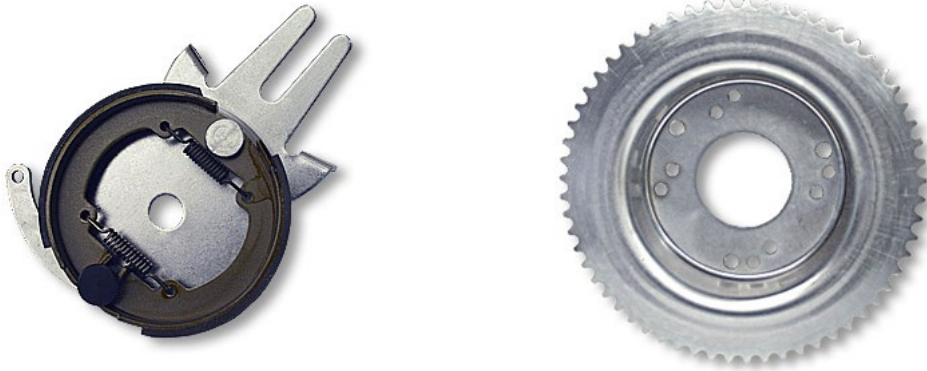




AZUSA ENGINEERING INC.

Mounting an Azusa 4-1/2" Drum Brake Assembly on a Wheel



First-time users sometimes claim that the brake drum is out-of-round or that the brake is binding, when in fact the brake components are all within tolerance - but the users disregard the assembly instructions. The proper procedure (listed below), takes time and patience but the end results are worth the effort.

A complete brake/wheel assembly consists of a wheel, tire & tube, brake drum, and brake backing plate with shoes, springs, etc. To work properly all components must be aligned and concentric with the axle using the following procedure:

1. Position the brake components (backing plate, shoes, springs, etc.) on the bike frame using an axle to align the brake assembly with the axle hangers. Insure that the backing plate is both perpendicular to and concentric with the axle.
2. Again, using an axle as an alignment tool, take a partially assembled tire/wheel/ brake drum combination, with the nuts and bolts barely finger tight.
3. Then slide the wheel assembly onto the axle within the frame members and into the brake assembly allowing the drum to "float" relative to the brake components. When the wheel/drum combination rotates freely with the least touching, begin to tighten the nuts a little at a time, in random sequence (as you would car lugnuts).
4. Check by rotating the wheel as you tighten the nuts, keeping the drum in the best available position relative to the backing plate.
5. Once assembled, some wearing-in of the brake shoes may be necessary. But consider that fine-tuning compared to the alignment sequence above.