

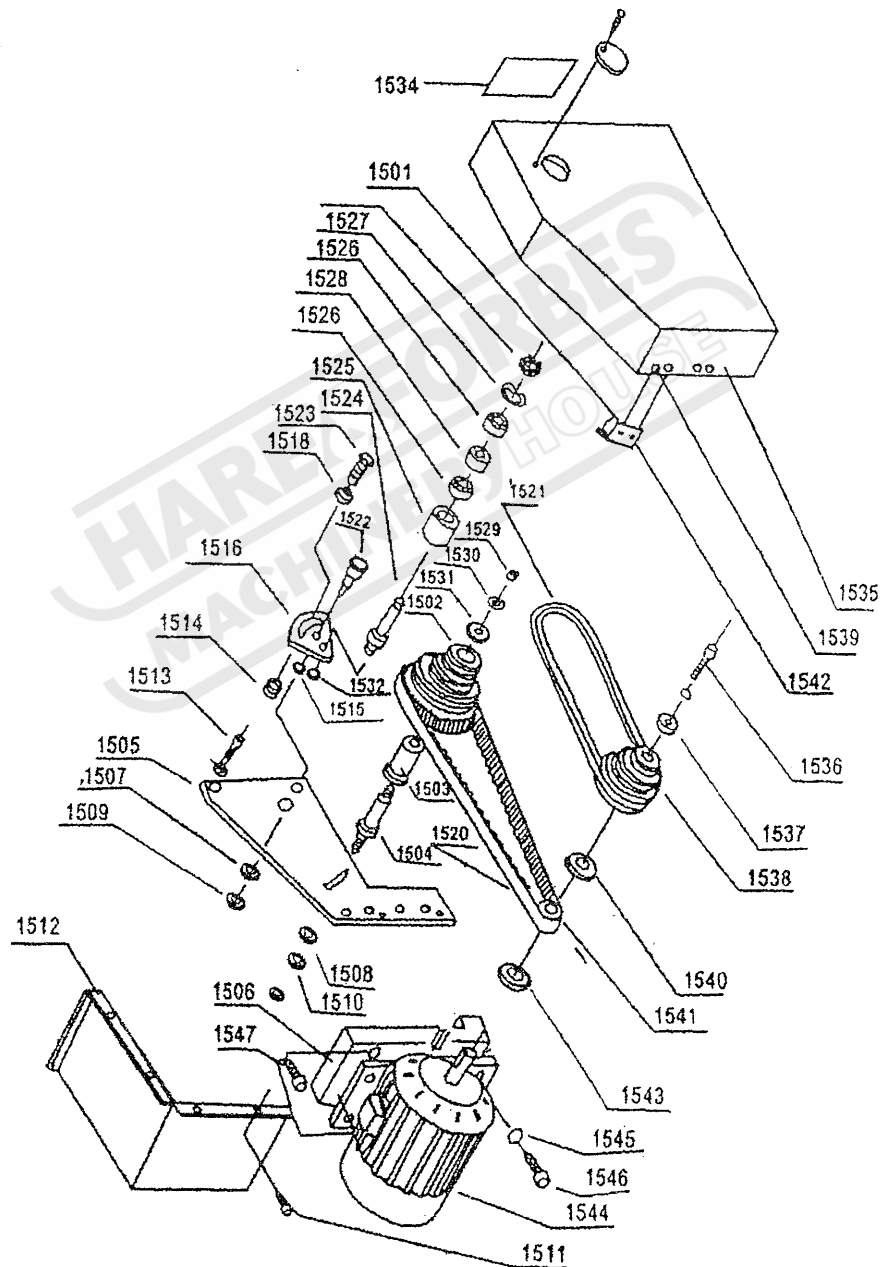
Special Attention

1. Remove the wooden crate. And check whether the standard or special accessories accord with the packing list or not. Please contact the seller for unconformity.
2. Never attempt to use, operate or adjust the lathe before reading the operation manual and understanding the installation procedure.
3. Wear gaberdine, approved safety goggles and face shield while using the machine.
4. Forbidden to wear gloves, high-heel shoes and skirts.
5. Be subject to alteration without notice during the production procedure.
6. Under the condition of normal use and maintenance, if the operation is not satisfied, please contact the seller.

Form 3 Bearings

No	Name	Type	Specification	Qty	Position
5	Single row taper bearing	2007107	35 × 62 × 17	2	Head stock
7	Single row thrust bearing	8101	12 × 26 × 9	1	Saddle
20	Single row thrust bearing	8101	12 × 26 × 9	1	Tail stock
23	Single row centripetal force bearing	101	12 × 28 × 8	2	Jam wheel
25	Single row centripetal force bearing	101	12 × 28 × 8	1	Change gear

Fig.3 Motor And Belt Wheels



Form4 Motor & pulley transmission

No.	Excused standard no.	Name	Qty	Notes
1501	GB96-52-67	Nut	3	M5
1502	15023	Synchromesh mid pulley	1	
1503	15021	Bearing	1	
1504	15020	Shaft	1	
1505	15022	Cover	1	
1506	GB96-76	Washer	1	12
1507	GB97-76	Washer	1	10
1508	GB52-76	Nut	1	M12
1509	GB52-76	Nut	1	M10
1510	GB54-76	Nut	1	M12
1511	GB818-76	Screw	4	M5×8
1512	15027	Cover	1	
1513	GB30-76	Threaded bolt	3	M10×20
1514	15025	Washer	1	
1515	15016	Washer	1	
1516	15026	Fan shaped support	1	
1517	15030	Support	1	
1518	GB97-76	Washer	1	8
1519	GB818-76	Screw	2	M5×12
1520		Serrated belt	1	M1.5×Z124
1521		Triangle belt	1	Otype762
1522	15015	Shaft	1	
1523	GB30-76	Bolt	1	M8×25
1524	15014	Shaft	1	
1525	15012	Jam wheel	1	
1526	101	Single row centripetal force bearing	2	12×28×8
1527	GB894-76	Spaver	1	12
1528	15013	Quill	1	
1529	R71-1	Oil seal	1	6
1530	GB894-76	Spacer	1	12
1531	15031	Washer	1	
1532	GB894-76	Spacer	1	12
1533	GB893-76	Spacer	1	28
1534	15029	Plate	1	
1535	15028	Cover	1	
1536	GB70-76	Screw	1	
1537	15017	Spacer	1	
1538	15018	Pulley	1	
1539	GB818-76	Screw	5	M5×8
1540	15024-1	Spacer	1	
1541	15024	Pulley	1	
1542		Hinge	1	75
1543	15024-2	Spacer	1	
1544	JZ7134	Motor	1	400/370W 500/550W
1545	GB97-76	Washer	4	8
1546	GB30-76	Bolt	4	M8×25

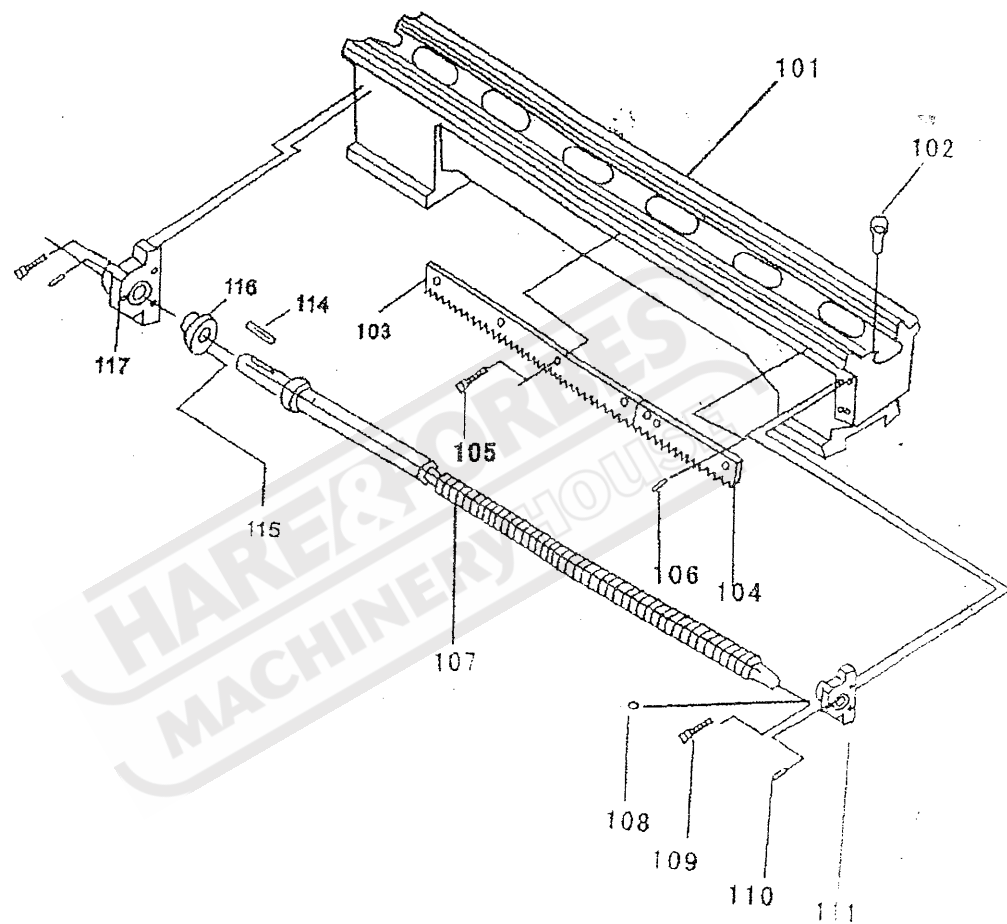
4.BED ASSEMBLY

See Fig 4-1

All the components will be assembled on the bed which is made of HT200 cast iron as the lathe body material after eliminating its internal stress, and it can be used for a long time without deformation, with adequate hardness to bear the cutting load, the fine processed two lozenge tracks can supply easy linear sliding for saddle, tail stock when processing parts.

Before delivery of the lathe, the moving precision of the lead screw & gear rack on bed body has been calibrated, customers do not have to adjust it.

Fig.4-1 Bed Assembly(CJ9528)



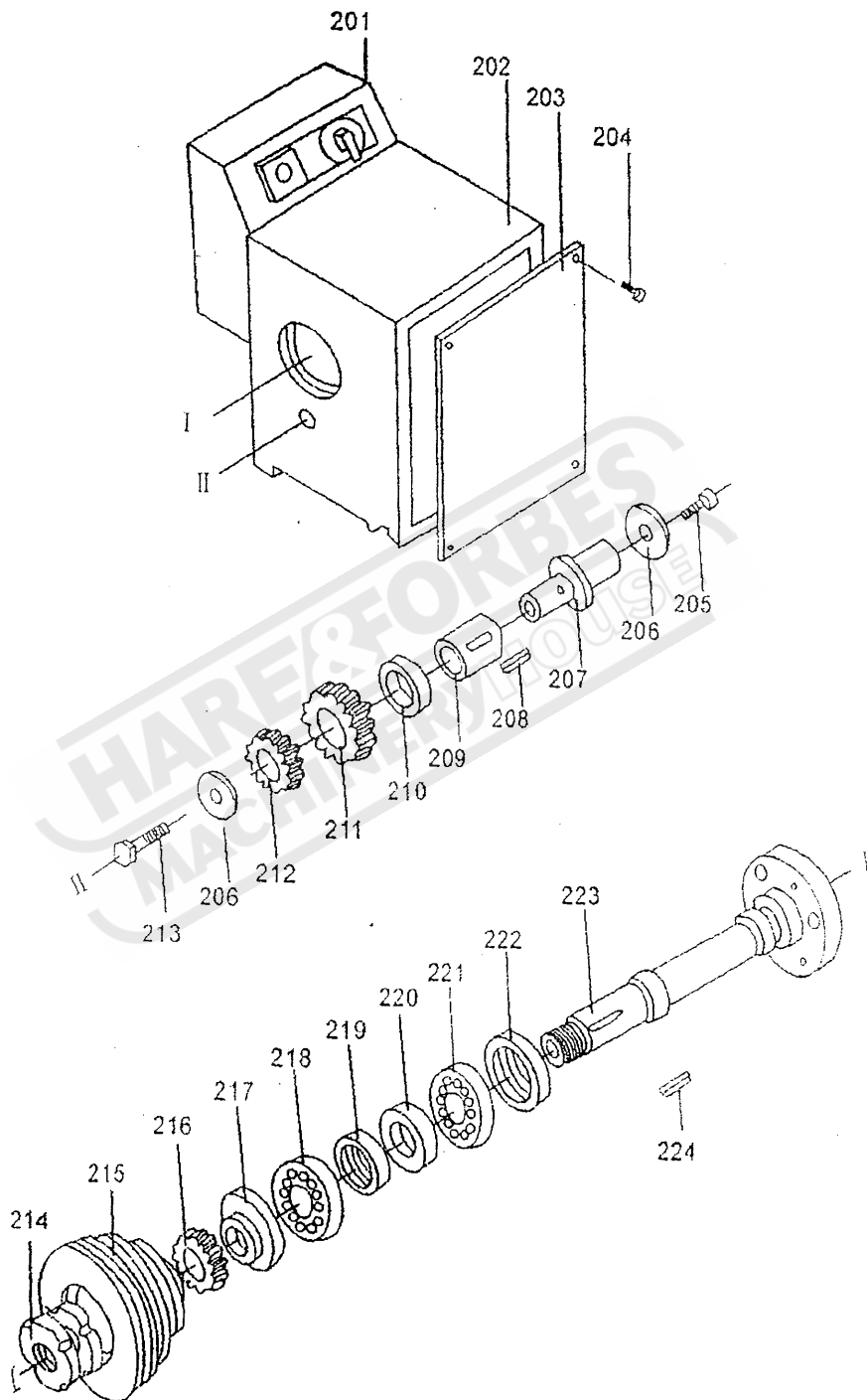
5、 HEAD STOCK

See Fig Fig5-3, Fig5-4.

Due to the adoption of cone pulley belt to transmit, the structure of the head stock does not become complicated, it is mainly composed of head stock base, shaft, bearings, retaining rings, pulley, nut, etc.

Head stock is important part of the lathe, it will deal with the precision or roughness of the work parts, and it's made with high precision. So the high precision grade of single row taper bearings are used for the supports of the main shaft, it can bear the load coming from the radial and axial direction, ensure the main shaft to remain the good precision of rigidity and revolution. The clearance of the bearings for the spindle has been well adjusted before delivery, customers don't have to adjust again. When the lathe is used long and the precision becomes low, also cutting with vibration, then it needs adjusting.

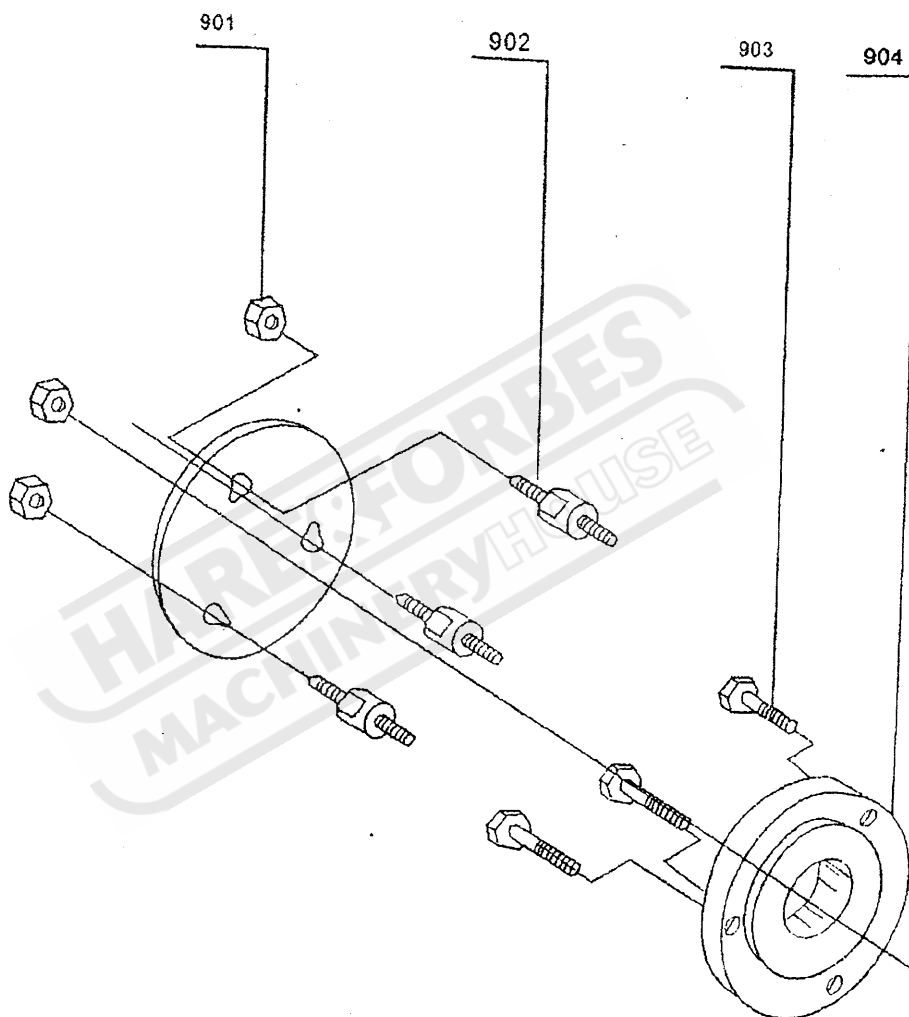
Fig.5-3 Head Stock(CJ9528)



Form7 Head stock (Fig5-3)

No.	Excused standard no.	Name	Qty	Notes
201	15032	Electric box	1	
202	02011	Head stock body	1	
203	02016	Face cover	1	
204	GB818-86	Screw	4	M3×6
205	GB70-85	Threaded bolt	1	M6×12
206	GB96-85	Washer	2	6
207	02027	Shaft	1	
208	GB1096-86	Key	1	4×20
209	02028	Quill	1	
210	08019	Loop	1	
211	08018A	Gear	1	Z52
212	08016	Gear	1	Z40
213	GB5783-86	Bolt	1	M6×16
214	GB812-88	Nut	1	M27×1.5
215	02020	Pulley	2	
216	02021	Gear	1	Z52
217	02025	Loop	1	
218	GB297-64	Bearing	1	2007107
219	02013	Oil seal	1	
220	02013	Oil seal	1	
221	GB297-64	Bearing	1	2007107
222	02013	Oil seal	1	
223	02012	Spindle	1	
224	GB1096-86	Key	1	4×50

Fig.5-4 3-jaw Chuck Base(CJ9528)



Form8 3-jaw chuck base(Fig5-4)

No.	Excused standard no.	Name	Qty	Notes
901	GB55-76	Nut	3	M10
902	09012	Bolt	3	
903	GB21-76	Bolt	3	M8×25
904	09011	3-jaw chuck base	1	

6、TAIL STOCK

See Fig 6-1

Tail stock is consisted of its base,sleeve,screw post,etc.It can be moved along the guiding rails, you can screw 304 Nut to fasten it at any position on the guiding rails. Then turn 320 Hand wheel to get the tail stock sleeve moving forward and backward to finish boring, tapping, reaming, cutting, etc. The manufacturing accuracy of the tail stock has reached the allowable error range. The zero central position line is carved in front of the 305 tail stock body and 326 tail stock base.If you need moving the tail stock axis to left and right side when cutting, adopt the following measures.

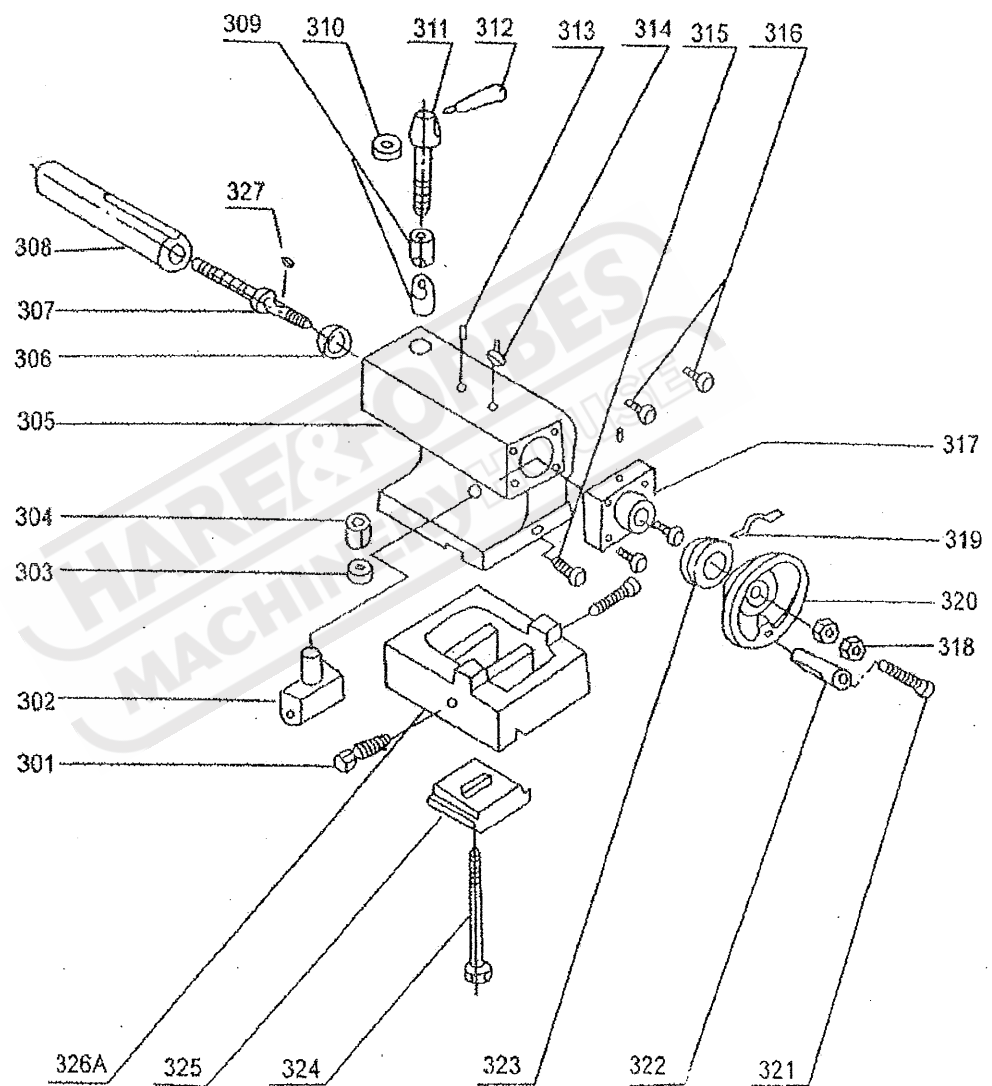
6.1 Loosen 304 Nut,you can move the tail stock.

6.2 Loosen 315 Nut

6.3 Adjust 301 screw slightly to move tail stock for the right process requirement.

6.4 Fasten 315 screw and 304 Nut to start operation.

Fig.6-1 Tail Stock(CJ9528)



Form 9 Tail stock prats(Fig6-1)

No.	Excused standard no.	Name	Qty	Notes
301	GB70-76	Screw	2	M8×30
302	03013	Nut	1	
303	GB97-76	Washer	1	B12
304	GB55-76	Nut	1	M12
305	03011	Tail stock base	1	
306	8101	Single row thrust bearing	1	12×26×9
307	03016	Screw post	1	
308	03015	Sleeve	1	
309	03020	Jam Quill	1pair	
310	GB97-76	Washer	1	B8
311	03021	Screw Post	1	
312	03022	Handle	1	6
313	R71-1	Oil cup	2	
314	03019	T-shaped key	1	M6×16
315	GB75-76	Screw	1	M5×16
316	GB70-76	Screw	4	
317	03017	End cover	1	4×30
318	GB879-76	Nut	1	
319	04022	Pinch cock	1	
320	03018	Hand wheel	1	
321	06027A	Threaded bolt	1	
322	06027	Quill	1	
323	04021	Ring	1	
324	GB30-76	Threaded bolt	1	M12×100
325	03014	Gland	1	
326	03012	Gase	1	
326A	HD210-03012	Base	1	
327	GB1079-86	Key	1	4×12

7. TOOL POST & SADDLE

See 7-2,8-1

Tool Post is connected with saddle, it's mainly consisted of slide, screw post, adjustable iron, tool post, turn plate base, etc. It can be moved longitudinally & transversely through locomotive and manual operation. The turn plate of the tool post can have 60° revolution from left to right, when needed, the dividing disk is fixed on the handle, using the mark can help process accurate circular column, taper and plane, etc. During the long time use of the lathe, the dovetail guide of the saddle, tool post slide, saddle clip, they'll abrade the guiding rails, the saddle bolts will also abrade the nuts and cause the bigger clearance, low precision. Adopt the following measures to adjust the clearance.

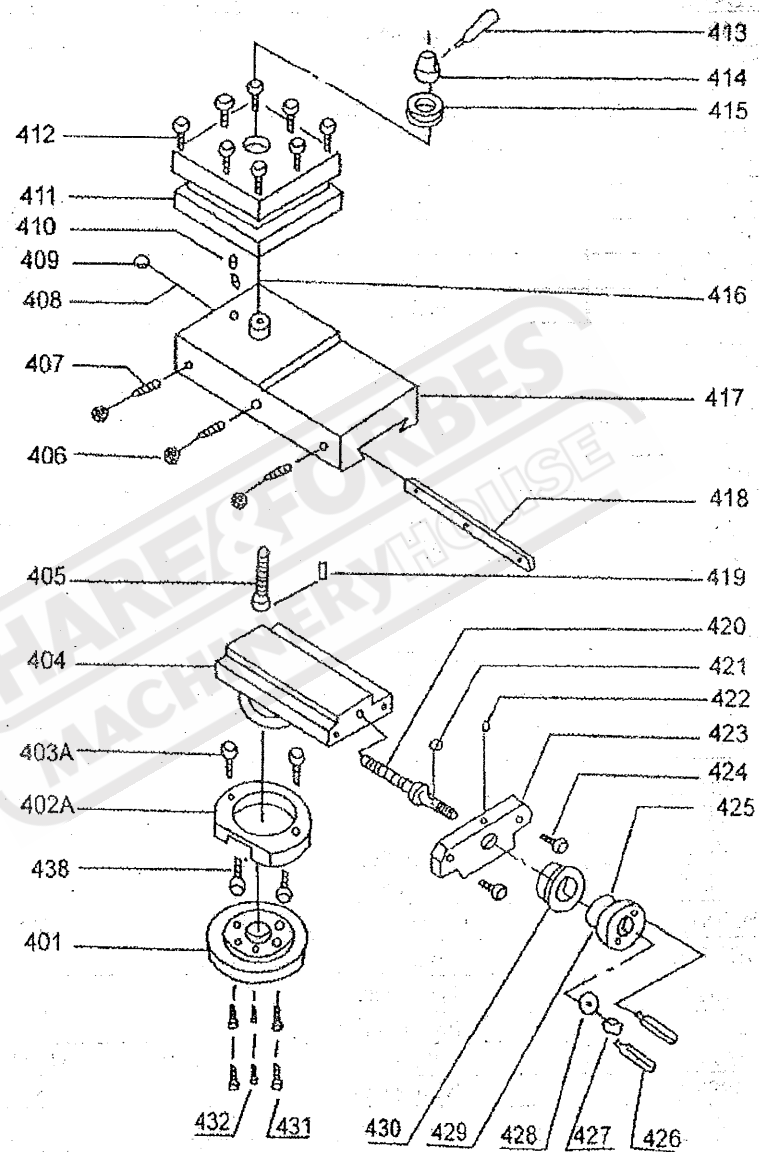
- 1、To adjust the clearance of the saddle slide dovetail, tool post slide dovetail and saddle clip is to loose 513Nut, adjust 514 nut till to eliminate the clearance, then screw up, 513 nut. Using the same way to adjust the clearance of the tool post slide and the clearance of 518 saddle to get the stable slide without looseness.
- 2、To adjust the clearance between the saddle bolts and nuts is to dismount 539 support and 501 nuts, properly screw up the two 541 screws, you'll see the clearance obviously

becomes small. After installing again , turn 533 hand wheel in clockwise & counter clockwise direction.

With the idle running amount decreased,the process precision is improved.



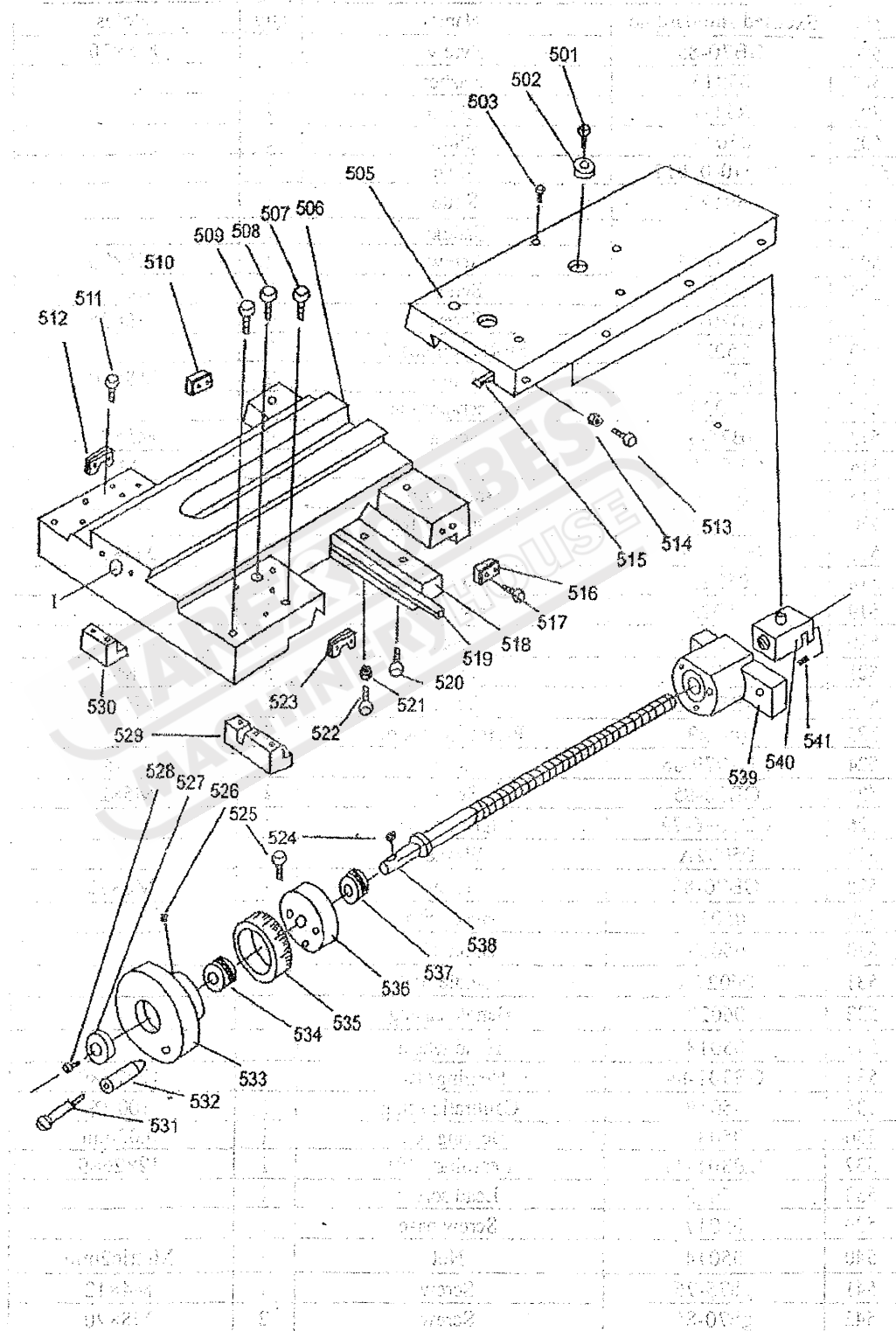
Fig.7-2 Tool Post(CJ9528)



From 10 Tool rest(Fig7-1,7-2,7-3)

No.	Excused standard no.	Name	Qty	Notes
401	04025	Turn plate base	1	
402	04024	Gland	1	
402A	04024A	Gland	1	
403	GB30-76	Threaded bolt	2	M8×20
403A	GB41-85	Nut	2	M6
404	04011	Turn plate	1	
404A	HD210-04011	Turn plate	1	
405	04015	Threaded bolt	1	
405A	HD210-04015	Threaded bolt	1	
406	GB54-76	Nut	3	M4
407	GB75-76	Screw	3	M4×20
408	GB75-76	Screw	1	M4×12
409	GB54-76	Nut	1	M4
410	04014	Locating pin	1	
411	04013	Follow rest	1	
411A	HD210-04013	Follow rest	1	
412	GB85-76	Screw	8	
413	03022	Handle	1	
414	04017	Handle base	1	
415	04016	Washer	1	
416	Q81-1	Spring	1	
417	04012	Slide	1	
418	04026	Filling iron	1	
419	GB879-76	Cylinder pin	1	
420	04018	Screw post	1	3×10
421	GB879-76	Key	1	
422	R71-1	Oil cup	2	3×10
423	04020	Srpport	1	
424	GB70-76	Screw	2	
425	04022	Spring slice	1	
426	04023B	Handle	2	
427	GB5781-76	Nut	2	M8
428	GB97-76	Washer	1	
429	04023	Hand wheel	1	
430	04021	Calibration ring	1	
431	GB65-76	Screw	4	M6×16
432	GB897-76	Cylinder pin	2	4×16
433	04024	Position bolt	1	
434	GB37	T-shaped bolt	2	M6×22
435	GB41-85	Nut	2	M6
436	04025	Shaft	1	
437	GB876-84	Rivet	2	2×4
438	GB37	T-shaped bolt	2	M6×22

Fig.8-1 Saddle(CJ9528)



From 11 Saddle(Fig8-1)

No.	Excused standard no.	Name	Qty	Notes
501	GB70-85	Screw	1	M5×10
502	05015	Washer	1	
503	R71-1	Oil vup	9	
505	05012	Slide	1	
501A	HG210-05012	Slide	1	
505B	05012A	Slide	1	
506	05011	Saddle	1	
507	GB70-85	Screw	4	M5×20
508	GB70-85	Screw	1	M8×20
509	GB70-85	Screw	4	M6×35
510	05027	Protection board	2	
511	GB70-86	Screw	2	M8×30
512	05030	Oil scraper felt	2	
513	GB75-76	Screw	4	M5×25
514	GB52-76	Nut	4	M5
515	05026	Brake iron	1	
516	05027	Oil scraper felt	1	
517	GB67-76	Screw	8	M3×12
518	05021	Brake clip	1	
519	05022	Brake iron	1	
520	GB70-85	Screw	4	M5×16
521	GB70-76	Nut	5	M4
522	GB54-76	Screw	5	M4×16
523	05029	Protection board	2	
524	GB1079-86	Key	1	4×8
525	GB70-85	Screw	3	M5×22
526	GB1096-79	Spring slice	1	
527	05032A	Washer	1	
528	GB70-85	Screw	1	M6×10
529	05024	Brake clip	1	
530	05023	Brake clip	1	
531	06027A	Handle bolt	1	
532	06027	Handle casing	1	
533	05018	Hand wheel	1	
534	GB301-84	Bearing 8101	1	12×26×9
535	05019	Calibration ring	1	100 格
536	05031	Bearing base	1	0.02mm
537	GB301-84	Bearing 8101	1	12×26×9
538	05013	Lead screw	1	
539	05017	Screw base	1	
540	05014	Nut	1	Metric 2mm
541	gb75-76	Screw	2	M4×12
542	gb70-85	Screw	2	M8×20

8、APRON

See Fig9-2.

Apron is the longitudinal transmission part on tool post . It can realize locomotive and manual operation measures during cutting .Apron is mainly consisted of its base,gears, shafts,half-nuts,operation handle,etc.

During the running of the lathe,push 608 handle down about 45° , the half nut with the revolution function of the 601 trough plate will get the mesh on the lead screw. Meanwhile the tool post may move forward and the slow or fast longitudinal preselected feed amount is based on the table on the change gear. During the completion of the process, move the handle of the half nut up, push in 619 hand wheel, you can withdraw the tool post to the original position. During the locomotive feed period. you'd better pull out the hand wheel to keep the hand wheel in still state for safe operation.

In order that the threads cutting and feed amount accord with the process precision, to shut or open 630 half nut is ensured by the stable slide of the dovetail guide without looseness.

During long time use of the lathe, the guide is hard to avoid from abrading .To adjust the clearance between the dovetail

guide and half nut is a must .The nethod is to loosen 606 nut, adjust 605 nut to proper position, that is, not too loose and not too tight without getting stuck, then tighten the nut.

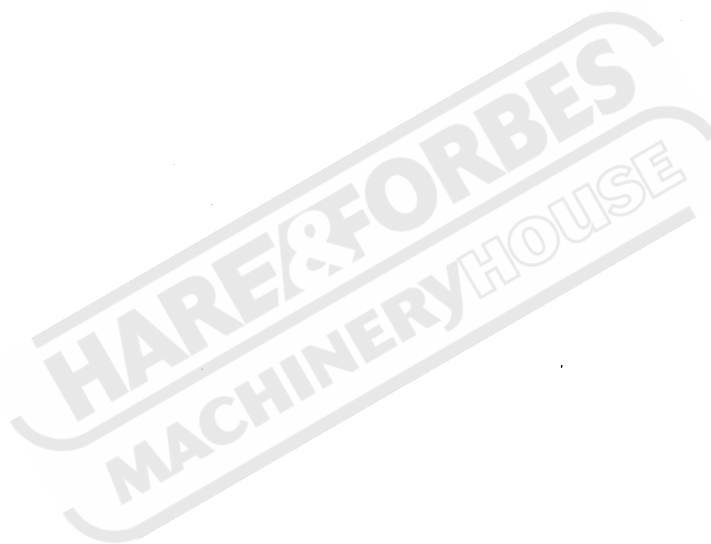
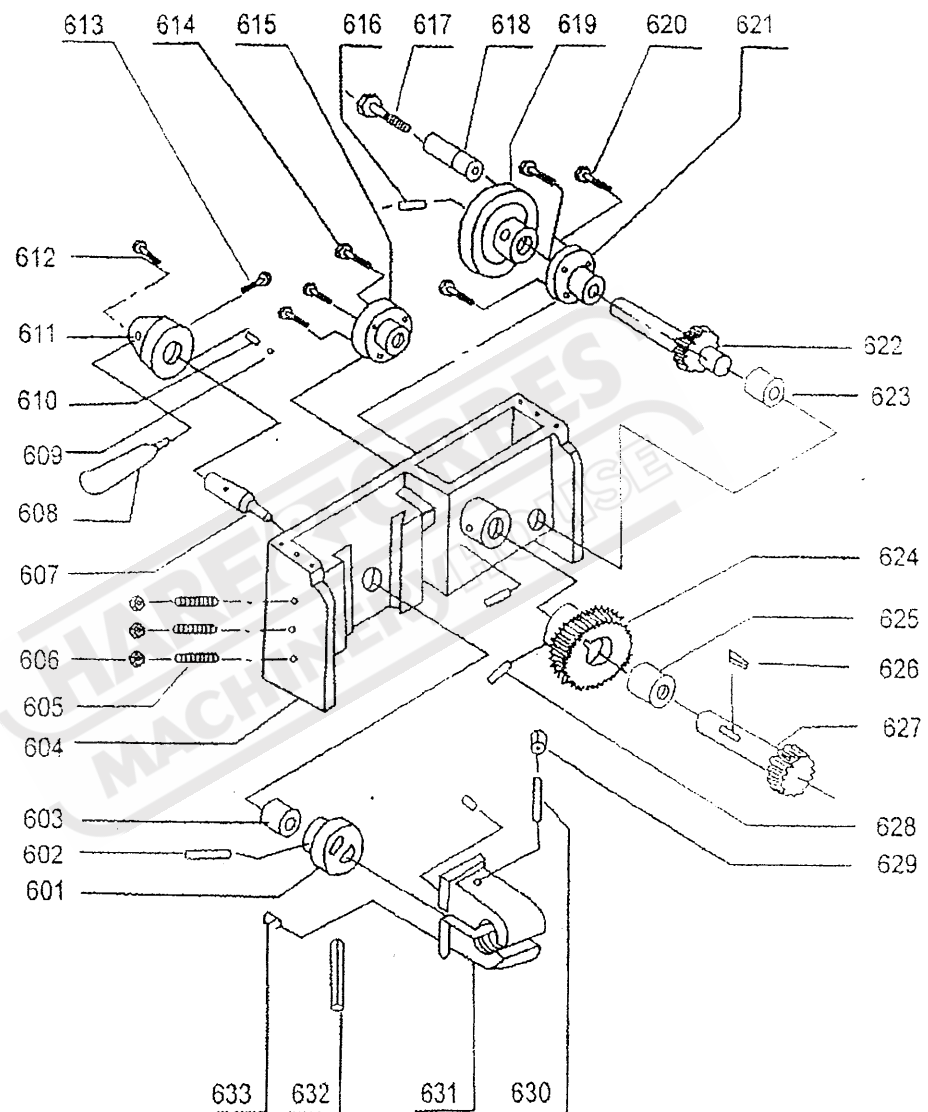


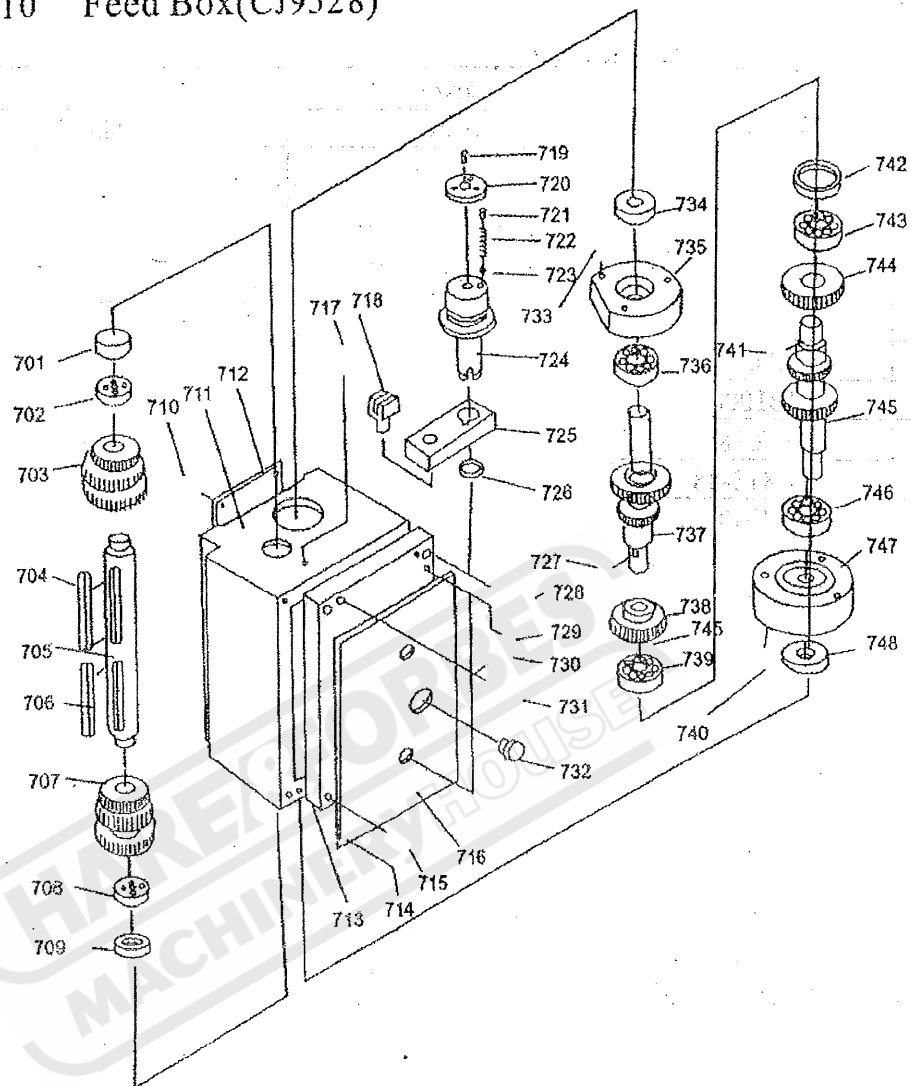
Fig.9-1 Apron



Form 12 Apron(Fig9-1)

No.	Excused standard no.	Name	Qty	Notes
601	06020	Notched joint	1	
602	GB117-76	Circular cone pin	1	
603	06012	Shaft,puill	1	
604	06011	Apron base	1	
605	GB75-76	Screw	3	
606	GB54-76	Nut	3	
607	06021	Rotation shaft	1	
608	03022	Handle	1	
609	GB308-77	Steel ball	1	
610	Q81-76	Spring	1	
611	06026	Fixed handle	1	
612	GB73-76	Screw	1	
613	GB73-76	Screw	1	
614	GB70-76	Screw	3	
615	06024	Quill	1	
616	GB117-76	Circular cone pin	1	
617	06027A	Bolt	1	
618	06027	Handle casing	1	
619	03018	Hand wheel	1	
620	GB70-76	Screw	3	
621	06025	Quill	1	
622	06013	Gear shaft	1	
623	06012	Quill	1	
624	06016	Gear	1	
625	06015	Quill	1	
626	GB1096-79	Key	1	
627	06014	Gear shaft	1	
628	GB71-76	Screw	2	
629	GB54-76	Nut	1	
630	GB73-76	Svrew	1	
631	06017	Half nut	1 组	
632	06019	Adjustable	1	
633	GB119-76	Cylinder pin	2	

Fig.10 Feed Box(CJ9528)

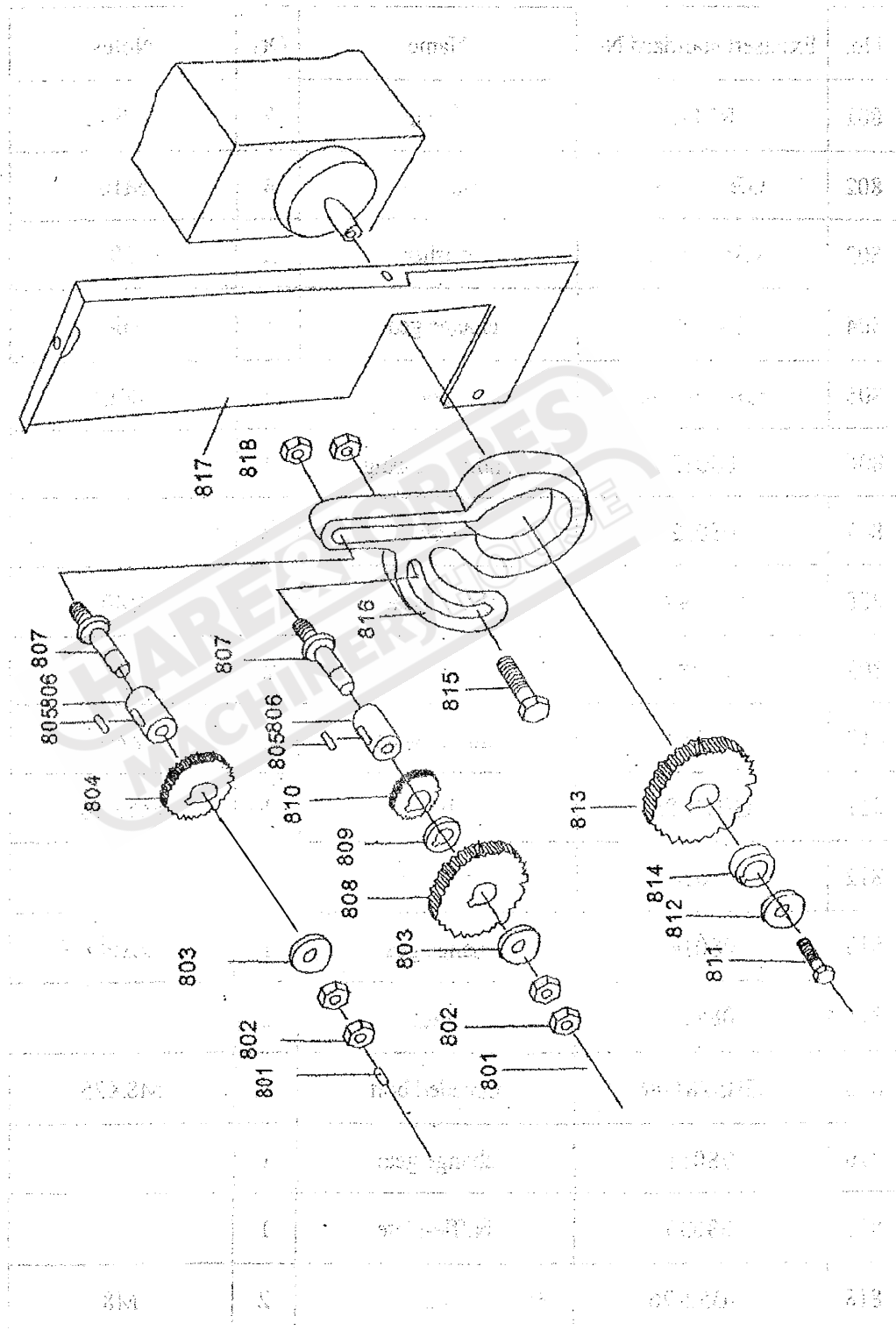


Form 14 Feed box(Fig10)

No.	Excused standard no.	Name	Qty	Specification
701	07023	cover	1	
702	GB276-86	Bearing	1	1000802
703	07026	Gear	1	
704	GB1096-86	Key	1	4×55
705	07024	Shaft	1	
706	GB1096-86	Key	1	4×55
707	07025	Gear	1	
708	GB276-86	Bearing	1	1000802

709	07023	Cover	1	
710	GB68-86	Screw	4	M5×8
711	07011	Feed box	1	
712	07027	Back cover	1	
713	07012	Face plate	1	
714	GB818-88	Screw	4	M3×6
715	GB70-85	Screw	4	M5×18
716	07029	Plate	1	
717	JB1000	Oil plug	1	M10×1
718	07018	Shift fork	2	
719	GB818-88	Screw	2	M3×6
720	07030	Plate	2	
721	GB73-85	Spring	4	M6×8
722	GB2089	Steel ball	4	0.7×5×19
723	GB308-85	Steel ball	4	
724	07017	Handle	2	
725	02016	Con nection block	2	
726	GB894.2-86	Spacer	2	
727	GB1096-86	Key	3	4×8
728	GB70-85	Threaded bolt	2	M8×90
729	GB118-89	Circular cone pin	2	
730	JB1000	Oil plug	1	M10×1
731	GB70-85	Screw	2	M6×90
732	GB1160.1-79	Oil window	1	
733	GB70-85	Screw	3	M5×20
734	HG4-691	Oil seal	1	15×30×10
735	070156	Cover	1	
736	GB276-89	Bearing	1	202
737	07022	Gear shaft	1	
738	07020	Gear	1	
739	GB276-89	Bearing	1	202
740	GB70-85	Screw	1	M5×25
741	GB1096-86	Key	1	4×8
742	07021	Spacer	1	
743	GB076-89	Bearing	1	202
744	07020	Gear	1	
745	07019	Gear shaft	1	
746	GB276-89	Bearing	1	103
747	07014	Cover	1	
748	HG4-691	Oil seal	1	

Fig.11-2 Change Gear(CJ9528)



Form 16 CHANGE GEAR WHEEL BOX (Fig11-2)

No.	Excused standard No.	Name	Qty	Notes
801	R71-1	oil cup	2	6
802	GB6172-86	thin nut	4	M10
803	GB97.1-86	washer	2	10
804	08018A	change gear	1	Z60
805	GB1096-86	key	2	4X12
806	08013	sliding bearing	2	
807	08012	bolt	2	
808	08019A	change gear	1	Z100
809	08038A	spare	2	
810	08017	change gear	1	Z30
811	GB70-85	bolt	1	M5X16
812	01020	washer	1	
813	08014	change gear	1	Z96
814	08019	quill	1	
815	GB5781-86	threaded bolt	1	M8X25
816	08011	change gear	1	
817	08035	baffle-plate	1	
818	GB52-76	nut	2	M8

10. FOLLOW REST & STEADY REST

See Fig 12, Fig 13.

The follow rest is used to process slender shafts, use 10-27 screw to fix is on the saddle when operating, turn 10-02 adjustable bolt to make 10-03 supports touch the work piece with proper gyration and move with the cutter. It can ensure the workpiece. Procession to bear the cutting force without bending and deformation. It can abate vibration and ameliorate the surface of the work piece inelegance level.

The steady rest is basically same as the follow rest in use and function principle. The difference is that its fixed on the lead screw and can't move with cutter. It has three support feet, just like one more pivot for the work piece, so its used more frequently than follow rest. Such as when processing the medium length shafts it can be used as the positioning support.

Fig.12 Follow Rest

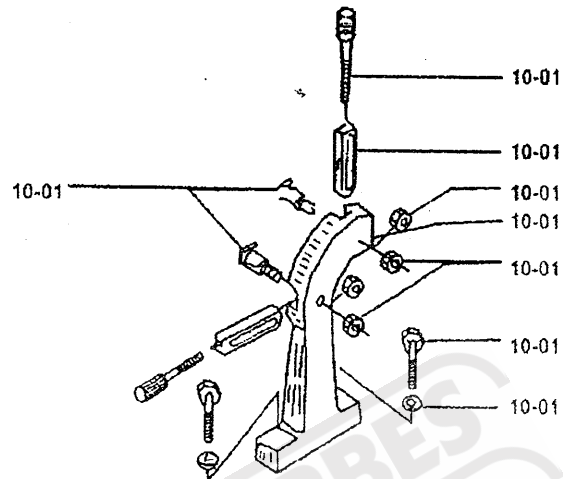
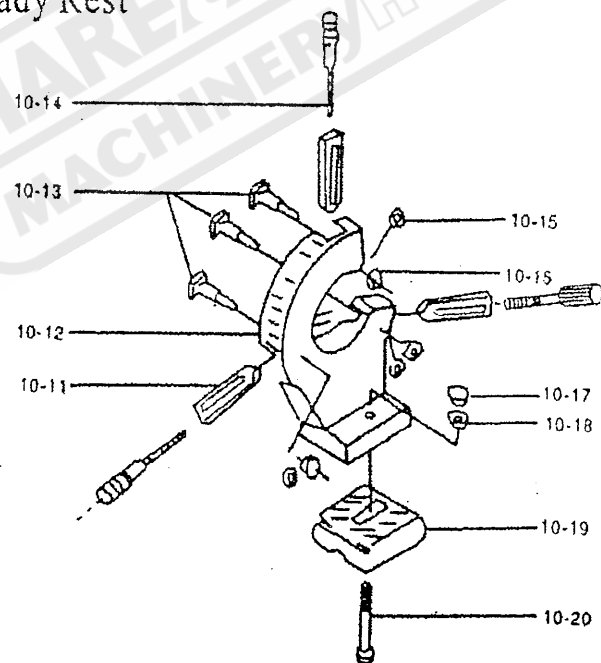


Fig.13 Steady Rest



Form 17 FOLLOW REST (Fig. 12)

No.	Excused standard No.	Name	Qty	Notes
1001	11014	screw	2	take to use
1002	11012	adjustable threaded bolt	2	take to use
1003	12012	support	2	
1004	GB97-76	washer	2	10
1005	12011	follow rest base	1	
1006	GB52-76	nut	2	M10
1007	GB30-76	threaded bolt	2	M8X30
1008	GB97-76	washer	2	8

Form 18 STEADY REST (Fig. 13)

No.	Excused standard No.	Name	Qty	Notes
1011	11013	support	3	
1012	11011	steady rest base	1	
1013	11014	screw	3	
1014	11012	adjustable	3	
1015	GB97-76	washer	3	10
1016	GB6170-86	nut	3	M10
1017	GB41-86	nut	1	M12
1018	GB97-76	washer	1	12
1019	03014	clip	1	
1020	GB8-76	threaded bolt	1	M12×70

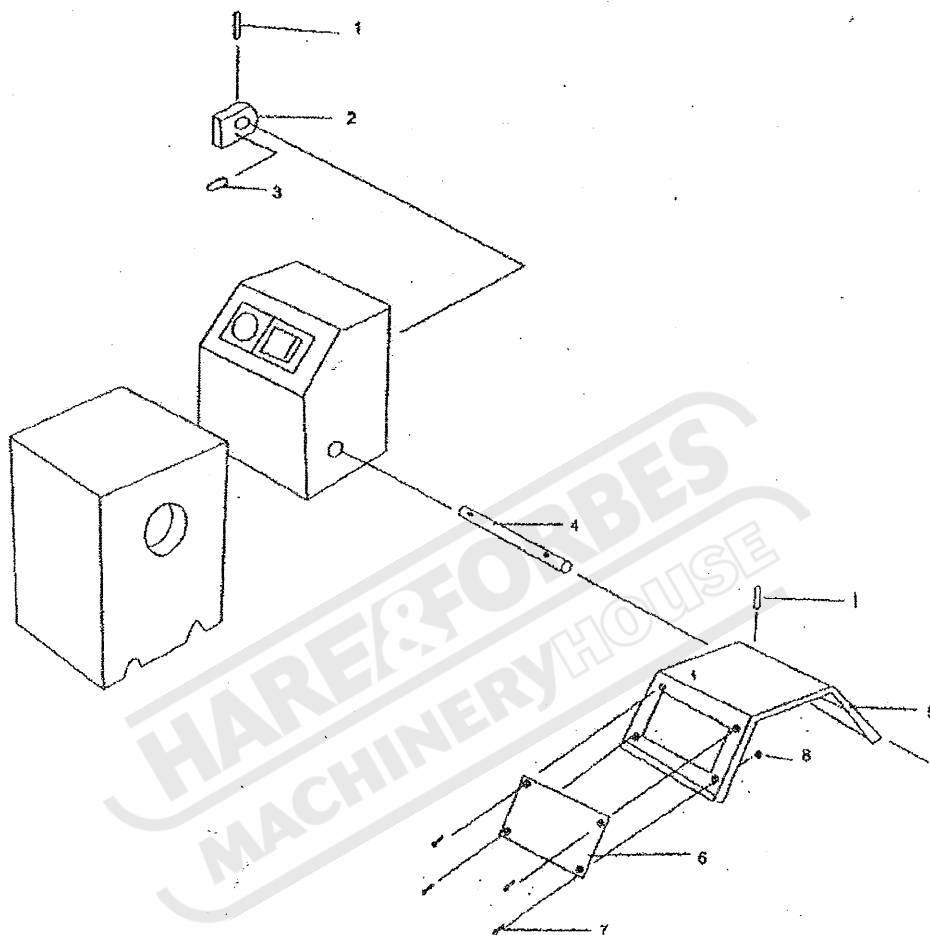
11. PROTECTION OF THE LATHE

In order to ensure the security, and avoid unexpected hurt, we supply many kinds of safety devices for customers to order properly.

11.1 Chuck protection

There are two kinds of chuck protection devices. See Fig

Fig.14-2 Chuck Cover(With cutting power device)



Form 20 Chuck cover (With cutting power device) (Fig. 14-2)

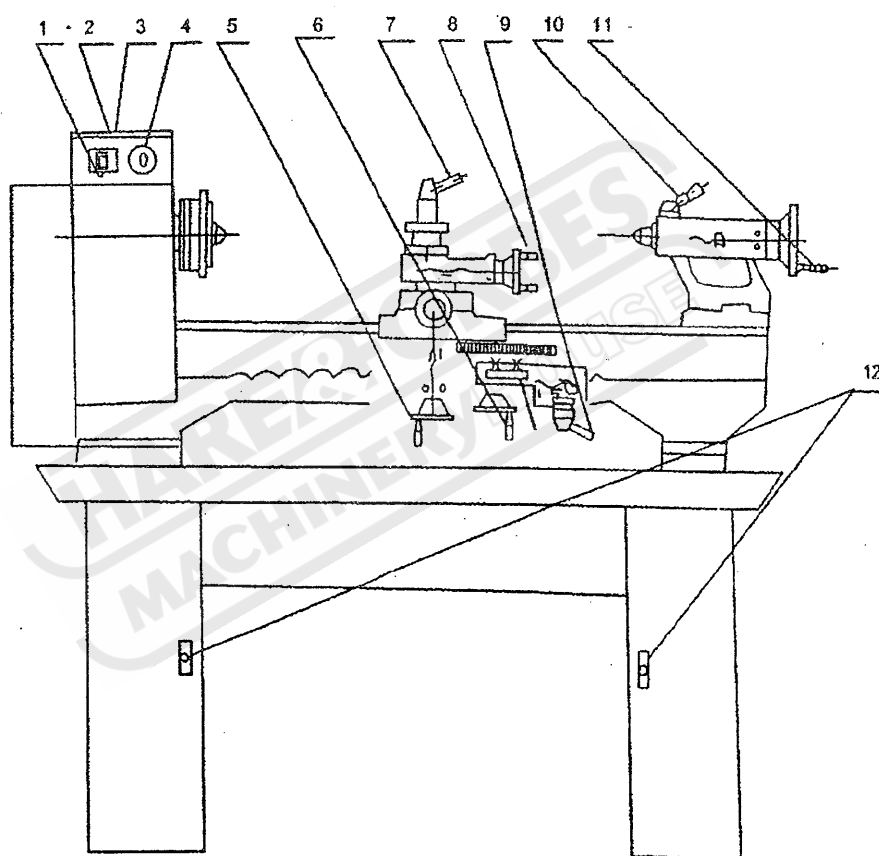
No.	Excused standard No.	Name	Qty	Notes
1	GB79-86	Elastic pin	2	4x20
2	02029	Switch block	1	
3	GB79-86	Elastic pin	1	4x10
4	02031A/2	Shaft	1	
5	02031A	Chuck cover	1	
6	02031A/3	Glass	1	
7	GB818-86	Screw	4	M3X6
8	GB6170-86	Nut	4	M3

13. TEST RUN, OPERATION & MAINTENANCE

Fig. 17, (From 23)

- 13.1 Read the operation manual carefully when operating the lathe at the beginning, try to know the functions of the operating handles.
- 13.2 Before starting, clean the lathe & refer to the lubrication fig. to fill the lubrication oil.
- 13.3 Check whether the transmission belt & the selection of the feed amount is rational or not, whether the gear collocation of the change gear system can meet the requirement or not.
- 13.4 Close the safety cover when the lathe is running, forbid opening the safety cover to use the belt, changing speeds and collocate the change gears.
- 13.5 Starting the motor's push button, pay attention to the above reminding. If you want to make the motor turn clock wisely and countetr-clockwise quickly, pause for at least 3 seconds in order not to damage the electric elements.
- 13.6 Whenever the mulfunction happens, stop using it immediately and check it.
- 13.7 Keep the lathe clean, clear away the iron flakes, clean the surfaces of the lead screw and sliding part, and smear oil to prevent from rusting.

Fig.17 Controlling part



Form 23 Controlling part (Fig 17)

No. sin fig	Name	Uses	Notes
1	Switch	To vary spindle to turn clock wise & counter-clock wise	Head stock
2	Green button	To control the connection and	Head stock
3	Red button	To control the connection of relay	Head stock
4	Main switch	To control connection and disconnection of the lathe	Head stock
5	Handle	To control the saddle to move forward and backward longitudinally	Head stock
6	Handle	To control the apron to move forward and backward longitudinally	Apron
7	Handle	To fix and loosen the tool post	Tool post
8	Handle	To control the slide to move forward & backward	Tool post
9	Handle	To control the half nut to connect & disconnect	Feed box
10	Handle	To lock & loosen the quill	Tail stock
11	Handle	To control the quill to move forward & backward longitudinally	Tail stock
12	Handle	To open and close tool box	Support

14. LUBRICATION SYSTEM

See Fig 18 (Form 24)

To keep regular running, the operators are required to use appointed machine oil stipulated in the lubrication fig, fill it periodically to reduce the abrasion, and elongate its working life.

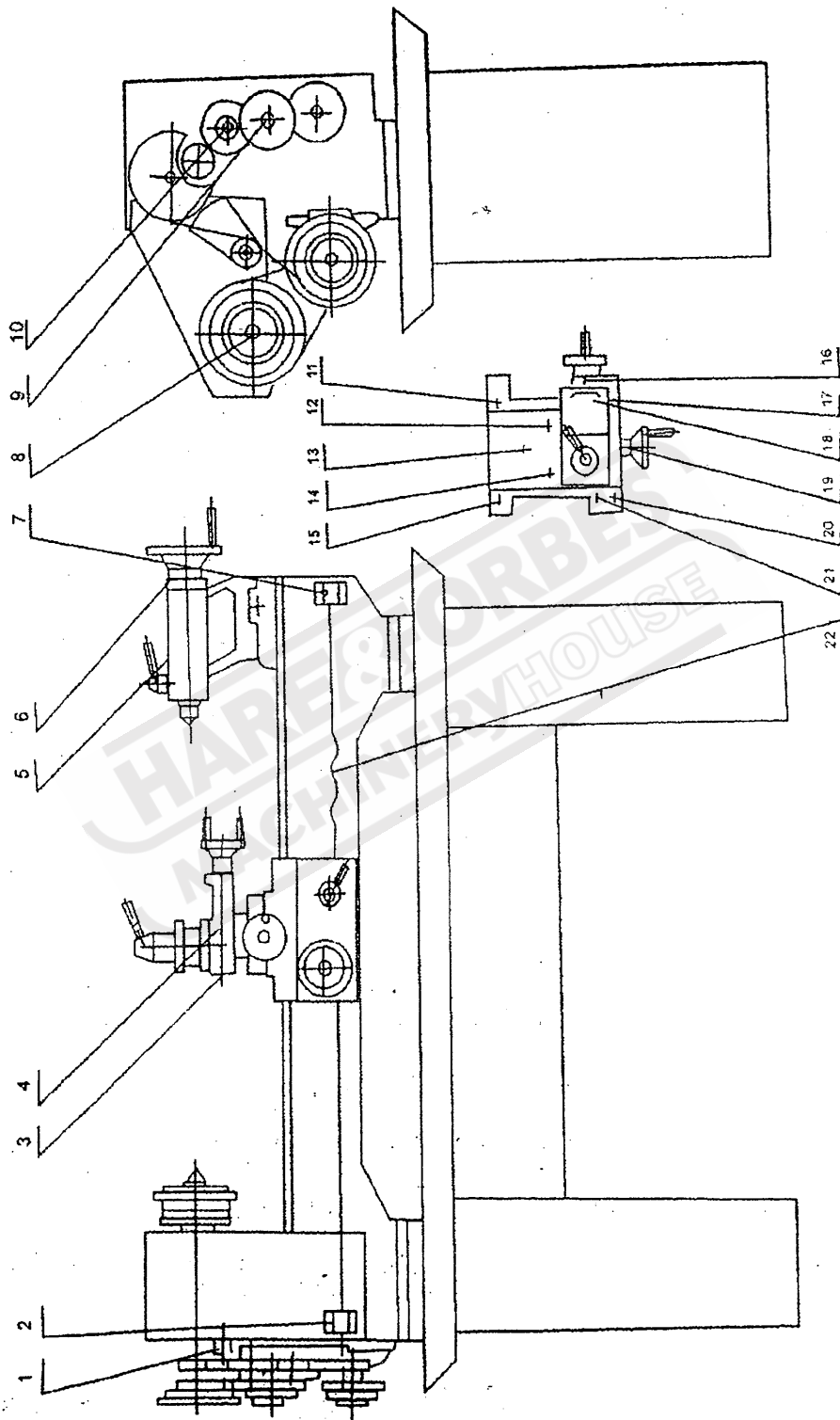


Fig.18 The Distribution Of The Lubrication Position

Form 24 Lubrication points (Fig 18)

No. in fig	Name of lubrication position	Name of lubrication part	Period	Type of oil	Injection tool
1	Fixed bolt of transition gear	Oil cup	Once per shift	203 machine oil	Oiler
2	Support	Oil cup	Once per shift	203 machine oil	Oiler
3	Screw post	Oil cup	Once per shift	203 machine oil	Oiler
4	Tool post slide	Oil cup	Once per shift	203 machine oil	Oiler
5	Quill	Oil cup	Once per shift	203 machine oil	Oiler
6	Screw post	Oil cup	Once per shift	203 machine oil	Oiler
7	Support	Oil cup	Once per shift	203 machine oil	Oiler
8	Mid pulley shaft	Oil cup	Once per shift	203 machine oil	Oiler
9	Change gear	Oil cup	Once per shift	203 machine oil	Oiler
10	Change gear bolt	Oil cup	Once per shift	203 machine oil	Oiler
11	Guiding rail	Oil cup	Once per shift	203 machine oil	Oiler
12	Slip board	Oil cup	Once per shift	203 machine oil	Oiler
13	Screw post	Oil cup	Once per shift	203 machine oil	Oiler
14	Slip board	Oil cup	Once per shift	203 machine oil	Oiler
15	Guiding rail	Oil cup	Once per shift	203 machine oil	Oiler
16	Screw bolt support	Oil cup	Once per shift	203 machine oil	Oiler
17	Feed box	Oil cup	Once per shift	203 machine oil	Oiler
18	Guiding rail	Oil cup	Once per shift	203 machine oil	Oiler
19	Support	Oil cup	Once per shift	203 machine oil	Oiler
20	Feed box	Oil cup	Once per shift	203 machine oil	Oiler
21	Guiding rail	Oil cup	Once per shift	203 machine oil	Oiler
22	Screw post	Direct injection	Once per shift	203 machine oil	Oiler

15. THE PROCEDURE OF PROCESSING THE COMMON PARTS

15.1. Preparations

15.1.1 Set the work piece on the chuck, check the excircle.

15.1.2 Select and fix the cutter on the tool post.

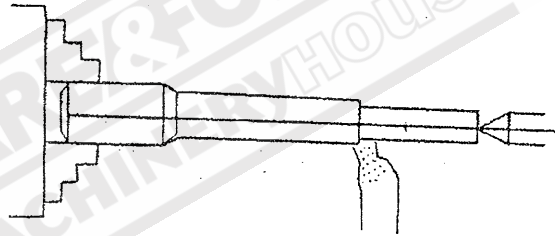
15.1.3 In the light of the size and material of the work piece to select the running speed and feed amount properly.

15.1.4 Adjust the belt, change gear base to collocate the change gears.

15.1.5 Switch on the starting button to check weather the cutting

end and the feed amount are correct or not.

- 15.2. The procedure to process the circular column parts. Firstly finish the above steps, move the hand wheel of the apron to the right end of the work piece, turn the handle of the saddle to have the cutting end touch the work piece, push the half nut handle to get automatic feed, repeat the cutting and measuring until reaching the right size of the work piece.



- 15.3. The procedure to process the circular cone parts.

The operation is similar as processing the circular column part with the difference of taper, the taper is divided into outer cone and inner cone, there're two ways to process it.

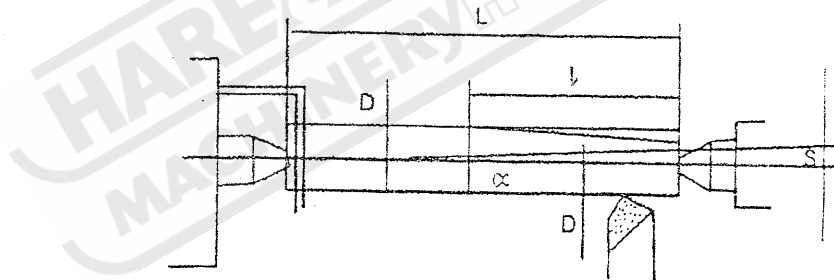
15.3.1 Manual operation

According to the required taper of the work piece, turn the tool post to the right angularity of the work piece and fix

it, repeat the cutting to get the needed shape.

15.3.2 Automatic feed.

Processing the taper automatically is to use the characteristic which the tail stock can be moved and adjust the feed. To process the long circular cone part with small angularity, adopt the way of clamping within the two top centers, make the center of the tail stock sleeve offset the main shaft center to keep the same angularity as the work piece, repeat the automatic feed till completion of cutting.



$$S = L \times \sin \alpha$$

$$S = \frac{D-d}{2} \times \frac{L}{l}$$

15.4. Procedure of processing threads..

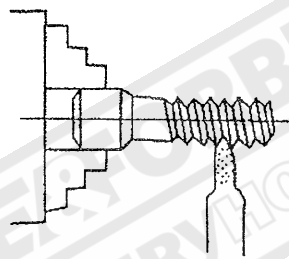
15.4.1 Before the threads cutting, get the tools ready first.

The ordinary specifications of the threads are 60° , 55° , and 30°

trapezoid threads, etc.

15.4.2 Check the table plate on the change gear base, in the light of the direction of 800 part to collocate change gears.

15.4.3 Get the needed size for the outer diameter of the threads cutting, check the right thread pitch to make sure it's no error, then repeat the cutting till the nut can be screwed up.



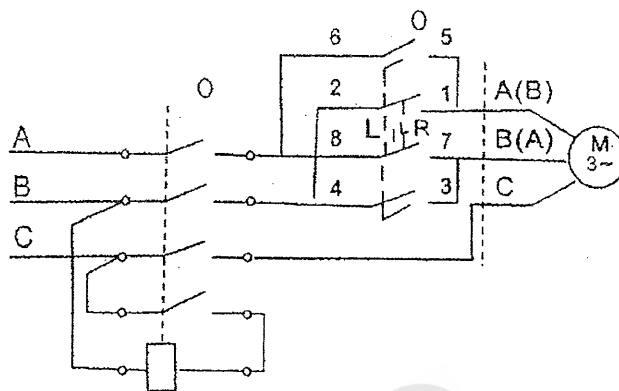
16. TRANSPORTATION & INSTALLATION

16.1. Transportation

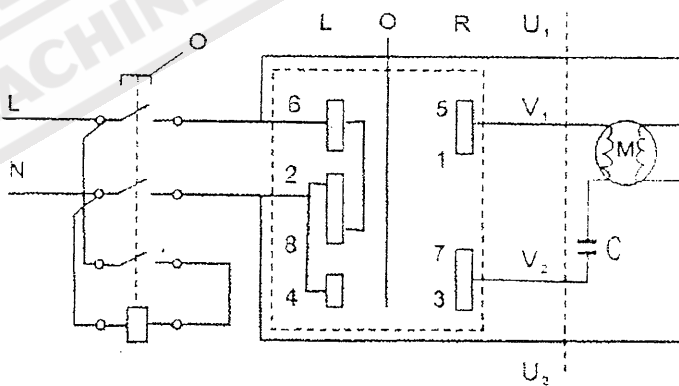
Avoid violent collision and fluctuation during loading, unloading and carrying, try to keep balance when hoisting, watch the cord or other things will not scrape the lead screw, spindle, hand wheels and other machine parts, the painted surfaces can't be scraped, for it will effect the outlook of the lathes.

17. ELECTRICAL PART

17.1 To open without cutting power device

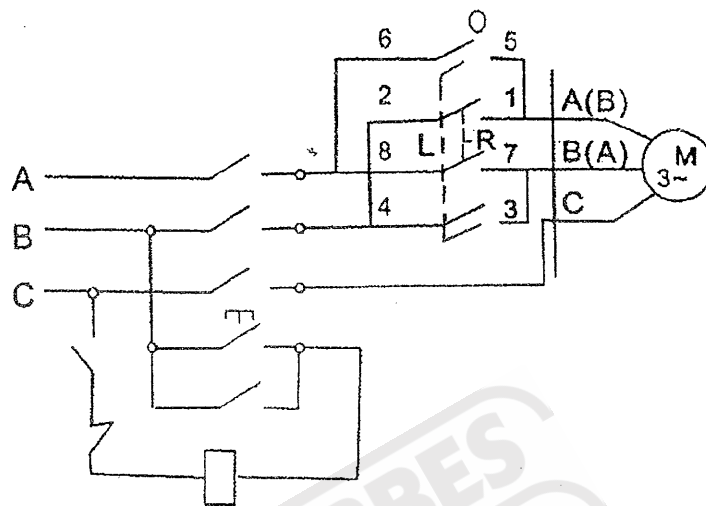


220V—440v/50-60Hz 3PH

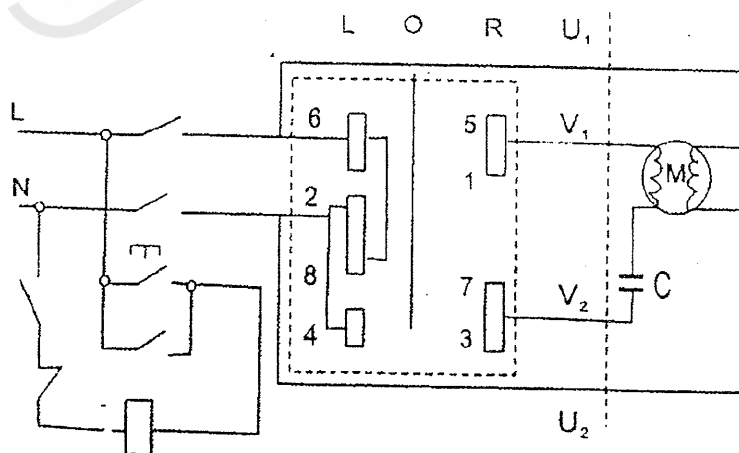


110V—240v/50-60Hz 1PH

17.2 To open with cutting power device

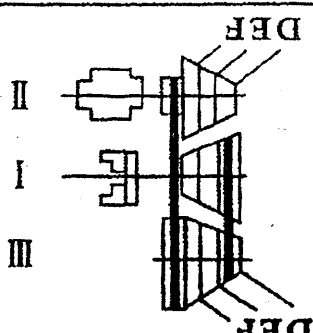


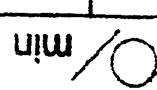
220V—440v/50-60Hz 3PH



110V—240v/50-60Hz 1PH

41



		D	E	F
	III - I	620	1000	2000
	II - I	125	210	420
	III - I			

18.2 Cj9528 Spindle Speeds Table

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Threading Table for METRIC Leadscrew									
mm									
D	E	AI	AII	AIII	BI	BIII	CII	CIII	
30	30	0.175	0.1	0.25			0.125		
36	36	0.2	0.125	0.3			0.15		
42	42	0.25	0.16	0.4			0.2		
48	48	0.3	0.2	0.5			0.25		
54	54	0.375	0.25	0.6			0.3		
60	60	0.45	0.3	0.75			0.4		
66	66	0.5	0.375	0.9			0.5		
72	72	0.6	0.45	1.0			0.6		
78	78	0.7	0.5	1.25			0.75		
84	84	0.8	0.6	1.5			0.9		
90	90	0.9	0.75	1.75			1.0		
96	96	1.0	0.8	2.0			1.25		
102	102	1.125	0.9	2.25			1.5		
108	108	1.25	1.0	2.5			1.75		
114	114	1.375	1.125	2.8			2.0		
120	120	1.5	1.25	3.0			2.25		
126	126	1.625	1.375	3.25			2.5		
132	132	1.75	1.5	3.5			2.75		
138	138	1.875	1.625	3.75			3.0		
144	144	2.0	1.75	4.0			3.25		
150	150	2.125	1.875	4.25			3.5		
156	156	2.25	2.0	4.5			3.75		
162	162	2.375	2.125	4.75			4.0		
168	168	2.5	2.25	5.0			4.25		
174	174	2.625	2.375	5.25			4.5		
180	180	2.75	2.5	5.5			4.75		
186	186	2.875	2.625	5.75			5.0		
192	192	3.0	2.75	6.0			5.25		
198	198	3.125	2.875	6.25			5.5		
204	204	3.25	3.0	6.5			5.75		
210	210	3.375	3.125	6.75			6.0		
216	216	3.5	3.25	7.0			6.25		
222	222	3.625	3.375	7.25			6.5		
228	228	3.75	3.5	7.5			6.75		
234	234	3.875	3.625	7.75			7.0		
240	240	4.0	3.75	8.0			7.25		
246	246	4.125	3.875	8.25			7.5		
252	252	4.25	4.0	8.5			7.75		
258	258	4.375	4.125	8.75			8.0		
264	264	4.5	4.25	9.0			8.25		
270	270	4.625	4.375	9.25			8.5		
276	276	4.75	4.5	9.5			8.75		
282	282	4.875	4.625	9.75			9.0		
288	288	5.0	4.75	10.0			9.25		
294	294	5.125	4.875	10.25			9.5		
300	300	5.25	5.0	10.5			9.75		
306	306	5.375	5.125	10.75			10.0		
312	312	5.5	5.25	11.0			10.25		
318	318	5.625	5.375	11.25			10.5		
324	324	5.75	5.5	11.5			10.75		
330	330	5.875	5.625	11.75			11.0		
336	336	6.0	5.75	12.0			11.25		
342	342	6.125	5.875	12.25			11.5		
348	348	6.25	6.0	12.5			11.75		
354	354	6.375	6.125	12.75			12.0		
360	360	6.5	6.25	13.0			12.25		
366	366	6.625	6.375	13.25			12.5		
372	372	6.75	6.5	13.5			12.75		
378	378	6.875	6.625	13.75			13.0		
384	384	7.0	6.75	14.0			13.25		
390	390	7.125	6.875	14.25			13.5		
396	396	7.25	7.0	14.5			13.75		
402	402	7.375	7.125	14.75			14.0		
408	408	7.5	7.25	15.0			14.25		
414	414	7.625	7.375	15.25			14.5		
420	420	7.75	7.5	15.5			14.75		
426	426	7.875	7.625	15.75			15.0		
432	432	8.0	7.75	16.0			15.25		
438	438	8.125	7.875	16.25			15.5		
444	444	8.25	8.0	16.5			15.75		
450	450	8.375	8.125	16.75			16.0		
456	456	8.5	8.25	17.0			16.25		
462	462	8.625	8.375	17.25			16.5		
468	468	8.75	8.5	17.5			16.75		
474	474	8.875	8.625	17.75			17.0		
480	480	9.0	8.75	18.0			17.25		
486	486	9.125	8.875	18.25			17.5		
492	492	9.25	9.0	18.5			17.75		
498	498	9.375	9.125	18.75			18.0		
504	504	9.5	9.25	19.0			18.25		
510	510	9.625	9.375	19.25			18.5		
516	516	9.75	9.5	19.5			18.75		
522	522	9.875	9.625	19.75			19.0		
528	528	10.0	9.75	20.0			19.25		
534	534	10.125	9.875	20.25			19.5		
540	540	10.25	10.0	20.5			19.75		
546	546	10.375	10.125	20.75			20.0		
552	552	10.5	10.25	21.0			20.25		
558	558	10.625	10.375	21.25			20.5		
564	564	10.75	10.5	21.5			20.75		
570	570	10.875	10.625	21.75			21.0		
576	576	11.0	10.75	22.0			21.25		
582	582	11.125	10.875	22.25			21.5		
588	588	11.25	11.0	22.5			21.75		
594	594	11.375	11.125	22.75			22.0		
600	600	11.5	11.25	23.0			22.25		
606	606	11.625	11.375	23.25			22.5		
612	612	11.75	11.5	23.5			22.75		
618	618	11.875	11.625	23.75			23.0		
624	624	12.0	11.75	24.0			23.25		
630	630	12.125	11.875	24.25			23.5		
636	636	12.25	12.0	24.5			23.75		
642	642	12.375	12.125	24.75			24.0		
648	648	12.5	12.25	25.0			24.25		
654	654	12.625	12.375	25.25			24.5		
660	660	12.75	12.5	25.5			24.75		
666	666	12.875	12.625	25.75			25.0		
672	672	13.0	12.75	26.0			25.25		
678	678	13.125	12.875	26.25			25.5		
684	684	13.25	13.0	26.5			25.75		
690	690	13.375	13.125	26.75			26.0		
696	696	13.5	13.25	27.0			26.25		
702	702	13.625	13.375	27.25			26.5		
708	708	13.75	13.5	27.5			26.75		
714	714	13.875	13.625	27.75			27.0		
720	720	14.0	13.75	28.0			27.25		
726	726	14.125	13.875	28.25			27.5		
732	732	14.25	14.0	28.5			27.75		
738	738	14.375	14.125	28.75			28.0		
744	744	14.5	14.25	29.0			28.25		
750	750	14.625	14.375	29.25			28.5		
756	756	14.75	14.5	29.5			28.75		
762	762	14.875	14.625	29.75			29.0		
768	768	15.0	14.75	30.0			29.25		
774	774	15.125	14.875	30.25			29.5		
780	780	15.25	15.0	30.5			29.75		
786	786	15.375	15.125	30.75			30.0		
792	792	15.5	15.25	31.0			30.25		
798	798	15.625	15.375	31.25			30.5		
804	804	15.75	15.5	31.5			30.75		
810	810	15.875	15.625	31.75			31.0		
816	816	16.0	15.75	32.0			31.25		
822	822	16.125	15.875	32.25			31.5		
828	828	16.25	16.0	32.5			31.75		
834	834	16.375	16.125	32.75			32.0		
840	840	16.5	16.25	33.0			32.25		
846	846	16.625	16.375	33.25			32.5		
852	852	16.75	16.5	33.5			32.75		
858	858	16.875	16.625	33.75			33.0		
864	864	17.0	16.75	34.0			33.25		
870	870	17.125	16.875	34.25			33.5		
876	876	17.25	17.0	34.5			33.75		
882	882	17.375	17.125	34.75			34.0		
888	888	17.5	17.25	35.0			34.25		
894	894	17.625	17.375	35.25			34.5		
900	900	17.75	17.5	35.5			34.75		
906	906	17.875	17.625	35.75			35.0		
912	912	18.0	17.75	36.0			35.25		
918	918	18.125	17.875	36.25			35.5		
924	924	18.25	18.0	36.5			35.75		
930	930	18.375	18.125	36.75			36.0		
936	936	18.5	18.25	37.0			36.25		
942	942	18.625	18.375	37.25			36.5		
948	948	18.75	18.5	37.5			36.75		
954	954	18.875	18.625	37.75			37.0		
960	960	19.0	18.75	38.0			37.25		
966	966	19.125	18.875	38.25			37.5		
972	9								