

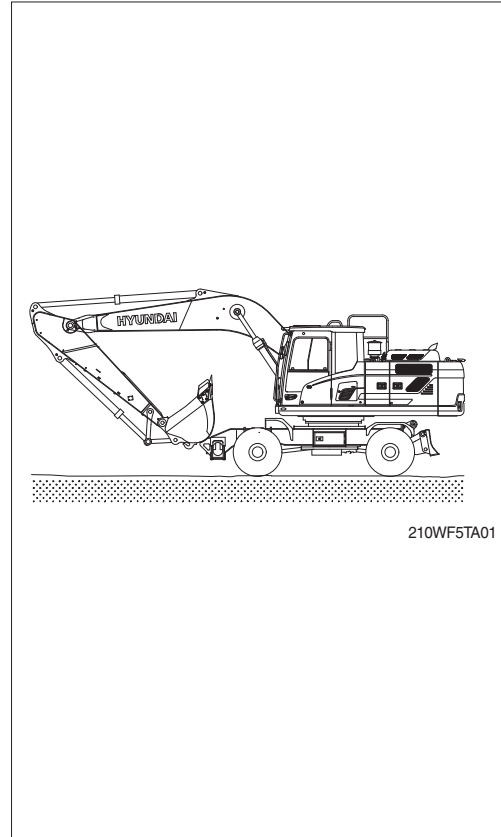
## 1. ROAD TRAVELING

As this machine can run at the maximum speed of 34.7 km/h (21.6 mph), 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.

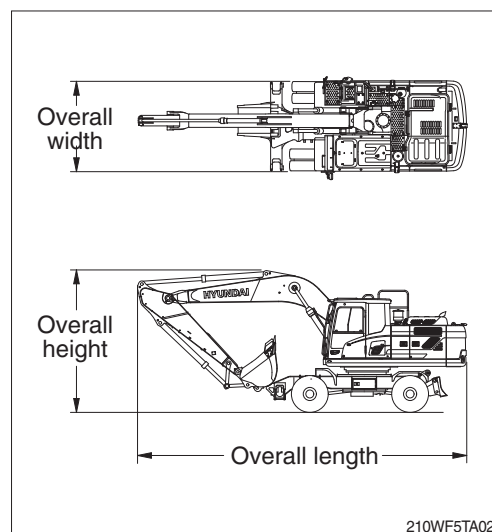
If it is necessary to travel on a road, observe the followings.

- 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.



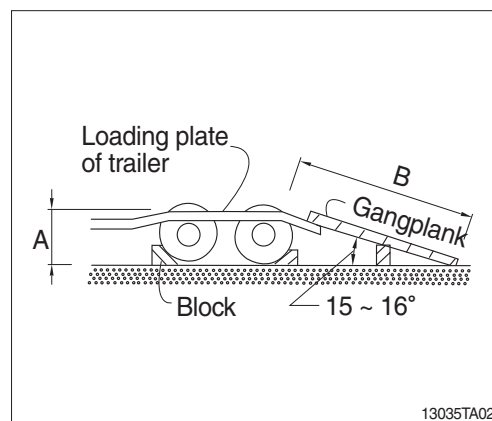
## 2. PREPARATION FOR TRANSPORTATION

- 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



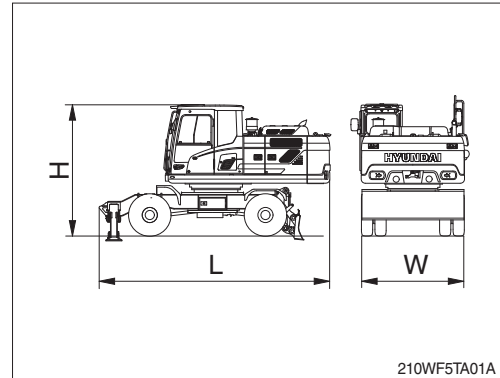
### 3. DIMENSION AND WEIGHT

#### 1) HW210

##### (1) Base machine

Mark	Description	Unit	Specification
L	Length	mm (ft-in)	5600 (18' 4")
H	Height	mm (ft-in)	3245 (10' 8")
W	Width	mm (ft-in)	2530 ( 8' 4")
Wt	Weight	kg (lb)	16700 (36820)

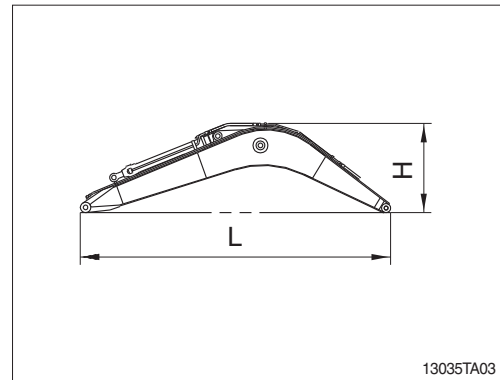
※ 3400 kg (7500 lb) counterweight.



##### (2) Boom assembly

Mark	Description	Unit	Specification
L	Length	mm (ft-in)	5840 (19' 2")
H	Height	mm (ft-in)	1550 ( 5' 1")
W	Width	mm (ft-in)	630 ( 2' 1")
Wt	Weight	kg (lb)	1790 (3950)

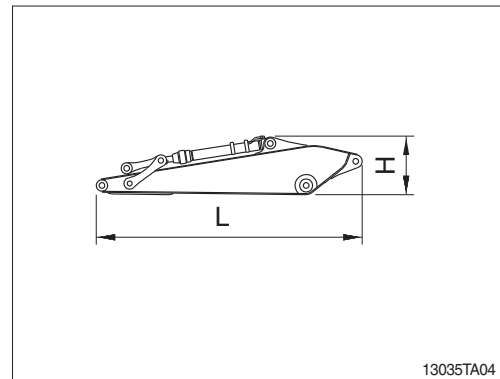
※ 5.65 m (18' 6") boom with arm cylinder (included piping and pins).



##### (3) Arm assembly

Mark	Description	Unit	Specification
L	Length	mm (ft-in)	3910 (12' 0")
H	Height	mm (ft-in)	870 ( 2' 10")
W	Width	mm (ft-in)	350 ( 1' 2")
Wt	Weight	kg (lb)	1095 (2410)

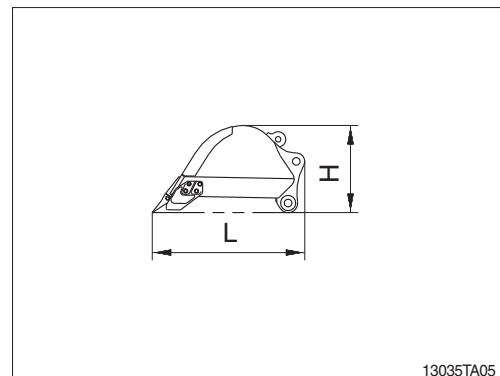
※ 2.92 m (9' 7") arm with bucket cylinder (included linkage and pins).



##### (4) Bucket assembly

Mark	Description	Unit	Specification
L	Length	mm (ft-in)	1600 ( 5' 3")
H	Height	mm (ft-in)	1070 ( 3' 6")
W	Width	mm (ft-in)	1160 ( 3' 10")
Wt	Weight	kg (lb)	770 (1700)

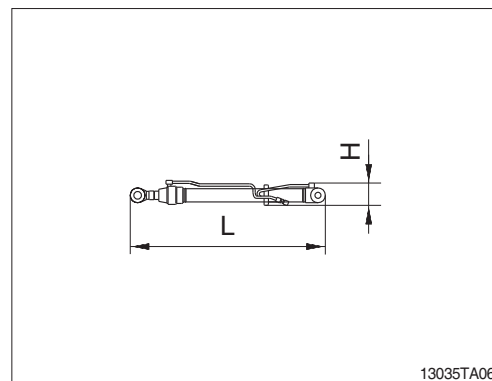
※ 0.80 m<sup>3</sup> (1.05 yd<sup>3</sup>) SAE heaped bucket (included tooth and side cutters).



### (5) Boom cylinder

Mark	Description	Unit	Specification
L	Length	mm (ft-in)	1960 ( 6' 5")
H	Height	mm (ft-in)	230 ( 0' 9")
W	Width	mm (ft-in)	330 ( 1' 1")
Wt	Weight	kg (lb)	360 (794)/2EA

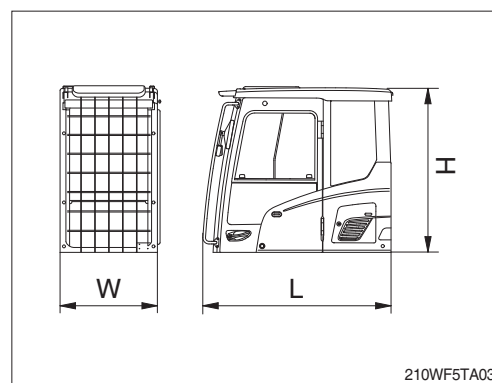
※ Included piping.



### (6) Cab assembly

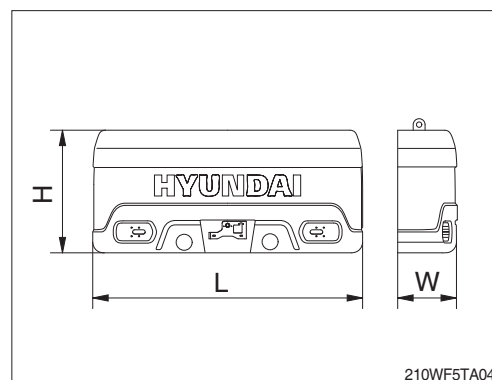
Mark	Description	Unit	Specification
L	Length	mm (ft-in)	1950 (6' 5") [2070 (6' 10")]
H	Height	mm (ft-in)	1780 (5' 10") [1822 (6')]
W	Width	mm (ft-in)	1104 (3' 7") [1126 (3' 8")]
Wt	Weight	kg (lb)	486.8 (1073) [641.7 (1415)]

[ ] : with FOG GUARD



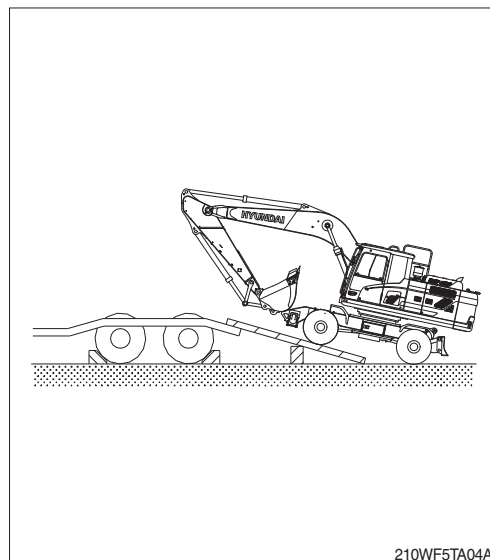
### (7) Counterweight

Mark	Description	Unit	Specification
L	Length	mm (ft-in)	2530 ( 8' 4")
H	Height	mm (ft-in)	1150 ( 3' 9")
W	Width	mm (ft-in)	560 ( 1' 10")
Wt	Weight	kg (lb)	3400 (7500)

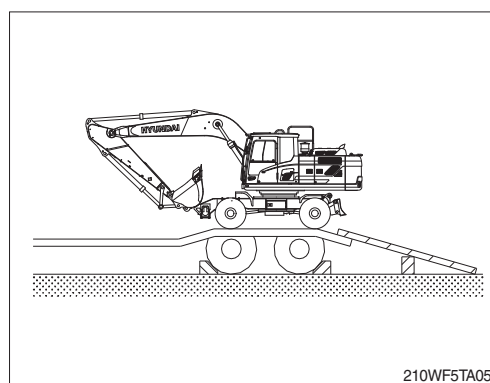


## 4. LOADING THE MACHINE

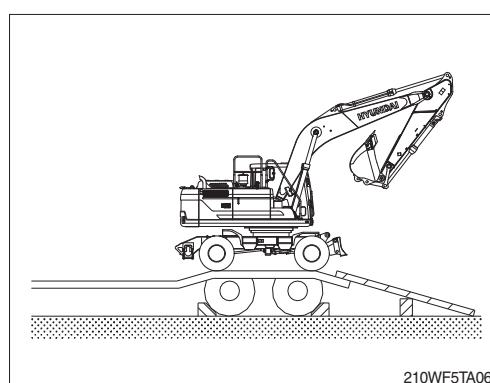
- 1) Load and unload the machine on a flat ground.
- 2) Use the gangplank with sufficient length, width, thickness and gradient.
- 3) Place block tires of the truck and the trailer not to move the trailer.
- 4) Place the swing lock device to the **LOCK** position before fixing the machine at the bed 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 upper structure 180 degree.



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

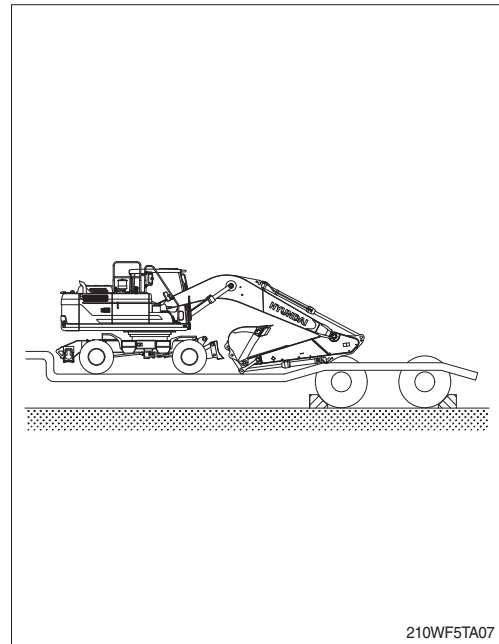
※ **Place rectangular timber under the bucket cylinder to prevent the damage of it during transportation.**

▲ **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.**

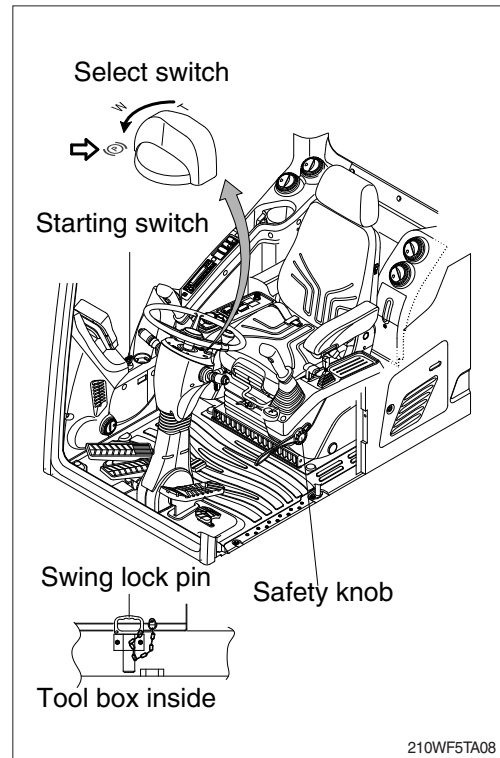
▲ **Do not operate any other device when loading.**

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

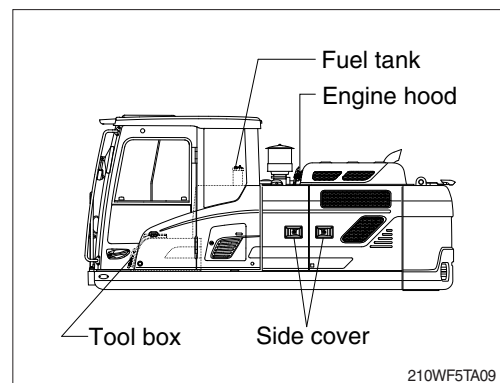


## 5. FIXING THE MACHINE

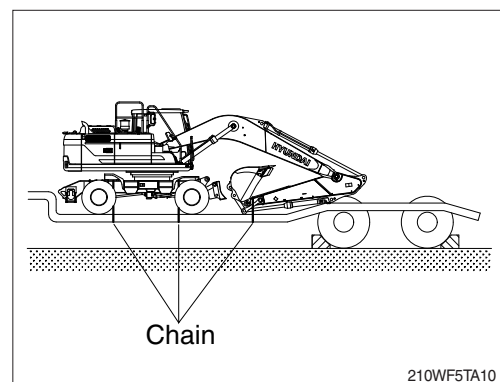
- 1) Place the swing lock device on the LOCK position.
- 2) Place the select switch to the parking position.
- 3) Keep the safety knob on the knob position.
- 4) Turn OFF all the switches and remove the key.



- 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 rope 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 knob 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.**

