

# Belt Drives Ltd.

## Installing BDL's Carbide Ball Bearings (CBB's)

Part #'s: CBB-4516 & CBB-8516, and CBB-438 & CBB-838, 5/16" & 3/8" (CBBs) = Carbide Ball Bearings.

Bearings are only sold in (4) or (8) packs

**Note\*** Must be used in conjunction with BDL's Diaphragm spring Part #'s, BT-15, DES-200, DES-600HD

For use with All Belt Drives Ltd. (BPP) Ball Bearing Pressure Plates, And Some of Belt Drives Ltd. (CC) Competitor Clutch Pressure Plates. For Engines with Higher Horse Power and FT. LBS. of Torque.

The Carbide Ball Bearings (CBBs) are harder and heavier than our standard Ball Bearings, Therefore they will Disperse "move" in the bearing pockets at a faster rate and help produce more force to the clutch pack.

## Installation Instructions

Read complete Installation Instructions first, Before you begin your installation.

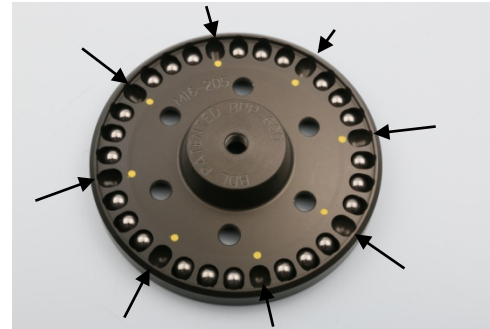
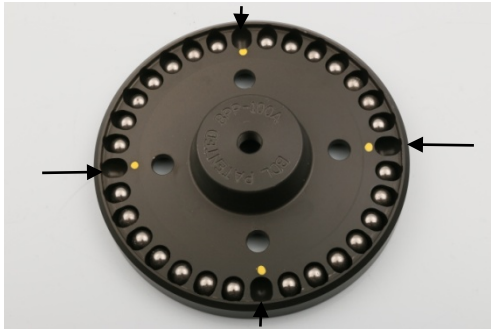
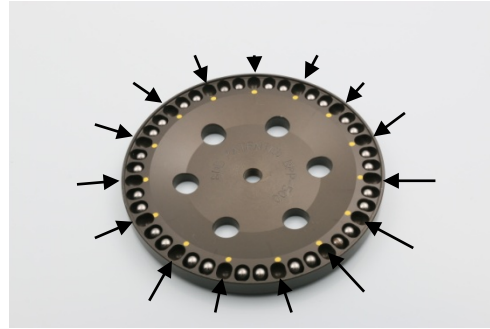
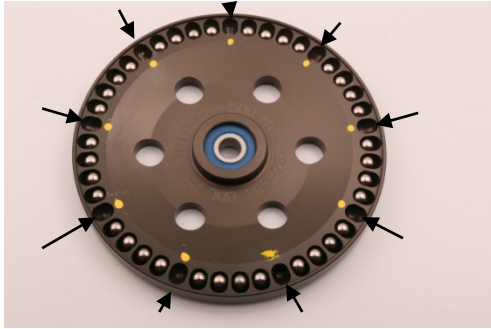
Determine the Belt Drive Ltd. Ball Bearing Pressure Plate (BPP) or Competitor Clutch Pressure Plate (CCPP) that you are using, And if you choose to install our (CBB) Carbide Ball Bearing kits you will first need to determine what size (CBBs) you will need, 5/16" for (42) & (45) (pockets), Or 3/8" for (32) pockets), for your BPP or Competitor Clutch. Also which Heavy Duty Diaphragm spring you will need. Part #'s DES-200, BT-15 or DES-600HD, You must disperse the CBBs in an equal pattern throughout the bearing pockets in the pressure plate, to create an equal force of pressure and balance.

**Belt Drives Ltd. pressure plate.** Part #'s: BPP-100, BPP-100T/S, BPP-100A, BPP-100-HYD, BPP-600HD. All use 32 of the standard 3/8" Ball Bearings, Or an upgrade Kit Part #'s: CBB-438 or CBB-838 Carbide Ball Bearings. With either upgraded bearing kit you will need to use a heavy duty diaphragm spring, Part # DES-200 for all but the BPP-600 series or DES-600HD. for the BPP-600 and BPP-600-HYD.

Install (4) or (8) CBBs as needed, Install in the following manner: For (4) CBBs (1) for every (8th) bearing pocket, Or for (8) CBBs (1) for every (4th) bearing pocket, You will still use the rest of our standard bearings in the remaining pockets. See diagrams below on second page.

**Belt Drives Ltd. pressure plate.** Part #'s: BPP-500, BPP-500-HYD, have (45) bearing pockets, And use either (5), (9) or (15) of the 5/16" carbide ball bearings. Install (5), (9) or (15) CBBs as needed. Install in the following manner: For (5) CBBs (1) for every (9th) bearing pocket, Or for (9) CBBs (1) for every (5th) bearing pocket, Or for (15) CBBs (1) for every (3rd.) bearing. The BPP-500 & BPP-500-HYD. will use heavy duty diaphragm spring Part # BT-15. "See Pictures on next page"

It is a good idea to mark the bearing pockets on the face of pressure plate for easy identification & location of where the CBBs are to be installed. "See example pressure plates on next page".



**Belt Drives Ltd. pressure plates.** BPP-700, CC-130-PP, CC-140-PP, and the CDBBC-B1, All use 42 of the 5/16" Ball Bearings, Or upgrade Kit Part #'s: CBB-4516 or CBB-8516 Carbide Ball Bearings. Either (6), (7) or (14) CBB's Install in the following manner. For (14) CBB's use (1) CBB every (3rd.) hole, For (6) CBB's use (1) CBB every (7th.) hole, And for (7) CBB's use (1) CBB every (6th.) hole All of these kits will use heavy duty diaphragm spring Part # DES-200. pocket. Install (1) CBB every (3rd.), (6th.) or (7th.) bearing pocket. "See pictures above"

**Note\*** The use of just (3) bearings for every (14th) or (15th) pocket will not enhance clutch performance or operate correctly.

**Reminder** When increasing the thickness or tension of pressure plate spring/s, This will also increase the pressure "pull in force" of your clutch lever. Also CBB's will create a little different sound to your clutch.

**Note\*** We do not recommend the use of any synthetic primary fluid in wet primaries or to pre soak our belt drive clutch plates in, As synthetic fluid is anti friction and clutches work on friction.

**Note\*** We have developed some new Diaphragm spring collars, Part #'s DSC-400 & DSC-600, These have a larger diameter, And are flat on both sides, This limits the diaphragm spring travel to keep spring pressure on a positive flat plane, This will enhance clutch performance and stabilize diaphragm spring at higher RPM's.