



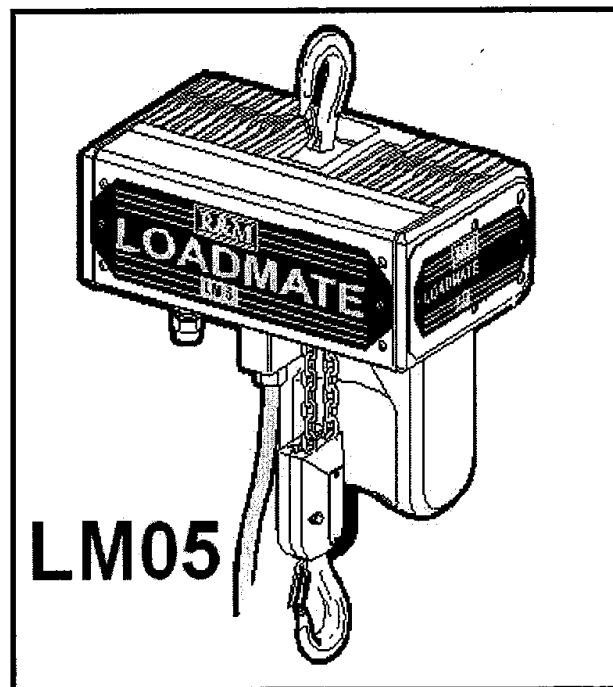
R&M
MATERIALS HANDLING

LoadMate® Chain Hoist
LM05 Series II Manual
Helical Gearing
April 2005

LM05 SERIES II

Helical Gearing

LoadMate® CHAIN HOIST



INSTALLATION & MAINTENANCE MANUAL

JOB NO.: _____

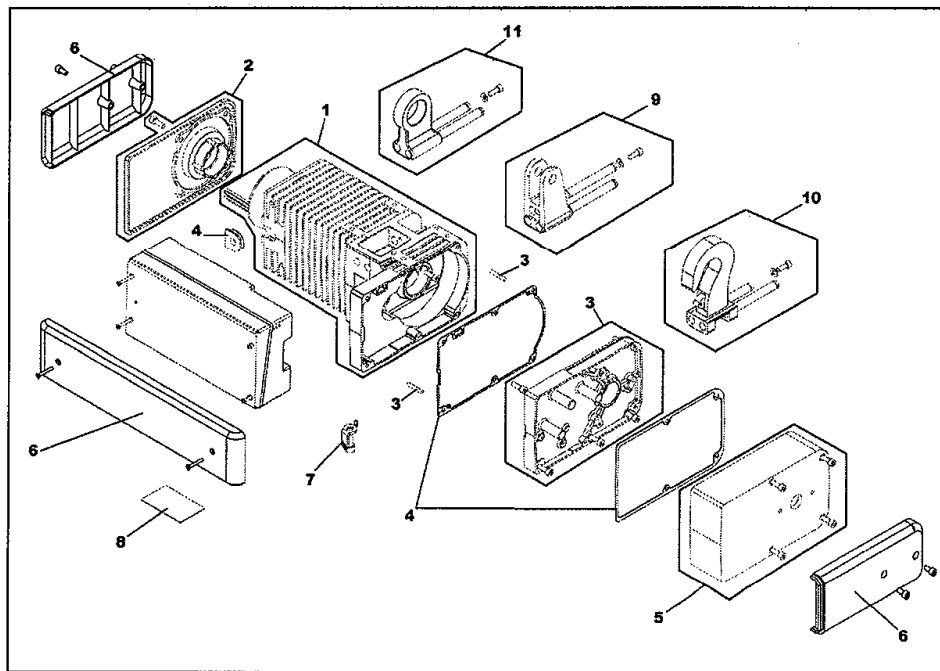
SERIAL NO.: _____

(RECORD HOIST SERIAL NUMBER FOR FUTURE REFERENCE)



7 PARTS ILLUSTRATIONS

7.1 Hoist Body – Three Phase Power Supply

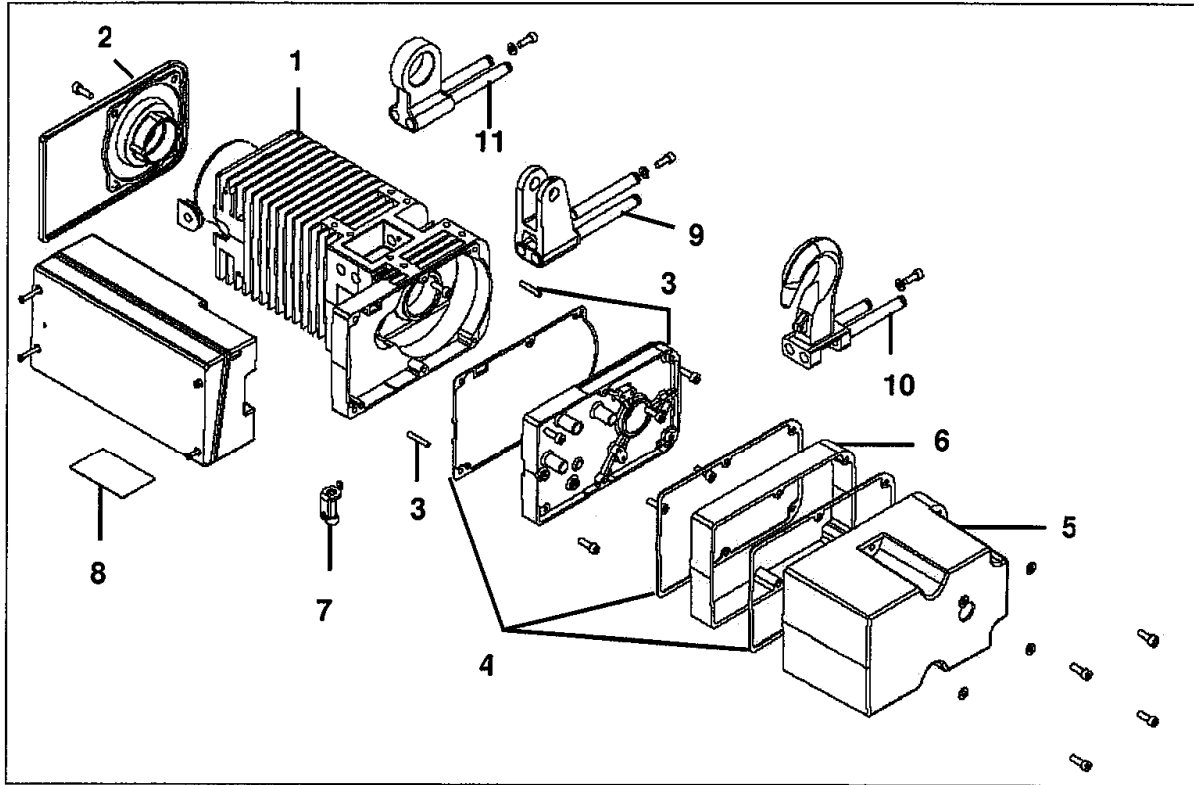




ITEM	PART NUMBER	DESCRIPTION	QTY
	52309839	COMPLETE HOIST BODY 460V TWO SPEED 32/8 FPM	1
	52309840	COMPLETE HOIST BODY 208/230V TWO SPEED 32/8 FPM	1
	52309841	COMPLETE HOIST BODY 208/230/460V SINGLE SPEED 32 FPM	1
	52309842	COMPLETE HOIST BODY 208/230/460V SINGLE SPEED 16FPM	1
	52309845	COMPLETE HOIST BODY 575V SINGLE SPEED 32 FPM	1
1	N/A	HOIST MACHINED BODY CASTING	1
2	52308741	MOTOR FLANGE ASSEMBLY	1
3	52308742	GEAR SET WITHOUT ROTARY LIMIT SWITCH	1
4	52308768	GEAR & BRAKE COVER SEAL SET	1
5	52308747	BRAKE COVER SET	1
6	2406879001	R&M LM05 BODY BRANDING SET	1
7	2218000	PUSHBUTTON SUSPENSION SET	1
8a	2213309001	HOIST BODY LOAD CAPACITY STICKER – ¼ TON	1
8b	2213309002	HOIST BODY LOAD CAPACITY STICKER – ½ TON	1
8c	2213309003	HOIST BODY LOAD CAPACITY STICKER – 1 TON	1
8d	2213309007	HOIST BODY LOAD CAPACITY STICKER – 250 kg	1
8e	2213309008	HOIST BODY LOAD CAPACITY STICKER – 500 kg	1
8f	2213309009	HOIST BODY LOAD CAPACITY STICKER – 1000 kg	1
9a	2229921	"C" STYLE TROLLEY COUPLING SET – PERPENDICULAR	1
9b	2229920	"C" STYLE TROLLEY COUPLING SET – PARALLEL	1
10a	2219955	TOP HOOK SET – PERPENDICULAR	1
10b	2219954	TOP HOOK SET – PARALLEL	1
11	52308832	RPT STYLE TROLLEY COUPLING SET	1
-	52308744	INSPECTION PORT CAP SET	1
-	2212017	TOP HOOK SAFETY LATCH – STEEL PLATE STYLE	1
-	2213445001	ELECTRICAL HAZZARD WARNING STICKER	1
-	2213445002	ELECTRICAL WIRING INFORMATION STICKER	1



7.2 Hoist Body – Single Phase Power Supply

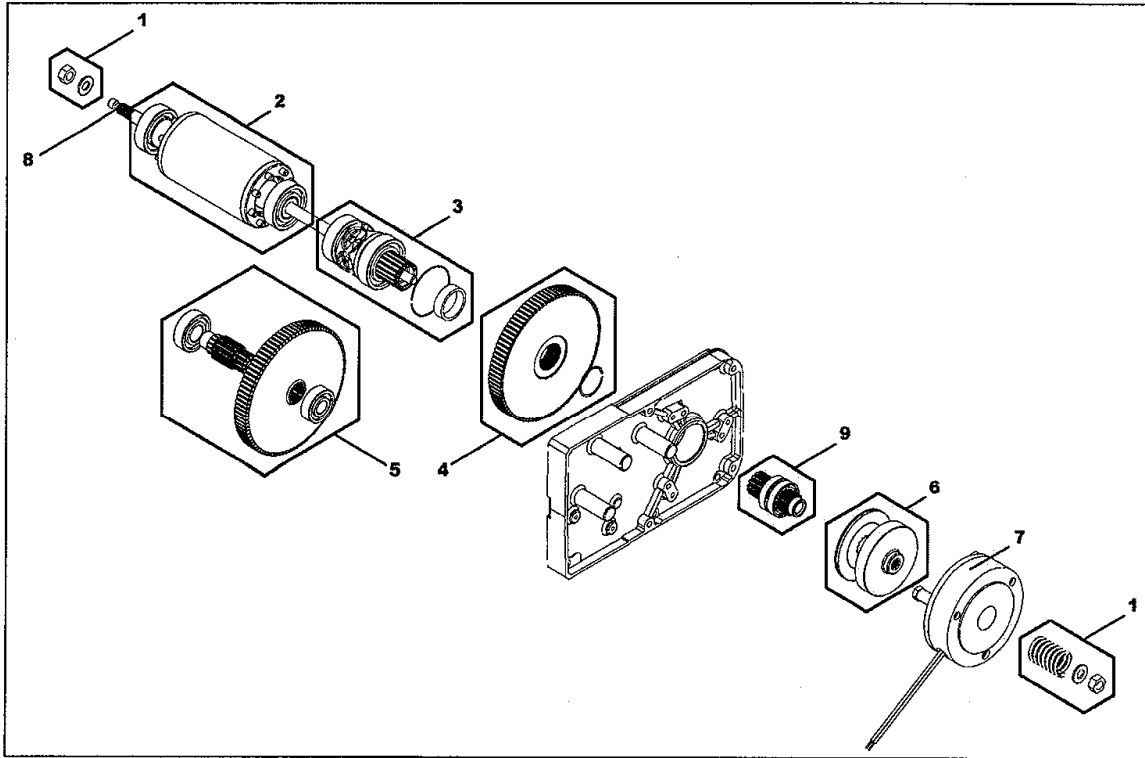




ITEM	PART NUMBER	DESCRIPTION	QTY
-	52315418	BODY & CONTROLS – 115V SINGLE PHASE – 16S	1
1	N/A	MACHINED CASING	1
2	52308741	MOTOR FLANGE ASSEMBLY	1
3	52308742	GEAR COVER WITHOUT ROTARY LIMIT ASSEMBLY	1
4	52308768	GEAR & BRAKE COVER SEAL SET	1
5	52305510	BRAKE COVER SET – SINGLE PHASE UNITS ONLY	1
6	52316243	EXTENSION HOUSING – SINGLE PHASE UNITS ONLY	1
7	2218000	PUSHBUTTON SUSPENSION SET	1
8a	2213309001	BODY CAPACITY STICKER – ¼ TON	1
8b	2213309002	BODY CAPACITY STICKER – ½ TON	1
8c	2213309003	BODY CAPACITY STICKER – 1 TON	1
8d	2213309007	BODY CAPACITY STICKER – 250 KG	1
8e	2213309008	BODY CAPACITY STICKER – 500 KG	1
8f	2213309009	BODY CAPACITY STICKER – 1000 KG	1
9a	2229921	"C" TROLLEY COUPLING SET - PERPENDICULAR	1
9b	2229920	"C" TROLLEY COUPLING SET - PARALLEL	1
10a	2219955	TOP HOOK SET - PERPENDICULAR	1
10b	2219954	TOP HOOK SET - PARALLEL	1
11	52308832	RPT COUPLING SET	1
-	2212017	TOP HOOK SAFETY LATCH – STEEL PLATE TYPE	1
-	52308744	INSPECTION PORT CAP	1
-	2213445001	ELECTRICAL HAZZARD WARNING STICKER	1
-	2213445002	ELECTRICAL WIRING INFORMATION STICKER	1



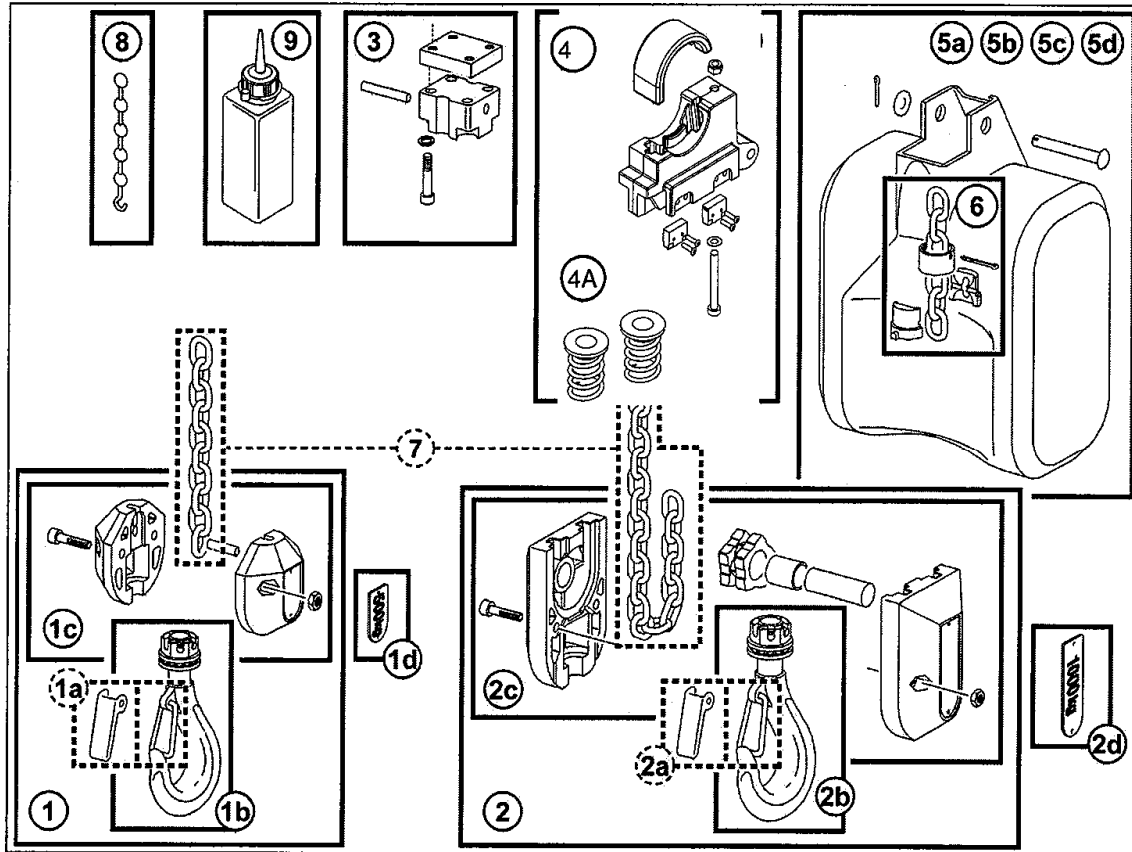
7.3 Helical Gear Mechanism & Brake



ITEM	PART NUMBER	DESCRIPTION	QTY
1	2211016	SLIP CLUTCH SPRING SET	1
2a	52305652	ROTOR ASSEMBLY – THREE PHASE POWER SUPPLY	1
2b	52315793	ROTOR ASSEMBLY – SINGLE PHASE POWER SUPPLY	1
3	52305659	LOAD CHAIN SPROCKET ASSEMBLY	1
4a	52305473	GEAR SET – 8 M / min.	1
4b	52308850	GEAR SET – 16 M / min.	1
5a	52308771	GEAR SET – 8 M / min.	1
5b	52315180	GEAR SET – 16 M / min.	1
6	52308772	TORQUE LIMITER / SLIP CLUTCH SET	1
7a	52305489	MOTOR BRAKE ASSEMBLY 190 VDC – 208/230/460VAC SS	1
7b	52305488	MOTOR BRAKE ASSEMBLY 100 VDC – 115/208/230VAC TS	1
7c	52305490	MOTOR BRAKE ASSEMBLY 230 VDC – 575VAC TS	1
8	52305461	MOTOR SHAFT	1
9	52305658	PINION SET	1



7.4 Lifting Assembly

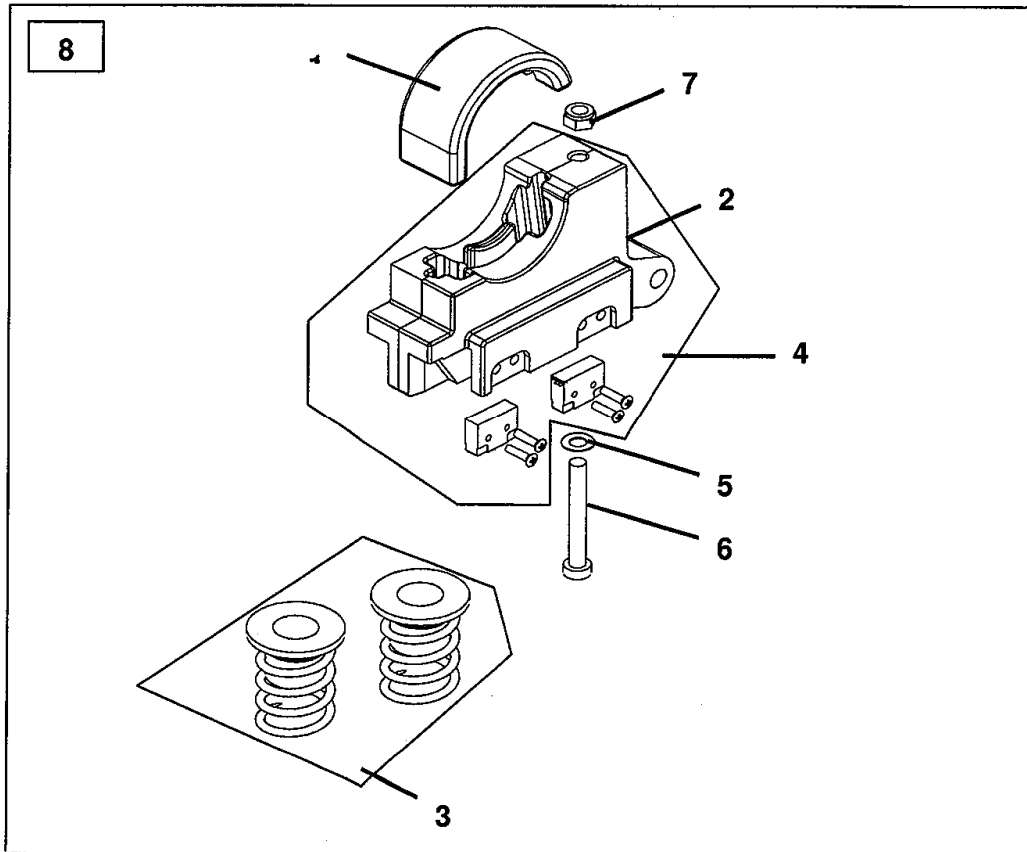




ITEM	PART NUMBER	DESCRIPTION	QTY
1	2219902	1-FALL LOAD BLOCK ASSY - STD HOOK	1
1	2212018	1-FALL LOAD BLOCK ASSY - SELF-LOCKING HOOK	1
1a	001512	1-FALL SAFETY LATCH - WIRE TYPE	1
1a	2212016	1-FALL SAFETY LATCH - STEEL PLATE TYPE	1
1b	2212011	1-FALL LOAD HOOK	1
1b	2217015	1-FALL LOAD HOOK - SELF LOCKING	1
1c	2219985	1-FALL LOAD BLOCK HALVES SET	1
1d	2213308008	1-FALL LOAD BLOCK CAPACITY STICKER - 250 KG	2
1d	2213308009	1-FALL LOAD BLOCK CAPACITY STICKER - 500 KG	2
1d	2213308001	1-FALL LOAD BLOCK CAPACITY STICKER - 1/4 TON	2
1d	2213308002	1-FALL LOAD BLOCK CAPACITY STICKER - 1/2 TON	2
2	2212020	2-FALL LOAD BLOCK ASSY - STD HOOK	1
2	2212028	2-FALL LOAD BLOCK ASSY - SELF-LOCKING HOOK	1
2a	001515	2-FALL SAFETY LATCH - WIRE TYPE	1
2a	2212017	2-FALL SAFETY LATCH - STEEL PLATE TYPE	1
2b	2217004	2-FALL LOAD HOOK - STD HOOK	1
2b	2247015	2-FALL LOAD HOOK - SELF-LOCKING	1
2c	2219987	2-FALL LOAD BLOCK HALVES SET	1
2d	2213333009	2-FALL LOAD BLOCK CAPACITY STICKER - 500 KG	2
2d	2213333010	2-FALL LOAD BLOCK CAPACITY STICKER - 1000 KG	2
2d	2213333002	2-FALL LOAD BLOCK CAPACITY STICKER - 1/2 TON	2
2d	2213333003	2-FALL LOAD BLOCK CAPACITY STICKER - 1 TON	2
3	52309350	CHAIN ANCHOR SET (2-FALL HOISTS)	1
4	52315430	CHAIN GUIDE ASSEMBLY SET W/ SWITCHES (STANDARD)	1
4a	52293583	SPRING & PLATE SET (SET OF 3)	1
5a	2219990	CHAIN CONTAINER SET - 25FT [8M] MAXIMUM CHAIN LENGTH	1
5b	2249925	CHAIN CONTAINER SET - 50FT [16M] MAXIMUM CHAIN LENGTH	1
5c	2249926	CHAIN CONTAINER SET - 75FT [30M] MAXIMUM CHAIN LENGTH	1
5d	2249932	CHAIN CONTAINER SET - 150FT [50M] MAXIMUM CHAIN LENGTH	1
6	2211050	SLACK FALL STOP ASSEMBLY	1
7a	2213500	LOAD CHAIN - STD ZINC PLATED	N
7b	2213501	LOAD CHAIN - BLACK	N
7c	2213502	LOAD CHAIN - STAINLESS STEEL - CHECK CAPACITY LIMITS	N
8	2211045	LOAD CHAIN INSERTION TOOL	1
9	9995008	CHAIN LUBRICANT	1



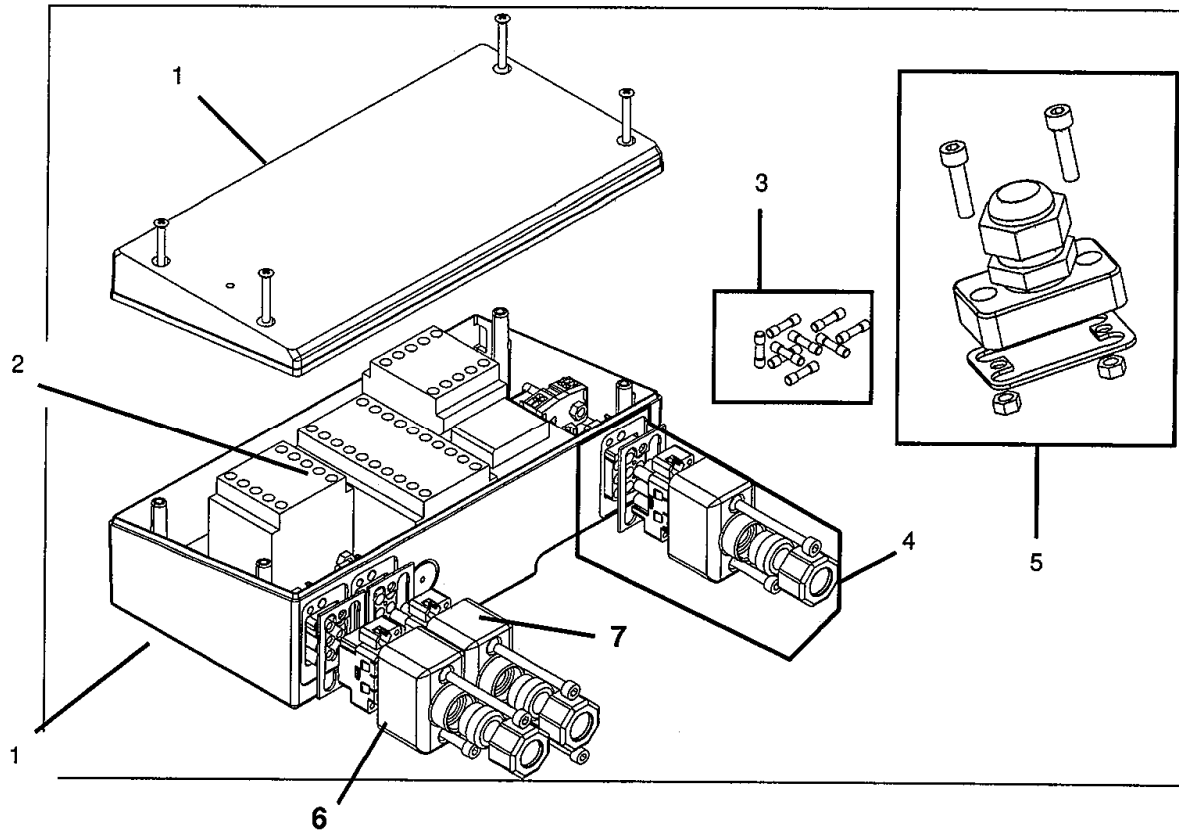
7.5 Chain Guide Assembly – With Limit Switches



ITEM	PART NUMBER	DESCRIPTION	QTY
1	2214011	UPPER CHAIN GUIDE	1
2	52305493	LOWER CHAIN GUIDE	1
3	52293583	WASHER & SPRING SET (SET OF 3)	1
4	52305660	CHAIN GUIDE WITH LIMIT SWITCHES	1
5	52315431	MOUNTING HARDWARE SET (5 + 6 + 7)	1
8	52315430	COMPLETE LIMIT SWITCH	1



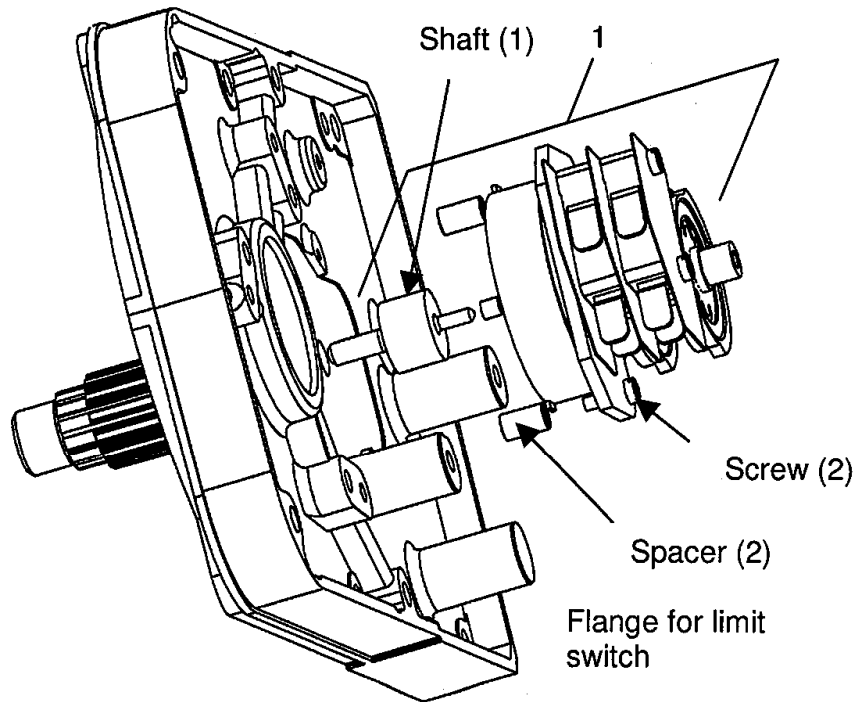
7.6 Controls



ITEM	PART NUMBER	DESCRIPTION	QTY
1	52308791	CONTROL BOX BASE & COVER SET	1
-	2213017	TS CONTROL – 208/230/460V – 115V CONTROL VOLTAGE	1
-	2213016	TS CONTROL – 575V – 115V CONTROL VOLTAGE	1
-	2213018	SS CONTROL - 208/230/460v – 115V CONTROL VOLTAGE	1
2	52305694	HOUR COUNTER 115V CONTROL VOLTAGE	1
3	52314754	115V CONTROL CIRCUIT FUSES - SET OF 10	1
4	2249945	PUSH BUTTON PLUG SET	1
5	2249947	POWER CABLE GLAND SET - STD	1
6	2249982	POWER PLUG SET – OPTIONAL	1
7	2249946	TROLLEY PLUG SET	1



7.7 Rotary Limit Switch

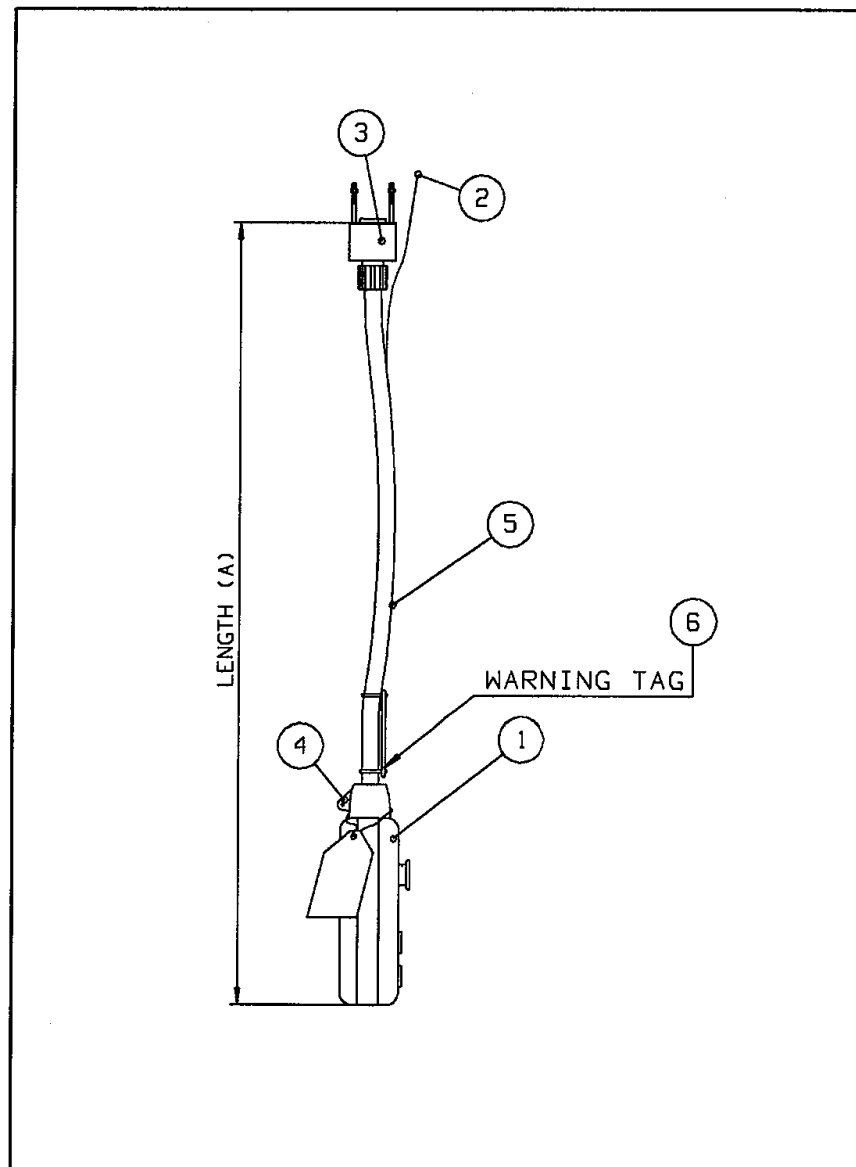


ITEM	PART NUMBER	DESCRIPTION	QTY
1	52314755	2-POS SWITCH SET FOR $\leq$ 131 FT [40M] OF CHAIN	1

If retrofitting LM05 Series II with a rotary limit switch, replace the gear cover with flange - part number 52305505.



7.8 Push Button Assembly – Vertical Pairs of Buttons

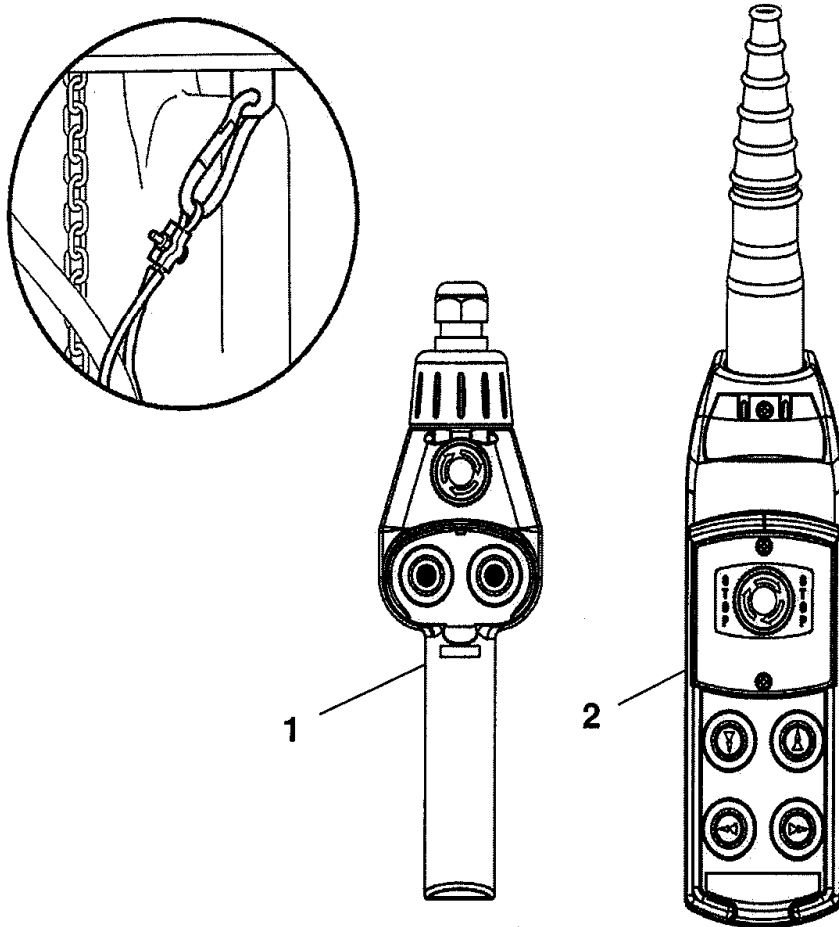




ITEM	PART NUMBER	DESCRIPTION	QTY
-	2309673010	P/B ASSEMBLY – 10 FT, E-STOP, SS HOIST	1
-	2309673015	P/B ASSEMBLY – 15 FT, E-STOP, SS HOIST	1
-	2309673020	P/B ASSEMBLY – 20 FT, E-STOP, SS HOIST	1
-	2309674010	P/B ASSEMBLY – 10 FT, E-STOP, TS HOIST	1
-	2309674015	P/B ASSEMBLY – 15 FT, E-STOP, TS HOIST	1
-	2309674020	P/B ASSEMBLY – 20 FT, E-STOP, TS HOIST	1
-	2309675010	P/B ASSEMBLY – 10 FT, E-STOP, SS HOIST, TS TROLLEY	1
-	2309675015	P/B ASSEMBLY – 15 FT, E-STOP, SS HOIST, TS TROLLEY	1
-	2309675020	P/B ASSEMBLY – 20 FT, E-STOP, SS HOIST, TS TROLLEY	1
-	2309676010	P/B ASSEMBLY – 10 FT, E-STOP, TS HOIST, TS TROLLEY	1
-	2309676015	P/B ASSEMBLY – 15 FT, E-STOP, TS HOIST, TS TROLLEY	1
-	2309676020	P/B ASSEMBLY – 20 FT, E-STOP, TS HOIST, TS TROLLEY	1
1a	2212932011	P/B ENCLOSURE ASSEMBLY: E-STOP, SS HOIST	1
1b	2212932012	P/B ENCLOSURE ASSEMBLY: E-STOP, TS HOIST	1
1c	2212932032	P/B ENCLOSURE ASSEMBLY: E-STOP, SS HOIST, TS TROLLEY	1
1c	2212932033	P/B ENCLOSURE ASSEMBLY: E-STOP, TS HOIST, TS TROLLEY	1
2	2218000	UPPER SUSPENSION KIT	1
3	7285035	PLUG KIT – P/B ASSEMBLY	1
4	-	SUSPENSION UNIT – INCLUDED WITH ITEM 3	1
5	52292266	P/B ELECTRICAL CABLE – 16 GAUGE / 12 CONDUCTOR RPC	1
6	2309414001	R&M OPERATOR'S WARNING TAG - ENGLISH	1



7.9 Push Button Assembly – Horizontal Pairs of Buttons



ITEM	PART NUMBER	DESCRIPTION	QTY
1	52301832	PISTOL GRIP P/B CONTROL ASSEMBLY – TWO SPEED	1
-	2309414001	R&M OPERATOR'S WARNING TAG - ENGLISH	1