

OPERATION MANUAL

SAW – Buddy FEEDER

World's 1st special for Table-Saw

APF 24

MFG No. : _____

● **TABLE OF CONTENTS**

☐	IMPORTANT SAFETY RULES -----	2
☐	ADDITIONAL SAFETY RULES FOR POWERFEEDER -----	2
☐	LOCATE MOUNTING AND BORING POSITION -----	3
☐	ASSEMBLING -----	4
☐	OPERATION CONTROLS -----	5
☐	POWER CONNECTION AND GROUNDING -----	6
☐	FEED RATE SETTING -----	7
☐	ROLLER REPLACEMENT -----	8
☐	LUBRICATION AND MAINTENANCE -----	8
☐	USING FEEDER ON MACHINES -----	9
☐	NOTES & EXPLODED VIEWS -----	--

● **IMPORTANT SAFETY RULES**

WARNING: Failure to follow these rules may result in serious personal injury.

Woodworking can be dangerous if safe and proper operation procedures are not followed. Using the tool with respect and caution will considerably lessen the possibility of accident. **ALWAYS FOLLOW RULES. USE COMMON SENSE AND EXERCISE CAUTION** in the workshop.

REMEMBER: your personal safety is your responsibility.

READ OPERATION MANUAL.

Keep and protect it near the machine for easy access in the event of future review.

IMPORTANT PERSONAL SAFETY NOTE.

Wear goggles – eyes protection.
Wear dust masks – respiratory protection.
Wear earpieces – hearing protection.
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 temperatures + 5°C ~ + 40°C, Humidity 30~95%, Altitude ≤ 1000M, Voltage deviation ± 5%.

KEEP WORK TABLE AND AREA CLEAN.

Loose hand tools left on table or cluttered work area invite accidents.

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.

FINAL INSPECTION AFTER EACH MAINTENANCE OR REPAIRING.

Make sure all parts are properly mounted, tightened, and aligned before next operation.

AVOID UNINTENTIONAL STARTING. Make sure the switch is in "OFF" position before power reconnection.

KEEP WORK SHOP CHILDPROOF. Use padlocks, master switches or remove starter keys. Prevent children or unauthorized personal from tampering. All visitors should be kept at a safe distance from work area.

NEVER LEAVE TOOL RUNNING UNATTENDED.

Turn power off. Don't leave until it comes to a complete stop.

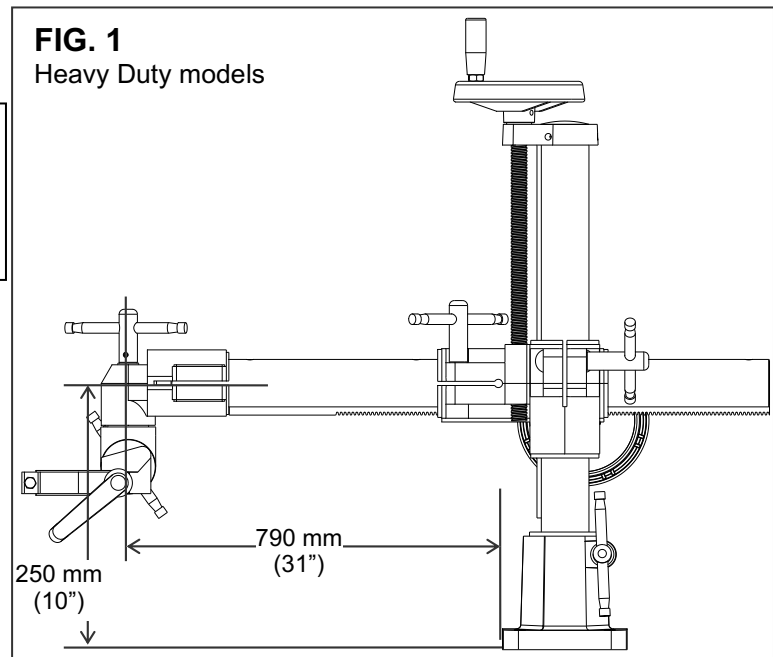
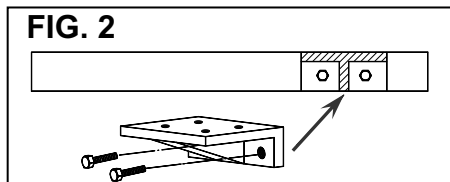
● **ADDITIONAL SAFETY RULES FOR POWERFEEDER**

- 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.

● LOCATE MOUNTING AND BORING POSITION

A) LOCATE MOUNTING POSITION

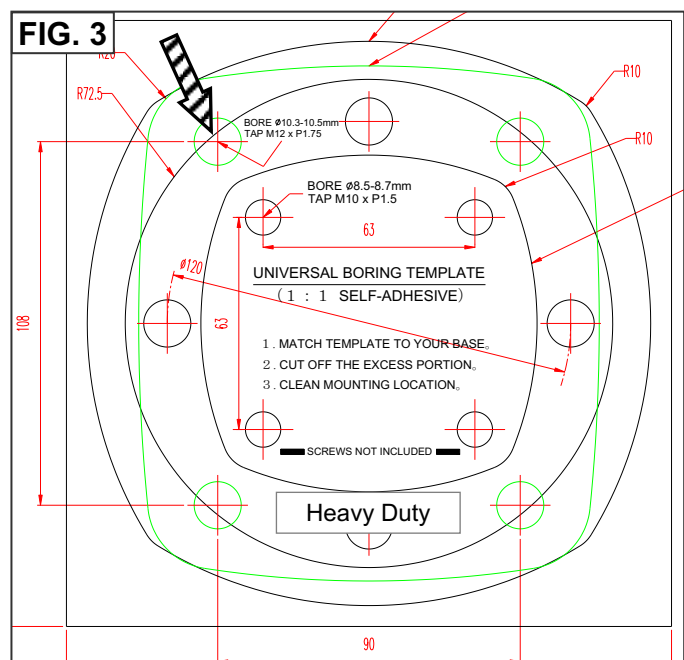
1. Elevation and extension of Universal Stand, **FIG. 1**.
2. Refer to **P. 9 FIG. 17** for assistance when mounting feeder to a table saw.
3. For small machine table, an extension bracket (not provided) is recommended. (SEE **FIG. 2**.)



B) LOCATE BORING POSITION

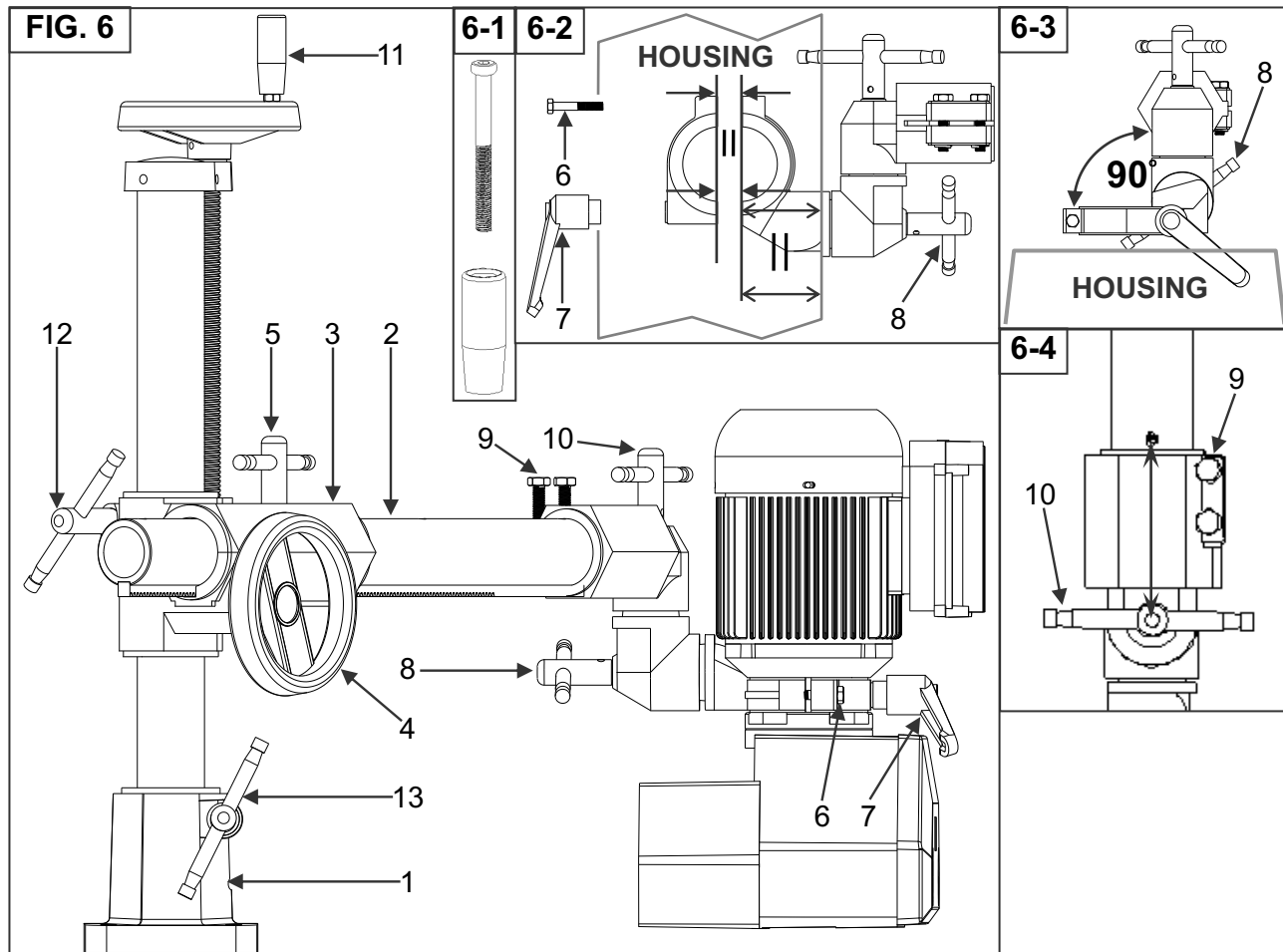
For your boring convenience and accuracy, a **SCALE 1:1 SELF-ADHESIVE DRILLING TEMPLATE** is provided and enclosed in the package, **FIG. 3**.

1. Prepare 4 sets of **M12** bolts & spring washers (not provided).
 $\text{LENGTH OF BOLT} \geq \text{Mounting-Base (thickness)} + \text{Tabletop (thickness)}$.
2. Avoid table ribs and support underneath the table.
3. Clean location free from oil. Tape **SELF-ADHESIVE DRILLING TEMPLATE** to desire position. Mark it with center punch.
4. **BORE & TAP.**

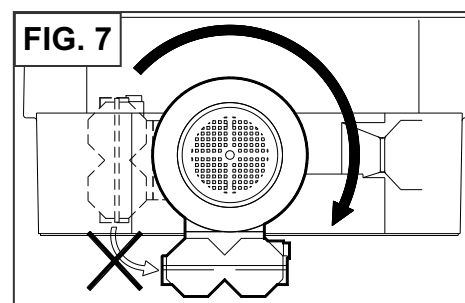


● **ASSEMBLING** (FIG. 6, 7 & 8)

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



1. Fasten BASE (1) to table.
2. Insert "STAND" to BASE (1). Assemble HANDLE (11). (SEE FIG. 6-1).
3. Insert OVER-ARM (2) into ELEVATING-BRACKET (3). Turn WHEEL (4) a few turns. Tighten LEVER (5).
4. **Reposition MOTOR**. Loosen 4 SCREWS. (SEE FIG. 7).

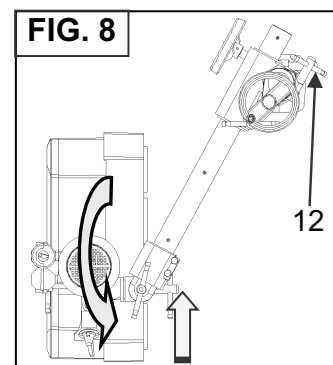


5. Assemble CONTROL-JOINT (FIG. 6-2) onto motor neck. (SEE FIG. 6). **MAKE SURE:**
 - Tighten SCREW (6) & LEVER (7) and keep gap on both side **EQUALLY SPACED**. So, once LEVER is loosen, feeder can swivel without having to loosen the SCREW (6). (SEE FIG. 6-2).
 - MOTOR-CLAMP **OPENING** is **PARALLEL** to **HOUSING**. (SEE FIG. 6-2).
 - Loosen LEVER (8) & adjust CONTROL-JOINT **UPRIGHT 90° to HOUSING**. Tighten LEVER (8). (SEE FIG. 6-3).
6. Assemble FEEDER to OVER-ARM (2). Tighten SCREWS (9). **MAKE SURE:**
 - Center of LEVER (10) is **IN LINE** with center of OVER-ARM (2). (SEE FIG. 6-4).

7. Move FEEDER to desired position by loosen LEVER (10).
Adjust height (11 & 12) and extension (4 & 5) accordingly.
8. Tighten all LEVERS.

IMPORTANT:

There is certain "PLAY" between ELEVATING-KEY & BRACKET-GROOVE. To assure "STURDY FEEDING," pull FEEDER against your IN-FEED direction, then tighten LEVER (12). (SEE FIG. 8) Do it on "EVERY ADJUSTMENT."



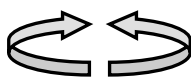
● **OPERATION CONTROLS** (FIG. 9 & 10)

WARNING: Disconnect feeder from power source.

A) STAND: – (FIG. 9) –

OVER-ARM (2) rotation:

Loosen LEVER (13).



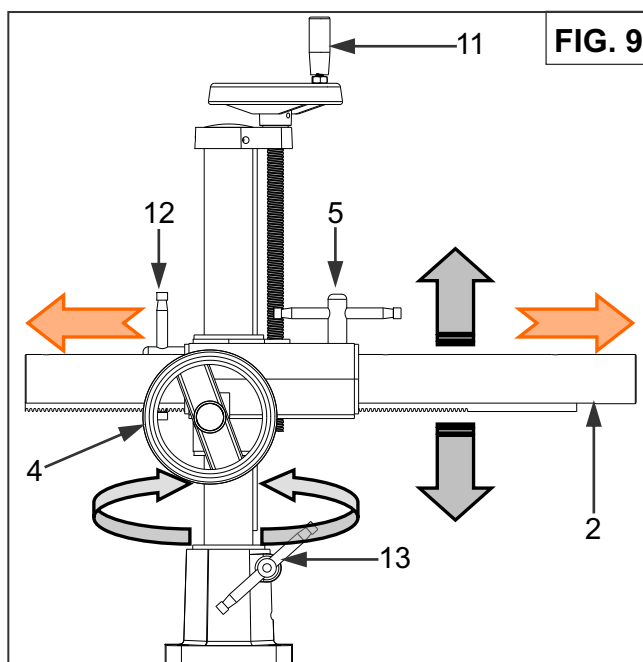
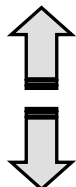
OVER-ARM (2) extension:

Loosen LEVER (5) & rotate SIDE-WHEEL (4).



OVER-ARM (2) elevation:

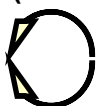
Loosen LEVER (12) & rotate TOP-WHEEL (11).



B) CONTROL-JOINT: – (FIG. 10) –

ARM-BRACKET (14)

Loosen SCREWS (9).



ANGLE-JOINT (15)

Loosen LEVER (10).



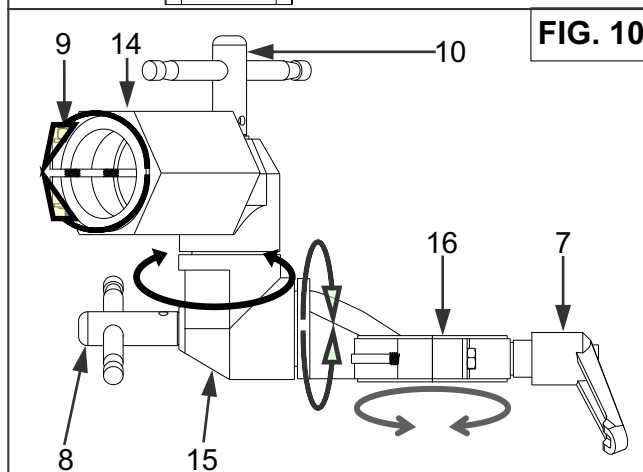
MOTOR-CLAMP (16)

Loosen LEVER (8).



MOTOR-CLAMP (16)

Loosen LEVER (7).

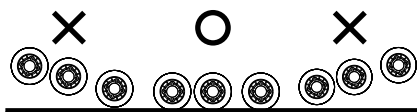


IMPORTANT:

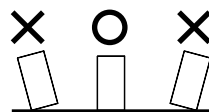
See P. 4 FIG. 6-2, 6-3 & 6-4 for recommendation.

C) ROLLER ALIGNMENT: - Lower feeder to table, SEE FIG. 9. –

Alignment “SLIGHTLY OFF” is acceptable. – Offset by indendent suspension.



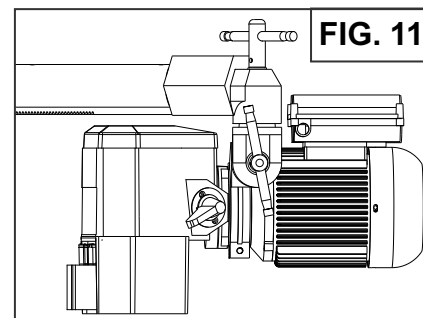
SEE P. 5 FIG. 10, loosen LEVER (8), adjust ANGLE-JOINT (15),



SEE P. 5 FIG. 10, loosen SCREWS (9), adjust ARM-BRACKET (7),.

D) SIDE FEEDING: – SEE FIG. 11. (P. 5 FIG. 9 & 10 for Control) –

1. Loosen LEVER (13), swing FEEDER off the table.
2. Loosen LEVER (8), turn FEEDER **90°** to floor with **ROLLERS facing you**. Tighten LEVER (8).
3. Loosen LEVER (7), turn FEEDER **90°** with **SWITCH BOX facing up**. Tighten LEVER (7).
4. Loosen LEVER (10), push FEEDER to desired position. Tighten LEVER (10 & 13).



WARNING: Tighten all Levers after each adjustment. (Ref. P. 5 FIG. 8.)

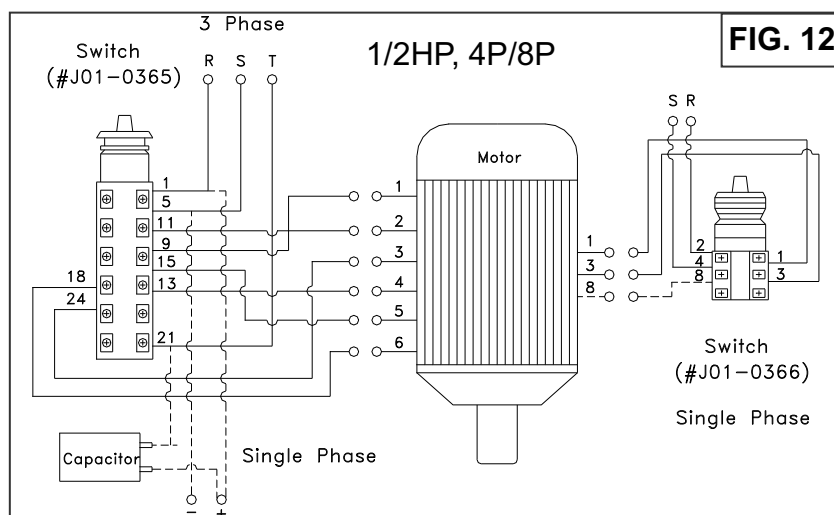
● **POWER CONNECTION AND GROUNDING** (FIG. 12)

WARNING: Make sure electric currenncy matches the motor specification (see motor cover.)

WARNING: Make sure switch is on the “OFF” position.

A) C. E. REQUIRED COUNTRY:

- Feeder is a supplemental tool, which works in conjunction with your shaper, table saw, jointer, ... etc. It's recommended to be used with a machine that is wired in compliance with your national or local electrical regulation.
- It must be connected to your machine through a specially designed current taps that ensures your machine's switch and emergency stop having controls of your feeder's power source.



In addition, the current tap must provides an overload and under voltage protection systems.

→ Electrical connection is reserved for certified electrician only.

B) OTHER'S COUNTRY:

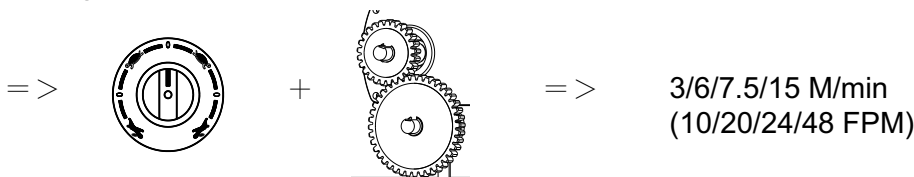
- A separate electrical outlet should be used for your feeder. The circuit should not be less than # 12. Wire properly installed and grounded in accordance with your local codes and ordinances, protected with a 15 Amp time lag fuse or circuit breaker.
- If an extension cord is used,
Less than 30M (100Ft), use #12 Wire;
Up to 46M (150Ft), use #10 Wire.
- Ensure all line connections make good contact. Low voltage running will damage the motor.
- Properly ground the motor to reduce the risk of electrical shock.
- The motor is equipped with a grounding conductor (green wire with or without yellow stripes.)
- If unsure, consult with a qualified electrician.

● FEED RATE SETTING

WARNING: Disconnect feeder from power source.

A) Choosing the right feed rate is important to achieve efficiency and quality. It is closely related to the speed of your machine, the sharpness of cutter or saw blade, the hardness and the thickness of the material to be removed. Listening to the sound of your cutting tool, look (exam) closely at your sample pieces.

B) Setting the available feed rate is a combination of MOTOR SPEEDS & GEAR SETTINGS.



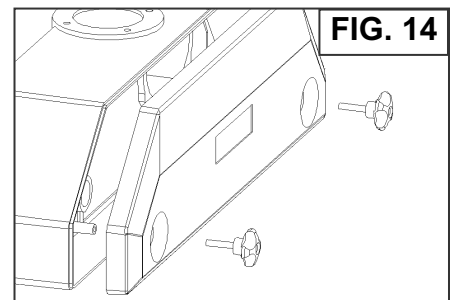
NOTE: If your GEARS come with a **HUB**, make sure it **FACES** the SHAFT avoiding damages to the chain drive. (**FIG. 13**)

NOTE: To enlarge available feeding-speed range (lower/higher,) extra gear set is available at your dealer. [XG-4+4 for Heavy-duties, → 4 + 4 = 8]



C) A gear arrangement and feed rate chart is attached to the **INSIDE** of GEARBOX-COVER.

D) To remove GEARBOX-COVER, remove two KNOBS. (**FIG. 14**)



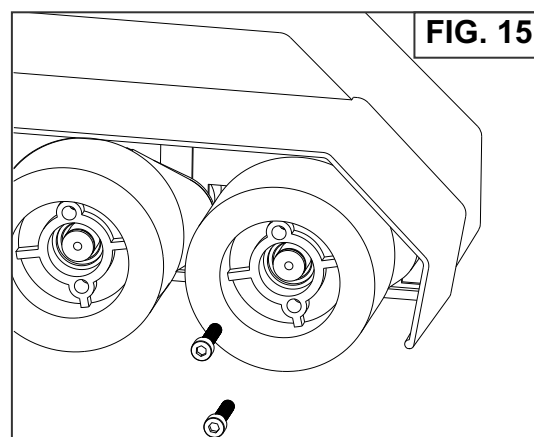
● **ROLLER REPLACEMENT**

(FIG. 15)

WARNING: Disconnect feeder from power source.

Remove SCREWS and replace ROLLER(s).
Replace SCREWS with each roller replacement.

NOTE: “**ROTATE**” roller positions periodically will prolong the usage of rollers.



● **LUBRICATION & MAINTENANCE**

(FIG. 16)

WARNING: Disconnect feeder from power source.

A) **ROLLERS**

Grease every 200 hours (30 days) through fittings, using grease gun.

Recommended Grease: # 2 GREASE. (Shell – Alvania Grease R2 or equivalents.)

B) **GEARS & CHAINS**

Lubricate periodically with grease.

Recommended Grease: # 2 GREASE. (Shell – Alvania Grease R2 or equivalents.)

C) **GEAR BOX**

Change oil first 200 hours (30 days.)

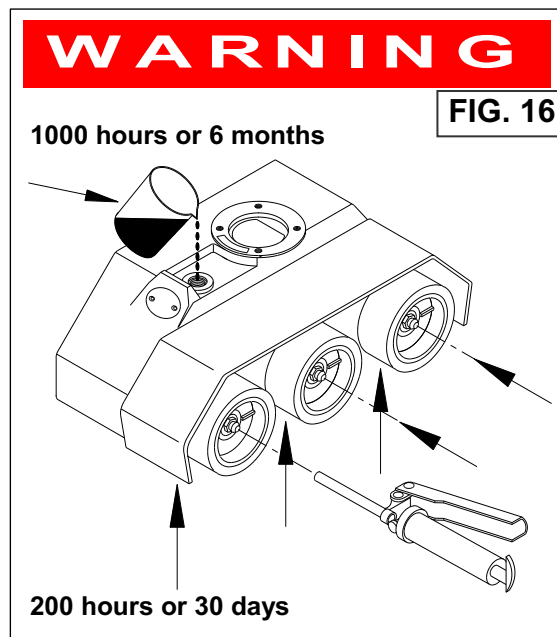
Change oil every 1000 hours (6 months.)

Recommended Gear Oil: MOBIL Mobilgear 630, Shell/Omala 150 BP, Energol GR-XP 150, or equivalents.

Above recommendation is based on 8 hours/day.

D) **OIL CHANGE:** (SEE P. 4 FIG. 6)

→ Loosen LEVER (13) and swing FEEDER off the table. Loosen LEVER (8) on ANGLE-JOINT. Turn FEEDER upside down, loosen OIL-CAPE, and allow time to drain.



E) OIL LEVEL

380CC (38mm, 1-1/2")

F) MAINTENANCE

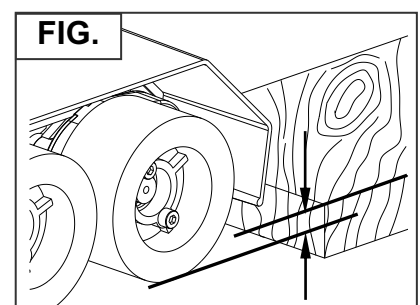
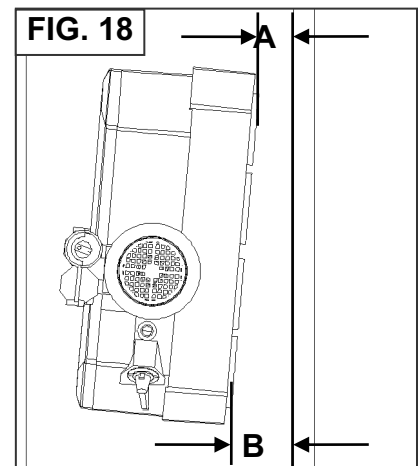
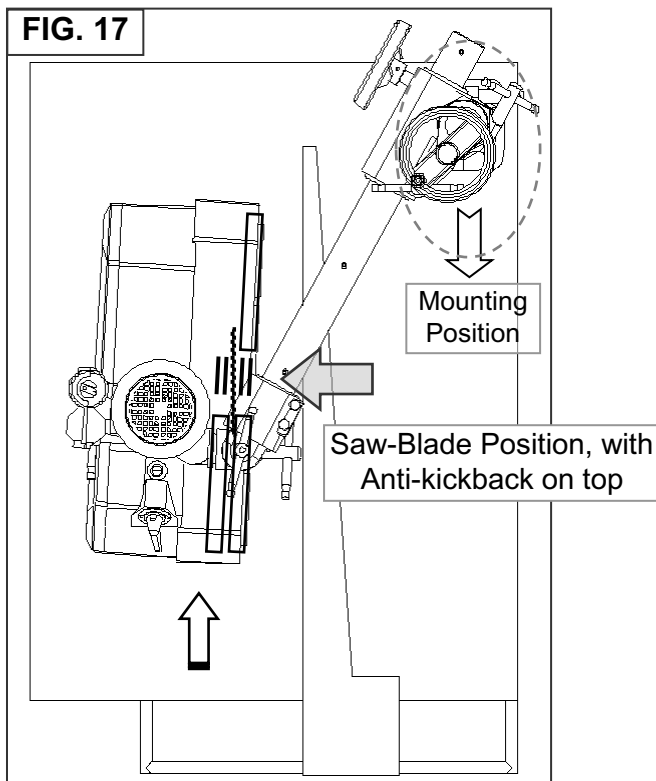
→ Remove working-waste (saw dust, shavings, etc) from the feeder by air gun after each use.

● USING POWERFEEDER ON MACHINES

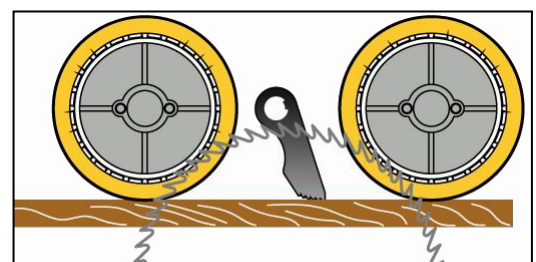
Roller Position -VS- Saw Blade **FIG. 17**

Feeder Position -VS- Fence **FIG. 18** ($B - A \cong 1 \sim 2\text{mm}$ ($1/16''$))

Feeder Pressure -VS- Feeding Stock **FIG. 19** ($\cong 3 \sim 4\text{mm}$ ($1/8''$))

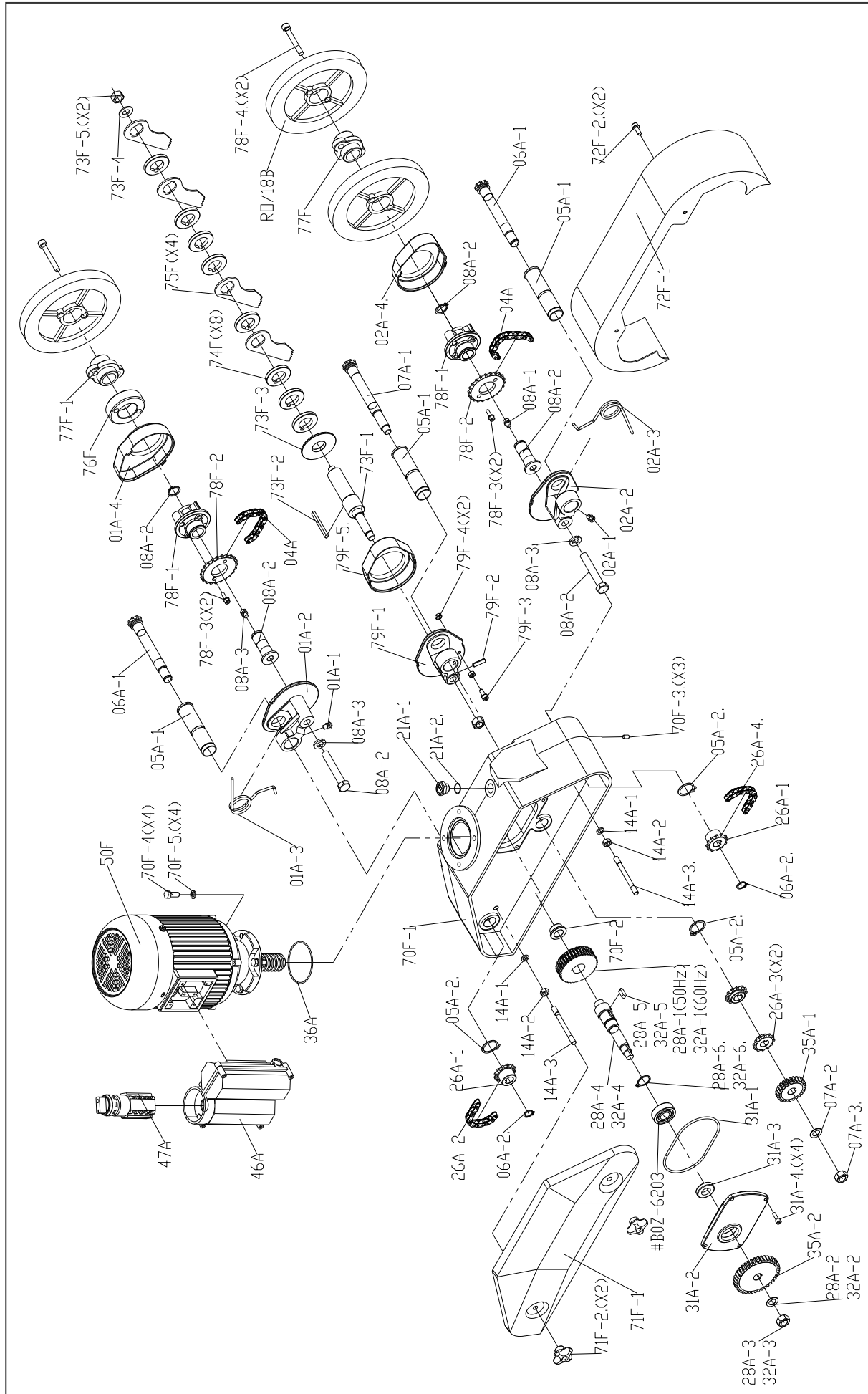


Make sure your saw blade keeps distances to the feeding rollers & the anti-kickback fingers of the feeder before power on.



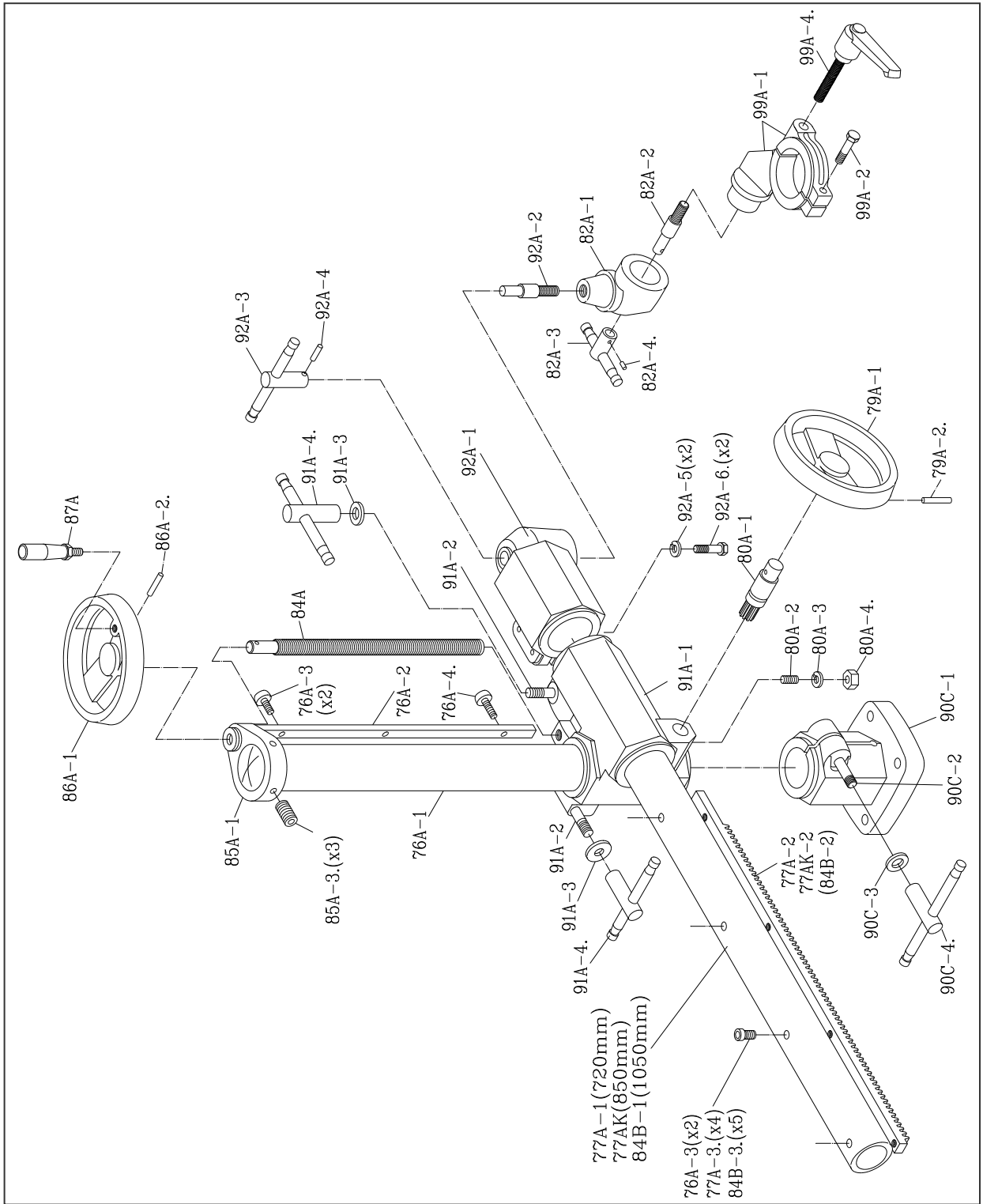
AF 24 SAW-MATE FEEDER HOUSING ASSEMBLY

*. Specifications subject to change without prior notice.



Part No.	Code No.	Description	Q'ty	Part No.	Code No.	Description	Q'ty	Part No.	Code No.	Description	Q'ty
#6203	B0Z-6203	Bearing(#6203)	1	21A-2*	Q01-0015	"O" Ring (P15)	1	70F-3*	S33-0610	Set Screw (M6-1.0Px10L)	3
01A	01A	Sprocket Case Kit(L/Right)	1	26A	26A	Transmission Kit	1	71F	71F	Housing Cover Kit (24)	1
01A-1	U01-1307	Grease Nipple (M6-1.0Px1.0)	1	26A-1	A50-0303	Sprocket	2	71F-1	C01-0366-1	Housing Cover	1
01A-2	C02I0332	Sprocket Case	1	26A-2	L20-0362	Chain (62S)	1	71F-2*	U01-1306	Knob (M8-1.25Px13L)	2
01A-3	U01-0310	Spring	1	26A-3	A50-0307	Double Sprocket	2	72F	72F	Roller Cover Kit	1
01A-4*	U01-0352	Case Cap	1	26A-4*	L20-0340	Chain (40S)	1	72F-1	E01-0337-1	Roller Cover	1
02A	02A	Sprocket Case Kit(L/Left)	1	28A	28A	Worm Gear Kit-50Hz	1	72F-2*	S90/0616	Cap Screw (M6-1.0Px16L)	2
02A-1	U01-1307	Grease Nipple (M6-1.0Px1.0)	1	28A-1	D01-1301-2	Worm Gear (30T, 50Hz)	1	73F	73F	Anti Kick-back Shaft Kit	1
02A-2	C02I0332	Sprocket Case	1	28A-2	R11-0400	Flat Washer (1/2"x25Dx2t)	1	73F-1	H45-0389	Anti Kick-back Shaft	1
02A-3	U01-0310	Spring	1	28A-3	N13-012R	Nut (M12-1.75P)	1	73F-2	P12-5560	Key (5x5x60L)	1
02A-4*	U01-0352	Case Cap	1	28A-4	H45-0346	Worm Gear Shaft	1	73F-3	G41-0365	Dust Shield	1
04A	04A	Chain Kit (26S)	2	28A-5	P12-6618	Key (6x6x18L)	1	73F-4	R18-0006	Flat Washer (M12x35D)	1
04A*	L20-0326	Chain (26S)	1	28A-6*	R21-0022	Snap Ring (22)	1	73F-5*	N13-012R	Nut (M12-1.75P)	2
05A	05A	Tube Kit(L)	3	31A	31A	Worm Gear Box Cover Kit	1	74F	74F	Spacer Kit	1
05A-1	G42-0303	Tube (27x19x103)	1	31A-1	Q02-0102	"O" Ring (G102)	1	74F*	G41-0364	Anti Kick-back Spacer	8
05A-2*	R21-0026	Snap Ring (26)	1	31A-2	C02-0345	Worm Gear Cover	1	75F	75F	Anti Kick-back Kit	1
06A	06A	Sprocket Shaft Kit(L)	2	31A-3	Q03-0302	Oil Seal (17x32x7t)	1	75F*	E01-0338	Anti Kick-Back	4
06A-1	H45-0307	Sprocket Shaft	1	31A-4*	S23-0516	Cap Screw (M5-0.8Px16L)	4	76F	G41-0363	Roller Spacer	1
06A-2*	R21-0015	Snap Ring (15)	1	32A	32A	Worm Gear Kit-60Hz	1	77F	77F	Roller Adaptor Kit	2
07A	07A	Sprocket Shaft Kit(L)	1	32A-1	D01-0301-2	Worm Gear(60Hz)	1	77F*	A20-0347-3	Roller Adaptor	1
07A-1	H45-1308	Sprocket Shaft	1	32A-2	R11-0400	Flat Washer (1/2"x25Dx2t)	1	78F	78F	Roller Supporter Kit	2
07A-2	R11-0400	Flat Washer (1/2"x25Dx2t)	1	32A-3	N13-012R	Nut (M12-1.75P)	1	78F-1	C02-0333A	Roller Supporter	1
07A-3*	N13-012R	Nut (M12-1.75P)	1	32A-4	H45-0346	Worm Gear Shaft	1	78F-2	A50-0309	Sprocket	1
08A	08A	Roller Spindle Kit(L)	2	32A-5	P12-6618	Key (6x6x18L)	1	78F-3	S90/0840	Cap Screw (M8-1.25Px40L)	2
08A-1	U01-1307	Grease Nipple (M6-1.0Px1.0)	1	32A-6*	R21-0022	Snap Ring (22)	1	78F-4*	S90/0616	Cap Screw (M6-1.0Px16L)	2
08A-2	H45-0366A	Roller Spindle Kit	1	36A	36A	"O" Ring (G70)	1	79F	79F	Sprocket Case Kit	1
08A-3*	R12-0012	Spring Washer (M12)	1	36A*	Q02-0070	"O" ring (G70)	1	79F-1	C02/0332	Sprocket Case	1
14A	14A	Stud Kit	2	46A	46A	Switch Box Kit -L	1	79F-2	P21-0622	Lock Pin (6x22L)	1
14A-1	R12-0008	Spring Washer (8.3x1.8t)	1	47A	47A	Switch Kit	1	79F-3	S90/0616	Cap Screw (M6-1.0Px16L)	1
14A-2	N13-008R	Nut (M8-1.25P)	1	50F	50F	Motor w/o Switch (1/2HP-4/8P)	1	79F-4	N13-006R	Nut (M6-1.0P)	2
14A-3*	S83-0886	Stud (M8-1.25Px86L)	1	70F	70F	Housing Frame Kit (24)	1	79F-5*	U01-0352	Case Cap	1
21A	21A	Oil-Cap Kit	1	70F-1	C01-0362-2	Housing Frame	1	RO/18B	C01-0418-2	PU Roller (φ180x20)	3
21A-1	U01-0308	Oil Cap	1	70F-2	A50-0301	Bushing (29Dx23Dx(9+3))	1				

US 03 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
76A	76A	Vertical Column Kit		80A-1	G41-0304	Pinion	1	90C	90C	Base Kit	
76A-1	G42-1301-2	Vertical Column(560mm)	1	80A-2	S33-0825	Screw	1	90C-1	A20-1301-4	Column Base	1
76A-2	G41-0301-2	Key	1	80A-3	R12-0008	Spring Washer	1	90C-2	S83-1270	Stud	1
76A-3	S23-0510	Screw	2	80A-4*	N13-008R	Nut	1	90C-3	R11-0400	Washer	1
76A-4*	S23-0516	Screw	1	82A	82A	Swivel Cone Kit		90C-4*	HA-1306L	Handle(200mm L)	1
76AK	76AK	Vertical Column Kit		82A-1	A20-1304-4	Swivel Cone	1	91A	91A	Elevating Bracket Kit	
76AK1	G42-0314-2	Vertical Column(850mm)	1	82A-2	G41-1305	Stud	1	91A-1	A20-1302-4	Elevating Bracket	1
76AK2	G41-0301-2	Key	1	82A-3	HA-0307	Handle	1	91A-2	S83-1270	Stud	2
76AK3	S23-0510	Screw	2	82A-4*	P21-0622	Lock Pin	1	91A-3	R11-0400	Washer	2
76AK4*	S23-0516	Screw	1	84A	G41-1303	Elevating Screw	1	91A-4*	HA-1306	Handle	2
77A	77A	Over Arm Kit (720mm)		84B	84B	Over Arm Kit (1050mm)		92A	92A	Over Arm Cone Kit	
77A-1	G42-0302-2	Over Arm (720mm)	1	84B-1	G42-0308-2	Over Arm (1050mm)	1	92A-1	A20-1303-4	Over Arm Cone	1
77A-2	G42-1302-1	Rack (650mm)	1	84B-2	G41-1322-1	Rack (980mm)	1	92A-2	G41-1305	Stud	1
77A-3*	S23-0510	Screw	4	84B-3*	S23-0510	Screw	5	92A-3	HA-0307	Handle	1
77AK	77AK	Over Arm Kit (850mm)		85A	85A	Column Cape Kit		92A-4	P21-0622	Lock Pin	1
77AK1	G42-0315-2	Over Arm (850mm)	1	85A-1	C02-1314A	Column Cape	1	92A-5	R12-0010	Washer	2
77AK2	G42-1302-1	Rack (650mm)	1	85A-3*	S33-0812	Screw	3	92A-6*	S13-1050	Svrew	2
77AK3*	S23-0510	Screw	4	86A	86A	Handwheel Kit		99A	99A	Motor Clamp kit	
79A	79A	Handwheel Kit		86A-1	U01-0381A	Elevating wheel	1	99A-1	A20-1305-5	Motor Clamp	1
79A-1	U01-0382	Handwheel	1	86A-2*	P21-0636	Lock Pin	1	99A-2	S13-0850	Screw	1
79A-2*	P21-0636	Lock Pin	1	87A	U01-1305	Wheel Handle	1	99A-4*	U01-0395	Pull Handle	1
80A	80A	Pinion Kit									