

AUTO 143 Wheel & Tire Job Sheet

Name: _____

Date: _____

-----SAFETY GLASSES & SAFETY-TOED SHOES REQUIRED AT ALL TIMES WHEN WORKING IN THE LAB-----

Directions : Pick a vehicle to use for this job sheet. Pull it into the shop and complete all of the job sheet tasks. Please ask questions if you are unsure about something. The main objective is to learn! Have fun!

VIN Code

Where is the VIN number located on this vehicle? _____

Copy the vehicles 17-digit VIN number into the box below:

<u>Vehicle Information</u>			
VIN# _____	Year: _____	Model: _____	
FWD or RWD	2WD or 4WD	Engine: _____	Mileage: _____
Other Vehicle Info:			

The first number or letter designates the **country of origin**. Where was your vehicle built? _____

1 = United States	6 = Australia	L = China	V = France
2 = Canada	8 = Argentina	R = Taiwan	W = Germany
3 = Mexico	9 = Brazil	S = England	X = Russia
4 = United States	J = Japan	T = Czechoslovakia	Y = Sweden
5 = United States	K = Korea	U = Romania	Z = Italy

The model of the vehicle is commonly the 4th or 5th character. What is your vehicle **model** character? _____

The 8th character is often the engine code. What is your vehicles **engine** code? _____

The 10th character is always the model year of the vehicle. What **model year** is your vehicle? _____

VIN Year Chart:

The pattern repeats every 30 years

A = 1980/2010	L = 1990/2020	Y = 2000/2030
B = 1981/2011	M = 1991/2021	1 = 2001/2031
C = 1982/2012	N = 1992/2022	2 = 2002/2032
D = 1983/2013	P = 1993/2023	3 = 2003/2033
E = 1984/2014	R = 1994/2024	4 = 2004/2034
F = 1985/2015	S = 1995/2025	5 = 2005/2035
G = 1986/2016	T = 1996/2026	6 = 2006/2036
H = 1987/2017	V = 1997/2027	7 = 2007/2037
J = 1988/2018	W = 1998/2028	8 = 2008/2038
K = 1989/2019	X = 1999/2029	9 = 2009/2039

Vehicle Hoisting

Getting Ready to Hoist the Vehicle

- _____ 1. Drive the vehicle into position to be hoisted (lifted) being certain to center the vehicle in the stall.
- _____ 2. Pull the vehicle forward until the front tire rests on the tire pad (if equipped).
- _____ 3. Place the gear selector into the park position (if the vehicle has an automatic transmission/transaxle) or in neutral (if the vehicle has a manual transmission/transaxle) and firmly apply the parking brake.
- _____ 4. Lower the driver's side window before exiting the vehicle. (This step helps prevent keys from being accidentally being locked in the vehicle.)
- _____ 5. Position the arms and hoist pads under the frame or pinch-weld seams of the body.

Hoisting the Vehicle

- _____ 6. **Shake Test!** Slowly raise the vehicle about 6-12" off the ground and check the stability of the vehicle by attempting to move the vehicle on the lift.
- _____ 7. If the vehicle is stable and all pads are properly positioned under the vehicle, continue hoisting the vehicle to the height needed. *Note: Best working height is at chest or elbow level.*
- _____ 8. Once desired working height is reached, lower the lift down until it rests on the safety latches.

Lowering the Vehicle

- _____ 9. To lower the vehicle, raise the hoist slightly, then release the safety latches.
- _____ 10. Lower the vehicle using the proper operating and safety release levers.
CAUTION: *Do not look away while lowering the vehicle. One side of the vehicle could become stuck or something (or someone) could get under the vehicle.*
- _____ 11. After lowering the hoist arms all the way to the floor, move the arms so that they will not be hit when the vehicle is driven out of the stall.

Tire Identification

Check the door placard for the specified tire size(s) and inflation pressure:

Tire size: _____ Optional tire size (if specified): _____

Spare tire size: _____ Specified tire inflation pressure: _____

Check the sidewall of the tires to determine the following information:

Tire width (mm): _____ Tire aspect ratio (%): _____ Tire sidewall height (mm): _____

Tire build date: _____ Tread wear rating: _____

Temperature rating: _____ Traction rating: _____

Maximum inflation pressure: _____ Load Rating (index & lbs): _____

Speed rating (index & M.P.H.): _____ Symmetrical Assymmetrical Directional
(circle the tire type)

Tire Rotation

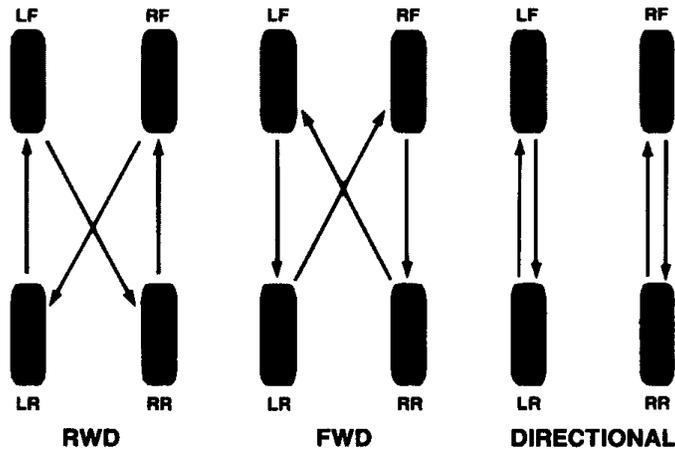
_____ 1. Check service information or owners manual for recommended tire rotation method. What method is recommended?

_____ Modified X pattern

_____ X pattern

_____ Front to rear & rear to front

_____ Cannot rotate tire on this vehicle. Why? _____



_____ 2. Safely hoist the vehicle to a good working position (chest or elbow height).

_____ 3. Measure the tread depth of each tire (measured in 32^{nds} of an inch):

LF _____

RF _____

LR _____

RR _____

_____ 4. Remove the wheels and rotate them (if possible) according to the vehicle manufacturer's recommendations.

_____ 5. Check and correct the tire air pressure accordingly.

Specified front tire PSI: _____

Specified rear tire PSI: _____

Wheel & Lug Nut Install

_____ 1. Determine the vehicle manufacturer's specified lug nut torque specification. _____

_____ 2. Check the wheel studs and lug nuts for any damage.

CAUTION: Some vehicle manufacturers warn to not lubricate the wheel studs because this can cause the lug nuts to loosen while the vehicle is being driven, resulting in personal injury.

_____ 3. Install the wheel over the studs and **start all lug nuts** (or bolts) **by hand!** NEVER START THREADING A LUG NUT WITH AN IMPACT GUN!

_____ 4. Tighten the lug nuts in a start pattern using a torque wrench or an air impact that is equipped with the proper torque limiting adapter.



Tire Dismount & Install

Directions : With the aid of the instructor, properly dismount and mount a tire. Then proceed to the wheel balancer to balance the wheel/tire assembly. Once completed, obtain the instructors signature.

Instructors OK:

Tire Repair

- _____ 1. Locate the source of the leak by submerging the tire under water or by spraying the tire with soapy water.
- _____ 2. Remove the foreign object and use a reamer to clean the hole in the tire **only if the hole is in the tread area.**
- _____ 3. Dismount the tire and buff the inside of the tire around the hole.
- _____ 4. Clean the buffed area with rubber cleaner.
- _____ 5. Apply rubber cement to the buffed area.
- _____ 6. Once the cement has dried, insert the repair plug from the inside of the tire.
- _____ 7. Pull the plug through the puncture from the outside of the tire.
- _____ 8. Use a stitching tool to make sure the inside of the patch is well adhered to the inside of the tire.
- _____ 9. Mount the tire back on the wheel and inflate to the correct pressure.
- _____ 10. Recheck the tire for leaks using soapy water.
- _____ 11. Balance the wheel and reinstall on the vehicle.