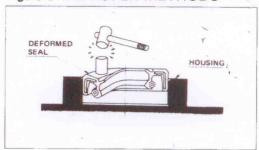
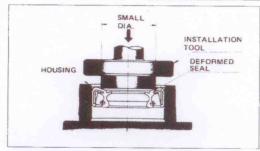
## **Installation Methods**

The subject of installation represents an area commonly overlooked when selecting an oil seal for an application. Studies have shown this area to be one of the major causes of premature seal failure. To assist the installation, the oil seal should be prelubricated with grease or oil to reduce sliding friction of contact surfaces. This will also help protect the seal lips during initial run-in. This section expands on recommended procedures for installation.

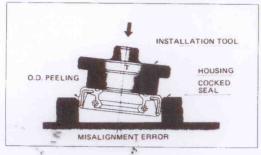
## HOUSING INSTALLATION

Figure 5 IMPROPER METHODS

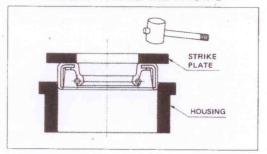


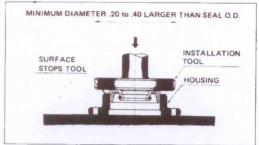




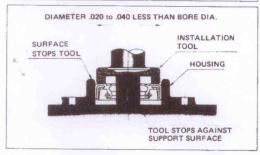


## ACCEPTABLE METHODS









An installation tool should always be used when installing an oil seal. The use of a tool can make installation easier and lower the possibility of seal cocking. A hydraulic or pneumatic press is advised to supply necessary force to install the seal. Figure 5 describes examples of both recommended and improper installation methods. In each preferred method, installation load is absorbed by either housing or bottom plate to prevent seal damage and to locate the seal properly within the bore.