

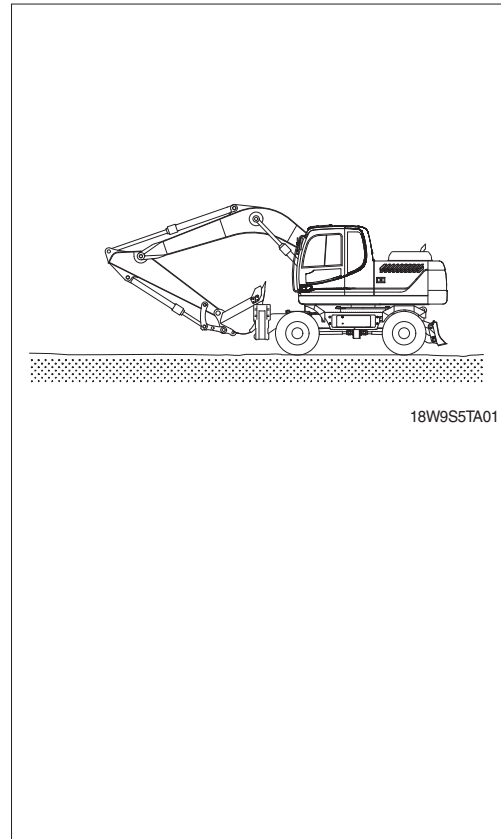
1. ROAD TRAVELING

As this machine can run at the maximum speed of 31 km/h, it is not necessary to transport the machine on trailer in a short distance.

But the transportation by the trailer is convenient in a long distance.

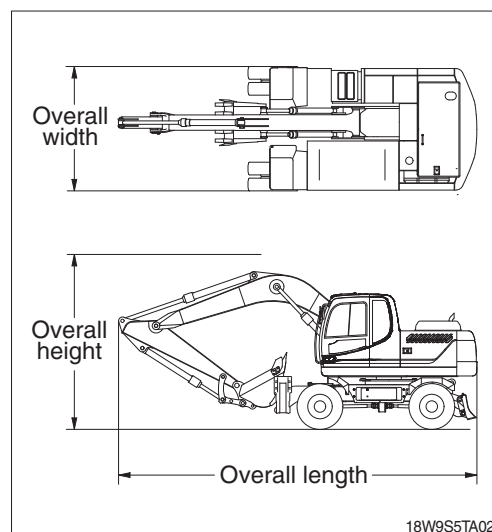
If it is necessary to travel on a road, observe the followings.

- 1) Comply with regulations regarding this machine for the sake of safety.
- 2) Perform daily inspection before starting the machine.
- 3) Cross the bridge after checking that it will safely support the machine weight. If the bridge can not support, a detour must be prepared or the bridge must be reinforced.
- 4) When traveling for a long distance, stop every hour to allow tires and other components to cool down and check any abnormality.
- 5) Drive with the bucket empty.



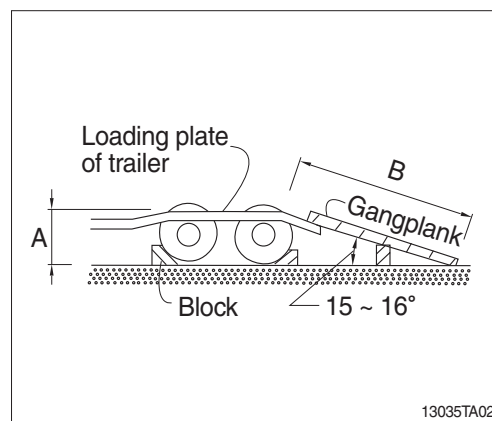
2. PREPARATION FOR TRANSPORTATION

- 1) When transporting the machine, observe the various road rules, road transportation vehicle laws and vehicle limit ordinances, etc.
- 2) Select proper trailer after confirming the weight and dimension from the chapter 2, specification.
- 3) Check the whole route such as the road width, the height of bridge and limit of weight and etc., which will be passed.
- 4) Get the permission from the related authority if necessary.
- 5) Prepare suitable capacity of trailer to support the machine.



- 6) Prepare gangplank for safe loading referring to the below table and illustration.

A	B
1.0	3.65 ~ 3.85
1.1	4.00 ~ 4.25
1.2	4.35 ~ 4.60
1.3	4.75 ~ 5.00
1.4	5.10 ~ 5.40
1.5	5.50 ~ 5.75



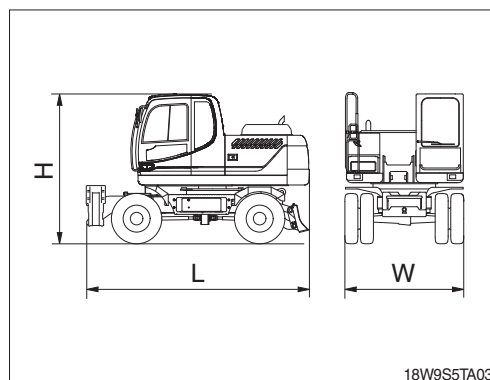
3. DIMENSION AND WEIGHT

1) ROBEX 180W-9S

(1) Base machine

Mark	Description	Unit	Specification
L	Length	mm (ft-in)	4910 (16' 1")
H	Height	mm (ft-in)	3190 (10' 6")
W	Width	mm (ft-in)	2500 (8' 2")
Wt	Weight	kg (lb)	14430 (31810)

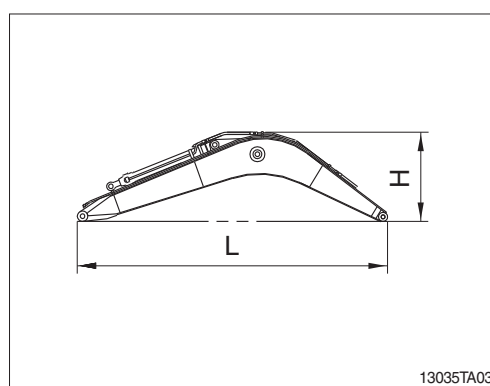
※ 2750 kg (6060 lb) counterweight.



(2) Boom assembly

Mark	Description	Unit	Specification
L	Length	mm (ft-in)	5290 (17' 4")
H	Height	mm (ft-in)	1460 (4' 9")
W	Width	mm (ft-in)	590 (1'11")
Wt	Weight	kg (lb)	1250 (2760)

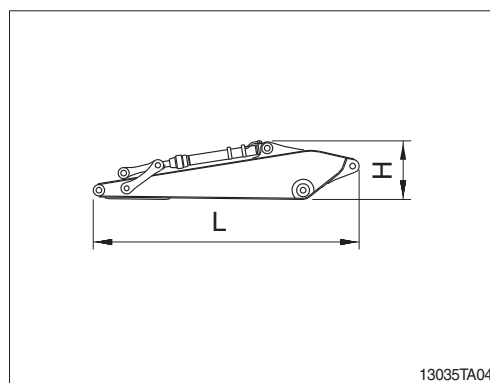
※ 5.1 m (16' 9") mono boom with arm cylinder (included piping and pins).



(3) Arm assembly

Mark	Description	Unit	Specification
L	Length	mm (ft-in)	3080 (10' 1")
H	Height	mm (ft-in)	790 (2' 7")
W	Width	mm (ft-in)	450 (1' 6")
Wt	Weight	kg (lb)	750 (1650)

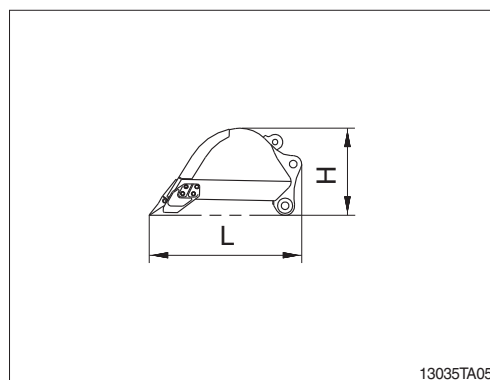
※ 2.2 m (7' 3") arm with bucket cylinder (included linkage and pins).



(4) Bucket assembly

Mark	Description	Unit	Specification
L	Length	mm (ft-in)	1510 (4'11")
H	Height	mm (ft-in)	940 (3' 3")
W	Width	mm (ft-in)	1180 (3' 10")
Wt	Weight	kg (lb)	570 (1260)

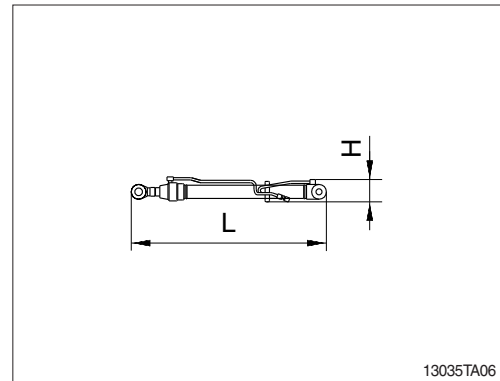
※ 0.76 m³ (0.99 yd³) SAE heaped bucket (included tooth and side cutters).



(5) Boom cylinder

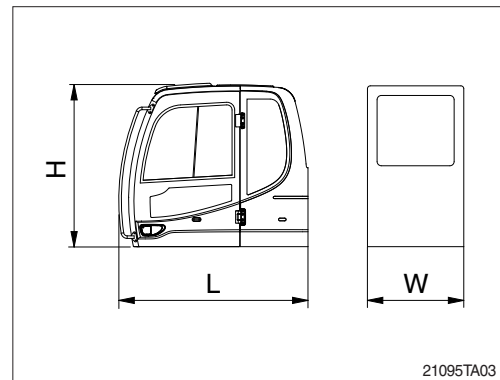
Mark	Description	Unit	Specification
L	Length	mm (ft-in)	1780 (5'10")
H	Height	mm (ft-in)	230 (0' 9")
W	Width	mm (ft-in)	330 (1' 1")
Wt	Weight	kg (lb)	320 (705)

※ Included piping.



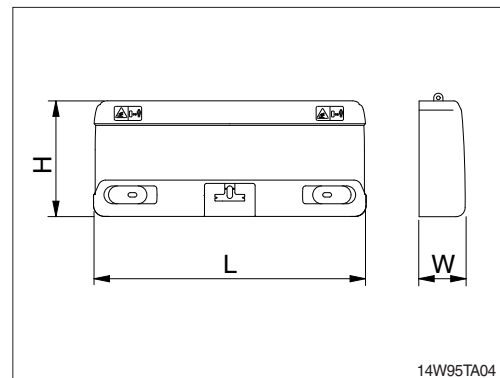
(6) Cab assembly

Mark	Description	Unit	Specification
L	Length	mm (ft-in)	2000 (6' 7")
H	Height	mm (ft-in)	1740 (5' 9")
W	Width	mm (ft-in)	1288 (4' 2")
Wt	Weight	kg (lb)	440 (970)



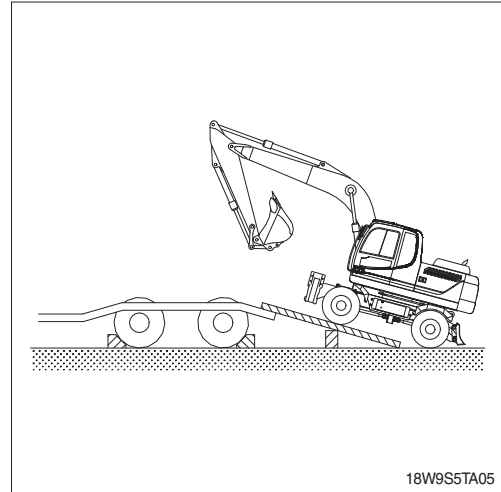
(7) Counterweight

Mark	Description	Unit	Specification
L	Length	mm (ft-in)	2475 (8' 1")
H	Height	mm (ft-in)	1050 (3' 5")
W	Width	mm (ft-in)	460 (1' 6")
Wt	Weight	kg (lb)	3050 (6720)

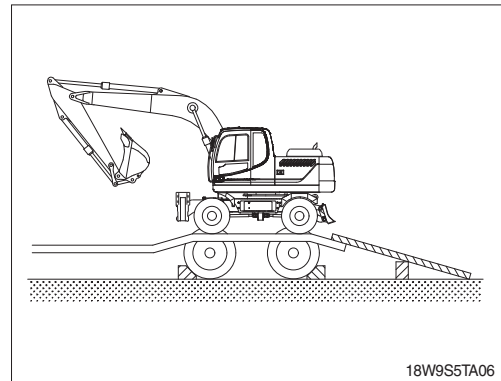


4. LOADING THE MACHINE

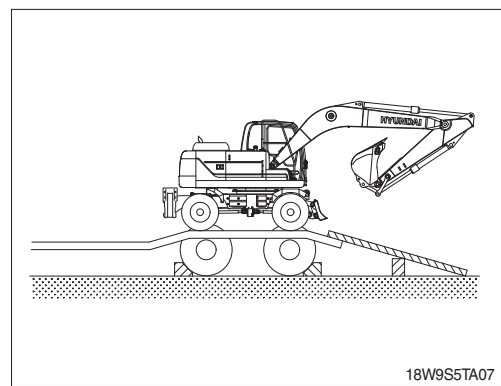
- 1) Load and unload the machine on a flat ground.
- 2) Use the gangplank with sufficient length, width, thickness and gradient.
- 3) Place block tires of the truck and the trailer not to move the trailer.
- 4) Place the swing lock device to the **LOCK** position before fixing the machine at the bed of trailer and confirm if the machine parallels the bed of trailer.
- 5) Drive straight and depress the acceleration pedal slowly on the gangplank with the two speed switch positioned as low speed.



- 6) Do the following after loading the machine to the trailer.
 - (1) Stop loading when the machine is located horizontally with the rear wheel of trailer.



- (2) Place the swing lock device to the **LOCK** position after the swing the machine 180 degree.



(3) Lower the working equipment gently after the location is determined.

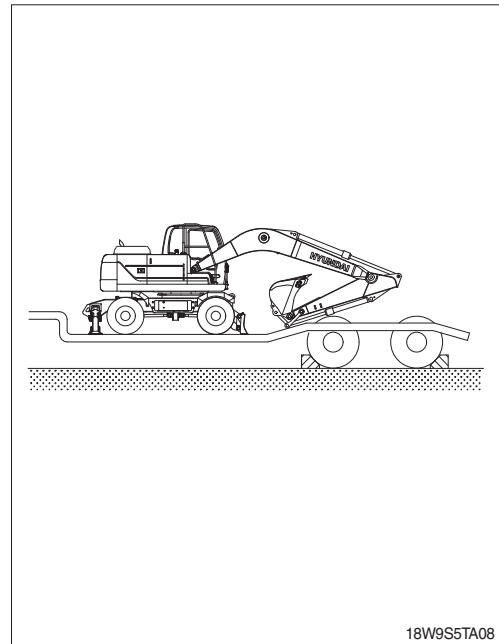
※ Place rectangular timber under the bucket cylinder to prevent the damage of it during transportation.

▲ Be sure to keep the travel speed switch on the low speed while loading and unloading the machine.

▲ Avoid using the working equipment for loading and unloading since it will be very dangerous.

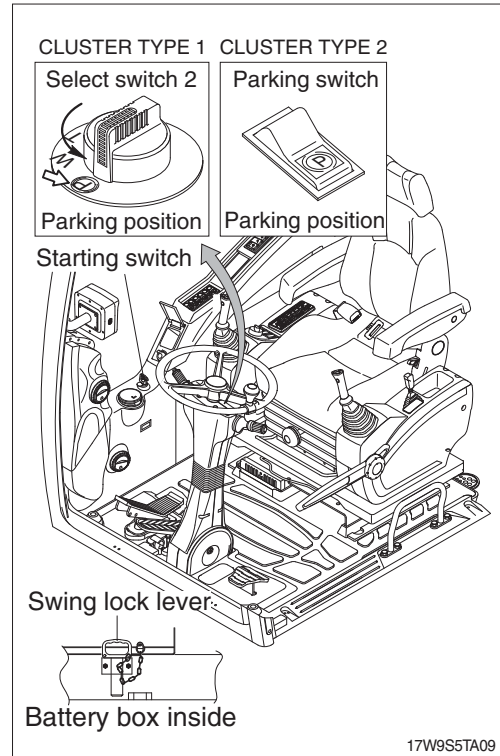
▲ Do not operate any other device when loading.

▲ Be careful on the boundary place of loading plate or trailer as the balance of machine will abruptly be changed on the point.

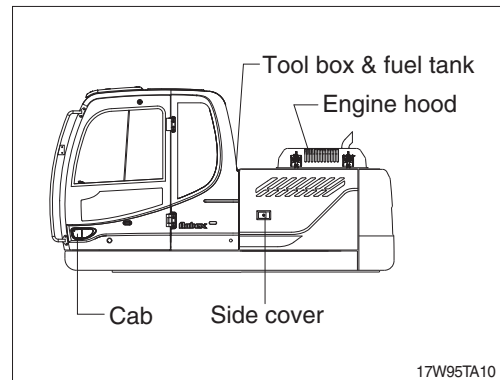


5. FIXING THE MACHINE

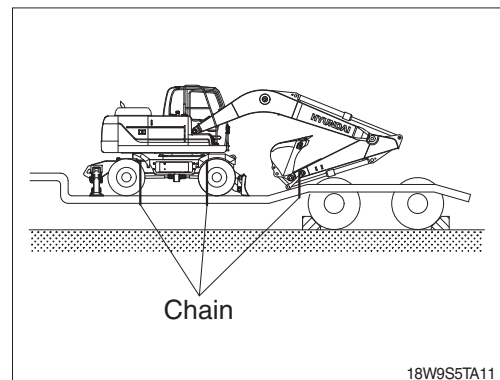
- 1) Place the swing lock device on the LOCK position.
- 2) Place the select switch 2 to the parking position.
(CLUSTER TYPE 1)
Place the parking switch to the parking position.
(CLUSTER TYPE 2)
- 3) Keep the safety lever on the SAFETY position.
- 4) Turn OFF all the switches and remove the key.



- 5) Secure all locks.



- 6) Place timber underneath of the tires and fix firmly with wire rope to prevent the machine from moving forward, backward, right or left.



6. LOADING AND UNLOADING BY CRANE

- 1) Check the weight, length, width and height of the machine referring to the chapter 2, specification when you are going to hoist the machine.
- 2) Use long wire rope and stay to keep the distance with the machine as it should avoid touching with the machine.
- 3) Put a rubber plate where the wire rop contact with the machine's body to prevent damage.
- 4) Place crane on the proper place.
- 5) After the boom is raised to the maximum high, install the wire rope and stay like the illustration.

- ⚠ **Make sure wire rope is proper size.**
- ⚠ **Place the safety lever to LOCK position to prevent the machine moving when hoisting the machine.**
- ⚠ **The wrong hoisting method or installation of wire rope can cause damage to the machine.**
- ⚠ **Do not load abruptly.**
- ⚠ **Keep area clear of personnel.**
- ⚠ **Recommend to manufacture the stays separately as per lifting conditions.**

