

High Strength Vibrator Bolts

Besser Company has a high strength vibrator bolt to address vibrator bolt stretching. Our bolt is offered as standard for both Posapac and SmartPac vibrator shafts eliminating all previous bolt types, lockwashers, and standard nuts. The combination of our standard high strength bolts, hardened washers, and Flex Loc® nut provides a more robust fastening system for the demands of high vibration systems. Please note that although the high strength bolt used in combination with the hardened washers and Flex Loc® nut and fastening procedure is technological advancement, it is not a fail-safe application if poor fastening procedures are used.

Note: Vibrator bolts, Flex Loc® nuts, and Hardened Flat Washers are rated for one time use only. Due to the special tooling and testing required to verify if a bolt has exceeded its' stretch limitations prior to re-use, the vibrator bolts cannot be relied upon past one time use.

All returns for warranty consideration for failure of any mold components, including vibrator shafts and vibrator bolts resulting from loose or broken vibrator bolts, will be contingent on return for inspection and analysis of the vibrator bolts and its components (Flex Loc® Nuts and hardened Flat Washers), associated with those mold component failures.

Reasonable care must be taken when matching up the mating surfaces of the mold top plates, mold sidebars, bearing housings and pallet guides. These surfaces must be kept clean prior to assembly, be free from burrs or rough edges around the holes and they must be flat so full surface contact can be maintained. If any of the above conditions are not met, this will detract from the normal bolt stretch that keeps the fastener tight and will cause a failure in any fastening system. Careful inspection of all components must be done prior to assembly and any components showing the above conditions should be repaired or replaced. Please observe the torque requirements on the following page. These torque requirements must be achieved when tightening the fasteners as the resulting bolt stretch keeps the fastener from loosening.

- The new Magne finish, which is silver in color, complies with new EPA restrictions and meets the same requirements as our previous gold colored cadmium coating found on vibrator bolts used for Ultracac applications. Initially, during the transition period to the New high strength bolt, some bolts will have a black finish but will meet the same specifications.
- A 1/4" thick hardened washer (#115333) will be placed above the nut of all fasteners and under the head of the hex head fasteners for a more rigid assembly. Non-hardened washers can adversely affect bolt stretch. The hardened washer also helps dissipate the load forces by offering a larger surface area. Note the orientation of the washers on the attached drawings.

High Strength Vibrator Bolts

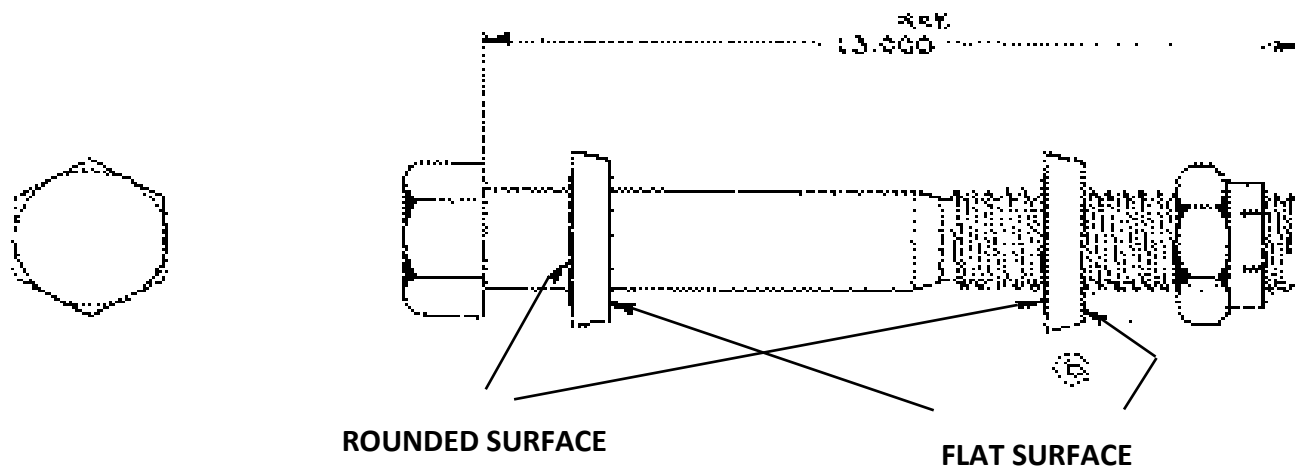
- A 3/4" Flex Loc® nut (#087871) is used with the fasteners. A Flex Loc® nut distributes the load evenly across the bolt threads, eliminating use of a lock

PART NO. DESCRIPTION

| | |
|---------|---|
| #648371 | Complete Set of Parts for one Ultrapac mold |
| #488059 | Hex Head Bolt 13.0" long |
| #488060 | Flat Head Bolt 13.25" long |
| #087871 | Flex Loc® Nut |
| #115333 | Hardened Washer |
| #490711 | Flat Head Assembly & Instruction Drawing |
| #490710 | Hex Head Assembly & Instruction Drawing |

NOTE: SOP 648371 is designed for Ultrapac molds but the Flex Loc® nut and hardened washers can be used on any bolt length and will be an improvement over lockwashers and standard nuts.

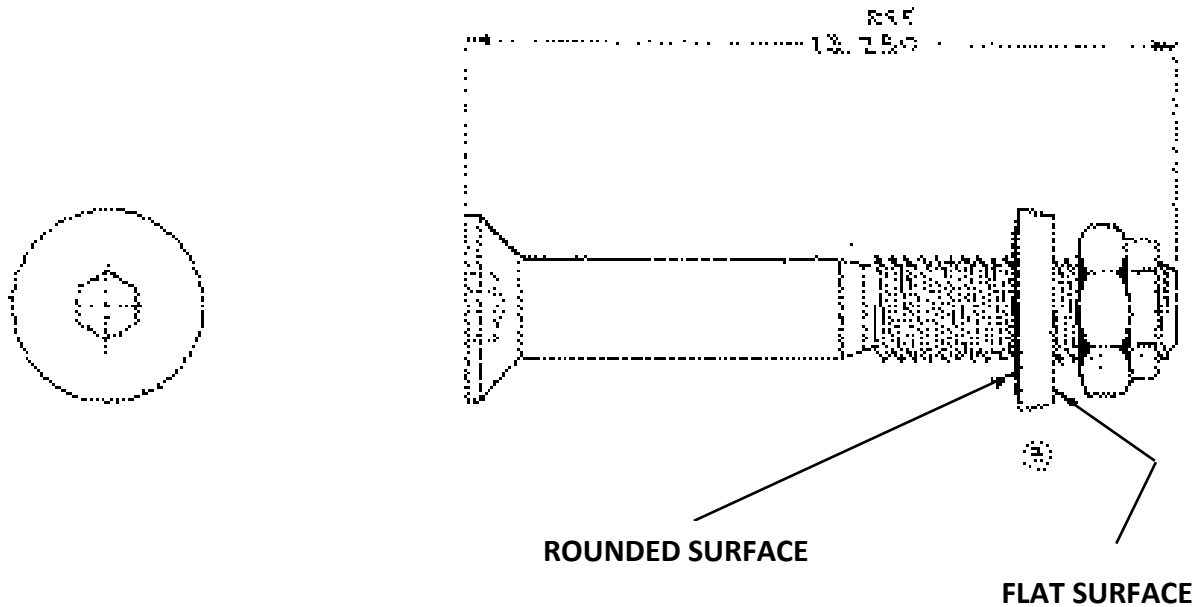
HEX HEAD FASTENER



RECOMMENDED FLAT WASHER ORIENTATION AS SHOWN.
INSTALLATION TORQUE 340 FT. LBS. - TURNING THE NUT

High Strength Vibrator Bolts

FLAT HEAD FASTENER



RECOMMENDED FLAT WASHER ORIENTATION AS SHOWN.
INSTALLATION TORQUE 190 FT. LBS. - TURNING THE NUT