

ASSEMBLED ULTRA-PROP

5/16"-18 BOLT & NUT (6)  
(GRADE 8)

QD FLANGE  
(SPROCKET)

QD BUSHING

1/4" KEY

DRILLED HOLE  
(NO THREADS)

1/4"-20 QD BUSHING  
HARDWARE (3)

ENGINE

1/4" MINIMUM

5/16"  
WASHER (6)

Safety bolt and washer(s)  
Appropriate thread and length.  
Do not torque. Use LocTite  
on threads.

ALUMINUM  
CRUSH  
PLATE

NOTES:

REVERSE

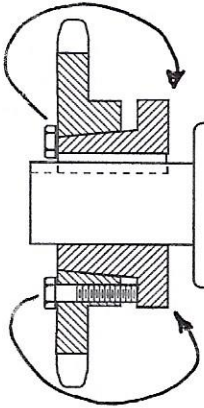
1. SEE MOUNTING PROCEDURE ON OTHER SIDE FOR DETAILS ON ASSEMBLY & REMOVAL
2. TORQUE 1/4"-20 BOLTS (3) TO 108 IN LB
3. TORQUE 5/16"-18 BOLTS (6) TO 150 IN LB
4. TIGHTEN SET SCREW AGAINST KEY

PROPELLER FLANGE INSTALLATION

## Martin MOUNTING PROCEDURE – QD BUSHINGS

**IMPORTANT – BE SURE TAPERED CONE SURFACES OF QD BUSHING AND INSIDE OF SHEAVE OR SPROCKET HUB ARE DRY AND FREE OF ALL FOREIGN SUBSTANCES SUCH AS PAINT, GREASE, OR DIRT.**

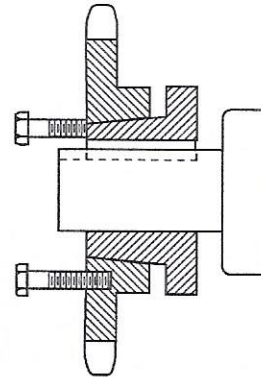
### STANDARD Mounting Assembly FOR QD SHEAVES AND SPROCKETS



#### MOUNTING

1. Be sure the tapered cone surfaces of the bushing and the inside of the driven product are clean and free of anti-seize lubricants.
  2. Slide QD bushing on shaft, flange end first. Assemble key.
  3. Position QD bushing on shaft. Tighten set screw over key "hand tight" with standard Allen wrench only. Do not use excessive force.
  4. Slide large end of sheave or sprocket taper bore into position over cone aligning drilled bolt holes in sheave or sprocket with tapped holes in flange of bushing. Assemble pull-up bolts and lock washers.
- NOTE: Install M thru S bushings in the hub so that the two extra holes in the hub are located as far as possible from the bushing's saw cut.**
5. Tighten pull-up bolts alternately and evenly to tightness indicated in torque table on back. Do not use extensions on wrench handles. There should be a gap between the face of the sheave or sprocket hub and the flange of the QD bushing to insure a satisfactory cone grip and press fit.

CAUTION: THIS GAP MUST NOT BE CLOSED.



#### DISMOUNTING

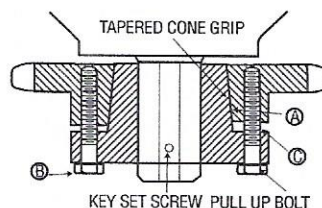
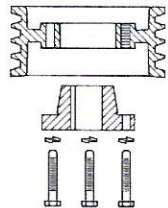
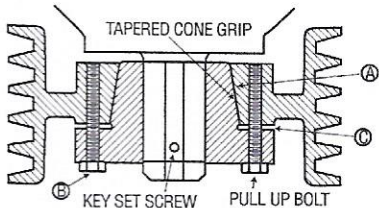
1. Remove pull-up bolts and screw them into TAPPED holes in sheave or sprocket and against flange of QD bushing to break cone grip.
2. Loosen set screw and slide QD bushing from shaft.

**WARNING:** Because of the possible danger to person(s) or property from accidents which may result from the improper use of products, it is important that correct procedures be followed: Products must be used in accordance with the engineering information specified in the catalog. Proper installation, maintenance and operation procedures must be observed. The instructions given above must be followed. Inspections should be made as necessary to assure safe operation under prevailing conditions. All rotating power transmission products when used in a drive are potentially dangerous and must be guarded by the user as required by applicable laws, regulations, standards, and good safety practice. (Refer to ANSI Standard B15.1.)

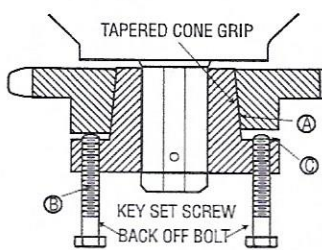
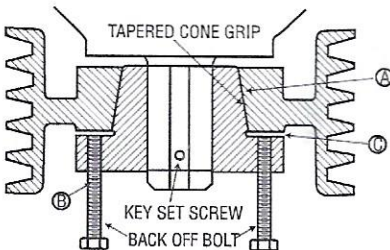
### REVERSE Mounting Assembly

#### FOR QD SHEAVES AND SPROCKETS USING JA, SH, SD, SDS, SK, SF, E, F, & J BUSHINGS

These bushings, as well as the sprockets and sheaves for them, are each drilled with six holes (three drilled and three tapped) to allow pull-up bolts to be inserted from either side. This enables variations of mounting characteristics to suit a particular installation.



1. Be sure the tapered cone surfaces of the bushing and the inside of the driven product are clean and free of anti-seize lubricants.
2. Assemble sheave or sprocket with bolts inserted (But not tightened) through DRILLED holes in bushing flange into TAPPED holes in sheave, sprocket, or other *Martin* QD part.
3. With key in shaft keyseat, slide assembly into approximate position on shaft with flange end of bushing away from bearing.
4. Position QD bushing on shaft by tightening set screw over key "hand tight" with standard Allen wrench only. Do not use excessive force.
5. Tighten pull-up bolts alternately and evenly to tightness indicated in torque table below. Do not use extensions on wrench handles. There should be a gap between the face of the sheave or sprocket hub and the flange of the QD bushing to insure a satisfactory cone grip and press fit. CAUTION: THIS GAP MUST NOT BE CLOSED.



1. Remove pull-up bolts and screw them into TAPPED holes in bushing flange and against hub of sheave or sprocket to break cone grip.
2. Loosen set screw in bushing flange and slide QD bushing from shaft.

### CAUTION

**WARNING: USE OF ANTI-SEIZE LUBRICANT ON TAPERED CONE SURFACES OR ON BOLT THREADS WHEN MOUNTING MAY RESULT IN DAMAGE TO SHEAVES AND SPROCKETS. THIS VOIDS ALL MANUFACTURER'S WARRANTIES.**

### BOLT TORQUE TABLE

QD Bushing Size	Size of Cap Screw	Wrench Torque in. / lbs.
JA	10 - 24	60
SH, SDS, SD	1/4 - 20	108
SK	5/16 - 18	180
SF	3/8 - 16	360
E	1/2 - 13	720
F	9/16 - 12	900
J	5/8 - 11	1620
M	3/4 - 10	2700
N	7/8 - 9	3600
P	1 - 8	5400
W	1-1/8 - 7	7200
S	1-1/4 - 7	9000