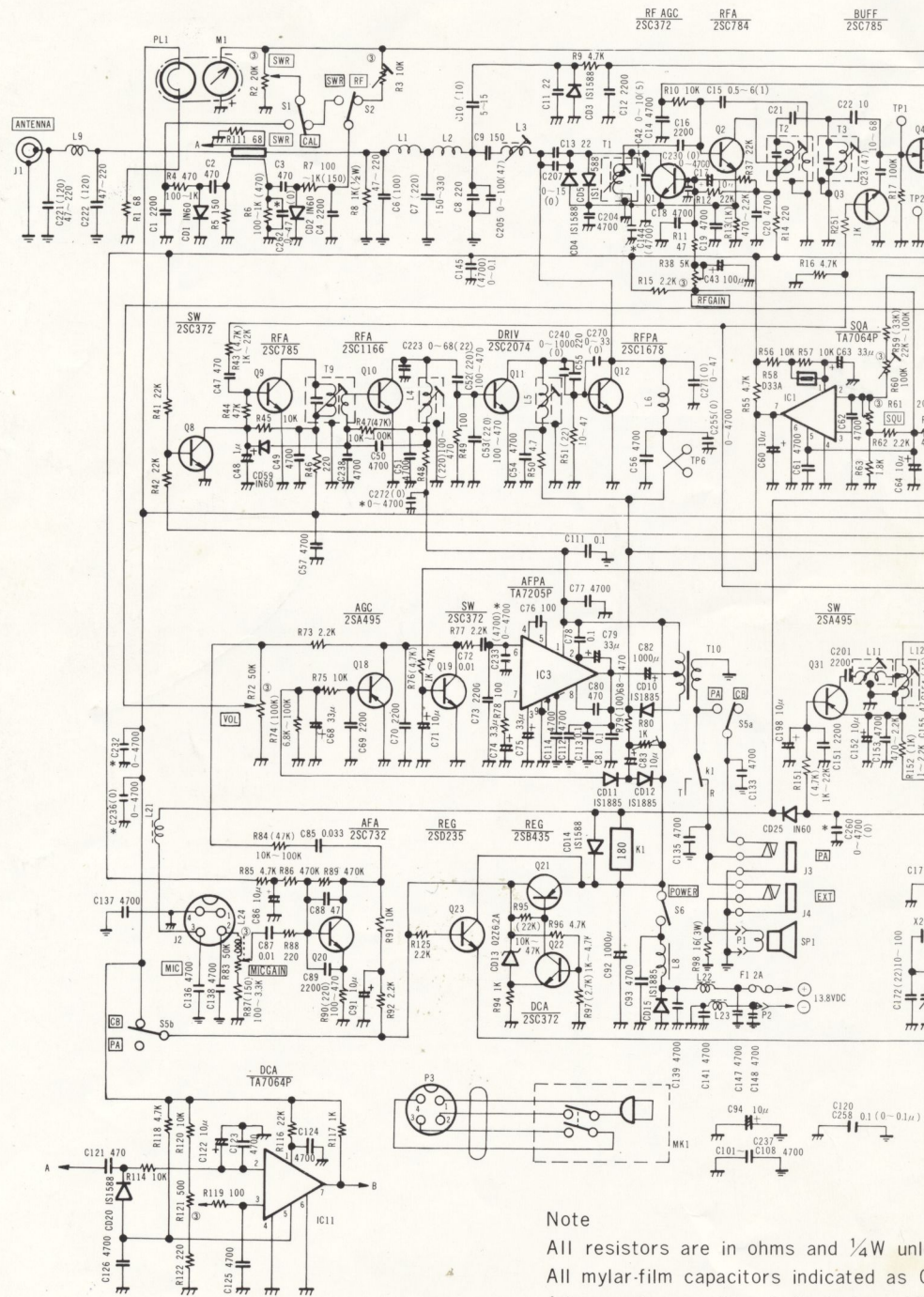
CABINET PARTS

| Location No. | Description | Parts No. |
|--------------|--------------------|-----------|
| | Bracket | 26074093 |
| | Shield Washer-(TR) | 26075077 |
| | Shield Washer-(IC) | 26075081 |
| | Bracket Stud | 26079045 |
| | Top Cover Ass'y | 26083059 |
| | Bottom Cover Ass'y | 26083060 |
| | Front Panel | 26084031 |
| | Knob A | 26086074 |
| | Knob C | 26086075 |
| | Knob D | 26086076 |
| | Meter Holder | 26074108 |

IMPORTANT NOTICE

To insure continued compliance to FCC technical requirements, service requiring adjustments to the transmitter portion of this transceiver must be performed only by persons holding commercial first or second class radio operator licenses.

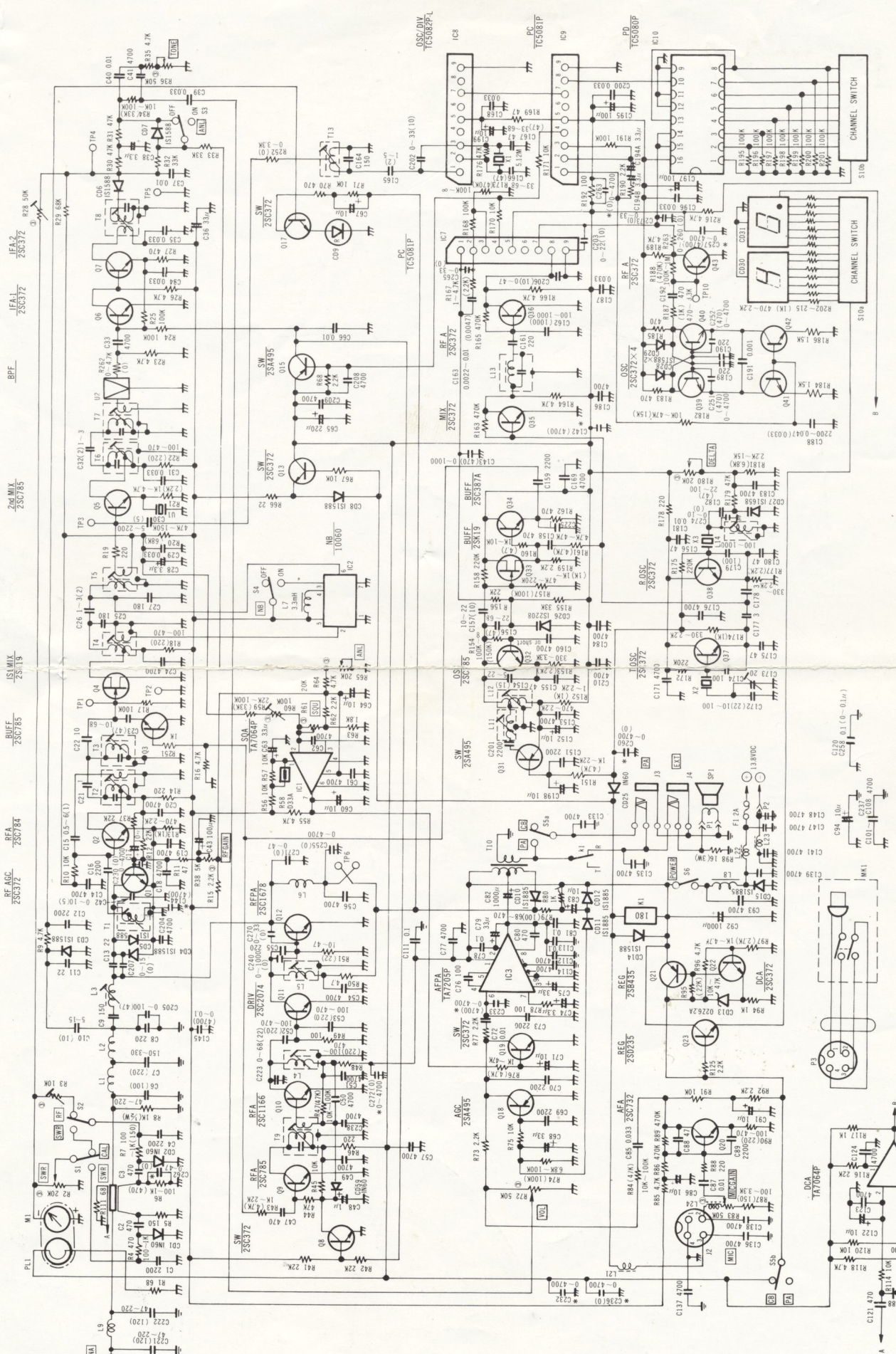
Replacement crystals should be ordered from Tram/Diamond Corporation in order that proper transmitter output frequency tolerances be maintained.



Note

All resistors are in ohms and 1/4W unless
 All mylar-film capacitors indicated as 0
 All ceramic capacitors indicated as 47
 * Variable (OPF or 4700PF)

SCHEMATIC DIAGRAM MODEL D42



Note

All resistors are in ohms and 1/4W unless otherwise noted.

All mylar-film capacitors indicated as 0.033, etc. are in μ F.

All ceramic capacitors indicated as 4700, etc. are in PF.

* Variable (OPF or 4700PF)