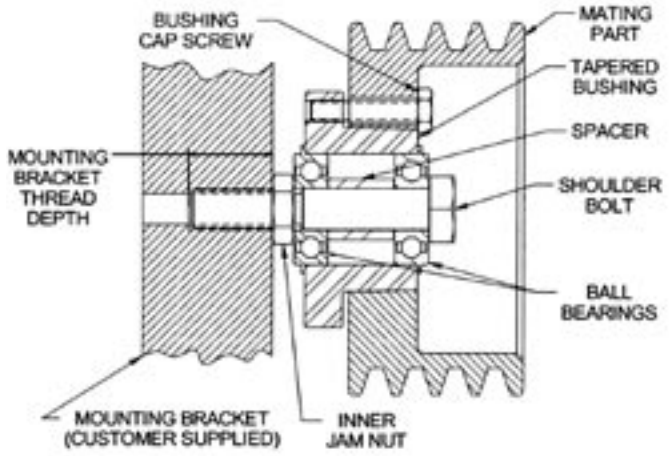
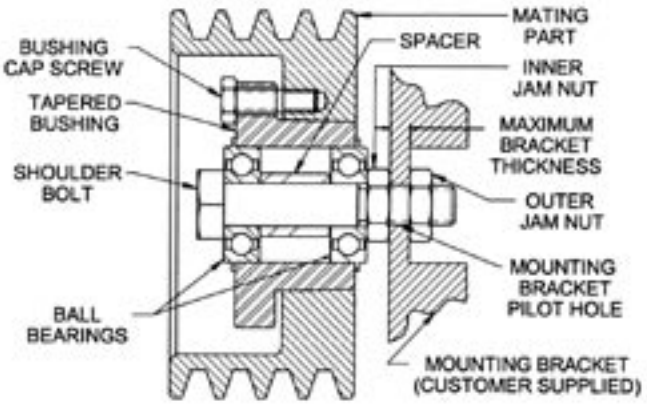
Martin QD Ball Bearing Idler Bushing Mounting Instructions





Installation:

1. Make sure that the shoulder bolt will fit into the mounting bracket.

2. Remove the outer jam nut.

3. The inner jam nut has been pre-torqued to 60 lb-in.

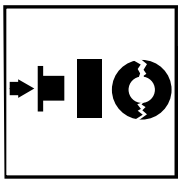
4. Thoroughly inspect the taper surfaces of the idler bushing and mating hub, to make sure the surfaces are clean and free of dirt, paint, oil, grease, etc.

⚠WARNING

Disconnect power before installation and maintenance. Failure to do so can result in severe injury or death.

⚠CAUTION

Do NOT over tighten the inner jam nut.



⚠WARNING

Lubricant on bushing barrel, hub or screws could lead to breakage.

Use of grease or anti-seize lubricant on taper cone surfaces or the threads of any mounting component may result in damage to mating parts.

These actions will void all manufactureís warranties.

5. Place the idler bushing in the mating hub.
6. Align the drilled holes in the mating hub with the threaded holes in the idler bushing flange.
7. Insert the cap screws, with lock washers, through the drilled holes in the mating hub and into the idler bushing flange tapped holes.
8. Tighten the cap screws to finger tight. Using a torque wrench, incrementally tighten all cap screws progressively and evenly to the torque values shown in Table 1.

Table I - Cap Screw Tightening Torques

Idler	Cap Screw	Torque	
SH-BB	1/4-20 NC	5 lb-ft	60 lb-in
SD-BR	1/4-20 NC	5 lb-ft	60 lb-in
SK-BB	5/16-18 NC	6 lb-ft	100 lb-in
SF-BB	3/8-16 NC	15 lb-ft	180 lb-in
E-BB	1/2-13 NC	30 lb-ft	360 lb-in

WARNING

The screw's tightening force is multiplied many times by the wedging action of the bushing's tapered surface. If excessive tightening force is applied to the screw or if a lubricant is used, pressure may be sufficient to cause bursting in the hub of the mating part. Do not over-tighten the cap screws to where the bushing flange will touch the face of the mating part. Table I torque values must be adhered to or the idler bushing assembly will fail prematurely.

9. Install the mounting stud in the bored hole.
10. Tighten the outermost nut to the torque values shown in Table 2. The inner nut has been pre-torqued to 60 in.lb.

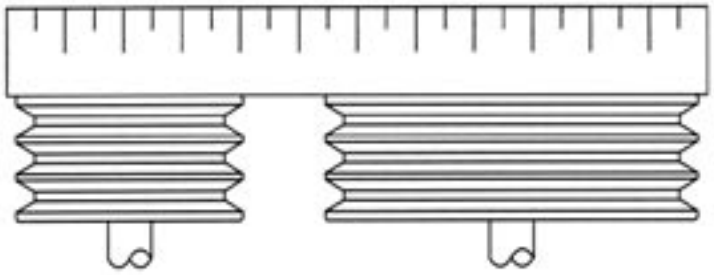
Do not tighten the inner nut further as it can cause premature bearing failure.

Table 2 - Outer Nut Tightening Torques

Idler	Cap Screw	Torque	
SH-BB	7/16-14 NC	40 lb-ft	480 lb-in
SD-BR	5/8-11 NC	120 lb-ft	1440 lb-in
SK-BB	3/4-10 NC	220 lb-ft	2640 lb-in
SF-BB	7/8-9 NC	350 lb-ft	4200 lb-in
E-BB	1 3/8-6 NC	700 lb-ft	8400 lb-in

11. Make sure all drive components are aligned properly. (See below figure.)

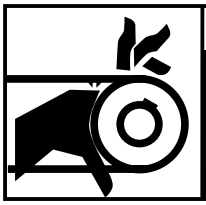
⚠CAUTION Do NOT over tighten the inner jam nut.



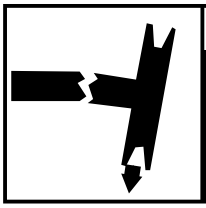
Removal

1. Remove pull-up bolts and screw the bolts into the tapped holes in the mating part. Evenly and progressively tighten the bolts until the parts separate.

2. Remove idler assembly from the mounting structure.



⚠WARNING
Operating drives without guards in place can result in severe injury or death.



⚠CAUTION
To avoid damage, supporting structure including shafts and bearings must be designed to handle transmitted loads and belt tension(s).