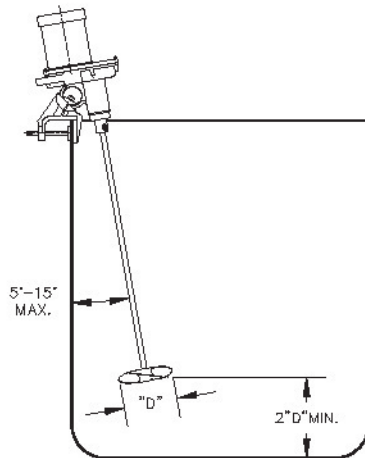
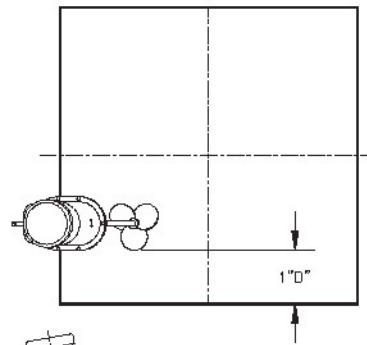
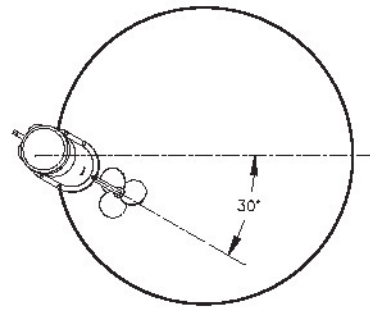
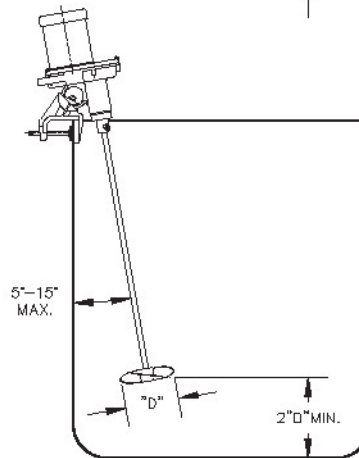


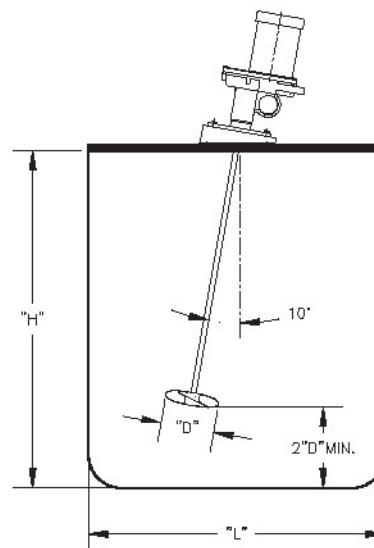
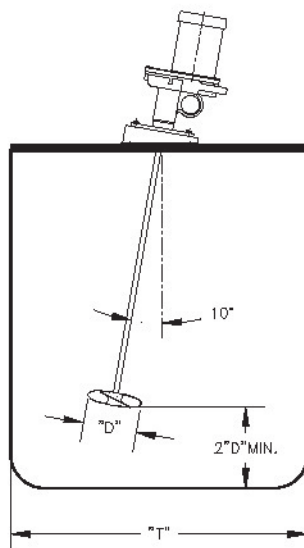
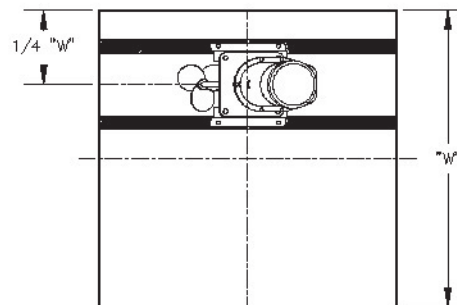
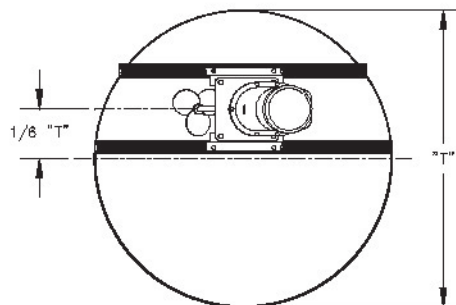
MIXER POSITIONING



VERTICAL
CYLINDRICAL



CUBICAL
(L=W)



"T" = TANK DIAMETER
"D" = IMPELLER DIAMETER

INTRODUCTION

The Neptune Mixer is a carefully designed piece of precision equipment which will give you years of satisfactory service under normal operating conditions.

A. INSPECTION

All Neptune Mixers are shipped in a specially designed carton to insure against damage in shipment. Each shaft is shipped in an individual box. Upon receipt, examine the mixer for damage; report any damage to Neptune and the delivering carrier at once.

B. LUBRICATION/MAINTENANCE

The outboard ball bearing [30] and upper ball bearing [27] are sealed and pre-greased for bearing life. The gear box is lubricated at the factory. Neptune recommends changing grease annually. To change grease or to change the motor: Remove motor midplate (fig. 21) by taking out the six bolts & washers (fig. 14/15). Remove motor and midplate (they will be attached) from gearbox. Remove four motor bolts (fig. 12/13) underneath midplate. Clean gear box and gears with solvent. Coat gears with about 4.8 oz of the following grease.

Mixers use Bel-Ray® 72560 Grease. Order P/N 104750

C. MOUNTING THE MIXER

Remove the mixer from the carton and attach clamp. Rotate the clamp to an initial position such that the motor will be upright when the unit is clamped to the tank. Place the clamp on the desired location on the tank, being certain that both the horizontal and vertical surfaces of the clamp are in contact with the top and side of the tank. Rotate the nut clockwise to tighten; counter clockwise to loosen.

D. MOUNTING MIXER SHAFT

Neptune supplies standard square pitch propellers which may be put on the mixer shaft either face up or face down. Place the propellers on the end of the shaft WITHOUT THE NOTCHES. If two propellers are used, they should be spaced at least two propeller diameters apart. Be certain to securely tighten the propeller set screws. Place the end of shaft with the notches into the shaft collar until it bottoms. Screw in the setscrews [32]. Rotate the shaft to line up the shaft notches with setscrews [32] and tighten the setscrews. (See Shaft Installation Diagram on pg. 5.)

E. ELECTRICAL CONNECTIONS

Your Neptune mixer is designed to rotate clockwise when looking down from the top of the motor. This is so indicated by arrows cast on the motor midplate.

Follow the wiring directions as indicated on the motor to obtain proper rotation. Jog motor to check propeller rotation.

F. MIXER POSITIONING

To utilize energy supplied by the mixer, a top to bottom turnover of the liquid should be created. The mixer shaft should be angled 5° to 15° off vertical wall of tank pointed 20° to 30° right of the center line. Refer to diagrams on page 3.

Moving the shaft to the left of the position described will increase swirl of vortex. This helps to submerge light powders and to aerate the mix but decreases mixing efficiency. Adjust vortexing by changing shaft position and angle (Stay within maximum limits).

G. MIXER OPERATION

Neptune mixers are designed for continuous operation under normal conditions. It is not a good practice to operate continuously when extreme vortexing occurs. Mixer Propellers must be submerged in the Liquid during mixing operation or damage could occur.

After mixer has been turned on and the mixing pattern developed, adjust mixer position if necessary.
DO NOT ADJUST WHILE RUNNING

After ten days of operation, check the Motor Midplate screws, and shaft collar Hex Nut for tightness. At the end of a mixing period, it is a good practice to turn off the mixer before the tank is drained. Turn mixer off when liquid level is one propeller diameter above lower propeller.