

Figure 31. Timing marks.

TRANSMISSION IS IN NEUTRAL AND PARKING BRAKE SET.

- 3. Start engine and allow it to come to a smooth idle.
- 4. Check timing arrow and marks. If arrow is not aligned as seen on figure 31, adjust timing using the following procedure.
- 5. If adjustment is required, remove heat shield and breaker box cover.
- 6. See figure 30. Attain an approximate setting by loosening mounting screws (D) and shift breaker box (and spacer if used) to align reference marks (E) on crankcase and breaker box (or spacer).
- 7. Turn engine over slowly in direction of crankshaft rotation until timing marks and arrow aligned as seen in figure 31.
- 8. Slightly loosen two mounting screws (A) in figure 30 to adjust point gap to 0.020 inch.
- 9. Start engine and check timing. With two screws (D) slightly loose, breaker point box can be moved left to advance spark and right to retard spark (as you face breaker point box from front of engine).
- 10. Securely tighten all screws, and replace breaker point cover, heat shield, etc.

CLEAN CRANKCASE BREATHER VALVE: See figure 32. The crankcase breather valve should be removed and cleaned every 200 hours or more often under dusty operating conditions. Proceed as follows:

- 1. Remove the hose clamp (A) and hose from the breather.
- 2. Turn the clamp screw (B) counter-clockwise to loosen the clamp.
- 3. Remove the clamp (C), breather cover (D), O-ring (F), screen (G), and breather filter mesh (E).
- 4. Wash the breather cover assembly, screen, and filter mesh in a non-flammable solvent. Replace O-ring.
- 5. Assemble the filter mesh, screen, breather cover, clamp and screw. Tighten the screw securely.
- 6. Install the hose and hose clamp.

CLEAN GOVERNOR LINKAGE: See figure 7. Every 200 hours or more often under dusty operating conditions,

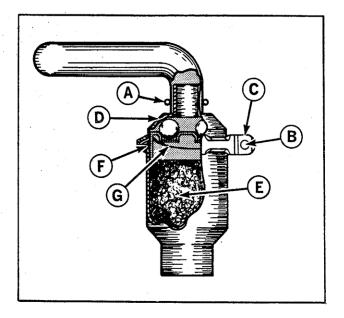


Figure 32. Crankcase breather.

the governor linkage should be cleaned. Wait until the engine cools to work on the linkage. An air hose may be used to blow dust and dirt away from the linkage. If the linkage is coated with grease or oil, a non-flammable solvent and soft brush should be used.

CLEAN ENGINE FINS: See figure 27. The engine cooling fins should be cleaned every 200 hours or more often if material accumulates in them. Proceed as follows:

- $l_{\cdot\cdot}$ Remove the capscrews (C) from the air shrouds (D) on each side of the engine.
- 2. Remove the air shrouds from each side of the engine.
- 3. Use air pressure or a brush to remove all foreign material from between the cooling fins.
- 4. Replace the air shrouds and tighten the capscrews securely in place.

REPLACE THE AIR CLEANER ELEMENT: See figure 25. The air cleaner element should be replaced every 200 hours or more often if dusty operation conditions cause it to become too dirty to be cleaned effectively.

EVERY 400 HOURS OF OPERATION

CHANGE THE TRANSMISSION OIL (FLUID): See figure 33. DO NOT RUN THE ENGINE WITHOUT OIL IN THE TRANSMISSION. The transmission case is divided into two compartments. Both the oil temperature sending unit (A) and the pipe fitting (B) on the front of the transmission must be removed to drain the transmission completely. Warm oil will drain best. The tractor should be operated at least 1/2 hour to warm the oil before draining the transmission. Proceed as follows:

- 1. Park the tractor on a level surface, stop the engine and set the parking brake.
- 2. Remove the wire from the oil temperature sending unit (A).
- 3. Remove the oil temperature sending unit.
- 4. Remove the spring clamp and hose from the pipe fitting (B).
- 5. Remove the pipe fitting from the transmission.