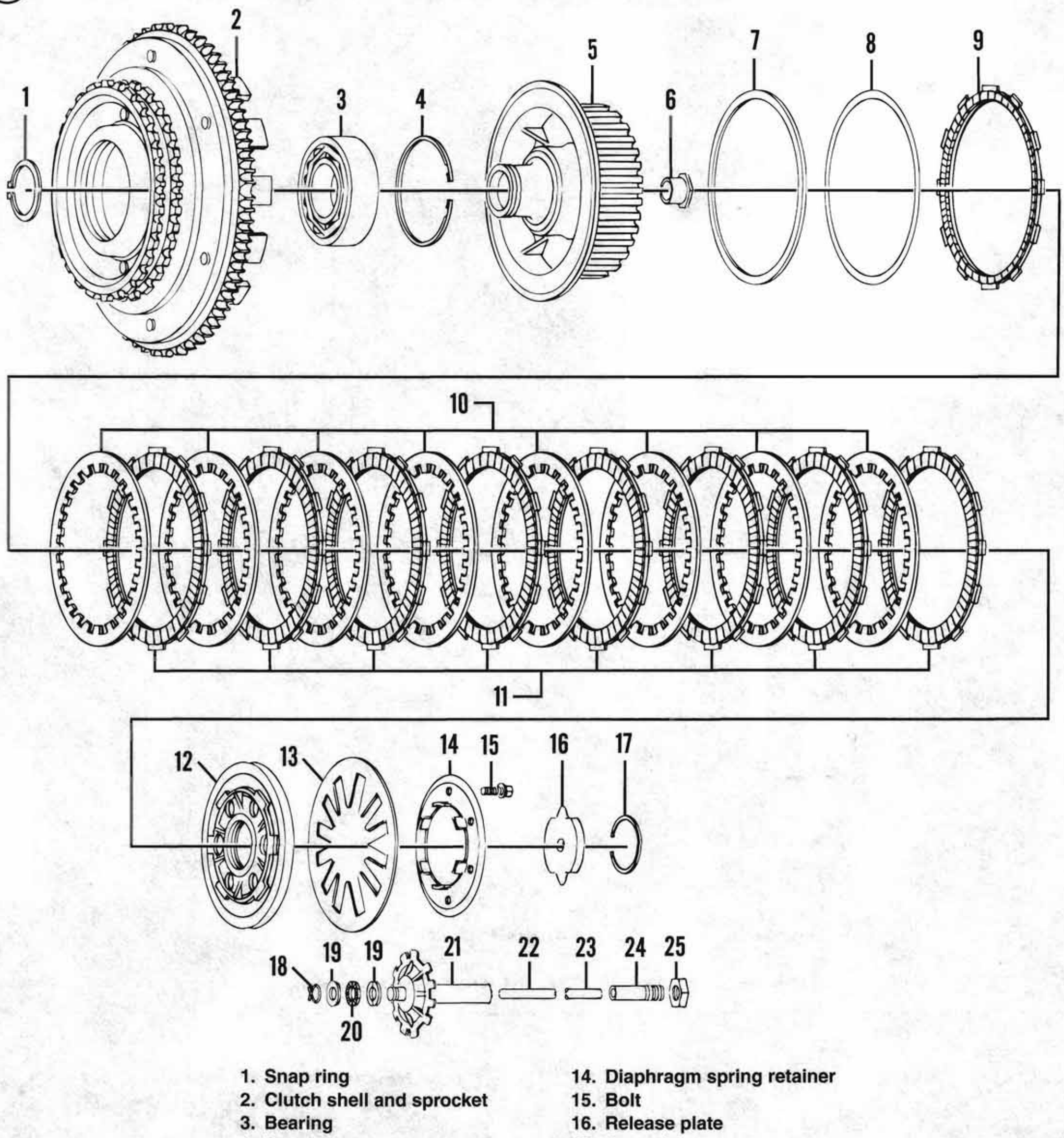
93

WET CLUTCH (1998-1999 MODELS)



1. Snap ring
2. Clutch shell and sprocket
3. Bearing
4. Snap ring
5. Clutch hub
6. Clutch nut
7. Diaphragm spring seat
8. Diaphragm spring
9. Friction disc B
10. Clutch plates
11. Friction disc A
12. Pressure plate
13. Diaphragm spring
14. Diaphragm spring retainer
15. Bolt
16. Release plate
17. Snap ring
18. Snap ring
19. Thrust washer
20. Radial bearing
21. Oil slinger
22. Pushrod (right side)
23. Pushrod (right side)
24. Pushrod (left side)
25. Locknut

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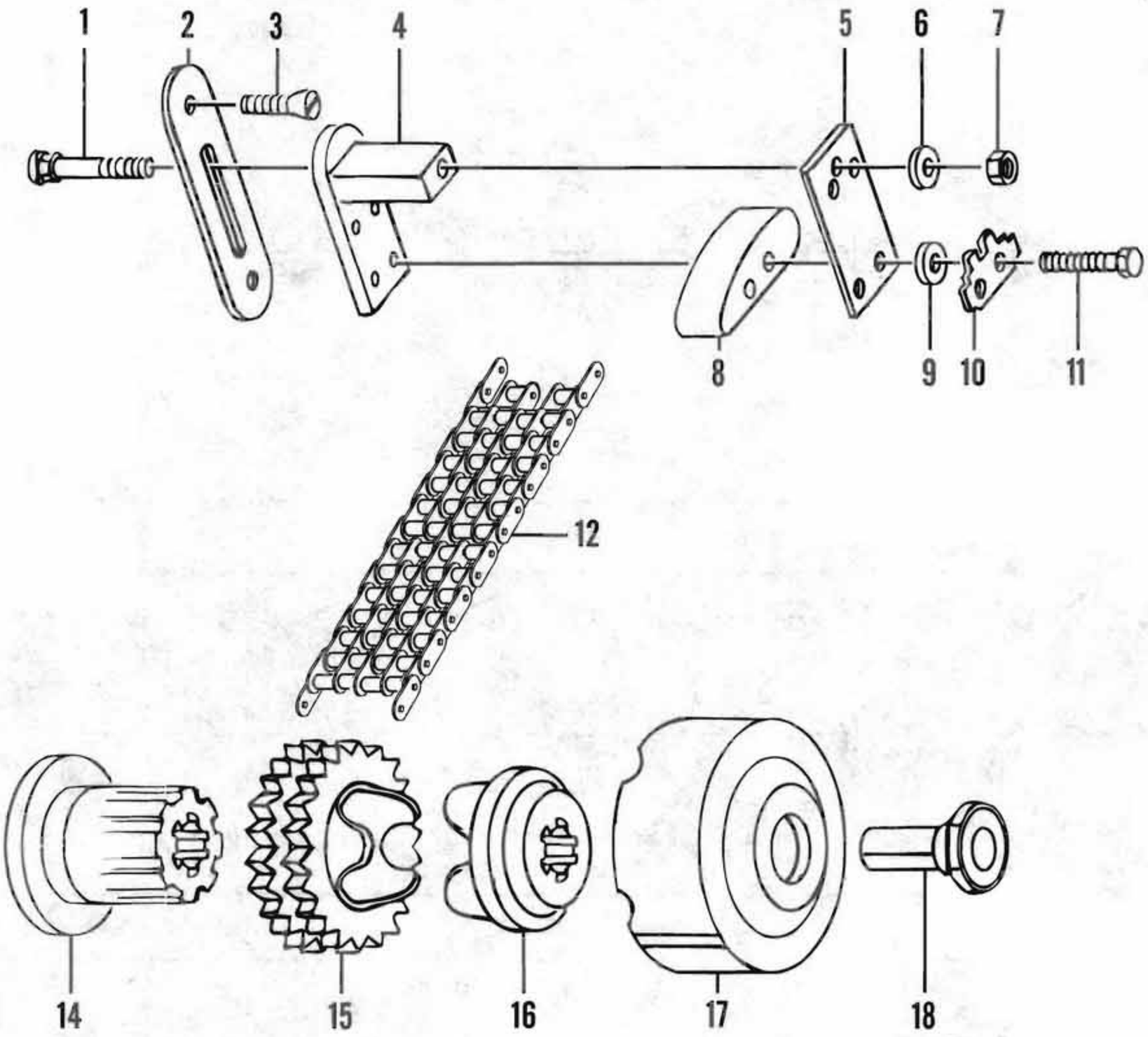
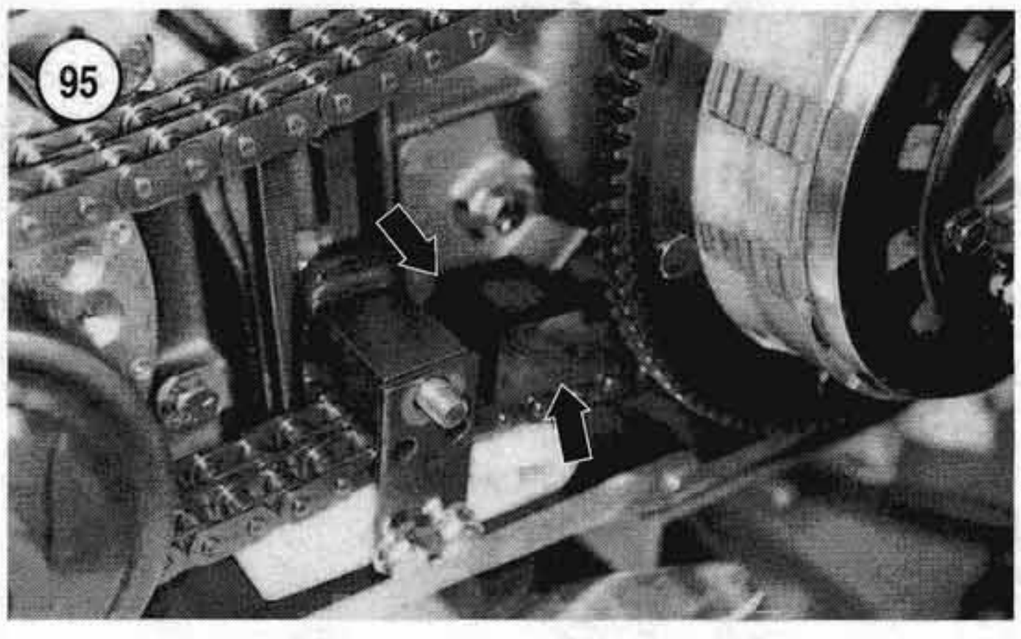
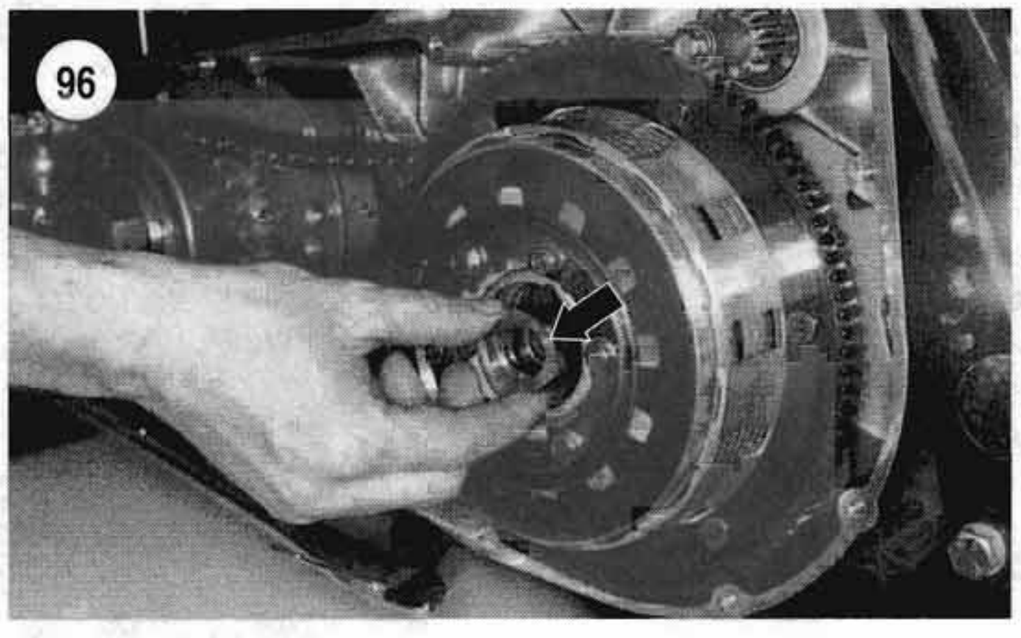
COMPENSATING SPROCKET

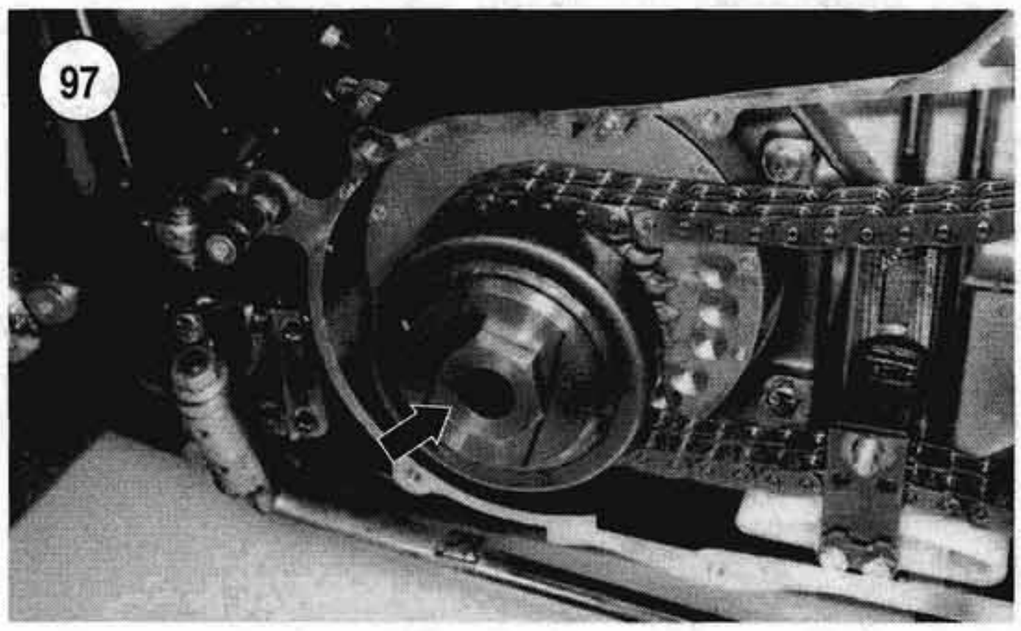


1. Bolt
2. Anchor plate
3. Screw
4. Chain tensioner
5. Plate
6. Washer
7. Nut
8. Tensioner pad
9. Washer
10. Lockwasher
11. Bolt
12. Primary drive chain
13. Spacer
14. Shaft extension
15. Compensating sprocket
16. Sliding cam
17. Cover assembly with springs*
18. Nut*

*Spacer between No. 17 and No. 18 for 1999 models not shown.



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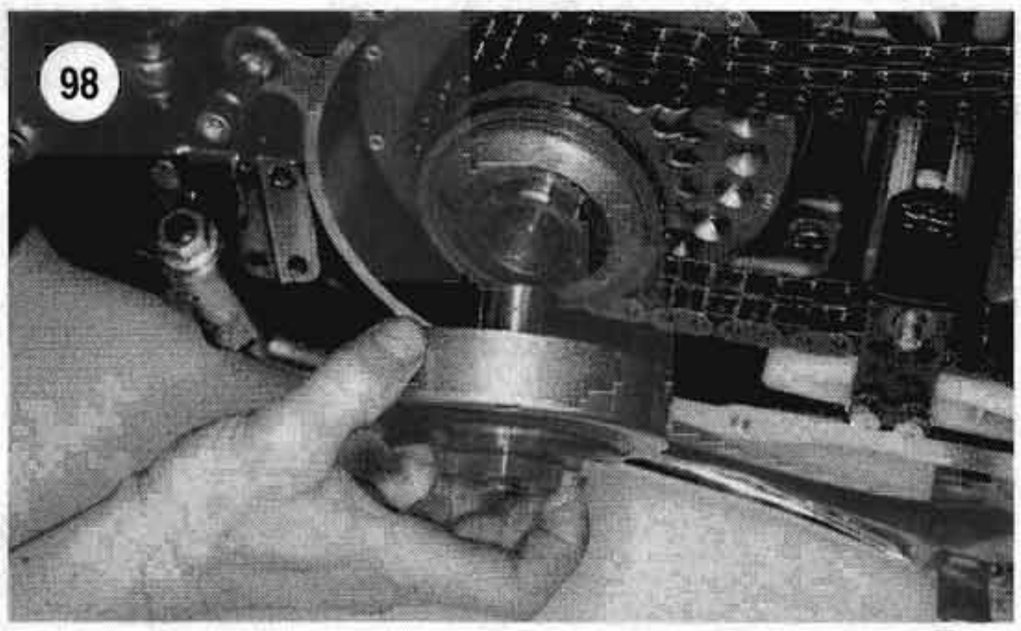
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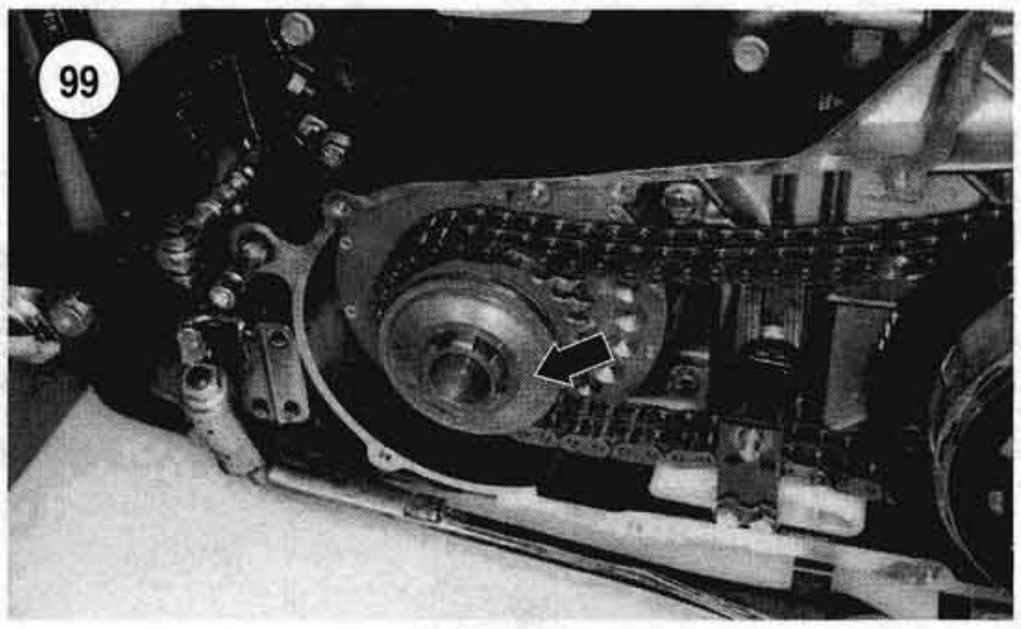
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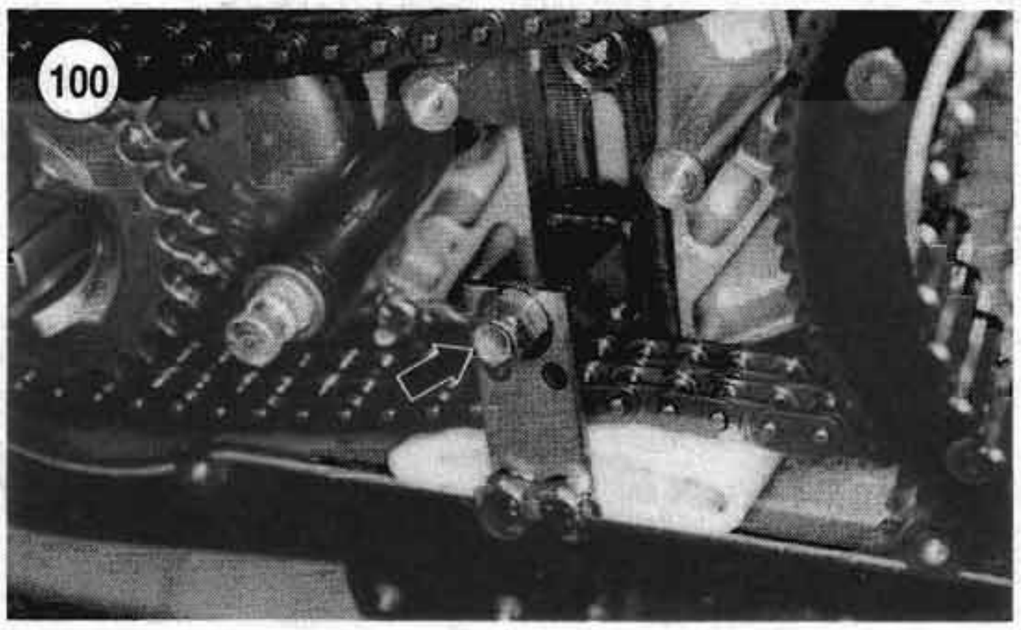
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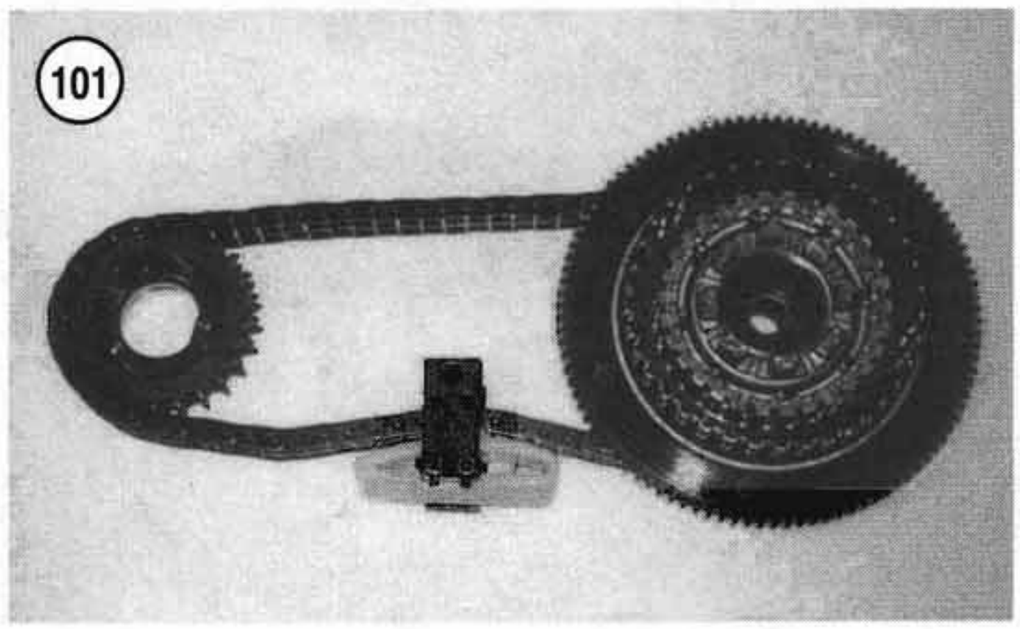
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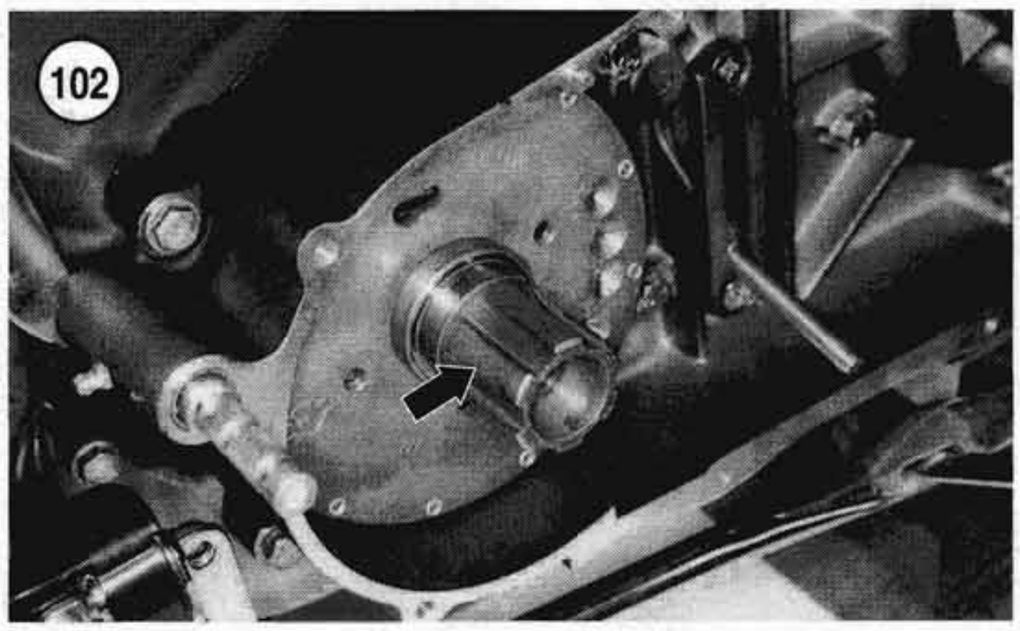
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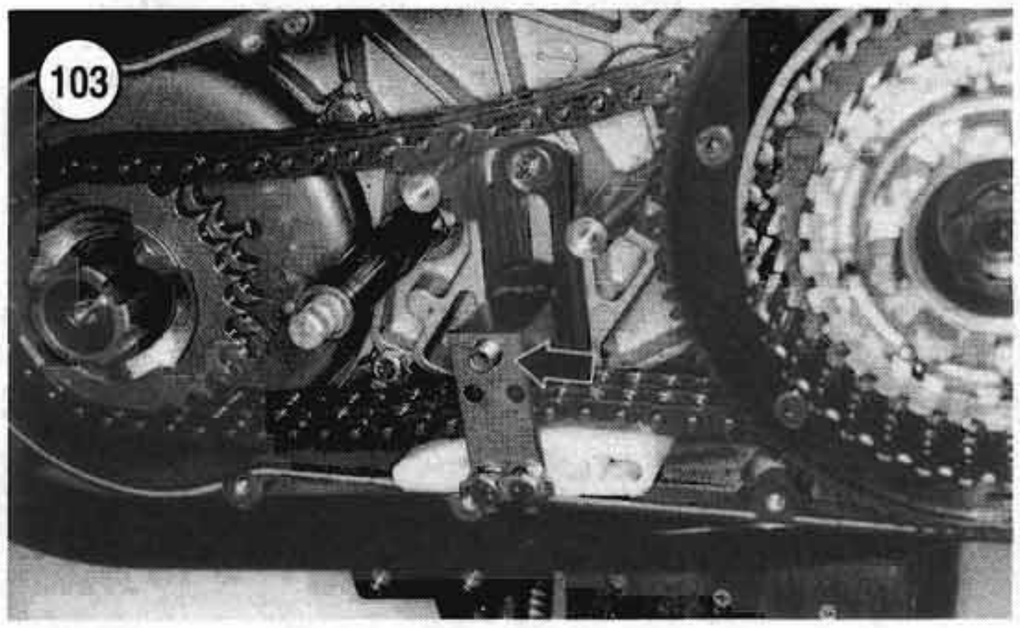
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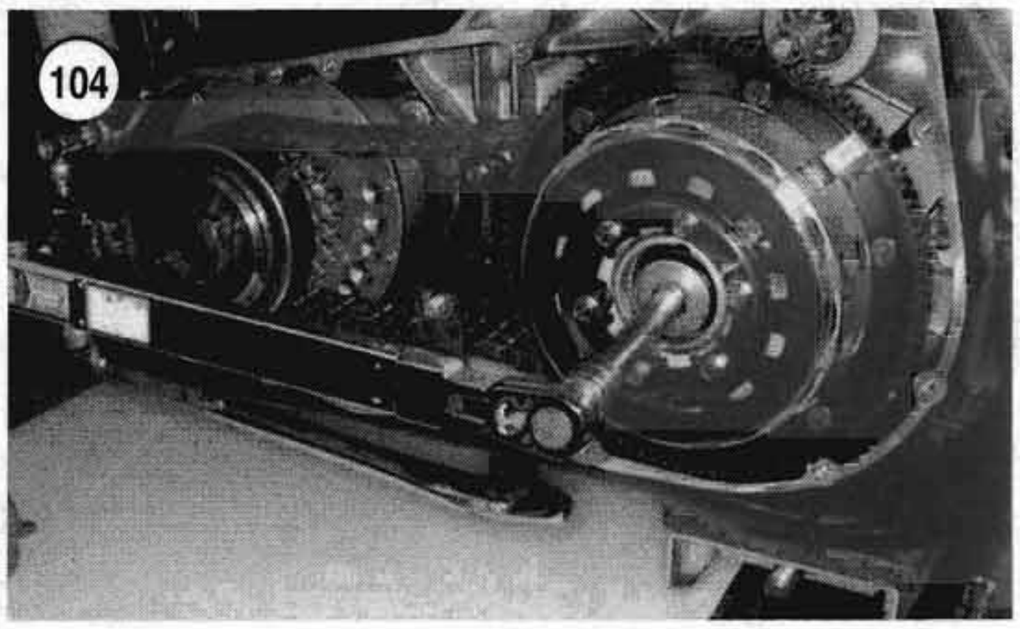
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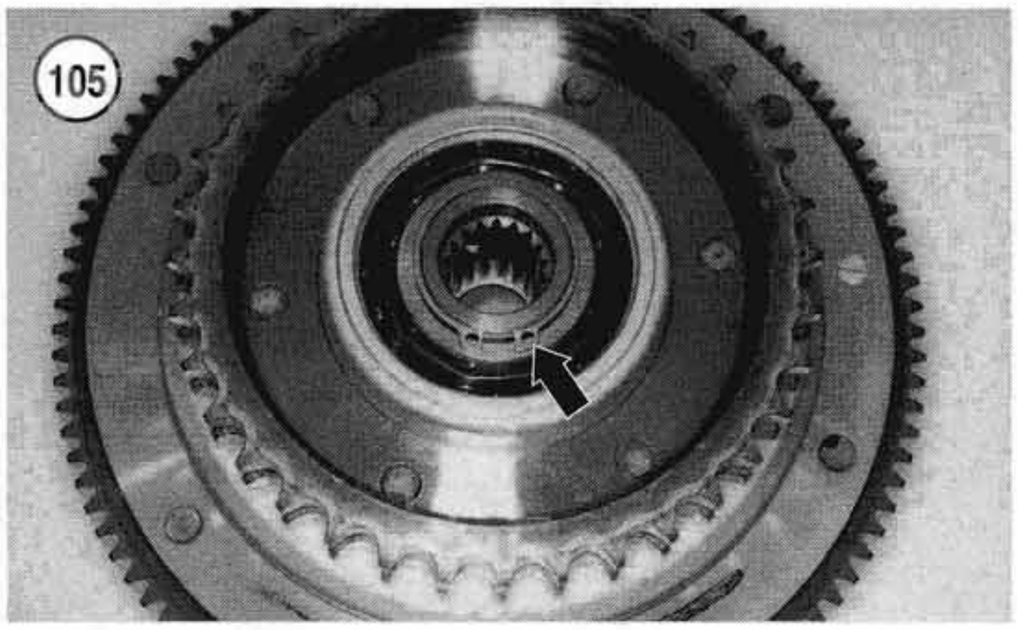
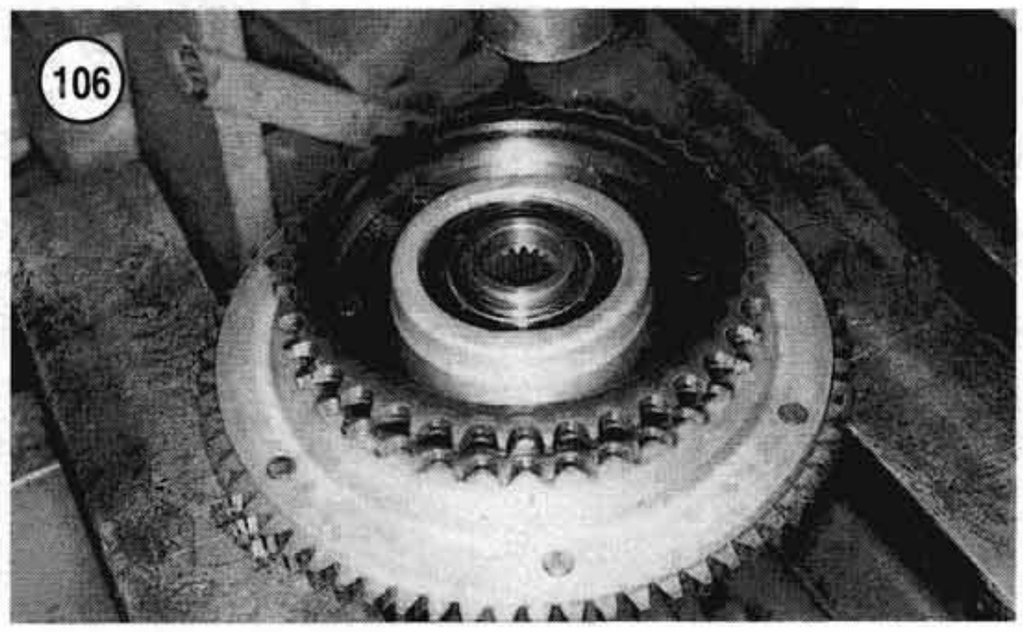


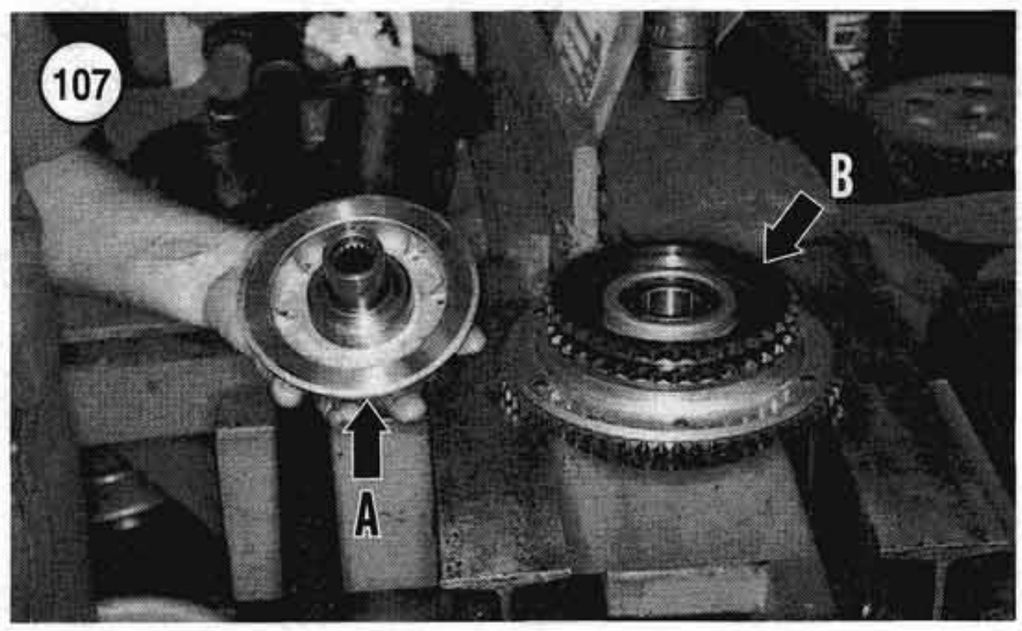


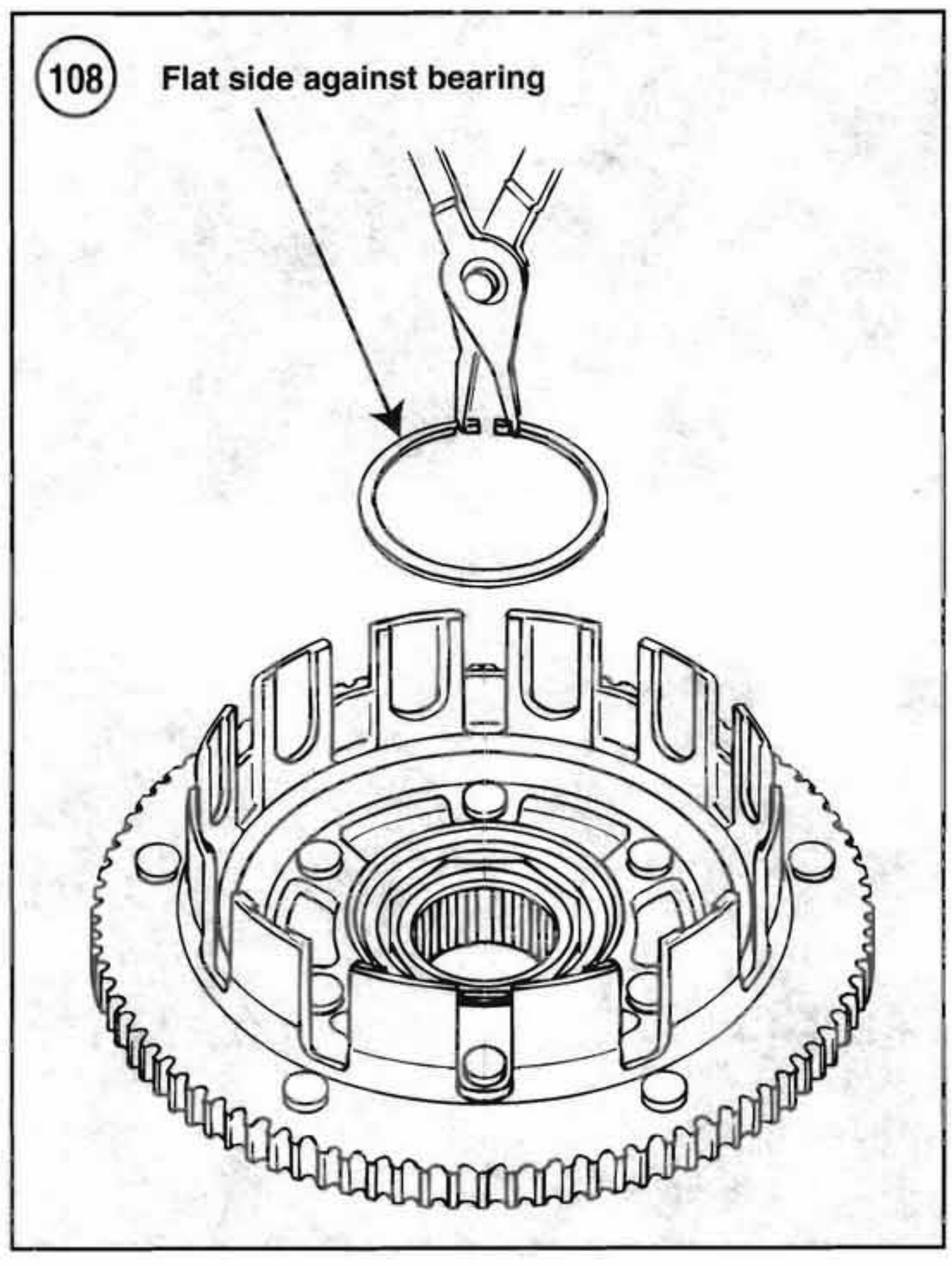
1. Remove the clutch as described in this chapter. Remove the clutch shell assembly from the primary drive chain.
2. Remove the snap ring (**Figure 105**) from the clutch hub groove.
3. Position the clutch hub and shell with the primary chain sprocket side *facing up*.
4. Support the clutch hub and clutch shell in a press (**Figure 106**).
5. Place a suitable size arbor in the clutch hub surface and press the clutch hub (A, **Figure 107**) out of the bearing.
6. Remove the clutch shell from the press (B, **Figure 107**).
7. On the inner surface of the clutch shell, remove the bearing retaining snap ring (**Figure 108**) from the groove in the middle of the clutch shell.

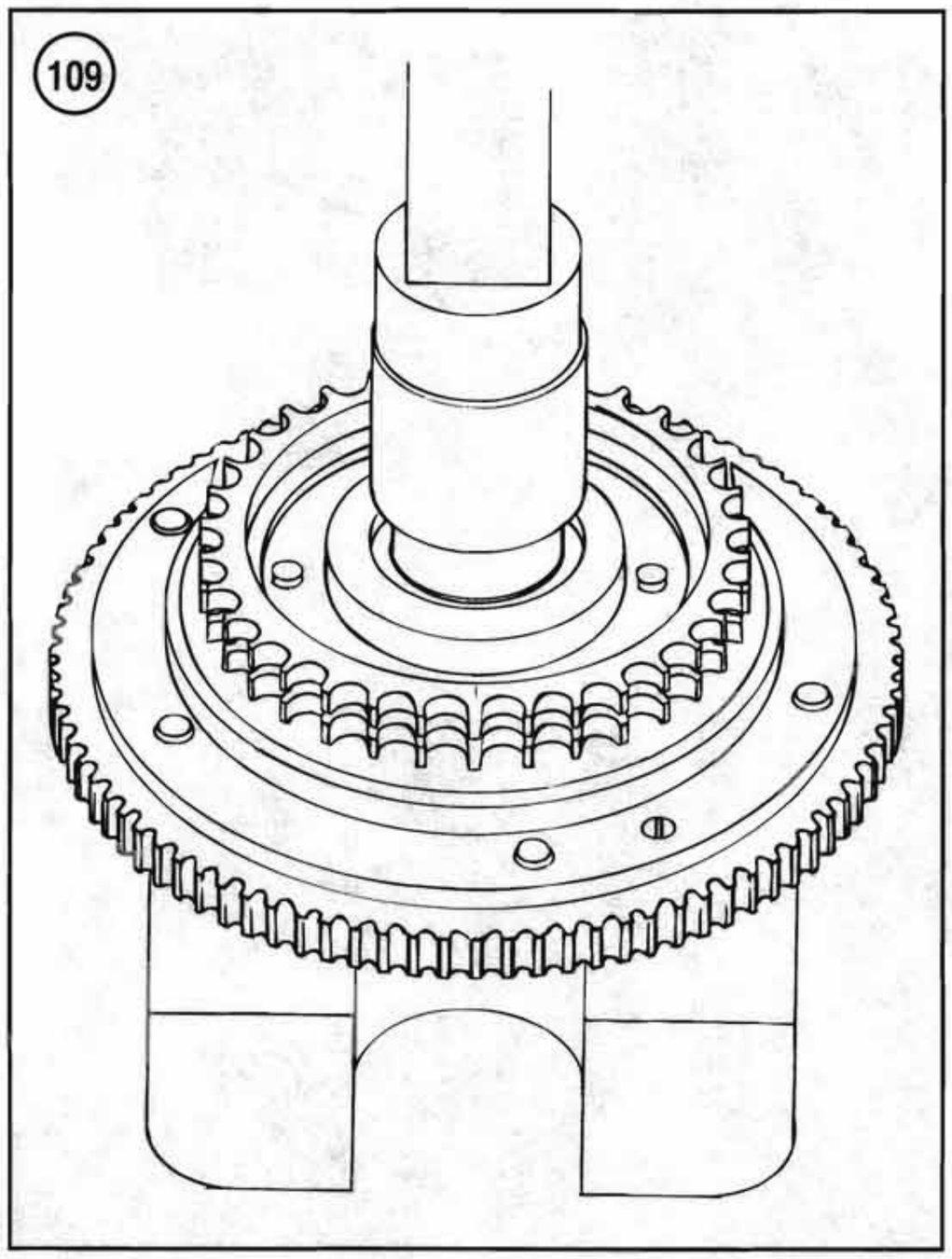
CAUTION

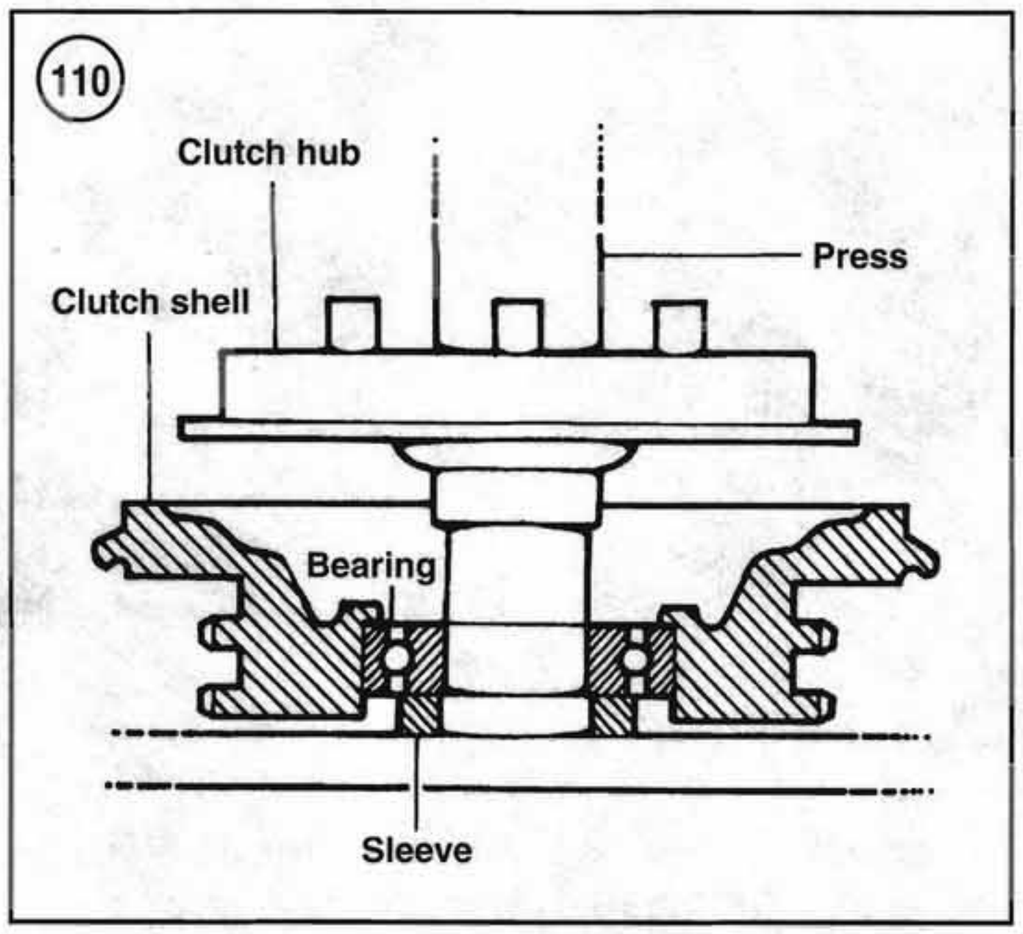
Press the bearing out from the primary chain sprocket side of the clutch shell. The bearing bore has a shoulder on the primary chain side.

8. Support the clutch shell in the press with the primary chain sprocket side *facing up*.
9. Place a suitable size arbor on the bearing inner race and press the bearing out of the clutch shell (**Figure 109**).
10. Thoroughly clean the clutch hub and shell in solvent and dry with compressed air.
11. Inspect the bearing bore in the clutch shell for damage or burrs. Clean off any burrs that would interfere with new bearing installation.
12. Support the clutch shell in the press with the primary chain sprocket side *facing down*.
13. Apply chaincase lubricant to the clutch shell bearing receptacle and to the outer surface of the bearing.
14. Align the bearing with the clutch shell receptacle.
15. Place a suitable size arbor on the bearing outer race and slowly press the bearing into the clutch shell until it



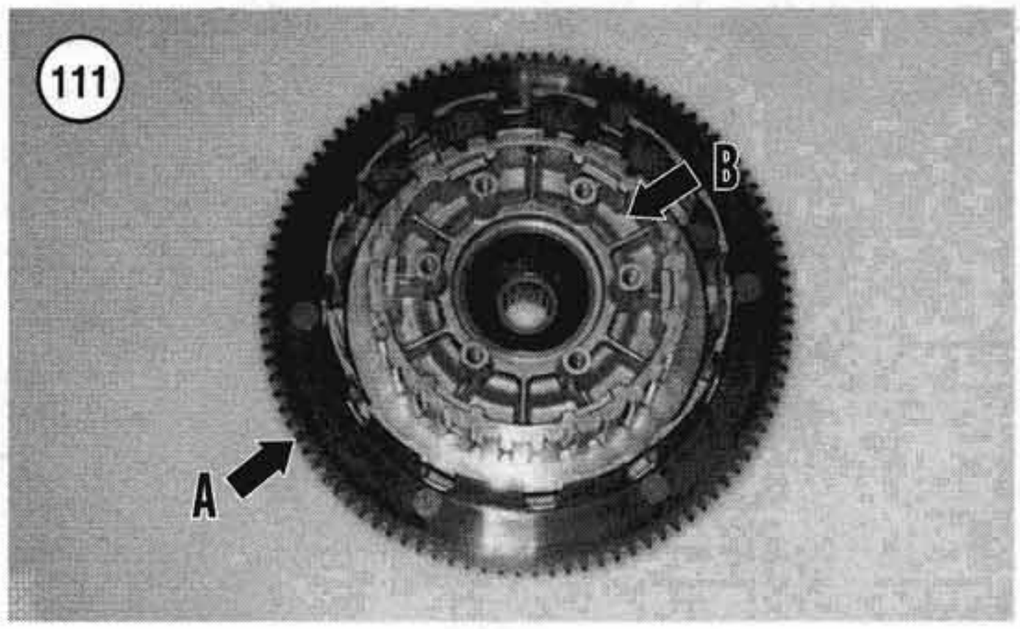






bottoms on the lower shoulder. Press only on the outer bearing race. Applying force to the bearing inner race will damage the bearing. Refer to *Bearing Replacement* in Chapter One for additional information.

16. Position the new snap ring with the flat side against the bearing and install the snap ring into the clutch shell groove (**Figure 108**). Make sure the snap ring is seated correctly in the clutch shell groove.



17. Press the clutch hub into the clutch shell as follows:

CAUTION

Failure to support the inner bearing race properly will cause bearing and clutch shell damage.

a. Place the clutch shell in a press. Support the inner bearing race with a sleeve as shown in **Figure 110**.
b. Align the clutch hub with the bearing and slowly press the clutch hub into the bearing until the clutch hub shoulder seats against the bearing inner race.
c. Install a *new* snap ring (**Figure 105**) into the clutch hub. Make sure the snap ring is seated correctly in the clutch hub groove.

18. After completing assembly, hold the clutch shell (A, **Figure 111**) and rotate the clutch hub (B) by hand. The shell must turn smoothly with no roughness or binding. If the clutch shell binds or turns roughly, the bearing was installed incorrectly. Repeat this procedure until this problem is corrected.

Inspection

The clutch shell is a subassembly consisting of the clutch shell, the clutch hub, the bearing and two snap rings.

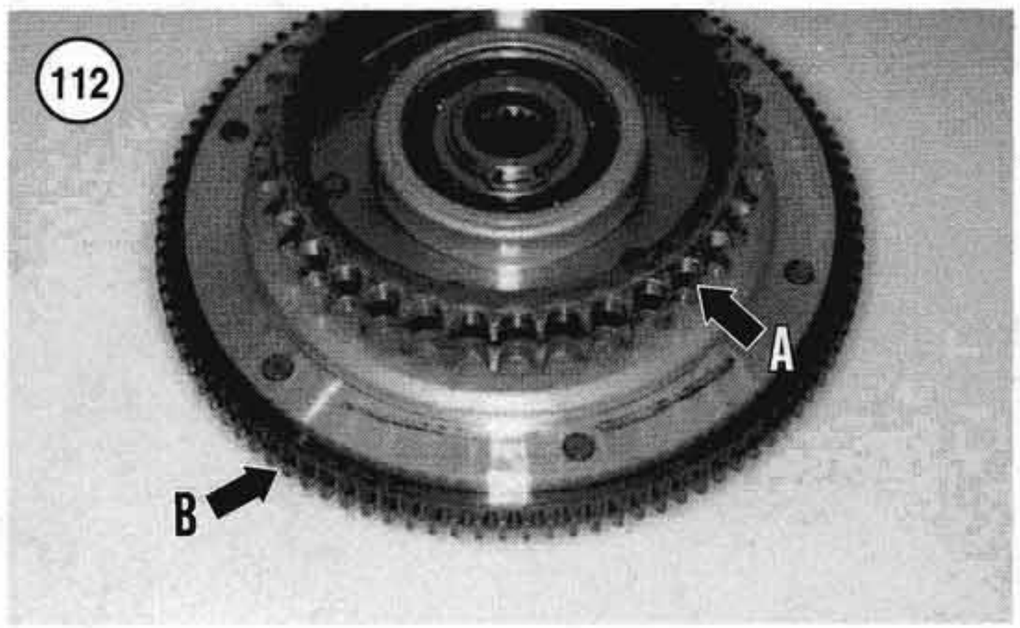
1. Remove the clutch shell as described in this chapter.
2. Hold the clutch shell and rotate the clutch hub by hand. The bearing is damaged if the clutch hub binds or turns roughly.
3. Check the sprocket (A, **Figure 112**) and the starter ring gear (B) on the clutch shell for cracks, deep scoring, excessive wear or heat discoloration.
4. If the sprocket or the ring gear are worn or damaged, replace the clutch shell. If the primary chain sprocket is

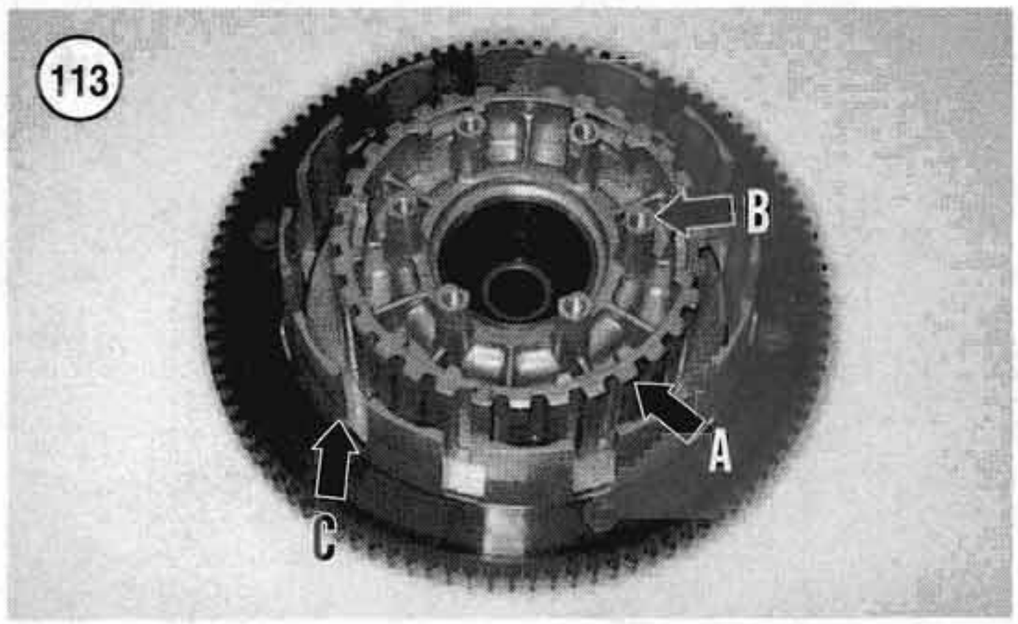
worn, also check the primary chain and the compensating sprocket as described in this chapter.

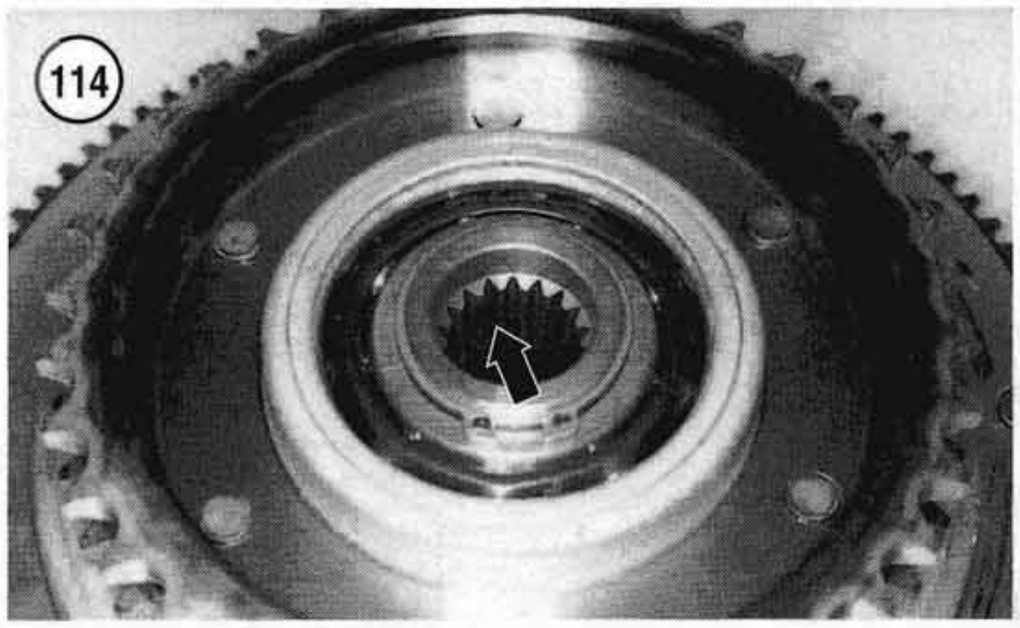
5. Inspect the clutch hub for the following conditions:
   a. The clutch plate teeth slide in the clutch hub splines (A, **Figure 113**). Inspect the splines for rough spots, grooves or other damage. Repair minor damage with a file or oil stone. If the damage is severe, replace the clutch hub.
   b. Inspect the clutch hub inner splines (**Figure 114**) for galling, severe wear or other damage. Repair minor damage with a fine-cut file. If damage is severe, replace the clutch hub.
   c. Inspect the bolt towers and threads (B, **Figure 113**) for thread damage or cracks at the base of the tower. Repair thread damage with the correctly sized metric tap. If the tower(s) is cracked or damaged, replace the clutch hub.

6. Check the clutch shell. The friction disc tangs slide in the clutch housing grooves (C, **Figure 113**). Inspect the grooves for cracks or galling. Repair minor damage with a file. If the damage is severe, replace the clutch housing.

7. If the clutch hub, the clutch shell or the bearing is damaged, replace it as described in the following procedure.







PRIMARY CHAIN AND GUIDE

Removal/Inspection/Installation

1. Remove the primary chain as described under the *Clutch, Compensating Sprocket and Primary Drive Chain Removal and Installation* procedure in this chapter.
2. Clean the primary chain in solvent and dry thoroughly.
3. Inspect the primary chain (A, **Figure 115**) for excessive wear, cracks or other damage. If the chain is worn or damaged, check both the compensating sprocket (B, **Figure 115**) and the clutch shell-driven sprocket (C) for wear or damage. Replace parts as necessary.

NOTE

If the primary chain is near the end of its adjustment level, or if no more adjustment is available, and the adjusting guide is not worn or damaged, the primary chain is excessively worn. Service specifications for chain wear are not available.

4. Inspect the adjusting guide for cracks, severe wear or other damage. Replace the adjusting shoe if necessary.

Adjustment Shoe Replacement

If the primary chain cannot be adjusted properly and the adjustment shoe (**Figure 116**) appears worn, replace it as follows.

1. Remove the primary chaincase outer cover as described under clutch removal in this chapter.
2. Remove the top shoe bracket bolt and remove the bracket.
3. Pry back the locking tabs and remove the adjusting shoe mounting bolts. Remove the old adjusting shoe and