MENDES

The Bowling Professionals Since 1962

MM-2001 Pinsetter Service Manual

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This manual assumes that the Mendes equipment and/or software has been installed by an accredited Mendes technician and is functional in every aspect. If you have a problem, refer to the Troubleshooting section in this manual.

In our continuing effort to provide the best products possible, we welcome your suggestions and comments on how we can improve the Mendes equipment or its documentation. If you have any information which you think would benefit other users of Mendes equipment or software and would like to share it with them, please write your ideas down along with your consent allowing MENDES INC. to use your idea and name in future publications of these same service letters and send them to Documentation Department, Mendes Inc., 2425 Watt Street, Sainte-Foy, Quebec, Canada, G1P 3X2.

Welcome to the wonderful world of the Mendes Magnet MM-2001 Pinsetter, the first brand new pinsetter to be manufactured since the introduction of the original automatic pinsetter in the 1950's. Utilizing permanent magnets, developed for the NASA space program and state of the art controllers, the Mendes Magnet MM-2001 brings the world of bowling into the 21st century.

Reliability, easy maintenance and speed were primary design goals and the Mendes Magnet MM-2001 exceeds even our expectations. All relays, switches and cam drive/control systems have been replaced with optical scanners and computer control.

Simple self diagnostic routines assure that problems are easily spotted and quickly fixed. The Magnet 2001 Controller identifies any malfunctioning section of the pinsetter and instructs how to fix the problem. Most of the time it is a simple matter of plug compatible exchange of a part.

All components have been selected because they have proven themselves in harsh environments. Servomotors, optical sensors, 32-bit micro controllers, stock timing belts and magnetic clutches assure reliability and at the same time, precise control.

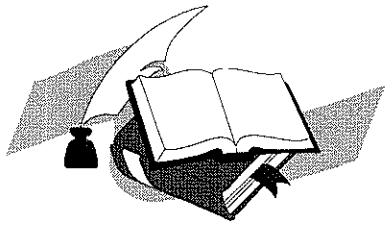
The Mendes Magnet MM-2001 Pinsetter has been designed to economize on the use of electricity. Only three electric motors are used to run a pinsetter, none is over ¾ hp.

The simplicity of the MM-2001 Pinsetter being its main characteristic, it is very easy to understand its concept but at the same time it must be understood that pinsetters of any kind require a minimum of maintenance and should operate according to standards.

This manual contains a complete description of the operation, maintenance and repair of the Mendes Magnet MM-2001 Pinsetter. It includes information for users who have little experience in addition to advanced topics for those who are more familiar with Mendes Futura equipment. It is not necessary to read this manual straight through. Consult the Table of Contents or Index to learn how to use the options you work with most.

The page numbering of this manual is standard with one exception. A revised page is always followed by a period and the number of the manual release. For example, if page 19 is revised for the third printing of this manual, its new page number will be 19.03 but will still be referred to as page 19 in the Table of Contents and Indexes. The reason for this page numbering system is to avoid confusion when speaking to our Service Department over the phone. Revised pages will be sent to existing customers upon their release. It is highly recommended that you keep your manual up to date by replacing the old pages with the revised ones you receive.

The Quality Control Department at Mendes has taken very good care to ship you a machine that was completely adjusted, field tested and checked before shipment. Since the basic functions and different components of the pinsetter are quite simple to understand, you too are now ready for the future. Enjoy.



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