

INSTRUCTIONS

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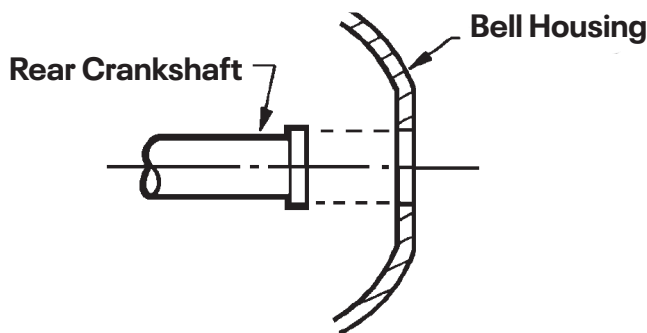
545-41100 - Chevy Roller Pilot Bearing

No modification to either crankshaft or input shaft is required.

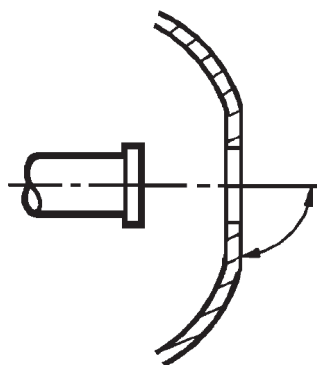
1. Just remove old pilot bearing and press the new roller bearing into crankshaft making sure the flat side of the bearing is facing the engine side and the radius side is facing the transmission.
2. **DO NOT** hammer the new bearing into the crankshaft, as this will damage it. Instead, use a Harmonic Balancer Puller kit to easily press the bearing into place. (Detailed instructions listed below).

DO NOT wipe, clean or wash out lubricant from bearing before use. This bearing comes pre-packed with a specific high temperature lubricant for high RPM/Performance applications.

For the roller bearing and transmission to operate properly, they must be perfectly in line with the crankshaft. Check the bell housing bore and transmission mounting face with a dial indicator to make sure the bore is concentric with the crankshaft center line and the mounting face is perpendicular to it within $\pm .002$.



Mounting bore must be concentric with crankshaft centerline within $\pm .005$.



Mounting face must be perpendicular to crankshaft within $\pm .002$.

Removal and Installation Steps:

1. Prepare the Vehicle:
 - Make sure the vehicle is on a stable surface high enough to gain full access to the underside.
 - Disconnect the negative battery cable.
2. Remove the Transmission:
 - Remove the driveshaft and any components blocking the transmission.
 - Support the engine and transmission with a jack.
 - Unbolt and remove the transmission.
3. Access the Flywheel:
 - Remove the clutch assembly (pressure plate and clutch disc).
 - Optional - Remove the flywheel. (May be needed for better access)
4. Remove the Old Pilot Bearing:
 - Use a pilot bearing removal tool or grease and a rod to extract the old bearing.
 - Use a removal tool or slide hammer to extract the old bearing.
 - Alternate Method: Pack the bearing cavity with grease or putty. Insert a rod or punch that fits the ID of the bearing and tap it with a hammer to force the bearing out.
5. Install the New Pilot Bearing:
 - Prior to installing - Clean the bearing cavity.
 - Apply a light coat of grease to the inside of the bearing cavity.
 - **DO NOT** hammer bearing into crankshaft as it will damage the bearing.

Steps on how to use a Harmonic Balancer Puller Kit to install a new bearing:

1. Start the Bearing Installation:
 - Lightly tap the new bearing into place with a rubber mallet to get it started and hold it in place.
2. Prepare the Tools:
 - Find a socket that is slightly smaller than the outer diameter (1.092" OD) of the new bearing.
3. Attach the Web Plate:
 - Bolt the threaded "Web Plate" to the crankshaft, leaving enough room for the socket to sit squarely on the new bearing.
4. Set up the Pressure Screw:
 - Place the "Pressure Screw" and "Pressure Tip" on top of the socket, lightly pressing on the socket.
5. Press the Bearing into Place:
 - Slowly turn the pressure screw with even pressure, pressing the bearing into place.
6. Finish the Installation:
 - Stop when you feel resistance, indicating that the bearing is fully seated.

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6. Reassemble:

- Reinstall the flywheel and clutch assembly, using a clutch alignment tool.
- Bolt and Torque the transmission back in place.
- Reattach the driveshaft and other components.
- Reconnect the negative battery cable.

7. Test:

- With the drive wheels supported off the ground and the vehicle transmission in the neutral position, start the engine checking the operation by actuating the clutch assembly for any issues.