



... Proudly Sold and Serviced by Marsh Micro Systems



MACHINES OFFERED

Sprinter Marking offers both in-line and off-line code-marking machines. The in-line machine is independently mountable and offered in eight standard models of various sizes of marking heads. The off-line model is a stand alone benchtop model that may use any one of the eight standard Sprinter models. It comes assembled for immediate operation after air supply attachment, electrical plug in, and ink supply charging is completed. A foot switch is standard.

TYPES OF MARKS:	PRODUCTS MARKED:	SURFACES MARKED:
<ul style="list-style-type: none">• Date / Product Coding• Dot / Spot marking• Logos / Symbols• Sell-by / Use-by dating• Expiration date• Pricing	<ul style="list-style-type: none">• Plastic, metal, glass• Rubber products• Paper• Cardboard• Flexible / Rigid containers• Films	<ul style="list-style-type: none">• Porous• Non-porous• Stationary• Moving (limited)• Flat• Curved / Round (limited)

FEATURES & BENEFITS

MACHINE

- Simple design
- Compact design
- Lightweight marking head
- Hardened wear surfaces
- Hardened rods / bearings
- Smooth / repeatable marking
- Mounts in confined areas
- Low pressure / better marks
- Millions of cycles
- Smooth action / minimum wear



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MACHINE ACTION

- Double acting air cylinder
- Small air cylinder
- Unique / patented motion
- Specially selected spring to rotate marking head
- Optional magnet-on-piston air cylinder (all except model 22)
- Optional flow controls mount on the air cylinder
- Controlled cycling action
- Minimal compressed air
- Smooth / high speed marks
- Assures millions of cycles before replacing
- Option of Hall / Reed effect switch to sense positions
- Variable speed control in either direction

MARKING HEAD

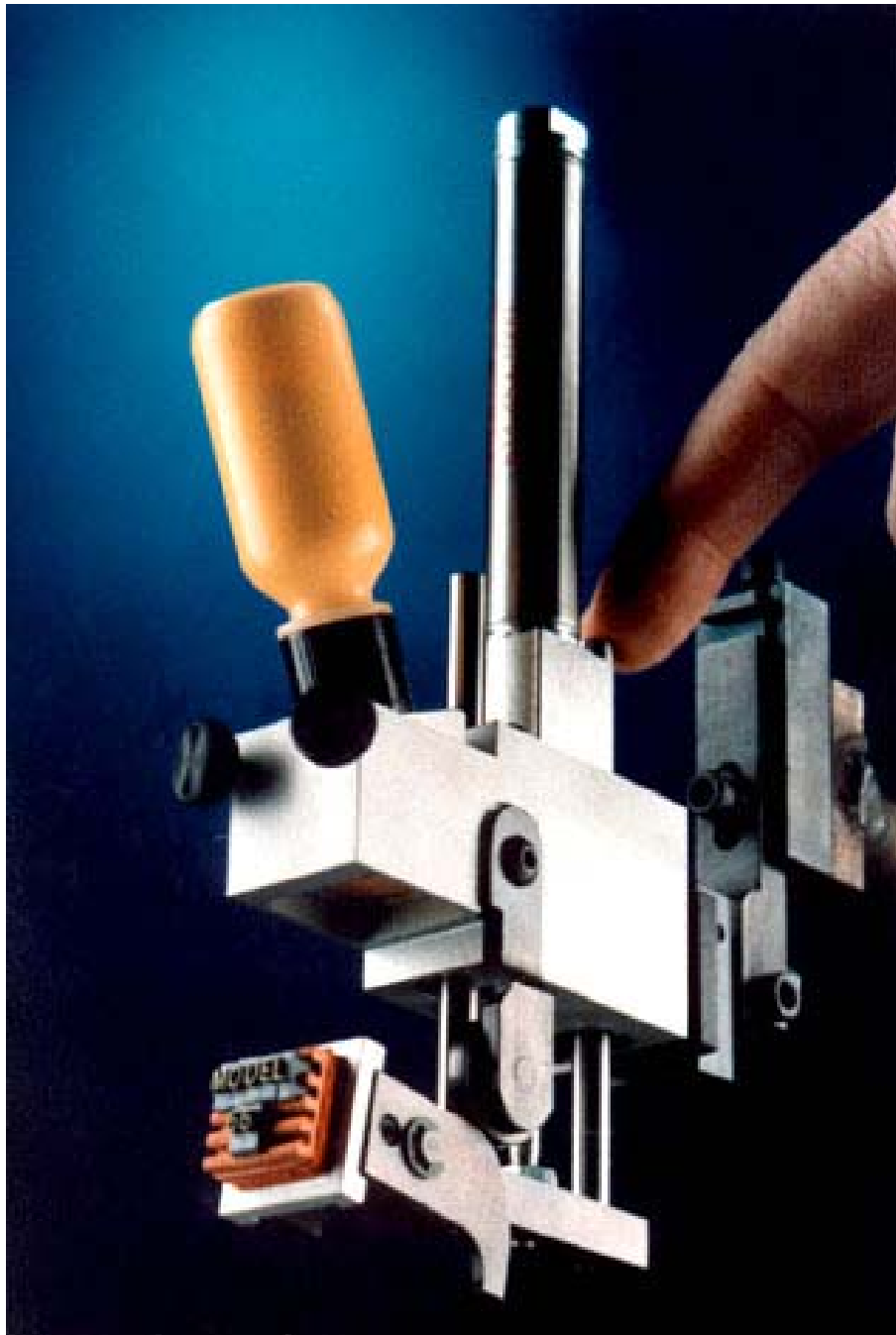
- Removable / rotate-able marking head
- Rubber marking type / dies
- Easy, quick message change / repositioning
- Excellent ink imprints

INK SUPPLY

- Quick-change ink reservoir
- Sealed ink system
- Durable quick-change ink pad
- Clear ink bottle
- Screw-on ink bottle
- Modified reservoir
- Fast change of ink supply
- Immediate start up
- Uniform prints / low cost
- Supply level visible
- Quick / easy changes
- Upside down marking

MOUNTING ARRANGEMENT

- Two standard brackets / three mounting options
- Narrow profile brackets
- One tool bracket adjustments
- Complete range of alignment
- Mounts in confined areas
- Quick / easy alignment



SPRINTER Machine Mount Unit

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MACHINE MOUNTING ORIENTATION

The ink supply from the ink bottle to the ink pad is gravity fed on standard models. Any mounting orientation is possible as long as ink is being fed by gravity. Rotation of ink reservoir assembly will handle most mounting orientations. In upside down mounting orientations (where the ink must feed against gravity) a wick is used in the reservoir assembly to assure continuous feeding of the ink to the ink pad.

MACHINE CYCLING OPTIONS

Switches used to activate the machine can include but are not limited to the following methods: mechanical / electrical timer, proximity switch, and / or mechanical trigger switch. Since each customer can have a different preference or application condition, a common system is not supplied for cycling the machine but left to the customer to determine the most ideal method.

One of the preferred ways to return cycle the machine to the ink supply position is utilizing a micro-pilot actuator switch (installed on the rod-end port of the air cylinder) and flow controls that restrict the flow of air. This switch senses the movement of air thru the line. When the marking head is in full contact with the surface to be marked, the switch senses an absence of air movement which immediately signals the four-way valve to return the marking head to the retracted position. This switch is available as optional equipment because of its uniqueness and applicability to the equipment operation.

Another way to signal retraction is to use a Reed / Hall effect switch (optional magnet-on-piston air cylinder required) which senses when a magnet on the piston (all models except Model 22) has come into position at the bottom of the piston stroke. Upon sensing the proximity of the magnet-on-piston a signal is sent to the four-way valve to return the marking head to the retracted position.

INK TYPES

A broad variety of inks are offered that are specially formulated for compatibility with the Sprinter. A complete stock of dye and pigmented inks to mark virtually any surface, absorbent or non-absorbent is available in a range of colors (including white) to suit customer needs. Alcohol-based dye and/or pigmented ink grades meet most customer's requirements. Typically they dry-to-touch in less than two seconds. If necessary, custom ink can be formulated to meet your specific marking needs.

OPTIONAL EQUIPMENT / MARKING SUPPLIES

1)Marking Head Plate 2)Ink Reservoir Assembly 3)Mounting Bracket 4)Four-way Valve 5)Flow Controls after four-way valve 6) Reed / Hall Switch 7)Ink (1/4 oz & 1/2 oz btl, pt, qt) 8)Micro-pilot Actuator Switch 9)Ink Pad 10)Ink Bottle 11)Ink Bottle Cap 12)Rubber Type 13)Rubber Type Holder 14)Rubber Cushion

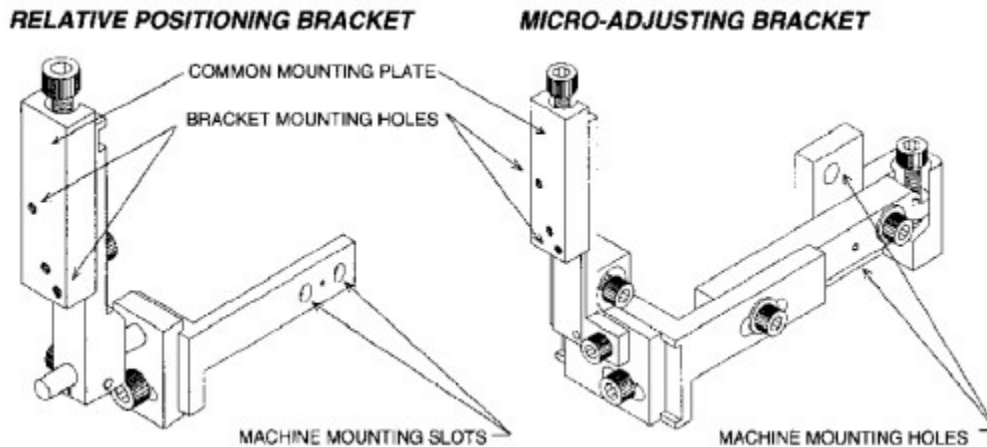
MACHINE INSTALLATION

For in-line mounting operation, the customer normally establishes the operational control system package. At a minimum a four-way valve to control air flow, flow controls, a signal actuation device to initiate marking action, and a signal actuation device to retract marking head is required. A manual override switch near the operator station to extend the marking head for positioning of marking head to surface is

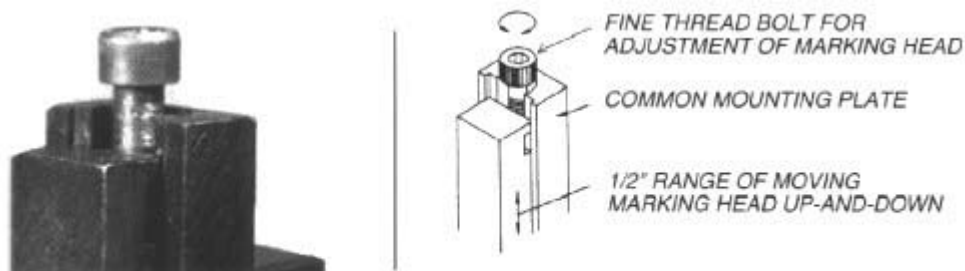
recommended. Additionally a shut-off valve to release air pressure from retracted marking head should be provided. This allows operator ease of extending marking head to remove the marking head for message changes.

MACHINE MOUNTING

A) For in-line machine mounting there are three possible mounting options. Two of these options are provided in optional mounting brackets (described / illustrated below in the "mounting bracket options"). A third option is to mount the machine directly to the frame described in section 2 below. Optimum clarity marks are obtained with parallel and lightest possible contact of the marking head with the surface to be marked. The options in more detail:



1) MOUNTING BRACKET OPTIONS: Either bracket provides a five-axis (two pivoting, three sliding) adjustability normally required to adjust and align the marking head. It is highly recommended that one of the two types of optional brackets be used to assure required machine adjustability. Two similar types of brackets are offered. These are designated as the relative positioning bracket and the micro-adjusting bracket (refer to above illustration). Either bracket has the same micro-adjustability of moving the machine up-and-down to adjust for precise marking head contact as depicted below:

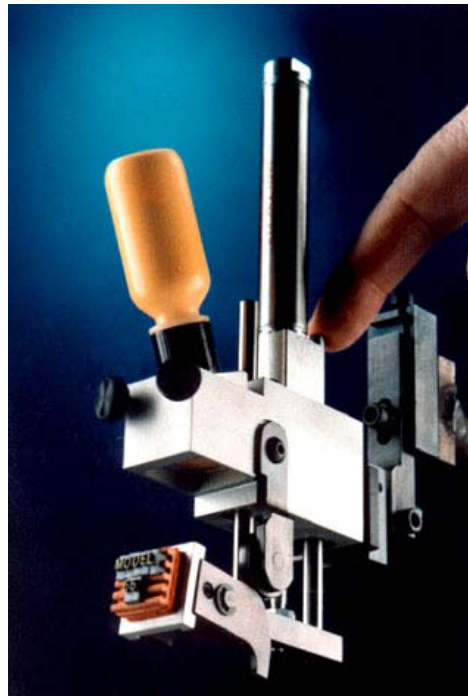


Common to both mounting bracket options.

Each mounting bracket provides a swiveling action of the marking head from front-to-back and left-to-right. In addition to the micro-adjustability and swiveling action, each bracket has a front-to-back and left-to-right one half inch range of travel to allow quick repositioning of the marking head. The difference between the two brackets lies in the mechanism to swivel the marking head. The relative positioning bracket relies on manual adjustment to loosen the appropriate bolts and manually swivel the marking head. The micro-adjusting bracket provides a controlled "fine tuning" capability of swiveling the marking head on a controlled basis. The relative positioning bracket is recommended for the majority of applications. Consult factory for recommendation if there is a question on which technique might be more suitable. Machine and bracket dimensional drawings are available upon request.

2) MOUNTING DIRECTLY TO FRAME BODY: A third (less common) mounting option is to mount the machine directly to the frame body or a locally designed bracket as described below. In this option a provision must be made in mounting the machine so that the marking head can easily adjust and align with the surface to be marked. To insure the best possible results it is necessary that a provision for both adjustment and alignment of the marking head as indicated in the above brackets be provided when engineering the mounting arrangement. Machine dimensional drawings that detail frame body mounting holes and associated dimensions are available by request.

B) For off-line machine mounting, the benchtop model base accomodates either mounting bracket to allow mounting of any machine model.



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