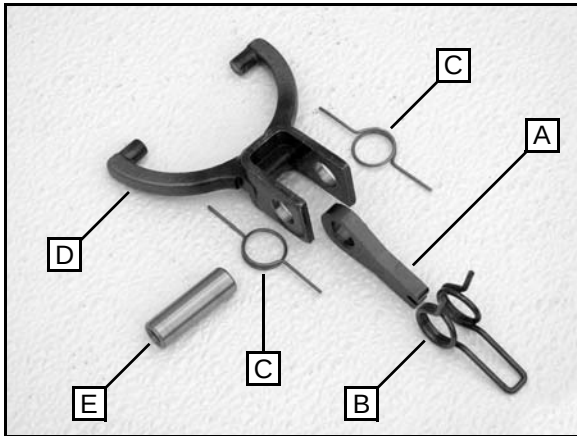


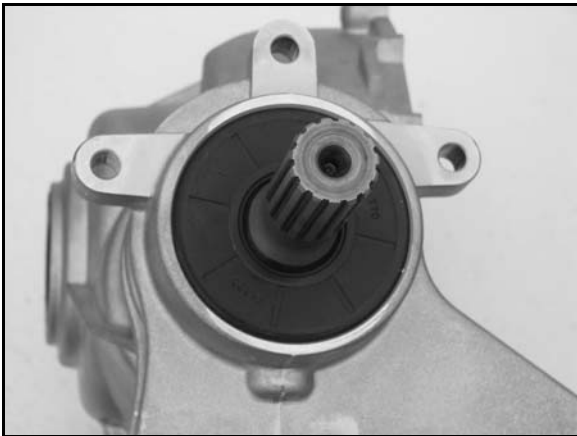
15. Inspect the shift lever (A), shift lever spring (B), shift return springs (C), shift yoke (D), and lock pin bushing (E). Inspect the components for excessive wear or damage and replace as needed.



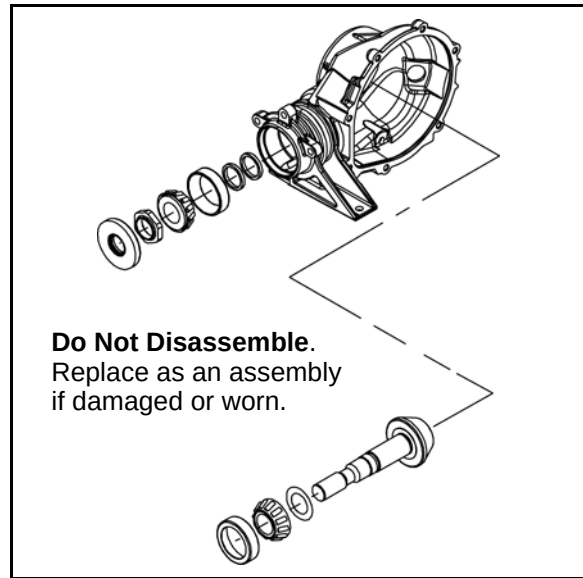
Rear Gearcase Assembly

NOTE: Grease all seals and O-rings with Polaris All Season Grease (PN 2871322) upon assembly.

1. Remove the pinion shaft oil seal using a seal puller and replace with a new seal.



NOTE: The pinion gear assembly is NOT intended to be disassembled from the case, as it requires special OEM tooling in order to properly reassemble. If there is any damage to the pinion gear, bearings or case, the assembly must be replaced.

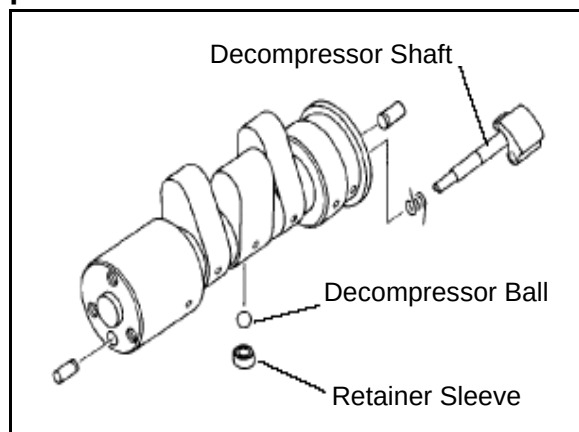


2. Replace the drive shaft oil seals located in the main gearcase and gearcase cover



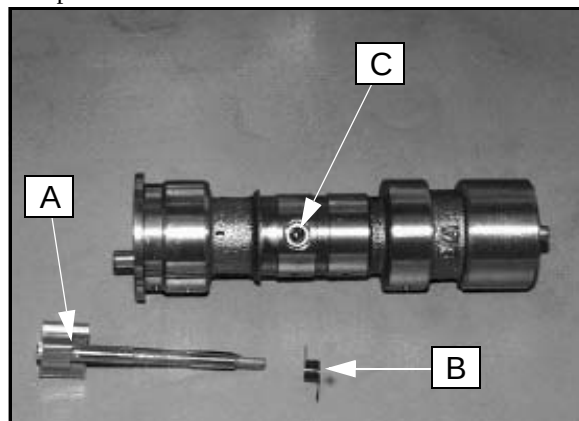
3. Replace all worn components.

Automatic Compression Release Removal / Inspection



NOTE: The automatic compression release mechanism can be inspected and serviced without removing the camshaft from the cylinder head. The actuator ball in the camshaft is not replaceable. Replace the camshaft as an assembly if the actuator ball is worn or damaged.

1. Check release lever shaft (A) for smooth operation throughout the entire range of rotation. The spring (B) should hold the shaft weight against the stop pin. In this position, the actuator ball (C) will be held outward in the compression release mode.



2. Remove release lever shaft and return spring.
3. Inspect shaft for wear or galling.
4. Inspect lobe on end of release lever shaft and actuator ball for wear and replace if necessary.

Automatic Compression Release Installation

1. Slide spring onto shaft.
2. Apply engine oil to release lever shaft.

The actuator ball must be held outward to allow installation of the release lever shaft.

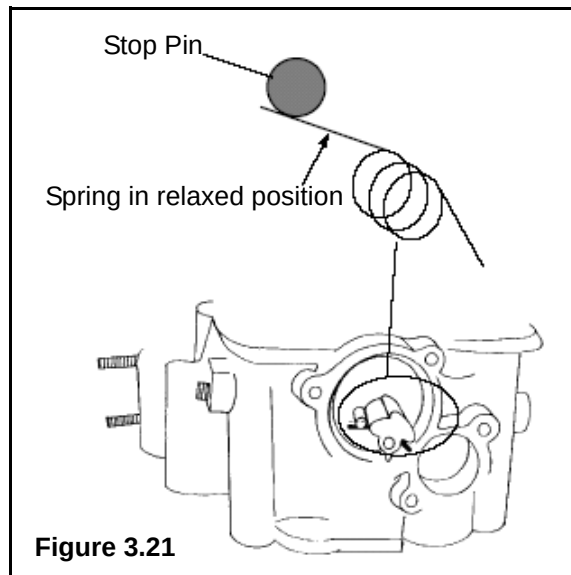


Figure 3.21

If Camshaft is Removed From Engine:

3. Turn the camshaft until the actuator ball is in the lowest position and install the release lever shaft.

If Camshaft is Installed in the Engine:

4. Use a small magnet to draw the actuator ball outward, or rotate the engine until the cam lobes face upward and install release lever shaft.
5. Position camshaft as shown at the bottom of **Figure 3.21**.
6. Place arm of spring under stop pin as shown and push release lever inward until fully seated. Do not pre-wind the spring one full turn or the compression release will not disengage when the engine starts. Check operation of mechanism as outlined in Step 1 of Removal (above).

NOTE: When shaft is properly installed, actuator ball will be held in the “out” position. It is important to note that spring pressure is very light.