

ELEPHANT

LEVER HOIST TORCON

With Overload Protector

PAT. P.

INTRODUCING YIII SERIES

*SAFETY ENGINEERING ADVANCES ARE
USED EXTENSIVELY IN THE YIII SERIES.*



ANYBODY WHEREVER SAFETY WORKS

A STATE-OF-THE-ART LEVER HOIST THE INDUSTRY'S

THE MOST IMPORTANT ASPECT IS SAFETY.

Safety measures are a vital concern in many different fields including transportation of heavy loads and construction sites. Today, one of the most important requirements of machine operation is a safe work environment.

Safety has been the guiding philosophy behind Elephant's product development. Based on our knowledge and experience, we have recently released a new line of chain lever hoists with overload protectors: the Torque Controller YIII Series.

The YIII series incorporates an ideal safety mechanism which counters an excessive force applied to the lever's handle. It prevents damages to the chain and hooks of the hoist body, as well as to wires and clips used in the operation.

Lever hoists without overload protection can have their hooks extended or chains broken by such activities as attaching a pipe to the lever's handle or applying the weight of two or more operators.

The YIII series is provided with a torque controller mechanism which prevents parts from being deformed by excessive force applied to the lever handle. It is actuated slowly so that it does not apply load to the other parts. (At the same time the brake functions without fail.) In other words, the Y-III series hoists are designed so that it is impossible to apply a load exceeding the set rated load in any way.

An example of an overload experiment



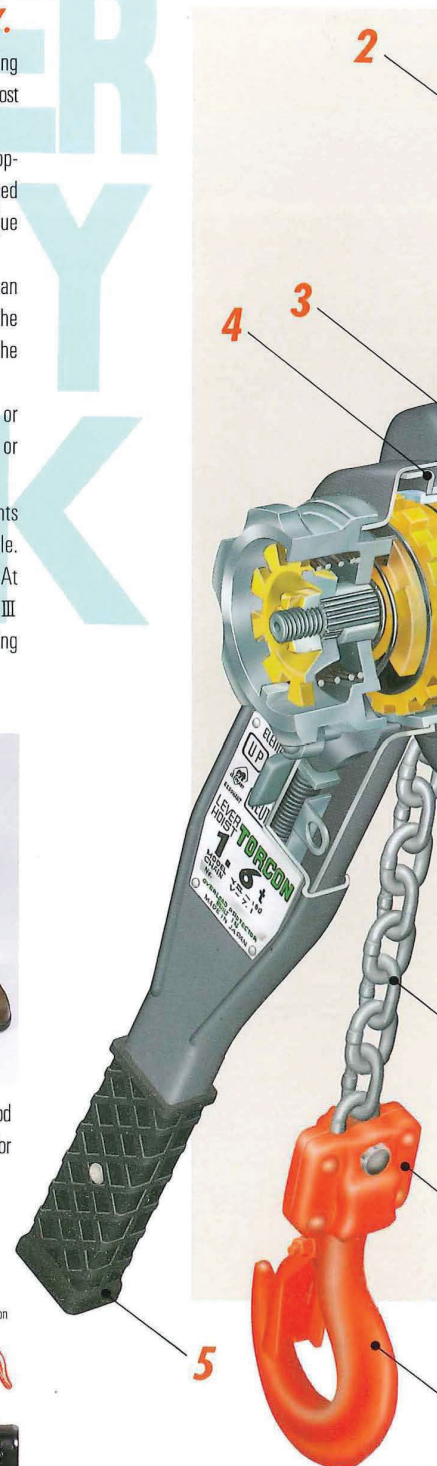
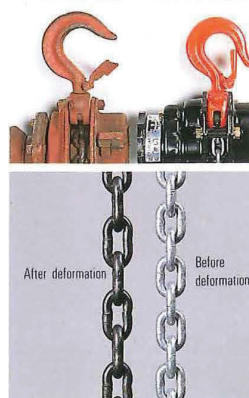
This mechanism ensures that the hoist will be operated safely and remain in good condition for a long time. It not only offers great safety benefits but also has major economic advantages.

Elephant's Torque Controller YIII Series lever hoists put safety first.

Results of the above experiment



After deformation Before deformation



THE BRAKE IS DESIGNED TO AVOID A SOLID DESIGN WITH SPECIAL RU

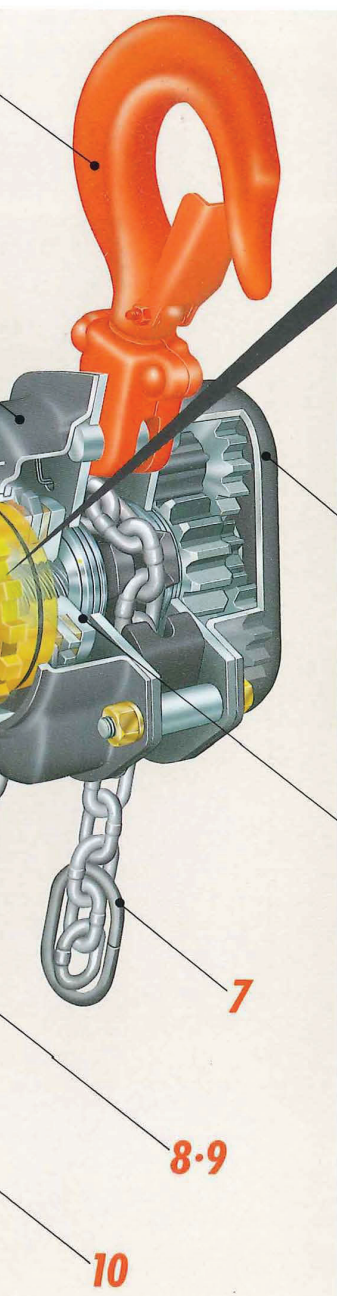
■ Tough black body.

A special, electrodeposited coating on the body. The body is securely held with 4 strong bolts,

■ CE marks indicates reliability.

All the products shown in this sheet have the

VER THAT SETS THE PACE OF S SAFETY-CONSCIOUS TRENDS



1

THE PIVOT OF SAFETY FUNCTIONS: THE TORQUE CONTROLLER MECHANISM

Elephant's safety policy pivots around a torque controller incorporated in the feed gear. The torque controller mechanism prevents the chain and hooks from being damaged by an excessive force applied to the handle of the lever. It also protects other parts from being damaged and does not interfere with the original ease of operation.



2. Hooks are safe even when accidentally overloaded.

The uniquely shaped, heat-treated alloy steel hooks withstand tough jobs. The safety latch, the strongest in the industry, ensures safe clamping.

3. Shock-resistant gear cover and brake cover.

An extraordinarily shock resistant, fully integrated gear cover and brake cover made of high-tensile steel plate protects the internal mechanism from external impact. Special knock pins maintain the reduction gears in their correct position, assuring high mechanical efficiency.

4. Locking out dust and rain.

The brake cover completely encloses the brake, keeping out water, mud, and other foreign substances.

This maintains braking precision, ensures a long service life and plays a major role in rust prevention.

5. Bolted rubber grip assures safe operation.

The rubber grip on the lever is securely bolted, guaranteeing safe, simple handle operation.

6. Extraordinary braking force, easy release, and the finest antirust treatment. The brake mechanism is designed to avoid seizing.

The brake mechanism, which uses a non-asbestos material, exerts an extraordinary braking force during the stop operation to securely hold the load. The brake, constructed to prevent seizing, releases smoothly. A special antirust treatment lowers maintenance.

7. The chain stopper protects the body.

The chain stopper crosses the body drive at right angles, protecting the body by clearly indicating the lowering limit.

8. A special surface-treated, rust resistant white load chain.

The surface of the white load chain is specially treated to ensure a long service life even in severe operating conditions, including marine operation.

9. Superstrong load chain for heavy-duty use.

Elephant's high-tech load chains are approved by DIN 5684, one of the world's strictest standards. Their tensile strength is higher than JIS Grade V (100kgf/mm²) (Of the world's standards, Grade V is only set in JIS.)

10. Dependable device prevents overwinding.

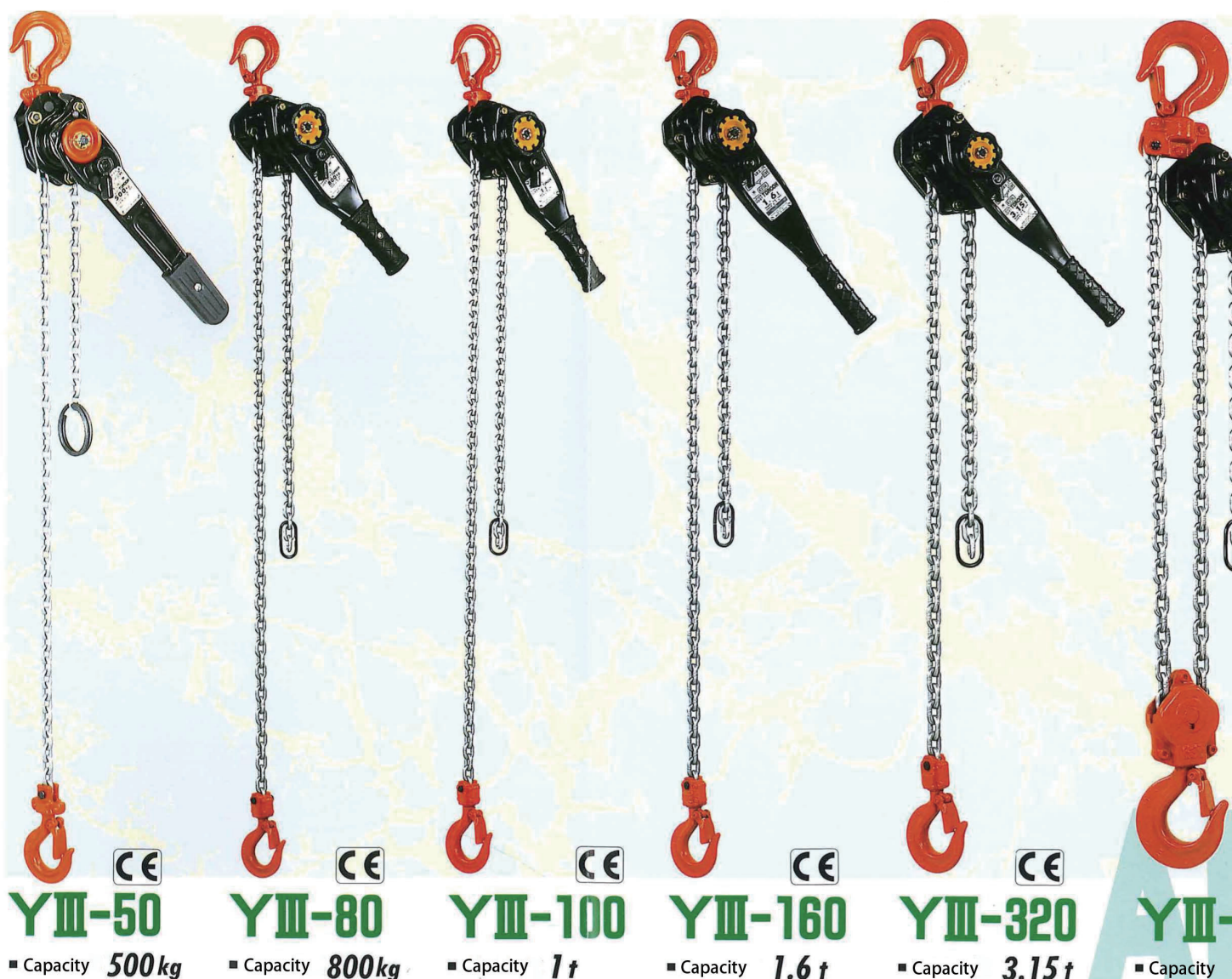
The bottom hook is shaped so that it can be stopped by the side plates of the body. It is also equipped with a guard which protects the chain stop pin when it is pulled horizontally.

SEIZING.
ST-RESISTANT COATING.

resists scratches and prevents rust.
ensuring safety and rigidity.

CE mark.

AN EXTENSIVE RANGE OF YIII SERIES MACHINES TO MEET



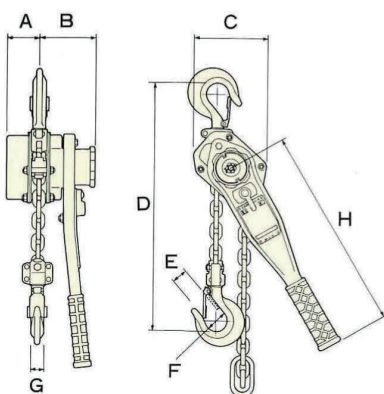
SPECIFICATIONS

Model	YIII-50	YIII-80	YIII-100	YIII-160	YIII-320	YIII-630	YIII-900
Capacity	500kg	800kg	1t	1.6t	3.15t	6.3t	9t
Standard lift (m)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Min. Headroom (mm)	265	294	312	355	411	564	689
Hand effort to lift full working load (kg)	34	30	37	30	37	38	39
Load chain diameter	5	5.6	5.6	7.2	9	9	9
Number of chain fall	1	1	1	1	1	2	3
Grade of chain (JIS)	V	V	V	V	V	V	V
Net weight (kg)	3.6	6.2	6.4	9.5	15.5	26.5	42

DIMENSIONS

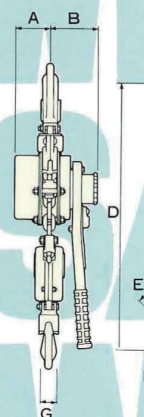
※The test load is 150% of the capacity.

Model	YIII-50	YIII-80	YIII-100	YIII-160	YIII-320	YIII-630	YIII-900
A	26.5	52.5	52.5	62.5	83	83	83
B	83	98.5	98.5	105	110.5	110.5	110.5
C	82	122	122	140	176	235	300
D	265	294	312	355	411	564	689
E	23	23	28	29	36	47	74
F	36	36	43	43	53	70	85
G	13	15	16	21	28	34	47.5
H	284	268	268	385	385	385	385



※The design of the YIII-50 is slightly different than what is shown above.

※Specifications and dimensions are subject to change without notice.



※The YIII-900 is

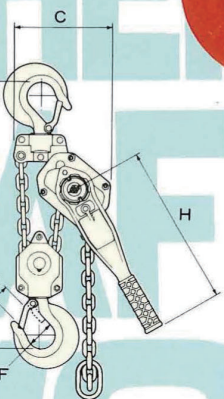
ELEPHANT

ET ALL REQUIREMENTS



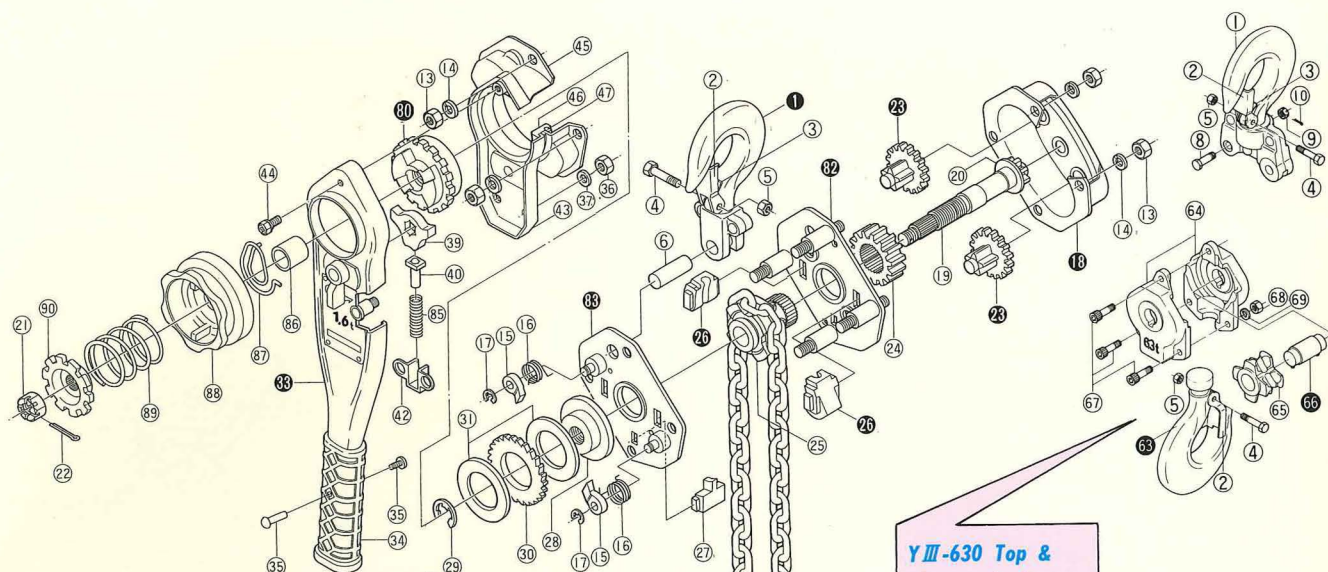
CE
YIII-630
6.3 t

CE
YIII-900
Capacity 9 t



a three chain model; its design is slightly different than what is shown above.

DETAIL DRAWING

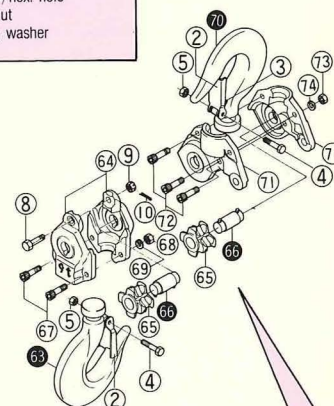


YIII-630 Top & Bottom hook assy.

- 63 Bottom hook assy. for 6.3t
- 64 Bottom hook cover for 6.3t
- 65 Fly wheel for 6.3t
- 66 Fly wheel pin set for 6.3t
- 67 Bolt w/hex. hole
- 68 Hex. nut
- 69 Spring washer

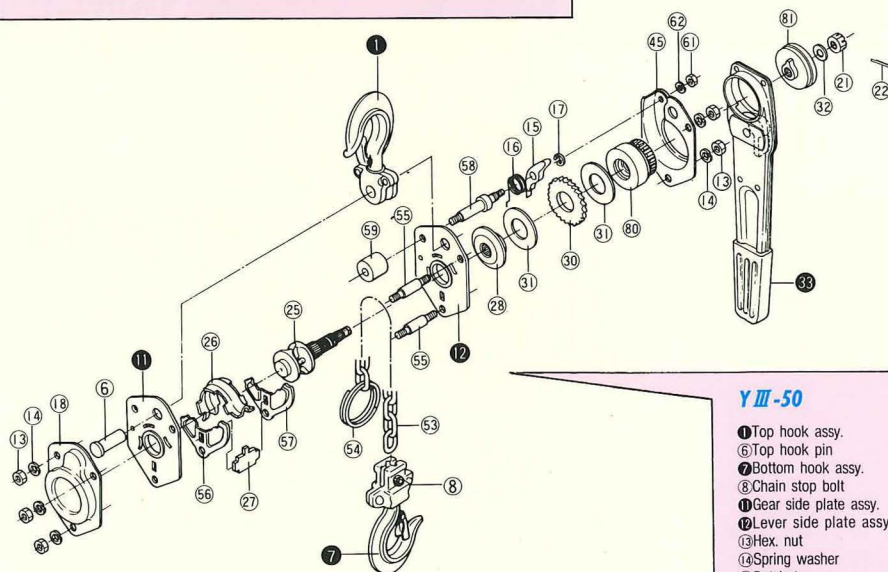
YIII-80, 100, 160, 320, 630, 900

- | | | |
|----------------------------|------------------------------|---------------------------|
| 1 Top hook assy. | 22 Cotter pin | 44 Hex. bolt w/cross hole |
| 2 Safety latch | 23 Second & Third gear assy. | 45 Brake cover |
| 3 Spring for safety latch | 24 Load gear | 46 Cover stop ring |
| 4 Hex. bolt | 25 Load sheave | 47 C-ring |
| 5 Hex. nut | 26 Chain guide assy. | 48 Load chain |
| 6 Top hook pin | 27 Chain stripper | 49 Torque controller |
| 7 Bottom hook assy. | 28 Disc hub | 50 Gear side plate assy. |
| 8 Chain stop bolt | 29 E-ring for disc hub | 51 Lever side plate assy. |
| 9 Castle nut | 30 Ratchet wheel | 52 Ratchet spring |
| 10 Cotter pin | 31 Friction disc | 53 Collar |
| 11 Hex. nut | 32 Lever assy. | 54 Spring for floating |
| 12 Spring washer | 33 Lever grip | 55 Feed handle |
| 13 Ratchet | 34 Pair screws | 56 Spring |
| 14 Ratchet spring | 35 Hex. nut | 57 Spring receiver |
| 15 E-ring | 36 Spring washer | 58 Chain stopper |
| 16 Gear cover assy. | 37 Ratchet for feed gear | |
| 17 Pinion shaft | 38 Ratchet spring pin | |
| 18 Washer for pinion shaft | 39 Spring case | |
| 19 Castle nut | 40 Lever cover | |



YIII-900 Top & Bottom hook assy.

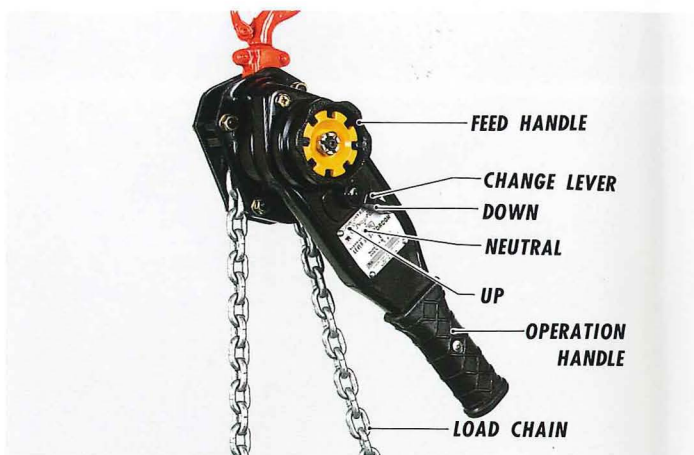
- 90 Bottom hook assy. for 9t
- 91 Bottom hook cover for 9t
- 92 Fly wheel for 9t
- 93 Fly wheel pin set for 9t
- 94 Bolt w/hex. hole
- 95 Hex. nut
- 96 Spring washer
- 97 Top hook assy. for 9t
- 98 Arm for 9t
- 99 Bolt w/hex. hole
- 100 Hex. nut
- 101 Spring washer



YIII-50

- | | | |
|----------------------------|-------------------|----------------------|
| 1 Top hook assy. | 21 Castle nut | 51 Chain stopper |
| 2 Top hook pin | 22 Cotter pin | 52 Stay bolt |
| 3 Bottom hook assy. | 23 Load sheave | 53 Chain leader A |
| 4 Chain stop bolt | 24 Chain presser | 54 Chain leader B |
| 5 Gear side plate assy. | 25 Chain guide | 55 Ratchet pin |
| 6 Lever side plate assy. | 26 Chain stripper | 56 Plain washer |
| 7 Hex. nut | 27 Disc hub | 57 Hex. nut |
| 8 Spring washer | 28 Ratchet wheel | 58 Spring washer |
| 9 Ratchet | 29 Friction disc | 59 Torque controller |
| 10 Ratchet spring | 30 Check washer | 60 Lever setter |
| 11 E-ring | 31 Lever assy. | |
| 12 Sheave cover | 32 Brake cover | |
| 13 Washer for pinion shaft | 33 Load chain | |

*Its simple operation ensures safety!
A one-touch neutral mechanism
proprietary to ELEPHANT brand.*



Operation is simple! Just set the change lever to the neutral position and pull up the feed handle to put the mechanism in neutral and then the chain can be quickly adjusted to a suitable length for each operation. The simple one-touch operation mechanism helps to improve work efficiency further.

The Floating Method of Y III Series.

※ Y III -80 Y III -100 Y III -160 Y III -320 Y III -630 Y III -900

※ For Y III -50, refer to the instruction manual.

Floating



- ①. Set the Change lever to Neutral.
- ②. Pull up the feed handle. (A yellow indicator will appear between the operation handle and the feed handle when the mechanism is in neutral.)
- ③. By pulling the load chain you can adjust the chain length.

Operation: (How to release floating)



- ④. Set the change lever to Up.
- ⑤. Turn the feed handle to the left (counterclockwise) while pressing it gently.

Operating the lever after the above procedures ④ and ⑤ winds up the lower hook if the change lever is set to Up and unwinds it when set to Down.

ANY
WHEEL
SAFE



ELEPHANT CHAIN BLOCK CO., LTD.