The XV-15 cartridge is covered by the following U.S. Patents: 3,546,399; 2,917,590; 3,572,725; 3,602-519, as well as corresponding patents or pending applications in the leading industrial nations throughout the world.

Only PICKERING AND COMPANY, INC. manufactures the genuine V-GUARD™ stylus assemblies used in the XV-15 stereo FLUX-VALVE™ cartridge series.

⊂⊃ PICKERING

"for those who can [hear] the difference"

XV-15/DCF℠ SERIES

Made in U.S.A.

FEATURING
LOW FREQUENCY TRACKING
AND HIGH FREQUENCY
traceAbility™

FULL ONE YEAR WARRANTY

Pickering & Company, Inc., of 101 Sunnyside Blvd., Plainview, New York 11803, hereby warrants to the owner of this cartridge that the cartridge and stylus originally purchased in the United States with this warranty shall be free from defects in material and workmanship for a period of one year from the date of original purchase. Proof of date of original purchase must be retained by you. In the event of any defect covered by this warranty, the cartridge should be carefully packed and sent prepaid with proof of date of original purchase to Pickering & Company, Inc. at the above address and the cartridge will then be repaired or replaced without charge and promptly returned to you prepaid. If it cannot be repaired or replaced in a reasonable period of time, you may elect to receive a product of equal value, or a refund.

Consequential damages are excluded from this warranty. The warranty shall not extend to stylus wear nor to damage resulting from abuse or misuse of the cartridge or stylus.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

This warranty applies to products purchased by the consumer in the United States.

V-GUARD™ STYLUS with DUSTAMATIC™ BRUSH

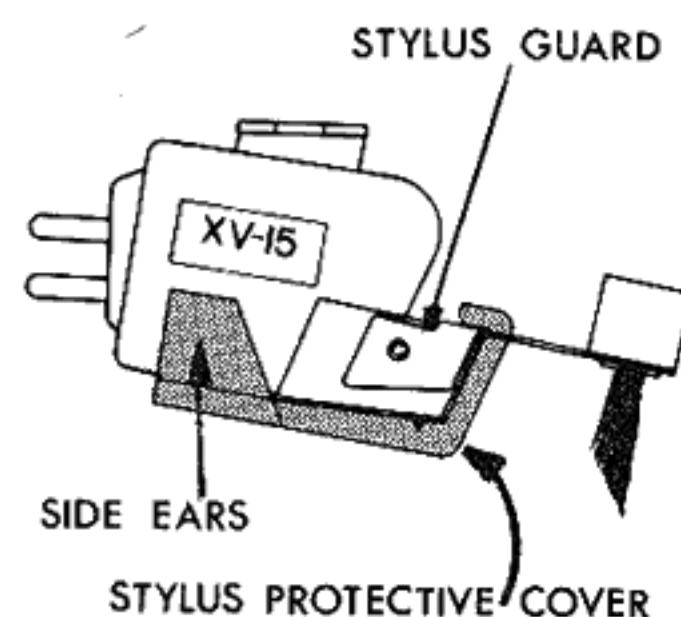The patented, replaceable V-GUARD™ DUST-AMATIC™ stylus assembly is removable. Simply grasp between the tips of the thumb and forefinger. Pull gently to remove the stylus assembly. Although the V-GUARD stylus assembly is sturdily constructed, please handle it carefully when removing and replacing it.

STYLUS PROTECTIVE COVER

Your XV-15 is supplied with a protective cover over the stylus. To remove, pull gently down on the two side ears. The stylus cover can be replaced, when desired, by placing the front lip over the stylus guard and pressing the ears gently onto the carriage body.

STYLUS GUARD

XV-15

SIDE EARS

STYLUS PROTECTIVE COVER

SPECIFICATIONS

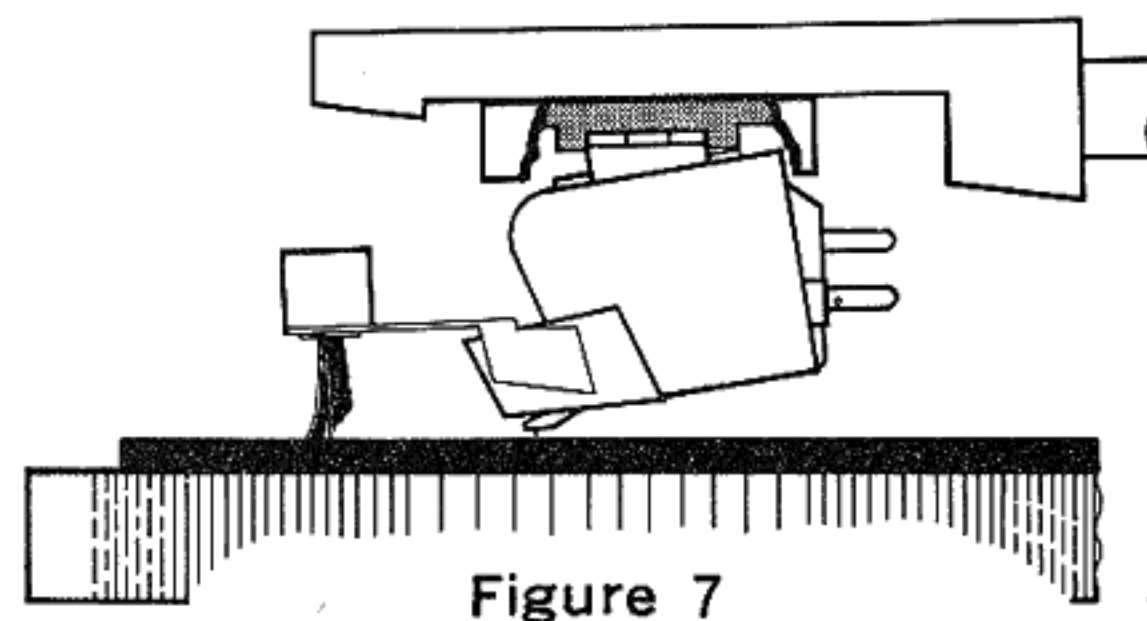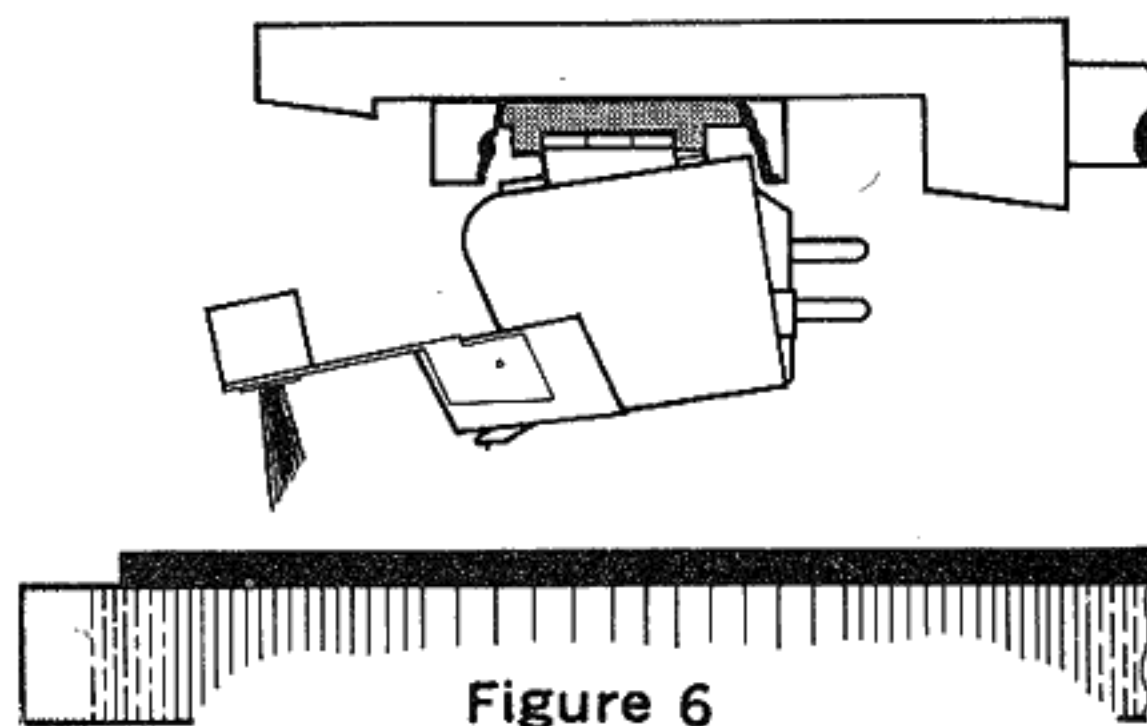| Model No.	DCF Value	Application	Stylus Radius	Tracking Force[1]	Nominal Frequency Response[2]	Nominal Output[3]	Nominal Channel Separation	Stylus Color	Replacement Stylus
XV-15/1200E	1200	Transcription Turntables and Automatic Transcription Turntables	Elliptical .0002 x .0007	3/4 +1/2 -1/4 Gram	10 to 30.000 Hz	4.4 mV	35 dB	Black w/Gold Ellipse & D1200	D1200
XV-15/750E	750	Transcription Turntables and Automatic Transcription Turntables	Elliptical .0003 x .0007	1 ± 1/2 Gram	10 to 25.000 Hz	4.4 mV	35 dB	Black w/Gold Ellipse & D750	D750
XV-15/625E	625	Manual Turntables Light Tracking Automatics	Elliptical .0003 x .0007	+1/2 1 -1/4 Gram	10 to 25.000 Hz	4.4 mV	35 dB	Black w/Gold D625	D625
XV-15/400E	400	Manual Turntables Light Tracking Automatics	Elliptical .0004 x .0007	1½ ± ½ Grams	10 to 25.000 Hz	5.5 mV	35 dB	Black w/Gold Ellipse & D400	D400
XV-15/350	350	Manual Turntables Light Tracking Automatics	Spherical .0007	2 ± 1 Grams	10 to 25.000 Hz	6.0 mV	35 dB	Black w/Gold Dot & D350	D350
XV-15/200E	200	Automatic Turntables	Elliptical .0004 x .0007	3 ± 1 Grams	10 to 25.000 Hz	8.0 mV	35 dB	Black w/Silver Ellipse & D200	D200
XV-15/150	150	Automatic Turntables	Spherical .0007	3 ± 1 Grams	10 to 25.000 Hz	8.0 mV	35 dB	Black w/Silver Dot & D150	D150
XV-15/140E	140	Record Changers	Elliptical .0005 x .0007	4 ± 1 Grams	10 to 20.000 Hz	8.0 mV	35 dB	Black w/Red Ellipse & D140	D140
XV-15/100	100	Record Changers	Spherical .0007	5 ± 2 Grams	10 to 20.000 Hz	8.0 mV	35 dB	Black w/Red Dot & D100	D100
Accessory Stylus For L.P. Records		L.P. Monophonic Records	Spherical .001	4 ± 1 Grams	10 to 17.000 Hz	8.0 mV	Monaural	Black w/Green Dot & 4510	4510
Accessory Stylus for 78 R.P.M. Records		78 r.p.m. Monophonic Records	Spherical .0027	5 ± 2 Grams	10 to 17.000 Hz	8.0 mV	Monaural	Black w/Blue Dot & 4527	4527

Note 1: Recommended by manufacturer for optimum performance.
Note 2: When the cartridge is terminated in the recommended load of 47k ohms and 275pF.
Note 3: Output with reference to 5.5 cm / sec record velocity.

TRACKING ADJUSTMENTS

1. Balance the tone arm and mounted cartridge according to turntable manufacturer's instructions. At balance brush and stylus tip should just clear the record. (See Figure 6)

2. Apply the desired tracking force PLUS one gram to compensate for the weight of the brush.

3. Stylus point is now in position and ready for operation (Figure 7). REMEMBER: When reading tracking force scale, you are actually tracking at one gram LESS than indicated due to the one gram added to compensate for the brush weight.

Figure 6

Figure 7

Important Notice!

ALL

PICKERING CARTRIDGES
ARE DESIGNED FOR USE WITH
STEREO RECORDS
AND ALL FOUR-CHANNEL
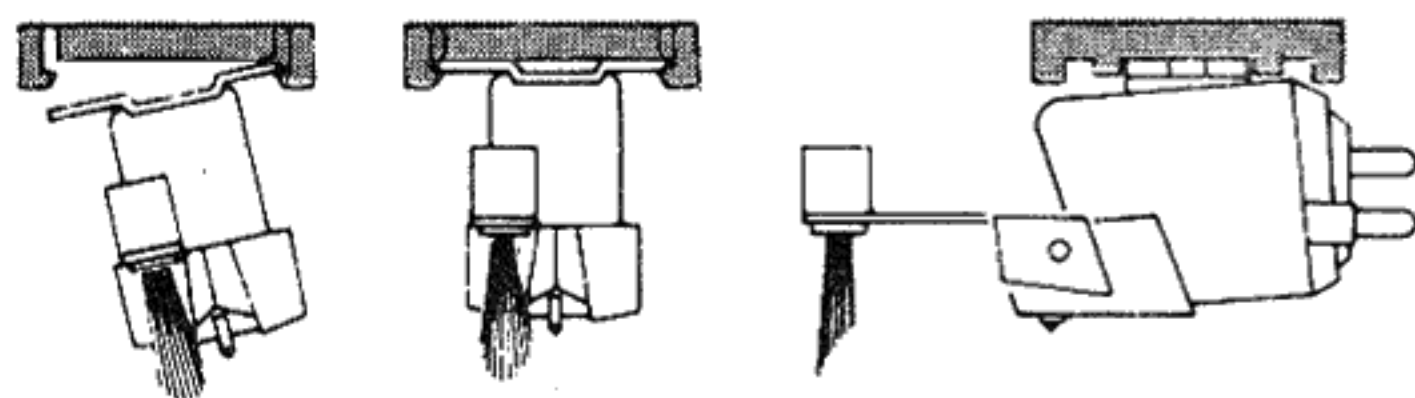MATRIX DERIVED COMPATIBLE SYSTEMS

CARTRIDGE MOUNTING INTO SNAP-IN-MOUNT

Mounting of your new PICKERING cartridge has been greatly simplified. You have been supplied with four SNAP-IN-MOUNTS (see following illustrations). Remove your required type SNAP-IN-MOUNT from the others. Types **A, B** and **C** may be mounted in either direction, while Type **D** has an arrow indicating the front direction. Place one end of your cartridge bracket in the end of the slot in your SNAP-IN-MOUNT, see Fig. 1 below. Press the free end of the bracket into the slot until both ends are securely held by the SNAP-IN-MOUNT, see Figures 2 and 3 below.
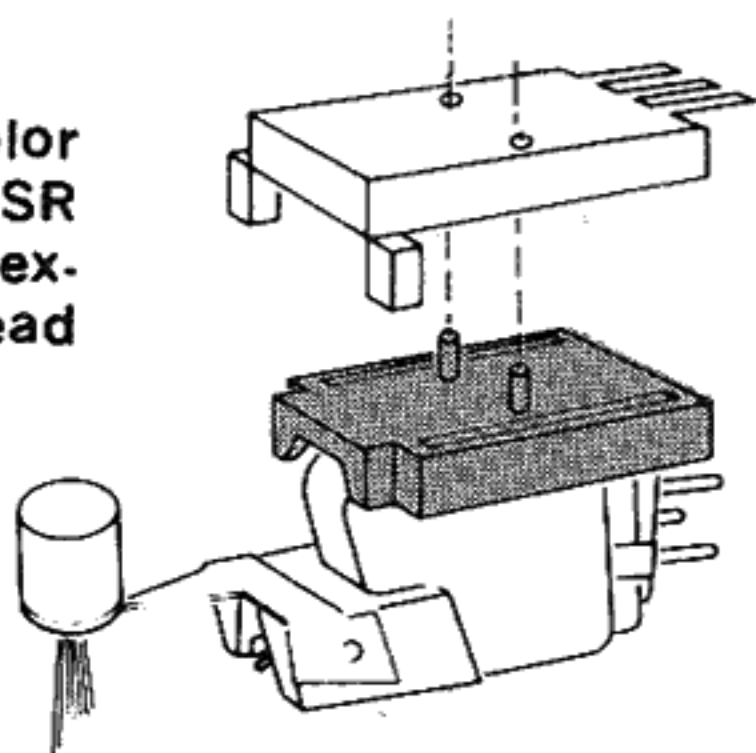
Fig. 1   Fig. 2   Fig 3

NOTE: For arm heads other than shown, mount the cartridge with screws provided with your head.

TYPE 'D' SNAP-IN-MOUNT
For BSR Head Adaptors (A107162)

First mount your cartridge in your SNAP-IN-MOUNT as shown in these instructions entitled "Cartridge Mounting Into SNAP-IN-MOUNT." You have mounted your cartridge in the type D SNAP-IN-MOUNT with the arrow pointing forward, thus allowing clearance for the BSR adaptors "ears." Next press the studs of the type D SNAP-IN-MOUNT into the screw holes of the BSR adaptor until the mount is firmly seated. Place the BSR terminal clips on the terminal pins with matching colors (see stereo connection illustration).
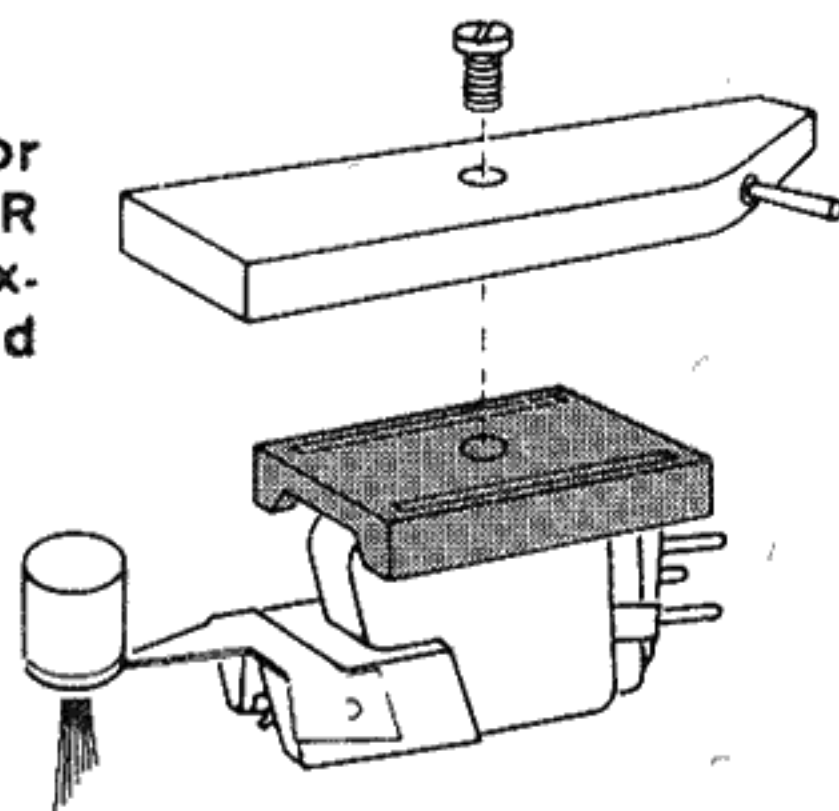
Note: terminal color plate matches BSR lead wire colors, except place **Black** lead wire on **Blue** pin.

TYPE 'A' SNAP-IN-MOUNT
For BSR Single Hole Heads (B106776)

First mount your cartridge in your SNAP-IN-MOUNT as shown in these instructions entitled "Cartridge Mounting Into SNAP-IN-MOUNT". Place the cartridge with SNAP-IN-MOUNT inside the BSR head and insert the BSR supplied screw. (This screw will form its matching thread in the hole of the SNAP-IN-MOUNT as it is turned to hold the mount firmly in place). Put the BSR terminal clips on the terminal pins with matching colors (see stereo connection illustration).

Note: terminal color plate matches BSR lead wire colors, except place **Black** lead wire on **Blue** pin.
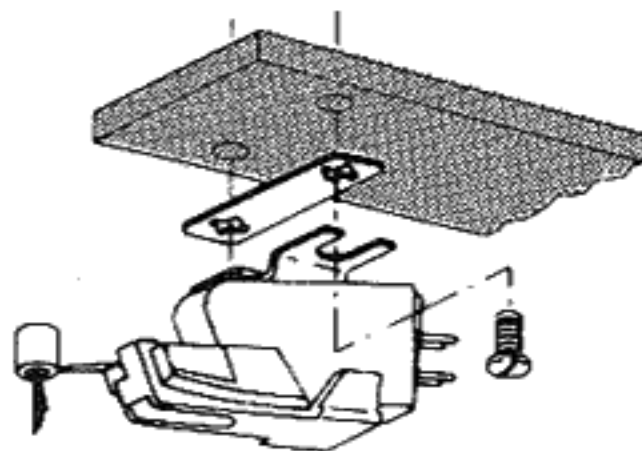

CARTRIDGE MOUNTING WITH SCREWS

Select from the hardware kit the two screws and the plastic screwholder you will need to mount the cartridge. Check the record player manufacturer's instructions to help you in your selection. The kit with this cartridge contains the following:

a. 2 long black screws (#4-48 x 5/16")
b. 2 short black screws (#4-48 x 3/16")
c. 2 long brass or nickel screws (#3-48 x 5/16")
d. 2 short brass screws (#3-48 x 3/16")
e. 2 small chrome screws (#2-56 x 3/16")
f. Three different plastic screw holders — BLUE, WHITE and BLACK (Pair)
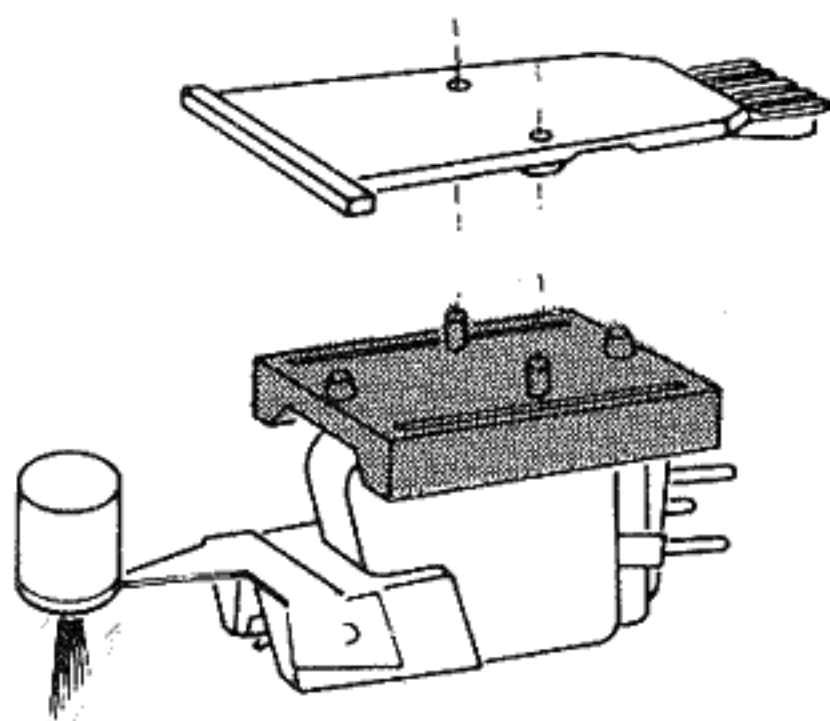
If the tone arm requires the cartridge to be mounted by *screws from underneath*, screwing into threaded holes in the tone arm, then use either the BLUE or WHITE plastic pieces. You will probably need to use the 3-48 screws (brass or nickel). However, in some special cases, you may need the 4-48 screws (black):

Choose the BLUE piece in tone arm heads requiring no spacing between cartridge bracket and mounting surface. Simply insert the required screws into holes in the plastic with the cartridge bracket between screw heads and plastic. This allows easy holding and
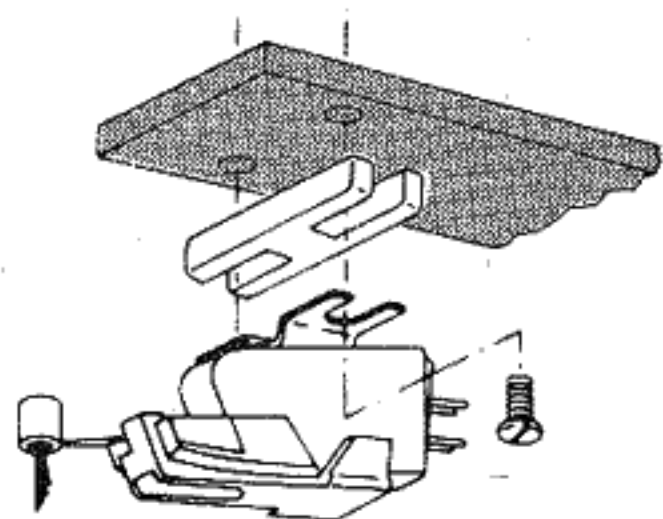
TYPE 'B' SNAP-IN-MOUNT
For GARRARD C1 and C2 Head Slides

First mount your cartridge in your SNAP-IN-MOUNT as shown in these instructions entitled "Cartridge Mounting Into SNAP-IN-MOUNT." Press the studs of the type B SNAP-IN-MOUNT into the screw holes of the Garrard slides until the SNAP-IN-MOUNT is seated firmly. Place the Garrard terminal clips on the terminal pins with matching colors. (See stereo connection illustrations).

TYPE 'C' SNAP-IN-MOUNT
For DUAL CH12 and CH19 Mounting Clips

First mount your cartridge in your SNAP-IN-MOUNT as shown in these instructions entitled "Cartridge Mounting Into SNAP-IN-MOUNT." Press the projections of the type C SNAP-IN-MOUNT into the slots of the Dual mounting clips until they snap in securely. Place the Dual terminal clips on the terminal pins with matching colors. (see stereo connection illustrations).
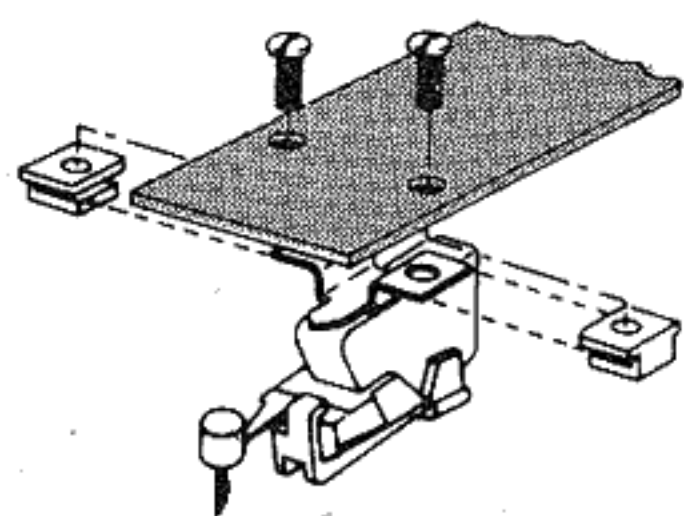
positioning of screws while tightening.

Choose the WHITE piece in those heads where more spacing is needed. The required screws are inserted upwards into slots in the white spacer with the cartridge bracket between screw heads and plastic.

If your tone arm requires cartridges to be mounted by screws from the top, use the two (2) BLACK pieces and the 2-56 chrome screws:
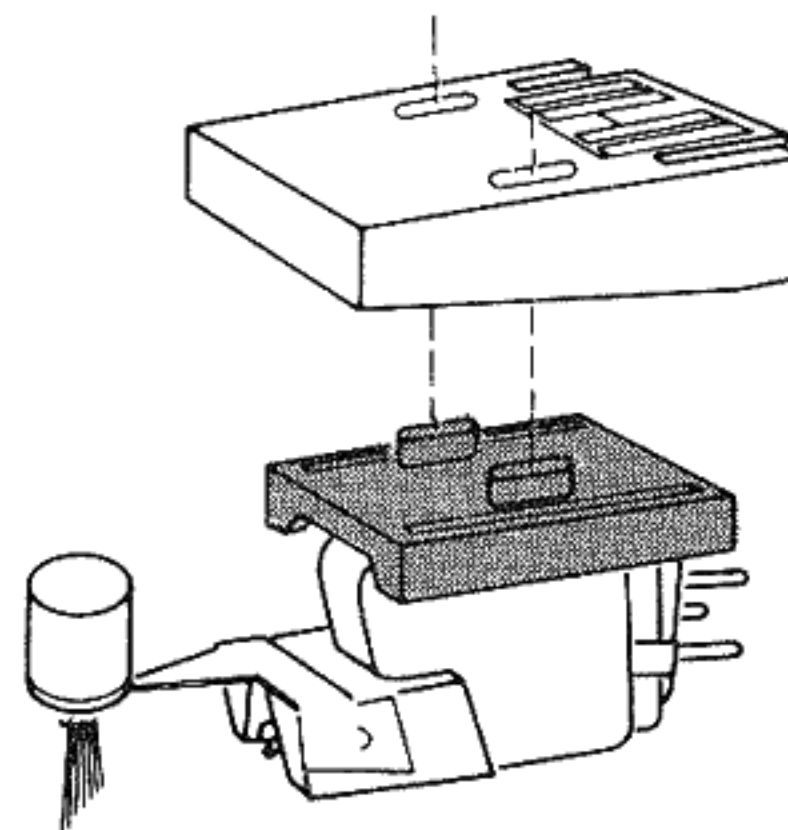
Simply slip the pieces onto the wings of the cartridge and insert the screws from above the tone arm head. The screws will form their own threads in the plastic so that no nuts are necessary.

When tightening the screws, never tighten one all the way with the other still loose. Always alternate a few turns at a time as the cartridge begins to tighten into position. Before the cartridge is finally tightened, check the turntable manufacturers instructions to insure the cartridge is in the correct position.

STEREO CONNECTIONS

1. Your turntable arm or head has four lead wires with terminal clips for normal stereo connection. Check the manufacturer's instruction for matching these leads with cartridge terminal pins in Figure 5.

Left Signal WHITE

Right Signal RED

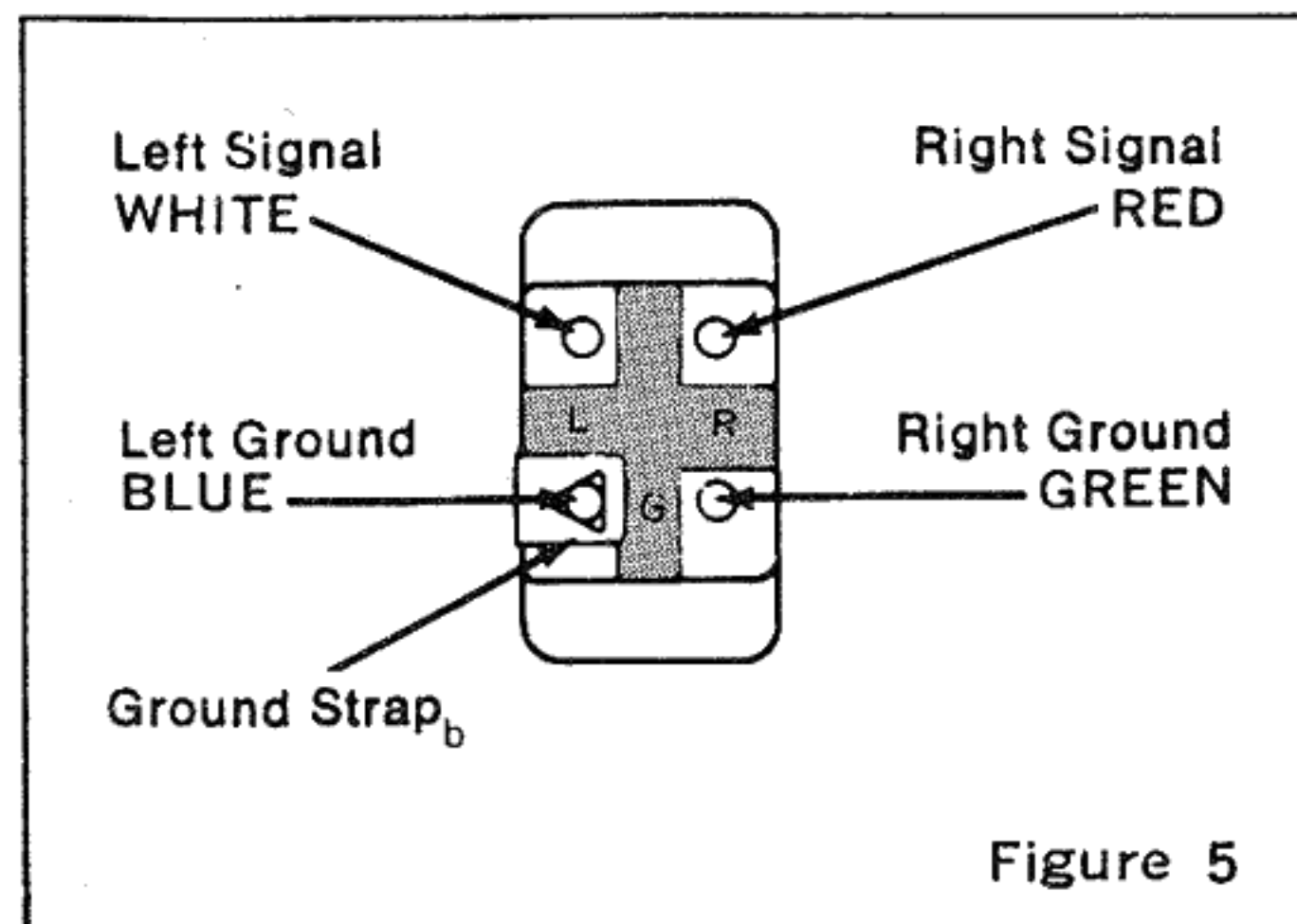Left Ground BLUE

Right Ground GREEN

Ground Strap_b

Figure 5

Note: a. Use your terminal clips in connecting lead wires to cartridge pins—Do not use solder on cartridge pins.
b. In metallic tone arm heads remove the ground strap when hum is encountered.
c. Ground your turntable mechanism with a separate wire to a suitable ground point.