

INSTRUCTION MANUAL  
 16AF AUTOMATIC CASE SEALER  
 MODEL 18200

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MAINTENANCE (CONTINUED)

REPLACEMENT PARTS & SERVICE INFORMATION

SPARE PARTS

A set of spare parts, that will periodically require replacement due to normal wear, is supplied with the Case Sealer. The set includes the following which should be reordered as consumed to keep the Case Sealer in production:

Quantity	Ref. No.	3M Part No.	Description
1	13-02	78-8017-9119-1	Spring-Main, Top Head, Zinc Pl.
1	13-20	78-8017-9424-5	Spring-Main, Button Head
4	14-10	78-8017-9136-5	Spring - Cutter
2	14-12	78-8017-9173-8	Blade - 2.5 inch/65 mm

In addition to the above minimum spare parts, it is suggested that the following spare parts be maintained depending on duty being served:

Quantity	Ref. No.	3M Part No.	Description
2	152-46	78-8042-2933-0	Driving-Belt
1	11-19	78-8017-9272-8	Spring-Tape Support
1	15-08	78-8017-9140-7	Roller-Buffering
1	11-11	78-8017-9101-9	Roller - Applying

HOW TO ORDER REPLACEMENT PARTS

- 1) Order parts by PART NUMBER, PART NAME, MACHINE CATALOG NUMBER, MODEL NUMBER and PART QUANTITY required.

Minimum billing on parts orders will be \$10.00
Replacement part prices available on request.

- 2) Replacement parts and part prices available direct from:

from:  
**3M Tape Dispenser Parts**  
**241 Venture Drive**  
**Amery, WI 54001-1325**

- 3) Refer to the front of the instruction manual for branch repair service information.



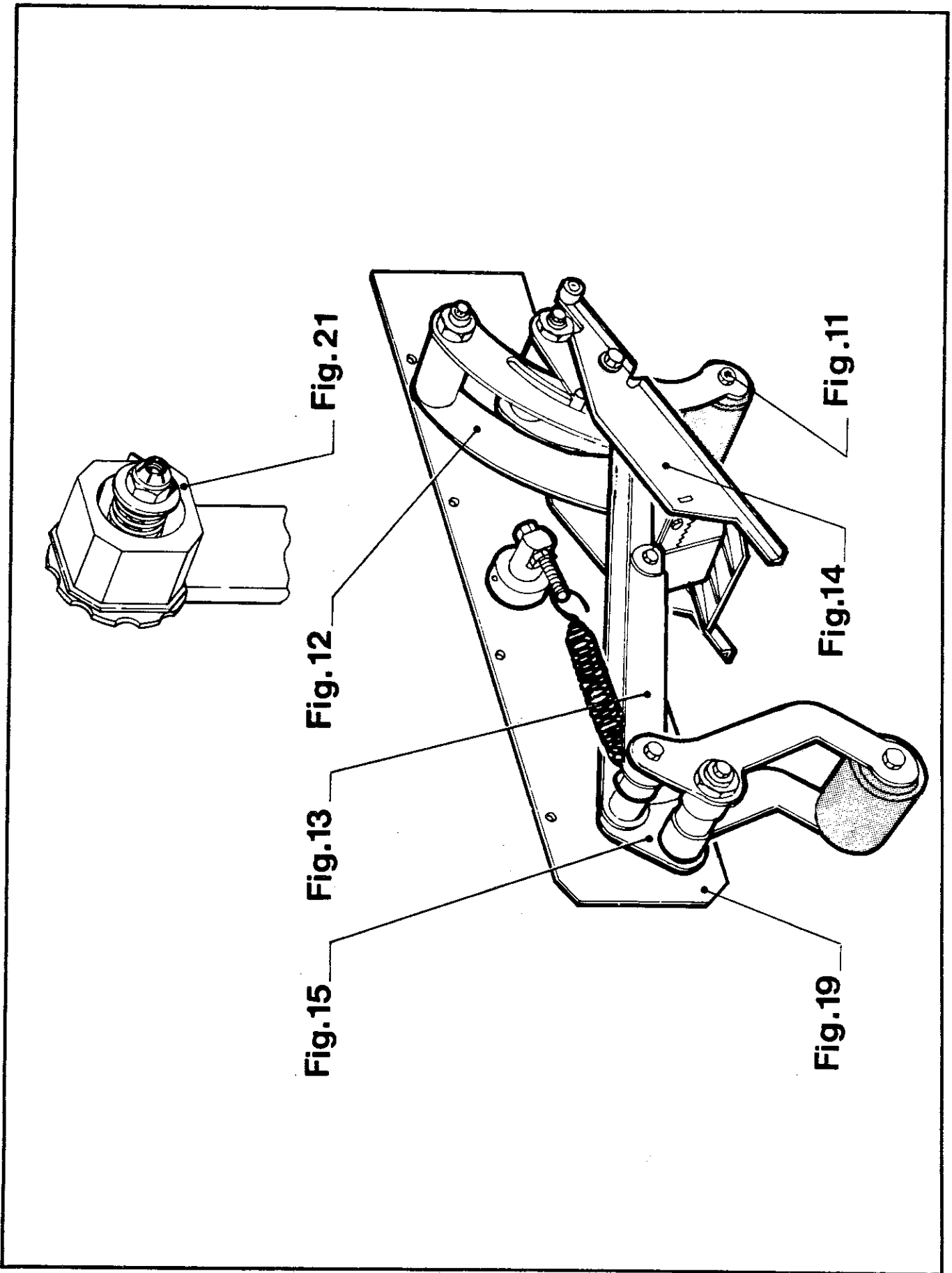
16AF AUTOMATIC CASE SEALER  
MODEL 18200  
TAPING HEAD ASSEMBLIES

- 1) Refer to Taping Head Assemblies Figures to find all the parts illustrations identified by figure numbers.
  
- 2) Refer to the figure or figures to determine the individual parts required and the parts reference number.
  
- 3) The replacement parts list, that follows each illustration, includes the part number and part description for the parts in that illustration.

NOTE - The complete description has been included for standard fasteners and some commercially available components. This has been done to allow obtaining these standard parts locally, should the customer elect to do so.

- 4) Refer to page 24 of "Maintenance - Replacement and Service Information" section of this manual for replacement parts ordering information.





**Taping Head Assemblies**

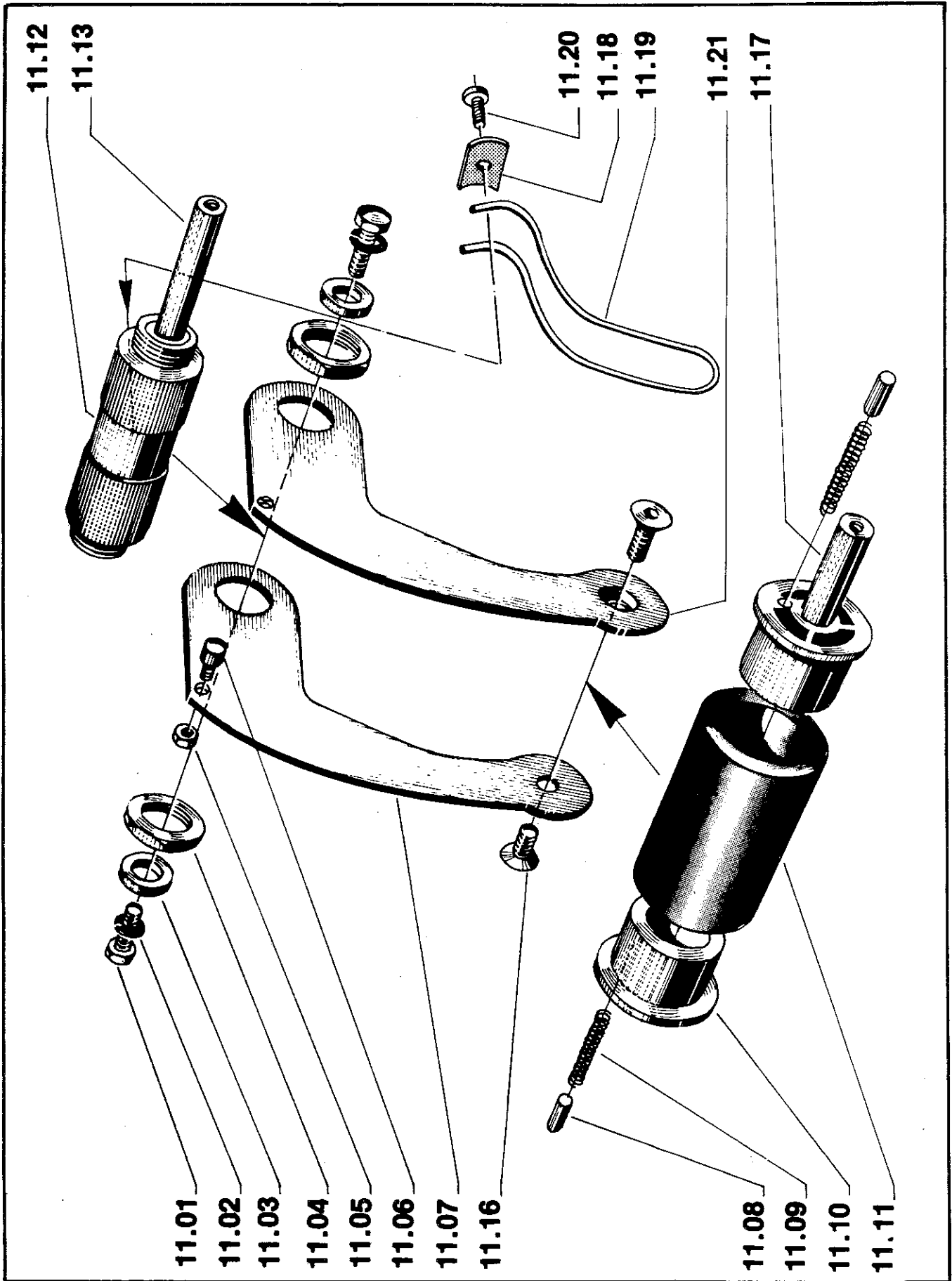


Figure 11



REF. No.	3M PART No.	DESCRIPTION
11-01	78-8032-0375-7	Screw - Metric, M6 x 16, Hex Hd. Cap, Steel, Nick. Pl., DIN 933-5.6
11-02	78-8010-7435-8	Washer - Metric, Lock, Spr., Steel M6
11-03	78-8017-9095-3	Spacer
11-04	78-8017-9096-1	Nut - Special M18 x 1
11-05	78-8010-7417-6	Nut - Metric, Hex, Steel, M5
11-06	78-8017-9097-9	Pin - Follower
11-07	78-8017-9076-3	Arm - Applying Roller, Right Side
11-08	78-8017-9098-7	Pin - Friction, 5mm
11-09	78-8017-9100-1	Spring - Friction
11-10	78-8017-9099-5	Bushing - Applying Roller
11-11	78-8017-9101-9	Roller - Applying
11-12	78-8017-9102-7	Spacer Assembly - Applying Roller Arms
11-13	78-8017-9109-2	Shaft - 10 x 90mm
11-16	78-8017-9162-1	Screw - Allen FH, M6 x 12
11-17	78-8017-9105-0	Shaft - 10 x 66mm
11-18	78-8017-9364-3	Clamp - Tape Support Spring
11-19	78-8017-9272-8	Spring - Tape Support
11-20	78-8017-9257-9	Screw - Phillips Head, M4 x 10
11-21	78-8017-9430-2	Arm - Applying Roller, Left Side

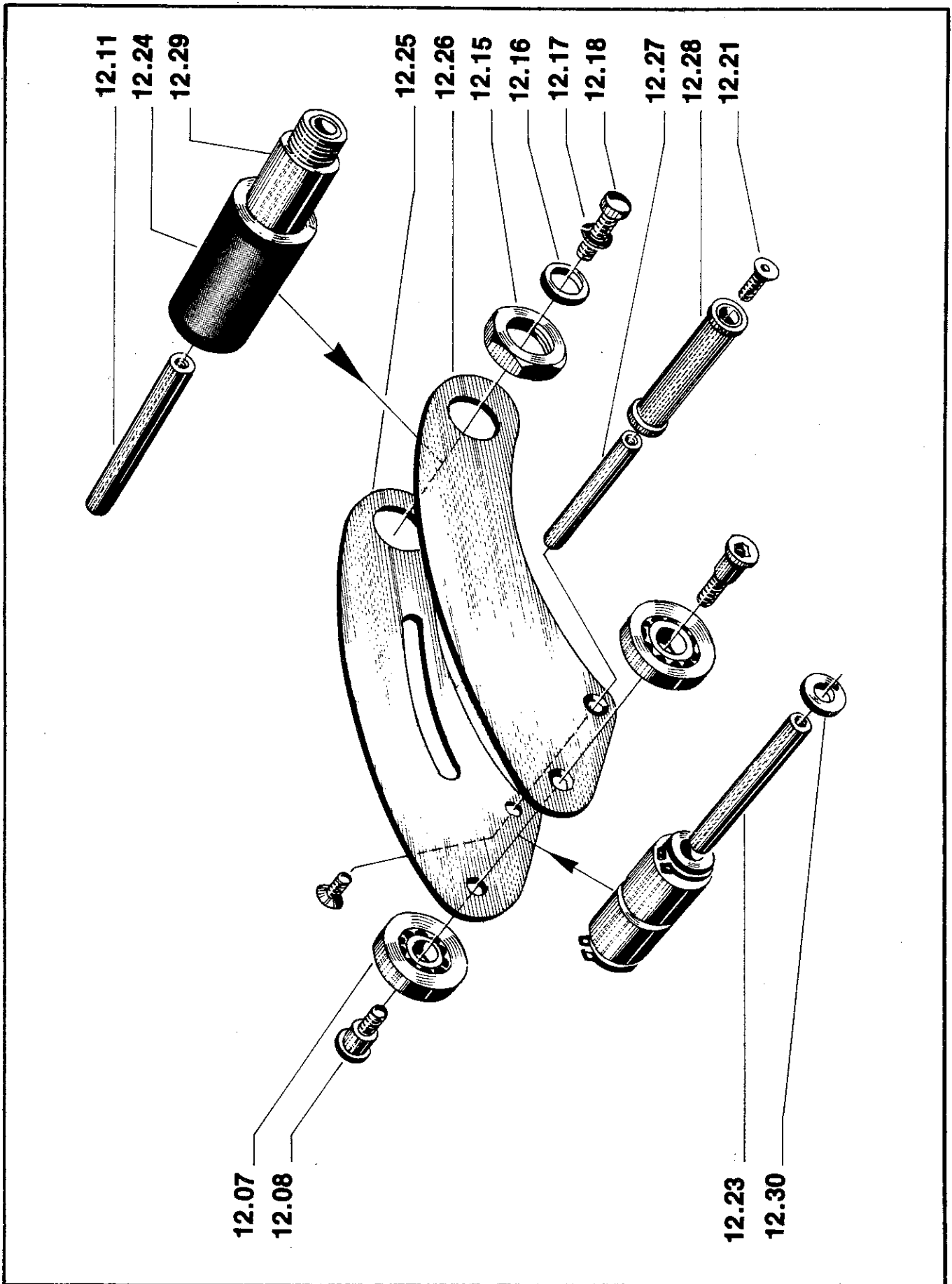


Figure 12

REF. NO.	3M PART NO.	DESCRIPTION
12-07	78-8017-9082-1	Bearing - Special 30mm
12-08	78-8017-9106-8	Screw - Bearing Shoulder
12-11	78-8017-9109-2	Shaft - 10 x 90mm
12-15	78-8017-9169-6	Nut - M18 x 1
12-16	78-8017-9095-3	Spacer
12-17	78-8010-7435-8	Washer - Metric, Lock, Spr., Steel M6
12-18	78-8032-0375-7	Screw - Metric, M6 x 16, Hex Hd. Cap, Steel, Nick. Pl., DIN 933-5.6
12-21	78-8017-9170-4	Screw - Phillips FH, M4 x 8
12-23	78-8018-7847-7	Shaft - 10 x 57 mm.
12-24	78-8018-7848-5	Roller Assembly - Tape Guide
12-25	78-8018-7849-3	Side Plate - w/Slot - One Way Roller Right
12-26	78-8018-7850-1	Side Plate - One Way Roller Left
12-27	78-8018-7851-9	Shaft - 8 x 57 mm.
12-28	78-8018-7852-7	Roller Assembly - One Way - Knurled
12-29	78-8018-7853-5	Shaft Assembly - Tape Guide Roller
12-30	78-8018-7854-3	Spacer - 16 $\phi$ /10,5 $\phi$ x1,5 mm thk.

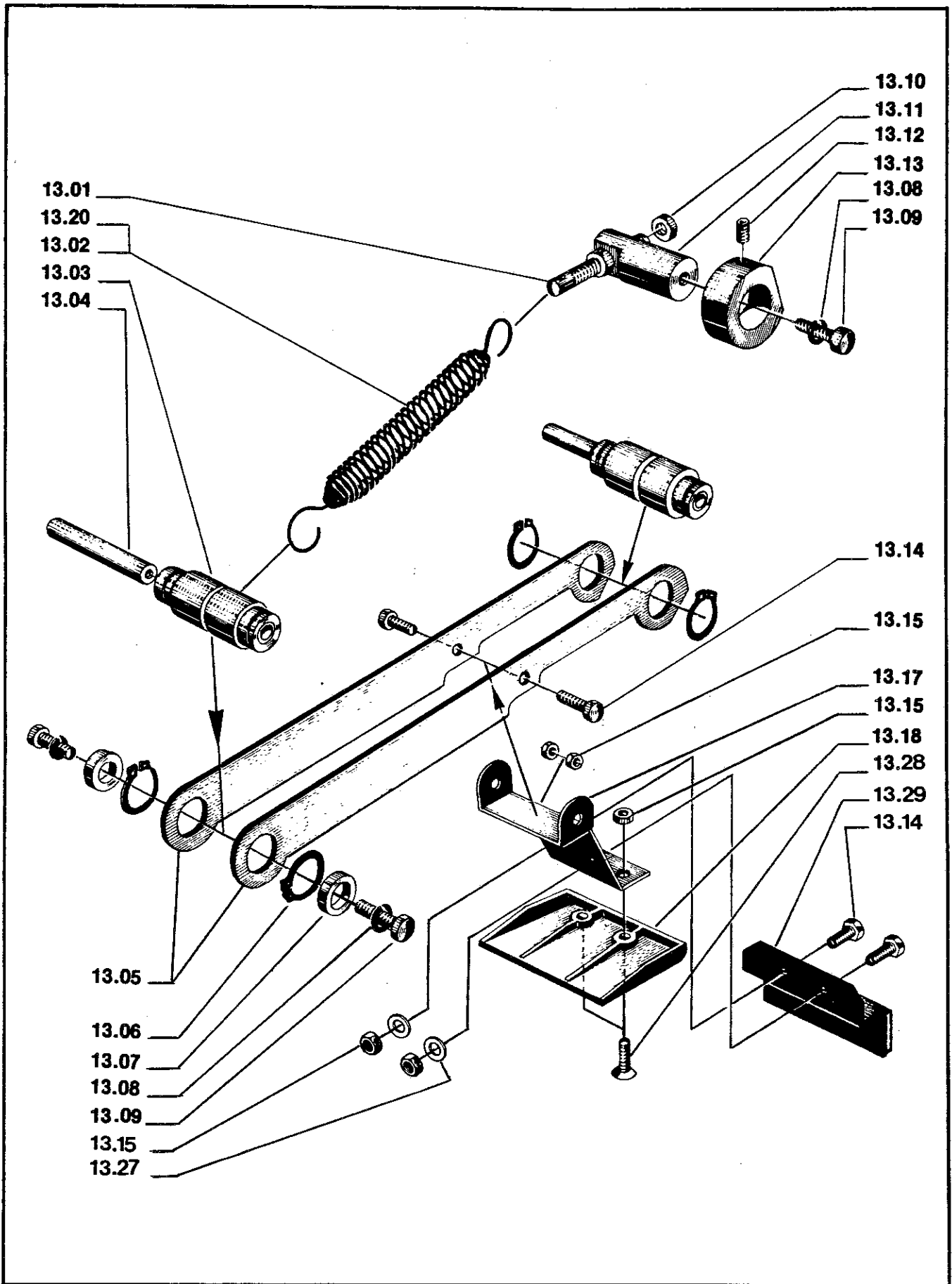


Figure 13

REF. NO.	3M PART NO.	DESCRIPTION
13-01	78-8017-9118-3	Screw - Spring Tensioner
13-02	78-8017-9119-1	Spring - Main, Top Head, Zinc Pl.
13-03	78-8017-9120-9	Roller Assembly - Grooved
13-04	78-8017-9105-0	Shaft - 10 x 66mm
13-05	78-8017-9122-5	Lever
13-06	78-8017-9171-2	Ring - Snap for 18mm
13-07	78-8017-9123-3	Spacer
13-08	78-8010-7435-8	Washer - Metric, Lock, Spr., Steel M6
13-09	78-8032-0375-7	Screw - Metric, M6 x 16, Hex Hd. Cap, Steel, Nick. Pl.
13-10	26-1000-1347-8	Nut - Metric Hex Stl., M8
13-11	78-8017-9124-1	Holder - Main Spring
13-12	78-8005-4230-6	Screw - Set, Allen M6 x 10
13-13	78-8017-9125-8	Collar - Retainer
13-14	78-8010-7163-6	Screw - Hex Head, M5 x 10, Nick. Pl.
13-15	78-8010-7417-6	Nut - Metric, Hex, Steel, M5, Nick. Pl.
13-16	78-8005-5735-3	Washer - Metric, Lock, Spr., Steel M5
13-17	78-8017-9126-6	Bracket - Blade guard
13-18	78-8017-9127-4	Guard - Blade
13-20	78-8017-9424-5	Spring, Main, Bottom Head
13-27	78-8005-5741-1	Washer, Plain - M5
13-28	26-0001-5862-1	Screw - Allen Fl. Hd. M5 x 12
13-29	78-8052-6285-0	Blade - Oiler

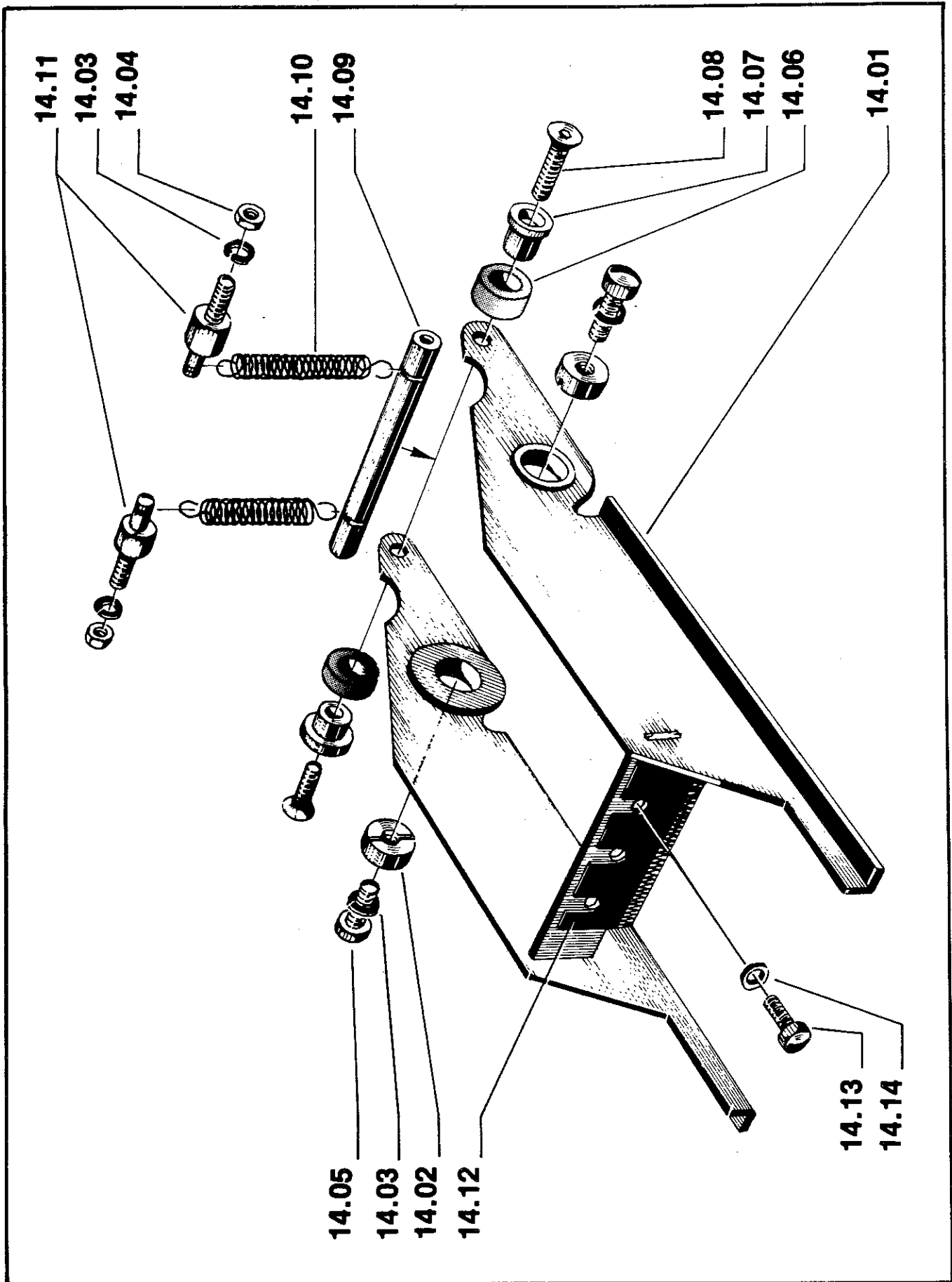


Figure 14

REF. No.	3M PART No.	DESCRIPTION
14-01	78-8017-9128-2	Lever Assembly - Cutter
14-02	78-8017-9132-4	Pivot - Cutter Lever
14-03	78-8010-7435-8	Washer - Metric, Lock, Spr., Steel - M6
14-04	78-8010-7418-4	Nut - Metric, Hex, Steel, M6
14-05	78-8010-7169-3	Screw - Metric, M6 x 12, Hex Hd. Cap, Steel, Nick. Pl., DIN 933-8.8
14-06	78-8017-9133-2	Bumper
14-07	78-8017-9134-0	Bushing - Bumper
14-08	78-8017-9172-0	Screw - Allen FH, M5 x 20
14-09	78-8017-9135-7	Pin - Spring Holder
14-10	78-8017-9136-5	Spring - Cutter
14-11	78-8017-9137-3	Holder - Cutter Spring
14-12	78-8017-9173-8	Blade - 2,56 inch/65mm
14-13	78-8010-7163-6	Screw - Metric, M5 x 10, Hex Hd. Cap, Steel, Nick. Pl., DIN 933-8.8
14-14	78-8005-5741-1	Washer - Metric, Plain, Steel, M5

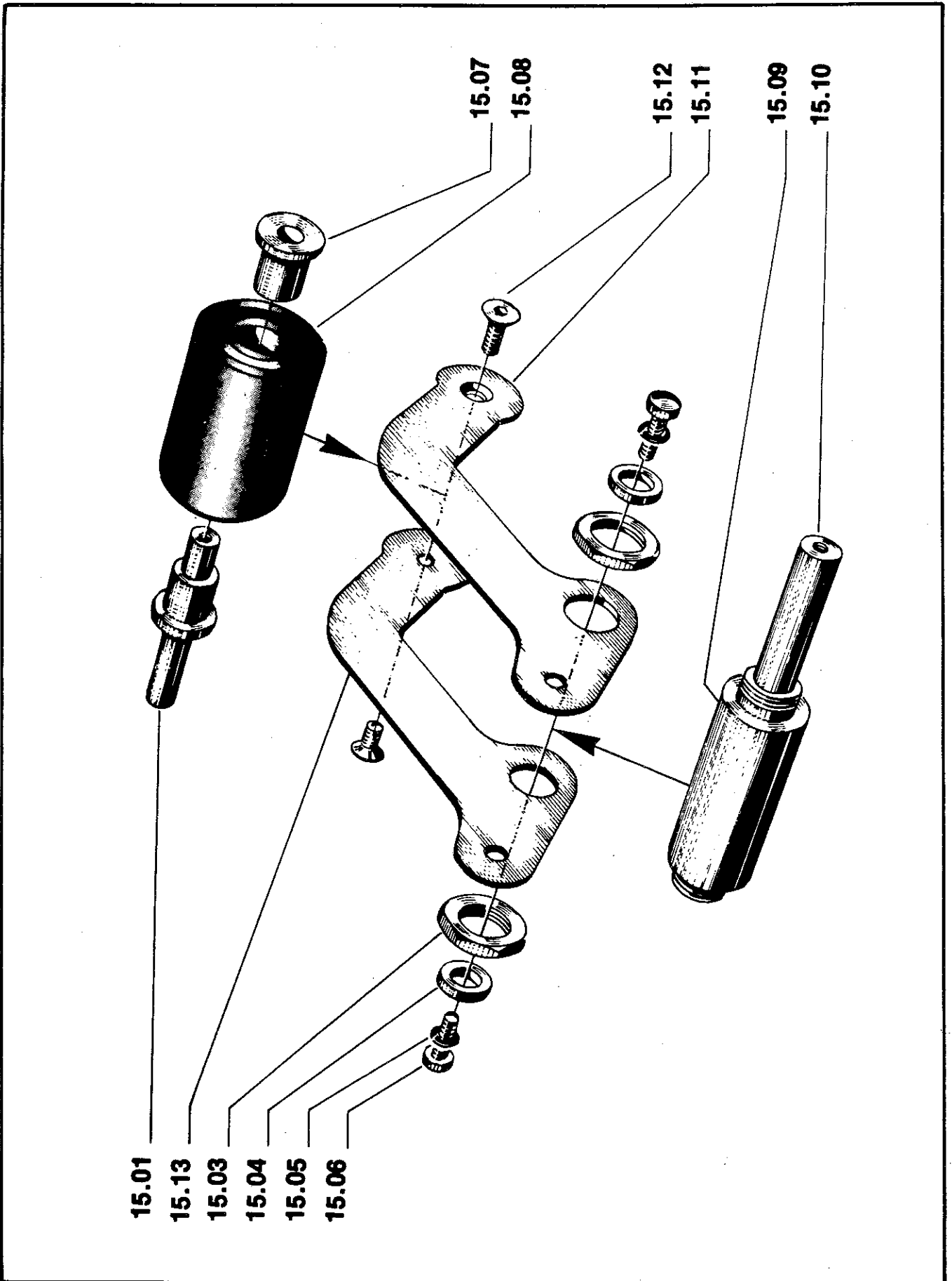
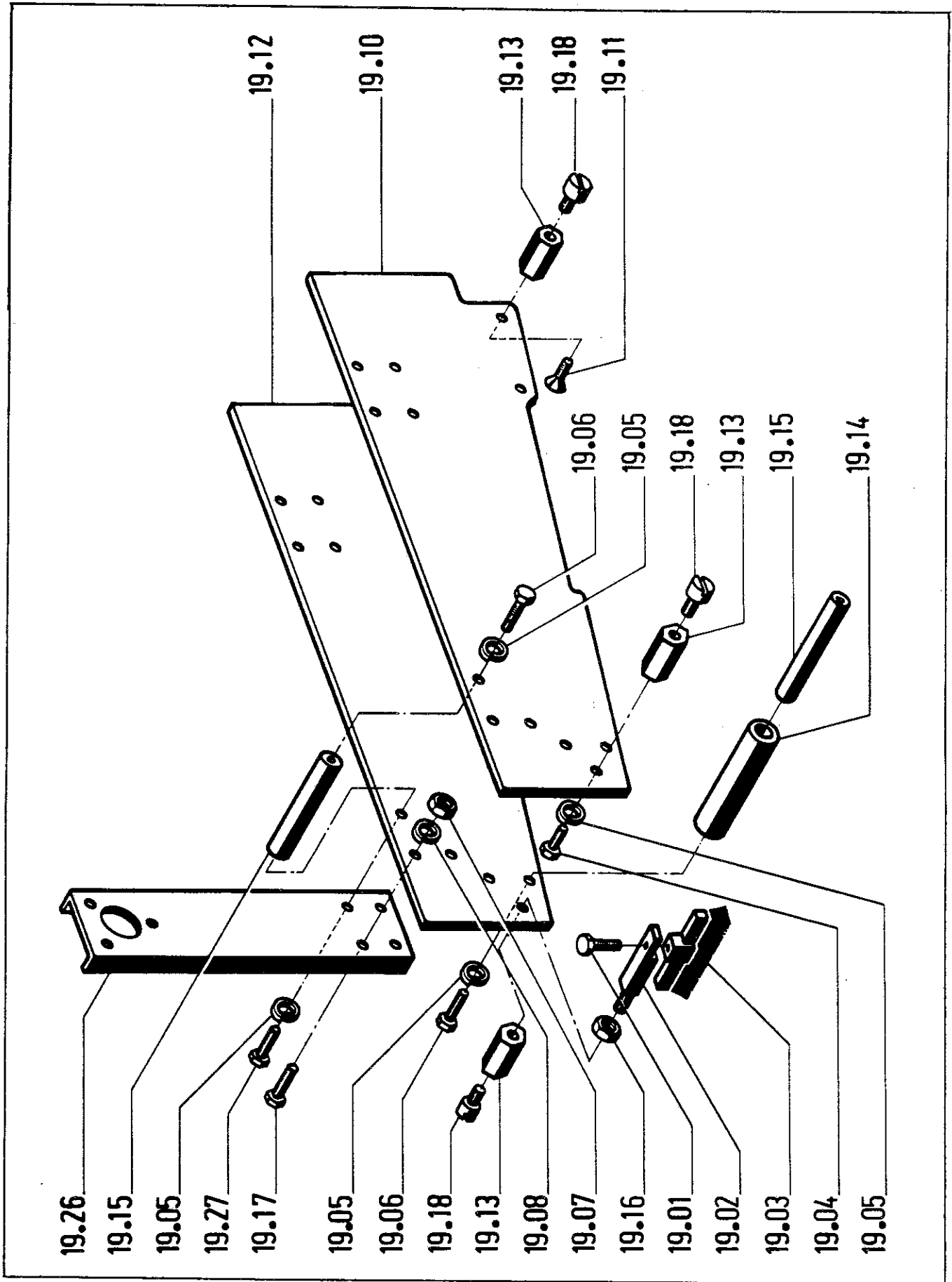


Figure 15



REF. No.	3M PART No.	DESCRIPTION
15-01	78-8017-9105-0	Shaft - 10 x 66mm
15-02	78-8017-9138-1	Arm - Buffing Roller
15-03	78-8017-9096-1	Nut - Special, M18 x 1
15-04	78-8017-9095-3	Spacer
15-05	78-8010-7435-8	Washer - Metric, Lock, Spr. Steel - M6
15-06	78-8032-0375-7	Screw - Metric, M6 x 16, Hex Hd. Cap, Steel, Nick. Pl., DIN 933-8.8
15-07	78-8017-9139-9	Bushing - Buffing Roller
15-08	78-8017-9140-7	Roller - Buffing
15-09	78-8017-9141-5	Spacer Assembly - Buffing Roller Arms
15-10	78-8017-9109-2	Shaft - 10 x 90mm
15-11	78-8018-7608-3	Arm - Buffing Roller, Right.
15-12	78-8017-9162-1	Screw - Allen FH, M6 x 12.
15-13	78-8018-7609-1	Arm - Buffing Roller, Left.



**Figure 19**

REF. No.	3M PART No.	Description
19-01	78-8010-7163-6	Screw - Metric, M5 x 10, Hex Hd. Cap. Steel, Nick. Pl.
19-02	78-8018-7746-1	Support - Brush
19-03	78-8018-7617-4	Brush - Assembly - Buffing
19-04	78-8010-7169-3	Screw - Metric, M6 x 12, Hex Hd. Cap. Steel, Nick. Pl.
19-05	78-8010-7435-8	Washer - Metric, lock, Spr., Steel, M6.
19-06	78-8032-0375-7	Screw - Metric, M6 x 16, Hex Hd. Cap Steel, Nick. Pl.
19-07	78-8010-7417-6	Nut - Metric, Hex, Steel, M5
19-08	78-8005-5735-3	Washer - Metric. Lock, Spr. Steel, M5
19-10	78-8018-7721-4	Sideplate - Left
19-11	78-8017-9162-1	Screw - Allen FH, M6 x 12.
19-12	78-8018-7722-2	Sideplate - Right.
19-13	78-8018-7723-0	Spacer - Hexagonal.
19-14	78-8017-9148-0	Bumper - Buffing Arm.
19-15	78-8017-9109-2	Pin - 10 x 90 mm.
19-16	78-8010-7418-4	Nut - Metric, Hex. Steel, M6.
19-17	78-8018-7798-2	Screw - Metric, M5 x 15, Hex Hd. Cap, Nick. Pl.
19-18	78-8023-2270-7	Screw - Mounting, Bottom Head.
19-26	78-8046-8301-5	Bracket - Tape Drum
19-27	78-8010-7193-3	Screw - Metric, M6 x 20, Hex Hd.

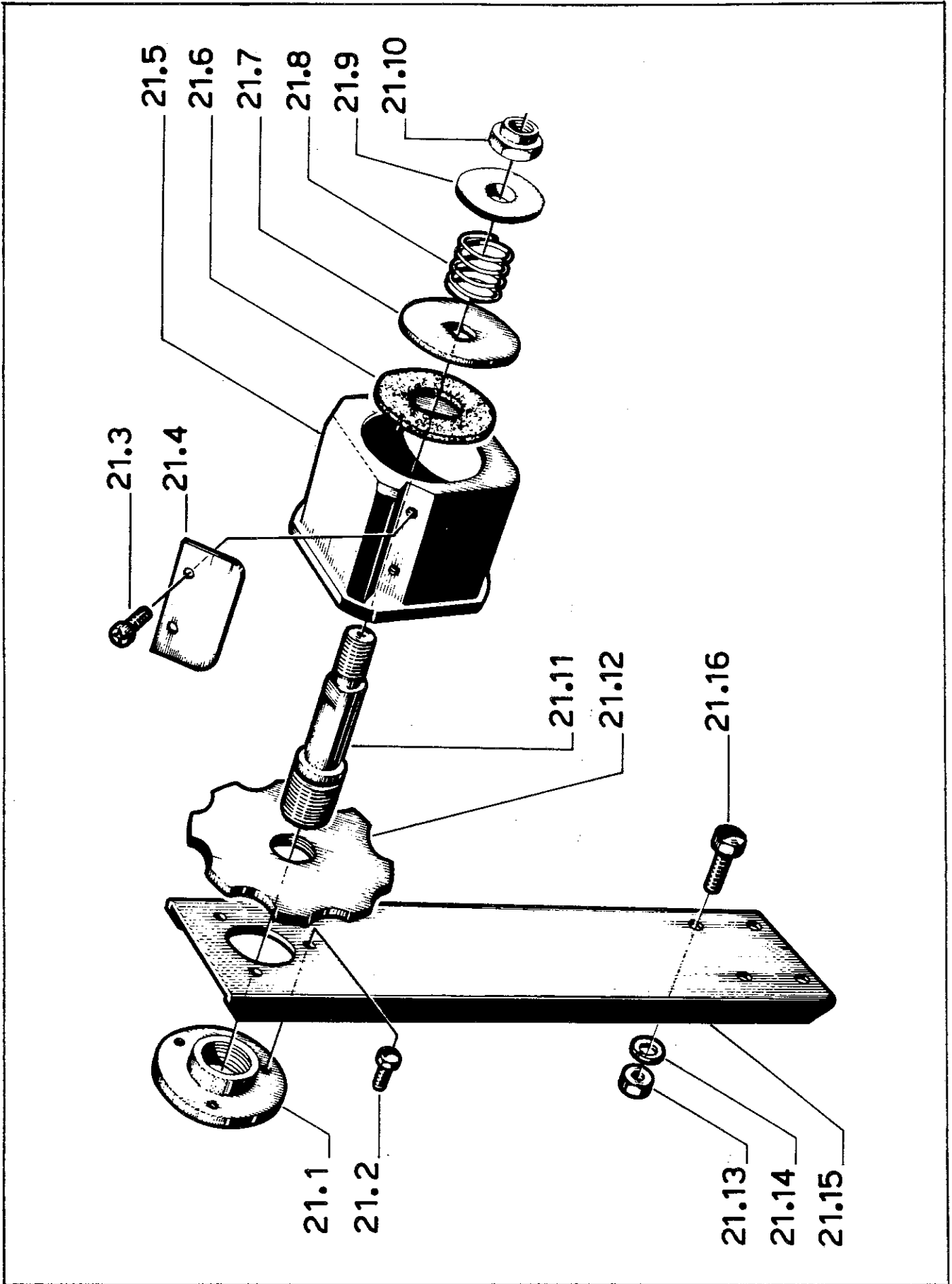


Figure 21

REF. NO.	3M PART NO.	DESCRIPTION
21-01	78-8017-9090-4	Flange - Tape Drum Shaft. Support
21-02	78-8010-7157-8	Screw - Hex Head M4x10
21-03	26-1002-5753-9	Screw - Self Tapping
21-04	78-8052-6268-6	Leaf Spring
21-05	78-8052-6269-4	Tape Drum
21-06✓	78-8052-6270-2	Washer - Friction
21-07✓	78-8052-6271-0	Washer - Tape Drum
21-08✓	78-8017-9071-4	Spring
21-09 ✓	78-8017-9094-6	Washer - Spring Holder
21-10 ✓	78-8017-9077-1	Nut - Self Locking M10
21-11✓	78-8052-6272-8	Shaft - Tape Drum
21-12	78-8017-9091-2	Plate - Locking, Tape Drum Shaft
21-13	78-8010-7417-6	Nut - Metric, Hex, Steel, M5
21-14	78-8005-5735-3	Washer - Metric, Lock Spr.St., M5
21-15	78-8046-8301-5	Bracket - Tape Drum
21-16	78-8018-7798-2	Screw - Metric, M5x14, Zinc Pl.



16AF AUTOMATIC CASE SEALER  
MODEL 18200  
FRAME ASSEMBLIES

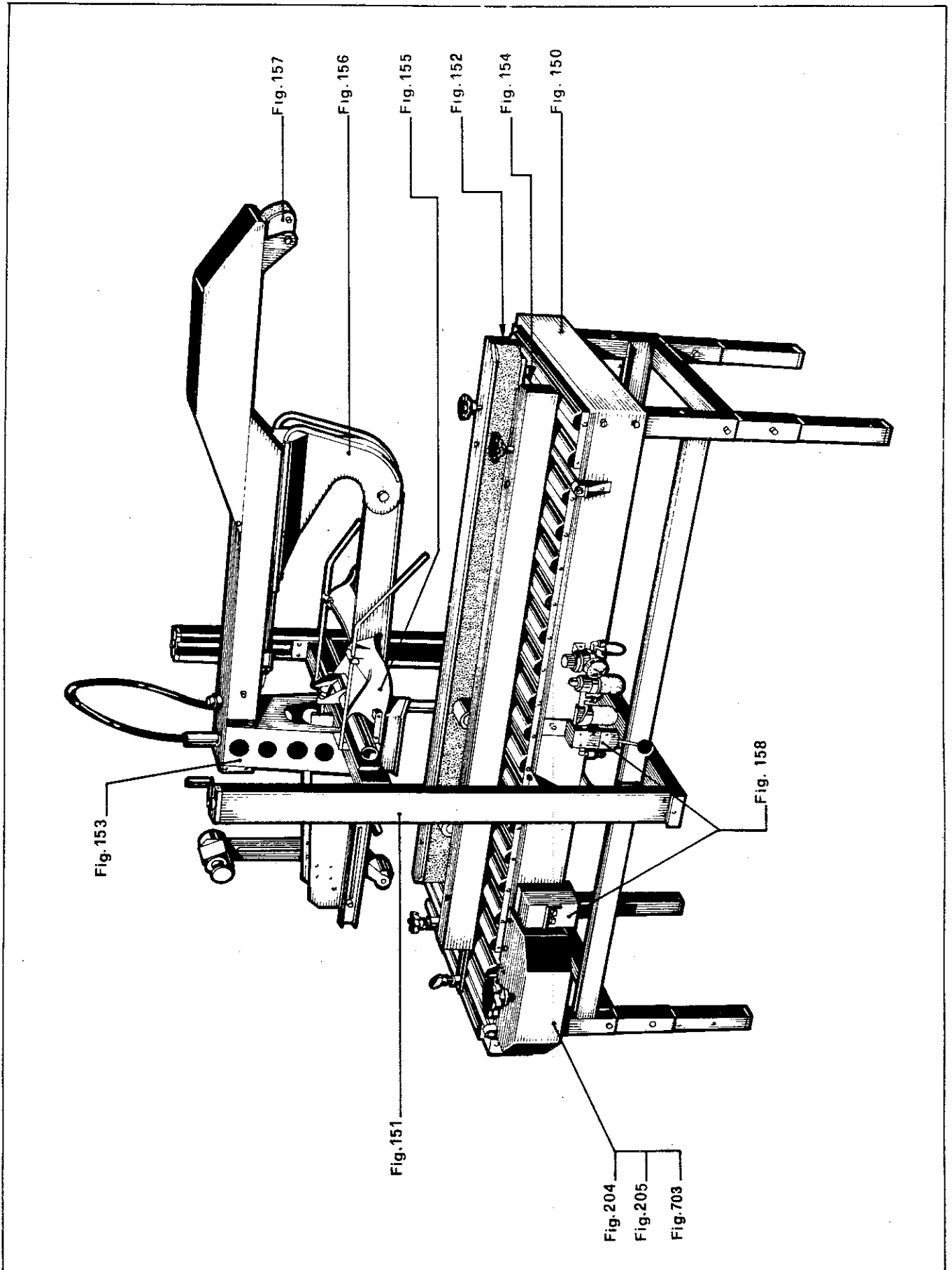
- 1) Refer to Frame Assemblies Figure to find all parts illustrations identified by figure numbers.
  
- 2) Refer to the figure or figures to determine the individual parts required and the parts reference number.
  
- 3) The replacement parts list, that follows each illustration, includes the part number and part description for the parts in that illustration.

NOTE - The complete description has been included for standard fasteners and some commercially available components. This has been done to allow obtaining these standard parts locally, should the customer elect to do so.

- 4) Refer to page 24 of "Maintenance - Parts Orders and Service Information" section of this manual for replacement parts ordering information.







**Frame Assemblies**

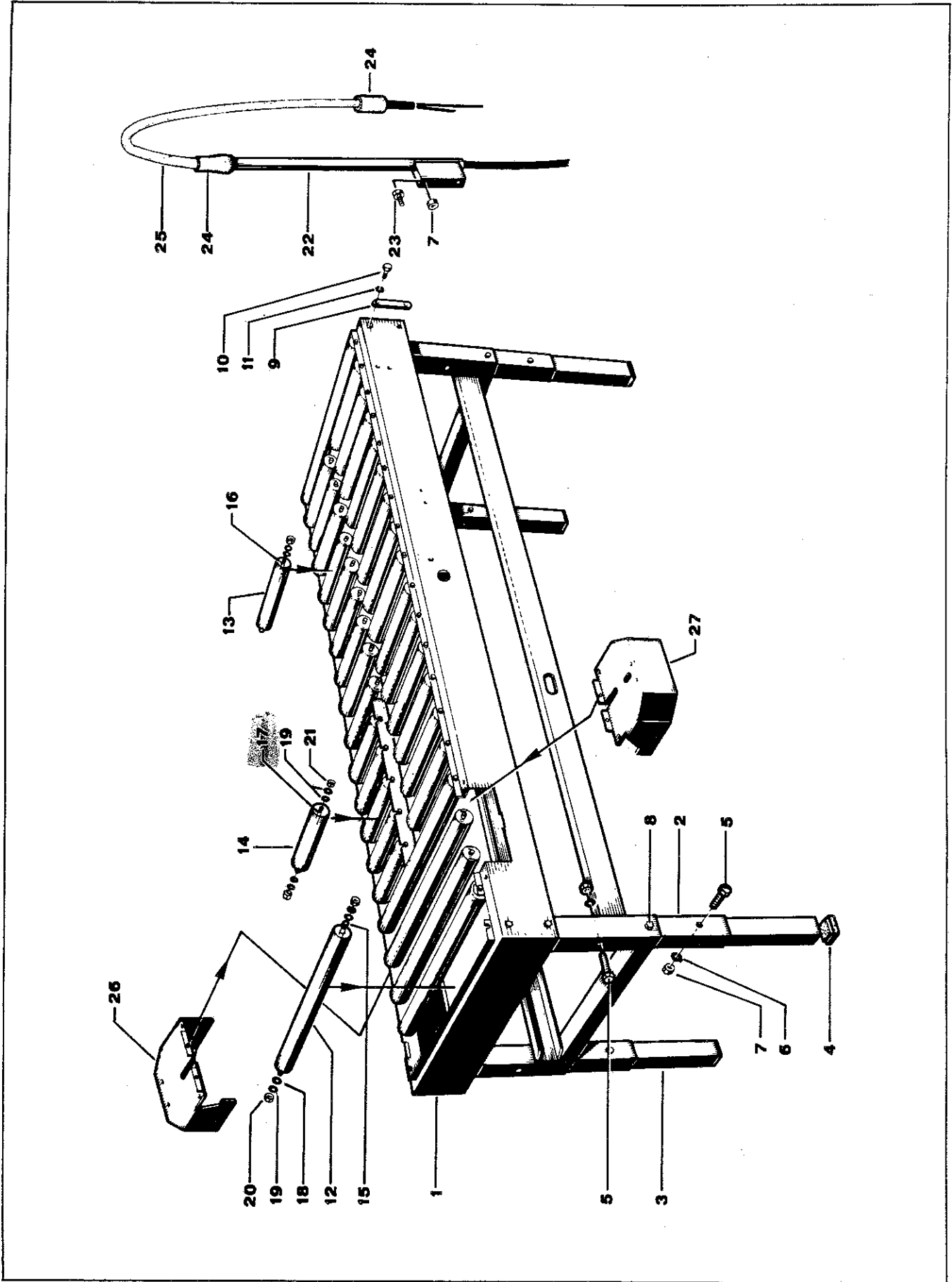


Figure 150

PLEASE READ AND PASS ON:

PEPPER  KRISTI

LISA  NANCY

PAT

DON  ROD

PER MARK SKOOG ON 7/22

STOCKROOM

PART # 78-8042-2874-6 SHAFT FOR 32X174 ROLLER

WE HAVE TO CALL EVERY CUSTOMER AND ASK WHICH MACHINE THEY HAVE. PARTS ARE NOT INTERCHANGEABLE, BUT WERE ASSIGNED THE SAME PART #. A NEW PART # WILL PROBABLY BE ASSIGNED UNLESS IT IS A PART THAT IS GOING TO BE DROPPED COMPLETELY. EVEN AFTER THE NUMBER IS ASSIGNED WE WILL HAVE TO CALL BECAUSE OF INCORRECT MANUALS IN THE FIELD.

PLEASE BRING ALL ORDERS FOR THIS PART TO THE OFFICE SO WE CAN CHECK

16 AF

Threaded both ends

8A

Hole in 1 end

DATE: 7/23/93

Hazel



Figure 150

Ref. No.	3M Part No.	Description
1	78-8042-2864-7	Weldment Assembly — Conveyor
2	78-8042-2865-4	Leg — Outer
3	78-8042-2866-2	Leg — Inner
4	78-8042-2867-0	Pad — Foot
5	78-8017-9326-2	Screw — Hex Hd, M6 × 50, Nick. Pl.
6	26-1000-0010-3	Washer — Plain Flat, 6mm, Nick. Pl.
7	78-8017-9307-2	Nut — Self-Locking, M6, Nick. Pl.
8	78-8017-9400-5	Screw — Hex Hd., Stl., M6 × 55 Nick. Pl.
9	78-8042-2868-8	Bracket
10	78-8017-9324-7	Screw — Hex Hd., M8 × 15, Nick. Pl.
11	78-8017-9318-9	Washer — Flat Plain, 8mm, Nick, Pl.
12	78-8042-2869-6	Roller — Conveyor, 32 × 498mm
13	78-8042-2870-4	Roller — Conveyor, 32 × 213mm
14	78-8042-2871-2	Roller — Conveyor, 32 × 174mm
15	78-8042-2872-0	Shaft — For 32 × 498mm Roller
16	78-8042-2873-8	Shaft — For 32 × 213mm Roller
17	78-8042-2874-6	Shaft — For 32 × 174mm Roller
18	78-8017-9321-3	Washer — Special
19	78-8005-5741-1	Washer — Plain, Metric 5mm, Nick. Pl.
20	78-8017-9311-4	Nut — Self Locking, M5, Nick Pl.
21	78-8010-7417-6	Nut — Metric, Hex, Stl., M5, Nick. Pl.
22	78-8018-7861-8	Holder Weldment Assembly — Sleeving
23	78-8010-7169-3	Screw — Hex Hd., M6 × 12, Nick. Pl.
24	78-8042-2880-3	Rubber — Flange
25	78-8042-2881-1	Sleeving
26	78-8042-2882-9	Cover — Right
27	78-8042-2883-7	Cover — Left

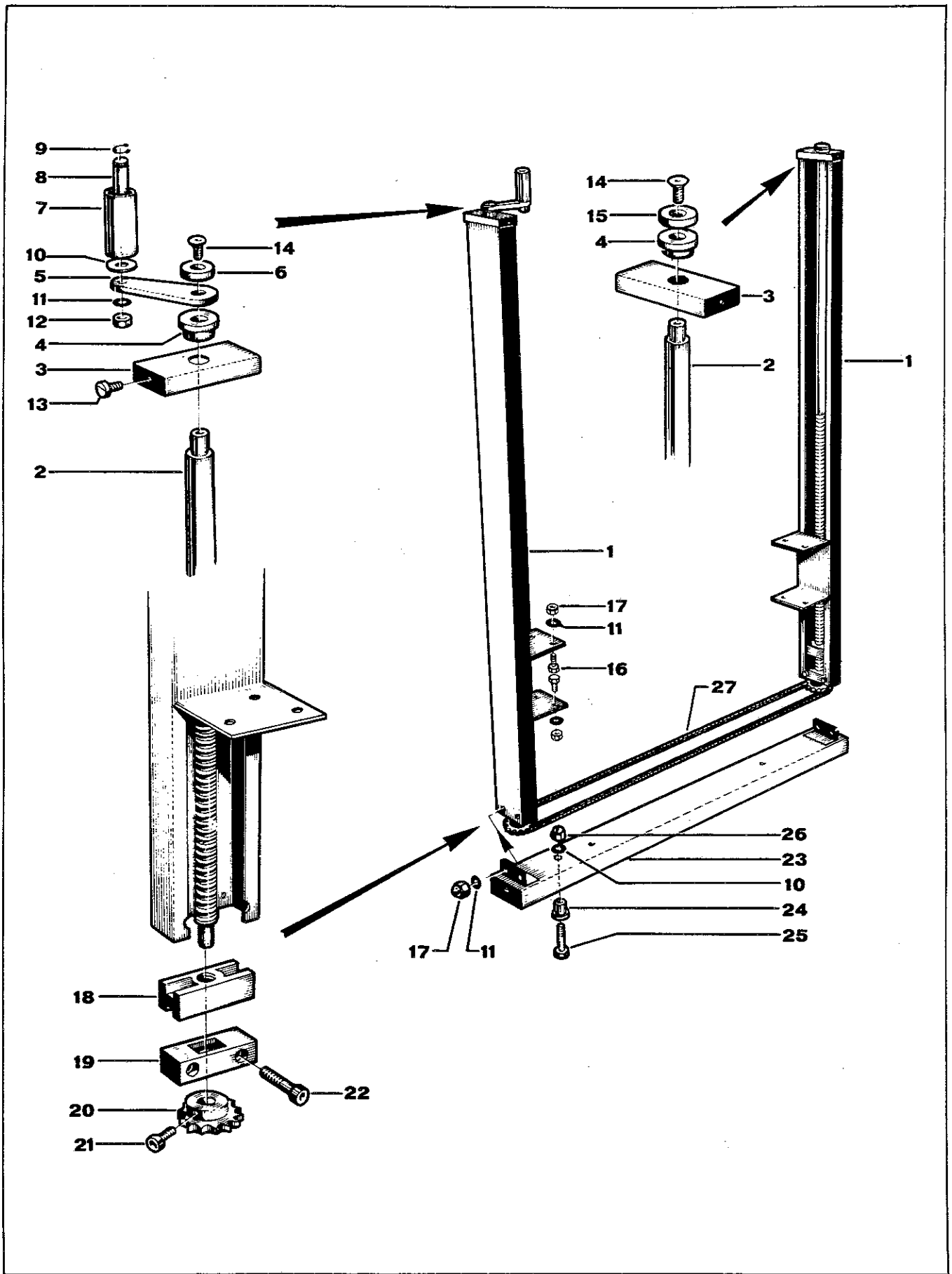


Figure 151

Figure 151

Ref. No.	3M Part No.	Description
1	78-8042-2875-3	Column
2	78-8042-2876-1	Screw — Height Adjustment
3	78-8042-2877-9	Cover — Column Top
4	78-8042-2878-7	Bushing — Nylon
5	78-8042-2879-5	Crank
6	78-8042-2884-5	Washer — Special
7	78-8017-9359-3	Handle
8	78-8042-2885-2	Stud — Special
9	78-8017-9360-1	Ring — Snap, For 8mm Shaft
10	78-8017-9318-9	Washer — Plain, Metric, 8mm, Nick. Pl.
11	26-1000-0010-3	Washer — Plain, Metric, 6mm, Nick. Pl.
12	78-8010-7418-4	Nut — Metric Hex Stl. M6, Nick. Pl.
13	78-8042-2886-0	Screw — Self Tapping — 3.7 × 7mm
14	78-8042-2887-8	Screw — Flat Head, M6 × 16mm
15	78-8018-7893-1	Washer — Special
16	78-8017-9065-6	Screw — Allen, FH, M6 × 16mm
17	78-8017-9307-2	Nut — Self-Locking, M6, Nick. Pl.
18	78-8018-7728-9	Nut — Height Adjustment
19	78-8017-9399-9	Block — Support
20	78-8017-9355-1	Sprocket
21	78-8010-7201-4	Screw — Soc. Hd., M4 × 25, Nick. Pl.
22	78-8042-2888-6	Screw — Soc. Hd., M6 × 35, Nick. Pl.
23	78-8042-2889-4	Cover — Chain Box
24	78-8017-9275-1	Bushing, Flanged, Nylon
25	78-8023-2372-1	Screw — Hex Hd, M8 × 40, Nick. Pl.
26	78-8017-9313-0	Nut — Self-Locking, M8, Nick. Pl.
27	78-8042-2890-2	Chain — 3/8 Pitch, 158 Pitch Long Metric

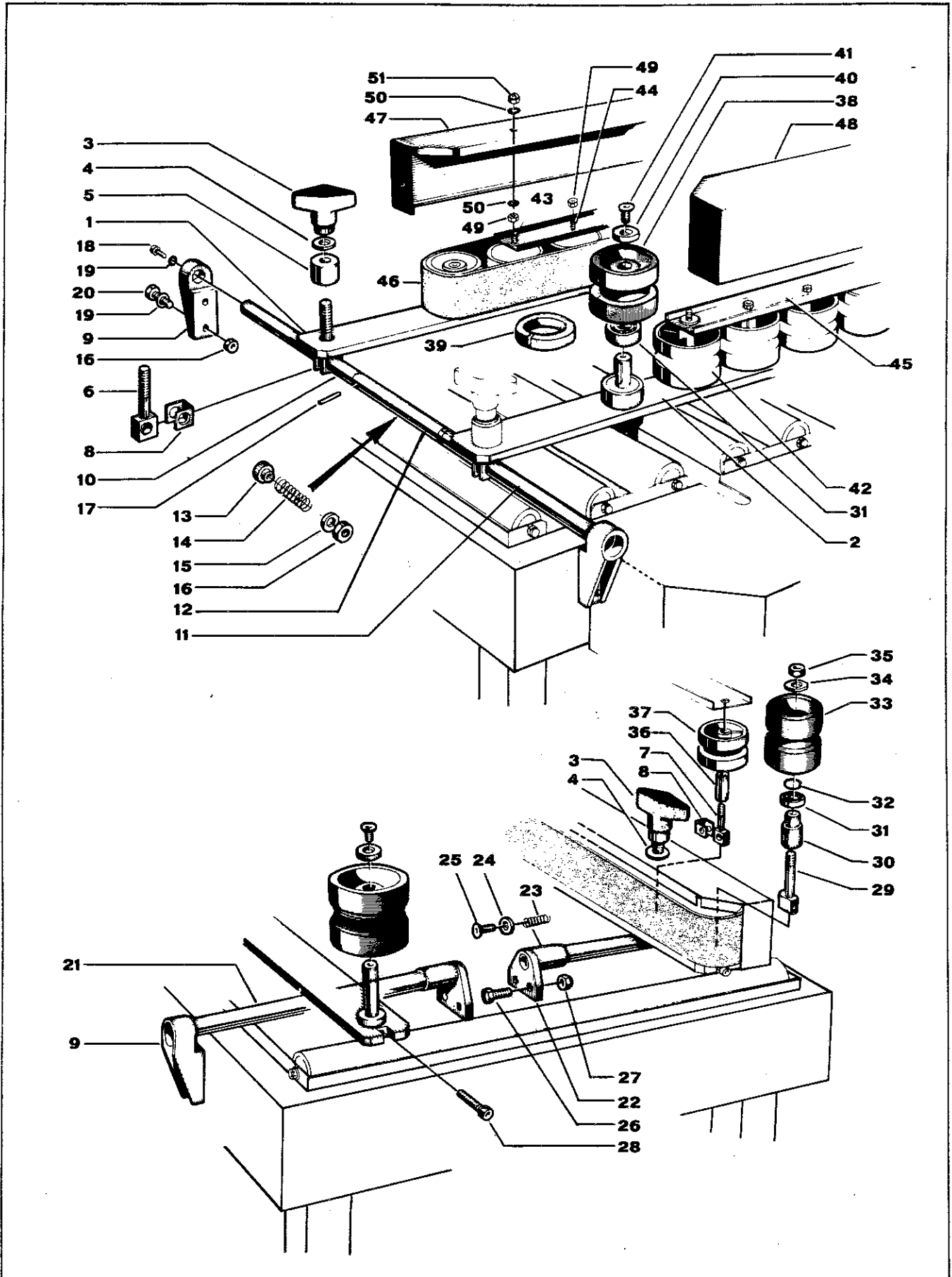


Figure 152



Figure 152

Ref. No.	3M Part No.	Description
1	78-8042-2891-0	Bar — Roller Mount Right
2	78-8042-2892-8	Bar — Roller Mount Left
3	78-8042-2893-6	Knob
4	78-8017-9319-7	Washer — Flat, 10mm, Nick. Pl.
5	78-8042-2894-4	Bushing
6	78-8042-2895-1	Stud — Special 80mm
7	78-8042-2896-9	Stud — Special 106mm
8	78-8042-2897-7	Clamp
9	78-8042-2898-5	Support
10	78-8042-2899-3	Bar — Support, Right
11	78-8042-2900-9	Bar — Support, Left
12	78-8042-2901-7	Bar — Support, Center
13	78-8042-2902-5	Bushing
14	78-8023-2247-5	Spring — Tensioning
15	78-8023-2903-3	Washer — Brass
16	78-8017-9307-2	Nut — Self Locking, M6, Nick. Pl.
17	78-8042-2904-1	Pin — Spring
18	78-8017-9325-4	Screw — Hex Hd., M6 × 15, Nick. Pl.
19	78-8042-2905-8	Washer — M6
20	78-8017-9331-2	Screw — Hex Hd., M6 × 20, Nick. Pl.
21	78-8042-2906-6	Bar — Support
22	78-8042-2907-4	Bar — Holder
23	78-8023-2250-9	Spring — Holding
24	78-8042-2908-2	Bushing
25	78-8042-2909-0	Screw — Flat Head, M6 × 25
26	78-8042-2910-8	Screw — Hex Hd., M5 × 16
27	78-8017-9311-4	Nut — Self Locking, M5, Nick. Pl.
28	78-8018-7918-6	Screw — Soc. Hd., M5 × 50
29	78-8042-2911-6	Stud — Special
30	78-8042-2912-4	Spacer
31	26-1000-4350-9	Bearing — 6002-2RS
32	78-8017-9419-5	Ring — Snap For 32mm Hole
33	78-8042-2913-2	Pulley
34	78-8042-2914-0	Washer — Special
35	78-8017-9077-1	Nut — Self Locking, M10, Nick. Pl.
36	78-8042-2915-7	Sleeve
37	78-8042-2916-5	Roller — Plastic
38	78-8042-2921-5	Pulley — Drive
39	78-8023-2249-1	Ring — Belt Guiding, Teflon
40	78-8042-2922-3	Washer — Special
41	78-8042-2923-1	Screw — F.H. M6 × 16
42	78-8042-2924-9	Roller — Plastic
43	78-8042-2925-6	Roller — Shaft, Long
44	78-8042-2926-4	Roller — Shaft, Short
45	78-8042-2927-2	Support — Roller
46	78-8042-2933-0	Drive — Belt
47	78-8042-2934-8	Belt — Guard, Right
48	78-8042-2935-5	Belt — Guard, Left
49	78-8042-2920-7	Nut — Metric, Hex, Stl, M6
50	78-8042-2905-8	Washer — Flat, M6
51	78-8017-9310-6	Nut — Cap, M6, Nick. Pl.

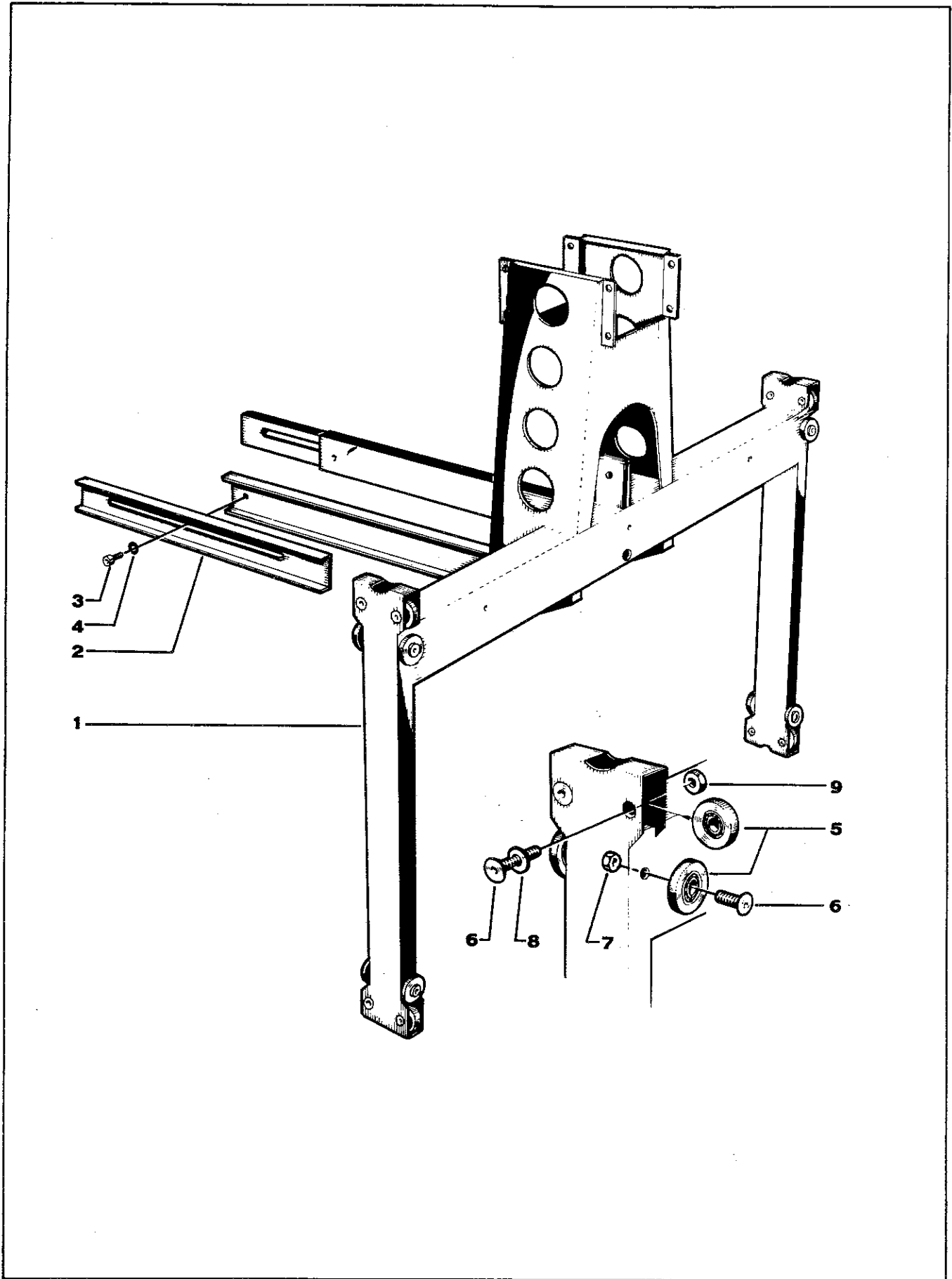


Figure 153

**Figure 153**

<b>Ref. No.</b>	<b>3M Part No.</b>	<b>Description</b>
1	78-8042-2917-3	Support — Frame
2	78-8042-2918-1	Rail — Extension
3	78-8032-0383-1	Screw — Soc. Hd., M6 × 16, Nick. Pl.
4	78-8042-2919-9	Washer — M6, Nick. Pl.
5	78-8017-9298-3	Bearing — 25 × 6mm
6	78-8017-9306-4	Screw — Allen FH, M6 × 20
7	78-8017-9307-2	Nut — Self-Locking, M6, Nick. Pl.
8	26-1000-0010-3	Washer — Plain Flat, 6mm, Nick. Pl.
9	78-8042-2920-7	Nut — Metric, Hex, Stl., M6

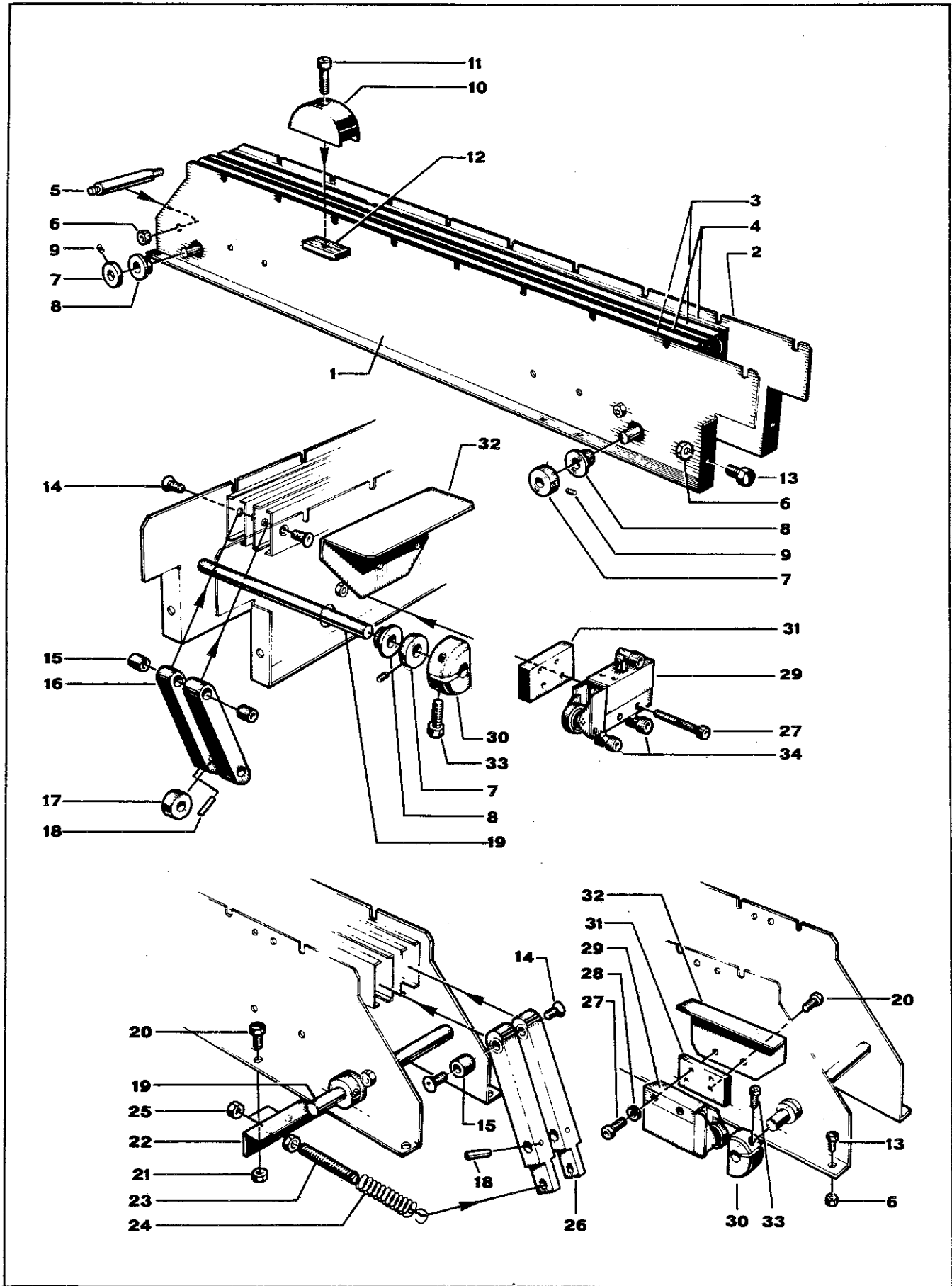


Figure 154

Figure 154

Ref. No.	3M Part No.	Description
1	78-8042-2936-3	Side Plate — Right
2	78-8042-2937-1	Side Plate — Left
3	78-8042-2938-9	Support — Right
4	78-8042-2939-7	Support — Left
5	78-8023-2327-5	Shaft — Threaded
6	78-8017-9307-2	Nut — Self Locking, M6, Nick. Pl.
7	78-8023-2340-8	Ring
8	78-8042-2940-5	Bushing
9	78-8042-2941-3	Set Screw — M6 × 8
10	78-8023-2335-8	Cam — Plastic
11	78-8023-2334-1	Screw — Soc. Hd., Hex Soc., M6 × 30, Nick. Pl.
12	78-8023-2337-4	Nut — Cam
13	78-8042-2942-1	Screw — Soc. Hd., M6 × 16
14	78-8023-2336-6	Screw — Allen M5 × 10
15	78-8042-2943-9	Spacer
16	78-8023-2338-2	Lever
17	78-8042-2944-7	Spacer
18	78-8042-2945-4	Pin — Spring 3.3 × 16
19	78-8023-2342-4	Shaft — Spring Return Lever
20	78-8023-2357-2	Screw — Hex Hd., M5 × 12, Nick. Pl.
21	78-8017-9311-4	Nut — Self Locking, M5, Nick. Pl.
22	78-8023-2347-3	Plate — Spring Tensioning
23	78-8023-2345-7	Screw — Tensioning
24	78-8023-2344-0	Spring
25	78-8017-9312-2	Nut — Hex, M8, Nick. Pl.
26	78-8023-2341-6	Lever — Spring Return
27	78-8023-2348-1	Screw — Soc. Hd., Hex Soc., M4 × 30, Nick. Pl.
28	78-8018-7912-9	Washer — Plain, Metric, 4mm, Nick. Pl.
29	78-8017-9270-2	Valve — Pneumatic, 4-way, C-48
30	78-8023-2346-5	Cam — Valve Actuator, Steel
31	78-8023-2325-9	Support — Pneumatic Valve
32	78-8023-2326-7	Guard — Pneumatic Valve
33	78-8010-7210-5	Screw — Soc. Hd., Hex Soc., M6 × 20
34	78-8017-9269-4	Elbow — 90°, 1/8" for 6mm Tubing

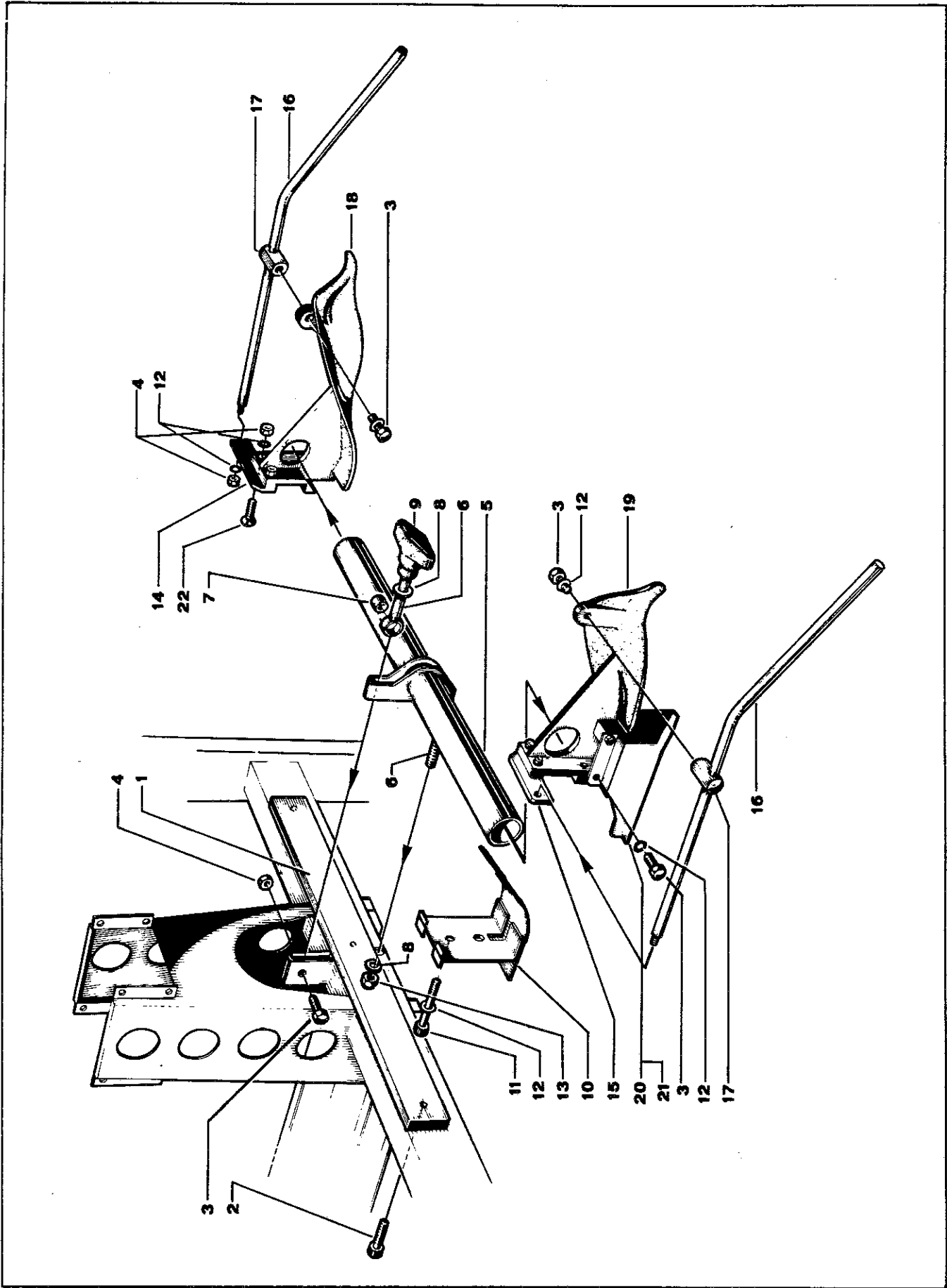


Figure 155

Figure 155

Ref. No.	3M Part No.	Description
1	78-8042-2946-2	Bracket — Side Guide
2	78-8018-7872-5	Screw — Soc. Hd., Hex Hd, M6 × 12, Nick. Pl.
3	26-1002-5833-9	Screw — Hex Hd., M6 × 25
4	78-8017-9307-2	Nut — Self Locking, M6, Nick. Pl.
5	78-8042-2947-0	Bracket — Flap Folder
6	78-8042-2948-8	Stud — Special
7	78-8042-2949-6	Bushing
8	78-8017-9319-7	Washer — Flat, 10mm, Nick. Pl.
9	78-8042-2950-4	Knob
10	78-8042-2951-2	Guide — Flap
11	78-8042-2952-0	Screw — Soc. Hd., M6 × 55
12	26-1000-0010-3	Washer — Metric Plain 6mm, Stl., Nick. Pl.
13	78-8017-9077-1	Nut — Self Locking, M10, Nick. Pl.
14	78-8042-2953-8	Bracket — Side Flap, Right
15	78-8042-2954-6	Bracket — Side Flap, Left
16	78-8042-2955-3	Flap Guide
17	78-8042-2956-1	Holder — Special
18	78-8042-2957-9	Folder — Side Flap, Right
19	78-8042-2958-7	Folder — Side Flap, Left
20	78-8042-2959-5	Guide — Right
21	78-8042-2960-3	Guide — Left
22	78-8042-2961-1	Screw — Flat Hd., M6 × 25

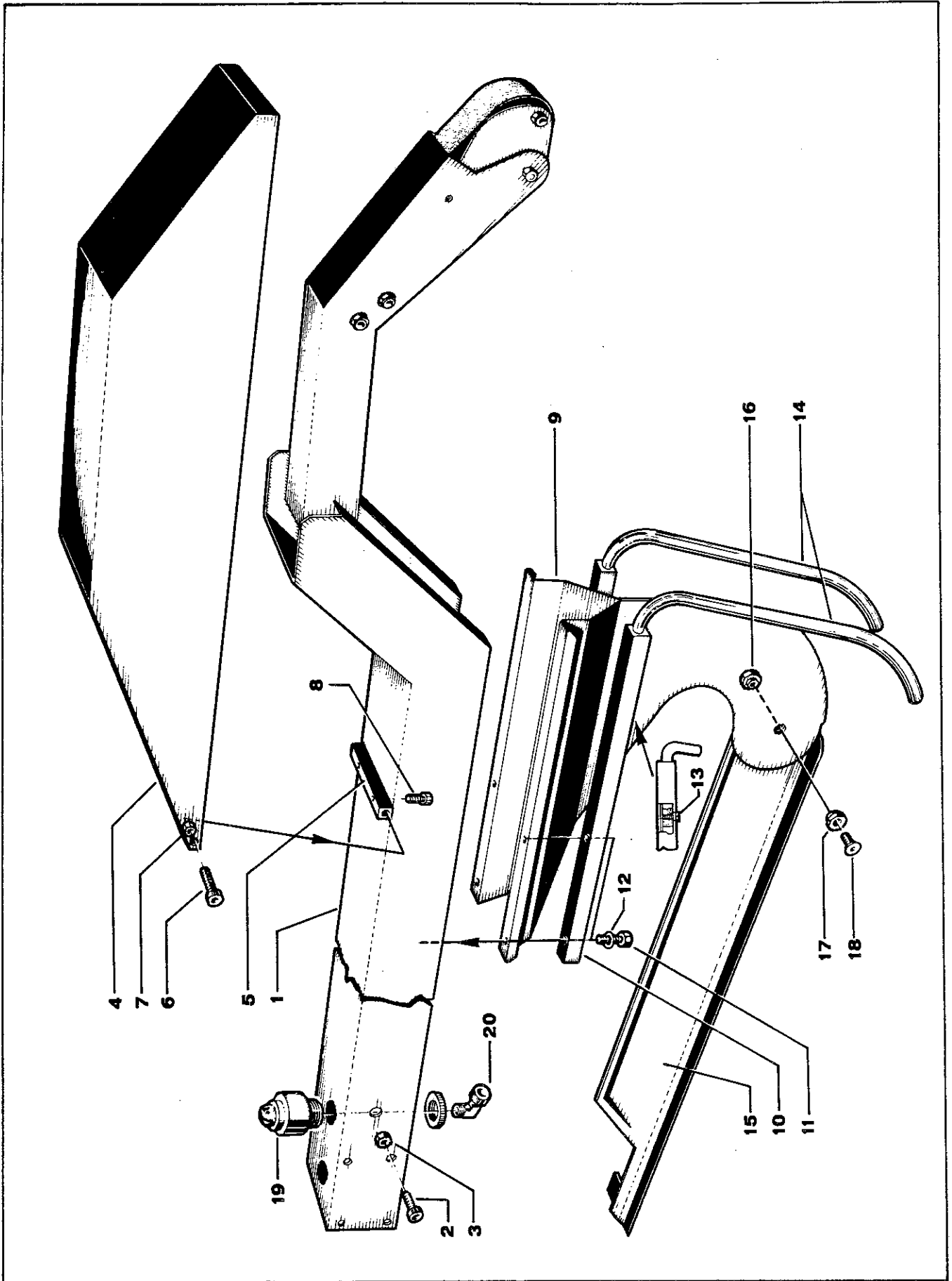


Figure 156



**Figure 156**

<b>Ref. No.</b>	<b>3M Part No.</b>	<b>Description</b>
1	78-8042-2962-9	Cylinder — Housing
2	78-8042-2963-7	Screw — Soc. Hd., M6 × 16
3	78-8017-9307-2	Nut — Self Locking, M6, Nick. Pl.
4	78-8042-2964-5	Guard
5	78-8042-2965-2	Block — Mounting
6	78-8010-7210-5	Screw — Soc. Hd., Hex Soc., M6 × 20
7	78-8010-7418-4	Nut — Metric, Hex, Stl., M6, Nick. Pl.
8	78-8010-7169-3	Screw — Hex Hd., M6 × 12, Nick. Pl.
9	78-8042-2966-0	Separator — Bracket
10	78-8042-2967-8	Tube
11	78-8042-2968-6	Screw — Soc. Hd., M6 × 25
12	26-1000-0010-3	Washer — Plain, Flat, 6mm, Nick. Pl.
13	78-8042-2969-4	Screw — Soc. Hd., M4 × 10
14	78-8013-9927-6	Folder — Inner Flap
15	78-8013-9928-4	Flap — Separator
16	78-8013-9929-2	Bushing — Special
17	78-8013-9930-0	Bushing — Special
18	78-8010-7163-6	Screw — Hex Hd., M5 × 10, Nick. Pl.
19	78-8018-7870-9	Lamp — Air Connecting Control
20	78-8017-9269-4	Elbow — 90°, 1/8", For 6mm Tubing

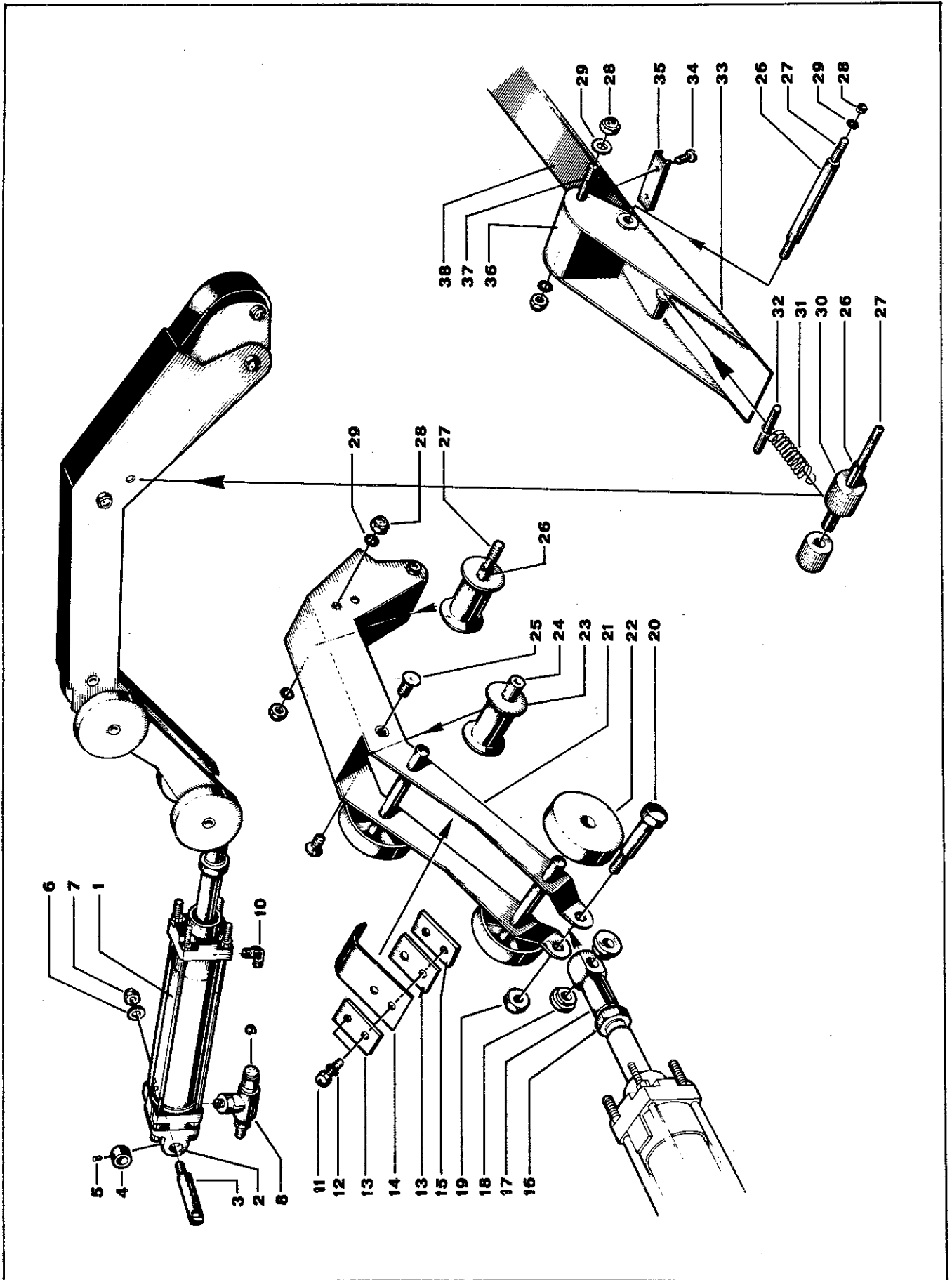


Figure 157

Figure 157

Ref. No.	3M Part No.	Description
1	78-8023-2391-1	Cylinder — Air 40 × 125mm Stroke
2	78-8013-9931-8	Cylinder — Mount
3	78-8013-9932-6	Stud — Special
4	78-8013-9933-4	Spacer
5	78-8013-9934-2	Set Screw — M6 × 12
6	78-8017-9318-9	Washer — Flat Plain, 8mm, Nick. Pl.
7	78-8017-9313-0	Nut — Self Locking, 8mm, Nick. Pl.
8	78-8013-9935-9	Valve — Quick Exhaust
9	78-8013-9936-7	Silencer
10	78-8017-9269-4	Elbow — 90°, 1/8 for 6mm Tubing
11	78-8023-2356-4	Screw — Hex Hd., M6 × 18, Nick. Pl.
12	78-8013-9937-5	Washer — Locking, M6
13	78-8013-9938-3	Washer — Square
14	78-8013-9939-1	Strap — Support
15	78-8013-9940-9	Retainer — Special
16	78-8023-2394-5	Nut — Hex, M16
17	78-8023-2395-2	Rod End
18	78-8013-9941-7	Bushing
19	78-8017-9077-1	Nut — Self Locking, M10, Nick. Pl.
20	78-8013-9942-5	Screw — Special
21	78-8013-9943-3	Housing
22	78-8013-9944-1	Roller
23	78-8013-9945-8	Roller — Flanged
24	78-8013-9946-6	Shaft — Roller
25	78-8013-9947-4	Screw — Flat Hd., M6 × 16
26	78-8013-9948-2	Shaft — Roller
27	78-8013-9949-0	Screw — Insert
28	78-8017-9307-2	Nut — Self Locking, M6, Nick. Pl.
29	26-1000-0010-3	Washer — Plain Flat, 6mm, Nick. Pl.
30	78-8013-9950-8	Stop
31	78-8013-9951-6	Spring — Return
32	78-8013-9952-4	Pin — Spring Holder
33	78-8013-9953-2	Folder — Flap
34	78-8010-7203-0	Screw — M5 × 10
35	78-8013-9954-0	Strap — Plate
36	78-8013-9955-7	Spacer
37	78-8013-9956-5	Shaft
38	78-8013-9957-3	Strap

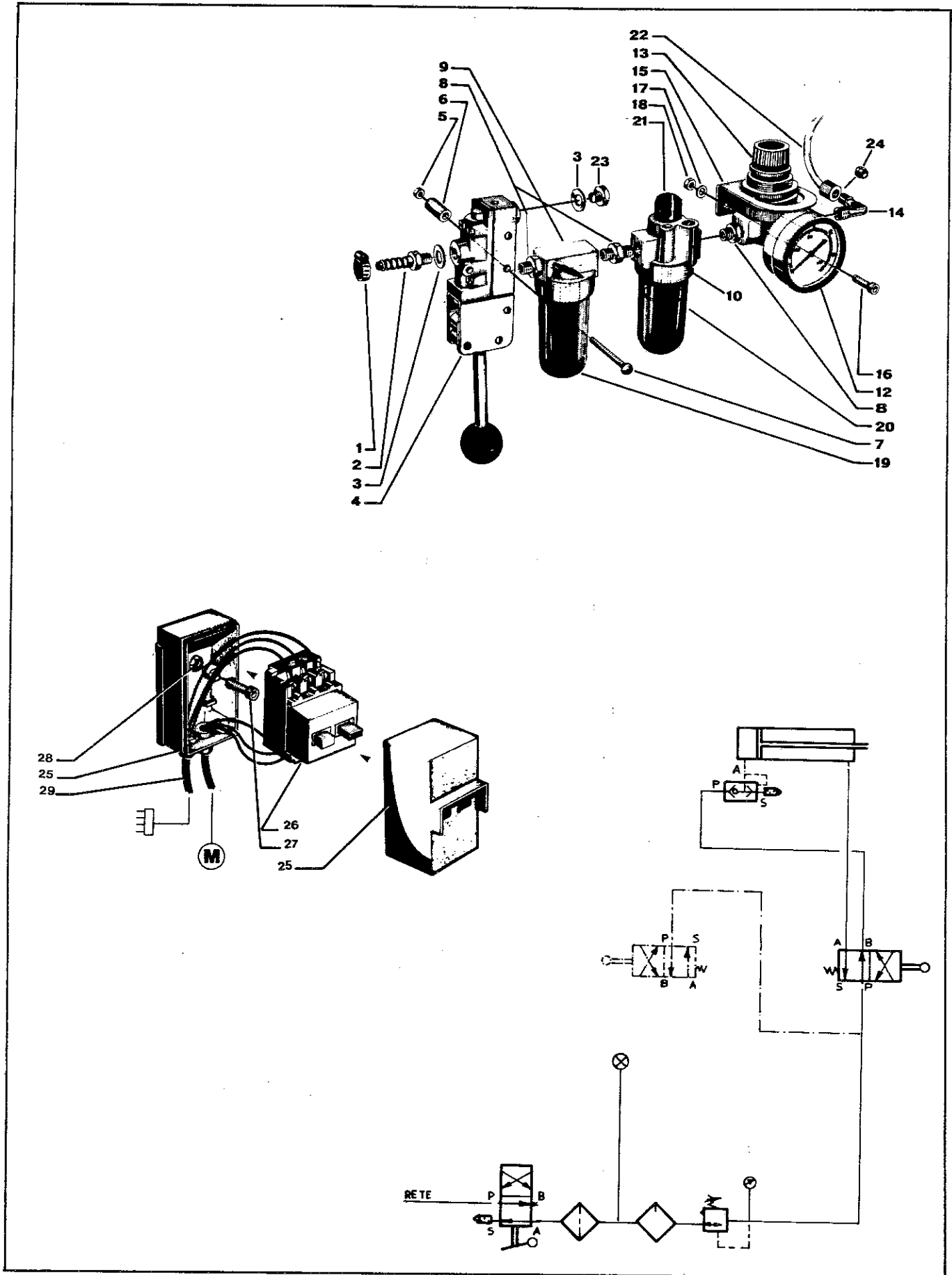


Figure 158

Figure 158

Ref. No.	3M Part No.	Description
1	78-8017-9295-9	Clamp — Tubing
2	78-8017-9296-7	Union — Air Supply Hose
3	78-8013-9958-1	Washer — Special
4	78-8017-9289-2	Valve — Pneumatic, On-Off
5	78-8017-9309-8	Nut — Self Locking, M4, Nick. Pl.
6	78-8013-9959-9	Spacer
7	78-8013-9960-7	Screw — M4 × 50
8	78-8017-9291-8	Nipple — Straight, 1/8 × 1/8
9	78-8013-9961-5	Filter — Air Complete
10	78-8013-9962-3	Lubricator — Air Complete
12	78-8013-9963-1	Gage — Air
13	78-8017-9294-2	Regulator — Air Pressure 0-10 ATM
14	78-8017-9269-4	Elbow — 90°, 1/8", For 6mm Tubing
15	78-8013-9964-9	Bracket — Regulator
16	78-8013-9965-6	Screw — Soc. Hd., M5 × 16
17	78-8013-9966-4	Washer — Plain, 5.5mm
18	78-8017-9311-4	Nut — Self Locking, M5, Nick. Pl.
19	78-8017-9290-0	Filter — Air
20	78-8017-9292-6	Lubricator — Air
21	78-8013-9967-2	Lubricator — Top
22	78-8013-9968-0	Tube — Air
23	78-8013-9969-8	Nipple — 1/8" B.S.
24	78-8013-9970-6	Seal
25	78-8017-9422-9	Switch Box — Plastic, Siemens
26	78-8023-2215-2	Switch — On-Off, 2J 2, 5 — 4A
27	78-8013-9971-4	Screw — Soc. Hd., M5 × 25
28	78-8010-7417-6	Nut — Hex, M5, Nick. Pl.
29	78-8018-7917-8	Power Cord — U.S.

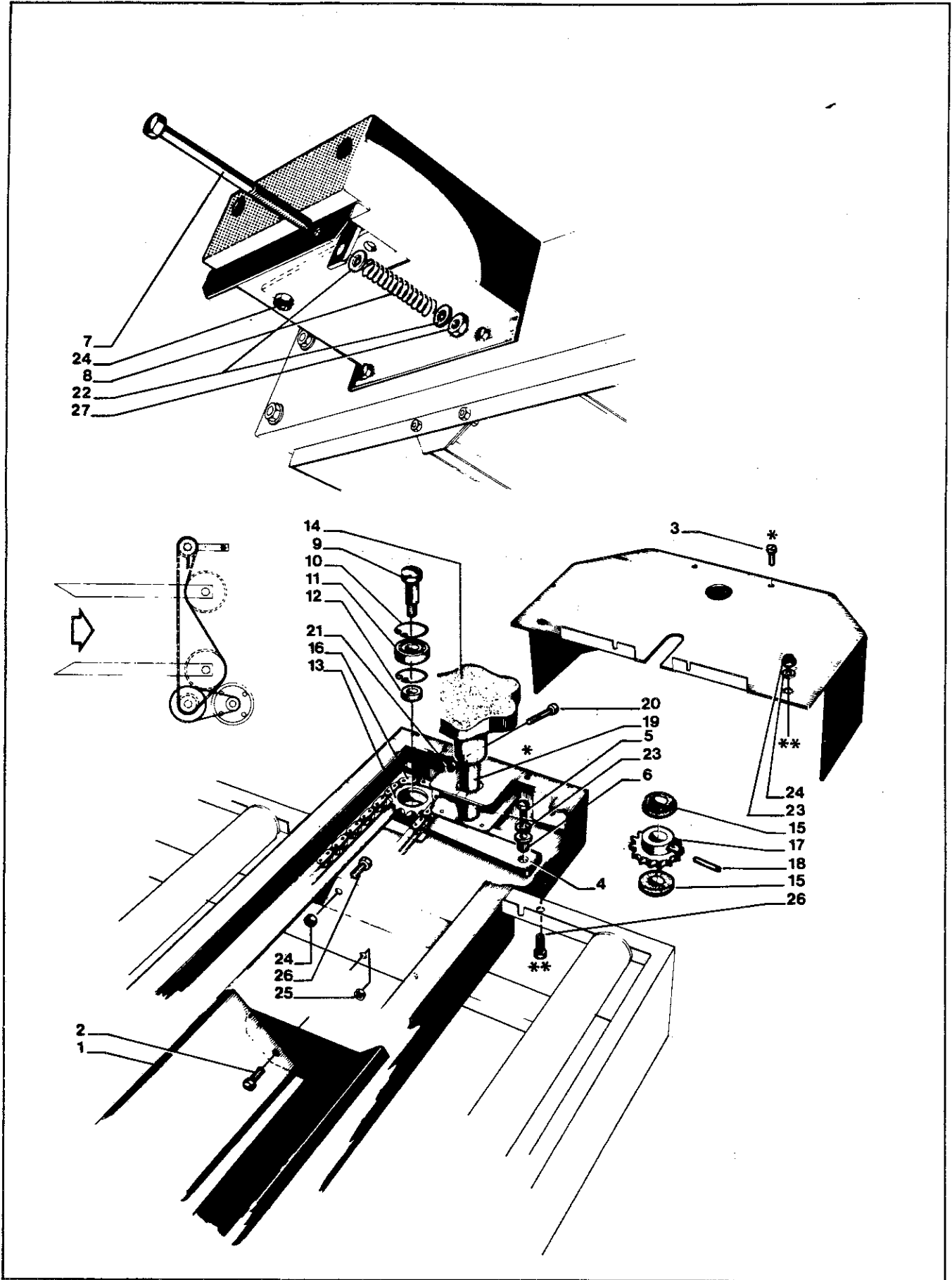


Figure 204

Figure 204

Ref. No.	3M Part No.	Description
1	78-8013-9972-2	Cover — Drive System
2	78-8010-7163-6	Screw — Hex Hd., M5 × 10, Nick. Pl.
3	78-8013-9973-0	Screw — Self Tapping 3.7 × 10
4	78-8013-9974-8	Bracket
5	78-8013-9975-5	Screw — Hex Hd., M6 × 25, Nick. Pl.
6	78-8013-9976-3	Bushing
7	78-8013-9977-1	Screw — Hex Hd., M8 × 120
8	78-8013-9978-9	Spring
9	78-8013-9979-7	Shaft — Bearing
10	78-8013-9980-5	Retainer — Bearing
11	78-8023-2410-9	Bearing — 6000-2RS
12	78-8013-9981-3	Spacer
13	78-8013-9982-1	Sprocket — Chain
14	78-8013-9983-9	Knob
15	78-8013-9984-7	Bushing — Nylon
16	78-8013-9985-4	Chain — Drive
17	78-8013-9986-2	Sprocket — Chain
18	78-8023-2222-8	Pin — Roll, 4 × 28mm Long
19	78-8013-9987-0	Shaft — Knob
20	78-8013-9988-8	Screw — Soc. Hd., M4 × 30
21	78-8013-9989-6	Nut — Hex, M4, Nick. Pl.
22	78-8013-9990-4	Washer — Flat, 8.5mm
23	78-8013-9991-2	Washer — Flat, 6.5mm
24	78-8017-9307-2	Nut — Self Locking, M6, Nick. Pl.
25	78-8017-9311-4	Nut — Self Locking, M5, Nick. Pl.
26	78-8013-9992-0	Screw — Hex Hd., M6 × 12
27	78-8017-9312-2	Nut — Hex, M8, Nick. Pl.

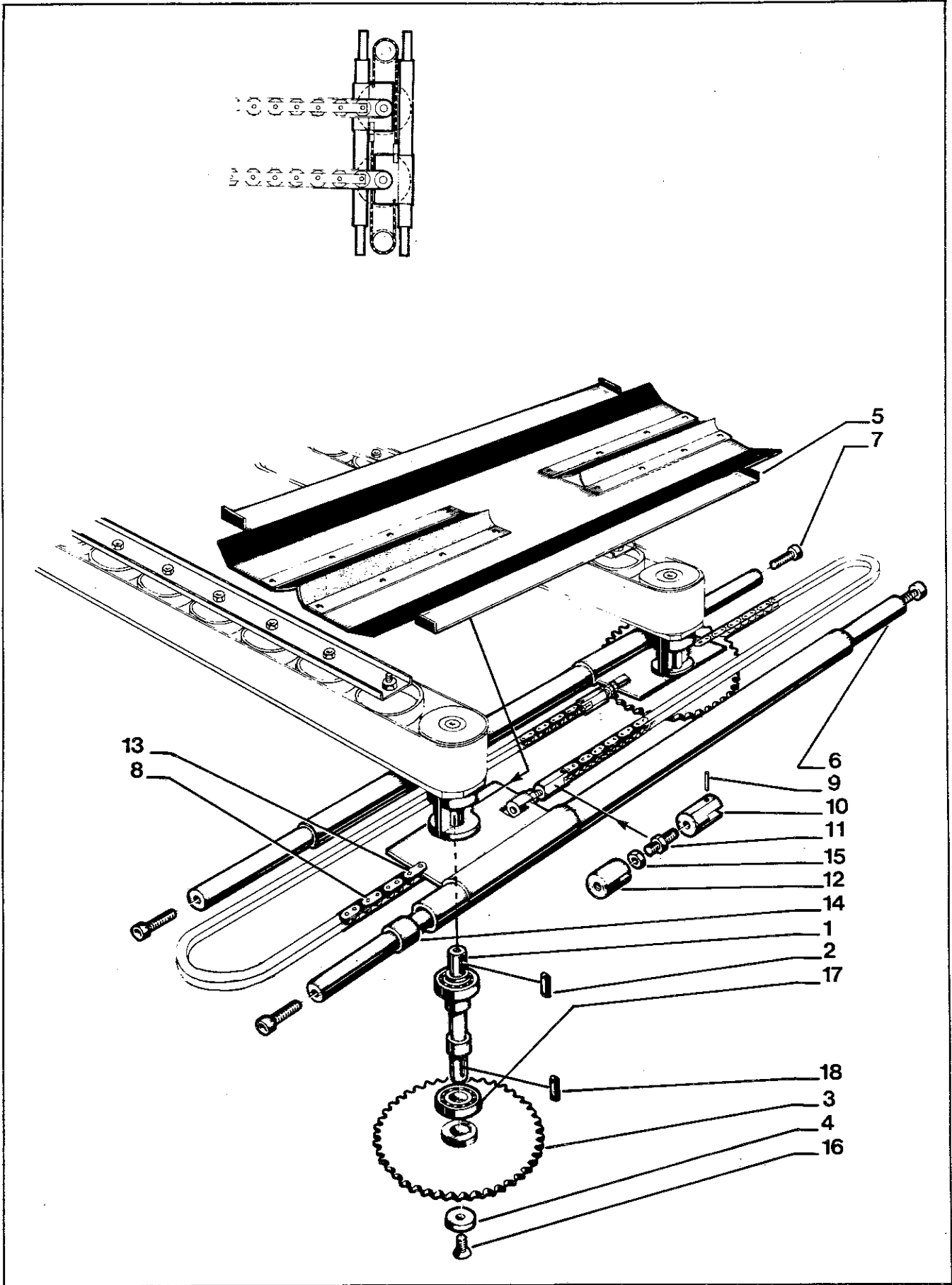


Figure 205



**Figure 205**

<b>Ref. No.</b>	<b>3M Part No.</b>	<b>Description</b>
1	78-8013-9993-8	Shaft — Bearing
2	78-8013-9994-6	Key — 5 × 5 × 20mm
3	78-8013-9995-3	Sprocket — Drive
4	78-8013-9996-1	Washer — Special
5	78-8013-9997-9	Guard — Chain
6	78-8013-9998-7	Shaft — 17 × 800mm
7	78-8013-9999-5	Screw — Soc. Hd., M8 × 15
8	78-8023-2223-6	Chain — 3/8 Pitch 67 Pitch Long
9	78-8023-2407-5	Pin — Roll 3 × 14mm Lg.
10	78-8017-9241-3	Holder — Chain
11	78-8046-8131-6	Shaft — Threaded
12	78-8046-8132-4	Nut — Special
13	78-8018-7904-6	Connecting Link — 3/8 Pitch Chain
14	78-8046-8133-2	Bushing
15	78-8017-9312-2	Nut — Hex, M8, Nick. Pl.
16	78-8046-8134-0	Screw — Flat Hd., M6 × 16
17	26-1000-4350-9	Bearing — 6002-2RS
18	78-8046-8135-7	Key — 5 × 5 × 12mm

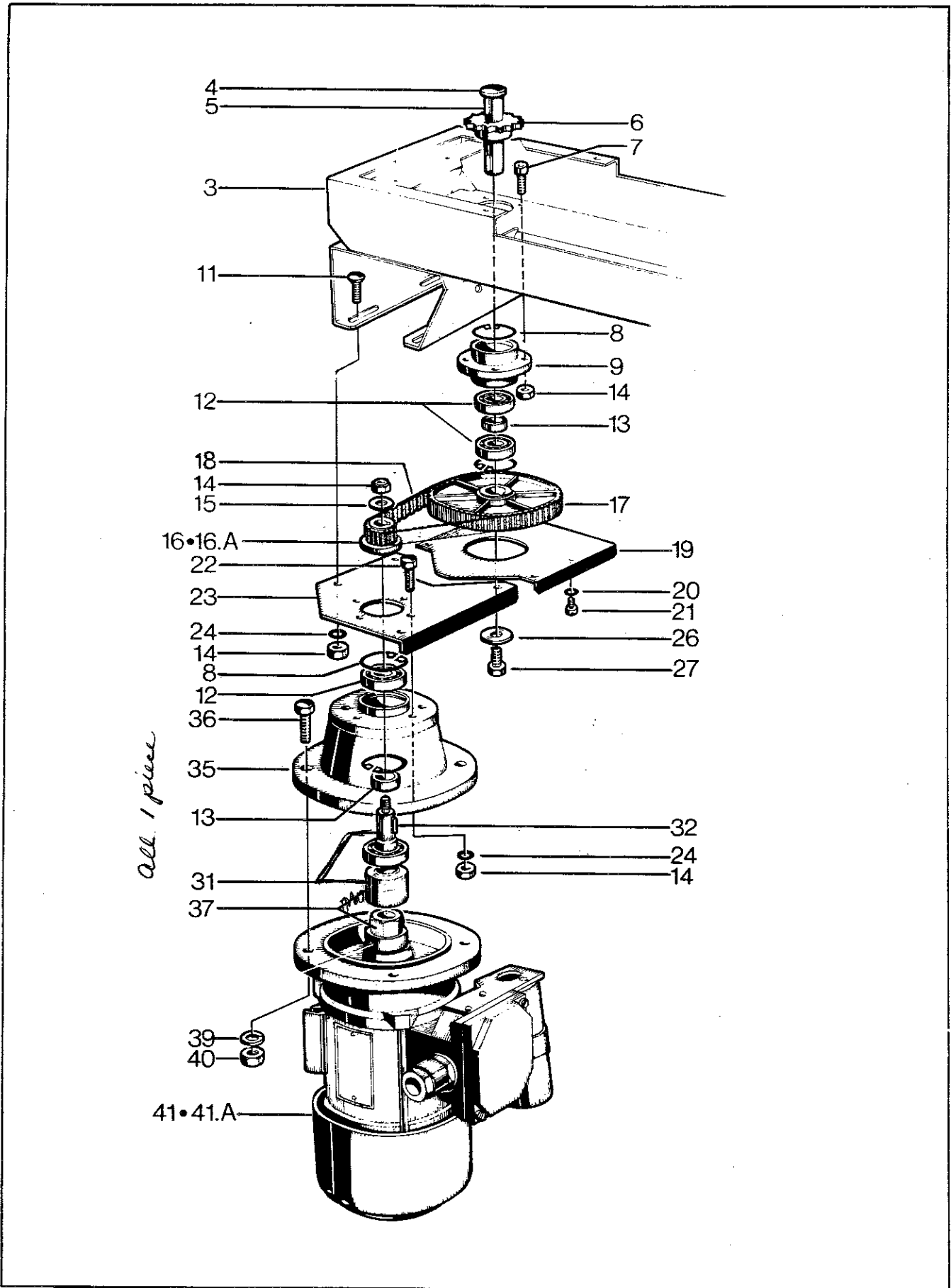


Figure 703

Figure 703

Ref. No.	3M Part No.	Description
3	78-8046-8136-5	Housing
4	78-8046-8137-3	Shaft — Main
5	78-8046-8138-1	Key — 5 × 5 × 12mm
6	78-8046-8139-9	Sprocket
7	78-8010-7210-5	Screw — Hex Hd., M6 × 20, Nick. Pl.
8	78-8017-9419-5	Ring — Snap for 32mm Hole
9	78-8046-8140-7	Hub
11	78-8046-8141-5	Screw — Allen, Large, M6 × 15
12	26-1000-4350-9	Bearing — 6002-2RS
13	78-8046-8142-3	Spacer
14	78-8017-9307-2	Nut — Self Locking, M6, Nick. Pl.
15	78-8017-9330-4	Washer — Special, $\varnothing$ 6/16 × 2
16A	78-8046-8143-1	Pulley — Timing 16 Teeth, for 50 Hz Motor
16	78-8046-8144-9	Pulley — Timing 14 Teeth, for 60 Hz Motor
17	78-8046-8145-6	Pulley — Timing 72 Teeth
18	78-8046-8146-4	Belt — Timing, 220L037
19	78-8046-8147-2	Guard
20	78-8018-7912-9	Washer — Plain, Metric, 4mm, Nick. Pl.
21	78-8017-9265-2	Screw — Self-Tapping, $\varnothing$ 3.5 × 10mm
22	78-8046-8148-0	Screw — Hex Soc., M6 × 25, Nick. Pl.
23	78-8046-8149-8	Support — Motor
24	26-1000-0010-3	Washer — Plain Metric, 6mm, Nick. Pl.
26	78-8046-8150-6	Washer — Special
27	78-8028-8196-7	Screw — Hex Hd., M6 × 16, Nick. Pl.
31	78-8028-8197-5	Shaft
32	78-8028-8244-5	Key — 4 × 4 × 10mm
35	78-8028-8245-2	Cap — Motor
36	78-8042-2970-2	Screw — Hex Hd., M8 × 30mm, Nick. Pl.
37	78-8042-2971-0	Joint — Motor
39	78-8017-9318-9	Washer — Plain Metric, 8mm, Nick. Pl.
40	78-8017-9313-0	Nut — Self-Locking, M8, Nick. Pl.
41	78-8042-2972-8	Motor — 110V, 60 Hz, Single-Phase
41A	78-8042-2973-6	Motor — 220V, 50 Hz, Single-Phase

