



Close-Coupled Centrifugal Pump Kits

Assembly Instructions

IMPORTANT: This pump kit is to be assembled by qualified personnel only.



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to: www.P65Warnings.ca.gov.

All necessary pump components are included in the kit furnished. For proper assembly follow these instructions:

1. Mount Shaft Sleeve onto motor shaft using sealant included in Sleeve Kit. Apply sealant to complete circumference of shaft to insure watertight seal.
2. Slide Water Slinger over Shaft Sleeve and locate near the Sleeve edge closest to the motor.
3. Mount the Motor Bracket Assembly to motor using motor bracket capscrews.
4. Press seal insert in Motor Bracket Assembly. Moisten the inner diameter of the seal assembly with soapy water and press seal firmly in place. Carbon seal face must be tight against the ceramic insert. Apply small end of tapered spring on seal.
5. Make certain that the impeller has been properly cut to size for required GPM and feet of head and balanced. Slide impeller onto motor shaft until it bottoms against the shaft sleeve shoulder. Install Impeller Key in slot. Fasten the impeller using (1) capscrew, (1) internal lockwasher and (1) large impeller washer. Tighten per capscrew torque values table.
6. Mount the Volute Gasket and Volute to the motor bracket assembly using the Volute Capscrews. Tighten according to the capscrew torque table.
7. Install the seal flushing tube assembly, as applicable.
8. Install the volute pipe plugs.
9. Recheck all exposed capscrews for tightness.
10. Complete all nameplate data and affix to Volute.
11. Affix all safety instruction decals supplied with the kit.
12. Affix Installation Operation & Service Instructions to pump.

Capscrew torque values

Capscrew torque in ft-lbs (Nm)

Capscrew type	Head marking	1/4 in.	5/16 in.	3/8 in.	7/16 in.	1/2 in.	5/8 in.	3/4 in.	7/8 in.	1 in.
SAE grade 2		6 (8)	13 (18)	25 (34)	38 (52)	60 (81)	120 (163)	190 (258)	210 (285)	300 (407)
Brass or stainless steel	 or 	4 (5)	10 (14)	17 (23)	27 (37)	42 (57)	83 (113)	130 (176)	200 (271)	300 (407)
SAE grade 5		10 (14)	20 (27)	35 (47)	60 (81)	90 (122)	180 (244)	325 (441)	525 (712)	800 (1085)

Impeller trimming guidelines

Machining

When it is necessary to reduce the pump flow rate and generated head by trimming the impeller diameter, the following guidelines apply for stainless steel impellers:

- Review the pump hydraulic selection data and consult your local Xylem representative to select the proper reduced diameter.
- For the e-80 5x5x7B model (e-1531/e-1532 4AD), before trimming the impeller refer to the angle cut guidelines below.
- For machining recommendations, see P2002535 Stainless Steel Impeller Trimming Guidelines.

Balancing

It is recommended that impellers trimmed more than 5% in diameter be rebalanced per ISO 1940 grade G6.3.

Angle cut guidelines

Model e-80 5x5x7B (e-1531/e-1532 4AD), pump impellers must be angle cut at reduced diameters according to the following information.

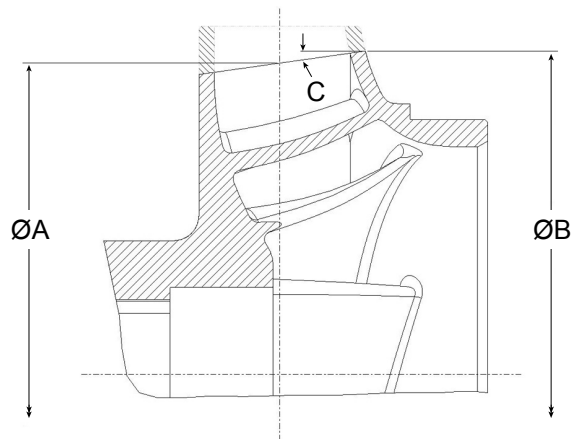
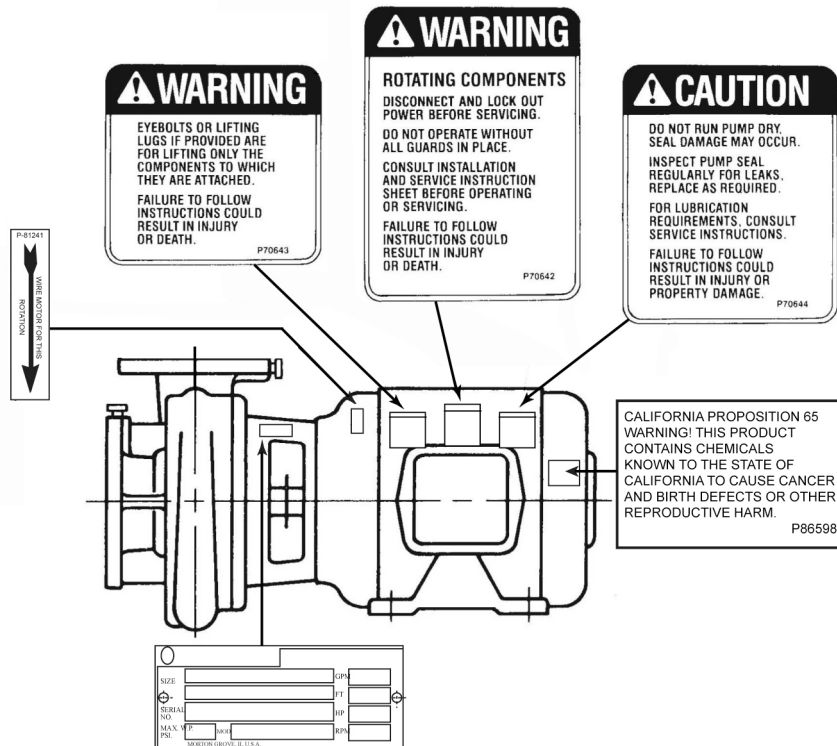
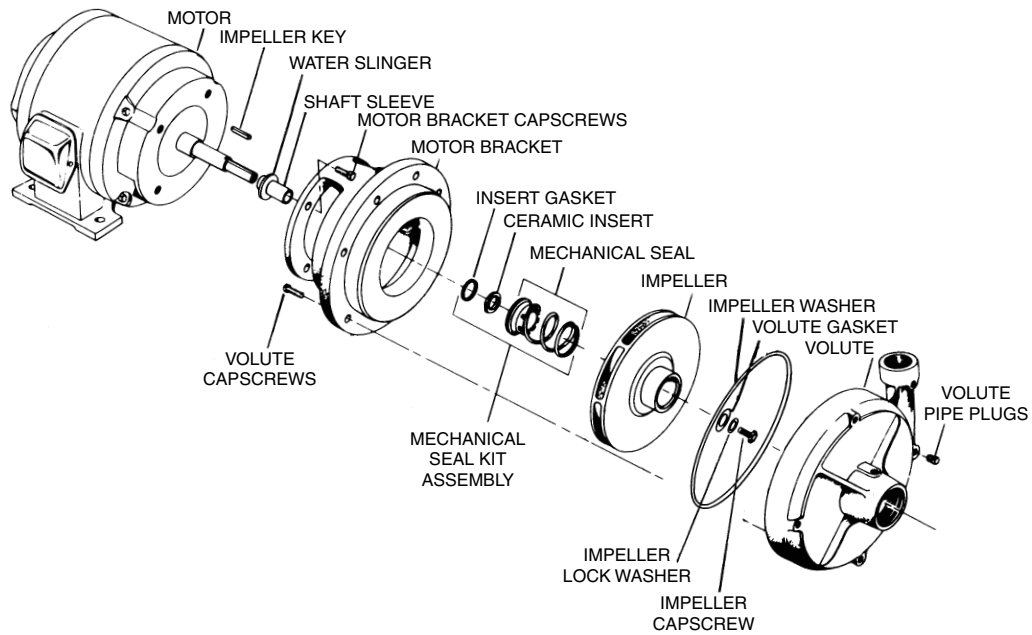


Figure 10: 5x5x7B (e-1531/e-1532 4AD) impeller trim – 0.125 in. (3.17 mm) increments

A	B	C
Hydraulic diameter, nominal, as shown on selection curves	Diameter at impeller inlet side shroud	Trim angle
From maximum diameter 7 in. (177.8 mm) to 6.125 in. (155.6 mm)	Use diameter from selection curves	0 degrees, no angle
6, 5.875, 5.75, 5.625 in. (162.4 to 142.9 mm)	B = A plus 0.250 in. (6.35 mm)	8 degrees
5.5, 5.375, 5.25, 5.125, minimum 5 in. (139.7 to 127.0 mm)	B = A plus 0.375 in. (9.53 mm)	8 degrees





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