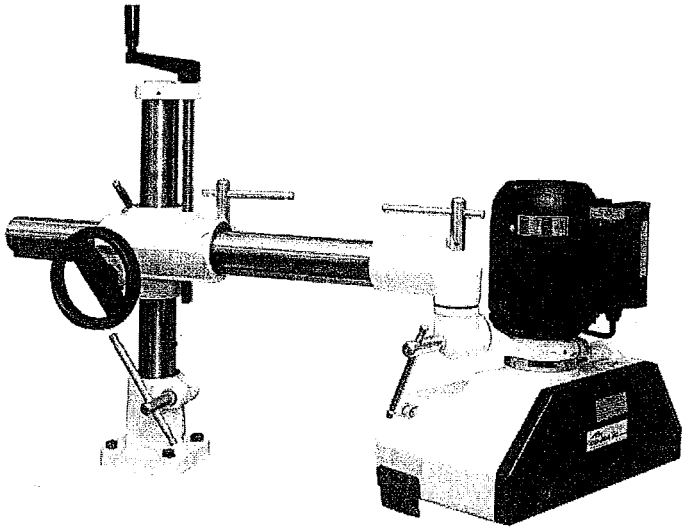
Power Feeder



	A-APF0038-1
	A-APF0038-3
	A-APF0048-1
	A-APF0048-3

Manual Information

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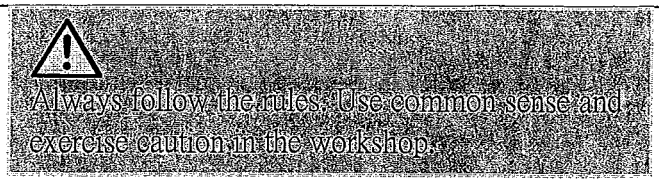
Index：



1. IMPORTANT SAFTY RULES

- Read operation manual, keep and protect it near the machine for easy access in the event of future review.
- Important personal safety note.
- Please wear goggles, eyes protection, dust masks, and respiratory protection.
- Please wear proper apparel. No loose clothing, gloves, neckties, and jewelry.
- No drugs, alcohol, medication. Do not operate under such influence.
- Don't use tool in dangerous environment. Keep work area well ventilated and lighted, avoid damp or wet location.
- Room temperature＋5℃～＋40℃；Humidity 30～95%；Altitude≦0～1,000M，Voltage deviation±5%.
- Keep work table and area clean.
- Keep up the maintenance. Follow operation manual for proper operation and maintenance.
- Disconnect tool from power source. Before any tooling change, repairing or regular maintenance.
- Make sure the switch is in "OFF" position before power reconnection.
- Prevent children or unauthorized personal from tampering. All visitors should be kept at a safe distance from work area.
- Turn power off. Don't leave until it comes to a complete stop.
- Cutting tools must be rotating before feeding.
- Do not overload the cutting tool by feeding too fast.
- Always keep hands away from rotating parts.
- Provide support for long stock on out-feed end of table.
- Stop the feeder before stopping the cutting tool.
- Disconnect power before making repairs or adjustment.

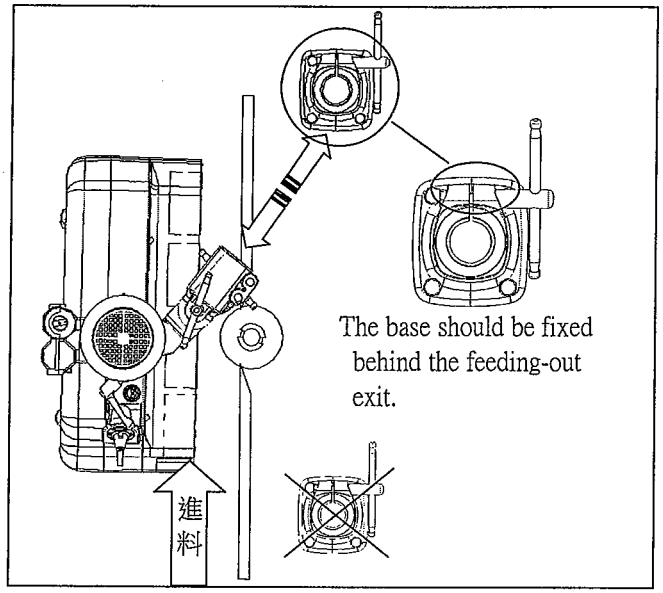
2. Tool Required

- Power drill, 10.2mm Drill, M12 Tapping （Tapper） Tool kits.
- Open-end wrench 13、14、17、19MM。
- Allen Key 4MM。
- M12 x 50MM Long Screw and 4 sets of M12 Spring washer，attached with packages。

3. Installation Steps

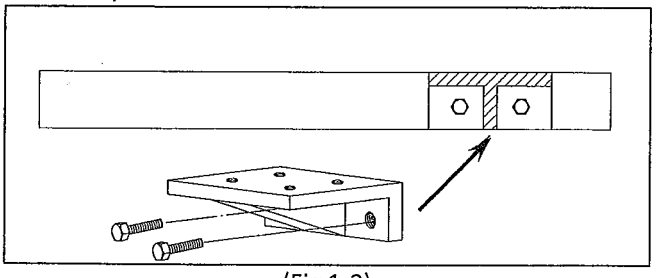
⚠ Ensure there is sufficient weight support to prevent power feeder tilted while Swing aside.

3.1 Confirmation of Power Feeder stand base mounting position：



(Fig 1-1)

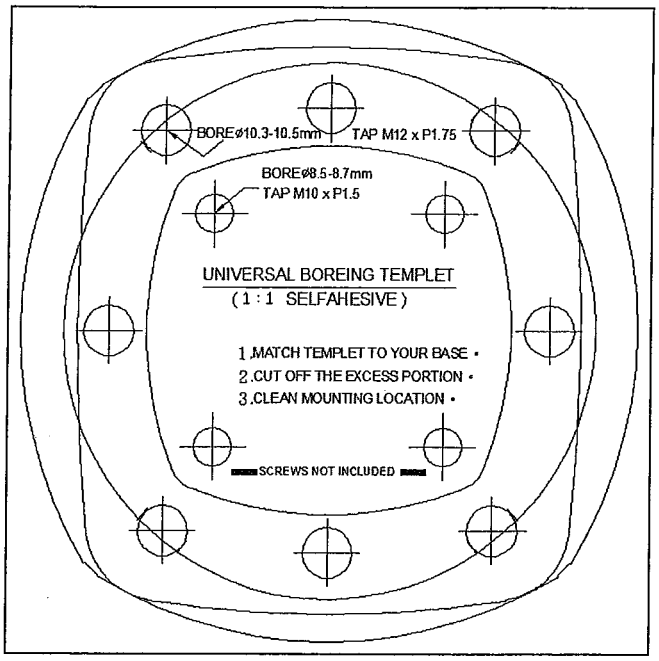
- For small machine table, an extension bracket (no provided) is recommended.(SEE 1-2)



(Fig 1-2)

3.2 Locate boring position：

- For your boring convenience and accuracy, a SCALE 1:1 SELF-ADHESIVE DRILLING TEMPLATE is provided and enclosed in the package. (Fig 2)
- Clean location free from oil. Tape SELF-ADHESIVE DRILLING TEMPLATE to desire position. Mark it with centre punch; Avoid table rib and support underneath the table.
- Prepare 4 sets of M12 bolts & spring washers (not provided).

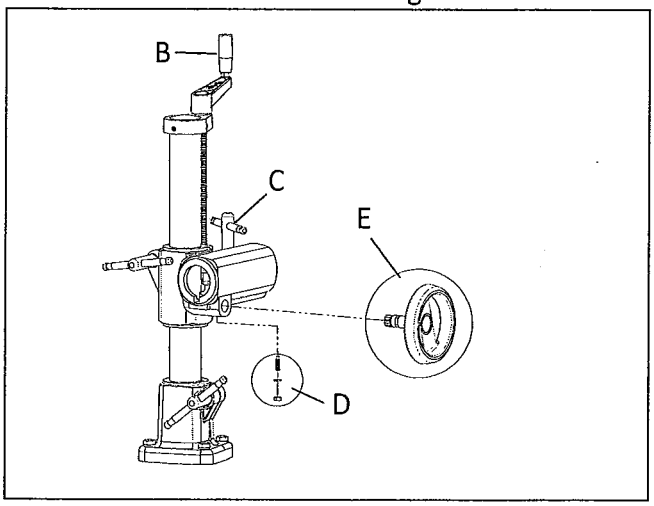


(Fig 2)

3.3 Assembling

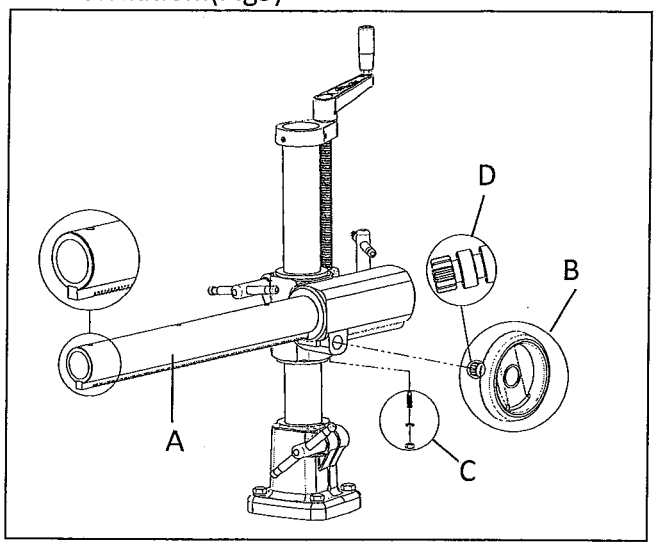
⚠ Get help! Feeder is heavy. Do not try to do it on your own.

- Fasten base to table：attached with 4 sets of M12 screws, spring washer.(fig 3)
- Insert "STAND" to BASE. Assemble Handle.
- Insert OVER-ARM into ELEVATING-BRACKET. Turn wheel a few turns. Tighten LEVER.

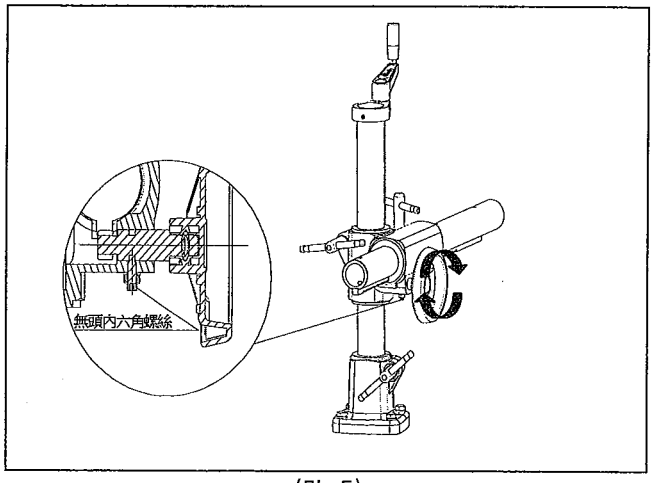


(Fig 3)

- Insert the extension tube (Fig 4-A) into cross slide vise, push (Fig 4-B) hand-wheel into cross slide vise (Fig 4) and rotating while push-in, ensure the hand-wheel kit are intermeshing with extension tube kit properly.
  Lock the headless hex-screw in to cross slide vise (Fig 4-C), the rotating the handle-wheel and insert it into hand-wheel gear groove (Fig 4-D) to ensure the gears can be rotating smoothly, lock the hex-screw to complete the installation.(Fig5)



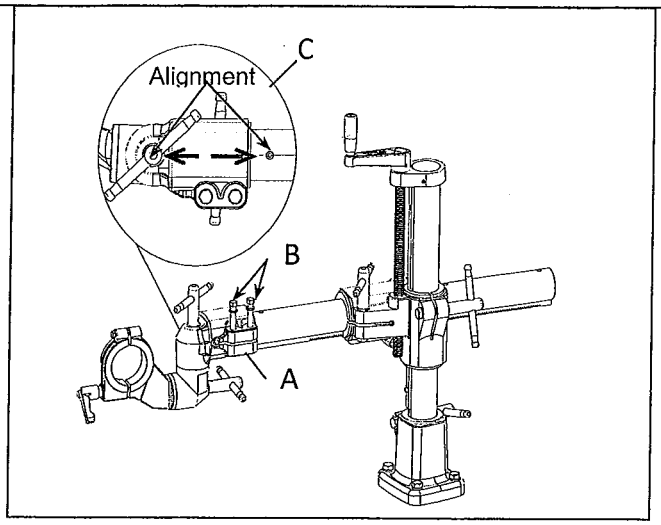
(Fig 4)



(Fig 5)

- Install control-joint：To slip the end side of the extension tube into swivel cone (Fig 6-A) and ensure the alignment of the lever and extension tube centre line (Fig 6-C) lock with 2 attached screw. (Fig 6-B)

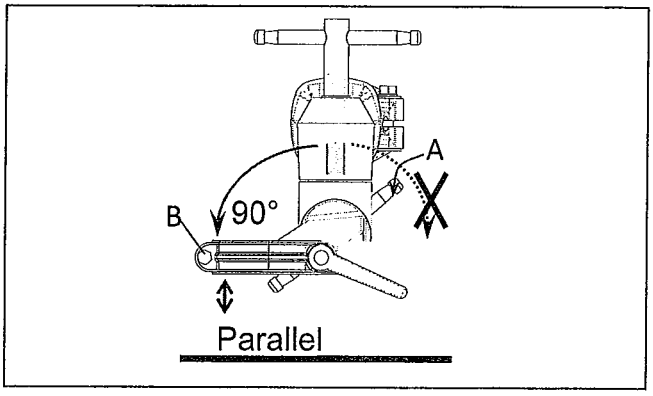
⚠ The parallelism of the feeder rollers can be affected by the angle of swivel cone.



(Fig 6)

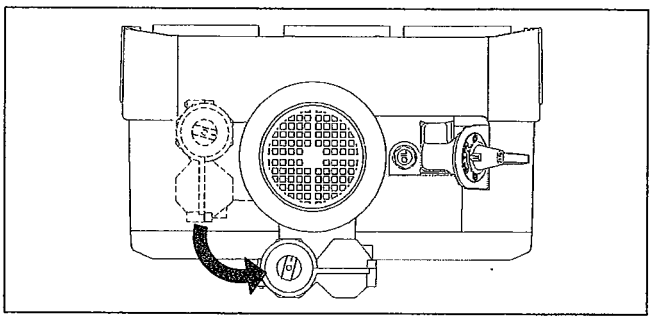
- Adjust the motor suspension: Loosen the lever(Fig 7-A) to push motor suspension to the left side of the table horizontally.(Fig 7).

⚠ Motor suspension level can stable the feeder and parallel to the worktable.



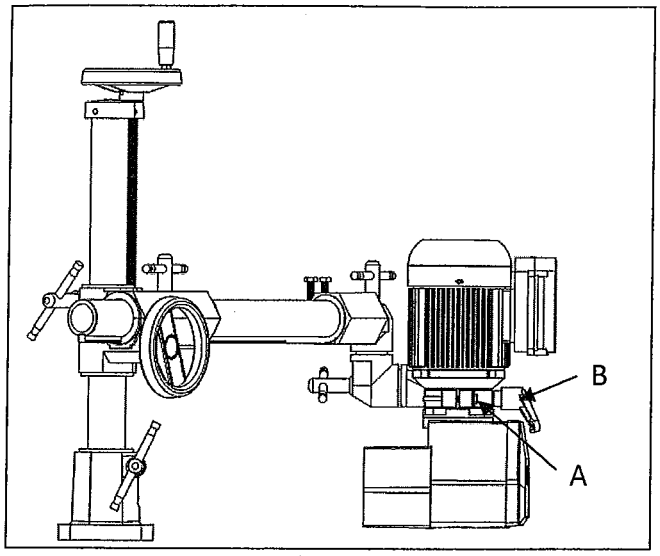
(Fig 7)

- Power switch positioning: Due to the packaging and shipping consideration, the power switch was placed aside. Loosen the attached 4 Hex screw to move the motor to the fromt for more convenient operation.(Fig 8)



(Fig8)

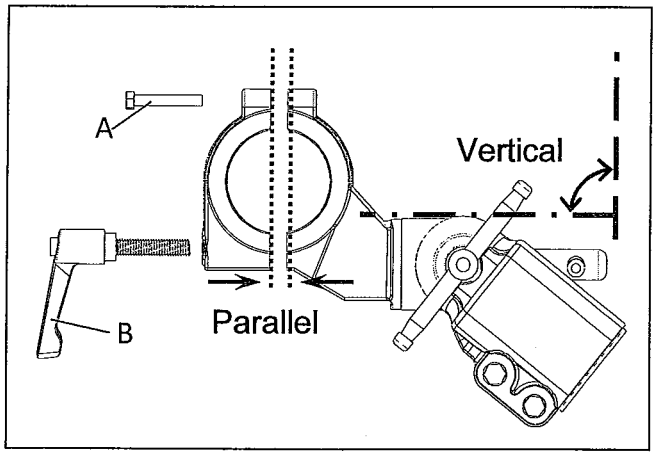
Machine body installation: Loosen the hex-screw(Fig 9-A) and quick release grip (Fig 9-B), and take off the motor clamp.



(Fig 9)

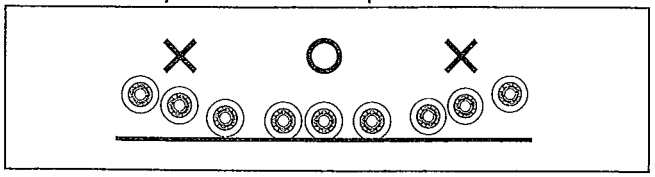
※ Confirmation：

- Locked the hex-screw (Fig 10-A) and quick release handle grip (Fig 10-B) to even the gap of two end. Loosen the quick release lever to rotate the machine body.(Fig 10)

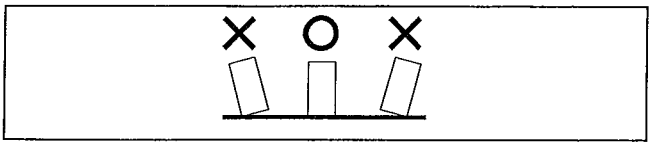


(Fig 10)

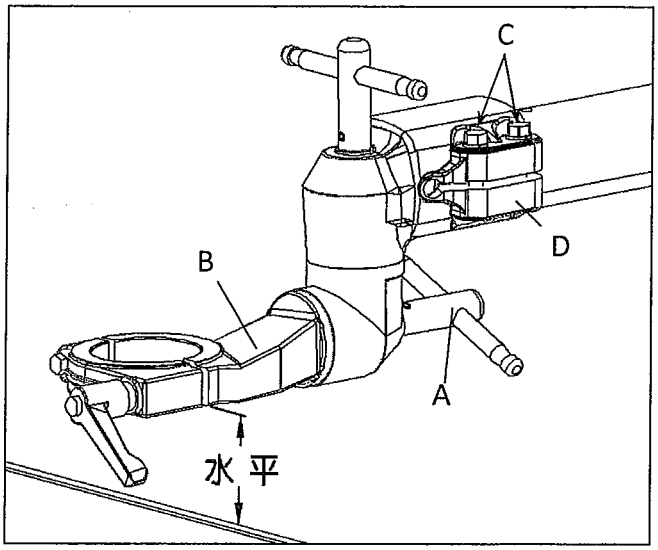
- Feeder angle adjustment（Fig 10）, Loosen the stand handle（Fig 10-A）and lower the feeder to adjust the rollers and worktable until them horizontally.（Fig 10-B）
- Feeder roller level positioning: Lower feeder to table, alignment "slight off" is acceptable.- offset by indendent suspension.



- (Fig 11), Loosen the handle grip (Fig 11-A), adjusting the motor suspension level (Fig 11-B)



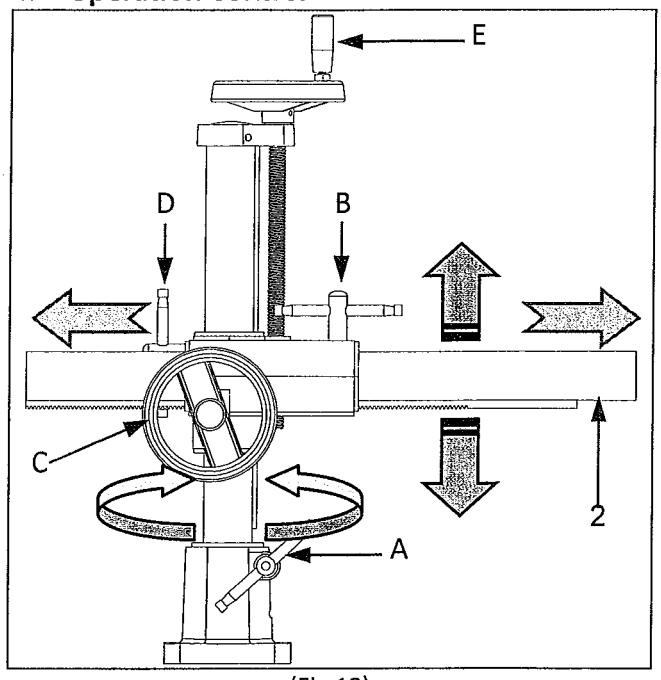
- Fig 11, Loosen two attached screws(Fig 11-C), and adjust the motor suspension angle (11-D).



(Fig 11)

- To complete the installation: Confirm all the handle and screws are locked properly.

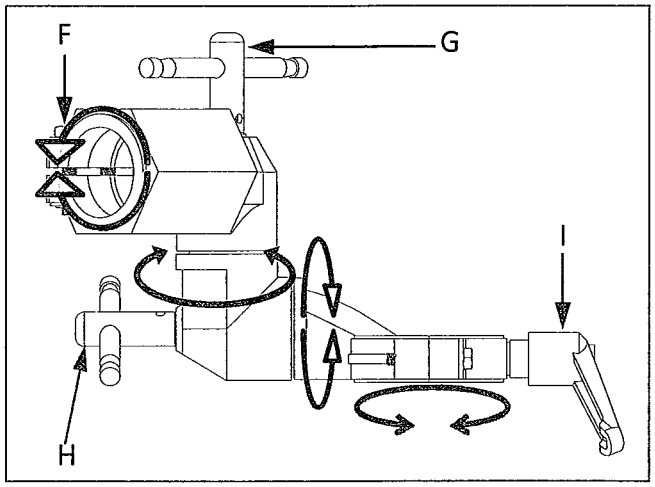
4. Operation Control



(Fig 12)

4.1 Stand：

- Over-Arm rotation:： Loosen lever. (Fig 12-A)
- Over-Arm extension： Loosen Lever (Fig 12-B), rotate side-wheel. (Fig 12-C)
- Over-Arm elevation： Loosen Lever (Fig 12-D), rotate TOP-Wheel. (Fig 12-E)



(Fig 13)

4.2 Control- Joint：

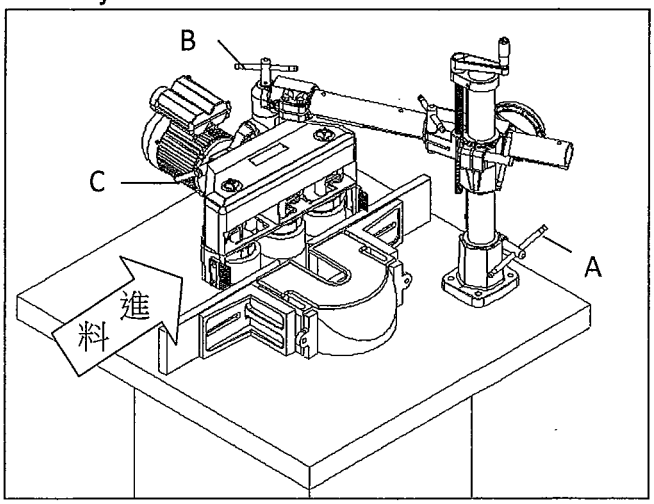
- Arm-bracket: Loosen 2 attached screws(Fig 13-F)
- Angle Joint：Loosen Lever(Fig 13-G)
- Motor clamp： Loosen Lever(Fig 13-H)
- Machine body： Loosen quick release(Fig 13-I)

4.3 Feeding：

- Loosen Level (Fig 14-A), then swing the feeder aside then locked the lever til tight

⚠ Ensure there is sufficient weight support to prevent power feeder tilted while Swing aside.

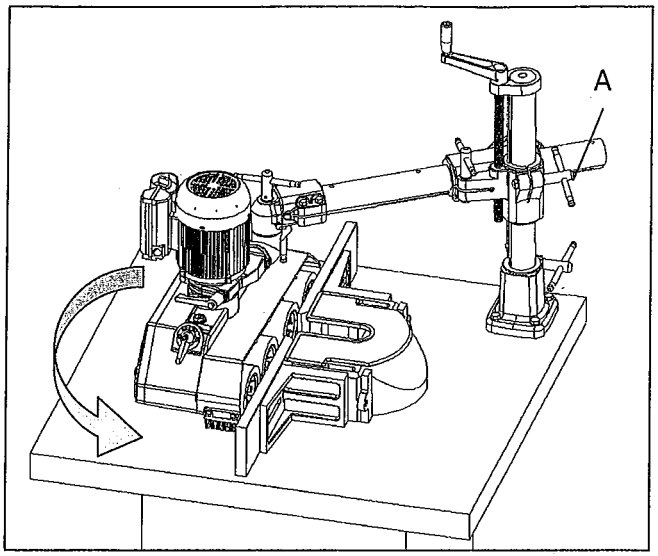
- Loosen LEVER(Fig 14-B), rotate the machine to left side 90° (vertical to the ground), rollers faced to right, motor to left then lock the lever. (Fig 14-B)
- Loosen LEVER(Fig 14-C), rotate the machine 90° (Parallel to the ground) power switch on top, roller at the bottom the lock the lever. (Fig 14-C)
- Loosen LEVER(Fig 14-A), push the machine back to worktable, postion the roller opposite to the guide plate then lock the lever. (14-A)
- Lock all ther lever properly to complete the adjustment.



(Fig 14)

- NOTICE：The purpose of elevating kits tolerance gap is to allow smooth operation while elevating the feeder;

  Please pull back machine body to feed-in direction after elevating adjustment and lock the hand lever to tight at the meantime. (FIG 15-A)



(Fig 15)

5. Power connection and Grounding

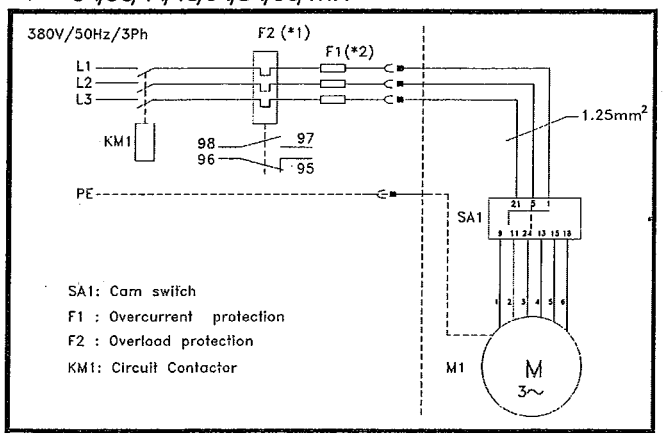
⚠ Read the motor specification to ensure the power source and voltage is compatible. (Range：±5%)
Ensure power switch is (OFF) before connect the power source.

- Requirement：
  - ➢ Connected to the repectively non-fuse circuit or motor circuit breaker.
  - ➢ The external power switch cord cannot be less than 12AWGl.
  - ➢ Switch required wired in compliance with your national or local electrical regulation.
- Using the extension cable if needed: 30M or under using 12AWG cable, 46M or above using 10AWG cable.
- Ensure all the grounding wires connected properly; impropriate connection may cause the damage to the motor.
- Ensure the groupding wire of the motor (green or yellow) connected techinician for any further assistance.
- Please contact professional technician for any further assistance.

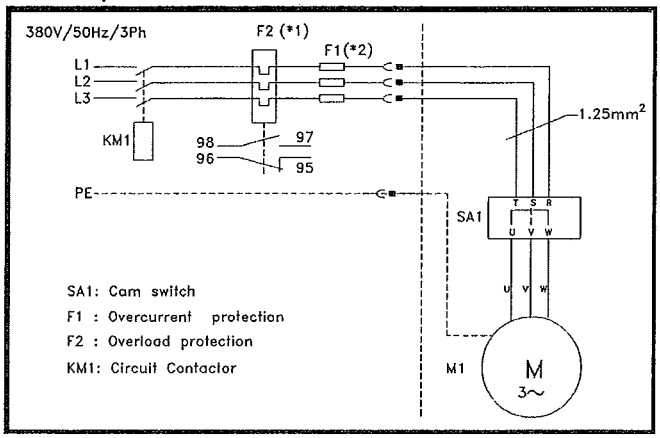
- Rated current reference:

Specification	Rated current
1PH 110V~120V	10.35A
1PH 220V~240V	5.0A
3PH 220V~240V	3.5A
3PH 380V~420V	1.8A
3PH 550V~600V	1.9A

➢ 34/38/44/48/04/54/68/MX



➢ 30/40



6. Speed control

⚠ Notice: cut out the power before adjustment

- Appropriate feeding speed rate and well sharped cutting blade can cause the procedure process quality and efficiency.
- Determinate the correct feeding speed by the hardness of the work-piece, material and the desired cutting procedure.
- Listen attentively while feeder rotating and re-check the sample after procedure process then adjust setting to desired result.
- Maintain the cutting blade and keep it sharpe all the time.

參考表　　送材速度　單位：米

主軸轉速	6000轉/分			8000轉/分			10000轉/分		
加工厚度 \ 送材速度 \ 刀刃數									
6cm	9	15	23	9	15	23	15	23	23
10cm	8	12	15	8	15	15	12	15	15
20cm	5	9	12	6	12	12	8	12	12
25cm	3	5	6	5	6	8	6	8	9

- Speed shifting：Cut out the power before shifting.
- Rotate the rollers while switch the speed to allow the clutch and derailleur get engaged properly.

- Derailleur and gear settle

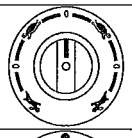
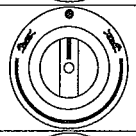
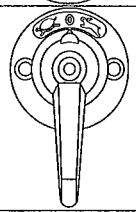
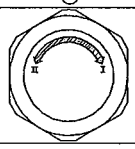
➢ Model：34/44/04/54
(Fig A) +Derailleur control(Fig 16-1)

➢ Model：38/48/68 (3PH)
Fig (A) +(C)+ Derailleur control (Fig 16-2)

➢ Model：38/48 (1PH)
Fig (B) +(C)+Derailleur control (Fig 16-2)

➢ Model：30/40
Fig (B) +(D)speed control

➢ Model：MX
Fig (A) +Derailleur(Fig 16-3)

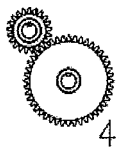
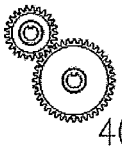
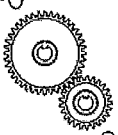
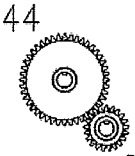
Switch	
A	
B	
C	
D	

Mot	Min.	Gear	Min.	Gear
L	4M(13Ft.)		10M(33Ft.)	
H	8M(26Ft.)		20M(66Ft.)	

(Fig 16-1)

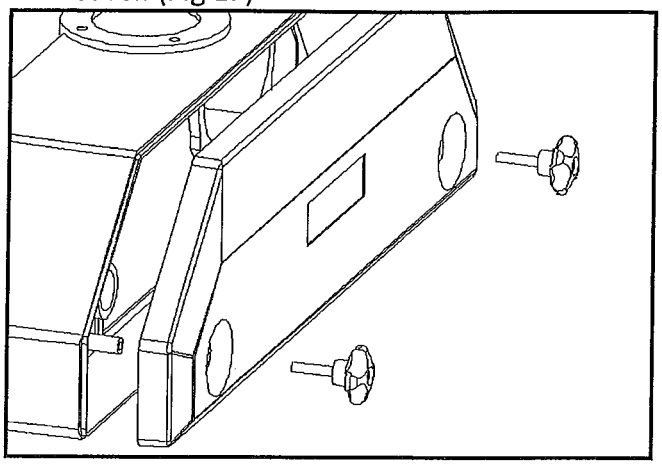
8 Speed Power Feeder				
				
				
	2M (6.5FT.)	6.7M (22FT.)	4M (13FT.)	13M (43FT.)
	5.5M (18FT.)	16.5M (55FT.)	11M (36FT.)	33M (108FT.)

(Fig 16-2)

MX Feeding Speed		
Gear	Switch 	
21  44	3.5 M/Min (11.5 Ft/Min)	7 M/Min (23 Ft/Min)
25  40	5 M/Min (16.5 Ft/Min)	10 M/Min (32.5 Ft/Min)
40  25	12.5 M/Min (40.5 Ft/Min)	25 M/Min (81.5 Ft/Min)
44  21	16 M/Min (52 Ft/Min)	32 M/Min (104 Ft/Min)

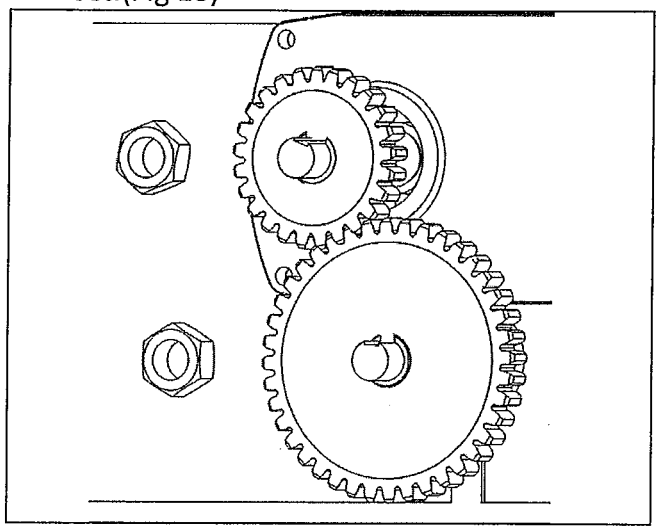
(Fig 16-3)

- Gear replacement instruction.
- Loosen two attached screws to take off the cover. (Fig 17)

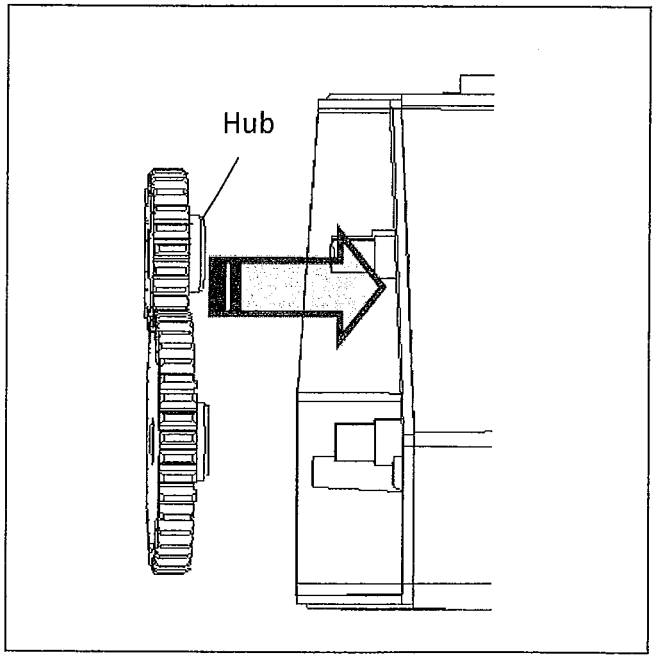


(Fig 17)

- Loosen the Hex screw to replace the gear set.(Fig 18)



(Fig 18)



(Fig 19)

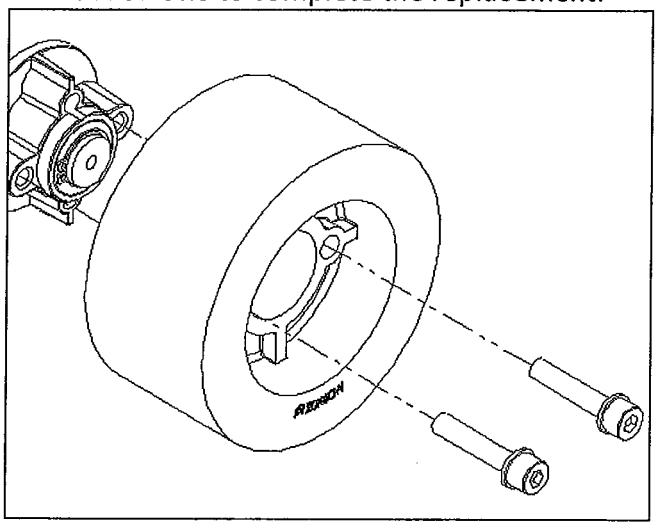
⚠ The hub of the gear should be turned inward to avoided possible interference.(Fig 19)

⚠ Optional gear set available
34/44/04/54 model speed(4+4=8)
38/48/68model speed(8+8=16)

7. Roller replacement

⚠ Notice: cut off the power source before operation.

- Loosen 2 attached M8 screws (Fig 20)
- Replace with brand new rollers then tighten the screws to complete the replacement.



(Fig 20)

⚠ Notice : Confirm all the screws are locked properly after first operation.
The rubbers have been tested by high standard QC control and durability test.
Its traction friction and durability is incomparable to other brands. Please replace with Co-matic made Roller.

8. Maintenance

⚠ Notice: Cut off the power source before operation.

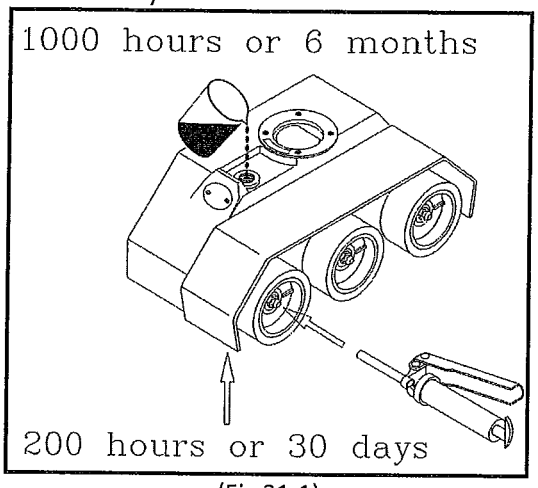
Rollers：

- Grease rollers and chains every 200 hours or 30 days through fittings by using grease gun.
- Chain wheel and chain should be maintained regularly.
- Recommended Grease:
  - SHELL Alvania（SHELL Alvania R. 2）;
  - (SHELL GADUS S2 V220 2);
  - (MOBILUX EP 2);
  - (FUCHS RENOLIT EP 2);
  - (BP ENERGREASE MM-EP 2)

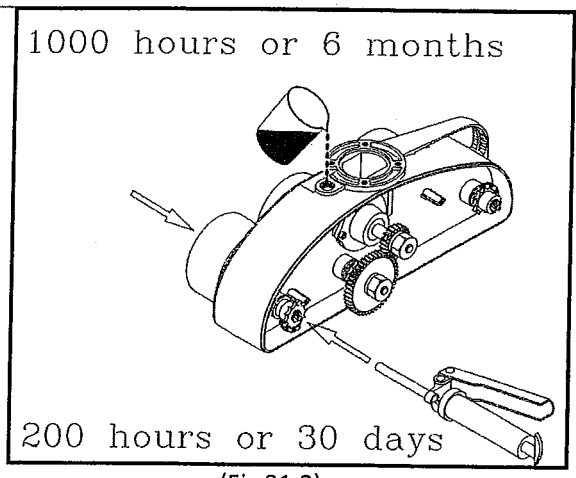
Turbine oil：

- Exchange turibine oil first 200 hours of 30 day while first starts the machine. Change oil after 1000 working hours or 90 days after purchase of new feeder.
- Using same brand of turbo oil or equivalent oil as following:
  - MOBIL - MOBILGEAR 630;
  - SHELL - OMALA 150;
  - BP - ENGERGOL GR-SP 150
- Turbine oil replacement:

  Refer to page 6: operation and adjustment please pay attention to the balance of the feeder and worktable while moving the feeder aside, then flip it over and open the oil plug to allow the oil flow out, follow the instruction to fill up the turbo oil.(Fig 21-1, 21-2)



(Fig 21-1)

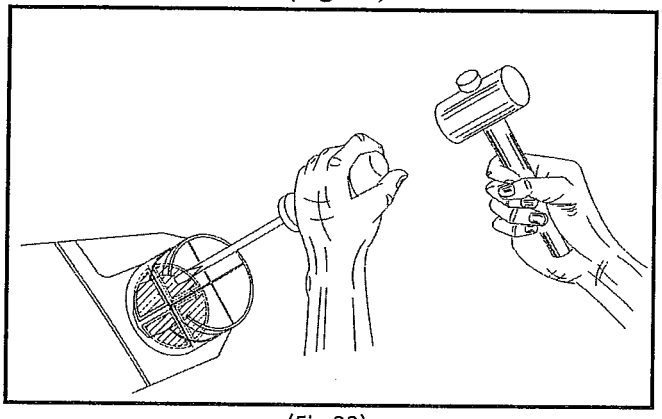


(Fig 21-2)

- Turbine oil filled up standard

➢	34/44	380CC (38mm, 1-1/2")
➢	38/48	300CC (38mm, 1-1/2")
➢	30/40	140CC (35mm, 1-3/8")
➢	04/54	350CC (42mm, 1-5/8")
➢	MX	200CC (38mm, 1-1/2")

- Using wind gun to maintain the feeder after every operation.
- Model MX: Using tool to pry open inside of dust collector ; Please seal up with tape while not in use.(Fig 22）


(Fig 22)

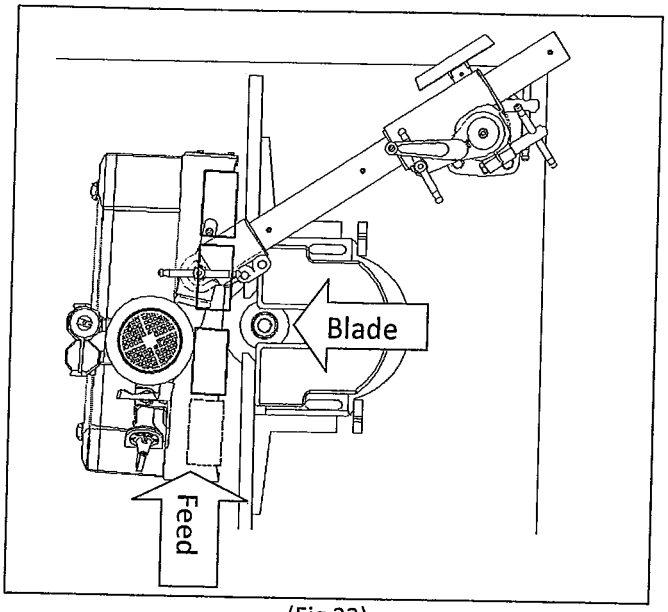
9. Feeder Operation Instruction.

- Jointer operation：（Fig 23）
  - Rollers & cutting blade: (Fig 23)
  - Feeder position & guiding plate: (Fig 24)
  - Feeding pressure & Work-piece: (Fig 25)

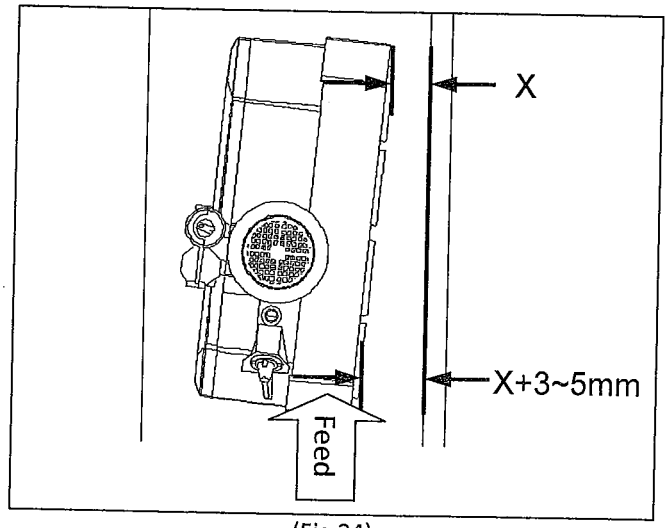
- Table-saw operation: (Fig 26)
  - Rollers & cutting blade: (Fig 26)
  - Feeder position & guiding plate: (Fig 24)

- Feeding pressure & Work-piece: (Fig 25)

- Manual operation: (Fig 27)
  - Rollers & cutting blade: (Fig 27)
  - Feeder position & guiding plate: (Fig 24)
  - Feeding pressure & Work-piece: light pressure

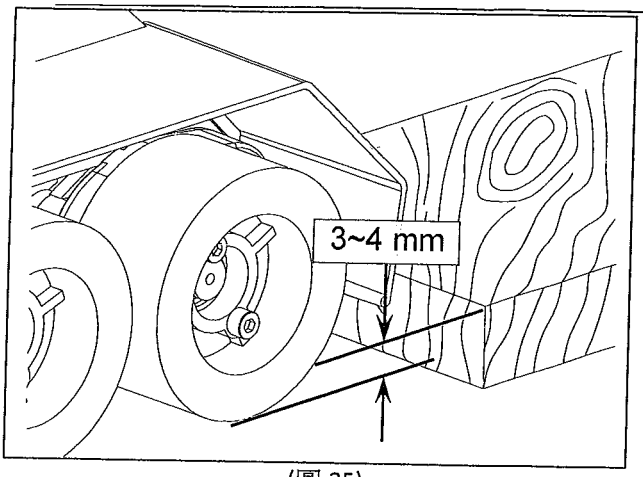


(Fig 23)

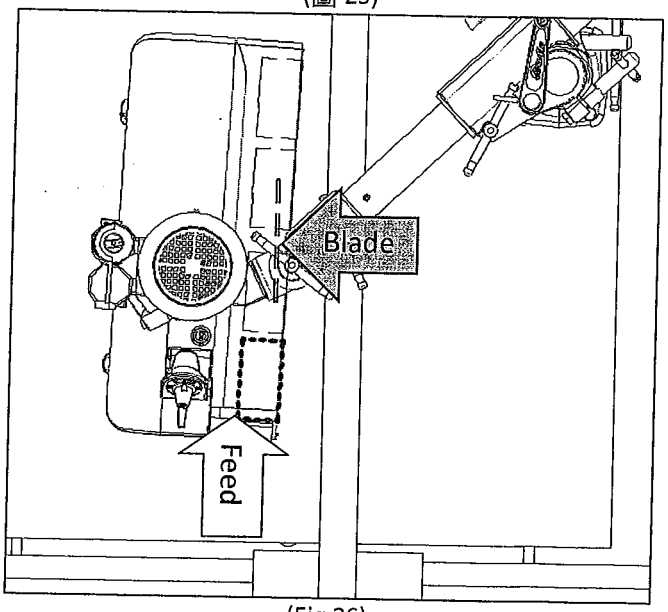


(Fig 24)

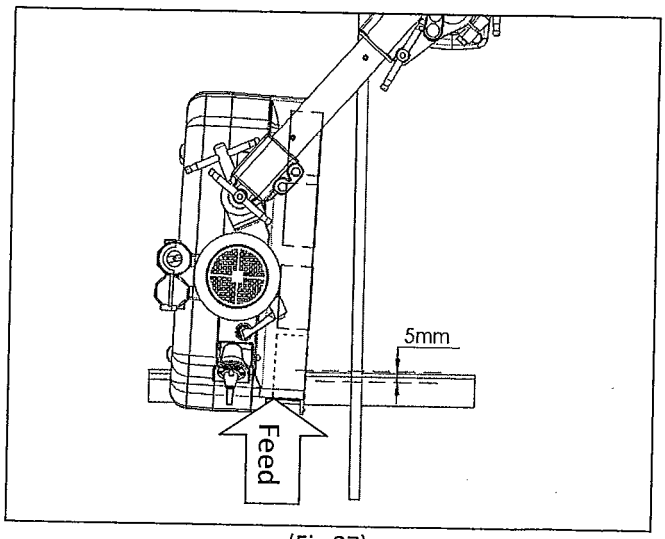
⚠ The space between feed-in rollers and the guide plate sould be at least 3~5mm wider than Feed-out rollers to ensure the roller can fully cover and give enough presssure to the work-piece. **(Fig 24)**



(圖 25)

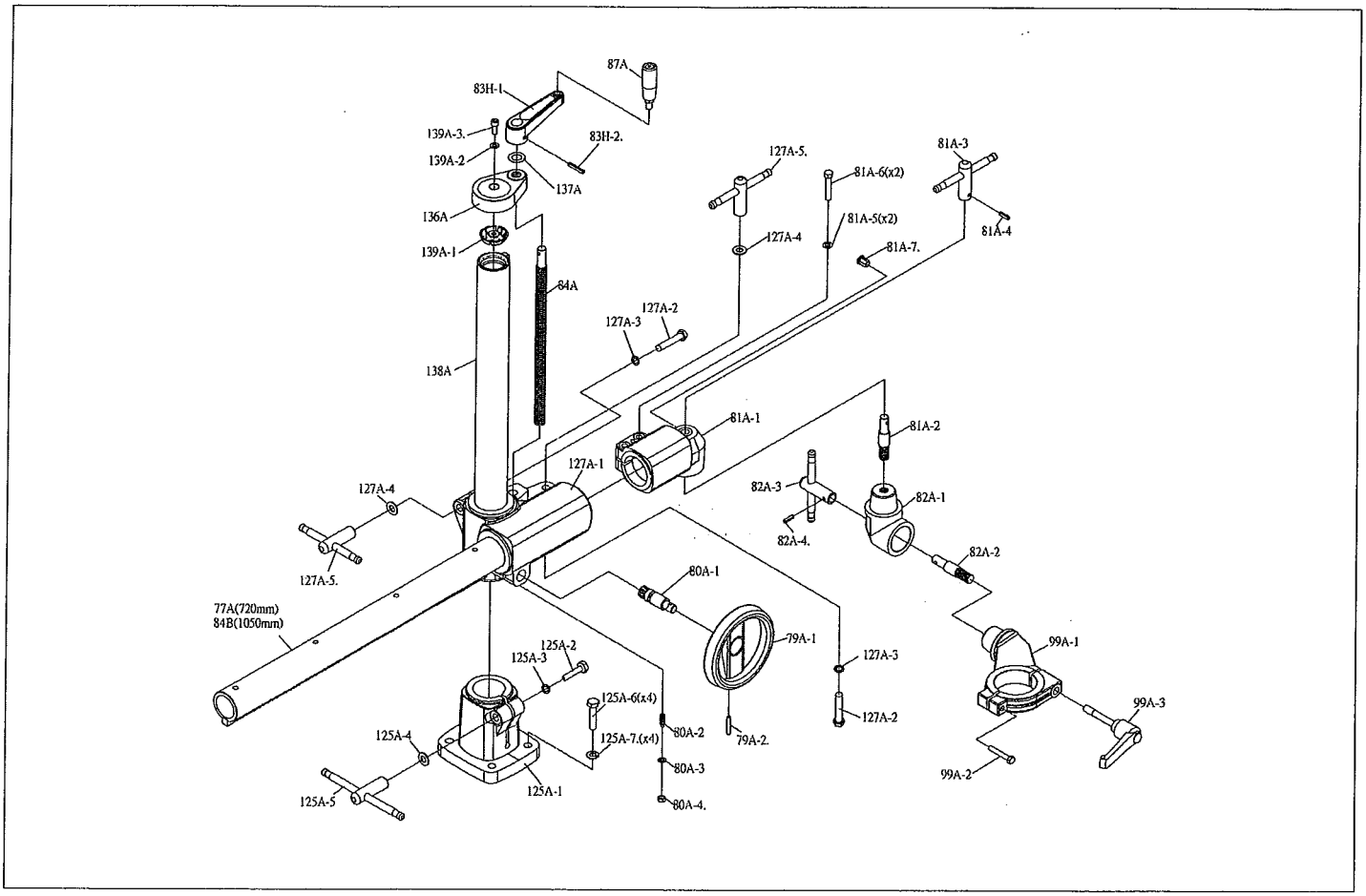


(Fig 26)



(Fig 27)

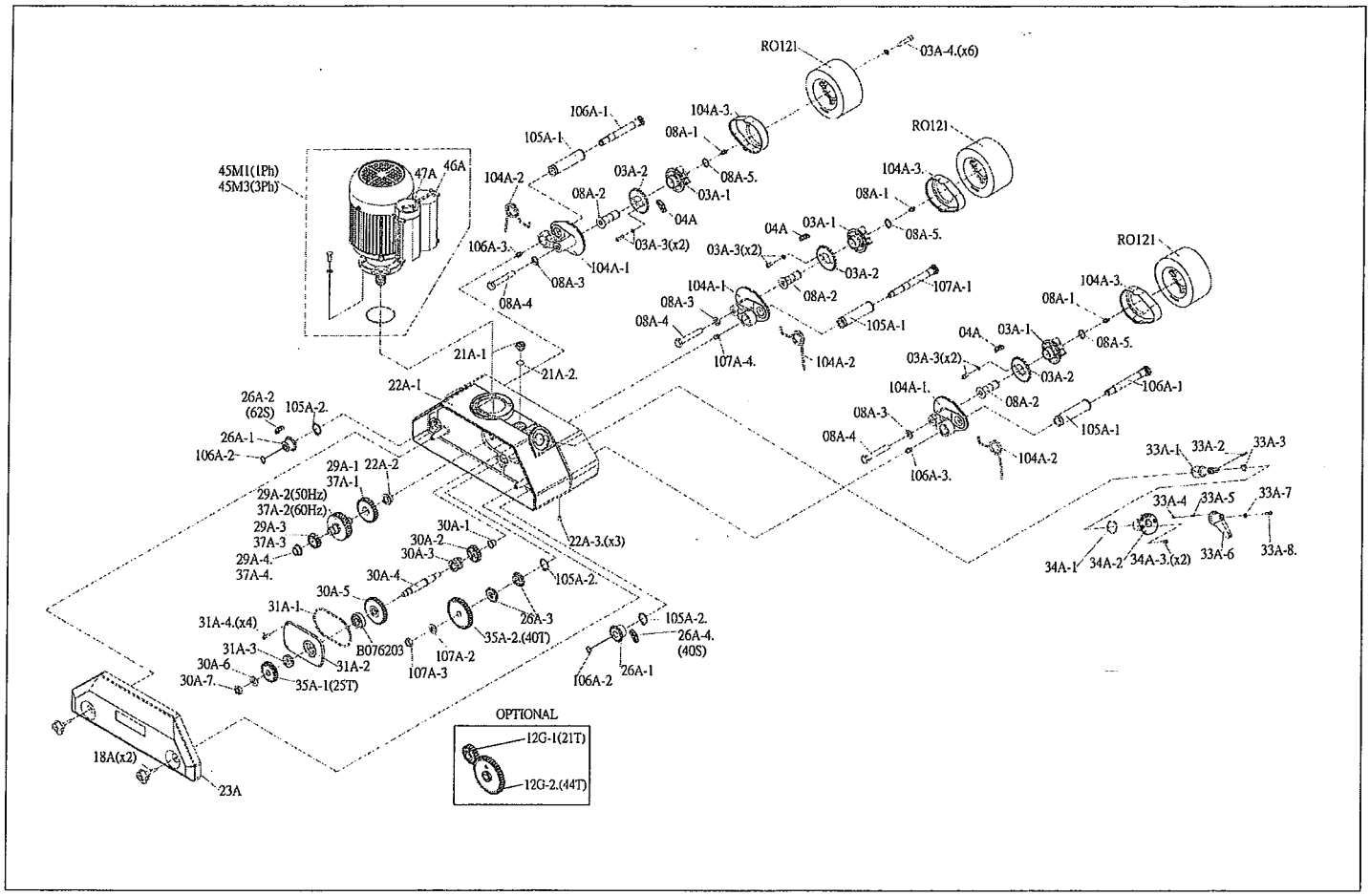
MODEL: US13(L) HEAVY-DUTY UNIVERSAL STAND



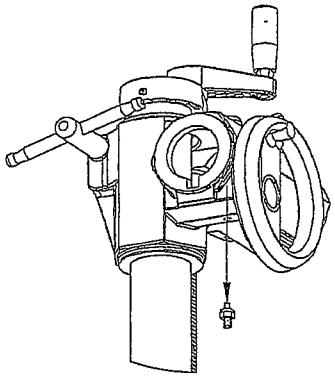
Part No.	Code No.	Description	Q'ty	Part No.	Code No.	Description	Q'ty	Part No.	Code No.	Description	Q'ty
77A	E580002A	Over Arm Kit (720mm)	1	82A-1	A200304	Swivel Cone	1	125A-4	N011225	Washer	1
79A	79A	Handwheel Kit	1	82A-2	G020005	Stud	1	125A-5	G020010A	Handle(200mmL)	1
79A-1	U010082	Handwheel	1	82A-3	G020007A	Handle	1	125A-6	S601250	Hex Screw	4
79A-2.	N810636	Lock Pin	1	82A-4.	N810622	Lock Pin	1	125A-7.	N030012	Spring Washer	4
80A	80A	Pinion Kit	1	83H	83H	Handle Kit	1	127A	127A	Elevating Bracket Kit	1
80A-1	G020001	Pinion	1	83H-1	U010139A	Handle w/ Bushing	1	127A-1	A250402	Elevating Bracket	1
80A-2	G000007	Screw	1	83H-2.	N810636	Lock Pin	1	127A-2	S601275	Hex Screw (M12-1.75Px75L)	2
80A-3	N030008	Spring Washer	1	84A	G320090	Elevating Screw	1	127A-3	N050012	Lock Washer (M12)	2
80A-4.	N11008R	Nut	1	84B	E580003A	Over Arm Kit (1050mm)	1	127A-4	N011225	Washer	2
81A	81A	Over Arm Cone Kit	1	87A	U010011	Handle-Grip (M10-P1.5x70L)	1	127A-5.	G020006A	Handle	2
81A-1	A250403	Over Arm Cone	1	99A	99A	Motor Clamp kit	1	136A	C020110A	Column Cape	1
81A-2	G020005	Stud	1	99A-1	A200305	Motor Clamp	1	137A	G150031	Washer	1
81A-3	G020007A	Handle	1	99A-2	S600850	Screw	1	138A	E580013A	Vertical Column Kit(560mm)	1
81A-4	N810622	Lock Pin	1	99A-3.	T060003	Pull Handle	1	139A	139A	Fastener Kit	1
81A-5	N030010	Washer	2	125A	125A	Base Kit	1	139A-1	U010279	Fastener	1
81A-6	S601050	Screw	2	125A-1	A250401	Column Base	1	139A-2	N015816	Flat Washer	1
81A-7.	U010119	Cord Sheath	1	125A-2	S601275	Hex Screw (M12-1.75Px75L)	1	139A-3.	S900825	Cap Screw M8X25L	1
82A	82A	Swivel Cone Kit	1	125A-3	N050012	Lock Washer (M12)	1				

2019/9/5

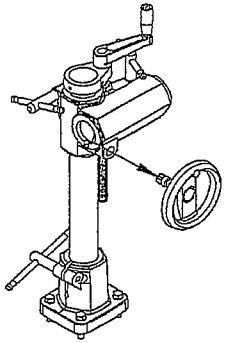
MODEL: A-APF0038-1(3) HOUSING ASSEMBLY



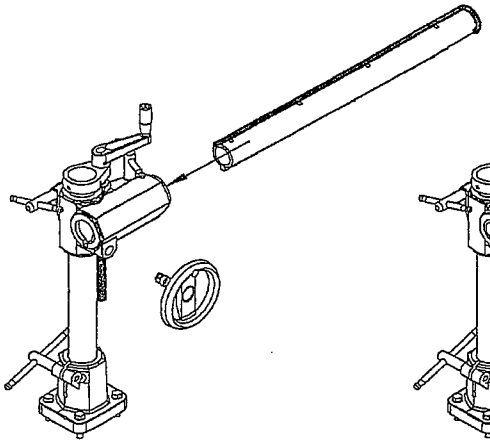
Part No.	Code No.	Description	Q'ty	Part No.	Code No.	Description	Q'ty	Part No.	Code No.	Description	Q'ty
B076203	B076203	Bearing	1	29A	29A	Worm Gear Kit	1	34A-3.	S900512	Cap Screw	2
03A	03A	Roller Supporter Kit	3	29A-1	A500329	Gear	1	35A	35A	Gear Kit	1
03A-1	C020333A	Roller Supporter	1	29A-2	A460002	Worm Gear	1	35A-1	A500310	Gear	1
03A-2	A500309	Sprocket	1	29A-3	A500330	Gear	1	35A-2.	A500311	Gear	1
03A-3	S060616	Cap Screw	2	29A-4.	A500301	Bushing	1	37A	37A	Worm Gear Kit	1
03A-4.	S060840	Cap Screw	2	30A	30A	Transmission Shaft Kit	1	37A-1	A500329	Gear	1
04A	K330026	Chain	3	30A-1	A500305	Bushing	1	37A-2	A460001	Worm Gear	1
08A	08A	Roller Spindle Kit	3	30A-2	A500320	Gear	1	37A-3	A500330	Gear	1
08A-1	T315106	Grease Nipple	1	30A-3	A500318	Clutch	1	37A-4.	A500301	Bushing	1
08A-2	G320028	Roller Spindle	1	30A-4	G320069	Transmission Shaft	1	45M1	45M1	Motor w/ Switch	1
08A-3	N030012	Spring Washer	1	30A-5	A500319	Gear	1	45M3	45M3	Motor w/ Switch	1
08A-4	S601275	Hex Screw	1	30A-6	N011225	Flat Washer	1	46A	46A	Switch Box	1
08A-5.	N510020	Snap Ring	1	30A-7.	N11012H	Nut	1	47A	47A	Switch Kit	1
12G	12G	GEAR SET	1	31A	31A	Wormgear Box Cover Kit	1	104A	104A	Sprocket Case Kit	3
12G-1	A500344	Gear	1	31A-1	Q010102	"O" Ring	1	104A-1	C020332-1	Sprocket Case	1
12G-2.	A500345	Gear	1	31A-2	C020345	Wormgear Box Cover	1	104A-2	N950001	Spring	1
18A	U010051	Knob	2	31A-3	Q021701	Oil Seal	1	104A-3.	U010052	Case Cap	1
21A	21A	Oil-Cap Kit	1	31A-4.	S070516	Cap Screw	4	105A	105A	Tube Kit	3
21A-1	U010008	Lil Cap	1	33A	33A	Speed Lever Kit	1	105A-1	E270006	Tube	1
21A-2.	Q010012	"O" Ring	1	33A-1	G320015	Gear Lever	1	105A-2.	N510026	Snap Ring	1
22A	22A	Housing Frame Kit	1	33A-2	N810420	Lock Pin	1	106A	106A	Sprocket Shaft Kit	2
22A-1	C020017	Housing Frame	1	33A-3	Q010012	"O" Ring	1	106A-1	G320132	Sprocket Shaft	1
22A-2	A500301	Bushing	1	33A-4	R090005	Steel Ball	1	106A-2	N510015	Snap Ring	1
22A-3.	S100610	Set Screw	3	33A-5	N930004	Comp. Spring	1	106A-3.	T315106	Grease Nipple	1
23A	U010035	Housing Cover	1	33A-6	U010040	Speed Lever	1	107A	107A	Main Sprocket Shaft Kit	1
26A	26A	Transmission Kit	1	33A-7	N050005	Lock Washer	1	107A-1	G320133	Main Sprocket Shaft	1
26A-1	A500303	Sprocket	2	33A-8.	S900512	Cap Screw	1	107A-2	N011225	Flat Washer	1
26A-2	K330062	Chain	1	34A	34A	Speed Lever Sleeve Kit	1	107A-3	N11012H	Nut	1
26A-3	A500307	Double-Sprocket	2	34A-1	Q017025	"O" Ring	1	107A-4.	T315106	Grease Nipple	1
26A-4.	K330040	Chain	1	34A-2	C020085	Speed Lever Sleeve	1	RO121	RO121	Roller tire	3



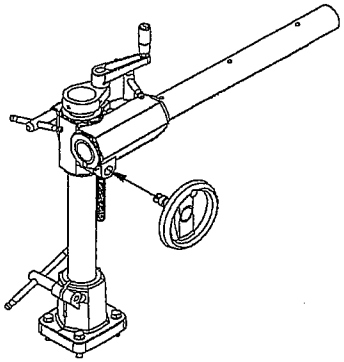
1.Take off the screw.



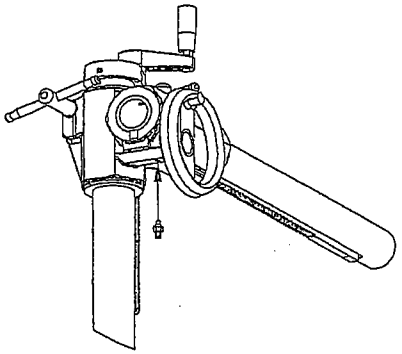
2.Unpack the handwheel.



3.Put in the extension arm.



4.Pack the handwheel.



5.Put on the screw.