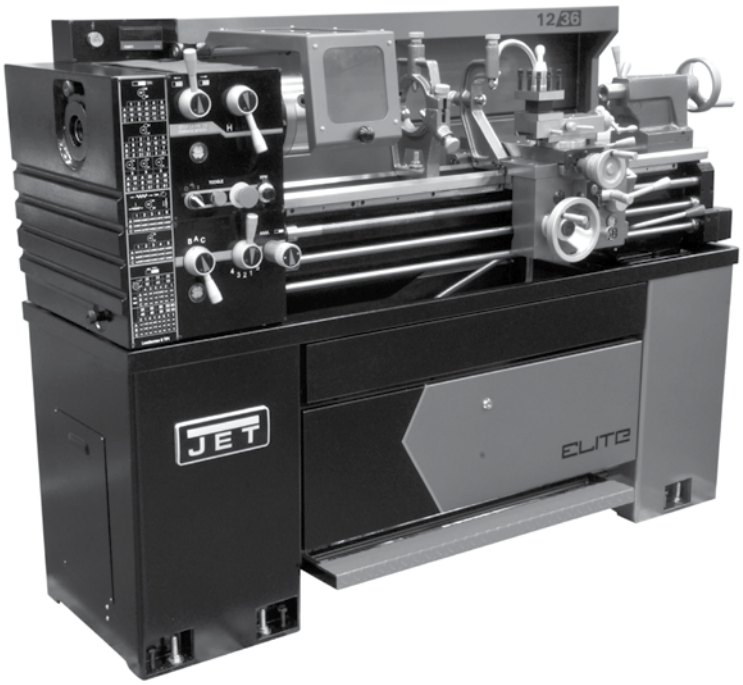
ELITE
HIGH PERFORMANCE MACHINERY

Operating Instructions and Parts Manual

1236 Lathe

Model: E-1236VS



JET

JET®
427 New Sanford Road
LaVergne, Tennessee 37086
www.jettools.com
Ph.: 855-336-4032

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1.0 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 1-855-336-4032, 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, jettools.com.

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.

HOW TO GET TECHNICAL SUPPORT
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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, jettools.com.

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2.0 TABLE OF CONTENTS

3.0 SAFETY PRECAUTIONS

1. Read and understand the entire owner's manual before attempting assembly or operation.
2. Read and understand the warnings posted on the machine and in this manual. Failure to comply with all of these warnings may cause serious injury.
3. Replace the warning labels if they become obscured or removed.
4. This lathe is designed and intended for use by properly trained and experienced personnel only. If you are not familiar with the proper and safe operation of a lathe, do not use until proper training and knowledge have been obtained.
5. Do not use this lathe for other than its intended use. If used for other purposes, JET®, disclaims any real or implied warranty and holds itself harmless from any injury that may result from that use.
6. Always wear approved safety glasses/face shields while using this lathe. Everyday eyeglasses only have impact resistant lenses; they are not safety glasses.
7. Before operating this lathe, remove tie, rings, watches and other jewelry, and roll sleeves up past the elbows. Remove all loose clothing and confine long hair. Non-slip footwear or anti-skid floor strips are recommended. Do not wear gloves.
8. Wear ear protectors (plugs or muffs) during extended periods of operation.
9. Do not operate this machine while tired or under the influence of drugs, alcohol or any medication.
10. Make certain the switch is in the OFF position before connecting the machine to the power supply.
11. Make certain the machine is properly grounded.
12. Make all machine adjustments or maintenance with the machine unplugged from the power source.
13. Remove adjusting keys and wrenches. Form a habit of checking to see that keys and adjusting wrenches are removed from the machine before turning it on.
14. Keep safety guards in place at all times when the machine is in use. If removed for maintenance purposes, use extreme caution and replace the guards immediately after maintenance is complete.
15. Check damaged parts. Before further use of the machine, 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.
16. Do not use power tools in damp/wet locations or other dangerous environments. Do not expose them to rain. Keep work area well lighted. Provide for adequate space surrounding work area and non-glare, overhead lighting.
17. Keep the floor around the machine clean and free of scrap material, oil, and grease.
18. Keep visitors a safe distance from the work area. Keep children away.
19. Make your workshop child proof with padlocks, master switches, or by removing starter keys.
20. Give your work undivided attention. Looking around, carrying on a conversation, and "horse-play" are careless acts that can result in serious injury.
21. Maintain a balanced stance at all times so that you do not fall or lean against moving parts. Do not overreach or use excessive force to perform any machine operation. Never force the cutting action.
22. Do not operate the lathe in flammable or explosive environments. Do not use in a damp environment or expose to rain.
23. Use the right tool at the correct speed and feed rate. Do not force a tool or attachment to do a job for which it was not designed. The right tool will do the job better and more safely.

24. Use recommended accessories; improper accessories may be hazardous.
25. Maintain tools with care. Keep cutting tools sharp and clean for the best and safest performance. Follow instructions for lubricating and changing accessories.
26. Do not attempt to adjust or remove tools during operation. Disconnect tools before servicing and when changing accessories, such as blades, bits, cutters, and the like.
27. Never stop a rotating chuck or workpiece with your hands.
28. Choose a low spindle speed when working unbalanced workpieces, and for threading and tapping operations.
29. Do not exceed the maximum speed of the workholding device.
30. Do not exceed the clamping capacity of the chuck.
31. Secure Work. For safety and use of both hands, use clamps or a vise to hold work when practical.
32. Workpieces longer than 3 times the chucking diameter must be supported by the tailstock or a steady rest.
33. Avoid small chuck diameters with large turning diameters.
34. Avoid short chucking lengths and small chucking contact.
35. Turn off the machine and disconnect from power before cleaning. Use a brush to remove shavings or debris — do not use your hands.
36. Do not stand on the machine. Serious injury could occur if the machine tips over.
37. Never leave the machine running unattended. Turn the power off and do not leave the machine until moving parts come to a complete stop.
38. Remove loose items and unnecessary work pieces from the area before starting the machine.
39. Direction of feed — feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
40. Installation work and electrical wiring must be done by qualified electrician in accordance with all applicable codes and standards.
41. Tighten all locks before operating.
42. Rotate workpiece by hand before applying power.
43. Rough out workpiece before installing on faceplate.
44. Do not mount split workpiece or one containing knot.
45. Use lowest speed when starting new workpiece.

Familiarize yourself with the following safety notices used in this manual:

⚠ CAUTION

This means that if precautions are not heeded, it may result in minor injury and/or possible machine damage.

⚠ WARNING

This means that if precautions are not heeded, it may result in serious injury or possibly even death.

4.0 INTRODUCTION

This manual is provided by JET® covering the safe operation and maintenance procedures for a JET Model E-1236VS. This manual contains instructions on installation, safety precautions, general operating procedures, maintenance instructions, and parts breakdown. Your machine has been designed and constructed to provide years of trouble-free operation if used in accordance with the instructions as set forth in this document.

If there are questions or comments, please contact your local supplier or JET. JET can also be reached at our web site: www.jettools.com. Retain this manual for future reference. If the machine transfers ownership, the manual should accompany it.

5.0 SPECIFICATION AND ACCESSORIES

5.1 GENERAL LAYOUT OF LATHE

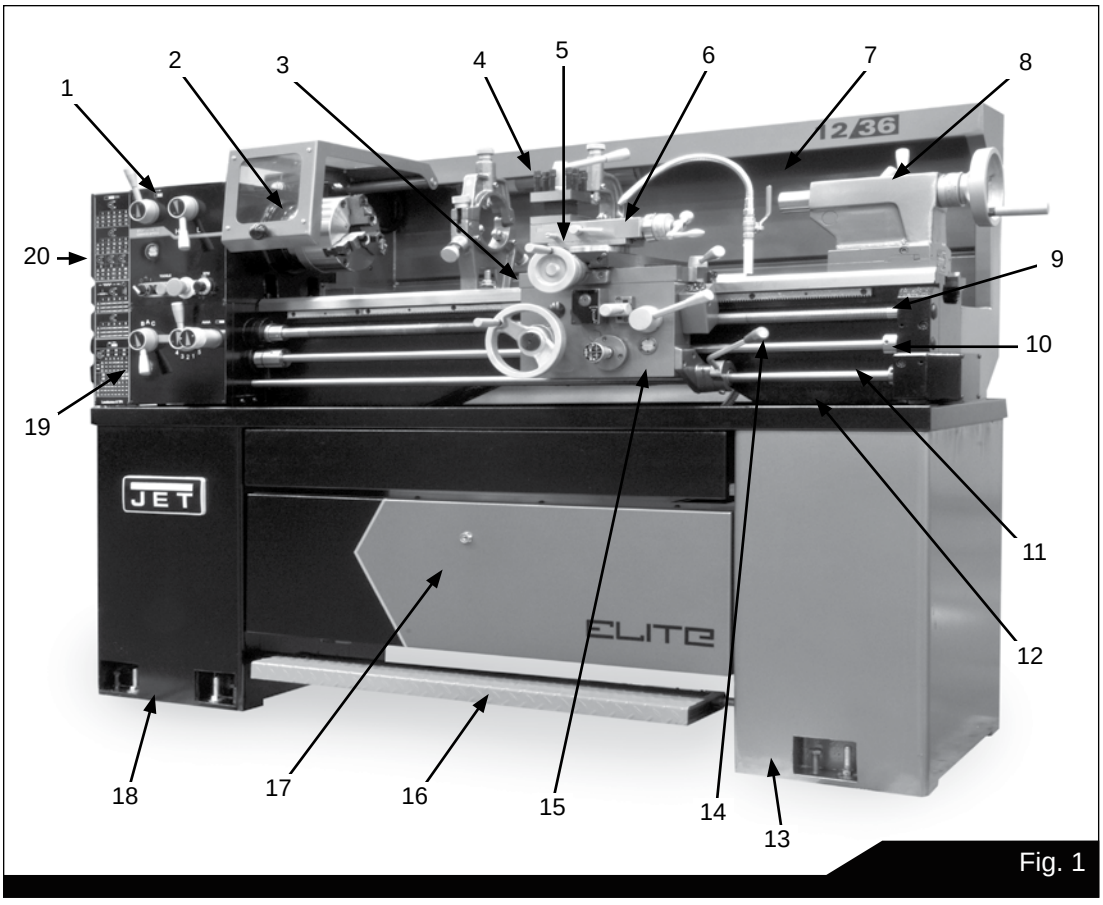

Fig. 1

1. Headstock
2. Spindle
3. Saddle
4. Toolpost
5. Cross - slide
6. Compound - rest (Top slide)
7. Splash Guard
8. Tailstock
9. Lead Screw
10. Feed Rod
11. Switch control rod
12. Bed
13. Stand
14. Spindle rotation lever
15. Apron
16. Footbrake
17. Cabinet (Tool box)
18. Head end stand
19. Gearbox
20. End Cover

5.2 DIMENSIONS

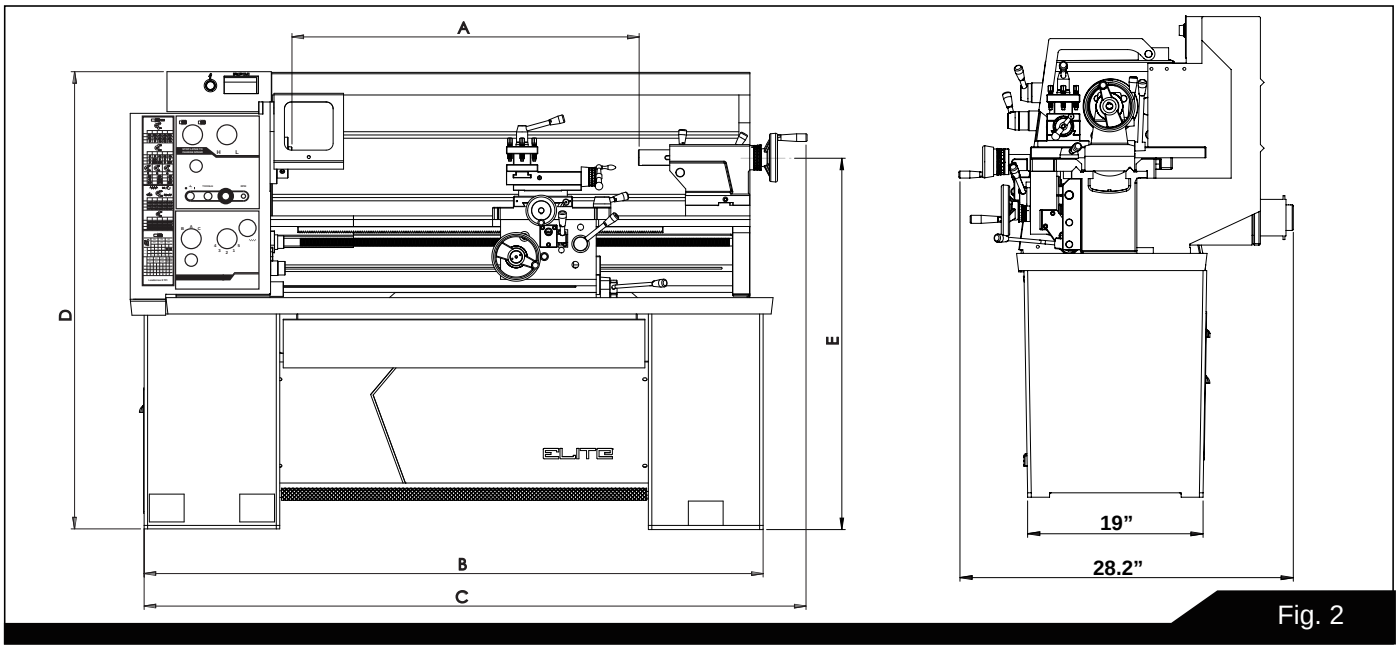

Fig. 2

Size/Type	A	B	C	D	E
E-1236VS	36 in	64-1/2 in	70-1/4 in	45-1/4 in	41 in

5.3 FOUNDATION PLAN

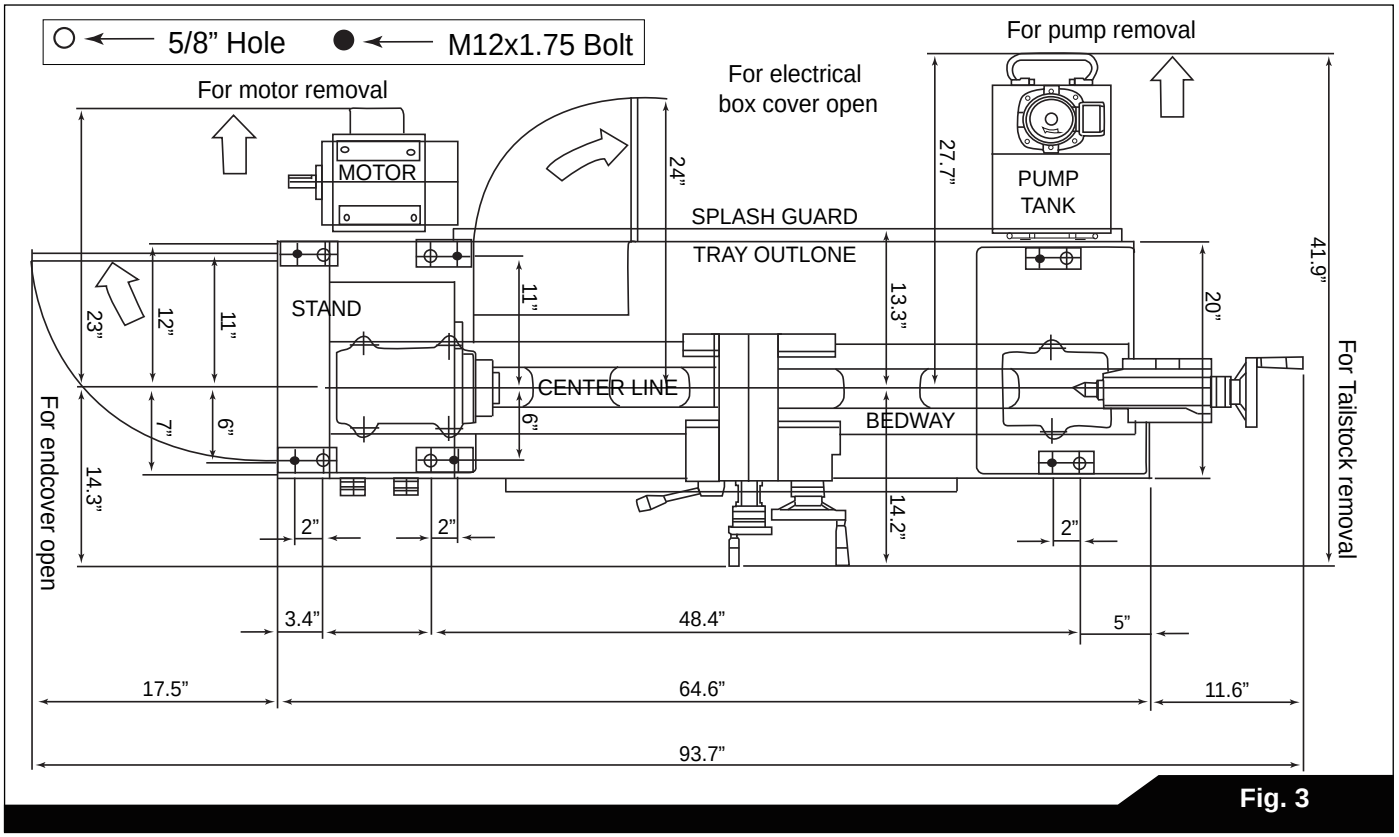

Fig. 3

5.4 SPECIFICATIONS

MODEL	E-1236VS
Swing over Bed	306mm 12in
Swing over Cross Slide	186mm 7-5/16in
Height of Center	150mm 6in
Distance between Centers	915mm 36in
BED	
Width of Bedways	190mm 7-1/2in
Swing over Gap	445mm 17-1/2in
Length of Gap	240mm 9-1/2in
Width in front of face plate	150mm 6in
SPINDLE	
Spindle nose mounting	D1-4 Camlock
Spindle bore	40mm 1-9/16in
Taper of spindle bore	M.T. #5
Number of spindle speeds	Variable speed change
Range of spindle speeds	40-2000 R.P.M.
TOOL SLIDE	
Total travel of cross slide	170mm 6-3/4in
Total travel of top slide	90mm 3-1/2in
Max. size cutting tool	13mm 1/2in
TAIL STOCK	
Total travel of tailstock barrel	100mm 4in
Taper in tailstock barrel	M.T. #3
Diameter of barrel	40mm 1-9/16in
THREADS	
Lead screw diameter & pitch	Dia. 22mm Pitch 4mm, 7/8in 8T.P.I.
Inch threads	3-24 TPI (8Nos) for metric system 2-56 TPI (34Nos) for inch system
Metric pitches	0.5-10mm (21Nos) for metric system 0.5-12mm (33Nos) for inch system
FEEDS	
Feed rod diameter	Dia. 19mm 3/4in
Longitudinal feeds	0.0016-0.0460in/rev. (25) for inch system
Cross feeds	0.0005-0.0150in/rev. for inch system
MOTOR	
Main spindle motor	2HP, 230V, 3 phase
Power input	3 phase
Coolant pump motor	1/8HP 0.1KW
Machine net weight	550kgs
Machine gross weight	670kgs
We reserve the right to modify and improve our products.	

5.5 STANDARD ACCESSORIES

- Electrical equipment & Motor 2 HP
- Set of change gears - 1 set
- Center sleeve M.T. No. 5x3 - 1 pc.
- Two centers M.T. No.3 - 1 set
- Threading dial indicator - 1 set
- Toolbox; set of spanners & Keys - 1 set
- 4-ways turret toolpost - 1 pc.
- Toolpost wrench - 1 set
- 6 inch (150mm) dia. backplates - 1 pc.
- 3 - jaw scroll chuck 6 inch (150mm)
- Face plate 10 inch (250mm)
- Steady rest
- Follow rest
- Coolant pump equipment
- Splash guard

5.6 OPTIONAL ACCESSORIES

- 4 - jaw independent chuck 8 inch (200mm)
- Taper turning attachment
- Quick change toolpost
- Micro carriage stop

6.0 INSTALLATION

1. Finish removing all crate material from around lathe.
2. Unbolt lathe from shipping pallet.
3. Choose a location for the lathe that is dry and has sufficient illumination (consult osha or ansi standards for recommended lighting levels in workshop environments).
4. Allow enough room to service the lathe on all four sides, and to load and off-load work pieces. In addition, if bar work is to be performed, allow enough space for stock to extend out the headstock end. If used in production operations, leave enough space for stacking unfinished and finished parts.
5. The foundation must be solid to support the weight of the machine and prevent vibration, preferably a solid concrete floor.
6. The lathe's center of weight is near the headstock. Before lifting, move the tailstock and the carriage (release carriage lock, see section 11.0) To the right end of the bed and lock them.
7. With properly rated lifting equipment, slowly raise lathe off shipping pallet. (See Figure 4). Do not lift lathe by the spindle.

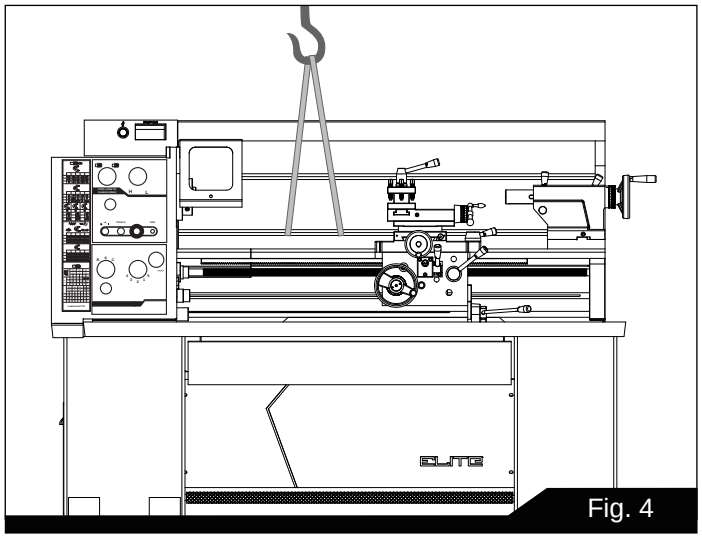
Fig. 4

⚠ CAUTION

Confirm that all suspension equipment is properly rated and in good condition for lifting lathe. Do not allow anyone beneath or near load while lifting.

8. The lathe can be placed upon the cast iron leveling pads under each foot hole, and adjusted using the adjusting bolts with hex nuts. Or, it may be secured to the floor using bolts placed head-down in the concrete, and using shims where needed to level the machine. Refer to Figure 3 for mounting hole locations and dimensions.

6.1 LEVELING THE LATHE

It is imperative that the lathe be on a level plane; that is, where headstock and tailstock center points remain aligned throughout the tailstock travel, with the bed ways absent of twist and thus parallel to the operational center line.

A lathe which is not properly leveled will be inaccurate, producing tapered cuts. Also, the center point of the tailstock will vary as it is positioned along the bed, thus requiring constant readjustment of the set of the tailstock.

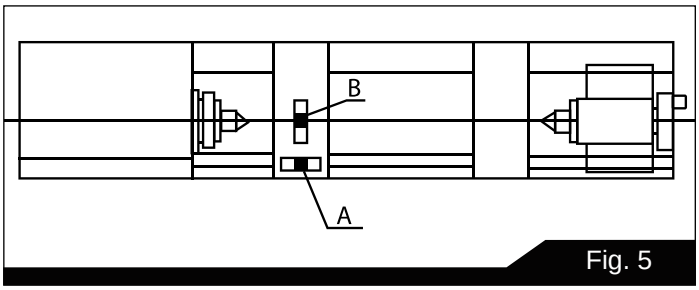

Fig. 5

1. Use a machinist's precision level on the bed ways both front to back and side to side, as shown in Figure 5. Take the reading in one direction every ten inches. Make sure the ways are clean and free of any debris before placing a level upon them.
2. Deviation over bed length (see Figure 5):
   (a) Maximum 0.02/1000mm
   (b) Maximum 0.04/1000mm
3. Tighten foot screw nuts evenly to avoid distortion.
4. Leveling should be inspected occasionally, and especially if the accuracy of the lathe begins to diminish.

6.2 COMPLETING INSTALLATION

1. Exposed metal surfaces have been coated with a rust protectant. Remove this using a soft rag and mild commercial solvent or kerosene. Do not use paint thinner, gasoline, or lacquer thinner, as these will damage painted surfaces. Cover all cleaned surfaces with a light film of SAE-20W machine oil, such as Mobil DTE Oil Heavy Medium.
2. Open the end gear cover. Clean all components of the end gear assembly and coat all gears with a heavy, non-slinging grease. Close the end gear cover.

Note: A limit switch prevents the lathe from operating when the end gear cover is open.

6.3 CHUCK PREPARATION

⚠ WARNING

Read and understand all directions for chuck preparation. Failure to comply may cause serious injury and/or damage to the lathe.

The three-jaw scroll chuck is shipped pre-installed on the lathe. It can be used for clamping cylindrical, triangular and hexagonal stock, and has reversible jaws.

The four-jaw chuck has independently adjustable jaws, and permits the holding of square and asymmetrical pieces. It also enables accurate concentric set-up of cylindrical pieces.

⚠ WARNING

Chucks are heavy. use an assistant to help remove.

Before removing a chuck, place a flat piece of thick plywood across the bedways under the chuck to prevent damage to the bedways should the chuck fall from your hands. Alternatively, many users make a wood chuck cradle that sits atop the ways and accepts the specific diameter of chuck for easier installing and removal. Figure 6 shows an example.

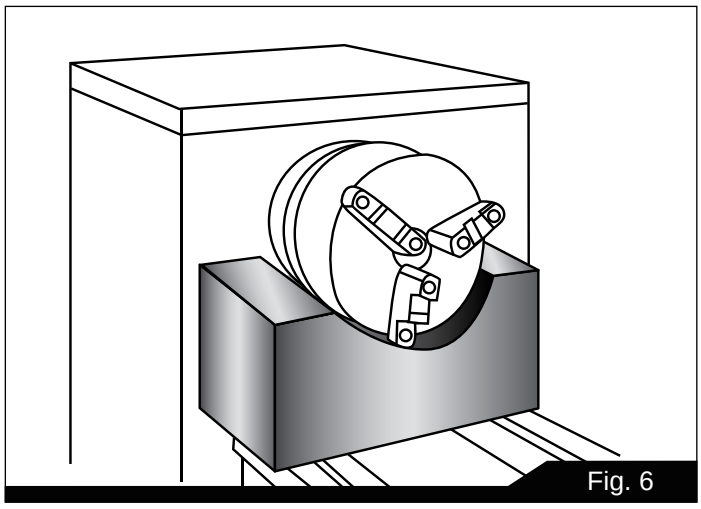
Fig. 6

To remove a chuck from the spindle:

1. Support the chuck and using the chuck wrench from the tool box, turn six camlocks 1/4-turn counterclockwise. See Figure 7.
2. Carefully remove the chuck from the spindle and place on a firm work surface. If the spindle seems stuck, use a mallet at various points on the back side to help free it from the spindle.
3. Inspect the camlock studs. Make sure they have not become cracked or broken during transit. Clean all parts thoroughly with solvent. Also clean the spindle and camlocks.

4. Cover all chuck jaws and the scroll inside the chuck with #2 lithium tube grease. Cover the spindle, camlocks, and chuck body with a light film of 20W oil.

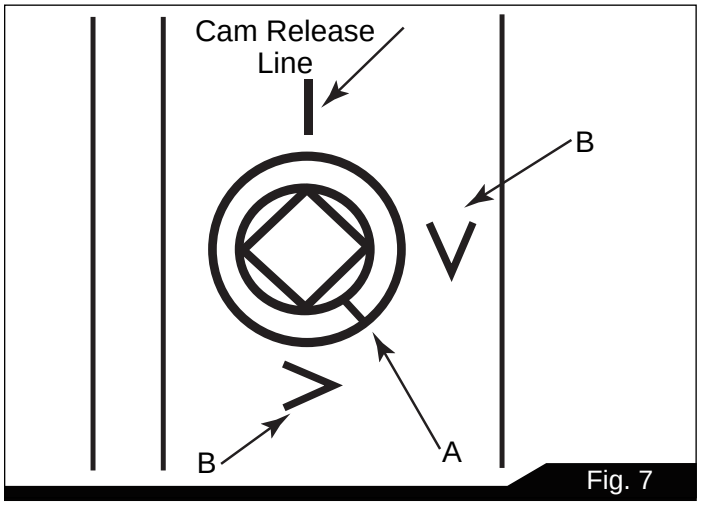

Fig. 7

5. Lift the chuck up to the spindle nose and press onto the spindle. Tighten in place by turning the camlocks 1/4 turn clockwise. The index mark (A, Figure 7) on the camlock should be between the two indicator arrows (B) when tight, as shown in Figure 7.
   - If the index mark (A) is not between the two arrows, i.e. the cam turns beyond the indicator arrows, then remove the chuck and turn the camlock stud IN one full turn.
   - If a camlock will not engage, remove the chuck and turn the camlock stud OUT one full turn.
6. Make sure chuck is secure on the spindle with the camlocks correctly engaged.

6.4 BREAK-IN PERIOD

Do not run the lathe above 560 RPM for the first six hours of operation, to allow gears and bearings to adapt and run smoothly.

6.5 CHUCK KEY BRACKET

The chuck key bracket (Figure 8) is located on the cabinet below the headstock. The chuck key must be placed within the bracket for lathe to operate. A sensor in the bracket will deactivate spindle if key is not present - this ensures key has been safely removed from chuck and spindle area before starting the lathe.

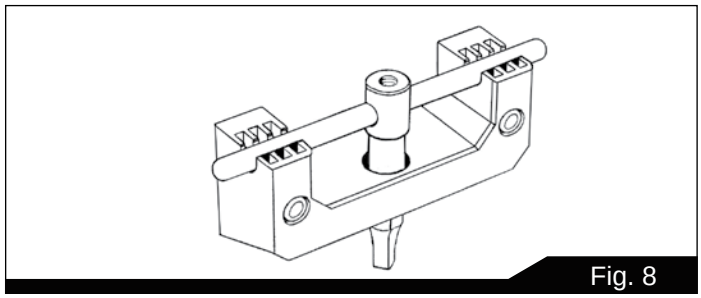
Fig. 8

7.0 MAINTENANCE/LUBRICATION

⚠ CAUTION

Lathe must be serviced at all lubrication points and all reservoirs filled to operating level before the lathe is put into service. Failure to comply may cause serious damage to the lathe.

The lathe is shipped with oil in the headstock. Coolant is not included.

Use clean lubricants and check levels often, including before each working shift. To ensure proper lubrication, oil levels should not be less than the center of the oil sight glass. Try not to overfill, as this may cause leakage.

Unless specified otherwise, the lubrication points require a non-detergent, ISO 68, SAE 20W oil. The recommended brand for this lathe is Mobil DTE® Oil Heavy Medium.

1. Chuck – Lubricate the chuck daily with SAE 20W oil through the ball oiler, shown in Figure 9.

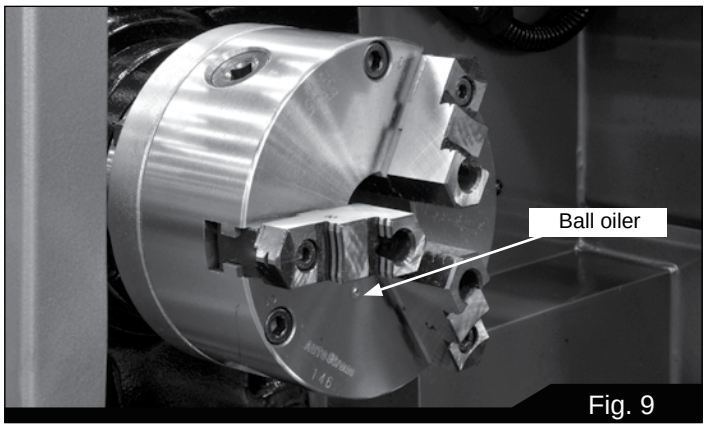

Fig. 9

2. Headstock – Oil must be up to indicator mark in oil sight glass on right side of headstock (A, Figure 10). Top off with SAE 20W oil. Fill by removing the rubber mat and unscrewing the plug (B) on top of headstock. To drain headstock, remove drain plug (C, Figure 11).

Drain oil completely and clean out all metal shavings, then rinse the casting case with kerosene. Refill after the first month of operation, then change the oil in the headstock every two months.

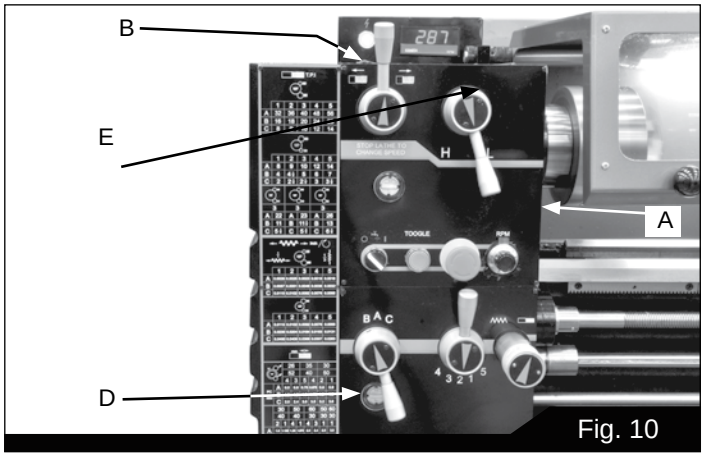

Fig. 10

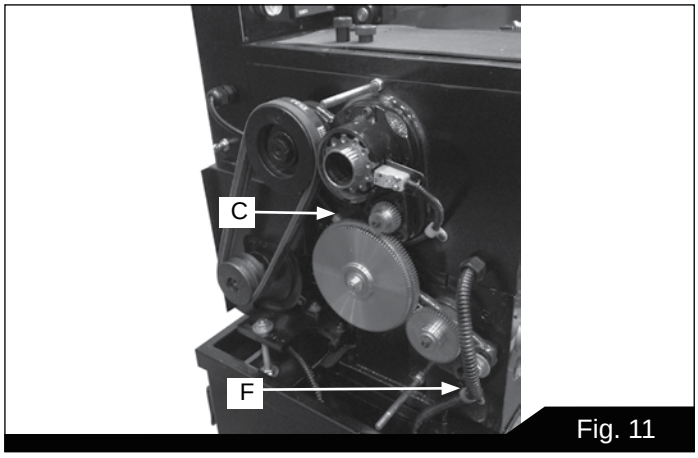

Fig. 11

3. Gearbox – Oil must be up to indicator mark in oil sight glass (D, Figure 10). Top off with SAE 20W oil. To add oil to the gearbox, remove rubber mat and unscrew oil plug (E, Figure 10). To drain, remove drain plug from the pipe (F, Figure 11). Drain oil completely and refill after the first three months of operation. Then change oil in the gearbox every six months.

4. Apron – Oil must be between indicator marks in the oil sight glass (G, Figure 12). Top off with SAE 20W oil. Unscrew oil plug (H, Figure 12) to fill. To drain, remove drain plug on the underside of apron. Drain oil completely and refill after the first three months of operation. Then, change oil in the apron annually.

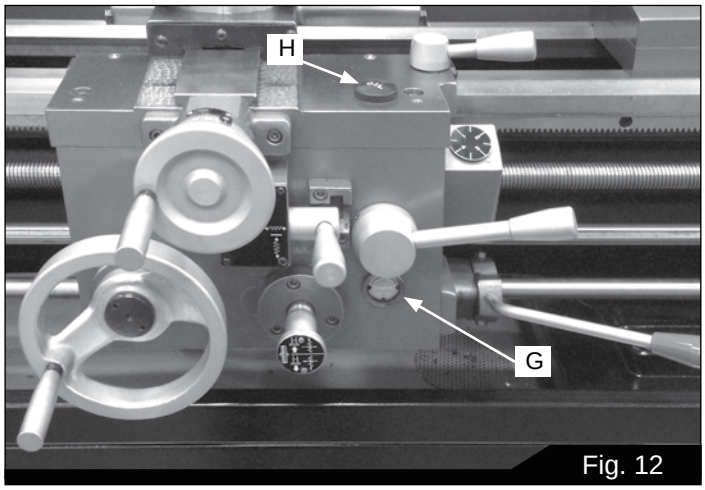

Fig. 12

5. Saddle – The anti-dust felt on both ends of the saddle (Figure 13) should be cleaned weekly with kerosene. If the felt becomes damaged, replace it.

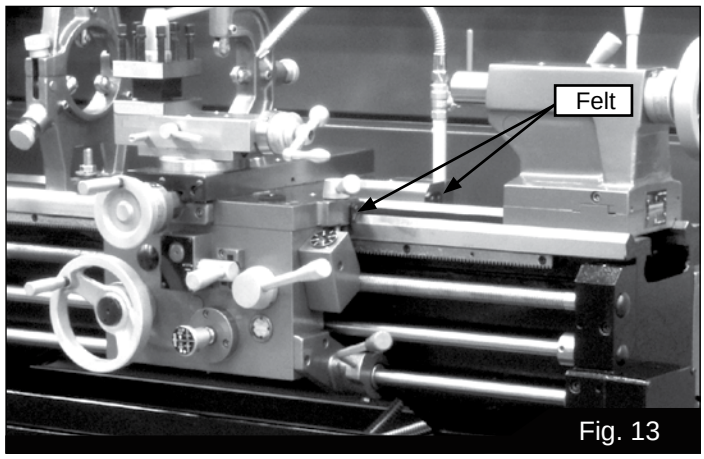

Fig. 13

6. V-Belts – Regularly check and adjust the tightness of the v-belts to prolong their service life.

7.1 BALL O ILER LOCATIONS

All ball oilers must be lubricated with SAE-20W oil (Mobil DTE® Oil Heavy Medium), as follows. Refer to Figures 13 and 14.

1. Cross Slide – Daily lubricate one ball oiler on the handwheel housing (K, Figure 14) and three ball oilers on the platform (L, Figure 14).

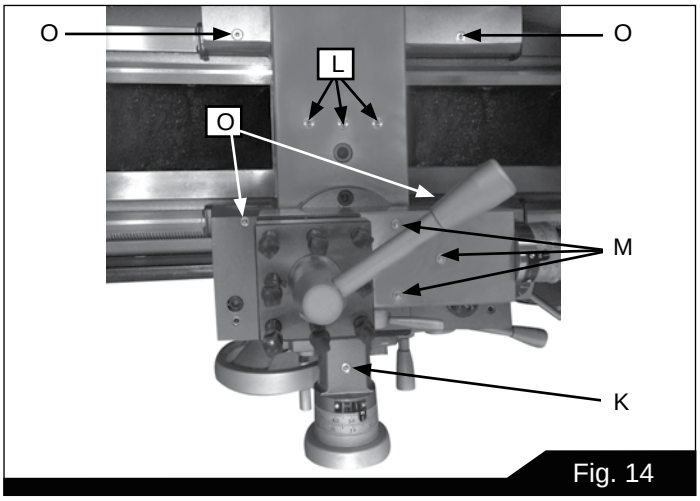

Fig. 14

2. Compound Rest – Daily lubricate three ball oilers (M, Figure 14) on top of compound rest.

3. Tool Post – Regularly clean dirt and coolant around the tool post to maintain its re-positioning accuracy.

4. Saddle – Daily lubricate four ball oilers (O, Figure 14).

5. Tailstock – Daily lubricate two ball oilers (Figure 15) on top of tailstock.

   The anti-dust felt beneath the tailstock that runs along the ways should be cleaned weekly with kerosene. If the felts become damaged, replace them.

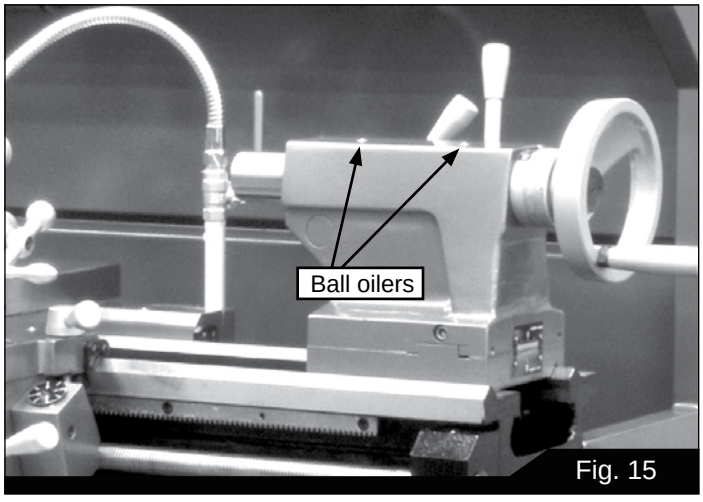

Fig. 15

7.2 COOLANT PREPARATION

⚠ CAUTION

Follow local regulations and/or coolant manufacturer's recommendations for use, care and disposal.

1. Remove access cover on the tailstock end of the lathe stand (Figure 16). Make sure coolant pump has not shifted during transport. Pour four gallons (approximate) of coolant mix into the reservoir. Use the gauge to determine when full.

2. After machine has been connected to power, turn on coolant pump and check to see that coolant is cycling properly. Flow is controlled by the tap at the base of the nozzle.

3. Reinstall access cover.

To change coolant, remove access panel from rear of lathe. Pull the coolant tray and dump dirty coolant. Clean the tray of any chips or residue. Refill with proper amount of new water soluble coolant.

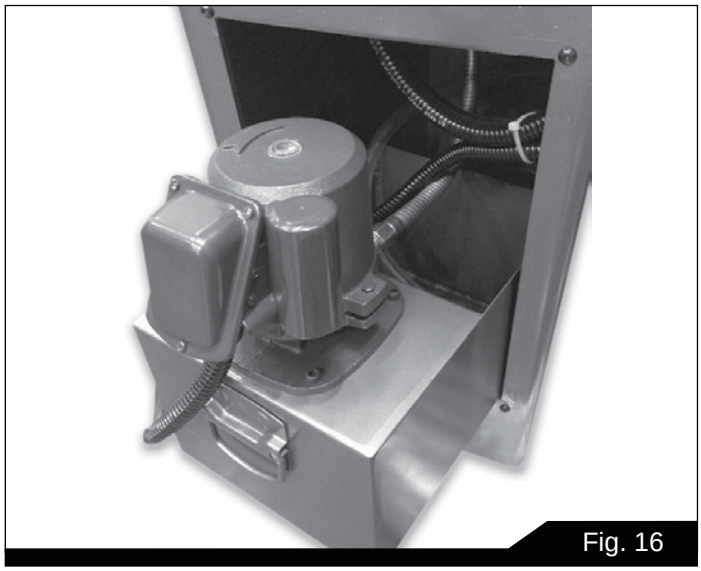
Fig. 16

8.0 ELECTRICAL CONNECTIONS

⚠ WARNING

Electrical connections must be made by a qualified electrician in compliance with all relevant codes. This machine must be properly grounded while in use to help protect the operator from electrical shock and possible fatal injury.

The main motor is rated for 230 volt, 3-phase operation only. Confirm that power available at the lathe's location meets this requirement.

IMPORTANT: The lathe must be wired properly for 230 volt, 3-phase operation. The spindle should rotate counterclockwise (as viewed from the tailstock end) while the feed rod rotates clockwise (as viewed from the tailstock end).

Make sure the lathe is properly grounded.

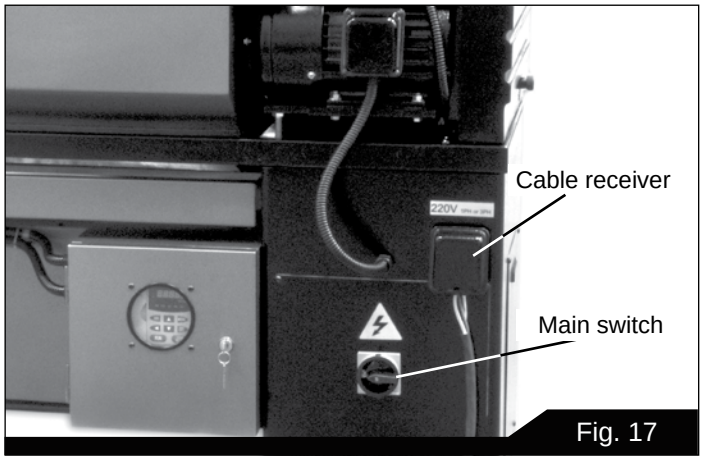

Fig. 17

9.0 BASIC CONTROLS

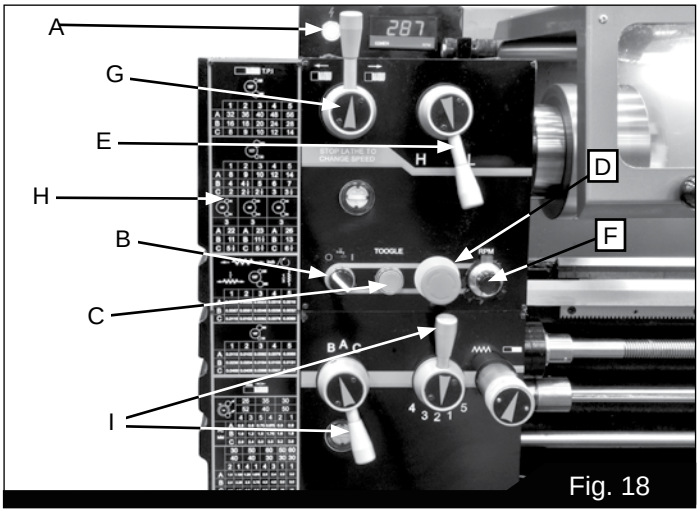

Fig. 18

1. **Control Panel**: Located on front of headstock.
   - **Power Indicator Light** (A, Figure 18). Illuminates whenever lathe is receiving power.
   - **Coolant On-Off Switch** (B, Figure 18). Activates coolant pump.
   - **Jog Button** (C, Figure 18). Quickly press and release to rotate spindle.
   - **Emergency Stop Button** (D, Figure 18). Shuts down all machine functions.

Note: Lathe will still have power. Twist button clockwise to reset.

   - **Motor Speed Switch** (E, Figure 18). Turn to select high or low speed.
2. **Speed Selection Levers** (F, Figure 18): Move levers left or right to desired spindle speed, according to accompanying chart.
3. **Feed Direction Knob** (G, Figure 18): Rotating the knob changes direction of feed. Center position is neutral.

⚠ CAUTION

Do not move feed direction knob (G) while machine is running.

4. **Lead and Feed Selector Levers** (I, Figure 18): Used conjunctively to set up for threading or feeding, according to the accompanying chart (H, Figure 18).

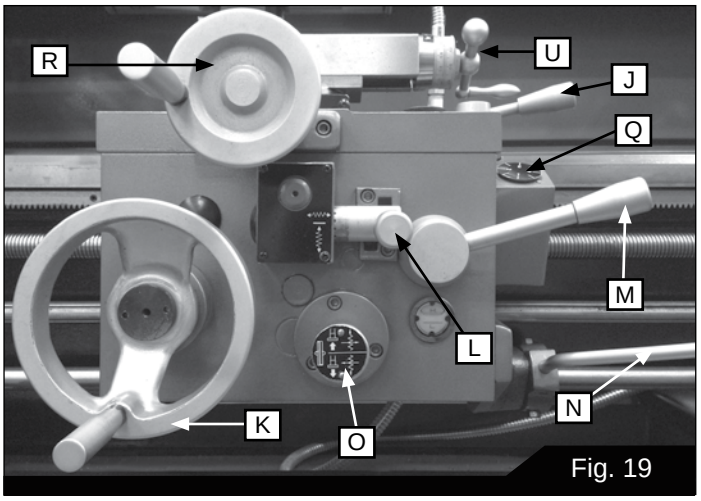

Fig. 19

5. **Carriage Lock** (J, Figure 19): Located on top right of carriage. Turn clockwise to lock, counterclockwise to unlock.

⚠ CAUTION

Carriage lock must be loose before moving carriage or damage to lathe may occur.

6. **Carriage Handwheel** (K, Figure 19): Located on the apron. Rotate handwheel clockwise to move the carriage assembly toward the tailstock (right). Rotate the wheel counterclockwise to move the carriage assembly toward headstock (left). A scale is mounted to the ring, graduated in 0.005 inch increments, and can be calibrated by loosening the thumb screw lock and rotating the ring as needed. Always retighten ring before using the feed.

7. **Feed Direction Lever** (O, Figure 19): Push in to move from left to right and pull out to move from right to left.

8. **Half Nut Lever** (M, Figure 19): Located on the front of the apron assembly. Engages the leadscrew for threading operations.

9. **Spindle Direction Control Lever** (N, Figure 19). Move the lever to the right so that its tab clears the notch, then down for forward spindle rotation, or up for reverse spindle rotation. Allow the spindle to come to a stop before changing directions. Position lever in neutral position (tab in notch) before shutting off the lathe.

10. **Feed Engagement Lever** (L, Figure 19): Push to one of three positions; Up for longitudinal; Down for crossfeed; the middle position allows screws to be cut by engaging the half nut.

11. **Threading Dial** (Q, Figure 19): Indicates the point on the leadscrew where the half nut can be re-engaged to continue inch threading.

12. **Cross Slide Handwheel** (R, Figure 19): Located above the apron assembly. Clockwise rotation moves the cross slide toward the rear of machine. The accompanying scale is graduated in 0.002 inch increments, and can be calibrated by loosening the thumb screw lock and rotating the ring as needed. Always re-tighten ring before using the feed.

    The cross slide lock is located at the right of the cross slide (S, Figure 20).

13. **Compound Rest**: Located on top of the cross slide and can be rotated 360° after loosening the lock. There are calibrations in degrees at the base of the rest to assist in placement to the desired angle.

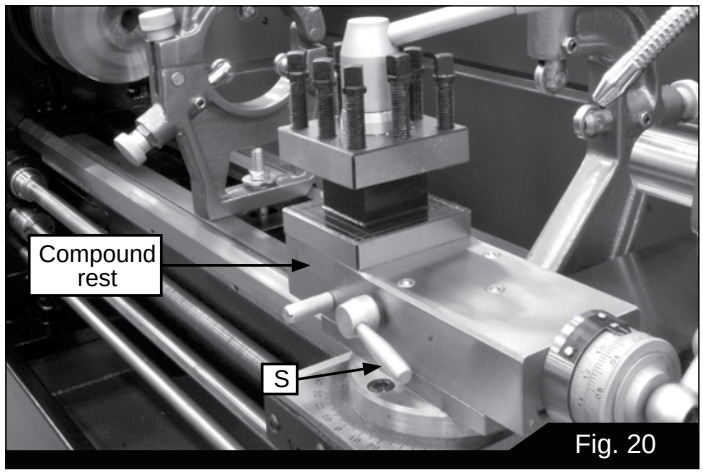

Fig. 20

14. **Compound Rest Handle** (U, Figure 19): Rotate clockwise or counterclockwise to position. The accompanying scale on the collar is graduated in 0.001 inch increments.

15. **Tailstock Quill Clamping Lever** (W, Figure 21): Push forward to lock the sleeve. Pull backward to unlock.

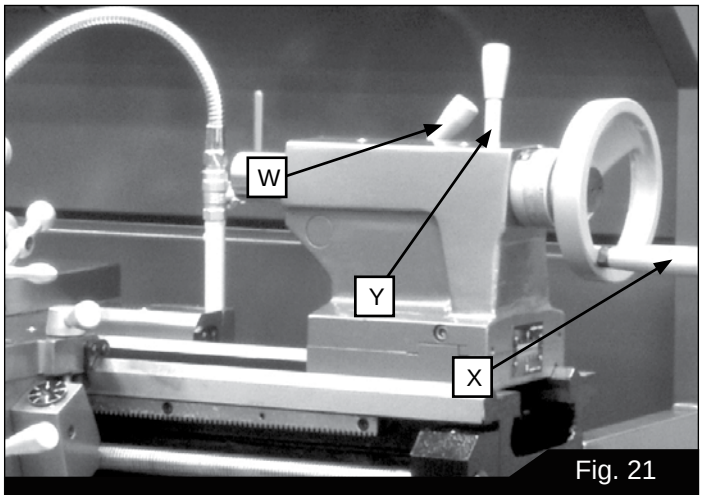

Fig. 21

16. **Tailstock Quill Traverse Handwheel** (X, Figure 21): Rotate clockwise to advance the quill and counterclockwise to retract it. Fully retract it to eject a center or drill chuck.

17. **Tailstock Clamping Lever** (Y, Figure 21): Lift up to lock. Push down to unlock.

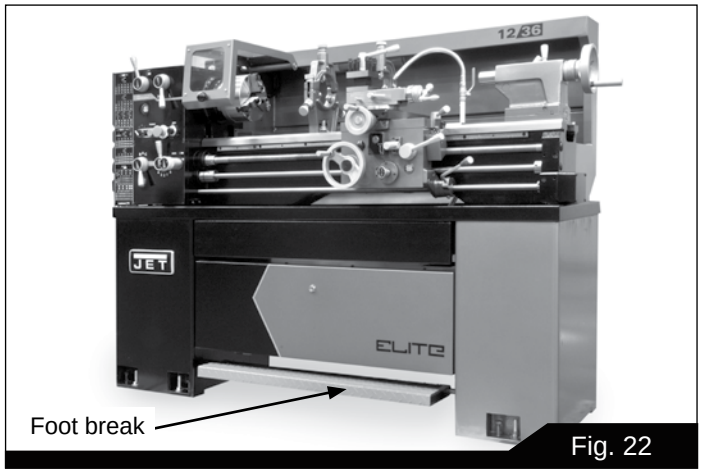

Fig. 22

18. **Foot Brake** (Figure 22): For emergency shutdown of all lathe functions. The connecting rod mechanism is in the bed stand, and activates a brake strap at the main motor. (Caution: Lathe still has power.) The foot brake is not intended for normal stopping of the lathe. Overuse can result in hastened wear of brake parts.

10.0 OPERATION

The operator should consult shop manuals such as "Machinery's Handbook" for cutting speeds and feeds appropriate to specific workpieces. Correct feed depends upon material to be cut, cutting operation, tool type, chucking rigidity, depth of cut, and desired surface quality.

IMPORTANT: Allow a break-in period for the new lathe so that gears and bearings can adapt; do not run the lathe above 560 RPM for the first six hours of operation.

⚠ CAUTION

The following points must be observed when operating the lathe:

- Never turn any handles or levers when spindle is at high speed.
- Change spindle speed only after spindle stops.
- Change feed rate only when spindle is at low speed or is stopped.
- Never exceed maximum speed limitation of the work holding device.
- Before starting spindle, check that each handle or lever is at correct position to ensure normal engagement of gears. The spindle direction control lever should be at neutral position.
- If the brake becomes ineffective, turn off machine and adjust brake immediately.
- When operating spindle direction control lever, always turn it to correct position; never use "pre-position" for cutting at a reduced speed.
- Jaw teeth and scroll must be fully engaged, to prevent the jaws from breaking and being thrown from chuck (see Figure 23).

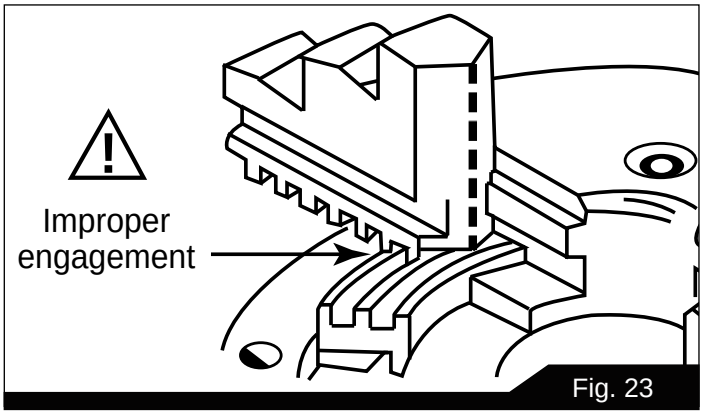

Fig. 23

- Avoid long workpiece extensions, as parts may bend or fly off (see Figure 24). Use rests or the tailstock for support.

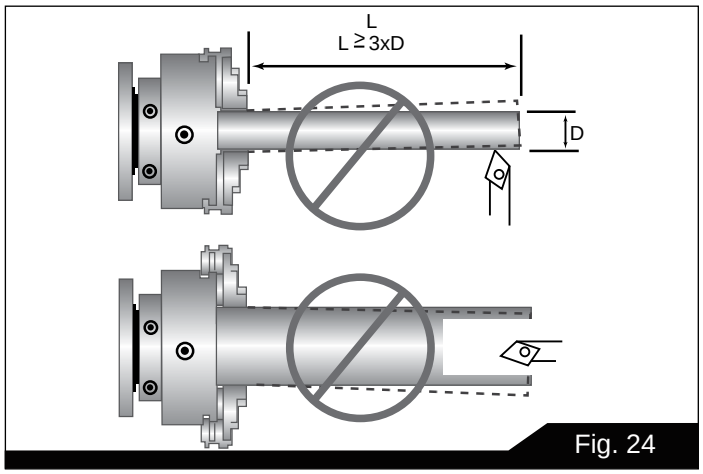

Fig. 24

- Avoid short clamping contact (Figure 25, A) or clamping on a minor part diameter (Figure 25, B). Face-locate the workpiece for added support.

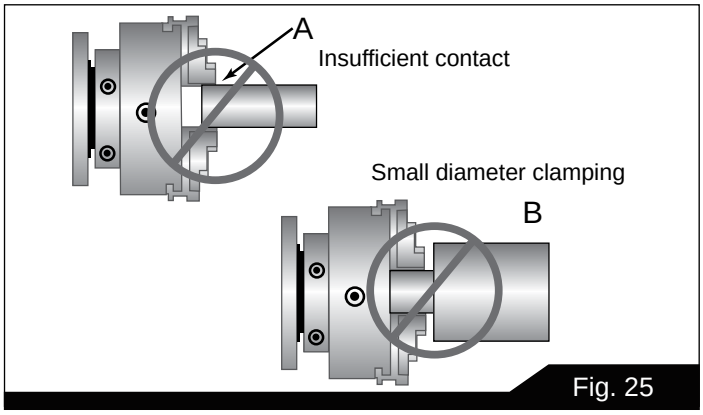

Fig. 25

10.1 TOOL SETUP

The cutting angle is correct when the cutting edge is in line with the center axis of workpiece. Use the point of the tailstock center as a gauge and shims under the tool to obtain correct center height.

Use a minimum of two clamping screws to secure each tool.

10.2 SPINDLE SPEED

The spindle speed is variable between 40 and 2000 RPM.

10.3 FEED AND THREAD SELECTION

To obtain various feed settings and thread pitches, the two levers (I, Figure 26) are used conjunctively. Position the two levers according to the Feed and Thread Chart on the front of the headstock.

TIP: When selecting feed/speed correlations, remember the general principal that high speeds complement fine feeding, and low speeds are better for coarse feeding.

10.4 THREAD CUTTING

Threading is performed in multiple passes, with increasing depths in succeeding cuts. It is recommended that test cuts be made on scrap material and the results checked before proceeding with regular material.

1. Move feed direction knob (G, Figure 26) to desired direction, for right-hand or left-hand threads.
2. Set spindle (F, Figure 26) to desired speed. Use lowest speed possible when threading.
3. Select desired thread using thread pitch levers (I, Figure 26) in conjunction with the charts on the headstock.
4. Set feed engagement lever (see L, Figure 19) to correct position (neutral).
5. Engage the half nut lever (M, Figure 19). The half nut lever must be engaged during the entire threading process when doing metric, diametral, and modular threading.
6. When tool reaches end of cut, disengage and back out the tool to clear the workpiece.
7. Reverse direction to allow cutting tool to return to its starting point.
8. Repeat process until desired result is obtained.

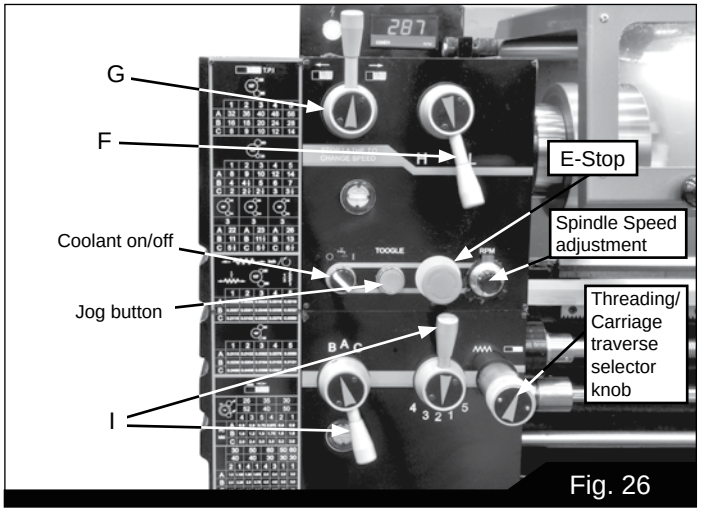

Fig. 26

11.0 ADJUSTMENTS

⚠ CAUTION

Adjustments to the lathe, especially those involving alignments of bearings, spindle, leadscrew, clutch, etc., should only be performed by qualified personnel. Improper alignments can damage the machine and/or create a safety hazard.

⚠ WARNING

Turn off main switch and press emergency stop button before making adjustments to lathe.

11.1 CHUCK JAW REVERSAL

The three jaws on the scroll chuck are reversible, to hold stock with larger diameters. See Figure 27. Loosen two screws with the provided hex key, remove jaw, and rotate it 180-degrees. Re-install jaw, and tighten each screw in increments until fully tightened.

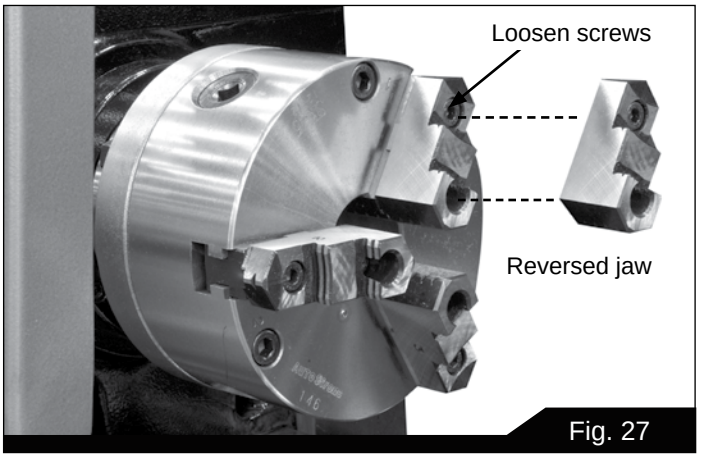

Fig. 27

11.2 GIB ADJUSTMENTS

After a period of time, some moving components may need adjustment for play (or “backlash”) due to wear. Do not overtighten gib screws as this can hasten wear to components.

Saddle – Turn screws on either side of saddle at the rear to adjust drag on saddle.

Cross Slide – Gib screws are located at front and rear of slide opposite to one another (A, Figure 28). To adjust drag, loosen rear gib screw one turn, and tighten front gib screw a quarter turn. Rotate handwheel to check play. Repeat as needed until slide moves freely without play. Gently tighten rear gib screw.

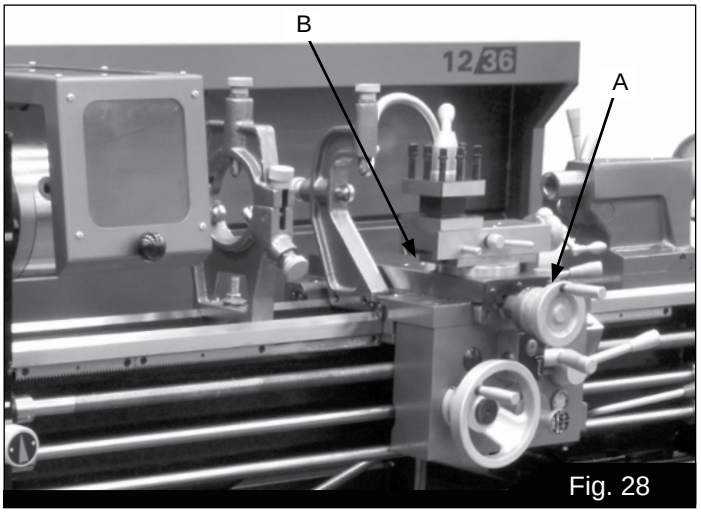

Fig. 28

Compound Rest – Gib screws are located at front and rear of compound rest (B, Figure 28). To adjust, use same method as for Cross Slide.

11.3 TAILSTOCK ADJUSTMENTS

The tailstock can be offset a distance of 16mm. See Figure 29.

1. Loosen tailstock in position by lowering locking handle (D).
2. Alternately loosen and tighten front and rear screws (E). [Only front screw shown.]

The scale (F) on the end of the tailstock indicates amount of offset, and helps when re-centering.

If the clamping force needs to be adjusted, use the hex nut beneath the tailstock body.

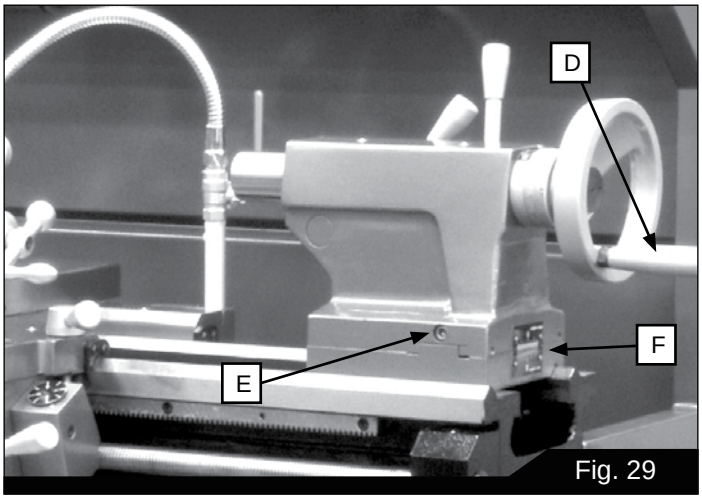

Fig. 29

11.4 GAP SECTION

1. To remove the gap section (Figure 30), first loosen the two set screws (B), then remove the four socket head cap bolts (A).
2. Remove gap section.

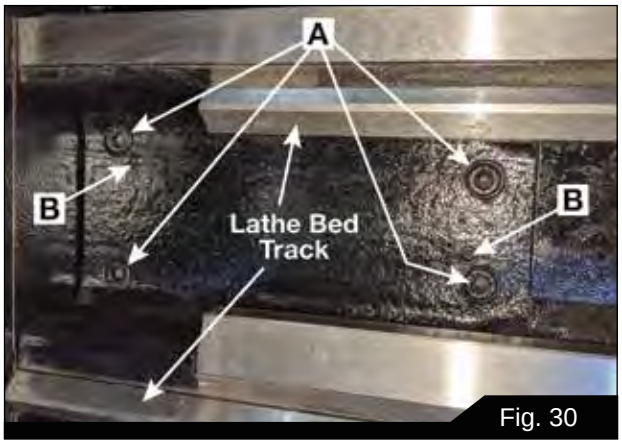

Fig. 30

To reinstall gap section:

1. Thoroughly clean bottom and ends of gap section.
2. Set gap section in place and align the ends.
3. Make sure to align the lathe bed tracks. After aligning them vertically, confirm they are also level horizontally.
4. Adjust the height of the gap component relative to the lathe bed tracks using the set screws (B).
5. Once the gap component tracks are aligned with the lathe bed tracks, install and tighten the four socket head cap bolts (A).

11.5 ALIGNING TAILSTOCK TO HEADSTOCK

Headstock and Tailstock have been aligned at the factory and should not require attention. If future adjustment should ever be needed, proceed as follows. (Make sure that twist in the lathe bed is not contributing to the problem; refer to sect. 6.1.)

1. Fit a 12” ground, center-drilled, steel bar between centers of headstock and tailstock (Figure 31).
2. Fit a dial indicator to the top slide and traverse the center line of the bar. If it indicates a taper, adjustment is needed.
3. Align tailstock using the off-set screws at front and back (see E, Figure 29) until tailstock is aligned.

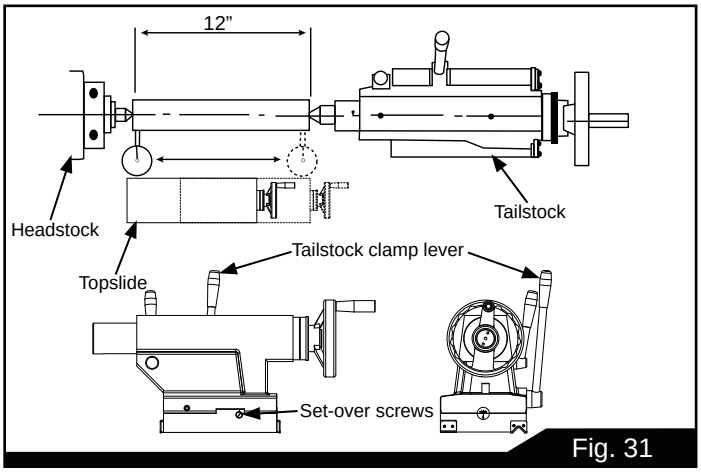

Fig. 31

11.6 CROSS SLIDE NUT ADJUSTMENT

The cross slide moves via a lead screw which drives a nut. This can be adjusted if backlash develops. Backlash is identified by turning the cross slide handwheel left and right – if there is a delay before any cross slide movement, the nut needs adjusting.

Move the cross slide to the far end. Tighten or loosen the screw shown in Figure 32 until backlash is adjusted out.

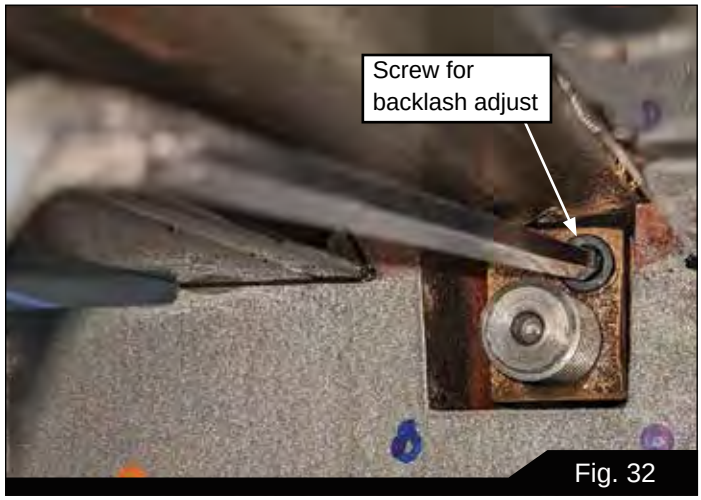

Fig. 32

11.7 SHEAR PIN REPLACEMENT

The lead screw and feed shaft are equipped with shear pins, which are designed to break in order to protect the drive system against overload. A broken shear pin must be replaced.

Knock out the broken pin; line up the holes and insert new pin.

11.8 STEADY REST ADJUSTMENT

Always lubricate the bearing shafts with grease before using the steady rest. The point at which the bearing shafts contact the workpiece require continuous lubrication to prevent premature wear.

To set the steady rest (see Figure 33):

1. Loosen hex nut (A) to slide steady rest along the ways.
2. Loosen knurled handle (B) until it can be pivoted out of the slot.
3. Loosen three lock knobs (C), and back off the bearing shafts (D) using knurled handles (E).
4. Pivot the collar on its hinge and position steady rest around workpiece.
5. Firmly tighten hex nut (A).
6. Set the bearing shafts snugly to work piece and secure by tightening locking knobs. The bearing shafts should be snug but not overly tight.

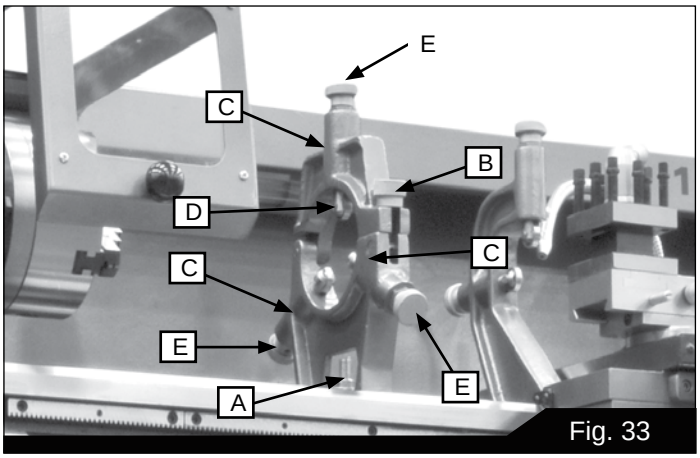

Fig. 33

11.9 FOLLOW REST ADJUSTMENT

The follow rest mounts to the saddle with two socket head cap bolts. The follow rest should be mounted so that locking knobs point away from chuck.

The sliding bearing shafts are set similar to those on the steady rest – free of play, but not binding.

Always lubricate the bearing shafts sufficiently with grease before operating.

12.0 RECOMMENDED CUTTING SPEED OF LATHE

Workpiece material		Speed (sfm)	Feed (lpr)
Aluminum	2021 to 6061	500	0.002
Brass		75	0.001
Bronze		70	0.001
Cast Iron	Gray	35 to 125	0.0015 to 0.004
	Ductile	15 to 125	0.001 to 0.004
	Malleable	35 to 170	0.0015 to 0.003
Copper	101 to 757	85 to 90	0.002
	834 to 978	340	0.003
Magnesium	AZ, AM, EZ, ZE, HK types	500	0.002
Nickel	Nickel 200 to 230	85	0.002
	Monel	15 to 60	0.001 to 0.0015
	Inconel, Waspaloy	15	0.002
	Hastelloy	10 to 15	0.002
Plastic	TFE, CTFE	250	0.002
	Nylon	350	0.002 to 0.003
	Phenolic	350	0.003
Stainless Steel	201 to 385	65 to 85	0.001 to 0.0015
	405 to 446	90	0.0011
	15-5 PH, 16-6 PH, 14-4 PH	30 to 60	0.0006 to 0.0012
Steel	1005 to 1029	80 to 140	0.001 to 0.002
	1030 to 1055	35 to 115	0.0009 to 0.0015
	1060 to 1095	30 to 80	0.0007 to 0.001
	10L45 to 10L50	40 to 140	0.0009 to 0.0015
	12L13 to 12L15	225 to 280	0.003 to 0.0035
	41L30 to 41L50	20 to 110	0.0007 to 0.0015
	4140 to 4150	20 to 115	0.0007 to 0.0015
	4140 (35 HRC)	70	0.001
	8617 to 8622	40 to 120	0.001 to 0.0016
	M-1 to M-6	60	0.0013
	H-10 to H-19	20 to 80	0.007 to 0.0011
	D-2 to D-7	45 to 60	0.001
	A-2 to A-9, 01 to 07	45 to 60	0.001
	W-1, W-2	110	0.0015
	M-50, 52100	20 to 85	0.0007 to 0.0015
Titanium	TI-6AI-6V	45	0.001

13.0 REPLACEMENT PARTS — E-1236VS

Replacement parts are listed on the following pages. To order parts or reach our service department, call 1-855-336-4032, 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.

JET®

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LaVergne, Tennessee 37086

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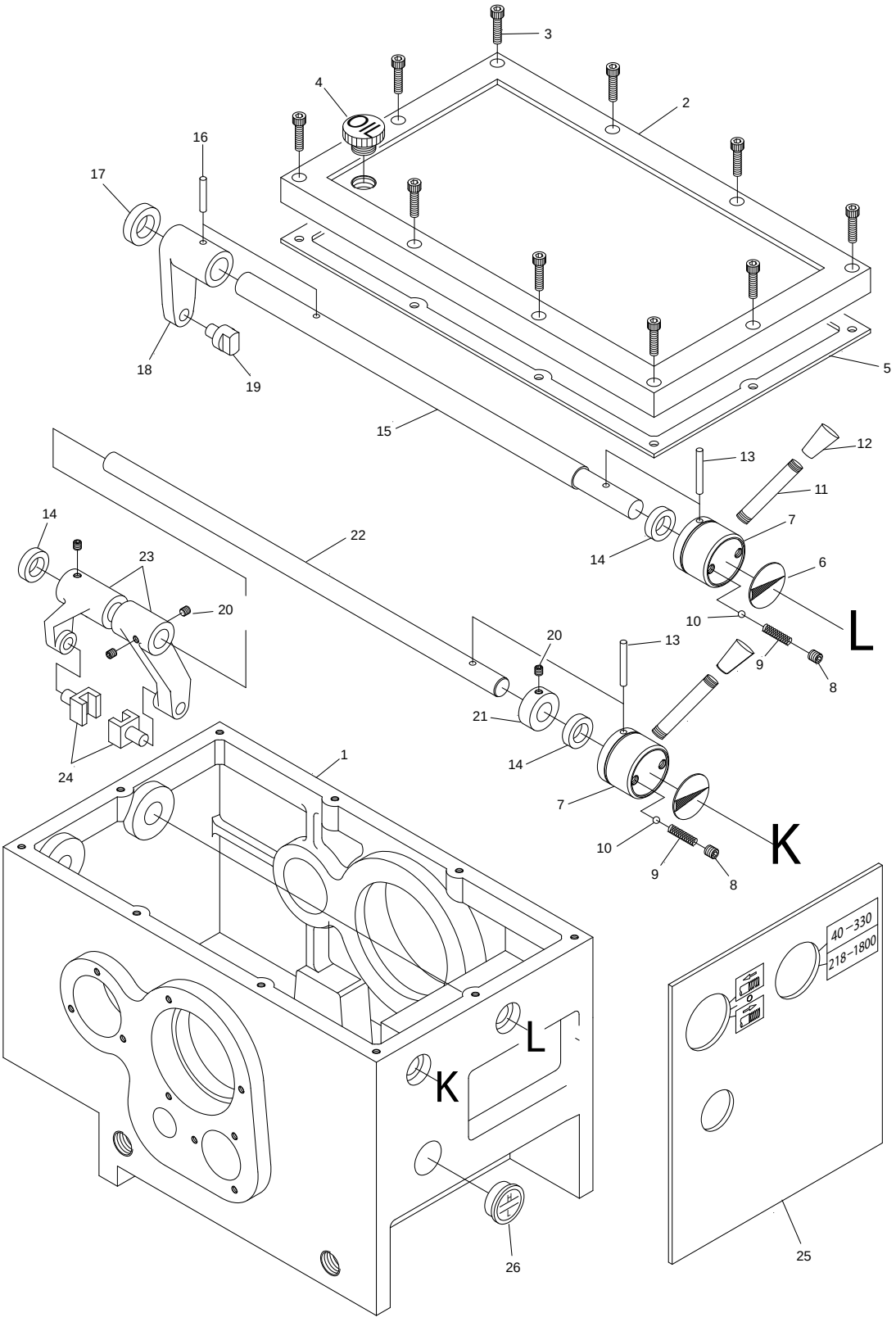
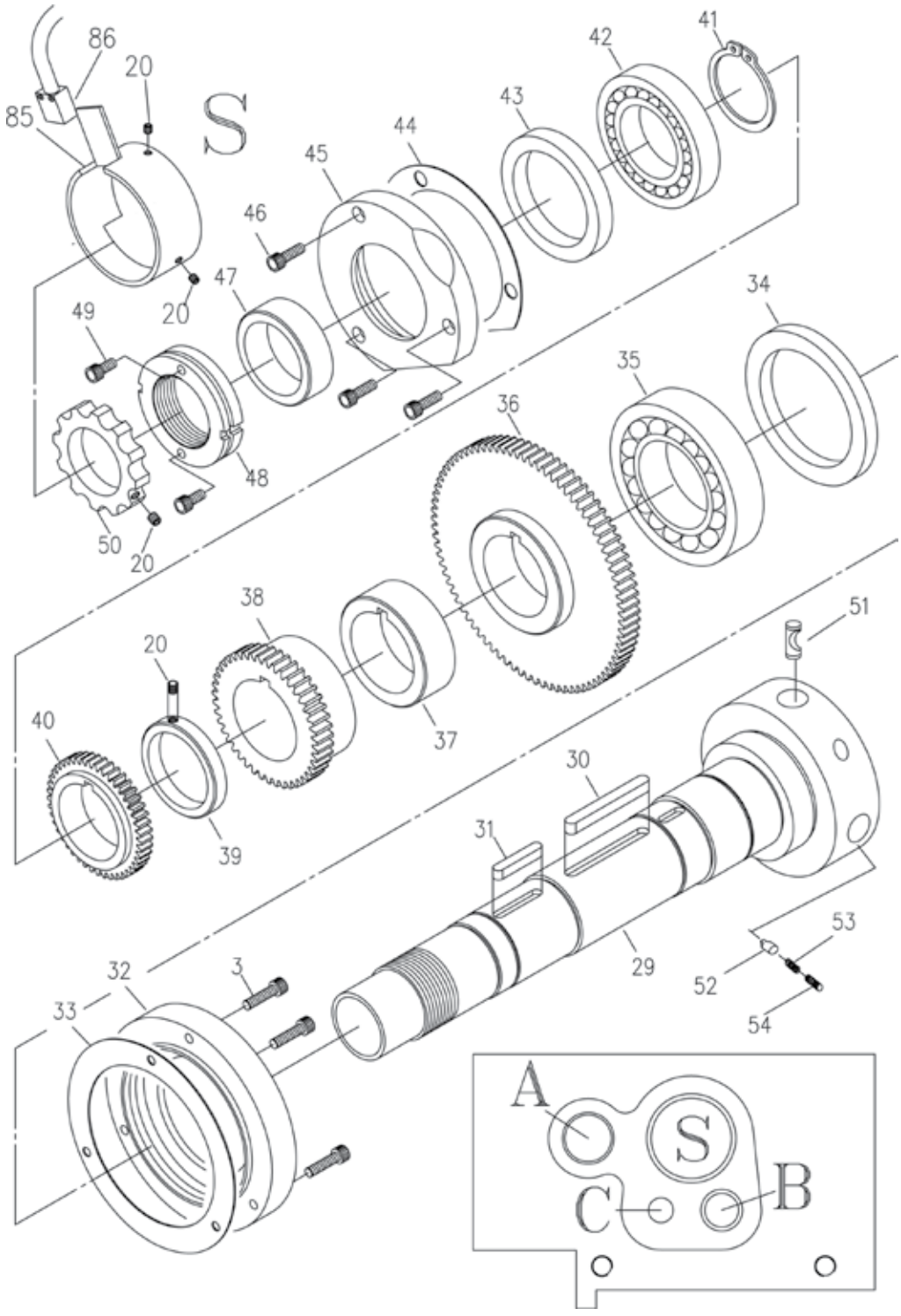
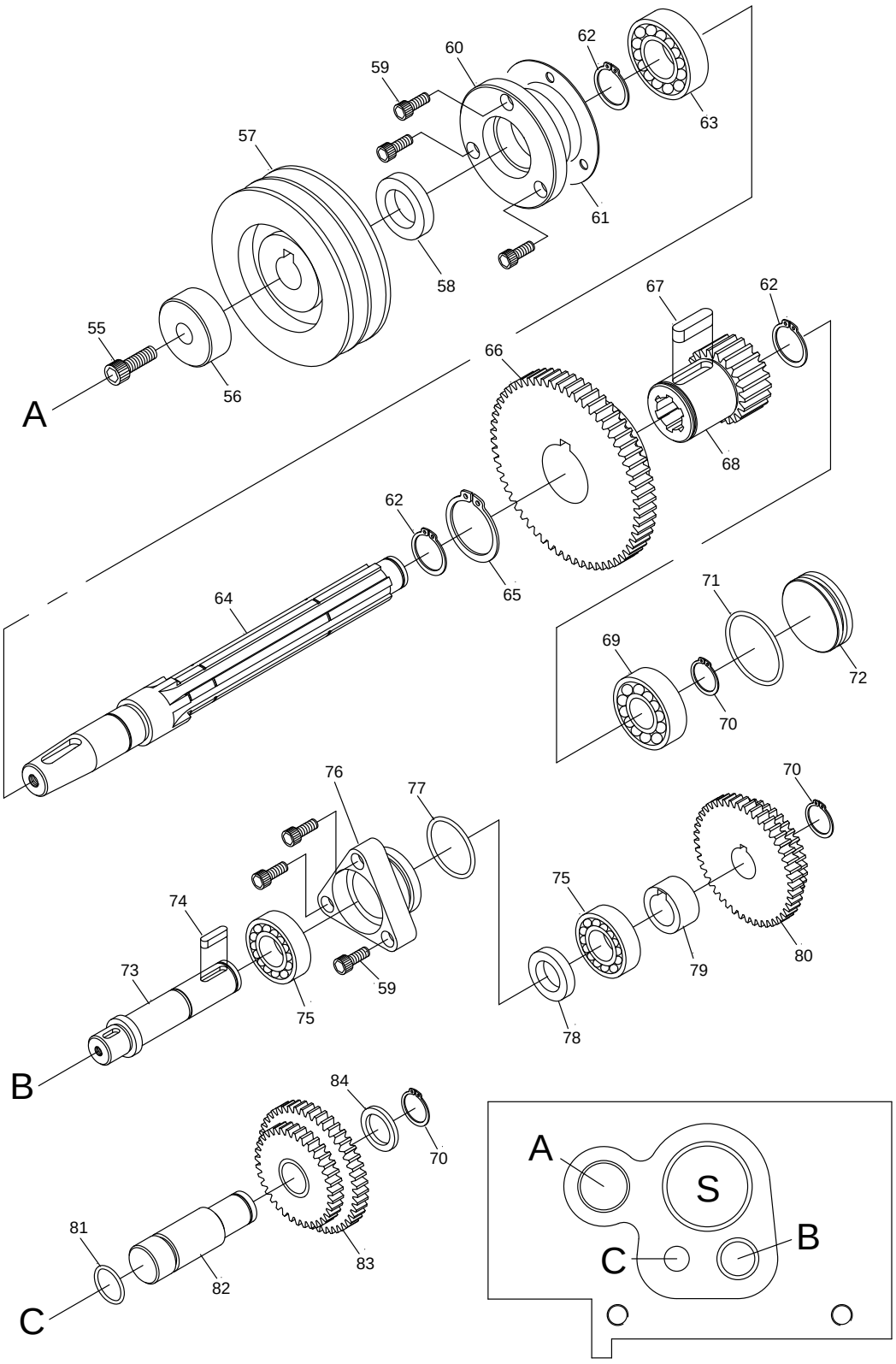
HEADSTOCK ASSEMBLY



HEADSTOCK ASSEMBLY



HEADSTOCK ASSEMBLY

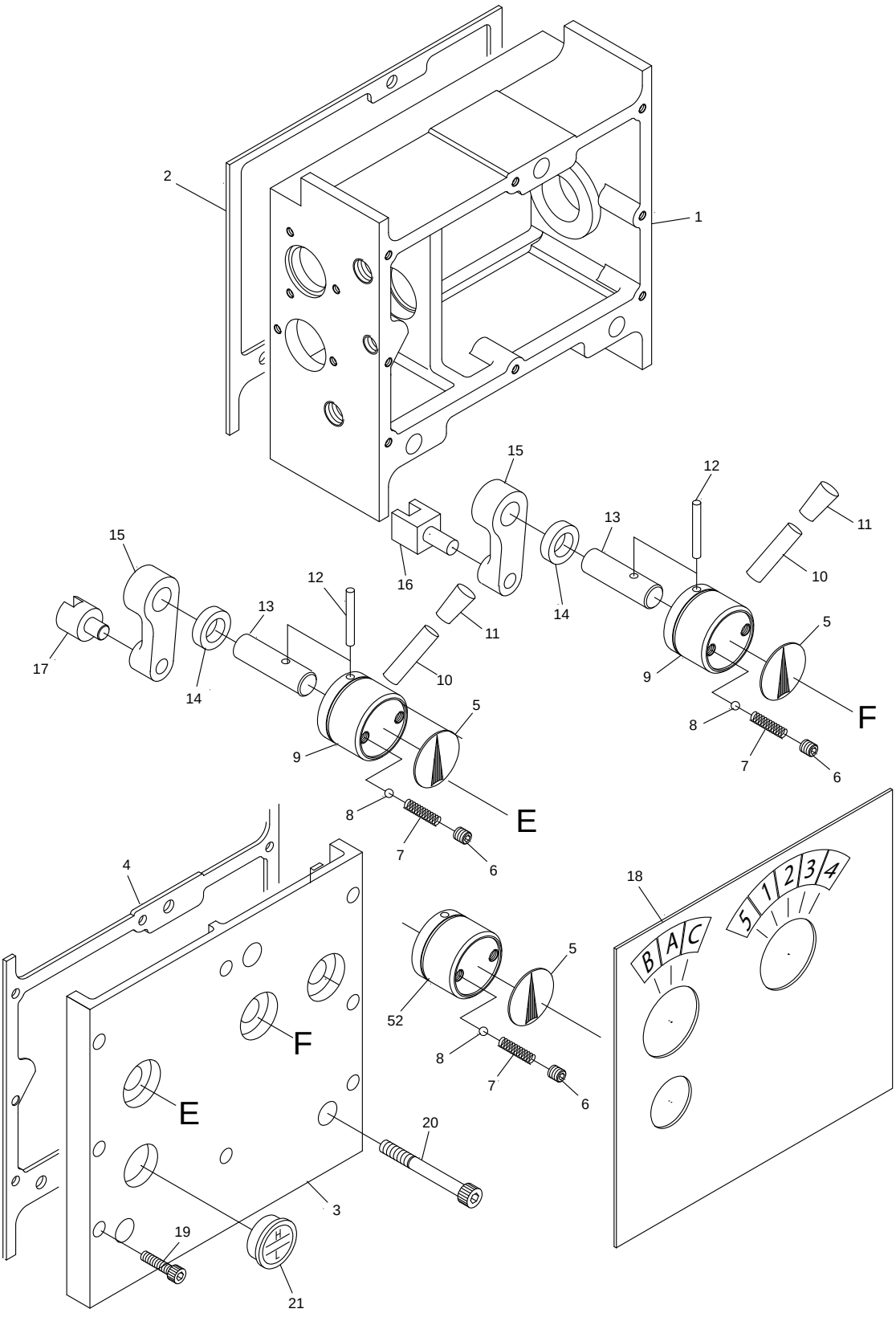


HEADSTOCK ASSEMBLY PARTS LIST

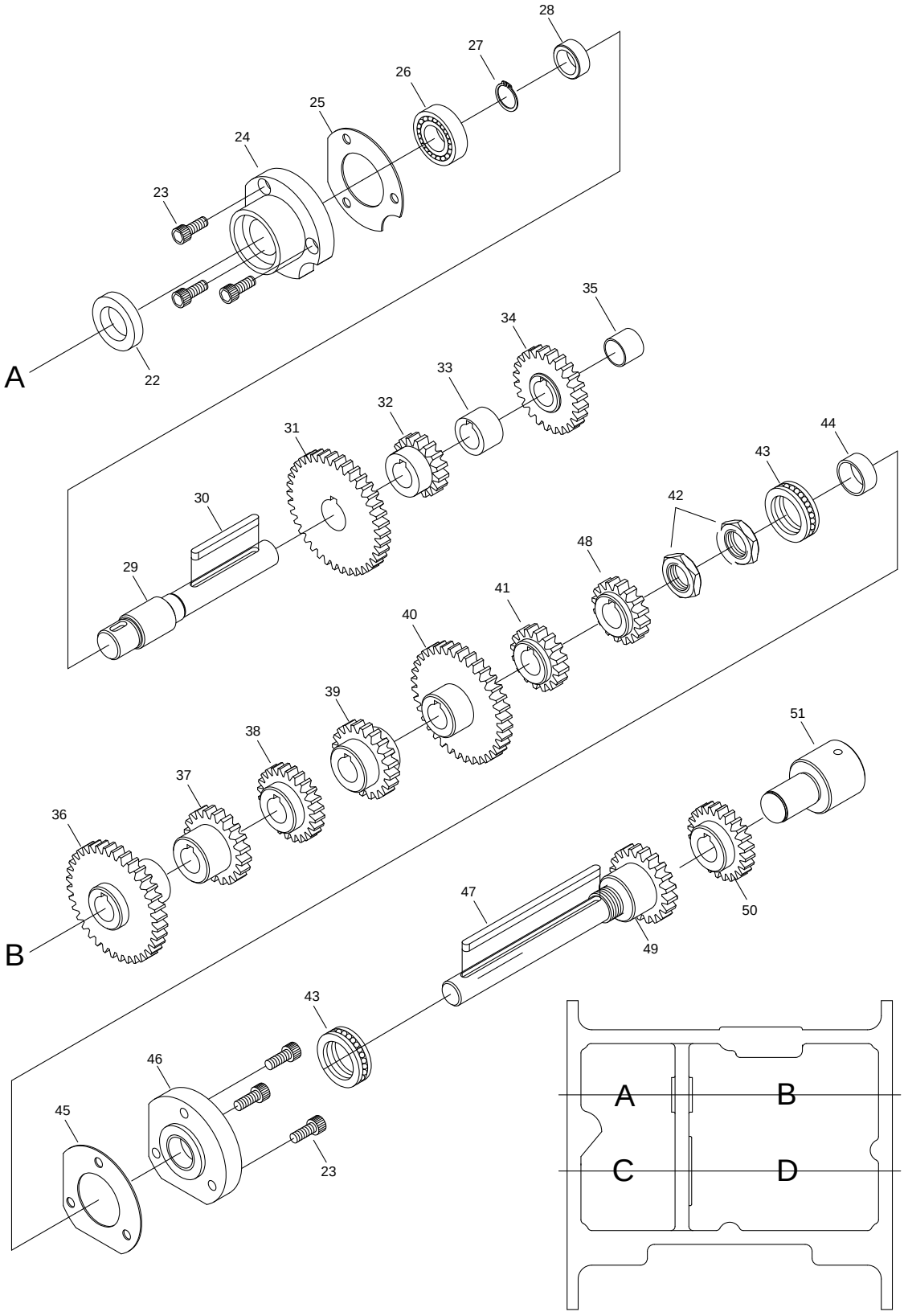
Index No.	Parts No.	Description	Size	Qty.
1	EBL1236VS-A01	Headstock Casting	405*235*238	1
2	EBL1236VS-A02	Headstock Cover	405L*235W*23H	1
3	TS-1503061	Socket Head Cap Screw	M6×25mm	13
4	EBL1236VS-A04	Plug	3/4 in.(P.V.C)	1
5	EBL1236VS-A05	Gasket For Headstock Cover 4163		1
6	EBL1236VS-A06	Index Plate		2
7	EBL1236VS-A07	Handle	Ø45*35L	2
8	TS-1524011	Set Screw	M8x8L	2
9	EBL1236VS-A09	Spring	1/4 in × 27mm	2
10	SB-1/4	Ball Steel	1/4 in. dia	2
11	EBL1236VS-A11	Lever		2
12	EBL1236VS-A12	Handle		2
13	EBL1236VS-A13	Pin	5×40mm	2
14	EBL1236VS-A14	Oil Seal	TC 16×26×7mm	2
15	EBL1236VS-A15	Shaft	Ø19.5*425L (Ø16)	1
16	EBL1236VS-A16	Pin	Ø5×30mm	1
17	EBL1236VS-A17	Oil Seal	TC 19×32×8mm	1
18	EBL1236VS-A18	Shaft Fork	PCD 62*50L	1
19	EBL1236VS-A19	Shift Fork	Ø19*26.5	2
20	TS-1523011	Set Screw	M6x6L	8
21	EBL1236VS-A21	Collar		1
22	EBL1236VS-A22	Shaft	Ø19.5*425L (Ø16)	1
23	EBL1236VS-A23	Shift Fork	122L 55h	2
24	EBL1236VS-A24	Shift Fork		2
25	EBL1236VS-A25	Headstock Plate		1
26	EBL1236VS-A26	Oil Sight	1-1/8 in.(28mm.)	1
29	EBL1236VS-A29	Main Spindle	Ø117.5*408.1L	1
30	EBL1236VS-A30	Key	8×70mm	1
31	EBL1236VS-A31	Key	7×40mm	1
32	EBL1236VS-A32	Cover	Ø145*Ø80.5*25W	1
33	EBL1236VS-A33	Gasket For 4162		1
34	EBL1236VS-A34	Oil Seal	TC Ø80×Ø105×Ø10mm	1
35	BB-32212	Bearing	No.32212	1
36	EBL1236VS-A36	Gear	2M 82T	1
37	EBL1236VS-A37	Collar	Ø75*Ø55*26 key 8*4.5	1
38	EBL1236VS-A38	Gear	2M 43T	1
39	EBL1236VS-A39	Collar	Ø52.25*Ø52*20W key 7*3.5	1
40	EBL1236VS-A40	Gear	1.75M 45T	1
41	EBL1236VS-A41	Circlip	S-50mm	1
42	BB-30210	Bearing	No.30210	1
43	EBL1236VS-A43	Oil Seal	TC 65×85×12mm	1

Index No.	Parts No.	Description	Size	Qty.
44	EBL1236VS-A44	Gasket For 4110		1
45	EBL1236VS-A45	Cover	Ø123*21W	1
46	TS-1503051	Socket Head Cap Screw	M6×20mm	3
47	EBL1236VS-A47	Collar	Ø64.5*Ø50*20W	1
48	EBL1236VS-A48	Nut	Ø75*19W	1
49	TS-1503031	Socket Head Cap Screw	M6×12mm	2
50	EBL1236VS-A50	Index Ring	Ø72*Ø45*12	1
51	EBL1236VS-A51	Cam Lock		3
52	EBL1236VS-A52	Pin		3
53	EBL1236VS-A53	Spring		3
54	EBL1236VS-A54	Screw		3
55	TS-1504051	Socket Head Cap Screw	M8x25L	1
56	EBL1236VS-A56	Washer	Ø44*Ø7.9*17	1
57	EBL1236VS-A57	Pulley	Ø114.3*Ø21.35*50W	1
58	EBL1236VS-A58	Oil Seal	TC 25×40×8mm	1
59	TS-1503041	Socket Head Cap Screw	M6×16mm	6
60	EBL1236VS-A60	Cover	Ø80*21L (Ø35)	1
61	EBL1236VS-A61	Gasket For 4164		1
62	EBL1236VS-A62	Circlip	S-25mm	3
63	BB-6205	Bearing	No.6205	1
64	EBL1236VS-A64	Shaft	Ø30*302L 21*25*5	1
65	EBL1236VS-A65	Circlip	S-38mm	1
66	EBL1236VS-A66	Gear	2M 60T	1
67	EBL1236VS-A67	Key	8×30mm	1
68	EBL1236VS-A68	Gear	2M 21T	1
69	BB-6204	Bearing	No.6204	1
70	EBL1236VS-A70	Circlip	S-20mm	3
71	EBL1236VS-A71	O-Ring	42×48×3.0mm	1
72	EBL1236VS-A72	Plug	Ø47*12W	1
73	EBL1236VS-A73	Shaft	Ø25*109L key 5*2.5	1
74	EBL1236VS-A74	Key	5×20mm	1
75	BB-6004	Bearing	No.6004	2
76	EBL1236VS-A76	Cover	P.C.D. Ø42*Ø32*32L	1
77	EBL1236VS-A77	O-Ring	34×40×3.0mm	1
78	EBL1236VS-A78	Oil Seal	TC 20×32×2.5mm	1
79	EBL1236VS-A79	Collar	Ø30*Ø20*16W key 7*3.5	1
80	EBL1236VS-A80	Gear	1.75M 35/45T	1
81	EBL1236VS-A81	O-Ring	20×25×2.5mm	1
82	EBL1236VS-A82	Shaft	Ø25*85L	1
83	EBL1236VS-A83	Gear	1.75M 35/45T	1
84	EBL1236VS-A84	Collar	Ø28*Ø20*3W	1
85	EBL1236VS-A85	Collar	Ø81*Ø20*3W	1
86	E1340VS-A32	Speed Sensor	NPN	1

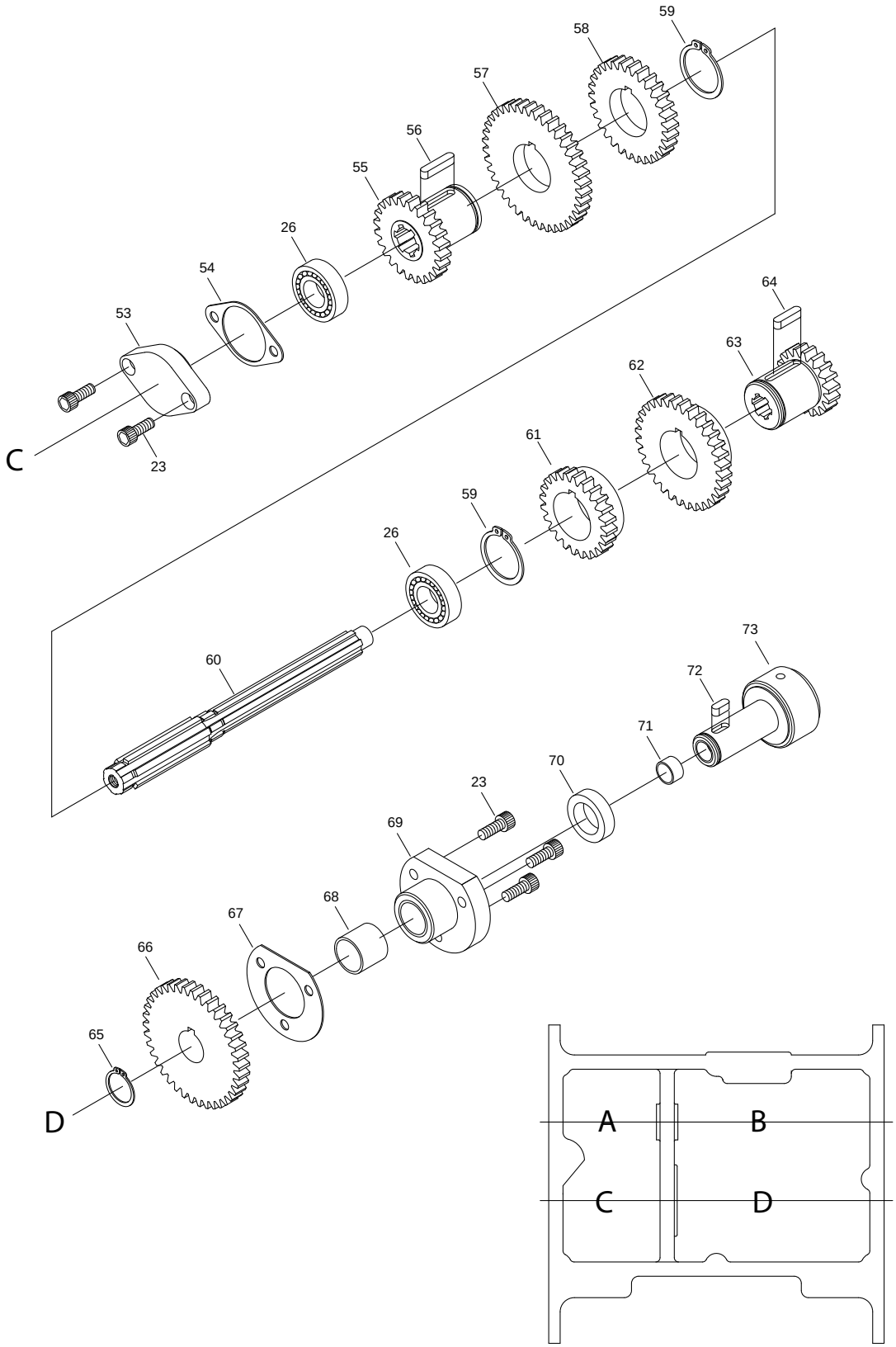
GEARBOX ASSEMBLY



GEARBOX ASSEMBLY



GEARBOX ASSEMBLY

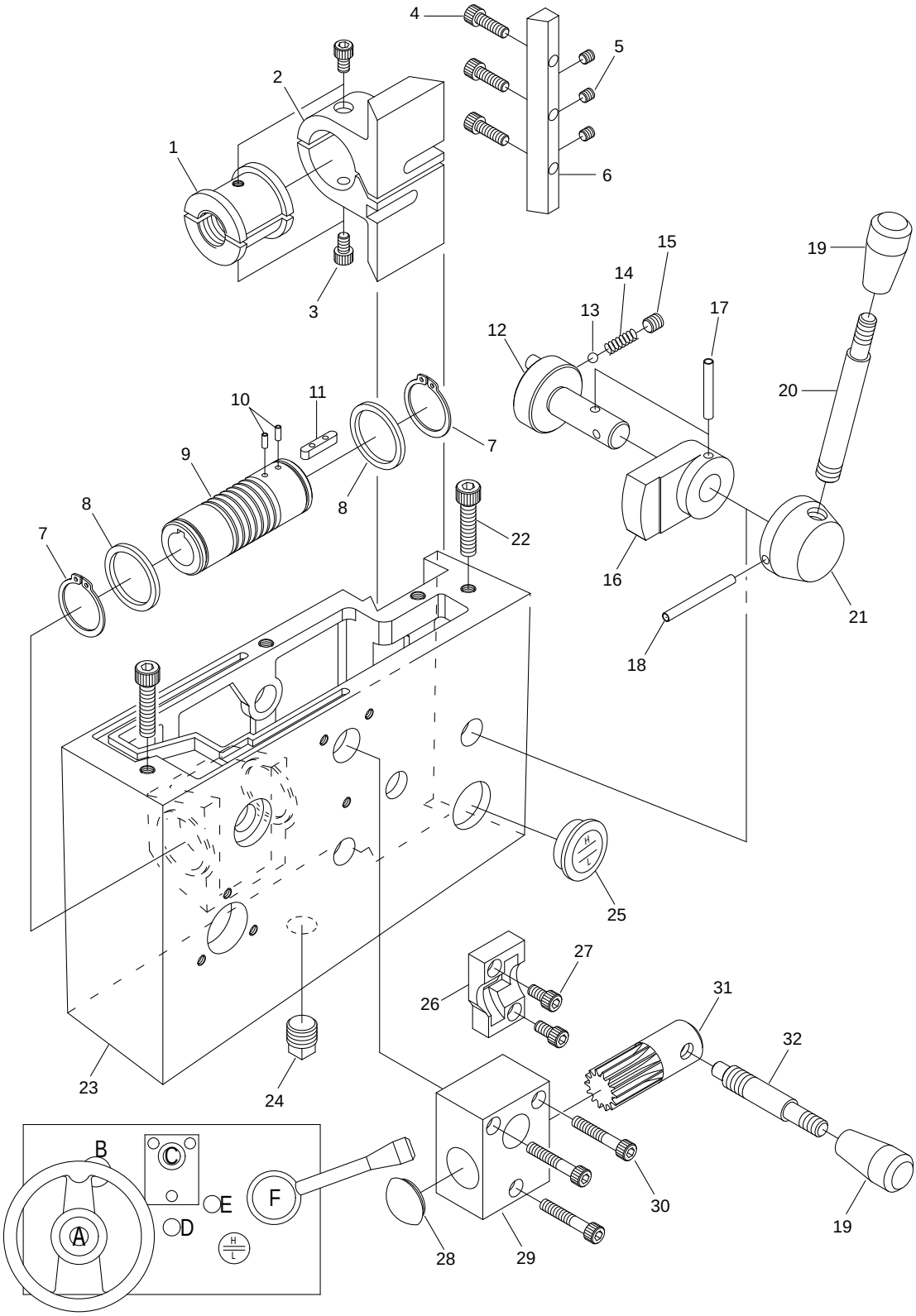


GEARBOX ASSEMBLY PARTS LIST

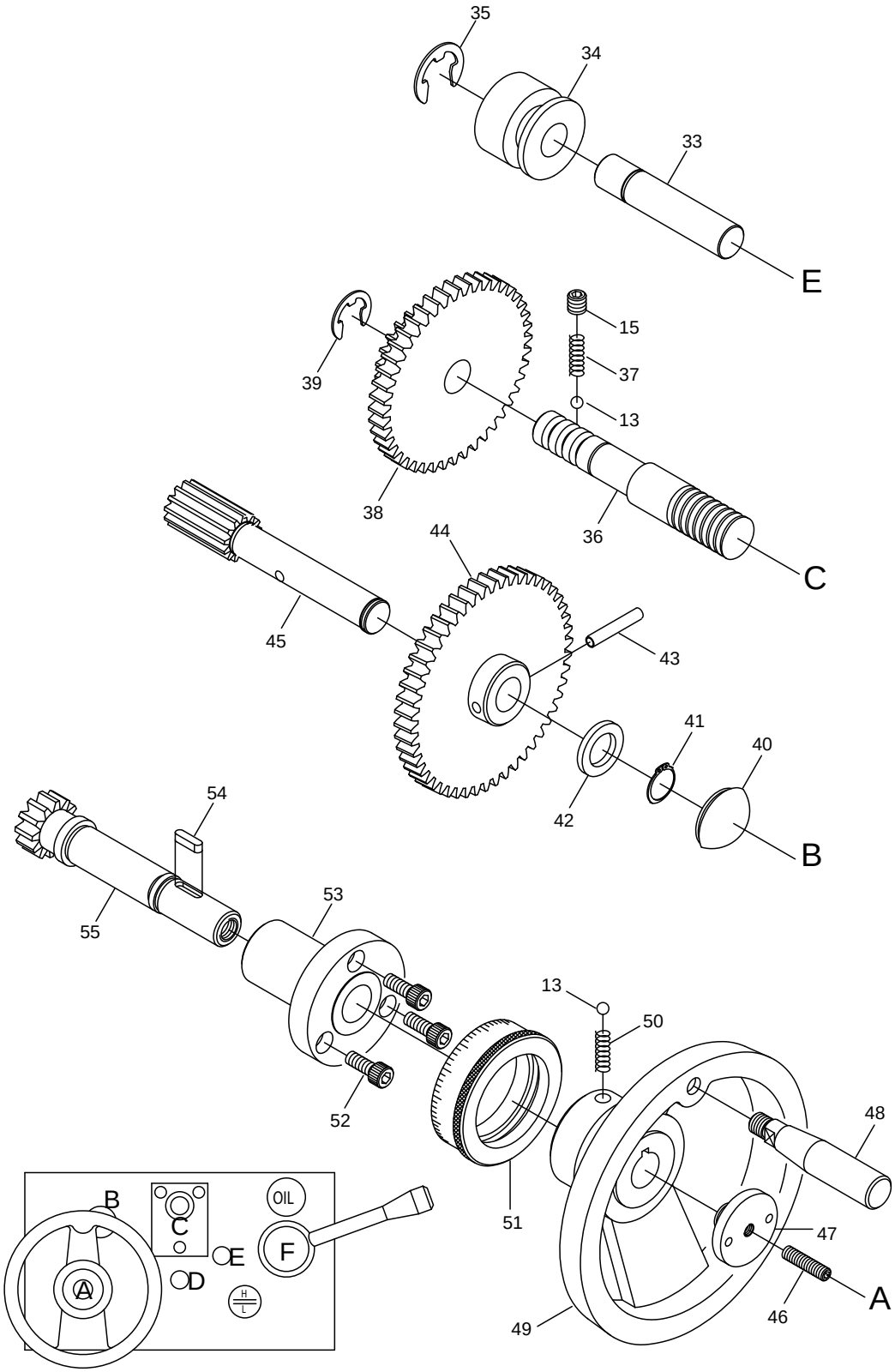
Index No.	Parts No.	Description	Size	Qty.
1	EBL1236VS-B01	Gear Box		1
2	EBL1236VS-B02	Gasket For Gearbox 42001		1
3	EBL1236VS-B03	Gear Box Cover		1
4	EBL1236VS-B04	Gasket For Gearbox Cover42002		1
5	EBL1236VS-B05	Index Plate		3
6	TS-1524011	Set Screw	M8x8L	3
7	EBL1236VS-B07	Spring	1/4 in × 27mm	3
8	SB-1/4	Ball Steel	1/4 in. dia	3
9	EBL1236VS-B09	Handle	Ø45*35L	2
10	EBL1236VS-B10	Lever		2
11	EBL1236VS-B11	Handle		2
12	EBL1236VS-B12	Pin	Ø5×40mm	2
13	EBL1236VS-B13	Lever		2
14	EBL1236VS-B14	Oil Seal	TC 16×26×7mm	2
15	EBL1236VS-B15	Shift Lever		2
16	EBL1236VS-B16	Shift Fork		1
17	EBL1236VS-B17	Shift Fork		1
18	EBL1236VS-B18	Gear Box Plate		1
19	TS-1503061	Socket Head Cap Screw	M6×25mm	8
20	TS-1504131	Socket Head Cap Screw	M8X70mm	3
21	EBL1236VS-B21	Oil Sight	1-1/8 in.(28mm.)	1
22	EBL1236VS-B22	Oil Seal	TC 22×35×7mm	1
23	TS-1503041	Socket Head Cap Screw	M6X16mm	11
24	EBL1236VS-B24	Cover		1
25	EBL1236VS-B25	Gasket For 42012		1
26	BB-6003	Bearing	No.6003	3
27	EBL1236VS-B27	Circlip	S-16mm	1
28	EBL1236VS-B28	Collar		1
29	EBL1236VS-B29	Shift		1
30	EBL1236VS-B30	Key	5×55mm	1
31	EBL1236VS-B31	Gear	2M 32T	1
32	EBL1236VS-B32	Gear	2M 16T	1
33	EBL1236VS-B33	Collar		1
34	EBL1236VS-B34	Gear	2M 24T	1
35	EBL1236VS-B35	Collar	LFB-1615	1
36	EBL1236VS-B36	Gear	2M 30T	1
37	EBL1236VS-B37	Gear	2.75M 20T	1
38	EBL1236VS-B38	Gear	2.75M 18T	1
39	EBL1236VS-B39	Gear	2.75M 16T	1
40	EBL1236VS-B40	Gear	2.25M 28T	1

Index No.	Parts No.	Description	Size	Qty.
41	EBL1236VS-B41	Gear	2M 16T	1
42	EBL1236VS-B42	Nut		2
43	BB-51104	Thrust Bearing	No.51104	2
44	EBL1236VS-B44	Collar	LFB-2010	1
45	EBL1236VS-B45	Gasket For 42045		1
46	EBL1236VS-B46	Cover		1
47	EBL1236VS-B47	Key	5×70mm	1
48	EBL1236VS-B48	Gear		1
49	EBL1236VS-B49	Shaft		1
50	EBL1236VS-B50	Shaft		1
51	EBL1236VS-B51	Clutch		1
52	EBL1236VS-B52	Handle		1
53	EBL1236VS-B53	Cover		1
54	EBL1236VS-B54	Gasket For 2205		1
55	EBL1236VS-B55	Gear	2M 2T	1
56	EBL1236VS-B56	Key	5×15mm	1
57	EBL1236VS-B57	Gear	2M 40T	1
58	EBL1236VS-B58	Gear	2M 30T	1
59	EBL1236VS-B59	Circlip	S-30	2
60	EBL1236VS-B60	Shaft		1
61	EBL1236VS-B61	Gear	2M 25T	1
62	EBL1236VS-B62	Gear	2.75M 20T	1
63	EBL1236VS-B63	Gear	2.25M 20T	1
64	EBL1236VS-B64	Key	5×20mm	1
65	EBL1236VS-B65	Circlip	S-20mm	1
66	EBL1236VS-B66	Gear	2M 38T	1
67	EBL1236VS-B67	Gasket For 42032		1
68	EBL1236VS-B68	Collar	LFB-2020	1
69	EBL1236VS-B69	Cover		1
70	EBL1236VS-B70	Oil Seal	TC 20x30x8mm	1
71	EBL1236VS-B71	Collar	LFB-1208	1
72	EBL1236VS-B72	Key	5×12mm	1
73	EBL1236VS-B73	Shaft		1

APRON ASSEMBLY (CASTING)



APRON ASSEMBLY (CASTING)



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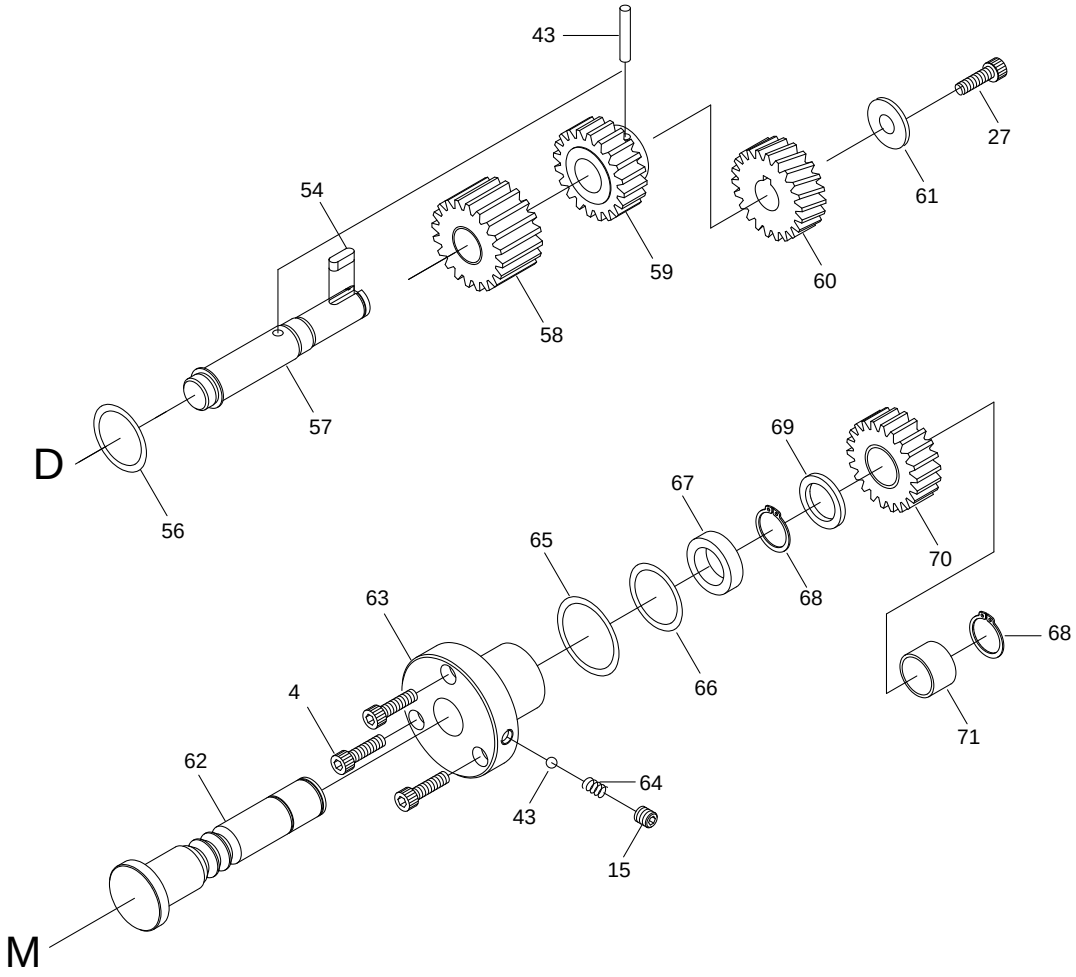
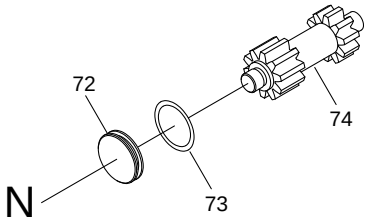
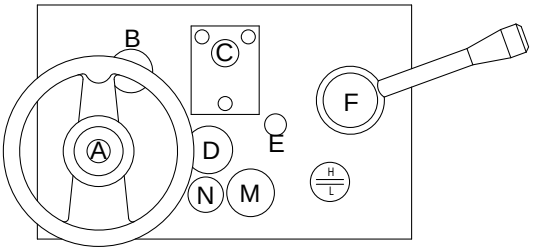




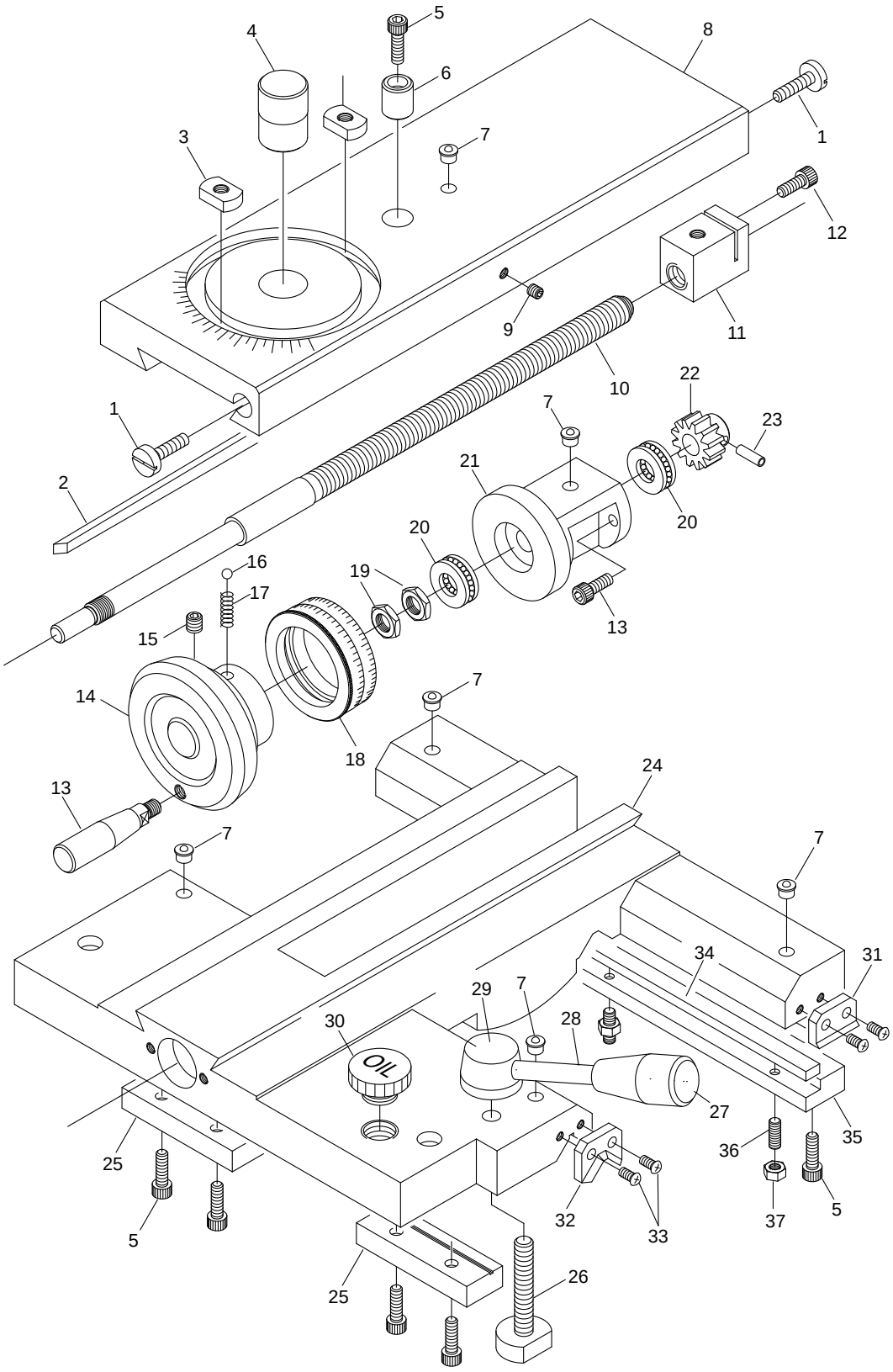


APRON ASSEMBLY (CASTING) PARTS LIST

Index No.	Parts No.	Description	Size	Qty.
1	EBL1236VS-C01	Walnut	8TPI	1
2	EBL1236VS-C02	Walnut Bracket	105L*50W*71h	1
3	TS-1503021	Socket Head Cap Screw	M6×10mm	2
4	TS-1503051	Socket Head Cap Screw	M6×20mm	6
5	TS-1523031	Set Screw	M6×10mm	3
6	EBL1236VS-C06	Gib	13.8W*10H*125L	1
7	EBL1236VS-C07	Circlip	S-30mm	2
8	EBL1236VS-C08	Collar	Ø38.1*Ø31*3t	2
9	EBL1236VS-C09	Worm	Ø19.05*Ø31*841L	1
10	EBL1236VS-C10	Pin	3×8 mm	2
	EBL1236VS-C08A	Collar Assembly (Including #8~10)		1
11	EBL1236VS-C11	Key	5×25mm	1
12	EBL1236VS-C12	Shaft	Ø39.9*61L	1
13	SB-1/4	Ball Steel	1/4 in. dia	4
14	EBL1236VS-C14	Spring	1/4 in × 25mm	1
15	TS-1524011	Set Screw	M8×8mm	3
16	EBL1236VS-C16	Lever	62L*36W*17H	1
17	EBL1236VS-C17	Pin	Ø5×36mm	1
18	EBL1236VS-C18	Pin	Ø5×60mm	1
19	EBL1236VS-C19	Handle		2
20	EBL1236VS-C20	Lever	Ø1/2”*107L	1
21	EBL1236VS-C21	Handle	Ø50*30L Ø16	1
22	TS-1504071	Socket Head Cap Screw	M8×35mm	2
23	EBL1236VS-C23	Apron	276L*78W*172H	1
24	EBL1236VS-C24	Plug	3/8 G.P	1
25	EBL1236VS-C25	Oil Sight	3/4 in. (19mm.)	1
26	EBL1236VS-C26	Cam	50*30*12H	1
27	TS-1503031	Socket Head Cap Screw	M6×12mm	2
28	EBL1236VS-C28	Plug	Ø28*8W	1
29	EBL1236VS-C29	Keep Assy	65L*50W*35H	1
30	TS-1503081	Socket Head Cap Screw	M6×35mm	3
31	EBL1236VS-C31	Gear Shaft	Ø24*67L	1
32	EBL1236VS-C32	Lever	Ø1/2”*80L	1
33	EBL1236VS-C33	Shaft	Ø16*77L	1
34	EBL1236VS-C34	Collar	Ø38*Ø16*30L	1
35	EBL1236VS-C35	Circlip	E-15mm	1
36	EBL1236VS-C36	Shaft	Ø20*122L	1
37	EBL1236VS-C37	Spring	1/4 in × 20mm	1
38	EBL1236VS-C38	Gear	2M 22/44T	1
39	EBL1236VS-C39	Circlip	E-12mm	1

Index No.	Parts No.	Description	Size	Qty.
40	EBL1236VS-C40	Plug	Ø28*8W	1
41	EBL1236VS-C41	Circlip	S-16mm	1
42	EBL1236VS-C42	Collar	Ø25.4*Ø16*3W	1
43	EBL1236VS-C43	Pin	Ø5×30mm	3
44	EBL1236VS-C44	Gear	2M 50T	1
45	EBL1236VS-C45	Rack Pinion	Ø22.5*120L	1
46	TS-1523071	Set Screw	M6×25mm	1
47	EBL1236VS-C47	Plug	35*15L ØM6 TAP	1
48	EBL1236VS-C48	Handle	Ø5/8"*77L	1
49	EBL1236VS-C49	Hand Wheel	Ø140*68H Ø17	1
50	EBL1236VS-C50	Spring	1/4 in.× 8mm	2
51	EBL1236VS-C51	Index Ring	Ø63*Ø45*20W	1
52	TS-1503041	Socket Head Cap Screw	M6×16mm	3
53	EBL1236VS-C53	Keep Ass'y	Ø60*Ø18*57L	1
54	EBL1236VS-C54	Key	4×15mm	2
55	EBL1236VS-C55	Shaft	Ø28*108L key4*2	1
56	EBL1236VS-C56	O-Ring	P14	1
57	EBL1236VS-C57	Shaft		1
58	EBL1236VS-C58	Gear		1
59	EBL1236VS-C59	Gear		1
60	EBL1236VS-C60	Worm Gear	Ø30*Ø14*23L	1
61	EBL1236VS-C61	Washer	Ø25*Ø1/4"*3t	1
62	EBL1236VS-C62	Shaft		1
63	EBL1236VS-C63	Keep Ass'y		1
64	EBL1236VS-C64	Spring	1/4 in.× 10mm	1
65	EBL1236VS-C65	O-Ring	3.5x34.7x41.7	1
66	EBL1236VS-C66	O-Ring	3.5x28.7x35.7	1
67	EBL1236VS-C67	Oil Seal	TC 20x30x8mm	1
68	EBL1236VS-C68	Circlip	S-20mm	2
69	EBL1236VS-C69	Collar		1
70	EBL1236VS-C70	Gear		1
71	EBL1236VS-C71	Collar	LFB-2012	1
72	EBL1236VS-C72	Plug		1
73	EBL1236VS-C73	O-Ring	Ø2.4xØ21.8xØ26.6	1
74	EBL1236VS-C74	Gear Shaft		1

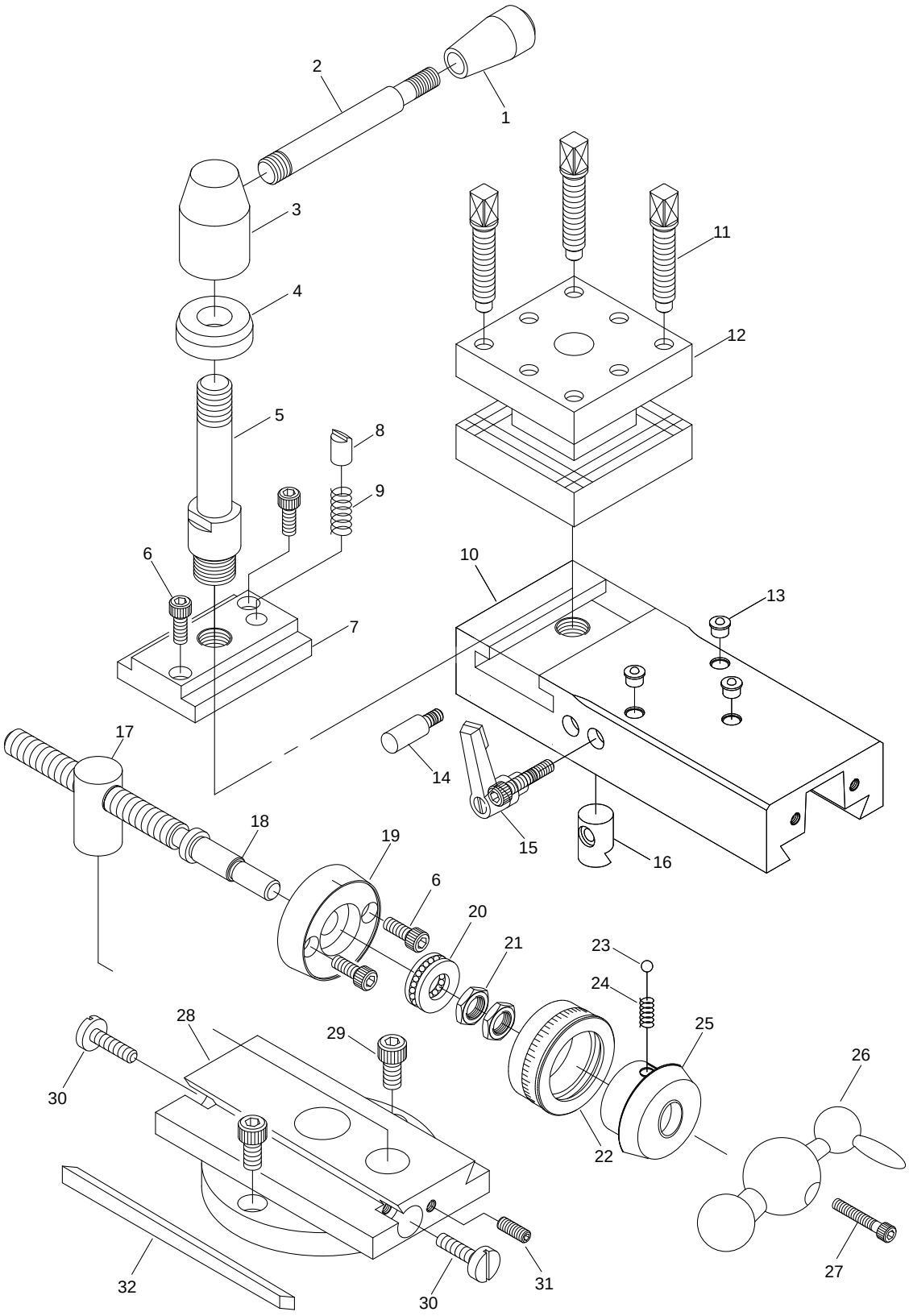
CARRIAGE ASSEMBLY



CARRIAGE ASSEMBLY PARTS LIST

Index No.	Parts No.	Description	Size	Qty.
1	EBL1236VS-D01	Gib Screw	Ø5/8"*30L	2
2	EBL1236VS-D02	Gib	15*22*410 355L	1
3	EBL1236VS-D03	Nut	Ø7/8"*14W*6.5T	2
4	EBL1236VS-D04	Pirot	Ø25.4*35L	1
5	TS-1503051	Socket Head Cap Screw	M6×20mm	8
6	EBL1236VS-D06	Collar	Ø16*18.5L	1
7	EBL1236VS-D07	Oiler	5/16 in	2
8	EBL1236VS-D08	Cross Slide Cover	115W*355L*29H	1
9	TS-1523011	Set Screw	M6×6mm	1
10	EBL1236VS-D10	Screw	Ø5/8"*404L	1
11	EBL1236VS-D11	Nut	24W*40L*29H	1
12	TS-1503041	Socket Head Cap Screw	M6×16mm	1
	EBL1236VS-D10A	Screw Assembly (Including #10~12)		1
13	EBL1236VS-D13	Handle	Ø5/8"*68L	1
14	EBL1236VS-D14	Hand Wheel	Ø85*45L Ø10	1
15	TS-1524011	Set Screw	M8×8mm	1
16	SB-1/4	Ball Steel	1/4 in. dia	3
17	EBL1236VS-D17	Spring	1/4 in.× 8mm	1
18	EBL1236VS-D18	Index Ring	Ø61.5~Ø60 Ø45*200L	1
19	TS-1540081	Nut	M12*PC1.25 4T	2
20	BB-51101	Thrust Bearing	No.51101	2
21	EBL1236VS-D21	Keep Ass'y	Ø60*Ø12*66L	1
22	EBL1236VS-D22	Gear	Ø27.9*Ø12*20L	1
23	EBL1236VS-D23	Pin	Ø5×16mm	1
24	EBL1236VS-D24	Saddle Casting	295W*307L	1
25	EBL1236VS-D25	Strip	80L*26W*13T	2
26	EBL1236VS-D26	Set Screw	Ø9/8"*67L	1
27	EBL1236VS-D27	Handle	3/8 in.	1
28	EBL1236VS-D28	Lever		1
29	EBL1236VS-D29	Handle		1
30	EBL1236VS-D30	Plug	3/4 in.(P.V.C)	1
31	EBL1236VS-D31	Wiper		2
32	EBL1236VS-D32	Wiper		2
33	EBL1236VS-D33	Screw	3/16×3/8 in	13
34	EBL1236VS-D34	Gib	295L*10W*6T	1
35	EBL1236VS-D35	Strip	295L*28W*15h	1
36	TS-1523051	Set Screw	M6×16mm	3
37	TS-1540041	Nut	M6	3

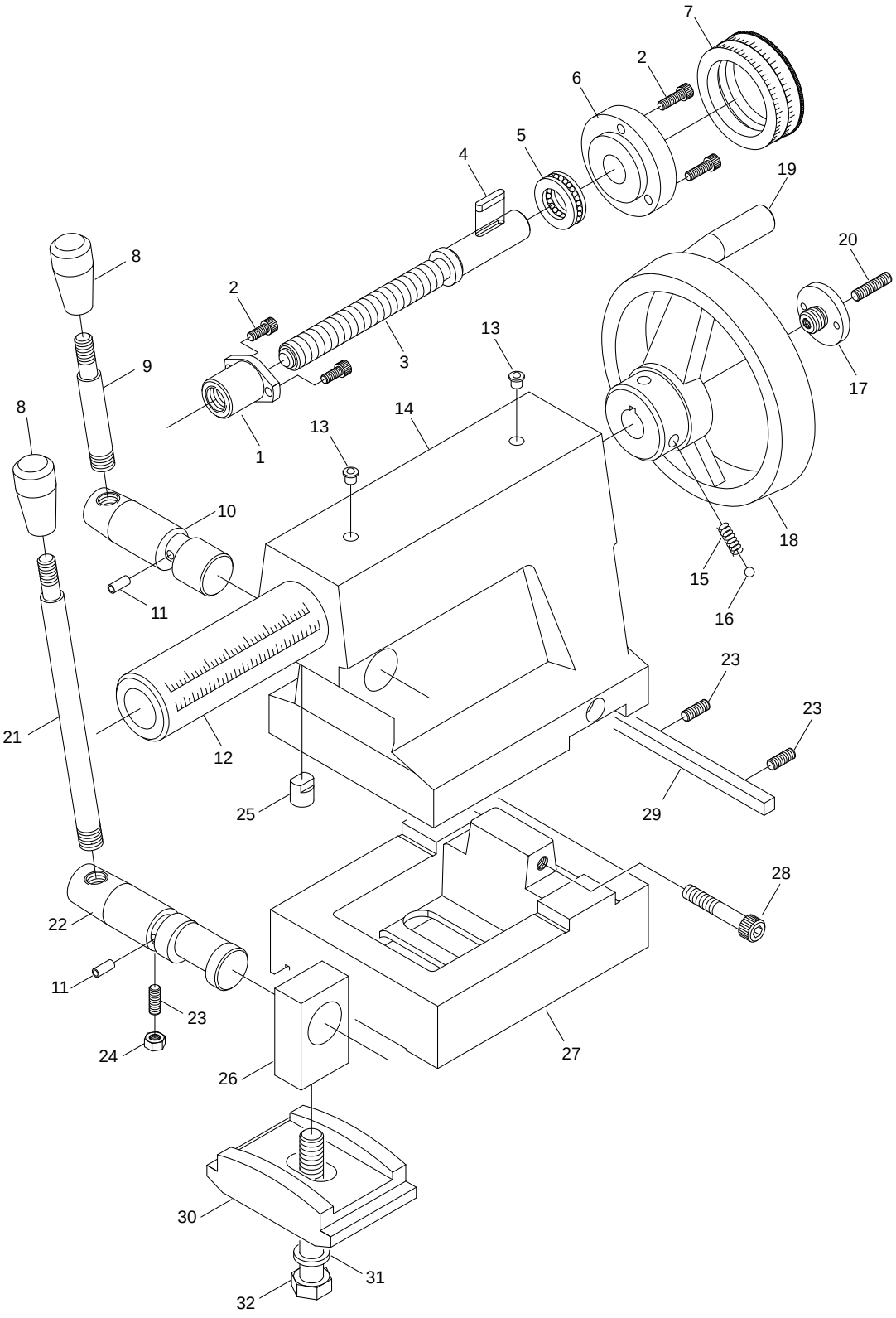
TOOLPOST ASSEMBLY



TOOLPOST ASSEMBLY PARTS LIST

Index No.	Parts No.	Description	Size	Qty.
1	EBL1236VS-E01	Handle	3/8 in.	1
2	EBL1236VS-E02	Lever	Ø1/2"*107L	1
3	EBL1236VS-E03	Tool Post	~12" 62H	1
4	EBL1236VS-E04	Washer	Ø35*Ø16*12h	1
5	EBL1236VS-E05	Bolt	Ø24*106.5L	1
6	TS-1503041	Socket Head Cap Screw	M6×16mm	4
7	EBL1236VS-E07	T Nut		1
8	EBL1236VS-E08	Pad	Ø3/8"*15L	1
9	EBL1236VS-E09	Spring	3/8 in × 20mm	1
10	EBL1236VS-E10	Top Slide	200L*75W*37W	1
11	EBL1236VS-E11	Screw	Ø12.7*65	8
12	EBL1236VS-E12	Tool Post		1
13	EBL1236VS-E13	Oiler	5/16 in	3
14	EBL1236VS-E14	Pin		1
15	EBL1236VS-E15	Handle		1
16	EBL1236VS-E16	Pad	Ø16*24L	1
17	EBL1236VS-E17	Nut	Ø20*40L	1
18	EBL1236VS-E18	Screw	Ø15.8*170L	1
	EBL1236VS-E17A	Nut Assembly (Including #17~18)		1
19	EBL1236VS-E19	Keep Ass'y	Ø52.5*Ø12*15L	1
20	BB-51101	Thrust	No.51101	2
21	TS-1540083	Nut	M12*PC1.25 4T	2
22	EBL1236VS-E22	Index Ring	Ø49.5~Ø48*Ø20L	1
23	SB-1/4	Ball Steel	1/4 in. dia	1
24	EBL1236VS-E24	Spring	1/4 in.× 8mm	1
25	EBL1236VS-E25	Keep Ass'y		1
26	EBL1236VS-E26	Three Ball Handle		1
27	TS-1503071	Socket Head Cap Screw	M6×30mm	1
28	EBL1236VS-E28	Swiveled Slide	11" 26 12"35 13"43	1
29	TS-1504031	Socket Head Cap Screw	M8×16mm	2
30	EBL1236VS-E30	Gib Screw	5/8"*30L	2
31	TS-1523051	Set Screw	M6×16mm	1
32	EBL1236VS-E32	Gib	140L 12*20*190	1

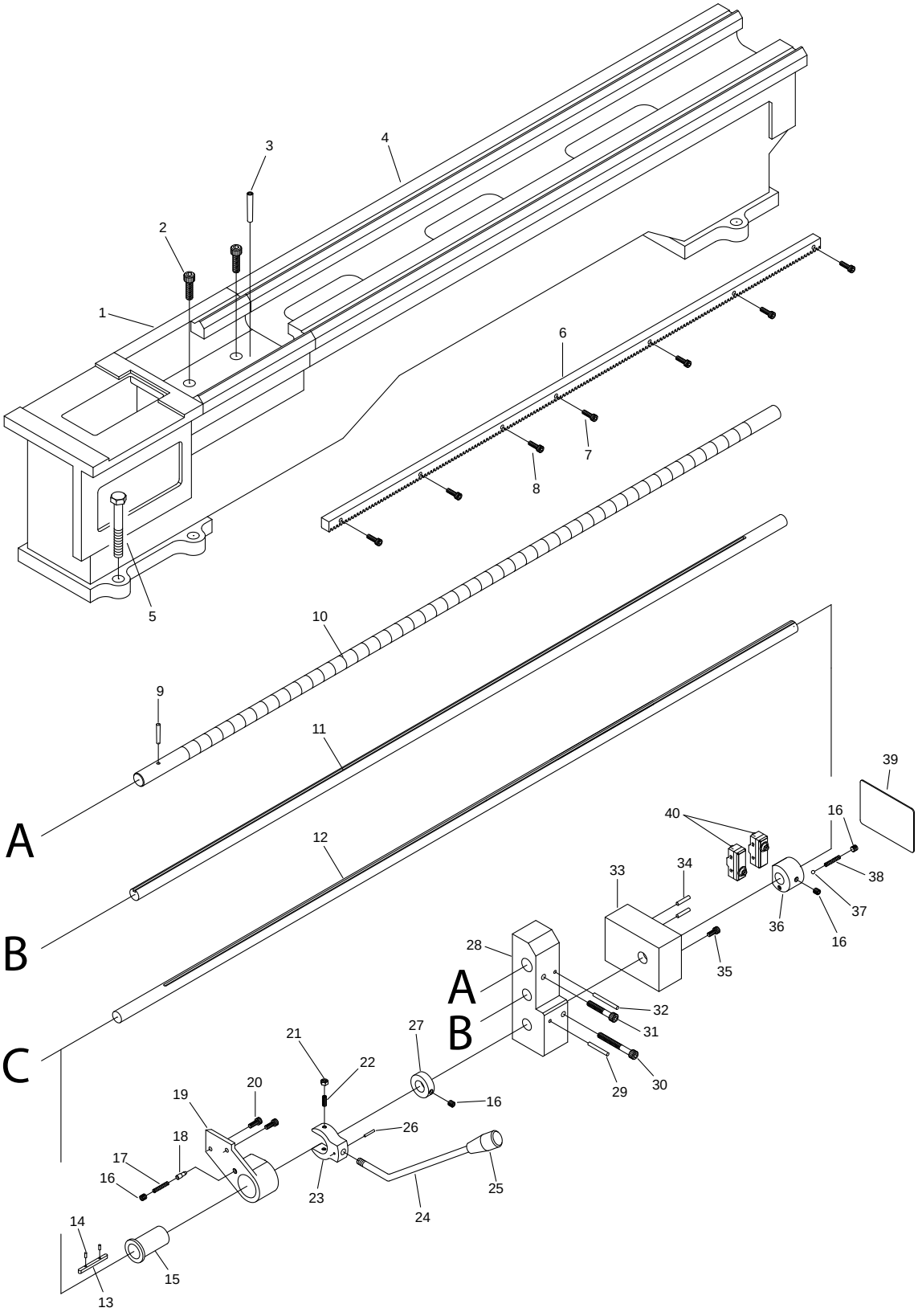
TAILSTOCK ASSEMBLY



TAILSTOCK ASSEMBLY PARTS LIST

Index No.	Parts No.	Description	Size	Qty.
1	EBL1236VS-F01	Nut	30L	1
2	TS-1502041	Socket Head Cap Screw	M5×16mm	4
3	EBL1236VS-F03	Screw	Ø20.5*179L	1
	EBL1236VS-F01A	Nut Assembly (Including #1~3)		1
4	EBL1236VS-F04	Key	4×20mm	1
5	BB-51102	Thrust	No.51102	1
6	EBL1236VS-F06	Keep Ass'y	Ø17*Ø60*17L	1
7	EBL1236VS-F07	Index Ring	Ø61.5~Ø60*Ø45*20W	1
8	EBL1236VS-F08	Handle	3/8 in.	1
9	EBL1236VS-F09	Lever		1
10	EBL1236VS-F10	Shaft	Ø25*Ø16*91L	1
11	EBL1236VS-F11	Pin	Ø5×12mm	1
12	EBL1236VS-F12	Barrel	2 Ø40*190L	1
13	EBL1236VS-F13	Oiler	5/16 in	2
14	EBL1236VS-F14	Tall stock Casting	2 Ø40 125h	1
15	EBL1236VS-F15	Spring	1/4 in × 20mm	2
16	SB-1/4	Ball Steel	1/4 in. dia	2
17	EBL1236VS-F17	Screw	Ø35*16L	1
18	EBL1236VS-F18	Handle Wheel	Ø140*68h	1
19	EBL1236VS-F19	Handle	Ø5/8"*77L	1
20	TS-1523071	Set Screw	M6×25mm	1
21	EBL1236VS-F21	Lever	Ø1/2"*190	1
22	EBL1236VS-F22	Shaft	Ø25*Ø18*114L	1
23	TS-1523051	Set Screw	M6×16mm	1
24	TS-1540041	Nut	M6	1
25	EBL1236VS-F25	Pad	2 Ø1/2"*14L	1
26	EBL1236VS-F26	Pirot Block	36L*20W*57H	1
27	EBL1236VS-F27	Base	~1 28h	1
28	TS-1504091	Socket Head Cap Screw	M8×45mm	2
29	EBL1236VS-F29	Gib	8*8*125	1
30	EBL1236VS-F30	Clamp Plate	65W*94L*28H	1
31	TS-0680061	Washer	1/2 in	1
32	TS-0070051	Cap Screw	1/2×2 in	1

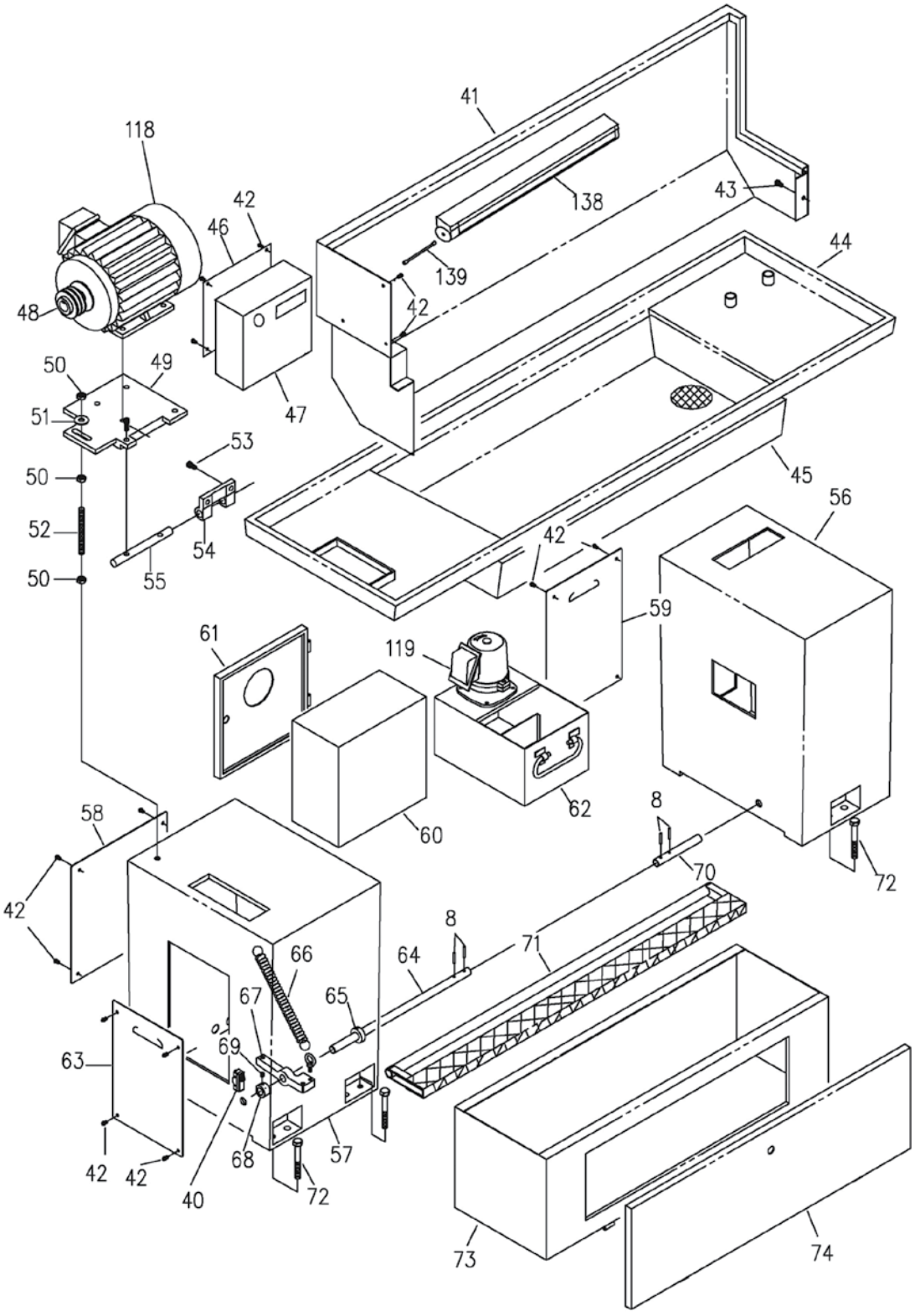
BED ASSEMBLY



BED ASSEMBLY PARTS LIST

Index No.	Parts No.	Description	Size	Qty.
1	EBL1236VS-G01	Gap	240*190*70	1
2	TS-1505051	Socket Head Cap Screw	M10×35mm	2
3	EBL1236VS-G03	Taper Pin	Ø4×38mm	2
4	EBL1236VS-G04	Bed Casting	36"-1525	1
5	TS-0050031	Hex Cap Screw	1/2×1-3/4 in	6
6	EBL1236VS-G06	Rack	36" 990L	1
7	TS-1503051	Socket Head Cap Screw	M6×20mm	4
8	EBL1236VS-G08	Pin	Ø5×30mm	8
9	EBL1236VS-G09	Pin		1
10	EBL1236VS-G10	Lead screw	36" 1250L	1
11	EBL1236VS-G11	Feed Shaft	36" 1268L	1
12	EBL1236VS-G12	Third-Rod Shaft		1
13	EBL1236VS-G13	Key	5×60mm	1
14	EBL1236VS-G14	Pin	Ø3×8 mm	2
15	EBL1236VS-G15	Sleeve	Ø38*Ø19.05*60L	1
16	TS-1524011	Set Screw	M8×8mm	3
17	EBL1236VS-G17	Spring	1/4 in × 35mm	1
18	EBL1236VS-G18	Pin	Ø6.3*19L	1
19	EBL1236VS-G19	Bracket	Ø54	1
20	TS-1503041	Socket Head Cap Screw	M6×16mm	2
21	TS-1540041	Nut	M6	2
22	TS-1523051	Set Screw	M6×16mm	2
23	EBL1236VS-G23	Fork	Ø51*20	1
24	EBL1236VS-G24	Lever	Ø3/8" *220L	1
25	EBL1236VS-G25	Handle	3/8 in.	1
26	EBL1236VS-G26	Pin	Ø3×20mm	1
27	EBL1236VS-G27	Collar	Ø38*Ø19.05**12L	1
28	EBL1236VS-G28	Base		1
29	EBL1236VS-G29	Pin	Ø5×40mm	1
30	TS-1504131	Socket Head Cap Screw	M8×70mm	1
31	TS-1504101	Socket Head Cap Screw	M8×50mm	1
32	EBL1236VS-G32	Pin	Ø5×50mm	1
33	EBL1236VS-G33	Box	115L*80W*48h	1
34	EBL1236VS-G34	Pin	Ø5×35mm	2
35	TS-1503031	Socket Head Cap Screw	M6×12mm	1
36	EBL1236VS-G36	Collar	Ø44*Ø19.5*30W	1
37	SB-1/4	Ball Steel	1/4 in. dia	1
38	EBL1236VS-G38	Spring	1/4 in × 30mm	1
39	EBL1236VS-G39	Cover		1
40	EBL1236VS-G40	Limit Switch		2

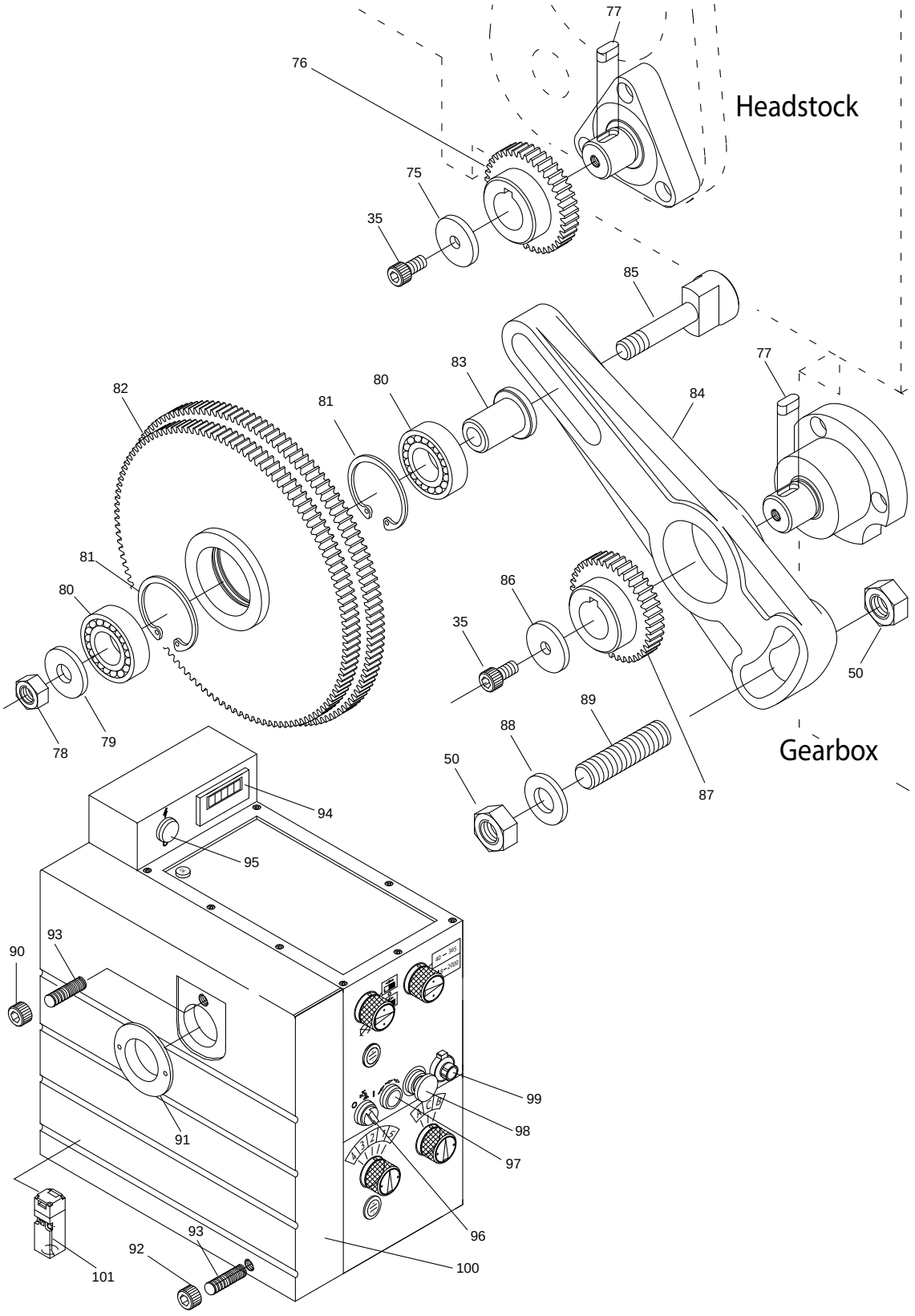
CABINET AND PANEL ASSEMBLY



CABINET AND PANEL ASSEMBLY PARTS LIST

Index No.	Parts No.	Description	Size	Qty.
41	EBL1236VS-G41	Splash Guard		1
42	TS-0254011	Screw	1/4×3/8 in	19
43	EBL1236VS-G43	Cap Screw	1/4x1-1/4 in	1
44	EBL1236VS-G44	Chip Pan		1
45	EBL1236VS-G45	Chip Tray		1
46	EBL1236VS-G46	Guard		1
47	EBL1236VS-G47	Cover		1
48	EBL1236VS-G48	Pulley		1
49	EBL1236VS-G49	Motor Platform	275*220W*1/2"T(12.7mm)	1
50	TS-0561051	Nut	1/2 in	3
51	TS-0680061	Washer	1/2 in	1
52	TS-0273121	Socket Hex Set Screw	1/2×3 in	1
53	TS-1504041	Socket Head Cap Screw	M8×20mm	2
54	EBL1236VS-G54	Bracket	109L*65W	1
55	EBL1236VS-G55	Shaft	Ø3/4"*170L	1
56	EBL1236VS-G56	Floor Stand	500W*300L*620H	1
57	EBL1236VS-G57	Floor Stand	437L*368W*15H	1
58	EBL1236VS-G58	Cover	350L*330W*1.6T	1
59	EBL1236VS-G59	Cover	390L*260W*1.6T	1
60	EBL1236VS-G60	Electric Box	300*300*178 1.2T	1
61	EBL1236VS-G61	Cover	300*300*20*1.2T	1
	EBL1236VS-G60A	Electric Box Assembly (Including #60~61)		1
62	EBL1236VS-G62	Coolant Tank	310L*220W*170H	1
63	EBL1236VS-G63	Cover	350L*240W*1.6T	1
64	EBL1236VS-G64	Shaft		1
65	EBL1236VS-G65	Collar		1
66	EBL1236VS-G66	Spring		1
67	EBL1236VS-G67	Bolt		1
68	EBL1236VS-G68	Collar		1
69	TS-1524011	Set Screw	M8x8mm	1
70	EBL1236VS-G70	Shaft		1
71	EBL1236VS-G71	Brake Pad		1
72	TS-0100041	Cap Screw	1/2×1/4 in	6
73	EBL1236VS-G73	Cabinet		1
74	EBL1236VS-G74	Front Cover		1
	EBL1236VS-G73A	Cabinet Assembly (Including #73~74)		1
118	EBL1236VS-G118	Main motor	2HP 3PH 230V	1
119	EBL1236VS-G119	Pump		1
138	EBL1236VS-G138	Work lamp	AC24V 9W 0.5m/500Lux	1
139	EBL1236VS-G139	Piple	115mm	1

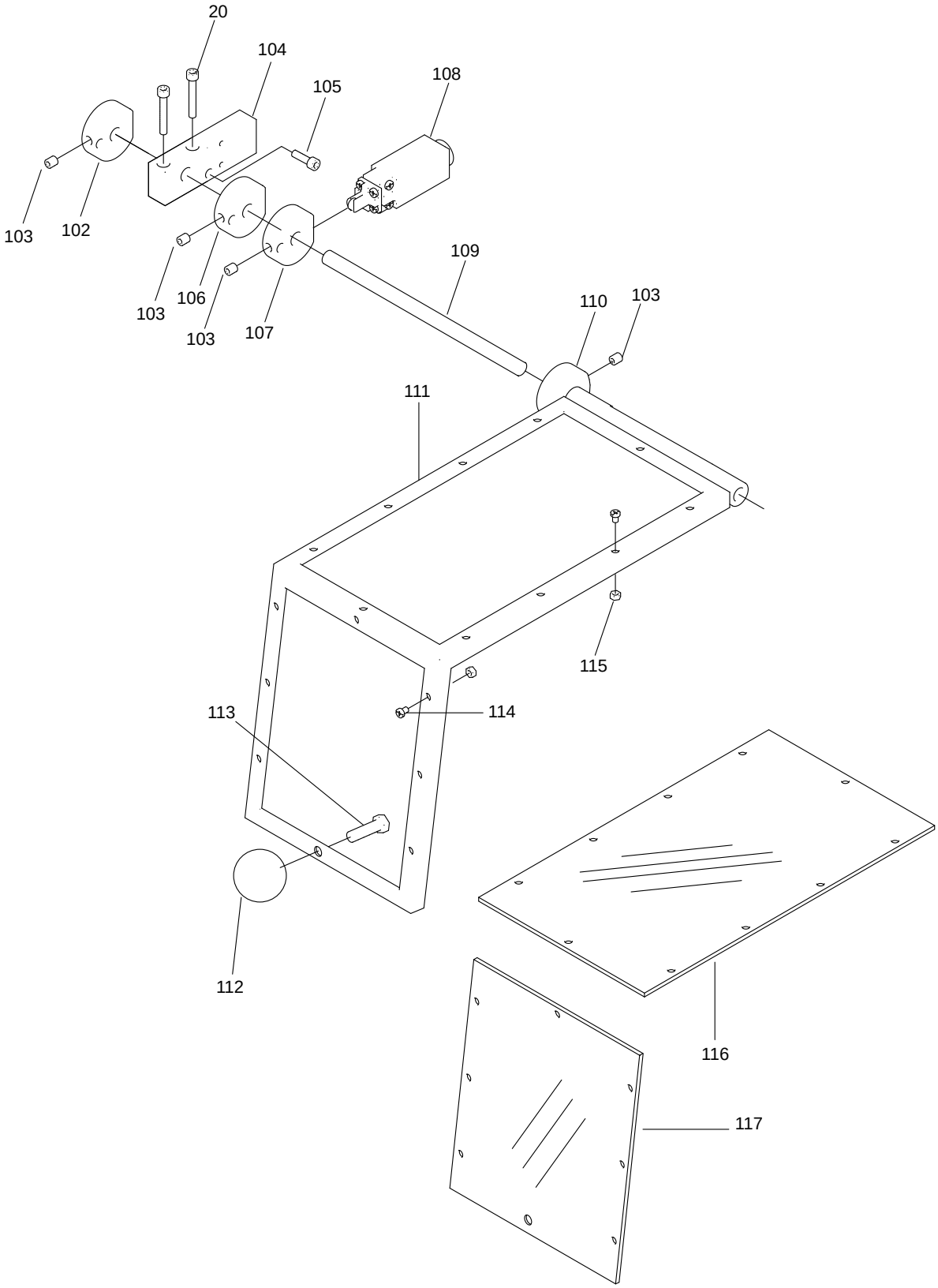
END GEAR ASSEMBLY



END GEAR ASSEMBLY PARTS LIST

Index No.	Parts No.	Description	Size	Qty.
35	TS-1503031	Socket Head Cap Screw	M6×12mm	2
50	TS-0561051	Nut	1/2 in	2
75	EBL1236VS-G75	Washer	Ø25*Ø1/4"*3T	2
76	EBL1236VS-G76	Change Gear		1
77	EBL1236VS-G77	Key	5×12mm	2
78	TS-0561031	Nut	3/8 in	1
79	EBL1236VS-G79	Washer	Ø25*Ø3/8"*2T	1
80	BB-6003Z	Bearing	No.6003Z	2
81	EBL1236VS-G81	Circlip	R-35mm	2
82	EBL1236VS-G82	Gear		1
83	EBL1236VS-G83	Shaft Collar	Ø25*Ø3/8"*29L	1
84	EBL1236VS-G84	Swing Frame		1
85	EBL1236VS-G85	Shaft	Ø25*65L	1
86	EBL1236VS-G86	Washer		1
87	EBL1236VS-G87	Change Gear		1
88	EBL1236VS-G88	Washer	Ø25*1/2"*3T	1
89	TS-0273101	Socket Hex Set Screw	1/2×2 in	1
90	EBL1236VS-G90	Nut		1
91	EBL1236VS-G91	Collar		1
92	EBL1236VS-G92	Nut		1
93	EBL1236VS-G93	Shaft		2
94	EBL1236VS-G94	RPM Speed Meter		1
95	EBL1236VS-G95	Pilot Light		1
96	EBL1236VS-G96	Coolant Selecting Switch		1
97	EBL1236VS-G97	Jogging Push Bottom Switch		1
98	EBL1236VS-G98	Emergency Stop Switch		1
99	EBL1236VS-G99	Variable Speed Selector		1
100	EBL1236VS-G100	Thread Chart Plate		1
101	EBL1236VS-G101	End Cover Limit Switch		1

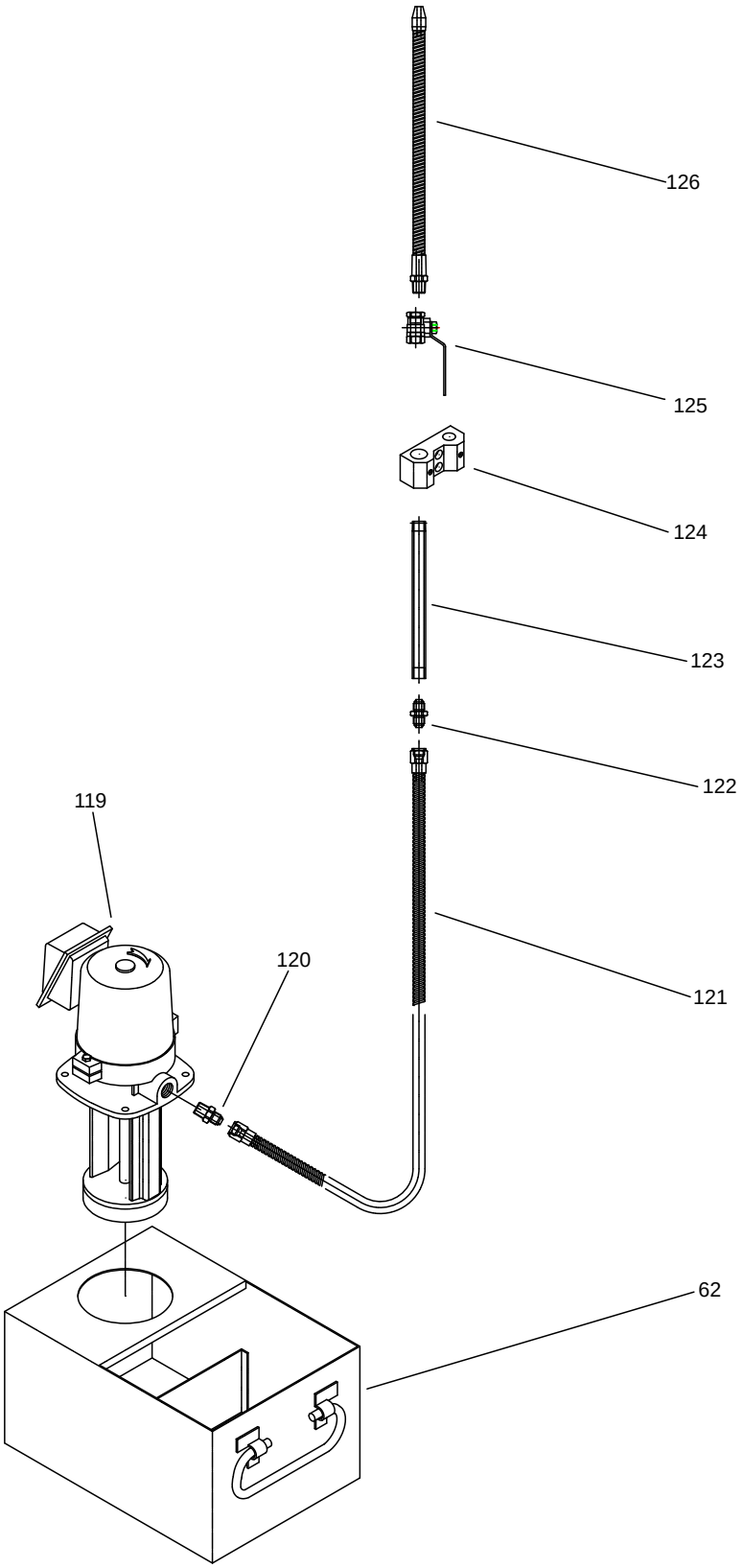
CHUCK SAFETY GUARD ASSEMBLY



CHUCK SAFETY GUARD ASSEMBLY PARTS LIST

Index No.	Parts No.	Description	Size	Qty.
20	TS-1503041	Socket Head Cap Screw	M6×16mm	2
102	EBL1236VS-G102	Cam		1
103	TS-1523021	Set Screw	M6×8mm	4
104	EBL1236VS-G104	Keep Assy		1
105	TS-1503021	Socket Head Cap Screw	M6×10mm	1
106	EBL1236VS-G106	Collar		1
107	EBL1236VS-G107	Cam		1
109	EBL1236VS-G109	Shaft		1
110	EBL1236VS-G110	Collar		1
111	EBL1236VS-G111	Chuck Guard		1
112	EBL1236VS-G112	Handle	PVC	1
113	TS-1505031	Socket Head Cap Screw	M10×25mm	1
114	EBL1236VS-G114	Screw	3/16×1/4 in	18
115	EBL1236VS-G115	Nut	3/16 in	18
116	EBL1236VS-G116	Window	3Tx193x343mm	1
117	EBL1236VS-G117	Window	3Tx193x230mm	1

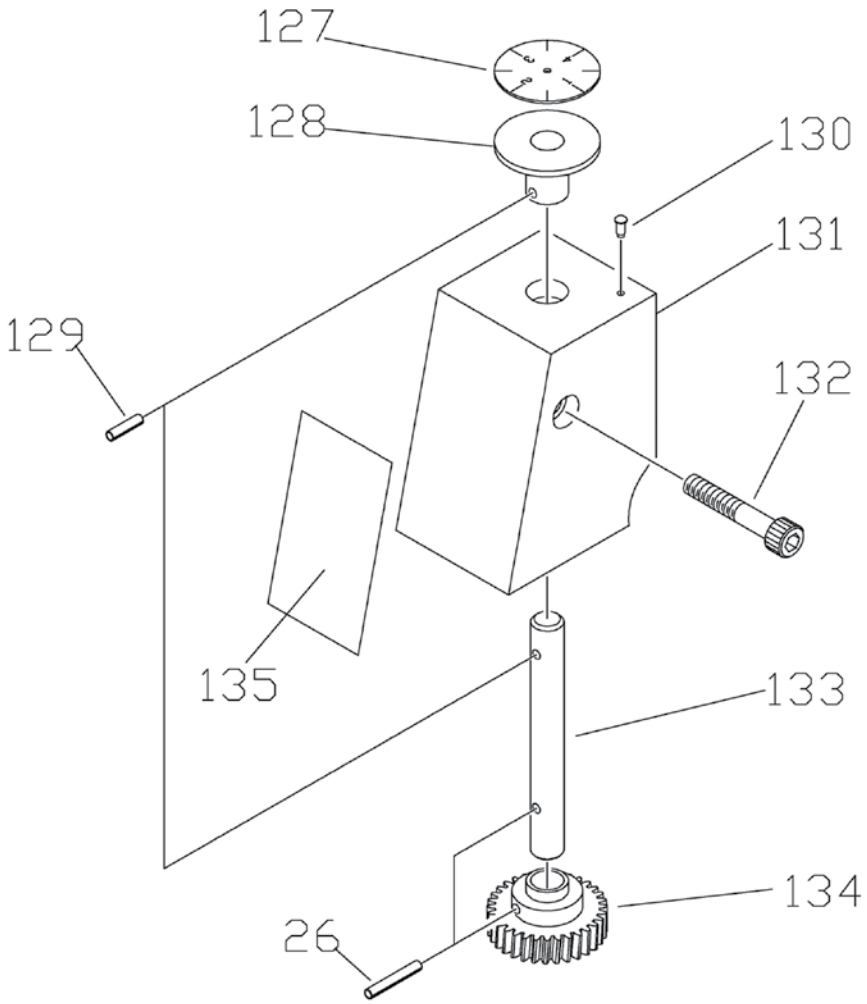
COOLANT PUMP ASSEMBLY



COOLANT PUMP ASSEMBLY PARTS LIST

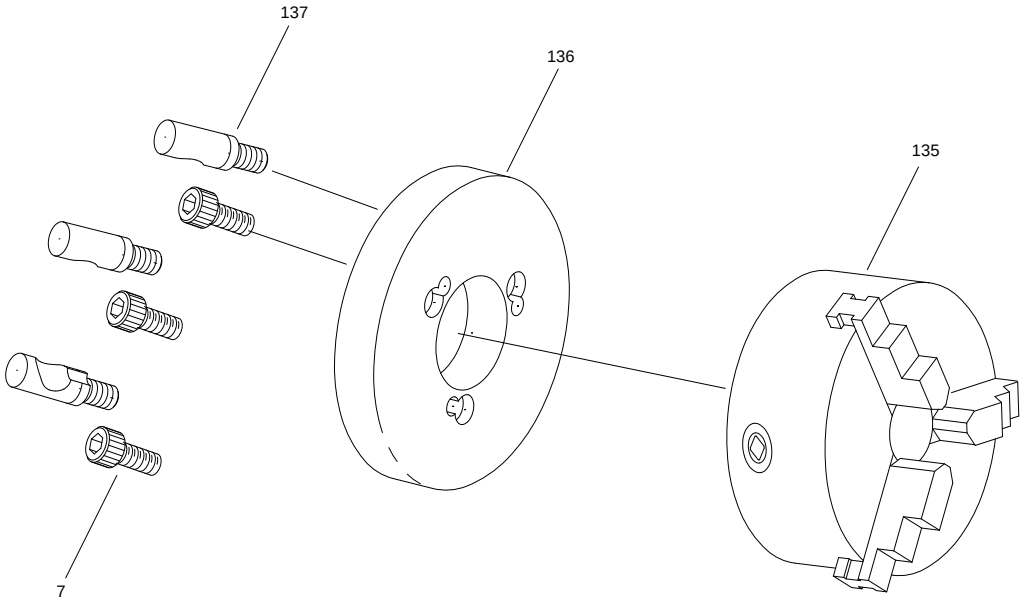
Index No.	Parts No.	Description	Size	Qty.
62	EBL1236VS-G62	Coolant Tank	310L*220W*170H	1
119	EBL1236VS-G119	Pump		1
120	EBL1236VS-G120	Nipple		1
121	EBL1236VS-G121	Flexible Hose		1
122	EBL1236VS-G122	Nipple		1
123	EBL1236VS-G123	Tube		1
124	EBL1236VS-G124	Bracket		1
125	EBL1236VS-G125	Value Gate		1
126	EBL1236VS-G126	Spraying Pipe		1

DIAL INDICATOR ASSEMBLY & PARTS LIST



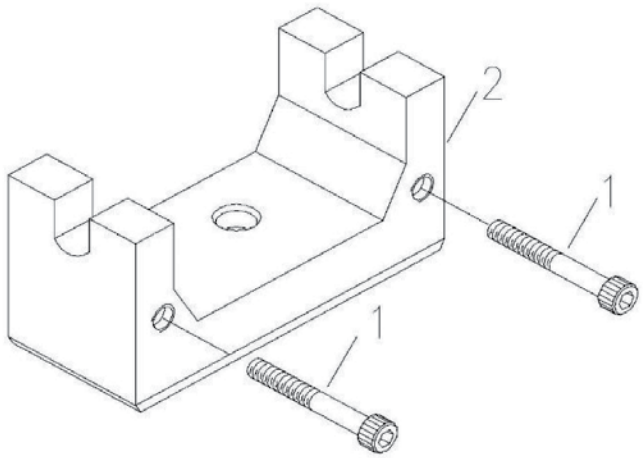
Index No.	Parts No.	Description	Size	Qty.
26	EBL1236VS-G26	Pin	Ø3×20mm	1
127	EBL1236VS-G127	Plate		1
128	EBL1236VS-G128	Dog	Ø60*Ø19.05*15W	1
129	EBL1236VS-G129	Pin	3*12 mm.	1
130	EBL1236VS-G130	Nail	2 mm.	1
131	EBL1236VS-G131	Guard	75*59*45	1
132	EBL1236VS-G132	Socket Head Cap Screw	M6*50mm	1
133	EBL1236VS-G133	Shaft	Ø9.5*81L	1
134	EBL1236VS-G134	Gear	Ø34Ø9.5*17L	1
135	EBL1236VS-G135	Threading Plate		1

CHUCK ASSEMBLY & PARTS LIST



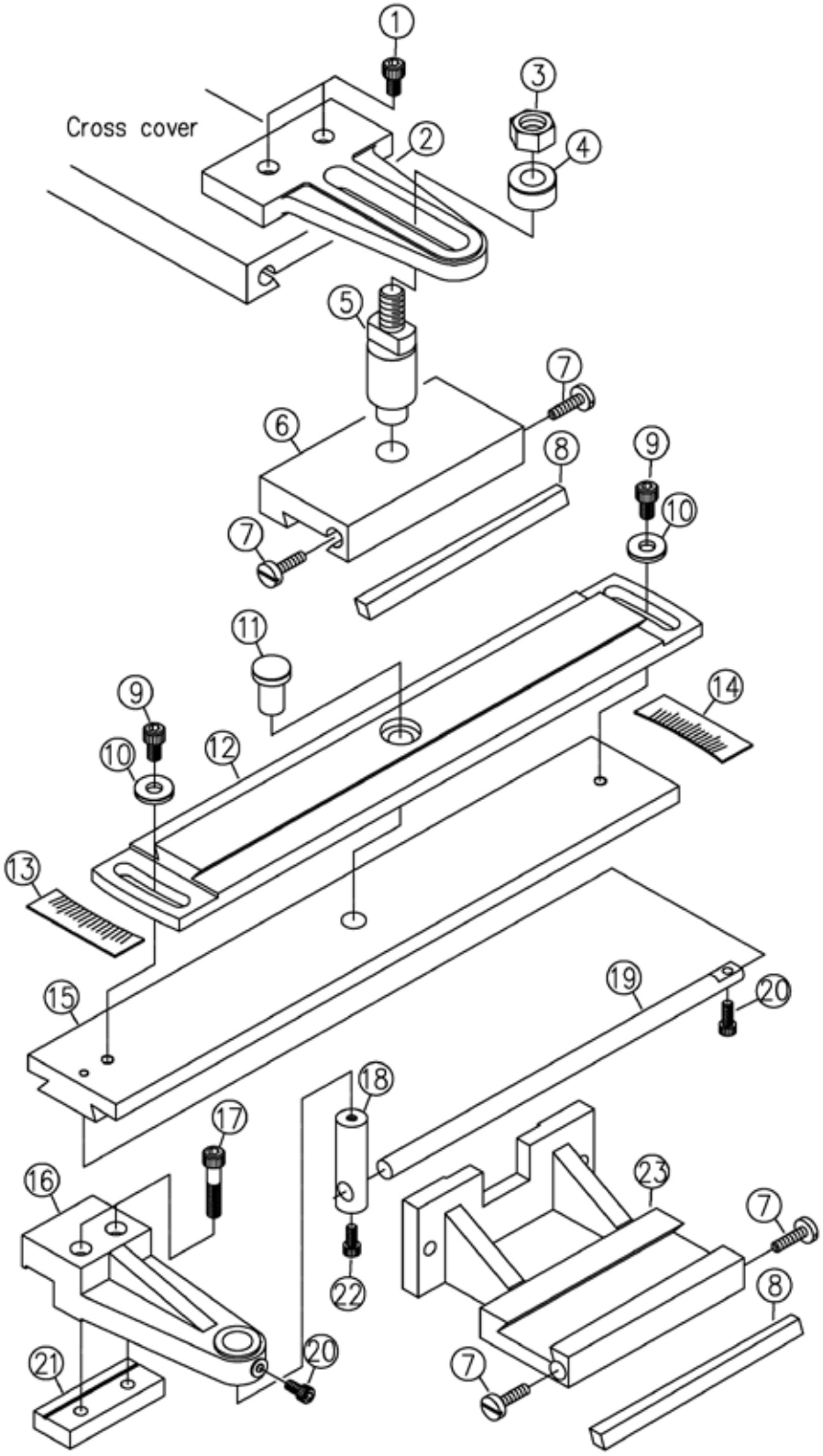
Index No.	Parts No.	Description	Size	Qty.
7	TS-1503051	Socket Head Cap Screw	M6×20mm	3
135	EBL1236VS-SK6	Chuck	6"	1
136	EBL1236VS-G136	Backplate	6"	1
137	EBL1236VS-G137	Stud	D1-4	3

CHUCK KEY BRACKET ASSEMBLY & PARTS LIST



Index No.	Parts No.	Description	Size	Qty.
1	TS-1504111	Socket Head Cap Screw	M8x55mm	2
2	EVS1440B-CKB	Chuck Key Bracket		1

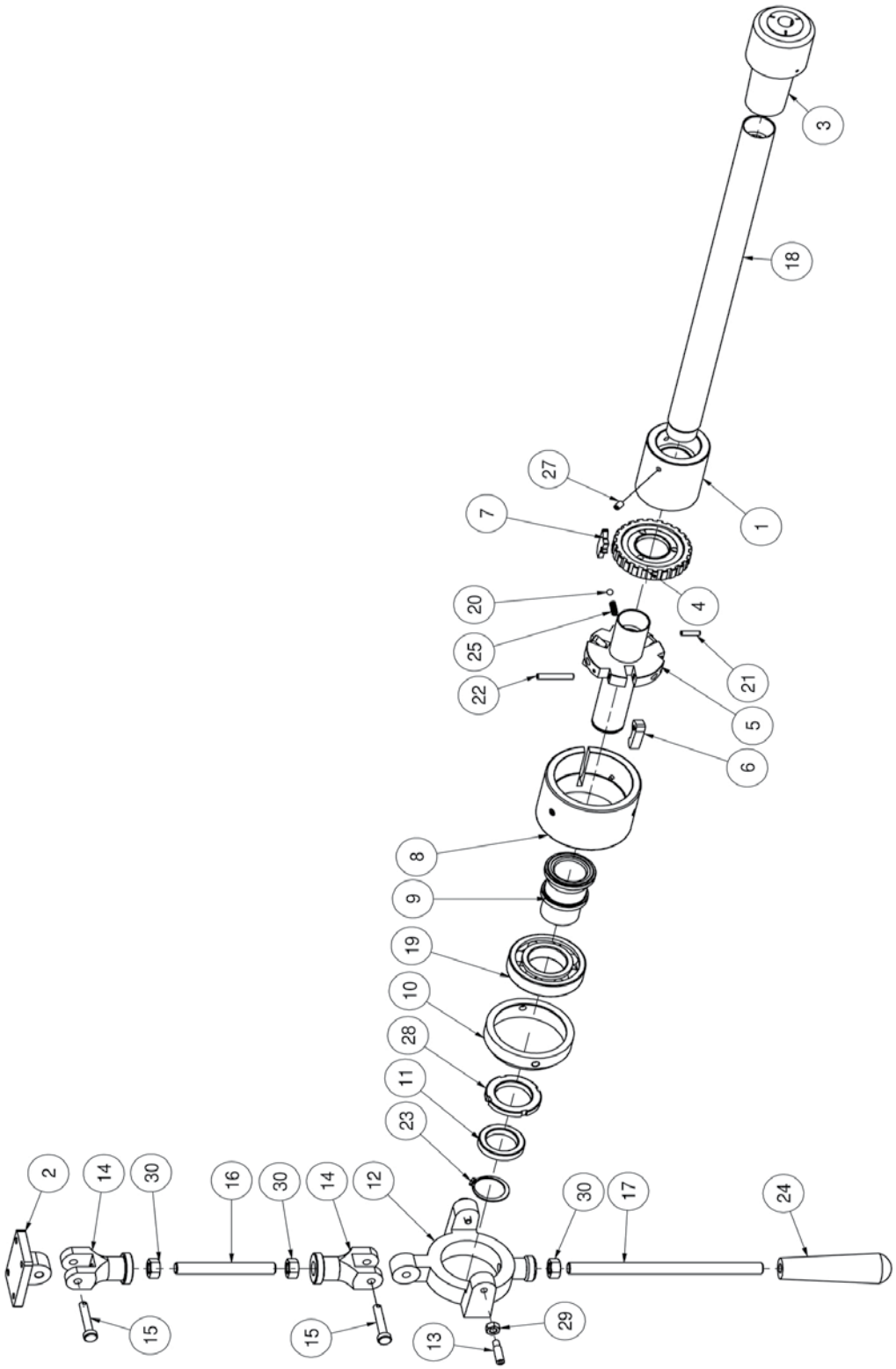
892005 TAPER ATTACHMENT (OPTIONAL)



892005 TAPER ATTACHMENT (OPTIONAL) PARTS LIST

Index No.	Parts No.	Description	Size	Qty.
1	TS-1504031	Socket Head Cap Screw	M8x16mm	1
2	E1236VS-J02	Trolley	160x110x16	1
3	TS-0561071	Nut	5/8"-11UNC	1
4	E1236VS-J04	Washer	Ø31x13	1
5	E1236VS-J05	Shaft	Ø5/8"(Ø20)x94L	1
6	E1236VS-J06	Slider	150x75x27	1
7	E1236VS-J07	Screw		4
8	E1236VS-J08	Gib	172x9.55x6.55	2
9	TS-1504041	Socket Head Cap Screw	M8x20mm	2
10	E1236VS-J10	Washer	Ø25x3	2
11	E1236VS-J11	Cover	Ø25(Ø16)x30L	1
12	E1236VS-J12	Base	380x75x22	1
13	E1236VS-J13	Angle Scale		1
14	E1236VS-J14	Angle Scale		1
15	E1236VS-J15	Base	480x75x22	1
16	E1236VS-J16	Bracket	172.5x60x40	1
17	TS-1504091	Socket Head Cap Screw	M8x45mm	1
18	E1236VS-J18	Shaft	Ø3/4"x65L	1
19	E1236VS-J19	Shaft	Ø1.2"x300L	1
20	TS-1503031	Socket Head Cap Screw	M6x12mm	2
21	E1236VS-J21	Clamping Block	80x31x13	1
22	TS-1503021	Socket Head Cap Screw	M6x10mm	1
23	E1236VS-J23	Base	145x150x71	1
	892005	Taper Attachment (#1 thru 23)		

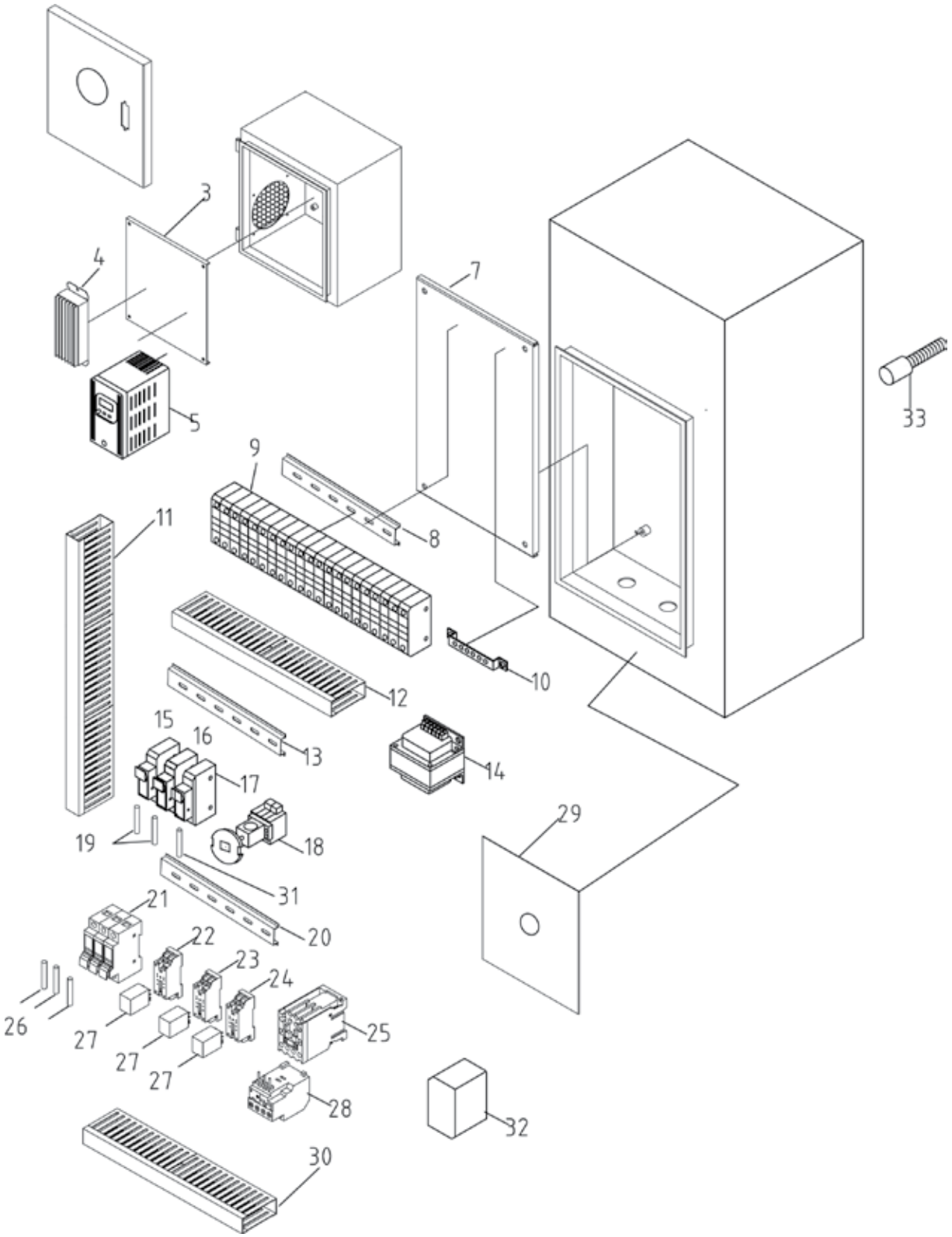
892006 5C COLLET CLOSER (OPTIONAL)



892006 5C COLLET CLOSER (OPTIONAL) PARTS LIST

Index No.	Parts No.	Description	Size	Qty.
1	C510350	Sleeve Coupling		1
2	C52302004	Fixed Seat (Length)		1
3	C53004118	Sleeve	#5	1
4	C54002038	Coupling		1
5	C54004047	Arbor		1
6	C54006001	Buckle		3
7	C54008007	Buckling Plate		1
8	C54012019	Outward Flange		1
9	C54014002	Bearing Shaft		1
10	C54016011	Bearing Stand		1
11	C54018020	Collar		1
12	C54020023	Bearing Body		1
13	C54021000	Set Screw		2
14	C54025015	Coupling		2
15	C54026005	Special Pin		2
16	C540271	Stud	105L	1
17	C54029208	Screw Bolt	205L	1
18	C55440000	Draw Bar	440L	1
19	BB-6208ZZ	Ball Bearing	6208ZZ	1
20	SB-6MM	Steel Ball	Ø6.0	1
21	5510484	Spring Pin	5 x 20L	1
22	F012000	Spring Pin	1/4"x1-1/2L	3
23	GC020101	Retaining Ring (external)	32	1
24	GD020596	Grip	1/2"	1
25	GE040176	Spring		1
26	TS-1501021	Hex Socket Cap Screw	M4 x 8L	3
27	TS-1523031	Set Screw	M6 x 10L	3
28	GF030823	Locking Nut	AN08	1
29	TS-0640081	Hex Nut	5/16 ”	2
30	TS-0640111	Hex Nut	1/2 ”	3
	892006	5C Collet Closer (#1 thru 30)		1

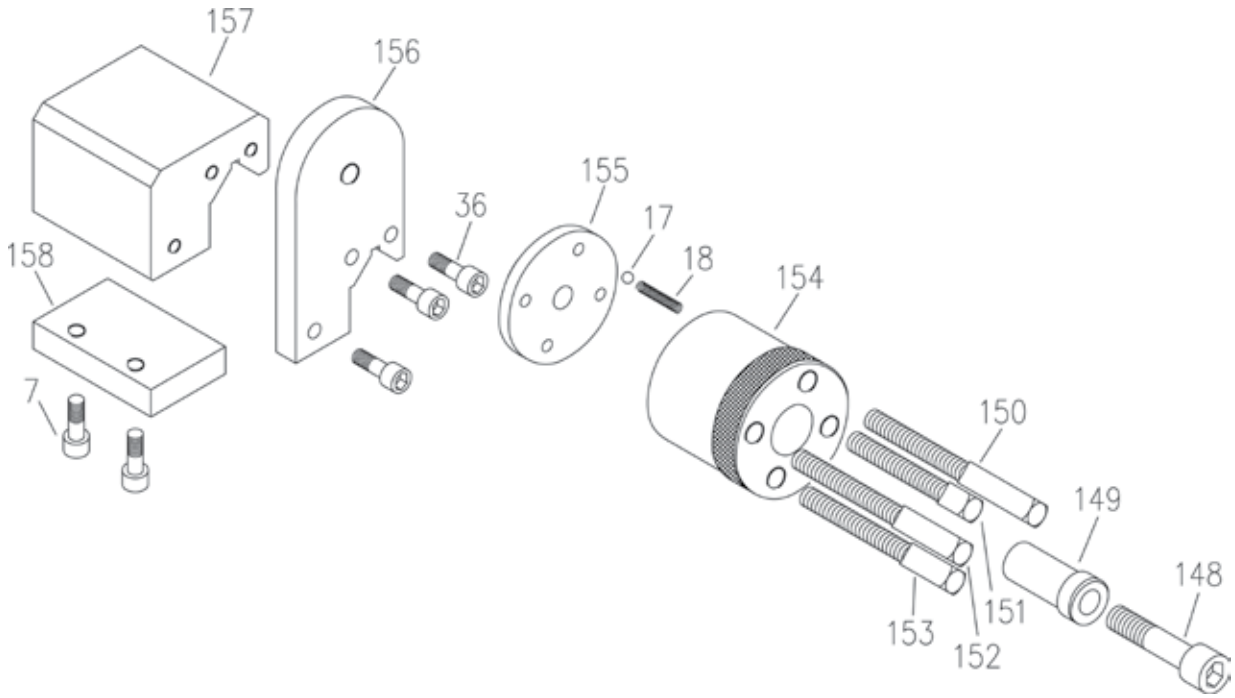
CONTROL PLATE ASSEMBLY



CONTROL PLATE ASSEMBLY PARTS LIST

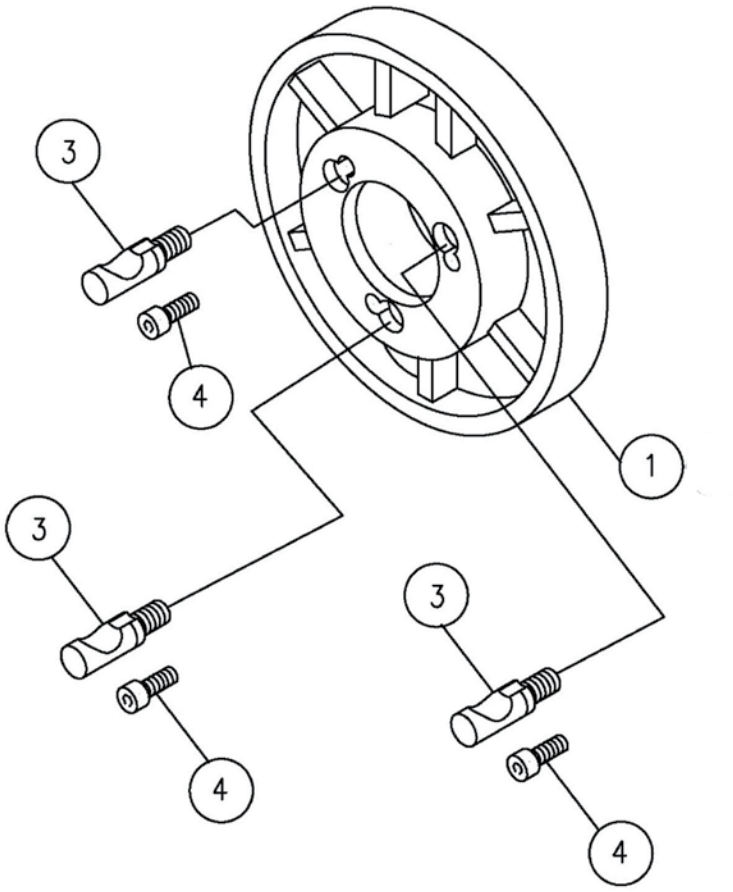
Index No.	Parts No.	Description	Size	Qty.
1	EBL1236VS-H01	Cover	300*300*20*1.2T	1
2	EBL1236VS-H02	Electric Box	300*300*178 1.2T	1
	EBL1236VS-H01A	Cover Assembly (Including #1~2)		1
3	EBL1236VS-H03	Plate		1
4	EBL1236VS-H04	Brake Resistance	260W 100Ω	1
5	E1236VS-MS3	Inverter	MS300 AC230V 3Ph 2hp	1
6	EBL1236VS-H06	Floor Stand	437L*368W*15H	1
7	EBL1236VS-H07	Plate		1
8	EBL1236VS-H08	Track		1
9	EBL1236VS-H09	Terminal Blocks		1
10	EBL1236VS-H10	Earthing Terminal Blocks		1
11	EBL1236VS-H11	Trunking		1
12	EBL1236VS-H12	Trunking		1
13	EBL1236VS-H13	Track		1
14	EBL1236VS-H14	Control Circuit Transformer	120VC Ac24v(5A)	1
15	EBL1236VS-H15	Fuse Box		1
16	EBL1236VS-H16	Fuse Box		1
17	EBL1236VS-H17	Fuse Box		1
18	EBL1236VS-H18	Main Power Switch	690VAC 25A	1
19	EBL1236VS-H19	Fuse	3A	3
20	EBL1236VS-H20	Track		1
21	EBL1236VS-H21	Fuse Boxes		1
22	EBL1236VS-H22	Relay Socket		1
23	EBL1236VS-H23	Relay Socket		1
24	EBL1236VS-H24	Relay Socket		1
25	EBL1236VS-H25	Magnetic Contactor	CU-11 Ac24v (3A1b)	1
26	EBL1236VS-H26	Fuse	32A	3
27	EBL1236VS-H27	Relay	MY4N-J Ac24v	3
28	EBL1236VS-H28	Thermal Overload Relay	RHU-10K1 0.45~0.63A	1
29	EBL1236VS-H29	Cover		1
30	EBL1236VS-H30	Trunking		1
31	E-1236VS-H31	Fuse (not shown)	4A	1
32	EVS1440B-H31	Power Supply	PU N AC 24V	1
33	EVS1440B-H32	Sensor	PNP M12x40	1

FOUR-POSITION STOP CARRIAGE & PARTS LIST



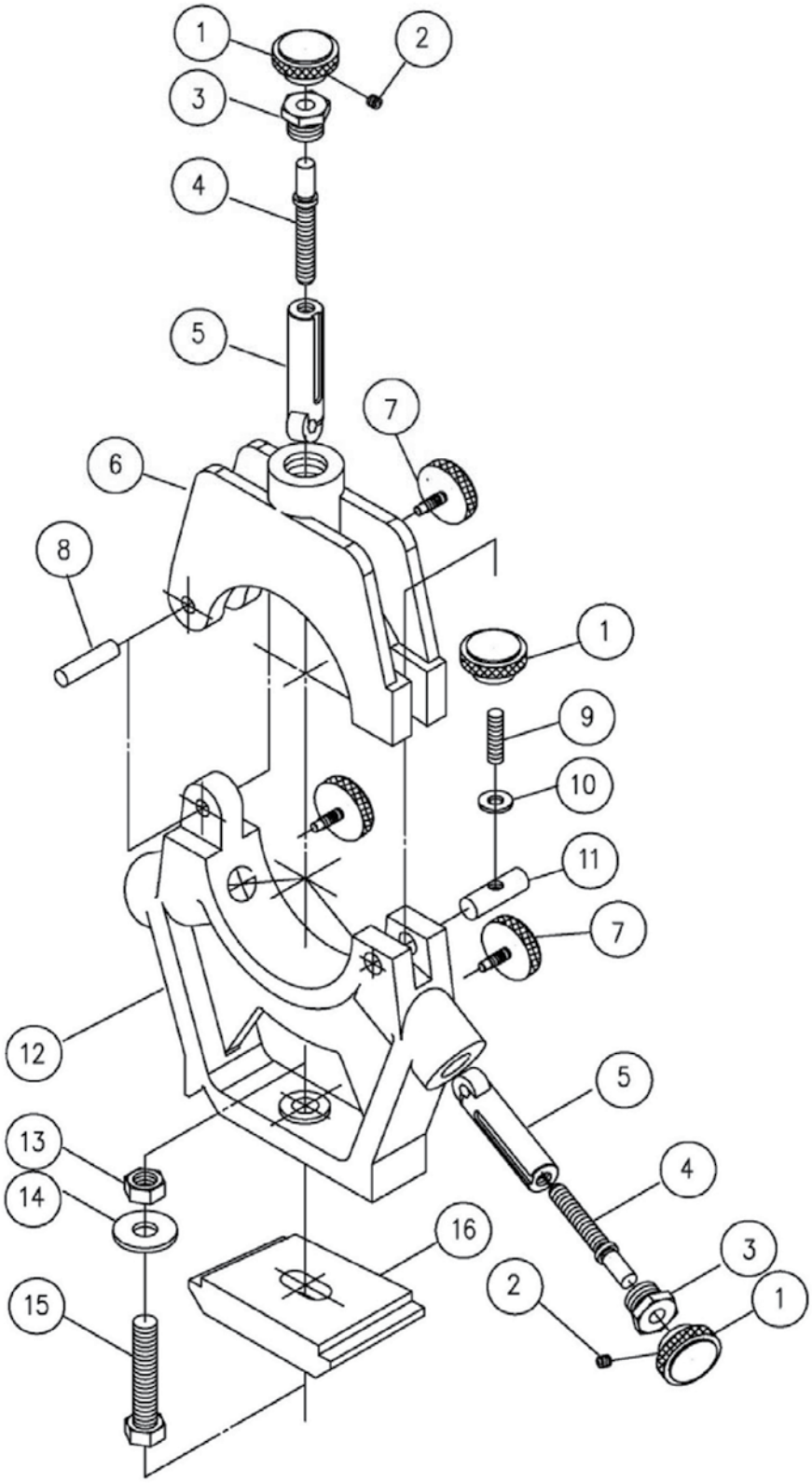
Index No.	Parts No.	Description	Size	Qty.
7	TS-1503051	Socket Head Cap Screw	M6 x 20mm	2
17	E1340VS-G17	Ball Steel	1/4 in. dia.	1
18	E1340VS-G18	Spring	1/4 in. x 35mm	1
36	TS-1503041	Socket Head Cap Screw	M6 x 16mm	3
148	E1440VS-I148	Socket Head Cap Screw	3/8 x 3 in.	1
149	E1440VS-I149	Sleeve	M6 x 6	1
150	E1440VS-I150	Screw		1
151	E1440VS-I151	Screw		1
152	E1440VS-I152	Screw		1
153	E1440VS-I153	Screw		1
154	E1440VS-I154	Collar		1
155	E1440VS-I155	Cover		1
156	E1440VS-I156	Plate		1
157	E1440VS-I157	Base		1
158	E1440VS-I158	Strip		1
	E1440VS-I4PSA	4-Position Stop Assembly		1

FACE PLATE & PARTS LIST



Index No.	Parts No.	Description	Size	Qty.
1	EBL1236VS-FP01	Face Plate 10”	Ø250x40H	1
3	EBL1236VS-G137	Stud	D1-4	3
4	TS-1503051	Socket Head Cap Screw	M6×20mm	3

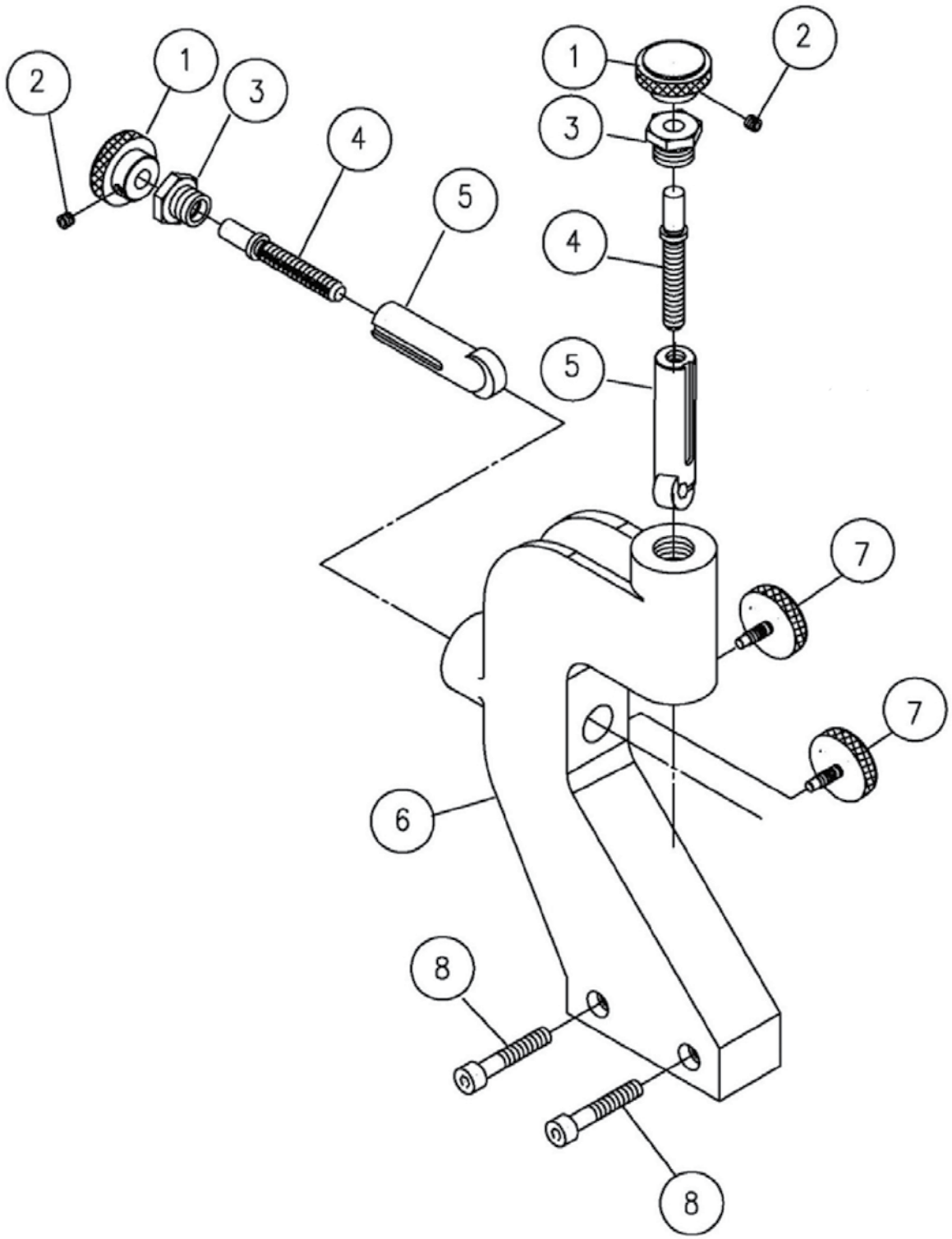
STEADY REST ASSEMBLY



STEADY REST ASSEMBLY PARTS LIST

Index No.	Parts No.	Description	Size	Qty.
1	E-1440VS-FR01	Nut	Ø20xØ24x25L	4
2	TS-1523011	Set Screw	M6*6mm	3
3	E1440VS-FR03	Screw	Ø23x17L	3
4	E1440VS-FR04	Set Screw	Ø9.5x77L	3
	E1440VS-FR01A	Nut Assembly (includes #1~4)		3
5	E1440VS-FR05	Bearing Shaft	Ø18.8(Ø24)x83L	3
6	E1236VS-SR06	Arm	168x32x125 mm	1
7	E1440VS-FR07	Set Screw	Ø20xØ4.5x30L	3
8	E1440VS-SR08	Shaft	Ø8x40L	1
9	E1440VS-SR09	Set Screw	M8*55mm	1
10	TS-0732061	Washer	3/8 in	1
11	E1440VS-SR11	Pin	Ø12.7x40L	1
12	E1236VS-SR12	Base	171x32x153	1
13	TS-0561051	Hex Nut	1/2-13 in	1
14	TS-0680061	Flat Washer	1/2 in.	1
15	TS-0070071	Hex Cap Screw	12-13 x 2-1/2 in.	1
16	EBL1236-F30	Clamp Plate	85L*94W*28h	1
	EBL1236-SRA	Steady Rest Assembly (#1~16)		

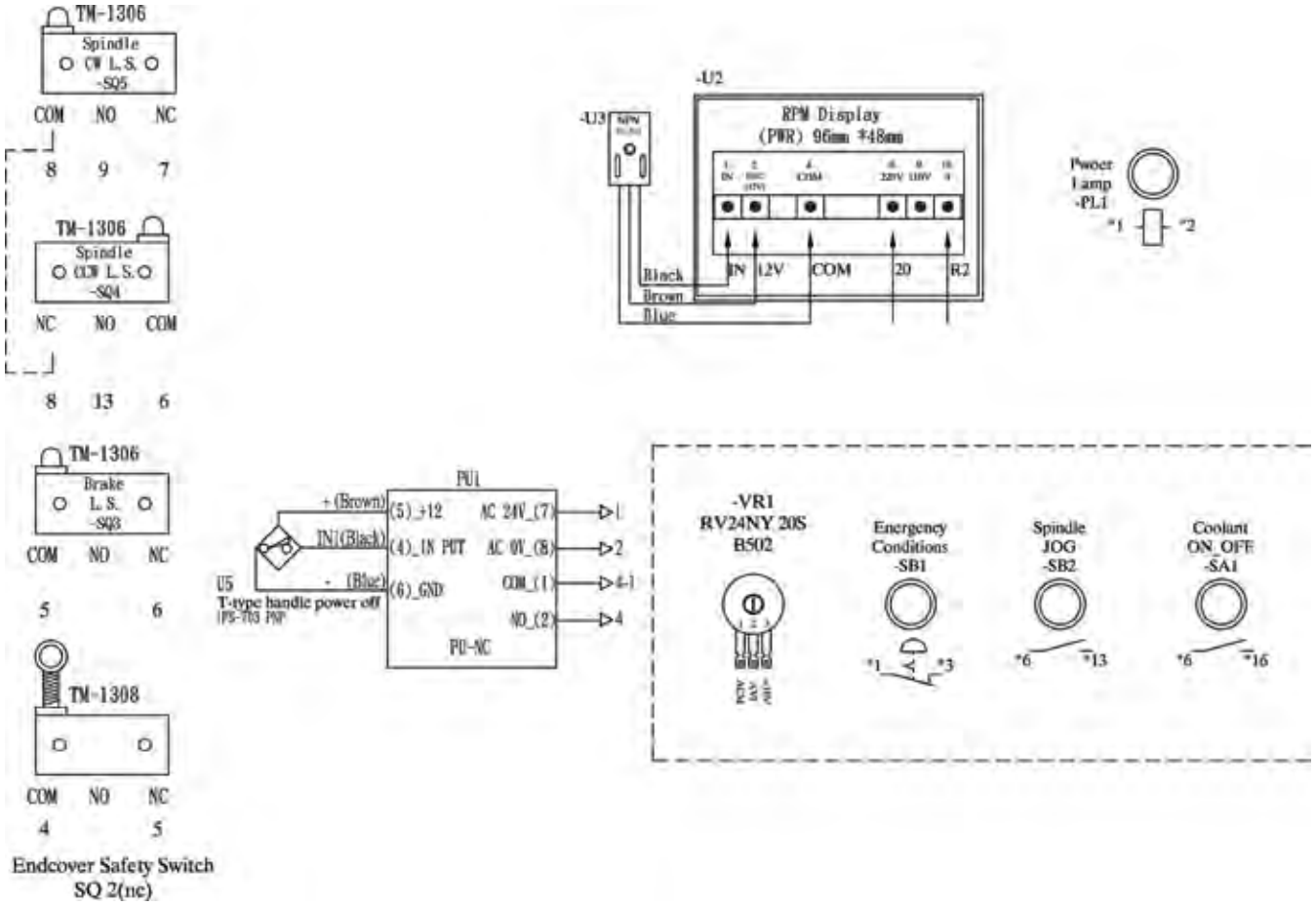
FOLLOW REST ASSEMBLY

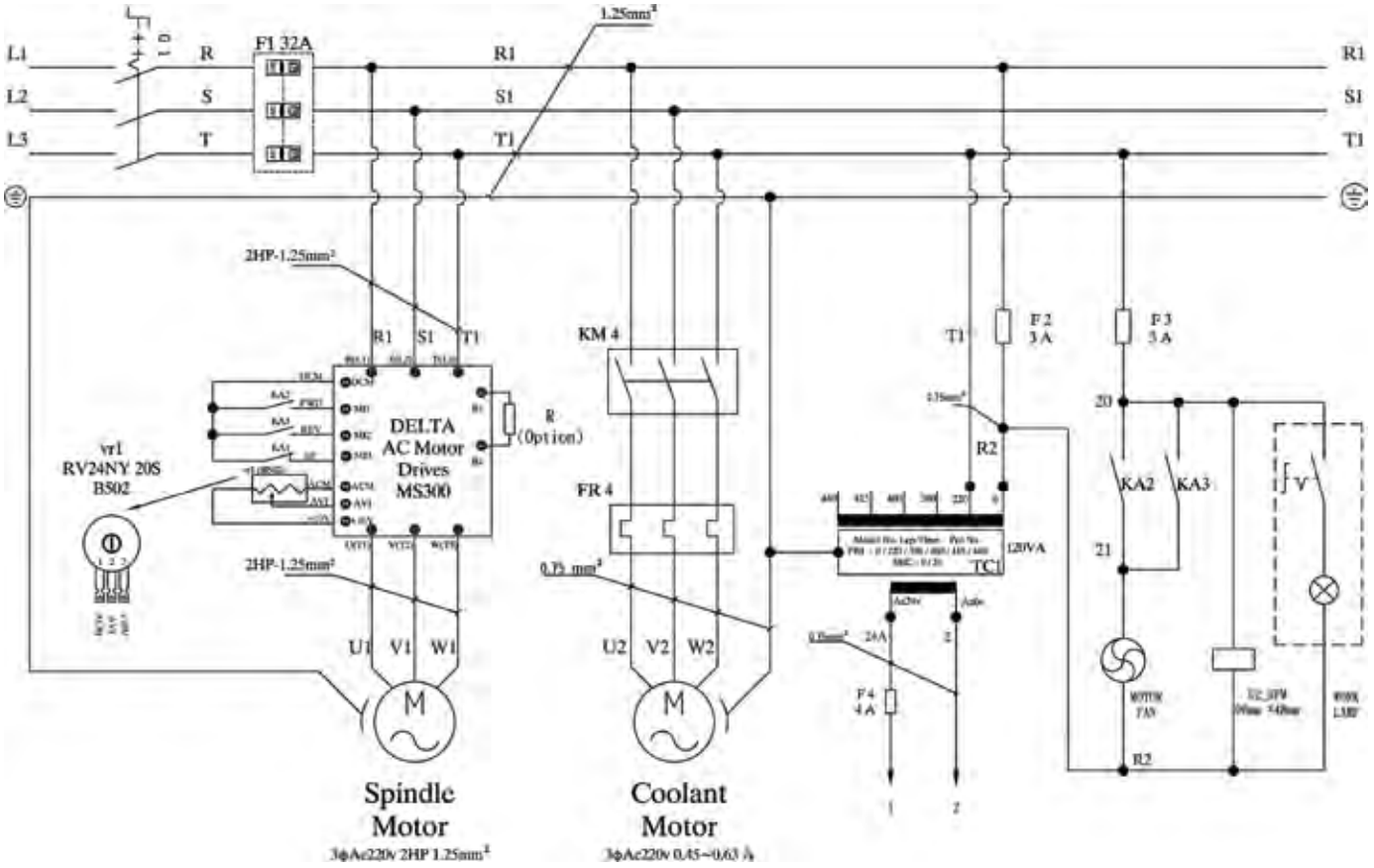


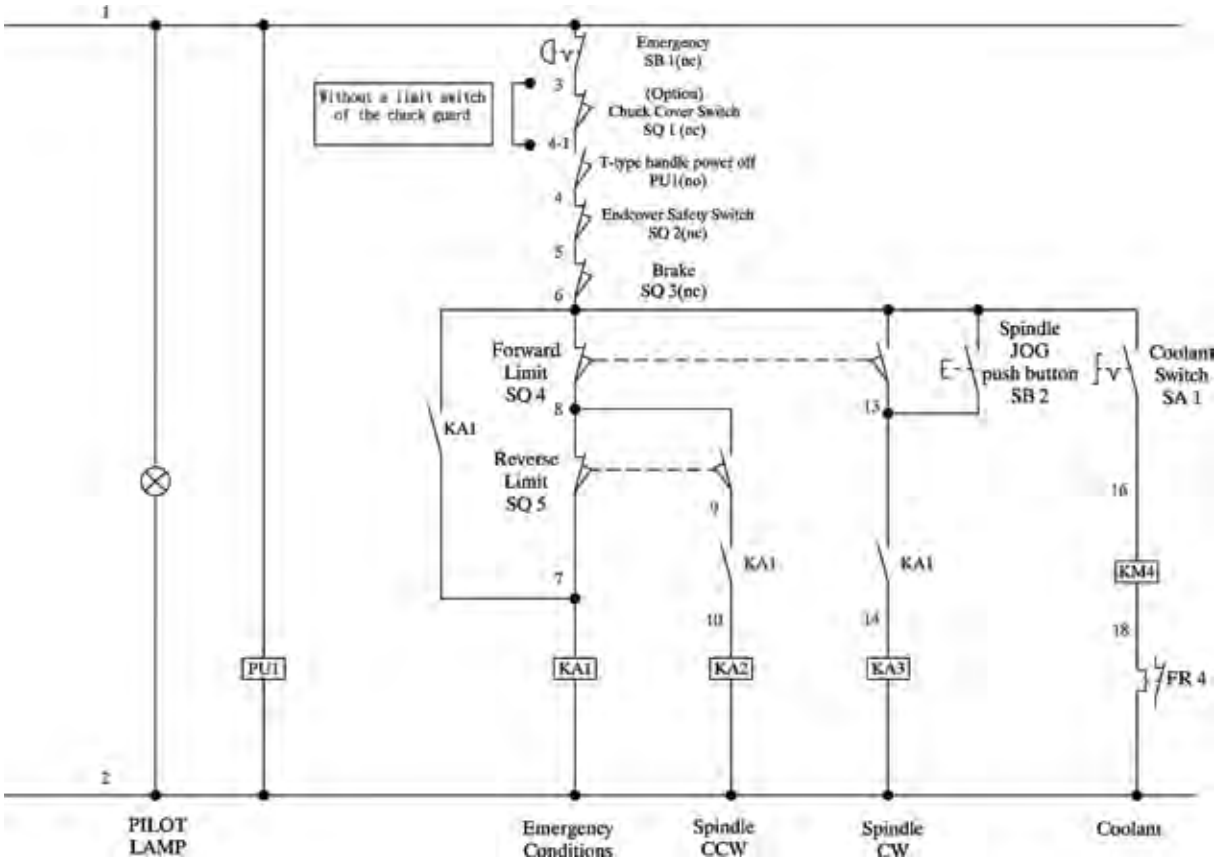
FOLLOW REST ASSEMBLY PARTS LIST

Index No.	Parts No.	Description	Size	Qty.
1	E1440VS-FR01	Nut	Ø20xØ24x25L	2
2	TS-1523011	Set Screw	M6*6mm	2
3	E1440VS-FR03	Screw	Ø23x17L	2
4	E1440VS-FR04	Set Screw	Ø9.5x77L	2
	E1440VS-FR01A	Nut Assembly (includes #1~4)		2
5	E1440VS-FR05	Bearing Shaft	Ø18.8(Ø24)x83L	2
6	E1236VS-FR06	Follow Rest	271x32x159 mm	1
7	E1440VS-FR07	Set Screw	Ø20(Ø4.5)x30L	2
8	TS-1490081	Socket Head Cap Screw	M8*45mm	2
	EBL1236-FRA	Follow Rest Assembly (#1~8)		

14.0 WIRING DIAGRAMS




L1
L2
L3
R
S
T
F1 32A
R1
S1
T1
1.25mm²
2HP-1.25mm²
DELTA
AC Motor
Drives
MS300
R
(Option)
vr1
RV24NY 20S
B502
KM 4
FR 4
0.75 mm²
F2
3A
F3
3A
R2
TC1
120VA
F4
4A
KA2
KA3
U1
V1
W1
U2
V2
W2
M
Spindle
Motor
3ΦAc220v 2HP 1.25mm²
Coolant
Motor
3ΦAc220v 0.45~0.63 A


Without a limit switch
of the chuck guard
Emergency
SB 1(nc)
(Option)
Chuck Cover Switch
SQ 1 (nc)
T-type handle power off
PU1(no)
Endcover Safety Switch
SQ 2(nc)
Brake
SQ 3(nc)
Forward
Limit
SQ 4
Reverse
Limit
SQ 5
Spindle
JOG
push button
SB 2
Coolant
Switch
SA 1
KA1
KA2
KA3
KM4
FR 4
PU1
PILOT
LAMP
Emergency
Conditions
Spindle
CCW
Spindle
CW
Coolant

15.0 SCHEDULE OF ELECTRICAL EQUIPMENT

Item designation	Circuit	Description and function	Technical data	Quantity
U1	1	For main motor spindle inverter	Ue=380V-460V~ 1.5kW 2HP	1
KM1	2,3	Relay contactor for main motor reverse	Res 5A 240VAC 5A 30VDC Coil 24VAC 50/60HZ	1
KM2	2,3	Relay contactor for main motor forward		1
KM3	2,3	Magnetic contactor for coolant pump		1
KM4	1	Magnetic contactor for power supply		1
KA1	3	Magnetic contactor for brake		1
FU1	1	Fuse boxes	10m/mX38m/m 100KA 690V, 32A	1
FU2				
FU3				
FU4	1	Fuse box	20mm 250V 16A	1
FU5	1	Fuse box	20mm 250V 16A	1
FU6	1	Fuse box	20mm 250V 16A	1
FR2	2,3	Thermal overload relay for coolant pump		1
QS1	1	Main power switch		1
HL1	3	Pilot light		1
TC1	1	Control circuit Tranformer	Prim 220V/380V Sec. 22V,24V,150VA	1
SA1	3	Selecting switch		1
SB1	3	Off hand switch Emergency		1
SB2	3	Push button switch (jogging switch)		1

Item designation	Circuit	Description and function	Technical data	Quantity
SB3	1	Push button switch (power supply off)		1
SB4	1	Push button switch (power supply on)		1
SQ1	3	Chuck guard switch	500V 6KV 10A	1
SQ2	3	Limit switch Endcover safety switch	500V 6KV 10A	1
SQ3	3	Limit switch for brake	250V 15A	1
SQ4	3	Limit switch for main motor forward	250V 15A	1
SQ5	3	Limit switch for main motor reverse	250V 15A	1
M1	2	Squirrel-cage motors Foot-mounted	60Hz, 220/360V 1400 rev/min class E insulation 100L type ASEC, 1.5kW	1
M2	2	Coolant pump	50/60Hz, 220/400V 2850/3400 rev/min type MT, 0.1kW	1

NOTES