

Sampling Pole Do-It-Yourself Instructions

Why a sampling pole?

Sampling poles are helpful tools to help make stram monitoring more accessible. For example, if stream conditions are unsafe (e.g. fast-moving water, slippery slope, etc.) or if the weather conditions are not ideal (e.g. winter snow and cold), a sampling pole can make the monitoring experience more comfortable. For these reasons and more, sampling poles can allow for better and easier access to sample your site! Follow these Do-It-Yourself (DIY) instructions to create your own sample pole for your water quality monitoring needs.

Getting Started: Materials

Recommended Parts:

- 1. Extension pole
- Hanger with Carriage bolt and nut,
 in. (nut is not needed)
- 3. Carriage bolt, 1/4" x 2" in.
- 4. Wing nut, 1/4" in.
- 5. (2) Lock nuts, 1/4" in.
- 6. Corner brace, 2 1/2" in.

Recommended Tools:

- 7. Drill
- 8. Dill bit, 17/64" in.
- 9. Nut driver (or ratchet & socket), 11 mm

















Preparing the Pole and Hanger

Pole Preparation

- Extend and tighten the end of the extension pole (A) far enough to hold onto it securely when drilling.
- 2. Drill a hole that is perpendicular through the plastic **(B)**, halfway between the pin and threads.

Hanger Preparation

- 3. Remove the original nut and bolt from the hanger.
- Insert the 2" in. bolt into the square opening of the hanger (C).
- 5. Attach the wing nut to the bolt, leaving enough space for the lock nut. Be sure to have the "wings" facing away from the hanger (D).
- 6. Add the lock nut to the bolt (E).
- 7. Push the bolt into the square opening of the hanger. Holding the bolt will prevent it from spinning. Tighten the lock nut with the nut driver until it is flush with the bolt.











- 8. Insert the small bolt from the original hanger through the hole you have drilled into the extension pole **(F)**.
- 9. Place the assembled hanger onto the bolt.
- 10. Place the corner brace **(G)** onto the bolt, facing towards the pole
- 11. Place the second lock nut onto the bolt **(H)**. Finally, tighten the lock nut with the nut driver until it is flush with the bolt.





Tips and Tricks

- The drill bit may want to glide at first, so hold onto the extension
 pole tightly and drill the hole slowly until the bit is in before applying
 more pressure. You can also use a punch to make an indentation
 in the plastic or a jig to keep the pole in place.
- Use a sharp knife to remove any plastic bits that may accumulate around the hole you drilled into the pole.
- Drilling near one of the ridges near the top of the pole makes for an easier drill.

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