

<p>U.S. Department of Agriculture Natural Resources Conservation Service</p>	<p>1. WORK PROJECT/ACTIVITY</p> <p style="text-align: center;">PUTTING ON CHAINS</p>	<p>2. LOCATION</p> <p style="text-align: center;">Davis, CA</p>	<p>3. UNIT</p> <p style="text-align: center;">Snow Survey</p>								
<p>JOB HAZARD ANALYSIS (JHA)</p>	<p>4. NAME OF ANALYST</p> <p style="text-align: center;">Marianne Hallet</p>	<p>5. JOB TITLE</p> <p style="text-align: center;">Water Supply Specialist</p>	<p>6. DATE PREPARED</p> <p style="text-align: center;">February 21, 2007</p>								
<p>7. TASKS/PROCEDURES</p>	<p>8. HAZARDS</p>	<p>9. ABATEMENT ACTIONS</p> <p style="text-align: center;">Engineering Controls * Substitution * Administrative Controls * PPE</p>									
<p>Knowledge of correct placement of chains.</p>	<p>Chains on the wrong set of tires will not provide the needed traction and gives the user a false sense of safety.</p>	<p>Fit chains to the driving wheels. i.e.</p> <table border="0" style="width: 100%;"> <tr> <td style="text-align: center;"><u>Types</u></td> <td style="text-align: center;"><u>Chains installed on:</u></td> </tr> <tr> <td style="text-align: center;">rear wheel drive (RWD)</td> <td style="text-align: center;">rear wheels</td> </tr> <tr> <td style="text-align: center;">front wheel drive (FWD)</td> <td style="text-align: center;">front wheels</td> </tr> <tr> <td style="text-align: center;">four wheel drive (4WD)</td> <td style="text-align: center;">front wheels</td> </tr> </table>		<u>Types</u>	<u>Chains installed on:</u>	rear wheel drive (RWD)	rear wheels	front wheel drive (FWD)	front wheels	four wheel drive (4WD)	front wheels
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<p>Installing chain instructions</p>	<p>Improper installation of chains may cause unsafe driving conditions.</p>	<p>Fitting Snow Chains</p> <p>There may be variations in tire-chain installation procedure depending on the style or brand you choose, so read and follow the instructions and safety precautions that come with the tire chains that you are installing.</p> <p>Here are the basic steps for installing tire chains.</p> <ul style="list-style-type: none"> • Pull a safe distance off the road and onto a flat surface. • Set the emergency brake. • Determine if your car is front wheel drive or rear wheel drive. • Lay chains flat on the ground, parallel to each other. Make sure there are no twists or kinks. • Drape the chains over each tire making sure the "J" hook or speed hook is on the inside. • Make sure the smooth side of the cross member end hooks are lying against the tires. • Reach behind the tire and fasten the speed hooks by inserting end of the cable into the metal fastener. An adjuster near the end of the cable can be used to tighten the cables for a smaller tire. • On the front of the tire, fasten the "J" hooks through fastener at the end of the chain). • Pull the slack toward the outside edge of the tire. • Pull forward several feet and pull the rest of the slack towards you. 									

<p>Installing chain instructions (cont.)</p>	<p>Improper installation of chains may cause unsafe driving conditions.</p>	<ul style="list-style-type: none"> • Insert the lever fasteners through the third links from the opposite ends of the outside chains and pivot the levers back on themselves. • Fasten them under the keeper links. • Secure the extra links with zip ties or remove them with bolt cutters. • Add rubber tensioners to lengthen the life of the chains. • Remember to keep the chains snug throughout operation and apply rubber adjusters only after the chains have been tightened. • If you can slip your hand between the tire and the chain, under a cross chain or a side chain, then the chains are too loose. • If cross chains or side chains are loose fitting, open the outer bow lever and move the inner "C" hook to the next tighter link, move the bow lever to the next tighter link. Re-close the bow lever and recheck the tightness. • After installing tire chains, drive approximately 1/4 mile, stop, and re-tighten if necessary.
<p>Tips for recommended use of tire chains</p>	<p>Improper use of chains can cause damage to the chains or vehicle, and can give a false sense of security to the driver.</p>	<ul style="list-style-type: none"> • A torch, plastic garbage bag (or ground sheet) & (rubber) gloves will make fitting easier. • Do not even try using a jack to lift your car to put chains on. Icy conditions make it very easy for your car to slide off. • Diamond chains are recommended. • Chains change your car's handling. Take time to readjust your driving. • Do not put on chains before you need to, nor leave them on after you are clear of snow and ice areas. As well as wearing out your car, they damage the road surface. • Always practice installing tire chains before you actually need them. Tire sizes can vary by manufacturer therefore it is important to check for proper fit before the actual need arises. • Tire chains are not to be used on snow tires. • Never exceed 30 MPH while the chains are installed. Accelerate slowly and evenly. • Avoid spinning your tires. • The life of your chains will vary according to road conditions, driving speed and individual driving habits. • The following are activities that can cause unnecessary wear to tire chains: <ul style="list-style-type: none"> ○ Locking your wheels when braking ○ Driving on bare pavement that is not covered with snow or ice ○ Hitting curbs ○ Installing the chains improperly

<p>Tips for recommended use of tire chains</p>	<p>Improper use of chains can cause damage to the chains or vehicle, and can give a false sense of security to the driver.</p>	<ul style="list-style-type: none"> • Tire chains are designed only to provide extra traction in severe winter weather emergencies. Drivers should always exercise caution and observe driving conditions during hazardous weather. • In the event that a cross-chain should break, immediately pull off the road to a safe place and remove, or tie back the cross chain. Do not continue driving with a broken cross chain. • Vehicle wheel-well clearance for traction devices is the responsibility of the automobile manufacturer. Please refer to your vehicle's owner manual for more details. • Use tire chains only as a traction device. Do not use them for any other purpose, including towing or lifting.
	<p>Video Links</p>	<p>http://www.carspace.com/videos/play!id=.59e575fe http://www.diynetwork.com/diy/ab_tires/article/0,2021,DIY_13697_4115775,00.html http://www.lesschwab.com/videos.asp</p>
	<p>References</p>	<p>http://www.ehow.com/how_5235_install-tire-chains.html http://www.edmunds.com/ownership/howto/articles/45790/article.html http://www.diynetwork.com/diy/ab_tires/article/0,2021,DIY_13697_4115775,00.html http://www.peerlesschain.com/downloads/New_Truck_Chains.pdf http://tirechain.com/FREQUENTLY_ASKED_QUESTIONS.HTM http://www.carspace.com/videos/play!id=.59e575fe</p>
<p>10. LINE OFFICER SIGNATURE</p>	<p>11. TITLE</p>	<p>12. DATE</p>

JHA Instructions

The JHA shall identify the location of the work project or activity, the name of employee(s) writing the JHA, the date(s) of development, and the name of the appropriate line officer approving it. The supervisor acknowledges that employees have read and understand the contents, have received the required training, and are qualified to perform the work project or activity.

Blocks 1, 2, 3, 4, 5, and 6: Self-explanatory.

Block 7: Identify all tasks and procedures associated with the work project or activity that have potential to cause injury or illness to personnel and damage to property or material. Include emergency evacuation procedures (EEP).

Block 8: Identify all known or suspect hazards associated with each respective task/procedure listed in block 7. For example:

- a. Research past accidents/incidents
- b. Research the Health and Safety Code literature.
- c. Discuss the work project/activity with participants
- d. Observe the work project/activity
- e. A combination of the above

Block 9: Identify appropriate actions to reduce or eliminate the hazards identified in block 8. Abatement measures listed below are in the order of the preferred abatement method:

- a. Engineering Controls (the most desirable method of abatement).
For example, ergonomically designed tools, equipment, and furniture.
- b. Substitution. For example, switching to high flash point, non-toxic solvents.
- c. Administrative Controls. For example, limiting exposure by reducing the work schedule; establishing appropriate procedures and practices.
- d. PPE (least desirable method of abatement). For example, using hearing protection when working with or close to portable machines (chain saws, rock drills portable water pumps)
- e. A combination of the above.

Block 10: The JHA must be reviewed and approved by a line officer. Attach a copy of the JHA as justification for purchase orders when procuring PPE.

Blocks 11 and 12: Self-explanatory.

Emergency Evacuation Instructions

Work supervisors and crew members are responsible for developing and discussing field emergency evacuation procedures (EEP) and alternatives in the event a person(s) becomes seriously ill or injured at the worksite.

Be prepared to provide the following information:

- a. Nature of the accident or injury (avoid using victim's name).
- b. Type of assistance needed, if any (ground, air, or water evacuation)
- c. Location of accident or injury, best access route into the worksite (road name/number), identifiable ground/air landmarks.
- d. Radio frequency(s).
- e. Contact person.
- f. Local hazards to ground vehicles or aviation.
- g. Weather conditions (wind speed & direction, visibility, temp).
- h. Topography.
- i. Number of person(s) to be transported
- j. Estimated weight of passengers for air/water evacuation.

The items listed above serve only as guidelines for the development of emergency evacuation procedures.

JHA and Emergency Evacuation Procedures Acknowledgement

We, the undersigned work leader and crew members, acknowledge participation in the development of this JHA (as applicable) and accompanying emergency evacuation procedures. We have thoroughly discussed and understand the provisions of each of these documents:

SIGNATURE DATE

SIGNATURE DATE
