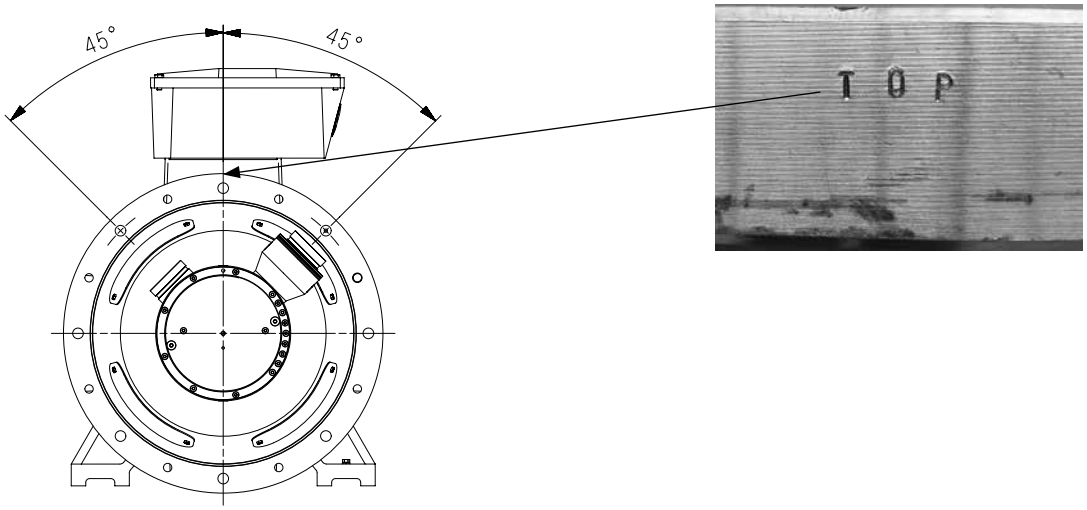
ENGINEERING
TOMORROW

Installation guide

APP 53-86 pumps
Mount and pump assembly

180R9398



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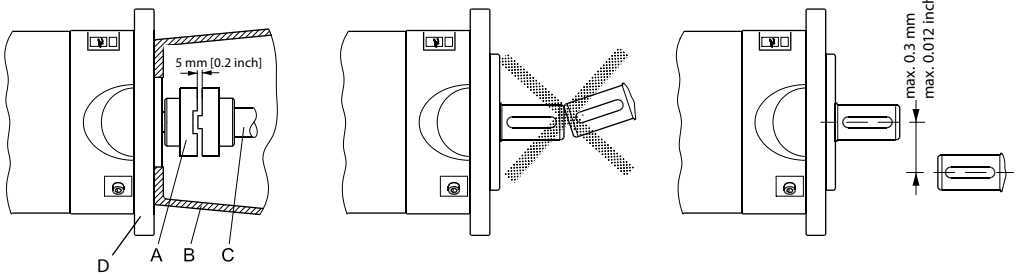
The clearance between the bell housing/mount and the motor, and the clearance between the pump and the bell housing, tend to cause the pump shaft to be positioned a little closer to the ground than the shaft of the motor. This tends to create a little misalignment in the downwards direction.

To minimize the misalignment between the shafts of the pump and motor, the intrinsic misalignment of the bell housing should be aligned in the upwards direction, so that the misalignment from the clearances is counteracted by the intrinsic misalignment of the bellhousing. To facilitate this all bell housings are engraved with "Top". The "Top" engraving should point in the upwards direction, or at least be within 45° of vertical upwards.

To optimize pump performance (minimize losses in the coupling) and to minimize stresses on the shaft, the pump and motor should be well aligned, preferably within 0.3 mm.



A: Elastic coupling
B: Bell housing
C: Motor shaft
D: Pump flange

1. Mount the coupling flush or maximum 1 mm offset from the motor shaft end.
2. Install the bell housing on the motor without fully tightening the screws. The "Top" indication on the motor side of the bell housing must be within +45° of vertical upwards.
3. Make sure that the screws are loose enough that gravity can push out the clearance in the vertical direction.
4. Thighten all the screws between the bell housing and the motor to indicated torque.
5. Measure the longest distance on the motor shaft coupling from end of the bell housing to the end of coupling claw.
6. Mount the coupling on the pump shaft. Ensure that the coupling and the pump flange are not in contact with each other.
7. Measure the distance from the pump flange to the end of the coupling. The distance shall be 5 mm [0.2 inc] shorter than the distance from the end of the bell housing to the end of the coupling claw.
8. Mount the pump on the bell housing without completely tightening any screws. Release equipment before tightening all srews to indicated torque.
9. Verify that there is an air gap between the coupling parts of 5 mm [0.2 inch].

It is recommended to verify alignment with a dial indicator. Alignment can be optimized by changing the orientation of the bell housing and by performing step 2 - 4 and 8 of the procedure (shown above) while carefully lifting/pushing in the opposite direction of the misalignment while tightening the screws.