

## SPROCKET INSPECTION

Inspect the sprocket for worn, broken or bent teeth.



To check for wear, pull upward on the chain. Replace sprocket if chain movement exceeds 1/4 (.6 cm).

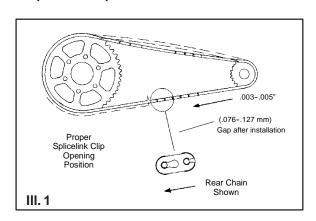
### DRIVE CHAIN INSPECTION

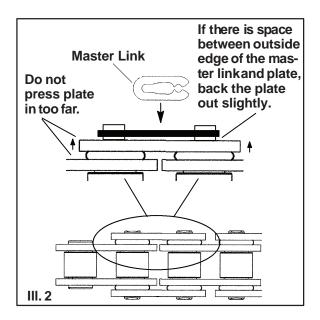
The chain must be replaced when it reaches 3% elongation.

- 1. Stretch the chain tightly in a straight line.
- Measure the length of twenty pitches (pins) from pin center to pin center, and compare to the specification. Replace the chain if the length exceeds the wear limit.

Drive Chain Wear Limit, 20 Pitch Length: Std: 12.5 (32 cm) Wear Limit: 12.875 (32.7 cm)

3. When replacing or reinstalling drive chain, install the closed end of the splice linkclipas shown, with the closed end leading in forward operation. There should be a .003-.005" (.076-.127 mm) gap between the side plate of the chain and the splice link clip. See Illustrations 1 and 2.





# DRIVE CHAIN ADJUSTMENT, CONCENTRIC SWINGARM

CAUTION: Never adjust or operate the vehicle with the rear drive chain too loose or too tight as severe damage to the transmission and drive components can result. Chain tension must be inspected with the swing arm in the position shown in the illustration so that the axle, swingarm pivot, and drive spocket are aligned horizontally (B).

Break-In: It is extremely important to maintain proper chain tension to ensure the best possible chain life. There is a chain break-in period of approximately 100 miles or two (2) tanks of fuel. During this time chain tension should be watched very closely and loads to the chain should be kept light

#### **Checking Chain Tension:**

Check the amount of chain slack by moving the vehicle slightly forward to gain slack at the top side of the rear chain.

- 1. Collapse the suspension with an adjustable (buckle type) trailer tie down strap (A). Fasten the strap around the axle and rear bumper tube.
- Tighten the strap until a straight line (B) can be drawn from the axle to the transmission output shaft, intersecting the swing arm pivot. This establishes the tightest chain position.
- At this point (C) the chain should have 1/4" 3/8" (0.6 -0.9 cm) deflection. Use the procedure on the following page if the chain needs adjustment.





## CRANKCASE BREATHER FILTER INSPECTION

Predator ATV engines are equipped with a crankcase breather filter in the air box. The filter is similar in appearance to a small foam block, and is visible on the left side (Location G, III 1).

The air breather filter should be inspected or replaced whenever the air filter is inspected.

### **OIL AND FILTER SERVICE**

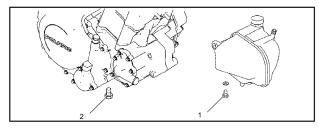
NOTICE: Polaris PS-4 Engine Oil is recommended for use in the Predator. PS-4 was specifically designed for the Predator's engine and clutching system. Other oils do not contain the needed additives to prolong engine life and provide proper lubrication to the Predator clutch and transmission components.

- 1. Place the vehicle on a level surface.
- Clean the area around the oil tank (1) and crankcase (2) drain plugs with clean shop towels.

#### CAUTION

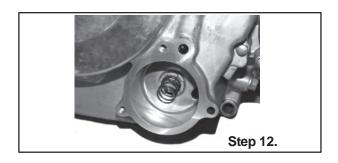
Hot oil can cause serious burns to skin. Do not allow hot oil to contact skin.

- 3. Run the engine for two to three minutes until warm, then stop the engine.
- 4. Place a drain pan beneath the oil tank and remove the drain plugs.

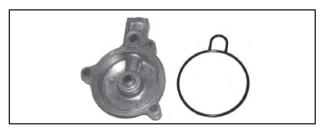


- 5. Allow the oil to drain completely.
- 6. Replace the sealing washer and reinstall the plug. Torque to 14ft. lbs. (19Nm). NOTE: The sealing surfaces should be clean and free of burrs, nicks, or scratches.
- 7. Place a drain pan beneath the crankcase and remove the drain plug.
- 8. Allow oil to drain completely.
- 9. Replace the sealing washer and reinstall the plug. Torque to 14ft.lbs. (19Nm)
- 10. Place shop towels beneath the oil filter.

- Remove the three cover bolts and remove the cover.
- 12. Pull out the oil filter. NOTE: A spring located behind the filter may pop out as the filter is removed. The spring must be reinstalled with the new filter.



- 13. Using a clean dry cloth, clean the filter sealing surfaces.
- 14. Replace the o-ring in the cover.



- 15. Lubricate the gasket on the new filter with a film of fresh engine oil.
- 16. Reinstall the spring and install the new filter with the open end facing outward.
- 17. Install the cover and torque the bolts to 72-78 in. lbs. (8-9 Nm). NOTE: The long bolt must be placed in the forward hole.
- 18. Remove the dipstick and fill the oil tank with 2.25 quarts (1.9 I) of Polaris PS-4 Engine Oil (PN 2874414).
- 19. Place gear selector in neutral and set parking brake.
- Start the engine and let it idle for one to two minutes. Stop the engine and inspect for leaks.
- 21. Re-check the oil level on the dipstick and add oil as necessary to bring the level to the upper mark on the dipstick.
- 22. Dispose of used filter and oil properly.

