

Figure 28. Setting spark plug gap.

## EVERY 200 HOURS OF OPERATION

**CHECK DROP HOUSING OIL LEVEL:** See figure 29. Remove the oil level plug (A) from each of the two drop housings to check the oil level. The oil should be even with the lower threads in the plug hole. If oil must be added to bring the oil level up to the threads, add SAE 90 transmission grease through the check plug hole. If it should be necessary to drain the drop housings the drain plug (B) may be removed.

**REPLACE FUEL FILTER:** The fuel filter is located in the fuel suction line between the fuel tank and fuel pump. **CAUTION: DO NOT REMOVE THE FUEL LINES FROM THE FUEL FILTER WHEN THE ENGINE IS HOT.** After determining that the engine is cool, squeeze the spring clamps on each side of the filter and remove the fuel filter. Install the new filter, fastening the hoses at each end with the spring clips.

**CHANGE BREAKER POINTS:** To maintain maximum efficiency, the ignition breaker points should be

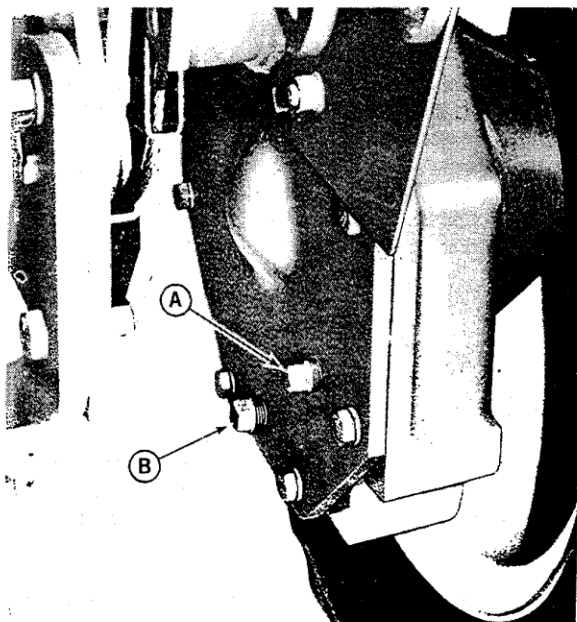


Figure 29. Drop housing drain and fill plugs.

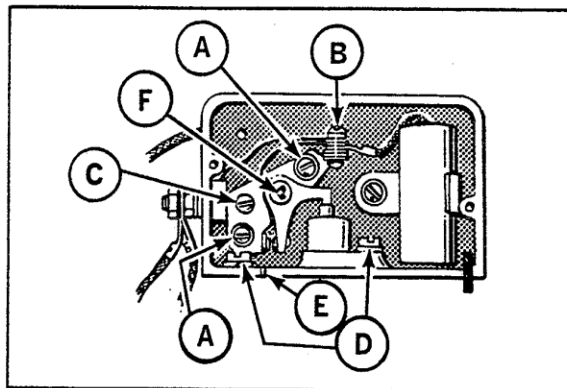


Figure 30. Breaker point box.

changed every 200 operating hours. Proceed as follows:

1. To help prevent injury, remove the ignition key from the tractor.
2. Remove the four screws and lift the heat shield off the engine.
3. Remove the two screws and remove the cover from the breaker point box.
4. Remove the two spark plugs so the engine can be easily rotated by hand as required in a later step. If the spark plugs have not been changed within the last 100 hours of operation, replace them with new ones after the breaker points and ignition timing have been set.
5. See figure 30. Remove the two mounting screws marked (A) and pull the points out of the box just far enough so screw (B) can be removed.
6. After removing screw (B) replace the points with a new set. Replace, but do not tighten the two mounting screws (A).
7. Rotate the engine clockwise (as viewed from the rear) by turning the engine cooling fan by hand until the points open. The flywheel should be about 1/4 turn after top center. Turn the screw (C) until the distance between the points measure 0.020 inch with a flat thickness gauge.
8. Tighten the mounting screws securely and recheck the distance between the points to be sure it is 0.020 inch.
9. Set the ignition timing as outlined in the following section. **NOTE: EACH TIME NEW BREAKER POINTS INSTALLED, PLACE A DROP OF OIL ON POINTS PIVOT POINT (F).**
10. Replace the breaker point cover, heat shield and oil cooler and tighten all screws securely.

**SETTING IGNITION TIMING:** The engine is equipped with an automotive type battery ignition system. Both spark plugs fire simultaneously, thus the need for a distributor is eliminated. Spark advance should be maintained for best performance. Ignition timing should be checked after point replacement or if poor engine performance is noticed. Proceed as follows:

1. To accurately check the ignition timing, use a timing light when the engine is running. Connect the timing light according to its manufacturers instructions. Either spark plug may be used as they fire simultaneously.
  2. Locate arrow mounted on camshaft on left side of engine and timing lines and mark TAC on electric clutch.
- CAUTION: BEFORE STARTING ENGINE, BE SURE**