



## IPD TECH BULLETIN

### *Why does the appearance vary on engine bearings?*

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For years you've seen engine bearings with a gray surface appearance due to the lead /tin overlay , but now with new bearing materials used in some applications you could find a variety of different looks . These differences will not only vary between engine models , but can also change depending on shaft diameter or journal size utilizing different part numbers within the same engine .

Below are three examples of what you may find :

Bearings made from copper bonded aluminum alloy with steel backing and lead-tin overlay have the gray appearance . These are the bearings you've seen for years . The lead-tin overlay stains easily if handled and can change in appearance .

Bearings made from aluminum alloy with a steel back . These bearing do not have the lead-tin overlay and have a shiny appearance on both upper and lower halves .

Lastly , bearings made with a combination of both type materials . These use the aluminum alloy with a steel back for the upper and the copper bonded aluminum alloy with steel backing and lead-tin overlay for the lower .



(Examples above are arranged to help explain the differences and are not in order of progression)

While these different materials are somewhat new to Heavy Duty engines , they have both been used and discussed for years in the light duty industries as to which type is superior . One bearing material's ability to conform and embed vs . the other's resistance to wear and corrosion is not the point of this bulletin . Our point is to simply make you aware of these changes so that next time you take one out of the box you won't wonder if it was miss-packaged or missed a step in the manufacturing and did not get plated!

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