

7. Lightning accessories (Sold separately)

7-1 Room light <Able to install in all cars>

This lighting accessories can use in all cars. <Either A009 or A030 can be used>  
Please read each instruction manual included with each lighting parts.

7-2 DCC Decoder <A059 able to install in all cars>

Trim a part of DCC decoder to fit, trim with nippers to install in every type of car with A059. DCC DECODER MULTIPUL TYPE.  
(See Figure 17) Please read included instruction manual of A059 for more information.

Figure 17

**T031-1 489 limited express “HAKUSAN” HAKUSAN color 5 cars basic set**

A030 Room light for front/tail car (short)      A009 Room light type A  
A059 DCC Decoder room light multi type (Room light C type mode)      A059 DCC Decoder room light multi type (Room light A type mode)

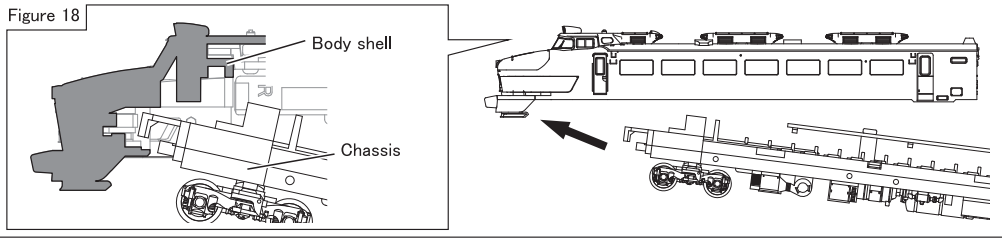
クハ489-505      サロ489-25      モハ488-205      モハ489-20      クハ489-5

**T031-2 489 limited express “HAKUSAN” HAKUSAN color 4 cars extension set**

A009 Room light type A  
A059 DCC Decoder room light multi type (Room light A type mode)

モハ488-215      モハ489-30      モハ488-13      モハ489-13

\*Please open car as shown when installing room light or decoder. (See Figure 18)  
Related cars…クハ489-505・クハ489-5  
\*After installing room light, or decoder, turn chassis upside down to install in body as shown.



8. Trouble shooting

Check following before ordering repair.

Problem	Cause	Correction
Trains do not run smoothly. Or lights flicker.	There is dirt on rails.	Remove the dirt with cleaner and cloth.
	There is dirt on wheels.	Remove the dirt with cleaner and cloth.
Trains do not run.	A train derails.	Set the train properly on track using relailer.

9. Trouble and repair

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



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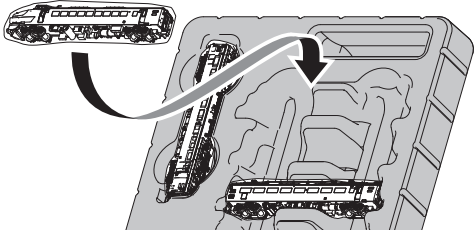
489 Limited Express “HAKUSAN” HAKUSAN Color  
Common instruction manual

T031-1  
T031-2

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

1. Caution

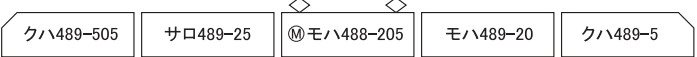
- Please operate this model with a Rokuhan controller.
- Clean up tracks (metal rails) before operation.
- Remove dirt and dust on wheels.
- Do not operate continuously over a long period of time.
- Do not change train direction suddenly. Stop train first then change direction.
- In the case of derailment or short circuit, turn off the power of controller immediately, unplug the controller, and then eliminate cause of problem.
- Disassembling and modification work could cause damage to this product.
- Storing this product under sunlight or fluorescent light for a long time could cause discoloration.
- Keep this product away humidity, dust and heating devices.
- To avoid shock or electrocution, do not operate this product in wet place or touch with wet hands.
- To avoid injury with sharp parts, please handle with care.
- This product is not recommended that children under 15 years old use unless supervised by an adult.
- Keep train cars in Poly bag, to avoid damage after using.



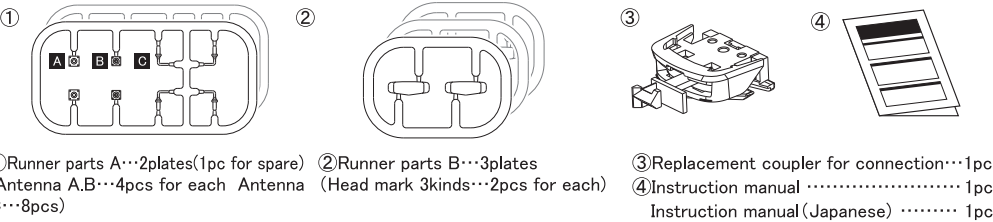
2. Parts list

T031-1 489 LIMITED EXPRESS “HAKUSAN” HAKUSAN COLOR 5 CARS BASIC SET

Cars



Accessory parts

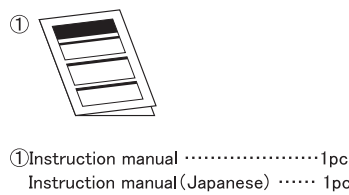


T031-2 489 LIMITED EXPRESS “HAKUSAN” HAKUSAN COLOR 4CARS EXTENSION SET

Cars



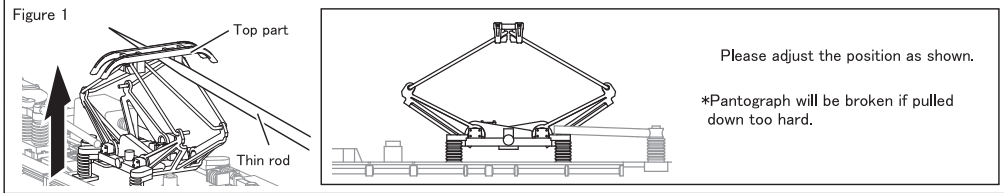
Accessory parts



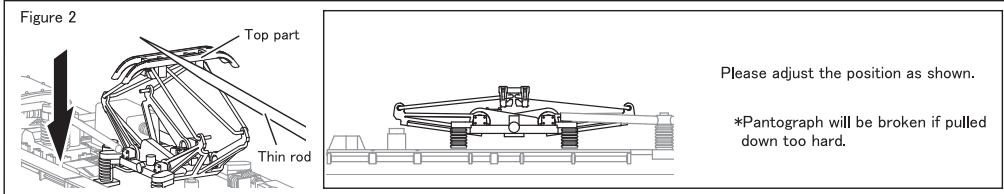
### 3. How to handle accessories

#### 3-1 Pantograph Related cars...モハ488

- ① Lift-up top part softly by thinner rod or needle until stop. (See Figure 1)



- ② Push down top part slowly and softly with thin rod or needle until stop. (See Figure 2)



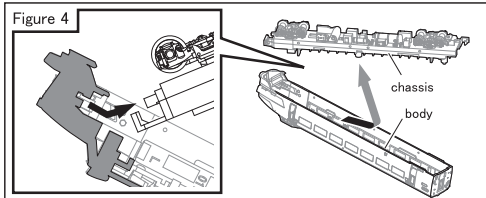
#### 3-2 Switch off head/ tail lights Related cars...クハ489

Please check the bottom chassis to move the slide switch to the off position. (See Figure 3)

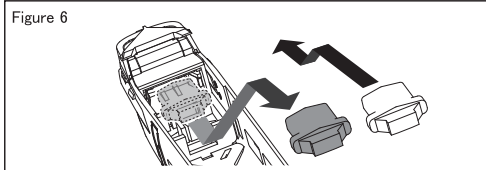
#### 3-3 How to change Head mark Related cars...クハ489

Please cut out the Head mark from Runner B.

- ① Turn upside down and remove chassis from body shell to diagonally upward. (See Figure 4)



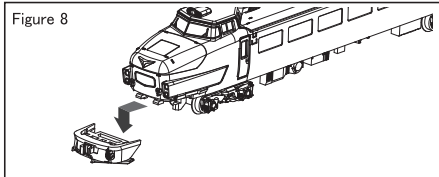
- ③ Take out original headmark by tweezers or suitable tools. Set new headmark in reverse order and push in until seated. (See Figure 6)



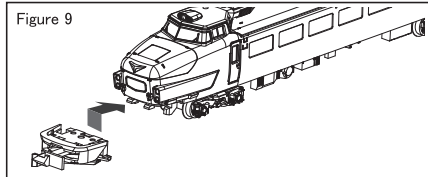
#### 3-4 Replacement of coupler Related cars...クハ489-505

For connect クハ489-505 with other cars.

- ① Take out dummy coupler by pull and down. (See Figure 8)



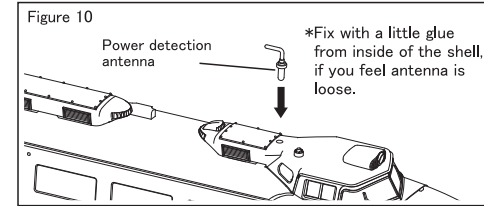
- ② Set connection coupler into body by reverse procedure. (See Figure 9)



### 4. How to set parts

#### Set Antenna C on T031-1

Please set Antenna C into the hole. (See Figure 10)



### 5. How to install antenna (for expert user)

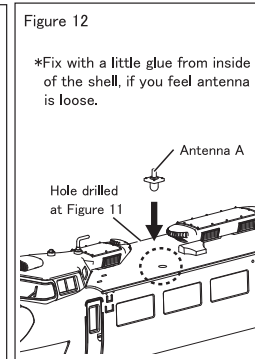
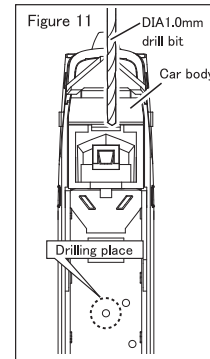
This process is for expert users who understand this model well. Please be careful to handle tools to avoid injury and work carefully. Also, DIA 1.0mm drill and tweezers are necessary to set small antenna.

This product has no hole for wireless or telephone antenna. If you like to set antenna for your preference, please follow this instruction as below.

Related cars...クハ489・サロ489

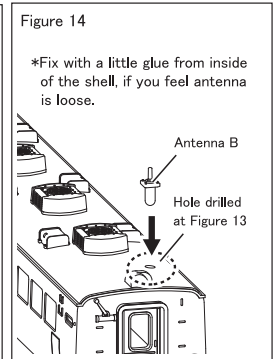
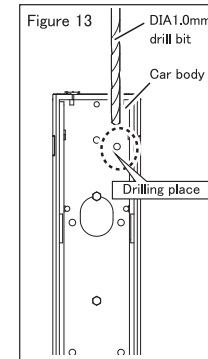
#### 5-1 Set Antenna A on T031-1 <クハ489>

- ① Take out chassis from body shell of クハ489. Turn over, find the drilling place and make DIA0.1mm hole. (See Figure 11)
- ② Set antenna A part into the hole. (See Figure 12)



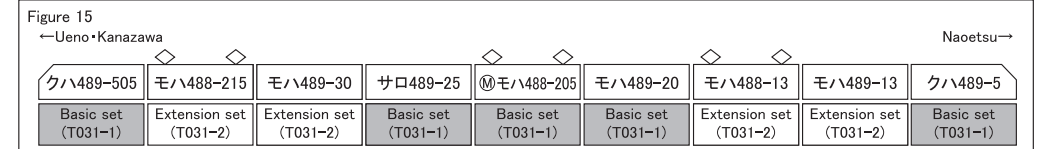
#### 5-2 Set Antenna B on T031-1 <サロ481>

- ① Take out chassis from body shell of サロ481. Turn over, find the drilling place and make DIA0.1mm hole. (See Figure 13)
- ② Set antenna B part into the hole. (See Figure 14)



### 6. Formation

Please set "HAKUSAN" full organization 9 cars T031-1 and T031-2. (See Figure 15)



Make another formation which operated at Shinetsu Line with EF63 Electric locomotive. (See Figure 16)

