

**OPERATING INSTRUCTIONS
AND PARTS LIST FOR**



CAR RADIO

**AM/FM PUSH BUTTON TUNED
FOR 12 VOLT D.C. NEGATIVE GROUND SYSTEMS ONLY**

Model Number BJ300

The MODEL NUMBER of your radio will be found stamped on the bottom part of radio. Always give this number when communicating with us regarding this unit, or when ordering parts.

**THE INSTRUCTIONS CONTAINED IN THIS MANUAL ARE FOR YOUR
BENEFIT. READ THEM CAREFULLY BEFORE BEGINNING INSTALLATION.**

This list is valuable. It will assure your being able to obtain proper parts service at all times. We suggest you keep it with other valuable papers.

**INLAND DYNATRONICS INTERNATIONAL OF
AUSTRALASIA PTY LTD**

139 CHETWYND ST NORTH MELBOURNE 3051
CNR PARAMATTA RD AND SLOANE ST HABERFIELD 2045
147 GREY ST STH BRISBANE 4000

ELECTRICAL CONNECTION

- a) Connect radio battery lead to the ammeter, fuse block, or ignition switch whichever is most convenient.
- b) Plug the antenna lead-in into the antenna receptacle located on the rear side of the radio.

ADJUST ANTENNA TRIMMER

- a) Extend the antenna to its full length, turn volume control to normal level and tune in a weak station around 1400kHz. Adjust antenna trimmer carefully for maximum volume. This is done by turning trimmer screw clockwise or counterclockwise.
- b) For maximum output, antenna trimmer must be properly adjusted for satisfactory operation of radio.

SERVICE DATA FOR TECHNICIANS USE
ONLY ALIGNMENT PROCEDURE

AM IF & RF ALIGNMENT USING AM SIGNAL GENERATOR

Press one of the push buttons marked "A" to set radio for AM reception, AM signal generator should be coupled with antenna receptacle (J1) thru dummy. Set volume control to maximum and tone to treble. Attenuate Signal Generator output to maintain 0.5 watts on output meter (approx. 1.4 volts across 4 ohms load).					
STEP	GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1	455 kHz 400Hz, 30% Mod.	Around 1000kHz of non-interference	Output meter across voice coil	AMIFT1 AMIFT2 AMIFT3	Adjust for Maximum
2	1650 kHz	High frequency end stop	"	CT6	"
3	525 kHz	Low frequency end stop	"	L9/L10	"
4	1400 kHz	Tune to signal	"	CT 5 CT 4	"
5	Repeat step 2, 3 and 4 until no further increase. Step 4 should be last step.				

FM IF ALIGNMENT USING FM SWEEP GENERATOR

Press one of the push buttons marked "F" to set the radio for FM reception. High side of sweep generator should be coupled with antenna receptacle (J1) thru dummy.					
STEP	GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
6	10.7 MHz	Point of non-interference	Vert. amp. of scope to point VR Low side to ground	FMIFT1 FMIFT2 FMIFT3	Adjust T7 to place maker at center of "S" curve similar. Adjust T4, T5 and T6 for maximum amplitude and straightness of line.

FM RF ALIGNMENT USING FM SIGNAL GENERATOR

Set the radio for FM reception. Connect FM signal generator across antenna receptacle (J1). Set volume control to maximum and tone to treble. Attenuate signal generator output to maintain 0.5 watts on output meter.					
STEP	GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
7	87.3 MHz 400 Hz 22.5 kHz dev.	Low frequency end stop	Output meter across voice coil	CT 3	Adjust for Maximum
8	98 MHz	Tune to signal	"	CT1 CT2	"

Model BJ300

TYPE SET	Battery Operated Indash Type AM & FM Automobile Receiver
TRANSISTOR & DIODE	AM; RFamp. 2SC-839 CONV. 2SC-839 IFamp. 2SC-839 DETECTOR. 1N60 DRIVER. 2SC-945×2 POWERamp. 2SC-1096×2 FM; RFamp. 2SK19 LOCAC osc. 2SC-394 MIXER. 2SC-922 IFamp. μPC-577 DETECTOR. 1N60P×2 AFC. 1S351
POWER SUPPLY RATING	12 volt Storage Battery 13.2 volt
TUNING RANGE	AM 540 ~ 1600kHz FM 88 ~ 108MHz

PARTS LIST

Schematic Location	Description	Schematic Location	Description
TRANSISTOR			
TR 1	2 SK 19	C 9	0.0 1 μF - Z
TR 2	2 SC922 -L	C 10	0.0 1 μF - Z
TR 3	2 SC394 -0	C 11	0.1 μF - Z
TR 4	2 SC380 -0	C 12	3 PF - N7 5 0
TR 5	2 SC839 -L	C 13	0.0 1 μF - Z
TR 6	2 SC839 -L	C 14	4 PF - N7 5 0
TR 7	2 SC839 -L	C 15	1 μF - 6 V
TR 8	2 SC945 -R	C 16	0.0 1 μF - Z
TR 9	2 SC945 -R	C 17	0.0 1 μF - Z
TR 10	2 SC1096 -L	C 18	0.0 2 μF - Z
TR 11	2 SC1096 -L	C 19	0.0 1 μF - Z
IC 1	μPC577 H	C 20	0.0 1 μF - Z
D 1	1 N60 P	C 21	0.0 1 μF - Z
D 2	1 N60 P	C 22	0.0 1 μF - Z
D 3	1 N60 P	C 23	0.0 1 μF - Z
D 4	1 S351	C 24	2 2 0 μF 1 0 V
D 5	RD9 AL	C 25	0.0 1 μF - Z
D 6	1 S953	C 26	1 0 μF 6 V
D 7	1 S953	C 27	1 0 μF 6 V
CAPACITORS			
C 1	1 0 PF - K	C 28	0.0 1 μF - Z
C 2	8 PF - K	C 29	0.0 1 μF - Z
C 3	0.0 0 1 μF - Z	C 30	0.0 0 2 2 μF - M
C 4	2 0 PF -	C 31	0.0 4 7 μF - M
C 5	2 PF - K	C 32	1 2 0 PF - K
C 6	1 PF - K	C 33	0.0 0 2 2 μF - M
C 7	5 PF - N7 5 0	C 34	0.0 0 1 μF - M
C 8	1 5 0 PF - K	C 35	0.0 1 μF - M
		C 36	0.0 1 μF - M
		C 37	2 0 0 PF - N7 5 0
		C 38	0.0 4 7 μF - M

OPERATING INSTRUCTIONS

TO TURN THE RADIO "ON".

The on-off switch is combined with the volume control, both of which are operated with the front left-hand knob. Turn this knob clockwise until a "click" indicates that the radio is "ON".

MANUAL TUNING

Turn the volume up until stations can be heard. Then turn the front right-hand knob until the desired station is received. The numbers on the dial scale indicate the frequency of the radio station to which the radio is tuned.

Tune carefully until you are exactly on the station; tuning to either side of station will result in poor tonal quality and noisy reception. After station is tuned in properly. Adjust the volume control to the desired level.

EXCHANGE OF FM & AM

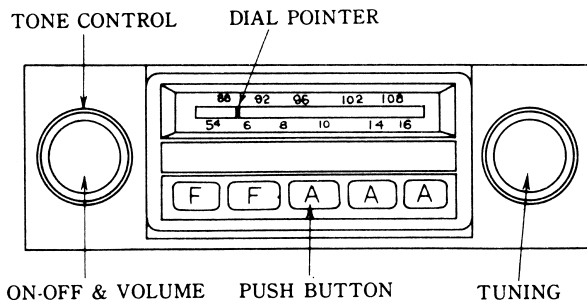
For medium wave push A button and for FM push F button then tune in station.

SETTING PUSHBUTTONS

1. Carefully tune-in the desired station with the MANUAL TUNING control. Tune exactly to the station.
2. Pull out the first pushbutton to be set, to unlock the button for station set-up, and the lock this button to the station which you have tuned-in by firmly pushing the button in.
3. Follow the above producer for the remaining four buttons.

TONE CONTROL

Tone control is located behind volume control.



STATION SELECTING FM-AM: Two for FM, three for AM.
By pushing the button, you can listen to the station you prefer.

Schematic Location	Description		Schematic Location	Description	
C 39	3 3 0	μ F - 16 V	R 36	1 0	K $\frac{1}{4}$ K
C 40	0.0 2 7	μ F - M	R 37	6 8	K $\frac{1}{4}$ K
C 41	0.0	μ F - M	R 38	4 7 0	Ω $\frac{1}{4}$ K
C 42	2 2	μ F - 16 V	R 39	1 0	K $\frac{1}{4}$ K
C 43	0.0 0 2	μ F - M	R 40	1	K $\frac{1}{4}$ K
C 44	0.2 3	μ F - Z	R 41	3 3 0	Ω $\frac{1}{4}$ K
C 45	4.7 1	μ F - 6 V	R 42	1 0	K $\frac{1}{4}$ K
C 46	4 7 0	μ F - 16 V	R 43	1 0	K $\frac{1}{4}$ K
C 47	0.0 9	μ F - M	R 44	18 0	Ω $\frac{1}{4}$ K
C 48	0.0 0	μ F - M	R 45	3 3	K $\frac{1}{4}$ K
C 49	4 7 0	μ F - 16 V	R 46	1 8	Ω $\frac{1}{4}$ K
C 50	1 0 1	μ F - 6 V	R 47	8 2	Ω $\frac{1}{4}$ K
C 51	4 7 7	μ F - 16 V	R 48	3 3 0	Ω $\frac{1}{4}$ K
C 52	1 2 1	PF - K	R 49	3 3 0	Ω $\frac{1}{4}$ K
C 53	0.0 0	μ F - M	R 50	4 7	K $\frac{1}{4}$ K
C 54	0.0 4 7	μ F - M	R 51	4 7 0	Ω $\frac{1}{4}$ K
C 55	0.0 0	μ F - M	R 52	8 2	Ω $\frac{1}{4}$ K
C 56	4 7 0	μ F - 16 V	R 53	4 7 0	Ω $\frac{1}{4}$ K
C 57	1 0 0 0	PF - YZ	R 54	8 2	Ω $\frac{1}{4}$ K
C 58	1 0 0 0	PF - YZ	R 55	0.2	Ω $\frac{1}{4}$ K
C 59	1 0	μ F - 10 V	R 56	0.2	Ω $\frac{1}{4}$ K
C 60	4.7 7	μ F - 6 V	R 57		
C 61	0.0 2	μ F - M	R 58	5 6 0	Ω $\frac{1}{4}$ K
C 62	3	PF - K	R 59	1 0 0	Ω $\frac{1}{4}$ K
C 63	0.0 1	μ F - M	R 60	1 0 0	Ω $\frac{1}{4}$ K
C 64	7	PF - K	TRANSFORMERS		
C 65	7	PF - K	T1	INPUT TRANS	
C 66	0.0 1	μ F - M	T2	FILTER CHOKE	
C 67	3 0	PF - K	AMIFT1	AM IF TRANS	
C 68	1 5	PF - K	AMIFT2	AM IF TRANS	
C 69	2	PF - K	AMIFT2	AM IF TRANS	
C 70	1 0	μ F - 10 V	FMIFT1	FM IF TRANS	
C 71	2	PF - N - 7 5 0	FMIFT2	FM IF TRANS	
C 72	2 0 0	PF - K	FMIFT3	FM IF TRANS	
RESISTORS			CF1	CERAMIC FILTER	
R 1	5 6 0	K $\frac{1}{4}$ K			
R 2	1 0 0	Ω $\frac{1}{4}$ K			
R 3					
R 4	3 3	Ω $\frac{1}{4}$ K			
R 5	3 3	K $\frac{1}{4}$ K			
R 6	3.9	K $\frac{1}{4}$ K			
R 7	1	K $\frac{1}{4}$ K			
R 8	3 3 0	Ω $\frac{1}{4}$ K			
R 9	1.8	K $\frac{1}{4}$ K			
R 10	3.3	K $\frac{1}{4}$ K			
R 11	15	K $\frac{1}{4}$ K			
R 12	4 7 0	Ω $\frac{1}{4}$ K			
R 13	1 0 0	K $\frac{1}{4}$ K			
R 14	5 6 0	K $\frac{1}{4}$ K			
R 15	2 0 0	K $\frac{1}{4}$ K			
R 16	5.6	K $\frac{1}{4}$ K			
R 17	2 7	K $\frac{1}{4}$ K			
R 18	4 7 0	Ω $\frac{1}{4}$ K			
R 19	3 3 0	Ω $\frac{1}{4}$ K			
R 20	2 2 0	Ω $\frac{1}{4}$ K			
R 21	1	K $\frac{1}{4}$ K			
R 22	1	K $\frac{1}{4}$ K			
R 23	1 8	K $\frac{1}{4}$ K			
R 24	1 8	K $\frac{1}{4}$ K			
R 25	1 0 0	Ω $\frac{1}{4}$ K			
R 26	1	K $\frac{1}{4}$ K			
R 27	1 0	K $\frac{1}{4}$ K			
R 28	4 7 0	K $\frac{1}{4}$ K			
R 29	2 2 0	Ω $\frac{1}{4}$ K			
R 30	2.7	K $\frac{1}{4}$ K			
R 31	8 2	Ω $\frac{1}{4}$ K			
R 32	5 6	K $\frac{1}{4}$ K			
R 33	1 0	K $\frac{1}{4}$ K			
R 34	1	K $\frac{1}{4}$ K			
R 35	1 0 0	K $\frac{1}{4}$ K			

SCHEMATIC DIAGRAM

