

## NATEF TASK SHEET --- SECTION A6 A9 P-1

### A6 A9 : Check Electrical/Electronic Circuit Waveforms

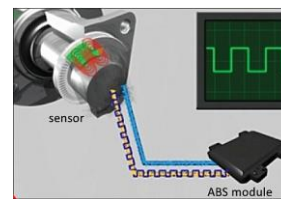
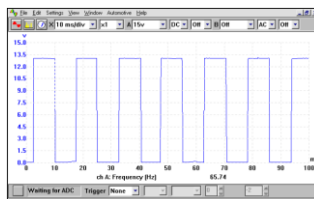
Student: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

VIN: \_\_\_\_\_ Year: \_\_\_\_\_ Make: \_\_\_\_\_ Model: \_\_\_\_\_

Engine: \_\_\_\_\_ Transmission: \_\_\_\_\_ Production Date: \_\_\_\_\_

**OBJECTIVE:** Student will Check electrical/electronic circuit waveforms, specifically wheel speed sensors (WSS); interpret readings and determine needed repairs.

- MATERIALS:**
1. **EYE PROTECTION**
  2. ABS Scan Tool
  3. Hoist
  4. Person w/ driver's license
  5. Vehicle (see instructor)



**PROCEDURE:** WEAR EYE PROTECTION! Raise vehicle on rack about 18" off floor and set parking brake. Turn ignition key on (engine off) and connect scan tool selecting the Anti-Lock Braking (ABS) system. Choose manual selection mode and check boxes for all four wheel-sensors in graphing mode. Show instructor.

Instructor initials. X \_\_\_\_\_

Next, with foot on service brake, start engine and put vehicle transmission into drive. Release parking brake and then slowly release service brake. Wheels should begin to turn. Select record mode on scan tool and record data for one minute. Press stop recording, apply service brake until wheels stop turning, put vehicle into park while brakes are still applied, then stop engine and set parking brake. Draw your graph data below.

<b>LFWSS</b>		<b>RFWSS</b>	
<b>LRWSS</b>		<b>RRWSS</b>	

**DATA:** LOOK UP YOUR VEHICLE IN ALL-DATA AND FIND OUT HOW THE WSS GRAPHS SHOULD APPEAR. HOW DO YOUR GRAPHS COMPARE? \_\_\_\_\_  
 ARE THE SPEED SENSORS WORKING PROPERLY? \_\_\_\_\_

#### INSTRUCTORS EVALUATION

LEVEL OF SKILL ATTAINED	Initial	OVERALL SKILL EVALUATION	Points
DEMONSTRATES MASTERY (5)		DOCUMENTATION COMPLETENESS (1)	
PERFORMS SATISFACTORILY (4)		SAFETY COMPLIANCE (1)	
CAPABLE, NEEDS PRACTICE (3)		WORK PROFESSIONALISM (3)	
ASSISTED IN PERFORMING (2)		LEVEL OF SKILL ATTAINED (1-5)	
EXPOSURE, OBSERVATION (1)		TOTAL SCORE	
<b>INSTRUCTOR'S SIGNATURE:</b>			