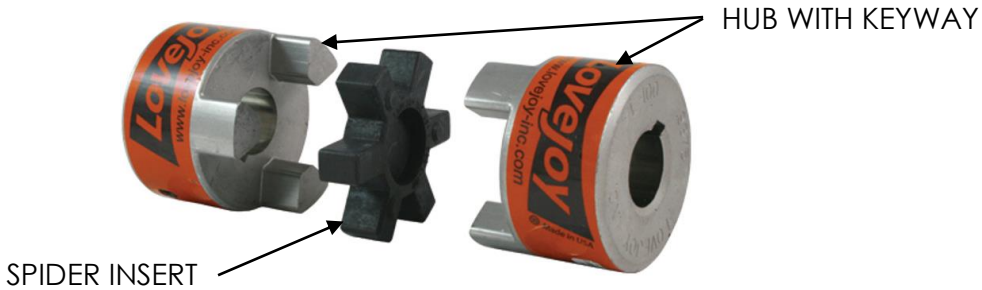
Flexible - Jaw Type Coupling Installation

CAUTION:

- **ALWAYS SHUT OFF AND LOCK OUT POWER SUPPLY TO THE MIXER BEFORE ANY MAINTENANCE IS PERFORMED.**
- **PINCH POINTS & SHARP EDGES MAY BE LOCATED IN THIS AREA.**

This Manual Section Covers Setting Drive Coupling Spacing for a Pro Series using a Flexible – Jaw Type Coupling between Input Drive & Bearing Housing

Correct installation and alignment/spacing practices will ensure longer coupling life, trouble free operation, and a safer operating environment for the coupling. Please thoroughly review all of the following instructions prior to installing this coupling and placing it in operation. Proper safety guidelines and practices should always be followed during every phase of the installation. Below is an image showing the Flexible – Jaw type coupling components. A combination square should be used for the assembly process.

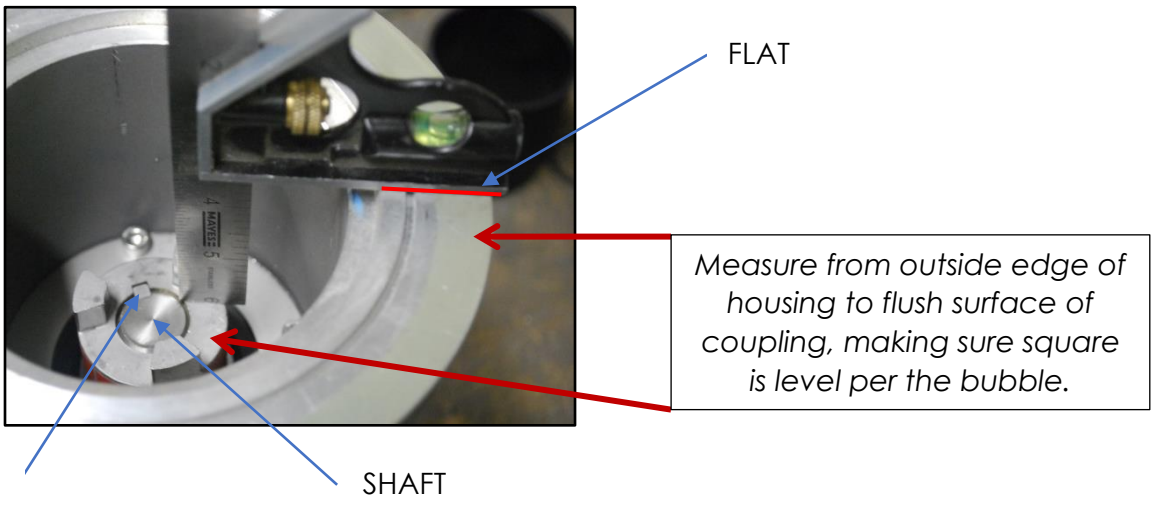


Begin Installation

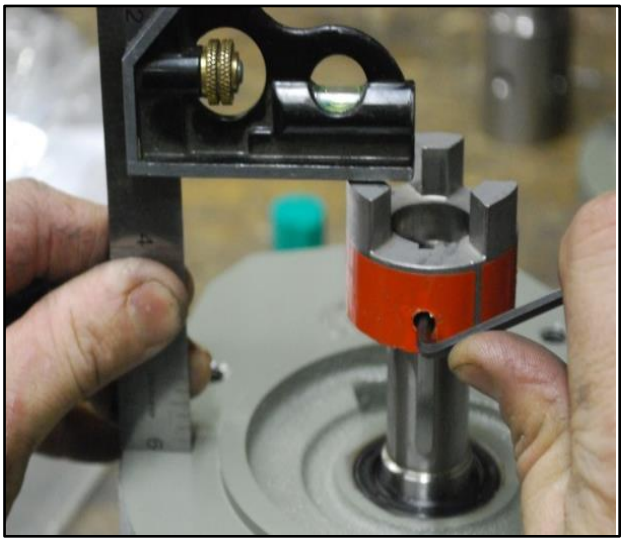
Make sure that all of the components in this assembly are free from any foreign materials, nicks, burrs, dents or gouges. Clean components and remove any nicks, burrs, dents or gouges before attempting installation.

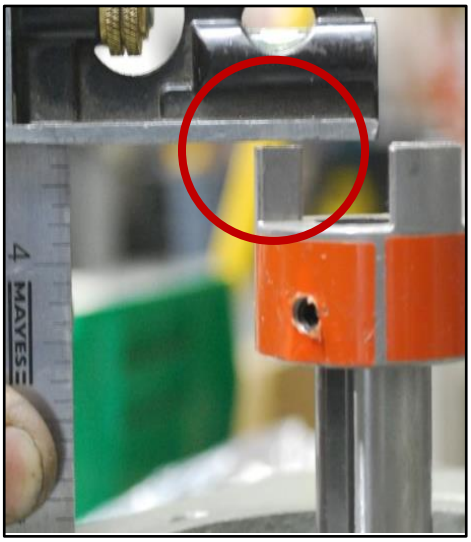
1) The driven coupling (coupling on the bearing housing stub shaft – Pro Series) & key should be installed flush with the driven shaft as shown in the image on the following page.

2) Use a combination square to measure the distance from the OUTSIDE edge of bearing housing to the flush surface where the Lovejoy coupling and stub shaft meet. Make certain the square anvil is flat on the mounting surface & is level per bubble. Tighten square to retain this measurement.



3) Place Lovejoy coupling & key onto the drive output shaft (gearbox or motor). Use the retained measurement on the combination square that was taken from the housing, and transfer measurement to place the Lovejoy coupling onto the drive output shaft. The measurement gets transferred from OUTSIDE edge of gearbox or motor to top of coupling tooth. Leave approximately a 1/16" gap (thickness of a penny) between the coupling and the square's arm. Adjust the integral set screw within the coupling with a hex/allen wrench to position then tighten the coupling to the appropriate value in torque table.

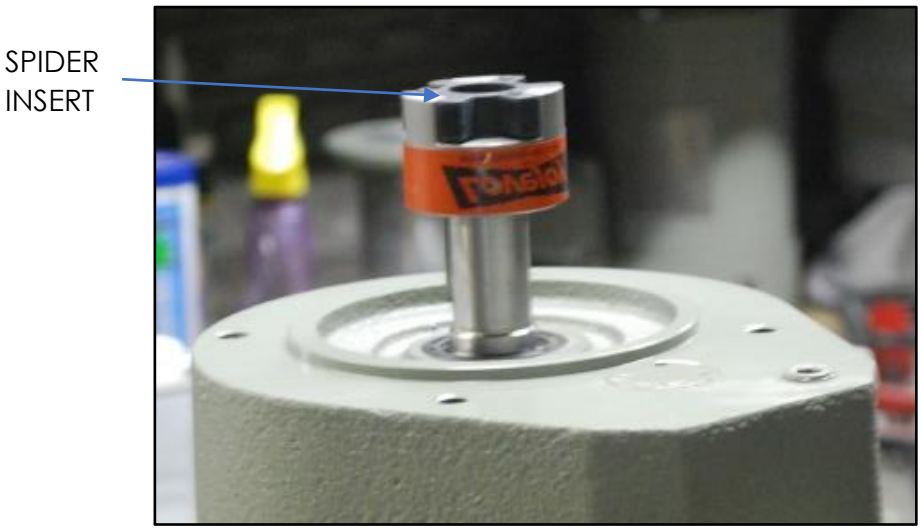




*Note the **1/16**" gap between square's arm and coupling tooth. A penny can be used to set this spacing.*

THREAD SIZE	TORQUE
1/4-20	75 in-lb.
5/16-18	14 ft-lb.

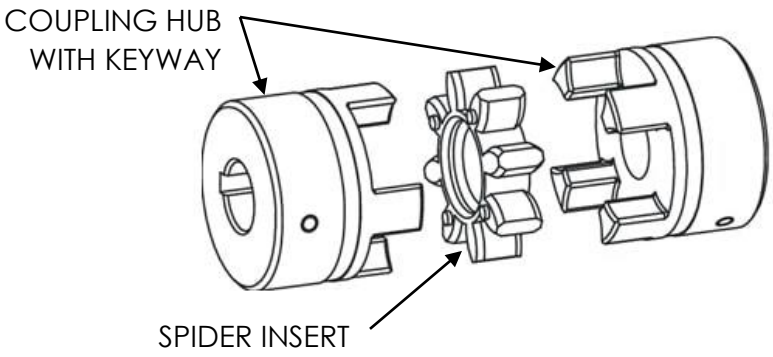
4) Place spider onto the coupling that is attached to the gearbox or motor shaft.



5) Once the drive coupling is in place mount the bearing housing using the appropriate bolts. Use lock washers or service removable thread locker on the bolt threads to prevent the bolts from vibrating loose. Ensure that the couplings are properly engaged without any excess pressure against the spider. Excessive vibration may occur at start up if the hubs are pressed too tightly together causing excess pressure against the spider which will also causes excess axial pressure against the bearings.

This Manual Section Covers Setting Drive Coupling Spacing for a Flow Series using a Flexible – Jaw Type Coupling Installation

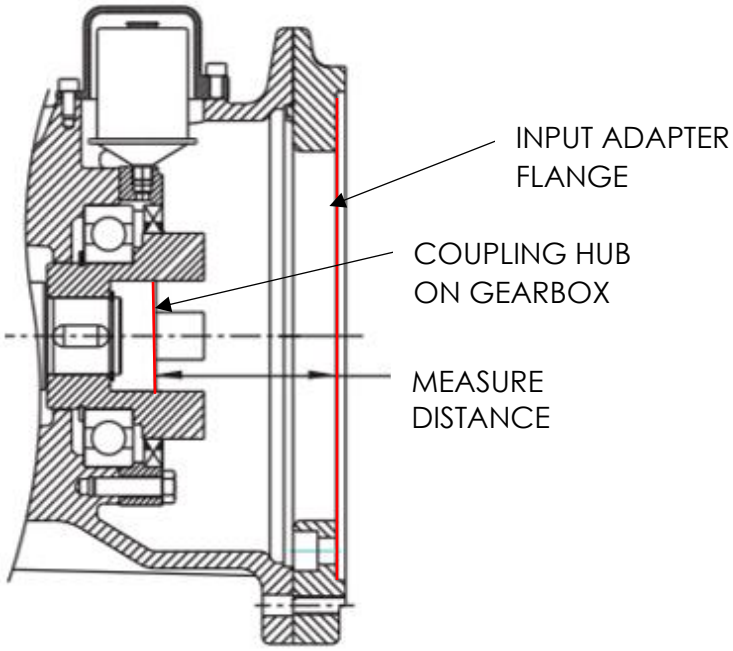
Correct installation and alignment/spacing practices will ensure longer coupling life, trouble free operation, and a safer operating environment for the coupling. Please thoroughly review all of the following instructions prior to installing this coupling and placing it in operation. Proper safety guidelines and practices should always be followed during every phase of the installation. Below is an image showing the Flexible – Jaw type coupling components. A combination square should be used for the assembly process.



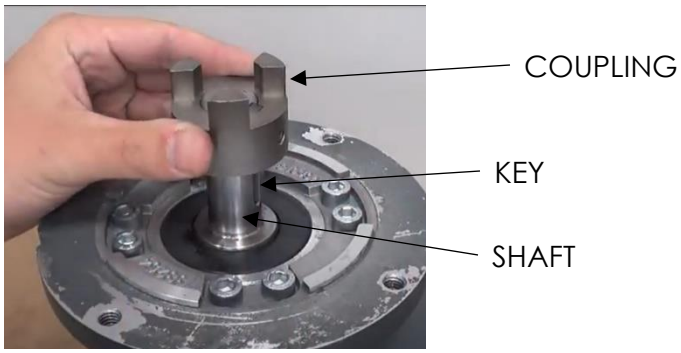
Begin Installation

Make sure that all of the components in this assembly are free from any foreign materials, nicks, burrs, dents or gouges. Clean components and remove any nicks, burrs, dents or gouges before attempting installation.

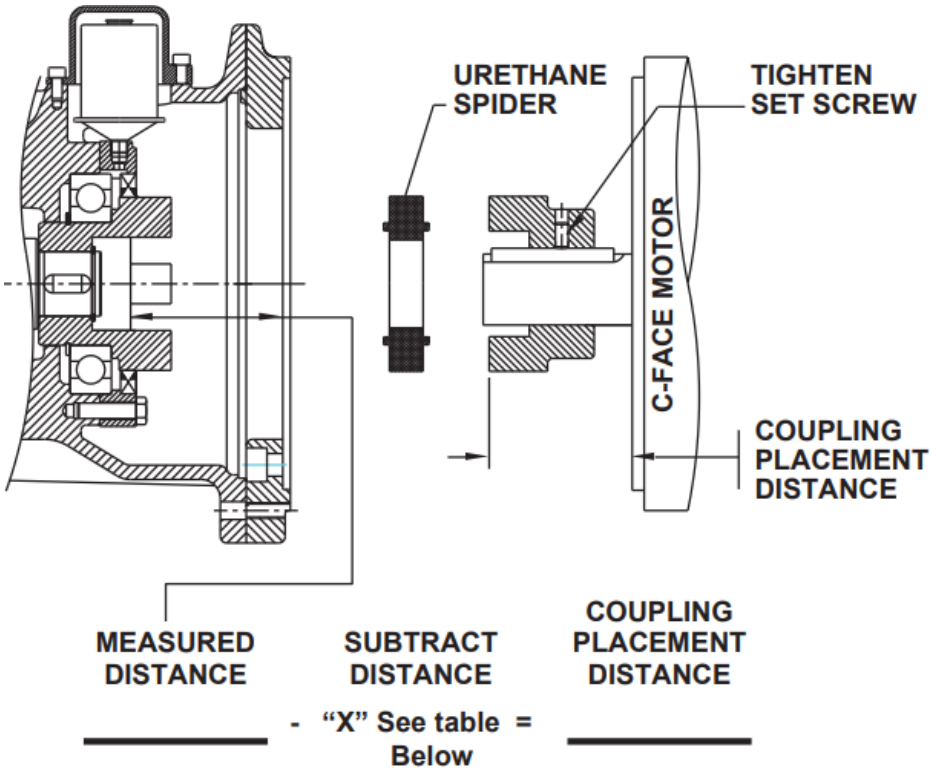
1) The coupling on the gearbox is already in place. Using a combination square, measure the distance from the gearbox input adapter flange to the lower surface of the coupling, as shown. Ensure the combination square's anvil is sitting flat on the gearbox input adapter flange.



2) Place the other coupling onto the motor's shaft with the key in the keyway.

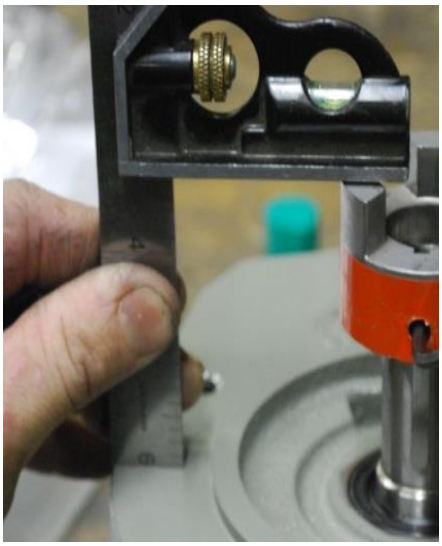


3) Based on the coupling size, use the table to select the appropriate subtract distance "X". Subtract this value from the measured distance from step 1 to get the coupling placement distance.



Coupling Size	Subtract Distance "X"	
R14	0.06"	1.5 mm
R19 & R24	0.08"	2.0 mm
R28	0.10"	2.5 mm
R38 & R42	0.12"	3.0 mm
R48	0.14"	3.5 mm
R55	0.16"	4.0 mm
R65	0.18"	4.5 mm
R75	0.20"	5.0 mm
R90	0.22"	5.5 mm

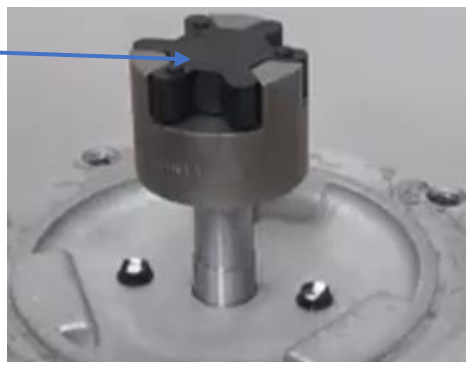
4) Set the combination square to the calculated value coupling placement distance from step 3. Set the coupling distance from the motor mounting face to the top of the coupling. Tighten the set screw(s) to keep the coupling at this location.



5) Tighten the set screw(s) to the appropriate value from the table below. Place the spider insert into the motor's coupling.

Coupling Size	Set Screw Size	Torque
R14	M4	13 in-lb.
R19 & R24	M5	18 in-lb.
R28	M8	89 in-lb.
R38 & R42	M8	89 in-lb.
R48	M8	89 in-lb.
R55; R65 & R75	M10	13 ft-lb.
R90	M12	30 ft-lb.

SPIDER INSERT



6) Mount the motor onto the gearbox with the appropriate bolts. Ensure that the couplings engage securely. Use lock washers or service removable thread locker to prohibit bolts from vibrating loose. Tighten to the appropriate value in the table below.

BOLT SIZE	18-8 SS	Gr5/Gr8
3/8"-16	16 ft-lb.	25 ft-lb.
1/2"-13	36 ft-lb.	61 ft-lb.
9/16"-12	48 ft-lb.	88 ft-lb.
5/8"-11	81 ft-lb.	121 ft-lb.
3/4"-10	114 ft-lb.	215 ft-lb.
7/8"-9	178 ft-lb.	251 ft-lb.
1"-8	269 ft-lb.	375 ft-lb.