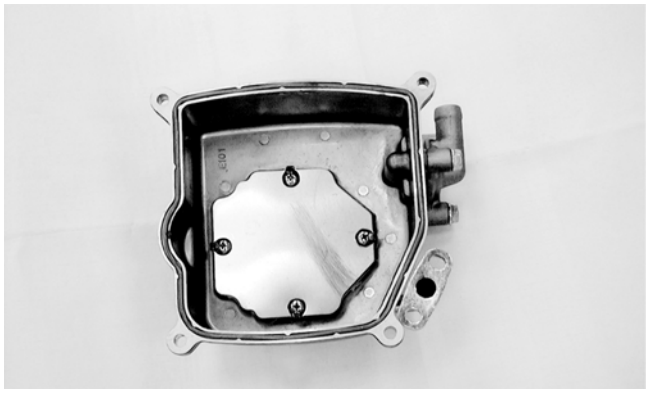
■**NOTE: The engine/transmission does not have to removed from the frame for this procedure.**

Removing Top-Side Components

A. Valve Cover
B. Cylinder Head

■**NOTE: Remove the spark plug and timing inspection plug; then rotate the crankshaft to top-dead-center of the compression stroke.**

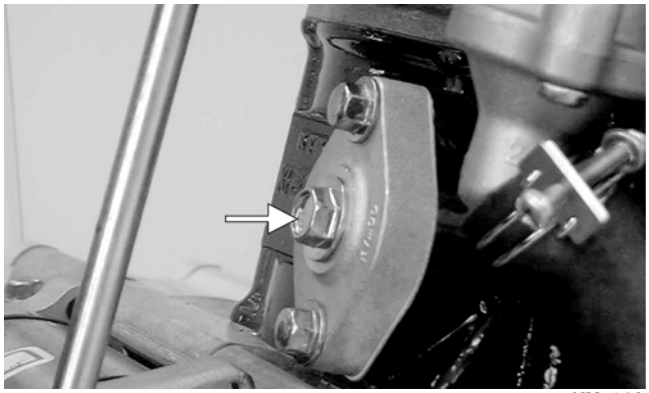
1. Remove the cap screws securing the cylinder head cover. Account for the O-ring.



KM703

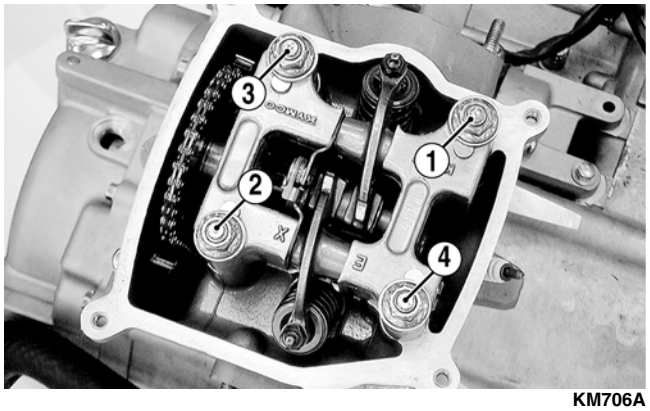
■**NOTE: Keep the mounting hardware with the cover for assembly purposes.**

2. Remove the plug from the cam chain tensioner; then turn the cam chain tensioner screw clockwise to release the chain tension.

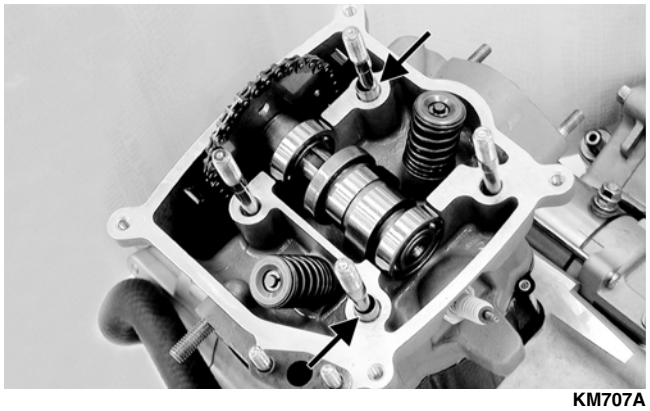


KM704A

3. Using a crisscross pattern, loosen the four nuts securing the camshaft holder to the cylinder head. Use 2-3 steps until the nuts are all free; then remove the camshaft holder. Account for four washers and two alignment pins.



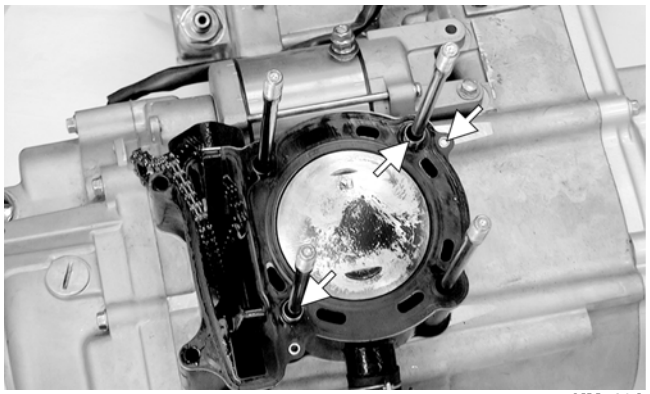
KM706A



KM707A

4. Remove the camshaft gear from the cam chain; then secure the timing chain so it will not fall into the engine. Remove the camshaft.

5. Remove the two cap screws securing the cylinder head to the cylinder; then remove the cylinder head. Account for two alignment pins and a cylinder head gasket.



KM718A

6. Remove the cam chain guide; then remove the cylinder. Support the piston with rubber bands or other suitable supports. Account for two dowel pins and the cylinder gasket.

☞ AT THIS POINT
To service valves and cylinder head, see Servicing Top-Side Components sub-section.

☞ AT THIS POINT
To inspect cam chain guide, see Servicing Top-Side Components sub-section.

CAUTION

DO NOT place any non-metallic components in parts-cleaning solvent because damage or deterioration will result.

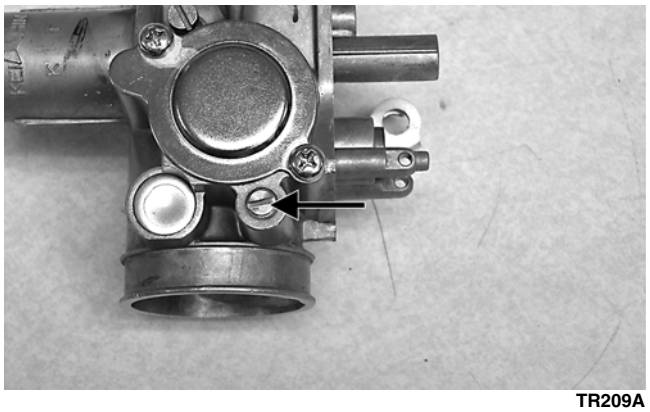
1. Place all metallic components in a wire basket and submerge in carburetor cleaner.
2. Soak for 30 minutes; then rinse with clean, hot water.
3. Wash all non-metallic components with soap and water. Rinse thoroughly.
4. Dry all components with compressed air only making sure all holes, orifices, and channels are unobstructed.
5. Inspect the carburetor body for cracks, nicks, stripped threads, and any imperfections in the casting.
6. Inspect float for damage.
7. Inspect gasket and O-rings for distortion, tears, or noticeable damage.
8. Inspect tips of the jet needle, pilot screw, and the needle jet for wear, damage, or distortion.
9. Inspect the slow jet and main jet for obstructions or damage.

■NOTE: If the slow jet is obstructed, the mixture will be extremely lean at idle and part-throttle operation.

10. Inspect the float valve for wear or damage.
11. Inspect the carburetor mounting flange for damage and tightness.

ASSEMBLING

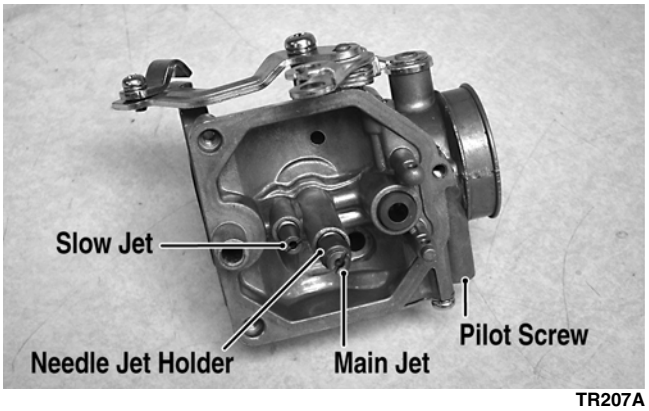
1. Install the pilot screw, spring, washer, and O-ring.



TR209A

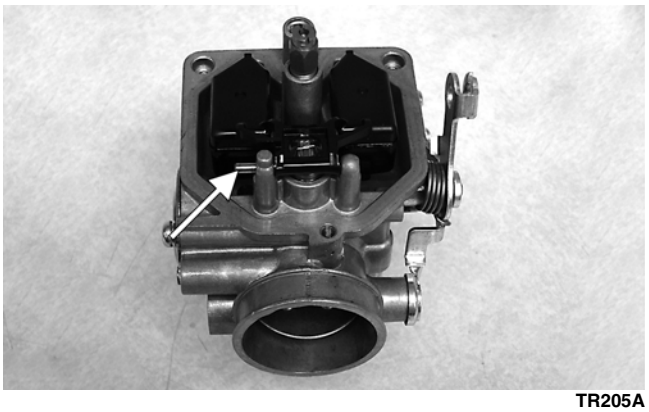
■NOTE: Turn the pilot screw clockwise until it is lightly seated; then turn it counterclockwise the recommended number of turns as an initial setting.

■NOTE: Note the locations of the jets and holder during assembling procedures.



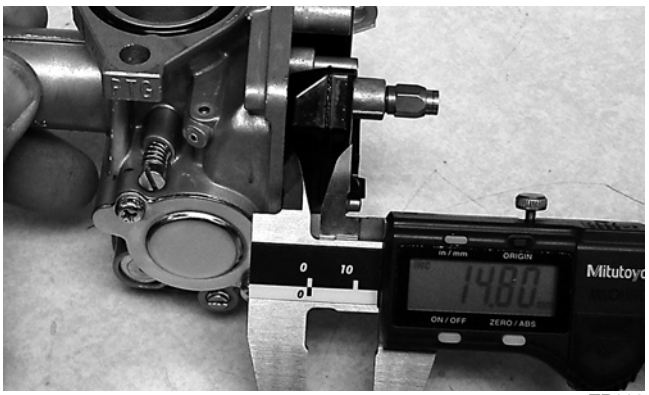
TR207A

2. Install the slow jet. Tighten securely.
3. Install the main jet into the needle jet holder and tighten securely; then install the needle jet holder assembly into the carburetor and tighten securely.
4. Place the float assembly (with float valve) into position and secure to the carburetor with the float pin.



TR205A

■NOTE: Check float arm height by placing the carburetor on its side w/float contacting the needle; then measure with a caliper the height when the float arm is in contact with the needle valve. Float arm height should be 14.8 mm.



TR220

5. Place the float chamber into position making sure the O-ring is properly positioned; then secure with the Phillips-head screws.