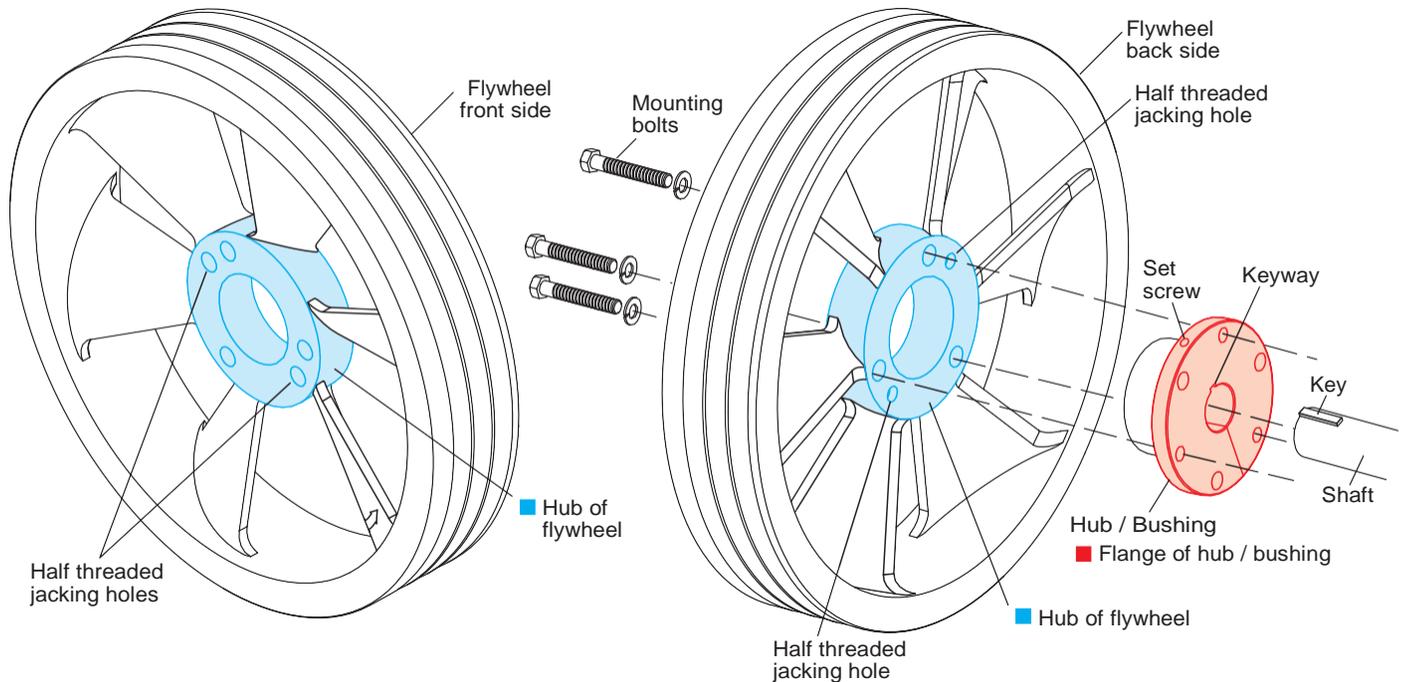


## New Torque Specifications for Compressor Flywheels



The torque values for mounting a flywheel have changed. Instead of a single torque value, each hub/bushing size now has a torque value range. This bulletin provides a list of revised torque values and a recommended installation procedure. Following this procedure reduces the possibility of a flywheel fracture.

The new torque values are listed in the table below.

Hub / Bushing Size	Diameter in. (cm)	Bolt Torque Ft-lb (kg-meter)	Set Screw Torque Ft-lb (kg-meter)
SF	4.625 (11.7)	12–18 (1.7–2.5)	22 (3.1)
E	6.0 (15.2)	30–36 (4.1–4.9)	22 (3.1)
J	7.25 (18.4)	75–81 (10.3–11.1)	22 (3.1)

### How to Install the Hub/Bushing and Flywheel:

1. Clean the shaft of the compressor, bore of the hub/bushing, outside of hub/bushing, and the inside bore of the flywheel. Remove all oil, paint, and dirt and file away any burrs.

NOTE: DO NOT use any lubrication to install the hub/bushing. Using lubricants may cause the hub of the flywheel to fracture.

2. Begin by aligning the keyway of the hub/bushing with the key located on the shaft of the compressor and slide the hub/bushing over the shaft.

TIP: If the hub/bushing does not slide easily over the shaft, it may be necessary to pry the hub/bushing open by driving a flathead screw driver into the gap of the hub/bushing.

**Standard crankshaft:** The outside edge of the hub/bushing should be flush with the end of crankshaft.

**Extended crankshaft:** The shaft protrudes through the hub/bushing allowing for a power-take-off (PTO) drive coupling.

After the hub/bushing is properly positioned, tighten the set screw to the torque value listed in the table.

3. Align the three non-threaded mounting holes of the flywheel with the three fully threaded holes in the hub/bushing and hand tighten with lightly oiled mounting bolts.

NOTE: The other two holes on the flywheel are half

threaded. Their only purpose is to jack the flywheel from the hub/bushing.

NOTE: DO NOT lubricate any part of the hub, flywheel, or compressor shaft. Doing so may cause the hub of the flywheel to fracture.

4. The mating surfaces of the hub/bushing and flywheel are a tapered fit. To properly secure the flywheel to the hub/bushing, start with half of the recommended torque value (see torque values listed in the table) and tighten the bolts in an alternating pattern until the flywheel and hub/bushing are seated together.
5. After reaching approximately half the recommended torque value, confirm the alignment of axial flywheel run out (wobble), and tighten one or two bolts as necessary to achieve proper alignment.
6. After proper alignment is achieved, go back to an alternating pattern and tighten the bolts to the recommended torque value.
7. To increase the gripping force of the hub/bushing, tap the edge of the flange on the hub/bushing with a brass hammer or punch. The flange of the hub/bushing is located on the back side of the flywheel. If the flywheel is slightly cocked in relation to the hub/bushing, this will help the hub/bushing seat firmly inside the circumference of the flywheel hub.

NOTE: Do not hit the hub/bushing on the front side with a hammer.

8. Re-torque the bolts one last time.

NOTE: After the recommended bolt torque value is reached, stop. Excessive torque over inserts the hub/bushing and may cause the hub of the flywheel to crack.

9. Recheck all bolt torque values after the initial run in, and periodically thereafter. Repeat steps above if loose.

#### How to Remove the Flywheel:

1. Loosen and remove the three mounting bolts on the outside of the flywheel.
2. Insert a bolt into each of the two half threaded jacking holes and hand tighten.
3. In an alternating pattern, use a wrench or ratchet to tighten each bolt in small increments. Continue in small but equal increments until the flywheel and hub disengage.



CORKEN, INC. • A Unit of IDEX Corporation  
9201 North I-35 Service Road, Oklahoma City, OK. 73131 U.S.A.  
Phone (405) 946-5576 • FAX (405) 948-7343  
Visit our website at [www.corken.com](http://www.corken.com)  
E-mail us at [cocsalesdept@idexcorp.com](mailto:cocsalesdept@idexcorp.com)

