

SAN YUAN ELECTRIC HOIST

CV

TYPE PARTS LIST

MAINTENANCE AND OPERATIONAL INSTRUCTIONS

Thank you for your wise choice of our distinguished electric hoist.
For your better understanding of the performance of this model,
Operational safety and inspection, please read carefully and keep this
manual in a safe place.

SAN YUAN ENTERPRISE CO., LTD

CAUTIONS IN OPERATION AND MAINTENANCE

An electric hoist has been used as a safe and convenient machine to save time and labor in operation. Before use, however, careful attention must be paid to operational safety and inspection procedures. Therefore, before operating this electric hoist, please read the following instructions and follow correct operational methods. Otherwise, it will not perform properly as is expected.

(A)

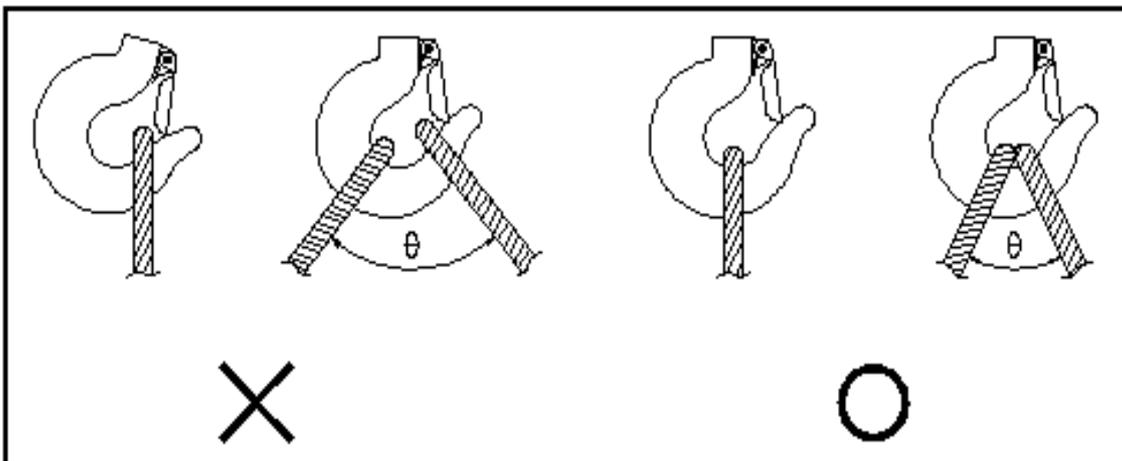
Before the installation, please ensure the delivery to have the exact specifications as you had purchased. This machine has been subjected to strict inspection before delivery ex-work. In case of any trouble caused during the handling process, please contact your local distributor or service station. We shall provide best services to meet your satisfaction.

(B) Items to be inspected before operation :

1. Mount the hoist in position. Make sure to secure the power cords and control cables, so as to avoid poor electrical connection.
2. For the wiring system, this machine must be grounded (green wire) to avoid slight leakage caused by static charge.
3. Depress the button switch when the machine runs in idle and check if the UP (↑) and DOWN (↓) operation is consistent with the switch indication.
4. The surface of chain(Wire ROPE)must be kept clean and oiled, to avoid the chain(Wire ROPE) from interwinding.
5. To store the chain, lower the chain to the lower limit, mount the chain bag onto the hoist, then, put the chain into the chain container.
6. Check the correct operation of the brake stop device.

(C) CAUTIONS FOR THE USE OF ELECTRICAL HOIST

1. For the sake of safety, do not apply a load in excess of the rated load.
2. Ensure if the load is tightly fastened?
3. Before applying the load, the chain (Wire ROPE) must be straightened to buffer the impact.
4. The center of gravity of the load should be hoisted. Never operate unbalanced hoisting. For inclined hoisting by the electric hoist, the inclination should be kept within 15°. (If possible, try to avoid inclined hoisting.)
5. During the hoisting of load, allow no person to stay below or nearby the load, to avoid any injury.
6. To move the electric hoist with a load, do not pull the control cable in a transverse direction, so as to avoid the electric cable from being broken.
7. Make sure to depress the switch to the full limit. NEVER operate abrupt positive then reverse rotation or inch movement.
8. During hoisting, try to keep the hook from reaching the upper and lower limits, so to minimize the wear of the Clutch lining.
9. A stop device must be fitted when the transverse pulley reaches the terminal of I-beam, so to avoid the hoist from damage or slipping off the end.
10. For outdoor use of electric hoist, keep the hoist from direct sunshine, rain and wind. There should be a proper shelter (such as rain resistant hood, etc.)
11. There is a stop button on the lower hook to prevent the steel cable from escaping. Therefore, make sure the cable is in the correct position on the lower hook and keep the safety angle within 60°. (See diagram)



(D) Routine and regular inspection items of electrical hoist :

To ensure the proper performance of this machine and extend its service life, please make the following routine checks.

D-1 Routine inspection items:

1. Depress the button switch and let the hoist run idle, check if the upward and downward operation are normal?

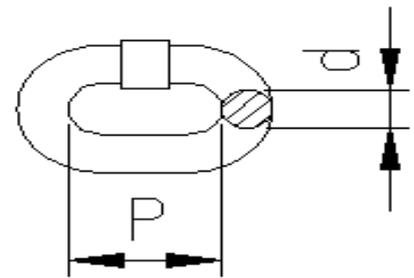
2. Is the hoist operation smooth? Is there abnormal noise when it is with load?
3. Check if the chain is oiled or damaged?
4. Is the brake operation normal when the winding is stopped?
5. Is the lower hook wasily rotating?

D-2 Regular inspection items:

1. Inspection of LINK chain

LINK chain is the most important part of the electrical chain hoist, which is made of special alloy steel with heat treatment. The purpose is to withstand wear and tension. In case the surface is dried and rusted, it will cause interwoven chains which may break. Therefore, the surface must be oiled frequently (use normal lubricating oil). In case the chain is deformed, cracked, elongated, worn, in excess of the following standards, new parts must be replaced:

CHAIN WEAR LIMITS: MEASUREMENT/DIAMETER		6.3Φ	7.1Φ	10Φ
Original measurement	d mm	6.3Φ	7.1Φ	10Φ
Critical measurement		5.7Φ	6.4Φ	9Φ
Original measurement	p mm	19.1	20.2	30Φ
Critical measurement		20	21	3.1Φ



2. Inspection of gear:

- a. Regular replacement of lubricating oil in the gearbox.
- b. Check if the gear surface is cracked or worn.

3. Inspection of hook:

- a. In case of abnormal deformation, damage or breakage at the opening of the hook, it must be replaced with new.
- b. In case the wear extent of the hook is in excess of 10%, it must be replaced with a new part.

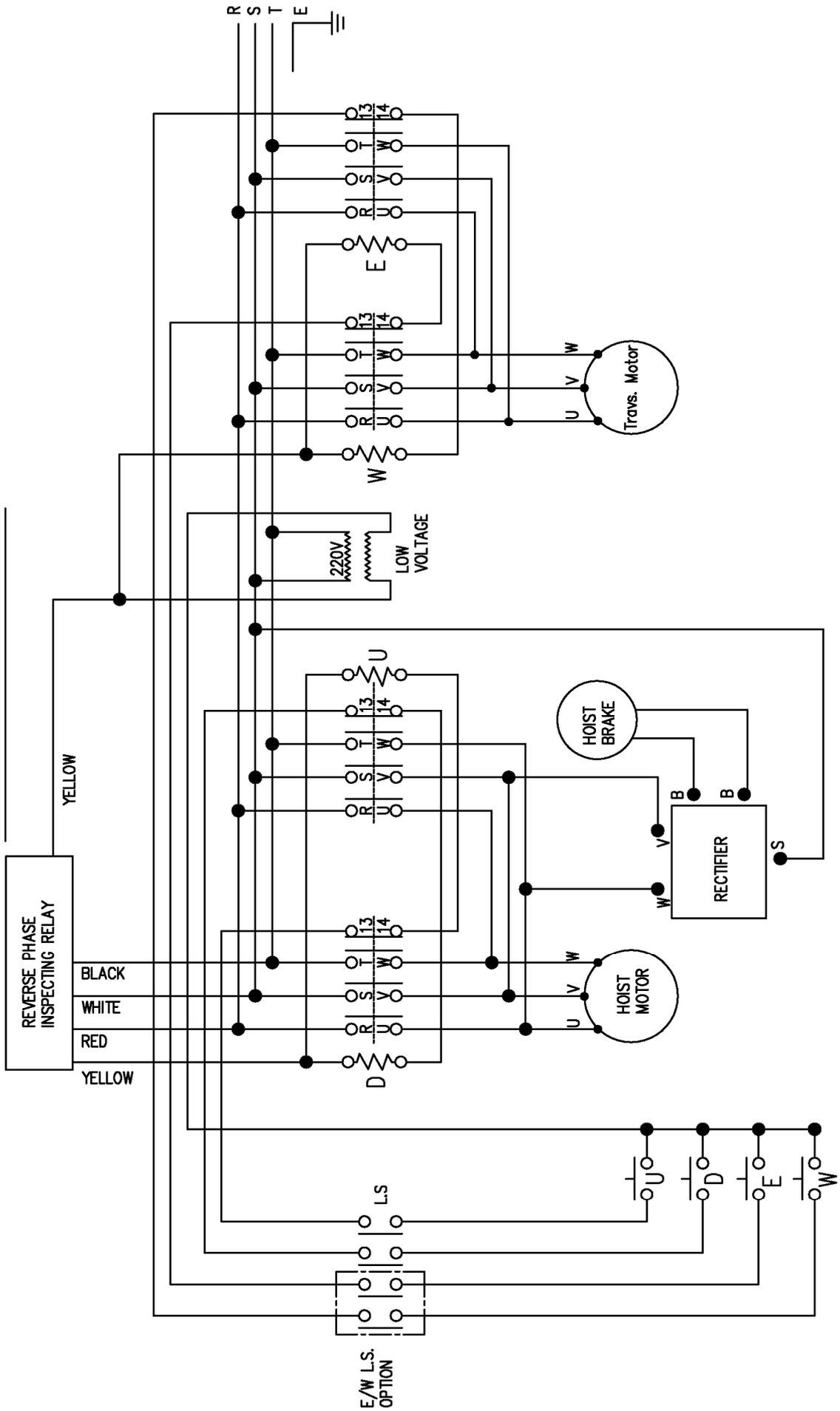
4. Inspection of pushbutton switch:

- a. Are the inner and outer screws of the pushbutton switch loosened? Is the electric wire damaged?
- b. Is there foreign substance between the contact points? Are the contact points abnormally worn?

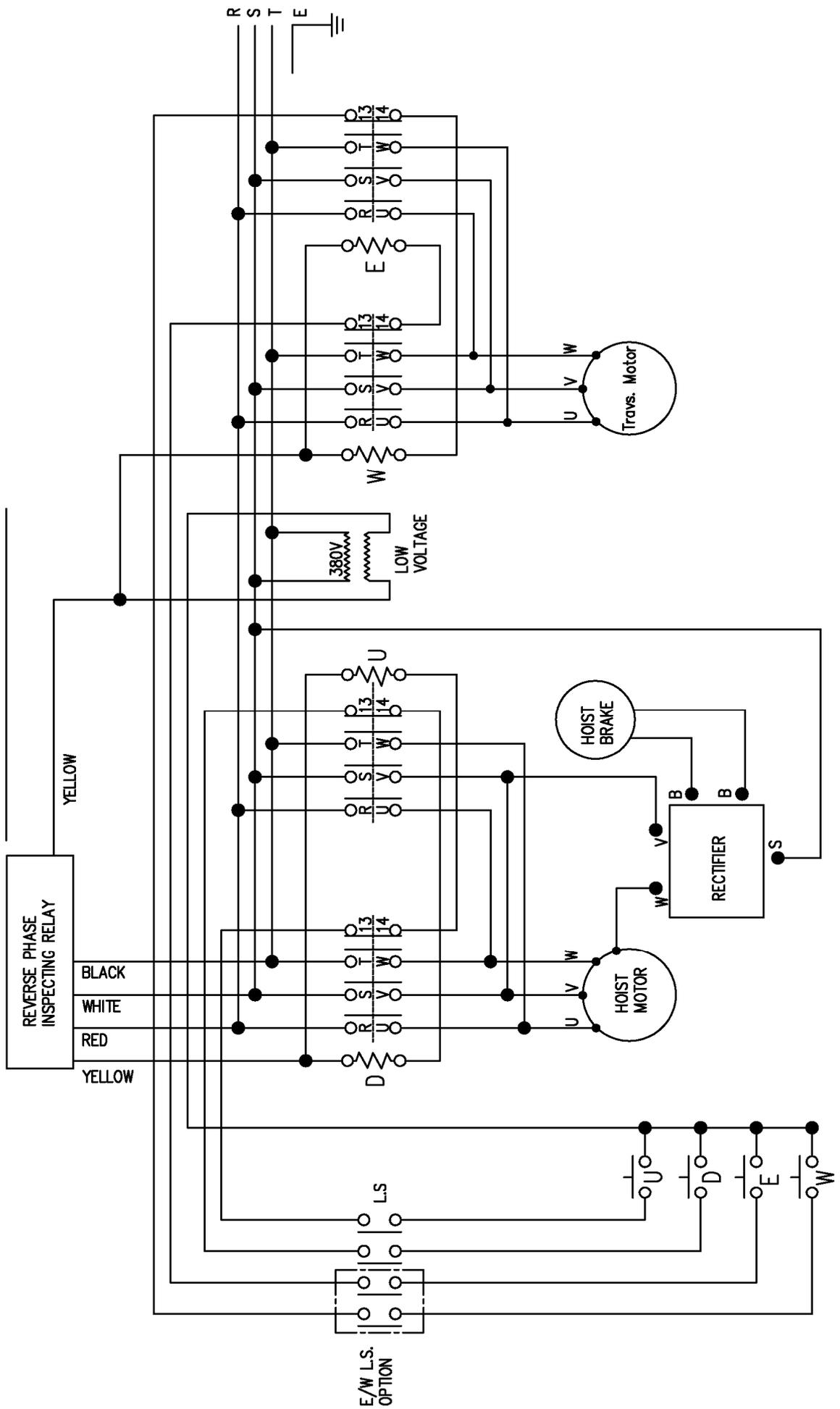
5. Inspection of main unit:

- a. Is the wiring system in the main unit secured? Is the electric wire aged or damaged?
- b. Are the inner or outer screws of the main unit loosened?
- c. Is the panel or casing of the main unit deformed?

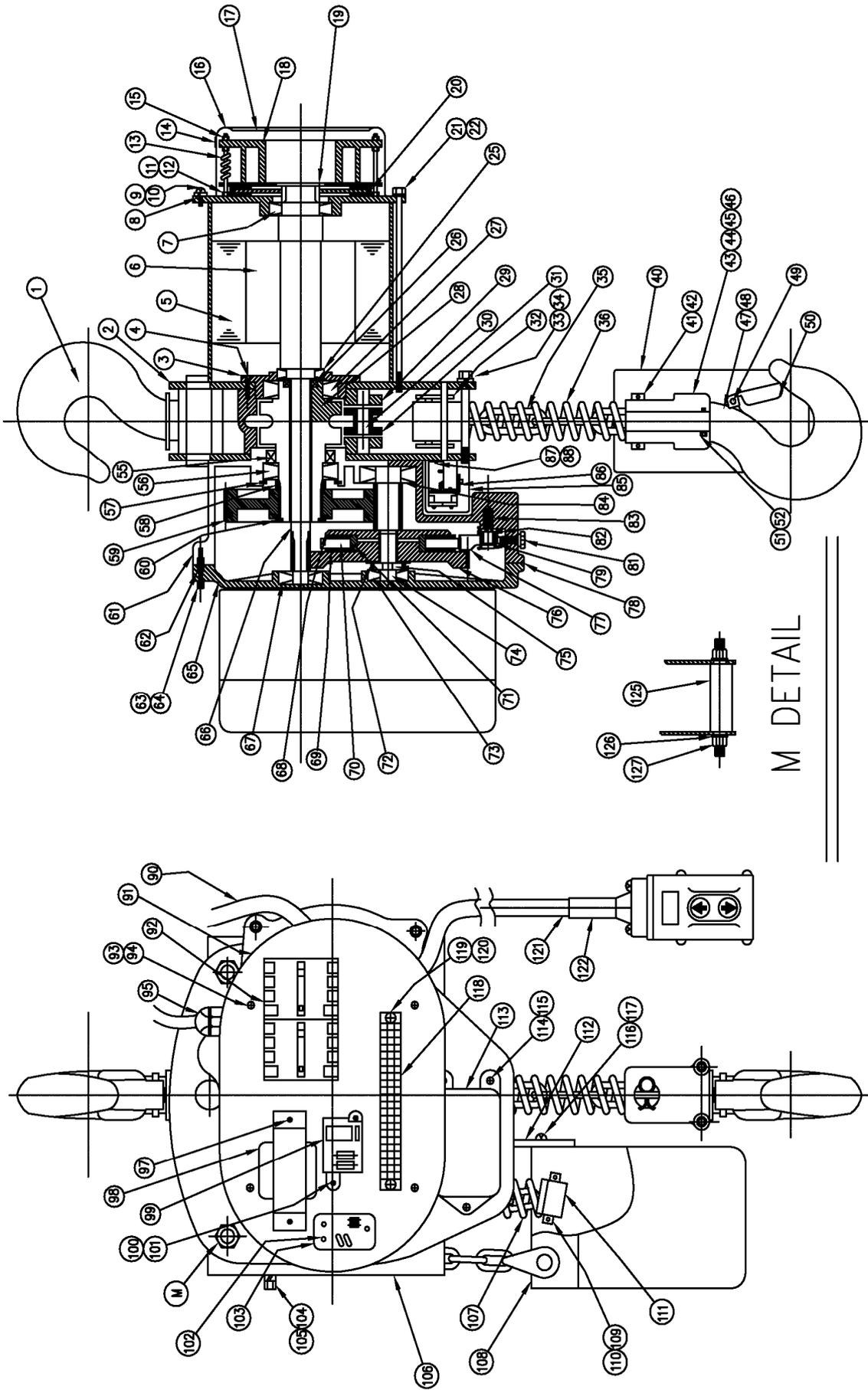
CV-MT 220V Wire



CV-MT 380V Wire



CV TYPE CHAIN HOIST STRUCTURE



M DETAIL

CHAIN HOIST PART LIST

NO.	PART NO.	PART NAME	SIZE	Q,TY	NO.	PART NO.	PART NAME	SIZE	Q,TY
1	V001	Upper Hook Ass'Y			32	V032	Limit Lever		1
	V001-20	2CV		1	33	V033	Blot	φ8	1
	V001-25	3CV		1	34	V034	S.W.	φ8	1
	V001-50	5CV		1	35	V035	Link Chain		1
	V001-75	7.5CV		1	36	V036	Upper Spring		1
	V001-100	10CV		1					
2	V002	M Frame		1					
3	V003	Middle Bracket		1	40	V040	Lower Hook Ass'Y		1
4	V004	Bolt	φ6	4		V040-20	2CV		1
5	V005	Housing Ass'Y		1		V040-30	3CV		1
6	V006	Rotor Ass'Y		1		V040-50	5CV		1
7	V007	Ball Bearing	6206 zz	1		V040-75	7.5		1
8	V008	End Bracket		1		V040-100	10CV		1
9	V009	Screw	φ6	3	41	V041	Chain Hanger Pin A		1
10	V010	S.W.	φ6	3	42	V042	Split Pin		2
11	V011	Support		3	43	V043	Lower Hook Seat		2
12	V012	S.W.	φ8	3	44	V044	Thrust Bearing		1
13	V013	Brake Spring		3	45	V045	NUT 1	1/8"	1
14	V014	A Rubber		1	46	V046	Spring Pin		1
15	V015	U NUT	φ8	6	47	V047	Spring Pin		1
16	V016	Brake Cover		1	48	V048	Spring		1
17	V017	Name Plate		1	49	V049	Latch		
18	V018	Brake Coil Ass'Y		1		V049-20	2CV		1
19	V019	Pressure Plate		1		V049-30	3CV		1
20	V020	Brake Wheel		1		V049-50	5CV		1
21	V021	Blot	φ8	4		V049-75	7.5CV		1
22	V022	S.W.	φ8	4		V049-100	10CV		1
					50	V050	Lower Hook		
						V050-20	2CVr		1
25	V025	Ball Bearing	6066 zz	1		V050-30	3CV		1
26	V026	Oil Seal	φ4×6 ^L	1		V050-50	5CV		1
						V050-75	7.5CV		1
27	V027	Ball Bearing	6209 zz	1		V050-100	10CV		1
28	V028	Sprocket		1	51	V051	Bolt	φ8	2
29	V029	Sprocket Guide		1	52	V052	S.W.	φ8	2
30	V030	Roller Pin		1					
31	V031	Guide Wheel		1	54	V054	G Frame		1

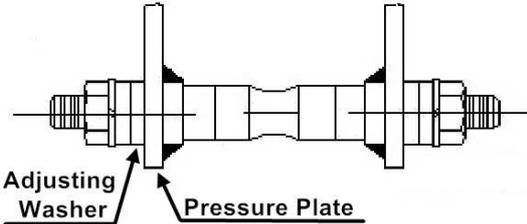
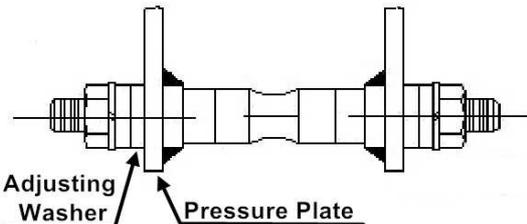
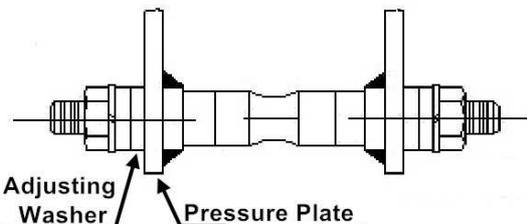
CHAIN HOIST PART LIST

NO.	PART NO.	PART NAME	SIZE	Q,TY	NO.	PART NO.	PART NAME	SIZE	Q,TY
55	V055	Oil Seal		1					
56	V056	Ball Bearing	6209	1	90	V090	Power Cable		1
57	V057	Snap Ring		1	91	V091	Control Box		1
58	V058	45φ Washer		1	92	V092	M.G. Switch		1
59	V059	2ND Gear		1	93	V093	Screw	φ6	4
60	V060	Snap Ring		1	94	V094	S.W.	φ6	4
61	V061	Gear Case		1	95	V095	Cable Gland		5
62	V062	Knock Pin		2	96	V096	Screw	φ4	2
63	V063	Bolt	φ6	6	97	V097	S.W.	φ4	2
64	V064	S.W.	φ6	6	98	V098	Transformer		1
65	V065	Gear Cover		1	99	V099	Reverse Phase		1
66	V066	1ST Pinion		1			Inspecting Relay		
67	V067	Ball Bearing	6302	1	100	V100	Screw	φ5	2
68	V068	Brake Disk		1	101	V101	S.W.	φ5	2
69	V069	Brake Lining		2	102	V102	Board Supper		3
70	V070	Ratchet		1	103	V103	Rectifier Ass'Y		1
71	V071	Bush		1	104	V104	Bolt	φ8	1
72	V072	Thrust Collar		1	105	V105	S.W.	φ8	1
73	V073	Ball Bearing	6204	1	106	V106	Side Cover		1
74	V074	2ND Pinion		1	107	V107	Lower Limit Spring		1
75	V075	Split Ring		2	108	V108	Chain Container		1
76	V076	1ST Gear		1		V108-A	For 6M Chain		1
77	V077	Brake Pawl		1		V108-B	For 12M Chain		1
78	V078	Packing		1		V108-C	For M Chain		1
79	V079	Snap Ring		1		V108-D	For M Chain		1
					109	V109	Chain Hanger Pin B		1
81	V081	Oil Plug		2	110	V110	Split Pin		2
82	V082	Spring		1	111	V111	Chain Stopper		1
83	V083	Bolt		1	112	V112	Chain Container Hanger Plate		1
84	V084	Ball Bearing	6206	1	113	V113	Rubber B		1
85	V085	Limit Switch Cover		1	114	V114	Screw	φ6	3
86	V086	Limit Switch		1	115	V115	S.W.	φ6	3
87	V087	Screw	φ5	2	116	V116	Screw	φ6	2
88	V088	S.W.	φ5	2	117	V117	S.W.	φ6	2

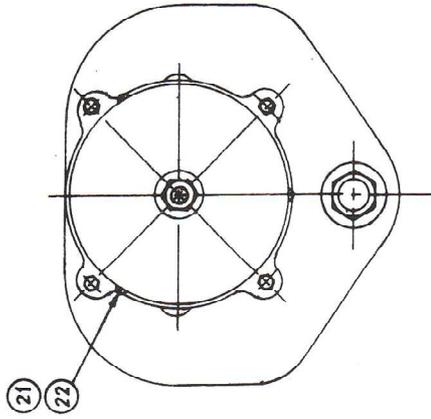
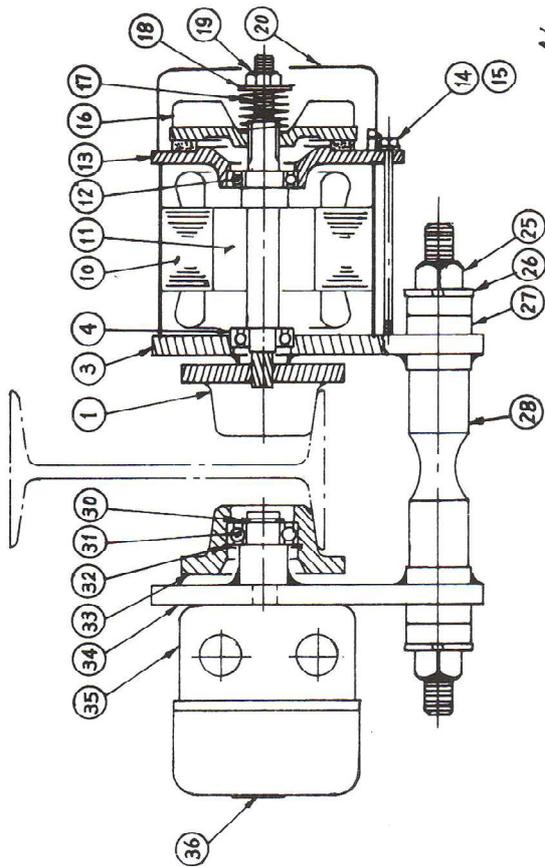
MOTOR TROLLEY

CAUTIONS FOR THE USE OF MOTOR TROLLEYS

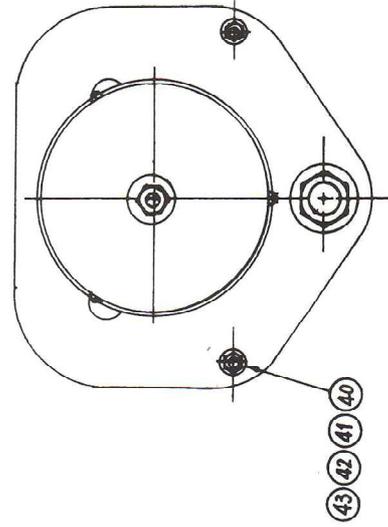
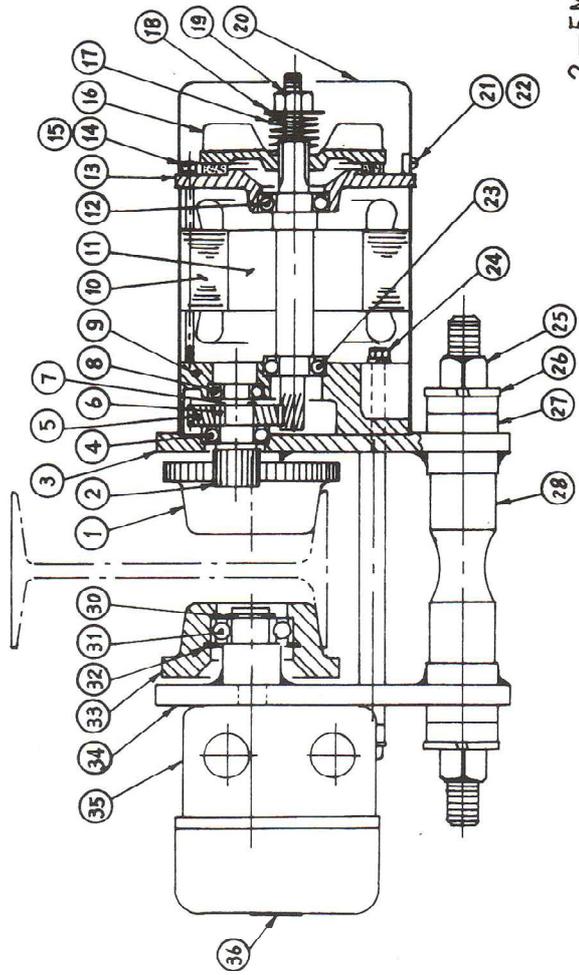
1. Before mounting the motor trolley on the I-beam, the width of I-beam must be measured. As shown in the following diagram, adjust the clearance between the two wheels of the trolley to the correct position. Then, mount it onto the I-beam and tighten the nuts at two ends.

TYPE	MEASURE MENT OF I-BEAM	ADJUSTING THE POSITION OF THE WASHER
1/4~1MT	I 150 X 75 X 5.5	
2~3MT	I 200 X 100 X 7	
5MT	I 250 X 125 X 7.5	
1/4~1MT	I 200 X 100 X 7	
2~3MT	I 250 X 125 X 7.5	
5MT	I 300 X 150 X 8	
1/4~1MT	I 250 X 125 X 7.5	
2~3MT	I 300 X 150 X 8	
5MT	I 450 X 175 X 11	

2. The paint on the contact surface of the moving wheel and I-beam must be removed. Otherwise, the wheel will run idle, interfere with the grounding connection and cause electrostatic charge.
3. The gear of the moving wheel with gear must be regularly oiled (use normal grease) . But do not oil the wheel surface and I-beam. Otherwise, it will run idle and perform no movement.
4. Check if the pressure plate is bent, deformed, the coating surface of the electrical cable is aged, damaged or disconnected.
5. Check if the bolts, nuts and snap rings are loosened or disengaged.



1/2 MT MOTOR TROLLEY STRUCTURE



2-5MT MOTOR TROLLEY STRUCTURE

MOTOR TROLLEY PART LIST

NO.	PART NO.	PART NAME	SIZE	Q,TY	NO.	PART NO.	PART NAME	SIZE	Q,TY
1	T001	Gear Wheel		2	11	T011	Rotor Ass'y		1
	1/2T001	1/4MT & 1/2MT				1/2 T010	1/4MT & 1/2MT		
	1T001	1MT				1T010	1MT		
	2T001	2MT				2T010	2MT & 3MT		
	3T001	3MT				5T010	5MT		
	5T001	5MT			12	T012	Ball Bearing	6005zz	1
2	T002	2ND Pinion		1	13	T013	End Bracket		1
	2T002	2MT				1/2T013	1/4MT & 1/2MT		
	3T002	3MT				1T013	1MT		
	5T002	5MT				2T013	2MT - 5MT		
3	T003	A Frame		1	14	T014	Bolt	φ6×135 ^L	4
	1/2T003	1/4MT & 1/2MT				1/2T014	1/4 & 1/2MT		
	1T003	1MT				1T014	1MT		
	2T003	2MT				2T014	2MT - 5MT		
	3T003	3MT			15	T015	Spring Washer	φ6	4
	5T003	5MT			16	T016	Pressure Plate		1
4	T004	Ball Bearing	6004 zz	1	17	T017	Spring		1
	1T004	1/4MT-1MT			18	T018	Washer	φ12	1
	2T004	2MT & 3MT			19	T019	NUT	M12	1
	5T004	5MT			20	T020	M Cover		1
5	T005	1ST Gear		1	21	T021	Screw	M4×5 ^L	3
	2T005	2MT			22	T022	Spring Washer	φ4	3
	3T005	3MT			23	T023	Ball Bearing	6004 zz	1
	5T005	5MT				2T023	2MT-5MT		
6	T006	Key	7×7×20 ^L	1	24	T024	Bolt	M8×50 ^L	3
	2T006	2MT-5MT				2T024	2MT-5MT		
7	T007	Snap Ring	S20	1	25	T025	NUT	1"	2
	2T007	2MT-5MT				1T025	1/4MT & 2MT		
8	T008	Ball Bearing	6003zz	1		3T025	3MT		
	2T008	2MT-5MT				5T025	5MT		
9	T009	Gear Box		1	26	T026	Spring Washer	φ1"	2
	2T009	2MT-5MT				1T026	1/4 -2MT		
10	T010	Housing Ass'y		1		3T026	3MT		
	1/2 T010	1/4MT & 1/2MT				5T026	5MT		
	1T010	1MT							
	2T010	2MT & 3MT							
	5T010	5MT							

MOTOR TROLLEY PART LIST

NO.	PART NO.	PART NAME	SIZE	Q,TY	NO.	PART NO.	PART NAME	SIZE	Q,TY
27	T027	Distant Ring		4	35	T035	Control Box		1
	1T027	1/4MT & 1/2MT				ST035	1/4MT-5MT 220V OR 380V		
	2T027	3MT			36	T036	Name Plate		1
	5T027	5MT				1/4T036	1/4MT		
28	T028	Hanger Pin		1		1/2T036	1/2MT		
	1/2T028	1/4MT & 1/2MT				1T036	1MT		
	1T028	1MT				2T036	2MT		
	2T028	2MT				3T036	3MT		
	3T028	3MT				5T036	5MT		
	5T028	5MT			40	T040	Screw	M12×150 ^L	2
30	T030	Snap Ring	S25	4		2T040	2MT & 3MT		
	1/2T030	1/4MT & 1/2MT			41	T041	Dist Collar	φ13	2
	1T030	1MT				2T041	2MT & 3MT		
	2T030	2MT			42	T042	Distant Ring	φ13	8
	3T030	3MT& 5MT				2T042	2MT & 3MT		
31	T031	Ball Bearing	6205 zz	4	43	T043	NUT	M12	4
	1/2T030	1/4MT & 1/2MT				2T043	2MT & 3MT		
	1T030	1MT			44	T044	Spring Washer		4
	2T030	2MT				2T044	2MT & 3MT		
	3T030	3MT & 5MT							
32	T032	Snap Ring	R52	4					
	1/2T030	1/4MT & 1/2MT							
	1T030	1MT							
	2T030	2MT							
	3T030	3MT & 5MT							
33	T033	Wheel		2					
	1/2T033	1/4MT & 1/2MT							
	1T033	1MT							
	2T033	2MT							
	3T033	3MT							
	5T033	5MT							
34	T034	B Frame		1					
	1/2T033	1/4MT & 1/2MT							
	1T033	1MT							
	2T033	2MT							
	3T033	3MT							
	5T033	5MT							