To replace the encoder, see Fig 28 and follow the steps below.

- 1. Turn the switch to OFF and unplug the machine.
- 2. Remove the right side cover (refer to **Removing the Right Side Cover** [p. 23]).
- 3. Remove the left side cover (refer to **Removing the Left Side Cover [p. 25**]).
- 4. Remove the pinch roller (refer to **Removing the Pinch Roller [p. 30]**).
- 5. Remove the weighted brush cover (refer to **Removing the Weighted Brush Cover [p. 32]**).
- 6. Remove the tape channel plate (refer to **Removing the Tape Channel Plate [p. 34]**).
- 7. Facing the left side of the machine, with one hand hold the encoder remove the screws holding the encoder.
- 8. Place the new encoder on the chassis and screw in the screws.
- 9. Pass the new encoder wires through the machine and attach to the connecter to the controller board at PHOTO EYE.

NOTE: To adjust the encoder, see Adjusting the Encoder.

- 10. Attach the tape channel plate (refer to **Attaching the Tape Channel Plate [p. 34]**).
- 11. Attach the weighted brush cover (refer to **Attaching the Weighted Brush Cover [p. 32]**).
- 12. Attach the pinch roller (refer to **Attaching the Pinch Roller [p. 30]**).
- 13. Attach the left side cover (refer to **Attaching the Left Side Cover [p. 25**]).
- 14. Attach the right side cover (refer to **Attaching the Right Side Cover** [p. 23]).

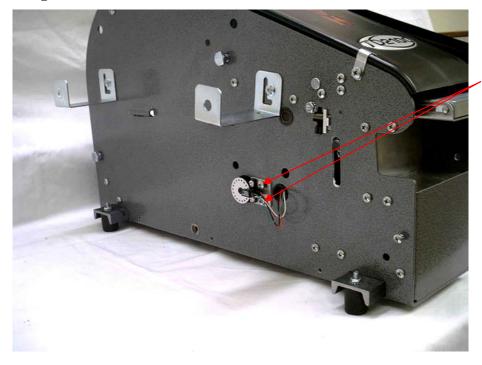
The machine is now ready to continue normal operations

Adjusting the Encoder

To adjust the encoder, see Fig 28 and follow the steps below.

- 1. Turn the switch to OFF and unplug the machine.
- 2. Remove the left side cover (refer to **Removing the Left Side Cover [p. 251**)
- 3. Facing the left side of the machine, remove the screws holding the encoder base.
- 4. Place a retaining compound (i.e. loctite) on the screws.
- 5. Put the screws back into the machine with the encoder attached loose enough that the encoder can be moved.
- 6. While moving the encoder forward, backward and at various angles, and keeping hands clear of the encoder wheel, run the machine at any given length until the machine is accurate within $\pm \frac{1}{2}$.
- 7. Holding the encoder in the correct position and tighten the screws so that the encoder is no longer able to move.
- 8. Attach the left side cover (refer to **Attaching the Left Side Cover [p. 25**]).

Fig 28 Encoder



7. Facing the left side of the machine, with one hand hold the encoder remove the screws holding the encoder.





6. While moving the encoder forward, backward and at various angles, and keeping hands clear of the encoder wheel, run the machine at any given length until the machine is accurate within $\pm \frac{1}{2}$.