

1. ⚠ Caution

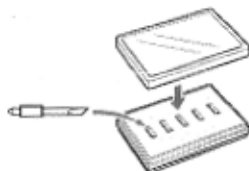
This plotter performs cutting using a cutting blade. To prevent operator injury, observe the following precautions whenever replacing the cutter blade, mounting and removing the plunger, or handling a cutter blade for other purposes.

1.1 Cutter Blades

Cutter blades are very sharp. Please be careful when handling.

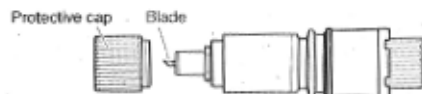


Promptly return used blades to the cutter blade case provided. When the case is completely filled, discard the used blades together with the case.



1.2 Plunger

The tip consists of a sharp blade. Do not extend it further than is necessary.



⚠ Caution

- When not using the device, make sure to attach the protective cap.
- The protective cap is used for attaching the chuck. **Please do not lose it absolutely.**

2. Applicable blades

Be sure to mount the cutter blade you will be using in the appropriate plunger. For blade-tip offset values, refer to the User's Manual and/or other supporting documentation for the main plotter unit.

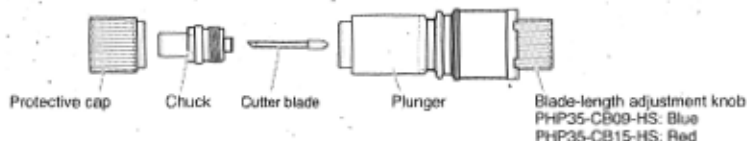
Applicable Blades for PHP35-CB09-HS/PHP35-CB15-HS Plungers

Plunger set	Color classification	Cutter blade types
PHP35-CB09-HS	Blue	CB09UB-5
		CB09UE-K60-5
		CB15U-5
PHP35-CB15-HS	Red	CB15UA-5
		CB15U-K30-5
		CB15UA-K30-5

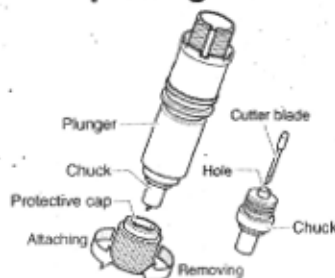
Prior to using the cutter blades listed below, remove the attached spring while referring to "4. Replacing the blade."

CB09UA-5 (Spring attached), CB09UA-K60-5 (Spring attached),
CB15U-5SP (Spring attached), CB15U-K20-2SP (Spring attached), CB15U-K30-5SP (Spring attached)

3. Appearance and names of parts



4. Replacing the blade



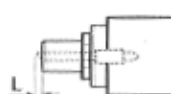
- Use the protective cap and remove the chuck from the plunger.
- Insert the replacement blade into the "hole" inside the chuck.
- Use the protective cap and attach the chuck to the plunger. (Make sure to fasten it all the way.) Sometimes the tip of the blade may protrude, so be very careful when performing this step.
- Adjust the length of the tip of the blade.

⚠ Caution

When the spring is attached to the blade to be replaced, remove the spring and then insert the blade only into the hole of chuck.

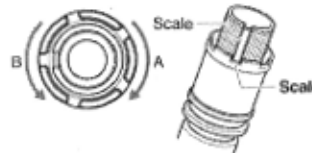


5. Adjusting the blade-tip length



The length from the tip of the blade to the tip of the holder is called the blade length (L). If the blade length is not adjusted to the thickness of the material that is being cut, you may experience trouble cutting the material. If the blade is too long, it may result in damage to the blade or the plotter itself. Following the steps below, adjust the blade-tip length to correspond with the film to be cut.

5.1 Adjusting the blade-tip length



The blade-tip length is adjusted by turning the blade length adjustment knob.

- Turn the knob in the direction of A (clockwise) to increase the blade-tip length.
- Turn the knob in the direction of B (counterclockwise) to decrease the blade-tip length.

The scale on the bottom stopper allows you to see how much the blade has moved.

- Turn the knob by one division on the scale to move the blade approx 0.1mm.
- Turn the knob by one full turn to move the blade approx 0.5mm.

5.2 Determining the Correct Blade Length

The blade length depends on the thickness and hardness of the material, presence or absence of the backing sheet, and the thickness of the backing sheet. Please refer to Plotter User's Manual.

6. Adjusting the Offset

When using this plunger, perform the test cut (cutting test) and then adjust the blade length. Please refer to Plotter User's Manual.



Not enough adjustment.
Increase the offset value.



Optimal offset value.



Too much adjustment.
Decrease the offset value.

7. Cleaning the tip of the cutter plunger



The tip of the cutter plunger gets worn down due to friction with the media. We recommend that you clean with a soft cloth before use.

⚠ Caution

Please be sure to retract the tip of the cutter plunger when cleaning it.