

**GROUNDS/MOVERS**  
**GROUNDS EQUIPMENT MECHANIC**  
**Ref. Code: G-M-1**

REPAIR TO TRACTORS		
Activity	Hazard Identification	Required Precautions
1. Replacing mufflers and tail pipes.	1a. Cuts, scrapes, pinches, smashes, punctures, and pokes.	1a. Keep tools in good condition. Inspect tools before use. Wear safety glasses. Work away from yourself. Use normal caution required for all hand tools.
	1b. Burns.	1b. Vehicle must be cool before beginning work on it.
	1c. Debris in eyes.	1c. Wear safety glasses.
	1d. Cuts and scrapes.	1d. Keep hands away from sharp and rough edges.
2. Replacing hoses and belts.	2a. Head or hands smashed by hood.	2a. Make sure hood is all the way up before working under the hood.
	2b. Cuts and scrapes.	2b. Keep hands away from sharp and rough edges.
	2c. Burns.	2c. Always replace hoses and belts when engine is cool.
	2d. Cuts, scrapes, smashes, pokes, and punctures.	2d. Keep tools in good condition. Inspect tools before use. Wear safety glasses. Work away from yourself. Use normal caution required for all hand tools.
3. Replacing lights.	3a. Hands or head smashed by hood of vehicle.	3a. Make sure hood is all the way up before working under the hood.
	3b. Cuts.	3b. Handle broken lights carefully.
4. Checking and adding oil, anti-freeze, brake fluid, transmission fluid, wiper fluid, and power-steering fluid.	4a. Smashing fingers in hood.	4a. Make sure hood is all the way open before working under the hood. Use bar if there is one.
	4b. Splashed with fluids; fluids in eyes.	4b. Wear safety goggles. Pour slowly to avoid splashing. Do not overfill.

	4c. Burns.	4c. Check fluids (except transmission) on a cool engine. When checking transmission fluid levels, be careful to avoid exhaust, manifold, and intake manifold.
	4d. Cuts; scrapes.	4d. Wear gloves when possible. Avoid sharp edges.
	4e. Tripping; slipping.	4e. Clean up any fluid spills.
5. Changing tires.	5a. Vehicle falling off jack.	5a. Make sure the jack is straight and under the axle.
	5b. Cuts, scrapes, smashes, punctures, and pokes.	5b. Keep tools in good condition. Inspect tools before use. Wear safety glasses. Work away from yourself. Use normal caution required for all hand tools.
	5c. Back strain.	5c. Know your weight lifting capacity and get help if needed. Lift using leg muscles. Keep back straight.
6. Removing and reinstalling mower blades.	6a. Severe cuts and lacerations from blades if mower kicks on.	6a. Remove spark plug wire before beginning work.
	6b. Deck of riding mower falling on worker.	6b. Lock brakes and mower deck. Put blocks underneath deck.
	6c. Mower dropping from hydraulic lift and crushing worker.	6c. Check for broken hoses and leaking fluid. Verify that all locks and safety latches are in place.
	6d. Pinches and cuts when removing blades using wrench.	6d. Use a block so the blade does not spin when belt is being loosened. Wear gloves. Handle blade carefully.
7. Sharpening blades on bench grinder.	7a. Electric shock; electrocution.	7a. Inspect power cord before use. Keep cord out of work area. Do not use electric tools if work area is wet.
	7b. Sparks and metal chips in eyes.	7b. Wear safety glasses. Verify that shield is in place.
	7c. Cuts.	7c. Handles blades carefully.

	7d. Burns.	7d. Do not touch hot blades. Sharpen one end of the blade and let it cool down before picking it up to sharpen the other end.
8. Replacing bearings.	8a. Cuts, scrapes, pinches, smashes, punctures, and pokes.	8a. Keep tools in good condition. Inspect tools before use. Wear safety glasses. Work away from yourself. Use normal caution required for all hand tools.
	8b. Severe cuts and lacerations from mower blades.	8b. Work carefully. Avoid putting hands near mower blades.
9. Replacing bolts.	9. Cuts, scrapes, pinches, smashes, punctures, and pokes.	1. Keep tools in good condition. Inspect tools before use. Wear safety glasses. Work away from yourself. Use normal caution required for all hand tools.
10. Repairing leaks in hydraulic system.	10a. Cuts, scrapes, pinches, smashes, punctures, and pokes.	10a. Keep tools in good condition. Inspect tools before use. Wear safety glasses. Work away from yourself. Use normal caution required for all hand tools.
	10b. Splashed/sprayed with hydraulic fluid.	10b. Wear safety glasses. Make sure all pressure is off the system before working on the hydraulic system.
	10c. Severe cuts and lacerations.	10c. Avoid sharp and rough edges.
	10d. Struck by wire in hydraulic hose.	10d. Handle hoses carefully.
11. Replacing batteries.	11a. Back strain.	11a. Know your weight lifting capacity and get help if needed. Lift using leg muscles. Keep back straight.
	11b. Spilling acid on self.	11b. Hold battery away from self. Hold battery upright at all times.
12. Jumping batteries.	12. Hooking up cables incorrectly; splashed with battery acid; fire.	1. Watch what you are doing. Make sure cables are hooked up correctly.

13. Storing or transporting compressed gas cylinders and oxygen/acetylene torch.	13a. Explosion of compressed gas.	13a. Do not allow cylinder valves or regulator assemblies to come into contact with grease, oil, or lubricants.
	13b. Rupture of cylinder if valve breaks off.	13b. Always install protective valve cover. Always secure cylinder to a stand or a wall.
14. Using oxygen/acetylene outfit.	14a. Regulator diaphragm rupturing when torch is turned on.	14a. Turn regulator adjusting screw counterclockwise to disengage plunger before turning on cylinder.
	14b. Acetylene explosion.	14b. Stand acetylene tank vertically before using.
	14c. Torch explosion.	14c. Install spark arrestors on torch and regulators.
	14d. Burning self.	14d. Wear gloves, overalls, and leather chaps. Always burn away from yourself.
	14e. Starting a fire.	14e. Remove flammable materials from work area. Always keep a fire extinguisher nearby and have a person stand by as a firewatch.
	14f. Burns from metal dripping on self.	14f. Do not reach to burn; always work level with torch.
	14g. Inhalation of fumes.	14g. Work in a well-ventilated area. Use exhaust fans and tubes for ventilation.
	14h. Flash burn to eyes.	14h. Wear burning goggles to protect eyes.
	14i. Burning tar coating and/or galvanized coating creates a poisonous gas.	14i. Tar coating is sometimes wrapped in cardboard. Silver coating on pipes or plates indicated galvanized coating. If possible, use reciprocating saw to cut instead of burning with torch. If it is not possible to saw the pipe, ventilate the area well with incoming and outgoing air. Wear an air pack or a galvanized-rated respirator to avoid breathing fumes.

	14j. Buildup of acetylene from leaks.	14j. Check hose and connections for leaks and damage before using.
15. Welding.	15a. Getting flashed.	15a. Wear welding mask. Prevent reflected arc rays by changing angle at which your are working. If it is not possible to change your angle, put up a nonreflective board on the wall behind you. All non-essential personnel should leave the area.
	15b. Getting burned.	15b. Wear protective clothing: welding jacket, gloves, and welding mask.
	15c. Hot metal bouncing up into face or eyes.	15c. Wear goggles or safety glasses under welding mask.
	15d. Fire hazard from flying sparks.	15d. Remove flammable materials from manhole. Wear welding jacket. Have coworker fire watch with an extinguisher.
	15e. Inhalation of fumes.	15e. Use fans to ventilate area. When necessary use one fan to push air in and one to pull it out. Wear respirator.
	15f. Electric shock; electrocution.	15f. Wear dry clothing. Make especially sure that gloves are dry. Keep leads in good repair and out of standing water. Do not stand in standing water. Do not work when it is raining.
	15g. Injury to others.	15g. Be aware of other workers or pedestrians in the area. Block welding arc with a screen.