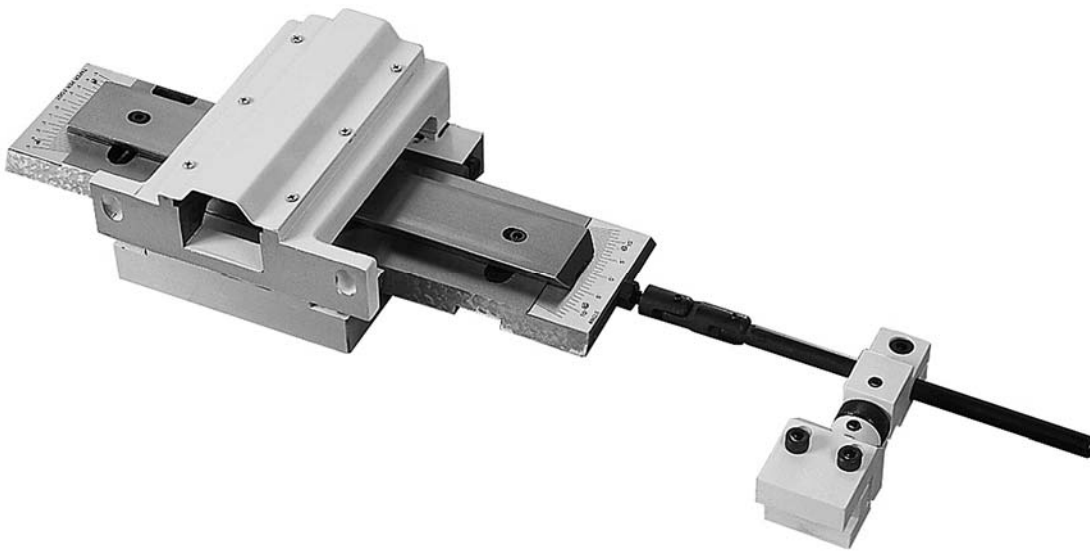




Assembly Instructions and Parts Manual

Taper Attachment for Bench Lathes

Model TAK-13GH/BD



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Warranty and Service

JET warrants every product it sells against manufacturers' defects. If one of our tools needs service or repair, please contact Technical Service by calling 1-800-274-6846, 8AM to 5PM CST, Monday through Friday.

Warranty Period

The general warranty lasts for the time period specified in the literature included with your product or on the official JET branded website.

- JET products carry a limited warranty which varies in duration based upon the product. (See chart below)
- Accessories carry a limited warranty of one year from the date of receipt.
- Consumable items are defined as expendable parts or accessories expected to become inoperable within a reasonable amount of use and are covered by a 90 day limited warranty against manufacturer's defects.

Who is Covered

This warranty covers only the initial purchaser of the product from the date of delivery.

What is Covered

This warranty covers any defects in workmanship or materials subject to the limitations stated below. This warranty does not cover failures due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, improper repair, alterations or lack of maintenance.

Warranty Limitations

Woodworking products with a Five Year Warranty that are used for commercial or industrial purposes default to a Two Year Warranty. Please contact Technical Service at 1-800-274-6846 for further clarification.

How to Get Technical Support

Please contact Technical Service by calling 1-800-274-6846. **Please note that you will be asked to provide proof of initial purchase when calling.** If a product requires further inspection, the Technical Service representative will explain and assist with any additional action needed. JET has Authorized Service Centers located throughout the United States. For the name of an Authorized Service Center in your area call 1-800-274-6846 or use the Service Center Locator on the JET website.

More Information

JET is constantly adding new products. For complete, up-to-date product information, check with your local distributor or visit the JET website.

How State Law Applies

This warranty gives you specific legal rights, subject to applicable state law.

Limitations on This Warranty

JET LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD OF THE LIMITED WARRANTY FOR EACH PRODUCT. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN 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.

JET sells through distributors only. The specifications listed in JET printed materials and on official JET website are given as general information and are not binding. JET reserves the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment which they may deem necessary for any reason whatsoever. JET® branded products are not sold in Canada by JPW Industries, Inc.

Product Listing with Warranty Period

90 Days – Parts; Consumable items; Light-Duty Air Tools
1 Year – Motors; Machine Accessories; Heavy-Duty Air Tools; Pro-Duty Air Tools
2 Year – Metalworking Machinery; Electric Hoists, Electric Hoist Accessories; Woodworking Machinery used for industrial or commercial purposes
5 Year – Woodworking Machinery
Limited Lifetime – JET Parallel clamps; VOLT Series Electric Hoists; Manual Hoists; Manual Hoist Accessories; Shop Tools; Warehouse & Dock products; Hand Tools

NOTE: JET is a division of JPW Industries, Inc. References in this document to JET also apply to JPW Industries, Inc., or any of its successors in interest to the JET brand.



Warnings

For your own safety, read this instruction manual before operating the tool.

Wear Eye Protection

- **KEEP GUARDS IN PLACE** and in working order.
- **REMOVE ADJUSTING KEYS AND WRENCHES.** Form the habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.
- **KEEP THE WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
- **DO NOT USE IN A DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.
- **KEEP CHILDREN AWAY.** All visitors should be kept safe distance from the work area.
- **MAKE THE WORKSHOP KID PROOF** with padlocks, master switches, or by removing starter keys.
- **DON'T FORCE THE TOOL.** It will do the job better and safer at the rate for which it was designed.
- **USE THE RIGHT TOOL.** Don't force a tool or attachment to do a job for which it was not designed.
- **USE THE PROPER EXTENSION CORD.** Make sure you extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in the line voltage resulting in loss of power and overheating. **For runs up to 25 feet, use a 14 AWG or larger gauge cord. For runs up to 50 feet, use a 12 AWG or larger cord. Runs over 50 feet are not recommended.** If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.
- **WEAR PROPER APPAREL.** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
- **ALWAYS USE SAFETY GLASSES.** Also use face or dust masks if the cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
- **SECURE WORK.** Use clamps or a vise to hold the work when its practical. It's safer than using your hand and it frees both hands to operate the tool.
- **DON'T OVERREACH.** Keep proper footing and balance at all times.
- **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- **DISCONNECT TOOLS** before servicing; when changing accessories, such as blades, bits cutters, and the like.
- **REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure the switch is in the off position before plugging in the machine.
- **USE RECOMMENDED ACCESSORIES.** Consult the owner's manual for recommended accessories. The use of improper accessories may cause a risk of injury.
- **NEVER STAND ON A TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
- **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
- **DIRECTION OF FEED.** Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
- **NEVER LEAVE THE TOOL RUNNING UNATTENDED. TURN THE POWER OFF.** Don't leave the tool until it comes to a complete stop.

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

Note: Numbers in parentheses refer to item numbers in the parts breakdown.

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 machine oil.
2. Remove existing crossfeed screw as follows:
 - a. Remove screw in center of handwheel.
 - b. Remove handwheel assembly, dial, key and bearing (#20, 21, 22, 23, 33 and 35).
 - c. Remove bracket (#30) and bearing (#19).
 - d. The crossfeed screw can now be removed by unscrewing the nut (#17).

The 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

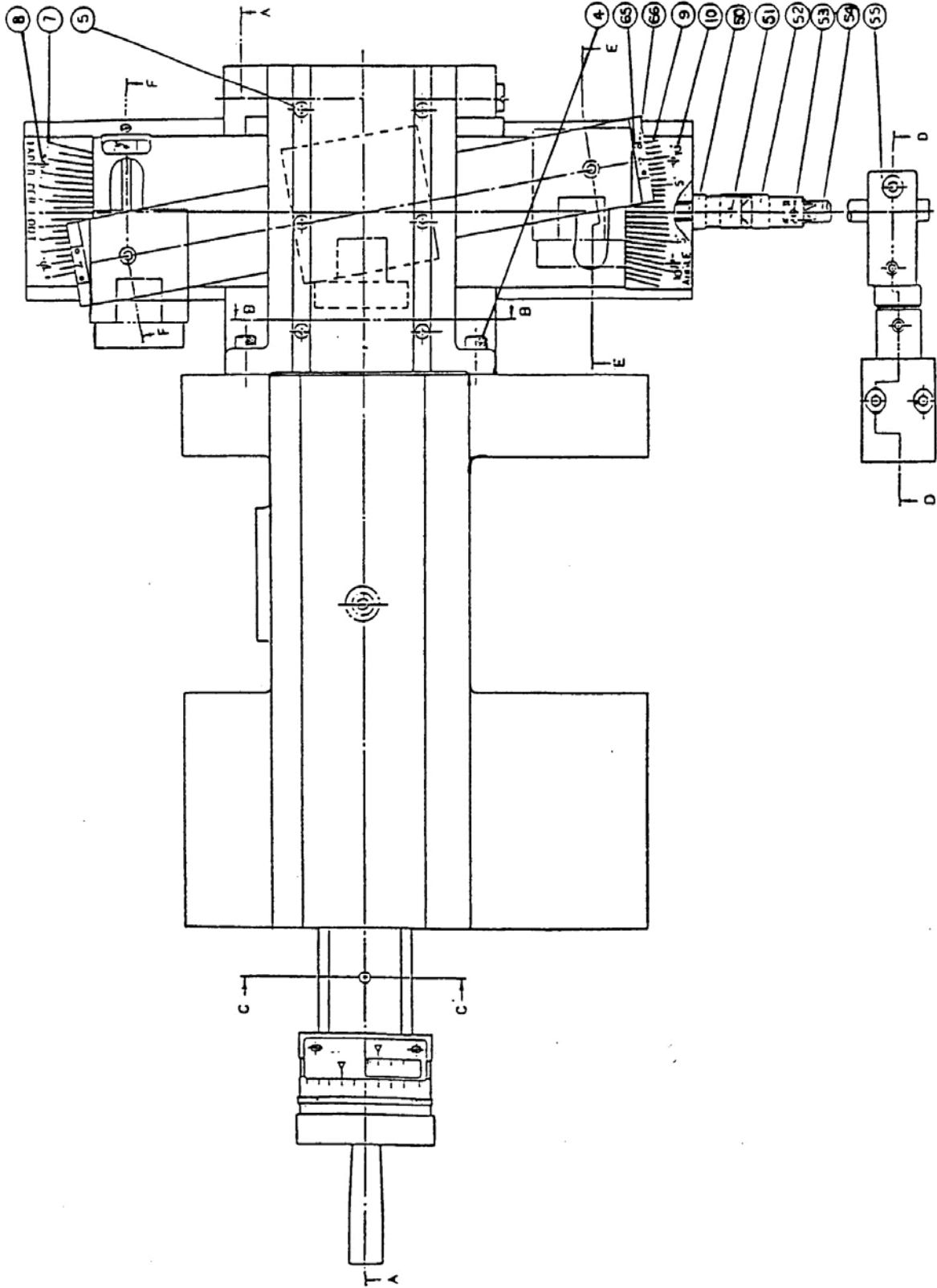
1. If you are using the brass nut supplied with the taper attachment, install it now. Note: Install screw but do not tighten at this time
2. Remove dust shield (#104) on back side of cross slide (two cross point screws).

3. Mount taper attachment assembly to back of cross slide using four socket head screws (#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", proceed as follows:
 - 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 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.

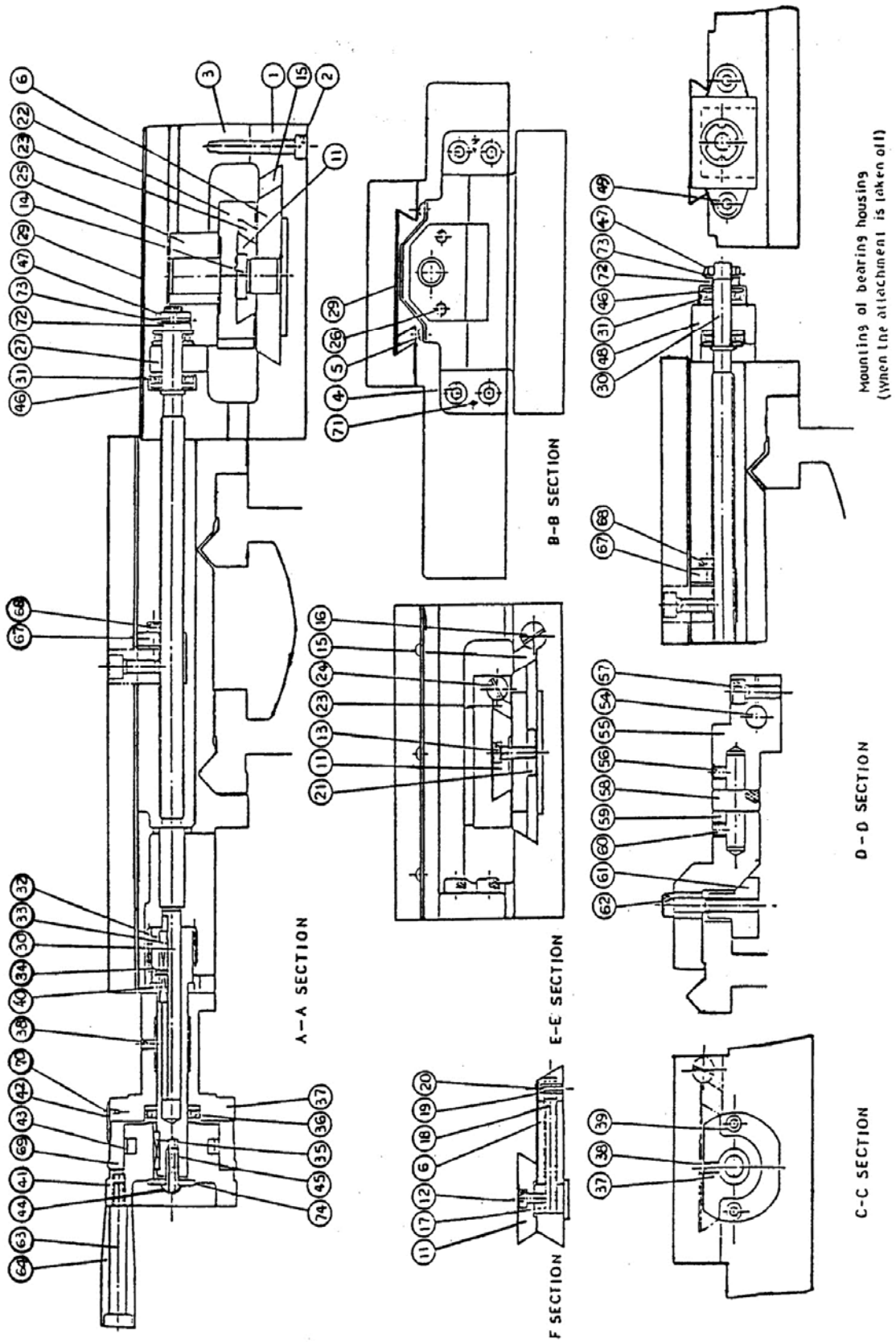
Replacement Parts

To order parts or reach our service department, call 1-800-274-6848 Monday through Friday, 8:00 a.m. to 5:00 p.m. CST. Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

TAK-13GH/BD Taper Attachment Kit



TAK-13GH/BD Taper Attachment Kit



TAK-13GH/BD Taper Attachment Kit – Parts List

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	Countersunk 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	Countersunk Flat Screw	M3x5	1
35	84-1007-00-3	Woodruff Key	3x13	1
36	BB-55102	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 mm	1
52	84-0031-00	Universal Joint		1
53	84-0031-00-1	Spring Pin	4x19 mm	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

Index No	Part No	Description	Size	Qty
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 mm	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 mm	2
72	84-0038-00	Spacer		1
73	84-0021-00-2	Lock Washer	AW#12	1
74	17-0306-00	Washer		1