

MANUAL NO.

PTI205-GR

(SUPPLEMENT TO  
IP9107-GR)

First Edition

STYLE

56500BL

## ILLUSTRATED PARTS LIST



SERIES 56500 - FLAT BED MACHINE WITH PULLER



*Union Special*<sup>®</sup>  
INDUSTRIAL SEWING EQUIPMENT

03-14-2019



MANUAL NO. PT1205-GR ILLUSTRATED PARTS LIST  
FOR 56500BL SERIES MACHINES

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## PREFACE

This technical manual has been prepared to guide you in the maintenance of your new Union Special machine. Careful attention to the instructions for operation and adjustment of these machines will enable you to maintain the superior performance and reliability designed and built into every Union Special machine.

The adjusting portion of this manual explains in detail the proper setting for each of the components related to forming the stitch and completing the functions of the machine. Illustrations are used to show the adjustments and reference numbers are used to point out specific items discussed.

Adjustments are presented in sequence so that a logical progression is accomplished. Some adjustments performed out of sequence may have an adverse effect on the function of other related parts.

**NOTE:** Instructions stating direction or location, such as right, left, front or rear of the machine are given relative to the operator's position at the machine unless otherwise noted. The handwheel rotates counterclockwise in operating direction; as viewed from the right end of the machine.

To simplify identification of repair parts, the mechanisms are illustrated by exploded views. A numerical index at the back of the manual will help you locate an item when only the part number is known.

Implementation of preventative maintenance procedures can bring about significant improvements in operator productivity by avoiding costly equipment breakdowns. Wherever it becomes necessary to make repairs or replace parts on your machine, be sure to insist on genuine UNION SPECIAL Repair Parts. These parts are designed specifically for your machine and manufactured with utmost precision to assure long lasting service.

This manual has been comprised on the basis of available information. Future changes and/or improvements may incorporate a slight modification of configuration in illustrations or part numbers.

## SAFETY RULES

1. Before putting the machines described in this manual into service, carefully read the instructions. The starting of each machine is only permitted after taking notice of the instructions and by qualified operators.

**IMPORTANT!** Before putting the machine into service, also read the safety rules and instructions from the motor supplier.

2. Observe the national safety rules valid for your country.
3. The sewing machines described in this instruction manual are prohibited from being put into service until it has been ascertained that the sewing units which these sewing machines will be built into, have conformed with the EC Council Directives (89/392/EEC, Annex II B).

Each machine is only allowed to be used as foreseen. The foreseen use of the particular machine is described in paragraph "STYLES OF MACHINES" of this instruction manual. Another use, going beyond the description, is not as foreseen.

4. All safety devices must be in position when the machine is ready for work or in operation. Operation of the machine without the ap-pertaining safety devices is prohibited.
5. Wear safety glasses.
6. In case of machine conversions and changes all valid safety rules must be considered. Conversions and changes are made at your own risk.
7. The warning hints in the instructions are marked with one of these two symbols:



8. When doing the following the machine has to be disconnected from the power supply by turning off the main switch or by pulling out the main plug:
  - 8.1 When threading needle(s), looper, spreader etc.
  - 8.2 When replacing any parts such as needle(s), presser foot, throat plate, looper, spreader, feed dog, needle guard, folder, fabric guide etc.
  - 8.3 When leaving the workplace and when the workplace is unattended.
  - 8.4 When doing maintenance work.
  - 8.5 When using clutch motors without actuation lock, wait until the motor is stopped totally.
9. Maintenance, repair and conversion work (see item 8) must be done only by trained technicians or special skilled personnel under consideration of the instructions.
10. Any work on the electrical equipment must be done by an electrician or under direction and supervision of special skilled personnel.
11. Work on parts and equipment under electrical power is not permitted. Permissible exceptions are described in the applicable sections of standard sheet DIN VDE 0105.
12. Before doing maintenance and repair work on the pneumatic equipment, the machine has to be disconnected from the compressed air supply. In case of existing residual air pressure, after disconnecting from compressed air supply (i.e. pneumatic equipment with air tank), the pressure has to be removed by bleeding.

## IDENTIFICATION OF MACHINES

Each UNION SPECIAL machine is identified by a Style number, which on these classes of machines, is stamped into the style plate affixed to the right front of the machine.

The serial number is stamped in the casting at the right rear base of machine.

## CLASS DESCRIPTION (56500)

Advanced high speed, high throw, flat bed machines. Two needles, independent row, two loopers, enclosed automatic lubricating system. With Rear Auxiliary Puller. Maximum recommended speed 3600 R.P.M. Maximum work space to right of needle bar 8 1/4 inches (209.6mm).

## MACHINE STYLES

56500BL Typical application - Lapseaming medium to heavy weight Tarps, Tents, Boat Covers and similar products

- Seam specification 40I LSA-2
- Stitch length 4 - 7 SPI (3.6 -6.4mm)
- Sewing Capacity up to 1 1/32" (8.7mm)
- Sewing speed up to 3600 SPM
- NeedleType 143GS200/080 (Standard)
- 48 gauge (3/4" - 19mm)

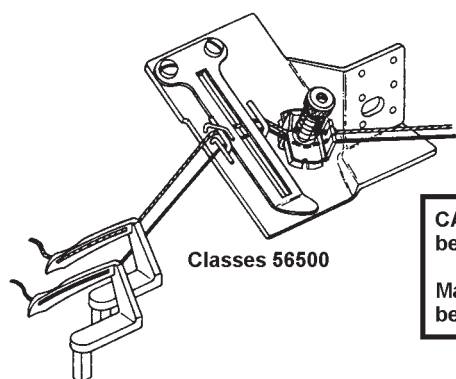
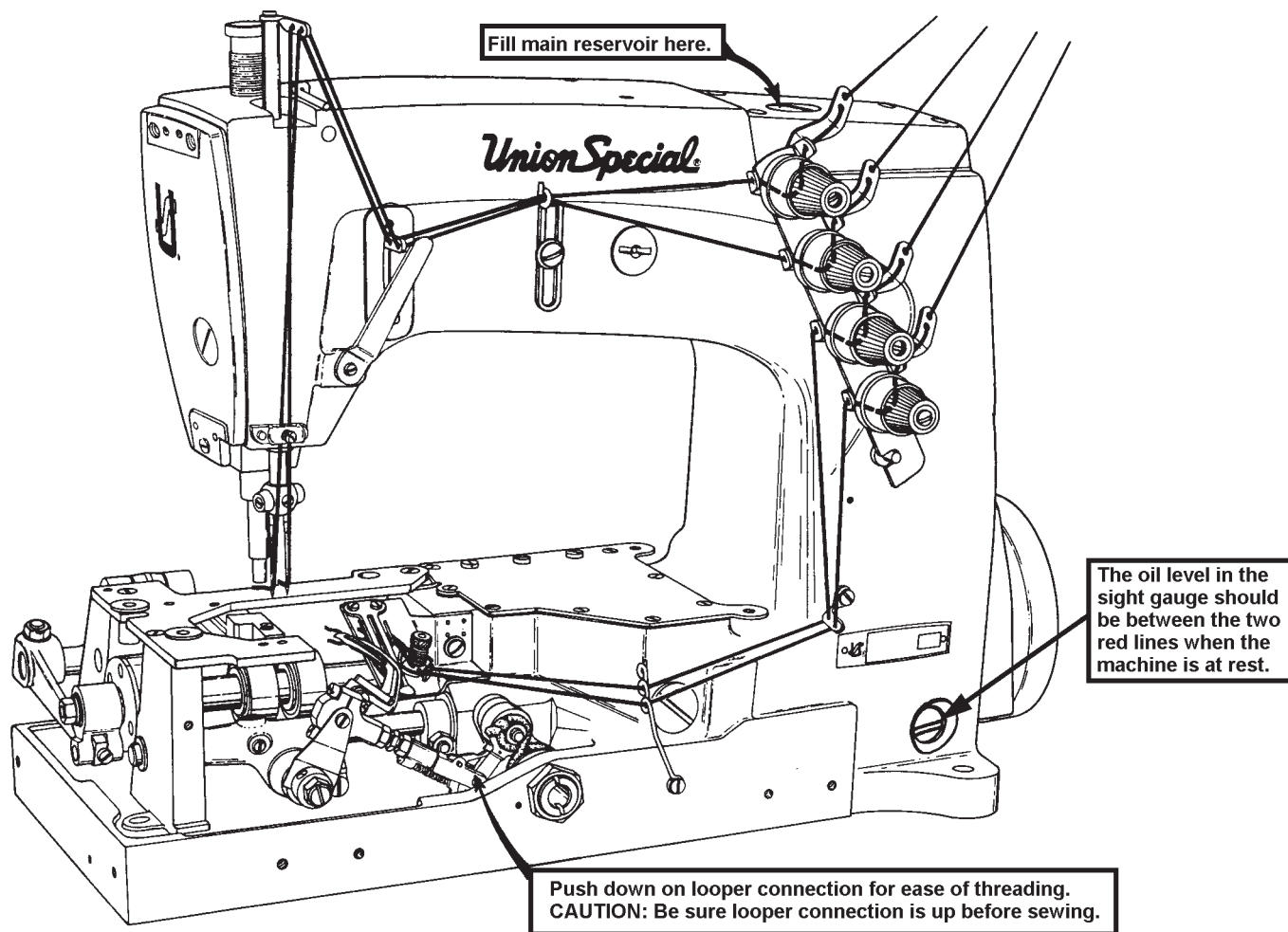
## NEEDLES

143 GS Round shank, round point, short, double groove, struck groove, spotted, chromium plated - sizes 140/054, 150/060, 170/067, 200/080, 230/090, 250/100.

## OPTIONAL NEEDLES

147 GS Round shank, round point, short, double groove, struck groove, ball eye, spotted, chromium plated - sizes 080/032, 090/036, 100/040, 110/044, 125/049, 140/054, 150/060, 170/067.

147 GKS Round shank, round point, long, double groove, struck groove, oversize ball eye, spotted, short point, standard eye and grooves, chromium plated - sizes 090/036, 100/040, 110/044, 125/049, 140/054.



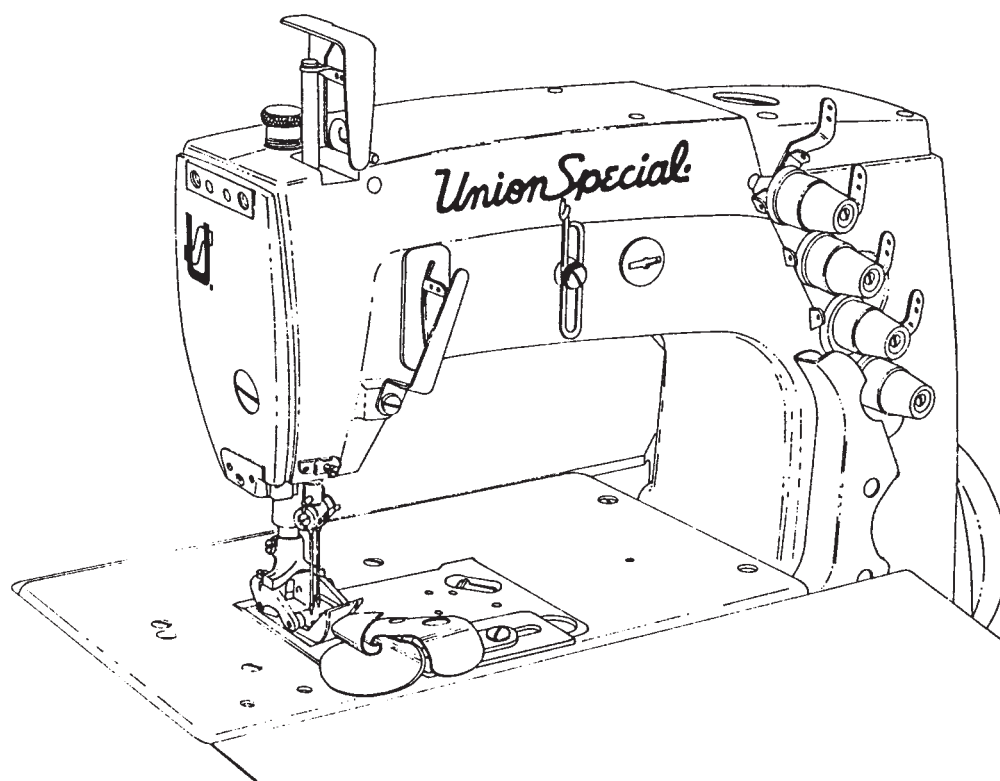
**CAUTION: Fill oil reservoir before starting**

**Machine has been drained before shipping.**

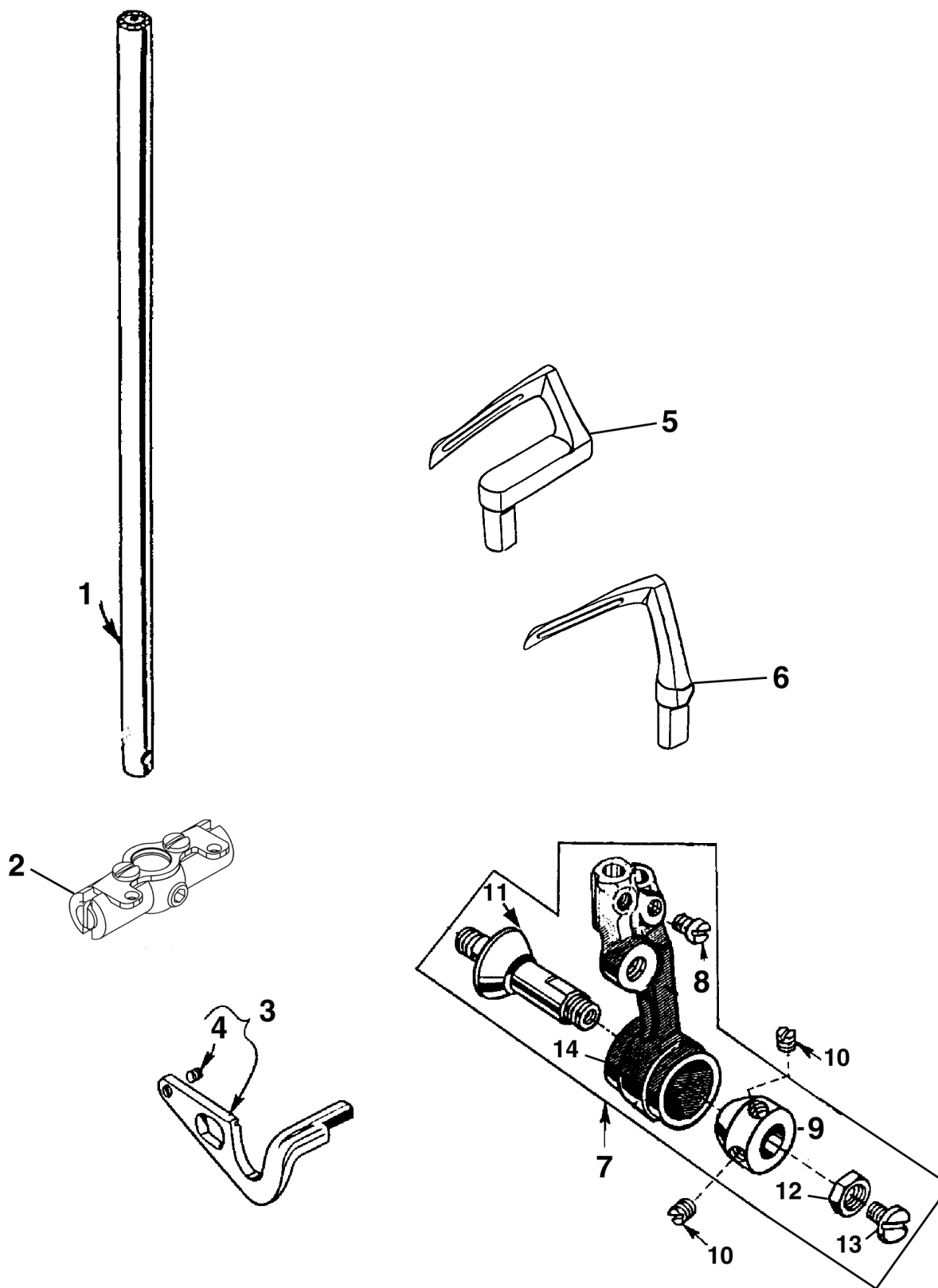
## THREADING AND OILING DIAGRAM

The oil has been drained from the machine before shipping and the reservoir must be filled before starting to operate. Maintain oil level in "OPERATE" zone; add oil when the needle on the gauge registers on the black line marked "LOW". The machine is automatically lubricated and no oiling other than keeping the main reservoir filled is necessary. Refer to instructions under "LUBRICATION" and "CHANGING LENGTH" for additional information.

Threading is illustrated above for all Styles.



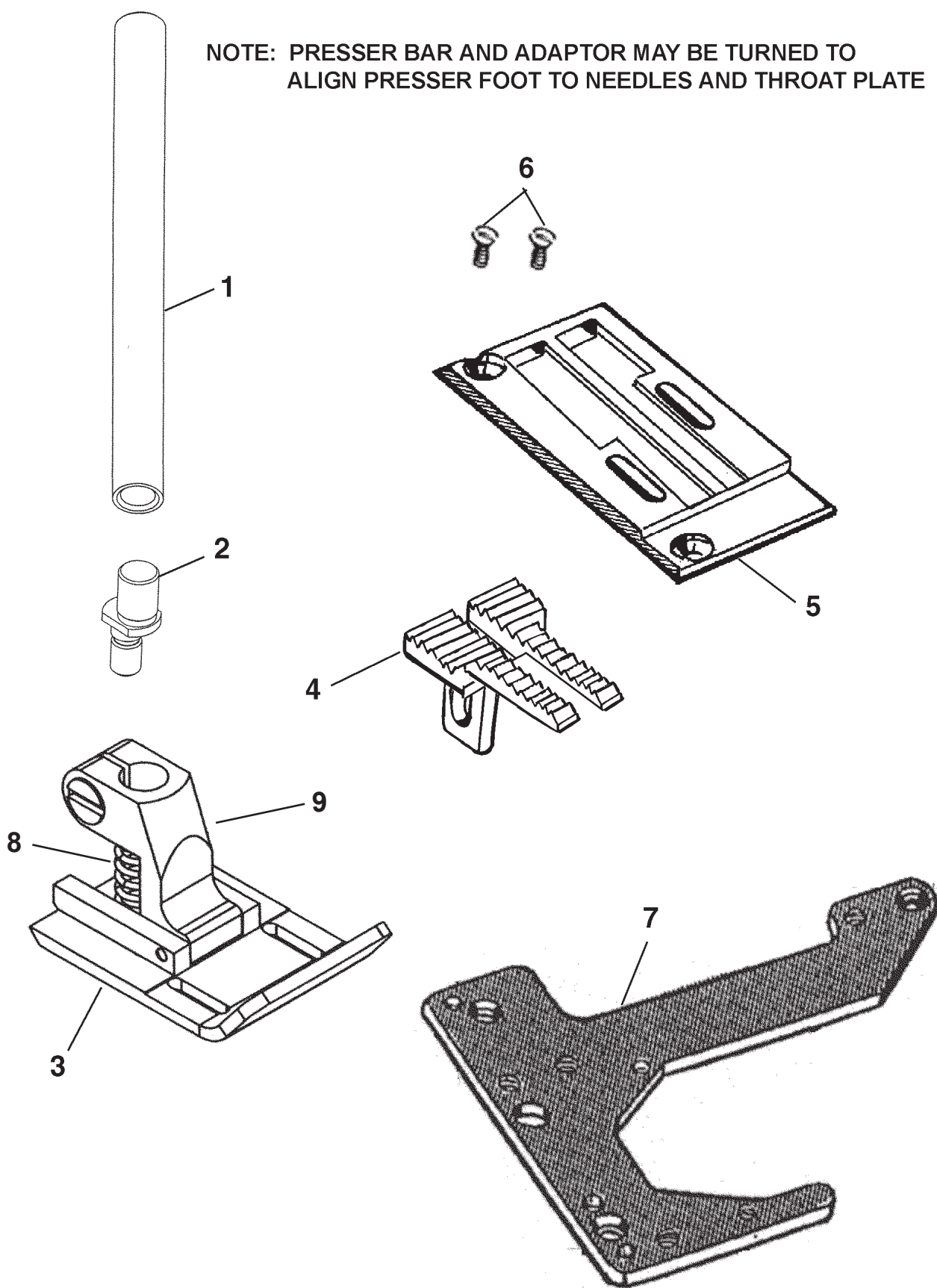
EXPLODED VIEWS  
AND  
DESCRIPTION OF PARTS



# NEEDLE BAR, HEAD, REAR GUARD, LOOPER ROCK, LOOPERS

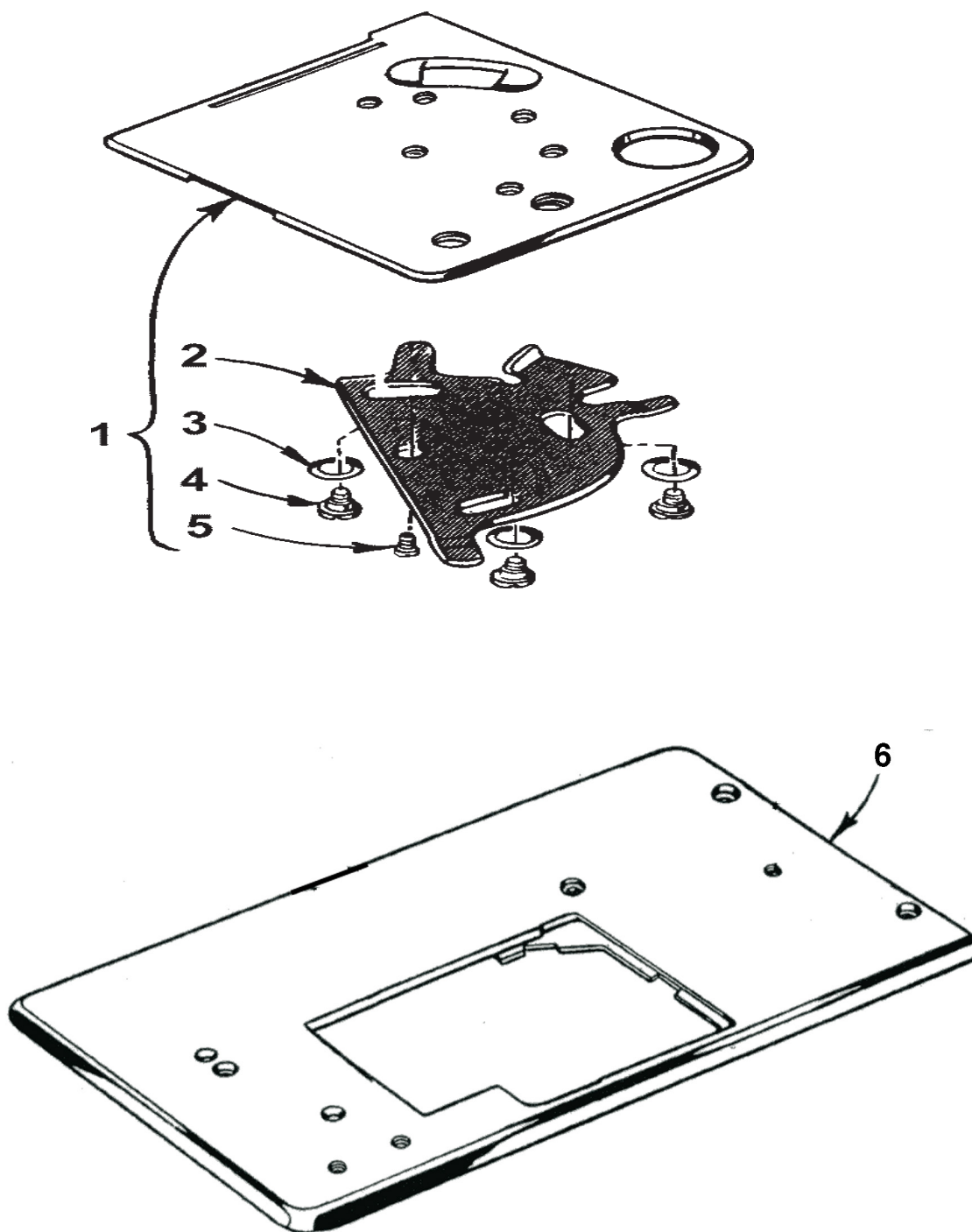
Ref. No.	Part No.	Description	Amt. Req.
1.	51417D	Needle Bar .....	1
2.	51418D48	Needle Head .....	1
3.	51525	Rear Needle Guard .....	1
4.	22801	Screw .....	1
5.	51509L	Looper, Rear .....	1
6.	51508L48	Looper, Front .....	1
7.	29192AA	Looper Rocker Assembly .....	1
8.	73	Screw .....	2
9.	15465F	Cone, Looper Rocker .....	1
10.	88	Screw .....	2
11.	51745	Stud, Looper Cone .....	1
12.	258	Nut .....	1
13.	22829	Screw .....	1
14.	56513	Looper Rocker .....	1

NOTE: PRESSER BAR AND ADAPTOR MAY BE TURNED TO  
ALIGN PRESSER FOOT TO NEEDLES AND THROAT PLATE



# THROAT PLATE, PRESSER FOOT, FEED DOG PRESSER BAR, SUPPORT

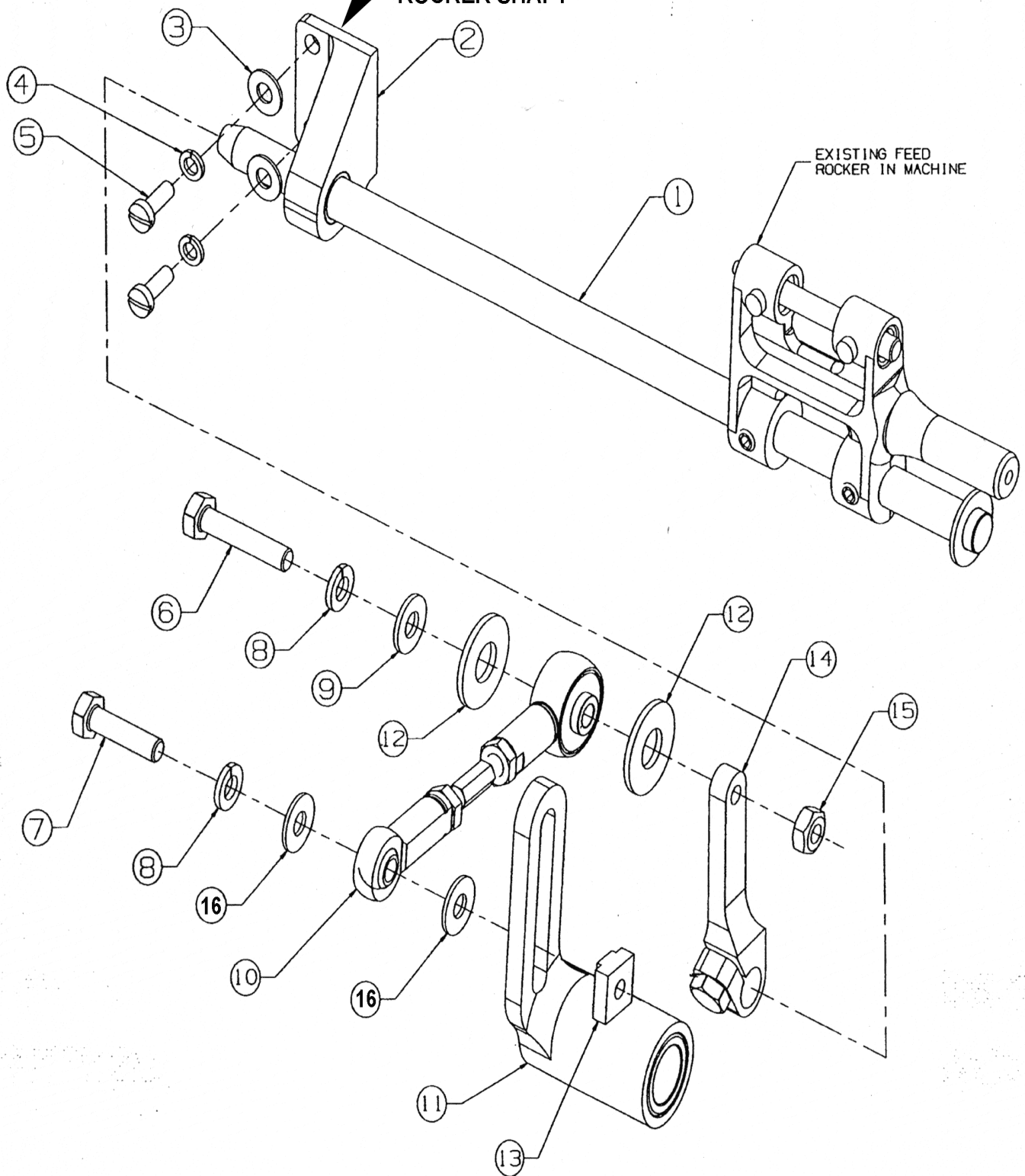
Ref. No.	Part No.	Description	Amt. Req.
1.	56557A	Presser Bar .....	1
2.	56557	Presser Bar Adaptor .....	1
3.	56520A48	Presser Foot .....	1
4.	7805A48	Feed Dog .....	1
5.	7824A48	Throat Plate .....	1
6.	22524	Screw .....	2
7.	51280A	Throat Plate Support .....	1
8.	56520A48-2	Presser Foot Spring .....	1
9.	56520A48-3	Presser Foot Shank .....	1



# CLOTH PLATE

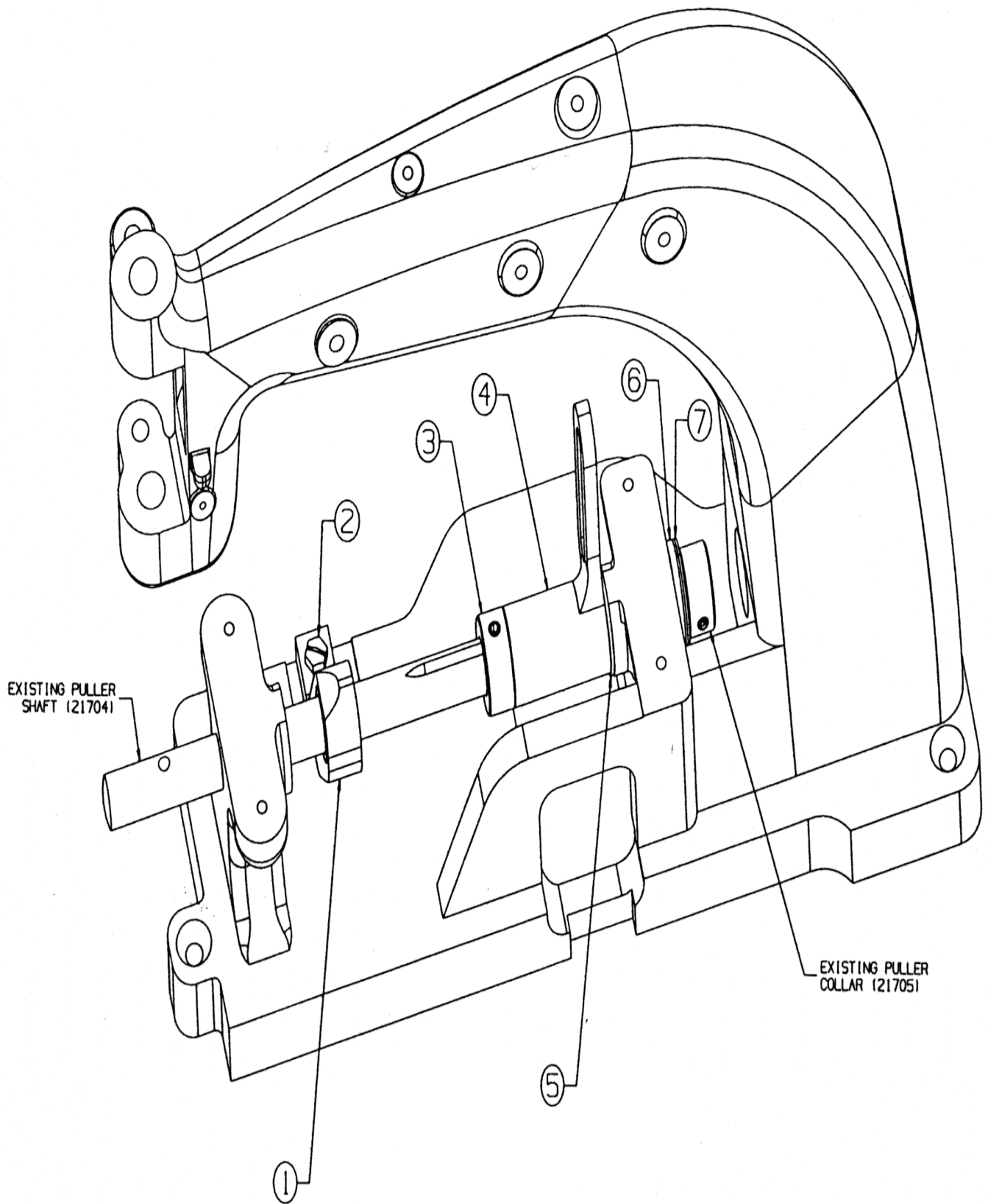
Ref. No.	Part No.	Description	Amt. Req.
1.	56381-207A	Cloth Plate Cover .....	1
2.	51281AC	Cloth Plate Cover Spring .....	1
3.	35772H	Spring Washer .....	3
4.	22760A	Screw, for spring washer .....	3
5.	22845B	Screw .....	1
6.	56401F	Cloth Plate .....	1

SHIMS MAY BE USED BEHIND SUPPORT BRACKET  
TO ALLOW FOR PROPER ALIGNMENT WITH FEED  
ROCKER SHAFT



## PULLER PARTS

Ref. No.	Part No.	Description	Amt. Req.
1.	56535	Feed Rocker Shaft, Long .....	1
2.	56562	Feed Rocker Shaft Support Bracket .....	1
3.	RM3293-6	Flat Washer # 10 .....	2
4.	RM3993-3	Helical Split Lock Washer # 10 .....	2
5.	22596	Screw for 56562 .....	2
6.	RM3162-3	Screw, 1/4"-20 X 1-1/4" H.H.C.S. ....	1
7.	RM3162-14	Screw, 1/4"-20 X 1" H.H.C.S. ....	1
8.	RM3993-8	1/4" Helical Split Lock Washer .....	2
9.	RM3293-1	1/4" Flat Washer .....	3
10.	29476VE	Connecting Rod Sub-Assembly.....	1
11.	56577	Arm, Feed Clutch .....	1
12.	652-24	Washer .....	2
13.	660-1161	T-Slot Nut, 1/4"-20 .....	1
14.	56567	Lever, Clutch Drive .....	1
15.	RM2791-3	1/4"-20 Hex Nut.....	1
16.	43137E	Washer .....	2



## PULLER FRAME PARTS

Ref. No.	Part No.	Description	Amt. Req.
1.	56577A	Check Bearing Support .....	1
2.	627	Screw for 56577A (use is part 136 is missing) .....	1
3.	RM3058-4	5/8" Shaft Collar .....	1
4.	56577	Arm, Feed Clutch .....	1
5.	660-906Z	Washer, Thrust Bearing .....	1
6.	56586A	Washer, Brake .....	1
7.	56586	Spring, Belleville Disc.....	2

[illegible]

## NOTES

[illegible]

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