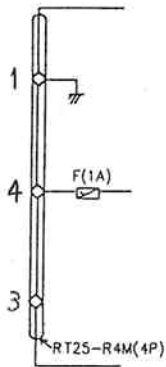
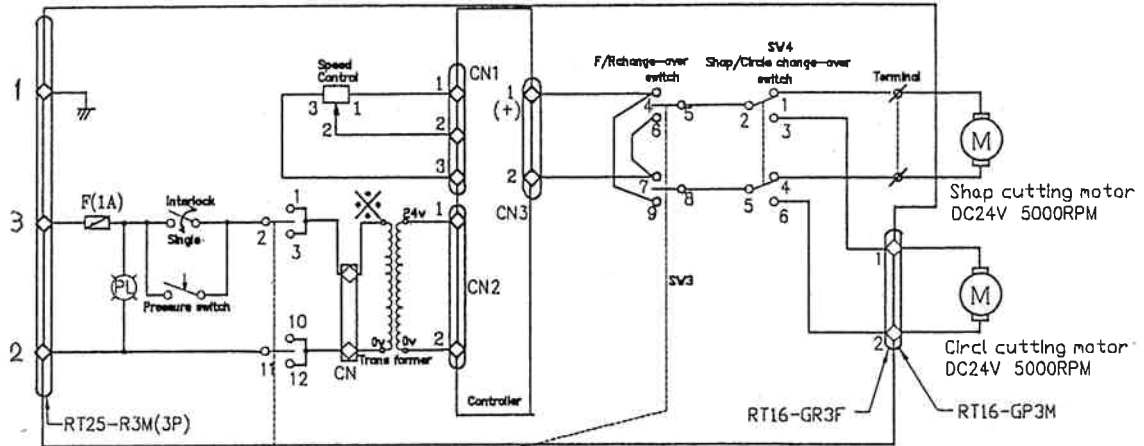
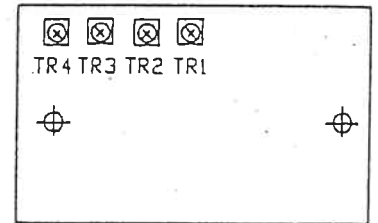


8 Wiring diagram

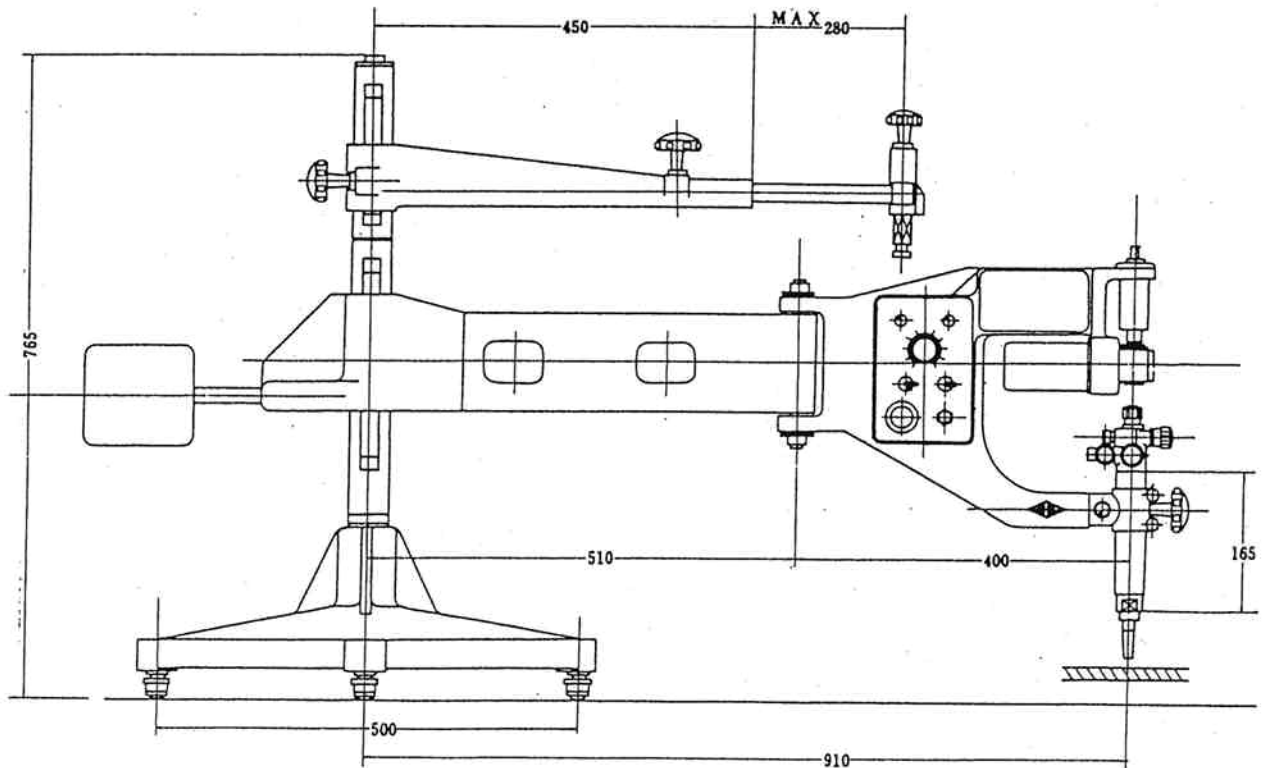


TRANSFORMER Connection		
SUPPLY VOLTAGE	PRIMARY V	SECONDARY
100V	100V	24V
110V	120V	
120V	120V	
200V	220V	
220V	220V	
230V	230V	
240V	240V	

Controller adjust
 TR1: SPEED MAX.
 TR3: SPEED MINI.

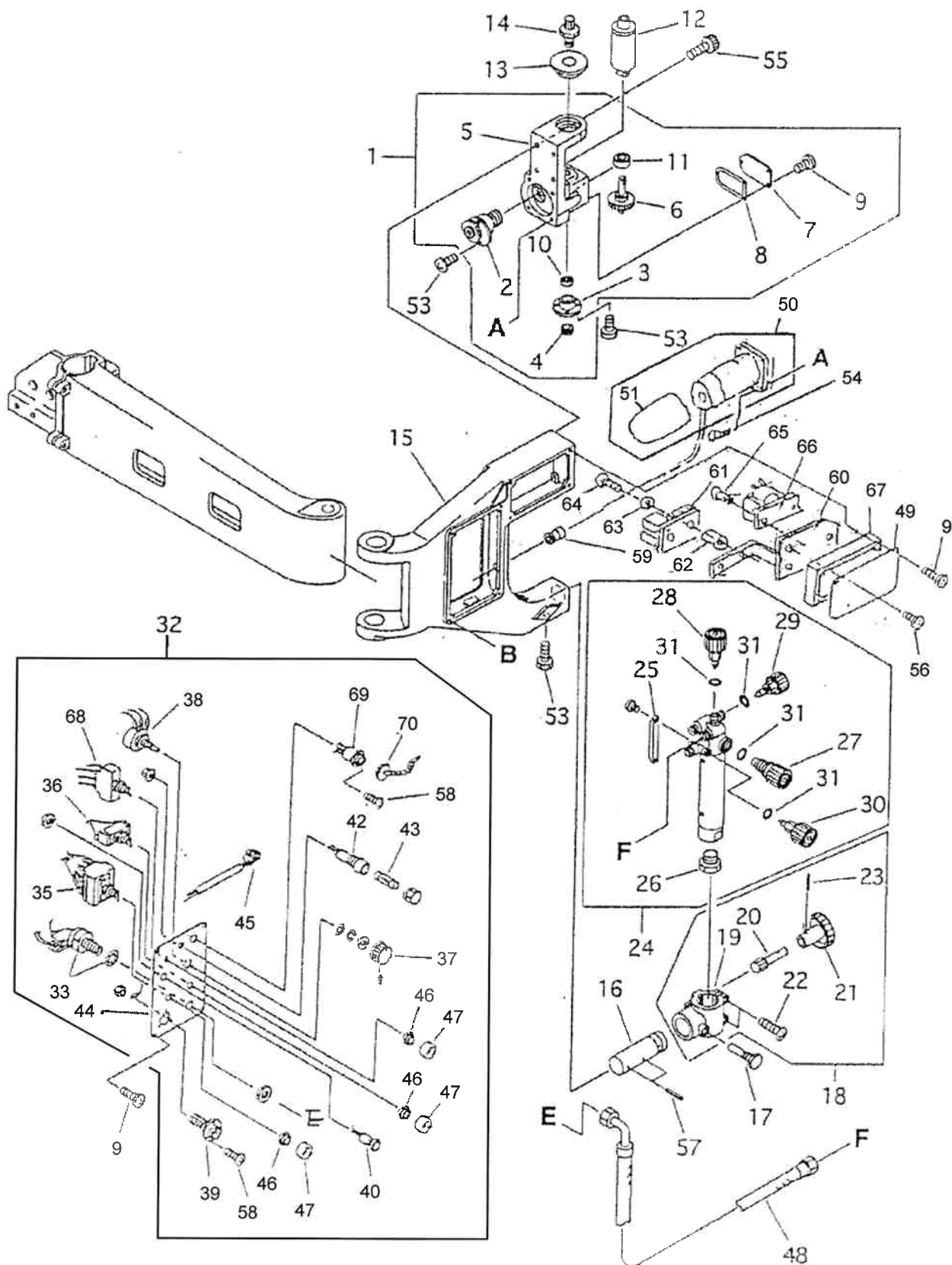


9 Assembly drawing of IK-54D



10 Parts list

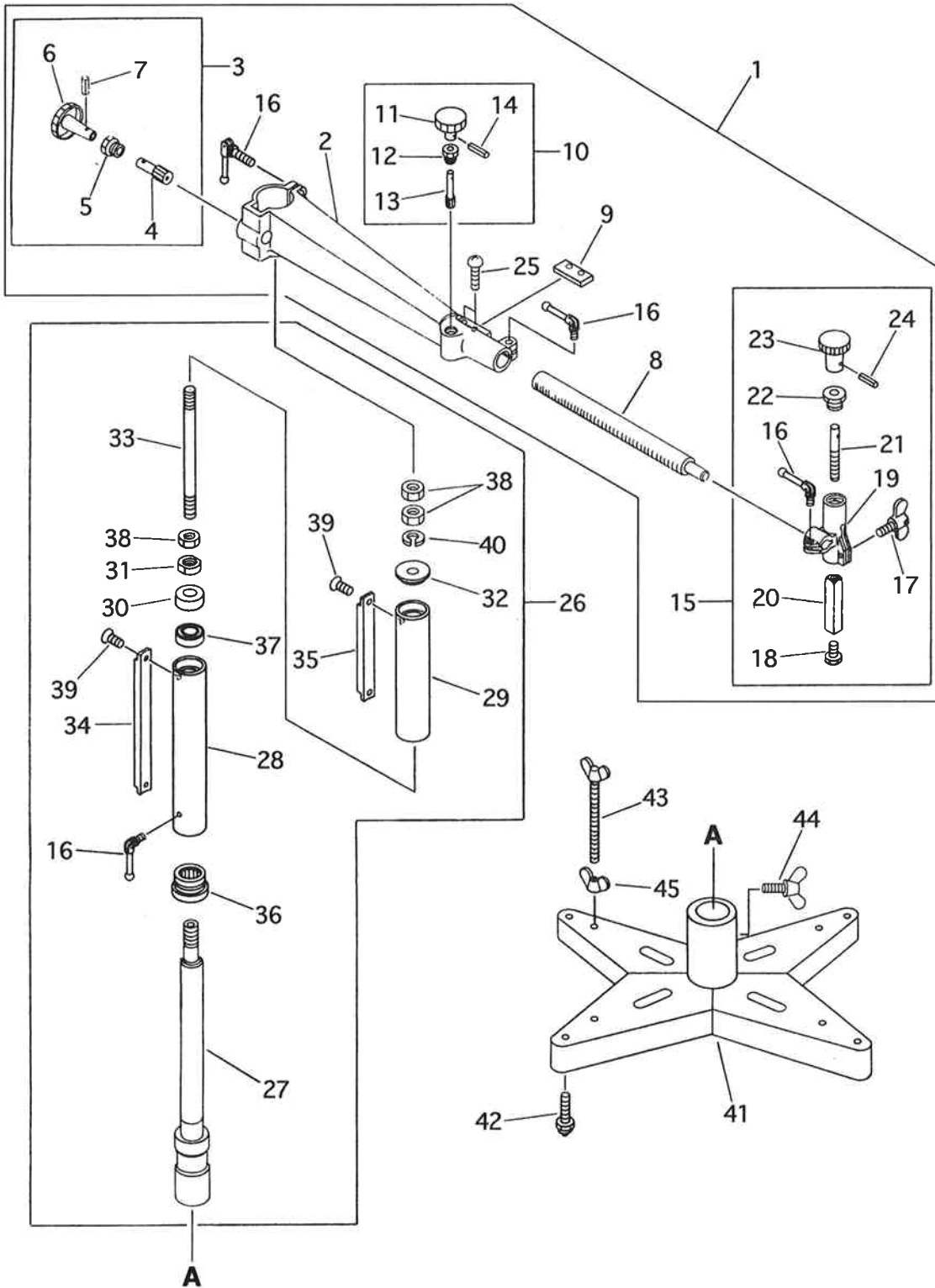
10.1 Gear case, No.1 arm unit



Gear case, No.1 arm unit

ITEM NO.	PART NAME	Q'T Y	STOCK NO.	REMARKS	ITEM NO.	PART NAME	Q'T Y	STOCK NO.	REMARKS
1	Gear case assembly(A)	1	60032200		28	Pressure valve	1	60015417	KE only
2	Gear assembly	1	60030712		29	Valve for Preheat oxygen	1	60015355	Except KE
3	Flange	1	60030713			Valve for Preheat oxygen	1	60015358	KE only
4	Bearing retainer	1	60030714		30	Valve for gas	1	60015356	
5	Gear case	1	60030715		31	O-ring	4	60005026	
6	Worm wheel assembly	1	60030716		32	Operation panel assembly	1	61004234	AC100V
7	Gear cover	1	60030719			Operation panel assembly	1	61004238	USA only AC120V
8	Packing	1	60030720			Operation panel assembly	1	61004252	AC200V-AC240V
9	Screw	11	6C520310	SP-3X10	33	Pressure switch	1	60030736	
10	Bearing	1	60030750	606ZZ		Pressure switch	1	60030737	USA only
11	Bearing	1	60030269	608ZZ					
12	Magnet bobbin	1	60030717	SP-4X10 2pcs	35	Switch	1	60031458	S-43
13	Magnet bracket assembly	1	60030718		36	Switch	1	60030743	DS-140
14	Magnet roller	1	60030721	φ 10 standard	37	Knob	1	60030744	With screw
	Magnet roller	1	60030722	φ 6	38	Variable resistor	1	60030745	
	Magnet roller	1	60030723	φ 8	39	Metal socket	1	6N100061	3P AC100V
	Magnet roller	1	60030724	φ 15		Metal socket	1	6N100062	4P AC200V-AC240V
	Magnet roller	1	60030725	φ 20	40	Lamp holder	1	6N380009	★
15	No.1 arm	1	60030726						★
16	Torch holder bar	1	60030728						★
17	Holder bolt	1	60030729		42	Fuse holder	1	60030749	
18	Torch holder assembly	1	60032203		43	Fuse	1	60030707	1A
19	Torch holder	1	60030727		44	Operation panel	1	60030834	
20	Pinion	1	60030732		45	Terminal	1	60031666	2P
21	Handle	1	60030317		46	Dust protective nut	3	60032480	
22	Screw	2	6C520518	SP-5X18	47	Dust protective cap	3	60032431	
23	Spring pin	1	6B022516	PR-2.5X16	48	Hose for pressure switch	1	60032238	Except USA
24	Torch	1	60010801	Except USA,KE		Hose for pressure switch	1	60030731	USA only
	Torch		60010802	USA only					
	Torch		60010807	KE only	49	Name plate	1	60030734	
25	Rack for torch	1	60010803	With screw	50	Motor	1	61001094	DC24V 5000r.p.m
26	Tip fixing nut	1	60005020		51	PCV cap	1	64000128	
27	Valve for Jet oxygen	1	60015416	Except KE					
	Valve for Jet oxygen	1	60015358	KE only	53	Screw	6	6C520410	SP-4X10
28	Pressure valve	1	60015354	Except KE	54	Screw	4	6C520415	SP-4X15

10.2 Upper arm · Main spindle unit

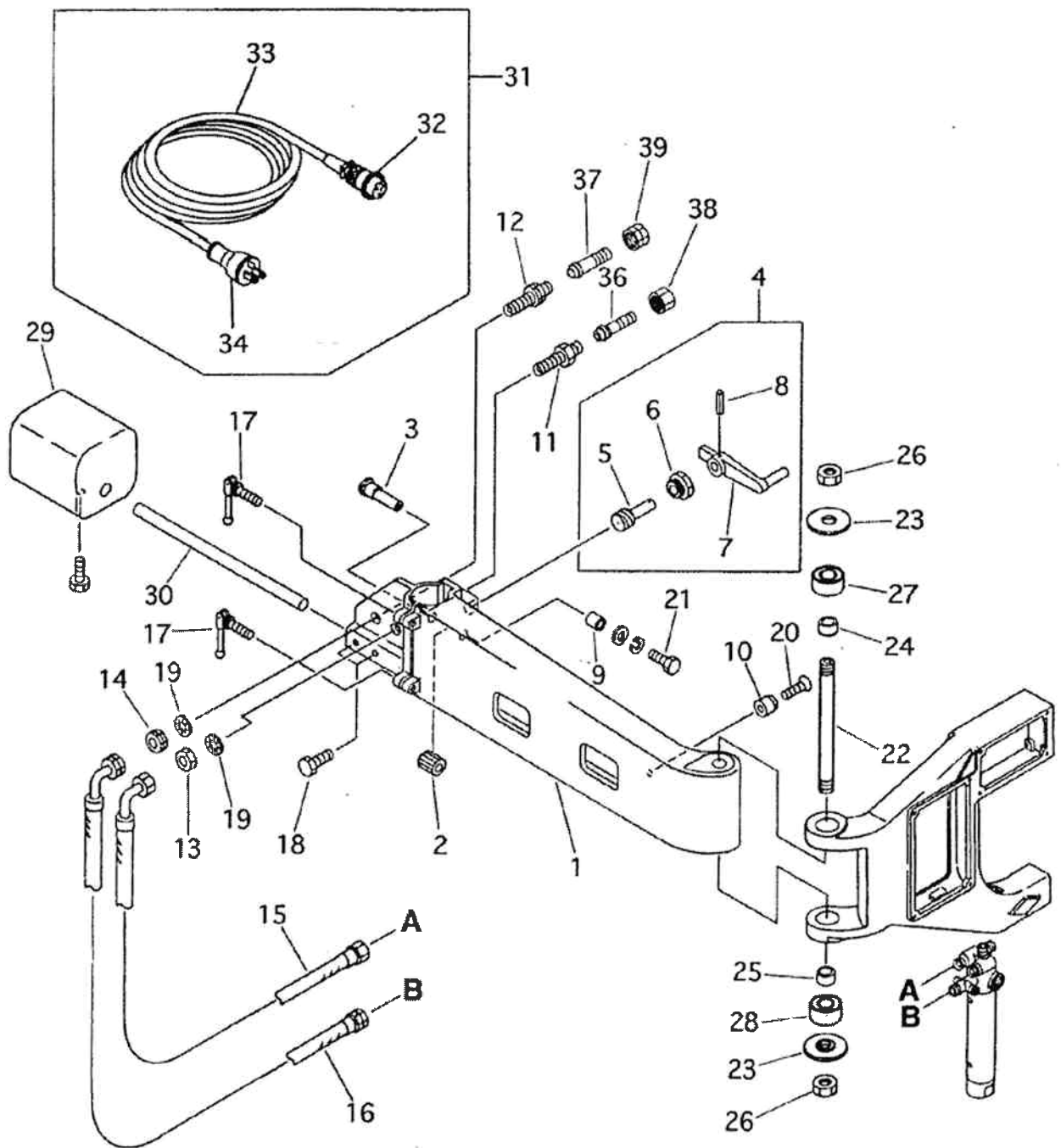


Upper arm • Main spindle unit

ITEM NO.	PART NAME	QTY	STOCK NO.	REMARKS
1	Upper arm assembly	1	60030701	
2	Upper arm base	1	60030767	
3	Handle assembly(B)	1	60032202	
4	Pinion	1	60030768	
5	Pinion metal	1	60030769	
6	Handle(φ 50)	2	60030317	
7	Spring pin	3	PR-2.5×16	
8	Slide bar	1	60030770	
9	Key	1	60030771	
10	Handle holder	1	60030772	
11	Handle(φ 50)	2	60030317	
12	Pinion metal	1	60030909	
13	Pinion	1	60030910	
14	Spring pin	3	PR-2.5×16	
15	Template holder unit	1	60030868	
16	Crank handle	5	60030313	M8×20
17	Wing bolt	1	60030315	M8×20
18	Template set bolt	1	60030773	
19	Template holder base	1	60030774	
20	Slide bar	1	60030775	
21	Slide screw	1	60030776	
22	Pinion metal	1	60030777	
23	Speed adjusting handle	1	60030223	
24	Spring pin	3	PR-2.5×16	
25	Screw	2	SP-3×20	M3×20
26	Main spindle assembly	1	60030702	
27	Main spindle	1	60030778	
28	Rotary pipe	1	60030779	
29	Set pipe	1	60030780	
30	Bearing retainer	1	60030781	
31	Nut	1	60030782	
32	Pipe set plate	1	60030783	

ITEM NO.	PART NAME	QTY	STOCK NO.	REMARKS
33	Set bolt	1	60030788	
34	Rack(A)long	1	60030784	
35	Rack(B)short	1	60030785	
36	Bearing	1	60030786	NAX3030Z
37	Bearing	1	60030787	6004Z
38	Nut	3	NH-12	M12
39	Screw	4	SF-5×8	M5×8
40	Spring washer	1	WS-12	
41	Stand assembly	1	60030708	
42	Idle wheel unit	4	60030709	
43	Wing bolt	2	BS-10×130	M10×130, With Nut
44	Wing bolt	1	BS-8×25	M8×25
45	Wing nut	2	NB-10	

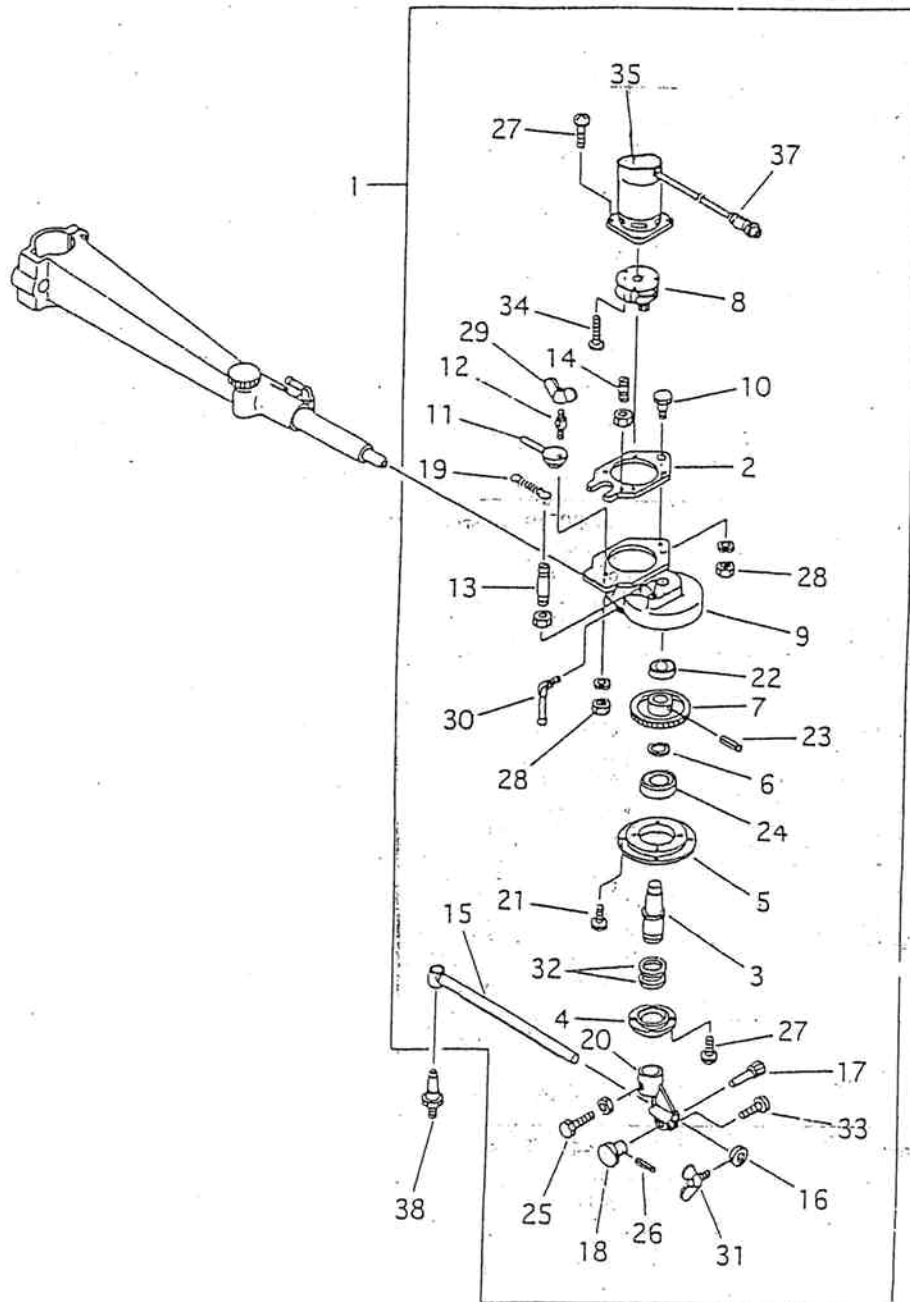
10.3 No.2 arm · Weight



No.2 arm · Weight

ITEM NO.	PART NAME	Q'T Y	STOCK NO.	REMARKS	ITEM NO.	PART NAME	Q'T Y	STOCK NO.	REMARKS
1	No.2 arm	1	60030753		29	Weight	1	60030710	With bolt
2	G-gear	1	60030945		30	Weight bar	1	60030711	
3	G-gear shaft	1	60030946		31	Cabtyre cord assembly	1	61004264	3P AC100V
4	Up/Down feed handle assembly	1	60032133			Cabtyre cord assembly	1	61004265	4P AC200V-AC240V
5	G-pinion	1	60030948		32	Metal plug	1	6N100056	3P AC100V
6	G-pinion metal	1	60030949			Metal plug	1	6N100057	4P AC200V-AC240V
7	Handle	1	60030950		33	Cabtyre cord	1	60030278	
8	Spring pin	1	6B023030	PR-3X30	34	Rubber plug	1	60030280	
9	G-collar	1	60030947						
10	Rubber packing	1	60030754		36	Hose connector (OX)	1	60015003	Except USA
11	Nipple for oxygen	1	60030755	Except USA		Hose connector (OX)	1	60015040	KE only
	Nipple for oxygen	1	60030756	USA only	37	Hose connector (GAS)	1	60015004	Except USA
12	Nipple for gas	1	60030757	Except USA		Hose connector (GAS)	1	60015062	KE only
	Nipple for gas	1	60030758	USA only	38	Nut for oxygen	1	60015001	Except USA
13	Lock nut (OX)	1	60030759	Except USA		Nut for oxygen	1	60015056	KE only
	Lock nut (OX)	1	60030760	USA only	39	Nut for gas	1	60015002	Except USA
14	Lock nut (GAS)	1	60030761	Except USA		Nut for gas	1	60015054	KE only
	Lock nut (GAS)	1	60030762	USA only					
15	Hose for oxygen	1	60032237	Except USA ★					
	Hose for oxygen	1	60030764	USA only					
16	Hose for gas	1	60030765	Except USA					
	Hose for gas	1	60030766	USA only					
17	Crank handle	2	60032211	M8X25					
18	Hexagon bolt	2	6C011025	BH-10X25					
19	Washer	2	6D500160	WF-16					
20	Screw	1	6C520415	SP-4X15					
21	Hexagon bolt	1	6C010815	BH-8X15 With WF,WS					
22	Arm shaft	1	60030794						
23	Bearing retainer	2	60030795						
24	F-Collar	1	60030796						
25	H-Collar	1	60030797						
26	Hexagon nut	2	60030798						
27	Bearing	1	60030790	6902ZZ					
28	Bearing	1	60030789	6202ZZ					

10.4 Circle cutting unit



Circle cutting unit

ITEM NO.	PART NAME	QTY	STOCK NO.	REMARKS
1	Circle cutting unit	1	61001299	
2	Clutch base	1	60030803	
3	Rotary shaft	1	60030804	
4	Flange	1	60030805	
5	Flange	1	60030806	
6	Collar	1	60030807	
7	Gear(A)	1	60030808	
8	Reduction gear assembly	1	60031299	
9	Circle cutting bracket	1	60031810	
10	Clutch bolt	1	60030811	
11	Clutch	1	60030812	
12	Clutch shaft	1	60030813	
13	Spring shaft(B)	1	60030814	
14	Spring shaft(A)	1	60030185	
15	Rotary bar assembly	1	60030816	
16	Stop collar	2	60031020	
17	Pinion	1	60031627	
18	Handle	1	60031628	
19	Spring	1	60030222	
20	Rotary base	1	60030817	
21	Screw	4	6C530512	With WS. M5 X 12
22	Bearing	1	60030818	6002ZZ
23	Spring pin	1	6B024030	PR-4.0X30
24	Bearing	1	60030830	6004ZZ
25	Hexagon bolt	1	6C010515	M3 X 15 With Nut
26	Spring pin	1	6B022012	PR-2.0X12
27	Screw	8	6C530412	M4 X 12 With WS
28	Hexagon nut	4	6D010060	M6 With WS
29	Wing nut	1	6D080060	NB-6
30	Crank handle	1	60032211	M8 X 15 With WS, WF
31	Wing bolt	2	6C110410	BS-4X10
32	FP ring	2	60030922	

ITEM NO.	PART NAME	QTY	STOCK NO.	REMARKS
33	Screw	2	6C520414	SP-4X14
34	Screw	3	6C520330	SP-3X30
35	Motor	1	69000126	DC24V 5000r.p.m
36				
37	Metal plug	1	6N100065	3P ★
38	Rotary roller	1	60030801	