JOB SHEET 7

Using a Vehicle Hoist

Name: _____ Station: _____ Date: _____

NATEF Correlation

This Job Sheet addresses the following NATEF task(s):

N/A

Performance Objective(s)

Upon completion of this Job Sheet, you will be able to use a vehicle hoist to raise a vehicle in the air safely and correctly.

Tools and Materials

Service manual
Vehicle
Hoist

Protective Clothing/Equipment

Goggles or safety glasses with side shields

Describe the vehicle being worked on:

Year	Make	Model	VIN	Engine type and size

PROCEDURE

1. Describe the type of hoist(s) that are located in the shop you are in.

_____

_____

2. Describe the type of hoist you are going to be using.

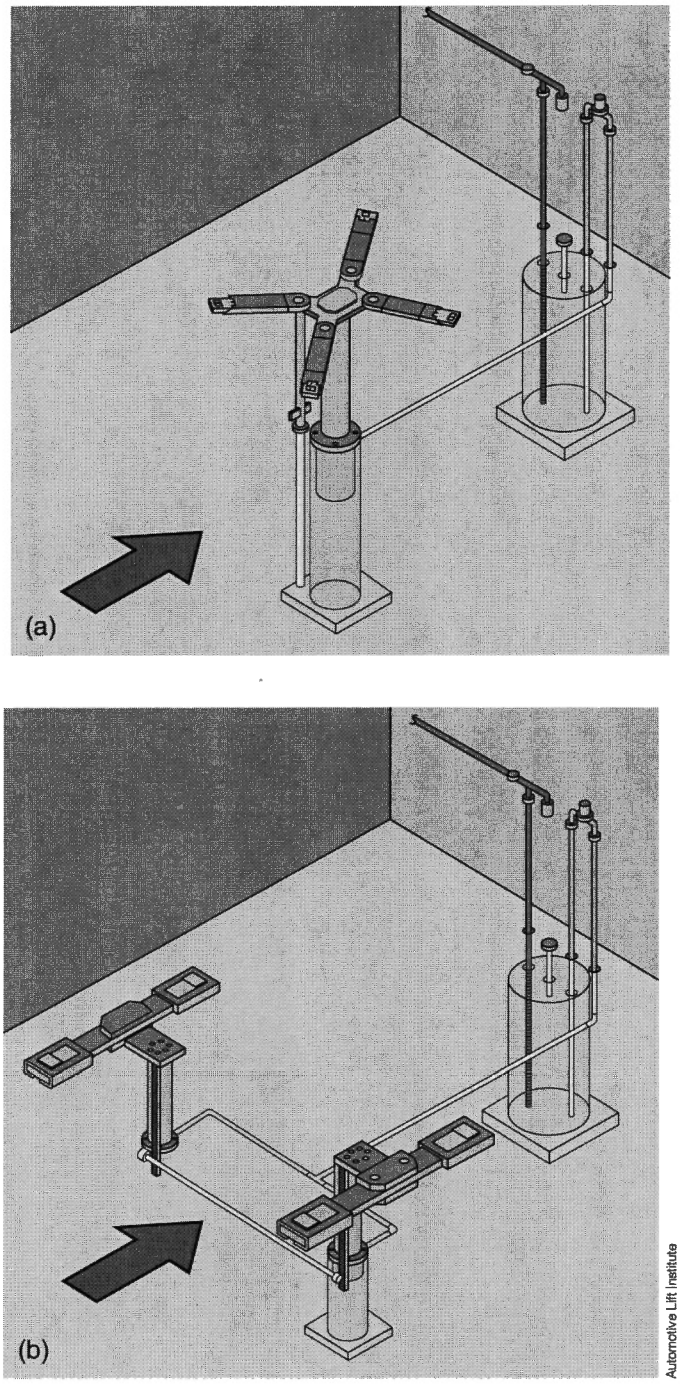


Figure 11.1 (a) Single-post frame-contact lift. (b) Two-post frame-contact lift.

(Continued)

(Concluded)

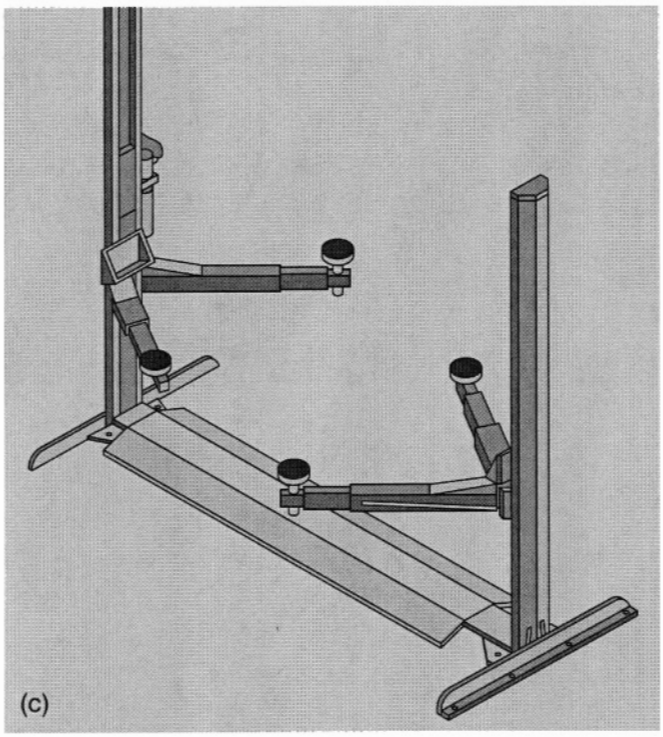


Figure 11.1 (continued) (c) Surface mount frame-contact lift.

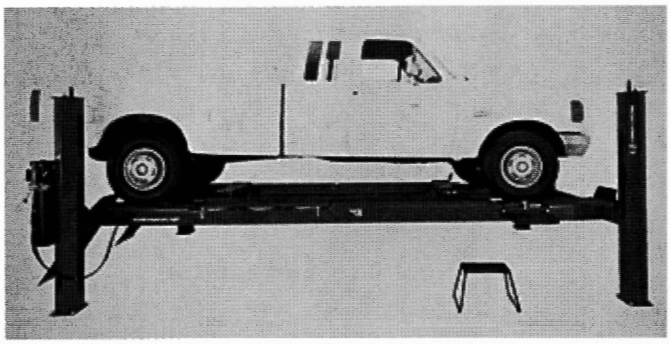
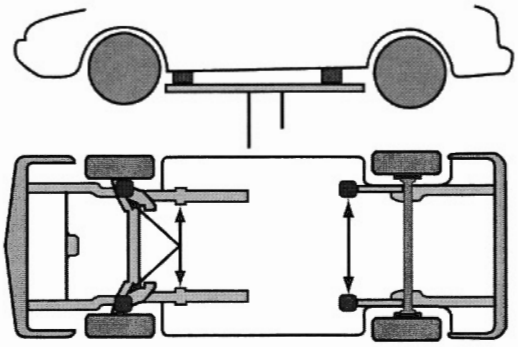


Figure 11.2 Wheel-contact lift.

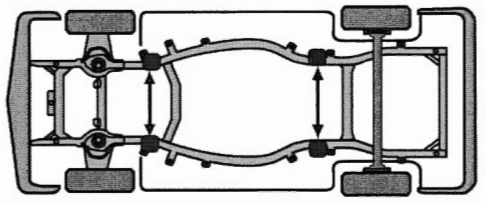
3. Use the controls of the hoist without a vehicle on it to get used to it.

Task Completed _____

4. Using the service manual, find the lift points of the vehicle you are using. Draw an outline of the frame (or body if using a unibody vehicle) and highlight the lift points.



Unitized body



Straight frame

Figure 11.3 Check the service information for the correct lift points for a particular vehicle.

5. Drive the vehicle into position on the hoist.

Note: *Shorter wheelbase vehicles will have to be in a different position than longer wheelbase vehicles. Trucks and vehicles that are front heavy will need to be placed on the hoist so that their weight is centered. Always refer to the operator's manual or a lift point chart for proper placement.*

Warning: *If you are having a friend guide you onto the hoist, make sure that he or she does not stand in front of the vehicle while you are driving into position.*

Task Completed _____

6. Align the contact pads of the hoist so they will contact the lift points described earlier.

Note: *Some vehicles have plastic ground effects or running boards that may come into contact with the hoist arms. Be sure to check this before you accidentally break them.*

Task Completed _____

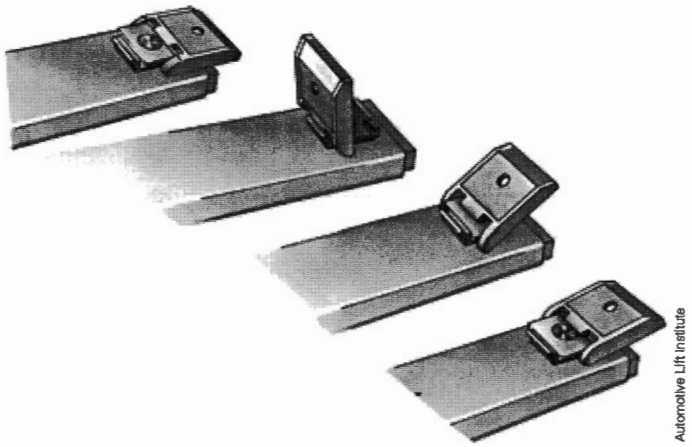


Figure 11.4 Adapters flip up to accommodate different frame heights.

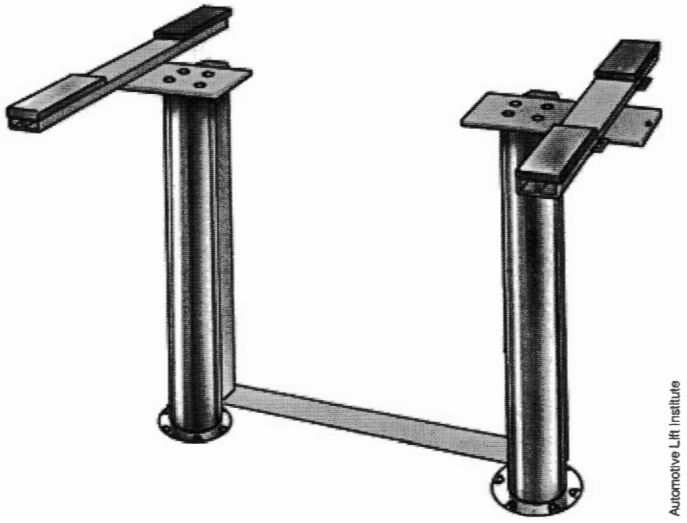


Figure 11.7 A rocker panel (pad) lift.

7. Slowly lift the hoist until all of the tires are about 6 inches off the ground.

Note: *The lift points on some vehicles may be at different heights. You may need to accommodate for this by changing the contact pad configuration.*

Task Completed _____

8. Gently shake the car by pushing on the bumper. Listen and watch the contact pads. The vehicle should not rock or make noises when doing this if the center of gravity is correct.

Task Completed _____

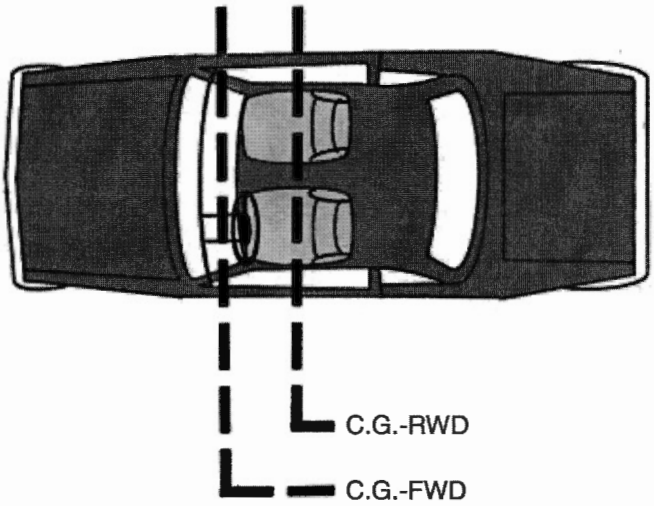


Figure 11.18 Center of gravity (C.G.) positions for front-wheel drive (FWD) and rear-wheel drive (RWD).

9. Continue to raise the vehicle to a comfortable height so that you can walk under it. Rest the vehicle's weight on the hoist locks.

Note: *Recheck the pad placement at this time. You will get a better viewpoint.*

Task Completed _____

10. Lift the vehicle off the locks, release the locks, and lower the vehicle down.

Task Completed _____

11. Once on the ground, move the arms out of the way and drive the vehicle out.

Task Completed _____

12. Given the type of hoist you were assigned to use for this exercise, what types of repair jobs would be most efficient using this type of hoist?

_____

_____

Problems Encountered

_____

_____

_____

INSTRUCTOR EVALUATION

- ☐ 4 Mastered Task
- ☐ 3 Able to Perform Task Independently; Some Additional Training Suggested
- ☐ 2 Able to Perform Task with Close Supervision; Requires Additional Training
- ☐ 1 Unable to Perform Task
- ☐ 0 Not Attempted

Comments

_____

_____

Instructor Name: _____ Date: _____

Instructor Signature: _____