



## Head Gasket Selection on CNH, Ford & New Holland Diesel Tractor Engines

The AERA Technical Committee offers the following information to consider during head gasket selection for CNH, Ford & New Holland diesel tractor engines. This information should be referenced before engine disassembly as different head gaskets are used for these series engines.

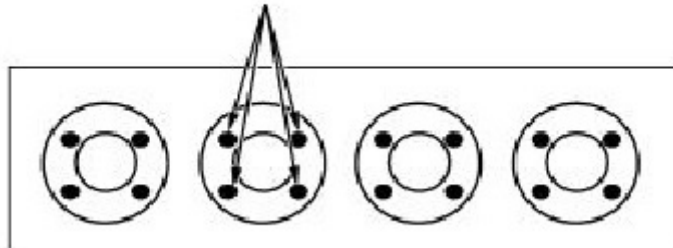
Head gasket selection for these engines is based on the piston stand-out (piston height or piston protrusion) observed during engine assembly. Piston stand-out is the distance the piston crown is when that location is at top dead center. This measurement should be measured in four locations above the piston pin as shown in the Figure 1 below. Take an average of the measurements observed for all locations and use that figure for your piston stand-out specification.

It is also recommended to keep no more than .0040" (.100 MM) variation between all piston heights. In the chart shown below, the standard head gasket is the thinnest one listed. Failure to select the proper head gasket may lead to engine damage or an engine lacking power.

Caution is expressed as additional use of these engines by other equipment manufacturers does not assure one that the same gasket thicknesses are required.

Model	Measurement Value	Head Gasket Part #	Installed Thickness
N843L	.0177-.0240" (.450-.600 MM)	111147490	.0512" (1.300 MM)
(TC35)	.0240-.0280" (.600-.700 MM)	111147500	.0551" (1.400 MM)
N844	.0197-.0236" (.500-.600 MM)	111147510	.0472" (1.200 MM)
(TC40)	.0236-.0276" (.600-.700 MM)	111147520	.0512" (1.300 MM)
N844L	.0118-.0177" (.300-.450 MM)	111147450	.0157" (.400 MM)
(TC45)	.0079-.0118" (.200-.300 MM)	111147460	.0197" (.500 MM)

### Measuring Points



**Figure 1. Piston Protrusion Measuring Points**