



Manual Tape Applicator MTA-2

3M™ Stamark™ Pavement Marking Tapes

Information Folder IF MTA-2

June 2010

Health and Safety Information

Precautions:

Wear safety shoes and appropriate gloves while handling and using the Manual Tape Applicator.

Description

The 3M™ Manual Tape Applicator MTA-2 is intended to be used for the application of 3M™ Stamark™ Pavement Marking Tapes. It is a simple-to-use, two-wheeled, robust, push-type device. (Figure 1)

The usage of A 380ESD(high tack adhesive) demands installation of the MTA-2 upgrade-kit DR995032239 to prevent roll blocking by the high tack adhesive during the tape application.



Figure 1: MTA-2 Tape applicator

The device is specifically designed to apply pavement marking tapes precoated with pressure sensitive adhesive.

The applicator weighs 75kg and can be partially disassembled for transporting in a van, truck or station wagon.

Product Width and Spacing

The MTA-2 can be used to apply all Stamark™ pavement marking tapes at all standard roll length.

Note: If special roll with larger length are being ordered, the maximum roll diameter must not exceed 50cm, if the material is to be applied with a Manual Tape Applicator.

Operation

The MTA-2 is operated by one person.

Note: Pavement Marking Roll changing should be supported by a second person due to the weight of a tape roll in order to avoid extensive workload for a single operator.

The application rates depend on the individual application conditions and environment. Typically tape is being applied at walking speed.

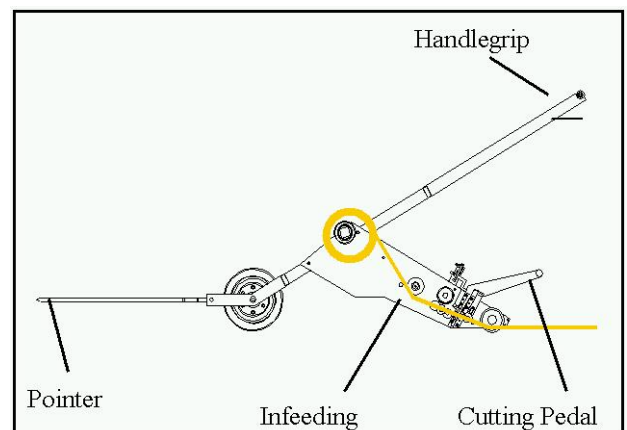


Figure 2: Schematic drawing MTA-2

Procedure for Adjusting Machine and Tape

Load the tape roll, feed it in to the machine and do the necessary adjustments, as shown in Figure 3 to 8. As soon as these steps are done, the machine is ready for the application.

Caution: Do not activate the cutting knife, while doing adjustments!



Figure 3: Feeding of the Tape



Figure 4: Adjustment of the upper tape guide rolls



Figure 7: Adjustment of the pointer system

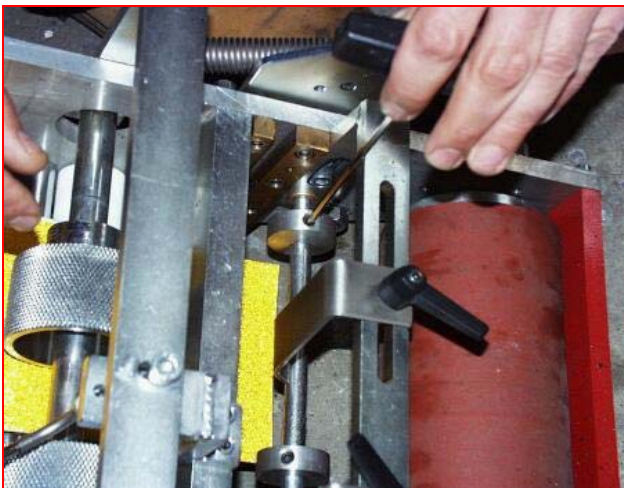


Figure 5: Adjustment of the lower tape guide rolls

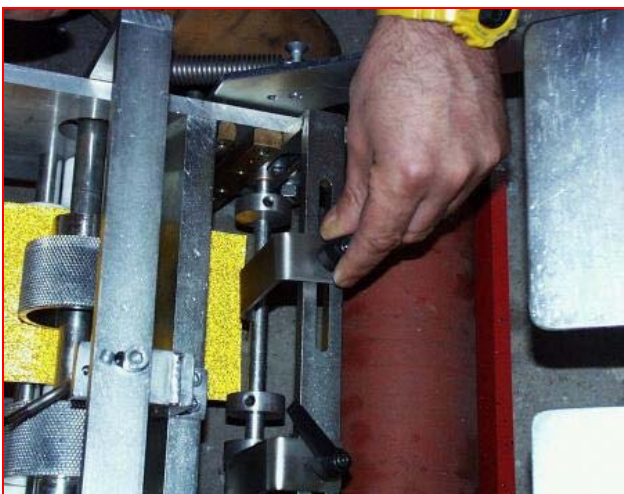


Figure 6: Adjustment of vertical guide plate

Tape Application

Determine where the first skip or long line starts by measuring from the last existing skip or reference mark. Adjust the pointer to the pre-marking. Best case is when the pre-marking and the later tape position are in between the wheels of the applicator. If primer is used apply tape exactly on primer.

For starting the application pull handgrip and watch tape being moved by infeeding-transportation roll. Position tape start at start of pre-marking. Push applicator forward and keep handle grip pulled until tape appears on other side of rubber application roll. Release handle-grip and keep pushing applicator.



Figure 8: Infeeding Handle Grip

Tape Cutting

Bring the applicator to a complete stop. Keep tape under slight tension.

Cut tape with one strong and fast movement of foot pedal. Release the pedal slowly. Do not attempt to cut the tape while moving. Cutting the tape in motion will stretch and tear the tape, causing the next line to start off center.



Figure 10: Cutting the tape

Tamping

After applying the pavement marking tape tamp it thoroughly with the RTC-3 with a minimum **90kg** (200lb.) load.

When using the RTC-3 Roller Tamper Cart:

- Do not twist or turn the tamping device on the tape.
- Make three passes back and forth over each part of the tape
- Move the RTC-3 slowly (4-5 km/h) over the tape
- Make sure all edges are firmly adhered
- If applying block markings or pedestrian crossings, start in the center of the marking, then work towards the edges to remove trapped air.
- Open road to traffic as soon as **tamping is completed**

Tamping is most important !

Maintenance

Keep all Fasteners Tight

Lubrication: The pivot points and sliding areas should be kept lubricated with light oil.

Cleaning: The silicone application roller wheels and cutting mechanism must be kept clean.

Mineral spirits, fuel oil or any other light oil cleaners may be used on the wheels and knives.

Check knife blades from time to time to prevent adhesive build-up.

Solvents may be used occasionally for difficult cleaning problems. A spray bottle of cleaner or silicone spray is useful to prevent asphalt and dirt pickup on the wheels and adhesive buildup on the knives during operation.

Caution: Do not use solvents or petroleum products on the silicone application roll when working on new, hot asphalt surfaces.

To prevent asphalt buildup around the roller, untighten the scraper mounting screws and move the scraper back. Tighten the screws.

Adjustments

The Knives are pre-adjusted by the manufacturer to slide across each other with a minimum of friction in a scissors action. Adjustment is needed when the tape is not properly cut.

Either the stationary knife or the sliding knife may be adjusted. To adjust the stationary knife, untighten the mounting screws slightly. Turn the setscrews to bring the cutting edge down, and retighten the mounting screws. The same procedure is followed to adjust the sliding knife. Each knife has two cutting edges. The knives may be removed and new cutting edges exposed. The knives may be sharpened after the cutting edges are dull.

Trouble Shooting

Tape is not properly cut: The tape will not cut cleanly if cutting is done while the applicator is in motion. If the knife edges are dull or out of alignment, the knives should be sharpened and adjusted. (See Adjustments). Clean adhesives build up from knives. (See Maintenance).

MTA-2 - Spare Parts:

Spare parts can be ordered directly at the machine manufacturer. Please contact your 3M representative for further information.

Literature Reference

For additional information on 3M™ Stamark™ Tapes, Application Instructions or 3M™ Application Equipment, refer to the following publications:

IF OV	Information Folder Overlay Application
IF AP	Information Folder Inlay Application
IF BPlus	Information Folder BitumenPlus Application
IF PS-98	Information Folder Adhesive Spray Applicator PS-98
IF P50	Information Folder Surface Preparation Adhesive 3M™ Stamark™ P50
IF RTC-3	Information Folder Tamper Cart RTC-3
PB A340	Product Bulletin 3M™ Stamark™ Durable Tape Series A340
PB A380	Product Bulletin 3M™ Stamark™ High Performance Tape Series A380SD/ESD
PB A820	Product Bulletin 3M™ Stamark™ Wet Reflective Tape Series A820
PB A650	Product Bulletin 3M™ Stamark™ Temporary Tape Series A650
PB A540	Product Bulletin 3M™ Stamark™ Temporary Tape Series A540
PB A720	Product Bulletin 3M™ Stamark™ Temporary Wet Reflective Tape Series A720
PB A750	Product Bulletin 3M™ Stamark™ Temporary Wet Reflective Tape Series A750

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3M Deutschland GmbH

Display & Graphics Laboratory

Traffic Safety Systems Division

Carl-Schurz-Str. 1, 41453 Neuss, Germany

Tel: +49 (0) 21 31 / 14 0

Fax: +49 (0) 21 31 / 14 36 94