

# ENGINEQUEST®

## Pontiac 2.5L Balance Box Replacement Bushings

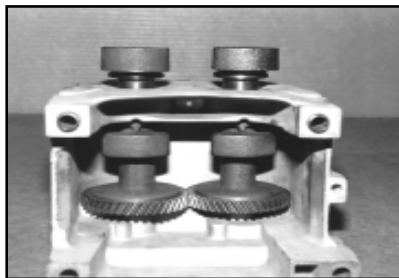
Disassemble the shafts by pressing them apart with a punch from the oil pump end. Clean and inspect the housing, shafts and gears for damage. Replace the bushings with part number **BBB151**. Time the weights to the top when reinstalling them. Be sure to use a .165" to .185" spacer between the gear and the housing while pressing the shafts together to ensure that the shafts are installed correctly.



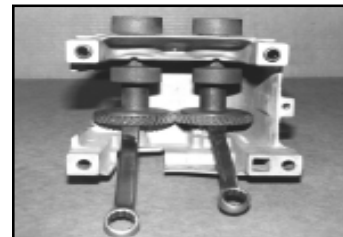
Disassemble the balancer by pressing the shafts apart from the oil pump side.



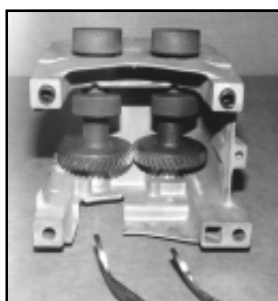
Be sure to install the new bearing even with the bottom of the chamfer in the housing so the oil will feed out to thrust faces through the slots machined in the housing.



With the weights positioned on top, install the gears with the helix angled to the outside on the bottom of both gears. Time the balance shafts by lining up all of the weights centered and facing toward you.



The shafts must be supported with a .165" - .185" spacer placed between the housing and the gear during assembly.



The spacers are made from 11/16" open end wrenches. Press the shafts back together with these spacers in place to get them properly positioned.

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## (800) 426-8771

# BBB151 Dimensional Data

Machine shops should reference the following table of specifications when checking the balancer shaft assemblies on late model GM 2.5L (151 CID) engines.

Housing ID	1.3012 - 1.3020"	(33.05 - 33.07mm)
Bushing OD	1.3031 - 1.3039"	(33.10 - 33.12mm)
Interference fit	0.0012 - 0.0028"	(0.03 - 0.07mm)
Bushing ID (installed)	0.9870 - 0.9886"	(25.070 - 25.110mm)
Shaft OD (big end)	0.9860 - 0.9864"	(25.045 - 25.055mm)
Operating clearance	0.0006 - 0.0388"	(0.015 - 0.065mm)
Housing bore ID	0.5524 - 0.5535"	(14.03 - 14.06mm)
Shaft OD (small end)	0.5508 - 0.5516"	(13.99 - 14.01mm)
Operating clearance	0.0008 - 0.0028"	(0.02 - 0.07mm)
Balance shaft OD (big end)	0.6311 - 0.6315"	(16.03 - 16.04mm)
Balance shaft OD (small end)	0.5917 - 0.5921"	(15.03 - 15.04mm)
Balance gear bore ID(big end)	0.6299 - 0.6307"	(16.00 - 16.02mm)
Balance gear bore ID(small end)	0.5906 - 0.5913"	(15.00 - 15.02mm)
Interference fit (shaft to gear)	0.0004 - 0.0016"	(0.01 - 0.04mm)

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