

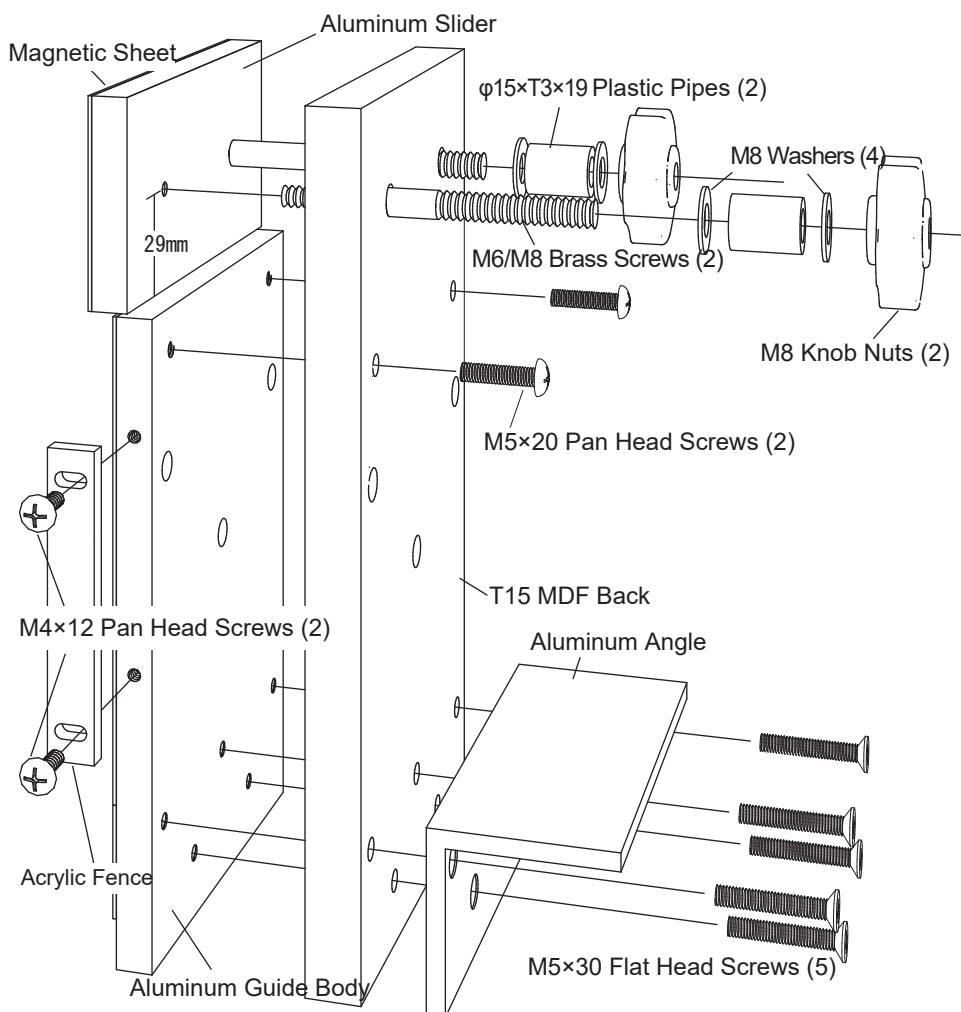
# MIRAI Aluminum Ripping Guide Instruction Manual

The Aluminum Ripping Guide is designed to cut various types of high precision joints using Sugita's Woodworking Method as described in the book Woodworking Joinery by Hand. To achieve the best performance from the guide, the MIRAI Alpha 265 Flush Cut Pull Saw Blade should be used. There is a significant performance difference between conventional flush cut saw blades and this special blade for long ripping distances such as tenon, half-lap joints and bridle joints. Left-handed users should install the acrylic fence on the opposite side of the Ripping Guide.

Author, Toyohisa Sugita

## Entire assembly

Assemble the parts as shown below. The aluminum slider has upper and lower dimensions. Assemble with the 29mm portion facing down, as shown.



## Spacers

Thickness and number of spacers  
 0.1mm×1  
 0.2mm×2 (or 0.2mm×1 and 0.3mm×1)  
 0.5mm×1  
 1mm×1  
 2mm×1  
 3mm×1  
 5mm×2  
 0.6mm×1(Black Metal Spacer)

**Remove the protective sheets and any burrs before use.**

When using a combination of spacers, measure the thickness with a caliper and check that the desired thickness is achieved before use. The black metal spacer has a thickness of 0.6 mm, which is the same thickness as the MIRAI Alpha 265 Flush Cut Pull Saw Blade. Please refer to the Function of the Accurate Guide section on the following page.

The application range of the Aluminum Ripping Guide can be extended by making your own spacers of various thickness, in addition to the supplied spacers.



Aluminum Ripping Guide 1/2



Aluminum Ripping Guide 2/2



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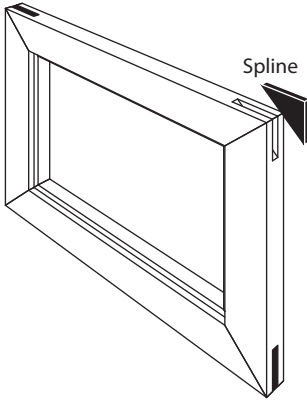
3-73 Haramachi, Shinjuku-ku, Tokyo 162-0053 Japan

Tel. 03-3205-2741/Fax. 03-3205-2742

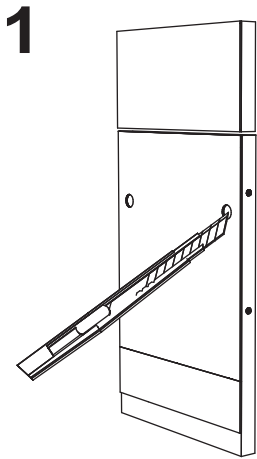
<http://www.mirai-tokyo.co.jp>

[mirai@momo.so-net.ne.jp](mailto:mirai@momo.so-net.ne.jp)

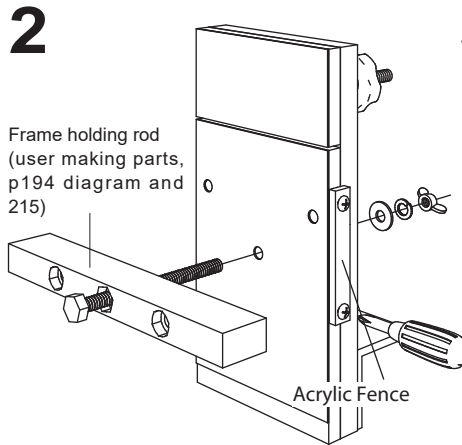
## Function of the Accurate Guide



When reinforcing the miter joints of a photo frame with triangular splines, as shown in the figure on the left, it is necessary to make the width of the groove where the spline is inserted exactly the same as the thickness of the spline (see Photo 18 on p. 66 of *Woodworking Joinery by Hand*). The Accurate Guide was used for this purpose (*ibid.* p193), and the MIRAI Aluminum Ripping Guide incorporates the same Accurate Guide functionality.

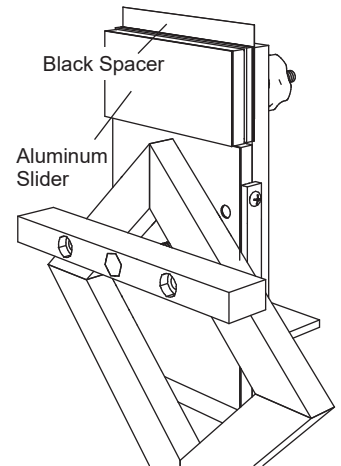


When carrying out this operation, cut the magnetic sheet with a utility knife to expose the three holes in the aluminum guide, which are not visible due to the attached magnetic sheet.

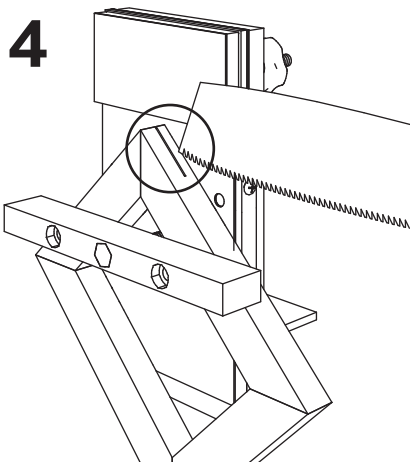


2  
Frame holding rod (user making parts, p194 diagram and 215)  
Acrylic Fence

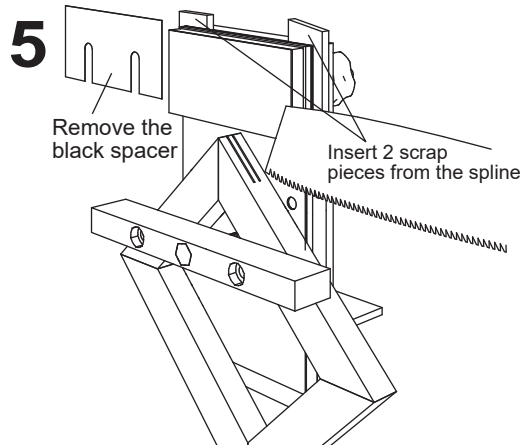
First, make your own frame holding rod (see *Woodworking Joinery by Hand*, p. 215). Also, retract the acrylic fence away from the magnetic sheet surface to allow space to fasten the picture frame to the guide.



3  
Black Spacer  
Aluminum Slider  
After fastening the picture frame with the frame holding rod, combine the spacers provided with the guide and align the aluminum slider with the first cut position. At this time, the black metal spacer should also be included in the combination.



4  
Make the first cut.



5  
Remove the black spacer  
Insert 2 scrap pieces from the spline  
Remove only the black spacer and insert two scrap pieces from the spline cut offs all the way down into the aluminum slider. This determines the position of the groove width and the second cut is then made. (See p. 212, photo 14 and following for further work.)