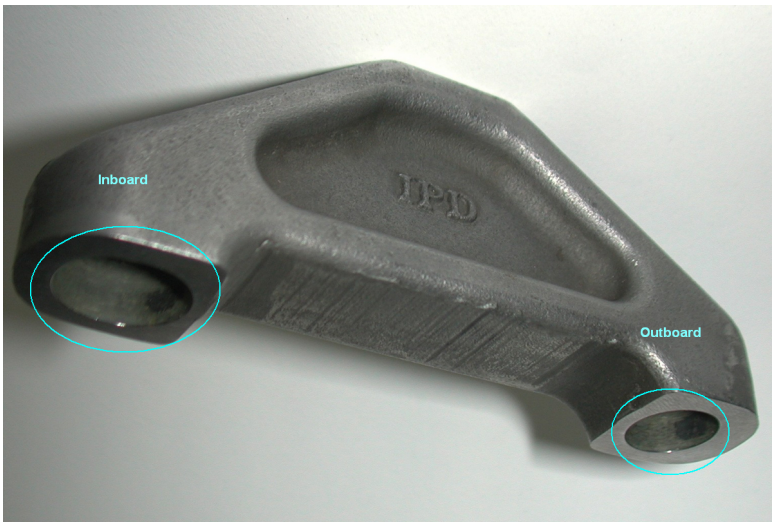
IPD TECH BULLETIN

Using the correct valve train parts on 3500 (with mechanical unit injector and all 3500B & 3500C engines

SEPTEMBER 2007

IPDTB-0012

The correct valve springs must be used to assure the proper balance of the newer floating valve bridges. The floating bridges are directional, with one slotted and round recession for the valve stems. The round recession goes to the outboard side and uses the outboard valve stem as a pilot to keep the bridge square.



An imbalance of the valve bridge can be caused by mismatching the valve springs. The same springs must be used on both valves under the common bridge. If a lower load spring is used on either valve under the same floating bridge the bridge will be imbalanced. At a minimum an imbalance can accelerate valve guide and valve stem wear. If the imbalance is severe, it can exert enough force to fracture the valve stem at the keeper grooves.

Use of the correct rotocoils and springs sets assures proper valve rotation and bridge load.

The 1976999 rotocoil (primarily Marine & Locomotive) must be used with the 1011177 & 1011180 springs.

The 1977062 rotocoil must be used with the 1944902 and 2816157 springs.

The 1977063 rotocoil must be used with the 1944902 and 2816157 springs.

IPD
Torrance CA USA 90501
www.ipdparts.com