Sure-Stitch Universal Adaptor

Before you begin:
Take a look at the sure-stitch instructions to determine if any of your encoders can be attached without the universal adaptor brackets. Steps 2, and 3 of the Sure-Stitch manual show how the encoders are typically installed. Also note that you will need the Sure-Stitch manual to complete the Sure-Stitch installation. The Universal Adaptor is simply another method to attach the Sure-Stitch encoders to the vast majority of “Grace Company” and Non-Grace quilting frames currently available. Replace Steps 2, and 3 in the Sure-Stitch manual with this manual, but continue using the Sure-Stitch manual for all of the remaining steps.

Hardware:
2) Universal Bracket
2) Encoder Arm
1) Angle Bracket
2) M5 Socket Head Screw
2) M5 Hex Nut
2) #0 Socket Head Screw
(2) #10 Nylock Nut

Keep the following guidelines in mind when determining where to attach your encoders.

Each encoder measures the movement from the Top/Bottom Plate that it is attached to. The encoders tell the controller how fast your sewing machine needs to stitch. See Fig. 1 The encoder attached to the top plate needs to roll from front to back. The encoder attached to the bottom plate needs to be able to roll from side to side, for the entire length of your quilting frame.

The Angle Bracket is provided for quilting frames that do not have a place for the encoder wheel to roll, to give the encoder attached to the top plate a place to roll on.(Original GMQ, Original Little Gracie). See Fig. 2

Fig. 1
Before you can attach an encoder to the Universal Bracket you need to remove the encoder from the standard encoder bracket. Remove the hardware as shown (Right). You may need to lift the encoder up slightly to remove the wheel. After the wheel is removed the encoder should now easily slide down and off of the bracket. You should place the wheel and other hardware back onto the bracket, for safe keeping.

Now attach the encoder to the Universal Encoder Arm. To do this, place the encoder posts through the holes in the Encoder Arm as shown (See Fig. 3). Then Slide the encoder into the notches. The spring isn’t required to hold the encoder in place, but may be put on if you prefer, or have problems with the encoder coming off of the Encoder arm.

When you attach the Angle Bracket to the Bottom Plate be sure to attach it low enough for the Top Plate to pass over it without hitting.

Figure 5, shows how to attach the Angle Bracket to the Bottom Plate. The Angle Bracket is required in this situation, it gives the encoder attached to the top plate a place to roll.
Assemble the Top Plate encoder as shown in Fig. 6.

**NOTE:** It is critical that you have the Top Plate in its furthest back position, with the sewing machine in place, and the take-up rail in place (before attaching the encoder).

![Encoder Attached to Top Plate](image)

**Attention:** Do not tighten Nylock nut completely. Encoder Arm needs to pivot freely.

Assemble the Encoder for the Bottom Plate as shown in Fig. 8.

**Attention:** Do not tighten Nylock nut completely. Encoder Arm needs to pivot freely.

Attach the encoder to the Bottom plate so that it rolls on the track that the Carriage rolls on.
There are many other possible ways to attach the Sure-Stitch to a quilting frame. If you don’t see a picture matching your type of Frame in this manual, there is still very likely a way to attach the encoders. (See Right)