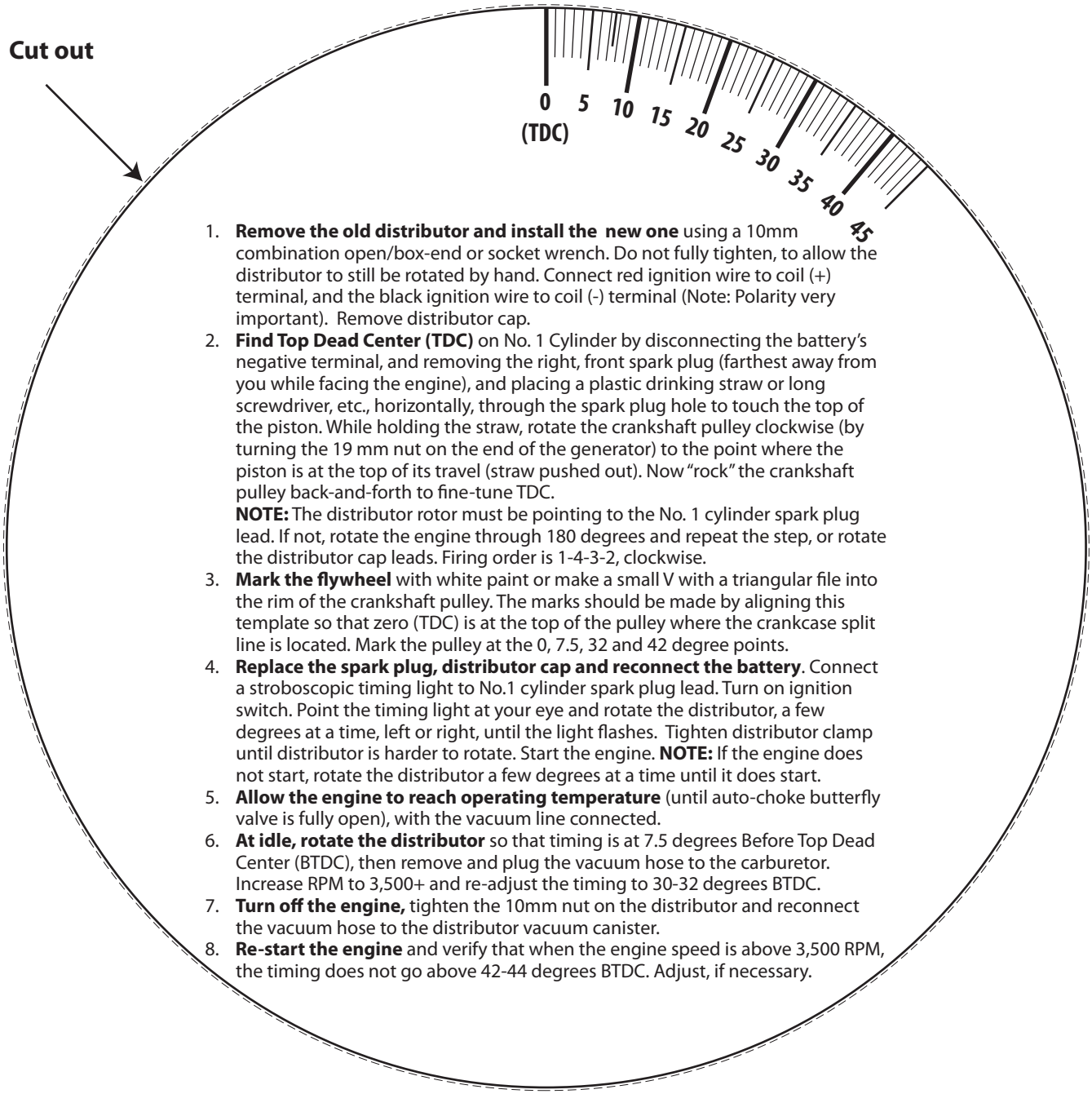
Degree Template
for Type I VW Crankshaft Pulley

(for installing and timing Hot-Spark SVDA 034 Electronic Distributor)

Drawn to scale. Print without scaling for actual size of pulley.

Cut out



1. **Remove the old distributor and install the new one** using a 10mm combination open/box-end or socket wrench. Do not fully tighten, to allow the distributor to still be rotated by hand. Connect red ignition wire to coil (+) terminal, and the black ignition wire to coil (-) terminal (Note: Polarity very important). Remove distributor cap.
2. **Find Top Dead Center (TDC)** on No. 1 Cylinder by disconnecting the battery's negative terminal, and removing the right, front spark plug (farthest away from you while facing the engine), and placing a plastic drinking straw or long screwdriver, etc., horizontally, through the spark plug hole to touch the top of the piston. While holding the straw, rotate the crankshaft pulley clockwise (by turning the 19 mm nut on the end of the generator) to the point where the piston is at the top of its travel (straw pushed out). Now "rock" the crankshaft pulley back-and-forth to fine-tune TDC.
   NOTE: The distributor rotor must be pointing to the No. 1 cylinder spark plug lead. If not, rotate the engine through 180 degrees and repeat the step, or rotate the distributor cap leads. Firing order is 1-4-3-2, clockwise.
3. **Mark the flywheel** with white paint or make a small V with a triangular file into the rim of the crankshaft pulley. The marks should be made by aligning this template so that zero (TDC) is at the top of the pulley where the crankcase split line is located. Mark the pulley at the 0, 7.5, 32 and 42 degree points.
4. **Replace the spark plug, distributor cap and reconnect the battery**. Connect a stroboscopic timing light to No.1 cylinder spark plug lead. Turn on ignition switch. Point the timing light at your eye and rotate the distributor, a few degrees at a time, left or right, until the light flashes. Tighten distributor clamp until distributor is harder to rotate. Start the engine. **NOTE:** If the engine does not start, rotate the distributor a few degrees at a time until it does start.
5. **Allow the engine to reach operating temperature** (until auto-choke butterfly valve is fully open), with the vacuum line connected.
6. **At idle, rotate the distributor** so that timing is at 7.5 degrees Before Top Dead Center (BTDC), then remove and plug the vacuum hose to the carburetor. Increase RPM to 3,500+ and re-adjust the timing to 30-32 degrees BTDC.
7. **Turn off the engine,** tighten the 10mm nut on the distributor and reconnect the vacuum hose to the distributor vacuum canister.
8. **Re-start the engine** and verify that when the engine speed is above 3,500 RPM, the timing does not go above 42-44 degrees BTDC. Adjust, if necessary.

Pulley (crankshaft) rotation

Tools Required:

Stroboscopic timing light
19mm wrench/spanner/socket
10mm combination open/box-end wrench or ring spanner
Spark plug socket, ratchet and extension
12mm or 13mm wrench for battery terminals
Small rod (screwdriver with 100+mm shaft or plastic soda/drinking straw)

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