

APPENDIX - A

CB for Moderate Duty Diesel Engine Service

Service typical of diesel engines operated in mild to moderate duty with lower quality fuels which necessitate more protection from wear and deposits. Occasionally has included gasoline engines in mild service. Oils designed for this service provide necessary protection from bearing corrosion and from ring belt deposits in some naturally aspirated diesel engines with high sulphur fuels. Oils designed for this service were introduced in 1949.

CC for Moderate Duty Diesel and Gasoline Engine Service

Service typical of certain naturally aspirated, turbocharged or supercharged diesel engines operated in moderate to severe-duty service and certain heavy-duty gasoline engines. Oils designed for this service provide protection from high-temperature deposits and bearing corrosion in these diesel engines and also from rust, corrosion and low-temperature deposits in gasoline engines. These oils were introduced in 1961.

CD for severe Duty Diesel Engine Service

The category CD denotes service typical of certain naturally aspirated, turbo charged, or super charged diesel engines where highly effective control of wear and deposits is vital or when using fuels of wide quality range, including high sulphur fuels. Oils designed for this service were introduced in 1955 and provide protection from bearing corrosion and from high-temperature deposits in these diesel engines.

CD-II Severe Duty Two-Stroke Cycle Diesel Engine Service

Service typical of two-stroke cycle diesel engines requiring highly effective control over wear and deposits. Oils designed for this service also meet all performance requirement of API Service Category CD.

CE for Severe Duty Turbocharged or Supercharged Diesel Engine Service

Service typical for Turbocharged or Supercharged Diesel Engines manufactured since 1982 and operated under both low-speed, high load and high-speed high-load conditions. Oils designed for this service may also be used when previous API engine service categories for diesel engines are recommended.

CF for Off-Road Indirect Injected Diesel Engine Service

API service category CF denotes service typical of off-road indirect injected diesel engines and other diesel engines that use a broad range of fuel types including those using fuel with high sulphur content, for example over 0.5% wt. Effective control of piston deposits, wear and corrosion of copper-containing bearings is essential for these engines, which may be naturally-aspirated, turbocharged or supercharged. Engine oils that meet the API service category CF designation have been tested in accordance with the CMA Code.