OPERATING & MAINTENANCE
MANUAL

PLEASE READ AND STUDY THIS MANUAL THOROUGHLY,
BEFORE YOU OPERATE THE MACHINE.

HEAVY REBAR CUTTER

REFLEX-RHD42A



Registered
ISO 9001:2000

UKAS
QUALITY
MANAGEMENT
127-A



REFLEX-RHD42A MANUAL

SAFETY PRECAUTION

- PLEASE READ THIS MANUAL THOROUGHLY AND STUDY THE STRUCTURE OF THE EQUIPMENT, SAFETY INFORMATION AND PRECAUTIONS, BEFORE YOU TRANSPORT, INSTALL, OPERATE, MAINTAIN OR CHECK THE EQUIPMENT.
- IN THIS MANUAL, SAFETY PRECAUTION IS DIVIDED INTO <Warning> AND <Caution>.

CAUTION — IF THE EQUIPMENT IS WRONGLY HANDLED, A DANGEROUS SITUATION INCLUDING DEATH OR SERIOUS INJURY IS LIKELY TO TAKE PLACE.

WARNING — IF THE EQUIPMENT IS WRONGLY HANDLED, PHYSICAL INJURY OF A MEDIUM LEVEL OR PROPERTY DAMAGED IS LIKELY TO TAKE PLACE.

CAUTION — MAY ALSO RESULT IN SERIOUS HAZARDS. SINCE ALL MAJOR POSSIBILITIES ARE WRITTEN IN THIS MANUAL, PLEASE MAKE SURE TO OBSERVE THEM WITHOUT FAIL.

- IF CUTTING PROCESS IS PERFORMED BEYOND THE CUTTING CAPACITY OF THE MACHINE, IT WILL CRITICALLY LEAD TO SERIOUS DAMAGE IN CUTTER BLOCKS OR THE MACHINE ITSELF.
- RUN THE MACHINE IDLE FOR MORE THAN 1 MINUTE BEFORE GOING INTO THE ACTUAL CUTTING PROCESS.
- CHECK THE BOLTS AND NUTS OF BLADE TIGHTENED BEFORE OPERATING.
- DO NOT USE THE CUTTER WITH WET HANDS AND KEEP IT DRY TO PREVENT AN ELECTRIC SHOCK.
- ALWAYS BE CAREFUL SO THAT YOU MAY NOT GET YOUR FINGERS HURT WHEN YOU PERFORM CUTTING PROCESS, WITH THE BAR HELD ON YOUR HAND.
- STOP THE CUTTING PROCESS BY PRESSING THE OFF SWITCH WHEN THERE OCCURS AN ABNORMAL PHENOMENON IN THE COURSE OF CUTTING PROCESS.
- MAKE SURE THAT YOU WILL BE CAUTIOUS TO AVOID A POSSIBILITY OF INJURIES IN HAND DURING CUTTING PROCESS.
- THE ADJUSTABLE STOPPER (HOLDER OF BLADE) FUNCTIONS TO MAINTAIN THE BAR IN A CORRECT POSITION AND KEEP THE BAR(S) FROM SHAKING DURING CUTTING PROCESS AND MUST BE PROPERLY SET FOR EACH SIZE OF BAR BEFORE MAKING CUT.
- FOR BETTER PERFORMANCE AND LONGER LIFE OF THE MACHINE, YOU ARE RECOMMENDED TO PERFORM CUTTING PROCESS WITH INTERMITTENT PAUSE, AFTER CUTTING FOR A LONG PERIOD OF TIME.
- PRIOR TO USE, MAKE SURE THAT THE OPERATOR SHOULD TIGHTEN PROPERLY BOTH THE BOLT FOR ADJUSTING CUTTER BLOCK AND FOR FIXING CUTTER BLOCK AS THE BOLT MIGHT GET LOOSENED BY THE VIBRATION CAUSED DURING CUTTING PROCESS. ESPECIALLY, THE BOLT FOR FIXING CUTTER BLOCK MUST BE STRICTLY CHECKED.





REFLEX MACHINERY

CONTENT

SPECIFICATION

NOMENCLATURE

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MAINTENANCE AND CHECKPOINTS



THANK YOU VERY MUCH FOR SELECTING **REFLEX-RHD42A**, A STEEL BAR CUTTING EQUIPMENT PRESENTED BY REFLEX MACHINERY.

THIS MANUAL IS PREPARED FOR THE PURPOSE TO MAINTAIN A GOOD CONDITION OF THE EQUIPMENT FOR AN EXTENDED PERIOD OF TIME, ENHANCE WORK EFFICIENCY, AND ALLOW THE MACHINE TO BE OPERATED SAGELY AND ACCURATELY. PLEASE KEEP THE MANUAL CLOSE AT HAND AT ALL TIME, SO THAT IT CAN BE SUFFICIENTLY UTILIZED FOR DAILY OPERATION.



REFLEX-RHD42A MANUAL

SPECIFICATION (SYSTEM STRUCTURE)

THIS EQUIPMENT IS A CUTTING SYSTEM THAT IS CAPABLE OF CUTTING HARD-STEEL BARS (HIGH-BARS) WITH DIAMETERS RANGING FROM 10mm TO 42mm RAPIDLY AND ACCURATELY.

THIS MACHINE DEVELOPED FOR YOUR MAXIMUM OUTSTANDING GROWTH IN PRODUCTIVITY.

SUPPLY MATERIAL

1) DIAMETER OF APPLICABLE HARD-STEEL BAR : HD10 ~ HD42
2) APPLICABLE STEEL BAR : DEFORMED STEEL BAR
3) LENGTH OF STEEL BAR : ∞

MAX SIMULTANEOUSLY APPLICABLE STEEL BARS

mm	Ø10	Ø13	Ø16	Ø19	Ø22, Ø25	Ø29~Ø42
SD500	8	6	5	3	2	1

WARNING MAKE SURE TO OBSERVE THE ABOVE MAX LIMITS

POWER SUPPLY

1) ELECTRIC POWER : THREE PHASE ¡ ¿220V~450V ¡ ¿50Hz/60Hz
2) WIRING : OBSERVE SPECIFIED WIRING REQUIREMENTS. THE WIRE SIZE SHOULD BE AT LEAST 2.0mm IN DIAMETER.

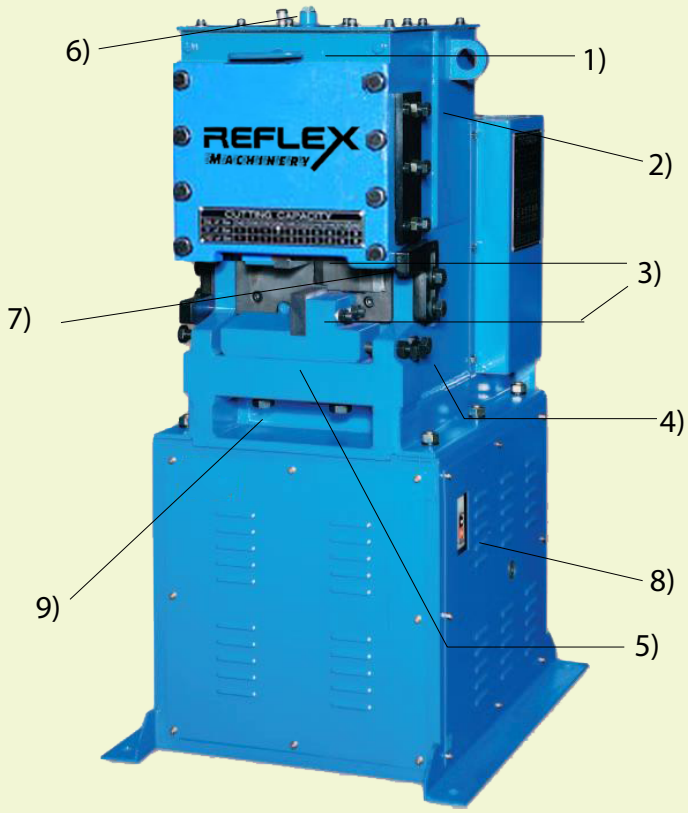
EQUIPMENT DIMENSION AND WEIGHT

1) EQUIPMENT DIMENSION : 838(L) ¡ ¿688(W) ¡ ¿1,313(H)
2) TOTAL WEIGHT : 836Kg





NOMENCLATURE



1) PULLING KNOB
2) BOLT FOR ADJUSTING SLIDE RAM
3) CUTTING BLADES
4) BOLT FOR ADJUSTING CUTTER BLOCK
5) CUTTER BLOCK
6) OIL INJECTOR
7) REBAR SUPPORTER
8) ON/OFF SWITCH
9) BOLT FOR FIXING CUTTER BLOCK



OPERATION

OPERATION

1) OPEN THE OIL CAP (No.6 IN ILLUSTRATION) AND REFILL THE OIL TILL THE LEVEL OF OIL GAUGE COMES TO 1/3.
2) WHEN YOU PRESS THE "ON" BUTTON, THE MACHINE BECOMES READY TO OPERATE. AT THE SAME TIME, THE POWER LAMP WILL SIGNAL WITH THE LIGHT.
3) INSERT THE BAR BETWEEN 2 CUTTER BLOCKS WITH ADJUSTMENT OF BOTH ADJUSTABLE STOPPERS.
4) A CUTTING PROCESS CAN BE COMPLETED BY PULLING AND RELEASING THE KNOB ONE TIME.

NOTICE

1) DO NOT RE-RUN THE MACHINE IMMEDIATELY AFTER CUTTING. WAIT UNTIL CUTTING IS COMPLETE AND THE MOTOR STOPS.
2) KEEP THE SURROUNDINGS CLEAN AND REMOVE ALL THE STEEL DUST AND FRAGMENT AROUND THE MACHINE.
3) DO NOT RUN THE MACHINE FOR A LONG TIME (TAKE A BREAK EVERY 20 MINUTES) IN CASE THE MACHINE IS BEING USED FOR LONG TIME WITHOUT A BREAK-TIME, OIL LEAKING HAPPEN TO BE BECAUSE OF THE DAMAGE OF SOME SPECIFIC PARTS, ROAD SEAL OR OIL SEAL.
4) DURING A LONG TIME USING THE ELECTRONIC MOTOR MAY BE HEAT THEN THE MOTOR COIL ENAMEL MAY DAMAGE.
5) CHECK THE OIL FREQUENTLY. (OIL MIGHT LEAK OR CONSUME ITSELF)
6) CHECK IF BLADE IS TIGHTLY FASTENED. IT MIGHT BE LOOSENED AFTER SEVERAL CUTTING ACTIONS)

IN CASE OF THE MACHINE IS BEING USED FOR LONG TIME WITHOUT A BREAK, IT MAY BRING OUT THE DAMAGE OF THE MOTOR OR OF THE BEARING THEN SOME NOISE MAY HAPPEN.





REFLEX MACHINERY

MAINTENANCE & CHECKPOINT

CHECK-UP AND REPAIR

1) IF THE UPPER CUTTER BLOCK MOVES WITH A SLIGHT SHAKE, CHECK RELATED SCREWS AND BOLTS ARE PROPERLY TIGHTENED.
2) IF V BELT IS EXCESSIVELY ABRADED, CHECK THE TENSION. TENSION CAN BE ADJUSTED WITH HEXAGONAL BOLT.
3) IF THE MACHINE OPERATES WITH EXCESSIVE NOISE OR DOES NOT OPERATE NORMALLY, CHECK IF THE LUBRICANT IS SUFFICIENTLY FILLED UP IN OIL PUMP.
4) IF THE CUTTER BLOCK(S) MOVES BACK TO ITS INITIAL POSITION WITH A "CLICKING" NOISE, CHECK THE BOLT FOR ADJUSTING SLIDER RAM THAT IS PROPERLY TIGHTENED.
5) IF CUTTING EDGES OF EACH CUTTER BLOCK BECOME BLUNT WITH PERSISTENT USE, USE ANOTHER CUTTING EDGES OF THE CUTTER BLOCK. ALL FOUR CUTTING EDGES OF EACH CUTTER BLOCK ARE AVAILABLE FOR CUTTING PROCESS.
6) FOR USING THE OTHER EDGES OF CUTTER BLOCK, LOOSEN THE BOLT FOR FIXING CUTTER BLOCK (No.9 IN ILLUSTRATION) AND THEN, REVERSE THE CUTTING EDGE.
7) PRIOR TO USE, CHECK IF MAJOR BOLT AND NUT ARE PROPERLY TIGHTENED. SPECIALLY, THE BOLT FOR FIXING CUTTER BLOCK SHOULD BE STRICTLY CHECKED.
8) IF THE LAMP DOES NOT WORK NORMAL, DESPITE CORRECT SUPPLY OF POWER, CHECK THE ELECTRIC CORD LINKING POWER SOURCE TO THE MACHINE. IF THE CORD IS NORMAL, OPEN THE CONTROL BOX AND CHECK IF THE FUSE IN IT WELL CONNECTED.

DAILY CHECK POINT

1) USE THE PROPER OIL (SHELL TELLUS OIL #46)
2) KEEP THE MACHINE CLEAR AFTER USING.



RETURN CHECK BEFORE WORK

CHECK POINT	SOLUTION
DID YOU CHECK THE POWER VOLTAGE?	ACCORDING TO THE MACHINE SPECIFICATION.
DID YOU CHECK THE MACHINE'S OIL?	IF THERE IS OIL-LEAKING, FEEL FREE TO CONTACT OUR AFTER SALES CENTER.
DID YOU FASTEN THE BOLTS?	ESPECIALLY AT THE KNIFE, AIR RELEASE BOLTS AND OIL SUPPLYING BOLTS.
DID YOU HAVE ANY ABNORMAL NOISE?	CHECK THE MOTOR, STATE OF THE MACHINE, ETC
DID YOU WORK WITH ANY MATERIAL WITHIN CAPACITY?	NO MORE THAN HD42mm REBAR.
DID YOU HAVE ANY DANGEROUS OBSTACLE?	SAFETY SECURITY.

CHECK BEFORE CALLING TO A/S CENTER

CHECK POINT	CAUSE	SOLUTION
MOTOR DOES NOT RUN OR RUNS IMPROPERLY	- MOTOR WILL NOT RUN	- CHECK THE ON/OFF SWITCH WITH THE CABLE.
OIL LEAKAGE	SEALANT OF OIL MIGHT BE LOOSENED	- CHECK THE OIL GAUGE.
MACHINE OPERATES BUT NOT PERFORM THE CUTTING	- SHORT OF OIL - AIR TRAP	- REFILL THE OIL - TAKE OUT THE TRAPPED AIR.
MOTOR RUNS BUT BLADE DOES NOT WORK	SHORT OF OIL	SHELL TELLS #46





REFLEX MACHINERY

EXTENSION CABLE

1) YOU WILL HAVE TO PREPARE EXTENSION CABLE, IF THE POWER SOURCE IS FAR AWAY FROM THE MACHINE.
2) THE EXTENSION CABLE MUST BE PROPERLY THICK FOR THE LENGTH. IF IT IS NOT ADEQUATELY THICK, THE VOLTAGE TENDS TO FLUCTUATE. THIS MAY LEAD TO WEAKENED MOTOR POWER.
3) WITH RESPECT TO LENGTH OF THE CABLE, SHORTER IS BETTER THAN THICKER.
4) REFER TO THE FOLLOWING THICKNESS OF CABLE

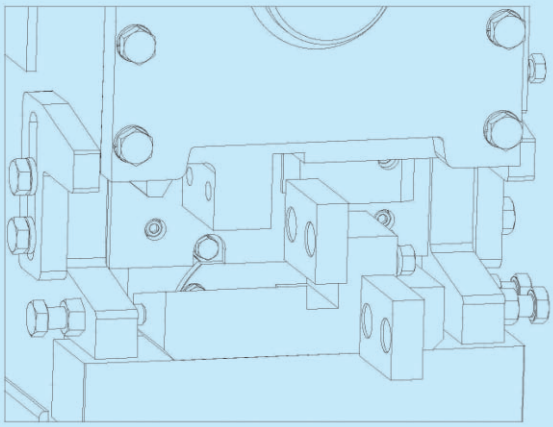
MAX LENGTH	THICKNESS NOMINAL CROSS SECTIONAL AREA
15M	2.0sq × 3C
25M	3.5sq × 3C
45M	5.5sq × 3C

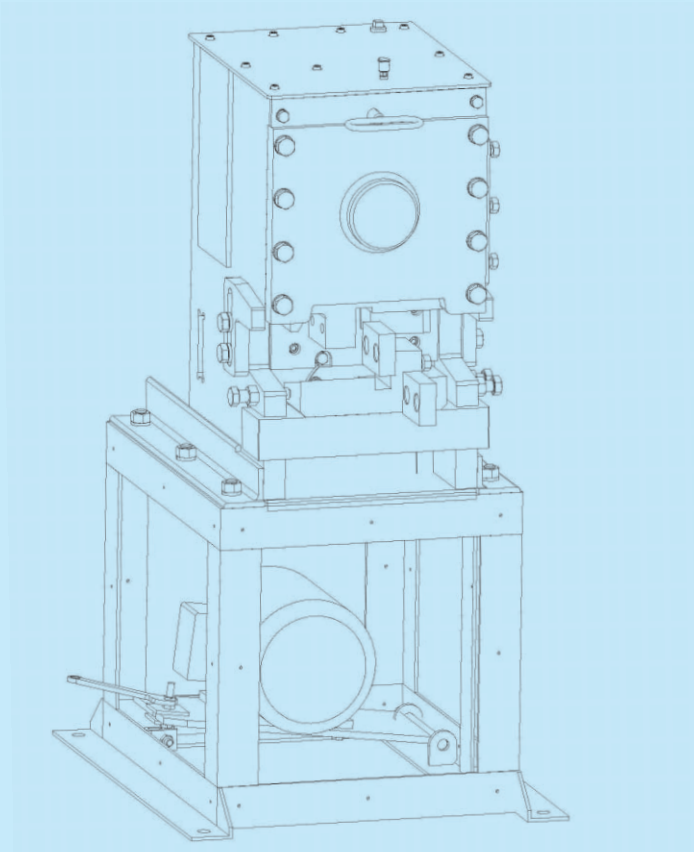
REFLEX MACHINERY



REFLEX-RHD42A MANUAL

Replacement of Blades



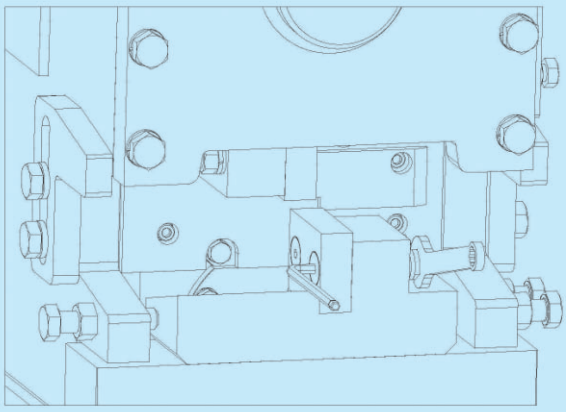


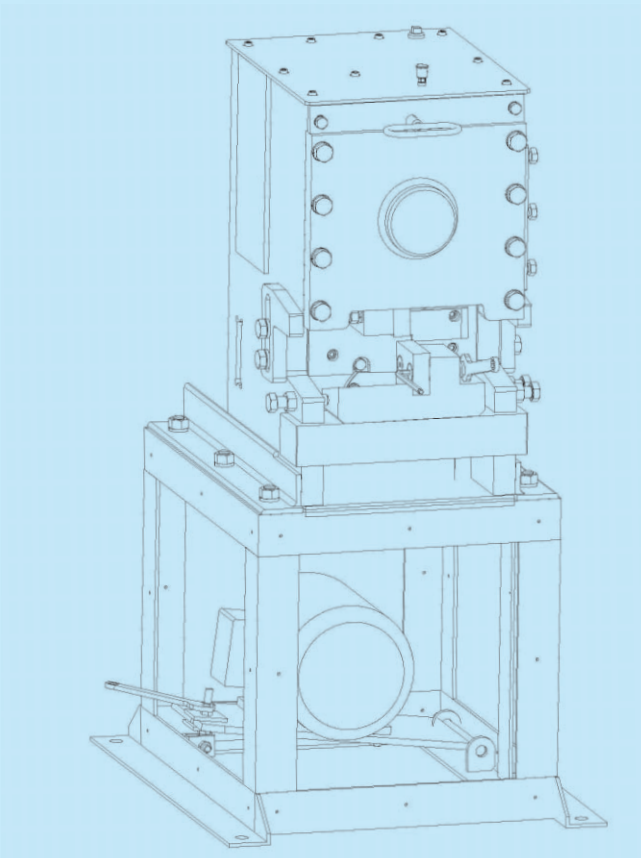




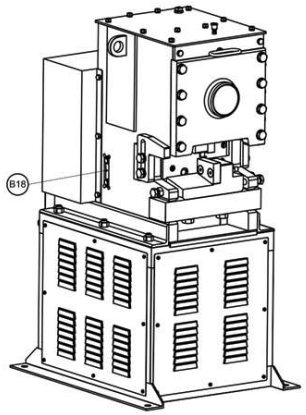
REFLEX MACHINERY

Replacement of Blades

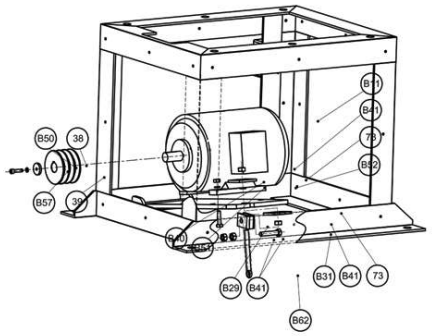




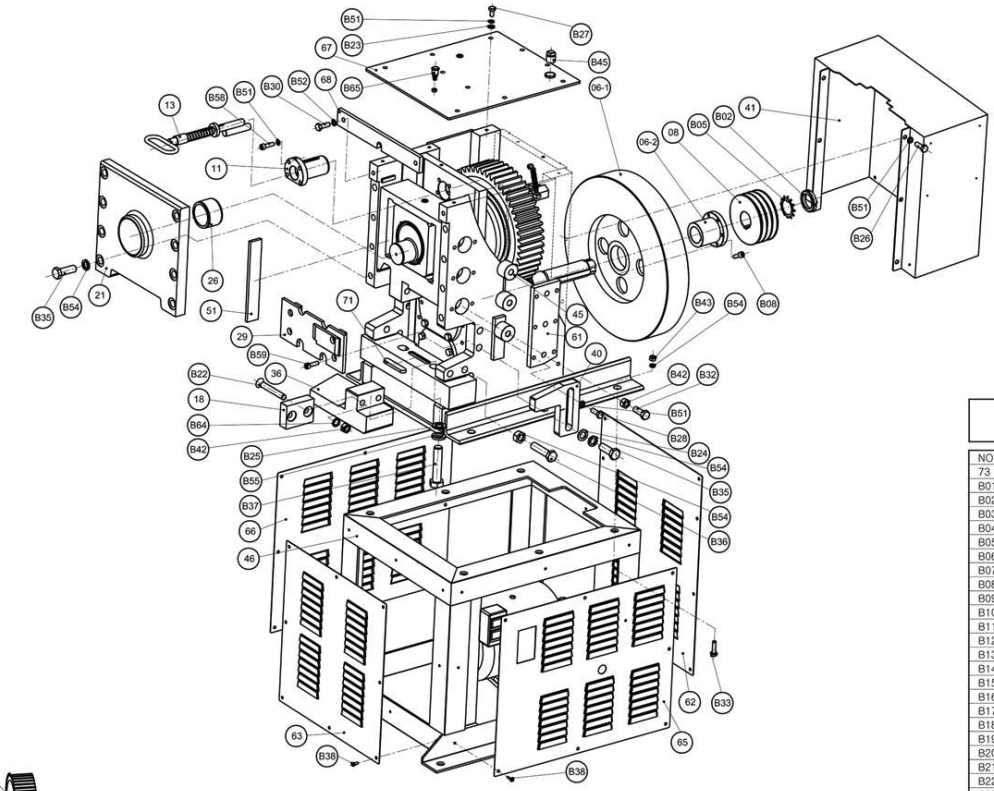
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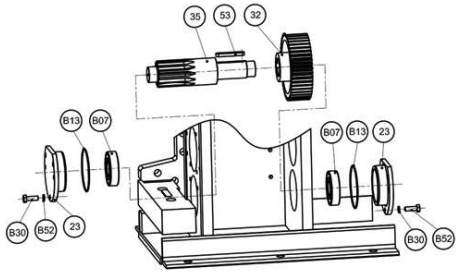


ISO METRIC VIEW

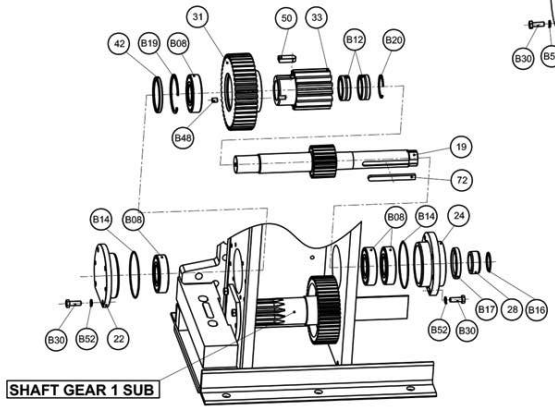


FRAME DIE ASS'Y



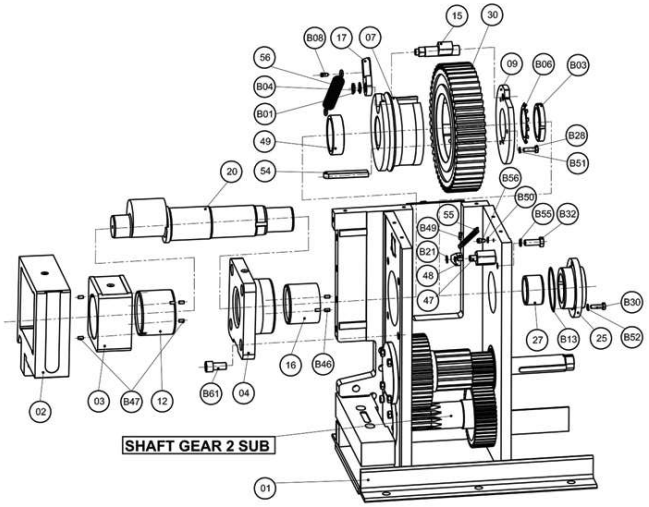


SHAFT GEAR 1 SUB



SHAFT GEAR 1 SUB

SHAFT GEAR 2 SUB



SHAFT GEAR 2 SUB

SHAFT GEAR 3 SUB

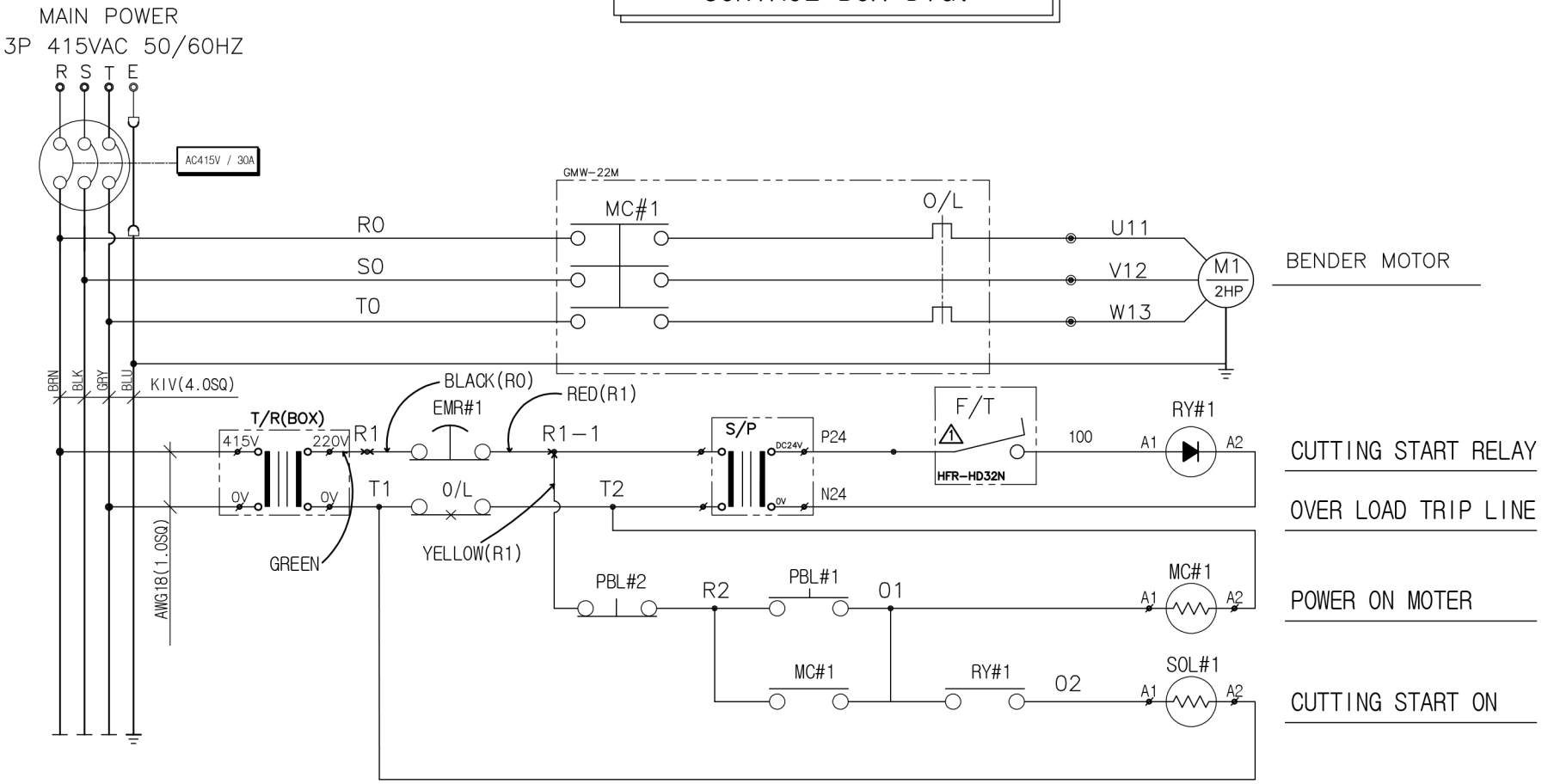
PRODUCT PART LIST

NO	DESCRIPTION	Q'TY	NO	DESCRIPTION	Q'TY
73	PLATE	1	01	BASE FRAME	1
B01	LOCK NUT	1	02	SLIDE RAM	1
B02	LOCK NUT	1	03	CAM SLIDE	1
B03	LOCK NUT	1	04	BEARING CASE(FRONT)	1
B04	LOCK WASHER	1	05	KNIFE DIE	1
B05	LOCK WASHER	1	06-1	FLY WHEEL	1
B06	LOCK WASHER	1	06-2	SHAFT HOUSING	1
B07	BALL BEARING	2	07	CLUTCH	1
B08	BALL BEARING	4	08	WHEEL PULLEY	1
B09	DUST SEAL	1	09	FLANGE	1
B10	BUTTER SWICH	1	10	SLIDE PLATE	2
B11	MOTOR	1	11	HANDLE FLANGE	1
B12	NEEDLE BEARING	2	12	OILLESS BEARING	1
B13	OIL RING	3	13	HANDLE ASS'Y	1
B14	OIL RING	2	15	CLUTCH SHAFT	1
B15	OIL RING	1	16	OILES BEARING	1
B16	OIL RING	1	17	CAM	1
B17	OIL SEAL	1	18	KNIFE	2
B18	SQUARE OIL GAUGE	1	19	MIDDLE SHAFT	1
B19	SNAP RING	1	20	CRANK SHAFT	1
B20	SNAP RING	1	21	TAEYEON COVER	1
B21	SNAP RING	1	22	BLOCKED COVER	1
B22	PLAT SOCKET SCREWS	4	23	LOWER COVER	2
B23	FLAT WASHER	10	24	HOLE COVER	1
B24	FLAT WASHER	4	25	BEARING CASE(BACK)	1
B25	FLAT WASHER	2	26	OILLESS BEARING	1
B26	HEXAGON BOLT	6	27	OILLESS BEARING	1
B27	HEXAGON BOLT	10	28	RETAINER	1
B28	HEXAGON BOLT	9	29	BACK PLATE ASS'Y	1
B29	HEXAGON BOLT	4	30	SPUR GEAR	1
B30	HEXAGON BOLT	21	31	SPUR GEAR	1
B31	HEXAGON BOLT	1	32	SPUR GEAR	1
B32	HEXAGON BOLT	4	33	SPUR GEAR	1
B33	HEXAGON BOLT	6	35	SHAFT GEAR	1
B34	HEXAGON BOLT	6	36	TOOL POST	1
B35	HEXAGON BOLT	12	37	MOTOR BASE	1
B36	HEXAGON BOLT	3	38	MOTOR END PLATE	1
B37	HEXAGON BOLT	2	39	MOTOR PULLEY	1
B38	HEXAGON HEAD BOLT(+)	33	40	STOPPER	2
B39	NUT	1	41	WHEEL COVER	1
B40	NUT	4	42	COLLAR	1
B41	NUT	4	45	PLUG	3
B42	NUT	7	46	FRAME DIE	1
B43	NUT	9	47	BACK STOPPER	1
B44	PT PLUG	1	48	BACK STOPPER PIN	1
B45	PT PLUG	1	49	SPACE COLLAR	1
B46	SET BOLT	3	50	KEY	1
B47	SET BOLT	6	51	STOPPER PLATE	1
B48	SET BOLT	3	53	KEY	1
B49	RECT BOLT	3	54	KEY	1
B50	SPRING WASHER	2	55	TENSION SPRING	1
B51	SPRING WASHER	35	56	TENSION SPRING	1
B52	SPRING WASHER	7	57	NAME STICKER	1
B53	SPRING WASHER	1	58	NAME STICKER	1
B54	SPRING WASHER	18	59	MOTOR HINGE	2
B55	SPRING WASHER	2	60	MOTOR HINGE	1
B56	WRENCH BOLT	1	61	SIDE COVER PLATE	1
B57	WRENCH BOLT	1	62	BACK COVER	1
B58	WRENCH BOLT	4	63	COVER	1
B59	WRENCH BOLT	4	64	SIDE COVER	1
B60	WRENCH BOLT	1	65	SIDE COVER	1
B61	WRENCH BOLT	4	66	SIDE COVER	1
B62	HINGER BOLT	1	67	UPPER COVER	1
B63	V-BELT	3	68	COVER PLATE	1
B64	NORD-LOCK	4	71	KEY	1
B65	OIL CAP	1	72	KEY	1

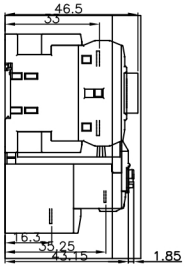
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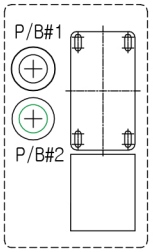
CONTROL BOX DIG.

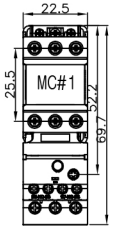
REV No.	DATE	REVISION RECORD	DES.	CHK.	APP.
1	2023.12.03	Safety Foot S/W DC24V input	C.H.GU	C.H.GU	



CONTROL BOX









EMR#1

No.	SYMBOL	PART NAME	STANDARD	Q'TY	UNIT	SAFETY CERTIFICATION	MAKER
1	M1	3P MOTOR	415V/50HZ	1	EA	CE, RU	
2	MC#1	CONTROL BOX	DMW22b 110V	1	EA	CE, RU	
3	EMR#1	EMR S/W	KPB25ER	1	EA	CE, RU	
4		EMERGENCY STOP NAME PLATE	KGEN22/25	1	EA	CE, RU	
5	F/T	FOOT S/W	HFR-HD32N	1	EA	CE, RU	
6	S/P	ADAPTER (SMPS)	TY-800 DC24V 1A	1	EA	CE, RU	
7		PLUG	110V GROUND	1	EA	CE, RU	
8	P/B#1	PUSH BUTTON	KGF-HAIR S26R	1	EA	CE, RU	
9	P/B#2	PUSH BUTTON	KGF-HMIG	1	EA	CE, RU	
10	T/R	TRANS FORMER	KGF-HMIG	1	EA		

3RD ANGLE PROJECTION	WEIGHT	UNIT	SCALE	MODEL NAME	REFLEX-RHD42A-FP
	- Kg	mm(inch)	mm(inch) A4 1/1	UPPER LEVEL GROUP	AUTO CUTTING M/C

DATE	DESIGNED BY	CHECKED BY	APPROVED BY	PART NAME
2023.12.03				CONTROL BOX DIG.

CAPITALMACHINERY SALES	SHEET NO	PART NUMBER
	1/1	

NOTE

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