



## Technical Tip

<b>Topic</b>	28-18-01TT – Waste Spark Ignition Diagnosis
<b>Market area</b>	United States 444 Volkswagen of America, Inc. (6444)
<b>Brand</b>	Volkswagen
<b>Date</b>	July 6, 2018

## Condition

**ATTENTION:****THIS IS A TECH TIP, NOT A TECHNICAL BULLETIN.****TECH TIPS ARE NOT ASSOCIATED WITH WARRANTY CLAIMING.**

### Waste Spark Ignition Diagnosis

Model(s)	Year	Eng. Code	Trans. Code	VIN Range From	VIN Range To
Jetta	2011-2015	2.0L (CBPA)	All	All	All

## Technical Background

The ignition system has two ignition coils combined into one pack. The coils fire at the end of the compression stroke on one cylinder and on the exhaust stroke of the companion cylinder. On the four cylinder engine the firing order is 1, 3, 4, 2. Cylinders 1 and 4 cycle at the same time, and cylinders 2 and 3 cycle at the same time. Ignition coil 1 provides spark for cylinders 1 and 4. Ignition coil 2 provides spark for cylinders 2 and 3.

## Service

If a misfire is found on a cylinder, the problem can be caused by an ignition coil or either companion spark plug wire. When diagnosing a misfire, spray a fine mist of water on the suspect spark plug wires and ignition coil. Inspect for arcing. Inspect the ignition coil housing carefully for cracks, which in this application are typically very fine, so a strong light is recommended. If no problems are noted, replace all 4 spark plugs. Road test and re-evaluate. If the misfire persists under heavy load replace the spark plug wires.

## Additional Information

Revision History		
Revision Number	Released Date	Reason For Update
2051801/1	7/6/18	Original publication.

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