

AUTOMOTIVE SAFETY PACKET









SCAN ME



TIRE CHANGING 101



STEP 1

- If driving, safely exit the roadway.
 - Maneuver vehicle to a flat surface.
 - Position vehicle as far from any active travel lane as possible.
 - If you cannot exit the roadway or pull the vehicle to a safe, flat area call 911 for assistance.
- Put the vehicle in park and set the emergency brake as well as turn on the hazard lights.
- · Check your surroundings for any hazards.
- Turn off ignition and secure keys.

STEP 2

- · Check the spare tire condition and locate tools.
- Retrieve the spare tire and tools and place in your workspace.
- Set the jack in proper lifting position and raise it slightly so there is still tension and the tire doesn't spin. For added stability, you can block the tire opposite of the flat on the same side with items in your spare tire changing kit or a wood block.
- Use the lug wrench to loosen all the lug nuts.



WELCHEL ENTERPRISES

STEP 3

- Now you can jack and raise the flat tire off the ground.
- Finish removing the lug nuts and pull off the flat tire and wheel and place the tire away from your workspace.
- Align the spare tire with the lugs and hand tighten the lug nuts so the wheel is flush against hub.
- Lower the jack so the so the spare touches the ground for tension so you can tighten the lug nuts. Using a crisscross pattern, use the lug wrench to tighten all the lug nuts.
 - If the wheel turns making it difficult to tighten the lugs then lower the jack some more.

STEP 4

- Store the flat tire and tools in a secure location.
 - Depending on the style of vehicle the trunk is most commonly used.

SAFETY TIPS:

- 1. Vehicles with a donut style spare tire are not designed to be driven long distances or at a high rate of speed. Seek tire repair or replacement asap!
- 2. Some newer vehicles have a full size spare and can be driven longer.
- 3. Be visible to other motorist. Don't get locked into tunnel vision and put yourself in harm's way.
- 4. Check your spare tire pressure, side wall and tire tread condition periodically to ensure safety.
- 5. Use gloves when handling tires. Older blown out tires can have metal wire protruding the rubber.





JUMP STARTING 101 59



STEP 1

- · Determine if the issue is a dead battery.
 - If the engine is turning over but the vehicle doesn't start it's likely not the battery.
 - If the ignition makes a "click" sound and the engine won't start move to Step 2.

STEP 2

- Position a running vehicle so that the front end of each vehicle are facing each other.
- Make sure both vehicles are turned off.
- · Locate the battery on both vehicles.
 - · Sometimes newer vehicles will have jump post.
- Ensure that the battery terminals are secure and clean of corrosion.

STEP 3

- · Ensure both ends of the jumper cables are secure and cannot touch each other.
- · Connect the RED (positive) cable to the positive terminal (+) on the stalled battery.
- · Connect the BLACK (negative) cable to the negative post (-) on the stalled battery.
 - A clean, unpainted metal surface under the hood will work for negative connection.
- Connect the RED (positive) cable to the positive terminal (+) on the good battery.
- · Connect the BLACK (negative) cable to the negative (-) post on the good battery.
 - A clean, unpainted metal surface under the hood will work for negative connection.



STEP 4

- Start the vehicle with the good battery and run for 2 to 3 minutes.
- · Start the vehicle with the dead battery.
 - If the battery was totally drained it could take up to 10 or 15 minutes to charge.

STEP 5

- Remove cables in reverse order ensuring the jumper cable ends do not touch each other.
- Keep the vehicle running for at least 30 minutes to give battery time to recharge.
 - This can be done by driving it, just don't shut off for at least 30 min so your alternator can charge the vehicle.
 - You may stall out again if you have a bad alternator or other charging problem if a voltage meter reads under 12.5.

SAFETY TIPS:

- 1. Minimize your time in between the 2 vehicles. Work to the side whenever possible.
- 2. Always check your surroundings and make sure you are not positioned near active traffic.
- 3. If you connect to the wrong post it can do electrical damage to the vehicle.
- 4. Make sure to keep the jumper cable ends from touching.





VEHICLE INSPECTION 101 =

STEP 1: EXTERIOR OF VEHICLE

TIRES

- · Check air pressure.
 - Proper pressure can usually be found on the driver side door sticker or on tires sidewall.
- · Check tire tread depth.
 - Use a tread depth gauge to ensure the tread depth is at least 2/32.
 - Use a penny if you don't have a tread depth gauge. Place a
 penny head down into the tread groove. If you can see the top
 of Abe's head then your treads are too low.
 - Tire rotation principles keep the tires with the most tread on the front tires for steering control.
 - Tires that are wearing unevenly are signs of misalignment.
- Don't forget to check the spare tire using same principles as above.

LIGHTS

- · Check the headlights and check the tag light.
- · Check the running lights front and rear.
- · Check the turn signals front and rear.
- · Check the hazard lights (flashers) front and rear.
- Use a friend, your phone or reflective surface like a store front window to check the brake lights.

OVERALL CONDITION

- Check the vehicles overall condition by doing a complete walk around.
- Check that there are no visible fluids leaking on the ground.



VEHICLE INSPECTION 101 =

STEP 2: UNDER THE HOOD

FLUIDS

- Check the oil level and top off with the recommended oil as needed.
 - Without the proper oil viscosity and/or oil level you can do damage to your engine.
- · Check the washer fluid.
- · Check the transmission fluid.
- · Check the coolant level.
- · Check the transmission fluid level.

SAFETY TIPS:

- 1. It's a good rule of thumb to keep at least $\frac{1}{2}$ tank of fuel in your vehicle.
- 2. Doing regular vehicle inspections can prolong the life of your vehicle, save you money and also help keep you safe on the road.

BELTS & HOSES

- · Check the condition of the drive belts.
 - Make sure there are no cracks or excessive wear.
- · Check the condition of the hoses.
 - Make sure there are no holes or signs of dry rot.

