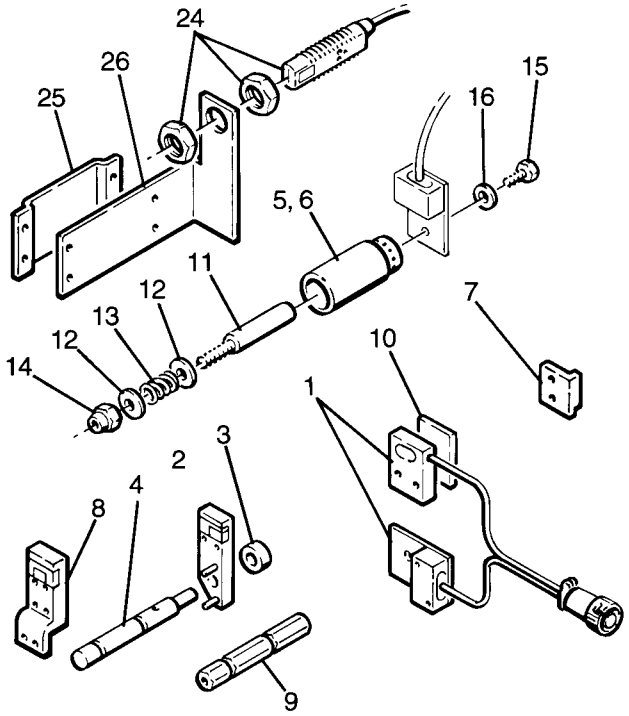
Back

3M-Matic™

P/N 78-8079-5587-3 Spare Taping Head Kit

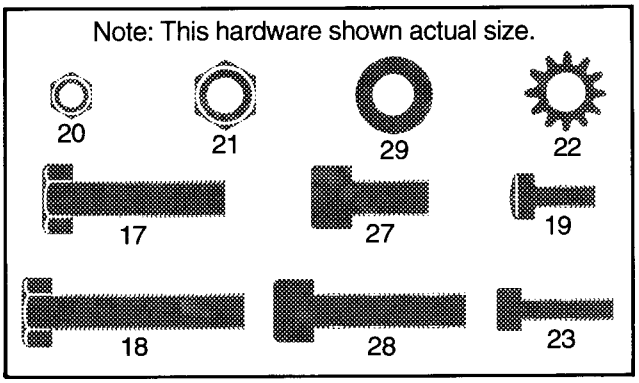
(Tape Application Sensor)



For use on 3M-Matic™ AccuGlide™ STD, AccuGlide™ II STD or AccuGlide™ HST Upper or Lower Taping Heads

Purpose of Kit

This kit contains all parts necessary to outfit one spare AccuGlide™ taping head with 3M-Matic™ tape application sensor components. In the event of taping head service or failure, a "tape sensor" equipped head allows quick changeover with minimum production line downtime.



Contents of Kit (See illustration above)

Ref.	Part No.	Description	Qty.	Ref.	Part No.	Description	Qty.
1	78-8095-1099-9	Dual Sensor Assembly	1	14	78-8017-9077-1	Nut – Self Locking, M10	1
2	78-8095-1108-8	Magnet Assembly – AccuGlide STD & AccuGlide II STD	1	15	26-1003-5829-5	Screw – Hex Hd, M6 x 12	1
				16	26-1000-0010-3	Washer – Plain, M6	1
3	78-8095-1116-1	Bushing – Magnet	1	17	26-1003-5822-0	Screw – Hex Hd, M5 x 20	2
4	78-8095-1115-3	Shaft – Magnet	1	18	26-1003-5823-8	Screw – Hex Hd, M5 x 25	2
5	78-8095-1117-9	Roller – Tension, Counterclockwise Rotation	1	19	26-1002-6286-9	Screw – Pan Hd, Phil Dr, M3 x 8	2
6	78-8095-1136-9	Roller – Tension, Clockwise Rotation	1	20	26-1003-6901-1	Nut – Hex, M3	2
				21	26-1004-4659-5	Nut – Hex, M5	2
7	78-8095-1122-9	Template – Drilling	1	22	26-1009-3592-8	Washer – Lock, Ext Tooth, M5	2
8	78-8095-1111-2	Magnet Assembly – AccuGlide HST	1	23	26-1009-8341-5	Screw – Soc Hd, M3 x 12	4
				24	78-8098-8943-5	Photoelectric Sensor	1
9	78-8095-1158-3	Spacer – Hex	1	25	78-8095-1121-1	Plate – Clamping	1
10	78-8095-1114-6	Shim – AccuGlide HST Magnet Assembly	1	26	78-8095-1120-3	Bracket – Photoelectric	1
				27	26-1009-8344-9	Screw – Soc Hd, M5 x 10	4
11	78-8052-6564-8	Shaft – Tension Roller	1	28	26-1009-7356-4	Screw – Soc Hd, M5 x 20	4
12	78-8052-6566-3	Washer – Friction	2	29	26-1004-5504-2	Washer – Plain, M5	4
13	78-8052-6567-1	Spring – Compression	1				

Installation

General Information – All Taping Heads

Spare Taping Head Kit includes parts for AccuGlide STD, AccuGlide II STD or AccuGlide HST taping heads. Some parts will not be used on your particular installation.

Most taping head illustrations in this manual show the upper taping head only. Lower head is a mirror image of the upper head.

Spare head must be equipped with a box presence sensor, tape rotation sensor and low tape sensor.

AccuGlide™ STD or AccuGlide™ II STD Taping Heads
(AccuGlide™ HST (See page 4)

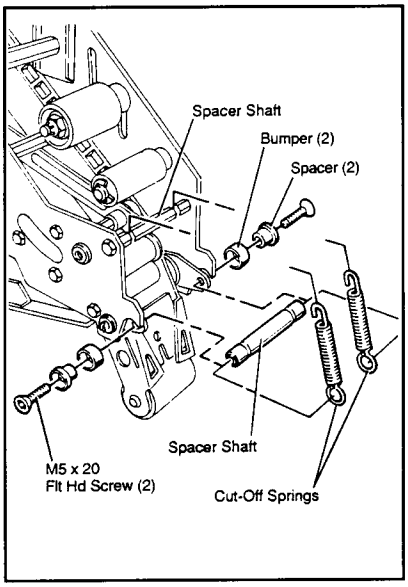


Figure 1

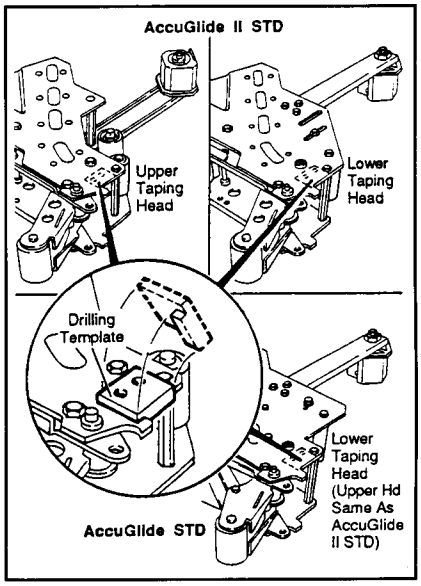


Figure 2

⚠ WARNING – Use care when working near taping head cut-off blade as blade is extremely sharp. If care is not taken, severe injury to personnel could result.

BOX PRESENCE SENSOR

1. Remove the two cut-off springs from the spacer shafts using a needle nose pliers. Figure 1.

2. Use a 3 mm hex wrench and remove the two M5 x 20 flat head screws, spacers and bumpers from the cut-off bracket spacer shaft. Figure 1.

Note – Newer AccuGlide™ II taping heads after date code 42-93-001-02 (week-year-xxx-x) have mounting holes for box presence sensor punched in sideplate. If mounting holes are present, skip to step 5.

3. Place the drilling template provided in sensor kit, on the side plate of the taping head as shown in Figure 2.

Note – On the upper head, the template is placed on the side plate **opposite** the tension roller side. On the lower head the template is placed on the side plate that tension roller is mounted on.

Place the detent of the template in the 90° cut-out of the side plate and clamp the template to the side plate. **IMPORTANT – This is critical, the template MUST BE POSITIONED SNUGLY into the 90° cut-out to provide proper sensor position.**

4. Mask off the rollers and guides of the applying mechanism with newspaper or other paper. Using the template as a guide, drill two 1/4 inch [6.5 mm] holes in the side plate of the taping head. Remove template (do not discard) and deburr holes if necessary.

   Remove masking paper and vacuum or brush away any metal chips that may have fallen on taping head. **Be sure no chips are left on applying mechanism rollers and guides.**

5. Attach the box presence sensor to the side plate using (2) M5 x 20 mm lg. hex head bolts, external tooth lock-washers and nuts provided. See Figure 3. **Do not tighten screws** (to be tightened after later alignment). The box sensor cable should face 180° away from where the corrugated box would be during case sealer operation.

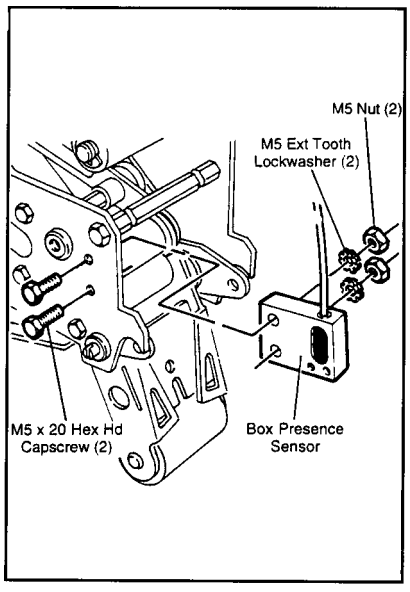


Figure 3

6. Assemble the new magnet shaft, magnet holder, bushing and cut-off springs as shown in Figure 3. Hold assembly together and insert into cut-off frame with magnet holder **towards** box presence sensor. The two dowels on the magnet holder will locate the magnet holder on the cutoff frame.

7. Attach magnet shaft to cut-off frame with bumpers, spacers and M5 x 20 flat head screws removed previously. See Figure 4. **Do not tighten screws** (to be tightened after later alignment).

8. Remove the hex spacer shaft shown in Figure 4 and install new hex spacer shaft. Install with spring grooves aligned vertically with grooves in magnet shaft.

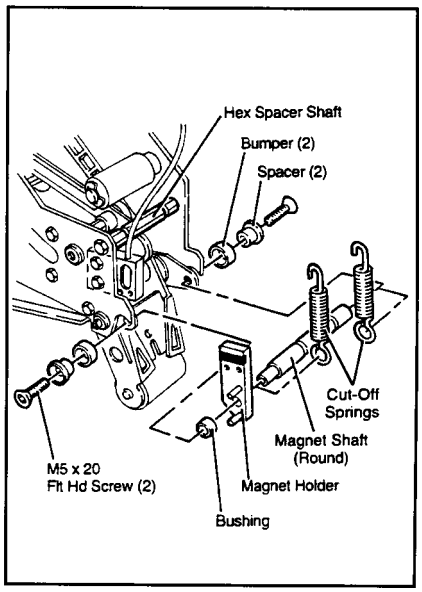


Figure 4

Installation (Continued)

9. Use a needle nose pliers and hook the cut-off spring furthest from the sensor to the hex spacer shaft as shown in Figure 5. **Be sure both spring loops are in shaft grooves.**

10. Insert two M3 x 12 mm lg. socket head capscrews through the holes in the magnet holder and into the tapped holes in the box presence sensor. If the holes do not line up, shift the location of the box presence sensor to line up the holes. Snug the M3 capscrews **(this aligns the sensor temporarily)**. See Figure 6.

11. Tighten the M5 x 20 mm lg. hex head capscrews and nuts holding the box presence sensor to taping head side plate.

12. Tighten the M5 flat head screws (installed in step 7) that secure the spacers, bumpers, bushing and magnet holder to the spacer shaft. (The magnet is now aligned with the box presence sensor.)

13. Remove the M3 x 12 mm socket head capscrews (installed in step 10) from magnet holder.

14. Use a needle nose pliers and hook the remaining cut-off spring to the hex spacer shaft. **Be sure spring loops are in shaft grooves.**

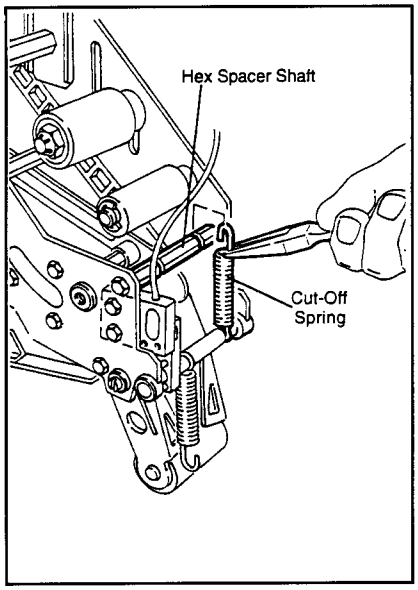


Figure 5

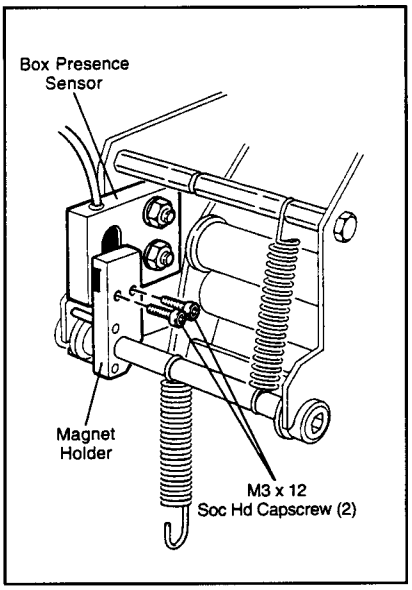


Figure 6

TAPE ROTATION SENSOR

Note – Tension roller must be replaced with new roller provided in kit. Tension roller is mounted in one of two slots on taping head side plate and is located in a certain position within the slot. Mark location of roller with tape to assure installation of new roller in same relative position as old roller.

1. Remove the M6 x 10 mm hex head cap-screw that fastens the tension roller shaft to the taping head side plate and remove the roller/shaft assembly. See Figure 7.

2. Remove existing tension roller from shaft and replace with new roller shaft and hardware as shown in Figure 8.

Note – Be sure to install correct roller on upper/lower taping heads. After placing roller on shaft, rotate roller (roller on upper taping head should rotate in counterclockwise direction, roller on lower head should rotate in clockwise direction) as viewed from outer side of roller. If rotation is incorrect, switch rollers.

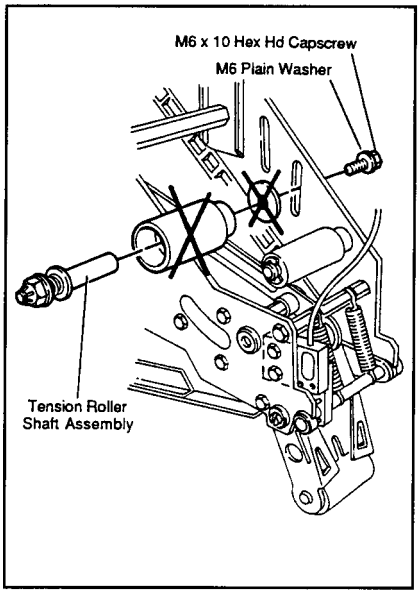


Figure 7

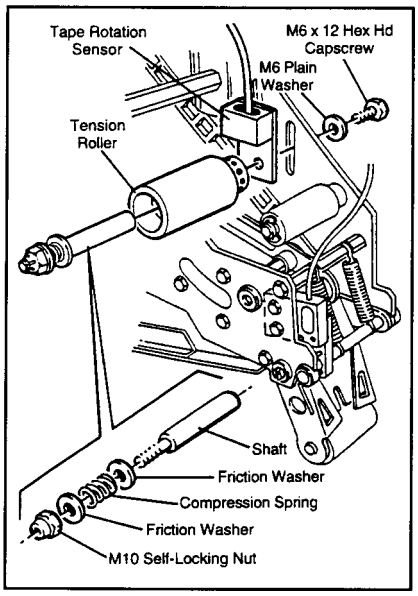


Figure 8

3. Install the tape rotation sensor between the tension roller shaft and the taping head side plate as shown in Figure 8. **Note – Tape rotation sensor REPLACES large plain washer between shaft and taping head side plate. DO NOT USE WASHER.** Install and tighten the M6 x 12 hex head capscrew and M6 plain washer that holds the tension roller shaft in position. **Be sure sensor cable is pointed in same direction as box presence sensor.**

4. Adjust roller tension according to instructions in taping head/case sealer manual.

LOW TAPE SENSOR

See page 6 for installation instructions.

Installation (Continued)

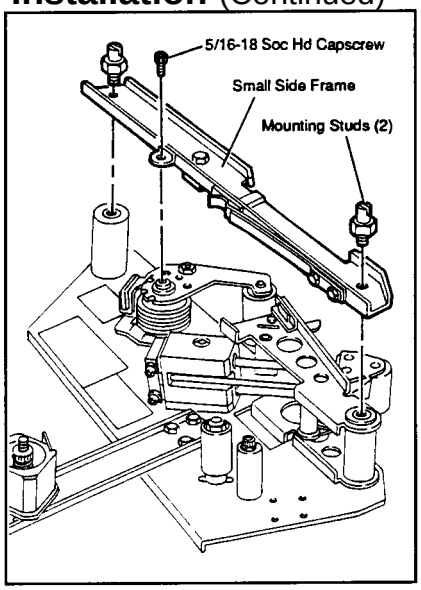


Figure 9

AccuGlide™ HST Taping Heads

⚠ WARNING – Use care when working near taping head cut-off blade as blade is extremely sharp. If care is not taken, severe injury to personnel could result.

BOX PRESENCE SENSOR

Note – Newer AccuGlide™ HST taping heads, after S/N T-1306 (upper) or B-1287 (lower), have mounting holes for box presence sensor punched in sideplate and also Pem nuts for magnet holder installed in cut-off frame. If box presence and magnet holder holes are provided, follow steps 6 and 10.

1. Lay the HST taping head on its side with the large side frame down.

2. Remove the mounting studs on the front and rear of the taping head. Also remove the 5/16-18 socket head capscrew that holds the buffing arm. Remove the small side frame from taping head. See Figure 9.

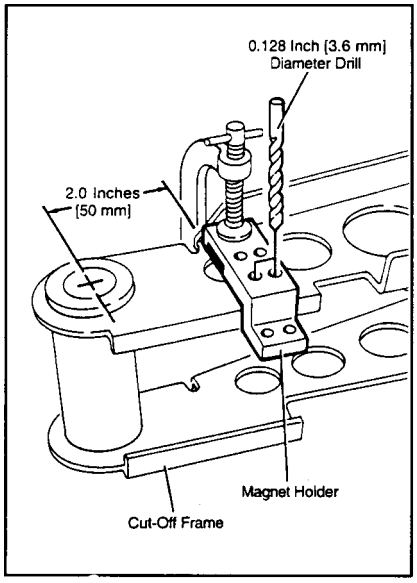


Figure 11

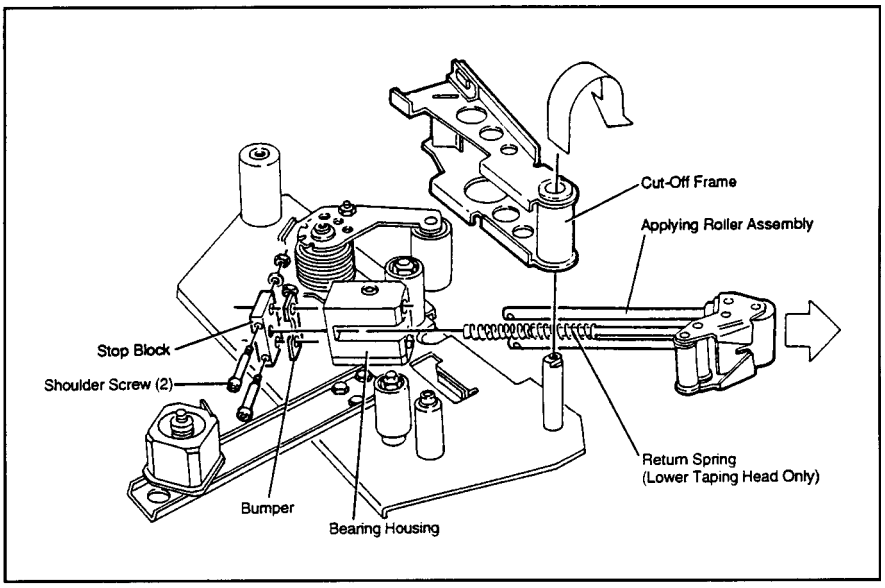


Figure 10

3. Remove the applying roller assembly as follows (refer to Figure 10):

   a. Remove the (2) shoulder screws, washers and nuts that fasten the stop block to the applying roller shafts.
   b. Remove the stop block and bumper from the shafts. **Be careful not to let the applying roller assembly slide out of the bearing housing unexpectedly.**
   c. Remove applying roller and shaft from bearing housing.

4. Lift the cut-off frame out of the taping head, turn it over and lay on its side. (The side facing up needs holes drilled for the magnet holder.) Figure 10.

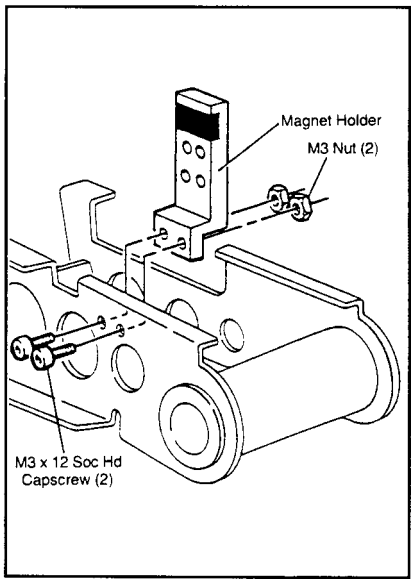


Figure 12

5. Locate and drill mounting holes for magnet holder in side of cut-off bracket as follows (refer to Figure 11):

   a. Locate and clamp the magnet holder to the cut-off frame 2.0 inches [50 mm] from the center of the cut-off frame pivot. (This is the side, when installed in the taping head, faces the large side plate.) Magnet holder should be tucked snugly into the corner of cut-off frame and then clamped firmly.

   b. Drill two .128 inch [3.6 mm] holes in cut-off frame through the center set of holes in the magnet holder. **Be sure to use the holes closest to the 90° angle in the magnet holder for drilling guide.** See Figure 11. Remove clamp holding magnet holder and remove magnet holder. Deburr holes and vacuum or brush metal chips away from taping head.

6. Attach the magnet holder to the cut-off frame with two M3 x 12 soc hd capscrews and nuts as shown in Figure 12. **Important – Install screws in direction shown.**

Note – On later type HST heads with Pem nuts installed in cut-off frame, use M3 x 8 phil hd screws and install in **opposite direction**, thru magnet holder and into Pem nuts.

7. Reinstall the cut-off frame into the taping head. Slide applying roller shafts into bearing block and assemble bumper, stop block, shoulder screws, washers and nuts. See Figure 13.

Note – On lower taping head, it is necessary to insert the return spring on the center shaft. To facilitate spring assembly, insert a screwdriver through the center shaft hole in the bearing housing, into the end of the spring and into the hole in the end of the center shaft. Use the screwdriver to guide the shaft through the hole in the bearing housing.

Installation (Continued)

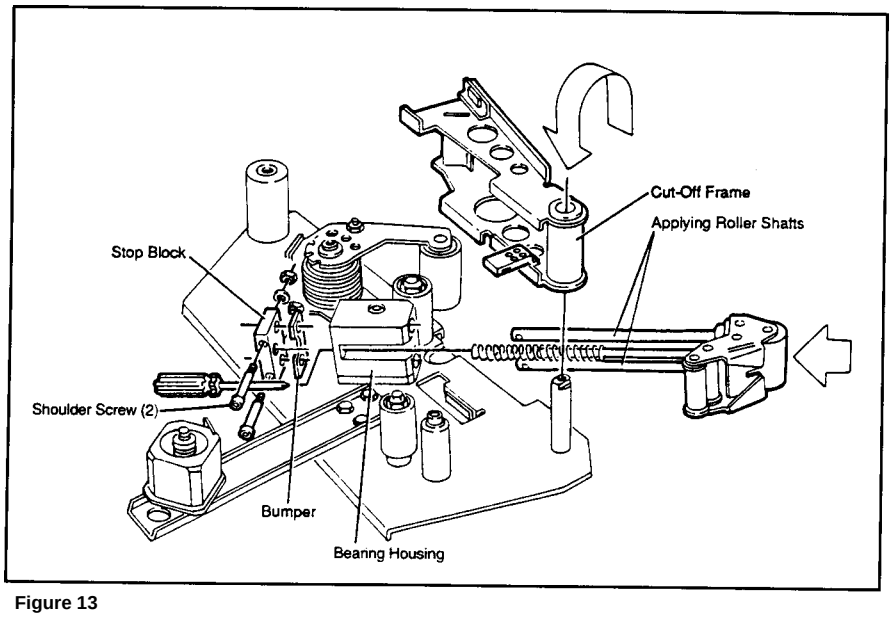


Figure 13

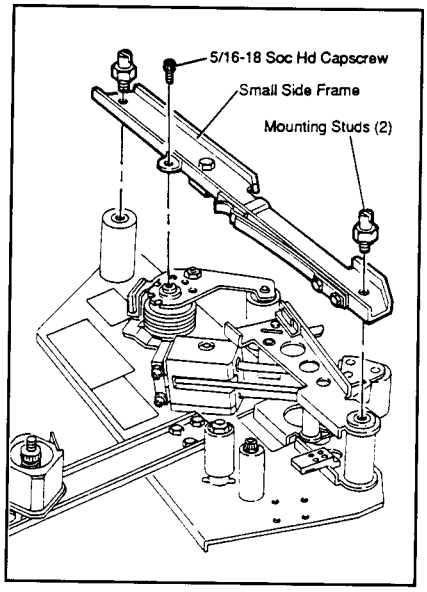


Figure 14

8. Replace the small side frame on the taping head with (2) mounting studs and 5/16-18 socket head capscrew that hold buffing arm assembly. See Figure 14.

9. Temporarily attach the box presence sensor to the magnet holder with two M3 x 12 socket head capscrews as shown in Figure 15. Using the holes in the box presence sensor as a guide, drill two 1/4 inch [6.3 mm] holes through large side plate of taping head. **Be sure cut-off frame is in its normal rest position when drilling holes.**

10. If magnet holder is not attached to box sensor yet, loosely attach it with M3 x 12 socket head capscrews as shown in Figure 15. Slip the .190 inch [4.8 mm] thick shim (provided in kit) between box presence sensor and large side plate and attach sensor to side plate with two M5 x 25 hex head capscrews and nuts as shown in Figure 16. **Capscrews should be inserted through sensor with nuts and external tooth lock-washers on back of side plate.** Snug tighten the M5 mounting screws. Remove the two M3 capscrews securing magnet holder and box presence sensor together. Firmly tighten the M5 mounting screws.

TAPE ROTATION SENSOR

Note – Tension roller must be replaced with new roller provided in kit. Tension roller is mounted in a certain position within a slot on the taping head side frame. Mark location of roller with tape to assure installation of new roller in same relative position as old roller.

1. Remove the 1/4-20 hex head screw that fastens the tension roller shaft to the taping head side plate, remove the tension roller/ shaft assembly and discard. See Figure 17.

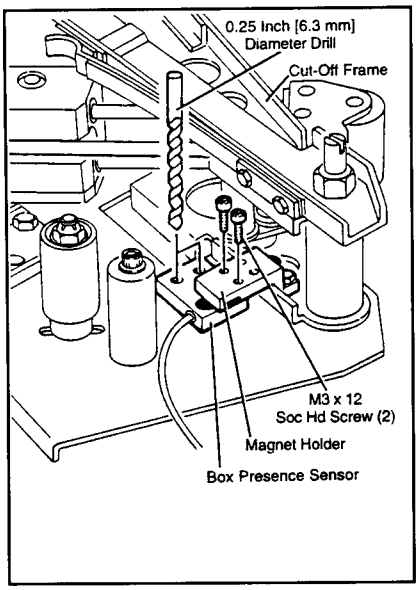


Figure 15

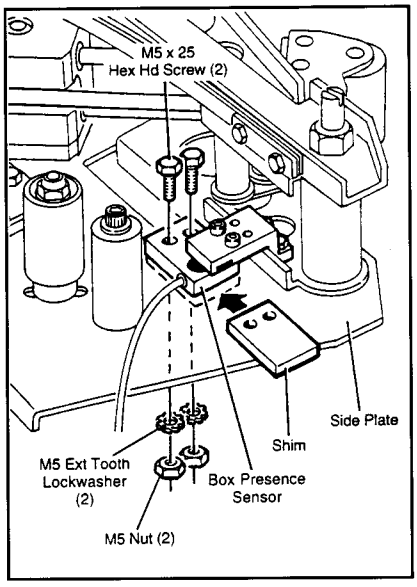


Figure 16

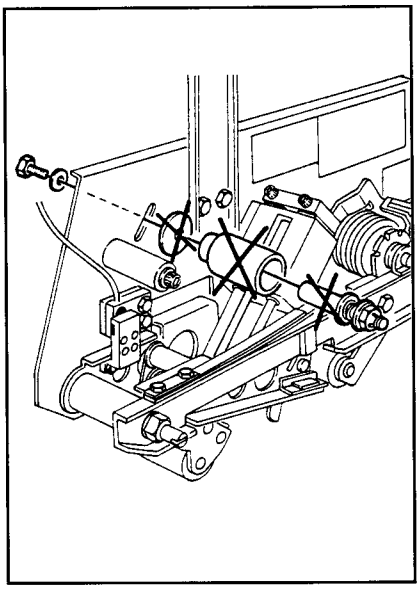


Figure 17

Installation (Continued)

2. Install new parts from kit. Shaft, tension roller, washers, compression spring and hex nut and fasten to taping head side plate with M6 x 12 hex head screw and M6 plain washer. See Figure 18. Install tape rotation sensor between shaft and side plate with sensor cable pointed in same direction as box presence sensor. **Note – Tape rotation sensor REPLACES large plain washer between shaft and taping head side plate. DO NOT USE WASHER.**

Note – Be sure to install correct roller on upper/lower taping heads. After placing roller on shaft, rotate roller (roller on upper taping head should rotate in clockwise direction, roller on lower head should rotate in counterclockwise direction) as viewed from outer side of roller. If rotation is incorrect, switch rollers. **This note applies to Type 39100 taping heads only. On Models 18600 and 28800, both tension rollers rotate counterclockwise. (Second counterclockwise tension roller must be ordered separately. See parts list on front page.)**

3. Adjust roller tension according to instructions in taping head manual.

Install low tape sensor as described below.

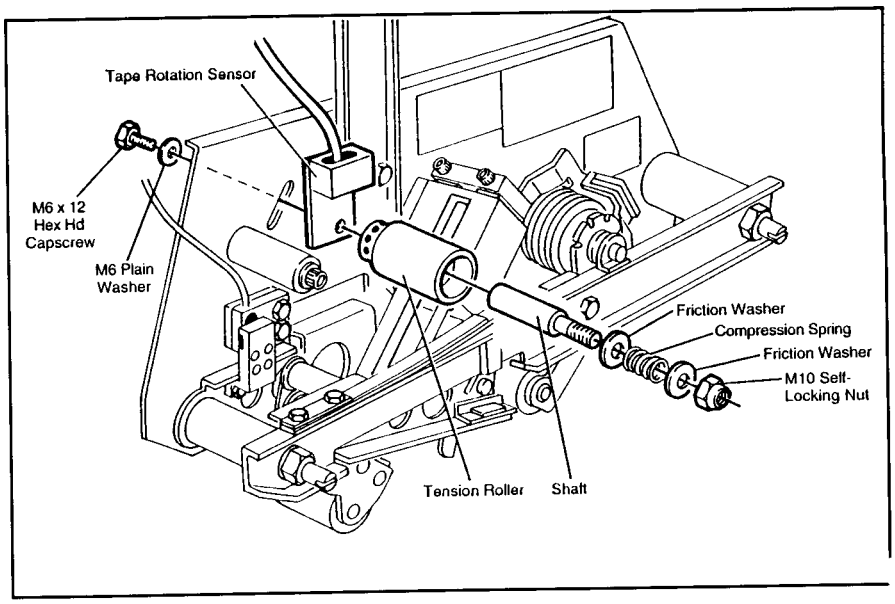


Figure 18

Low Tape Sensor – All Taping Heads

Important – If a low tape sensor is attached to remote tape drum bracket (tape drum bracket on case sealer upper crossbar or lower outboard mounting), low tape sensor in this kit need not be used.

1. Attach sensor mounting bracket to tape drum bracket as shown in Figure 19. Mounting bracket clamp should be centered on tape drum bracket and sensor mounting hole centered on tape drum.

   Fasten clamp with (4) each M5 x 10 socket head capscrews and M5 plain washers. Install screws as shown with heads on tape drum side of bracket.

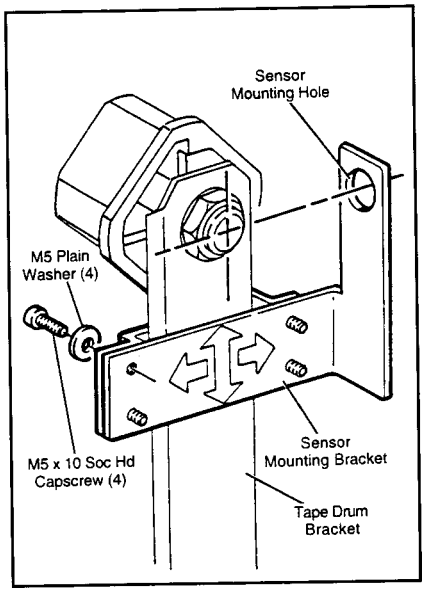


Figure 19

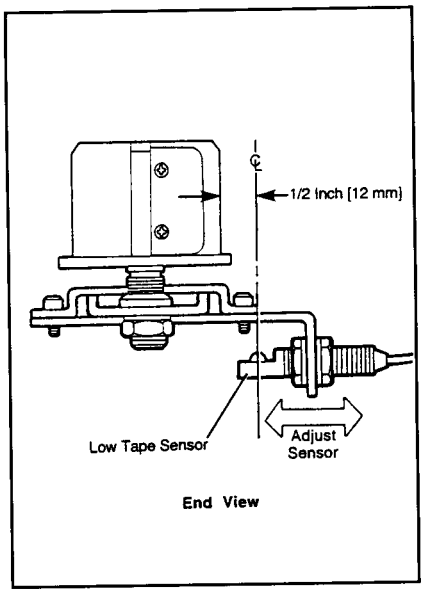


Figure 20

2. Install sensor (see Figure 20) into hole in mounting bracket with wave washers and nuts provided. Adjust so sensor is approximately 1/2 inch [12 mm] from core of tape when tape roll is installed. **Tighten nuts snugly but DO NOT overtighten.**

Note – Usage/line speed and response time will determine proper position of sensor for specific customer satisfaction. For earlier low tape sensing, move sensor away from core of tape roll. For later sensing, move sensor closer to core of tape roll.

Installation of box presence, tape rotation and low tape sensors completes the taping head installation.

Note – Be careful when installing taping heads to avoid damage to tape sensors. Also, be careful not to damage sensor connectors when installing taping heads.

How To Order Replacement Parts

1. Refer to the front page for parts needed.

2. Order by part number, description, kit name and kit part number.

3. Replacement parts and part prices available direct from:

CSPD division of Combi Packaging Systems LLC.
5365 East Center Dr. N.E.
Canton, OH 44721
1-800-344-9883
e-mail: CSPD-CSR@combi.com
www.combi.com

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3M warrants that its **3M-Matic™ P/N 78-8079-5587-3 Spare Taping Head Kit** will be free from defects for ninety (90) days after delivery. If any part is proved to be defective within the warranty period, then the exclusive remedy and 3M's and seller's sole obligation shall be, at 3M's option, to repair or replace the part, provided the defective part is returned immediately to 3M's factory or an authorized service station designated by 3M. A part will be presumed to have become defective after the warranty period unless the part is received or 3M is notified of the problem no later than five (5) calendar days after the warranty period. If 3M is unable to repair or replace the part within a reasonable time, then 3M, at its option, will replace the equipment or refund the purchase price. 3M shall have no obligation to provide or pay for the labor required to install the repaired or replacement part. 3M shall have no obligation to repair or replace (1) those parts failing due to operator misuse, carelessness, or due to any accidental cause other than equipment failure, or (2) parts failing due to non-lubrication, inadequate cleaning, improper operating environment, improper utilities or operator error.

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3M Center, Building 220-8W-01
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