



# OPERATOR'S MANUAL

TAK-13GH/BD TAPER ATTACHMENT



# Important Information

**1 YEAR  
LIMITED WARRANTY**

JET offers a one year warranty on all products

## REPLACEMENT PARTS

Replacement parts for this tool are available directly from JET Equipment & Tools. To place an order call **1-800-274-6844**. Please have the following information ready:

1. Visa, MasterCard or Discover Card number
2. Expiration date
3. Part number listed within this manual
4. Shipping address other than a Post Office box

## REPLACEMENT PARTS WARRANTY

JET Equipment & Tools makes every effort to assure that parts meet high quality and durability standards and warrants to the original retail consumer/purchaser of our parts that each such part(s) be free from defects in materials and workmanship for a period of thirty (30) days from the date of purchase.

## PROOF OF PURCHASE

Please retain your dated sales receipt as proof of purchase to validate the warranty period.

## LIMITED TOOL AND EQUIPMENT WARRANTY

JET makes every effort to assure that its products meet high quality and durability standards and warrants to the original retail consumer/purchaser of our products that each product be free from defects in materials and workmanship as follows: **1 YEAR LIMITED WARRANTY ON ALL JET PRODUCTS**. Warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities or to a lack of maintenance. **JET LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD SPECIFIED ABOVE FROM THE DATE THE PRODUCT WAS PURCHASED AT RETAIL. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG THE IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. JET SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES TO PERSONS OR PROPERTY OR FOR INCIDENTAL, CONTINGENT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.** To take advantage of this warranty, the product or part must be returned for examination, postage prepaid, to an authorized service station designated by our Tacoma office. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection discloses a defect, JET will either repair or replace the product or refund the purchase price, if we cannot readily and quickly provide a repair or replacement, if you are willing to accept such refund. JET will return repaired product or replacement at JET's expense, but if it is determined there is no defect, or that the defect resulted from causes not within the scope of JET's warranty, then the user must bear the cost of storing and returning the product. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

JET Equipment & Tools

**JET EQUIPMENT AND TOOLS**  
A WMH - WALTER MEIER HOLDING COMPANY

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## INTRODUCTION

The TAK-13GH/BD Taper Attachment is designed to produce accurate tapers up to 10" long and 20 degree included angle at any distance from the spindle nose.

The attachment is easy to set, is always ready for use, and has two sets of graduations - one in degrees of taper, the other in inches per foot (10 degrees both sides of center line and 4" per foot).

The telescopic screw turns on two thrust bearings in the taper slide and does not interfere with regular use of the cross slide.

To realize the highest precision from the TAK-13GH/BD taper attachment, great care must be taken to ensure that it is correctly mounted.

Please read this manual carefully before mounting and operating the attachment.

## MOUNTING INSTRUCTIONS

1. Remove all contents from the shipping container and clean all rust protected parts with kerosene or parts cleaner. Dry and lightly oil all components with light lubrication oil.
2. Remove existing crossfeed screw as follows:
  - A. Remove screw in center of handwheel.
  - B. Remove handwheel assembly, dial, key, and bearing. (Refer to the parts breakdown in the machine manual) Items 20, 21, 22, 23, 33, and 35.
  - C. Remove bracket (item 30) and bearing (19).
  - D. The crossfeed screw can now be removed by unscrewing from the nut (17).

The new telescoping crossfeed screw is supplied with a brass nut. This nut can be used or the existing nut supplied with the machine can be used. If the machine is new, use the existing nut in the machine. If the machine has been used extensively, remove the existing nut by removing screw (26).

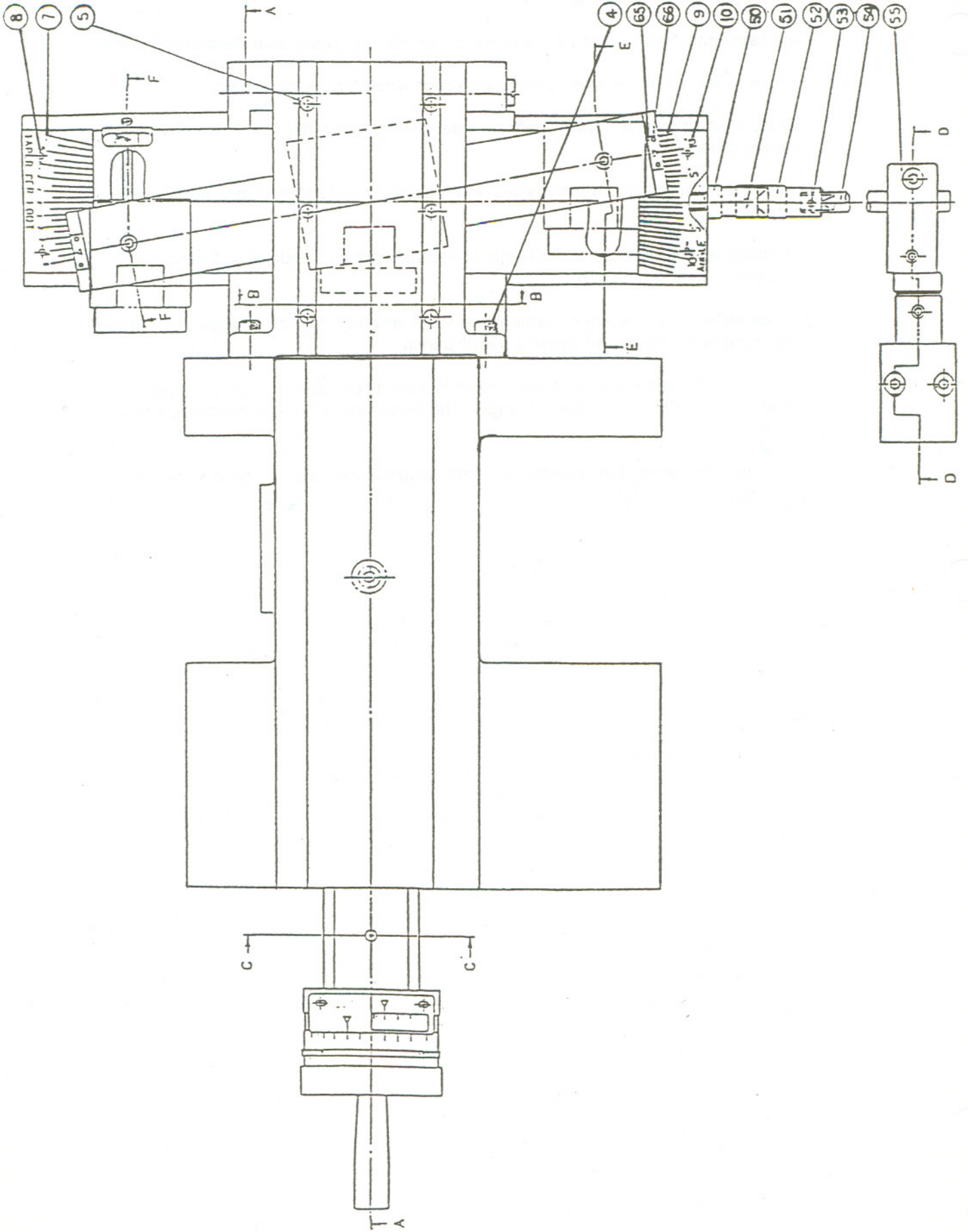
## INSTALLING THE TAPER ATTACHMENT

(Refer to the drawing supplied with the taper attachment.)

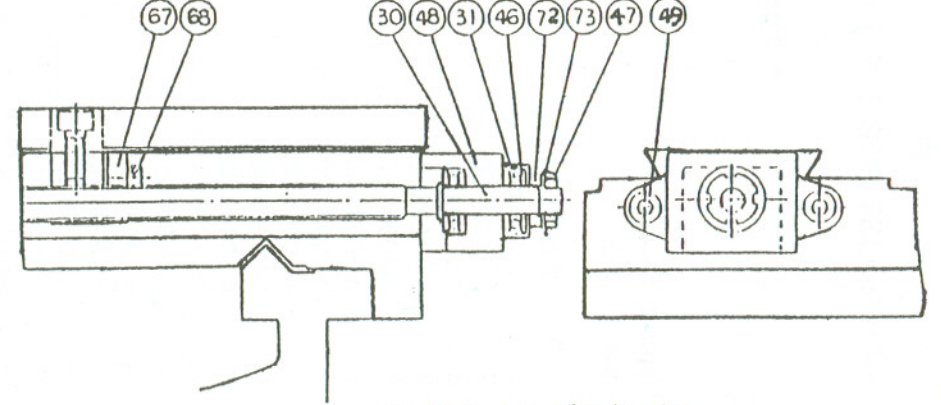
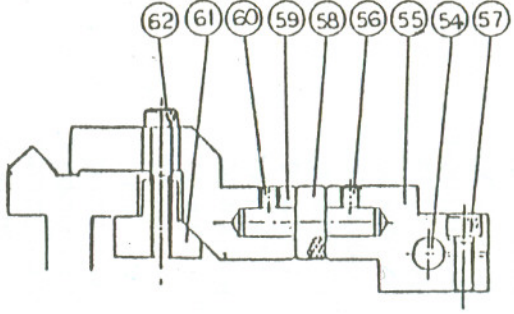
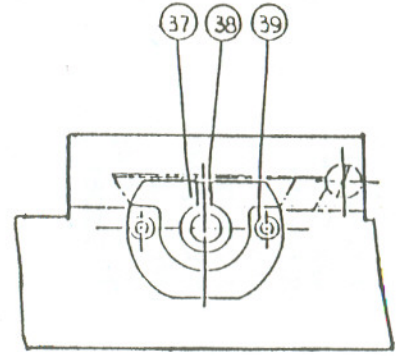
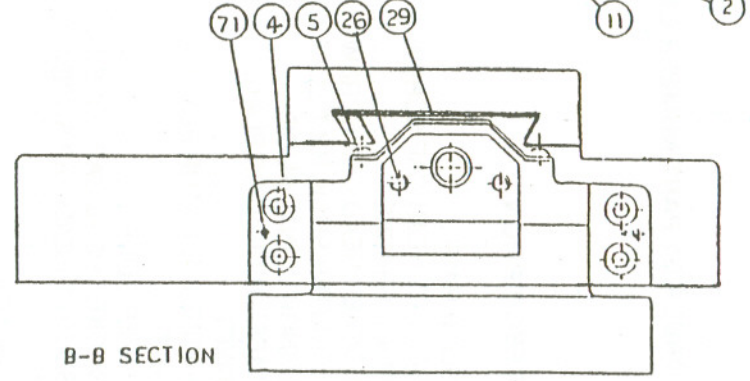
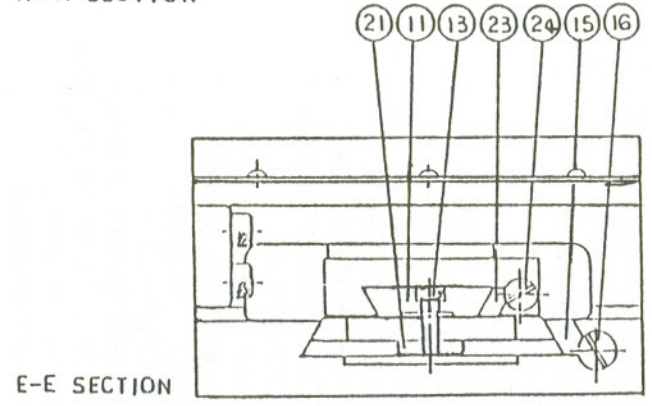
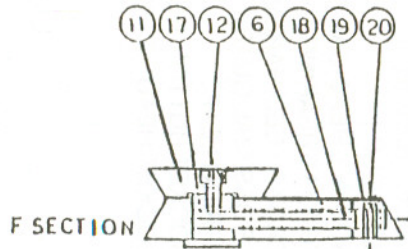
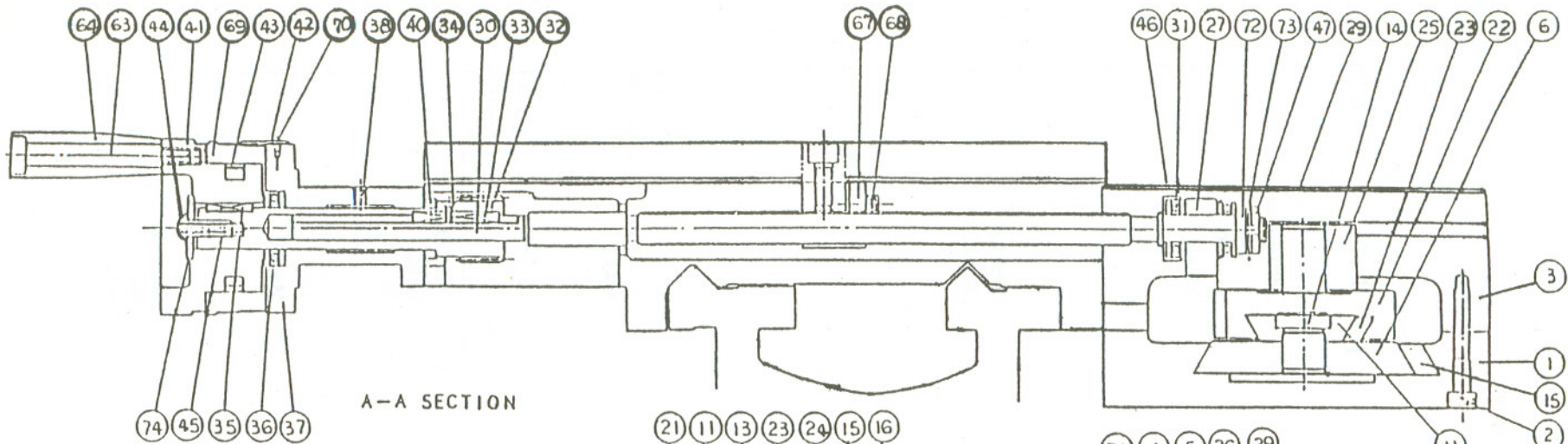
1. If you are using the brass nut supplied with the taper attachment, install it at this time. Note: install screw but do not tighten at this time.
2. Remove dust shield on back side of cross slide (two cross point screws) - item 104 in machine manual.
3. Mount taper attachment assembly to back of cross slide using four socket head screws (item 4). Note: do not securely tighten at this time.

4. Install new crossfeed screw and remaining components per drawing enclosed with taper attachment. Reference section A-A.
5. Align taper attachment (using a dial indicator) so that it is parallel with the bed of the lathe.
6. Tighten all screws at this time. Check cross slide screw for free movement.
7. The taper attachment is supplied with no index mark on the taper slide. To adjust taper slide to "zero":
  - A. Insert test bar (minimum dimensions of 3/4" diameter and 18" in length) into the lathe chuck.
  - B. Indicate test bar end to end (or length of attachment travel) and adjust taper bar until "0" degree run-out is obtained.
  - C. Lock taper bar to prevent movement and stake an index mark at "0" degrees. This can be done with a small cold chisel or center punch.
8. To use the lathe to cut a taper, simply attach locking block (55) to the bed. Loosen the taper bar and adjust to the desired angle. The cross slide will now follow the taper bar angle.
9. To use the lathe without the taper attachment, simply loosen and swing the locking block (55) away from the bed.

PARTS LIST FOR THE TAK-13GH/BD TAPER ATTACHMENT







C-C SECTION

D-D SECTION



# PARTS LIST FOR THE TAK-13GH\BD TAPER ATTACHMENT

PLEASE ORDER BY PART NUMBER ONLY

INDEX NO.	PART NO.	DESCRIPTION	SIZE	QTY.
1	84-0001-00	SLIDE BASE		1
2	TS-1504081	SOCKET HEAD CAP SCREW	M8x40	4
3	84-1001-00	SLIDE BRACKET		1
4	TS-1504061	SOCKET HEAD CAP SCREW	M4x30	4
5	TS-1532021	COUNTER SUNK FLAT SCREW	M4x8	6
6	84-0003-00	LONGITUDINAL SLIDE		1
7	84-0004-00	TAPER INDICATOR PLATE		1
8	84-0004-00-1	RIVET		2
9	84-0005-00	ANGLE INDICATOR PLATE		1
10	84-0005-00-1	RIVET		2
11	84-0006-00	TAPER SLIDE		1
12	TS-1503031	SOCKET HEAD CAP SCREW	M6x12	1
13	TS-1503051	SOCKET HEAD CAP SCREW	M6x20	1
14	84-0007-00	AXLE		1
15	84-0008-00	GIB STRIP		1
16	84-0006-00	ADJUSTING SCREW		2
17	84-0100-00	ADJUSTING PIECE		1
18	84-0011-00	ADJUSTING SCREW		1
19	84-0012-00	ADJUSTING KNOB		1
20	84-0012-00-1	SPRING PIN	3x14	1
21	84-0013-00	CLAMPING PIECE		1
22	84-1002-00	TAPER SLIDE REST		1
23	84-0015-00	GIB STRIP		1
24	84-0016-00	ADJUSTING SCREW		2
25	84-1003-00	CROSS SLIDE BLOCK		1
26	TS-1501061	SOCKET HEAD CAP SCREW	M4x20	2
27	84-1004-00	FEED BLOCK		1
29	84-1005-00	DUST COVER		1
30	84-1006-2/2-00	CROSS FEED SCREW	10 TPI	1
31	BB-51101	THRUST BEARING		2
32	84-1007-00	PINION SHAFT		1
33	84-1007-00-1	DOUBLE ROUND HEAD KEY	5x5x30	1
34	84-1007-00-2	COUNTER SUNK FLAT SCREW	M3x5	1
35	84-1007-00-3	WOODRUFF KEY	3x13	1
36	BB-51102	THRUST BEARING		1
37	17-0303A-00	CROSS BRACKET		1
38	84-0023-01-1	BALL CUP	1/4"	1
39	TS-1503051	SOCKET HEAD CAP SCREW	M6x20	2
40	BB-51102	THRUST BEARING		1
41	17-0304-00	CROSS FEED HANDWHEEL		1
42	17-0356-2/2-00	CROSS DIAL GUARD		1
43	17-0357-00	SPRING LEAF		1
44	17-0504-00-2	SOCKET BUTTON HEAD SCREW	M8x20	1
45	TS-1522061	SOCKET HEAD SET SCREW	M5x20	1



46	84-0027-00	BEARING DUST COVER		1
47	84-0028-00	LOCKING NUT		1
48	84-1008-00	BEARING HOUSING		1
49	TS-1504101	SOCKET HEAD CAP SCREW	M8x50	2
50	84-0030-00	JOINT		1
51	84-0030-00-1	SPRING PIN	4x19	1
52	84-0031-00	UNIVERSAL JOINT		1
53	84-0031-00-1	SPRING PIN	4x19	1
54	84-0032-00	ADJUSTING BAR		1
55	84-1009-00	LOCKING BLOCK ADJUSTING BAR		1
56	84-0033-00-1	SOCKET HEAD SET SCREW	M8x8	1
57	TS-1504041	SOCKET HEAD CAP SCREW	M8X20	1
58	84-0034-00	ECCENTRIC SHAFT		1
59	84-1010-00	ADJUSTING BAR BRACKET		1
60	TS-1524011	SOCKET HEAD SET SCREW	M8x8	1
61	84-0036-00	CLAMPING BLOCK		1
62	TS-1504101	SOCKET HEAD CAP SCREW	M8x50	2
63	17-0308-00	BOLT		1
64	17-0307-00	HANDLE		1
65	84-0039-00	INDICATOR		2
66	84-0039-00-1	RIVET	2x5	4
67	17-0323-2/2-00	FEED NUT		1
68	TS-1503041	SOCKET HEAD CAP SCREW	M6x16	1
69	17-0305-2/2-00	DUAL DIAL		1
70	17-0356-00-1	ROUND HEAD SCREW	M4x6	2
71	84-0002-00-3	SPRING PIN	3x20	2
72	84-0038-00	SPACER		1
73	84-0021-00-2	LOCK WASHER	AW#12	1
74	17-0306-00	WASHER		1







