

# ITEM #PKDART 1, 2, 3, 4 Custom Dart Kits: Standard Brass OR "Pro-Style"

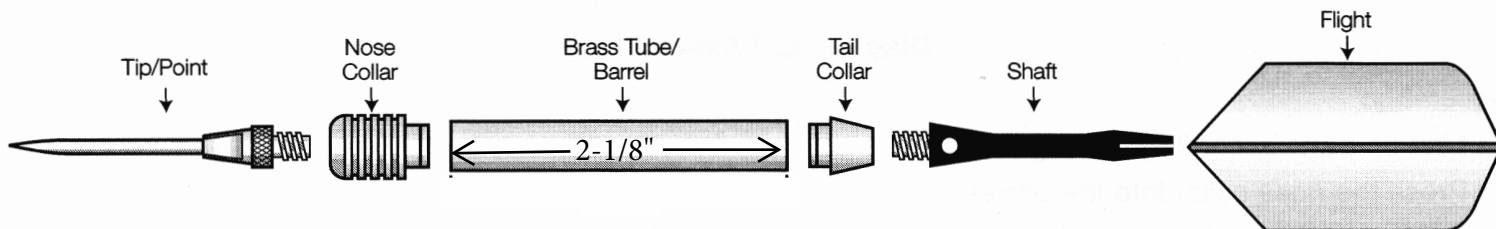
## Kit Features:

- 3 Dart Kits per set
- High quality components; either solid brass or tungsten steel fittings
- Adjustable body length and weight
- Weight scale to balance dart (*available*)
- Turn body straight or with a gripper profile
- Uses standard 2 ba replacement points (*available*)
- Can turn 2 blanks on the mandrel at once

## Accessories:

- 7mm, PSI Long Mandrel
- 7mm Bushing Set #PKM-BUSH3
- 7mm Drill Bit #PK-7mm
- 7mm Barrel Trimmer #PKTRIM (*optional*)
- 2 part epoxy glue or Insta-Cure Glue (cyanoacrylate)
- Tip Fastening Installation Tool #PKDARTTIP (*optional*)
- Gram Weight Balancing Scale #PKDARTGS (*optional*)

**Diagram A / Parts List**

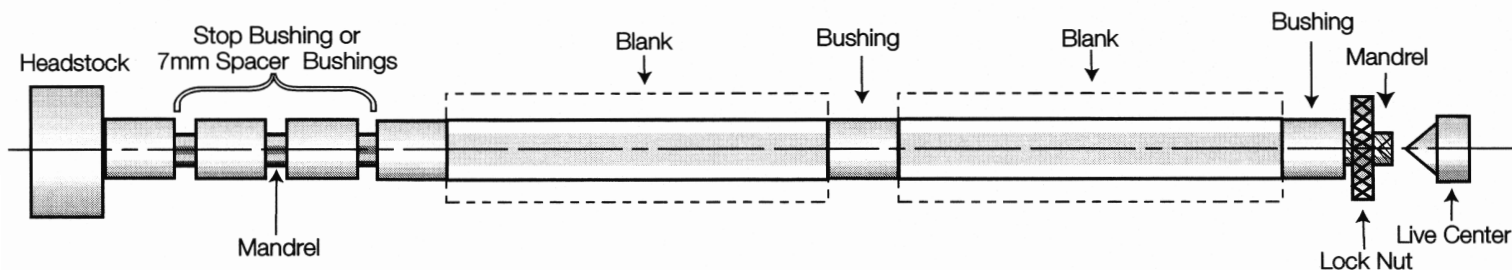


## Preparing The Blank:

**NOTE:** Depending on your dart throwing style, you may prefer to alter the length of the barrel. The final barrel length may vary from 1-1/8" to 2" long.

- Cut a 1/2" to 5/8" square blank to the length of the brass tube (add 1/16" for squaring off) you may use PSI 7mm pre-drilled blanks in wood or acrylic.
- Drill a center hole lengthwise through the blank.
- Spread glue over the brass tube. Insert the tube into the blank with a twisting motion to spread the glue evenly inside. Center the tube lengthwise in the blank.
- When the glue dries, square the ends of the blank. Use a 7mm barrel trimmer. Take the wood down to the brass.

**Diagram B / Turning The Blanks  
(2 Kits at one time)**

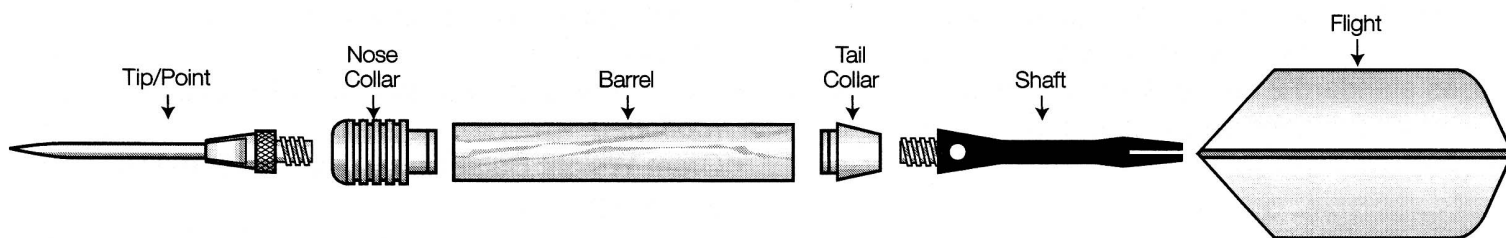


## Turning The Blanks:

- Place the stop collar or 3-4 7mm spacer bushings on the mandrel. Next, place one of the blanks on the mandrel, then another 7mm bushing, then the other blank. Complete with another bushing and the lock nut. Adjust the space with spare bushings or other fillers. Tighten the lock nut. Bring the tail stock up to the mandrel, and lock the live center snug against the dimple in the mandrel. Do not over tighten, it may damage the mandrel.
- Turn the wood down, flush with the bushings using a lathe chisel and progressive finer grits of sand paper. Finish with your choice of polish and wax. You may turn the barrel to any profile you desire for better gripping.

## Adjust The Barrel For Weight

- A "lead wool" filler is included in this kit to adjust the weight of the dart. If you would like to attain a specific weight, a gram scale is available through the PSI catalog for accurate measurement. The base weight of just the barrel for a plastic point dart is 11.5 grams, and 13.5 grams for a steel point dart. The lead can be added into the barrel to build up more weight as needed. The average weight range for most USA steel tip darts is 18 to 27 grams, complete. Electronic darts will weigh slightly less.



**Diagram C / Assembly:**

### Assembly:

- Line up parts according to Diagram 'C'
- Press the nose collar into the barrel
- Determine the final dart weight desired.
- Insert small amounts of "lead wool" into the barrel. Press in the lead using a narrow tool. Use the gram scale to check the weight with all parts assembled to achieve the desired number of grams. See *"Adjust The Barrel For Weight"* section above.

**NOTE:** *Be sure all 3 darts in the set are the same weight.*

- Press the tail collar into the opposite end of the barrel.
- Thread the shaft into the tail collar.
- Carefully spread the flight foil into 4 even 90° sections. Push the pointed end of flight into the slots at the end of the shaft. Use a thin brad in the hole to tighten the shaft into the collar.
- Thread the point (pin) into the nose collar. Use a tip installation tool (available in the PSI catalog) to tighten the point into the collar.