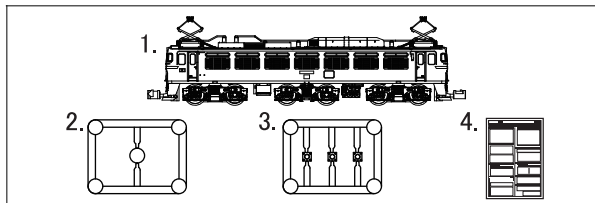


Thank you for purchasing this Rokuhan product.  
This product is precise. Please read this instruction manual carefully before operation and operate properly.

## 1. Caution

- Use only a Rokuhan controller to operate this product.
- Clean track (Metal rails) before operation.
- Remove dirt and dust on wheels.
- Do not operate continuously over a long period of time.
- Do not change train direction in suddenly. Stop train first then change direction.
- In the case of derailment or short circuit, turn off the power of controller, unplug the controller, and then eliminate the cause of problem.
- Disassembling and modification could cause failure of this product.
- Keeping this product under sunlight or fluorescent light for long time could cause change in color.
- Keep and operate this product in dry dust free locations. Keep away from sources of heat.
- To avoid shock or electrocution, do not operate this product in a wet location or operate with wet hands.
- This product includes sharp edge parts. Handle with care.
- Handle tools with care.
- This product is not recommended for use by children under 8 years old unless supervised by an adult.

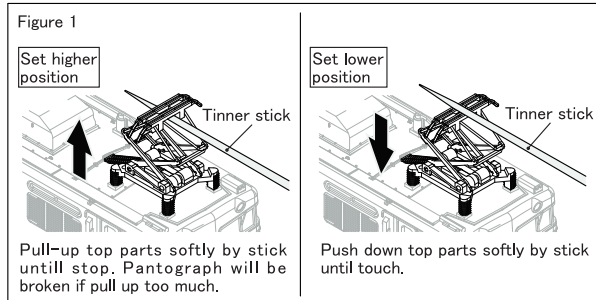
## 2. Parts list



1. EF81 Electric locomotive ..... 1 pc
2. Runner part (Depends on model spec)  
Head mark ..... 1 pc
3. Runner part  
Radio antenna ..... 3 pcs (1pc is spare)
4. Instruction manual ..... 1 pc

## 3. How to set pantograph height

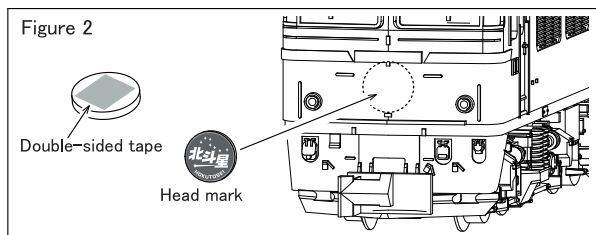
Please use tinner stick or similar tool. (See Figure 1)



## 4. How to set the accessory parts

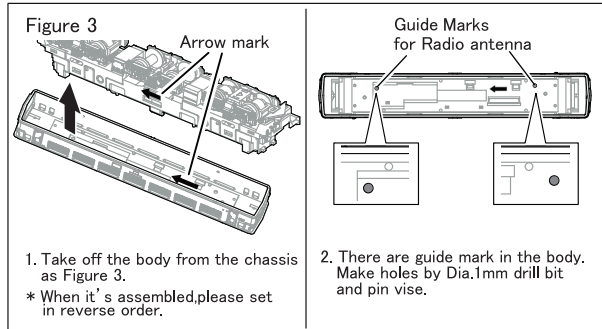
### 4-1 Set Head mark

Cut out the head mark from the runner by Nipper.  
Stick the head mark with double-sided tape on the place as shown in figure 2.

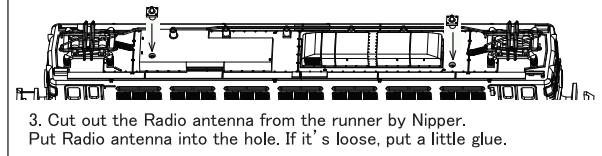


### 4-2. Set Radio antenna

All EF81 series locomotives are not equipped with Radio antenna.  
Thus, there is no hole on the body and consumers need to make it by himself. Please set Radio antenna according to following instruction.  
(See Figure 3)



1. Take off the body from the chassis as Figure 3.  
\* When it's assembled, please set in reverse order.
2. There are guide mark in the body. Make holes by Dia.1mm drill bit and pin vise.

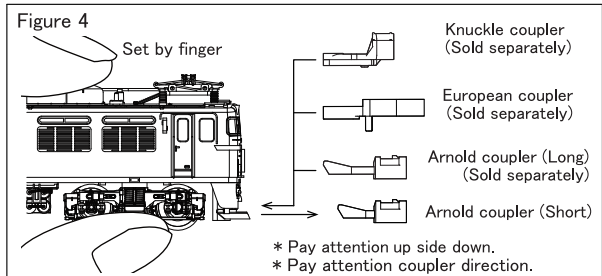


## 5. How to exchange Coupler

Arnold coupler (Short) in default, Can exchange to another ROKUHAN snap in coupler set.

- A019 Knuckle coupler (Short) ● A020 Knuckle coupler (Long)
- A021 European coupler (Short) ● A022 European coupler (Long)
- A025 Arnold coupler (Long)

Push out original coupler softly from body, Push another coupler in. (See Figure 4)



## 6. Maintenance

- If EF81 does not run, check feeder cable and power are plugged in correctly, the positions of main switch and direction switch on controller. Also check batteries are set correctly in controller if batteries are used as power.
- The wheels and track may be dirty if EF81 does not run smoothly. Remove the dirt on the wheels and track with a clean cloth and rail cleaner.  
\* Do not put excessive power on the wheels when you clean it.
- Precise parts are used to make EF81. Please pay attention not give damage, drop nor give strong force. Handle with care. If it is broken, be careful not to be injured by the broken piece or not to accidentally swallow it.

## 7. Trouble and repair

- The user is responsible for any trouble, accident, or injury caused by misuse, disassembling, or modification of this product. Rokuhan will not repair a product which has been opened, taken apart, or modified.
- Specification and appearance of our products are subject to change without prior notice.
- We sell assembled product only.
- Contact Rokuhan customer service if you have any questions about this product.