

# USER'S MANUAL

# LB-90A



**KUKDONG**  
MATERIAL HANDLING

## ● DIRECTIONS FOR USE

1. CHOOSE CORRECT CAPACITY AFTER CONSIDERING LOADING WEIGHT.
2. APPLY OIL TO LOAD CHAIN AND CHECK IF LOAD CHAIN IS TWISTED OR NOT.
3. USE LOAD CHAIN IN A STRAIGHT WAY.
4. HOW TO ADJUST THE LENGTH OF LOAD CHAIN
  - 1) IN CASE 'CHANGE LEVER' IS IN THE 'MIDDLE', LOAD CHAIN IS CONTROLLED FREELY IN ANY DIRECTIONS.  
AT THE MOMENT, HANG HOOK ON LOADING PULLING LOAD CHAIN.
  - 2) IN CASE YOU PULL LOAD CHAIN OF RING AFTER PUTTING 'CHANGE LEVER' ON 'UP'.  
LOAD CHAIN OF HOOK HAVE LOAD.
5. OPERATION  
AFTER LOAD CHAIN'S ADJUSTMENT, REVOLVE 'GRIP RING' IS GOING UP REVOLVING IN A RIGHT-HANDED DIRECTIONS.  
WHILE, IF YOU PUSH 'HANDLE' UP AND DOWN AFTER PUTTING 'CHANGE LEVER' ON DOWN, 'GRIP RING' IS GOING DOWN REVOLVING IN OPPOSITE DIRECTIONS.  
- EVEN IF 'CHANGE LEVER' IS IN THE MIDDLE IN THE CONDITION OF LOAD, 'BRAKE' WORKS VERY WELL.  
NOTE 1. : CHECK IF BRAKE IS WORKING OR NOT.  
NOTE 2. : IN CASE 'GRIP RING' IS OPERATED WITH FORCE, GEARS WILL BE DAMAGED.

## ● AFTER USE

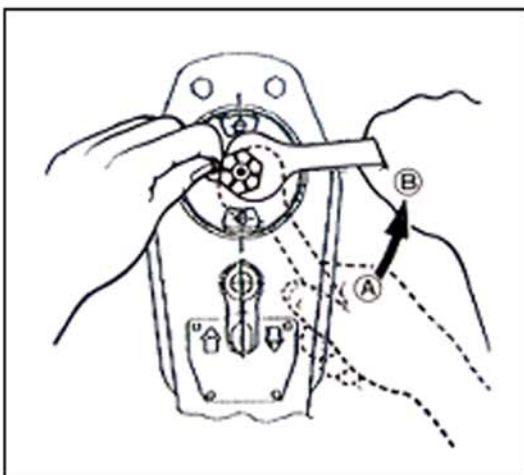
1. LEAVE IT RELEASED.
2. APPLY OIL TO JOINT PARTS OF LOAD CHAIN, HOOK & LOCK LEVER AFTER REMOVING DUST & MOISTURE.
3. KEEP THEM WHERE IS WELL VENTILATED OR DRIED.

## ● ASS'Y & DISASS'Y - SEE 'PART LIST'

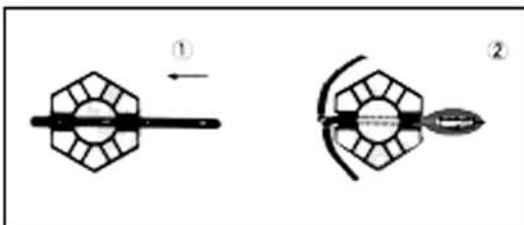
1. REMOVE LOAD CHAIN : REMOVE 'END RING' AND THEN REMOVE IT IN THE RELEASED STATUS.
2. DISASSEMBLE LEVER, BRAKE : DISASSEMBLE THEM FROM LEFT TO RIGHT OF PART LIST.
3. DISASSEMBLE GEAR, CENTER PART : DISASSEMBLE THEM FROM RIGHT TO LEFT OF PART LIST.
4. [ASSEMBLY] OPPOSITE OF DISASS'Y.

## ● MAINTENANCE & CHECKING

- CHANGE SPARE PART IN CASE OF DEFORMITY (EXTENSION, FROOVE, WEAR, DAMAGE etc.)
- DISASS'Y 1. DEFORMITY OF END RING, CHAIN, BOTTOM HOOK.
- DISASS'Y 2. DEFORMITY OF LEVER, GRIP RING, STOPPER, BRAKE DISK, RATCHET GEAR, HUB, PAWL.
- DISASS'Y 3. DEFORMITY OF GEAR COVER, GEAR SIDE PLATE, TOP HOOK, TOP HOOK BOLT, GUIDE, LOAD SHEAVE, STRIPPER.



[PIC.1] CASTLE NUT (HOW TO ADJUST)



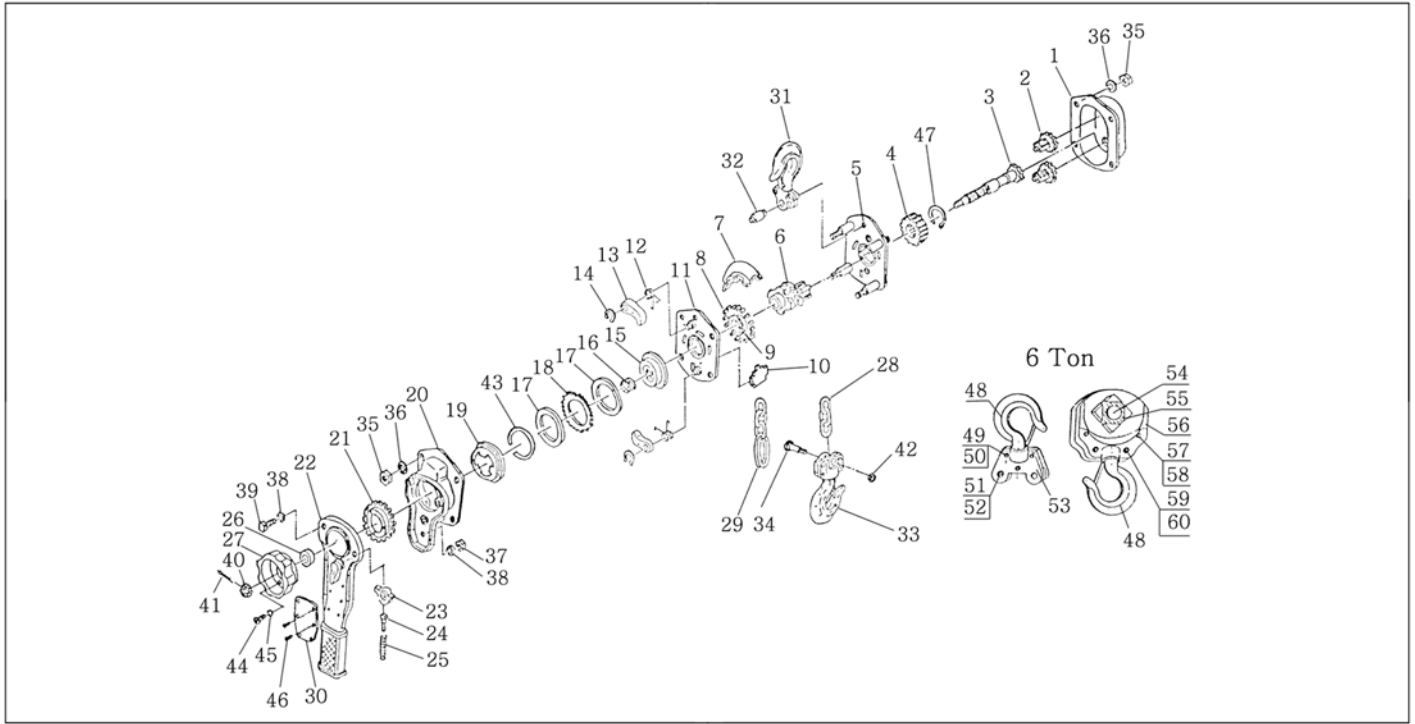
[PIC.3] SPLIT PIN (HOW TO JOIN)

1. OIL MUST BE APPLIED ON CONTACT SURFACE OF BRAKE DISK.
2. HOW TO ADJUST 'BRAKE'
  - a. PUT 'CHANGE LEVER' ON 'UP'
  - b. PULL LOAD CHAIN OF HOOK.
  - c. BRAKE WORKS.
  - d. RELEASE CASTLE NUT'S GROOVE A BIT AT CASTLE NUT'S COMPLETE FASTENING [PIC.1 A] AND THEN, INSERT SPLIT PIN [PIC.1 B] AND COMBINE REVOLVING AS [PIC.2]

## ● CHARACTERISTICS

1. AUTOMATIC BRAKE OPERATION WITHOUT GRIP RING'S WORK.  
(POSSIBLE TO ADJUST CHAIN'S LENGTH PULLING CHAIN)
2. IN CASE YOU PULL CHAIN STRONGLY, BRAKE WORKS, SO USE LIGHT POWER.
3. BRAKE WORK AUTOMATICALLY. BUT IN CASE OF LOAD OF BELOW 35kgf, BRAKE IS NOT WORKING.

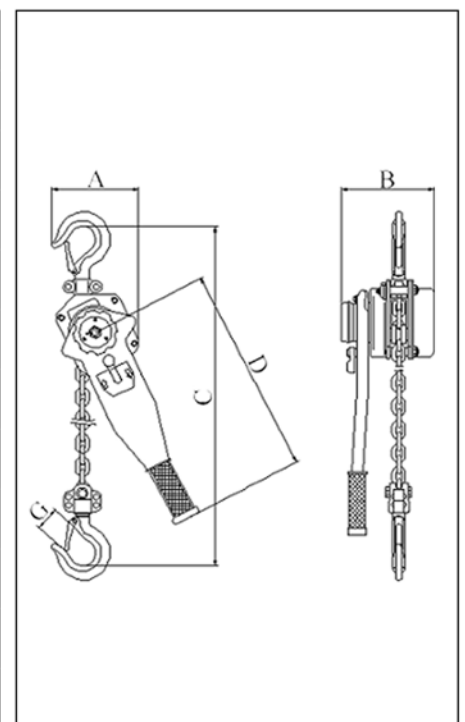
# ● PART LIST



1. GEAR CASE ASSEMBLY	11. LEVER SIDE PLATE ASSEMBLY	21. CHANGE OVER GEAR	31. TOP HOOK ASSEMBLY	41. SPLIT PIN	51. 6t PIN
2. DISK GEAR ASSEMBLY	12. PAWL SPRING	22. LEVER HANDLE ASSEMBLY	32. TOP HOOK SHAFT	42. CASTLE NUT	52. NUT
3. DRIVE SHAFT	13. PAWL	23. CHANGE OVER PAWL	33. BOTTOM HOOK ASSEMBLY	43. WIRE SNAP RING	53. 6t TOP HOOK FRAME
4. SPLINED GEAR	14. SNAP RING	24. SPRING SEAT	34. CHAIN PIN	44. SCREW	54. MOVE WHEEL PIN
5. GEAR SIDE PLATE ASSEMBLY	15. DISK HUB	25. CHANGE OVER SPRING	35. HEX NUT	45. LOCK WASHER	55. MOVE WHEEL
6. LOAD SHEAVE	16. FREE SPRING	26. BUSHING	36. LOCK WASHER	46. RIVET	56. 6t BOTTOM HOOK FRAME
7. GUIDE PLATE	17. FRICTION DISK	27. HAND WHEEL	37. HEX NUT	47. SNAP RING	57. NUT
8. ROLLER	18. RATCHET DISK	28. LOAD CHAIN	38. LOCK WASHER	48. WIRE SNAP RING	58. SCREW
9. BEARING RACE	19. FEMALE THREAD GRIP	29. CHAIN RING	39. SCREW	49. NUT	59. NUT
10. STRIPPER	20. BRAKE COVER ASSEMBLY	30. NAME PLATE	40. CASTLE NUT	50. SCREW	60. SCREW

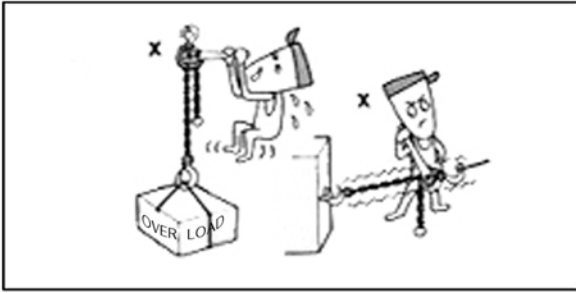
# ● STANDARD SPECIFICATION

MODEL	0.75ton	1.5ton	3.0ton	6.0ton	
CAPACITY	0.75	1.5	3.0	6.0	
RUNNING HIGHT (ft/m)	4.9/1.5	4.9/1.5	4.9/1.5	4.9/1.5	
HANDLE PULL (kg)	14.3	22.4	32.6	34.7	
NO OF COLUMNS OF LOAD CHAIN	1	1	1	2	
LOAD CHAIN DIA (inch/mm)	0.24/6.0	0.32/8.0	0.39/10.0	0.39/10.0	
NET WEIGHT (kg)	7.2	11.8	23.0	33.0	
DIMENSIONS (inch/mm)	A	5.4/136	6.3/160	7.1/180	9.3/235
	B	5.8/148	6.8/172	7.9/200	7.9/200
	C	12.8/325	15.0/380	18.9/480	24.4/620
	D	11.0/280	16.1/410	16.1/410	16.1/410
	G	1.2/30	1.4/35	1.6/40	2.0/50

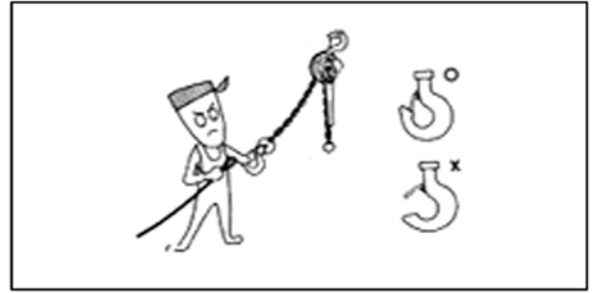


# EIGHT DONT'S THAT SHOULD BE OBSERVED.

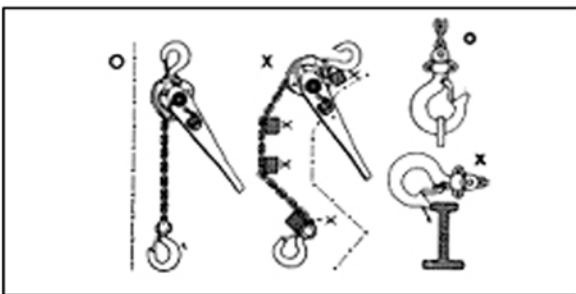
SINCE THE LEVER BLOCK HANDLES HEAVY OBJECTS, NEGLECT OF SAFETY PRECAUTIONS CAN LEAD TO DAMAG TO ARTICLES OR LOSS OF LIFE. YOU CANNOT BE TOO CAREFUL ABOUT HANDLING.



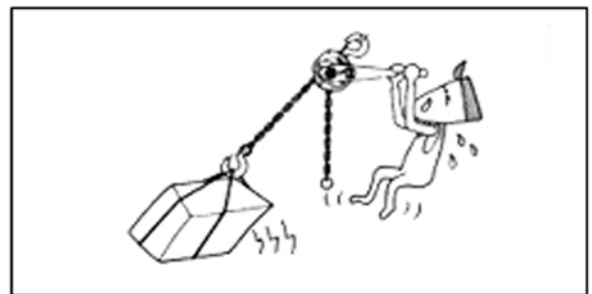
1. DO NOT APPLY OVER SPECIFIED LOAD.



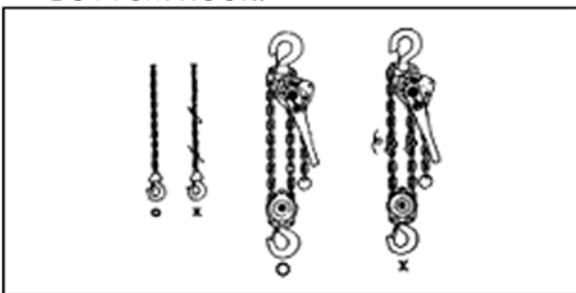
2. DO NOT USE DEFORMED PARTS.



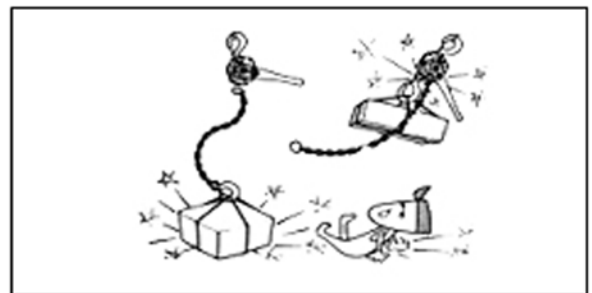
3. DO USE IT IN THE STRAIGHT WAY BETWEEN CHAIN AND TOP, BOTTOM HOOK.



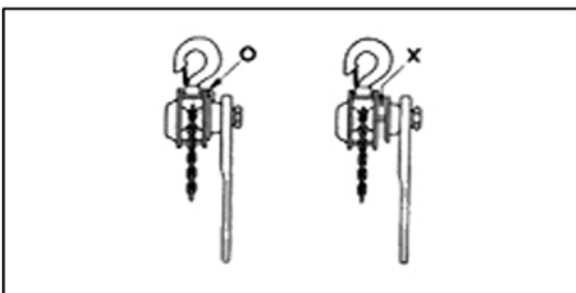
4. DO NOT GIVE IMPACT LOAD TO TOP & BOTTOM HOOK AND CHAIN.



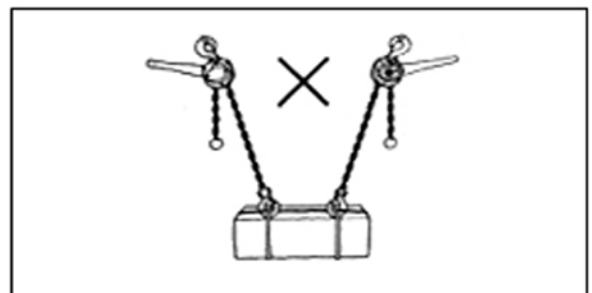
5. DO NOT USE TWISTED OR KINKED CHAIN.



6. DO NOT USE TO THE MAX. AND MIN.



7. DO USE IT AFTER LOCK LEVER'S WORK.



8. DO NOT TRY TO SUSPEND A LOADING WITH TWO BLOCKS.

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