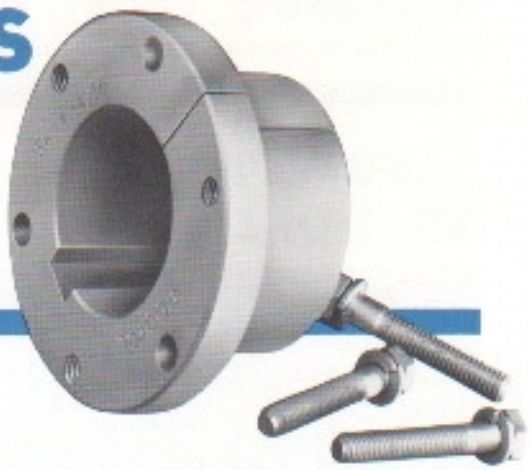
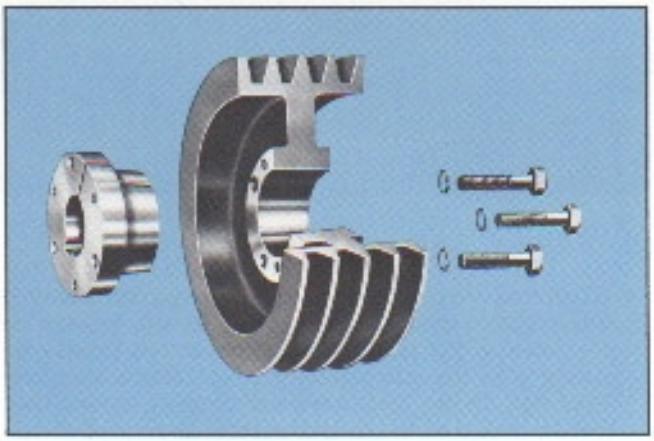
Wood's

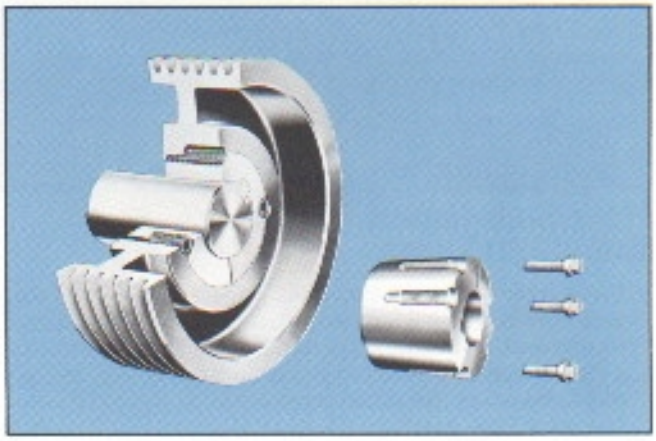
Advantages of Wood's Sure-Grip® Bushings

- **Compared with Taper-Lock**
- **Compared with Split Taper**



Sure-Grip® vs. Taper-Lock





How Sure-Grip is better than Taper-Lock

- Wood's Sure-Grip Quick-Detachable type bushings can be securely mounted to the product, needing only the cap screws provided. It's not necessary to use a hammer, punch or block to force the mating tapers together, which is sometimes necessary with Taper-Lock bushings. With Sure-Grip, it's not required or recommended to use a lubricant either.
- Sure-Grip bushings have a much simpler mounting procedure than Taper-Lock. Taper-Lock mountings have half-holes (some threaded and some smooth) in the sheave, or pulley, and in the bushing. The half-holes in the bushing must be matched up with the half-holes in the product, alternately matching a smooth half-hole with a threaded half-hole. They are used for both assembly and disassembly.
- Sure-Grip bushings are easier to disassemble than Taper-Lock bushings. The large jack-screws of the Sure-Grip exert a much stronger separating force than the small set screws which only have half of each thread engaged in the hole.
- Sure-Grip has a very gradual taper (¾-inch taper per ft. on the diameter) which is about half the inclined angle of the Taper-Lock. As a result, Sure-Grip can grip the motor shaft with twice the force.
- The chance of axial movement of a mounted Sure-Grip bushing is practically impossible because the pressure exerted on the mating tapers of the bushing and sheave by the mounting bolts is much greater than the pressure from the Taper-Lock screws with their half-engaged threads.
- Many types of wrenches can be used to assemble and disassemble the Sure-Grip mountings. Only Allen wrenches can be used on the Taper-Lock mountings.
- Taper-Lock bushings are available from only one source. Sure-Grip Quick-Detachable bushings can be purchased from many sources.
- Wood's Sure-Grip is more symmetrical (better balanced) than the Taper-Lock because of the drilling pattern of the holes, and the fact that the saw slot is directly opposite the keyseat.
- Sure-Grip bushings have a greater resistance to loosening than Taper-Lock bushings, so they're preferred in high horsepower drives with heavy vibrating loads.
- With Sure-Grip bushings, it's easier to mount products and have a minimal axial run-out because they have a longer bore length than Taper-Lock types.

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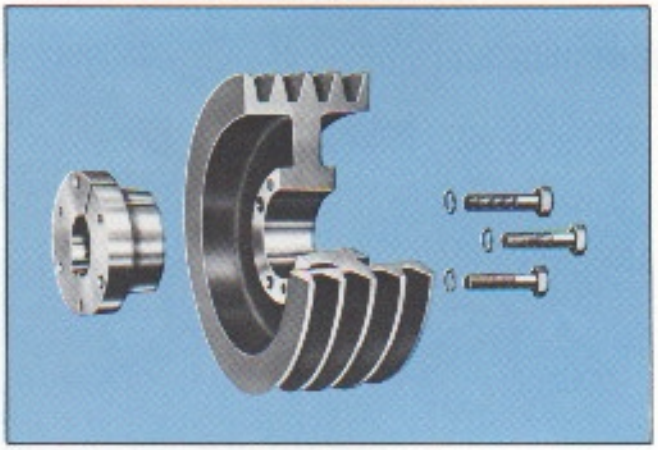
- Simply by additional tightening of one of the mounting bolts, it's easy to correct the problem of axial run-out caused by improper mounting on Sure-Grip bushings. Axial runout due to improper mounting is difficult to correct with Taper-Lock.

How Taper-Lock is better than Sure-Grip

- Taper-Lock bushings have no protruding bolt-heads.
- Taper-Lock bushings have shorter bores, so products can be mounted on shorter shafts.
- Because Taper-Lock bushing's screws act like keys between the bushing taper and the product taper, extremely high torque values can be transmitted on steady loads, if necessary.
- As the bolts are being tightened, there is less axial movement of the product with Taper-Lock bushings during mounting, because the Taper-Lock has a steeper taper angle.

Sure-Grip® vs. Split Taper



How Sure-Grip is better than Split Taper

- Since the flange of the Split Taper bushing is **not** split, the bushing does not grip the shaft tightly at the flange end; the bore of the bushing can become cocked on the shaft, causing a rocking or fretting movement. Because the taper always remains constant on the Sure-Grip bushing, there is less chance of axial run-out of the product. Its gripping pressure is uniform along the bore length as the bolts draw the tapers together. Split Taper bushings do not have a constant taper angle because they are not completely split, longitudinally, and their bore diameter is unchangeable at the flange end.
- There are many places to purchase the Sure-Grip or Quick-Detachable bushings, but there's only a single source for Split Taper bushings.
- Split Taper bushings have external keys on their tapers, so the keyways on both the bushing and the companion product must be machined and properly oriented with their own and each other's mounting holes. The Sure-Grip bushing does not need an external keyway on its taper or its companion.
- Since most installers do not bother to put a key in the Split Taper's external keyway, the balance is not as good as the balance of the Sure-Grip bushing.
- When mounting the Split Taper bushing there is only one position that will work because the keyway on the taper of the bushing must match the keyway on the bore of the companion product. Since Sure-Grip bushings do not have keyways on their tapers, they can be mounted in any of the three or four positions to align the bolt holes.

  Split Taper bushings can only be mounted with the bolt heads on the flange side of the bushing.
- Sure-Grip bushings are drilled and/or tapped so they can be mounted or dismounted from either the inboard or outboard side, for easier access to the bolt heads. This also permits better alignment possibilities to reduce over-hung bearing loads or when the shaft length is short.

How Split Taper is better than Sure-Grip

- Split Taper provides positive locking of the mating taper surfaces . . . on those sizes which have a key on the taper . . . if the installer uses the key.

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