

Proper seal installation will prevent premature failure

Tech tip

Proper seal installation is generally overlooked when selecting an oil or grease seal for any given application.

To begin the seal installation, an important step is to pre-lubricate the seal with the oil or grease you are going to seal. This will reduce the “sliding” friction force that can damage the seal when installed dry. It also prevents a dry starting condition that can tear the seal material during initial run-in periods.

Acceptable installation methods used to install seals will always include supporting the seal case. Special tools are not necessarily required as long as the seal case is properly supported and an even force is uniformly applied. In each acceptable method, installation load is absorbed by either the housing or plate to prevent seal damage and to assist in properly locating the seal squarely in the bore. (See Illustrations A, B & C)

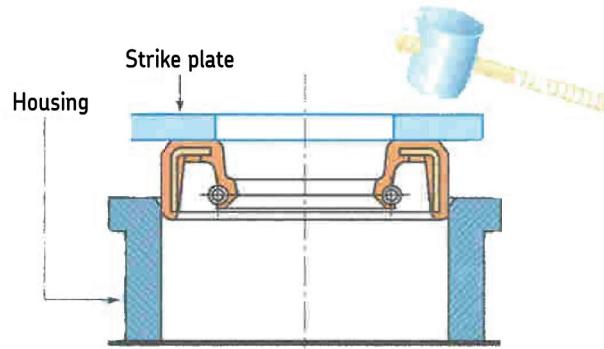


Illustration A

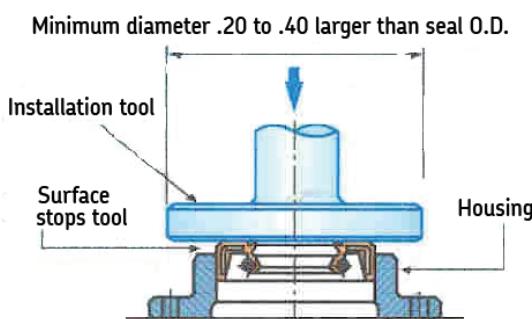


Illustration B

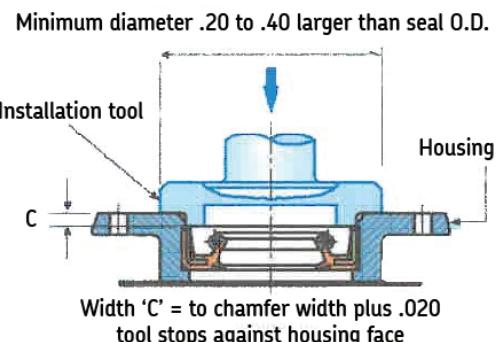


Illustration C

Proper seal installation will prevent premature failure – cont.

Improper methods will cause damage to the seal case which will change the geometry of the seal head in relation to the sealing surface, causing leakage. (See Illustrations D & E)

Improper methods of seal installation

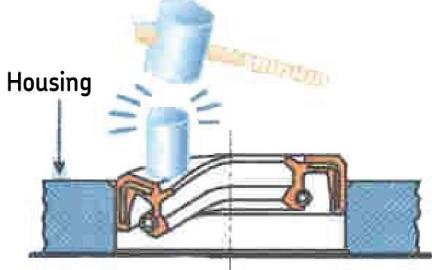


Illustration D

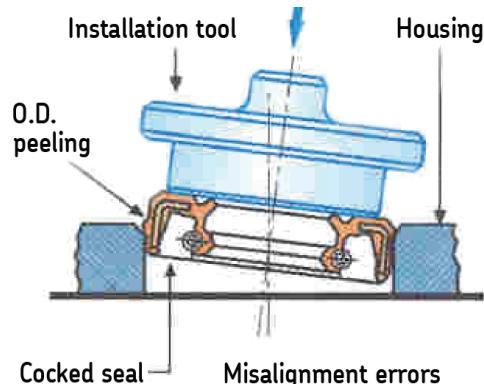


Illustration E

Proper seal maintenance and handling are critical. Follow the equipment manufacturer's installation instructions. Failure to follow proper installation methods can result in equipment failure.