

SHURE**MICROPHONES AND ELECTRONIC COMPONENTS**

AREA CODE 312/328-9000 • CABLE SHUREMICRO

MODEL M44-5**DATA SHEET****STEREO DYNETIC®****PHONOGRAPH CARTRIDGE****SPECIFICATIONS****M44 CARTRIDGE AND N44 STYLUS SERIES**

10,200 7/40
Cartridges 5.50 6/5/68

Model Number	Diamond Stylus Replacement	Output Voltage (1,000 Hz. at 5 cm/sec)	Stylus Grip Color	Compliance (Vertical, Horizontal, cm per dyne)	Tracking (Grams)
M44-5	N44-5 Radius: .0005" (.013 mm)	7 millivolts	Red	25.0 x 10 ⁻⁶	¾ to 1½
M44-7	N44-7, Radius: .0007" (.018 mm)	11 millivolts	White	20.0 x 10 ⁻⁶	1½ to 3
M44C	N44C, Radius: .0007" (.018 mm)	9.3 millivolts	Light Blue	7.5 x 10 ⁻⁶	3 to 5
M44E	N44E Elliptical Side Contact Radius: .0004" (.010 mm) Frontal Radius: .0007" (.018 mm)	9.3 millivolts	Brown	15.0 x 10 ⁻⁶	1¾ to 4
M44G	N44G, Radius: .0006" (.015 mm)	6.2 millivolts	Gray	25.0 x 10 ⁻⁶	¾ to 1½
M44 M55E V-15	N44-1,* Radius: .001" (.026 mm)	7.5 millivolts	Blue	20.0 x 10 ⁻⁶	1½ to 3
M44 M55E V-15	N44-3,* Radius: .0025" (.064 mm)	6 millivolts	Green	20.0 x 10 ⁻⁶	1½ to 3

* The N44-1 Stylus may be used to reproduce older monophonic long play 33⅓ rpm records. The N44-3 stylus may be used to reproduce the standard 78 rpm records. In either of the preceding cases, the amplifier should be set to "Monaural" or "A+B."

FREQUENCY RESPONSE: From 20 to 20,000 Hz.

CHANNEL SEPARATION: More than 25 db at 1,000 Hz.

RECOMMENDED LOAD IMPEDANCE: 47,000 ohms per channel

INDUCTANCE: 720 millihenries

D.C. RESISTANCE: 630 ohms

MOUNTING: Standard ½" (12.7 mm) mounting center

WEIGHT: 7 grams

TERMINALS: 4 terminals

GENERAL: The M44 Series of Dynetic phonograph cartridges has been developed for use with all high fidelity amplifiers having magnetic and constant velocity inputs.

OPERATION: Recommended needle forces for optimum results are listed under "Specifications." Forces greater than the indicated "maximum" should not be used.

CONNECTIONS

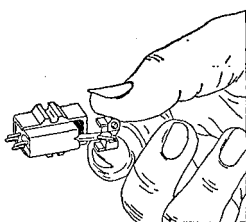
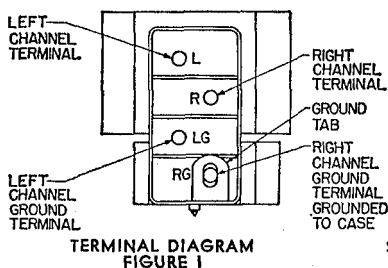
4-LEAD STEREO CONNECTION: Connect "hot" lead of right channel to terminal "R" and shield or ground lead of right channel to terminal "RG." Connect "hot" lead of left channel to terminal "L" and shield or ground lead of left channel to "LG." To prevent "ground loops" and hum, no common connection should be used at cartridge terminals.

MONAURAL CONNECTIONS: For single channel reproduction of Monaural or Stereo recordings, connect "hot" lead to both "R" and "L" terminals and connect ground or shield lead to both ground terminals marked "RG" and "LG."

Suggestions for Cleaning Your Stylus

To clean the stylus, use a camel's-hair brush (No. 2 size or smaller) dipped lightly in alcohol. The alcohol will remove any sludge deposits which may have coated the stylus tip. The brush bristles should be trimmed to a length no longer than ¼ inch. Always brush the stylus with a forward movement from the rear (terminal end of the cartridge) to the front. Never brush or wipe the stylus from front to back or side to side.

CAUTION: Do not make solder connections to cartridge terminals. Make all solder connections to terminal jacks provided before slipping them over the terminals.



EASY STYLUS REPLACEMENT

Grasp molded housing of stylus between thumb and forefinger. Gently withdraw stylus by pulling forward out of cartridge. Grasp replacement stylus between thumb and forefinger and insert into stylus socket. Press stylus into socket until the molded housing of the stylus mates with the cartridge case. Care must be taken not to allow the finger to slip off the molded housing of the stylus, resulting in damage to the stylus tip or shank.

SPECIAL NOTE: The Dynetic stylus assembly used in these cartridges is the most critical component. To maintain the original performance standards of your cartridge, be certain that any replacement stylus you buy bears the following certification on the package: "This Dynetic stylus is precision manufactured by Shure Brothers, Inc."

Avoid inferior imitations. They will seriously degrade the performance of your cartridge. All genuine "Dynetic" styli are manufactured by Shure Brothers, Inc.

LABORATORY TEST FINDINGS: (Note: The following stylus test findings of the Shure N3D stylus are an example of the close scrutiny Shure pays to all imitation Shure Dynetic Styli.) Shure laboratory tests show that the imitation stylus assemblies labeled as replacements for the Shure Model N3D Stylus Assembly vary drastically in important performance characteristics. For example, the compliance varied from a low of 0.9 to a high of 11.5, requiring 9.0 grams to track a record with a low compliance stylus, and 2 grams with a high compliance stylus. The high compliance stylus retracted at 4 grams needle force, allowing the cartridge case to drag on the record surface, thereby becoming inoperative. Response at high frequency (relative to the 1kc level) ranged from a 5.5db peak to a drop of 7.5db. Separation varied from "good" (27db) to "poor" (16.5db) at 1kc. These figures reveal that there is very little consistency in performance characteristics of the imitation Dynetic Styli.

In each of the categories shown above, the results ranged from good to poor. As a matter of fact, only 10% of the samples met the Shure performance standards for the Shure N3D Stereo Dynetic Stylus. In addition to our test findings, our Service Department records show that an increasing number of Dynetic Phono Cartridges are being returned because of poor performance—and our examination has disclosed that most of these returned cartridges are using imitation Dynetic Styli.

CONCLUSION: Obviously, if *any* imitation Dynetic Stylus is used, we cannot guarantee that the performance of Shure Dynetic cartridges will meet the published Shure specifications. Accept no substitute.

Guarantee

The M44 Stereo Dynetic Cartridge and N44 Stereo Dynetic Styli are guaranteed to be free from electrical and mechanical defects for one year from date of shipment from factory provided all instructions are complied with fully. The Guarantee does not cover stylus wear, nor does it cover damage to the stylus assembly from abuse or mishandling.

PATENT NOTICE: Manufactured under U. S. Patents 3,055,988, 3,077,521 and 3,077,522. Other patents pending.