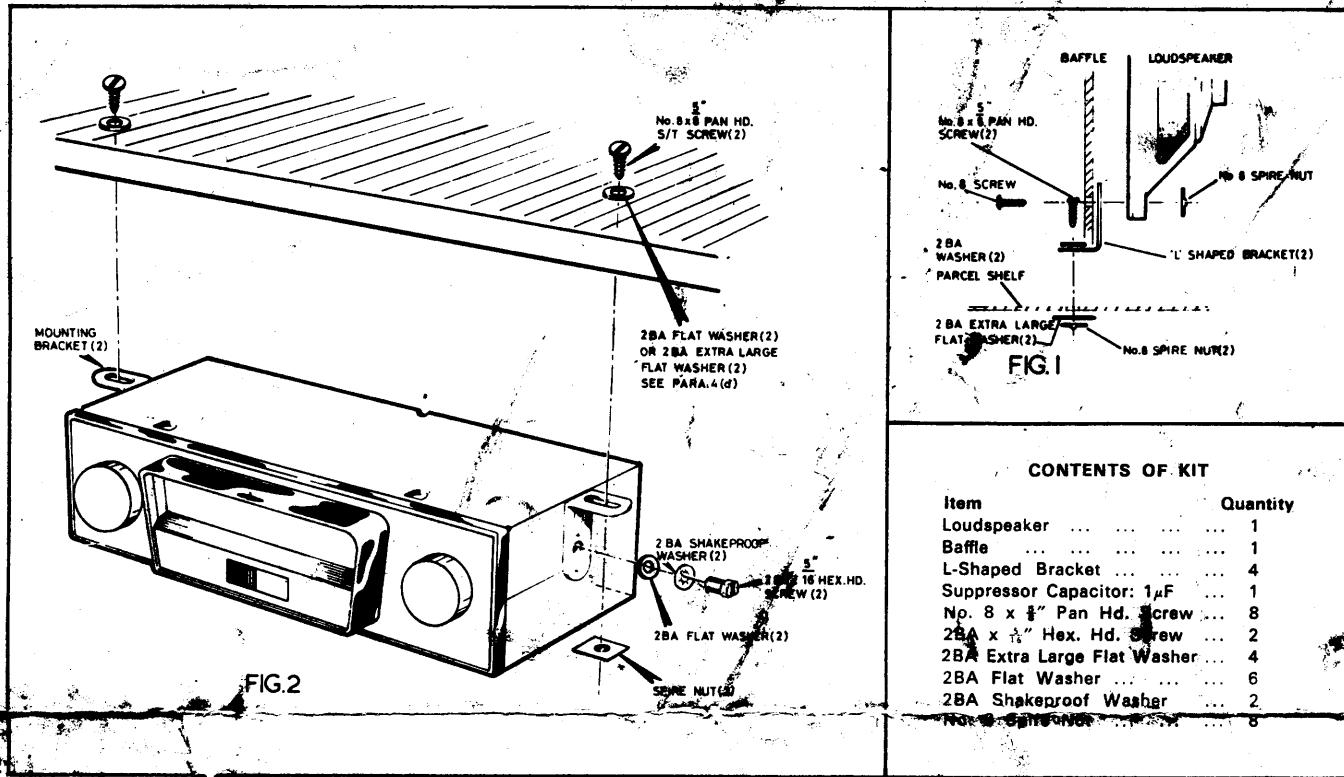




MODEL 2050

Car Radio

Installation Instructions



CONTENTS OF KIT

Item	Quantity
Loudspeaker	1
Baffle	1
L-Shaped Bracket	4
Suppressor Capacitor: 1μF	1
No. 8 x $\frac{1}{2}$ " Pan Hd. Screw	8
2BA x $\frac{1}{2}$ " Hex. Hd. Screw	2
2BA Extra Large Flat Washer	4
2BA Flat Washer	6
2BA Shakeproof Washer	2
TOTAL	8

INTRODUCTION

This fitting kit enables the above car radio to be installed in any car which uses a 12 volt battery. When carrying out the installation, you should have on hand the operating instructions supplied with the radio, as this describes certain internal adjustments which must be made to ensure satisfactory operation.

POLARITY

The radio is designed for negative or positive earth polarity operation. It is essential to check that both car and radio are the same polarity. Incorrect polarity connection may cause serious damage to the radio and invalidate the guarantee.

Car Polarity

Lift up the bonnet and look at the battery, when you will see that one battery lead connects to the car metal bodywork. If the car body connection is made to the - (negative) battery terminal, the car is negative earth polarity. If the body connection is on the + (positive) battery terminal, then the car is positive earth polarity.

Radio Polarity

Although the radio is adjusted for negative earth polarity when it leaves the factory, this should always be verified and the polarity of the radio altered (where necessary) to suit the car, as described in the operating instructions.

INSTALLATION

1. Preliminary

Before commencing the installation, disconnect the car battery. Then check the length of the aerial, loudspeaker and battery leads to make certain that the proposed mounting positions are suitable, i.e. the battery lead will reach the junction box or accessory terminal on ignition switch; the aerial lead will reach the radio and the speaker leads, the loudspeaker.

2. Aerial Installation

To ensure the best possible reception, it is necessary to use a good quality aerial and the choice will naturally depend upon the vehicle and the mounting position required. A wide range of aerials have been approved for use with the radio.

(a) For all wing-mounted aerials, before drilling a pilot hole it is advisable to check the underside and ensure that there is adequate clearance for the aerial base; also that the drill will not foul any wiring.

(b) Mark and drill a $\frac{1}{2}$ " pilot hole in the selected position.

(c) Follow separate aerial instructions, if provided, otherwise:-

(d) Enlarge hole to suit aerial base and clean underside area around hole to bright metal. This is important to ensure good earthing.

(e) Secure aerial in position and route the lead to radio position.

Note: Where additional holes are required to be drilled to route aerial lead, these holes should be sealed with a rubber grommet or sealing compound.

3. Loudspeaker Installation (Fig. 1)

The loudspeaker/baffle assembly can be installed in any convenient position above or below the parcel shelf. It should be mounted so that the loudspeaker terminals face towards the radio.

If alternatively it is desired to mount the speaker baffle to a suitable metal panel or metal shelf and to use the No. 8 x $\frac{1}{2}$ " screws as self-tapping screws, section (b) below should then read—'Mark and drill two $\frac{1}{2}$ " diameter holes'.

- (a) Secure the loudspeaker to the baffle, using four each of the No. 8 x $\frac{1}{2}$ " screws and spire nuts, and two of the 'L' shaped brackets supplied with the kit. The 'L' brackets should be fitted between the speaker and the baffle, as shown in Fig. 1.
- (b) Mark and drill two $\frac{1}{2}$ " diameter holes, using the brackets as a guide.
- (c) Connect the loudspeaker lead push-on tags to the speaker terminals.
- (d) Secure the assembly in position, using the No. 8 x $\frac{1}{2}$ " screws.

The extra large flat 2BA washers are provided to give additional strength when mounting to a fibreboard type of parcel shelf. Fit one of these washers between the parcel shelf and each spire nut, as in Fig. 1.

4. Radio Installation (Fig. 2)

The radio may be mounted above or below the parcel shelf, as shown in the illustration.

If alternatively it is desired to mount the radio to a suitable metal panel or metal shelf and to use the No. 8 x $\frac{1}{2}$ " screws as self-tapping screws, section (b) below should then read—'Drill two $\frac{1}{2}$ " diameter holes'.

- (a) Attach the two 'L' brackets to the radio side fixing points, using two 2BA x $\frac{1}{2}$ " screws, shakeproof washers and plain washers.
- Note: If the radio is to be mounted on a non-metallic surface, a separate piece of copper braid should be connected between the radio case and the nearest metal part of the bulkhead or car body, which should be cleaned to bright metal to ensure good electrical contact.
- (b) Hold the radio in the mounting position and, using the brackets as a guide, mark the position of the fixing holes. Drill the holes $\frac{1}{8}$ " diameter.
- (c) The aerial trimmer is located through a hole at the rear of the radio. Since it will not be readily accessible when the radio is secured in position, you should connect the leads and adjust the trimmer as described in sections 5 and 6 before carrying out step (d).
- (d) Secure the radio in position with No. 8 x $\frac{1}{2}$ " screws, washers and spire nuts. The two extra large flat washers, are provided for use in place of the standard 2BA washers to give added strength when the radio is mounted to a fibreboard type parcel shelf.

5. Connecting Up

- (a) Check fuse is in fuse holder and route battery lead to the junction box, or to accessory terminal on ignition switch.
- (b) Connect aerial lead.
- (c) Reconnect battery.

Note: It is important always to remember that the output transistors may be seriously damaged if the radio is switched on with the loudspeaker leads joined together or if either lead is touching the vehicle or radio chassis.

6. Aerial Trimming

- (a) Fully extend aerial.
- (b) Switch on and select the medium waveband. Tune to a weak station between 200 and 250 metres and adjust the aerial trimmer for maximum volume. In the absence of a signal, trim carefully for maximum background noise.

Note: The aerial trimmer is located at the rear of the case.

7. Interference Suppression

After completing the aerial trimming, the car's engine should be started and any interference noted. Ensure bonnet is closed.

- (a) A loud 'clicking' noise will indicate engine interference. Fit the lug of the $1\mu F$ suppressor capacitor under the bolt securing H.T. coil, ensuring good earth contact, and connect the flying lead to S.W. terminal (not the terminal which is connected to distributor). On certain vehicles, it may be necessary to fit individual plug suppressors.
- (b) If a whine is heard which increases as the engine is 'revved', this indicated that the dynamo or alternator needs suppressing.
 - 1) For dynamo interference the lug of a $1\mu F$ suppressor capacitor should be secured under one of the dynamo mounting bolts, ensuring good earth contact, and the flying lead must be connected to the D or + terminal (the larger terminal).
 - 2) For alternator interference, the lug of the suppressor should be secured under one of the alternator mounting bolts, ensuring good earth contact. The flying lead must be connected to the main output terminal of the alternator. (Generally, this termination is a thick brown lead.)
- (c) Other auxiliary electrical equipment may need suppressing. Interference suppression material is easily obtainable and you should enquire at your local car radio or auto-electrical stockists for this and any additional items required.