**Meets ASE Task:** (A8-C-4) P-1 Inspect and test crankshaft and camshaft position sensor(s); determine needed action.

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date:\_\_\_\_\_\_\_\_\_\_\_\_\_

Time on Task:\_\_\_\_\_\_\_\_\_\_\_\_\_

Make/Model/Year:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

VIN:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Evaluation (Enter number from 4, 3, 2, 1) :\_\_\_\_\_\_\_\_\_

**Position Sensor Waveform Testing**

Page 237

1. Check service information regarding the location and type of position sensors used on

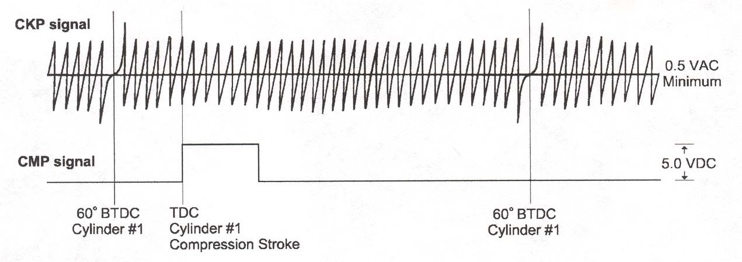
the vehicle being tested.

Crankshaft Position (CKP) Camshaft Position (CMP)

Location (describe): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Type of sensor (Hall-Effect,

magnetic, etc.): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



2. Check service information for the wire colors used and their purpose.

Crankshaft Position (CKP) Camshaft Position (CMP)

Wire 1 (color and purpose): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Wire 2 (color and purpose): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Wire 3 (color and purpose): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Check service information for the specified voltage output and/or waveform for the

CKP and CMP sensors. CKP \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ CMP \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Following the test equipment manufacturer’s instructions, show the instructor the

waveforms. CKP – **Instructor OK** \_\_\_\_ CMP – **Instructor OK** \_\_\_\_

5. Based on the comparison between the captured waveform and the specified waveform,

what action is needed?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_