



TECHNICAL BULLETIN

SUBJECT- INSTALLATION INSTRUCTIONS

for fitting

MODEL "CS" 12 VOLT, 6 VALVE CAR RADIO INTO THE STANDARD VANGUARD CAR

ANTENNA.

The antenna used is a three section telescopic whip type which mounts in the centre of the top cowl and lays parallel with the centre pillar of the windscreen. In the centre of the top cowl and $1\frac{7}{8}$ ins. forward of the windscreen trim mark a spot with a centre punch and drill a $13/32$ in. dia. hole. Clean off all burrs and duco varnish for approx. $\frac{1}{2}$ in. on the under-side of the mount hole to provide a good electrical contact.

ASSEMBLY OF CONTROL HEAD TO RECEIVER.

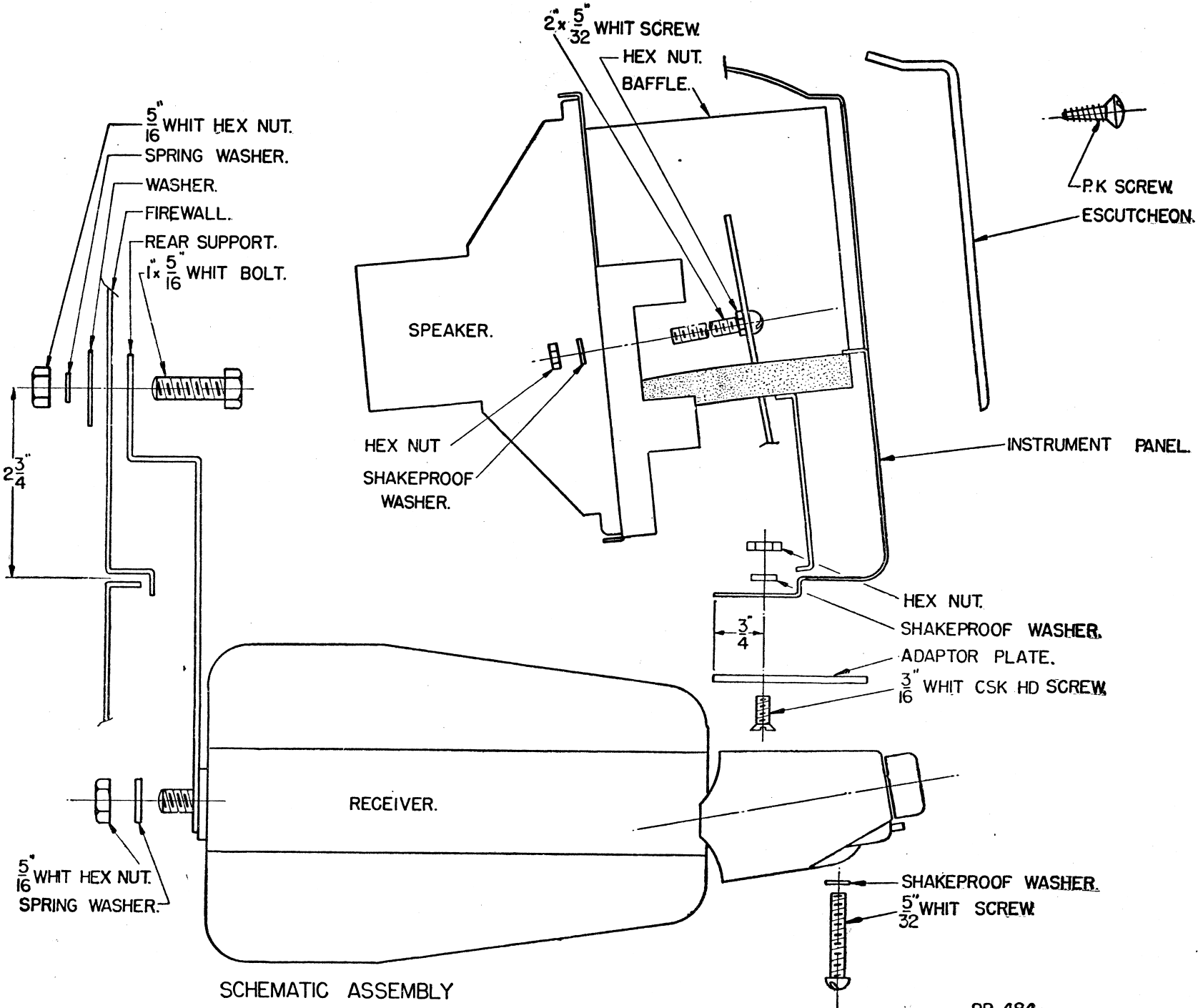
1. Remove control knobs and housing from control head.
2. Insert shielded lead from receiver through large hole in rear of control head chassis and fasten the lug on the end of this lead under the head of the screw in the corner of the 7 pin socket.
3. Insert 7 pin plug on lead from receiver through large hole in rear of control head chassis and fit plug on to 7-pin socket.
4. Insert a small screw driver into the hole in receiver case and into the rubber moulding on the condenser gang shaft and then turn screw driver fully clockwise.
5. Turn control head tuning knob fully clockwise until pointer reaches max. travel of the dial. Insert splined end of tuning spindle through the hole in the receiver can into the rubber moulding on condenser gang shaft.

Care should be taken to make sure that the tin plate shield is over the spindle.

6. Mount control head in position on receiver can with the four $5/32$ in. screws supplied in accessory package, also earth the tin plate shield on the tuning spindle shaft to the receiver case with the No. 4 PK. self tapping screw supplied in accessory package.
7. Refit control head housing and control knobs.

INSTALLATION OF SPEAKER.

1. Remove plastic escutcheon from centre of instrument panel.
2. Behind the instrument panel on either side of the speaker opening are panel braces. A hole will be found in these braces about half way down. Assemble into these holes the two 2 in. by $5/32$ in. Whit. screws and lock in position with $5/32$ in. nuts and shakeproof washers supplied in accessory package.



SCHEMATIC ASSEMBLY
 OF RECEIVER AND SPEAKER
 INTO VANGUARD.

BULLETIN: R-17.

File: Installation Receiver

Date: 20/4/50.

Parts List		Part No.
Antenna	: Antenna only, less lead-in, fully extended 5' 3", fully retracted 2' 1"	M226
Antenna Lead-in	: 28" overall length	M181
Speaker	: 6" x 9" oval type, with two only 24" leads, less shielding braid, nylex covering and plug	K158
Speaker Plug	: 2 pin	336/30C
Dist. Suppressor	: Screw type, 12 volt	PR314
By-pass Cond.	: .5MFD. 200V. DCW. Metal clad	PC545
Fuse	: 15 amp.	PM219
Pointer Assy.	:	A103/323
Control Knob	:	15/306-1
Knob Spring	:	86/71
7 Pin Socket Assy.	: On sub unit	A104/323
7 Pin Plug Assy.	: On receiver lead	104/58-1
Dial Reading	:	14/665-1
Dial Lamp	: 6-8 V. 0.3A. min. bay. base G3½ bulb	M127 or 0.15 Amp. PM220
Escutcheon	: Speaker	19/317
Rear Mount Nut	: On receiver case rear mount screw	3/478-14
Screw 2" x 5/32"	: RD. HD. Whit.	16/560-26
Baffle assy.	:	A106/317
Screw 1½" x 5/32"	: RD. HD. Whit. ..	16/560-20
Escutcheon	: On receiver control head	2/323-1
Felt Washer	: On receiver control head knob	66/30C-1
Bolt 5/16" dia.	: Mounts rear bracket to firewall	40/560-20
Screw	: Mounts speaker escutcheon to inst. panel	40/560-4
Tuning Spindle Assy.:		A101/323
Thumb Wheel	: Tone Control	3/306-2
Tone Control	: 100K. ohms.	PR678
Volume Control	: .5 Megohm	PR679

3. Place speaker baffle in position behind braces and mount in position with the two 5/32 in. nuts and shakeproof washers supplied. Tuck front edge of gasket in behind instrument panel—refer diagram for details.
4. Fit speaker grille supplied with accessories to instrument panel with the two self tapping screws previously removed from plastic escutcheon.

INSTALLATION OF RECEIVER INTO CAR.

1. Drill a $\frac{3}{8}$ in. dia. hole $2\frac{3}{4}$ ins. above join line of firewall and on the vertical centre line of the car.
2. Drill two 7/32 in. dia. holes in the bottom lip of the switch bracket. These holes to be on $3\frac{9}{16}$ in. centres, $\frac{3}{4}$ in. from back edge of lip and on vertical centre line of car.
3. Disconnect the A+ accumulator lead from the control head at the fuse holder. Connect the end of the free lead into the receptacle on the headlamp switch which contains the lead from the car accumulator.
4. Mount adaptor plate in position with the two 3/16 in. C/sk. head screws nuts and shakeproof washers supplied in accessory package.
5. Assemble rear bracket to receiver case—refer diagram.
6. Mount receiver in position with the 5/16 in. mount bolt inserted through the rear mount bracket and firewall also the two 5/32 in. screws up through the control head into tapped holes in adaptor plate. It may be necessary to adjust the position of the rear bracket on the receiver.
7. Connect speaker lead plug to receiver speaker socket. Connect antenna lead-in to receiver lead-in socket.
8. Re-connect other end of free A+ accumulator lead to fuse holder making sure the fuse and fuse insulator are correctly fitted.

INTERFERENCE ELIMINATION.

No spark plug suppressors are required.

Distributor Suppressor: Insert a distributor suppressor, part No. PR314, in the high tension lead from the coil a few inches from where the lead enters the distributor. Make sure the lead is fitted well into the suppressor and that good contact is made. Securely bind the lead at both ends of the suppressor with adhesive tape.

Ignition Coil Condenser: Install a metal clad .5 MFD. by-pass condenser part No. PC545 on the battery terminal of the ignition coil keeping the lead as short as possible. The condenser is mounted under the bolt which fastens the ignition coil mount strap. The other side of the condenser is internally connected to the condenser case which forms the other contact to the car when mounted.

Generator Condenser: Install a .5 MFD. metal clad condenser part No. PC545 on the generator. Connect the lead from the condenser to the armature terminal not the field terminal, make the lead as short as possible. The condenser is mounted under the longitudinal assembly bolt.

NOTE: The nuts and mounting positions of the by-pass condensers must be entirely free of paint, grease or duco varnish to ensure a good electrical contact.