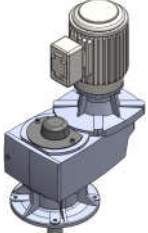
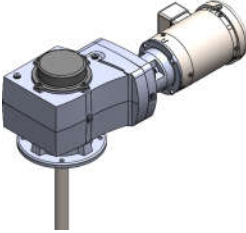
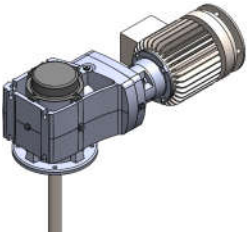
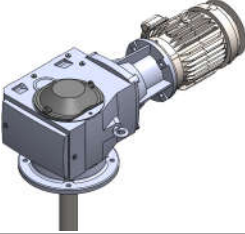


QUICK START GUIDE (QSG)

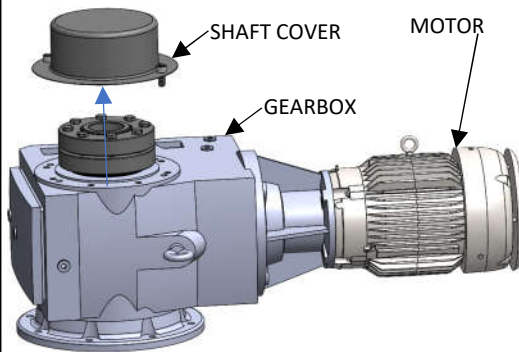
SERIES: FLOW TOP & BOTTOM ENTRY

SHAFT INSTALLATION – SHRINK DISCS

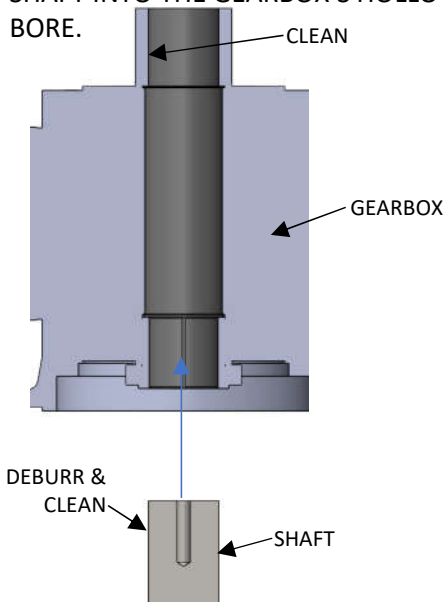


FG SERIES	FR2 SERIES	FR2E SERIES	FR3 SERIES
			

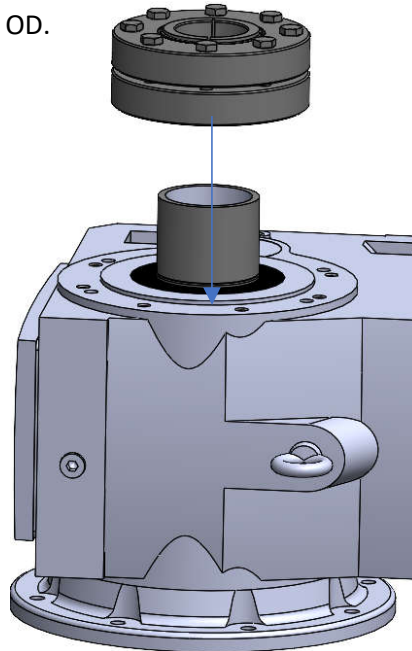
1.) REMOVE THE GEARBOX'S SHAFT COVER BY REMOVING THE BOLTS THAT HOLD IT DOWN. KEEP THE SHAFT COVER AND BOLTS.



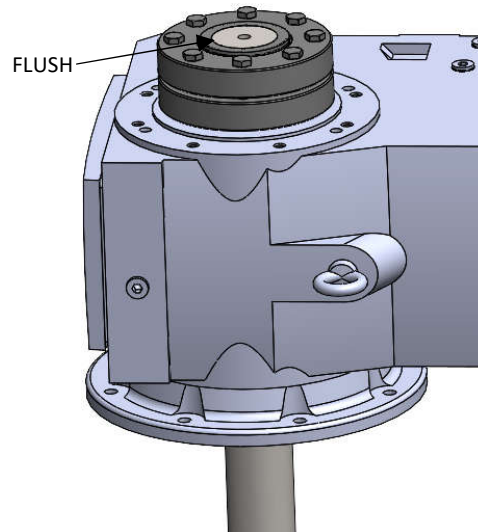
2.) DEBURR & CLEAN SHAFT AND HOLLOW BORE ID WITH ACETONE OR A SIMILAR SOLVENT. INSERT THE SHAFT INTO THE GEARBOX'S HOLLOW BORE.



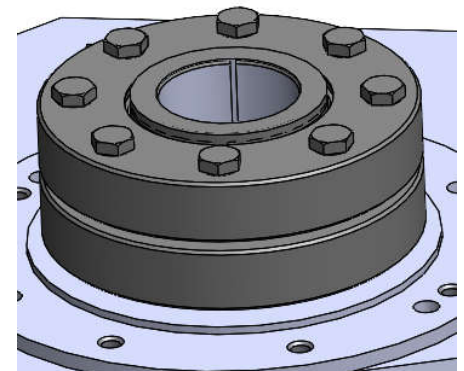
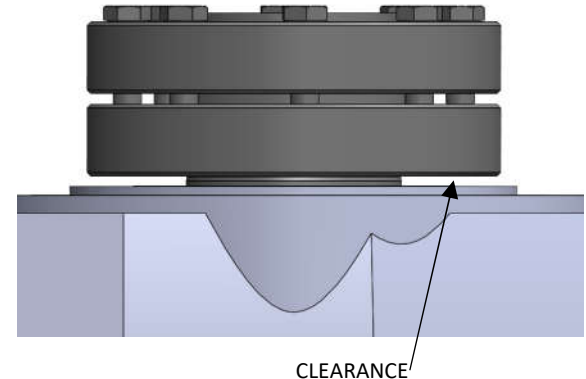
3.) VERIFY ALL THE BOLTS ON THE SHRINK DISC ARE LOOSE AND SLIDE THE SHRINK DISC ONTO THE HOLLOW BORE OD.



4.) POSITION THE SHAFT SO IT'S FLUSH WITH THE HOLLOW BORE OR AS INDICATED ON THE APPROVAL (OR AS MANUFACTURED) DRAWING.



5.) VERIFY THERE IS CLEARANCE BETWEEN THE GEARBOX AND THE SHRINK DISC. HAND TIGHTEN 3 OR 4 EQUALLY SPACED BOLTS. THEN HAND TIGHTEN THE REMAINING BOLTS.



CAUTION: TIGHTENING SHRINK DISC WITHOUT SHAFT IN THE BORE, WILL CAUSE DAMAGE TO THE GEARBOX.



ENSURE THE SHRINK DISC IS TIGHTENING EVENLY AND PARALLEL

CAUTION

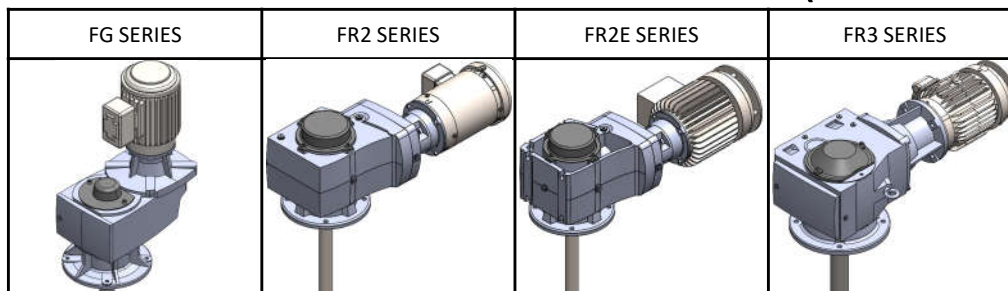
DISCONNECT MIXER FROM POWER SOURCE BEFORE ASSEMBLING, LIFTING, MOVING, OR SERVICING MIXER.

CAUTION:

- THE VISCOSITY AND SPECIFIC GRAVITY OF THE FLUID AFFECTS MIXER SIZING AND SPECIFICATIONS



SHAFT INSTALLATION – SHRINK DISCS (CONTINUED)



6.) TIGHTEN THE BOLTS IN A CIRCULAR PATTERN USING 1/4 (90°) TURNS, EVEN IF SOME BOLTS INITIALLY REQUIRE VERY LOW TIGHTENING TORQUE TO ACHIEVE 1/4 TURNS. TIGHTEN TO THE APPROPRIATE “TIGHTENING TORQUE” VALUE IN THE TABLE.

7.) CONTINUE THE TIGHTENING SEQUENCE DESCRIBED IN STEP 6. WHEN THE TORQUE ON THE BOLT IS AT THE “TIGHTENING TORQUE” VALUE WITH LESS THAN 1/4 TURN ON THE BOLT, PROCEED TO STEP 8.

9.) RESET THE TORQUE WRENCH TO THE APPROPRIATE “TIGHTENING TORQUE” VALUE IN THE TABLE. ENSURE ALL OF THE BOLTS ARE PROPERLY TIGHTENED USING THE CIRCULAR PATTERN.

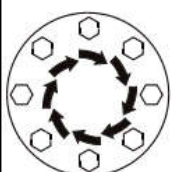
Screw Size	Wrench Size	Tightening Torque	4% Over Torque
M5	8	62 in-lb.	64 in-lb.
M6	10	106 in-lb.	110 in-lb.
M8	13	22 ft-lb.	23 ft-lb.
M10	17	44 ft-lb.	46 ft-lb.
M12	19	74 ft-lb.	77 ft-lb.
M16	24	184 ft-lb.	191 ft-lb.
M20	30	361 ft-lb.	375 ft-lb.
M24	36	620 ft-lb.	645 ft-lb.
M30	46	1254 ft-lb.	1304 ft-lb.



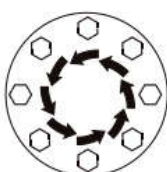
8.) SET THE TORQUE WRENCH TO THE APPROPRIATE VALUE IN THE TABLE, BUT USE THE “4% OVER TORQUE” VALUE IN THE TABLE. DO ONE OR TWO COMPLETE ROTATIONS USING THE SAME CIRCULAR PATTERN TECHNIQUE.

10.) INSTALL THE SHAFT COVER AND BOLTS BACK ONTO THE GEARBOX.

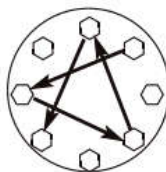
BOLT TIGHTENING PATTERN



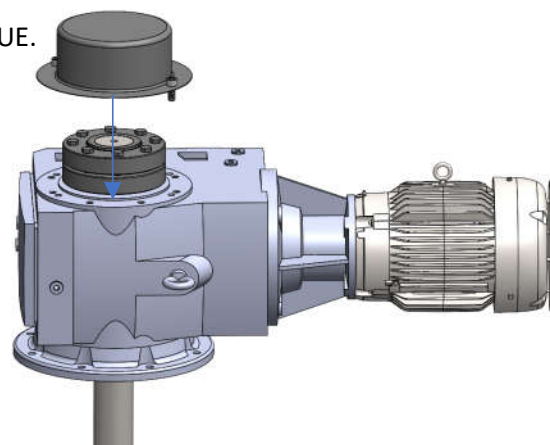
CLOCKWISE
CIRCULAR
PATTERN
RIGHT



COUNTER
CLOCKWISE
CIRCULAR
PATTERN
RIGHT



STAR
PATTERN
WRONG



CAUTION

DISCONNECT MIXER FROM
POWER SOURCE BEFORE
ASSEMBLING, LIFTING,
MOVING, OR SERVICING MIXER.

CAUTION:

- THE VISCOSITY AND SPECIFIC GRAVITY OF THE FLUID AFFECTS MIXER SIZING AND SPECIFICATIONS