YANMAR

LIGHT BOY

OPERATION & MAINTENANCE MANUAL

⚠ WARNING

- **Never attempt to operate or service this Lighting Tower until you have first read and understood all of the applicable Safety Instructions that are set forth in this Manual.**

  The failure to comply with all relevant Safety Instructions could result in bodily injury.

- **To assure that this Manual will be conveniently available to future users, store this manual carefully after use.**

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MODEL LB446HB-1/H-1

Published:04/06/2007
p/n°:LGBBOY-00000

LB446HB-1 S/N E1000001 & Above
LB446H-1 S/N E0900001 & Above

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2. Safety Information

- The YANMAR lighting tower is designed to give safe and dependable service provided that it is operated according to instructions.
  Read and understand the Operation & Maintenance Manual before operating the lighting tower. Failure to do so could result in personal injury or equipment damage.

- The following signal words have been used in this manual and on the safety signs to indicate the seriousness of the hazards that could be encountered by failing to comply with the applicable product warnings, as follows:

⚠ DANGER — Could result in death or catastrophic bodily injury.

⚠ WARNING — Could result in bodily injury.

⚠ CAUTION — Could result in property damage.

IMPORTANT — The signal word "IMPORTANT" has been utilized in this manual to denote those user directions that must be followed to assure the safe operation and maintenance of the lighting tower.

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8. Lighting tower

Type				High-frequency lighting tower	
Model				Balloon type(LB446HB-1)	Spotlight type(LB446H-1)
Lighting tower	Rated voltage		V	130	
	Lamp	Type×Number of lamp		Metal Halide Lamp (HIE400W/C/U/EURO/4K×4)	
		Total luminous flux	lm	160000	
		Projection angle		Variable	
	Balloon	Diameter	ft.in.(mm)	3'9" (1150)	-
	Mast	Type of mast		Telescopic 3 stage mast	
		Mast operation		Manual winch	
		Min. & max. height	ft.in.(mm)	8' to 14'7" (2440 to 4470)	6'8" to 13'6" (2060 to 4160)
	Wheel			4 tired wheels Ø12" (Ø300mm)	
	Dimension	In operation (L×W×H)	ft.in. (mm)	5'1"×5'2"×8'×14'7" (1550×1600×2440 to 4470)	5'1"×5'2"×6'8"×13'6" (1550×1600×2060 to 4160)
		In storage (L×W×H)	ft.in. (mm)	3'1"×2'8"×5'7" (945×800×1750)	3'4"×3'4"(2'8")×5'6" (1040×920×1700)
	Cart dry mass		lbs.(kg)	214 (97)	231(105)
Engine & Generator	Model			YDG25HSS-EXB	
	Rated output		kVA	1.7	
	Starting system			Electric starting	
	Fuel oil/Tank capacity		gal.(L)	Diesel fuel/4.0 (15)	
	Continuous operation without re-supplying fuel oil		hrs	18*	
	Emergency stop system			Engine stop device by low level oil sensor	
	Dry mass		lbs.(kg)	287 (130)	
Mass			lbs.(kg)	501(227)	518 (235)

Note :

The operating time of a generator is measured continuously using a lighting tower in the condition of the generator fitted after breaking in.

Type	Fan motor
Model	DC fan motor
Rated voltage	12V
Ampere	1.08A
Pressure	152Pa

- The specifications could be changed without notice because of the improvements.
- An actual article could differ from the figure in this manual.

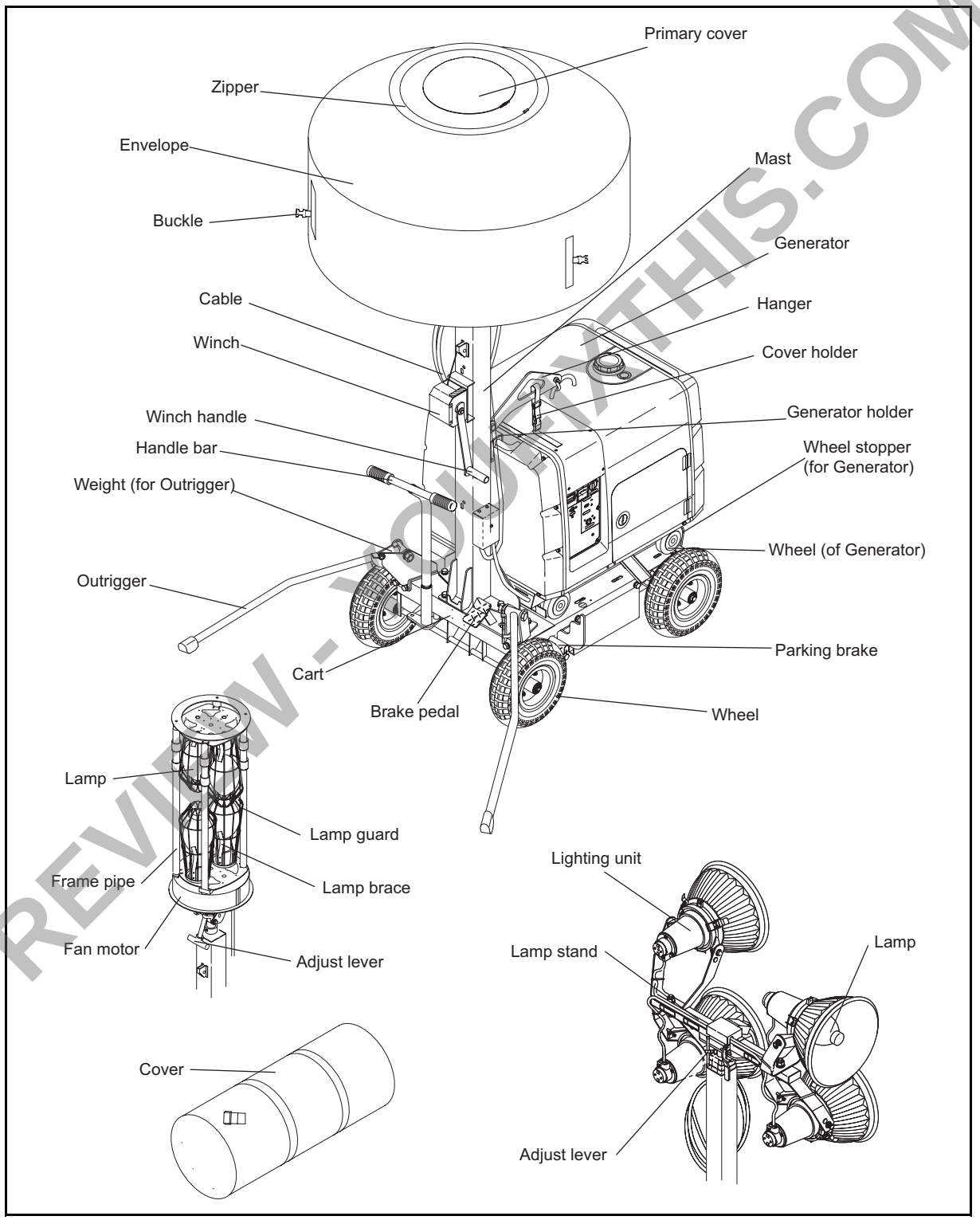
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9. Lighting tower

9-1. Product overview

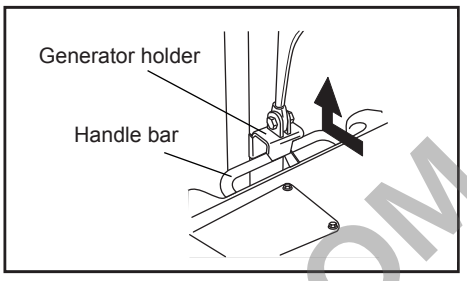
9-1-1. Parts name



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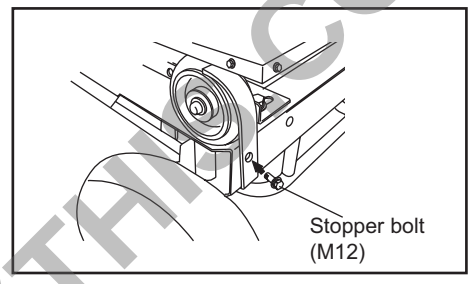
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6) Fix the handle bar at the rear side of the generator to the generator holder in order to completely put the generator on the cart.



7) Install the wheel stoppers, which have been removed, and tighten up the both sides with the stopper bolts (M12) to secure the wheels.

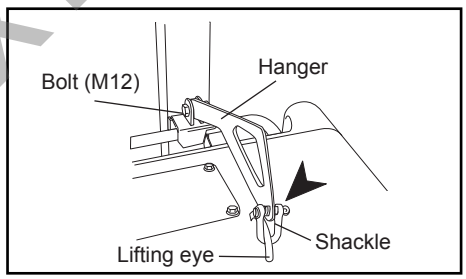
Tightening torque : 28 to 38 ft•lbf (38 to 51 N•m)



8) Loosen the bolt (M12) for the hanger and connect the eyebolt of the generator to the shackle.

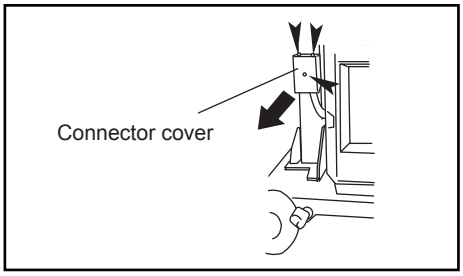
9) Lift the hanger upward so that there is no room in connection between the shackle and the lifting eye of the generator, and then tighten the bolt (M12).

Tightening torque : 28 to 38 ft•lbf (38 to 51 N•m)

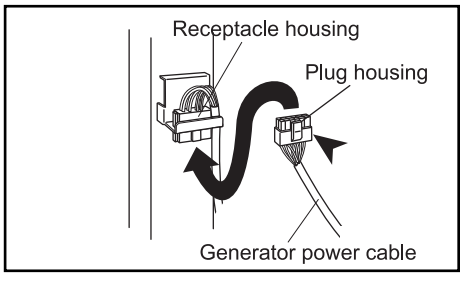


9-2-2. Connection of generator power cable

1) Remove the connector cover at the side of the mast. (Remove the 3 screws.)



2) Securely plug the coupler of the generator power cable as shown in the right figure. (Disconnect the coupler pressing the part indicated by arrow as the coupler has a lock.)



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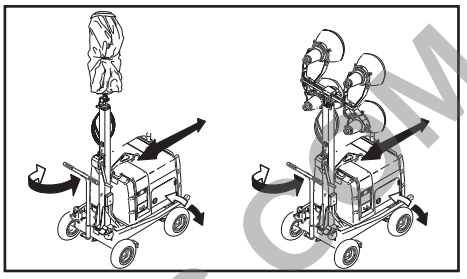
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9-5. Operating each part

9-5-1. Handle operation

1) Forward and reverse travel

Pushing the handle bar forward makes the lighting tower to travel forward and pulling back the handle makes it to travel reverse.



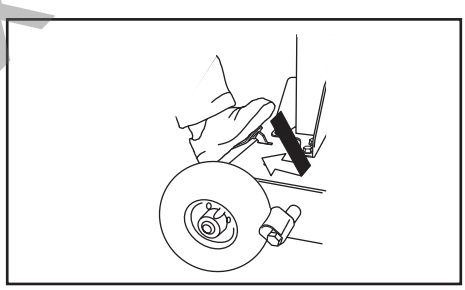
2) Right and left travel

Turn the handle bar in the left (right) direction, and the front wheels turn in the right (left) direction, respectively. The wheels are designed to turn in the opposite direction of the handle operation so that you can apply the force easier.

9-5-2. Operation of parking brake

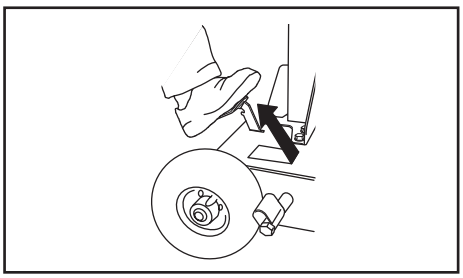
1) Braking

Step on the brake pedal and draw it toward you, so that the wheels are locked to apply the brake.



2) Releasing brake

Push the brake pedal forward to release the brake lock.



⚠ DANGER

When parking on a sloping road or ground, be sure to provide stoppers using stones or blocks for the wheels with as well as apply the brake lock. Without them, the lighting tower could move and cause accidents or injuries.

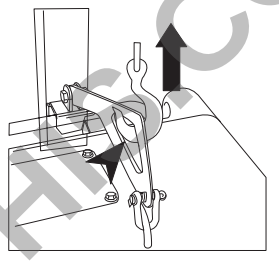
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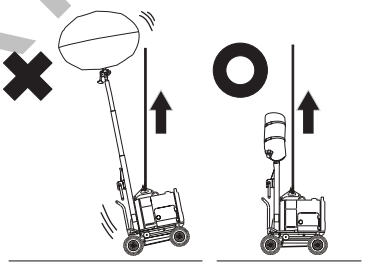
5-3. Precautions for transportation

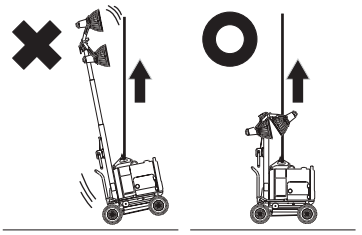
Precautions for loading and unloading the lighting tower

- Be sure to use crane when lifting the lighting tower by the hanger.
- Never lift up the lighting tower at any points except the specified one. Using the other point could result in personal injuries.
- The lighting tower can be lifted in a well-balanced posture at the specified point when the generator is mounted and the mast is completely lowered.

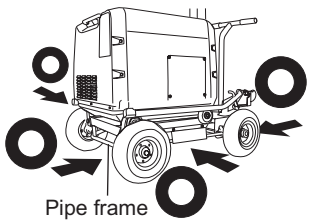


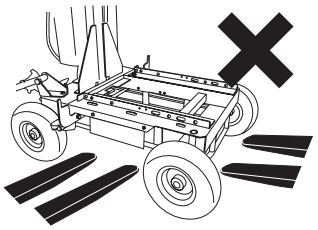
- Lower the mast fully when moving or lifting the lighting tower. Failure to do so could cause the wire to be come off or the lighting tower to be overturned and result in personal injuries.





- Make sure that the generator is loaded when conveying lighting tower by forklift. Failure to do so could cause the lighting tower to fall down and result in bodily injuries.
- Be sure to insert forks at marked position exactly under pipe frame of the base plate.
- Be careful not to make a sudden stop or a short turn when conveying lighting tower by forklift, to prevent it from falling down.





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