

NATEF TASK SHEET --- SECTION A.5 C.4 P-1

A5C4: DRUM BRAKE SERVICE

Student: _____ Date: _____ Period: _____

VIN: _____ Year: _____ Make: _____ Model: _____

Engine: _____ Transmission: _____ Production Date: _____

OBJECTIVE: Student will remove, clean, and inspect brake shoes, springs, pins, clips, levers, adjusters/self-adjusters, other related brake hardware, and backing support plates; lubricate and reassemble.

- MATERIALS:**
1. **EYE PROTECTION**
 2. Hand Tools
 3. Brake spring pliers
 4. Brake shoe hold-down spring tool
 5. Drum to brake shoe clearance gage
 6. Vehicle and Hoist (see instructor)



PROCEDURE: **WEAR EYE PROTECTION!** Use fender covers, floor mats, and seat covers. Place vehicle in park. Release parking brake. Raise vehicle and secure. Remove the rear wheels of the vehicle to be serviced and remove both rear brake drums. Encapsulate and clean all the brake parts to be serviced using the instructions supplied with the approved equipment. Clean the drum and brake assembly components taking care not to touch, get oil, or grease on drum face or brake shoe face. Measure brake shoe lining thickness at thinnest point and **RECORD FINDINGS:**

_____/1000ths. Take apart only one drum brake assembly at a time and/or take picture showing all hardware in its proper place. Using the brake spring tool, remove the brake shoe return spring (s) from the anchor. Using the hold-down spring tool, remove the brake shoe hold-down device on both shoes. Disconnect the brake-adjuster linkage from the anchor. Pull both brakes shoes away from the anchor. When pulling rear-wheel brake shoes away from their anchors, you will have to separate the parking brake lever from the trailing shoe. In some cases, the lever will need to be disengaged from a notch. In other units, a clip will have to be removed from a pin, which retains the lever. In either case, the lever can be left to hang on the cable while other components are being serviced. Compare the new brake shoes with the old ones. Inspect wheel cylinder for leakage. Clean and lubricate all brake hardware. Check springs and hardware for corrosion, discoloration, and distortion; replace any questionable components. Clean the backing plate with a non-contaminating solvent. Make sure to remove all dirt, rust, and scale from the plate. Next, lubricate the backing plate forms with a Lithium based brake lubricant designed to withstand high temperatures. Assemble the rear brakes including the following: cleaning and lubricating the adjusters; installing the brake shoes; installing the parking brake; and adjusting the brakes. Install drum, wheel, and torque to specifications. Test brake pedal and emergency brake. Put away tools & equipment. Clean up any mess.

WHEEL TORQUE SPECS: _____ ft-lb's.

	Condition? Keep or Replace?		Condition? Keep or Replace?
Brake Shoes		Wheel Cylinder	
Springs		Drum	
Hardware		Adjuster	

TYPE OF LUBRICANT USED? _____ **RECOMMENDATIONS?**

INSTRUCTORS EVALUATION

LEVEL OF SKILL ATTAINED	<i>Initial</i>	OVERALL SKILL EVALUATION	<i>Points</i>
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	
INSTRUCTOR'S SIGNATURE:			